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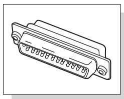
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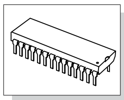
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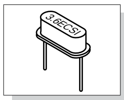

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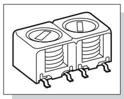
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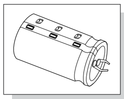
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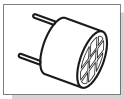
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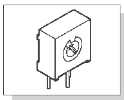
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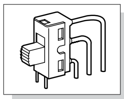
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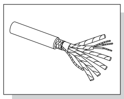
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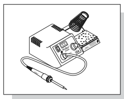
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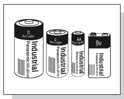

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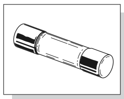
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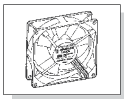
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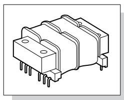
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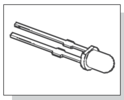
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inch	*to*	mm	inch x 25.4
mm	*to*	inch	mm ÷ 25.4
inch	*to*	cm	inch x 2.54
cm	*to*	inch	cm x .3937
feet	*to*	meters	foot x .3048
meters	*to*	feet	meter x 3.28084
ounce	*to*	grams	oz. x 28.349
pounds	*to*	kilograms	lb. x .4536
µf	*to*	pf	.1µf = 100,000pf
µf	*to*	nf	.1µf = 100nf
pf	*to*	nf	100,000pf = 100nf
nf	*to*	µf	100nf = .1µf
celsius	*to*	farhenheit	c x 1.8 + 32
farhenheit	*to*	celsius	f – 32 ÷ 1.8

VA = volt x amps
watt = volt x amps

MAIL/FAX ORDER FORM

#T013

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701 Brooks Ave. South
P.O. Box 677
Thief River Falls, MN 56701-0677

	No. of Pages:
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Co.: *Digi-Key Corporation*	**Co.:**
Dept.: *Order Department*	**Phone No:**
Fax No: *218-681-3380*	**Fax No:**

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Card Number: ☐☐☐☐-☐☐☐☐-☐☐☐☐-☐☐☐☐

☐ MC ☐ VISA
☐ AmEx ☐ Discover

Expiration Date ☐☐ ☐☐ **Mo.** **Yr.**

Security Code *(See back of card.)* ☐☐☐☐

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Credit Card Holder's Name (Please Print Clearly)

☐ **Personal Order** ☐ **Company Order** **(Please Check One)**

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Customer Name ______________________

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Shipping Address ______________________ **Apartment/Suite** ______________

City ______________________ **State** __________ **Zip** __________

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	Quantity	Digi-Key Part No.	Description (brief)	Price/Unit	Total Price
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Ship Via: ______________________

Are substitutions acceptable?

☐ Yes ☐ No

Are backorders acceptable?

☐ Yes ☐ No

Backordered for a period of ______ days.

Backorder shipping method: ____________

Confirmation required?

☐ Yes ☐ No

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5. International orders
   (excluding Canada)
   add $6.00 . . . . $__________
6. Total enclosed . . . . $__________
   (Total of all lines) (U.S. Dollars)

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❑ By Internet: www.digikey.com

Order online 24 hours a day, 7 days a week. Orders received after normal business hours are promptly processed the next business day. Simply click “Online Ordering” from the home page at the website address above.

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Digi-Key Corporation
701 Brooks Avenue South
P.O. Box 677
Thief River Falls, MN 56701-0677

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Several convenient payment options are available: Check, money order, MasterCard, VISA, American Express, Discover, C.O.D. and we also extend credit to qualified institutions and companies.

A credit application can be obtained by calling 1-800-344-4539 and talking to any sales representative. When opening an account with us, please allow sufficient time to complete the approval process. To avoid delay in your initial order you may want to include a check or authorization for C.O.D.

We are sorry, but we are unable to process C.O.D. orders to Canadian addresses.

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  — All USPS Options (Express Mail, 1 day delay).
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  — All USPS Options including Next-Day Delivery.
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  — All UPS 2nd/3rd Day, Surface Delivery Options.

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FOB point is Thief River Falls, MN.

When check or money order accompanies your order, Digi-Key pays all shipping and insurance (our choice for method of shipping) to all addresses in the U.S.A. and Canada, unless such charges exceed 10% on orders of $200 or less, or 5% on orders greater than $200. Digi-Key will notify you prior to shipment if these conditions exist.

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Any shipping charges billed to a customer account or consignee billing, which are disputed, will be billed back to the customer by Digi-Key.

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A friendly, competent staff of Customer Service Representatives is available from 7:30a.m. to 11:00p.m. Central Time to assist you. Please have your sales order or invoice number available when you call.

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Only Minnesota residents need to remit 6.5% sales tax. Digi-Key is not able to remit sales tax to states other than Minnesota.

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- *Orders paid by check, money order or credit card:*
  Items not available for immediate shipment will be shipped as they become available. Items not available at the end of 30 days will be cancelled and refunded or credited. The number of backorder days may be extended beyond 30 days with your approval. If a refund check is issued, the cancelled item can be re-entered without a handling charge if the check and cancellation notice are returned to us.

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  Items not available for immediate shipment will be shipped as they become available. Items not available at the end of 90 days will be cancelled. The number of backorder days may be extended beyond 90 days with your approval.

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Digi-Key will gladly accept merchandise returns and will replace the product or refund your money at your option.

In order to facilitate our return processing:

- Please contact a Customer Service Representative to obtain a return authorization number.
- All returns should be made within 30 days of date of invoice and be accompanied by the original invoice number and a brief explanation of the reason for the return.
- Return freight charge must be prepaid. Sorry, COD returns cannot be accepted.
- Return merchandise in original packaging and in resalable condition.
- Please note that parts returned due to customer error may be subject to a restocking charge and that "Not-in-Catalog Items" are not returnable.
- Defective merchandise may be returned within 90 days of date of invoice and need not be in original packaging.

This return policy may be altered for special circumstances.

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If a check you give us as payment is dishonored for any reason by the bank or other institution on which it is drawn, you agree to pay us $20.00 as a service charge (if the check cannot be redeposited) pursuant to Minnesota Statutes § 332.50. In addition, you agree to pay any other reasonable charges imposed by any check verification company or collection agency that we may use for collection.

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If you receive merchandise that has been damaged in transit it is important to keep the shipping carton, packing material and parts intact. Please contact Digi-Key Customer Service to initiate a claim.

☐ Prices/Quantities:

Prices are subject to change without notice and quantities may be limited.

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This warranty does not apply to products which have been subject to misuse (including static discharge), neglect, accident, or modification, or which have been soldered or altered during assembly and are not capable of being tested.

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Products sold by Digi-Key are not authorized for use as critical components in life support devices or systems. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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If you receive more than one catalog with the same name and address, please send the labels to Digi-Key and pass the catalog along to a friend.

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All anti-static packing peanuts used by Digi-Key contain **NO** CFC's and are biodegradable.

☐ ISO 9002 Certified

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VISA

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DISCOVER

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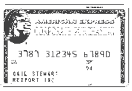

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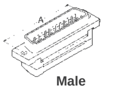
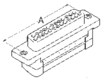
A

D-Subminiature Connectors


Male


Female

Material and Finish: Plastic Shell: Housing, Cover & Cable Stabilizer — 94V-0 rated thermoplastic, black **Metal Shell: Front Shell —** Steel, tin plated **Housing, Cover & Cable Stabilizer —** 94V-0 rated thermoplastic, black **Contacts —** Phosphor bronze, duplex plated 30µ" gold on mating end, tin-lead on termination end, with entire contact nickel underplated **Threaded Inserts —** Brass, unplated **Mounting Holes: Standard —** .120" (3.05mm) Dia. • Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476

• Certified by Canadian Standards Assoc., File No. LR 46568

No. of Contacts	Contact Finish	Dim. A In. (mm)	Digi-Key Part No.	Pricing 1	Pricing 10	AMP Part No.
Male D-Sub Conn., Plastic Shell						
9	Gold	.984 (24.99)	AMS09G-ND	6.14	29.47	747321-4
15	Gold	1.312 (33.32)	AMS15G-ND	7.15	34.31	747321-3
25	Gold	1.852 (47.04)	AMS25G-ND	8.92	42.79	747321-2
37	Gold	2.500 (63.50)	AMS37G-ND	12.20	58.54	747321-1
Male D-Sub Conn., Metal Shell, w/Threaded Inserts						
9	Gold	.984 (24.99)	AML09K-ND	8.33	39.97	747043-4
15	Gold	1.312 (33.32)	AML15K-ND	9.34	44.81	747043-3
25	Gold	1.852 (47.04)	AML25K-ND	11.19	53.69	747043-2
37	Gold	2.500 (63.50)	AML37K-ND	14.30	68.63	747043-1
Female D-Sub Conn., Plastic Shell						
9	Gold	.984 (24.99)	AFS09G-ND	6.14	29.47	747318-4
15	Gold	1.312 (33.32)	AFS15G-ND	7.15	34.31	747318-3
25	Gold	1.852 (47.04)	AFS25G-ND	8.92	42.79	747318-2
37	Gold	2.500 (63.50)	AFS37G-ND	12.20	58.54	747318-1
Female D-Sub Conn., Metal Shell, w/Threaded Inserts						
9	Gold	.984 (24.99)	AFL09K-ND	8.33	39.97	747052-4
15	Gold	1.312 (33.32)	AFL15K-ND	9.34	44.81	747052-3
25	Gold	1.852 (47.04)	AFL25K-ND	11.19	53.69	747052-2
37	Gold	2.500 (63.50)	AFL37K-ND	14.30	68.63	747052-1
Male D-Sub Conn., Metal Shell						
9	Gold	.984 (24.99)	AMR09G-ND	6.64	31.89	747306-4
15	Gold	1.312 (33.32)	AMR15G-ND	7.57	36.33	747306-3
25	Gold	1.852 (47.04)	AMR25G-ND	9.42	45.21	747306-2
37	Gold	2.500 (63.50)	AMR37G-ND	12.62	60.55	747306-1
50	Gold	2.406 (61.11)	AMR50G-ND	20.09	163.59	746790-1
Male D-Sub Conn., Plastic Shell, w/Threaded Inserts						
9	Gold	.984 (24.99)	AMV09K-ND	7.91	37.95	747053-4
15	Gold	1.312 (33.32)	AMV15K-ND	8.92	42.79	747053-3
25	Gold	1.852 (47.04)	AMV25K-ND	10.68	51.27	747053-2
37	Gold	2.500 (63.50)	AMV37K-ND	13.88	66.61	747053-1
Female D-Sub Conn., Metal Shell						
9	Gold	.984 (24.99)	AFR09G-ND	6.64	31.89	747303-4
15	Gold	1.312 (33.32)	AFR15G-ND	7.57	36.33	747303-3
25	Gold	1.852 (47.04)	AFR25G-ND	9.42	45.21	747303-2
37	Gold	2.500 (63.50)	AFR37G-ND	12.62	60.55	747303-1
50	Gold	2.406 (61.11)	AFR50G-ND	22.93	186.68	746789-1
Female D-Sub Conn., Plastic Shell, w/Threaded Inserts						
9	Gold	.984 (24.99)	AFV09K-ND	7.91	37.95	747051-4
15	Gold	1.312 (33.32)	AFV15K-ND	8.92	42.79	747051-3
25	Gold	1.852 (47.04)	AFV25K-ND	10.68	51.27	747051-2
37	Gold	2.500 (63.50)	AFV37K-ND	13.88	66.61	747051-1
Cable Strain Relief/Stabilizer						
9	—	—	ADSR09-ND	.30	2.40	747275-4
15	—	—	ADSR15-ND	.34	2.70	747275-3
25	—	—	ADSR25-ND	.38	3.00	747275-2
37	—	—	ADSR37-ND	.46	3.60	747275-1
50	—	—	ADSR50-ND	.95	7.51	746785-1

A□□□□-□□□□□-ND

Style 7□□ (D-Sub)

Conn. Finish
G is ≤15µ Gold
A is >15µ Gold
T=Tin

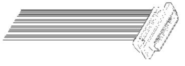
No. Of Contacts

Length
(Use "Feet" only.)

Ribbon Cable
M=Multi-color
G=Gray

D-Subminiature Cable Assemblies

Single Ended — Male

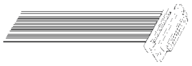


* MC = Multi-Color, GR = Gray

No. of Con-tacts	Conn. Finish	Length Feet (Meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
9	Gold	6 (1.83)	MC	A7MXG-0906M-ND	8.53	69.44
	Gold	6 (1.83)	GR	A7MXG-0906G-ND	8.27	67.30
	Gold	10 (3.05)	MC	A7MXG-0910M-ND	9.50	77.39
	Gold	10 (3.05)	GR	A7MXG-0910G-ND	9.07	73.83
15	Gold	6 (1.83)	MC	A7MXG-1506M-ND	10.78	87.80
	Gold	6 (1.83)	GR	A7MXG-1506G-ND	9.96	81.14
	Gold	10 (3.05)	MC	A7MXG-1510M-ND	12.53	102.05
	Gold	10 (3.05)	GR	A7MXG-1510G-ND	11.17	90.94
25	Gold	6 (1.83)	MC	A7MXG-2506M-ND	14.24	115.96
	Gold	6 (1.83)	GR	A7MXG-2506G-ND	13.08	106.51
	Gold	10 (3.05)	MC	A7MXG-2510M-ND	16.99	138.33
	Gold	10 (3.05)	GR	A7MXG-2510G-ND	15.05	122.58
37	Gold	6 (1.83)	MC	A7MXG-3706M-ND	19.73	160.67
	Gold	6 (1.83)	GR	A7MXG-3706G-ND	18.24	148.53
	Gold	10 (3.05)	MC	A7MXG-3710M-ND	23.75	193.42
	Gold	10 (3.05)	GR	A7MXG-3710G-ND	21.27	173.19

Also available in the following configuration:
A7PX□-□□□□□-ND – With Metal Shell Connector.
Call for complete part number and pricing!

Single Ended — Female

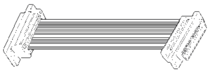


* MC = Multi-Color
GR = Gray

No. of Con-tacts	Conn. Finish	Length Feet (Meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
9	Gold	6 (1.83)	MC	A7FXG-0906M-ND	8.56	69.72
	Gold	6 (1.83)	GR	A7FXG-0906G-ND	8.30	67.58
	Gold	10 (3.05)	MC	A7FXG-0910M-ND	9.54	77.67
	Gold	10 (3.05)	GR	A7FXG-0910G-ND	9.10	74.11
15	Gold	6 (1.83)	MC	A7FXG-1506M-ND	11.65	94.88
	Gold	6 (1.83)	GR	A7FXG-1506G-ND	10.83	88.21
	Gold	10 (3.05)	MC	A7FXG-1510M-ND	13.40	109.13
	Gold	10 (3.05)	GR	A7FXG-1510G-ND	12.04	98.01
25	Gold	6 (1.83)	MC	A7FXG-2506M-ND	14.82	120.70
	Gold	6 (1.83)	GR	A7FXG-2506G-ND	13.66	111.26
	Gold	10 (3.05)	MC	A7FXG-2510M-ND	17.57	143.07
	Gold	10 (3.05)	GR	A7FXG-2510G-ND	15.64	127.34
37	Gold	6 (1.83)	MC	A7FXG-3706M-ND	21.21	172.71
	Gold	6 (1.83)	GR	A7FXG-3706G-ND	19.72	160.57
	Gold	10 (3.05)	MC	A7FXG-3710M-ND	25.23	205.46
	Gold	10 (3.05)	GR	A7FXG-3710G-ND	22.75	185.22

Also available in the following configuration:
A7SX□-□□□□□-ND – With Metal Shell Connector.
Call for complete part number and pricing!

Male to Male

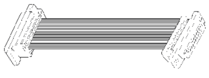


* MC = Multi-Color
GR = Gray

No. of Con-tacts	Conn. Finish	Length Feet (Meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
9	Gold	6 (1.83)	MC	A7MMG-0906M-ND	15.59	126.95
	Gold	6 (1.83)	GR	A7MMG-0906G-ND	15.33	124.82
	Gold	10 (3.05)	MC	A7MMG-0910M-ND	16.57	134.91
	Gold	10 (3.05)	GR	A7MMG-0910G-ND	16.13	131.34
15	Gold	6 (1.83)	MC	A7MMG-1506M-ND	18.94	154.23
	Gold	6 (1.83)	GR	A7MMG-1506G-ND	18.12	147.56
	Gold	10 (3.05)	MC	A7MMG-1510M-ND	20.69	168.48
	Gold	10 (3.05)	GR	A7MMG-1510G-ND	19.33	157.37
25	Gold	6 (1.83)	MC	A7MMG-2506M-ND	24.36	198.35
	Gold	6 (1.83)	GR	A7MMG-2506G-ND	23.20	188.91
	Gold	10 (3.05)	MC	A7MMG-2510M-ND	27.11	220.73
	Gold	10 (3.05)	GR	A7MMG-2510G-ND	25.17	204.98
37	Gold	6 (1.83)	MC	A7MMG-3706M-ND	35.81	291.56
	Gold	6 (1.83)	GR	A7MMG-3706G-ND	21.44	174.59
	Gold	10 (3.05)	MC	A7MMG-3710M-ND	37.45	304.98
	Gold	10 (3.05)	GR	A7MMG-3710G-ND	34.97	284.74

Also available in the following configuration:
A7PP□-□□□□□-ND – With Metal Shell Connector.
Call for complete part number and pricing!

Female to Female

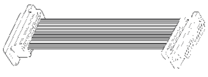


* MC = Multi-Color
GR = Gray

No. of Con-tacts	Conn. Finish	Length Feet (Meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
9	Gold	6 (1.83)	MC	A7FFG-0906M-ND	15.66	127.51
	Gold	6 (1.83)	GR	A7FFG-0906G-ND	15.40	125.37
	Gold	10 (3.05)	MC	A7FFG-0910M-ND	15.48	126.06
	Gold	10 (3.05)	GR	A7FFG-0910G-ND	16.20	131.90
15	Gold	6 (1.83)	MC	A7FFG-1506M-ND	20.68	168.38
	Gold	6 (1.83)	GR	A7FFG-1506G-ND	19.86	161.71
	Gold	10 (3.05)	MC	A7FFG-1510M-ND	22.43	182.63
	Gold	10 (3.05)	GR	A7FFG-1510G-ND	21.06	171.51
25	Gold	6 (1.83)	MC	A7FFG-2506M-ND	25.53	207.85
	Gold	6 (1.83)	GR	A7FFG-2506G-ND	24.36	198.39
	Gold	10 (3.05)	MC	A7FFG-2510M-ND	28.27	230.22
	Gold	10 (3.05)	GR	A7FFG-2510G-ND	26.34	214.46
37	Gold	6 (1.83)	MC	A7FFG-3706M-ND	36.39	296.31
	Gold	6 (1.83)	GR	A7FFG-3706G-ND	34.90	284.17
	Gold	10 (3.05)	MC	A7FFG-3710M-ND	40.41	329.06
	Gold	10 (3.05)	GR	A7FFG-3710G-ND	37.93	308.83

Also available in the following configuration:
A7SS□-□□□□□-ND – With Metal Shell Connector.
Call for complete part number and pricing!

Male to Female

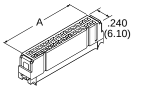


* MC = Multi-Color
GR = Gray

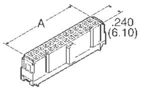
No. of Con-tacts	Conn. Finish	Length Feet (Meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
9	Gold	6 (1.83)	MC	A7MFG-0906M-ND	15.62	127.23
	Gold	6 (1.83)	GR	A7MFG-0906G-ND	15.36	125.09
	Gold	10 (3.05)	MC	A7MFG-0910M-ND	16.60	135.18
	Gold	10 (3.05)	GR	A7MFG-0910G-ND	16.16	131.62
15	Gold	6 (1.83)	MC	A7MFG-1506M-ND	19.81	161.31
	Gold	6 (1.83)	GR	A7MFG-1506G-ND	18.99	154.64
	Gold	10 (3.05)	MC	A7MFG-1510M-ND	21.56	175.56
	Gold	10 (3.05)	GR	A7MFG-1510G-ND	20.20	164.45
25	Gold	6 (1.83)	MC	A7MFG-2506M-ND	23.78	193.65
	Gold	6 (1.83)	GR	A7MFG-2506G-ND	23.75	193.40
	Gold	10 (3.05)	MC	A7MFG-2510M-ND	27.69	225.47
	Gold	10 (3.05)	GR	A7MFG-2510G-ND	25.76	209.72
37	Gold	6 (1.83)	MC	A7MFG-3706M-ND	34.91	284.27
	Gold	6 (1.83)	GR	A7MFG-3706G-ND	33.42	272.13
	Gold	10 (3.05)	MC	A7MFG-3710M-ND	38.93	317.02
	Gold	10 (3.05)	GR	A7MFG-3710G-ND	36.45	296.78

Also available in the following configuration:
A7PS□-□□□□□-ND – With Metal Shell Connector.
Call for complete part number and pricing!

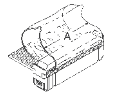
Socket Connectors



Socket Connector



Socket Connector with Central Polarizing Key



Permanent Pull-Tabs To Be Used With Strain Relief Version

Material and Finish:

- **Housing, Cover & Strain Relief —** Black thermoplastic, 94V-0 rated
- **Gold Finish: Contacts —** Phosphor bronze, duplex 15µ" gold or 30µ" gold on post/pin mating end, 100µ"-200µ" bright tin-lead on termination end, with entire contact underplated 50µ" nickel

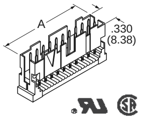
No. of Contacts	Contact Finish	Dim. A In. (mm)	Digi-Key Part No.	Pricing 1	Pricing 10	AMP Part No.
Socket Connector Only (Strain Reliefs Sold Separately)						
10	15µ" AU	.68 (17.27)	ASC10G-ND	1.11	5.24	499997-1
14	15µ" AU	.88 (22.35)	ASC14G-ND	1.62	7.66	499997-2
16	15µ" AU	.98 (24.89)	ASC16G-ND	1.70	8.07	499997-3
20	15µ" AU	1.18 (29.97)	ASC20G-ND	1.79	8.47	499997-4
24	15µ" AU	1.38 (35.05)	ASC24G-ND	2.21	10.49	499997-5
26	15µ" AU	1.48 (37.59)	ASC26G-ND	2.21	10.49	499997-6
30	15µ" AU	1.68 (42.67)	ASC30G-ND	2.47	11.70	499997-7
34	15µ" AU	1.88 (47.75)	ASC34G-ND	2.47	11.70	499997-8
40	15µ" AU	2.18 (55.37)	ASC40G-ND	2.72	12.91	499997-9
50	15µ" AU	2.68 (68.07)	ASC50G-ND	3.32	15.73	1-499997-0
60	15µ" AU	3.18 (80.77)	ASC60G-ND	4.25	20.17	1-499997-1
64	15µ" AU	3.38 (85.85)	ASC64G-ND	4.68	22.18	1-499997-2
10	30µ" AU	.680 (17.27)	ASN10A-ND	1.36	6.45	746290-1
14	30µ" AU	.880 (22.35)	ASN14A-ND	1.79	8.47	746290-2
16	30µ" AU	.980 (24.89)	ASN16A-ND	1.87	8.87	746290-3
20	30µ" AU	1.180 (29.97)	ASN20A-ND	1.96	9.28	746290-4
24	30µ"AU	1.380 (35.05)	ASN24A-ND	2.21	10.49	746290-5
26	30µ" AU	1.480 (37.59)	ASN26A-ND	2.21	10.49	746290-6
30	30µ" AU	1.680 (42.67)	ASN30A-ND	2.55	12.10	746290-7
34	30µ" AU	1.880 (47.75)	ASN34A-ND	2.81	13.31	746290-8
40	30µ" AU	2.180 (55.37)	ASN40A-ND	3.32	15.73	746290-9
50	30µ" AU	2.670 (68.07)	ASN50A-ND	4.00	18.96	1-746290-0
60	30µ" AU	3.180 (80.77)	ASN60A-ND	4.93	23.39	1-746290-1
64	30µ" AU	3.380 (85.85)	ASN64A-ND	5.44	25.81	1-746290-2
Socket Connector With Polarizing Key						
10	15µ" AU	.68 (17.27)	AKC10G-ND	1.11	5.24	746285-1
14	15µ" AU	.88 (22.35)	AKC14G-ND	1.62	7.66	746285-2
16	15µ" AU	.98 (24.89)	AKC16G-ND	1.70	8.07	746285-3
20	15µ" AU	1.18 (29.97)	AKC20G-ND	1.79	8.47	746285-4
24	15µ" AU	1.38 (35.05)	AKC24G-ND	2.21	10.49	746285-5
26	15µ" AU	1.48 (37.59)	AKC26G-ND	2.21	10.49	746285-6
30	15µ" AU	1.68 (42.67)	AKC30G-ND	2.47	11.70	746285-7
34	15µ" AU	1.88 (47.75)	AKC34G-ND	2.47	11.70	746285-8
40	15µ" AU	2.18 (55.37)	AKC40G-ND	2.72	12.91	746285-9
44	15µ" AU	2.38 (60.45)	AKC44G-ND	3.23	15.33	1-746285-3
50	15µ" AU	2.68 (68.07)	AKC50G-ND	3.32	15.73	1-746285-0
60	15µ" AU	3.18 (80.77)	AKC60G-ND	4.25	20.17	1-746285-1
64	15µ" AU	3.38 (85.85)	AKC64G-ND	4.68	22.18	1-746285-2
10	30µ" AU	.680 (17.27)	AKN10A-ND	1.36	6.45	746288-1
14	30µ" AU	.880 (22.35)	AKN14A-ND	1.79	8.47	746288-2
16	30µ" AU	.980 (24.89)	AKN16A-ND	1.87	8.87	746288-3
20	30µ" AU	1.180 (29.97)	AKN20A-ND	1.96	9.28	746288-4
24	30µ" AU	1.380 (35.05)	AKN24A-ND	2.21	10.49	746288-5
26	30µ" AU	1.480 (37.59)	AKN26A-ND	2.21	10.49	746288-6
30	30µ" AU	1.680 (42.67)	AKN30A-ND	2.81	13.31	746288-7
34	30µ" AU	1.880 (47.75)	AKN34A-ND	2.81	13.31	746288-8
40	30µ" AU	2.180 (55.37)	AKN40A-ND	3.32	15.73	746288-9
44	30µ" AU	2.380 (60.45)	AKN44A-ND	3.91	18.55	1-746288-3
50	30µ" AU	2.670 (68.07)	AKN50A-ND	4.00	18.96	1-746288-0
60	30µ" AU	3.180 (80.77)	AKN60A-ND	4.93	23.39	1-746288-1
64	30µ" AU	3.380 (85.85)	AKN64A-ND	5.44	25.81	1-746288-2
Strain Relief For Socket Connectors						
10	—	.68 (17.27)	ASSR10-ND	.19	1.72	499252-5
14	—	.88 (22.35)	ASSR14-ND	.19	1.72	499252-9
16	—	.98 (24.89)	ASSR16-ND	.19	1.72	499252-8
20	—	1.18 (29.97)	ASSR20-ND	.19	1.72	499252-2
24	—	1.38 (35.05)	ASSR24-ND	.23	2.06	1-499252-0
26	—	1.48 (37.59)	ASSR26-ND	.23	2.06	499252-3
30	—	1.68 (42.67)	ASSR30-ND	.23	2.06	1-499252-2
34	—	1.88 (47.75)	ASSR34-ND	.23	2.06	499252-6
40	—	2.18 (55.37)	ASSR40-ND	.27	2.41	499252-1
44	—	2.38 (60.45)	ASSR44-ND	.31	2.75	1-499252-1
50	—	2.68 (68.07)	ASSR50-ND	.31	2.75	499252-4
60	—	3.18 (80.77)	ASSR60-ND	.35	3.09	499252-7
64	—	3.38 (85.85)	ASSR64-ND	.42	3.78	1-499252-3
Permanent Pull Tabs (For Conn. w/Strain Reliefs)						
10	—	.44 (11.18)	ASPT10-ND	.13	1.17	88450-2
14	—	.64 (16.26)	ASPT14-ND	.14	1.25	88450-3
16	—	.74 (18.80)	ASPT16-ND	.14	1.28	88450-4
20	—	.88 (22.35)	ASPT20-ND	.16	1.41	88450-5
24	—	1.08 (27.43)	ASPT24-ND	.17	1.54	88450-6
26	—	1.18 (29.97)	ASPT26-ND	.18	1.61	88450-7
30	—	1.38 (35.05)	ASPT30-ND	.19	1.74	1-88450-2
34	—	1.58 (40.13)	ASPT34-ND	.21	1.87	88450-8
40	—	1.82 (46.23)	ASPT40-ND	.23	2.07	88450-9
50	—	2.32 (58.93)	ASPT50-ND	.27	2.40	1-88450-0
60	—	2.80 (71.12)	ASPT60-ND	.31	2.73	1-88450-1
Continous strip no positions		120.0 (3048.0)	ASPT01-ND	18.59	166.45	88450-1
Keying Plug For Socket Connectors						
Keying Plugs			ASKP01-ND	.30	2.67	499712-1
Keying Plugs 10/Comb			ASKP02-ND	.93	8.38	104072-1

(Continued)

Socket Connectors *(Cont.)*

No. of Contacts	Contact Finish	Dim. A In. (mm)	Digi-Key Part No.	Pricing 1	Pricing 10	AMP Part No.
Snap-In Polarizer						
For Pin Connectors, Universal Pin, Pinless Headers and Low Profile Pin Headers			A24195-ND	1.12	10.08	499991-2
Socket Connector Only (Strain Reliefs Sold Separately)						
16	30µ" AU	.980 (24.89)	ASC16A-ND	1.44	11.69	111634-3
60	30µ" AU	3.180 (80.77)	ASC60A-ND	3.40	27.65	1-111634-1
Socket Connector With Polarizing Key						
14	30µ" AU	.880 (22.35)	AKC14A-ND	1.33	10.83	111633-2
Strain Relief						
14	—	.880 (22.35)	ASSU14-ND	.20	1.78	111564-9
16	—	.980 (24.89)	ASSU16-ND	.20	1.84	111564-8
60	—	3.180 (80.77)	ASSU60-ND	.37	3.36	111564-7
64	—	3.380 (85.85)	ASSU64-ND	.41	3.71	1-111564-3

Pin Connectors

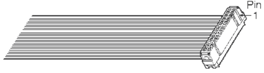


Material and Finish: Housing & Cover – Black thermoplastic, 94V-0 rated **Electrical Characteristics –** Contact current rating: 1 amp. **Operating temp:** -55°C to +105°C **Dielectric Withstanding Voltage:** receptacles- 1000 volts, RMS, pin connectors- 500 volts, RMS. **Contacts –** Phosphor bronze, duplex plated .000015 gold pin end; .000100- .000200 bright tin-lead on cable termination end; entire contact underplated with .000050 nickel • Recognized under Component Program of Underwriters Laboratories Inc. File No. E28476 • Certified by Canadian Standards Association File No. LR16455

No. of Contacts	Contact Finish	Dim. A In. (mm)	Digi-Key Part No.	Pricing 1	Pricing 10	AMP Part No.
Pin Connectors (Strain Reliefs Sold Separately)						
16	Gold	1.172 (29.77)	APK16G-ND	8.26	67.26	111445-3
34	Gold	2.072 (52.63)	APK34G-ND	10.08	82.08	111445-8
40	Gold	2.372 (60.25)	APK40G-ND	10.64	86.64	111445-9
60	Gold	3.372 (85.65)	APK60G-ND	14.00	114.00	1-111445-2
Strain Reliefs For Pin Connectors						
26	—	—	APSR26-ND	2.47	22.20	111547-6

Termination Jumpers

Socket Connector — Single Ended

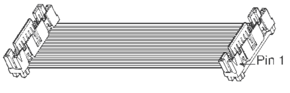


* MC = Multi-Color
GR = Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
10	Gold	36 (91.44)	MC	A1AXG-1036M-ND	1.92	15.67
	Gold	36 (91.44)	GR	A1AXG-1036G-ND	1.67	13.58
14	Gold	36 (91.44)	MC	A1AXG-1436M-ND	2.77	22.52
	Gold	36 (91.44)	GR	A1AXG-1436G-ND	2.41	19.65
16	Gold	36 (91.44)	MC	A1AXG-1636M-ND	3.01	24.54
	Gold	36 (91.44)	GR	A1AXG-1636G-ND	2.60	21.20
20	Gold	36 (91.44)	MC	A1AXG-2036M-ND	3.57	29.09
	Gold	36 (91.44)	GR	A1AXG-2036G-ND	3.06	24.94
26	Gold	36 (91.44)	MC	A1AXG-2636M-ND	4.35	35.38
	Gold	36 (91.44)	GR	A1AXG-2636G-ND	3.69	30.06
34	Gold	36 (91.44)	MC	A1AXG-3436M-ND	5.25	42.74
	Gold	36 (91.44)	GR	A1AXG-3436G-ND	4.40	35.81
40	Gold	36 (91.44)	MC	A1AXG-4036M-ND	6.01	48.92
	Gold	36 (91.44)	GR	A1AXG-4036G-ND	4.99	40.65
50	Gold	36 (91.44)	MC	A1AXG-5036M-ND	8.09	65.88
	Gold	36 (91.44)	GR	A1AXG-5036G-ND	6.81	55.49
60	Gold	36 (91.44)	MC	A1AXG-6036M-ND	10.01	81.52
	Gold	36 (91.44)	GR	A1AXG-6036G-ND	8.50	69.19

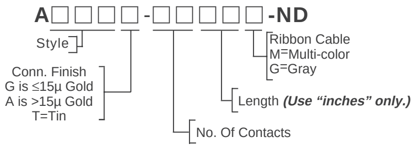
Also available in the following versions:
A1BXG-□□□□□-ND — Socket Connector with Strain Relief
A1CXG-□□□□□-ND — Socket Connector with Central Polarizing Key
A1DXG-□□□□□-ND — Socket Connector w/Strain Relief & Central Polarizing Key
Call for complete part number and pricing!

Pin Connector to Pin Connector

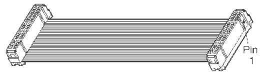


* MC = Multi-Color
GR = Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
10	Gold	6 (15.24)	MC	A3KKG-1006M-ND	10.80	87.98
	Gold	6 (15.24)	GR	A3KKG-1006G-ND	10.76	87.63
	Gold	18 (45.72)	MC	A3KKG-1018M-ND	11.08	90.20
	Gold	18 (45.72)	GR	A3KKG-1018G-ND	10.95	89.16
	Gold	36 (91.44)	MC	A3KKG-1036M-ND	11.49	93.54
	Gold	36 (91.44)	GR	A3KKG-1036G-ND	11.23	91.44
14	Gold	6 (15.24)	MC	A3KKG-1406M-ND	16.22	132.09
	Gold	6 (15.24)	GR	A3KKG-1406G-ND	16.16	131.61
	Gold	18 (45.72)	MC	A3KKG-1418M-ND	16.60	135.21
	Gold	18 (45.72)	GR	A3KKG-1418G-ND	16.43	133.78
	Gold	36 (91.44)	MC	A3KKG-1436M-ND	17.18	139.89
	Gold	36 (91.44)	GR	A3KKG-1436G-ND	16.83	137.03
16	Gold	6 (15.24)	MC	A3KKG-1606M-ND	16.74	136.30
	Gold	6 (15.24)	GR	A3KKG-1606G-ND	16.67	135.75
	Gold	18 (45.72)	MC	A3KKG-1618M-ND	17.18	139.86
	Gold	18 (45.72)	GR	A3KKG-1618G-ND	16.97	138.20
	Gold	36 (91.44)	MC	A3KKG-1636M-ND	17.83	145.21
	Gold	36 (91.44)	GR	A3KKG-1636G-ND	17.42	141.87
20	Gold	6 (15.24)	MC	A3KKG-2006M-ND	17.63	143.59
	Gold	6 (15.24)	GR	A3KKG-2006G-ND	17.55	142.90
	Gold	18 (45.72)	MC	A3KKG-2018M-ND	18.18	148.05
	Gold	18 (45.72)	GR	A3KKG-2018G-ND	17.93	145.98
	Gold	36 (91.44)	MC	A3KKG-2036M-ND	19.00	154.74
	Gold	36 (91.44)	GR	A3KKG-2036G-ND	18.49	150.59
26	Gold	6 (15.24)	MC	A3KKG-2606M-ND	19.68	160.22
	Gold	6 (15.24)	GR	A3KKG-2606G-ND	19.57	159.33
	Gold	18 (45.72)	MC	A3KKG-2618M-ND	20.39	166.01
	Gold	18 (45.72)	GR	A3KKG-2618G-ND	20.06	163.35
	Gold	36 (91.44)	MC	A3KKG-2636M-ND	21.45	174.70
	Gold	36 (91.44)	GR	A3KKG-2636G-ND	20.80	169.38
34	Gold	6 (15.24)	MC	A3KKG-3406M-ND	20.62	167.94
	Gold	6 (15.24)	GR	A3KKG-3406G-ND	20.48	166.78
	Gold	18 (45.72)	MC	A3KKG-3418M-ND	21.55	175.49
	Gold	18 (45.72)	GR	A3KKG-3418G-ND	21.13	172.03
	Gold	36 (91.44)	MC	A3KKG-3436M-ND	22.94	186.82
	Gold	36 (91.44)	GR	A3KKG-3436G-ND	22.09	179.89
40	Gold	6 (15.24)	MC	A3KKG-4006M-ND	21.83	177.74
	Gold	6 (15.24)	GR	A3KKG-4006G-ND	21.66	176.36
	Gold	18 (45.72)	MC	A3KKG-4018M-ND	22.92	186.66
	Gold	18 (45.72)	GR	A3KKG-4018G-ND	22.42	182.52
	Gold	36 (91.44)	MC	A3KKG-4036M-ND	24.57	200.04
	Gold	36 (91.44)	GR	A3KKG-4036G-ND	23.55	191.77
50	Gold	6 (15.24)	MC	A3KKG-5006M-ND	24.65	200.75
	Gold	6 (15.24)	GR	A3KKG-5006G-ND	24.44	199.02
	Gold	18 (45.72)	MC	A3KKG-5018M-ND	26.02	211.90
	Gold	36 (91.44)	MC	A3KKG-5036M-ND	28.08	228.64
	Gold	36 (91.44)	GR	A3KKG-5036G-ND	26.80	218.25
60	Gold	6 (15.24)	MC	A3KKG-6006M-ND	28.82	234.66
	Gold	6 (15.24)	GR	A3KKG-6006G-ND	28.57	232.61
	Gold	18 (45.72)	MC	A3KKG-6018M-ND	30.45	247.99
	Gold	18 (45.72)	GR	A3KKG-6018G-ND	29.70	241.82
	Gold	36 (91.44)	MC	A3KKG-6036M-ND	32.91	267.97
	Gold	36 (91.44)	GR	A3KKG-6036G-ND	31.39	255.64



Socket Connector to Socket Connector

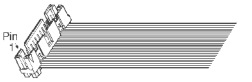


* MC = Multi-Color
GR = Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
10	Gold	6 (15.24)	MC	A3AAG-1006M-ND	2.35	19.12
	Gold	6 (15.24)	GR	A3AAG-1006G-ND	2.30	18.77
	Gold	18 (45.72)	MC	A3AAG-1018M-ND	2.62	21.34
	Gold	18 (45.72)	GR	A3AAG-1018G-ND	2.49	20.29
	Gold	36 (91.44)	MC	A3AAG-1036M-ND	3.03	24.67
	Gold	36 (91.44)	GR	A3AAG-1036G-ND	2.77	22.58
14	Gold	6 (15.24)	MC	A3AAG-1406M-ND	3.42	27.87
	Gold	6 (15.24)	GR	A3AAG-1406G-ND	3.36	27.40
	Gold	18 (45.72)	MC	A3AAG-1418M-ND	3.81	30.99
	Gold	18 (45.72)	GR	A3AAG-1418G-ND	3.63	29.56
	Gold	36 (91.44)	MC	A3AAG-1436M-ND	4.38	35.68
	Gold	36 (91.44)	GR	A3AAG-1436G-ND	4.11	33.49
16	Gold	6 (15.24)	MC	A3AAG-1606M-ND	3.62	29.48
	Gold	6 (15.24)	GR	A3AAG-1606G-ND	3.55	28.92
	Gold	18 (45.72)	MC	A3AAG-1618M-ND	4.06	33.04
	Gold	18 (45.72)	GR	A3AAG-1618G-ND	3.85	31.38
	Gold	36 (91.44)	MC	A3AAG-1636M-ND	4.71	38.39
	Gold	36 (91.44)	GR	A3AAG-1636G-ND	4.30	35.05
20	Gold	6 (15.24)	MC	A3AAG-2006M-ND	4.13	33.64
	Gold	6 (15.24)	GR	A3AAG-2006G-ND	4.05	32.95
	Gold	18 (45.72)	MC	A3AAG-2018M-ND	4.68	38.10
	Gold	18 (45.72)	GR	A3AAG-2018G-ND	4.42	36.03
	Gold	36 (91.44)	MC	A3AAG-2036M-ND	5.50	44.79
	Gold	36 (91.44)	GR	A3AAG-2036G-ND	4.99	40.64
26	Gold	6 (15.24)	MC	A3AAG-2606M-ND	4.78	38.90
	Gold	6 (15.24)	GR	A3AAG-2606G-ND	4.67	38.02
	Gold	18 (45.72)	MC	A3AAG-2618M-ND	5.49	44.70
	Gold	18 (45.72)	GR	A3AAG-2618G-ND	5.16	42.04
	Gold	36 (91.44)	MC	A3AAG-2636M-ND	6.56	53.39
	Gold	36 (91.44)	GR	A3AAG-2636G-ND	5.90	48.06
34	Gold	6 (15.24)	MC	A3AAG-3406M-ND	5.40	43.94
	Gold	6 (15.24)	GR	A3AAG-3406G-ND	5.25	42.78
	Gold	18 (45.72)	GR	A3AAG-3418G-ND	5.90	48.03
	Gold	36 (91.44)	MC	A3AAG-3436M-ND	7.71	62.82
	Gold	36 (91.44)	GR	A3AAG-3436G-ND	6.86	55.89
40	Gold	6 (15.24)	MC	A3AAG-4006M-ND	5.99	48.78
	Gold	6 (15.24)	GR	A3AAG-4006G-ND	5.82	47.40
	Gold	18 (45.72)	MC	A3AAG-4018M-ND	7.09	57.70
	Gold	18 (45.72)	GR	A3AAG-4018G-ND	6.96	56.69
	Gold	36 (91.44)	MC	A3AAG-4036M-ND	8.73	71.08
	Gold	36 (91.44)	GR	A3AAG-4036G-ND	7.71	62.81
50	Gold	6 (15.24)	MC	A3AAG-5006M-ND	8.83	71.91
	Gold	6 (15.24)	GR	A3AAG-5006G-ND	8.43	68.66
	Gold	18 (45.72)	MC	A3AAG-5018M-ND	10.02	81.55
	Gold	18 (45.72)	GR	A3AAG-5018G-ND	9.56	77.83
	Gold	36 (91.44)	MC	A3AAG-5036M-ND	12.07	98.29
	Gold	36 (91.44)	GR	A3AAG-5036G-ND	10.79	87.90
60	Gold	6 (15.24)	MC	A3AAG-6006M-ND	11.02	89.76
	Gold	6 (15.24)	GR	A3AAG-6006G-ND	10.77	87.70
	Gold	18 (45.72)	MC	A3AAG-6018M-ND	12.66	103.08
	Gold	18 (45.72)	GR	A3AAG-6018G-ND	11.90	96.91
	Gold	36 (91.44)	MC	A3AAG-6036M-ND	15.11	123.07
	Gold	36 (91.44)	GR	A3AAG-6036G-ND	13.60	110.73

Also available in the following versions:
A3BBG-□□□□□-ND — Socket Connector with Strain Relief.
A3CCG-□□□□□-ND — Socket Connector with Central Polarizing Key.
A3DDG-□□□□□-ND — Socket Connector w/Strain Relief & Central Polarizing Key.
Call for complete part number and pricing!

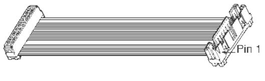
Pin Connector — Single Ended



* MC = Multi-Color
GR = Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
10	Gold	36 (91.44)	MC	A1KXG-1036M-ND	6.15	50.10
	Gold	36 (91.44)	GR	A1KXG-1036G-ND	5.90	48.01
14	Gold	36 (91.44)	MC	A1KXG-1436M-ND	9.16	74.63
	Gold	36 (91.44)	GR	A1KXG-1436G-ND	8.81	71.76
16	Gold	36 (91.44)	MC	A1KXG-1636M-ND	9.57	77.95
	Gold	36 (91.44)	GR	A1KXG-1636G-ND	9.16	74.61
20	Gold	36 (91.44)	MC	A1KXG-2036M-ND	10.32	84.06
	Gold	36 (91.44)	GR	A1KXG-2036G-ND	9.81	79.91
26	Gold	36 (91.44)	MC	A1KXG-2636M-ND	11.79	96.04
	Gold	36 (91.44)	GR	A1KXG-2636G-ND	11.14	90.72
34	Gold	36 (91.44)	MC	A1KXG-3436M-ND	12.86	104.74
	Gold	36 (91.44)	GR	A1KXG-3436G-ND	12.01	97.81
40	Gold	36 (91.44)	MC	A1KXG-4036M-ND	13.93	113.40
	Gold	36 (91.44)	GR	A1KXG-4036G-ND	12.91	105.13
50	Gold	36 (91.44)	MC	A1KXG-5036M-ND	16.09	131.06
60	Gold	36 (91.44)	MC	A1KXG-6036M-ND	18.91	153.97
	Gold	36 (91.44)	GR	A1KXG-6036G-ND	17.39	141.64

Socket Connector to Pin Connector



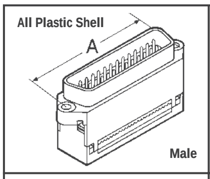
* MC = Multi-Color
GR = Gray

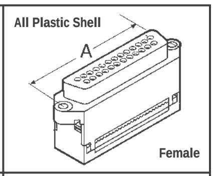
No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
10	Gold	6 (15.24)	MC	A3AKG-1006M-ND	6.58	53.55
	Gold	6 (15.24)	GR	A3AKG-1006G-ND	6.53	53.20
	Gold	18 (45.72)	MC	A3AKG-1018M-ND	6.85	55.77
	Gold	18 (45.72)	GR	A3AKG-1018G-ND	6.72	54.72
	Gold	36 (91.44)	MC	A3AKG-1036M-ND	7.26	59.11
	Gold	36 (91.44)	GR	A3AKG-1036G-ND	7.00	57.01
14	Gold	6 (15.24)	MC	A3AKG-1406M-ND	9.82	79.98
	Gold	6 (15.24)	GR	A3AKG-1406G-ND	9.76	79.50
	Gold	18 (45.72)	MC	A3AKG-1418M-ND	10.21	83.10
	Gold	18 (45.72)	GR	A3AKG-1418G-ND	10.03	81.67
	Gold	36 (91.44)	MC	A3AKG-1436M-ND	10.78	87.78
	Gold	36 (91.44)	GR	A3AKG-1436G-ND	10.43	84.92
16	Gold	6 (15.24)	MC	A3AKG-1606M-ND	10.18	82.89
	Gold	6 (15.24)	GR	A3AKG-1606G-ND	10.11	82.33
	Gold	18 (45.72)	MC	A3AKG-1618M-ND	10.62	86.45
	Gold	18 (45.72)	GR	A3AKG-1618G-ND	10.41	84.79
	Gold	36 (91.44)	MC	A3AKG-1636M-ND	11.27	91.80
	Gold	36 (91.44)	GR	A3AKG-1636G-ND	10.86	88.46
20	Gold	6 (15.24)	MC	A3AKG-2006M-ND	10.88	88.62
	Gold	6 (15.24)	GR	A3AKG-2006G-ND	10.80	87.92
	Gold	18 (45.72)	MC	A3AKG-2018M-ND	11.43	93.08
	Gold	18 (45.72)	GR	A3AKG-2018G-ND	11.18	91.00
	Gold	36 (91.44)	MC	A3AKG-2036M-ND	12.25	99.77
	Gold	36 (91.44)	GR	A3AKG-2036G-ND	11.74	95.62
26	Gold	6 (15.24)	MC	A3AKG-2606M-ND	12.23	99.56
	Gold	6 (15.24)	GR	A3AKG-2606G-ND	12.12	98.67
	Gold	18 (45.72)	MC	A3AKG-2618M-ND	12.94	105.35
	Gold	18 (45.72)	GR	A3AKG-2618G-ND	12.61	102.69
	Gold	36 (91.44)	MC	A3AKG-2636M-ND	14.01	114.04
	Gold	36 (91.44)	GR	A3AKG-2636G-ND	13.35	108.72
34	Gold	6 (15.24)	MC	A3AKG-3406M-ND	12.50	101.78
	Gold	6 (15.24)	GR	A3AKG-3406G-ND	12.87	104.78
	Gold	18 (45.72)	MC	A3AKG-3418M-ND	13.94	113.49
	Gold	18 (45.72)	GR	A3AKG-3418G-ND	13.51	110.03
	Gold	36 (91.44)	MC	A3AKG-3436M-ND	15.33	124.82
	Gold	36 (91.44)	GR	A3AKG-3436G-ND	14.48	117.89
40	Gold	6 (15.24)	MC	A3AKG-4006M-ND	13.91	113.26
	Gold	6 (15.24)	GR	A3AKG-4006G-ND	13.74	111.88
	Gold	18 (45.72)	MC	A3AKG-4018M-ND	15.00	122.18
	Gold	18 (45.72)	GR	A3AKG-4018G-ND	14.50	118.04
	Gold	36 (91.44)	MC	A3AKG-4036M-ND	16.65	135.56
	Gold	36 (91.44)	GR	A3AKG-4036G-ND	15.63	127.29
50	Gold	6 (15.24)	MC	A3AKG-5006M-ND	16.65	135.57
	Gold	6 (15.24)	GR	A3AKG-5006G-ND	16.44	133.84
	Gold	18 (45.72)	MC	A3AKG-5018M-ND	18.02	146.73
	Gold	18 (45.72)	GR	A3AKG-5018G-ND	17.38	141.53
	Gold	36 (91.44)	MC	A3AKG-5036M-ND	20.07	163.46
	Gold	36 (91.44)	GR	A3AKG-5036G-ND	18.80	153.08
60	Gold	6 (15.24)	MC	A3AKG-6006M-ND	19.92	162.21
	Gold	6 (15.24)	GR	A3AKG-6006G-ND	19.67	160.15
	Gold	18 (45.72)	MC	A3AKG-6018M-ND	21.56	175.53
	Gold	18 (45.72)	GR	A3AKG-6018G-ND	20.80	169.37
	Gold	36 (91.44)	MC	A3AKG-6036M-ND	24.01	195.52
	Gold	36 (91.44)	GR	A3AKG-6036G-ND	22.50	183.19

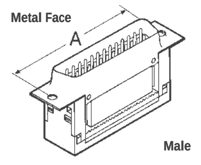
Also available in the following version:
A3CKG-□□□□□-ND — Socket Connector with Central Polarizing Key.
Call for complete part number and pricing!

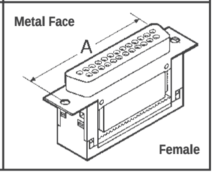
CW INDUSTRIES

D-Subminiature Connectors









Specifications: • Contacts: phosphor bronze • Contact Plating: Gold –10µ in. gold (in mating area) over 50µ in. nickel; Tin -100µ in. tin-lead • Insulator material: UL 94V-0 flame-retardant thermoplastic • Cover pull-off force 226.79 grams/contact minimum (force applied along contacts' primary axis) • Withdrawal force 56.70g – 226.79g/contact, typical • Color: blue • Operating temp.: –55° to +125°C • Current 1A (max.) per contact • Dielectric Withstand Voltage: 500Vdc (sea level) • Insulation resistance: 5 x 10^9 ohms

No. of Contacts	Contact Finish	Dim.A In. (mm)	Digi-Key Part No.	Pricing 1	10	100
Male D-Subminiature Connectors, Plastic Shell						
9	Gold	.984 (24.99)	CMP09G-ND	3.35	25.38	194.40
9	Tin	.984 (24.99)	CMP09T-ND	2.85	21.62	165.60
15	Gold	1.312 (33.32)	CMP15G-ND	4.40	33.37	255.60
15	Tin	1.312 (33.32)	CMP15T-ND	3.75	28.44	217.80
25	Gold	1.852 (47.04)	CMP25G-ND	5.92	44.89	343.80
25	Tin	1.852 (47.04)	CMP25T-ND	5.02	38.07	291.60
37	Gold	2.500 (63.50)	CMP37G-ND	8.74	66.27	507.60
37	Tin	2.500 (63.50)	CMP37T-ND	7.44	56.40	432.00
Female D-Subminiature Connectors, Plastic Shell						
9	Gold	.984 (24.99)	CFP09G-ND	3.84	29.14	223.20
9	Tin	.984 (24.99)	CFP09T-ND	3.26	24.68	189.00
15	Gold	1.312 (33.32)	CFP15G-ND	5.02	38.07	291.60
15	Tin	1.312 (33.32)	CFP15T-ND	4.28	32.43	248.40
25	Gold	1.852 (47.04)	CFP25G-ND	6.82	51.70	396.00
25	Tin	1.852 (47.04)	CFP25T-ND	5.80	43.95	336.60
37	Gold	2.500 (63.50)	CFP37G-ND	10.08	76.38	585.00
37	Tin	2.500 (63.50)	CFP37T-ND	8.56	64.86	496.80
Male D-Subminiature Connectors, Metal Face						
9	Gold	.984 (24.99)	CMM09G-ND	3.66	27.73	212.40
9	Tin	.984 (24.99)	CMM09T-ND	3.11	23.57	180.54
15	Gold	1.312 (33.32)	CMM15G-ND	4.81	36.43	279.00
15	Tin	1.312 (33.32)	CMM15T-ND	4.08	30.96	237.15
25	Gold	1.852 (47.04)	CMM25G-ND	6.51	49.35	378.00
25	Tin	1.852 (47.04)	CMM25T-ND	5.53	41.95	321.30
37	Gold	2.500 (63.50)	CMM37G-ND	9.64	73.09	559.80
37	Tin	2.500 (63.50)	CMM37T-ND	8.19	62.12	475.83
Female D-Subminiature Connectors, Metal Face						
9	Gold	.984 (24.99)	CFM09G-ND	4.25	32.20	246.60
9	Tin	.984 (24.99)	CFM09T-ND	3.61	27.37	209.61
15	Gold	1.312 (33.32)	CFM15G-ND	5.52	41.83	320.40
15	Tin	1.312 (33.32)	CFM15T-ND	4.69	35.56	272.34
25	Gold	1.852 (47.04)	CFM25G-ND	7.47	56.64	433.80
25	Tin	1.852 (47.04)	CFM25T-ND	6.35	48.14	368.73
37	Gold	2.500 (63.50)	CFM37G-ND	11.10	84.13	644.40
37	Tin	2.500 (63.50)	CFM37T-ND	9.43	71.51	547.74

C□□□□-□□□□□-ND

Style
7□□ (D-Sub)

Conn. Finish
G=Gold
T=Tin

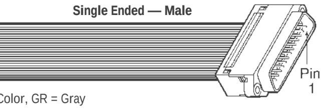
No. Of Contacts

Length *(Use "Feet" only.)*

Ribbon Cable
M=Multi-color
G=Gray

D-Subminiature Cable Assemblies

Single Ended — Male

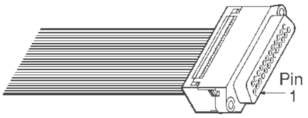


* MC = Multi Color, GR = Gray

No. of Contacts	Conn. Finish	Length Feet (Meters)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	10
Using Plastic Shell Connectors						
9	Gold	6 (1.83)	MC	C7MXG-0906M-ND	4.65	35.21
	Tin	6 (1.83)	MC	C7MXT-0906M-ND	4.14	31.41
	Gold	6 (1.83)	GR	C7MXG-0906G-ND	4.41	33.45
	Tin	6 (1.83)	GR	C7MXT-0906G-ND	3.91	29.65
	Gold	10 (3.05)	MC	C7MXG-0910M-ND	5.51	41.77
	Tin	10 (3.05)	MC	C7MXT-0910M-ND	5.01	37.96
	Gold	10 (3.05)	GR	C7MXG-0910G-ND	5.12	38.83
	Tin	10 (3.05)	GR	C7MXT-0910G-ND	4.62	35.03
15	Gold	6 (1.83)	MC	C7MXG-1506M-ND	6.73	51.00
	Tin	6 (1.83)	MC	C7MXT-1506M-ND	6.07	45.99
	Gold	6 (1.83)	GR	C7MXG-1506G-ND	6.00	45.50
	Tin	6 (1.83)	GR	C7MXT-1506G-ND	5.34	40.49
	Gold	10 (3.05)	MC	C7MXG-1510M-ND	8.28	62.75
	Tin	10 (3.05)	MC	C7MXT-1510M-ND	7.62	57.74
	Gold	10 (3.05)	GR	C7MXG-1510G-ND	7.07	53.58
	Tin	10 (3.05)	GR	C7MXT-1510G-ND	6.41	48.57
25	Gold	6 (1.83)	MC	C7MXG-2506M-ND	9.57	72.56
	Tin	6 (1.83)	MC	C7MXT-2506M-ND	8.68	65.82
	Gold	6 (1.83)	GR	C7MXG-2506G-ND	8.54	64.77
	Tin	6 (1.83)	GR	C7MXT-2506G-ND	7.66	58.03
	Gold	10 (3.05)	MC	C7MXG-2510M-ND	12.00	91.00
	Tin	10 (3.05)	MC	C7MXT-2510M-ND	11.12	84.27
	Gold	10 (3.05)	GR	C7MXG-2510G-ND	10.29	78.02
	Tin	10 (3.05)	GR	C7MXT-2510G-ND	9.40	71.29
37	Gold	6 (1.83)	MC	C7MXG-3706M-ND	14.08	106.77
	Tin	6 (1.83)	MC	C7MXT-3706M-ND	12.77	96.83
	Gold	6 (1.83)	GR	C7MXG-3706G-ND	12.76	96.76
	Tin	6 (1.83)	GR	C7MXT-3706G-ND	11.45	86.82
	Gold	10 (3.05)	MC	C7MXG-3710M-ND	17.65	133.77
	Tin	10 (3.05)	MC	C7MXT-3710M-ND	16.34	123.83
	Gold	10 (3.05)	GR	C7MXG-3710G-ND	15.45	117.09
	Tin	10 (3.05)	GR	C7MXT-3710G-ND	14.13	107.15

Also available in the following configuration:
C7PX□-□□□□□-ND — With Metal Face Connector.
Call for complete part number and pricing!

Single Ended — Female

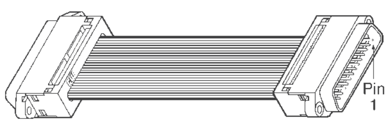


* MC = Multi-Color, GR = Gray

No. of Contacts	Conn. Finish	Length Feet (Meters)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	10
Using Plastic Shell Connectors						
9	Gold	6 (1.83)	MC	C7FXG-0906M-ND	5.14	38.97
	Tin	6 (1.83)	MC	C7FXT-0906M-ND	4.56	34.60
	Gold	6 (1.83)	GR	C7FXG-0906G-ND	4.91	37.21
	Tin	6 (1.83)	GR	C7FXT-0906G-ND	4.33	32.84
	Gold	10 (3.05)	MC	C7FXG-0910M-ND	6.01	45.53
	Tin	10 (3.05)	MC	C7FXT-0910M-ND	5.43	41.16
	Gold	10 (3.05)	GR	C7FXG-0910G-ND	5.62	42.59
	Tin	10 (3.05)	GR	C7FXT-0910G-ND	5.04	38.22
15	Gold	6 (1.83)	MC	C7FXG-1506M-ND	7.35	55.70
	Tin	6 (1.83)	MC	C7FXT-1506M-ND	6.59	49.98
	Gold	6 (1.83)	GR	C7FXG-1506G-ND	6.62	50.20
	Tin	6 (1.83)	GR	C7FXT-1506G-ND	5.87	44.49
	Gold	10 (3.05)	MC	C7FXG-1510M-ND	8.90	67.45
	Tin	10 (3.05)	MC	C7FXT-1510M-ND	8.14	61.73
	Gold	10 (3.05)	GR	C7FXG-1510G-ND	7.69	58.28
	Tin	10 (3.05)	GR	C7FXT-1510G-ND	6.93	52.57
25	Gold	6 (1.83)	MC	C7FXG-2506M-ND	10.47	79.37
	Tin	6 (1.83)	MC	C7FXT-2506M-ND	9.45	71.62
	Gold	6 (1.83)	GR	C7FXG-2506G-ND	9.44	71.58
	Tin	6 (1.83)	GR	C7FXT-2506G-ND	8.42	63.83
	Gold	10 (3.05)	MC	C7FXG-2510M-ND	12.90	97.82
	Tin	10 (3.05)	MC	C7FXT-2510M-ND	11.88	90.06
	Gold	10 (3.05)	GR	C7FXG-2510G-ND	11.19	84.84
	Tin	10 (3.05)	GR	C7FXT-2510G-ND	10.17	77.08
37	Gold	6 (1.83)	MC	C7FXG-3706M-ND	15.42	116.88
	Tin	6 (1.83)	MC	C7FXT-3706M-ND	13.91	105.42
	Gold	6 (1.83)	GR	C7FXG-3706G-ND	14.10	106.87
	Tin	6 (1.83)	GR	C7FXT-3706G-ND	12.59	95.41
	Gold	10 (3.05)	MC	C7FXG-3710M-ND	18.98	143.88
	Tin	10 (3.05)	MC	C7FXT-3710M-ND	17.47	132.42
	Gold	10 (3.05)	GR	C7FXG-3710G-ND	16.78	127.19
	Tin	10 (3.05)	GR	C7FXT-3710G-ND	15.27	115.74

Also available in the following configuration:
C7SX□-□□□□□-ND — With Metal Face Connector.
Call for complete part number and pricing!

Male to Male

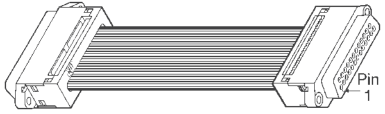


* MC = Multi-Color, GR = Gray

No. of Contacts	Conn. Finish	Length Feet (Meters)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	10
Using Plastic Shell Connectors						
9	Gold	6 (1.83)	MC	C7MMG-0906M-ND	7.99	60.59
	Tin	6 (1.83)	MC	C7MMT-0906M-ND	6.99	52.98
	Gold	6 (1.83)	GR	C7MMG-0906G-ND	7.76	58.83
	Tin	6 (1.83)	GR	C7MMT-0906G-ND	6.76	51.22
	Gold	10 (3.05)	MC	C7MMG-0910M-ND	8.86	67.15
	Tin	10 (3.05)	MC	C7MMT-0910M-ND	7.85	59.54
	Gold	10 (3.05)	GR	C7MMG-0910G-ND	8.47	64.21
	Tin	10 (3.05)	GR	C7MMT-0910G-ND	7.47	56.60
15	Gold	6 (1.83)	MC	C7MMG-1506M-ND	11.13	84.37
	Tin	6 (1.83)	MC	C7MMT-1506M-ND	9.81	74.35
	Gold	6 (1.83)	GR	C7MMG-1506G-ND	10.40	78.87
	Tin	6 (1.83)	GR	C7MMT-1506G-ND	9.08	68.86
	Gold	10 (3.05)	MC	C7MMG-1510M-ND	12.68	96.12
	Tin	10 (3.05)	MC	C7MMT-1510M-ND	11.36	86.10
	Gold	10 (3.05)	GR	C7MMG-1510G-ND	11.47	86.95
	Tin	10 (3.05)	GR	C7MMT-1510G-ND	10.15	76.94
25	Gold	6 (1.83)	MC	C7MMG-2506M-ND	15.49	117.44
	Tin	6 (1.83)	MC	C7MMT-2506M-ND	13.72	103.98
	Gold	6 (1.83)	GR	C7MMG-2506G-ND	14.46	109.65
	Tin	6 (1.83)	GR	C7MMT-2506G-ND	12.69	96.19
	Gold	10 (3.05)	MC	C7MMG-2510M-ND	17.93	135.89
	Tin	10 (3.05)	MC	C7MMT-2510M-ND	16.15	122.42
	Gold	10 (3.05)	GR	C7MMG-2510G-ND	16.21	122.91
	Tin	10 (3.05)	GR	C7MMT-2510G-ND	14.44	109.44
37	Gold	6 (1.83)	MC	C7MMG-3706M-ND	22.83	173.04
	Tin	6 (1.83)	MC	C7MMT-3706M-ND	20.20	153.16
	Gold	6 (1.83)	GR	C7MMG-3706G-ND	21.51	163.03
	Tin	6 (1.83)	GR	C7MMT-3706G-ND	18.88	143.15
	Gold	10 (3.05)	MC	C7MMG-3710M-ND	26.39	200.04
	Tin	10 (3.05)	MC	C7MMT-3710M-ND	23.77	180.16
	Gold	10 (3.05)	GR	C7MMG-3710G-ND	24.19	183.36
	Tin	10 (3.05)	GR	C7MMT-3710G-ND	21.57	163.48

Also available in the following configuration:
C7PP□-□□□□□-ND — With Metal Face Connector.
Call for complete part number and pricing!

Female to Female

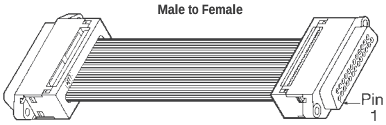


* MC = Multi-Color, GR = Gray

No. of Contacts	Conn. Finish	Length Feet (Meters)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	10
Using Plastic Shell Connectors						
9	Gold	6 (1.83)	MC	C7FFG-0906M-ND	8.99	68.11
	Tin	6 (1.83)	MC	C7FFT-0906M-ND	7.83	59.37
	Gold	6 (1.83)	GR	C7FFG-0906G-ND	8.75	66.35
	Tin	6 (1.83)	GR	C7FFT-0906G-ND	7.60	57.61
	Gold	10 (3.05)	MC	C7FFG-0910M-ND	9.85	74.67
	Tin	10 (3.05)	MC	C7FFT-0910M-ND	8.70	65.93
	Gold	10 (3.05)	GR	C7FFG-0910G-ND	9.46	71.73
	Tin	10 (3.05)	GR	C7FFT-0910G-ND	8.31	62.99
15	Gold	6 (1.83)	MC	C7FFG-1506M-ND	12.37	93.77
	Tin	6 (1.83)	MC	C7FFT-1506M-ND	10.86	82.34
	Gold	6 (1.83)	GR	C7FFG-1506G-ND	11.64	88.27
	Tin	6 (1.83)	GR	C7FFT-1506G-ND	10.14	76.85
	Gold	10 (3.05)	MC	C7FFG-1510M-ND	13.92	105.52
	Tin	10 (3.05)	MC	C7FFT-1510M-ND	12.41	94.09
	Gold	10 (3.05)	GR	C7FFG-1510G-ND	12.71	96.35
	Tin	10 (3.05)	GR	C7FFT-1510G-ND	11.20	84.93
25	Gold	6 (1.83)	MC	C7FFG-2506M-ND	17.30	131.15
	Tin	6 (1.83)	MC	C7FFT-2506M-ND	15.24	115.56
	Gold	6 (1.83)	GR	C7FFG-2506G-ND	16.26	123.28
	Tin	6 (1.83)	GR	C7FFT-2506G-ND	14.22	107.77
	Gold	10 (3.05)	MC	C7FFG-2510M-ND	19.72	149.52
	Tin	10 (3.05)	MC	C7FFT-2510M-ND	17.68	134.01
	Gold	10 (3.05)	GR	C7FFG-2510G-ND	18.01	136.54
	Tin	10 (3.05)	GR	C7FFT-2510G-ND	15.97	121.03
37	Gold	6 (1.83)	MC	C7FFG-3706M-ND	25.49	193.25
	Tin	6 (1.83)	MC	C7FFT-3706M-ND	22.47	170.34
	Gold	6 (1.83)	GR	C7FFG-3706G-ND	24.17	183.24
	Tin	6 (1.83)	GR	C7FFT-3706G-ND	21.15	160.33
	Gold	10 (3.05)	MC	C7FFG-3710M-ND	29.05	220.25
	Tin	10 (3.05)	MC	C7FFT-3710M-ND	26.03	197.34
	Gold	10 (3.05)	GR	C7FFG-3710G-ND	26.85	203.57
	Tin	10 (3.05)	GR	C7FFT-3710G-ND	23.83	180.66

Also available in the following configuration:
C7SS□-□□□□□-ND — With Metal Face Connector.
Call for complete part number and pricing!

Male to Female



* MC = Multi-Color, GR = Gray

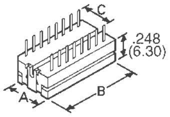
No. of Contacts	Conn. Finish	Length Feet (Meters)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	10
Using Plastic Shell Connectors						
9	Gold	6 (1.83)	MC	C7MFG-0906M-ND	8.49	64.35
	Tin	6 (1.83)	MC	C7MFT-0906M-ND	7.41	56.18
	Gold	6 (1.83)	GR	C7MFG-0906G-ND	8.26	62.59
	Tin	6 (1.83)	GR	C7MFT-0906G-ND	7.18	54.41
	Gold	10 (3.05)	MC	C7MFG-0910M-ND	9.35	70.91
	Tin	10 (3.05)	MC	C7MFT-0910M-ND	8.28	62.73
	Gold	10 (3.05)	GR	C7MFG-0910G-ND	8.97	67.97
	Tin	10 (3.05)	GR	C7MFT-0910G-ND	7.89	59.80
15	Gold	6 (1.83)	MC	C7MFG-1506M-ND	11.75	89.07
	Tin	6 (1.83)	MC	C7MFT-1506M-ND	10.34	78.35
	Gold	6 (1.83)	GR	C7MFG-1506G-ND	11.02	83.57
	Tin	6 (1.83)	GR	C7MFT-1506G-ND	9.61	72.85
	Gold	10 (3.05)	MC	C7MFG-1510M-ND	13.30	100.82
	Tin	10 (3.05)	MC	C7MFT-1510M-ND	11.89	90.10
	Gold	10 (3.05)	GR	C7MFG-1510G-ND	12.09	91.65
	Tin	10 (3.05)	GR	C7MFT-1510G-ND	10.68	80.93
25	Gold	6 (1.83)	MC	C7MFG-2506M-ND	16.39	124.26
	Tin	6 (1.83)	MC	C7MFT-2506M-ND	14.48	109.77
	Gold	6 (1.83)	GR	C7MFG-2506G-ND	15.36	116.47
	Tin	6 (1.83)	GR	C7MFT-2506G-ND	13.45	101.98
	Gold	10 (3.05)	MC	C7MFG-2510M-ND	18.82	142.70
	Tin	10 (3.05)	MC	C7MFT-2510M-ND	16.91	128.22
	Gold	10 (3.05)	GR	C7MFG-2510G-ND	17.11	129.72
	Tin	10 (3.05)	GR	C7MFT-2510G-ND	15.20	115.23
37	Gold	6 (1.83)	MC	C7MFG-3706M-ND	24.16	183.15
	Tin	6 (1.83)	MC	C7MFT-3706M-ND	21.34	161.75
	Gold	6 (1.83)	GR	C7MFG-3706G-ND	22.84	173.14
	Tin	6 (1.83)	GR	C7MFT-3706G-ND	20.02	151.74
	Gold	10 (3.05)	MC	C7MFG-3710M-ND	27.72	210.15
	Tin	10 (3.05)	MC	C7MFT-3710M-ND	24.90	188.75
	Gold	10 (3.05)	GR	C7MFG-3710G-ND	25.52	193.46
	Tin	10 (3.05)	GR	C7MFT-3710G-ND	22.70	172.07

Also available in the following configuration:
C7PS□-□□□□□-ND — With Metal Face Connector.
Call for complete part number and pricing!

CW INDUSTRIES

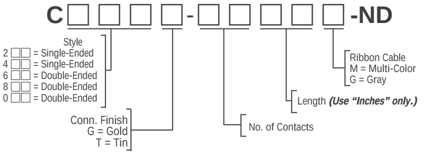
DIP Connectors

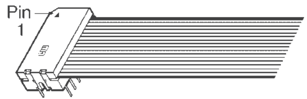
No. of Pins	Dimensions – In. (mm)		
	A	B	C
14	.42 (10.67)	.754 (19.15)	.300 (7.62)
16	.42 (10.67)	.854 (21.69)	.300 (7.62)
24	.72 (18.29)	1.264 (32.11)	.600 (15.24)
40	.72 (18.29)	2.067 (52.50)	.600 (15.24)



SPECIFICATIONS: • **Contacts:** phosphor bronze • **Contact Plating:** Gold – 10µ in. gold over 50µ in. nickel Tin – 100µ in. tin-lead • **Insulator Material:** UL 94V 0 retardant glass-filled thermoplastic • **Strain Relief Strap Material:** Tin-plated steel • **Color:** Blue • **Operating Temperature:** -55°C to -125°C • **Current Rating:** 1A (maximum) per contact • **Dielectric Withstand Voltage:** Greater than 500Vdc at sea level • **Insulation Resistance:** Greater than 5 x 109 ohms • Mates with .050” (1.27mm) centered round conductor flat cable and standard Dip socket with .100” x .300” or .100” x .600” (2.54mm x 7.62mm or 2.54mm x 15.24mm) contact spacing • Cover pull-off force, with strain relief 20 lb. (7.46kg) minimum (force along contacts’ primary axis)

No. of Contacts	Contact Finish	Digi-Key Part No.	Pricing			
			1	10	100	1,000
DIP Connectors — .175” (4.44mm) Pin Length						
14	Gold	CDP14G-ND	1.61	12.22	93.60	676.00
14	Tin	CDP14T-ND	1.37	10.39	79.56	574.60
16	Gold	CDP16G-ND	1.71	12.93	99.00	715.00
16	Tin	CDP16T-ND	1.45	10.99	84.15	607.75
24	Gold	CDP24G-ND	2.82	21.39	163.80	1183.00
24	Tin	CDP24T-ND	2.40	18.18	139.23	1005.55
40	Gold	CDP40G-ND	4.06	30.79	235.80	1703.00
40	Tin	CDP40T-ND	3.45	26.17	200.43	1447.55
Strain Relief Straps For DIP Connectors						
14	—	CDSR14-ND	.16	1.18	9.00	65.00
16	—	CDSR16-ND	.19	1.41	10.80	78.00
24	—	CDSR24-ND	.22	1.65	12.60	91.00
40	—	CDSR40-ND	.25	1.88	14.40	104.00



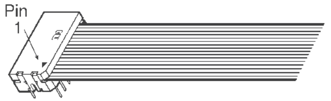


Single Ended — Style 2

* MC = Multi Color, GR = Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
14	Gold	6 (15.24)	MC	C2PXG-1406M-ND	1.78	13.51
	Tin	6 (15.24)	MC	C2PXT-1406M-ND	1.54	11.67
	Gold	6 (15.24)	GR	C2PXG-1406G-ND	1.73	13.11
	Tin	6 (15.24)	GR	C2PXT-1406G-ND	1.49	11.28
	Gold	18 (45.72)	MC	C2PXG-1418M-ND	2.12	16.08
	Tin	18 (45.72)	MC	C2PXT-1418M-ND	1.88	14.25
	Gold	18 (45.72)	GR	C2PXG-1418G-ND	1.97	14.90
	Tin	18 (45.72)	GR	C2PXT-1418G-ND	1.72	13.07
	Gold	36 (91.44)	MC	C2PXG-1436M-ND	2.63	19.94
	Tin	36 (91.44)	MC	C2PXT-1436M-ND	2.39	18.11
	Gold	36 (91.44)	GR	C2PXG-1436G-ND	2.32	17.58
	Tin	36 (91.44)	GR	C2PXT-1436G-ND	2.08	15.75
16	Gold	6 (15.24)	MC	C2PXG-1606M-ND	1.90	14.39
	Tin	6 (15.24)	MC	C2PXT-1606M-ND	1.64	12.46
	Gold	6 (15.24)	GR	C2PXG-1606G-ND	1.84	13.94
	Tin	6 (15.24)	GR	C2PXT-1606G-ND	1.58	12.00
	Gold	18 (45.72)	MC	C2PXG-1618M-ND	2.29	17.33
	Tin	18 (45.72)	MC	C2PXT-1618M-ND	2.03	15.39
	Gold	18 (45.72)	GR	C2PXG-1618G-ND	2.10	15.96
	Tin	18 (45.72)	GR	C2PXT-1618G-ND	1.85	14.02
	Gold	36 (91.44)	MC	C2PXG-1636M-ND	2.87	21.74
	Tin	36 (91.44)	MC	C2PXT-1636M-ND	2.61	19.80
	Gold	36 (91.44)	GR	C2PXG-1636G-ND	2.50	18.99
	Tin	36 (91.44)	GR	C2PXT-1636G-ND	2.25	17.05
24	Gold	6 (15.24)	MC	C2PXG-2406M-ND	3.11	23.59
	Tin	6 (15.24)	MC	C2PXT-2406M-ND	2.69	20.39
	Gold	6 (15.24)	GR	C2PXG-2406G-ND	3.02	22.90
	Tin	6 (15.24)	GR	C2PXT-2406G-ND	2.60	19.69
	Gold	18 (45.72)	MC	C2PXG-2418M-ND	3.70	28.01
	Tin	18 (45.72)	MC	C2PXT-2418M-ND	3.27	24.80
	Gold	18 (45.72)	GR	C2PXG-2418G-ND	3.42	25.93
	Tin	18 (45.72)	GR	C2PXT-2418G-ND	3.00	22.72
	Gold	36 (91.44)	MC	C2PXG-2436M-ND	4.57	34.64
	Tin	36 (91.44)	MC	C2PXT-2436M-ND	4.15	31.43
	Gold	36 (91.44)	GR	C2PXG-2436G-ND	4.02	30.48
	Tin	36 (91.44)	GR	C2PXT-2436G-ND	3.60	27.27
40	Gold	6 (15.24)	MC	C2PXG-4006M-ND	4.55	34.46
	Tin	6 (15.24)	MC	C2PXT-4006M-ND	3.94	29.85
	Gold	6 (15.24)	GR	C2PXG-4006G-ND	4.40	33.33
	Tin	6 (15.24)	GR	C2PXT-4006G-ND	3.79	28.71
	Gold	18 (45.72)	MC	C2PXG-4018M-ND	5.52	41.82
	Tin	18 (45.72)	MC	C2PXT-4018M-ND	4.91	37.20
	Gold	18 (45.72)	GR	C2PXG-4018G-ND	5.07	38.41
	Tin	18 (45.72)	GR	C2PXT-4018G-ND	4.46	33.79
	Gold	36 (91.44)	MC	C2PXG-4036M-ND	6.97	52.85
	Tin	36 (91.44)	MC	C2PXT-4036M-ND	6.36	48.23
	Gold	36 (91.44)	GR	C2PXG-4036G-ND	6.07	46.03
	Tin	36 (91.44)	GR	C2PXT-4036G-ND	5.46	41.41

Also available in the following version:
C2RX☐-☐☐☐☐☐-ND — Dip Connector with Strain Relief Strap.
Call for complete part number and pricing!

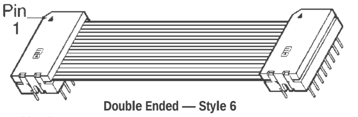


Single Ended — Style 4

* MC = Multi Color, GR = Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
14	Gold	6 (15.24)	MC	C4PXG-1406M-ND	1.78	13.51
	Tin	6 (15.24)	MC	C4PXT-1406M-ND	1.54	11.67
	Gold	6 (15.24)	GR	C4PXG-1406G-ND	1.73	13.11
	Tin	6 (15.24)	GR	C4PXT-1406G-ND	1.49	11.28
	Gold	18 (45.72)	MC	C4PXG-1418M-ND	2.12	16.08
	Tin	18 (45.72)	MC	C4PXT-1418M-ND	1.88	14.25
	Gold	18 (45.72)	GR	C4PXG-1418G-ND	1.97	14.90
	Tin	18 (45.72)	GR	C4PXT-1418G-ND	1.72	13.07
	Gold	36 (91.44)	MC	C4PXG-1436M-ND	2.63	19.94
	Tin	36 (91.44)	MC	C4PXT-1436M-ND	2.39	18.11
	Gold	36 (91.44)	GR	C4PXG-1436G-ND	2.32	17.58
	Tin	36 (91.44)	GR	C4PXT-1436G-ND	2.08	15.75
16	Gold	6 (15.24)	MC	C4PXG-1606M-ND	1.90	14.39
	Tin	6 (15.24)	MC	C4PXT-1606M-ND	1.64	12.46
	Gold	6 (15.24)	GR	C4PXG-1606G-ND	1.84	13.94
	Tin	6 (15.24)	GR	C4PXT-1606G-ND	1.58	12.00
	Gold	18 (45.72)	MC	C4PXG-1618M-ND	2.29	17.33
	Tin	18 (45.72)	MC	C4PXT-1618M-ND	2.03	15.39
	Gold	18 (45.72)	GR	C4PXG-1618G-ND	2.10	15.96
	Tin	18 (45.72)	GR	C4PXT-1618G-ND	1.85	14.02
	Gold	36 (91.44)	MC	C4PXG-1636M-ND	2.87	21.74
	Tin	36 (91.44)	MC	C4PXT-1636M-ND	2.61	19.80
	Gold	36 (91.44)	GR	C4PXG-1636G-ND	2.50	18.99
	Tin	36 (91.44)	GR	C4PXT-1636G-ND	2.25	17.05
24	Gold	6 (15.24)	MC	C4PXG-2406M-ND	3.11	23.59
	Tin	6 (15.24)	MC	C4PXT-2406M-ND	2.69	20.39
	Gold	6 (15.24)	GR	C4PXG-2406G-ND	3.02	22.90
	Tin	6 (15.24)	GR	C4PXT-2406G-ND	2.60	19.69
	Gold	18 (45.72)	MC	C4PXG-2418M-ND	3.70	28.01
	Tin	18 (45.72)	MC	C4PXT-2418M-ND	3.27	24.80
	Gold	18 (45.72)	GR	C4PXG-2418G-ND	3.42	25.93
	Tin	18 (45.72)	GR	C4PXT-2418G-ND	3.00	22.72
	Gold	36 (91.44)	MC	C4PXG-2436M-ND	4.57	34.64
	Tin	36 (91.44)	MC	C4PXT-2436M-ND	4.15	31.43
	Gold	36 (91.44)	GR	C4PXG-2436G-ND	4.02	30.48
	Tin	36 (91.44)	GR	C4PXT-2436G-ND	3.60	27.27
40	Gold	6 (15.24)	MC	C4PXG-4006M-ND	4.55	34.46
	Tin	6 (15.24)	MC	C4PXT-4006M-ND	3.94	29.85
	Gold	6 (15.24)	GR	C4PXG-4006G-ND	4.40	33.33
	Tin	6 (15.24)	GR	C4PXT-4006G-ND	3.79	28.71
	Gold	18 (45.72)	MC	C4PXG-4018M-ND	5.52	41.82
	Tin	18 (45.72)	MC	C4PXT-4018M-ND	4.91	37.20
	Gold	18 (45.72)	GR	C4PXG-4018G-ND	5.07	38.41
	Tin	18 (45.72)	GR	C4PXT-4018G-ND	4.46	33.79
	Gold	36 (91.44)	MC	C4PXG-4036M-ND	6.97	52.85
	Tin	36 (91.44)	MC	C4PXT-4036M-ND	6.36	48.23
	Gold	36 (91.44)	GR	C4PXG-4036G-ND	6.07	46.03
	Tin	36 (91.44)	GR	C4PXT-4036G-ND	5.46	41.41

Also available in the following version:
C4RX☐-☐☐☐☐☐-ND — Dip Connector with Strain Relief Strap.
Call for complete part number and pricing!

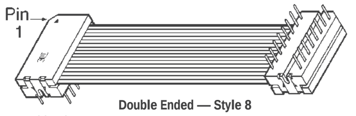


Double Ended — Style 6

* MC = Multi Color, GR = Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
14	Gold	6 (15.24)	MC	C6PPG-1406M-ND	3.39	25.73
	Tin	6 (15.24)	MC	C6PPT-1406M-ND	2.91	22.06
	Gold	6 (15.24)	GR	C6PPG-1406G-ND	3.34	25.33
	Tin	6 (15.24)	GR	C6PPT-1406G-ND	2.86	21.67
	Gold	18 (45.72)	MC	C6PPG-1418M-ND	3.73	28.30
	Tin	18 (45.72)	MC	C6PPT-1418M-ND	3.25	24.64
	Gold	18 (45.72)	GR	C6PPG-1418G-ND	3.58	27.12
	Tin	18 (45.72)	GR	C6PPT-1418G-ND	3.09	23.45
	Gold	36 (91.44)	MC	C6PPG-1436M-ND	4.24	32.16
	Tin	36 (91.44)	MC	C6PPT-1436M-ND	3.76	28.49
	Gold	36 (91.44)	GR	C6PPG-1436G-ND	3.93	29.80
	Tin	36 (91.44)	GR	C6PPT-1436G-ND	3.45	26.13
16	Gold	6 (15.24)	MC	C6PPG-1606M-ND	3.60	27.32
	Tin	6 (15.24)	MC	C6PPT-1606M-ND	3.09	23.44
	Gold	6 (15.24)	GR	C6PPG-1606G-ND	3.54	26.86
	Tin	6 (15.24)	GR	C6PPT-1606G-ND	3.03	22.98
	Gold	18 (45.72)	MC	C6PPG-1618M-ND	4.01	30.41
	Tin	18 (45.72)	MC	C6PPT-1618M-ND	3.48	26.38
	Gold	18 (45.72)	GR	C6PPG-1618G-ND	3.81	28.88
	Tin	18 (45.72)	GR	C6PPT-1618G-ND	3.30	25.00
	Gold	36 (91.44)	MC	C6PPG-1636M-ND	4.57	34.66
	Tin	36 (91.44)	MC	C6PPT-1636M-ND	4.06	30.79
	Gold	36 (91.44)	GR	C6PPG-1636G-ND	4.21	31.91
	Tin	36 (91.44)	GR	C6PPT-1636G-ND	3.70	28.04
24	Gold	6 (15.24)	MC	C6PPG-2406M-ND	5.93	44.98
	Tin	6 (15.24)	MC	C6PPT-2406M-ND	5.09	38.56
	Gold	6 (15.24)	GR	C6PPG-2406G-ND	5.84	44.29
	Tin	6 (15.24)	GR	C6PPT-2406G-ND	5.00	37.87
	Gold	18 (45.72)	MC	C6PPG-2418M-ND	6.52	49.40
	Tin	18 (45.72)	MC	C6PPT-2418M-ND	5.67	42.98
	Gold	18 (45.72)	GR	C6PPG-2418G-ND	6.24	47.32
	Tin	18 (45.72)	GR	C6PPT-2418G-ND	5.40	40.90
	Gold	36 (91.44)	MC	C6PPG-2436M-ND	7.39	56.02
	Tin	36 (91.44)	MC	C6PPT-2436M-ND	6.54	49.61
	Gold	36 (91.44)	GR	C6PPG-2436G-ND	6.84	51.86
	Tin	36 (91.44)	GR	C6PPT-2436G-ND	6.00	45.45
40	Gold	6 (15.24)	MC	C6PPG-4006M-ND	8.61	65.25
	Tin	6 (15.24)	MC	C6PPT-4006M-ND	7.39	56.01
	Gold	6 (15.24)	GR	C6PPG-4006G-ND	8.46	64.11
	Tin	6 (15.24)	GR	C6PPT-4006G-ND	7.24	54.87
	Gold	18 (45.72)	MC	C6PPG-4018M-ND	9.58	72.60
	Tin	18 (45.72)	MC	C6PPT-4018M-ND	8.36	63.37
	Gold	18 (45.72)	GR	C6PPG-4018G-ND	9.13	69.19
	Tin	18 (45.72)	GR	C6PPT-4018G-ND	7.91	59.96
	Gold	36 (91.44)	MC	C6PPG-4036M-ND	11.03	83.64
	Tin	36 (91.44)	MC	C6PPT-4036M-ND	9.81	74.40
	Gold	36 (91.44)	GR	C6PPG-4036G-ND	10.13	76.82
	Tin	36 (91.44)	GR	C6PPT-4036G-ND	8.91	67.58

Also available in the following version:
C6RR☐-☐☐☐☐☐-ND — Dip Connector with Strain Relief Strap.
Call for complete part number and pricing!

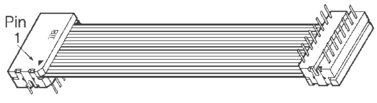


Double Ended — Style 8

* MC = Multi Color, GR = Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
14	Gold	6 (15.24)	MC	C8PPG-1406M-ND	3.39	25.73
	Tin	6 (15.24)	MC	C8PPT-1406M-ND	2.91	22.06
	Gold	6 (15.24)	GR	C8PPG-1406G-ND	3.34	25.33
	Tin	6 (15.24)	GR	C8PPT-1406G-ND	2.86	21.67
	Gold	18 (45.72)	MC	C8PPG-1418M-ND	3.73	28.30
	Tin	18 (45.72)	MC	C8PPT-1418M-ND	3.25	24.64
	Gold	18 (45.72)	GR	C8PPG-1418G-ND	3.58	27.12
	Tin	18 (45.72)	GR	C8PPT-1418G-ND	3.09	23.45
	Gold	36 (91.44)	MC	C8PPG-1436M-ND	4.24	32.16
	Tin	36 (91.44)	MC	C8PPT-1436M-ND	3.76	28.49
	Gold	36 (91.44)	GR	C8PPG-1436G-ND	3.93	29.80
	Tin	36 (91.44)	GR	C8PPT-1436G-ND	3.45	26.13
16	Gold	6 (15.24)	MC	C8PPG-1606M-ND	3.60	27.32
	Tin	6 (15.24)	MC	C8PPT-1606M-ND	3.09	23.44
	Gold	6 (15.24)	GR	C8PPG-1606G-ND	3.54	26.86
	Tin	6 (15.24)	GR	C8PPT-1606G-ND	3.03	22.98
	Gold	18 (45.72)	MC	C8PPG-1618M-ND	3.99	30.26
	Tin	18 (45.72)	MC	C8PPT-1618M-ND	3.48	26.38
	Gold	18 (45.72)	GR	C8PPG-1618G-ND	3.81	28.88
	Tin	18 (45.72)	GR	C8PPT-1618G-ND	3.30	25.00
	Gold	36 (91.44)	MC	C8PPG-1636M-ND	4.57	34.66
	Tin	36 (91.44)	MC	C8PPT-1636M-ND	4.06	30.79
	Gold	36 (91.44)	GR	C8PPG-1636G-ND	4.21	31.91
	Tin	36 (91.44)	GR	C8PPT-1636G-ND	3.70	28.04
24	Gold	6 (15.24)	MC	C8PPG-2406M-ND	5.93	44.98
	Tin	6 (15.24)	MC	C8PPT-2406M-ND	5.09	38.56
	Gold	6 (15.24)	GR	C8PPG-2406G-ND	5.84	44.29
	Tin	6 (15.24)	GR	C8PPT-2406G-ND	5.00	37.87
	Gold	18 (45.72)	MC	C8PPG-2418M-ND	6.52	49.40
	Tin	18 (45.72)	MC	C8PPT-2418M-ND	5.67	42.98
	Gold	18 (45.72)	GR	C8PPG-2418G-ND	6.24	47.32
	Tin	18 (45.72)	GR	C8PPT-2418G-ND	5.40	40.90
	Gold	36 (91.44)	MC	C8PPG-2436M-ND	7.39	56.02
	Tin	36 (91.44)	MC	C8PPT-2436M-ND	6.54	49.61
	Gold	36 (91.44)	GR	C8PPG-2436G-ND	6.84	51.86
	Tin	36 (91.44)	GR	C8PPT-2436G-ND	6.00	45.45
40	Gold	6 (15.24)	MC	C8PPG-4006M-ND	8.61	65.25
	Tin	6 (15.24)	MC	C8PPT-4006M-ND	7.39	56.01
	Gold	6 (15.24)	GR	C8PPG-4006G-ND	8.46	64.11
	Tin	6 (15.24)	GR	C8PPT-4006G-ND	7.24	54.87
	Gold	18 (45.72)	MC	C8PPG-4018M-ND	9.58	72.60
	Tin	18 (45.72)	MC	C8PPT-4018M-ND	8.36	63.37
	Gold	18 (45.72)	GR	C8PPG-4018G-ND	9.13	69.19
	Tin	18 (45.72)	GR	C8PPT-4018G-ND	7.91	59.96
	Gold	36 (91.44)	MC	C8PPG-4036M-ND	11.03	83.64
	Tin	36 (91.44)	MC	C8PPT-4036M-ND	9.81	74.40
	Gold	36 (91.44)	GR	C8PPG-4036G-ND	10.13	76.82
	Tin	36 (91.44)	GR	C8PPT-4036G-ND	8.91	67.58

Also available in the following version:
C8RR☐-☐☐☐☐☐-ND — Dip Connector with Strain Relief Strap.
Call for complete part number and pricing!



Double Ended — Style 0

* MC = Multi Color, GR = Gray

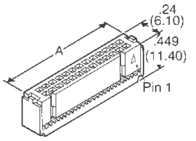
No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
14	Gold	6 (15.24)	MC	C0PPG-1406M-ND	3.39	25.73
	Tin	6 (15.24)	MC	C0PPT-1406M-ND	2.91	22.06
	Gold	6 (15.24)	GR	C0PPG-1406G-ND	3.34	25.33
	Tin	6 (15.24)	GR	C0PPT-1406G-ND	2.86	21.67
	Gold	18 (45.72)	MC	C0PPG-1418M-ND	3.73	28.30
	Tin	18 (45.72)	MC	C0PPT-1418M-ND	3.25	24.64
	Gold	18 (45.72)	GR	C0PPG-1418G-ND	3.58	27.12
	Tin	18 (45.72)	GR	C0PPT-1418G-ND	3.09	23.45
	Gold	36 (91.44)	MC	C0PPG-1436M-ND	4.24	32.16
	Tin	36 (91.44)	MC	C0PPT-1436M-ND	3.76	28.49
	Gold	36 (91.44)	GR	C0PPG-1436G-ND	3.93	29.80
	Tin	36 (91.44)	GR	C0PPT-1436G-ND	3.45	26.13
16	Gold	6 (15.24)	MC	C0PPG-1606M-ND	3.60	27.32
	Tin	6 (15.24)	MC	C0PPT-1606M-ND	3.09	23.44
	Gold	6 (15.24)	GR	C0PPG-1606G-ND	3.54	26.86
	Tin	6 (15.24)	GR	C0PPT-1606G-ND	3.03	22.98
	Gold	18 (45.72)	MC	C0PPG-1618M-ND	3.99	30.26
	Tin	18 (45.72)	MC	C0PPT-1618M-ND	3.48	26.38
	Gold	18 (45.72)	GR	C0PPG-1618G-ND	3.81	28.88
	Tin	18 (45.72)	GR	C0PPT-1618G-ND	3.30	25.00
	Gold	36 (91.44)	MC	C0PPG-1636M-ND	4.57	34.66
	Tin	36 (91.44)	MC	C0PPT-1636M-ND	4.06	30.79
	Gold	36 (91.44)	GR	C0PPG-1636G-ND	4.21	31.91
	Tin	36 (91.44)	GR	C0PPT-1636G-ND	3.70	28.04
24	Gold	6 (15.24)	MC	C0PPG-2406M-ND	5.93	44.98
	Tin	6 (15.24)	MC	C0PPT-2406M-ND	5.09	38.56
	Gold	6 (15.24)	GR	C0PPG-2406G-ND	5.84	44.29
	Tin	6 (15.24)	GR	C0PPT-2406G-ND	5.00	37.87
	Gold	18 (45.72)	MC	C0PPG-2418M-ND	6.52	49.40
	Tin	18 (45.72)	MC	C0PPT-2418M-ND	5.67	42.98
	Gold	18 (45.72)	GR	C0PPG-2418G-ND	6.24	47.32
	Tin	18 (45.72)	GR	C0PPT-2418G-ND	5.40	40.90
	Gold	36 (91.44)	MC	C0PPG-2436M-ND	7.39	56.02
	Tin	36 (91.44)	MC	C0PPT-2436M-ND	6.54	49.61
	Gold	36 (91.44)	GR	C0PPG-2436G-ND	6.84	51.86
	Tin	36 (91.44)	GR	C0PPT-2436G-ND	6.00	45.45
40	Gold	6 (15.24)	MC	C0PPG-4006M-ND	8.61	65.25
	Tin	6 (15.24)	MC	C0PPT-4006M-ND	7.39	56.01
	Gold	6 (15.24)	GR	C0PPG-4006G-ND	8.46	64.11
	Tin	6 (15.24)	GR	C0PPT-4006G-ND	7.24	54.87
	Gold	18 (45.72)	MC	C0PPG-4018M-ND	9.58	72.60
	Tin	18 (45.72)	MC	C0PPT-4018M-ND	8.36	63.37
	Gold	18 (45.72)	GR	C0PPG-4018G-ND	9.13	69.19
	Tin	18 (45.72)	GR	C0PPT-4018G-ND	7.91	59.96
	Gold	36 (91.44)	MC	C0PPG-4036M-ND	11.03	83.64
	Tin	36 (91.44)	MC	C0PPT-4036M-ND	9.81	74.40
	Gold	36 (91.44)	GR	C0PPG-4036G-ND	10.13	76.82
	Tin	36 (91.44)	GR	C0PPT-4036G-ND	8.91	67.58

Also available in the following version:
C0RR☐-☐☐☐☐☐-ND — Dip Connector with Strain Relief Strap.
Call for complete part number and pricing!

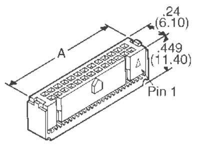
CW INDUSTRIES

Socket Connectors

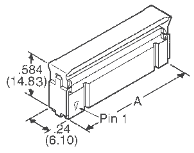
Socket Connector



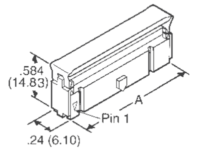
Socket Connector With Central Polarizing Key



Socket Connector With Strain Relief



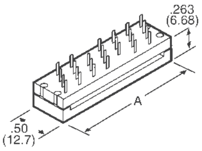
Socket Connector With Strain Relief and Central Polarizing Key



• **Contacts:** Phosphor bronze • **Contact Plating:** Gold – 10µ in. gold (in mating area) over 50µ in. nickel. Tin – 100µ in. tin-lead • **Insulator Material:** UL 94V-0 flame-retardant thermoplastic • **Strain Relief Strap Material:** Insulated stainless steel • **Color:** Blue • **Operating Temperature:** -55°C to +125°C • **Current Rating:** 1A (maximum) per contact • **Dielectric Withstand Voltage:** Greater than 500 Vdc at sea level • **Insulation Resistance:** Greater than 5x10^9 ohms • Withdrawal force 56.70g – 226.79g/contact, typical. • Cover pull-off force 226.79g/contact, minimum (force along contacts' primary axis)

No. of Cont.	Cont. Finish	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	10	100
Socket Connector						
10	Gold	.677 (17.20)	CSC10G-ND	1.12	.85	.65
	Tin	.677 (17.20)	CSC10T-ND	.95	.72	.56
14	Gold	.877 (22.28)	CSC14G-ND	1.58	1.20	.92
	Tin	.877 (22.28)	CSC14T-ND	1.34	1.02	.79
16	Gold	.977 (24.82)	CSC16G-ND	1.83	1.39	1.07
	Tin	.977 (24.82)	CSC16T-ND	1.55	1.18	.91
20	Gold	1.177 (29.90)	CSC20G-ND	1.92	1.46	1.12
	Tin	1.177 (29.90)	CSC20T-ND	1.63	1.24	.95
26	Gold	1.477 (37.52)	CSC26G-ND	2.29	1.74	1.34
	Tin	1.477 (37.52)	CSC26T-ND	1.95	1.48	1.14
34	Gold	1.877 (47.68)	CSC34G-ND	2.82	2.14	1.64
	Tin	1.877 (47.68)	CSC34T-ND	2.40	1.82	1.40
40	Gold	2.177 (55.30)	CSC40G-ND	3.10	2.35	1.80
	Tin	2.177 (55.30)	CSC40T-ND	2.64	2.00	1.53
50	Gold	2.677 (68.00)	CSC50G-ND	3.72	2.82	2.16
	Tin	2.677 (68.00)	CSC50T-ND	3.16	2.40	1.84
60	Gold	3.177 (80.70)	CSC60G-ND	4.53	3.44	2.63
	Tin	3.177 (80.70)	CSC60T-ND	3.85	2.92	2.24
Socket Connector With Strain Relief						
10	Gold	.677 (17.20)	CSR10G-ND	1.36	1.04	.80
	Tin	.677 (17.20)	CSR10T-ND	1.16	.88	.68
14	Gold	.877 (22.28)	CSR14G-ND	1.83	1.39	1.07
	Tin	.877 (22.28)	CSR14T-ND	1.55	1.18	.91
16	Gold	.977 (24.82)	CSR16G-ND	2.05	1.56	1.19
	Tin	.977 (24.82)	CSR16T-ND	1.74	1.32	1.01
20	Gold	1.177 (29.90)	CSR20G-ND	2.14	1.63	1.25
	Tin	1.177 (29.90)	CSR20T-ND	1.82	1.38	1.06
26	Gold	1.477 (37.52)	CSR26G-ND	2.48	1.88	1.44
	Tin	1.477 (37.52)	CSR26T-ND	2.11	1.60	1.23
34	Gold	1.877 (47.68)	CSR34G-ND	3.04	2.31	1.77
	Tin	1.877 (47.68)	CSR34T-ND	2.58	1.96	1.50
40	Gold	2.177 (55.30)	CSR40G-ND	3.29	2.50	1.91
	Tin	2.177 (55.30)	CSR40T-ND	2.79	2.12	1.63
50	Gold	2.677 (68.00)	CSR50G-ND	3.94	2.99	2.29
	Tin	2.677 (68.00)	CSR50T-ND	3.35	2.54	1.95
60	Gold	3.177 (80.70)	CSR60G-ND	4.77	3.62	2.78
	Tin	3.177 (80.70)	CSR60T-ND	4.06	3.08	2.36
Socket Connector With Polarizing Key						
10	Gold	.677 (17.20)	CKC10G-ND	1.12	.85	.65
	Tin	.677 (17.20)	CKC10T-ND	.95	.72	.56
14	Gold	.877 (22.28)	CKC14G-ND	1.58	1.20	.92
	Tin	.877 (22.28)	CKC14T-ND	1.34	1.02	.79
16	Gold	.977 (24.82)	CKC16G-ND	1.83	1.39	1.07
	Tin	.977 (24.82)	CKC16T-ND	1.55	1.18	.91
20	Gold	1.177 (29.90)	CKC20G-ND	1.92	1.46	1.12
	Tin	1.177 (29.90)	CKC20T-ND	1.63	1.24	.95
26	Gold	1.477 (37.52)	CKC26G-ND	2.29	1.74	1.34
	Tin	1.477 (37.52)	CKC26T-ND	1.95	1.48	1.14
Socket Connector With Polarizing Key (cont.)						
34	Gold	1.877 (47.68)	CKC34G-ND	2.82	2.14	1.64
	Tin	1.877 (47.68)	CKC34T-ND	2.40	1.82	1.40
40	Gold	2.177 (55.30)	CKC40G-ND	3.10	2.35	1.80
	Tin	2.177 (55.30)	CKC40T-ND	2.64	2.00	1.53
50	Gold	2.677 (68.00)	CKC50G-ND	3.72	2.82	2.16
	Tin	2.677 (68.00)	CKC50T-ND	3.16	2.40	1.84
60	Gold	3.177 (80.70)	CKC60G-ND	4.53	3.44	2.63
	Tin	3.177 (80.70)	CKC60T-ND	3.85	2.92	2.24
Socket Connector w/Polarizing Key and Strain Relief						
10	Gold	.677 (17.20)	CKR10G-ND	1.36	1.04	.80
	Tin	.677 (17.20)	CKR10T-ND	1.16	.88	.68
14	Gold	.877 (22.28)	CKR14G-ND	1.83	1.39	1.07
	Tin	.877 (22.28)	CKR14T-ND	1.55	1.18	.91
16	Gold	.977 (24.82)	CKR16G-ND	2.05	1.56	1.19
	Tin	.977 (24.82)	CKR16T-ND	1.74	1.32	1.01
20	Gold	1.177 (29.90)	CKR20G-ND	2.14	1.63	1.25
	Tin	1.177 (29.90)	CKR20T-ND	1.82	1.38	1.06
26	Gold	1.477 (37.52)	CKR26G-ND	2.48	1.88	1.44
	Tin	1.477 (37.52)	CKR26T-ND	2.11	1.60	1.23
34	Gold	1.877 (47.68)	CKR34G-ND	3.04	2.31	1.77
	Tin	1.877 (47.68)	CKR34T-ND	2.58	1.96	1.50
40	Gold	2.177 (55.30)	CKR40G-ND	3.29	2.50	1.91
	Tin	2.177 (55.30)	CKR40T-ND	2.79	2.12	1.63
50	Gold	2.677 (68.00)	CKR50G-ND	3.94	2.99	2.29
	Tin	2.677 (68.00)	CKR50T-ND	3.35	2.54	1.95
60	Gold	3.177 (80.70)	CKR60G-ND	4.77	3.62	2.78
	Tin	3.177 (80.70)	CKR60T-ND	4.06	3.08	2.36
Polarizing Key			PK-1-ND	.22/2	.86/10	6.30/100

PCB Connectors

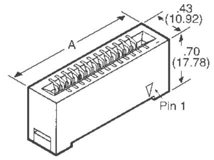


• **Contacts:** Phosphor bronze • **Contact Plating:** Tin – 100µ in tin-lead • **Insulator Material:** UL 94V-0 flame-retardant thermoplastic • **Color:** Blue • **Op Temperature:** -55°C to +125°C • **Current Rating:** 1A (max.) per contact • **Dielectric Withstand Voltage:** Greater than 500 VDC at sea level • **Insulation Resistance:** Greater than 5 x 10^9 ohms. Cover pull-off force, without strain relief, 5.60kg. min. (force along contacts' primary axis)

No. of Cont.	Cont. Finish	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	10	100
PCB Connectors						
10	Tin	.700 (17.78)	CPC10T-ND	1.24	.94	.72
•20	Tin	1.200 (30.48)	CPC20T-ND	1.46	1.11	.85
26	Tin	1.500 (38.10)	CPC26T-ND	1.86	1.41	1.08
34	Tin	1.900 (48.26)	CPC34T-ND	2.26	1.72	1.32
•40	Tin	2.200 (55.88)	CPC40T-ND	2.60	1.98	1.52
50	Tin	2.700 (68.58)	CPC50T-ND	3.22	2.45	1.88
•60	Tin	3.200 (81.28)	CPC60T-ND	3.72	2.82	2.16

• Full row version. ("Special Center" version shown above).

Card Edge Connectors

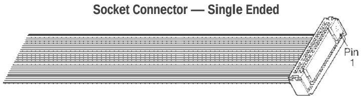


• **Contacts:** Phosphor bronze • **Contact Plating:** Gold – 10µ in. gold (in mating area) over 50µ in. nickel. Tin – 100µ in. tin-lead • **Insulator Material:** UL 94V-0 flame-retardant thermoplastic • **Color:** Blue • **Op Temperature:** -55°C to +125°C • **Current Rating:** 1 A (max.) per contact • **Dielectric Withstand Voltage:** Greater than 500 Vdc at sea level • **Insulation Resistance:** Greater than 5x10^9 ohms • Cover pull-off force 226.79g./contact min. (force along contacts' primary axis)

No. of Cont.	Contact Finish	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	10	100
Card Edge Connectors						
10	Gold	.976 (24.79)	CCE10G-ND	2.42	1.84	1.41
10	Tin	.976 (24.79)	CCE10T-ND	2.05	1.56	1.19
20	Gold	1.476 (37.49)	CCE20G-ND	3.22	2.45	1.88
20	Tin	1.476 (37.49)	CCE20T-ND	2.73	2.07	1.59
26	Gold	1.776 (45.11)	CCE26G-ND	3.88	2.94	2.25
26	Tin	1.776 (45.11)	CCE26T-ND	3.29	2.50	1.91
34	Gold	2.176 (55.27)	CCE34G-ND	4.81	3.65	2.79
34	Tin	2.176 (55.27)	CCE34T-ND	4.09	3.11	2.38
40	Gold	2.476 (62.89)	CCE40G-ND	5.61	4.26	3.26
40	Tin	2.476 (62.89)	CCE40T-ND	4.77	3.62	2.78
50	Gold	2.976 (75.59)	CCE50G-ND	6.32	4.80	3.68
50	Tin	2.976 (75.59)	CCE50T-ND	5.36	4.07	3.12
Polarizing Key			PK-2-ND	.22/2	.86/10	6.30/100

Termination Jumpers

Socket Connector — Single Ended



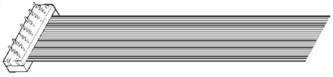
* MC = Multi-Color, GR = Gray

No. of Con-tacts	Conn. Finish	Length Inch (cm)	Rib-bon* Cable	Digi-Key Part No.	Price Each 1	10
10	Gold	36 (91.44)	MC	C1AXG-1036M-ND	1.84	1.40
	Tin	36 (91.44)	MC	C1AXT-1036M-ND	1.67	1.27
	Gold	36 (91.44)	GR	C1AXG-1036G-ND	1.61	1.23
	Tin	36 (91.44)	GR	C1AXT-1036G-ND	1.45	1.10
14	Gold	36 (91.44)	MC	C1AXG-1436M-ND	2.60	1.97
	Tin	36 (91.44)	MC	C1AXT-1436M-ND	2.36	1.80
	Gold	36 (91.44)	GR	C1AXG-1436G-ND	2.29	1.74
	Tin	36 (91.44)	GR	C1AXT-1436G-ND	2.05	1.56
16	Gold	36 (91.44)	MC	C1AXG-1636M-ND	2.99	2.27
	Tin	36 (91.44)	MC	C1AXT-1636M-ND	2.72	2.06
	Gold	36 (91.44)	GR	C1AXG-1636G-ND	2.63	2.00
	Tin	36 (91.44)	GR	C1AXT-1636G-ND	2.35	1.79
20	Gold	36 (91.44)	MC	C1AXG-2036M-ND	3.38	2.56
	Tin	36 (91.44)	MC	C1AXT-2036M-ND	3.09	2.35
	Gold	36 (91.44)	GR	C1AXG-2036G-ND	2.93	2.22
	Tin	36 (91.44)	GR	C1AXT-2036G-ND	2.64	2.00
26	Gold	36 (91.44)	MC	C1AXG-2636M-ND	4.18	3.18
	Tin	36 (91.44)	MC	C1AXT-2636M-ND	3.84	2.92
	Gold	36 (91.44)	GR	C1AXG-2636G-ND	3.61	2.74
	Tin	36 (91.44)	GR	C1AXT-2636G-ND	3.26	2.48
34	Gold	36 (91.44)	MC	C1AXG-3436M-ND	5.29	4.01
	Tin	36 (91.44)	MC	C1AXT-3436M-ND	4.86	3.69
	Gold	36 (91.44)	GR	C1AXG-3436G-ND	4.53	3.44
	Tin	36 (91.44)	GR	C1AXT-3436G-ND	4.11	3.12
40	Gold	36 (91.44)	MC	C1AXG-4036M-ND	6.01	4.56
	Tin	36 (91.44)	MC	C1AXT-4036M-ND	5.55	4.21
	Gold	36 (91.44)	GR	C1AXG-4036G-ND	5.11	3.88
	Tin	36 (91.44)	GR	C1AXT-4036G-ND	4.65	3.53
50	Gold	36 (91.44)	MC	C1AXG-5036M-ND	7.36	5.58
	Tin	36 (91.44)	MC	C1AXT-5036M-ND	6.80	5.16
	Gold	36 (91.44)	GR	C1AXG-5036G-ND	6.23	4.73
	Tin	36 (91.44)	GR	C1AXT-5036G-ND	5.67	4.31
60	Gold	36 (91.44)	MC	C1AXG-6036M-ND	8.87	6.73
	Tin	36 (91.44)	MC	C1AXT-6036M-ND	8.19	6.22
	Gold	36 (91.44)	GR	C1AXG-6036G-ND	7.53	5.71
	Tin	36 (91.44)	GR	C1AXT-6036G-ND	6.85	5.20

Also available in the following versions:
C1BX☐-☐☐☐☐☐-ND – Socket Connector with Strain Relief.
C1CX☐-☐☐☐☐☐-ND – Socket Connector with Central Polarizing Key.
C1DX☐-☐☐☐☐☐-ND – Socket Connector w. Strain Relief & Central Polarizing Key.
Call for complete part number and pricing!

CW

PCB Connector – Single Ended



* MC = Multi-Color, GR = Gray

No. of Con-tacts	Conn. Finish	Length Inch (cm)	Rib-bon* Cable	Digi-Key Part No.	Price Each 1	10
10	Tin	36 (91.44)	MC	C1PXT-1036M-ND	1.97	1.49
	Tin	36 (91.44)	GR	C1PXT-1036G-ND	1.74	1.32
20	Tin	36 (91.44)	MC	C1PXT-2036M-ND	2.91	2.21
	Tin	36 (91.44)	GR	C1PXT-2036G-ND	2.46	1.87
26	Tin	36 (91.44)	MC	C1PXT-2636M-ND	3.75	2.85
	Tin	36 (91.44)	GR	C1PXT-2636G-ND	3.17	2.41
34	Tin	36 (91.44)	MC	C1PXT-3436M-ND	4.73	3.59
	Tin	36 (91.44)	GR	C1PXT-3436G-ND	3.97	3.02
40	Tin	36 (91.44)	MC	C1PXT-4036M-ND	5.51	4.19
	Tin	36 (91.44)	GR	C1PXT-4036G-ND	4.62	3.50
50	Tin	36 (91.44)	MC	C1PXT-5036M-ND	6.86	5.21
	Tin	36 (91.44)	GR	C1PXT-5036G-ND	5.74	4.35
60	Tin	36 (91.44)	MC	C1PXT-6036M-ND	5.59	4.24
	Tin	36 (91.44)	GR	C1PXT-6036G-ND	4.25	3.22

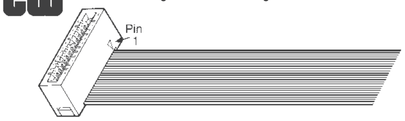
C☐☐☐☐-☐☐☐☐☐-ND

Style
Conn. Finish
G=Gold
T=Tin
No. Of Contacts
Length *(Use "Inches" only.)*
Ribbon Cable
M=Multi-color
G=Gray

Digi-Key® Custom Cable Assemblies Available

Call Toll Free: 1-800-344-4539

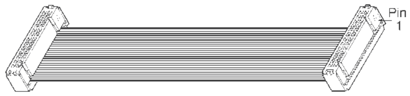
Card Edge Connector – Single Ended



* MC = Multi-Color, GR = Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Price Each 1	10
10	Gold	36 (91.44)	MC	C1EXG-1036M-ND	3.14	2.39
	Tin	36 (91.44)	MC	C1EXT-1036M-ND	2.78	2.11
	Gold	36 (91.44)	GR	C1EXG-1036G-ND	2.92	2.21
	Tin	36 (91.44)	GR	C1EXT-1036G-ND	2.55	1.94
20	Gold	36 (91.44)	MC	C1EXG-2036M-ND	4.68	3.55
	Tin	36 (91.44)	MC	C1EXT-2036M-ND	4.20	3.19
	Gold	36 (91.44)	GR	C1EXG-2036G-ND	4.23	3.21
	Tin	36 (91.44)	GR	C1EXT-2036G-ND	3.74	2.84
26	Gold	36 (91.44)	MC	C1EXG-2636M-ND	5.77	4.38
	Tin	36 (91.44)	MC	C1EXT-2636M-ND	5.18	3.93
	Gold	36 (91.44)	GR	C1EXG-2636G-ND	5.19	3.94
	Tin	36 (91.44)	GR	C1EXT-2636G-ND	4.61	3.50
34	Gold	36 (91.44)	MC	C1EXG-3436M-ND	7.27	5.52
	Tin	36 (91.44)	MC	C1EXT-3436M-ND	6.55	4.97
	Gold	36 (91.44)	GR	C1EXG-3436G-ND	6.52	4.94
	Tin	36 (91.44)	GR	C1EXT-3436G-ND	5.80	4.40
40	Gold	36 (91.44)	MC	C1EXG-4036M-ND	8.52	6.46
	Tin	36 (91.44)	MC	C1EXT-4036M-ND	7.68	5.83
	Gold	36 (91.44)	GR	C1EXG-4036G-ND	7.62	5.78
	Tin	36 (91.44)	GR	C1EXT-4036G-ND	6.78	5.14
50	Gold	36 (91.44)	MC	C1EXG-5036M-ND	9.96	7.56
	Tin	36 (91.44)	MC	C1EXT-5036M-ND	9.02	6.84
	Gold	36 (91.44)	GR	C1EXG-5036G-ND	8.84	6.70
	Tin	36 (91.44)	GR	C1EXT-5036G-ND	7.89	5.98

Socket Connector - to - Socket Connector



* MC = Multi-Color, GR = Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Price Each 1	10
10	Gold	6 (15.24)	MC	C3AAG-1006M-ND	2.35	1.79
	Tin	6 (15.24)	MC	C3AAT-1006M-ND	2.02	1.53
	Gold	6 (15.24)	GR	C3AAG-1006G-ND	2.32	1.76
	Tin	6 (15.24)	GR	C3AAT-1006G-ND	1.98	1.51
	Gold	18 (45.72)	MC	C3AAG-1018M-ND	2.59	1.97
	Tin	18 (45.72)	MC	C3AAT-1018M-ND	2.26	1.72
	Gold	18 (45.72)	GR	C3AAG-1018G-ND	2.48	1.89
	Tin	18 (45.72)	GR	C3AAT-1018G-ND	2.15	1.63
	Gold	36 (91.44)	MC	C3AAG-1036M-ND	2.96	2.25
	Tin	36 (91.44)	MC	C3AAT-1036M-ND	2.62	1.99
	Gold	36 (91.44)	GR	C3AAG-1036G-ND	2.73	2.07
	Tin	36 (91.44)	GR	C3AAT-1036G-ND	2.39	1.82
14	Gold	6 (15.24)	MC	C3AAG-1406M-ND	3.33	2.53
	Tin	6 (15.24)	MC	C3AAT-1406M-ND	2.86	2.17
	Gold	6 (15.24)	GR	C3AAG-1406G-ND	3.28	2.49
	Tin	6 (15.24)	GR	C3AAT-1406G-ND	2.81	2.13
	Gold	18 (45.72)	MC	C3AAG-1418M-ND	3.67	2.79
	Tin	18 (45.72)	MC	C3AAT-1418M-ND	3.20	2.43
	Gold	18 (45.72)	GR	C3AAG-1418G-ND	3.52	2.67
	Tin	18 (45.72)	GR	C3AAT-1418G-ND	3.04	2.31
	Gold	36 (91.44)	MC	C3AAG-1436M-ND	4.18	3.17
	Tin	36 (91.44)	MC	C3AAT-1436M-ND	3.71	2.81
	Gold	36 (91.44)	GR	C3AAG-1436G-ND	3.87	2.94
	Tin	36 (91.44)	GR	C3AAT-1436G-ND	3.39	2.58
16	Gold	6 (15.24)	MC	C3AAG-1606M-ND	3.85	2.92
	Tin	6 (15.24)	MC	C3AAT-1606M-ND	3.30	2.51
	Gold	6 (15.24)	GR	C3AAG-1606G-ND	3.79	2.88
	Tin	6 (15.24)	GR	C3AAT-1606G-ND	3.24	2.46
	Gold	18 (45.72)	MC	C3AAG-1618M-ND	4.24	3.22
	Tin	18 (45.72)	MC	C3AAT-1618M-ND	3.69	2.80
	Gold	18 (45.72)	GR	C3AAG-1618G-ND	4.06	3.08
	Tin	18 (45.72)	GR	C3AAT-1618G-ND	3.51	2.66
	Gold	36 (91.44)	MC	C3AAG-1636M-ND	4.82	3.66
	Tin	36 (91.44)	MC	C3AAT-1636M-ND	4.27	3.24
	Gold	36 (91.44)	GR	C3AAG-1636G-ND	4.46	3.38
	Tin	36 (91.44)	GR	C3AAT-1636G-ND	3.91	2.97
20	Gold	6 (15.24)	MC	C3AAG-2006M-ND	4.09	3.10
	Tin	6 (15.24)	MC	C3AAT-2006M-ND	3.51	2.67
	Gold	6 (15.24)	GR	C3AAG-2006G-ND	4.01	3.05
	Tin	6 (15.24)	GR	C3AAT-2006G-ND	3.43	2.61
	Gold	18 (45.72)	MC	C3AAG-2018M-ND	4.57	3.47
	Tin	18 (45.72)	MC	C3AAT-2018M-ND	4.00	3.03
	Gold	18 (45.72)	GR	C3AAG-2018G-ND	4.35	3.30
	Tin	18 (45.72)	GR	C3AAT-2018G-ND	3.77	2.86
	Gold	36 (91.44)	MC	C3AAG-2036M-ND	5.30	4.02
	Tin	36 (91.44)	MC	C3AAT-2036M-ND	4.72	3.58
	Gold	36 (91.44)	GR	C3AAG-2036G-ND	4.85	3.68
	Tin	36 (91.44)	GR	C3AAT-2036G-ND	4.27	3.24
26	Gold	6 (15.24)	MC	C3AAG-2606M-ND	4.90	3.72
	Tin	6 (15.24)	MC	C3AAT-2606M-ND	4.21	3.20
	Gold	6 (15.24)	GR	C3AAG-2606G-ND	4.81	3.65
	Tin	6 (15.24)	GR	C3AAT-2606G-ND	4.12	3.13
	Gold	18 (45.72)	MC	C3AAG-2618M-ND	5.53	4.20
	Tin	18 (45.72)	MC	C3AAT-2618M-ND	4.84	3.68
	Gold	18 (45.72)	GR	C3AAG-2618G-ND	5.24	3.98
	Tin	18 (45.72)	GR	C3AAT-2618G-ND	4.56	3.46
	Gold	36 (91.44)	MC	C3AAG-2636M-ND	6.48	4.92
	Tin	36 (91.44)	MC	C3AAT-2636M-ND	5.79	4.39
	Gold	36 (91.44)	GR	C3AAG-2636G-ND	5.90	4.48
	Tin	36 (91.44)	GR	C3AAT-2636G-ND	5.21	3.95
34	Gold	6 (15.24)	MC	C3AAG-3406M-ND	6.05	4.59
	Tin	6 (15.24)	MC	C3AAT-3406M-ND	5.21	3.95
	Gold	6 (15.24)	GR	C3AAG-3406G-ND	5.93	4.50
	Tin	6 (15.24)	GR	C3AAT-3406G-ND	5.08	3.86
	Gold	18 (45.72)	MC	C3AAG-3418M-ND	6.87	5.22
	Tin	18 (45.72)	MC	C3AAT-3418M-ND	6.03	4.57
	Gold	18 (45.72)	GR	C3AAG-3418G-ND	6.50	4.93
	Tin	18 (45.72)	GR	C3AAT-3418G-ND	5.65	4.29
	Gold	36 (91.44)	MC	C3AAG-3436M-ND	8.11	6.15
	Tin	36 (91.44)	MC	C3AAT-3436M-ND	7.26	5.51
	Gold	36 (91.44)	GR	C3AAG-3436G-ND	7.35	5.58
	Tin	36 (91.44)	GR	C3AAT-3436G-ND	6.51	4.94
40	Gold	6 (15.24)	MC	C3AAG-4006M-ND	6.69	5.07
	Tin	6 (15.24)	MC	C3AAT-4006M-ND	5.76	4.37
	Gold	6 (15.24)	GR	C3AAG-4006G-ND	6.54	4.96
	Tin	6 (15.24)	GR	C3AAT-4006G-ND	5.61	4.25
	Gold	18 (45.72)	MC	C3AAG-4018M-ND	7.66	5.81
	Tin	18 (45.72)	MC	C3AAT-4018M-ND	6.73	5.10
	Gold	18 (45.72)	GR	C3AAG-4018G-ND	7.21	5.47
	Tin	18 (45.72)	GR	C3AAT-4018G-ND	6.28	4.76
	Gold	36 (91.44)	MC	C3AAG-4036M-ND	9.11	6.91
	Tin	36 (91.44)	MC	C3AAT-4036M-ND	8.18	6.21
	Gold	36 (91.44)	GR	C3AAG-4036G-ND	8.21	6.23
	Tin	36 (91.44)	GR	C3AAT-4036G-ND	7.28	5.52
50	Gold	6 (15.24)	MC	C3AAG-5006M-ND	8.05	6.10
	Tin	6 (15.24)	MC	C3AAT-5006M-ND	6.93	5.26
	Gold	6 (15.24)	GR	C3AAG-5006G-ND	7.86	5.96
	Tin	6 (15.24)	GR	C3AAT-5006G-ND	6.74	5.12
	Gold	18 (45.72)	MC	C3AAG-5018M-ND	9.26	7.02
	Tin	18 (45.72)	MC	C3AAT-5018M-ND	8.14	6.18
	Gold	18 (45.72)	GR	C3AAG-5018G-ND	8.70	6.60
	Tin	18 (45.72)	GR	C3AAT-5018G-ND	7.58	5.75
	Gold	36 (91.44)	MC	C3AAG-5036M-ND	11.08	8.40
	Tin	36 (91.44)	MC	C3AAT-5036M-ND	9.96	7.56
	Gold	36 (91.44)	GR	C3AAG-5036G-ND	9.95	7.55
	Tin	36 (91.44)	GR	C3AAT-5036G-ND	8.84	6.70
60	Gold	6 (15.24)	MC	C3AAG-6006M-ND	9.78	7.42
	Tin	6 (15.24)	MC	C3AAT-6006M-ND	8.42	6.39
	Gold	6 (15.24)	GR	C3AAG-6006G-ND	9.55	7.25
	Tin	6 (15.24)	GR	C3AAT-6006G-ND	8.20	6.22
	Gold	18 (45.72)	MC	C3AAG-6018M-ND	11.23	8.51
	Tin	18 (45.72)	MC	C3AAT-6018M-ND	9.87	7.49
	Gold	18 (45.72)	GR	C3AAG-6018G-ND	10.56	8.01
	Tin	18 (45.72)	GR	C3AAT-6018G-ND	9.20	6.98
	Gold	36 (91.44)	MC	C3AAG-6036M-ND	13.40	10.16
	Tin	36 (91.44)	MC	C3AAT-6036M-ND	12.04	9.13
	Gold	36 (91.44)	GR	C3AAG-6036G-ND	12.06	9.15
	Tin	36 (91.44)	GR	C3AAT-6036G-ND	10.70	8.12

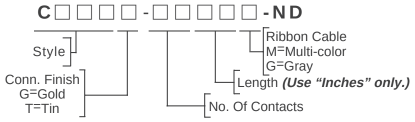
Also available in the following versions:

C3BB□-□□□□□-ND — Socket Connector with Strain Relief.

C3CC□-□□□□□-ND — Socket Connector with Central Polarizing Key.

C3DD□-□□□□□-ND — Socket Connector w. Strain Relief & Central Polarizing Key.

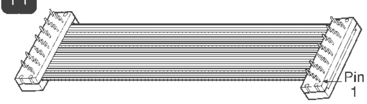
Call for complete part number and pricing!



Digi-Key® Custom Cable Assemblies Available

Call Toll Free: 1-800-344-4539

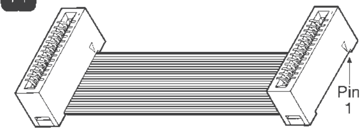
PCB Connector to PCB Connector



* MC = Multi-Color, GR = Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Price Each 1	10
10	Tin	6 (15.24)	MC	C3PPT-1006M-ND	2.60	1.98
	Tin	6 (15.24)	GR	C3PPT-1006G-ND	2.56	1.95
	Tin	18 (45.72)	MC	C3PPT-1018M-ND	2.84	2.16
	Tin	18 (45.72)	GR	C3PPT-1018G-ND	2.73	2.07
	Tin	36 (91.44)	MC	C3PPT-1036M-ND	3.21	2.43
	Tin	36 (91.44)	GR	C3PPT-1036G-ND	2.98	2.26
20	Tin	6 (15.24)	MC	C3PPT-2006M-ND	3.16	2.40
	Tin	6 (15.24)	GR	C3PPT-2006G-ND	3.08	2.34
	Tin	18 (45.72)	MC	C3PPT-2018M-ND	3.64	2.77
	Tin	18 (45.72)	GR	C3PPT-2018G-ND	3.42	2.59
	Tin	36 (91.44)	MC	C3PPT-2036M-ND	4.37	3.32
	Tin	36 (91.44)	GR	C3PPT-2036G-ND	3.92	2.97
26	Tin	6 (15.24)	MC	C3PPT-2606M-ND	4.03	3.06
	Tin	6 (15.24)	GR	C3PPT-2606G-ND	3.94	2.99
	Tin	18 (45.72)	MC	C3PPT-2618M-ND	4.67	3.54
	Tin	18 (45.72)	GR	C3PPT-2618G-ND	4.38	3.32
	Tin	36 (91.44)	MC	C3PPT-2636M-ND	5.61	4.26
	Tin	36 (91.44)	GR	C3PPT-2636G-ND	5.03	3.82
34	Tin	6 (15.24)	MC	C3PPT-3406M-ND	4.94	3.75
	Tin	6 (15.24)	GR	C3PPT-3406G-ND	4.81	3.65
	Tin	18 (45.72)	MC	C3PPT-3418M-ND	5.76	4.37
	Tin	18 (45.72)	GR	C3PPT-3418G-ND	5.38	4.08
	Tin	36 (91.44)	MC	C3PPT-3436M-ND	6.99	5.30
	Tin	36 (91.44)	GR	C3PPT-3436G-ND	6.24	4.73
40	Tin	6 (15.24)	MC	C3PPT-4006M-ND	5.69	4.32
	Tin	6 (15.24)	GR	C3PPT-4006G-ND	5.54	4.21
	Tin	18 (45.72)	MC	C3PPT-4018M-ND	6.66	5.06
	Tin	18 (45.72)	GR	C3PPT-4018G-ND	6.21	4.71
	Tin	36 (91.44)	MC	C3PPT-4036M-ND	8.12	6.16
	Tin	36 (91.44)	GR	C3PPT-4036G-ND	7.22	5.48
50	Tin	6 (15.24)	MC	C3PPT-5006M-ND	7.05	5.35
	Tin	6 (15.24)	GR	C3PPT-5006G-ND	6.87	5.21
	Tin	18 (45.72)	MC	C3PPT-5018M-ND	8.27	6.27
	Tin	18 (45.72)	GR	C3PPT-5018G-ND	7.70	5.84
	Tin	36 (91.44)	MC	C3PPT-5036M-ND	10.09	7.65
	Tin	36 (91.44)	GR	C3PPT-5036G-ND	8.96	6.80
60	Tin	6 (15.24)	MC	C3PPT-6006M-ND	8.16	6.19
	Tin	6 (15.24)	GR	C3PPT-6006G-ND	7.94	6.02
	Tin	18 (45.72)	MC	C3PPT-6018M-ND	9.61	7.29
	Tin	18 (45.72)	GR	C3PPT-6018G-ND	8.94	6.78
	Tin	36 (91.44)	MC	C3PPT-6036M-ND	11.79	8.94
	Tin	36 (91.44)	GR	C3PPT-6036G-ND	10.45	7.92

Card Edge to Card Edge



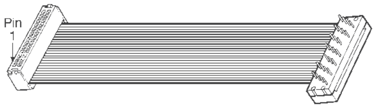
* MC = Multi-Color, GR = Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Price Each 1	10
10	Gold	6 (15.24)	MC	C3EEG-1006M-ND	4.96	3.76
	Tin	6 (15.24)	MC	C3EET-1006M-ND	4.23	3.21
	Gold	6 (15.24)	GR	C3EEG-1006G-ND	4.92	3.73
	Tin	6 (15.24)	GR	C3EET-1006G-ND	4.19	3.18
	Gold	18 (45.72)	MC	C3EEG-1018M-ND	5.20	3.95
	Tin	18 (45.72)	MC	C3EET-1018M-ND	4.47	3.40
	Gold	18 (45.72)	GR	C3EEG-1018G-ND	5.08	3.86
	Tin	18 (45.72)	GR	C3EET-1018G-ND	4.36	3.31
	Gold	36 (91.44)	MC	C3EEG-1036M-ND	5.56	4.22
	Tin	36 (91.44)	MC	C3EET-1036M-ND	4.84	3.67
	Gold	36 (91.44)	GR	C3EEG-1036G-ND	5.33	4.05
	Tin	36 (91.44)	GR	C3EET-1036G-ND	4.61	3.50
20	Gold	6 (15.24)	MC	C3EEG-2006M-ND	6.69	5.08
	Tin	6 (15.24)	MC	C3EET-2006M-ND	5.72	4.34
	Gold	6 (15.24)	GR	C3EEG-2006G-ND	6.62	5.02
	Tin	6 (15.24)	GR	C3EET-2006G-ND	5.65	4.29
	Gold	18 (45.72)	MC	C3EEG-2018M-ND	7.18	5.44
	Tin	18 (45.72)	MC	C3EET-2018M-ND	6.21	4.71
	Gold	18 (45.72)	GR	C3EEG-2018G-ND	6.95	5.27
	Tin	18 (45.72)	GR	C3EET-2018G-ND	5.98	4.54
	Gold	36 (91.44)	MC	C3EEG-2036M-ND	7.90	6.00
	Tin	36 (91.44)	MC	C3EET-2036M-ND	6.94	5.26
	Gold	36 (91.44)	GR	C3EEG-2036G-ND	7.45	5.65
	Tin	36 (91.44)	GR	C3EET-2036G-ND	6.49	4.92

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Price Each 1	10
26	Gold	6 (15.24)	MC	C3EEG-2606M-ND	8.06	6.12
	Tin	6 (15.24)	MC	C3EET-2606M-ND	6.90	5.24
	Gold	6 (15.24)	GR	C3EEG-2606G-ND	7.97	6.05
	Tin	6 (15.24)	GR	C3EET-2606G-ND	6.81	5.16
	Gold	18 (45.72)	MC	C3EEG-2618M-ND	8.70	6.60
	Tin	18 (45.72)	MC	C3EET-2618M-ND	7.53	5.71
	Gold	18 (45.72)	GR	C3EEG-2618G-ND	8.41	6.38
	Tin	18 (45.72)	GR	C3EET-2618G-ND	7.24	5.50
	Gold	36 (91.44)	MC	C3EEG-2636M-ND	9.64	7.31
	Tin	36 (91.44)	MC	C3EET-2636M-ND	8.48	6.43
	Gold	36 (91.44)	GR	C3EEG-2636G-ND	9.06	6.87
	Tin	36 (91.44)	GR	C3EET-2636G-ND	7.90	5.99
34	Gold	6 (15.24)	MC	C3EEG-3406M-ND	10.02	7.60
	Tin	6 (15.24)	MC	C3EET-3406M-ND	8.58	6.51
	Gold	6 (15.24)	GR	C3EEG-3406G-ND	9.90	7.51
	Tin	6 (15.24)	GR	C3EET-3406G-ND	8.45	6.41
	Gold	18 (45.72)	MC	C3EEG-3418M-ND	10.84	8.22
	Tin	18 (45.72)	MC	C3EET-3418M-ND	9.40	7.13
	Gold	18 (45.72)	GR	C3EEG-3418G-ND	10.47	7.94
	Tin	18 (45.72)	GR	C3EET-3418G-ND	9.02	6.85
	Gold	36 (91.44)	MC	C3EEG-3436M-ND	12.07	9.16
	Tin	36 (91.44)	MC	C3EET-3436M-ND	10.63	8.07
	Gold	36 (91.44)	GR	C3EEG-3436G-ND	11.32	8.59
	Tin	36 (91.44)	GR	C3EET-3436G-ND	9.88	7.49
40	Gold	6 (15.24)	MC	C3EEG-4006M-ND	11.71	8.88
	Tin	6 (15.24)	MC	C3EET-4006M-ND	10.02	7.60
	Gold	6 (15.24)	GR	C3EEG-4006G-ND	11.56	8.77
	Tin	6 (15.24)	GR	C3EET-4006G-ND	9.87	7.49
	Gold	18 (45.72)	MC	C3EEG-4018M-ND	12.68	9.61
	Tin	18 (45.72)	MC	C3EET-4018M-ND	10.99	8.34
	Gold	18 (45.72)	GR	C3EEG-4018G-ND	12.23	9.27
	Tin	18 (45.72)	GR	C3EET-4018G-ND	10.54	8.00
	Gold	36 (91.44)	MC	C3EEG-4036M-ND	14.13	10.72
	Tin	36 (91.44)	MC	C3EET-4036M-ND	12.45	9.44
	Gold	36 (91.44)	GR	C3EEG-4036G-ND	13.23	10.04
	Tin	36 (91.44)	GR	C3EET-4036G-ND	11.55	8.76
50	Gold	6 (15.24)	MC	C3EEG-5006M-ND	13.25	10.05
	Tin	6 (15.24)	MC	C3EET-5006M-ND	11.36	8.61
	Gold	6 (15.24)	GR	C3EEG-5006G-ND	13.07	9.91
	Tin	6 (15.24)	GR	C3EET-5006G-ND	11.17	8.47
	Gold	18 (45.72)	MC	C3EEG-5018M-ND	14.47	10.97
	Tin	18 (45.72)	MC	C3EET-5018M-ND	12.57	9.53
	Gold	18 (45.72)	GR	C3EEG-5018G-ND	13.90	10.54
	Tin	18 (45.72)	GR	C3EET-5018G-ND	12.01	9.11
	Gold	36 (91.44)	MC	C3EEG-5036M-ND	16.29	12.35
	Tin	36 (91.44)	MC	C3EET-5036M-ND	14.39	10.91
	Gold	36 (91.44)	GR	C3EEG-5036G-ND	15.16	11.50
	Tin	36 (91.44)	GR	C3EET-5036G-ND	13.26	10.06

CW

Socket Connector to PCB Connector



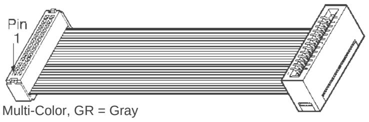
* MC = Multi-Color, GR = Gray

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Price Each 1	10
10	Tin	6 (15.24)	MC	C3APT-1006M-ND	2.02	1.53
	Tin	6 (15.24)	GR	C3APT-1006G-ND	1.98	1.51
	Tin	18 (45.72)	MC	C3APT-1018M-ND	2.26	1.72
	Tin	18 (45.72)	GR	C3APT-1018G-ND	2.15	1.63
	Tin	36 (91.44)	MC	C3APT-1036M-ND	2.62	1.99
	Tin	36 (91.44)	GR	C3APT-1036G-ND	2.39	1.82
20	Tin	6 (15.24)	MC	C3APT-2006M-ND	3.33	2.53
	Tin	6 (15.24)	GR	C3APT-2006G-ND	3.26	2.47
	Tin	18 (45.72)	MC	C3APT-2018M-ND	3.82	2.90
	Tin	18 (45.72)	GR	C3APT-2018G-ND	3.59	2.73
	Tin	36 (91.44)	MC	C3APT-2036M-ND	4.55	3.45
	Tin	36 (91.44)	GR	C3APT-2036G-ND	4.10	3.11
26	Tin	6 (15.24)	MC	C3APT-2606M-ND	4.12	3.13
	Tin	6 (15.24)	GR	C3APT-2606G-ND	4.03	3.06
	Tin	18 (45.72)	MC	C3APT-2618M-ND	4.76	3.61
	Tin	18 (45.72)	GR	C3APT-2618G-ND	4.47	3.39
	Tin	36 (91.44)	MC	C3APT-2636M-ND	5.70	4.33
	Tin	36 (91.44)	GR	C3APT-2636G-ND	5.12	3.89
34	Tin	6 (15.24)	MC	C3APT-3406M-ND	5.07	3.85
	Tin	6 (15.24)	GR	C3APT-3406G-ND	4.95	3.75
	Tin	18 (45.72)	MC	C3APT-3418M-ND	5.89	4.47
	Tin	18 (45.72)	GR	C3APT-3418G-ND	5.52	4.19
	Tin	36 (91.44)	MC	C3APT-3436M-ND	7.13	5.41
	Tin	36 (91.44)	GR	C3APT-3436G-ND	6.37	4.83
40	Tin	6 (15.24)	MC	C3APT-4006M-ND	5.72	4.34
	Tin	6 (15.24)	GR	C3APT-4006G-ND	5.57	4.23
	Tin	18 (45.72)	MC	C3APT-4018M-ND	6.69	5.08
	Tin	18 (45.72)	GR	C3APT-4018G-ND	6.24	4.74
	Tin	36 (91.44)	MC	C3APT-4036M-ND	8.15	6.18
	Tin	36 (91.44)	GR	C3APT-4036G-ND	7.25	5.50
50	Tin	6 (15.24)	MC	C3APT-5006M-ND	6.99	5.31
	Tin	6 (15.24)	GR	C3APT-5006G-ND	6.80	5.16
	Tin	18 (45.72)	MC	C3APT-5018M-ND	8.21	6.23
	Tin	18 (45.72)	GR	C3APT-5018G-ND	7.64	5.80
	Tin	36 (91.44)	MC	C3APT-5036M-ND	10.03	7.61
	Tin	36 (91.44)	GR	C3APT-5036G-ND	8.90	6.75
60	Tin	6 (15.24)	MC	C3APT-6006M-ND	8.29	6.29
	Tin	6 (15.24)	GR	C3APT-6006G-ND	8.07	6.12
	Tin	18 (45.72)	MC	C3APT-6018M-ND	9.74	7.39
	Tin	18 (45.72)	GR	C3APT-6018G-ND	9.07	6.88
	Tin	36 (91.44)	MC	C3APT-6036M-ND	11.91	9.04
	Tin	36 (91.44)	GR	C3APT-6036G-ND	10.57	8.02

Also available in the following versions:
C3BP☐-☐☐☐☐☐-ND — Socket Connector with Strain Relief.
C3CP☐-☐☐☐☐☐-ND — Socket Connector with Central Polarizing Key.
C3DP☐-☐☐☐☐☐-ND — Socket Connector w. Strain Relief & Central Polarizing Key.
Call for complete part number and pricing!

CW

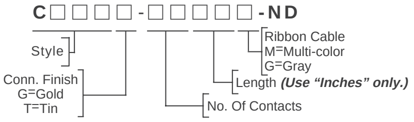
Socket Connector to Card Edge Connector



* MC = Multi-Color, GR = Gray

No. of Con-tacts	Conn. Finish	Length In (cm)	Rib-bon* Cable	Digi-Key Part No.	Price Each 1	10
10	Gold	6 (15.24)	MC	C3AEG-1006M-ND	3.65	2.78
	Tin	6 (15.24)	MC	C3AET-1006M-ND	3.12	2.37
	Gold	6 (15.24)	GR	C3AEG-1006G-ND	3.62	2.75
	Tin	6 (15.24)	GR	C3AET-1006G-ND	3.09	2.34
	Gold	18 (45.72)	MC	C3AEG-1018M-ND	3.90	2.96
	Tin	18 (45.72)	MC	C3AET-1018M-ND	3.37	2.56
	Gold	18 (45.72)	GR	C3AEG-1018G-ND	3.78	2.87
	Tin	18 (45.72)	GR	C3AET-1018G-ND	3.25	2.47
	Gold	36 (91.44)	MC	C3AEG-1036M-ND	4.26	3.23
	Tin	36 (91.44)	MC	C3AET-1036M-ND	3.73	2.83
	Gold	36 (91.44)	GR	C3AEG-1036G-ND	4.03	3.06
	Tin	36 (91.44)	GR	C3AET-1036G-ND	3.50	2.66
20	Gold	6 (15.24)	MC	C3AEG-2006M-ND	5.39	4.09
	Tin	6 (15.24)	MC	C3AET-2006M-ND	4.62	3.50
	Gold	6 (15.24)	GR	C3AEG-2006G-ND	5.31	4.03
	Tin	6 (15.24)	GR	C3AET-2006G-ND	4.54	3.45
	Gold	18 (45.72)	MC	C3AEG-2018M-ND	5.87	4.46
	Tin	18 (45.72)	MC	C3AET-2018M-ND	5.10	3.87
	Gold	18 (45.72)	GR	C3AEG-2018G-ND	5.65	4.29
	Tin	18 (45.72)	GR	C3AET-2018G-ND	4.88	3.70
	Gold	36 (91.44)	MC	C3AEG-2036M-ND	6.60	5.01
	Tin	36 (91.44)	MC	C3AET-2036M-ND	5.83	4.42
	Gold	36 (91.44)	GR	C3AEG-2036G-ND	6.15	4.67
	Tin	36 (91.44)	GR	C3AET-2036G-ND	5.38	4.08
26	Gold	6 (15.24)	MC	C3AEG-2606M-ND	6.48	4.92
	Tin	6 (15.24)	MC	C3AET-2606M-ND	5.56	4.22
	Gold	6 (15.24)	GR	C3AEG-2606G-ND	6.39	4.85
	Tin	6 (15.24)	GR	C3AET-2606G-ND	5.46	4.15
	Gold	18 (45.72)	MC	C3AEG-2618M-ND	7.11	5.40
	Tin	18 (45.72)	MC	C3AET-2618M-ND	6.19	4.70
	Gold	18 (45.72)	GR	C3AEG-2618G-ND	6.82	5.18
	Tin	18 (45.72)	GR	C3AET-2618G-ND	5.90	4.48
	Gold	36 (91.44)	MC	C3AEG-2636M-ND	8.06	6.11
	Tin	36 (91.44)	MC	C3AET-2636M-ND	7.13	5.41
	Gold	36 (91.44)	GR	C3AEG-2636G-ND	7.48	5.68
	Tin	36 (91.44)	GR	C3AET-2636G-ND	6.55	4.97
34	Gold	6 (15.24)	MC	C3AEG-3406M-ND	8.04	6.10
	Tin	6 (15.24)	MC	C3AET-3406M-ND	6.89	5.23
	Gold	6 (15.24)	GR	C3AEG-3406G-ND	7.91	6.00
	Tin	6 (15.24)	GR	C3AET-3406G-ND	6.77	5.13
	Gold	18 (45.72)	MC	C3AEG-3418M-ND	8.86	6.72
	Tin	18 (45.72)	MC	C3AET-3418M-ND	7.71	5.85
	Gold	18 (45.72)	GR	C3AEG-3418G-ND	8.48	6.43
	Tin	18 (45.72)	GR	C3AET-3418G-ND	7.34	5.57
	Gold	36 (91.44)	MC	C3AEG-3436M-ND	10.09	7.65
	Tin	36 (91.44)	MC	C3AET-3436M-ND	8.95	6.79
	Gold	36 (91.44)	GR	C3AEG-3436G-ND	9.34	7.08
	Tin	36 (91.44)	GR	C3AET-3436G-ND	8.19	6.22
40	Gold	6 (15.24)	MC	C3AEG-4006M-ND	9.20	6.98
	Tin	6 (15.24)	MC	C3AET-4006M-ND	7.89	5.99
	Gold	6 (15.24)	GR	C3AEG-4006G-ND	9.05	6.86
	Tin	6 (15.24)	GR	C3AET-4006G-ND	7.74	5.87
	Gold	18 (45.72)	MC	C3AEG-4018M-ND	10.17	7.71
	Tin	18 (45.72)	MC	C3AET-4018M-ND	8.86	6.72
	Gold	18 (45.72)	GR	C3AEG-4018G-ND	9.72	7.37
	Tin	18 (45.72)	GR	C3AET-4018G-ND	8.41	6.38
	Gold	36 (91.44)	MC	C3AEG-4036M-ND	11.62	8.81
	Tin	36 (91.44)	MC	C3AET-4036M-ND	10.32	7.82
	Gold	36 (91.44)	GR	C3AEG-4036G-ND	10.72	8.13
	Tin	36 (91.44)	GR	C3AET-4036G-ND	9.42	7.14
50	Gold	6 (15.24)	MC	C3AEG-5006M-ND	10.65	8.08
	Tin	6 (15.24)	MC	C3AET-5006M-ND	9.14	6.94
	Gold	6 (15.24)	GR	C3AEG-5006G-ND	10.46	7.94
	Tin	6 (15.24)	GR	C3AET-5006G-ND	8.96	6.79
	Gold	18 (45.72)	MC	C3AEG-5018M-ND	11.86	9.00
	Tin	18 (45.72)	MC	C3AET-5018M-ND	10.36	7.86
	Gold	18 (45.72)	GR	C3AEG-5018G-ND	11.30	8.57
	Tin	18 (45.72)	GR	C3AET-5018G-ND	9.79	7.43
	Gold	36 (91.44)	MC	C3AEG-5036M-ND	13.68	10.38
	Tin	36 (91.44)	MC	C3AET-5036M-ND	12.18	9.24
	Gold	36 (91.44)	GR	C3AEG-5036G-ND	12.56	9.52
	Tin	36 (91.44)	GR	C3AET-5036G-ND	11.05	8.38

Also available in the following versions:
C3BE☐-☐☐☐☐☐-ND — Socket Connector with Strain Relief.
C3CE☐-☐☐☐☐☐-ND — Socket Connector with Central Polarizing Key.
C3DE☐-☐☐☐☐☐-ND — Socket Connector w. Strain Relief & Central Polarizing Key.
Call for complete part number and pricing!



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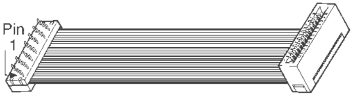
CW

PCB Connector to Card Edge Connector



* MC = Multi-Color, GR = Gray

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Price Each 1	10
10	Tin	6 (15.24)	MC	C3PET-1006M-ND	3.42	2.59
	Tin	6 (15.24)	GR	C3PET-1006G-ND	3.38	2.57
	Tin	18 (45.72)	MC	C3PET-1018M-ND	3.66	2.78
	Tin	18 (45.72)	GR	C3PET-1018G-ND	3.54	2.69
	Tin	36 (91.44)	MC	C3PET-1036M-ND	4.02	3.05
	Tin	36 (91.44)	GR	C3PET-1036G-ND	3.79	2.88
20	Tin	6 (15.24)	MC	C3PET-2006M-ND	4.44	3.37
	Tin	6 (15.24)	GR	C3PET-2006G-ND	4.36	3.31
	Tin	18 (45.72)	MC	C3PET-2018M-ND	4.93	3.74
	Tin	18 (45.72)	GR	C3PET-2018G-ND	4.70	3.57
	Tin	36 (91.44)	MC	C3PET-2036M-ND	5.65	4.29
	Tin	36 (91.44)	GR	C3PET-2036G-ND	5.20	3.95
26	Tin	6 (15.24)	MC	C3PET-2606M-ND	5.47	4.15
	Tin	6 (15.24)	GR	C3PET-2606G-ND	5.37	4.08
	Tin	18 (45.72)	MC	C3PET-2618M-ND	6.10	4.63
	Tin	18 (45.72)	GR	C3PET-2618G-ND	5.81	4.41
	Tin	36 (91.44)	MC	C3PET-2636M-ND	7.04	5.34
	Tin	36 (91.44)	GR	C3PET-2636G-ND	6.47	4.91
34	Tin	6 (15.24)	MC	C3PET-3406M-ND	6.76	5.13
	Tin	6 (15.24)	GR	C3PET-3406G-ND	6.63	5.03
	Tin	18 (45.72)	MC	C3PET-3418M-ND	7.58	5.75
	Tin	18 (45.72)	GR	C3PET-3418G-ND	7.20	5.46
	Tin	36 (91.44)	MC	C3PET-3436M-ND	8.81	6.68
	Tin	36 (91.44)	GR	C3PET-3436G-ND	8.06	6.11
40	Tin	6 (15.24)	MC	C3PET-4006M-ND	7.86	5.96
	Tin	6 (15.24)	GR	C3PET-4006G-ND	7.71	5.85
	Tin	18 (45.72)	MC	C3PET-4018M-ND	8.83	6.70
	Tin	18 (45.72)	GR	C3PET-4018G-ND	8.38	6.36
	Tin	36 (91.44)	MC	C3PET-4036M-ND	10.28	7.80
	Tin	36 (91.44)	GR	C3PET-4036G-ND	9.38	7.12
50	Tin	6 (15.24)	MC	C3PET-5006M-ND	9.21	6.98
	Tin	6 (15.24)	GR	C3PET-5006G-ND	9.02	6.84
	Tin	18 (45.72)	MC	C3PET-5018M-ND	10.42	7.90
	Tin	18 (45.72)	GR	C3PET-5018G-ND	9.85	7.48
	Tin	36 (91.44)	MC	C3PET-5036M-ND	12.24	9.28
	Tin	36 (91.44)	GR	C3PET-5036G-ND	11.11	8.43

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50-Conductor Ribbon Cable (.635mm Pitch)

(For NANO IDC Connector System)

RIBBON CABLE: 0.635mm (25MIL) pitch flat gray cable with 30AWG (7/0.1mm) conductors is designed to allow terminations to a High Density IDC connector.

Features: • **Capacitance:** Approx. 105pF/m • **Inductance:** Approx. 0.48μH/m • **Impedance:** • Approx. 71Ω • **Propagation Delay Time:** Approx. 5.4ns/m

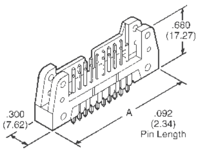
Description	Digi-Key Part No.	Price Each
5 Foot (1.52 Meter) Length	R9029-5-ND	13.00
10 Foot (3.05 Meter) Length	R9029-10-ND	23.20
50 Foot (15.24 Meter) Length........	R9029-50-ND	104.00
100 Foot (30.48 Meter) Length	R9029-100-ND	192.00
200 Foot (60.96 Meter) Length	R9029-200-ND	352.00

CW INDUSTRIES

Protected Headers

Straight-Lead

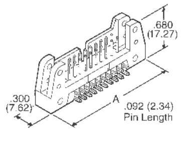
No. of Pins	Dim. A In. (mm)
10	1.26 (32.00)
14	1.46 (37.08)
16	1.56 (39.62)
20	1.76 (44.70)
26	2.06 (52.32)
34	2.46 (62.48)
40	2.76 (70.10)
50	3.26 (82.80)
60	3.76 (95.50)



Lock Ejector Hooks, two required per connector, sold separately (see below).

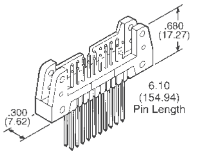
Right-Angle

No. of Pins	Dim. A In. (mm)
10	1.26 (32.00)
14	1.46 (37.08)
16	1.56 (39.62)
20	1.76 (44.70)
26	2.06 (52.32)
34	2.46 (62.48)
40	2.76 (70.10)
50	3.26 (82.80)
60	3.76 (95.50)



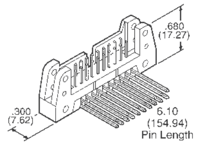
Lock Ejector Hooks, two required per connector, sold separately (see below).

Straight-Lead Wire Wrap



Lock Ejector Hooks, two required per connector, sold separately (see below)

Right-Angle Wire Wrap



Lock Ejector Hooks, two required per connector, sold separately (see below)

SPECIFICATIONS: • **Contacts:** phosphor bronze, standard. • **Contact Plating:** 10µ in. gold (in mating area) over 50µ in. nickel. • **Insulator Material:** UL 94V-0 flame-retardant thermoplastic. • **Color:** blue. • **Operating Temperature:** -55°C to +125°C. • **Current Rating:** 1A (maximum) per contact. • **Dielectric Withstand Voltage:** greater than 500 Vdc at sea level. • **Insulation Resistance:** greater than 5 x 10^9 ohms. • U.S. Defense Department Mil-C-83503/20, 21, approved.

No. of Contacts	Description	Digi-Key Part No.	Price Each 1	10	100	1,000
Protected Headers - Gold Finish						
10	Straight-Lead	CHS10G-ND	.99	.76	.58	.42
	Right-Angle	CHR10G-ND	.99	.76	.58	.42
	Straight-Lead WW	CHW10G-ND	2.08	1.58	1.21	.88
	Right-Angle WW	CHA10G-ND	2.08	1.58	1.21	.88
14	Straight-Lead	CHS14G-ND	1.30	.99	.76	.55
	Right-Angle	CHR14G-ND	1.30	.99	.76	.55
	Straight-Lead WW	CHW14G-ND	2.64	2.00	1.53	1.11
	Right-Angle WW	CHA14G-ND	2.64	2.00	1.53	1.11
16	Straight-Lead	CHS16G-ND	1.46	1.11	.85	.62
	Right-Angle	CHR16G-ND	1.46	1.11	.85	.62
	Straight-Lead WW	CHW16G-ND	2.98	2.26	1.73	1.25
	Right-Angle WW	CHA16G-ND	2.98	2.26	1.73	1.25
20	Straight-Lead	CHS20G-ND	1.52	1.16	.89	.64
	Right-Angle	CHR20G-ND	1.52	1.16	.89	.64
	Straight-Lead WW	CHW20G-ND	3.10	2.35	1.80	1.30
	Right-Angle WW	CHA20G-ND	3.10	2.35	1.80	1.30
26	Straight-Lead	CHS26G-ND	1.86	1.41	1.08	.78
	Right-Angle	CHR26G-ND	1.86	1.41	1.08	.78
	Straight-Lead WW	CHW26G-ND	3.72	2.82	2.16	1.56
	Right-Angle WW	CHA26G-ND	3.72	2.82	2.16	1.56
34	Straight-Lead	CHS34G-ND	2.23	1.70	1.30	.94
	Right-Angle	CHR34G-ND	2.23	1.70	1.30	.94
	Straight-Lead WW	CHW34G-ND	4.46	3.39	2.60	1.88
	Right-Angle WW	CHA34G-ND	4.46	3.39	2.60	1.88
40	Straight-Lead	CHS40G-ND	2.73	2.07	1.59	1.15
	Right-Angle	CHR40G-ND	2.73	2.07	1.59	1.15
	Straight-Lead WW	CHW40G-ND	5.43	4.12	3.15	2.28
	Right-Angle WW	CHA40G-ND	5.43	4.12	3.15	2.28
50	Straight-Lead	CHS50G-ND	3.04	2.31	1.77	1.28
	Right-Angle	CHR50G-ND	3.04	2.31	1.77	1.28
	Straight-Lead WW	CHW50G-ND	6.11	4.63	3.55	2.57
	Right-Angle WW	CHA50G-ND	6.11	4.63	3.55	2.57
60	Straight-Lead ST* (Shrouded)	CHB60G-ND	5.08	3.86	2.96	2.14
	Straight-Lead WW* (Shrouded)	CHC60G-ND	5.08	3.86	2.96	2.14
	Right-Angle ST* (Shrouded)	CHD60G-ND	3.72	2.82	2.16	1.56
	Right-Angle WW* (Shrouded)	CHE60G-ND	5.08	3.86	2.96	2.14

CLKS01-ND Lock Ejector Hooks-Short (2 required per connector) . . **$.22/2**
CLKS02-ND Lock Ejector Hooks: Long - with strain relief; (2 required per connector) . . . . **$.22/2**

* Lock ejector hooks included.

tyco Electronics AMP

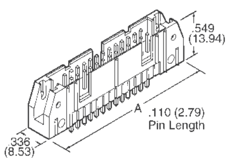
Protected Headers

Specifications:

- Connectors recognized under component program of Underwriters Laboratories Inc. File No. E28476.
- Connectors certified by Canadian Standards Association File No. LR16455.
- .025” (.64mm) Sq. Posts, .240” (6.10mm) Mating Post Length.
- Material and Finish: Housing and Latches — Black thermoplastic, 94V-0 rated.
- Contact Finish: 15µ or 30µ gold on post/pin mating end, .000100-.000200 bright tin-lead on termination end, with entire contact underplated .000050 nickel.

Straight-Lead

No. of Pins	Dim. A In. (mm)
10	1.26 (32.00)
14	1.46 (37.08)
16	1.56 (39.62)
20	1.76 (44.70)
24	1.96 (49.78)
26	2.06 (52.32)
30	2.26 (57.40)
34	2.46 (62.48)
40	2.76 (70.10)
44	2.96 (75.18)
50	3.26 (82.80)
60	3.76 (95.50)
64	3.96 (100.58)



Lock Ejector Hooks, two required per connector, sold separately (see below).

No.of Con-tacts	Cont. Gold Plat.	Post Length Inch (mm)	Digi-Key Part No.	Price Each 1	10	AMP Part No.
Pin Header Without Latches						
10	15µ”	.110 (2.79)	AHS10G-ND	1.02	.85	102153-1
	30µ”	.110 (2.79)	AHS10K-ND	1.11	.93	102154-1
	15µ”	.155 (3.94)	AHJ10G-ND	1.11	.93	102155-1
14	15µ”	.110 (2.79)	AHS14G-ND	1.34	1.12	102153-2
	30µ”	.110 (2.79)	AHS14K-ND	1.43	1.20	102154-2
	15µ”	.155 (3.94)	AHJ14G-ND	1.43	1.20	102155-2
	30µ”	.155 (3.94)	AHJ14K-ND	1.62	1.35	102156-2
16	15µ”	.110 (2.79)	AHS16G-ND	1.53	1.27	102153-3
	30µ”	.110 (2.79)	AHS16K-ND	1.76	1.47	102154-3
	15µ”	.155 (3.94)	AHJ16G-ND	1.76	1.47	102155-3
	30µ”	.155 (3.94)	AHJ16K-ND	1.94	1.62	102156-3
20	15µ”	.110 (2.79)	AHS20G-ND	1.90	1.58	102153-4
	30µ”	.110 (2.79)	AHS20K-ND	2.08	1.74	102154-4
	15µ”	.155 (3.94)	AHJ20G-ND	2.08	1.74	102155-4
	30µ”	.155 (3.94)	AHJ20K-ND	2.31	1.93	102156-4
24	15µ”	.110 (2.79)	AHS24G-ND	2.22	1.85	102153-5
	30µ”	.110 (2.79)	AHS24K-ND	2.45	2.04	102154-5
	15µ”	.155 (3.94)	AHJ24G-ND	2.45	2.04	102155-5
	30µ”	.155 (3.94)	AHJ24K-ND	2.68	2.24	102156-5
26	15µ”	.110 (2.79)	AHS26G-ND	2.41	2.01	102153-6
	30µ”	.110 (2.79)	AHS26K-ND	2.55	2.12	102154-6
	15µ”	.155 (3.94)	AHJ26G-ND	2.55	2.12	102155-6
	30µ”	.155 (3.94)	AHJ26K-ND	2.78	2.31	102156-6
30	15µ”	.110 (2.79)	AHS30G-ND	2.78	2.31	102153-7
	30µ”	.110 (2.79)	AHS30K-ND	2.87	2.39	102154-7
	15µ”	.155 (3.94)	AHJ30G-ND	2.87	2.39	102155-7
34	15µ”	.110 (2.79)	AHS34G-ND	3.05	2.54	102153-8
	30µ”	.110 (2.79)	AHS34K-ND	3.15	2.62	102154-8
	15µ”	.155 (3.94)	AHJ34G-ND	3.15	2.62	102155-8
	30µ”	.155 (3.94)	AHJ34K-ND	3.33	2.77	102156-8
40	15µ”	.110 (2.79)	AHS40G-ND	3.52	2.93	102153-9
	30µ”	.110 (2.79)	AHS40K-ND	3.61	3.01	102154-9
	15µ”	.155 (3.94)	AHJ40G-ND	3.61	3.01	102155-9
	30µ”	.155 (3.94)	AHJ40K-ND	3.84	3.20	102156-9
44	30µ”	.110 (2.79)	AHS44K-ND	3.79	3.16	1-102154-3
50	15µ”	.110 (2.79)	AHS50G-ND	4.16	3.47	1-102153-0
	30µ”	.110 (2.79)	AHS50K-ND	4.26	3.54	1-102154-0
	15µ”	.155 (3.94)	AHJ50G-ND	4.26	3.54	1-102155-0
	30µ”	.155 (3.94)	AHJ50K-ND	4.66	3.87	1-102156-0
60	15µ”	.110 (2.79)	AHS60G-ND	4.87	4.05	1-102153-1
	30µ”	.110 (2.79)	AHS60K-ND	4.97	4.14	1-102154-1
	15µ”	.155 (3.94)	AHJ60G-ND	4.97	4.14	1-102155-1
	30µ”	.155 (3.94)	AHJ60K-ND	5.18	4.31	1-102156-1
64	15µ”	.110 (2.79)	AHS64G-ND	5.01	4.17	1-102153-2
	30µ”	.110 (2.79)	AHS64K-ND	5.11	4.25	1-102154-2
	15µ”	.155 (3.94)	AHJ64G-ND	5.11	4.25	1-102155-2
	30µ”	.155 (3.94)	AHJ64K-ND	5.32	4.43	1-102156-2
Pin Header With ACTION PIN Contacts						
10	30µ”	.174 (4.42)	AHA10A-ND	1.76	1.47	499582-1
14	30µ”	.174 (4.42)	AHA14A-ND	2.41	2.01	499582-2
16	30µ”	.174 (4.42)	AHA16A-ND	2.68	2.24	499582-3
20	30µ”	.174 (4.42)	AHA20A-ND	3.15	2.62	499582-4
24	30µ”	.174 (4.42)	AHA24A-ND	3.79	3.16	499582-5
26	30µ”	.174 (4.42)	AHA26A-ND	3.98	3.31	499582-6
30	30µ”	.174 (4.42)	AHA30A-ND	4.49	3.74	499582-7
34	30µ”	.174 (4.42)	AHA34A-ND	4.94	4.11	499582-8
40	30µ”	.174 (4.42)	AHA40A-ND	5.46	4.54	499582-9
50	30µ”	.174 (4.42)	AHA50A-ND	6.02	5.01	1-499582-0
60	30µ”	.174 (4.42)	AHA60A-ND	6.69	5.56	1-499582-1
64	30µ”	.174 (4.42)	AHA64A-ND	8.19	6.81	1-499582-2

No.of Con-tacts	Cont. Gold Plat.	Post Length Inch (mm)	Digi-Key Part No.	Price Each 1	10	AMP Part No.
Pin Header With Latches - Without Strain Relief						
10	15µ”	.110 (2.79)	AHE10G-ND	1.62	1.35	499910-1
	30µ”	.110 (2.79)	AHE10A-ND	1.71	1.43	499160-1
	30µ”	.155 (3.94)	AHG10A-ND	1.71	1.43	499374-1
14	15µ”	.110 (2.79)	AHE14G-ND	2.22	1.85	499910-2
	30µ”	.155 (3.94)	AHG14A-ND	2.36	1.97	499374-2
16	15µ”	.110 (2.79)	AHE16G-ND	2.45	2.04	499910-3
	30µ”	.110 (2.79)	AHE16A-ND	2.64	2.20	499160-3
	30µ”	.155 (3.94)	AHG16A-ND	2.64	2.20	499374-3
20	15µ”	.110 (2.79)	AHE20G-ND	3.01	2.51	499910-4
	30µ”	.110 (2.79)	AHE20A-ND	5.25	4.37	499160-4
	30µ”	.155 (3.94)	AHG20A-ND	3.19	2.66	499374-4
24	15µ”	.110 (2.79)	AHE24G-ND	3.47	2.89	499910-5
	30µ”	.110 (2.79)	AHE24A-ND	3.79	3.16	499160-5
	30µ”	.155 (3.94)	AHG24A-ND	3.79	3.16	499374-5
26	15µ”	.110 (2.79)	AHE26G-ND	3.70	3.08	499910-6
	30µ”	.110 (2.79)	AHE26A-ND	3.98	3.31	499160-6
	30µ”	.155 (3.94)	AHG26A-ND	3.98	3.31	499374-6
30	15µ”	.110 (2.79)	AHE30G-ND	4.16	3.47	499910-7
	30µ”	.110 (2.79)	AHE30A-ND	4.49	3.74	499160-7
34	15µ”	.110 (2.79)	AHE34G-ND	4.58	3.81	499910-8
	30µ”	.110 (2.79)	AHE34A-ND	4.97	4.14	499160-8
	30µ”	.155 (3.94)	AHG34A-ND	4.97	4.14	499374-8
40	15µ”	.110 (2.79)	AHE40G-ND	5.25	4.37	499910-9
	30µ”	.110 (2.79)	AHE40A-ND	5.71	4.75	499160-9
	30µ”	.155 (3.94)	AHG40A-ND	5.71	4.75	499374-9
50	15µ”	.110 (2.79)	AHE50G-ND	6.37	5.30	1-499910-0
	30µ”	.110 (2.79)	AHE50A-ND	6.93	5.77	1-499160-0
	30µ”	.155 (3.94)	AHG50A-ND	6.93	5.77	1-499374-0
60	15µ”	.110 (2.79)	AHE60G-ND	7.49	6.23	1-499910-1
	30µ”	.110 (2.79)	AHE60A-ND	8.09	6.73	1-499160-1
	30µ”	.155 (3.94)	AHG60A-ND	8.09	6.73	1-499374-1
64	15µ”	.110 (2.79)	AHE64G-ND	7.81	6.49	1-499910-2
	30µ”	.110 (2.79)	AHE64A-ND	8.40	6.99	1-499160-2
Pin Header With Latches - With Strain Relief						
10	15µ”	.110 (2.79)	AHK10G-ND	1.62	1.35	499922-1
	30µ”	.110 (2.79)	AHK10A-ND	1.62	1.35	499206-1
	15µ”	.155 (3.94)	AHL10G-ND	3.50	2.91	499923-1
	30µ”	.155 (3.94)	AHL10A-ND	1.71	1.43	102321-1
14	15µ”	.110 (2.79)	AHK14G-ND	2.22	1.85	499922-2
	30µ”	.110 (2.79)	AHK14A-ND	2.36	1.97	499206-2
	30µ”	.155 (3.94)	AHL14A-ND	2.36	1.97	102321-2
16	15µ”	.110 (2.79)	AHK16G-ND	2.45	2.04	499922-3
	30µ”	.110 (2.79)	AHK16A-ND	2.64	2.20	499206-3
	15µ”	.155 (3.94)	AHL16G-ND	2.45	2.04	499923-3
	30µ”	.155 (3.94)	AHL16A-ND	2.64	2.20	102321-3
20	15µ”	.110 (2.79)	AHK20G-ND	3.01	2.51	499922-4
	30µ”	.110 (2.79)	AHK20A-ND	3.19	2.66	499206-4
	15µ”	.155 (3.94)	AHL20G-ND	2.98	2.48	499923-4
	30µ”	.155 (3.94)	AHL20A-ND	3.19	2.66	102321-4
24	15µ”	.110 (2.79)	AHK24G-ND	3.47	2.89	499922-5
	30µ”	.110 (2.79)	AHK24A-ND	3.79	3.16	499206-5
	30µ”	.155 (3.94)	AHL24A-ND	3.79	3.16	102321-5
26	15µ”	.110 (2.79)	AHK26G-ND	3.70	3.08	499922-6
	30µ”	.110 (2.79)	AHK26A-ND	3.24	2.70	499206-6
	15µ”	.155 (3.94)	AHL26G-ND	3.71	3.09	499923-6
	30µ”	.155 (3.94)	AHL26A-ND	3.98	3.31	102321-6
30	30µ”	.110 (2.79)	AHK30A-ND	4.49	3.74	499206-7
	15µ”	.155 (3.94)	AHL30G-ND	4.17	3.47	499923-7
	30µ”	.155 (3.94)	AHL30A-ND	4.49	3.74	102321-7
34	15µ”	.110 (2.79)	AHK34G-ND	4.58	3.81	499922-8
	30µ”	.110 (2.79)	AHK34A-ND	4.97	4.14	499206-8
	15µ”	.155 (3.94)	AHL34G-ND	4.59	3.82	499923-8
	30µ”	.155 (3.94)	AHL34A-ND	4.97	4.14	102321-8
40	15µ”	.110 (2.79)	AHK40G-ND	5.25	4.37	499922-9
	30µ”	.110 (2.79)	AHK40A-ND	5.71	4.75	499206-9
	15µ”	.155 (3.94)	AHL40G-ND	5.29	4.40	499923-9
	30µ”	.155 (3.94)	AHL40A-ND	5.71	4.75	102321-9
50	15µ”	.110 (2.79)	AHK50G-ND	6.37	5.30	1-499922-0
	30µ”	.110 (2.79)	AHK50A-ND	5.95	4.95	1-499206-0
	15µ”	.155 (3.94)	AHL50G-ND	6.41	5.33	1-499923-0
	30µ”	.155 (3.94)	AHL50A-ND	6.93	5.77	1-102321-0
60	15µ”	.110 (2.79)	AHK60G-ND	7.49	6.23	1-499922-1
	30µ”	.110 (2.79)	AHK60A-ND	8.09	6.73	1-499206-1
	15µ”	.155 (3.94)	AHL60G-ND	7.49	6.23	1-499923-1
	30µ”	.155 (3.94)	AHL60A-ND	8.09	6.73	1-102321-1
64	15µ”	.110 (2.79)	AHK64G-ND	7.81	6.49	1-499922-2
	30µ”	.110 (2.79)	AHK64A-ND	8.40	6.99	1-499206-2
	15µ”	.155 (3.94)	AHL64G-ND	7.77	6.46	1-499923-2
	30µ”	.155 (3.94)	AHL64A-ND	8.40	6.99	1-102321-2
Lock Ejector Hooks (2 Required per Connector)						
Short			ALSN01-ND	$.47/2		102312-1
Long w/o Push Tabs			ALLN01-ND	$.47/2		102320-1
*Pin Header Mounting Kit **						
Bolt and Nut, 2 each/kit			A26333-ND	1.53	—	102198-1

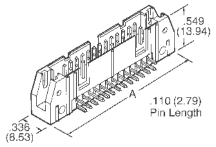
* 2-56 bolts and nuts may be used to mount pin headers with and w/out latches. If latches are to be used, the bolts must be positioned in the pin header before the latches are installed.

tyco / Electronics AMP

Protected Headers *(Cont.)*

Right-Angle

No. of Pins	Dim. A In. (mm)
10	1.26 (32.00)
14	1.46 (37.08)
16	1.56 (39.62)
20	1.76 (44.70)
24	1.96 (49.78)
26	2.06 (52.32)
30	2.26 (57.40)
34	2.46 (62.48)
40	2.76 (70.10)
50	3.26 (82.80)
60	3.76 (95.50)
64	3.96 (100.58)



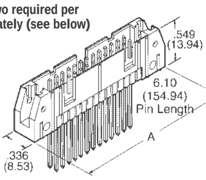
Lock Ejector Hooks, two required per connector, sold separately.

No. of Contacts	Cont. Gold Plat.	Post Length Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 10	AMP Part No.
Right-Angle Pin Headers Without Latches						
10	15µ"	.110 (2.79)	AHR10G-ND	1.11	.93	102159-1
	30µ"	.110 (2.79)	AHR10K-ND	1.30	1.08	102160-1
14	15µ"	.110 (2.79)	AHR14G-ND	1.43	1.20	102159-2
	30µ"	.110 (2.79)	AHR14K-ND	1.62	1.35	102160-2
	15µ"	.155 (3.94)	AHZ14G-ND	1.99	1.66	102161-2
	30µ"	.155 (3.94)	AHZ14K-ND	1.85	1.54	102162-2
16	15µ"	.110 (2.79)	AHR16G-ND	1.76	1.47	102159-3
	30µ"	.110 (2.79)	AHR16K-ND	2.17	1.81	102160-3
	15µ"	.155 (3.94)	AHZ16G-ND	2.22	1.85	102161-3
20	15µ"	.110 (2.79)	AHR20G-ND	2.08	1.74	102159-4
	30µ"	.110 (2.79)	AHR20K-ND	2.31	1.93	102160-4
	15µ"	.155 (3.94)	AHZ20G-ND	2.73	2.27	102161-4
	30µ"	.155 (3.94)	AHZ20K-ND	2.45	2.04	102162-4
24	30µ"	.110 (2.79)	AHR24K-ND	2.68	2.24	102160-5
	15µ"	.155 (3.94)	AHZ24G-ND	3.19	2.66	102161-5
26	15µ"	.110 (2.79)	AHR26G-ND	2.55	2.12	102159-6
	30µ"	.110 (2.79)	AHR26K-ND	2.78	2.31	102160-6
	15µ"	.155 (3.94)	AHZ26G-ND	3.38	2.81	102161-6
	30µ"	.155 (3.94)	AHZ26K-ND	3.01	2.51	102162-6
30	15µ"	.110 (2.79)	AHR30G-ND	2.87	2.39	102159-7
	30µ"	.110 (2.79)	AHR30K-ND	3.05	2.54	102160-7
	15µ"	.155 (3.94)	AHZ30G-ND	3.79	3.16	102161-7
	30µ"	.155 (3.94)	AHZ30K-ND	3.38	2.81	102162-7
34	15µ"	.110 (2.79)	AHR34G-ND	3.15	2.62	102159-8
	30µ"	.110 (2.79)	AHR34K-ND	3.33	2.77	102160-8
	15µ"	.155 (3.94)	AHZ34G-ND	4.21	3.51	102161-8
	30µ"	.155 (3.94)	AHZ34K-ND	3.75	3.12	102162-8
40	15µ"	.110 (2.79)	AHR40G-ND	3.61	3.01	102159-9
	30µ"	.110 (2.79)	AHR40K-ND	3.84	3.20	102160-9
	30µ"	.155 (3.94)	AHZ40K-ND	4.26	3.54	102162-9
50	15µ"	.110 (2.79)	AHR50G-ND	4.26	3.54	1-102159-0
	30µ"	.110 (2.79)	AHR50K-ND	4.66	3.87	1-102160-0
	15µ"	.155 (3.94)	AHZ50G-ND	5.92	4.92	1-102161-0
	30µ"	.155 (3.94)	AHZ50K-ND	5.18	4.31	1-102162-0
60	15µ"	.110 (2.79)	AHR60G-ND	4.97	4.12	1-102159-1
	30µ"	.110 (2.79)	AHR60K-ND	5.18	4.31	1-102160-1
	15µ"	.155 (3.94)	AHZ60G-ND	6.93	5.77	1-102161-1
	30µ"	.155 (3.94)	AHZ60K-ND	5.95	4.95	1-102162-1
64	15µ"	.110 (2.79)	AHR64G-ND	5.11	4.25	1-102159-2
	30µ"	.110 (2.79)	AHR64K-ND	5.32	4.43	1-102160-2
	15µ"	.155 (3.94)	AHZ64G-ND	7.21	6.00	1-102161-2
	30µ"	.155 (3.94)	AHZ64K-ND	6.20	5.16	1-102162-2
Receptacles Without Strain Relief - With Latches						
10	15µ"	.110 (2.79)	AHB10G-ND	1.71	1.43	499913-1
	30µ"	.110 (2.79)	AHB10K-ND	3.93	3.27	499345-1
14	15µ"	.110 (2.79)	AHB14G-ND	2.36	1.97	499913-2
	30µ"	.110 (2.79)	AHB14K-ND	4.66	3.87	499345-2
16	15µ"	.110 (2.79)	AHB16G-ND	2.64	2.20	499913-3
	30µ"	.110 (2.79)	AHB16K-ND	2.87	2.39	499345-3
20	15µ"	.110 (2.79)	AHB20G-ND	3.19	2.66	499913-4
	30µ"	.110 (2.79)	AHB20K-ND	3.52	2.93	499345-4
24	15µ"	.110 (2.79)	AHB24G-ND	3.79	3.16	499913-5
	30µ"	.110 (2.79)	AHB24K-ND	4.16	3.47	499345-5
26	15µ"	.110 (2.79)	AHB26G-ND	3.98	3.31	499913-6
	30µ"	.110 (2.79)	AHB26K-ND	4.40	3.66	499345-6
30	15µ"	.110 (2.79)	AHB30G-ND	4.49	3.74	499913-7
34	15µ"	.110 (2.79)	AHB34G-ND	4.97	4.14	499913-8
	30µ"	.110 (2.79)	AHB34K-ND	5.46	4.54	499345-8
40	15µ"	.110 (2.79)	AHB40G-ND	5.15	4.28	499913-9
	30µ"	.110 (2.79)	AHB40K-ND	6.23	5.18	499345-9
50	15µ"	.110 (2.79)	AHB50G-ND	6.93	5.77	1-499913-0
	30µ"	.110 (2.79)	AHB50K-ND	7.63	6.35	1-499345-0
60	15µ"	.110 (2.79)	AHB60G-ND	8.09	6.73	1-499913-1
	30µ"	.110 (2.79)	AHB60K-ND	8.93	7.43	1-499345-1
64	15µ"	.110 (2.79)	AHB64G-ND	8.40	6.99	1-499913-2
	30µ"	.110 (2.79)	AHB64K-ND	9.31	7.75	1-499345-2
Receptacles With Strain Relief - With Latches						
10	15µ"	.110 (2.79)	AHC10G-ND	1.71	1.43	499786-1
	30µ"	.110 (2.79)	AHC10K-ND	1.90	1.58	499141-1
	30µ"	.155 (3.94)	AHT10K-ND	2.08	1.74	102322-1
14	15µ"	.110 (2.79)	AHC14G-ND	2.36	1.97	499786-2
	30µ"	.110 (2.79)	AHC14K-ND	2.59	2.16	499141-2
	30µ"	.155 (3.94)	AHT14K-ND	2.87	2.39	102322-2
16	15µ"	.110 (2.79)	AHC16G-ND	2.64	2.20	499786-2
	30µ"	.110 (2.79)	AHC16K-ND	2.87	2.39	499141-3
	30µ"	.155 (3.94)	AHT16K-ND	3.15	2.62	102322-3
20	15µ"	.110 (2.79)	AHC20G-ND	3.19	2.66	499786-4
	30µ"	.110 (2.79)	AHC20K-ND	3.52	2.93	499141-4
	30µ"	.155 (3.94)	AHT20K-ND	3.89	3.24	102322-4
24	15µ"	.110 (2.79)	AHC24G-ND	3.79	3.16	499786-5
	30µ"	.110 (2.79)	AHC24K-ND	4.16	3.47	499141-5
26	15µ"	.110 (2.79)	AHC26G-ND	3.98	3.31	499786-6
	30µ"	.110 (2.79)	AHC26K-ND	4.40	3.66	499141-6
	30µ"	.155 (3.94)	AHT26K-ND	4.83	4.02	102322-6
30	15µ"	.110 (2.79)	AHC30G-ND	4.49	3.74	499786-7
	30µ"	.110 (2.79)	AHC30K-ND	8.54	7.10	499141-7
34	15µ"	.110 (2.79)	AHC34G-ND	4.97	4.14	499786-8
	30µ"	.110 (2.79)	AHC34K-ND	5.46	4.54	499141-8
	30µ"	.155 (3.94)	AHT34K-ND	5.95	4.95	102322-8
40	15µ"	.110 (2.79)	AHC40G-ND	5.71	4.75	499786-9
	30µ"	.110 (2.79)	AHC40K-ND	6.23	5.18	499141-9
	30µ"	.155 (3.94)	AHT40K-ND	6.93	5.77	102322-9
50	15µ"	.110 (2.79)	AHC50G-ND	6.93	5.77	1-499786-0
	30µ"	.110 (2.79)	AHC50K-ND	7.63	6.35	1-499141-0
	30µ"	.155 (3.94)	AHT50K-ND	8.40	6.99	1-102322-0
60	15µ"	.110 (2.79)	AHC60G-ND	10.68	8.88	1-499786-1
	30µ"	.110 (2.79)	AHC60K-ND	8.93	7.43	1-499141-1
	30µ"	.155 (3.94)	AHT60K-ND	9.80	8.15	1-102322-1
64	15µ"	.110 (2.79)	AHC64G-ND	8.40	6.99	1-499786-2
	30µ"	.110 (2.79)	AHC64K-ND	9.31	7.75	1-499141-2
	30µ"	.155 (3.94)	AHT64K-ND	10.26	8.53	1-102322-2

Straight-Lead Wire-Wrap

Lock Ejector Hooks, two required per connector, sold separately (see below)

No. of Pins	Dim. A In. (mm)
10	1.26 (32.00)
14	1.46 (37.08)
16	1.56 (39.62)
20	1.76 (44.70)
34	2.46 (62.48)
40	2.76 (70.10)
50	3.26 (82.80)
60	3.76 (95.50)



No. of Contacts	Contact Gold Plating	Digi-Key Part No.	Price Each 1	Price Each 10	AMP Part No.
Protected Headers - Gold Finish					
16	15µ"	AHW16G-ND	10.64	8.67	102158-3
40	15µ"	AHW40G-ND	9.87	8.21	102158-9
60	15µ"	AHW60G-ND	28.63	23.32	1-102158-1
Lock Ejector Hooks (2 Required per Connector)					
Short		ALSN01-ND	$.47/2		102312-1
Long w/o Push Tabs		ALLN01-ND	$.47/2		102320-1

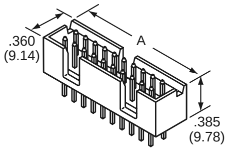
tyco / Electronics AMP

Low Profile - 4 Sided Protective Headers - .100 x .100 Centers

Specifications:

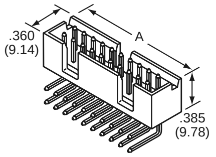
- .025" (.64mm) Sq. Posts, .240" (6.10mm) Mating Post Length.
- Material and Finish: Housing and Latches — Black thermoplastic, 94V-0 rated.
- Contact Finish: 15µ or 30µ gold on post/pin mating end, 100µ-200µ bright tin-lead on termination end, with entire contact underplated 50µ nickel.

No. of Pins	Dim. A In. (mm)
10	.800 (20.32)
14	1.00 (25.40)
16	1.10 (27.94)
20	1.30 (33.02)
26	1.60 (40.64)
34	2.00 (50.80)
40	2.30 (58.42)
50	2.80 (71.12)
60	3.30 (83.82)



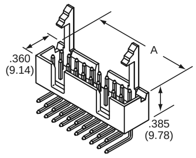
No. of Contacts	Contact Gold Plating	Digi-Key Part No.	Price Each 1	Price Each 100	AMP Part No.
Shrouded with .150" (3.81mm) End Dimension Double Row - Straight Post					
10	15µ"	A26267-ND	.44	.36	103308-1
	30µ"	A26268-ND	.53	.43	103309-1
14	15µ"	A26269-ND	.58	.48	103308-2
	30µ"	A26270-ND	.82	.67	103309-2
16	15µ"	A26271-ND	2.16	1.76	103308-3
	30µ"	A26272-ND	.90	.74	103309-3
20	15µ"	A26273-ND	.78	.63	103308-5
	30µ"	A26274-ND	.94	.77	103309-5
26	15µ"	A26275-ND	.92	.75	103308-6
	30µ"	A26276-ND	1.11	.90	103309-6
34	15µ"	A26277-ND	1.19	.97	103308-7
	30µ"	A26278-ND	1.28	1.04	103309-7
40	15µ"	A26279-ND	1.39	1.13	103308-8
	30µ"	A26280-ND	1.93	1.57	103309-8
50	15µ"	A26281-ND	1.33	1.08	1-103308-0
	30µ"	A26282-ND	1.69	1.38	1-103309-0
60	15µ"	A26283-ND	2.42	1.96	1-103308-2
	30µ"	A26284-ND	2.86	2.32	1-103309-2

No. of Pins	Dim. A In. (mm)
10	.800 (20.32)
14	1.00 (25.40)
16	1.10 (27.94)
20	1.30 (33.02)
26	1.60 (40.64)
34	2.00 (50.80)
40	2.30 (58.42)
50	2.80 (71.12)



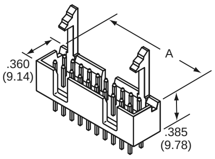
No. of Contacts	Contact Gold Plating	Digi-Key Part No.	Price Each 1	Price Each 100	AMP Part No.
Shrouded with .150" (3.81mm) End Dimension Double Row - Right-Angle Post					
10	15µ"	A26285-ND	.59	.48	103310-1
	30µ"	A26286-ND	.65	.53	103311-1
14	15µ"	A26287-ND	.78	.63	103310-2
	30µ"	A26288-ND	1.41	1.14	103311-2
16	15µ"	A26289-ND	.65	.53	103310-3
	30µ"	A26290-ND	.95	.77	103311-3
20	15µ"	A26291-ND	2.71	2.20	103310-5
	30µ"	A26292-ND	1.00	.81	103311-5
26	15µ"	A26293-ND	1.24	1.01	103310-6
	30µ"	A26294-ND	1.39	1.13	103311-6
34	15µ"	A26295-ND	1.58	1.28	103310-7
	30µ"	A26296-ND	1.79	1.45	103311-7
40	15µ"	A26297-ND	4.73	3.83	103310-8
	30µ"	A26298-ND	1.83	1.49	103311-8
50	15µ"	A26299-ND	1.94	1.58	1-103310-0
	30µ"	A26300-ND	2.39	1.94	1-103311-0

No. of Pins	Dim. A In. (mm)
10	.800 (20.32)
14	1.00 (25.40)
16	1.10 (27.94)
20	1.30 (33.02)
26	1.60 (40.64)
34	2.00 (50.80)
40	2.30 (58.42)
50	2.80 (71.12)



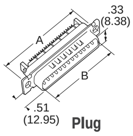
No. of Contacts	Contact Gold Plating	Latching Height Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 100	AMP Part No.
Shrouded with Ejection Latches and .150" (3.81mm) End Dimension Double Row - RIght Angle Post						
10	30µ"	.585 (14.9)	A26301-ND	2.01	1.63	104130-1
	30µ"	.435 (11.0)	A26302-ND	2.00	1.62	104315-1
14	30µ"	.585 (14.9)	A26303-ND	2.18	1.77	104130-2
16	30µ"	.585 (14.9)	A26304-ND	6.11	4.95	104130-3
20	30µ"	.585 (14.9)	A26305-ND	6.62	5.36	104130-4
26	30µ"	.585 (14.9)	A26306-ND	2.79	2.27	104130-5
	30µ"	.435 (11.0)	A26307-ND	2.75	2.23	104315-5
34	30µ"	.585 (14.9)	A26308-ND	3.13	2.54	104130-6
40	30µ"	.585 (14.9)	A26309-ND	3.34	2.71	104130-7
	30µ"	.435 (11.0)	A26310-ND	3.34	2.71	104315-7
50	30µ"	.585 (14.9)	A26311-ND	3.78	3.06	104130-9
	30µ"	.435 (11.0)	A26312-ND	3.74	3.03	104315-9

No. of Pins	Dim. A In. (mm)
10	.800 (20.32)
14	1.00 (25.40)
16	1.10 (27.94)
20	1.30 (33.02)
26	1.60 (40.64)
34	2.00 (50.80)
40	2.30 (58.42)
50	2.80 (71.12)
60	3.30 (83.82)

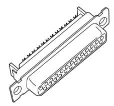


No. of Contacts	Contact Gold Plating	Latching Height Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 100	AMP Part No.
Shrouded with Ejection Latches and .150" (3.81mm) End Dimension Double Row - Straight Post						
10	30µ"	.585 (14.9)	A26313-ND	1.92	1.56	104128-1
	30µ"	.435 (11.0)	A26314-ND	1.92	1.56	104313-1
14	30µ"	.585 (14.9)	A26315-ND	2.16	1.76	104128-2
	30µ"	.435 (11.0)	A26316-ND	2.16	1.76	104313-2
16	30µ"	.585 (14.9)	A26317-ND	2.25	1.82	104128-3
	30µ"	.435 (11.0)	A26318-ND	2.25	1.82	104313-3
20	30µ"	.585 (14.9)	A26319-ND	2.42	1.96	104128-4
	30µ"	.435 (11.0)	A26320-ND	2.42	1.96	104313-4
26	30µ"	.585 (14.9)	A26321-ND	2.56	2.08	104128-5
	30µ"	.435 (11.0)	A26322-ND	2.69	2.18	104313-5
34	30µ"	.585 (14.9)	A26323-ND	3.05	2.47	104128-6
	30µ"	.435 (11.0)	A26324-ND	3.05	2.47	104313-6
40	30µ"	.585 (14.9)	A26325-ND	3.28	2.66	104128-7
	30µ"	.435 (11.0)	A26326-ND	3.28	2.66	104313-7
50	30µ"	.585 (14.9)	A26327-ND	3.65	2.96	104128-9
	30µ"	.435 (11.0)	A26328-ND	3.65	2.96	104313-9
60	30µ"	.585 (14.9)	A26329-ND	1.93	1.57	1-104128-0
	30µ"	.435 (11.0)	A26330-ND	4.20	3.40	1-104313-0

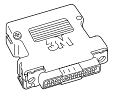
3M D-Subminiature Connectors



Plug



Receptacle



Backshell

Wire Accommodation: 26 & 28 AWG solid and stranded.
Order strain reliefs separately.

Physical: • Contact Material: Beryllium Copper Plating • Underplate: 50µ" Nickel — QQ-N-290, Class 2 • Wiping Area: 30µ" Gold — MIL-G-45204, Type II, Grade C • Shell Material: Steel, Plating: Tin • Strain Relief Material: Stainless Steel .016" (.41mm) Thick • Marking: 3M logo and Contact Position Numbers. **Electrical:** • Current Rating: 1 amp. • Insulation Resistance: >1x10⁹ Ω @ 500 VDC. • Withstanding Voltage: 1000VRMS @ sea level. **Environmental:** • Temperature Rating: -55°C to +105°C. UL File No.: E68080, CSA File No.: LR-40971.

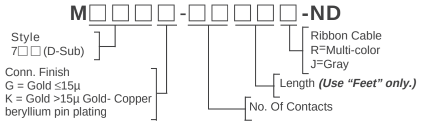
No. of Cont.	Dim. – In. (mm) A	B	Digi-Key Part No.	Pricing 1	10	3M Part No.
Plugs with flange, thru-hole style, Male						
9	.98 (24.89)	.67 (17.02)	MMR09K-ND	5.01	42.18	8209-6000
15	1.31 (33.27)	1.00 (25.40)	MMR15K-ND	5.70	47.95	8215-6000
25	1.85 (46.99)	1.54 (39.12)	MMR25K-ND	6.47	54.43	8225-6000
37	2.50 (63.50)	2.18 (55.37)	MMR37K-ND	8.36	70.35	8237-6000
Plugs with 4-40 threaded insert, Male						
9	.98 (24.89)	.67 (17.02)	MML09K-ND	6.14	51.63	8209-6003
15	1.31 (33.27)	1.00 (25.40)	MML15K-ND	6.82	57.40	8215-6003
25	1.85 (46.99)	1.54 (39.12)	MML25K-ND	7.36	61.95	8225-6003
37	2.50 (63.50)	2.18 (55.37)	MML37K-ND	9.13	76.83	8237-6003
50	2.40 (60.96)	2.074 (52.68)	MML50K-ND	18.20	153.13	8250-6003
Receptacles with flange, thru-hole style, Female						
9	.98 (24.89)	.67 (17.02)	MFR09K-ND	5.14	43.23	8309-6000
15	1.31 (33.27)	.97 (24.64)	MFR15K-ND	5.91	49.70	8315-6000
25	1.85 (46.99)	1.51 (38.35)	MFR25K-ND	6.57	55.30	8325-6000
37	2.50 (63.50)	2.16 (54.86)	MFR37K-ND	8.49	71.40	8337-6000
Receptacles with 4-40 threaded insert, Female						
9	.98 (24.89)	.67 (17.02)	MFL09K-ND	6.26	52.68	8309-6003
15	1.31 (33.27)	.97 (24.64)	MFL15K-ND	7.03	59.15	8315-6003
25	1.85 (46.99)	1.51 (38.35)	MFL25K-ND	7.47	62.83	8325-6003
37	2.50 (63.50)	2.16 (54.86)	MFL37K-ND	9.13	76.83	8337-6003
50	2.40 (60.96)	2.068(52.53)	MFL50K-ND	18.20	153.13	8350-6003
Backshells						
9	—	—	MDBF09-ND	3.12	26.25	3485-2100
15	—	—	MDBF15-ND	3.12	26.25	3485-2200
25	—	—	MDBF25-ND	3.12	26.25	3485-2300
37	—	—	MDBF37-ND	3.12	26.25	3485-2400
50	—	—	MDBF50-ND	3.12	26.25	3485-2500
Strain Relief						
9	—	—	MDSR09-ND	.25	2.10	3448-8D09A
15	—	—	MDSR15-ND	.25	2.10	3448-8D15A
25	—	—	MDSR25-ND	.25	2.10	3448-8D25A
37	—	—	MDSR37-ND	.25	2.10	3448-8D37A
50	—	—	MDSR50-ND	.25	2.10	3448-8D50A

Series 89
D-Subminiature Connectors

We've designed these standard-performance D-Sub connectors to reduce costs and save assembly time.

Physical Specifications: • Insulation Material: Glass reinforced polyester (PBT) • Flammability rating: UL94V-0 • Color: Gray • Marking: Molded figures 3M Logo, part identification number and contact position number • Shell Material: Steel • Plating: Tin • Design: Pin Connector with dimples • Fastening: Through Hole and 4-40 Insert • Contact Material: Copper Alloy • Contact Plating: Wipe area 15µ" average gold over nickel • Wire Accommodation: 26 & 28 AWG Solid or Stranded. **Electrical Specifications:** • Current Rating: 1A • Insulation Resistance: >1 x 10Ω @ 500 VDC • Withstanding Voltage: 1000V$_{RMS}$ @ Sea Level. **Environmental Specifications:** • Operating Temperature: -55°C to +105°C

No. of Cont.	Dim. – In. (mm) A	B	Digi-Key Part No.	Pricing 1	10	3M Part No.
D-Sub Connectors, Male						
9	.98 (24.89)	.67 (17.02)	MMR09G-ND	4.59	37.34	89809-8000
15	1.31 (33.27)	1.00 (25.40)	MMR15G-ND	5.92	48.17	89815-8000
25	1.85 (46.99)	1.54 (39.12)	MMR25G-ND	6.41	52.16	89825-8000
37	2.50 (63.50)	2.18 (55.37)	MMR37G-ND	8.68	70.68	89837-8000
D-Sub Connectors, Male, Insert						
9	.98 (24.89)	.67 (17.02)	MML09G-ND	5.08	41.33	89809-8003
15	1.31 (33.27)	1.00 (25.40)	MML15G-ND	6.34	51.59	89815-8003
25	1.85 (46.99)	1.54 (39.12)	MML25G-ND	6.79	55.29	89825-8003
37	2.50 (63.50)	2.18 (55.37)	MML37G-ND	8.96	72.96	89837-8003
D-Sub Connectors, Female						
9	.98 (24.89)	.67 (17.02)	MFR09G-ND	4.24	34.49	89909-8000
15	1.31 (33.27)	1.00 (25.40)	MFR15G-ND	5.25	42.75	89915-8000
25	1.85 (46.99)	1.54 (39.12)	MFR25G-ND	5.74	46.74	89925-8000
37	2.50 (63.50)	2.18 (55.37)	MFR37G-ND	7.77	63.27	89937-8000
D-Sub Connectors, Female, Insert						
9	.98 (24.89)	.67 (17.02)	MFL09G-ND	4.38	35.63	89909-8003
15	1.31 (33.27)	1.00 (25.40)	MFL15G-ND	5.71	46.46	89915-8003
25	1.85 (46.99)	1.54 (39.12)	MFL25G-ND	6.16	50.16	89925-8003
37	2.50 (63.50)	2.18 (55.37)	MFL37G-ND	7.77	63.27	89937-8003
Strain Relief						
9	—	—	MDSR09-ND	.25	—	3448-8D09A
15	—	—	MDSR15-ND	.25	—	3448-8D15A
25	—	—	MDSR25-ND	.25	—	3448-8D25A
37	—	—	MDSR37-ND	.25	—	3448-8D37A



M□□□□-□□□□□-ND

Style
7□□ (D-Sub)

Conn. Finish
G = Gold ≤15µ
K = Gold >15µ Gold- Copper beryllium pin plating

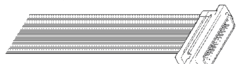
No. Of Contacts

Length *(Use "Feet" only.)*

Ribbon Cable
R=Multi-color
J=Gray

D-Sub Cable Assemblies

Single Ended — Male

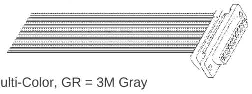


*MC = 3M Multi-Color, GR = 3M Gray

No. of Contacts	Conn. Finish	Length Feet (Meters)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	10
9	Au 30µ"	6 (1.83)	MC	M7PXK-0906R-ND	11.40	100.01
	Au 15µ"	6 (1.83)	MC	M7PXG-0906R-ND	7.63	66.95
	Au 30µ"	6 (1.83)	GR	M7PXK-0906J-ND	10.42	91.41
	Au 15µ"	6 (1.83)	GR	M7PXG-0906J-ND	6.65	58.35
	Au 30µ"	10 (3.05)	MC	M7PXK-0910R-ND	13.53	118.61
	Au 15µ"	10 (3.05)	MC	M7PXG-0910R-ND	9.76	85.55
	Au 30µ"	10 (3.05)	GR	M7PXK-0910J-ND	11.89	104.27
	Au 15µ"	10 (3.05)	GR	M7PXG-0910J-ND	8.12	71.21
15	Au 30µ"	6 (1.83)	MC	M7PXK-1506R-ND	14.52	127.32
	Au 15µ"	6 (1.83)	MC	M7PXG-1506R-ND	10.85	95.12
	Au 30µ"	6 (1.83)	GR	M7PXK-1506J-ND	12.95	113.53
	Au 15µ"	6 (1.83)	GR	M7PXG-1506J-ND	9.27	81.33
	Au 30µ"	10 (3.05)	MC	M7PXK-1510R-ND	17.92	157.10
	Au 15µ"	10 (3.05)	MC	M7PXG-1510R-ND	14.24	124.90
	Au 30µ"	10 (3.05)	GR	M7PXK-1510J-ND	15.29	134.12
	Au 15µ"	10 (3.05)	GR	M7PXG-1510J-ND	11.62	101.92
25	Au 30µ"	6 (1.83)	MC	M7PXK-2506R-ND	18.77	164.62
	Au 15µ"	6 (1.83)	MC	M7PXG-2506R-ND	14.32	125.57
	Au 30µ"	6 (1.83)	GR	M7PXK-2506J-ND	16.22	142.25
	Au 15µ"	6 (1.83)	GR	M7PXG-2506J-ND	11.77	103.20
	Au 30µ"	10 (3.05)	MC	M7PXK-2510R-ND	24.29	212.99
	Au 15µ"	10 (3.05)	MC	M7PXG-2510R-ND	19.84	173.94
	Au 30µ"	10 (3.05)	GR	M7PXK-2510J-ND	20.04	175.71
	Au 15µ"	10 (3.05)	GR	M7PXG-2510J-ND	15.58	136.67
37	Au 30µ"	6 (1.83)	MC	M7PXK-3706R-ND	25.46	223.24
	Au 15µ"	6 (1.83)	MC	M7PXG-3706R-ND	20.06	175.93
	Au 30µ"	6 (1.83)	GR	M7PXK-3706J-ND	21.83	191.41
	Au 15µ"	6 (1.83)	GR	M7PXG-3706J-ND	16.43	144.10
	Au 30µ"	10 (3.05)	MC	M7PXK-3710R-ND	33.31	292.08
	Au 15µ"	10 (3.05)	MC	M7PXG-3710R-ND	27.91	244.77
	Au 30µ"	10 (3.05)	GR	M7PXK-3710J-ND	27.26	239.03
	Au 15µ"	10 (3.05)	GR	M7PXG-3710J-ND	21.86	191.72

Also available in the following configurations:
M7NX□-□□□□□-ND – Metal Shell Connector with Threaded Insert.
M7VX□-□□□□□-ND – Metal Shell Connector with Threaded Insert & Strain Relief.
Call for complete part number and pricing!

Single Ended — Female

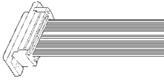


*MC = 3M Multi-Color, GR = 3M Gray

No. of Contacts	Conn. Finish	Length Feet (Meters)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	10
9	Au 30µ"	6 (1.83)	MC	M7SXK-0906R-ND	11.60	101.72
	Au 15µ"	6 (1.83)	MC	M7SXG-0906R-ND	7.31	64.10
	Au 30µ"	6 (1.83)	GR	M7SXK-0906J-ND	10.62	93.12
	Au 15µ"	6 (1.83)	GR	M7SXG-0906J-ND	6.33	55.50
	Au 30µ"	10 (3.05)	MC	M7SXK-0910R-ND	13.72	120.32
	Au 15µ"	10 (3.05)	MC	M7SXG-0910R-ND	9.43	82.70
	Au 30µ"	10 (3.05)	GR	M7SXK-0910J-ND	12.09	105.98
	Au 15µ"	10 (3.05)	GR	M7SXG-0910J-ND	7.80	68.36
15	Au 30µ"	6 (1.83)	MC	M7SXK-1506R-ND	14.84	130.17
	Au 15µ"	6 (1.83)	MC	M7SXG-1506R-ND	10.26	89.99
	Au 30µ"	6 (1.83)	GR	M7SXK-1506J-ND	13.27	116.38
	Au 15µ"	6 (1.83)	GR	M7SXG-1506J-ND	8.69	76.20
	Au 30µ"	10 (3.05)	MC	M7SXK-1510R-ND	18.24	159.95
	Au 15µ"	10 (3.05)	MC	M7SXG-1510R-ND	13.66	119.77
	Au 30µ"	10 (3.05)	GR	M7SXK-1510J-ND	15.62	136.97
	Au 15µ"	10 (3.05)	GR	M7SXG-1510J-ND	11.04	96.79
25	Au 30µ"	6 (1.83)	MC	M7SXK-2506R-ND	18.93	166.04
	Au 15µ"	6 (1.83)	MC	M7SXG-2506R-ND	13.73	120.44
	Au 30µ"	6 (1.83)	GR	M7SXK-2506J-ND	16.38	143.67
	Au 15µ"	6 (1.83)	GR	M7SXG-2506J-ND	11.18	98.07
	Au 30µ"	10 (3.05)	MC	M7SXK-2510R-ND	24.45	214.41
	Au 15µ"	10 (3.05)	MC	M7SXG-2510R-ND	19.25	168.81
	Au 30µ"	10 (3.05)	GR	M7SXK-2510J-ND	20.20	177.14
	Au 15µ"	10 (3.05)	GR	M7SXG-2510J-ND	15.00	131.54
37	Au 30µ"	6 (1.83)	MC	M7SXK-3706R-ND	25.65	224.95
	Au 15µ"	6 (1.83)	MC	M7SXG-3706R-ND	19.49	170.90
	Au 30µ"	6 (1.83)	GR	M7SXK-3706J-ND	22.02	193.12
	Au 15µ"	6 (1.83)	GR	M7SXG-3706J-ND	15.86	139.07
	Au 30µ"	10 (3.05)	MC	M7SXK-3710R-ND	33.50	293.79
	Au 15µ"	10 (3.05)	MC	M7SXG-3710R-ND	27.34	239.74
	Au 30µ"	10 (3.05)	GR	M7SXK-3710J-ND	27.45	240.74
	Au 15µ"	10 (3.05)	GR	M7SXG-3710J-ND	21.29	186.69

Also available in the following configurations:
M7OX□-□□□□□-ND – Metal Shell Connector w/ Threaded Insert.
M7WX□-□□□□□-ND – Metal Shell Connector w/ Threaded Insert & Strain Relief.
Call for complete part number and pricing!

Male to Male

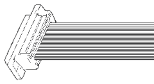


*MC = 3M Multi-Color, GR = 3M Gray

No. of Contacts	Conn. Finish	Length Feet (Meters)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	10
9	Au 30µ"	6 (1.83)	MC	M7PPK-0906R-ND	19.63	172.11
	Au 15µ"	6 (1.83)	MC	M7PPG-0906R-ND	12.09	105.99
	Au 30µ"	6 (1.83)	GR	M7PPK-0906J-ND	18.65	163.51
	Au 15µ"	6 (1.83)	GR	M7PPG-0906J-ND	11.11	97.39
	Au 30µ"	10 (3.05)	MC	M7PPK-0910R-ND	21.75	190.71
	Au 15µ"	10 (3.05)	MC	M7PPG-0910R-ND	14.21	124.59
	Au 30µ"	10 (3.05)	GR	M7PPK-0910J-ND	20.11	176.38
	Au 15µ"	10 (3.05)	GR	M7PPG-0910J-ND	12.57	110.26
15	Au 30µ"	6 (1.83)	MC	M7PPK-1506R-ND	23.94	209.97
	Au 15µ"	6 (1.83)	MC	M7PPG-1506R-ND	16.60	145.56
	Au 30µ"	6 (1.83)	GR	M7PPK-1506J-ND	22.37	196.18
	Au 15µ"	6 (1.83)	GR	M7PPG-1506J-ND	15.03	131.77
	Au 30µ"	10 (3.05)	MC	M7PPK-1510R-ND	27.34	239.75
	Au 15µ"	10 (3.05)	MC	M7PPG-1510R-ND	20.00	175.34
	Au 30µ"	10 (3.05)	GR	M7PPK-1510J-ND	24.72	216.77
	Au 15µ"	10 (3.05)	GR	M7PPG-1510J-ND	17.37	152.36
25	Au 30µ"	6 (1.83)	MC	M7PPK-2506R-ND	29.27	256.67
	Au 15µ"	6 (1.83)	MC	M7PPG-2506R-ND	20.36	178.58
	Au 30µ"	6 (1.83)	GR	M7PPK-2506J-ND	26.72	234.30
	Au 15µ"	6 (1.83)	GR	M7PPG-2506J-ND	17.81	156.21
	Au 30µ"	10 (3.05)	MC	M7PPK-2510R-ND	34.79	305.04
	Au 15µ"	10 (3.05)	MC	M7PPG-2510R-ND	25.88	226.95
	Au 30µ"	10 (3.05)	GR	M7PPK-2510J-ND	30.53	267.77
	Au 15µ"	10 (3.05)	GR	M7PPG-2510J-ND	21.63	189.68
37	Au 30µ"	6 (1.83)	MC	M7PPK-3706R-ND	39.14	343.23
	Au 15µ"	6 (1.83)	MC	M7PPG-3706R-ND	28.35	248.61
	Au 30µ"	6 (1.83)	GR	M7PPK-3706J-ND	35.51	311.40
	Au 15µ"	6 (1.83)	GR	M7PPG-3706J-ND	24.72	216.78
	Au 30µ"	10 (3.05)	MC	M7PPK-3710R-ND	46.99	412.06
	Au 15µ"	10 (3.05)	MC	M7PPG-3710R-ND	36.20	317.44
	Au 30µ"	10 (3.05)	GR	M7PPK-3710J-ND	40.94	359.01
	Au 15µ"	10 (3.05)	GR	M7PPG-3710J-ND	30.15	264.39

Also available in the following configurations:
M7NN□-□□□□□-ND – Metal Shell Connector w/ Threaded Insert.
M7VV□-□□□□□-ND – Metal Shell Connector w/ Threaded Insert & Strain Relief.
Call for complete part number and pricing!

Female to Female

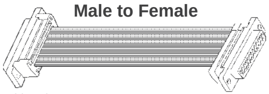


*MC = 3M Multi-Color, GR = 3M Gray

No. of Contacts	Conn. Finish	Length Feet (Meters)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	10
9	Au 30µ"	6 (1.83)	MC	M7SSK-0906R-ND	20.02	175.53
	Au 15µ"	6 (1.83)	MC	M7SSG-0906R-ND	11.44	100.29
	Au 30µ"	6 (1.83)	GR	M7SSK-0906J-ND	19.04	166.93
	Au 15µ"	6 (1.83)	GR	M7SSG-0906J-ND	10.46	91.69
	Au 30µ"	10 (3.05)	MC	M7SSK-0910R-ND	22.14	194.13
	Au 15µ"	10 (3.05)	MC	M7SSG-0910R-ND	13.56	118.89
	Au 30µ"	10 (3.05)	GR	M7SSK-0910J-ND	20.50	179.80
	Au 15µ"	10 (3.05)	GR	M7SSG-0910J-ND	11.92	104.56
15	Au 30µ"	6 (1.83)	MC	M7SSK-1506R-ND	24.59	215.67
	Au 15µ"	6 (1.83)	MC	M7SSG-1506R-ND	15.43	135.30
	Au 30µ"	6 (1.83)	GR	M7SSK-1506J-ND	23.02	201.88
	Au 15µ"	6 (1.83)	GR	M7SSG-1506J-ND	13.86	121.51
	Au 30µ"	10 (3.05)	MC	M7SSK-1510R-ND	27.99	245.45
	Au 15µ"	10 (3.05)	MC	M7SSG-1510R-ND	18.83	165.08
	Au 30µ"	10 (3.05)	GR	M7SSK-1510J-ND	25.37	222.47
	Au 15µ"	10 (3.05)	GR	M7SSG-1510J-ND	16.20	142.10
25	Au 30µ"	6 (1.83)	MC	M7SSK-2506R-ND	29.59	259.52
	Au 15µ"	6 (1.83)	MC	M7SSG-2506R-ND	19.19	168.32
	Au 30µ"	6 (1.83)	GR	M7SSK-2506J-ND	27.04	237.15
	Au 15µ"	6 (1.83)	GR	M7SSG-2506J-ND	16.64	145.95
	Au 30µ"	10 (3.05)	MC	M7SSK-2510R-ND	35.11	307.89
	Au 15µ"	10 (3.05)	MC	M7SSG-2510R-ND	24.71	216.69
	Au 30µ"	10 (3.05)	GR	M7SSK-2510J-ND	30.86	270.62
	Au 15µ"	10 (3.05)	GR	M7SSG-2510J-ND	20.46	179.42
37	Au 30µ"	6 (1.83)	MC	M7SSK-3706R-ND	39.53	346.65
	Au 15µ"	6 (1.83)	MC	M7SSG-3706R-ND	27.20	238.55
	Au 30µ"	6 (1.83)	GR	M7SSK-3706J-ND	35.90	314.82
	Au 15µ"	6 (1.83)	GR	M7SSG-3706J-ND	23.57	206.72
	Au 30µ"	10 (3.05)	MC	M7SSK-3710R-ND	47.38	415.48
	Au 15µ"	10 (3.05)	MC	M7SSG-3710R-ND	35.05	307.39
	Au 30µ"	10 (3.05)	GR	M7SSK-3710J-ND	41.33	362.43
	Au 15µ"	10 (3.05)	GR	M7SSG-3710J-ND	29.00	254.34

Also available in the following configurations:
M7OO□-□□□□□-ND – Metal Shell Connector w/ Threaded Insert.
M7WW□-□□□□□-ND – Metal Shell Connector w/ Threaded Insert & Strain Relief.
Call for complete part number and pricing!

Male to Female

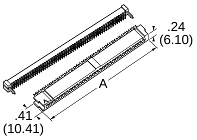


*MC = 3M Multi-Color, GR = 3M Gray

No. of Con-tacts	Conn. Finish	Length Feet (meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing	
					1	10
9	Au 30µ"	6 (1.83)	MC	M7PSK-0906R-ND	19.82	173.82
	Au 15µ"	6 (1.83)	MC	M7PSG-0906R-ND	11.76	103.14
	Au 30µ"	6 (1.83)	GR	M7PSK-0906J-ND	18.84	165.22
	Au 15µ"	6 (1.83)	GR	M7PSG-0906J-ND	10.78	94.54
	Au 30µ"	10 (3.05)	MC	M7PSK-0910R-ND	21.94	192.42
	Au 15µ"	10 (3.05)	MC	M7PSG-0910R-ND	13.88	121.74
	Au 30µ"	10 (3.05)	GR	M7PSK-0910J-ND	20.31	178.09
	Au 15µ"	10 (3.05)	GR	M7PSG-0910J-ND	12.25	107.41
15	Au 30µ"	6 (1.83)	MC	M7PSK-1506R-ND	24.27	212.82
	Au 15µ"	6 (1.83)	MC	M7PSG-1506R-ND	16.01	140.43
	Au 30µ"	6 (1.83)	GR	M7PSK-1506J-ND	22.70	199.03
	Au 15µ"	6 (1.83)	GR	M7PSG-1506J-ND	14.44	126.64
	Au 30µ"	10 (3.05)	MC	M7PSK-1510R-ND	27.67	242.60
	Au 15µ"	10 (3.05)	MC	M7PSG-1510R-ND	19.41	170.21
	Au 30µ"	10 (3.05)	GR	M7PSK-1510J-ND	25.04	219.62
	Au 15µ"	10 (3.05)	GR	M7PSG-1510J-ND	16.79	147.23
25	Au 30µ"	6 (1.83)	MC	M7PSK-2506R-ND	29.43	258.10
	Au 15µ"	6 (1.83)	MC	M7PSG-2506R-ND	19.78	173.45
	Au 30µ"	6 (1.83)	GR	M7PSK-2506J-ND	26.88	235.73
	Au 15µ"	6 (1.83)	GR	M7PSG-2506J-ND	17.23	151.08
	Au 30µ"	10 (3.05)	MC	M7PSK-2510R-ND	34.95	306.47
	Au 15µ"	10 (3.05)	MC	M7PSG-2510R-ND	25.30	221.82
	Au 30µ"	10 (3.05)	GR	M7PSK-2510J-ND	30.70	269.19
	Au 15µ"	10 (3.05)	GR	M7PSG-2510J-ND	21.04	184.55
37	Au 30µ"	6 (1.83)	MC	M7PSK-3706R-ND	39.33	344.94
	Au 15µ"	6 (1.83)	MC	M7PSG-3706R-ND	27.78	243.58
	Au 30µ"	6 (1.83)	GR	M7PSK-3706J-ND	35.71	313.11
	Au 15µ"	6 (1.83)	GR	M7PSG-3706J-ND	24.15	211.75
	Au 30µ"	10 (3.05)	MC	M7PSK-3710R-ND	47.18	413.77
	Au 15µ"	10 (3.05)	MC	M7PSG-3710R-ND	35.63	312.42
	Au 30µ"	10 (3.05)	GR	M7PSK-3710J-ND	41.14	360.72
	Au 15µ"	10 (3.05)	GR	M7PSG-3710J-ND	29.58	259.37

Also available in the following configurations:
M7NO□-□□□□□-ND – Metal Shell Connector w/ Threaded Insert.
M7VW□-□□□□□-ND – Metal Shell Connector w/ Threaded Insert & Strain Relief.
Call for complete part number and pricing!

3M .100" x .100" (2.54mm x 2.54mm) Socket Connectors



Wire Accommodation:
26, 28 ,30 AWG solid or stranded.

Physical: • Insulation Material: Glass reinforced polyester. Flammability rating: UL 94V-0 • Color: Gray • Contact Material: Beryllium copper • Plating: 30µ" gold • Wire Accommodation: 26 & 28 AWG solid or stranded, 30 AWG solid • Marking: 3M logo, Part Identification Number and Orientation Triangle. **Electrical:** • Current Rating: 1A • Insulation Resistance: >1x10^9Ω @ 500 VDC • Withstanding Voltage: 1000VRMS @ sea level. **Environmental:** • Temp. Rating: -55°C to +105°C. UL File No.: E68080; CSA File No.: LR-40971.

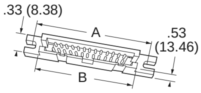
No. of Contacts	Dim. A In. (mm)	Digi-Key Part No.	Pricing		3M Part No.
			1	10	
Polarizing Slots (Open End)					
10	.68 (17.27)	MSC10K-ND	1.93	16.28	3473-6000
14	.88 (22.35)	MSC14K-ND	2.35	19.78	3385-6000
16	.98 (24.89)	MSC16K-ND	2.56	21.53	3452-6000
20	1.18 (29.97)	MSC20K-ND	2.83	23.80	3421-6000
24	1.38 (35.05)	MSC24K-ND	3.39	28.53	3626-6000
26	1.48 (37.59)	MSC26K-ND	3.66	30.80	3399-6000
30	1.68 (42.67)	MSC30K-ND	4.20	35.35	3419-6000
34	1.88 (47.75)	MSC34K-ND	4.76	40.08	3414-6000
40	2.18 (55.37)	MSC40K-ND	5.60	47.08	3417-6000
50	2.68 (68.07)	MSC50K-ND	6.99	58.80	3425-6000
60	3.18 (80.77)	MSC60K-ND	8.65	72.80	3334-6000
Center-Bumped Polarizing (Open End)					
10	.68 (17.27)	MKC10K-ND	1.93	16.28	3473-6600
14	.88 (22.35)	MKC14K-ND	2.35	19.78	3385-6600
16	.98 (24.89)	MKC16K-ND	2.56	21.53	3452-6600
20	1.18 (29.97)	MKC20K-ND	2.83	23.80	3421-6600
24	1.38 (35.05)	MKC24K-ND	3.39	28.53	3626-6600
26	1.48 (37.59)	MKC26K-ND	3.66	30.80	3399-6600
30	1.68 (42.67)	MKC30K-ND	4.20	35.35	3419-6600
34	1.88 (47.75)	MKC34K-ND	4.76	40.08	3414-6600
40	2.18 (55.37)	MKC40K-ND	5.60	47.08	3417-6600
50	2.68 (68.07)	MKC50K-ND	6.99	58.80	3425-6600
60	3.18 (80.77)	MKC60K-ND	8.65	72.80	3334-6600
Center-Bumped Polarizing (Closed End)					
10	.68 (17.27)	MSD10K-ND	2.06	17.33	3473-7600
14	.88 (22.35)	MSD14K-ND	2.58	21.70	3385-7600
16	.98 (24.89)	MSD16K-ND	2.70	22.75	3452-7600
20	1.18 (29.97)	MSD20K-ND	2.97	25.03	3421-7600
24	1.38 (35.05)	MSD24K-ND	3.56	29.93	3626-7600
26	1.48 (37.59)	MSD26K-ND	3.85	32.38	3399-7600
30	1.68 (42.67)	MSD30K-ND	4.41	37.10	3419-7600
34	1.88 (47.75)	MSD34K-ND	4.97	41.83	3414-7600
40	2.18 (55.37)	MSD40K-ND	5.82	49.00	3417-7600
50	2.68 (68.07)	MSD50K-ND	7.26	61.08	3425-7600
60	3.18 (80.77)	MSD60K-ND	8.99	75.60	3334-7600
Cable Strain Relief/Stabilizer					
10	—	MSSR10-ND	.25	2.10	3448-3010
14	—	MSSR14-ND	.25	2.10	3448-3014
16	—	MSSR16-ND	.25	2.10	3448-3016
20	—	MSSR20-ND	.25	2.10	3448-3020
24	—	MSSR24-ND	.25	2.10	3448-3024
26	—	MSSR26-ND	.25	2.10	3448-3026
30	—	MSSR30-ND	.25	2.10	3448-3030
34	—	MSSR34-ND	.25	2.10	3448-3034
40	—	MSSR40-ND	.25	2.10	3448-3040
50	—	MSSR50-ND	.25	2.10	3448-3050
60	—	MSSR60-ND	.25	2.10	3448-3060

3M Series 89, .100" x .100" (2.54mm x 2.54mm) Socket Connectors

These high-quality, standard-performance IDC sockets minimize applied assembly costs without sacrificing reliability. The Series 89 IDC socket is part of a new line of standard-performance interconnects specifically designed to help electronic equipment manufacturers hold down applied assembly costs. These interconnects also offer the quality and reliability you'd expect from 3M. They have been engineered with a "systems" approach that has a positive impact on your process and product costs. **Physical Specifications:** • Insulation Material: Glass filled polyester (PBT), flammability rating: UL94V-0 • Color: Gray • Marking: Molded figures: 3M Logo and Orientation Triangle • Pins are Phosphor Bronze • Contact Plating: Wipe Area: 30µ" Gold: - MIL-G-45204. Type 11, Grade C. Under Plate: 100µ" Nickel-QQ-N-290, Class 2 • Wire Accommodation: 28 AWG Stranded. **Electrical Specifications:** • Current Rating: 1A • Insulation Resistance: >1x10^9Ω @ 500 VDC • Withstanding Voltage: 1000V_{RMS} @ Sea Level. **Environmental Specifications:** • Operating Temperature: -55°C to +105°C. **UL File No.:** E68080, **CSA File No.:** LR40971

No. of Contacts	Dim. A In. (mm)	Digi-Key Part No.	Pricing		3M Part No.
			1	10	
IDC Socket Gold					
10	.68 (17.27)	MSC10A-ND	.53	4.28	89110-0001
14	.88 (22.35)	MSC14A-ND	.74	5.99	89114-0001
16	.98 (24.89)	MSC16A-ND	.84	6.84	89116-0001
20	1.18 (29.97)	MSC20A-ND	1.05	8.55	89120-0001
24	1.38 (35.05)	MSC24A-ND	1.26	10.26	89124-0001
26	1.48 (37.59)	MSC26A-ND	1.37	11.12	89126-0001
30	1.68 (42.67)	MSC30A-ND	1.58	12.83	89130-0001
34	1.88 (47.75)	MSC34A-ND	1.79	14.54	89134-0001
40	2.18 (55.37)	MSC40A-ND	2.10	17.10	89140-0001
50	2.68 (68.07)	MSC50A-ND	2.63	21.38	89150-0001
60	3.18 (80.77)	MSC60A-ND	3.15	25.65	89160-0001
IDC Socket Gold, Polarizing					
10	.68 (17.27)	MKC10A-ND	.53	4.28	89110-0101
14	.88 (22.35)	MKC14A-ND	.74	5.99	89114-0101
16	.98 (24.89)	MKC16A-ND	.84	6.84	89116-0101
20	1.18 (29.97)	MKC20A-ND	1.05	8.55	89120-0101
24	1.38 (35.05)	MKC24A-ND	1.26	10.26	89124-0101
26	1.48 (37.59)	MKC26A-ND	1.37	11.12	89126-0101
30	1.68 (42.67)	MKC30A-ND	1.58	12.83	89130-0101
34	1.88 (47.75)	MKC34A-ND	1.79	14.54	89134-0101
40	2.18 (55.37)	MKC40A-ND	2.10	17.10	89140-0101
50	2.68 (68.07)	MKC50A-ND	2.63	21.38	89150-0101
60	3.18 (80.77)	MKC60A-ND	3.15	25.65	89160-0101
Strain Relief					
10	—	MKSR10-ND	.21	1.71	3448-89110
14	—	MKSR14-ND	.21	1.71	3448-89114
16	—	MKSR16-ND	.21	1.71	3448-89116
20	—	MKSR20-ND	.21	1.71	3448-89120
24	—	MKSR24-ND	.21	1.71	3448-89124
26	—	MKSR26-ND	.21	1.71	3448-89126
30	—	MKSR30-ND	.21	1.71	3448-89130
34	—	MKSR34-ND	.21	1.71	3448-89134
40	—	MKSR40-ND	.21	1.71	3448-89140
50	—	MKSR50-ND	.21	1.71	3448-89150
60	—	MKSR60-ND	.21	1.71	3448-89160

3M .100" x .100" (2.54mm x 2.54mm) Plug Connectors

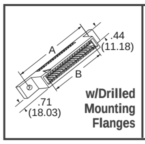


Wire Accommodation: 26 & 28 AWG solid or stranded, 30 AWG solid.

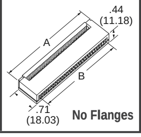
Physical: • Insulation Material: Glass reinforced polyester. Flammability rating: UL 94V-0. • Color: Gray. • Contact Material: Flat Cable Connectors are Beryllium Copper • Plating: 30µ" Gold. Latch Eject Headers are Copper Alloy. **Electrical:** • Current Rating: 1 amp. • Insulation Resistance: >1x10^9 Ω @ 500 VDC. • Withstanding Voltage: 1000VRMS @ sea level. **Environmental:** • Temperature Rating: -55°C to +105°C. UL File No.: E68080, CSA File No.: LR-40971.

No. of Cont.	Dim. – In. (mm) A	B	Digi-Key Part No.	Pricing		3M Part No.
				1	10	
With Slotted Mounting Flanges						
10	1.20 (30.48)	.90 (22.86)	MPL10K-ND	2.81	23.63	4610-6050
14	1.40 (35.56)	1.10 (27.94)	MPL14K-ND	3.89	32.73	4614-6000
16	1.50 (38.10)	1.20 (30.48)	MPL16K-ND	4.41	37.10	4616-6000
20	1.70 (43.18)	1.40 (35.56)	MPL20K-ND	5.14	43.23	4620-6000
24	1.90 (48.26)	1.60 (40.64)	MPL24K-ND	5.66	47.60	4624-6000
26	2.00 (50.80)	1.70 (43.18)	MPL26K-ND	5.84	49.18	4626-6000
30	2.20 (55.88)	1.90 (48.26)	MPL30K-ND	6.43	54.08	4630-6000
34	2.40 (60.96)	2.10 (53.34)	MPL34K-ND	7.26	61.08	4634-6000
36	2.50 (63.50)	2.20 (55.88)	MPL36K-ND	7.68	64.58	4636-6000
40	2.70 (68.58)	2.40 (60.96)	MPL40K-ND	8.05	67.73	4640-6000
50	3.20 (81.28)	2.90 (73.66)	MPL50K-ND	8.72	73.33	4650-6000
60	3.70 (93.98)	3.40 (86.36)	MPL60K-ND	10.28	86.45	4660-6000
64	3.90 (99.06)	3.60 (91.44)	MPL64K-ND	10.96	92.23	4664-6000
Without Mounting Flanges						
10	1.20 (30.48)	.90 (22.86)	MPK10K-ND	2.81	23.63	4610-6051
14	1.40 (35.56)	1.10 (27.94)	MPK14K-ND	3.89	32.73	4614-6001
16	1.50 (38.10)	1.20 (30.48)	MPK16K-ND	4.41	37.10	4616-6001
20	1.70 (43.18)	1.40 (35.56)	MPK20K-ND	5.14	43.23	4620-6001
24	1.90 (48.26)	1.60 (40.64)	MPK24K-ND	5.66	47.60	4624-6001
26	2.00 (50.80)	1.70 (43.18)	MPK26K-ND	5.84	49.18	4626-6001
30	2.20 (55.88)	1.90 (48.26)	MPK30K-ND	6.43	54.08	4630-6001
34	2.40 (60.96)	2.10 (53.34)	MPK34K-ND	7.26	61.08	4634-6001
36	2.50 (63.50)	2.20 (55.88)	MPK36K-ND	7.68	64.58	4636-6001
40	2.70 (68.58)	2.40 (60.96)	MPK40K-ND	8.05	67.73	4640-6001
50	3.20 (81.28)	2.90 (73.66)	MPK50K-ND	8.72	73.33	4650-6001
60	3.70 (93.98)	3.40 (86.36)	MPK60K-ND	10.28	86.45	4660-6001
64	3.90 (99.06)	3.60 (91.44)	MPK64K-ND	10.96	92.23	4664-6001
Strain Reliefs						
10	—	—	MPSR10-ND	.46	3.85	3448-4610
14	—	—	MPSR14-ND	.46	3.85	3448-4614
16	—	—	MPSR16-ND	.46	3.85	3448-4616
20	—	—	MPSR20-ND	.46	3.85	3448-4620
24	—	—	MPSR24-ND	.46	3.85	3448-4624
26	—	—	MPSR26-ND	.46	3.85	3448-4626
30	—	—	MPSR30-ND	.46	3.85	3448-4630
34	—	—	MPSR34-ND	.46	3.85	3448-4634
36	—	—	MPSR36-ND	.46	3.85	3448-4636
40	—	—	MPSR40-ND	.46	3.85	3448-4640
50	—	—	MPSR50-ND	.46	3.85	3448-4650
60	—	—	MPSR60-ND	.46	3.85	3448-4660
64	—	—	MPSR64-ND	.46	3.85	3448-4664
Lock Eject. Hooks (Short)			MDLKS1-ND	.29/2	1.23	3505-16
Lock Eject. Hooks (Long)			MDLKS2-ND	.33/2	1.40	3505-17

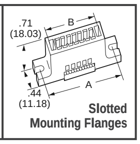
3M .100" (2.54mm) Card Edge Connectors



w/Drilled Mounting Flanges



No Flanges



Slotted Mounting Flanges

Physical: • Insulation Material: Glass reinforced polyester. Flammability rating: UL 94V-0 • Color: Gray • Contact Material: Beryllium copper • Plating: 30µ" Gold • Marking: 3M logo, Part Identification Number. **Electrical:** • Current Rating: 1 amp • Insulation Resistance: >1x10^9Ω @ 500VDC • Withstanding Voltage: 1000VRMS @ sea level. **Environmental:** • Temperature Rating: -55°C to +105°C. UL File No.: E68080, CSA File No.: LR-40971.

Wire Accommodation: 26AWG solid or stranded, 28AWG solid or stranded, 30 AWG solid. *Order strain reliefs separately.*

No. of Cont.	Dim. – In. (mm) A	B	Digi-Key Part No.	Pricing		3M Part No.
				1	10	
With Drilled Mounting Flanges						
10	1.40 (35.56)	.612 (15.54)	MCF10K-ND	3.02	25.38	3358-0000
16	1.70 (43.18)	.912 (23.16)	MCF16K-ND	3.72	31.33	3368-0000
20	1.90 (48.26)	1.112 (28.24)	MCF20K-ND	4.62	38.85	3461-0000
26	2.20 (55.88)	1.412 (35.86)	MCF26K-ND	5.47	46.03	3462-0000
34	2.60 (66.04)	1.812 (46.02)	MCF34K-ND	6.36	53.55	3463-0000
40	2.90 (73.66)	2.112 (53.64)	MCF40K-ND	7.80	65.63	3464-0000
50	3.40 (86.36)	2.612 (66.34)	MCF50K-ND	8.03	67.55	3415-0000
60	3.90 (99.06)	3.112 (79.04)	MCF60K-ND	10.11	85.05	3666-0000
64	4.10 (104.14)	3.312 (84.12)	MCF64K-ND	10.28	86.45	3403-0000
Without Flanges						
10	.96 (24.38)	.612 (15.54)	MCE10K-ND	3.02	25.38	3358-0001
16	1.26 (32.00)	.912 (23.16)	MCE16K-ND	3.72	31.33	3368-0001
20	1.46 (37.08)	1.112 (28.24)	MCE20K-ND	4.62	38.85	3461-0001
26	1.76 (44.70)	1.412 (35.86)	MCE26K-ND	5.47	46.03	3462-0001
34	2.16 (54.86)	1.812 (46.02)	MCE34K-ND	6.36	53.55	3463-0001
40	2.46 (62.48)	2.112 (53.64)	MCE40K-ND	7.80	65.63	3464-0001
50	2.96 (75.18)	2.612 (66.34)	MCE50K-ND	8.03	67.55	3415-0001
60	3.46 (87.88)	3.112 (79.04)	MCE60K-ND	10.11	85.05	3666-0001
64	3.66 (92.96)	3.312 (84.12)	MCE64K-ND	10.28	86.45	3403-0001
With Slotted Mounting Flanges						
10	1.30 (33.02)	.612 (15.54)	MCS10K-ND	3.02	25.38	3358-0002
16	1.60 (40.64)	.912 (23.16)	MCS16K-ND	3.72	31.33	3368-0002
20	1.80 (45.72)	1.112 (28.24)	MCS20K-ND	4.62	38.85	3461-0002
26	2.10 (53.34)	1.412 (35.86)	MCS26K-ND	5.47	46.03	3462-0002
34	2.50 (63.50)	1.812 (46.02)	MCS34K-ND	6.36	53.55	3463-0002
40	2.80 (71.12)	2.112 (53.64)	MCS40K-ND	7.80	65.63	3464-0002
50	3.30 (83.82)	2.612 (66.34)	MCS50K-ND	8.03	67.55	3415-0002
60	3.80 (96.52)	3.112 (79.04)	MCS60K-ND	10.11	85.05	3666-0002
64	4.00 (101.60)	3.312 (84.12)	MCS64K-ND	10.28	86.45	3403-0002
Strain Reliefs						
10	—	—	MCSR10-ND	1.02	8.58	3448-52
16	—	—	MCSR16-ND	1.02	8.58	3448-53
20	—	—	MCSR20-ND	1.02	8.58	3448-54
26	—	—	MCSR26-ND	1.02	8.58	3448-55
34	—	—	MCSR34-ND	1.02	8.58	3448-56
40	—	—	MCSR40-ND	1.02	8.58	3448-57
50	—	—	MCSR50-ND	1.02	8.58	3448-58
60	—	—	MCSR60-ND	2.60	21.88	3448-31
64	—	—	MCSR64-ND	1.02	8.58	3448-59

M□□□□-□□□□□-ND

Style
1□□ Single Ended
3□□ Double Ended

Conn. Finish
A = Gold >15µ phosphor bronze
G = Gold ≤15µphosphor bronze
K = Gold >15µ Gold- Copper beryllium pin plating

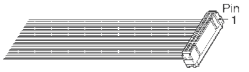
No. Of Contacts

Length *(Use "Inches" only.)*

Ribbon Cable
R=Multi-color
J=Gray
K=Twisted Pair

3M Termination Jumpers

Single Ended Socket Connector



*MC = 3M Multi-Color, GR = 3M Gray

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Pricing	
					1	10
10	Au 30µ"	36 (91.44)	MC	M1AXK-1036R-ND	4.61	40.46
	Au 15µ"	36 (91.44)	MC	M1AXA-1036R-ND	2.08	18.23
	Au 30µ"	36 (91.44)	GR	M1AXK-1036J-ND	4.12	36.16
	Au 15µ"	36 (91.44)	GR	M1AXA-1036J-ND	1.59	13.93
14	Au 30µ"	36 (91.44)	MC	M1AXK-1436R-ND	5.90	51.74
	Au 15µ"	36 (91.44)	MC	M1AXA-1436R-ND	2.91	25.52
	Au 30µ"	36 (91.44)	GR	M1AXK-1436J-ND	5.21	45.72
	Au 15µ"	36 (91.44)	GR	M1AXA-1436J-ND	2.22	19.50
16	Au 30µ"	36 (91.44)	MC	M1AXK-1636R-ND	6.54	57.39
	Au 15µ"	36 (91.44)	MC	M1AXA-1636R-ND	3.33	29.18
	Au 30µ"	36 (91.44)	GR	M1AXK-1636J-ND	5.76	50.50
	Au 15µ"	36 (91.44)	GR	M1AXA-1636J-ND	2.54	22.28
20	Au 30µ"	36 (91.44)	MC	M1AXK-2036R-ND	7.60	66.66
	Au 15µ"	36 (91.44)	MC	M1AXA-2036R-ND	4.16	36.45
	Au 30µ"	36 (91.44)	GR	M1AXK-2036J-ND	6.62	58.07
	Au 15µ"	36 (91.44)	GR	M1AXA-2036J-ND	3.18	27.86

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	10
24	Au 30µ"	36 (91.44)	MC	M1AXK-2436R-ND	9.12	79.94
	Au 15µ"	36 (91.44)	MC	M1AXA-2436R-ND	4.99	43.75
	Au 30µ"	36 (91.44)	GR	M1AXK-2436J-ND	7.94	69.62
	Au 15µ"	36 (91.44)	GR	M1AXA-2436J-ND	3.81	33.42
26	Au 30µ"	36 (91.44)	MC	M1AXK-2636R-ND	9.86	86.44
	Au 15µ"	36 (91.44)	MC	M1AXA-2636R-ND	5.40	47.40
	Au 30µ"	36 (91.44)	GR	M1AXK-2636J-ND	8.58	75.26
	Au 15µ"	36 (91.44)	GR	M1AXA-2636J-ND	4.13	36.21
30	Au 30µ"	36 (91.44)	MC	M1AXK-3036R-ND	11.97	105.00
	Au 15µ"	36 (91.44)	MC	M1AXA-3036R-ND	6.87	60.25
	Au 30µ"	36 (91.44)	GR	M1AXK-3036J-ND	10.31	90.39
	Au 15µ"	36 (91.44)	GR	M1AXA-3036J-ND	5.20	45.64
34	Au 30µ"	36 (91.44)	MC	M1AXK-3436R-ND	12.85	112.69
	Au 15µ"	36 (91.44)	MC	M1AXA-3436R-ND	7.07	61.96
	Au 30µ"	36 (91.44)	GR	M1AXK-3436J-ND	11.18	98.08
	Au 15µ"	36 (91.44)	GR	M1AXA-3436J-ND	5.40	47.35
40	Au 30µ"	36 (91.44)	MC	M1AXK-4036R-ND	15.11	132.47
	Au 15µ"	36 (91.44)	MC	M1AXA-4036R-ND	8.31	72.91
	Au 30µ"	36 (91.44)	GR	M1AXK-4036J-ND	13.15	115.27
	Au 15µ"	36 (91.44)	GR	M1AXA-4036J-ND	6.35	55.71
50	Au 30µ"	36 (91.44)	MC	M1AXK-5036R-ND	18.87	165.52
	Au 15µ"	36 (91.44)	MC	M1AXA-5036R-ND	10.39	91.13
	Au 30µ"	36 (91.44)	GR	M1AXK-5036J-ND	16.42	144.02
	Au 15µ"	36 (91.44)	GR	M1AXA-5036J-ND	7.94	69.63
60	Au 30µ"	36 (91.44)	MC	M1AXK-6036R-ND	23.07	202.27
	Au 15µ"	36 (91.44)	MC	M1AXA-6036R-ND	12.47	109.36
	Au 30µ"	36 (91.44)	GR	M1AXK-6036J-ND	20.12	176.47
	Au 15µ"	36 (91.44)	GR	M1AXA-6036J-ND	9.53	83.56

Also available in the following configurations:
M1BX☐-☐☐36☐-ND – Standard Open End w/ Strain Relief.
M1CX☐-☐☐36☐-ND – Standard Open End w/ Polarizing Key.
M1DX☐-☐☐36☐-ND – Standard Open End w/ Polarizing Key & Strain Relief.
M1TXK-☐☐36☐-ND – Standard Closed End w/ Polarizing Key.
M1UXK-☐☐36☐-ND – Standard Closed End w/ Polarizing Key & Strain Relief.
Call for complete part number and pricing!

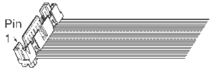
Single Ended Socket Connector

***Twisted Pair Cable Finished Length is Approximate**

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	10
10	Au 30µ"	40 (101.60)	TW	M1AXK-1040K-ND	4.99	43.80
	Au 15µ"	40 (101.60)	TW	M1AXA-1040K-ND	2.46	21.57
14	Au 30µ"	40 (101.60)	TW	M1AXK-1440K-ND	6.43	56.41
	Au 15µ"	40 (101.60)	TW	M1AXA-1440K-ND	3.44	30.19
16	Au 30µ"	40 (101.60)	TW	M1AXK-1640K-ND	7.15	62.72
	Au 15µ"	40 (101.60)	TW	M1AXA-1640K-ND	3.93	34.50
20	Au 30µ"	40 (101.60)	TW	M1AXK-2040K-ND	8.36	73.34
	Au 15µ"	40 (101.60)	TW	M1AXA-2040K-ND	4.92	43.13
26	Au 30µ"	40 (101.60)	TW	M1AXK-2640K-ND	10.85	95.11
	Au 15µ"	40 (101.60)	TW	M1AXA-2640K-ND	6.39	56.07
34	Au 30µ"	40 (101.60)	TW	M1AXK-3440K-ND	14.15	124.05
	Au 15µ"	40 (101.60)	TW	M1AXA-3440K-ND	8.36	73.32
40	Au 30µ"	40 (101.60)	TW	M1AXK-4040K-ND	16.63	145.83
	Au 15µ"	40 (101.60)	TW	M1AXA-4040K-ND	9.84	86.26
50	Au 30µ"	40 (101.60)	TW	M1AXK-5040K-ND	20.78	182.21
	Au 15µ"	40 (101.60)	TW	M1AXA-5040K-ND	12.30	107.82
60	Au 30µ"	40 (101.60)	TW	M1AXK-6040K-ND	25.35	222.30
	Au 15µ"	40 (101.60)	TW	M1AXA-6040K-ND	14.76	129.39

Also available in the following configurations:
M1BX☐-☐☐40K-ND – Standard Open End w/ Strain Relief.
M1CX☐-☐☐40K-ND – Standard Open End w/ Polarizing Key.
M1DX☐-☐☐40K-ND – Standard Open End w/ Polarizing Key & Strain Relief.
M1TXK-☐☐40K-ND – Standard Closed End w/ Polarizing Key.
M1UXK-☐☐40K-ND – Standard Closed End w/ Polarizing Key & Strain Relief.
Call for complete part number and pricing!

Plug Connector — Single Ended



3M

*MC = 3M Multi-Color, GR = 3M Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	10
10	Au 30µ"	36 (91.44)	MC	M1KXK-1036R-ND	5.98	52.43
	Au 30µ"	36 (91.44)	GR	M1KXK-1036J-ND	5.49	48.13
14	Au 30µ"	36 (91.44)	MC	M1KXK-1436R-ND	8.31	72.83
	Au 30µ"	36 (91.44)	GR	M1KXK-1436J-ND	7.62	66.81
16	Au 30µ"	36 (91.44)	MC	M1KXK-1636R-ND	9.44	82.76
	Au 30µ"	36 (91.44)	GR	M1KXK-1636J-ND	8.65	75.86
20	Au 30µ"	36 (91.44)	MC	M1KXK-2036R-ND	11.21	98.30
	Au 30µ"	36 (91.44)	GR	M1KXK-2036J-ND	10.23	89.70
24	Au 30µ"	36 (91.44)	MC	M1KXK-2436R-ND	12.66	111.01
	Au 30µ"	36 (91.44)	GR	M1KXK-2436J-ND	11.48	100.68
26	Au 30µ"	36 (91.44)	MC	M1KXK-2636R-ND	13.27	116.37
	Au 30µ"	36 (91.44)	GR	M1KXK-2636J-ND	11.99	105.18
30	Au 30µ"	36 (91.44)	MC	M1KXK-3036R-ND	15.45	135.49
	Au 30µ"	36 (91.44)	GR	M1KXK-3036J-ND	13.78	120.88
34	Au 30µ"	36 (91.44)	MC	M1KXK-3436R-ND	16.75	146.89
	Au 30µ"	36 (91.44)	GR	M1KXK-3436J-ND	15.08	132.28
36	Au 30µ"	36 (91.44)	MC	M1KXK-3636R-ND	17.88	156.79
	Au 30µ"	36 (91.44)	GR	M1KXK-3636J-ND	16.07	140.88
40	Au 30µ"	36 (91.44)	MC	M1KXK-4036R-ND	18.94	166.10
	Au 30µ"	36 (91.44)	GR	M1KXK-4036J-ND	16.98	148.90
50	Au 30µ"	36 (91.44)	MC	M1KXK-5036R-ND	21.57	189.17
	Au 30µ"	36 (91.44)	GR	M1KXK-5036J-ND	19.12	167.67
60	Au 30µ"	36 (91.44)	MC	M1KXK-6036R-ND	25.60	224.50
	Au 30µ"	36 (91.44)	GR	M1KXK-6036J-ND	22.66	198.70
64	Au 30µ"	36 (91.44)	MC	M1KXK-6436R-ND	27.31	239.48
	Au 30µ"	36 (91.44)	GR	M1KXK-6436J-ND	24.17	211.97

Also available in the following configurations:
M1RXK-☐☐36☐-ND – Pin Connector w/o Flange w/ PK & Strain Relief.
M1WXK-☐☐36☐-ND – Pin Connector with Flange w/ Polarizing Key.
M1YXK-☐☐36☐-ND – Pin Connector w/ Polarizing Key & Strain Relief.
Call for complete part number and pricing!

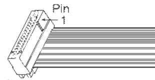
Plug Connector — Single Ended

***Twisted Pair Cable Finished Length is Approximate**

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	10
10	Au 30µ"	40 (101.60)	TW	M1KXK-1040K-ND	6.36	55.77
14	Au 30µ"	40 (101.60)	TW	M1KXK-1440K-ND	8.84	77.50
16	Au 30µ"	40 (101.60)	TW	M1KXK-1640K-ND	10.04	88.08
20	Au 30µ"	40 (101.60)	TW	M1KXK-2040K-ND	11.97	104.97
26	Au 30µ"	40 (101.60)	TW	M1KXK-2640K-ND	14.26	125.04
34	Au 30µ"	40 (101.60)	TW	M1KXK-3440K-ND	18.05	158.25
40	Au 30µ"	40 (101.60)	TW	M1KXK-4040K-ND	20.46	179.46
50	Au 30µ"	40 (101.60)	TW	M1KXK-5040K-ND	23.48	205.86
60	Au 30µ"	40 (101.60)	TW	M1KXK-6040K-ND	27.89	244.53
64	Au 30µ"	40 (101.60)	TW	M1KXK-6440K-ND	29.75	260.85

Also available in the following configurations:
M1RXK-☐☐40K-ND – Standard Open End without Flange, with Polarizing Key & Strain Relief.
M1WXK-☐☐40K-ND – Standard Open End with Flange, with Polarizing Key.
M1YXK-☐☐40K-ND – Standard Open End with Flange, with Polarizing Key and Strain Relief.
Call for complete part number and pricing!

Single Ended Card Edge Connector



3M

*MC = 3M Multi-Color, GR = 3M Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	10
10	Au 30µ"	36 (91.44)	MC	M1EXK-1036R-ND	5.82	51.00
	Au 30µ"	36 (91.44)	GR	M1EXK-1036J-ND	5.33	46.70
16	Au 30µ"	36 (91.44)	MC	M1EXK-1636R-ND	8.36	73.35
	Au 30µ"	36 (91.44)	GR	M1EXK-1636J-ND	7.58	66.46
20	Au 30µ"	36 (91.44)	MC	M1EXK-2036R-ND	10.40	91.17
	Au 30µ"	36 (91.44)	GR	M1EXK-2036J-ND	9.42	82.58
26	Au 30µ"	36 (91.44)	MC	M1EXK-2636R-ND	12.68	111.24
	Au 30µ"	36 (91.44)	GR	M1EXK-2636J-ND	11.41	100.05
34	Au 30µ"	36 (91.44)	MC	M1EXK-3436R-ND	15.35	134.64
	Au 30µ"	36 (91.44)	GR	M1EXK-3436J-ND	13.69	120.03
40	Au 30µ"	36 (91.44)	MC	M1EXK-4036R-ND	18.55	162.68
	Au 30µ"	36 (91.44)	GR	M1EXK-4036J-ND	16.59	145.48
50	Au 30µ"	36 (91.44)	MC	M1EXK-5036R-ND	20.50	179.77
	Au 30µ"	36 (91.44)	GR	M1EXK-5036J-ND	18.05	158.27
60	Au 30µ"	36 (91.44)	MC	M1EXK-6036R-ND	25.34	222.22
	Au 30µ"	36 (91.44)	GR	M1EXK-6036J-ND	22.40	196.42
64	Au 30µ"	36 (91.44)	MC	M1EXK-6436R-ND	26.24	230.07
	Au 30µ"	36 (91.44)	GR	M1EXK-6436J-ND	23.10	202.56

Also available in the following configurations:
M1FXK-☐☐36☐-ND – Card Edge Connector w/ Flange.
M1GXK-☐☐36☐-ND – Card Edge Connector w/ Slotted Flange.
M1MXK-☐☐36☐-ND – Card Edge Connector w/ Strain Relief.
Call for complete part number and pricing!

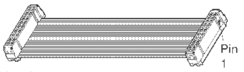
Single Ended Card Edge Connector

***Twisted Pair Cable Finished Length is Approximate**

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	10
10	Au 30µ"	40 (101.60)	TW	M1EXK-1040K-ND	6.20	54.34
16	Au 30µ"	40 (101.60)	TW	M1EXK-1640K-ND	8.97	78.68
20	Au 30µ"	40 (101.60)	TW	M1EXK-2040K-ND	11.16	97.85
26	Au 30µ"	40 (101.60)	TW	M1EXK-2640K-ND	13.67	119.91
34	Au 30µ"	40 (101.60)	TW	M1EXK-3440K-ND	16.65	146.00
40	Au 30µ"	40 (101.60)	TW	M1EXK-4040K-ND	20.07	176.04
50	Au 30µ"	40 (101.60)	TW	M1EXK-5040K-ND	22.40	196.46
60	Au 30µ"	40 (101.60)	TW	M1EXK-6040K-ND	27.63	242.25
64	Au 30µ"	40 (101.60)	TW	M1EXK-6440K-ND	28.67	251.45

Also available in the following configurations:
M1FXK-☐☐40K-ND – Card Edge Connector w/ Flange.
M1GXK-☐☐40K-ND – Card Edge Connector w/ Slotted Flange.
M1MXK-☐☐40K-ND – Card Edge Connector w/ Strain Relief.
Call for complete part number and pricing!

Socket to Socket Connector



3M

*MC = 3M Multi-Color, GR = 3M Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	10
10	Au 30µ"	6 (15.24)	MC	M3AAK-1006R-ND	6.31	55.34
	Au 15µ"	6 (15.24)	MC	M3AAA-1006R-ND	1.24	10.88
	Au 30µ"	6 (15.24)	GR	M3AAK-1006J-ND	6.23	54.62
	Au 15µ"	6 (15.24)	GR	M3AAA-1006J-ND	1.16	10.16
10	Au 30µ"	18 (45.72)	MC	M3AAK-1018R-ND	6.84	59.99
	Au 15µ"	18 (45.72)	MC	M3AAA-1018R-ND	1.77	15.53
	Au 30µ"	18 (45.72)	GR	M3AAK-1018J-ND	6.60	57.84
	Au 15µ"	18 (45.72)	GR	M3AAA-1018J-ND	1.53	13.38
10	Au 30µ"	36 (91.44)	MC	M3AAK-1036R-ND	7.64	66.96
	Au 15µ"	36 (91.44)	MC	M3AAA-1036R-ND	2.57	22.50
	Au 30µ"	36 (91.44)	GR	M3AAK-1036J-ND	7.15	62.66
	Au 15µ"	36 (91.44)	GR	M3AAA-1036J-ND	2.08	18.20
14	Au 30µ"	6 (15.24)	MC	M3AAK-1406R-ND	7.72	67.67
	Au 15µ"	6 (15.24)	MC	M3AAA-1406R-ND	1.74	15.23
	Au 30µ"	6 (15.24)	GR	M3AAK-1406J-ND	7.60	66.66
	Au 15µ"	6 (15.24)	GR	M3AAA-1406J-ND	1.62	14.22
14	Au 30µ"	18 (45.72)	MC	M3AAK-1418R-ND	8.46	74.18
	Au 15µ"	18 (45.72)	MC	M3AAA-1418R-ND	2.48	21.74
	Au 30µ"	18 (45.72)	GR	M3AAK-1418J-ND	8.12	71.17
	Au 15µ"	18 (45.72)	GR	M3AAA-1418J-ND	2.14	18.73

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	10
14	Au 30µ"	36 (91.44)	MC	M3AAK-1436R-ND	9.57	83.95
	Au 15µ"	36 (91.44)	MC	M3AAA-1436R-ND	3.59	31.51
	Au 30µ"	36 (91.44)	GR	M3AAK-1436J-ND	8.89	77.92
	Au 15µ"	36 (91.44)	GR	M3AAA-1436J-ND	2.91	25.48
16	Au 30µ"	6 (15.24)	MC	M3AAK-1606R-ND	8.42	73.83
	Au 15µ"	6 (15.24)	MC	M3AAA-1606R-ND	1.98	17.40
	Au 30µ"	6 (15.24)	GR	M3AAK-1606J-ND	8.29	72.68
	Au 15µ"	6 (15.24)	GR	M3AAA-1606J-ND	1.85	16.25
16	Au 30µ"	18 (45.72)	MC	M3AAK-1618R-ND	9.27	81.28
	Au 15µ"	18 (45.72)	MC	M3AAA-1618R-ND	2.83	24.85
	Au 30µ"	18 (45.72)	GR	M3AAK-1618J-ND	8.88	77.83
	Au 15µ"	18 (45.72)	GR	M3AAA-1618J-ND	2.44	21.40
16	Au 30µ"	36 (91.44)	MC	M3AAK-1636R-ND	10.54	92.45
	Au 15µ"	36 (91.44)	MC	M3AAA-1636R-ND	4.11	36.02
	Au 30µ"	36 (91.44)	GR	M3AAK-1636J-ND	9.76	85.55
	Au 15µ"	36 (91.44)	GR	M3AAA-1636J-ND	3.32	29.12
20	Au 30µ"	6 (15.24)	MC	M3AAK-2006R-ND	9.37	82.17
	Au 15µ"	6 (15.24)	MC	M3AAA-2006R-ND	2.48	21.75
	Au 30µ"	6 (15.24)	GR	M3AAK-2006J-ND	9.21	80.74
	Au 15µ"	6 (15.24)	GR	M3AAA-2006J-ND	2.32	20.32
20	Au 30µ"	18 (45.72)	MC	M3AAK-2018R-ND	10.43	91.47
	Au 15µ"	18 (45.72)	MC	M3AAA-2018R-ND	3.54	31.05
	Au 30µ"	18 (45.72)	GR	M3AAK-2018J-ND	9.94	87.17
	Au 15µ"	18 (45.72)	GR	M3AAA-2018J-ND	3.05	26.75
20	Au 30µ"	36 (91.44)	MC	M3AAK-2036R-ND	12.02	105.42
	Au 15µ"	36 (91.44)	MC	M3AAA-2036R-ND	5.13	45.00
	Au 30µ"	36 (91.44)	GR	M3AAK-2036J-ND	11.04	96.83
	Au 15µ"	36 (91.44)	GR	M3AAA-2036J-ND	4.15	36.41
24	Au 30µ"	6 (15.24)	MC	M3AAK-2406R-ND	11.23	98.49
	Au 15µ"	6 (15.24)	MC	M3AAA-2406R-ND	2.98	26.10
	Au 30µ"	6 (15.24)	GR	M3AAK-2406J-ND	11.04	96.77
	Au 15µ"	6 (15.24)	GR	M3AAA-2406J-ND	2.78	24.38
24	Au 30µ"	18 (45.72)	MC	M3AAK-2418R-ND	12.50	109.65
	Au 15µ"	18 (45.72)	MC	M3AAA-2418R-ND	4.25	37.26
	Au 30µ"	18 (45.72)	GR	M3AAK-2418J-ND	11.92	104.49
	Au 15µ"	18 (45.72)	GR	M3AAA-2418J-ND	3.66	32.10
24	Au 30µ"	36 (91.44)	MC	M3AAK-2436R-ND	14.41	126.40
	Au 15µ"	36 (91.44)	MC	M3AAA-2436R-ND	6.16	54.01
	Au 30µ"	36 (91.44)	GR	M3AAK-2436J-ND	13.24	116.07
	Au 15µ"	36 (91.44)	GR	M3AAA-2436J-ND	4.98	43.68
26	Au 30µ"	6 (15.24)	MC	M3AAK-2606R-ND	12.13	106.37
	Au 15µ"	6 (15.24)	MC	M3AAA-2606R-ND	3.22	28.28
	Au 30µ"	6 (15.24)	GR	M3AAK-2606J-ND	11.92	104.50
	Au 15µ"	6 (15.24)	GR	M3AAA-2606J-ND	3.01	26.41
26	Au 30µ"	18 (45.72)	MC	M3AAK-2618R-ND	13.51	118.46
	Au 15µ"	18 (45.72)	MC	M3AAA-2618R-ND	4.60	40.37
	Au 30µ"	18 (45.72)	GR	M3AAK-2618J-ND	12.87	112.87
	Au 15µ"	18 (45.72)	GR	M3AAA-2618J-ND	3.97	34.78
26	Au 30µ"	36 (91.44)	MC	M3AAK-2636R-ND	15.58	136.60
	Au 15µ"	36 (91.44)	MC	M3AAA-2636R-ND	6.67	58.51
	Au 30µ"	36 (91.44)	GR	M3AAK-2636J-ND	14.30	125.42
	Au 15µ"	36 (91.44)	GR	M3AAA-2636J-ND	5.40	47.33
30	Au 30µ"	6 (15.24)	MC	M3AAK-3006R-ND	14.03	123.05
	Au 15µ"	6 (15.24)	MC	M3AAA-3006R-ND	3.83	33.56
	Au 30µ"	6 (15.24)	GR	M3AAK-3006J-ND	13.75	120.61
	Au 15µ"	6 (15.24)	GR	M3AAA-3006J-ND	3.55	31.12
30	Au 30µ"	18 (45.72)	MC	M3AAK-3018R-ND	15.83	138.85
	Au 15µ"	18 (45.72)	MC	M3AAA-3018R-ND	5.63	49.36
	Au 30µ"	18 (45.72)	GR	M3AAK-3018J-ND	15.00	131.55
	Au 15µ"	18 (45.72)	GR	M3AAA-3018J-ND	4.80	42.06
30	Au 30µ"	36 (91.44)	MC	M3AAK-3036R-ND	18.54	162.57
	Au 15µ"	36 (91.44)	MC	M3AAA-3036R-ND	8.33	73.08
	Au 30µ"	36 (91.44)	GR	M3AAK-3036J-ND	16.87	147.96
	Au 15µ"	36 (91.44)	GR	M3AAA-3036J-ND	6.67	58.47
34	Au 30µ"	6 (15.24)	MC	M3AAK-3406R-ND	15.79	138.44
	Au 15µ"	6 (15.24)	MC	M3AAA-3406R-ND	4.22	36.98
	Au 30µ"	6 (15.24)	GR	M3AAK-3406J-ND	15.51	136.00
	Au 15µ"	6 (15.24)	GR	M3AAA-3406J-ND	3.94	34.54
34	Au 30µ"	18 (45.72)	MC	M3AAK-3418R-ND	17.59	154.24
	Au 15µ"	18 (45.72)	MC	M3AAA-3418R-ND	6.02	52.78
	Au 30µ"	18 (45.72)	GR	M3AAK-3418J-ND	16.76	146.94
	Au 15µ"	18 (45.72)	GR	M3AAA-3418J-ND	5.19	45.48
34	Au 30µ"	36 (91.44)	MC	M3AAK-3436R-ND	20.29	177.96
	Au 15µ"	36 (91.44)	MC	M3AAA-3436R-ND	8.72	76.50
	Au 30µ"	36 (91.44)	GR	M3AAK-3436J-ND	18.63	163.35
	Au 15µ"	36 (91.44)	GR	M3AAA-3436J-ND	7.07	62.02
40	Au 30µ"	6 (15.24)	MC	M3AAK-4006R-ND	18.55	162.63
	Au 15µ"	6 (15.24)	MC	M3AAA-4006R-ND	4.96	43.50
	Au 30µ"	6 (15.24)	GR	M3AAK-4006J-ND	18.22	159.76
	Au 15µ"	6 (15.24)	GR	M3AAA-4006J-ND	4.63	40.63
40	Au 30µ"	18 (45.72)	MC	M3AAK-4018R-ND	20.67	181.23
	Au 15µ"	18 (45.72)	MC	M3AAA-4018R-ND	7.08	62.10
	Au 30µ"	18 (45.72)	GR	M3AAK-4018J-ND	19.69	172.63
	Au 15µ"	18 (45.72)	GR	M3AAA-4018J-ND	6.10	53.50
40	Au 30µ"	36 (91.44)	MC	M3AAK-4036R-ND	23.85	209.14
	Au 15µ"	36 (91.44)	MC	M3AAA-4036R-ND	10.26	90.01
	Au 30µ"	36 (91.44)	GR	M3AAK-4036J-ND	21.89	191.94
	Au 15µ"	36 (91.44)	GR	M3AAA-4036J-ND	8.30	72.81
50	Au 30µ"	6 (15.24)	MC	M3AAK-5006R-ND	23.17	203.15
	Au 15µ"	6 (15.24)	MC	M3AAA-5006R-ND	6.20	54.38
	Au 30µ"	6 (15.24)	GR	M3AAK-5006J-ND	22.76	199.56
	Au 15µ"	6 (15.24)	GR	M3AAA-5006J-ND	5.79	50.79
50	Au 30µ"	18 (45.72)	MC	M3AAK-5018R-ND	25.82	226.40
	Au 15µ"	18 (45.72)	MC	M3AAA-5018R-ND	8.85	77.63
	Au 30µ"	18 (45.72)	GR	M3AAK-5018J-ND	24.59	215.65
	Au 15µ"	18 (45.72)	GR	M3AAA-5018J-ND	7.63	66.88
50	Au 30µ"	36 (91.44)	MC	M3AAK-5036R-ND	29.79	261.28
	Au 15µ"	36 (91.44)	MC	M3AAA-5036R-ND	12.83	112.51
	Au 30µ"	36 (91.44)	GR	M3AAK-5036J-ND	27.34	239.78
	Au 15µ"	36 (91.44)	GR	M3AAA-5036J-ND	10.38	91.01
60	Au 30µ"	6 (15.24)	MC	M3AAK-6006R-ND	28.63	251.07
	Au 15µ"	6 (15.24)	MC	M3AAA-6006R-ND	7.44	65.25
	Au 30µ"	6 (15.24)	GR	M3AAK-6006J-ND	28.14	246.77
	Au 15µ"	6 (15.24)	GR	M3AAA-6006J-ND	6.95	60.95

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
60	Au 30µ”	18 (45.72)	MC	M3AAK-6018R-ND	31.81	278.98
	Au 15µ”	18 (45.72)	MC	M3AAA-6018R-ND	10.62	93.16
	Au 30µ”	18 (45.72)	GR	M3AAK-6018J-ND	30.34	266.08
	Au 15µ”	18 (45.72)	GR	M3AAA-6018J-ND	9.15	80.26
60	Au 30µ”	36 (91.44)	MC	M3AAK-6036R-ND	36.59	320.83
	Au 15µ”	36 (91.44)	MC	M3AAA-6036R-ND	15.40	135.01
	Au 30µ”	36 (91.44)	GR	M3AAK-6036J-ND	33.64	295.03
	Au 15µ”	36 (91.44)	GR	M3AAA-6036J-ND	12.45	109.21

Also available in the following configurations:
M3BB□-□□□□□-ND – Standard Open End w/ Strain Relief.
M3CC□-□□□□□-ND – Standard Open End w/ Polarizing Key.
M3DD□-□□□□□-ND – Standard Open End w/ Polarizing Key & Strain Relief.
M3TTK-□□□□□-ND – Standard Closed End w/ Polarizing Key.
M3UUK-□□□□□-ND – Standard Closed End w/ Polarizing Key & Strain Relief.
Call for complete part number and pricing!

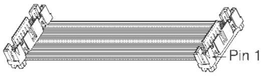
Socket to Socket Connector

***Twisted Pair Cable Finished Length is Approximate**

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
10	Au 30µ”	20 (50.80)	TW	M3AAK-1020K-ND	7.03	61.65
	Au 15µ”	20 (50.80)	TW	M3AAA-1020K-ND	1.96	17.19
	Au 30µ”	40 (101.60)	TW	M3AAK-1040K-ND	8.02	70.30
	Au 15µ”	40 (101.60)	TW	M3AAA-1040K-ND	2.95	25.84
	Au 30µ”	60 (152.40)	TW	M3AAK-1060K-ND	9.00	78.95
	Au 15µ”	60 (152.40)	TW	M3AAA-1060K-ND	3.93	34.49
14	Au 30µ”	20 (50.80)	TW	M3AAK-1420K-ND	8.73	76.51
	Au 15µ”	20 (50.80)	TW	M3AAA-1420K-ND	2.75	24.07
	Au 30µ”	40 (101.60)	TW	M3AAK-1440K-ND	10.11	88.62
	Au 15µ”	40 (101.60)	TW	M3AAA-1440K-ND	4.13	36.18
	Au 30µ”	60 (152.40)	TW	M3AAK-1460K-ND	11.49	100.72
	Au 15µ”	60 (152.40)	TW	M3AAA-1460K-ND	5.51	48.28
16	Au 30µ”	20 (50.80)	TW	M3AAK-1620K-ND	9.57	83.94
	Au 15µ”	20 (50.80)	TW	M3AAA-1620K-ND	3.14	27.51
	Au 30µ”	40 (101.60)	TW	M3AAK-1640K-ND	11.15	97.77
	Au 15µ”	40 (101.60)	TW	M3AAA-1640K-ND	4.71	41.34
	Au 30µ”	60 (152.40)	TW	M3AAK-1660K-ND	12.73	111.61
	Au 15µ”	60 (152.40)	TW	M3AAA-1660K-ND	6.29	55.18
20	Au 30µ”	20 (50.80)	TW	M3AAK-2020K-ND	10.81	94.81
	Au 15µ”	20 (50.80)	TW	M3AAA-2020K-ND	3.92	34.39
	Au 30µ”	40 (101.60)	TW	M3AAK-2040K-ND	12.78	112.10
	Au 15µ”	40 (101.60)	TW	M3AAA-2040K-ND	5.89	51.68
	Au 30µ”	60 (152.40)	TW	M3AAK-2060K-ND	14.76	129.39
	Au 15µ”	60 (152.40)	TW	M3AAA-2060K-ND	7.87	68.97
26	Au 30µ”	20 (50.80)	TW	M3AAK-2620K-ND	14.00	122.80
	Au 15µ”	20 (50.80)	TW	M3AAA-2620K-ND	5.10	44.71
	Au 30µ”	40 (101.60)	TW	M3AAK-2640K-ND	16.57	145.27
	Au 15µ”	40 (101.60)	TW	M3AAA-2640K-ND	7.66	67.18
	Au 30µ”	60 (152.40)	TW	M3AAK-2660K-ND	19.13	167.75
	Au 15µ”	60 (152.40)	TW	M3AAA-2660K-ND	10.22	89.66
34	Au 30µ”	20 (50.80)	TW	M3AAK-3420K-ND	18.24	159.92
	Au 15µ”	20 (50.80)	TW	M3AAA-3420K-ND	6.67	58.46
	Au 30µ”	40 (101.60)	TW	M3AAK-3440K-ND	21.59	189.32
	Au 15µ”	40 (101.60)	TW	M3AAA-3440K-ND	10.02	87.86
	Au 30µ”	60 (152.40)	TW	M3AAK-3460K-ND	24.94	218.71
	Au 15µ”	60 (152.40)	TW	M3AAA-3460K-ND	13.37	117.25
40	Au 30µ”	20 (50.80)	TW	M3AAK-4020K-ND	21.43	187.91
	Au 15µ”	20 (50.80)	TW	M3AAA-4020K-ND	7.84	68.78
	Au 30µ”	40 (101.60)	TW	M3AAK-4040K-ND	25.37	222.49
	Au 15µ”	40 (101.60)	TW	M3AAA-4040K-ND	11.79	103.36
	Au 30µ”	60 (152.40)	TW	M3AAK-4060K-ND	29.32	257.07
	Au 15µ”	60 (152.40)	TW	M3AAA-4060K-ND	15.73	137.94
50	Au 30µ”	20 (50.80)	TW	M3AAK-5020K-ND	26.77	234.75
	Au 15µ”	20 (50.80)	TW	M3AAA-5020K-ND	9.80	85.98
	Au 30µ”	40 (101.60)	TW	M3AAK-5040K-ND	31.70	277.97
	Au 15µ”	40 (101.60)	TW	M3AAA-5040K-ND	14.73	129.20
	Au 30µ”	60 (152.40)	TW	M3AAK-5060K-ND	36.63	321.20
	Au 15µ”	60 (152.40)	TW	M3AAA-5060K-ND	19.66	172.43
60	Au 30µ”	20 (50.80)	TW	M3AAK-6020K-ND	32.96	288.99
	Au 15µ”	20 (50.80)	TW	M3AAA-6020K-ND	11.77	103.17
	Au 30µ”	40 (101.60)	TW	M3AAK-6040K-ND	38.87	340.86
	Au 15µ”	40 (101.60)	TW	M3AAA-6040K-ND	17.68	155.04
	Au 30µ”	60 (152.40)	TW	M3AAK-6060K-ND	44.79	392.73
	Au 15µ”	60 (152.40)	TW	M3AAA-6060K-ND	23.60	206.91

Also available in the following configurations:
M3BB□-□□□□K-ND – Standard Open End w/ Strain Relief.
M3CC□-□□□□K-ND – Standard Open End w/ Polarizing Key.
M3DD□-□□□□K-ND – Standard Open End w/ Polarizing Key & Strain Relief.
M3TTK-□□□□K-ND – Standard Closed End w/ Polarizing Key.
M3UUK-□□□□K-ND – Standard Closed End w/ Polarizing Key & Strain Relief.
Call for complete part number and pricing!

Plug Connector to Plug Connector



*MC = 3M Multi-Color, GR = 3M Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
10	Au 30µ”	6 (15.24)	MC	M3KKK-1006R-ND	9.04	79.28
	Au 30µ”	6 (15.24)	GR	M3KKK-1006J-ND	8.96	78.56
	Au 30µ”	18 (45.72)	MC	M3KKK-1018R-ND	9.57	83.93
	Au 30µ”	18 (45.72)	GR	M3KKK-1018J-ND	9.33	81.78
	Au 30µ”	36 (91.44)	MC	M3KKK-1036R-ND	10.37	90.90
	Au 30µ”	36 (91.44)	GR	M3KKK-1036J-ND	9.88	86.60
14	Au 30µ”	6 (15.24)	MC	M3KKK-1406R-ND	12.53	109.85
	Au 30µ”	6 (15.24)	GR	M3KKK-1406J-ND	12.41	108.84
	Au 30µ”	18 (45.72)	MC	M3KKK-1418R-ND	13.27	116.36
	Au 30µ”	18 (45.72)	GR	M3KKK-1418J-ND	12.93	113.35
	Au 30µ”	36 (91.44)	MC	M3KKK-1436R-ND	14.38	126.13
	Au 30µ”	36 (91.44)	GR	M3KKK-1436J-ND	13.70	120.10

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
16	Au 30µ”	6 (15.24)	MC	M3KKK-1606R-ND	14.20	124.56
	Au 30µ”	6 (15.24)	GR	M3KKK-1606J-ND	14.07	123.41
	Au 30µ”	18 (45.72)	MC	M3KKK-1618R-ND	15.05	132.01
	Au 30µ”	18 (45.72)	GR	M3KKK-1618J-ND	14.66	128.56
	Au 30µ”	36 (91.44)	MC	M3KKK-1636R-ND	16.33	143.18
	Au 30µ”	36 (91.44)	GR	M3KKK-1636J-ND	15.54	136.28
20	Au 30µ”	6 (15.24)	MC	M3KKK-2006R-ND	16.59	145.44
	Au 30µ”	6 (15.24)	GR	M3KKK-2006J-ND	16.42	144.01
	Au 30µ”	18 (45.72)	MC	M3KKK-2018R-ND	17.65	154.74
	Au 30µ”	18 (45.72)	GR	M3KKK-2018J-ND	17.16	150.44
	Au 30µ”	36 (91.44)	MC	M3KKK-2036R-ND	19.24	168.69
	Au 30µ”	36 (91.44)	GR	M3KKK-2036J-ND	18.26	160.10
24	Au 30µ”	6 (15.24)	MC	M3KKK-2406R-ND	18.32	160.62
	Au 30µ”	6 (15.24)	GR	M3KKK-2406J-ND	18.12	158.90
	Au 30µ”	18 (45.72)	MC	M3KKK-2418R-ND	19.59	171.78
	Au 30µ”	18 (45.72)	GR	M3KKK-2418J-ND	19.00	166.62
	Au 30µ”	36 (91.44)	MC	M3KKK-2436R-ND	21.50	188.53
	Au 30µ”	36 (91.44)	GR	M3KKK-2436J-ND	20.32	178.20
26	Au 30µ”	6 (15.24)	MC	M3KKK-2606R-ND	18.95	166.22
	Au 30µ”	6 (15.24)	GR	M3KKK-2606J-ND	18.74	164.35
	Au 30µ”	18 (45.72)	MC	M3KKK-2618R-ND	20.33	178.31
	Au 30µ”	18 (45.72)	GR	M3KKK-2618J-ND	19.70	172.72
	Au 30µ”	36 (91.44)	MC	M3KKK-2636R-ND	22.40	196.45
	Au 30µ”	36 (91.44)	GR	M3KKK-2636J-ND	21.13	185.27
30	Au 30µ”	6 (15.24)	MC	M3KKK-3006R-ND	20.99	184.04
	Au 30µ”	6 (15.24)	GR	M3KKK-3006J-ND	20.71	181.60
	Au 30µ”	18 (45.72)	MC	M3KKK-3018R-ND	22.79	199.84
	Au 30µ”	18 (45.72)	GR	M3KKK-3018J-ND	21.96	192.54
	Au 30µ”	36 (91.44)	MC	M3KKK-3036R-ND	25.49	223.56
	Au 30µ”	36 (91.44)	GR	M3KKK-3036J-ND	23.83	208.95
34	Au 30µ”	6 (15.24)	MC	M3KKK-3406R-ND	23.59	206.84
	Au 30µ”	6 (15.24)	GR	M3KKK-3406J-ND	23.31	204.40
	Au 30µ”	18 (45.72)	MC	M3KKK-3418R-ND	25.39	222.64
	Au 30µ”	18 (45.72)	GR	M3KKK-3418J-ND	24.56	215.34
	Au 30µ”	36 (91.44)	MC	M3KKK-3436R-ND	28.09	246.36
	Au 30µ”	36 (91.44)	GR	M3KKK-3436J-ND	26.43	231.75
36	Au 30µ”	6 (15.24)	MC	M3KKK-3606R-ND	24.97	218.93
	Au 30µ”	6 (15.24)	GR	M3KKK-3606J-ND	24.66	216.28
	Au 30µ”	18 (45.72)	MC	M3KKK-3618R-ND	26.93	236.14
	Au 30µ”	18 (45.72)	GR	M3KKK-3618J-ND	26.02	228.19
	Au 30µ”	36 (91.44)	MC	M3KKK-3636R-ND	29.87	261.96
	Au 30µ”	36 (91.44)	GR	M3KKK-3636J-ND	28.06	246.04
40	Au 30µ”	6 (15.24)	MC	M3KKK-4006R-ND	26.22	229.89
	Au 30µ”	6 (15.24)	GR	M3KKK-4006J-ND	25.89	227.02
	Au 30µ”	18 (45.72)	MC	M3KKK-4018R-ND	28.34	248.49
	Au 30µ”	18 (45.72)	GR	M3KKK-4018J-ND	27.36	239.89
	Au 30µ”	36 (91.44)	MC	M3KKK-4036R-ND	31.52	276.40
	Au 30µ”	36 (91.44)	GR	M3KKK-4036J-ND	29.56	259.20
50	Au 30µ”	6 (15.24)	MC	M3KKK-5006R-ND	28.56	250.46
	Au 30µ”	6 (15.24)	GR	M3KKK-5006J-ND	28.15	246.87
	Au 30µ”	18 (45.72)	MC	M3KKK-5018R-ND	31.21	273.71
	Au 30µ”	18 (45.72)	GR	M3KKK-5018J-ND	29.99	262.96
	Au 30µ”	36 (91.44)	MC	M3KKK-5036R-ND	35.19	308.59
	Au 30µ”	36 (91.44)	GR	M3KKK-5036J-ND	32.74	287.09
60	Au 30µ”	6 (15.24)	MC	M3KKK-6006R-ND	33.70	295.53
	Au 30µ”	6 (15.24)	GR	M3KKK-6006J-ND	33.21	291.23
	Au 30µ”	18 (45.72)	MC	M3KKK-6018R-ND	36.88	323.44
	Au 30µ”	18 (45.72)	GR	M3KKK-6018J-ND	35.41	310.54
	Au 30µ”	36 (91.44)	MC	M3KKK-6036R-ND	41.66	365.29
	Au 30µ”	36 (91.44)	GR	M3KKK-6036J-ND	38.71	339.49
64	Au 30µ”	6 (15.24)	MC	M3KKK-6406R-ND	35.95	315.27
	Au 30µ”	6 (15.24)	GR	M3KKK-6406J-ND	35.43	310.69
	Au 30µ”	18 (45.72)	MC	M3KKK-6418R-ND	39.35	345.03
	Au 30µ”	18 (45.72)	GR	M3KKK-6418J-ND	37.78	331.28
	Au 30µ”	36 (91.44)	MC	M3KKK-6436R-ND	44.44	389.67
	Au 30µ”	36 (91.44)	GR	M3KKK-6436J-ND	41.30	362.16

Also available in the following configurations:
M3RRK-□□□□□-ND – Pin Connector w/o Flange, w/ Polarizing Key & Strain Relief.
M3WWK-□□□□□-ND – Pin Connector with Flange, w/ Polarizing Key.
M3YYK-□□□□□-ND – Pin Connector with Flange, w/ Polarizing Key & Strain Relief.
Call for complete part number and pricing!

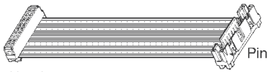
Plug Connector to Plug Connector

***Twisted Pair Cable Finished Length is Approximate**

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
10	Au 30µ”	20 (50.80)	TW	M3KKK-1020K-ND	9.76	85.59
	Au 30µ”	40 (101.60)	TW	M3KKK-1040K-ND	10.75	94.24
14	Au 30µ”	20 (50.80)	TW	M3KKK-1420K-ND	13.54	118.69
	Au 30µ”	40 (101.60)	TW	M3KKK-1440K-ND	14.92	130.80
16	Au 30µ”	20 (50.80)	TW	M3KKK-1620K-ND	15.36	134.67
	Au 30µ”	40 (101.60)	TW	M3KKK-1640K-ND	16.93	148.50
20	Au 30µ”	20 (50.80)	TW	M3KKK-2020K-ND	18.03	158.08
	Au 30µ”	40 (101.60)	TW	M3KKK-2040K-ND	20.00	175.37
20	Au 30µ”	20 (50.80)	TW	M3KKK-2620K-ND	20.83	182.65
	Au 30µ”	40 (101.60)	TW	M3KKK-2640K-ND	23.39	205.12
34	Au 30µ”	20 (50.80)	TW	M3KKK-3420K-ND	26.04	228.32
	Au 30µ”	40 (101.60)	TW	M3KKK-3440K-ND	29.39	257.72
40	Au 30µ”	20 (50.80)	TW	M3KKK-4020K-ND	29.10	255.17
	Au 30µ”	40 (101.60)	TW	M3KKK-4040K-ND	33.04	289.75
50	Au 30µ”	20 (50.80)	TW	M3KKK-5020K-ND	32.16	282.06
	Au 30µ”	40 (101.60)	TW	M3KKK-5040K-ND	37.09	325.28
60	Au 30µ”	20 (50.80)	TW	M3KKK-6020K-ND	38.03	333.45
	Au 30µ”	40 (101.60)	TW	M3KKK-6040K-ND	43.94	385.32
64	Au 30µ”	20 (50.80)	TW	M3KKK-6420K-ND	40.56	355.72
	Au 30µ”	40 (101.60)	TW	M3KKK-6440K-ND	46.87	411.05

Also available in the following configurations:
M3RRK-□□□□K-ND – Pin Connector without Flange, with Polarizing Key and Strain Relief.
M3WWK-□□□□K-ND – Pin Connector with Flange, with Polarizing Key.
M3YYK-□□□□K-ND – Pin Connector with Flange, with Polarizing Key and Strain Relief.
Call for complete part number and pricing!

Socket Connector to Plug Connector



*MC = 3M Multi-Color, GR = 3M Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
10	Au 30µ”	6 (15.24)	MC	M3AKK-1006R-ND	7.68	67.31
	Au 30µ”	6 (15.24)	GR	M3AKK-1006J-ND	7.59	66.59
	Au 30µ”	18 (45.72)	MC	M3AKK-1018R-ND	8.21	71.96
	Au 30µ”	18 (45.72)	GR	M3AKK-1018J-ND	7.96	69.81
	Au 30µ”	36 (91.44)	MC	M3AKK-1036R-ND	9.00	78.93
	Au 30µ”	36 (91.44)	GR	M3AKK-1036J-ND	8.51	74.63
16	Au 30µ”	6 (15.24)	MC	M3AKK-1606R-ND	11.31	99.20
	Au 30µ”	6 (15.24)	GR	M3AKK-1606J-ND	11.18	98.05
	Au 30µ”	18 (45.72)	MC	M3AKK-1618R-ND	12.16	106.64
	Au 30µ”	18 (45.72)	GR	M3AKK-1618J-ND	11.77	103.20
	Au 30µ”	36 (91.44)	MC	M3AKK-1636R-ND	13.43	117.81
	Au 30µ”	36 (91.44)	GR	M3AKK-1636J-ND	12.65	110.92
20	Au 30µ”	6 (15.24)	MC	M3AKK-2006R-ND	12.98	113.81
	Au 30µ”	6 (15.24)	GR	M3AKK-2006J-ND	12.81	112.37
	Au 30µ”	18 (45.72)	MC	M3AKK-2018R-ND	14.04	123.11
	Au 30µ”	18 (45.72)	GR	M3AKK-2018J-ND	13.55	118.81
	Au 30µ”	36 (91.44)	MC	M3AKK-2036R-ND	15.63	137.06
	Au 30µ”	36 (91.44)	GR	M3AKK-2036J-ND	14.65	128.46
24	Au 30µ”	6 (15.24)	MC	M3AKK-2406R-ND	14.77	129.56
	Au 30µ”	6 (15.24)	GR	M3AKK-2406J-ND	14.58	127.84
	Au 30µ”	18 (45.72)	MC	M3AKK-2418R-ND	16.05	140.72
	Au 30µ”	18 (45.72)	GR	M3AKK-2418J-ND	15.46	135.56
	Au 30µ”	36 (91.44)	MC	M3AKK-2436R-ND	17.96	157.46
	Au 30µ”	36 (91.44)	GR	M3AKK-2436J-ND	16.78	147.14
26	Au 30µ”	6 (15.24)	MC	M3AKK-2606R-ND	15.54	136.29
	Au 30µ”	6 (15.24)	GR	M3AKK-2606J-ND	15.33	134.43
	Au 30µ”	18 (45.72)	MC	M3AKK-2618R-ND	16.92	148.39
	Au 30µ”	18 (45.72)	GR	M3AKK-2618J-ND	16.28	142.79
	Au 30µ”	36 (91.44)	MC	M3AKK-2636R-ND	18.99	166.53
	Au 30µ”	36 (91.44)	GR	M3AKK-2636J-ND	17.71	155.34
30	Au 30µ”	6 (15.24)	MC	M3AKK-3006R-ND	17.51	153.54
	Au 30µ”	6 (15.24)	GR	M3AKK-3006J-ND	17.23	151.10
	Au 30µ”	18 (45.72)	MC	M3AKK-3018R-ND	19.31	169.35
	Au 30µ”	18 (45.72)	GR	M3AKK-3018J-ND	18.48	162.04
	Au 30µ”	36 (91.44)	MC	M3AKK-3036R-ND	22.02	193.06
	Au 30µ”	36 (91.44)	GR	M3AKK-3036J-ND	20.35	178.45
34	Au 30µ”	6 (15.24)	MC	M3AKK-3406R-ND	19.69	172.64
	Au 30µ”	6 (15.24)	GR	M3AKK-3406J-ND	19.41	170.20
	Au 30µ”	18 (45.72)	MC	M3AKK-3418R-ND	21.49	188.44
	Au 30µ”	18 (45.72)	GR	M3AKK-3418J-ND	20.66	181.14
	Au 30µ”	36 (91.44)	MC	M3AKK-3436R-ND	24.19	212.16
	Au 30µ”	36 (91.44)	GR	M3AKK-3436J-ND	22.53	197.55
40	Au 30µ”	6 (15.24)	MC	M3AKK-4006R-ND	22.38	196.26
	Au 30µ”	6 (15.24)	GR	M3AKK-4006J-ND	22.05	193.39
	Au 30µ”	18 (45.72)	MC	M3AKK-4018R-ND	24.50	214.86
	Au 30µ”	18 (45.72)	GR	M3AKK-4018J-ND	23.52	206.26
	Au 30µ”	36 (91.44)	MC	M3AKK-4036R-ND	27.68	242.77
	Au 30µ”	36 (91.44)	GR	M3AKK-4036J-ND	25.72	225.57
	Au 30µ”	6 (15.24)	MC	M3AKK-5006R-ND	25.86	226.80
50	Au 30µ”	6 (15.24)	GR	M3AKK-5006J-ND	25.45	223.22
	Au 30µ”	18 (45.72)	MC	M3AKK-5018R-ND	28.51	250.05
	Au 30µ”	18 (45.72)	GR	M3AKK-5018J-ND	27.29	239.30
50	Au 30µ”	36 (91.44)	MC	M3AKK-5036R-ND	32.49	284.93
	Au 30µ”	36 (91.44)	GR	M3AKK-5036J-ND	30.04	263.43
60	Au 30µ”	6 (15.24)	MC	M3AKK-6006R-ND	31.17	273.30
	Au 30µ”	6 (15.24)	GR	M3AKK-6006J-ND	30.68	269.00
	Au 30µ”	18 (45.72)	MC	M3AKK-6018R-ND	34.35	301.21
	Au 30µ”	18 (45.72)	GR	M3AKK-6018J-ND	32.88	288.31
	Au 30µ”	36 (91.44)	MC	M3AKK-6036R-ND	39.12	343.06
	Au 30µ”	36 (91.44)	GR	M3AKK-6036J-ND	36.18	317.26

Also available in the following configurations:
M3AW□-□□□□□-ND – Socket Connector w/Polarizing Key & Strain Relief.
M3BR□-□□□□□-ND – Socket Connector with SR, Pin Connector without Flange with PK and SR.
M3BY□-□□□□□-ND – Socket Connector with SR, Pin Connector with Flange with PK and SR.
M3CK□-□□□□□-ND – Socket Connector Open with Polarizing Key.
M3CW□-□□□□□-ND – Socket Connector with PK, Pin Connector with Flange w/ PK.
M3DR□-□□□□□-ND – Socket Connector with PK and SR, Pin Connector without Flange with PK and SR.
M3DY□-□□□□□-ND – Socket Connector with PK and SR, Pin Connector with Flange with PK and SR.
M3TK□-□□□□□-ND – Socket Connector Closed with Polarizing Key.
M3UR□-□□□□□-ND – Socket Connector Closed End with PK and SR, Pin Connector without Flange with PK and SR.
M3UY□-□□□□□-ND – Socket Connector Closed End with PK and SR, Pin Connector with Flange with PK & SR.
Call for complete part number and pricing!

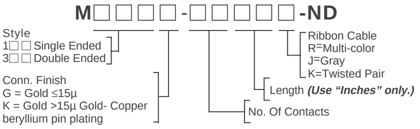
Socket Connector to Plug Connector

***Twisted Pair Cable Finished Length is Approximate**

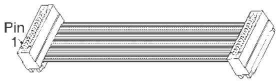
No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
10	Au 30µ”	20 (50.80)	TW	M3AKK-1020K-ND	8.40	73.62
	Au 30µ”	40 (101.60)	TW	M3AKK-1040K-ND	9.38	82.27
	Au 30µ”	60 (152.40)	TW	M3AKK-1060K-ND	10.37	90.92
16	Au 30µ”	20 (50.80)	TW	M3AKK-1620K-ND	12.46	109.31
	Au 30µ”	40 (101.60)	TW	M3AKK-1640K-ND	14.04	123.14
	Au 30µ”	60 (152.40)	TW	M3AKK-1660K-ND	15.62	136.97
20	Au 30µ”	20 (50.80)	TW	M3AKK-2020K-ND	14.42	126.45
	Au 30µ”	40 (101.60)	TW	M3AKK-2040K-ND	16.39	143.73
	Au 30µ”	60 (152.40)	TW	M3AKK-2060K-ND	18.36	161.03
26	Au 30µ”	20 (50.80)	TW	M3AKK-2620K-ND	17.42	152.72
	Au 30µ”	40 (101.60)	TW	M3AKK-2640K-ND	19.98	175.20
	Au 30µ”	60 (152.40)	TW	M3AKK-2660K-ND	22.54	197.68
34	Au 30µ”	20 (50.80)	TW	M3AKK-3420K-ND	22.14	194.12
	Au 30µ”	40 (101.60)	TW	M3AKK-3440K-ND	25.49	223.52
	Au 30µ”	60 (152.40)	TW	M3AKK-3460K-ND	28.84	252.91
40	Au 30µ”	20 (50.80)	TW	M3AKK-4020K-ND	25.26	221.54
	Au 30µ”	40 (101.60)	TW	M3AKK-4040K-ND	29.21	256.12
	Au 30µ”	60 (152.40)	TW	M3AKK-4060K-ND	33.15	290.70

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
50	Au 30µ"	20 (50.80)	TW	M3AKK-5020K-ND	29.47	258.40
	Au 30µ"	40 (101.60)	TW	M3AKK-5040K-ND	34.40	301.62
	Au 30µ"	60 (152.40)	TW	M3AKK-5060K-ND	39.33	344.85
60	Au 30µ"	20 (50.80)	TW	M3AKK-6020K-ND	35.49	311.22
	Au 30µ"	40 (101.60)	TW	M3AKK-6040K-ND	41.41	363.09
	Au 30µ"	60 (152.40)	TW	M3AKK-6060K-ND	47.32	414.96

Also available in the following configurations:
M3AW□-□□□□K-ND – Socket Connector/Pin Connector w/ Flange w/ PK.
M3BR□-□□□□K-ND – Socket Connector with SR, Pin Connector without Flange with PK and SR.
M3BY□-□□□□K-ND – Socket Connector with SR, Pin Connector with Flange with PK and SR.
M3CK□-□□□□K-ND – Socket Connector with PK, Pin Connector without Flange with PK.
M3CW□-□□□□K-ND – Socket Connector with PK, Pin Connector with Flange with PK.
M3DR□-□□□□K-ND – Socket Connector with PK and SR, Pin Connector without Flange with PK and SR.
M3DY□-□□□□K-ND – Socket Connector with PK and SR, Pin Connector with Flange with PK and SR.
M3TK□-□□□□K-ND – Closed End Socket Connector with PK, Pin Connector without Flange with PK.
M3UR□-□□□□K-ND – Closed End Socket Connector with PK and SR, Pin Connector without Flange with PK and SR.
M3UY□-□□□□K-ND – Closed End Socket Connector with PK and SR, Pin Connector with Flange with PK and SR.
Call for complete part number and pricing!



Card Edge to Card Edge



*MC = 3M Multi-Color, GR = 3M Gray

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
10	Au 30µ"	6 (15.24)	MC	M3EEK-1006R-ND	8.72	76.43
	Au 30µ"	6 (15.24)	GR	M3EEK-1006J-ND	8.63	75.71
	Au 30µ"	18 (45.72)	MC	M3EEK-1018R-ND	9.25	81.08
	Au 30µ"	18 (45.72)	GR	M3EEK-1018J-ND	9.00	78.93
	Au 30µ"	36 (91.44)	MC	M3EEK-1036R-ND	10.04	88.05
	Au 30µ"	36 (91.44)	GR	M3EEK-1036J-ND	9.55	83.75
16	Au 30µ"	6 (15.24)	MC	M3EEK-1606R-ND	12.06	105.75
	Au 30µ"	6 (15.24)	GR	M3EEK-1606J-ND	11.93	104.60
	Au 30µ"	18 (45.72)	MC	M3EEK-1618R-ND	12.91	113.20
	Au 30µ"	18 (45.72)	GR	M3EEK-1618J-ND	12.52	109.75
	Au 30µ"	36 (91.44)	MC	M3EEK-1636R-ND	14.18	124.37
	Au 30µ"	36 (91.44)	GR	M3EEK-1636J-ND	13.40	117.47
20	Au 30µ"	6 (15.24)	MC	M3EEK-2006R-ND	14.96	131.19
	Au 30µ"	6 (15.24)	GR	M3EEK-2006J-ND	14.80	129.76
	Au 30µ"	18 (45.72)	MC	M3EEK-2018R-ND	16.02	140.49
	Au 30µ"	18 (45.72)	GR	M3EEK-2018J-ND	15.53	136.19
	Au 30µ"	36 (91.44)	MC	M3EEK-2036R-ND	17.61	154.44
	Au 30µ"	36 (91.44)	MC	M3EEK-2036J-ND	16.63	145.85
26	Au 30µ"	6 (15.24)	MC	M3EEK-2606R-ND	17.78	155.96
	Au 30µ"	6 (15.24)	GR	M3EEK-2606J-ND	17.57	154.09
	Au 30µ"	18 (45.72)	MC	M3EEK-2618R-ND	19.16	168.05
	Au 30µ"	18 (45.72)	GR	M3EEK-2618J-ND	18.53	162.46
	Au 30µ"	36 (91.44)	MC	M3EEK-2636R-ND	21.23	186.19
	Au 30µ"	36 (91.44)	GR	M3EEK-2636J-ND	19.96	175.01
34	Au 30µ"	6 (15.24)	MC	M3EEK-3406R-ND	20.79	182.33
	Au 30µ"	6 (15.24)	GR	M3EEK-3406J-ND	20.51	179.89
	Au 30µ"	18 (45.72)	MC	M3EEK-3418R-ND	22.59	198.13
	Au 30µ"	18 (45.72)	GR	M3EEK-3418J-ND	21.76	190.83
	Au 30µ"	36 (91.44)	MC	M3EEK-3436R-ND	25.30	221.85
	Au 30µ"	36 (91.44)	GR	M3EEK-3436J-ND	23.63	207.24
40	Au 30µ"	6 (15.24)	MC	M3EEK-4006R-ND	25.44	223.05
	Au 30µ"	6 (15.24)	GR	M3EEK-4006J-ND	25.11	220.18
	Au 30µ"	18 (45.72)	MC	M3EEK-4018R-ND	27.56	241.65
	Au 30µ"	18 (45.72)	GR	M3EEK-4018J-ND	26.58	233.05
	Au 30µ"	36 (91.44)	MC	M3EEK-4036R-ND	31.18	273.46
	Au 30µ"	36 (91.44)	GR	M3EEK-4036J-ND	28.78	252.36
50	Au 30µ"	6 (15.24)	MC	M3EEK-5006R-ND	26.42	231.65
	Au 30µ"	6 (15.24)	GR	M3EEK-5006J-ND	26.01	228.06
	Au 30µ"	18 (45.72)	MC	M3EEK-5018R-ND	29.07	254.90
	Au 30µ"	18 (45.72)	GR	M3EEK-5018J-ND	27.84	244.15
	Au 30µ"	36 (91.44)	MC	M3EEK-5036R-ND	33.04	289.78
	Au 30µ"	36 (91.44)	GR	M3EEK-5036J-ND	30.59	268.28
60	Au 30µ"	6 (15.24)	MC	M3EEK-6006R-ND	33.18	290.97
	Au 30µ"	6 (15.24)	GR	M3EEK-6006J-ND	32.69	286.67
	Au 30µ"	18 (45.72)	MC	M3EEK-6018R-ND	36.36	318.88
	Au 30µ"	18 (45.72)	GR	M3EEK-6018J-ND	34.89	305.98
	Au 30µ"	36 (91.44)	MC	M3EEK-6036R-ND	41.14	360.73
	Au 30µ"	36 (91.44)	GR	M3EEK-6036J-ND	38.19	334.93
64	Au 30µ"	6 (15.24)	MC	M3EEK-6406R-ND	33.81	296.46
	Au 30µ"	6 (15.24)	GR	M3EEK-6406J-ND	33.28	291.88
	Au 30µ"	18 (45.72)	MC	M3EEK-6418R-ND	37.20	326.22
	Au 30µ"	18 (45.72)	GR	M3EEK-6418J-ND	35.63	312.47
	Au 30µ"	36 (91.44)	MC	M3EEK-6436R-ND	42.29	370.86
	Au 30µ"	36 (91.44)	GR	M3EEK-6436J-ND	39.15	343.35

Also available in the following configurations:
M3FFK-□□□□□-ND – Card Edge Connector w/ Flange.
M3GGK-□□□□□-ND – Card Edge Connector w/ Slotted Flange.
M3MMK-□□□□□-ND – Card Edge Connector w/ Strain Relief.
Call for complete part number and pricing!

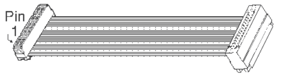
Card Edge to Card Edge

***Twisted Pair Cable Finished Length is Approximate**

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
10	Au 30µ"	20 (50.80)	TW	M3EEK-1020K-ND	9.44	82.74
	Au 30µ"	40 (101.60)	TW	M3EEK-1040K-ND	10.42	91.39
	Au 30µ"	60 (152.40)	TW	M3EEK-1060K-ND	11.41	100.04
16	Au 30µ"	20 (50.80)	TW	M3EEK-1620K-ND	13.21	115.86
	Au 30µ"	40 (101.60)	TW	M3EEK-1640K-ND	14.79	129.69
	Au 30µ"	60 (152.40)	TW	M3EEK-1660K-ND	16.37	143.53
20	Au 30µ"	20 (50.80)	TW	M3EEK-2020K-ND	16.40	143.83
	Au 30µ"	40 (101.60)	TW	M3EEK-2040K-ND	18.37	161.12
	Au 30µ"	60 (152.40)	TW	M3EEK-2060K-ND	20.35	178.41
26	Au 30µ"	20 (50.80)	TW	M3EEK-2620K-ND	19.66	172.39
	Au 30µ"	40 (101.60)	TW	M3EEK-2640K-ND	22.22	194.86
	Au 30µ"	60 (152.40)	TW	M3EEK-2660K-ND	24.78	217.34
34	Au 30µ"	20 (50.80)	TW	M3EEK-3420K-ND	23.24	203.81
	Au 30µ"	40 (101.60)	TW	M3EEK-3440K-ND	26.59	233.21
	Au 30µ"	60 (152.40)	TW	M3EEK-3460K-ND	29.95	262.60
40	Au 30µ"	20 (50.80)	TW	M3EEK-4020K-ND	28.32	248.33
	Au 30µ"	40 (101.60)	TW	M3EEK-4040K-ND	32.26	282.91
	Au 30µ"	60 (152.40)	TW	M3EEK-4060K-ND	36.21	317.49
50	Au 30µ"	20 (50.80)	TW	M3EEK-5020K-ND	30.02	263.25
	Au 30µ"	40 (101.60)	TW	M3EEK-5040K-ND	34.95	306.47
	Au 30µ"	60 (152.40)	TW	M3EEK-5060K-ND	39.88	349.70
60	Au 30µ"	20 (50.80)	TW	M3EEK-6020K-ND	37.51	328.89
	Au 30µ"	40 (101.60)	TW	M3EEK-6040K-ND	43.42	380.76
	Au 30µ"	60 (152.40)	TW	M3EEK-6060K-ND	49.34	432.63
64	Au 30µ"	20 (50.80)	TW	M3EEK-6420K-ND	38.42	336.91
	Au 30µ"	40 (101.60)	TW	M3EEK-6440K-ND	44.73	392.24
	Au 30µ"	60 (152.40)	TW	M3EEK-6460K-ND	51.04	447.56

Also available in the following configurations:
M3FFK-□□□□K-ND – with Flange.
M3GGK-□□□□K-ND – with Slotted Flange.
Call for complete part number and pricing!

Socket Connector to Card Edge Connector



*MC = 3M Multi-Color, GR = 3M Gray

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
10	Au 30µ"	6 (15.24)	MC	M3AEK-1006R-ND	7.51	65.88
	Au 30µ"	6 (15.24)	GR	M3AEK-1006J-ND	7.43	65.16
	Au 30µ"	18 (45.72)	MC	M3AEK-1018R-ND	8.04	70.53
	Au 30µ"	18 (45.72)	GR	M3AEK-1018J-ND	7.80	68.38
	Au 30µ"	36 (91.44)	MC	M3AEK-1036R-ND	8.84	77.51
	Au 30µ"	36 (91.44)	GR	M3AEK-1036J-ND	8.35	73.21
16	Au 30µ"	6 (15.24)	MC	M3AEK-1606R-ND	10.24	89.79
	Au 30µ"	6 (15.24)	GR	M3AEK-1606J-ND	10.11	88.64
	Au 30µ"	18 (45.72)	MC	M3AEK-1618R-ND	11.09	97.24
	Au 30µ"	18 (45.72)	GR	M3AEK-1618J-ND	10.70	93.79
	Au 30µ"	36 (91.44)	MC	M3AEK-1636R-ND	12.36	108.41
	Au 30µ"	36 (91.44)	GR	M3AEK-1636J-ND	11.58	101.51
20	Au 30µ"	6 (15.24)	MC	M3AEK-2006R-ND	12.17	106.68
	Au 30µ"	6 (15.24)	GR	M3AEK-2006J-ND	12.00	105.25
	Au 30µ"	18 (45.72)	MC	M3AEK-2018R-ND	13.23	115.98
	Au 30µ"	18 (45.72)	GR	M3AEK-2018J-ND	12.74	111.68
	Au 30µ"	36 (91.44)	MC	M3AEK-2036R-ND	14.82	129.93
	Au 30µ"	36 (91.44)	GR	M3AEK-2036J-ND	13.84	121.34
26	Au 30µ"	6 (15.24)	MC	M3AEK-2606R-ND	14.96	131.16
	Au 30µ"	6 (15.24)	GR	M3AEK-2606J-ND	14.74	129.30
	Au 30µ"	18 (45.72)	MC	M3AEK-2618R-ND	16.34	143.26
	Au 30µ"	18 (45.72)	GR	M3AEK-2618J-ND	15.70	137.66
	Au 30µ"	36 (91.44)	MC	M3AEK-2636R-ND	18.40	161.40
	Au 30µ"	36 (91.44)	GR	M3AEK-2636J-ND	17.13	150.21
34	Au 30µ"	6 (15.24)	MC	M3AEK-3406R-ND	18.29	160.38
	Au 30µ"	6 (15.24)	GR	M3AEK-3406J-ND	18.01	157.94
	Au 30µ"	18 (45.72)	MC	M3AEK-3418R-ND	20.09	176.19
	Au 30µ"	18 (45.72)	GR	M3AEK-3418J-ND	19.26	168.88
	Au 30µ"	36 (91.44)	MC	M3AEK-3436R-ND	22.80	199.90
	Au 30µ"	36 (91.44)	GR	M3AEK-3436J-ND	21.13	185.29
40	Au 30µ"	6 (15.24)	MC	M3AEK-4006R-ND	21.99	192.84
	Au 30µ"	6 (15.24)	GR	M3AEK-4006J-ND	21.66	189.97
	Au 30µ"	18 (45.72)	MC	M3AEK-4018R-ND	24.11	211.44
	Au 30µ"	18 (45.72)	GR	M3AEK-4018J-ND	23.13	202.84
	Au 30µ"	36 (91.44)	MC	M3AEK-4036R-ND	27.29	239.35
	Au 30µ"	36 (91.44)	GR	M3AEK-4036J-ND	25.33	222.15
50	Au 30µ"	6 (15.24)	MC	M3AEK-5006R-ND	24.79	217.40
	Au 30µ"	6 (15.24)	GR	M3AEK-5006J-ND	24.38	213.81
	Au 30µ"	18 (45.72)	MC	M3AEK-5018R-ND	27.44	240.65
	Au 30µ"	18 (45.72)	GR	M3AEK-5018J-ND	26.22	229.90
	Au 30µ"	36 (91.44)	MC	M3AEK-5036R-ND	31.42	275.53
	Au 30µ"	36 (91.44)	GR	M3AEK-5036J-ND	28.97	254.03
60	Au 30µ"	6 (15.24)	MC	M3AEK-6006R-ND	30.91	271.02
	Au 30µ"	6 (15.24)	GR	M3AEK-6006J-ND	30.42	266.72
	Au 30µ"	18 (45.72)	MC	M3AEK-6018R-ND	34.09	298.93
	Au 30µ"	18 (45.72)	GR	M3AEK-6018J-ND	32.62	286.03
	Au 30µ"	36 (91.44)	MC	M3AEK-6036R-ND	38.86	340.78
	Au 30µ"	36 (91.44)	GR	M3AEK-6036J-ND	35.92	314.98

Also available in the following configurations:
M3AFK-□□□□□-ND – Socket Connector/Card Edge Connector w/ Flange.
M3AGK-□□□□□-ND – Socket Conn./Card Edge Conn. w/ Slotted Flange.
M3AMK-□□□□□-ND – Socket Conn./Card Edge Conn. w/ Strain Relief.
M3BEK-□□□□□-ND – Socket Connector/Card Edge Connector
M3BFK-□□□□□-ND – Socket Connector/Card Edge Connector w/ Flange.
M3BGK-□□□□□-ND – Socket Conn./Card Edge Conn. w/ Slotted Flange.
M3BMK-□□□□□-ND – Socket Connector with Strain Relief./Card Edge Connector with Strain Relief.
M3CEK-□□□□□-ND – Socket Connector/Card Edge Connector.
M3CFK-□□□□□-ND – Socket Connector/Card Edge Connector w/ Flange.
M3CGK-□□□□□-ND – Socket Conn./Card Edge Conn. w/ Slotted Flange.
M3CMK-□□□□□-ND – Socket Conn. Open End w/ Strain Relief/Card Edge Connector with Strain Relief.
M3DEK-□□□□□-ND – Socket Connector/Card Edge Connector .
M3DFK-□□□□□-ND – Socket Connector/Card Edge Connector w/Flange.
M3DGK-□□□□□-ND – Socket Conn./Card Edge Conn. w/ Slotted Flange.
M3DMK-□□□□□-ND – Socket Conn. Open End w/ PK & Strain Relief/ Card Edge Conn. with Strain Relief.
M3TEK-□□□□□-ND – Socket Connector Closed End with PK/Card Edge Connector Standard.
M3TFK-□□□□□-ND – Socket Connector Closed End with PK/Card Edge Connector with Flange.
M3TGK-□□□□□-ND – Socket Connector Closed End with PK/Card Edge Connector with Slotted Flange.
M3TMK-□□□□□-ND – Socket Connector Closed End with PK/Card Edge Connector with Strain Relief.
M3UEK-□□□□□-ND – Socket Connector Closed End with PK & SR/Card Edge Connector Standard.
M3UFK-□□□□□-ND – Socket Connector Closed End with PK & SR/Card Edge Connector with Flange.
M3UGK-□□□□□-ND – Socket Connector Closed End with PK & SR/Card Edge Connector with Slotted Flange.
M3UMK-□□□□□-ND – Socket Connector Closed End with PK & Strain Relief/Card Edge Connector w/ Strain Relief.
Call for complete part number and pricing!

Socket Connector to Card Edge

***Twisted Pair Cable Finished Length is Approximate**

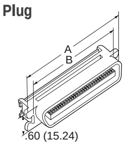
No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
10	Au 30µ"	20 (50.80)	TW	M3AEK-1020K-ND	8.23	72.20
	Au 30µ"	40 (101.60)	TW	M3AEK-1040K-ND	9.22	80.85
	Au 30µ"	60 (152.40)	TW	M3AEK-1060K-ND	10.21	89.49
16	Au 30µ"	20 (50.80)	TW	M3AEK-1620K-ND	11.39	99.90
	Au 30µ"	40 (101.60)	TW	M3AEK-1640K-ND	12.97	113.73
	Au 30µ"	60 (152.40)	TW	M3AEK-1660K-ND	14.55	127.57
20	Au 30µ"	20 (50.80)	TW	M3AEK-2020K-ND	13.61	119.32
	Au 30µ"	40 (101.60)	TW	M3AEK-2040K-ND	15.58	136.61
	Au 30µ"	60 (152.40)	TW	M3AEK-2060K-ND	17.55	153.90
26	Au 30µ"	20 (50.80)	TW	M3AEK-2620K-ND	16.83	147.59
	Au 30µ"	40 (101.60)	TW	M3AEK-2640K-ND	19.39	170.07
	Au 30µ"	60 (152.40)	TW	M3AEK-2660K-ND	21.96	192.55
34	Au 30µ"	20 (50.80)	TW	M3AEK-3420K-ND	20.74	181.87
	Au 30µ"	40 (101.60)	TW	M3AEK-3440K-ND	24.09	211.26
	Au 30µ"	60 (152.40)	TW	M3AEK-3460K-ND	27.44	240.65
40	Au 30µ"	20 (50.80)	TW	M3AEK-4020K-ND	24.87	218.12
	Au 30µ"	40 (101.60)	TW	M3AEK-4040K-ND	28.82	252.70
	Au 30µ"	60 (152.40)	TW	M3AEK-4060K-ND	32.76	287.28
50	Au 30µ"	20 (50.80)	TW	M3AEK-5020K-ND	28.39	249.00
	Au 30µ"	40 (101.60)	TW	M3AEK-5040K-ND	33.32	292.22
	Au 30µ"	60 (152.40)	TW	M3AEK-5060K-ND	38.25	335.45
60	Au 30µ"	20 (50.80)	TW	M3AEK-6020K-ND	35.23	308.94
	Au 30µ"	40 (101.60)	TW	M3AEK-6040K-ND	41.15	360.81
	Au 30µ"	60 (152.40)	TW	M3AEK-6060K-ND	47.06	412.68

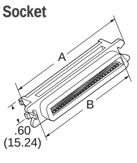
Also available in the following configurations:
M3AFK-□□□□K-ND – Socket Connector/Card Edge Connector w/ Flange.
M3AGK-□□□□K-ND – Socket Conn./Card Edge Conn. w/ Slotted Flange.
M3AMK-□□□□K-ND – Socket Conn./Card Edge Conn. w/ Strain Relief.
M3BEK-□□□□K-ND – Socket Connector/Card Edge Connector.
M3BFK-□□□□K-ND – Socket Connector/Card Edge Connector w/ Flange.
M3BGK-□□□□K-ND – Socket Conn./Card Edge Conn. w/ Slotted Flange.
M3BMK-□□□□K-ND – Socket Connector with Strain Relief/Card Edge Connector with Strain Relief.
M3CEK-□□□□K-ND – Socket Connector/Card Edge Connector.
M3CFK-□□□□K-ND – Socket Connector/Card Edge Conn. w/ Flange.
M3CGK-□□□□K-ND – Socket Conn./Card Edge Conn. w/ Slotted Flange.
M3CMK-□□□□K-ND – Socket Connector Open End with PK/Card Edge Connector with Strain Relief.
M3DEK-□□□□K-ND – Socket Connector/Card Edge Connector.
M3DFK-□□□□K-ND – Socket Connector/Card Edge Connector w/ Flange.
M3DGK-□□□□K-ND – Socket Conn./Card Edge Conn. w/ Slotted Flange.
M3DMK-□□□□K-ND – Socket Conn. Open End w/ PK & Strain Relief/ Card Edge Conn. w/ Strain Relief.
M3TEK-□□□□K-ND – Socket Connector Closed End w/ PK/Card Edge Connector Stand.
M3TFK-□□□□K-ND – Socket Connector Closed End w/ PK/Card Edge Connector w/ Flange.
M3TGK-□□□□K-ND – Socket Connector Closed End w/ PK/Card Edge Connector w/ Slotted Flange.
M3TMK-□□□□K-ND – Socket Connector Closed End w/ PK/Card Edge Connector w/ Strain Relief.
M3UEK-□□□□K-ND – Socket Connector Closed End w/ PK & SR/Card Edge Connector Standard.
M3UFK-□□□□K-ND – Socket. Conn. Closed End w/ PK & SR/Card Edge Connector Flange.
M3UGK-□□□□K-ND – Socket Conn. Closed End w/ PK & SR/Card Edge Connector w/ Slotted Flange.
M3UMK-□□□□K-ND – Socket Conn. Closed End w/ PK & Strain Relief/ Card Edge Connector w/Strain Relief.
Call for complete part number and pricing!

Delta Flat Ribbon Cable Connectors

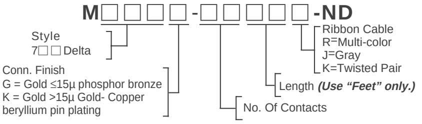
Physical: • Insulation Material: Glass reinforced polyester. Flammability rating: UL 94V-0 • Color: Gray • Contact Material: Flat cable connectors are beryllium copper; Latch eject headers are copper alloy • Plating: 30µ" gold. **Electrical:** • Current Rating: 1A • Insulation Resistance: >1x10⁹ Ω @ 500 VDC • Withstanding Voltage: 1000VRMS @ sea level. **Environmental:** • Temperature Rating: -55°C to +105°C. UL File No.: E68080, CSA File No.: LR-40971

3 mounting designs available. Those with **Prefix MDA** on Digi-Key part number: combination mount, which is a universal mount type that accepts both bail and screw mount hardware. **Prefix MDC:** bail mount, which can be used as a standard I/O connector for various electronic applications. Positive latching and easy disconnect. **Prefix MDB:** screw mount, which have #4-40 threaded insert that simplifies mounting when a more permanent connection is desired • Wire Accommodation: 26-30 AWG stranded



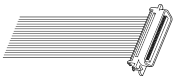


No. of Cont.	Dim. – In. (mm) A	B	Digi-Key Part No.	Pricing 1	10	3M Part No.
Plugs						
14	1.75 (44.45)	1.42 (36.07)	MDA14K-ND	4.41	37.10	3572-1000
	1.58 (40.13)	1.20 (30.48)	MDC14K-ND	4.60	38.68	3572-1001
	1.75 (44.45)	1.42 (36.07)	MDB14K-ND	4.70	39.55	3572-1002
24	2.17 (55.12)	1.84 (46.74)	MDA24K-ND	5.22	43.93	3548-1000
	2.00 (50.80)	1.63 (41.40)	MDC24K-ND	5.45	45.85	3548-1001
	2.17 (55.12)	1.84 (46.74)	MDB24K-ND	5.55	46.73	3548-1002
36	2.68 (68.07)	2.35 (59.69)	MDA36K-ND	6.43	54.08	3366-1000
	2.52 (64.01)	2.14 (54.36)	MDC36K-ND	6.74	56.70	3366-1001
	2.68 (68.07)	2.35 (59.69)	MDB36K-ND	6.88	57.93	3366-1002
50	3.27 (83.06)	2.95 (74.93)	MDA50K-ND	7.65	64.40	3564-1000
	3.11 (78.99)	2.73 (69.34)	MDC50K-ND	8.26	69.48	3564-1001
	3.27 (83.06)	2.95 (74.93)	MDB50K-ND	8.47	71.23	3564-1002
Sockets						
14	1.75 (44.45)	1.42 (36.07)	MDD14K-ND	4.41	37.10	3573-1000
	1.58 (40.13)	1.20 (30.48)	MDF14K-ND	4.60	38.68	3573-1001
	1.75 (44.45)	1.42 (36.07)	MDE14K-ND	4.70	39.55	3573-1002
24	2.17 (55.12)	1.84 (46.74)	MDD24K-ND	5.22	43.93	3549-1000
	2.00 (50.80)	1.63 (41.40)	MDF24K-ND	5.45	45.85	3549-1001
	2.17 (55.12)	1.84 (46.74)	MDE24K-ND	5.55	46.73	3549-1002
36	2.68 (68.07)	2.35 (59.69)	MDD36K-ND	6.43	54.08	3367-1000
	2.52 (64.01)	2.14 (54.36)	MDF36K-ND	6.74	56.70	3367-1001
	2.68 (68.07)	2.35 (59.69)	MDE36K-ND	6.88	57.93	3367-1002
50	3.27 (83.06)	2.95 (74.93)	MDD50K-ND	7.65	64.40	3565-1000
	3.11 (78.99)	2.73 (69.34)	MDF50K-ND	8.26	69.48	3565-1001
	3.27 (83.06)	2.95 (74.93)	MDE50K-ND	8.47	71.23	3565-1002
Backshells						
50	—	—	MDBF50-ND	3.12	26.25	3485-2500
Metal Strain Reliefs						
14	—	—	MDSF14-ND	.44	3.68	3448-60
24	—	—	MDSF24-ND	.44	3.68	3448-61
36	—	—	MDSF36-ND	.44	3.68	3448-62
50	—	—	MDSF50-ND	.44	3.68	3448-63


M□□□□-□□□□□-ND
Style
7□□Delta
Conn. Finish
G = Gold ≤15µ phosphor bronze
K = Gold >15µ Gold- Copper beryllium pin plating
No. Of Contacts
Length (Use "Feet" only.)
Ribbon Cable
R=Multi-color
J=Gray
K=Twisted Pair

Delta Cable Assemblies

Single Ended — Male



*MC = 3M Multi-Color, GR = 3M Gray

No. of Con-tacts	Conn. Finish	Length Feet (Meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
14	Au 30µ"	6 (1.83)	MC	M7KXK-1406R-ND	12.00	105.19
	Au 30µ"	6 (1.83)	GR	M7KXK-1406J-ND	10.62	93.14
	Au 30µ"	10 (3.05)	MC	M7KXK-1410R-ND	14.97	131.24
	Au 30µ"	10 (3.05)	GR	M7KXK-1410J-ND	12.68	111.16
24	Au 30µ"	6 (1.83)	MC	M7KXK-2406R-ND	16.48	144.50
	Au 30µ"	6 (1.83)	GR	M7KXK-2406J-ND	14.12	123.85
	Au 30µ"	10 (3.05)	MC	M7KXK-2410R-ND	21.57	189.15
	Au 30µ"	10 (3.05)	GR	M7KXK-2410J-ND	17.65	154.74
36	Au 30µ"	6 (1.83)	MC	M7KXK-3606R-ND	22.53	197.59
	Au 30µ"	6 (1.83)	GR	M7KXK-3606J-ND	18.90	165.76
	Au 30µ"	10 (3.05)	MC	M7KXK-3610R-ND	30.38	266.43
	Au 30µ"	10 (3.05)	GR	M7KXK-3610J-ND	24.33	213.38
50	Au 30µ"	6 (1.83)	MC	M7KXK-5006R-ND	28.62	250.95
	Au 30µ"	6 (1.83)	GR	M7KXK-5006J-ND	23.71	207.95
	Au 30µ"	10 (3.05)	MC	M7KXK-5010R-ND	39.22	343.96
	Au 30µ"	10 (3.05)	GR	M7KXK-5010J-ND	31.05	272.30

Also available in the following configuration:
M7LX□-□□□□□-ND – Male Delta w/ Insert.
M7QX□-□□□□□-ND – Male Delta w/ Bail Lock.
Call for complete part number and pricing!

Single Ended — Male

***Twisted Pair Cable Finished Length is Approximate**

No. of Con-tacts	Conn. Finish	Length Feet (Meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
14	Au 30µ"	5 (1.52)	TW	M7KXK-1405K-ND	11.68	102.43
	Au 30µ"	10 (3.05)	TW	M7KXK-1410K-ND	15.82	138.74
24	Au 30µ"	5 (1.52)	TW	M7KXK-2405K-ND	14.76	129.39
	Au 30µ"	10 (3.05)	TW	M7KXK-2410K-ND	20.67	181.26
36	Au 30µ"	5 (1.52)	TW	M7KXK-3605K-ND	21.40	187.70
	Au 30µ"	10 (3.05)	TW	M7KXK-3610K-ND	32.05	281.07
50	Au 30µ"	5 (1.52)	TW	M7KXK-5005K-ND	27.50	241.11
	Au 30µ"	10 (3.05)	TW	M7KXK-5010K-ND	42.28	370.79

Also available in the following configurations:
M7LX□-□□□□K-ND – Male Delta with Insert.
M7QX□-□□□□K-ND – Male Delta with Bail Lock.
Call for complete part number and pricing!

Single Ended — Female

*MC = 3M Multi-Color, GR = 3M Gray

No. of Con-tacts	Conn. Finish	Length Feet (Meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
14	Au 30µ"	6 (1.83)	MC	M7RXK-1406R-ND	12.00	105.19
	Au 30µ"	6 (1.83)	GR	M7RXK-1406J-ND	10.62	93.14
	Au 30µ"	10 (3.05)	MC	M7RXK-1410R-ND	14.97	131.24
	Au 30µ"	10 (3.05)	GR	M7RXK-1410J-ND	12.68	111.16
24	Au 30µ"	6 (1.83)	MC	M7RXK-2406R-ND	16.48	144.50
	Au 30µ"	6 (1.83)	GR	M7RXK-2406J-ND	14.12	123.85
	Au 30µ"	10 (3.05)	MC	M7RXK-2410R-ND	21.57	189.15
	Au 30µ"	10 (3.05)	GR	M7RXK-2410J-ND	17.65	154.74
36	Au 30µ"	6 (1.83)	MC	M7RXK-3606R-ND	22.53	197.59
	Au 30µ"	6 (1.83)	GR	M7RXK-3606J-ND	18.90	165.76
	Au 30µ"	10 (3.05)	MC	M7RXK-3610R-ND	30.38	266.43
	Au 30µ"	10 (3.05)	GR	M7RXK-3610J-ND	24.33	213.38
50	Au 30µ"	6 (1.83)	MC	M7RXK-5006R-ND	28.62	250.95
	Au 30µ"	6 (1.83)	GR	M7RXK-5006J-ND	23.71	207.95
	Au 30µ"	10 (3.05)	MC	M7RXK-5010R-ND	39.22	343.96
	Au 30µ"	10 (3.05)	GR	M7RXK-5010J-ND	31.05	272.30

Also available in the following configurations:
M7TX□-□□□□□-ND – Female Delta with Insert.
M7UX□-□□□□□-ND – Female Delta with Bail Lock.
Call for complete part number and pricing!

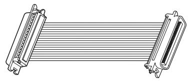
Single Ended — Female

***Twisted Pair Cable Finished Length is Approximate**

No. of Con-tacts	Conn. Finish	Length Feet (Meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
14	Au 30µ"	5 (1.52)	TW	M7RXK-1405K-ND	11.68	102.43
	Au 30µ"	10 (3.05)	TW	M7RXK-1410K-ND	15.82	138.74
24	Au 30µ"	5 (1.52)	TW	M7RXK-2405K-ND	14.76	129.39
	Au 30µ"	10 (3.05)	TW	M7RXK-2410K-ND	20.67	181.26
36	Au 30µ"	5 (1.52)	TW	M7RXK-3605K-ND	21.40	187.70
	Au 30µ"	10 (3.05)	TW	M7RXK-3610K-ND	32.05	281.07
50	Au 30µ"	5 (1.52)	TW	M7RXK-5005K-ND	27.50	241.11
	Au 30µ"	10 (3.05)	TW	M7RXK-5010K-ND	42.28	370.79

Also available in the following configuration:
M7TX□-□□□□K-ND – Female Delta w/ Insert.
M7UX□-□□□□K-ND – Female Delta w/ Bail Lock.
Call for complete part number and pricing!

Male to Male



*MC = 3M Multi-Color, GR = 3M Gray

No. of Con-tacts	Conn. Finish	Length Feet (Meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
14	Au 30µ"	6 (1.83)	MC	M7KKK-1406R-ND	19.54	171.31
	Au 30µ"	6 (1.83)	GR	M7KKK-1406J-ND	18.16	159.26
	Au 30µ"	10 (3.05)	MC	M7KKK-1410R-ND	22.51	197.36
	Au 30µ"	10 (3.05)	GR	M7KKK-1410J-ND	20.22	177.28
24	Au 30µ"	6 (1.83)	MC	M7KKK-2406R-ND	25.32	222.02
	Au 30µ"	6 (1.83)	GR	M7KKK-2406J-ND	22.96	201.37
	Au 30µ"	10 (3.05)	MC	M7KKK-2410R-ND	30.41	266.67
	Au 30µ"	10 (3.05)	GR	M7KKK-2410J-ND	26.49	232.26
36	Au 30µ"	6 (1.83)	MC	M7KKK-3606R-ND	33.29	291.93
	Au 30µ"	6 (1.83)	GR	M7KKK-3606J-ND	29.66	260.10
	Au 30µ"	10 (3.05)	MC	M7KKK-3610R-ND	41.14	360.76
	Au 30µ"	10 (3.05)	GR	M7KKK-3610J-ND	35.09	307.71
50	Au 30µ"	6 (1.83)	MC	M7KKK-5006R-ND	41.32	362.38
	Au 30µ"	6 (1.83)	GR	M7KKK-5006J-ND	36.42	319.39
	Au 30µ"	10 (3.05)	MC	M7KKK-5010R-ND	51.93	455.39
	Au 30µ"	10 (3.05)	GR	M7KKK-5010J-ND	43.76	383.73

Also available in the following configuration:
M7LL□-□□□□□-ND – Double Ended Male Delta w/ Insert.
M7QQ□-□□□□□-ND – Double Ended Male Delta w/ Bail Lock.
Call for complete part number and pricing!

Male to Male

***Twisted Pair Cable Finished Length is Approximate**

No. of Con-tacts	Conn. Finish	Length Feet (Meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
14	Au 30µ"	5 (1.52)	TW	M7KKK-1405K-ND	19.22	168.55
	Au 30µ"	10 (3.05)	TW	M7KKK-1410K-ND	23.36	204.86
36	Au 30µ"	5 (1.52)	TW	M7KKK-3605K-ND	32.16	282.04
	Au 30µ"	10 (3.05)	TW	M7KKK-3610K-ND	42.81	375.40
50	Au 30µ"	5 (1.52)	TW	M7KKK-5005K-ND	40.20	352.55
	Au 30µ"	10 (3.05)	TW	M7KKK-5010K-ND	54.99	482.22

Also available in the following configuration:
M7LL□-□□□□K-ND – Double Ended Male Delta w/ Insert.
M7QQ□-□□□□K-ND – Double Ended Male Delta w/ Bail Lock.
Call for complete part number and pricing!

Female to Female

*MC = 3M Multi-Color, GR = 3M Gray

No. of Con-tacts	Conn. Finish	Length Feet (Meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
14	Au 30µ"	6 (1.83)	MC	M7RRK-1406R-ND	19.54	171.31
	Au 30µ"	6 (1.83)	GR	M7RRK-1406J-ND	18.16	159.26
	Au 30µ"	10 (3.05)	MC	M7RRK-1410R-ND	22.51	197.36
	Au 30µ"	10 (3.05)	GR	M7RRK-1410J-ND	20.22	177.28
24	Au 30µ"	6 (1.83)	MC	M7RRK-2406R-ND	25.32	222.02
	Au 30µ"	6 (1.83)	GR	M7RRK-2406J-ND	22.96	201.37
	Au 30µ"	10 (3.05)	MC	M7RRK-2410R-ND	30.41	266.67
	Au 30µ"	10 (3.05)	GR	M7RRK-2410J-ND	26.49	232.26
36	Au 30µ"	6 (1.83)	MC	M7RRK-3606R-ND	33.29	291.93
	Au 30µ"	6 (1.83)	GR	M7RRK-3606J-ND	29.66	260.10
	Au 30µ"	10 (3.05)	MC	M7RRK-3610R-ND	41.14	360.76
	Au 30µ"	10 (3.05)	GR	M7RRK-3610J-ND	35.09	307.71
50	Au 30µ"	6 (1.83)	MC	M7RRK-5006R-ND	41.32	362.38
	Au 30µ"	6 (1.83)	GR	M7RRK-5006J-ND	36.42	319.39
	Au 30µ"	10 (3.05)	MC	M7RRK-5010R-ND	51.93	455.39
	Au 30µ"	10 (3.05)	GR	M7RRK-5010J-ND	43.76	383.73

Also available in the following configuration:
M7TT□-□□□□□-ND – Double Ended Female Delta w/ Insert.
M7UU□-□□□□□-ND – Double Ended Female Delta w/ Bail Lock.
Call for complete part number and pricing!

Female to Female

***Twisted Pair Cable Finished Length is Approximate**

No. of Con-tacts	Conn. Finish	Length Feet (Meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
14	Au 30µ"	5 (1.52)	TW	M7RRK-1405K-ND	19.22	168.55
	Au 30µ"	10 (3.05)	TW	M7RRK-1410K-ND	23.36	204.86
36	Au 30µ"	5 (1.52)	TW	M7RRK-3605K-ND	32.16	282.04
	Au 30µ"	10 (3.05)	TW	M7RRK-3610K-ND	42.81	375.40
50	Au 30µ"	5 (1.52)	TW	M7RRK-5005K-ND	40.20	352.55
	Au 30µ"	10 (3.05)	TW	M7RRK-5010K-ND	54.99	482.22

Also available in the following configuration:
M7TT□-□□□□K-ND – Double Ended Female Delta w/ Insert.
M7UU□-□□□□K-ND – Double Ended Female Delta w/ Bail Lock.
Call for complete part number and pricing!

Male to Female

*MC = 3M Multi-Color, GR = 3M Gray

No. of Con-tacts	Conn. Finish	Length Feet (Meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
14	Au 30µ"	6 (1.83)	MC	M7KRK-1406R-ND	19.54	171.31
	Au 30µ"	6 (1.83)	GR	M7KRK-1406J-ND	18.16	159.26
	Au 30µ"	10 (3.05)	MC	M7KRK-1410R-ND	22.51	197.36
	Au 30µ"	10 (3.05)	GR	M7KRK-1410J-ND	20.22	177.28
24	Au 30µ"	6 (1.83)	MC	M7KRK-2406R-ND	25.32	222.02
	Au 30µ"	6 (1.83)	GR	M7KRK-2406J-ND	22.96	201.37
	Au 30µ"	10 (3.05)	MC	M7KRK-2410R-ND	30.41	266.67
	Au 30µ"	10 (3.05)	GR	M7KRK-2410J-ND	26.49	232.26
36	Au 30µ"	6 (1.83)	MC	M7KRK-3606R-ND	33.29	291.93
	Au 30µ"	6 (1.83)	GR	M7KRK-3606J-ND	29.66	260.09
	Au 30µ"	10 (3.05)	MC	M7KRK-3610R-ND	41.14	360.76
	Au 30µ"	10 (3.05)	GR	M7KRK-3610J-ND	35.09	307.71
50	Au 30µ"	6 (1.83)	MC	M7KRK-5006R-ND	41.32	362.38
	Au 30µ"	6 (1.83)	GR	M7KRK-5006J-ND	36.42	319.39
	Au 30µ"	10 (3.05)	MC	M7KRK-5010R-ND	51.93	455.39
	Au 30µ"	10 (3.05)	GR	M7KRK-5010J-ND	43.76	383.73

Also available in the following configuration:
M7LT□-□□□□□-ND – Male Delta/Female Delta w/ Insert.
M7QU□-□□□□□-ND – Male Delta/Female Delta w/ Bail Lock.
Call for complete part number and pricing!

Male to Female

***Twisted Pair Cable Finished Length is Approximate**

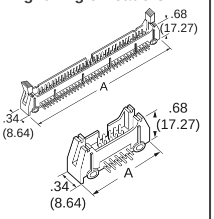
No. of Con-tacts	Conn. Finish	Length Feet (Meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
14	Au 30µ"	5 (1.52)	TW	M7KRK-1405K-ND	19.22	168.55
	Au 30µ"	10 (3.05)	TW	M7KRK-1410K-ND	23.36	204.86
36	Au 30µ"	5 (1.52)	TW	M7KRK-3605K-ND	32.16	282.04
	Au 30µ"	10 (3.05)	TW	M7KRK-3610K-ND	42.81	375.40
50	Au 30µ"	5 (1.52)	TW	M7KRK-5005K-ND	40.20	352.55
	Au 30µ"	10 (3.05)	TW	M7KRK-5010K-ND	54.99	482.22

Also available in the following configuration:
M7LT□-□□□□K-ND – Male Delta/Female Delta w/ Insert.
M7QU□-□□□□K-ND – Male Delta/Female Delta w/ Bail Lock.
Call for complete part number and pricing!

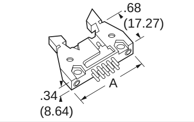
3M Latch/Eject Headers .100” x .100” (2.54mm x 2.54mm)

Four-wall shrouded housing to protect against physical and chemical pin damage. *Order optional ejector latches separately below.*

Right Angle Headers



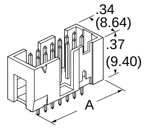
Straight Header



No. of Cont.	Dim. A In. (mm)	Digi-Key Part No.	Pricing 1	Pricing 100	Pricing 500	3M Part No.
Right Angle						
10	1.26 (32.00)	MHR10K-ND	1.54	116.92	529.10	3793-5002
14	1.46 (37.08)	MHR14K-ND	1.71	129.56	586.30	3314-5002
16	1.56 (39.62)	MHR16K-ND	1.77	134.30	607.75	3408-5002
20	1.76 (44.70)	MHR20K-ND	1.98	150.10	679.25	3428-5002
24	1.96 (49.78)	MHR24K-ND	2.18	165.90	750.75	3627-5002
26	2.06 (52.32)	MHR26K-ND	2.33	176.96	800.80	3429-5002
30	2.26 (57.40)	MHR30K-ND	2.68	203.82	922.35	3440-5002
34	2.46 (62.48)	MHR34K-ND	3.02	229.10	1036.75	3431-5002
40	2.76 (70.10)	MHR40K-ND	3.45	262.28	1186.90	3432-5002
50	3.26 (82.80)	MHR50K-ND	4.16	316.00	1430.00	3433-5002
60	3.76 (95.50)	MHR60K-ND	5.12	388.68	1758.90	3372-5002
Straight						
10	1.26 (32.00)	MHS10K-ND	1.54	116.92	529.10	3793-6002
14	1.46 (37.08)	MHS14K-ND	1.71	129.56	586.30	3314-6002
16	1.56 (39.62)	MHS16K-ND	1.77	134.30	607.75	3408-6002
20	1.76 (44.70)	MHS20K-ND	1.89	143.78	650.65	3428-6002
24	1.96 (49.78)	MHS24K-ND	2.18	165.90	750.75	3627-6002
26	2.06 (52.32)	MHS26K-ND	2.33	176.96	800.80	3429-6002
30	2.26 (57.40)	MHS30K-ND	2.68	203.82	922.35	3440-6002
34	2.46 (62.48)	MHS34K-ND	3.02	229.10	1036.75	3431-6002
40	2.76 (70.10)	MHS40K-ND	3.45	262.28	1186.90	3432-6002
50	3.26 (82.80)	MHS50K-ND	4.16	316.00	1430.00	3433-6002
60	3.76 (95.50)	MHS60K-ND	5.12	388.68	1758.90	3372-6002
Optional Ejector Latches for Connectors						
Short		MLKS01-ND*	.21/2	7.90	35.75	3505-2
Long		MLKS02-ND†	.21/2	7.90	35.75	3505-3

* Use without strain relief; † Use with strain relief

3M Low Profile Headers (Protected Headers)



Physical Specifications: Insulation: • Material: Glass filled Polyester (PBT) • Flammability: UL94V-0 • Color: Gray • Marking: 3M logo and Orientation Triangle **Contact:** • Material: Phosphor Bronze (C510) **Plating:** • Underplate: 100µ” Nickel--QQ-N-290, Class 2 • Wiping Area: Gold--MIL-G-45204, Type II, Grade C • Solder Tails: 200µ” 60/40 Tin Lead--MIL-P-81728 • Wrap Tails: Gold Flash

Electrical Specifications: • Current Rating: 2A • Insulation Resistance: >1x10⁹Ω @ 500Vdc • Withstanding voltage: 1000Vrms at Sea Level

Environmental Specification:
• Temperature Rating: -55°C to +105°C

UL File No.: E68080
CSA File No.: LR 40971

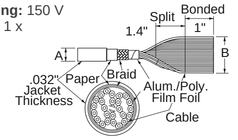
No. of Cont.	Dim. A In. (mm)	Digi-Key Part No.	Pricing 1	Pricing 100	Pricing 500	3M Part No.
Straight Solder Tail						
10	0.79 (20.07)	MHB10K-ND	1.33	101.12	457.60	2510-6002UB
14	0.99 (22.15)	MHB14K-ND	1.37	104.28	471.90	2514-6002UB
16	1.09 (27.69)	MHB16K-ND	1.54	116.92	529.10	2516-6002UB
20	1.29 (32.77)	MHB20K-ND	1.60	121.66	550.55	2520-6002UB
24	1.49 (37.85)	MHB24K-ND	1.68	127.98	579.15	2524-6002UB
26	1.59 (40.39)	MHB26K-ND	1.71	129.56	586.30	2526-6002UB
30	1.79 (45.47)	MHB30K-ND	1.98	150.10	679.25	2530-6002UB
34	1.99 (50.55)	MHB34K-ND	2.06	156.42	707.85	2534-6002UB
40	2.29 (58.17)	MHB40K-ND	2.20	167.48	757.90	2540-6002UB
50	2.79 (70.87)	MHB50K-ND	2.72	206.98	936.65	2550-6002UB
60	3.29 (83.57)	MHB60K-ND	3.27	248.06	1122.55	2560-6002UB
Right Angle Solder Tail						
10	0.79 (20.07)	MHD10K-ND	1.48	112.18	507.65	2510-5002UB
14	0.99 (22.15)	MHD14K-ND	1.52	115.34	521.95	2514-5002UB
16	1.09 (27.69)	MHD16K-ND	1.68	127.98	579.15	2516-5002UB
20	1.29 (32.77)	MHD20K-ND	1.77	134.30	607.75	2520-5002UB
24	1.49 (37.85)	MHD24K-ND	1.85	140.62	636.35	2524-5002UB
26	1.59 (40.39)	MHD26K-ND	1.87	142.20	643.50	2526-5002UB
30	1.79 (45.47)	MHD30K-ND	2.54	192.76	872.30	2530-5002UB
34	1.99 (50.55)	MHD34K-ND	2.25	170.64	772.20	2534-5002UB
40	2.29 (58.17)	MHD40K-ND	2.41	183.28	829.40	2540-5002UB
50	2.79 (70.87)	MHD50K-ND	3.00	227.52	1029.60	2550-5002UB
60	3.29 (83.57)	MHD60K-ND	3.60	273.34	1236.95	2560-5002UB

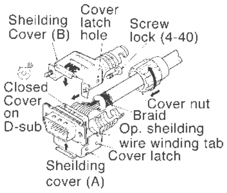
3M Round Jacketed/Shielded Flat Cable 3659 Series

PHYSICAL: • **Insulation Material:** Polyvinyl Chloride (PVC) • **Flammability Rating:** UL VW-1 • **Color:** Black • **Inner Cable:** Scotchflex Product No. 3365; 28 AWG 7 x 36 Conductors; UL Style: 2651 • **Shielding:** 0.001” (.03mm) and 90% Optical Coverage Tinned Copper Braid

ELECTRICAL: • **Volt. Rating:** 150 V • **Insulation Resistance:** > 1 x $10^{10}\Omega$/ 10 ft.

ENVIRONMENTAL:
• **Temperature Rating:**
-4°F to +176°F
(-20°C to +80°C)



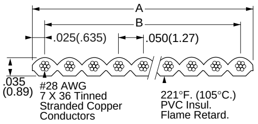


No. of Con-tacts	Dim. (Inch) “A”	Dim. (Inch) “B”	Digi-Key Part No.	Note: X In Part No. = Ft. Per Roll *Price Per Roll 5 ft.	10 ft.	25 ft.	50 ft.	100 ft.
15	.29	.700	MC15R-X-ND	11.54	21.43	47.81	82.44	131.90
20	.30	.950	MC20R-X-ND	12.43	23.08	51.49	88.78	142.04
24	.35	1.150	MC24R-X-ND	13.32	24.73	55.17	95.11	152.18
25	.35	1.200	MC25R-X-ND	13.73	25.50	56.89	98.09	156.94
26	.35	1.250	MC26R-X-ND	14.20	26.38	58.84	101.45	162.32
34	.39	1.650	MC34R-X-ND	15.98	29.68	66.20	114.14	182.62
36	.41	1.750	MC36R-X-ND	16.42	30.50	68.04	117.31	187.70
37	.41	1.800	MC37R-X-ND	16.87	31.32	69.88	120.48	192.76
40	.41	1.950	MC40R-X-ND	17.31	32.15	71.72	123.65	197.84
50	.50	2.450	MC50R-X-ND	19.97	37.09	82.74	142.66	228.26
60	.53	2.950	MC60R-X-ND	22.39	41.58	92.76	159.94	255.90
64	.54	3.150	MC64R-X-ND	23.53	43.69	97.46	168.04	268.86

No. of Contacts	Digi-Key Part No.	Pricing 1	Pricing 100	Pricing 500	Pricing 1,000	3M Part No.
D-Sub Backshells						
9	MDBS09-ND	3.12	237.00	1072.50	1950.00	3357-9209
15	MDBS15-ND	4.26	323.90	1465.75	2665.00	3357-9215
25	MDBS25-ND	4.58	347.60	1573.00	2860.00	3357-9225
37	MDBS37-ND	6.45	489.80	2216.50	4030.00	3357-9237
50	MDBS50-ND	10.77	818.44	3703.70	6734.00	3357-9250

3M Gray Flat Cable 3365 Series

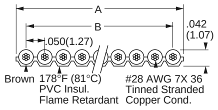
PHYSICAL: • Insulation Material: Polyvinyl Chloride (PVC) • Flammability Rating: UL VW-1 • Color: Gray • Marking: Red Edge • Conductors: 28 AWG 7x36 Tinned Stranded Copper
ELECTRICAL: • Voltage Rating: 300 V • Insulation Resistance: >1 x $10^{10}\Omega$/ 10 ft.
ENVIRONMENTAL: • Temperature Rating: -4°F to +221°F (-20°C to +105°C)



No. of Contacts	Dimensions Inch (mm) “A”	Dimensions Inch (mm) “B”	Digi-Key Part No.	Note: X In Part No. = Ft. Per Roll *Price Per Roll 5 ft.	10 ft.	25 ft.	50 ft.	100 ft.	300 ft.
10	.500 (12.70)	.450 (11.43)	MC10G-X-ND	1.98	3.67	8.18	14.11	25.40	67.72
14	.700 (17.78)	.650 (16.51)	MC14G-X-ND	2.77	5.14	11.46	19.75	35.56	94.82
16	.800 (20.32)	.750 (19.05)	MC16G-X-ND	3.16	5.87	13.09	22.58	40.64	108.36
20	1.000 (25.40)	.950 (24.13)	MC20G-X-ND	3.95	7.34	16.37	28.23	50.81	135.48
24	1.200 (30.48)	1.150 (29.21)	MC24G-X-ND	4.74	8.81	19.64	33.87	60.96	162.56
26	1.300 (33.02)	1.250 (31.75)	MC26G-X-ND	5.14	9.54	21.28	36.69	66.04	176.12
34	1.700 (43.18)	1.650 (41.91)	MC34G-X-ND	6.72	12.47	27.83	47.98	86.36	230.30
37	1.850 (46.99)	1.800 (45.72)	MC37G-X-ND	7.31	13.58	30.28	52.21	93.98	250.62
40	2.000 (50.80)	1.950 (49.53)	MC40G-X-ND	7.90	14.68	32.74	56.45	101.60	270.94
50	2.500 (63.50)	2.450 (62.23)	MC50G-X-ND	9.88	18.34	40.92	70.55	127.00	338.66
60	3.000 (76.20)	2.950 (74.93)	MC60G-X-ND	11.85	22.01	49.11	84.67	152.40	406.40
64	3.200 (81.28)	3.150 (80.01)	MC64G-X-ND	12.64	23.48	52.38	90.31	162.56	433.50

3M Color Coded Flat Cable 3302 Series

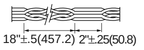
PHYSICAL: • Insulation Material: Polyvinyl Chloride (PVC) • Flammability Rating: UL VW-1 • Color: 10 Color Repeat, Clear Carrier • Conductors: 28 AWG 7 x 36 Tinned Stranded Copper. **ELECTRICAL:** • Voltage Rating: 300 V • Insulation Resistance: > 1 x $10^9\Omega$/ 10 ft. **ENVIRONMENTAL:** • Temperature Rating: -4°F to +176°F (-20°C to +80°C)



No. of Contacts	Dimensions Inch (mm) “A”	Dimensions Inch (mm) “B”	Digi-Key Part No.	Note: X In Part No. = Ft. Per Roll *Price Per Roll 5 ft.	10 ft.	25 ft.	50 ft.	100 ft.	300 ft.
10	.500 (12.70)	.450 (11.43)	MC10M-X-ND	3.06	5.67	12.66	21.83	39.29	104.76
14	.700 (17.78)	.650 (16.51)	MC14M-X-ND	4.28	7.95	17.73	30.56	55.01	146.70
16	.800 (20.32)	.750 (19.05)	MC16M-X-ND	4.89	9.08	20.27	34.94	62.89	167.72
20	1.000 (25.40)	.950 (24.13)	MC20M-X-ND	6.11	11.35	25.32	43.65	78.57	209.52
24	1.200 (30.48)	1.150 (29.21)	MC24M-X-ND	7.33	13.62	30.38	52.39	94.30	251.46
26	1.300 (33.02)	1.250 (31.75)	MC26M-X-ND	7.95	14.76	32.92	56.75	102.16	272.42
34	1.700 (43.18)	1.650 (41.91)	MC34M-X-ND	10.39	19.29	43.03	74.20	133.55	356.14
37	1.850 (46.99)	1.800 (45.72)	MC37M-X-ND	11.31	21.00	46.84	80.76	145.37	387.66
40	2.000 (50.80)	1.950 (49.53)	MC40M-X-ND	12.22	22.70	50.63	87.30	157.14	419.04
50	2.500 (63.50)	2.450 (62.23)	MC50M-X-ND	15.27	28.37	63.28	109.10	196.38	523.68
60	3.000 (76.20)	2.950 (74.93)	MC60M-X-ND	18.33	34.05	75.95	130.95	235.71	628.56
64	3.200 (81.28)	3.150 (80.01)	MC64M-X-ND	19.55	36.31	81.01	139.67	251.41	670.42

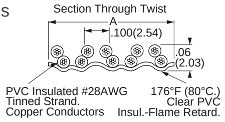
3M Twisted Pair Flat Cable 1700 Series

PHYSICAL: • Insulation Material: Polyvinyl Chloride (PVC) • Flammability Rating: UL VW-1.
ELECTRICAL: • Voltage Rating: 300 V • Insulation Resistance: >1 x $10^9\Omega$/ 10ft.
ENVIRONMENTAL: • Temperature Rating: -4°F to +176°F (-20°C to +80°C)



Standard product has alt. 18” (45.72cm) twisted sections and 2” (5.08cm) flat sections.

Section Through Twist



No. of Contacts	Dimensions Inch (mm) “A”	Dimensions Inch (mm) “B”	Digi-Key Part No.	Note: X In Part No. = Ft. Per Roll *Price Per Roll 5 ft.	10 ft.	25 ft.	50 ft.	100 ft.†
10	.50 (12.70)	.450 (11.43)	MC10F-X-ND	2.74	5.10	11.37	19.60	31.36
14	.70 (17.78)	.650 (16.51)	MC14F-X-ND	3.84	7.13	15.91	27.44	43.90
16	.80 (20.32)	.750 (19.05)	MC16F-X-ND	4.39	8.78	18.19	31.36	50.18
20	1.00 (25.40)	.950 (24.13)	MC20F-X-ND	5.49	10.19	22.74	39.20	62.72
26	1.30 (33.02)	1.250 (31.75)	MC26F-X-ND	7.13	13.25	29.56	50.96	81.54
34	1.70 (43.18)	1.650 (41.91)	MC34F-X-ND	9.33	17.33	38.65	66.64	106.62
36	1.80 (45.72)	1.750 (44.45)	MC36F-X-ND	9.88	18.35	40.93	70.56	112.90
40	2.00 (50.80)	1.950 (49.53)	MC40F-X-ND	10.98	20.38	45.47	78.40	125.44
50	2.50 (63.50)	2.450 (62.23)	MC50F-X-ND	13.72	25.48	56.84	98.00	156.80
60	3.00 (76.20)	2.950 (74.93)	MC60F-X-ND	15.73	29.21	65.16	112.35	179.76
64	3.20 (81.28)	3.150 (80.01)	MC64F-X-ND	17.56	32.61	72.75	125.44	200.70

† If ordered in full reel size, may contain a splice. Comes in unreel box.

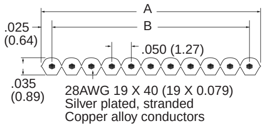
3M High Flex Life Cable 3319 Series

19 strands of high strength copper alloy provide the longest flex life available for dynamic applications.

PHYSICAL: • Insulation Material: Polyvinyl Chloride (PVC) • Color: Black • Marking, Standard: None • CSA Option: UL AWM 2651 105C 300V VW1, 3M NU, CSA AWM 1A 105C 300V FT1 • Conductors: 28 AWG 19x40 (19x0.079) Silver Plated Stranded Copper Alloy (89% conductivity)

ELECTRICAL: • Voltage Rating: 300 V • Insulation Resistance: >1 x $10^{10}\Omega$/ 10ft. (3m)

ENVIRONMENTAL: • Temperature Rating: -4°F to +221°F (-20°C to +105°C) • Flammability Rating: UL: VW-1, CSA: FT1



No. of Contacts	Dimensions Inch (mm) “A”	Dimensions Inch (mm) “B”	Digi-Key Part No.	Note: X In Part No. = Ft. Per Roll *Price Per Roll 5 ft.	10 ft.	25 ft.	50 ft.	100 ft.
10	.50 (12.70)	.45 (11.43)	MC10H-X-ND	18.99	35.26	78.66	135.63	217.00
14	.70 (17.78)	.65 (16.51)	MC14H-X-ND	26.58	49.37	110.13	189.88	303.80
16	.80 (20.32)	.75 (19.05)	MC16H-X-ND	30.38	56.42	125.86	217.00	347.20
20	1.00 (25.40)	.95 (24.13)	MC20H-X-ND	37.98	70.53	157.33	271.25	434.00
24	1.20 (30.48)	1.15 (29.21)	MC24H-X-ND	45.57	84.63	188.79	325.50	520.80
26	1.30 (33.02)	1.25 (31.75)	MC26H-X-ND	49.37	91.68	204.52	352.63	564.20
34	1.70 (43.18)	1.65 (41.91)	MC34H-X-ND	64.56	119.89	267.45	461.13	737.80
37	1.85 (46.99)	1.80 (45.72)	MC37H-X-ND	70.25	130.47	291.05	501.81	802.90
40	2.00 (50.80)	1.95 (49.53)	MC40H-X-ND	75.95	141.05	314.65	542.50	868.00
50	2.50 (63.50)	2.45 (62.23)	MC50H-X-ND	94.94	176.31	393.31	678.13	1085.00
60	3.00 (76.20)	2.95 (74.93)	MC60H-X-ND	113.93	211.58	471.98	813.75	1302.00
64	3.20 (81.28)	3.15 (80.01)	MC64H-X-ND	121.52	225.67	503.43	867.98	1388.76

ASSMANN Computer Cable Assemblies

Fig. 1 — Parallel Extension

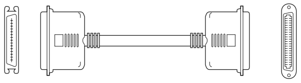


Fig. 2 — Parallel Printer (Snap Hood)

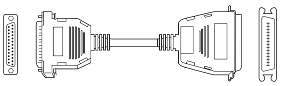


Fig. 3 — Parallel Printer (Molded Hood)

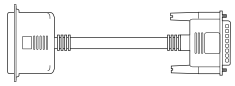


Fig. 4 — Right Angle Parallel Printer

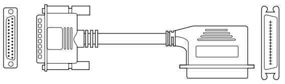


Fig. 5 — Serial Printer (Snap Hoods)

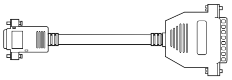


Fig. 6 — IEEE 1284 Bi-Directional Printer

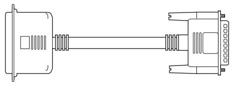


Fig. 7 — IEEE 1284 Bi-Directional Connection

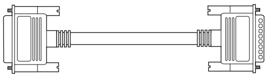


Fig. 8 — IEEE 1284 Bi-Directional Extension

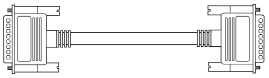


Fig. 9 — Connection Cable, 25-Pin Interface Serial/Parallel

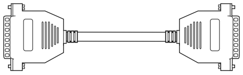


Fig. 10 — 25-Pin Interface Extension

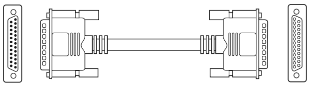


Fig. 11 — 9-Pin Interface Extension

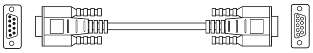


Fig. 12 — VGA Monitor Extension

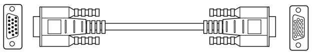


Fig. 13 — Premium VGA Monitor Extension

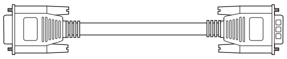


Fig. 14— PC/XT/AT Keyboard Extension

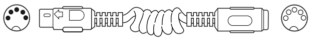


Fig. 15 — PS/2 Keyboard Extension - Spiral

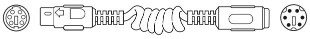


Fig. 16 — PS/2 Keyboard Extension – Straight

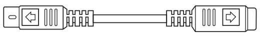


Fig. 17 — PS/2 Keyboard Cable - Straight

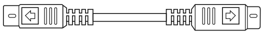


Fig. 18 — Disk Drive Power Splitters

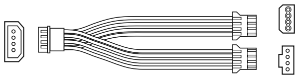


Fig. 19 — Stereo Extension Cable

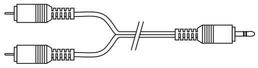


Fig. 20 — Stereo Extension Cable

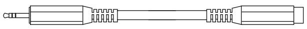


Fig. No.	Length Feet (Meters)	Lines	Description	Digi-Key Part No.	Price Each			Assmann Part No.
					1	10	25	
Molded Extension for 36-Pin Centronics Interfaces								
1	6.56 ft. (2m) 9.84 ft. (3m)	36	2x Centronics 36-Pin Female to Female	AE1000-ND AE1001-ND	12.38 16.50	10.88 14.50	9.75 13.00	AK155-2 AK434-3
1	6.56 ft. (2m) 9.84 ft. (3m)	36	2x Centronics 36-Pin Male to Male	AE1002-ND AE1003-ND	10.73 15.02	9.43 13.20	8.45 11.83	AK138-2 AK426-3
1	6.56 ft. (2m) 9.84 ft. (3m)	36	2x Centronics 36-Pin Male to Female	AE1004-ND AE1005-ND	11.55 15.68	10.15 13.78	9.10 12.35	AK140-2 AK430-3
Parallel Printer Cable, IBM PC & Compatibles								
2	5.90 ft (1.8m) 9.84 ft. (3m) 16.40 ft. (5m) 22.96 ft. (7m)	25	D-Sub 25-Pin Male to Centronics 36-Pin Male, Snap-Hoods	AE1006-ND AE1007-ND AE1099-ND AE1100-ND	4.79 7.99 7.06 8.94	4.21 7.02 6.21 7.86	3.77 6.30 5.57 7.05	AK101-1.8 AK102-3 AK103-5 AK104-7
3	6.56 ft. (2m) 9.84 ft. (3m) 22.96 ft. (7m)	25	D-Sub 25-Pin Male to Centronics 36-Pin Male, Molded Hoods	AE1101-ND AE1102-ND AE1104-ND	4.59 5.81 9.47	4.04 5.11 8.33	3.62 4.58 7.47	AK108-2 AK127-3 AK159-7
4	6.56 ft. (2m) 6.56 ft. (2m)	25	D-Sub 25-Pin Male to Right Angle Centronics 36-Pin Male D-Sub 25-Pin Male to Left Angle Centronics 36-Pin Male	AE1008-ND AE1009-ND	8.25 8.25	7.25 7.25	6.50 6.50	AK525-2 AK525-L2
Parallel Printer Cable, IBM PC & Compatibles								
5	9.84 ft. (3m)	8	D-Sub 9-Pin Female to D-Sub 25-Pin Male, Snap-Hoods	AE1103-ND	3.27	2.88	2.58	AK150-3
IEEE 1284 Bi-Directional Cable - Molded Hoods								
6	5.90 ft. (1.8m) 9.84 ft. (3m) 16.40 ft. (5m)	25	D-Sub 25-Pin Male to Centronics 36-Pin Male, Printer	AE1105-ND AE1106-ND AE1107-ND	10.26 13.79 18.65	9.02 12.13 16.39	8.09 10.87 14.69	AK711-1.8 AK712-3 AK713-5
7	5.90 ft. (1.8m) 9.84 ft. (3m) 16.40 ft. (5m)	25	D-Sub 25-Pin Male to D-Sub 25-Pin Female, Connection	AE1108-ND AE1109-ND AE1110-ND	10.82 14.59 20.53	9.52 12.82 18.04	8.53 11.50 16.18	AK733-1.8 AK734-3 AK735-5
8	5.90 ft. (1.8m) 9.84 ft. (3m) 16.40 ft. (5m)	25	D-Sub 25-Pin Male to D-Sub 25-Pin Male, Extension	AE1112-ND AE1113-ND AE1114-ND	10.63 13.93 20.66	9.34 12.24 18.16	8.38 10.98 16.28	AK736-1.8 AK737-3 AK738-5
Snap-Hood Connection for 25-Pin Interface								
9	6.56 ft. (2m)	25	D-Sub 25-Pin Male to D-Sub 25-Pin Male, Snap-Hoods	AE1111-ND	3.83	3.37	3.02	AK401-2
Molded Extension for 25-Pin Interfaces								
10	6.56 ft. (2m) 9.84 ft. (3m)	25	2x D-Sub 25-Pin Male to Male	AE1010-ND AE1011-ND	6.93 8.58	6.09 7.54	5.46 6.76	AK137-2 AK162-3
10	6.56 ft. (2m) 9.84 ft. (3m)	25	2x D-Sub 25-Pin Male to Female	AE1012-ND AE1013-ND	7.06 8.58	6.21 7.54	5.57 6.76	AK135-2 AK166-3
10	6.56 ft. (2m) 9.84 ft. (3m)	25	2x D-Sub 25-Pin Female to Female	AE1014-ND AE1015-ND	7.23 10.03	6.36 8.82	5.70 7.91	AK133-2 AK170-3
Molded Extension for 9-Pin Interfaces								
11	6.56 ft. (2m) 9.84 ft. (3m)	9	2x D-Sub 9-Pin Male to Male	AE1018-ND AE1019-ND	5.35 6.01	4.70 5.28	4.22 4.74	AK129-2 AK174-3
11	6.56 ft. (2m) 9.84 ft. (3m)	9	2x D-Sub 9-Pin Male to Female	AE1020-ND AE1021-ND	5.35 6.01	4.70 5.28	4.22 4.74	AK131-2 AK178-3
11	6.56 ft. (2m) 9.84 ft. (3m)	9	2x D-Sub 9-Pin Female to Female	AE1016-ND AE1017-ND	5.35 6.11	4.70 5.37	4.22 4.81	AK152-2 AK182-3
VGA Monitor Extension Cable - IBM PS/2								
12	6.56 ft. (2m)	—	2x H/D D-Sub 15-Pin Male to Female	AE1022-ND	6.01	5.28	4.74	AK322-2
Molded VGA to 5 x BNC, Monitor Cable								
—	6.56 ft. (2m)	—	HD D-Sub 15-Pin Male to 5 x BBNC Male	AE1116-ND	17.23	15.14	13.58	AK553-2
Molded Premium VGA Monitor Extension Cable								
13	5.90 ft. (1.8m)	—	HD D-Sub 15-Pin Male to HD D-Sub 15-Pin Female	AE1117-ND	10.13	8.91	7.99	AK3220-1.8
IBM PC-XT/AT Keyboard Extension								
14	6.56 ft. (2m) 16.4 ft. (5m)	5	5-Pin Standard Din Male to Female	AE1023-ND AE1024-ND	4.29 8.75	3.77 7.69	3.38 6.89	AK306-2 AK307-5
Molded PS/2 Keyboard Extension								
15	6.56 ft. (2m) 16.4 ft. (5m)	6	6-Pin Mini Din Male to Female, Spiral	AE1025-ND AE1026-ND	5.84 10.73	5.14 9.43	4.61 8.45	AK323-2 AK528-5
16	6.56 ft. (2m)	6	MiniDIN 6-Pin Male to MiniDIN 6-Pin Female, Straight	AE1118-ND	2.48	2.18	1.95	AK323/G-2
PS/2 Keyboard Cable - Straight								
17	6.56 ft. (2m)	6	MiniDIN 6-Pin Male to MiniDIN 6-Pin Male, Molded	AE1119-ND	2.41	2.12	1.90	AK678-2

Fig. 21 — Stereo Extension Cable

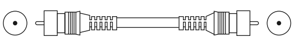


Fig. 22 — Stereo Extension Cable

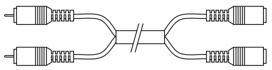
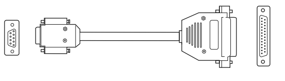
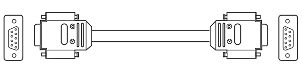


Fig. 23 — IBM Modem/Adapter



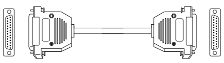
AE1030-ND: 1-8, 2-3, 3-2, 4-20, 5-7, 6-6, 7-4, 8-5, 9-22, S-S
AE1031-ND & AE1032-ND: 1-8, 2-2, 3-3, 4-6, 5-7, 6-20, 7-5, 8-4, 9-22, shell-shell

Fig. 24 — Null Modem Cross-Over Cable



AE1033-ND & AE1034-ND: 1-4, 2-3, 3-2, 4-1, 5-5, 7-8, 8-7, 9-9, shell-shell

Fig. 25 — Null Modem Serial Cable



AE1035-ND: 1-1; 2-3; 3-2; 4-5; 5-4; 7-7; 8-20; 15,17-8, 24-15.
AE1036-ND: 2-15, 3-13, 4-12, 5-10, 6-11, 10-5, 11-6, 12-4, 13-3, 15-2, 25-25.
AE1037-ND: 01-01, 02-03, 03-02, 04-05, 05-04, 06-08+20, 07-07, 08-06+20, 20-06+08

Fig. 26 — PS/2 Keyboard Adapter

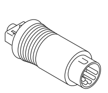
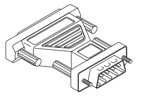


Fig. 27 — D-Sub Adapter



Adapter to assist in the installation of interface systems, using standard cables.

Fig. 28 — PS/2 Mouse Adapter

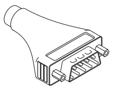


Fig. 29 — PS/2 Mouse-Cable Adapter

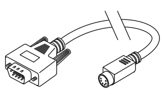


Fig. 30 — Jumper Box

Adapter for special matching of RS 232 interfaces. The link wires included give an easy economical way of permanently reconfiguring pin functions without rewiring cable assemblies.

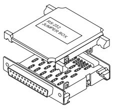


Fig. 31 — Wiring Box

Adapter for special matching of RS 232 interfaces, with the high quality contacts and wire bridges. This adapter can be used many times for the reconfiguration of cables without the need for soldering.

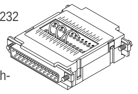


Fig. 32 — Y-Power Cord

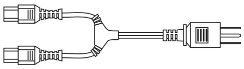


Fig. 33 — Power Cord, Straight/Angled

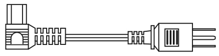


Fig. 34 — Power Cord, Straight/Straight

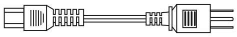


Fig. 35 — Power Cord, Straight/8-Device

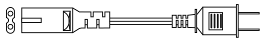


Fig. 36 — Power Cord Extension

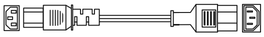


Fig. 37 — Modular Plug

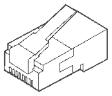


Fig. No.	Length Feet (Meters)	Lines	Description	Digi-Key Part No.	Price Each 1	10	25	Assmann Part No.
			Power Splitter Cables					
18	.66 ft. (.2m)	4	Power Cable for 2 - 5 1/4” Drives	AE1027-ND	1.98	1.74	1.56	AK319-.2
	.66 ft. (.2m)	4	Power Cable for 2 - 3 1/2” Drives	AE1028-ND	1.98	1.74	1.56	AK520-.2
	.66 ft. (.2m)	4	Power Cable for 3 1/2” and 5 1/4” Drives	AE1029-ND	1.98	1.74	1.56	AK521-.2
			Multi Media Cables					
19	6.56 ft. (2m)	—	3.5mm Stereo Cable, 2 Phono Plugs	AE1042-ND	6.77	5.95	5.33	AK243-2
20	8.2 ft. (2.5m)	—	3.5mm Stereo Cable, Plug/Jack	AE1043-ND	3.60	3.17	2.84	AK203-2.5
21	6.56 ft. (2m)	—	RCA Cable, Phono Plug/Plug	AE1044-ND	1.81	1.59	1.43	AK-302-2
22	6.56 ft. (2m)	—	RCA Cable, Double Phono Plug/Jack	AE1045-ND	2.44	2.14	1.92	AK3030-2
			AT Adapter Cable					
23	.82 ft. (.25m)	9	D-Sub 9-Pin Female to D-Sub 25-Pin Male	AE1115-ND	1.72	1.51	1.36	AK128-0.25
	6.56 ft. (2m)	9	D-Sub 9-Pin to D-Sub 25-Pin Female-Male	AE1030-ND	4.72	4.15	3.72	AK125-2
			Modem Cables					
23	9.84 ft. (3m)	9	D-Sub 9-Pin to D-Sub 25-Pin Female-Male	AE1031-ND	5.05	4.44	3.98	AK149-3
	9.84 ft. (3m)	9	D-Sub 9-Pin to D-Sub 25-Pin Female-Female	AE1032-ND	5.28	4.64	4.16	AK124-3
			Null Modem Computer AT/AT, Cross-Over					
24	9.84 ft. (3m)	9	D-Sub 9-Pin to D-Sub 9-Pin Female-Female	AE1033-ND	5.68	4.99	4.48	AK143-3
	9.84 ft. (3m)	9	D-Sub 9-Pin to D-Sub 9-Pin Male-Female	AE1034-ND	5.68	4.99	4.48	AK142-3
			Null Modem-Connection-Cable XT/XT + PS/2, Serial					
25	9.84 ft. (3m)	25	D-Sub 25-Pin to D-Sub 25-Pin Female-Female	AE1035-ND	4.39	3.86	3.46	AK144-3
	9.84 ft. (3m)	25	2 x D-Sub-Plug, 25-Pin Male-Male	AE1036-ND	7.49	6.59	5.91	AK250-3
	9.84 ft. (3m)	25	2 x D-Sub-Socket, 25-Pin Female-Female	AE1037-ND	4.39	3.86	3.46	AK251-3
			PS/2 Keyboard Adapters					
26	—	—	1 x MiniDIN, 6-Pin Female to 1 x DIN 5-Pin Male	AE1046-ND	3.93	3.46	3.10	AB961
	—	—	1 x MiniDIN, 6-Pin Male to DIN 5-Pin Female	AE1047-ND	3.04	2.67	2.40	AB440
			D-Sub Adapters					
27	—	—	2 x Male, 9 to 25-Pin	AE1048-ND	3.04	2.67	2.40	AB913
	—	—	1 x Female, 1 x Male, 9 on 25-Pin	AE1049-ND	3.04	2.67	2.40	AB914
	—	—	1 x Male, 1 x Female, 9 on 25-Pin	AE1050-ND	3.04	2.67	2.40	AB914F
	—	—	2 x Female, 9 to 25-Pin	AE1051-ND	3.04	2.67	2.40	AB915
			PS/2 Mouse Adapters					
28	—	—	1 x MiniDIN, 6-Pin Female to 1 x D-Sub 9-Pin Male	AE1052-ND	3.00	2.64	2.37	AB401
	—	—	1 x MiniDIN, 6-Pin Male to 1 x D-Sub 9-Pin Female	AE1053-ND	6.01	5.28	4.74	AB450
	—	—	1 x MiniDIN, 6-Pin Female to 1 x D-Sub 25-Pin Male	AE1054-ND	6.30	5.54	4.97	AB402
	—	—	1 x MiniDIN, 6-Pin Male to 1 x D-Sub 9-Pin Male	AE1055-ND	2.77	2.44	2.19	AB405
	—	—	1 x MiniDIN, 6-Pin Female to 1 x D-Sub 9-Pin Male	AE1156-ND	2.08	1.83	1.64	AB406
	—	—	1 x MiniDIN, 6-Pin Female to 1 x D-Sub 25-Pin Female	AE1056-ND	7.26	6.38	5.72	AB441
			PS/2 Mouse-Cable Adapters					
29	.5 ft. (.15m)	—	1 x MiniDIN, 6-Pin Female to 1 x D-Sub 9-Pin Male	AE1154-ND	2.28	2.01	1.80	AB401K
	.5 ft. (.15m)	—	1 x MiniDIN, 6-Pin Male to 1 x D-Sub 9-Pin Female	AE1158-ND	2.08	1.83	1.64	AB450K
	.5 ft. (.15m)	—	1 x MiniDIN, 6-Pin Male to 1 x D-Sub 9-Pin Male	AE1155-ND	2.28	2.01	1.80	AB405K
	.5 ft. (.15m)	—	1 x MiniDIN, 6-Pin Female to 1 x D-Sub 9-Pin Female	AE1157-ND	2.28	2.01	1.80	AB406K
			Jumper Box					
30	—	—	1 x Male, 1 x Female, 25-Pin, Plastic	AE1038-ND	7.39	6.50	5.83	AB972
	—	—	1 x Male, 1 x Female, 25-Pin, Metalized	AE1039-ND	7.82	6.88	6.17	AB973
			Wiring Box					
31	—	—	1 x Male, 1 x Female, 25-Pin, Plastic	AE1040-ND	14.12	12.42	11.13	AB946
	—	—	1 x Male, 1 x Female, 25-Pin, Metalized	AE1041-ND	14.62	12.85	11.52	AB947
			Y-Power Cord					
32	6.56 ft. (2m)	—	1 x Power Plug to 2 x Straight Connector, 10A, 125V	AE1120-ND	6.40	5.63	5.05	AK500/Y-U-2
			Power Cords					
33	6.56 ft. (2m)	—	Power Plug, Straight to IEC Connector, Angled, 10A, 125V	AE1121-ND	3.43	3.02	2.71	AK500/U-1-2
34	6.56 ft. (2m)	—	Power Plug, Straight to IEC Connector, Straight, 10A, 125V	AE1122-ND	3.43	3.02	2.71	AK500/U-2-2
35	6.56 ft. (2m)	—	Power Plug, Straight to Figure 8 Device Connector, Straight	AE1123-ND	2.15	1.89	1.69	AK500/U-3-2
			Power Cord Extension					
36	6.56 ft. (2m)	—	IEC Plug, Straight to IEC Socket, Straight, 10A, 125V	AE1124-ND	3.73	3.28	2.94	AK500/U-4-2
			Modular Plugs					
37	—	—	4P4C, Unshielded, for Flat Cable	AE1194-ND	.13	.12	.11	A-MO-4/4-SF
	—	—	6P4C, Unshielded, for Flat Cable	AE1196-ND	.13	.12	.11	A-MO-6/4-SF
	—	—	6P6C, Unshielded, for Flat Cable	AE1198-ND	.20	.18	.16	A-MO-6/6-SF
	—	—	8P8C, Unshielded, for Flat Cable	AE1200-ND	.30	.27	.24	A-MO-8/8-SF
	—	—	8P8C, Shielded, for Flat Cable, CAT5	AE1201-ND	1.52	1.34	1.20	A-MO-8/8-SFS
37	—	—	4P4C, Unshielded, for Round Cable	AE1195-ND	.13	.12	.11	A-MO-4/4-SR
	—	—	6P4C, Unshielded, for Round Cable	AE1197-ND	.13	.12	.11	A-MO-6/4-SR
	—	—	6P6C, Unshielded, for Round Cable	AE1199-ND	.20	.18	.16	A-MO-6/6-SR
	—	—	8P8C, Unshielded, for Round Cable	AE1202-ND	.30	.27	.24	A-MO-8/8-SR
	—	—	8P8C, Shielded, for Round Cable, CAT5	AE1203-ND	1.52	1.34	1.20	A-MO-8/8-SRS

ASSMANN SCSI, USB & CAT5 Computer Cable Assemblies

Fig. 1 — Internal Adapter, Molding

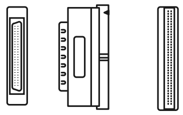


Fig. 2 — Internal Adapter, Assembly

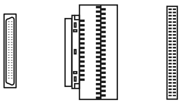


Fig. 3 — Low Profile Adapter

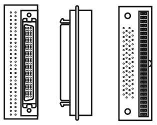


Fig. 4 — SCSI-3 M-F Adapter

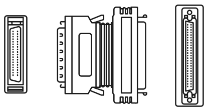


Fig. 5 — SCSI-3 F-F Adapter

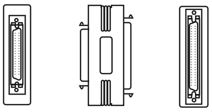


Fig. 6 — SCSI-3 M-M Adapter

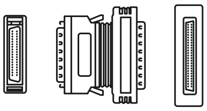


Fig. 7 — SCSI-3 M-F Adapter

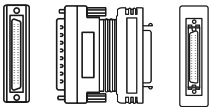


Fig. 8 — Centronic 50 Male

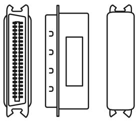


Fig. 9 — Box Header 50 Male

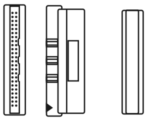


Fig. 10 — Box Header 50 M/F

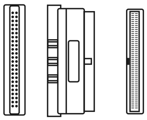


Fig. 11 — D-Sub 50 Male w/Latch

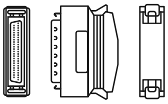


Fig. 12 — D-Sub 68 Male w/Latch

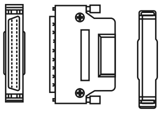


Fig. 13 — SCSI-2 Extension Cable

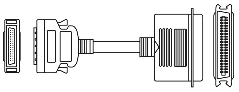


Fig. 14 — SCSI-3 Extension Cable

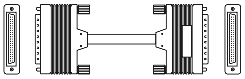


Fig. 15 — SCSI-3 Adapter Cable

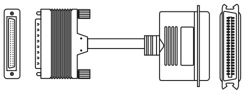


Fig. 16 — SCSI-3 Adapter Cable

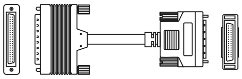


Fig. 17 — SCSI-3 Adapter Cable

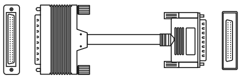


Fig. 18 — SCSI Internal RAID Flat Cable

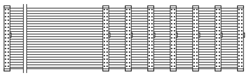


Fig. 19 — SCSI-3 Internal Flat Cable

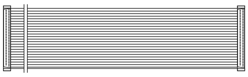


Fig. 20 — SCSI-3 Internal Flat Cable

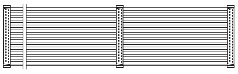


Fig. 21 — SCSI-3 Internal RAID Flat Cable

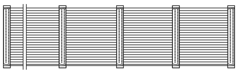


Fig. 22 — SCSI-3 Internal RAID Flat Cable

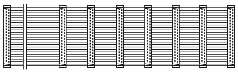


Fig. 23 — SCSI-3 Internal RAID Flat Cable

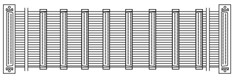


Fig. 24 — SCSI 2 to SCSI 2 Round Cable

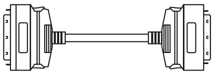


Fig. 25 — IEEE 1394 Cable

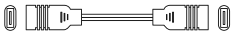


Fig. No.	Length Feet (Meters)	Lines	Description	Digi-Key Part No.	Price Each			Assmann Part No.
					1	10	25	
SCSI Series, Internal Adapter								
1	—	—	HP D-sub 68 Male to Box Header 50 Male	AE1057-ND	13.99	12.30	11.03	AB-Y1007
2	—	—	HP D-sub 68 Female to Socket 50 Female	AE1058-ND	18.68	16.42	14.72	AB-Y1008
SCSI Series, Low Profile Adapter								
3	—	50	HPD68 Female to IDC 50 Female	AE1059-ND	20.00	17.58	15.76	AB-Y1014
SCSI-3 Series, Adapter								
4	—	50	HP D-sub 50 Male to HP D-sub 68 Female	AE1060-ND	26.93	23.67	21.22	AB-Y334
5	—	50	HP D-sub 50 Female to HP D-sub 68 Female	AE1061-ND	25.81	22.68	20.34	AB-Y335
6	—	50	HP D-sub 50 Male to HP D-sub 68 Male	AE1062-ND	29.34	25.79	23.12	AB-Y344
7	—	50	HP D-sub 68 Male to HP D-sub 50 Female	AE1063-ND	27.98	24.60	22.05	AB-Y345
SCSI-1 Series, Terminator								
8	—	50	Centronic 50 Male, A Cable, Active	AE1064-ND	15.35	13.49	12.09	AB-Y102T
9	—	50	Box Header 50 Male, A Cable, Active	AE1066-ND	16.47	14.48	12.98	AB-Y130T
10	—	50	Box Header 50 M/F, A Cable, Active	AE1065-ND	20.00	17.58	15.76	AB-Y126T
SCSI-2 Series, Terminator								
11	—	50	HP D-sub 50 Male with Latch, A Cable, Active	AE1067-ND	20.00	17.58	15.76	AB-Y201L
SCSI-3 Series, Terminator								
12	—	68	HP D-sub 68 Male with Latch, P Cable, Passive	AE1068-ND	22.28	19.58	17.55	AB-Y315T
SCSI-2 Series, Round Cable								
13	3 ft. (.91m)	50	Half-pitch D-sub 50 Male to Centronic 50 Male, A Cable	AE1069-ND	16.60	14.59	13.08	AK-Y1202
SCSI-3 Series, Round Cable								
14	3 ft. (.91m)	68	Half-pitch D-sub 68 Male * 2, A Cable	AE1070-ND	29.60	26.02	23.33	AK-Y1301
15	3 ft. (.91m)	50	Half-pitch D-sub 68 Male to Centronic 50 Male, A Cable	AE1071-ND	18.94	16.65	14.93	AK-Y1302
16	3 ft. (.91m)	50	Half-pitch D-sub 68 Male to Half-pitch D-sub 50 Male, A Cable	AE1072-ND	21.62	19.00	17.03	AK-Y1303
17	3 ft. (.91m)	25	Half-pitch D-sub 68 Male to D-sub 25 Male, A Cable	AE1073-ND	15.94	14.01	12.56	AK-Y1304
SCSI Series, Flat Cable								
18	6.56 ft. (2m)	50	UL 2651, 50 pins, 1.27mm pitch, IDC 50 * 8, P Cable	AE1074-ND	7.06	6.21	5.57	AK-Y2110
SCSI-3 Series, Flat Cable								
19	1.48 ft. (.45m)	68	.635mm HP D-sub 68 Male * 2, P Cable	AE1075-ND	13.33	11.72	10.51	AK-Y2301
20	1.97 ft. (.60m)	68	.635mm HP D-sub 68 Male * 3, P Cable	AE1076-ND	21.32	18.74	16.80	AK-Y2302
21	3.94 ft. (1.2m)	68	.635mm HP D-sub 68 Male * 5, P Cable	AE1077-ND	29.67	26.08	23.38	AK-Y2303
22	6.56 ft. (2.0m)	68	.635mm HP D-sub 68 Male * 8, P Cable	AE1078-ND	43.33	38.08	34.14	AK-Y2304
23	5.25 ft. (1.6m)	68	.635mm HP D-sub 68 Female * 2 to .635mm HP D-sub 68 Male * 8	AE1079-ND	59.73	52.49	47.06	AK-Y2310
FAST SCSI 2 to SCSI 2 Cable, UL 2919								
24	2.95 ft. (.90m)	50	D-Sub 50, HP, Male, Clip to D-Sub 50, HP, Male, Clip - Shielded	AE1163-ND	18.71	16.45	14.75	AK579/F-1
24	6.56 ft. (2.0m)	50	D-Sub 50, HP, Male, Clip to D-Sub 50, HP, Male, Clip - Shielded	AE1164-ND	25.01	21.99	19.71	AK579/F-2
IEEE1394 Cable								
25	5.90 ft. (1.8m)	6	6-Pin Male to 6-Pin Male, Double Shielded	AE1125-ND	18.25	16.04	14.38	AK1394-18
25	9.84 ft. (3.0m)	6	6-Pin Male to 6-Pin Male, Double Shielded	AE1128-ND	24.02	21.12	18.93	AK1394-30
25	16.40 ft. (5.0m)	6	6-Pin Male to 6-Pin Male, Double Shielded	AE1131-ND	34.22	30.08	26.97	AK1394-50
25	5.90 ft. (1.8m)	4	6-Pin Male to 4-Pin Male, Double Shielded	AE1126-ND	21.81	19.17	17.19	AK1394-184
25	9.84 ft. (3.0m)	4	6-Pin Male to 4-Pin Male, Double Shielded	AE1129-ND	26.70	23.47	21.04	AK1394-304
25	16.40 ft. (5.0m)	4	6-Pin Male to 4-Pin Male, Double Shielded	AE1132-ND	34.88	30.66	27.49	AK1394-504
25	5.90 ft. (1.8m)	4	4-Pin Male to 4-Pin Male, Double Shielded	AE1127-ND	28.05	24.65	22.10	AK1394-1844
25	9.84 ft. (3.0m)	4	4-Pin Male to 4-Pin Male, Double Shielded	AE1130-ND	32.93	28.95	25.95	AK1394-3044
25	16.40 ft. (5.0m)	4	4-Pin Male to 4-Pin Male, Double Shielded	AE1133-ND	41.12	36.14	32.40	AK1394-5044

(Continued)

ASSMANN SCSI, USB & CAT5 Computer Cable Assemblies *(Cont.)*

Fig. 26 — USB 4P Female Rt. Angle Dip Connector

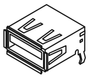


Fig. 27 — USB 4P Female SMT Dip Connector

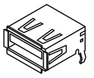


Fig. 28 — USB 4P Male Right Angle Connector

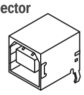


Fig. 29 — USB 4P Female Dual Port Right Angle Dip Connector

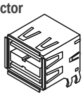


Fig. 30 — USB Plugs and Hoods

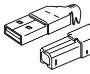


Fig. 31 — USB Extension Cable, A to A

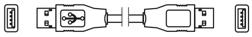


Fig. 32 — USB Extension Cable, A to B

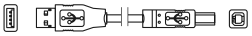


Fig. 33 — USB Extension Cable

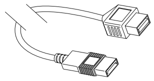


Fig. 34 — USB Cable, A to Open End

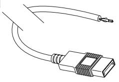


Fig. 35 — USB Cable, B to B

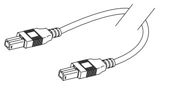


Fig.36 — USB Adapter on Slot Bracket

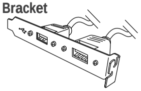


Fig. 37 — USB A-Type F Connector

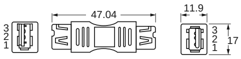


Fig. 38 — CAT 5 Patch Cable

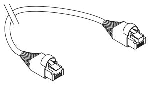
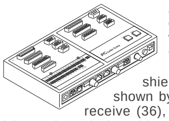


Fig.	Length Feet (Meter)	Lines	Description	Digi-Key Part No.	Price Each 1	10	25	Assmann Part No.
USB Connectors								
26	—	4	USB 4P Female Right Angle Dip, Type A Connector	AE1083-ND	1.39	1.22	1.10	AU-Y1005
27	—	4	USB 4P Female SMT Dip, Type A Connector	AE1084-ND	1.39	1.22	1.10	AU-Y1006
28	—	4	USB 4P Male Right Angle Dip, Type B Connector	AE1085-ND	2.57	2.27	2.03	AU-Y1007
29	—	4	USB 4P Female * 2, Dual Port, Right Angle Dip, Type A Connector	AE1086-ND	2.57	2.27	2.03	AU-Y1008
USB Plugs and Hoods								
30	—	—	USB A-Male, Solder Version	AE1134-ND	.92	.82	.73	A-USBPA
30	—	—	USB B-Male, Solder Version	AE1136-ND	1.06	.93	.84	A-USBPB
30	—	—	Hood for USB A Male	AE1135-ND	.43	.38	.34	A-USBPA-HOOD
30	—	—	Hood for USB B Male	AE1137-ND	.43	.38	.34	A-USBPB-HOOD
USB Extension Cable								
31	5 ft. (1.5m)	4	High Speed, USB4P Male (A) to (A)	AE1081-ND	4.46	3.92	3.51	AU-Y1001
32	5 ft. (1.5m)	4	High Speed, USB4P Male (A) to Female (B)	AE1082-ND	4.85	4.27	3.83	AU-Y1002A
33	5.90 ft. (1.8m)	4	USB A Male to USB A Female, Double Shielded	AE1138-ND	5.28	4.64	4.16	AK669-18
33	9.84 ft. (3.0m)	4	USB A Male to USB A Female, Double Shielded	AE1139-ND	6.50	5.72	5.13	AK669-30
33	16.40 ft. (5.0m)	4	USB A Male to USB A Female, Double Shielded	AE1140-ND	7.62	6.70	6.01	AK669-50
USB Cable								
31	6.56 ft. (2.0m)	4	USB A Male to USB B Male, Double Shielded, iMac blue, Transparent Design	AE1146-ND	4.95	4.35	3.90	AK672MB
31	6.56 ft. (2.0m)	4	USB A Male to USB B Male, Double Shielded, iMac purple, Transparent Design	AE1147-ND	4.95	4.35	3.90	AK672MG
31	6.56 ft. (2.0m)	4	USB A Male to USB B Male, Double Shielded, iMac green, Transparent Design	AE1148-ND	4.95	4.35	3.90	AK672ML
31	6.56 ft. (2.0m)	4	USB A Male to USB B Male, Double Shielded, iMac red, Transparent Design	AE1149-ND	4.95	4.35	3.90	AK672MS
31	6.56 ft. (2.0m)	4	USB A Male to USB B Male, Double Shielded, iMac orange, Transparent Design	AE1150-ND	4.95	4.35	3.90	AK672MT
31	6.56 ft. (2.0m)	4	USB A Male to USB A Male, Double Shielded	AE1141-ND	4.82	4.24	3.80	AK670
31	16.40 ft. (5.0m)	4	USB A Male to USB A Male, Double Shielded	AE1142-ND	7.79	6.85	6.14	AK670-5
34	6.56 ft. (2.0m)	4	USB A to Open End, Double Shielded	AE1143-ND	3.17	2.79	2.50	AK670-OE
34	6.56 ft. (2.0m)	4	USB B to Open End, Double Shielded	AE1153-ND	3.23	2.85	2.55	AK673-OE
32	6.56 ft. (2.0m)	4	USB A Male to USB B Male, Double Shielded	AE1144-ND	4.82	4.24	3.80	AK672
32	16.40 ft. (5.0m)	4	USB A Male to USB B Male, Double Shielded	AE1145-ND	7.26	6.38	5.72	AK672-5
35	6.56 ft. (2.0m)	4	USB B Male to USB B Male, Double Shielded	AE1151-ND	4.95	4.35	3.90	AK673
35	16.40 ft. (5.0m)	4	USB B Male to USB B Male, Double Shielded	AE1152-ND	7.95	6.99	6.27	AK673-5
USB Adapters — Internal/External on Slot Bracket								
36	.82 ft. (0.25m)	—	2 x USB-A Female to 2 x 5-Pin, 2.54mm Socket Connector, Double Shielded	AE1161-ND	7.10	6.24	5.59	AK674
36	.82 ft. (0.25m)	—	2 x USB-A Female to 1 x 8-Pin, 2.54mm Socket Connector, Double Shielded	AE1162-ND	7.49	6.59	5.91	AK674-8
USB Adapters — Molded								
37	—	4	USB Adapter, A Type, Female	AE1080-ND	2.94	2.59	2.32	AU-Y1000-A
37	—	4	USB-A Female to USB-B Female	AE1159-ND	6.73	5.92	5.31	A-USB-2
37	—	4	USB-A Male to USB-B Female	AE1160-ND	6.73	5.92	5.31	A-USB-3

Fig.	Length Feet (Meter)	Description	Unshielded Version (UTP)					Shielded Version (FTP)				
			Digi-Key Part No.	Price Each 1	10	25	Assmann Part No.	Digi-Key Part No.	Price Each 1	10	25	Assmann Part No.
PVC Cable Assembly CAT5, RJ45 — Assembled												
38	1.64 ft. (0.5m)	CAT 5, Patch Cable, Gray	AE1087-ND	2.05	1.80	1.62	A-MCU 80005-APGRAY	AE1090-ND	4.39	3.86	3.46	A-MCS 80005-APGRAY
38	3.28 ft. (1.0m)	CAT 5, Patch Cable, Gray	AE1088-ND	2.57	2.27	2.03	A-MCU 80010-APGRAY	AE1091-ND	5.05	4.44	3.98	A-MCS 80010-APGRAY
38	6.56 ft. (2.0m)	CAT 5, Patch Cable, Gray	AE1089-ND	3.53	3.11	2.79	A-MCU 80020-APGRAY	AE1092-ND	6.30	5.54	4.97	A-MCS 80020-APGRAY
PVC Cable Assembly CAT5, RJ45 — Molded												
38	1.64 ft. (0.5m)	CAT 5, Patch Cable, Gray	AE1093-ND	2.51	2.21	1.98	A-MCU 80005-MPGRAY	AE1096-ND	4.85	4.27	3.83	A-MCS 80005-MPGRAY
38	3.28 ft. (1.0m)	CAT 5, Patch Cable, Gray	AE1094-ND	3.00	2.64	2.37	A-MCU 80010-MPGRAY	AE1097-ND	5.51	4.85	4.35	A-MCS 80010-MPGRAY
38	6.56 ft. (2.0m)	CAT 5, Patch Cable, Gray	AE1095-ND	3.73	3.28	2.94	A-MCU 80020-MPGRAY	AE1098-ND	6.73	5.92	5.31	A-MCS 80020-MPGRAY
38	9.84 ft. (3.0m)	CAT 5, Patch Cable, Gray	AE1184-ND	4.65	4.09	3.67	A-MCU-80030	AE1169-ND	7.26	6.38	5.72	A-MCS-80030
38	16.4 ft. (5m)	CAT 5, Patch Cable, Gray	AE1189-ND	6.57	5.78	5.18	A-MCU-80050	AE1174-ND	9.47	8.33	7.47	A-MCS-80050
38	6.56 ft. (2.0m)	CAT 5, Patch Cable, Blue	AE1180-ND	3.73	3.28	2.94	A-MCU-80020/B	AE1165-ND	5.97	5.25	4.71	A-MCS 80020/B
38	9.84 ft. (3.0m)	CAT 5, Patch Cable, Blue	AE1185-ND	4.65	4.09	3.67	A-MCU-80030/B	AE1170-ND	7.26	6.38	5.72	A-MCS-80030/B
38	16.4 ft. (5m)	CAT 5, Patch Cable, Blue	AE1190-ND	6.57	5.78	5.18	A-MCU-80050/B	AE1175-ND	9.47	8.33	7.47	A-MCS-80050/B
38	6.56 ft. (2.0m)	CAT 5, Patch Cable, Green	AE1181-ND	3.73	3.28	2.94	A-MCU-80020/G	AE1166-ND	5.97	5.25	4.71	A-MCS 80020/G
38	9.84 ft. (3.0m)	CAT 5, Patch Cable, Green	AE1186-ND	4.65	4.09	3.67	A-MCU-80030/G	AE1171-ND	7.26	6.38	5.72	A-MCS-80030/G
38	16.4 ft. (5m)	CAT 5, Patch Cable, Green	AE1191-ND	6.57	5.78	5.18	A-MCU-80050/G	AE1176-ND	9.47	8.33	7.47	A-MCS-80050/G
38	6.56 ft. (2.0m)	CAT 5, Patch Cable, Red	AE1182-ND	3.73	3.28	2.94	A-MCU-80020/R	AE1167-ND	5.97	5.25	4.71	A-MCS 80020/R
38	9.84 ft. (3.0m)	CAT 5, Patch Cable, Red	AE1187-ND	4.65	4.09	3.67	A-MCU-80030/R	AE1172-ND	7.26	6.38	5.72	A-MCS-80030/R
38	16.4 ft. (5m)	CAT 5, Patch Cable, Red	AE1192-ND	6.57	5.78	5.18	A-MCU-80050/R	AE1177-ND	9.47	8.33	7.47	A-MCS-80050/R
38	6.56 ft. (2.0m)	CAT 5, Patch Cable, Yellow	AE1183-ND	3.73	3.28	2.94	A-MCU-80020/Y	AE1168-ND	5.97	5.25	4.71	A-MCS 80020/Y
38	9.84 ft. (3.0m)	CAT 5, Patch Cable, Yellow	AE1188-ND	4.65	4.09	3.67	A-MCU-80030/Y	AE1173-ND	7.26	6.38	5.72	A-MCS-80030/Y
38	16.4 ft. (5m)	CAT 5, Patch Cable, Yellow	AE1193-ND	6.57	5.78	5.18	A-MCU-80050/Y	AE1178-ND	9.47	8.33	7.47	A-MCS-80050/Y

Cable Testers

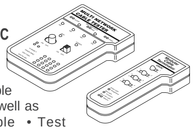
PC Cable Tester, Standalone



All suitable PC cable can be tested with this tester. • Checks: connection, pin allocation and shielding • Pin allocation shown by LEDs: transmit (25), receive (36), battery (1), shielding (2), number of wires (4) • 4 Buttons: Test, auto/manual, speed, on/off • Automatic and manual test run • Connectors: DSub-9 M/F, DSub-15 M/F, DSub-15 HD M/F, DSub-25 M/F Centronics 36 female, BNC male, RJ45 female, USB A+B female, IEEE 1394 female • Power supply by 9V block battery, 9V/150mA external power supply optional • Dimensions (WxDxH): 250mm x 130mm x 35mm

AE1207-ND PC Cable Tester, Standalone (ACT-PC-SO) **$335.25**

Network Cable Tester, RJ45, BNC

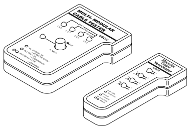


• Cable tester for shielded and unshielded CAT5 cable with RJ45 plug as well as for BNC-coax cable • Test function for cable with RJ45 UTP/STP and BNC plug, patch panels and modular wall plates • Fast test function by auto-scanning • Tests: connection, allocation, pairs according to EIA/TIA 356A, 568A, 568B, Token Ring • Main device with one RJ45 and one BNC female, remote unit with one RJ45 female • With remote unit for testing of installed cable • LEDs for status display • Operation with 9V block battery • Includes artificial leather bag

AE1206-ND Network Cable Tester (ACT-MN) **$130.94**

Modular Cable Tester

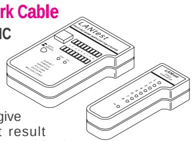
RJ45 / RJ11 / RJ12



- Modular cable tester for cable with RJ45, RJ12 and RJ11 plug
- Fast test function by auto-scanning
- Test: connection, allocation and pairs
- Main device with two RJ45 female; remote unit with one RJ45 female
- Installed cable can be tested with remote unit
- LEDs for status display
- Operation with 9V block battery
- Includes artificial leather bag

AE1204-ND Modular Cable Tester (ACT-MM) **$131.64**

Premium Network Cable Tester RJ45, BNC



• Total of 18 LEDs (for each wire and for shielding) show the allocation and give a fast, exact test result • Operation with 9V block battery • Test function for cable with RJ45/11 UTP/STP & BNC plugs, patch panels and modular wall plates • Includes BNC cable adapter for coax cable test • Manual or automatic test run • Tests: connection, allocation, pairs according to EIA/TIA 356A, 568A, 568B, Token Ring • Main device with two RJ45 female, remote unit with one RJ45 female • Installed cable can be tested with remote unit • Includes artificial leather bag

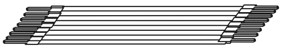
AE1205-ND Premium Network Cable Tester (ACT-LAN) **$217.90**

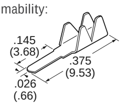
tyco Electronics AMP

.100” (2.54mm) Flat Flex Cable Assemblies

.100 (2.54mm) Flat Flex Cable Material: • Conductors: Un-plated copper per QQ-C-502 • Insulation: Flame retardant polyester film **Performance Characteristics:** • Current Rating: 2 amperes (28AWG equivalent) • Voltage Rating: 300 volts • Temperature Rating: -20°C to +105°C • Insulation Resistance: 5000 megohms (min.) • Insulation Flammability: Polyester, self-extinguishing per UL Flame Test VW-1

Solder Tab to Solder Tab



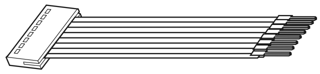


Solder Tab pin

No. of Contacts	Length in.(mm)	Digi-Key Part No.	Pricing		
			1	10	100
2	2 (50.80)	A9AAT-0202F-ND	.59	4.82	35.49
	3 (76.20)	A9AAT-0203F-ND	.71	5.76	42.42
	4 (101.60)	A9AAT-0204F-ND	.82	6.70	49.35
	5 (127.00)	A9AAT-0205F-ND	.94	7.64	56.28
	6 (152.40)	A9AAT-0206F-ND	1.05	8.58	63.21
	8 (203.20)	A9AAT-0208F-ND	1.28	10.43	76.86
3	2 (50.80)	A9AAT-0302F-ND	.76	6.18	45.57
	3 (76.20)	A9AAT-0303F-ND	.88	7.15	52.71
	4 (101.60)	A9AAT-0304F-ND	1.00	8.15	60.06
	5 (127.00)	A9AAT-0305F-ND	1.12	9.15	67.41
	6 (152.40)	A9AAT-0306F-ND	1.24	10.12	74.55
	8 (203.20)	A9AAT-0308F-ND	1.49	12.11	89.25
4	2 (50.80)	A9AAT-0402F-ND	.91	7.38	54.39
	3 (76.20)	A9AAT-0403F-ND	1.03	8.41	61.95
	4 (101.60)	A9AAT-0404F-ND	1.16	9.43	69.51
	5 (127.00)	A9AAT-0405F-ND	1.28	10.46	77.07
	6 (152.40)	A9AAT-0406F-ND	1.41	11.49	84.63
	8 (203.20)	A9AAT-0408F-ND	1.66	13.54	99.75
5	2 (50.80)	A9AAT-0502F-ND	1.04	8.46	62.37
	3 (76.20)	A9AAT-0503F-ND	1.17	9.52	70.14
	4 (101.60)	A9AAT-0504F-ND	1.30	10.57	77.91
	5 (127.00)	A9AAT-0505F-ND	1.43	11.66	85.89
	6 (152.40)	A9AAT-0506F-ND	1.56	12.71	93.66
	8 (203.20)	A9AAT-0508F-ND	1.82	14.85	109.41
6	2 (50.80)	A9AAT-0602F-ND	1.18	9.60	70.77
	3 (76.20)	A9AAT-0603F-ND	1.32	10.77	79.38
	4 (101.60)	A9AAT-0604F-ND	1.47	11.97	88.20
	5 (127.00)	A9AAT-0605F-ND	1.62	13.17	97.02
	6 (152.40)	A9AAT-0606F-ND	1.76	14.36	105.84
	8 (203.20)	A9AAT-0608F-ND	2.06	16.76	123.48
8	2 (50.80)	A9AAT-0802F-ND	1.48	12.06	88.83
	3 (76.20)	A9AAT-0803F-ND	1.66	13.51	99.54
	4 (101.60)	A9AAT-0804F-ND	1.84	14.99	110.46
	5 (127.00)	A9AAT-0805F-ND	2.02	16.44	121.17
	6 (152.40)	A9AAT-0806F-ND	2.20	17.90	131.88
	8 (203.20)	A9AAT-0808F-ND	2.56	20.83	153.51
9	2 (50.80)	A9AAT-0902F-ND	1.65	13.40	98.70
	3 (76.20)	A9AAT-0903F-ND	1.87	15.22	112.14
	4 (101.60)	A9AAT-0904F-ND	2.09	17.04	125.58
	5 (127.00)	A9AAT-0905F-ND	2.32	18.87	139.02
	6 (152.40)	A9AAT-0906F-ND	2.54	20.69	152.46
	8 (203.20)	A9AAT-0908F-ND	2.99	24.34	179.34
10	2 (50.80)	A9AAT-1002F-ND	1.72	14.02	103.32
	3 (76.20)	A9AAT-1003F-ND	1.95	15.87	116.97
	4 (101.60)	A9AAT-1004F-ND	2.18	17.73	130.62
	5 (127.00)	A9AAT-1005F-ND	2.41	19.61	144.48
	6 (152.40)	A9AAT-1006F-ND	2.64	21.46	158.13
	8 (203.20)	A9AAT-1008F-ND	3.09	25.17	185.43
11	2 (50.80)	A9AAT-1102F-ND	1.80	14.62	107.73
	3 (76.20)	A9AAT-1103F-ND	2.03	16.50	121.59
	4 (101.60)	A9AAT-1104F-ND	2.26	18.41	135.66
	5 (127.00)	A9AAT-1105F-ND	2.50	20.32	149.73
	6 (152.40)	A9AAT-1106F-ND	2.73	22.20	163.59
	8 (203.20)	A9AAT-1108F-ND	3.19	25.99	191.52
12	2 (50.80)	A9AAT-1202F-ND	2.08	16.90	124.53
	3 (76.20)	A9AAT-1203F-ND	2.39	19.47	143.43
	4 (101.60)	A9AAT-1204F-ND	2.70	22.00	162.12
	5 (127.00)	A9AAT-1205F-ND	3.02	24.57	181.02
	6 (152.40)	A9AAT-1206F-ND	3.33	27.10	199.71
	8 (203.20)	A9AAT-1208F-ND	3.96	32.21	237.30
13	2 (50.80)	A9AAT-1302F-ND	2.21	17.96	132.30
	3 (76.20)	A9AAT-1303F-ND	2.52	20.55	151.41
	4 (101.60)	A9AAT-1304F-ND	2.84	23.14	170.52
	5 (127.00)	A9AAT-1305F-ND	3.16	25.74	189.63
	6 (152.40)	A9AAT-1306F-ND	3.48	28.33	208.74
	8 (203.20)	A9AAT-1308F-ND	4.12	33.52	246.96
14	2 (50.80)	A9AAT-1402F-ND	2.34	19.04	140.28
	3 (76.20)	A9AAT-1403F-ND	2.66	21.66	159.60
	4 (101.60)	A9AAT-1404F-ND	2.98	24.28	178.92
	5 (127.00)	A9AAT-1405F-ND	3.30	26.90	198.24
	6 (152.40)	A9AAT-1406F-ND	3.63	29.55	217.77
	8 (203.20)	A9AAT-1408F-ND	4.27	34.80	256.41
15	2 (50.80)	A9AAT-1502F-ND	2.47	20.12	148.26
	3 (76.20)	A9AAT-1503F-ND	2.80	22.80	168.00
	4 (101.60)	A9AAT-1504F-ND	3.13	25.48	187.74
	5 (127.00)	A9AAT-1505F-ND	3.46	28.16	207.48
	6 (152.40)	A9AAT-1506F-ND	3.79	30.84	227.22
	8 (203.20)	A9AAT-1508F-ND	4.45	36.20	266.70
16	2 (50.80)	A9AAT-1602F-ND	2.60	21.18	156.03
	3 (76.20)	A9AAT-1603F-ND	2.93	23.88	175.98
	4 (101.60)	A9AAT-1604F-ND	3.27	26.62	196.14
	5 (127.00)	A9AAT-1605F-ND	3.60	29.33	216.09
	6 (152.40)	A9AAT-1606F-ND	3.93	32.03	236.04
	8 (203.20)	A9AAT-1608F-ND	4.60	37.48	276.15
18	2 (50.80)	A9AAT-1802F-ND	3.31	26.93	198.45
	3 (76.20)	A9AAT-1803F-ND	3.87	31.55	232.47
	4 (101.60)	A9AAT-1804F-ND	4.44	36.17	266.49
	5 (127.00)	A9AAT-1805F-ND	5.01	40.78	300.51
	6 (152.40)	A9AAT-1806F-ND	5.58	45.40	334.53
	8 (203.20)	A9AAT-1808F-ND	6.71	54.61	402.36
20	2 (50.80)	A9AAT-2002F-ND	3.57	29.07	214.20
	3 (76.20)	A9AAT-2003F-ND	4.15	33.80	249.06
	4 (101.60)	A9AAT-2004F-ND	4.73	38.50	283.71
	5 (127.00)	A9AAT-2005F-ND	5.31	43.21	318.36
	6 (152.40)	A9AAT-2006F-ND	5.88	47.91	353.01
	8 (203.20)	A9AAT-2008F-ND	7.04	57.34	422.52

Single-Row Receptacle Housing to Solder Tab

Mates with single row .025 (.64mm) square pin, .100 (2.54mm) headers.



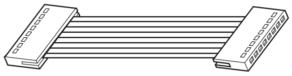
Housing Contacts — Material and Finish: Phosphor bronze; plated gold duplex or bright tin-lead overall. Duplex plated 15µ gold or 30µ gold on mating area. A9BAG – □□□□F-ND = 15µ gold, A9BAA – □□□□F-ND = 30µ gold.

No. of Contacts	Length in.(mm)	Digi-Key Part No.	Pricing		
			1	10	100
2	2 (50.80)	A9BAG-0202F-ND	1.73	14.11	103.95
	3 (76.20)	A9BAG-0203F-ND	1.85	15.05	110.88
	4 (101.60)	A9BAG-0204F-ND	1.96	15.96	117.60
	5 (127.00)	A9BAG-0205F-ND	2.08	16.90	124.53
	6 (152.40)	A9BAG-0206F-ND	2.19	17.84	131.46
	8 (203.20)	A9BAG-0208F-ND	2.42	19.72	145.32
3	2 (50.80)	A9BAG-0302F-ND	1.99	16.22	119.49
	3 (76.20)	A9BAG-0303F-ND	2.11	17.21	126.84
	4 (101.60)	A9BAG-0304F-ND	2.23	18.18	133.98
	5 (127.00)	A9BAG-0305F-ND	2.36	19.18	141.33
	6 (152.40)	A9BAG-0306F-ND	2.48	20.18	148.68
	8 (203.20)	A9BAG-0308F-ND	2.72	22.14	163.17
4	2 (50.80)	A9BAG-0402F-ND	2.24	18.27	134.61
	3 (76.20)	A9BAG-0403F-ND	2.37	19.29	142.17
	4 (101.60)	A9BAG-0404F-ND	2.50	20.32	149.73
	5 (127.00)	A9BAG-0405F-ND	2.62	21.35	157.29
	6 (152.40)	A9BAG-0406F-ND	2.75	22.37	164.85
	8 (203.20)	A9BAG-0408F-ND	3.00	24.42	179.97
5	2 (50.80)	A9BAG-0502F-ND	2.49	20.24	149.10
	3 (76.20)	A9BAG-0503F-ND	2.61	21.29	156.87
	4 (101.60)	A9BAG-0504F-ND	2.75	22.37	164.85
	5 (127.00)	A9BAG-0505F-ND	2.88	23.43	172.62
	6 (152.40)	A9BAG-0506F-ND	3.01	24.48	180.39
	8 (203.20)	A9BAG-0508F-ND	3.27	26.62	196.14
6	2 (50.80)	A9BAG-0602F-ND	2.74	22.32	164.43
	3 (76.20)	A9BAG-0603F-ND	2.89	23.51	173.25
	4 (101.60)	A9BAG-0604F-ND	3.03	24.71	182.07
	5 (127.00)	A9BAG-0605F-ND	3.18	25.88	190.68
	6 (152.40)	A9BAG-0606F-ND	3.33	27.08	199.50
	8 (203.20)	A9BAG-0608F-ND	3.62	29.47	217.14
8	2 (50.80)	A9BAG-0802F-ND	3.27	26.59	195.93
	3 (76.20)	A9BAG-0803F-ND	3.45	28.07	206.85
	4 (101.60)	A9BAG-0804F-ND	3.63	29.53	217.56
	5 (127.00)	A9BAG-0805F-ND	3.80	30.98	228.27
	6 (152.40)	A9BAG-0806F-ND	3.99	32.46	239.19
	8 (203.20)	A9BAG-0808F-ND	4.34	35.37	260.61
9	2 (50.80)	A9BAG-0902F-ND	3.58	29.13	214.62
	3 (76.20)	A9BAG-0903F-ND	3.80	30.95	228.06
	4 (101.60)	A9BAG-0904F-ND	4.03	32.78	241.50
	5 (127.00)	A9BAG-0905F-ND	4.25	34.57	254.73
	6 (152.40)	A9BAG-0906F-ND	4.47	36.39	268.17
	8 (203.20)	A9BAG-0908F-ND	4.92	40.04	295.05
10	2 (50.80)	A9BAG-1002F-ND	3.79	30.87	227.43
	3 (76.20)	A9BAG-1003F-ND	4.02	32.72	241.08
	4 (101.60)	A9BAG-1004F-ND	4.25	34.57	254.73
	5 (127.00)	A9BAG-1005F-ND	4.47	36.42	268.38
	6 (152.40)	A9BAG-1006F-ND	4.70	38.30	282.24
	8 (203.20)	A9BAG-1008F-ND	5.16	42.01	309.54
11	2 (50.80)	A9BAG-1102F-ND	4.00	32.60	240.24
	3 (76.20)	A9BAG-1103F-ND	4.24	34.49	254.10
	4 (101.60)	A9BAG-1104F-ND	4.47	36.39	268.17
	5 (127.00)	A9BAG-1105F-ND	4.70	38.28	282.03
	6 (152.40)	A9BAG-1106F-ND	4.94	40.19	296.10
	8 (203.20)	A9BAG-1108F-ND	5.40	43.98	324.03
12	2 (50.80)	A9BAG-1202F-ND	4.41	35.94	264.81
	3 (76.20)	A9BAG-1203F-ND	4.73	38.50	283.71
	4 (101.60)	A9BAG-1204F-ND	5.04	41.04	302.40
	5 (127.00)	A9BAG-1205F-ND	5.36	43.61	321.30
	6 (152.40)	A9BAG-1206F-ND	5.67	46.14	339.99
	8 (203.20)	A9BAG-1208F-ND	6.29	51.24	377.58
13	2 (50.80)	A9BAG-1302F-ND	4.66	37.93	279.51
	3 (76.20)	A9BAG-1303F-ND	4.98	40.53	298.62
	4 (101.60)	A9BAG-1304F-ND	5.30	43.12	317.73
	5 (127.00)	A9BAG-1305F-ND	5.61	45.69	336.63
	6 (152.40)	A9BAG-1306F-ND	5.93	48.28	355.74
	8 (203.20)	A9BAG-1308F-ND	6.57	53.47	393.96
14	2 (50.80)	A9BAG-1402F-ND	4.90	39.90	294.00
	3 (76.20)	A9BAG-1403F-ND	5.22	42.52	313.32
	4 (101.60)	A9BAG-1404F-ND	5.54	45.14	332.64
	5 (127.00)	A9BAG-1405F-ND	5.87	47.77	351.96
	6 (152.40)	A9BAG-1406F-ND	6.19	50.42	371.49
	8 (203.20)	A9BAG-1408F-ND	6.84	55.66	410.13
15	2 (50.80)	A9BAG-1502F-ND	5.33	43.41	319.83
	3 (76.20)	A9BAG-1503F-ND	5.66	46.08	339.57
	4 (101.60)	A9BAG-1504F-ND	5.99	48.76	359.31
	5 (127.00)	A9BAG-1505F-ND	6.32	51.44	379.05
	6 (152.40)	A9BAG-1506F-ND	6.65	54.12	398.79
	8 (203.20)	A9BAG-1508F-ND	7.30	59.48	438.27
16	2 (50.80)	A9BAG-1602F-ND	5.64	45.91	338.31
	3 (76.20)	A9BAG-1603F-ND	5.97	48.62	358.26
	4 (101.60)	A9BAG-1604F-ND	6.31	51.36	378.42
	5 (127.00)	A9BAG-1605F-ND	6.64	54.06	398.37
	6 (152.40)	A9BAG-1606F-ND	6.98	56.80	418.53
	8 (203.20)	A9BAG-1608F-ND	7.64	62.22	458.43
18	2 (50.80)	A9BAG-1802F-ND	6.70	54.58	402.15
	3 (76.20)	A9BAG-1803F-ND	7.27	59.19	436.17
	4 (101.60)	A9BAG-1804F-ND	7.84	63.81	470.19
	5 (127.00)	A9BAG-1805F-ND	8.40	68.43	504.21
	6 (152.40)	A9BAG-1806F-ND	8.97	73.05	538.23
	8 (203.20)	A9BAG-1808F-ND	10.10	82.28	606.27
20	2 (50.80)	A9BAG-2002F-ND	7.33	59.65	439.53
	3 (76.20)	A9BAG-2003F-ND	7.90	64.35	474.18
	4 (101.60)	A9BAG-2004F-ND	8.48	69.06	508.83
	5 (127.00)	A9BAG-2005F-ND	9.06	73.76	543.48
	6 (152.40)	A9BAG-2006F-ND	9.64	78.46	578.13
	8 (203.20)	A9BAG-2008F-ND	10.79	87.89	647.64

Also available in 30µ Gold, A9BAA – □□□□F-ND
Call for complete part number and pricing.

Single-Row Receptacle Housing to Single-Row Receptacle Housing

Mates with single row .025 (.64mm) square pin, .100 (2.54mm) headers.

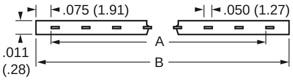


Plain Style Housing — Material: Black thermoplastic, flame retardant, 94V-0 rated. Duplex plated contacts. A9BBG – □□□□F-ND = 15µ gold, A9BBA – □□□□F-ND = 30µ gold

No. of Contacts	Length in.(mm)	Digi-Key Part No.	Pricing		
			1	10	100
2	2 (50.80)	A9BBG-0202F-ND	2.87	23.37	172.20
	3 (76.20)	A9BBG-0203F-ND	2.99	24.31	179.13
	4 (101.60)	A9BBG-0204F-ND	3.10	25.25	186.06
	5 (127.00)	A9BBG-0205F-ND	3.22	26.19	192.99
	6 (152.40)	A9BBG-0206F-ND	3.33	27.13	199.92
	8 (203.20)	A9BBG-0208F-ND	3.56	28.98	213.57
3	2 (50.80)	A9BBG-0302F-ND	3.23	26.28	193.62
	3 (76.20)	A9BBG-0303F-ND	3.35	27.25	200.76
	4 (101.60)	A9BBG-0304F-ND	3.47	28.24	208.11
	5 (127.00)	A9BBG-0305F-ND	3.59	29.21	215.25
	6 (152.40)	A9BBG-0306F-ND	3.71	30.21	222.60
	8 (203.20)	A9BBG-0308F-ND	3.95	32.18	237.09
4	2 (50.80)	A9BBG-0402F-ND	3.58	29.18	215.04
	3 (76.20)	A9BBG-0403F-ND	3.71	30.21	222.60
	4 (101.60)	A9BBG-0404F-ND	3.84	31.24	230.16
	5 (127.00)	A9BBG-0405F-ND	3.96	32.26	237.72
	6 (152.40)	A9BBG-0406F-ND	4.09	33.29	245.28
	8 (203.20)	A9BBG-0408F-ND	4.34	35.34	260.40
5	2 (50.80)	A9BBG-0502F-ND	3.93	32.01	235.83
	3 (76.20)	A9BBG-0503F-ND	4.06	33.09	243.81
	4 (101.60)	A9BBG-0504F-ND	4.19	34.14	251.58
	5 (127.00)	A9BBG-0505F-ND	4.33	35.23	259.56
	6 (152.40)	A9BBG-0506F-ND	4.46	36.28	267.33
	8 (203.20)	A9BBG-0508F-ND	4.72	38.42	283.08
6	2 (50.80)	A9BBG-0602F-ND	4.30	35.03	258.09
	3 (76.20)	A9BBG-0603F-ND	4.45	36.22	266.91
	4 (101.60)	A9BBG-0604F-ND	4.60	37.42	275.73
	5 (127.00)	A9BBG-0605F-ND	4.74	38.62	284.55
	6 (152.40)	A9BBG-0606F-ND	4.89	39.81	293.37
	8 (203.20)	A9BBG-0608F-ND	5.18	42.18	310.80
8	2 (50.80)	A9BBG-0802F-ND	5.05	41.15	303.24
	3 (76.20)	A9BBG-0803F-ND	5.23	42.61	313.95
	4 (101.60)	A9BBG-0804F-ND	5.41	44.06	324.66
	5 (127.00)	A9BBG-0805F-ND	5.59	45.54	335.58
	6 (152.40)	A9BBG-0806F-ND	5.77	47.00	346.29
	8 (203.20)	A9BBG-0808F-ND	6.13	49.93	367.92
9	2 (50.80)	A9BBG-0902F-ND	5.51	44.83	330.33
	3 (76.20)	A9BBG-0903F-ND	5.73	46.65	343.77
	4 (101.60)	A9BBG-0904F-ND	5.95	48.48	357.21
	5 (127.00)	A9BBG-0905F-ND	6.18	50.30	370.65
	6 (152.40)	A9BBG-0906F-ND	6.40	52.13	384.09
	8 (203.20)	A9BBG-0908F-ND	6.85	55.77	410.97
10	2 (50.80)	A9BBG-1002F-ND	5.86	47.71	351.54
	3 (76.20)	A9BBG-1003F-ND	6.09	49.56	365.19
	4 (101.60)	A9BBG-1004F-ND	6.31	51.41	378.84
	5 (127.00)	A9BBG-1005F-ND	6.54	53.27	392.49
	6 (152.40)	A9BBG-1006F-ND	6.77	55.15	406.35
	8 (203.20)	A9BBG-1008F-ND	7.23	58.85	433.65
11	2 (50.80)	A9BBG-1102F-ND	6.21	50.56	372.54
	3 (76.20)	A9BBG-1103F-ND	6.44	52.47	386.61
	4 (101.60)	A9BBG-1104F-ND	6.68	54.38	400.68
	5 (127.00)	A9BBG-1105F-ND	6.91	56.26	414.54
	6 (152.40)	A9BBG-1106F-ND	7.14	58.17	428.61
	8 (203.20)	A9BBG-1108F-ND	7.61	61.96	456.54
12	2 (50.80)	A9BBG-1202F-ND	6.75	54.98	405.09
	3 (76.20)	A9BBG-1203F-ND	7.07	57.54	423.99
	4 (101.60)	A9BBG-1204F-ND	7.38	60.08	442.68
	5 (127.00)	A9BBG-1205F-ND	7.69	62.64	461.58
	6 (152.40)	A9BBG-1206F-ND	8.00	65.18	480.27
	8 (203.20)	A9BBG-1208F-ND	8.63	70.28	517.86
13	2 (50.80)	A9BBG-1302F-ND	7.11	57.88	426.51
	3 (76.20)	A9BBG-1303F-ND	7.43	60.48	445.62
	4 (101.60)	A9BBG-1304F-ND	7.75	63.07	464.73
	5 (127.00)	A9BBG-1305F-ND	8.06	65.66	483.84
	6 (152.40)	A9BBG-1306F-ND	8.38	68.26	502.95
	8 (203.20)	A9BBG-1308F-ND	9.02	73.44	541.17
14	2 (50.80)	A9BBG-1402F-ND	7.46	60.76	447.72
	3 (76.20)	A9BBG-1403F-ND	7.78	63.38	467.04
	4 (101.60)	A9BBG-1404F-ND	8.11	66.01	486.36
	5 (127.00)	A9BBG-1405F-ND	8.43	68.63	505.68
	6 (152.40)	A9BBG-1406F-ND	8.75	71.28	525.21
	8 (203.20)	A9BBG-1408F-ND	9.40	76.52	563.85
15	2 (50.80)	A9BBG-1502F-ND	8.19	66.69	491.40
	3 (76.20)	A9BBG-1503F-ND	8.52	69.37	511.14
	4 (101.60)	A9BBG-1504F-ND	8.85	72.05	530.88
	5 (127.00)	A9BBG-1505F-ND	9.18	74.73	550.62
	6 (152.40)	A9BBG-1506F-ND	9.51	77.41	570.36
	8 (203.20)	A9BBG-1508F-ND	10.16	82.76	609.84
16	2 (50.80)	A9BBG-1602F-ND	8.68	70.65	520.59
	3 (76.20)	A9BBG-1603F-ND	9.01	73.39	540.75
	4 (101.60)	A9BBG-1604F-ND	9.35	76.10	560.70
	5 (127.00)	A9BBG-1605F-ND	9.68	78.80	580.65
	6 (152.40)	A9BBG-1606F-ND	10.01	81.54	600.81
	8 (203.20)	A9BBG-1608F-ND	10.68	86.98	640.92
18	2 (50.80)	A9BBG-1802F-ND	10.10	82.22	605.85
	3 (76.20)	A9BBG-1803F-ND	10.66	86.84	639.87
	4 (101.60)	A9BBG-1804F-ND	11.23	91.46	673.89
	5 (127.00)	A9BBG-1805F-ND	11.80	96.07	707.91
	6 (152.40)	A9BBG-1806F-ND	12.37	100.69	741.93
	8 (203.20)	A9BBG-1808F-ND	13.50	109.92	809.97
20	2 (50.80)	A9BBG-2002F-ND	11.08	90.20	664.65
	3 (76.20)	A9BBG-2003F-ND	11.66	94.91	699.30
	4 (101.60)	A9BBG-2004F-ND	12.23	99.61	733.95
	5 (127.00)	A9BBG-2005F-ND	12.81	104.34	768.81
	6 (152.40)	A9BBG-2006F-ND	13.39	109.04	803.46
	8 (203.20)	A9BBG-2008F-ND	14.55	118.45	872.76

Also available in 30µ Gold, A9BBA – □□□□F-ND
Call for complete part number and pricing.

.100” (2.54mm) Flat Flex Cable



Conductors	Dim. – Inch (mm) “A”	Dim. – Inch (mm) “B”
2	.100 (2.54)	.300 (7.62)
3	.200 (5.08)	.400 (10.16)
4	.300 (7.62)	.500 (12.70)
5	.400 (10.16)	.600 (15.24)
6	.500 (12.70)	.700 (17.78)
8	.700 (17.78)	.900 (22.86)
9	.800 (20.32)	1.000 (25.40)
10	.900 (22.86)	1.100 (27.94)
11	1.000 (25.40)	1.200 (30.48)
12	1.100 (27.94)	1.300 (33.02)
13	1.200 (30.48)	1.400 (35.56)
14	1.300 (33.02)	1.500 (38.10)
15	1.400 (35.56)	1.600 (40.64)
16	1.500 (38.10)	1.700 (43.18)
18	1.700 (43.18)	1.900 (48.26)
20	1.900 (48.26)	2.100 (53.34)

Material:
- Conductors: Unplated copper per QQ-C502
- Insulation: Flame retardant polyester film

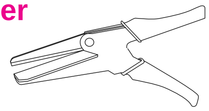
Performance Characteristics:
- Current Rating: 2 amperes (28 AWG equivalent)
- Voltage Rating: 300 volts
- Temperature Rating: -55° to +105°C
- Insulation Resistance: 5000 megohms (min.)
- Insulation Flammability: Polyester, self-extinguishing per UL Flame Test VW-1
- UL Style 2643

Typical Electrical Values:
- Resistance: 55Ω/1000 feet (304.8 meters) max.
- Capacitance: 10.8 pf/ft (max.)
- Impedance: 128 ohms

Flex Cable

No. of Con-tacts	Digi-Key Part No.	(Note: “X” in Digi-Key Part No. Represents No. of Feet) Pricing 5	10	25	50	100
2	AF02-X-ND	5.36	9.57	23.10	44.55	82.50
3	AF03-X-ND	5.85	10.44	25.20	48.60	90.00
4	AF04-X-ND	6.18	11.02	26.60	51.30	95.00
5	AF05-X-ND	6.34	11.31	27.30	52.65	97.50
6	AF06-X-ND	6.83	12.18	29.40	56.70	105.00
8	AF08-X-ND	7.64	13.63	32.90	63.45	117.50
9	AF09-X-ND	8.78	15.66	37.80	72.90	135.00
10	AF10-X-ND	9.10	16.24	39.20	75.60	140.00
11	AF11-X-ND	9.43	16.82	40.60	78.30	145.00
12	AF12-X-ND	9.75	17.40	42.00	81.00	150.00
13	AF13-X-ND	10.08	17.98	43.40	83.70	155.00
14	AF14-X-ND	10.40	18.56	44.80	86.40	160.00
15	AF15-X-ND	10.73	19.14	46.20	89.10	165.00
16	AF16-X-ND	11.70	20.88	50.40	97.20	180.00
18	AF18-X-ND	13.49	24.07	58.10	112.05	207.50
20	AF20-X-ND	15.44	27.55	66.50	128.25	237.50

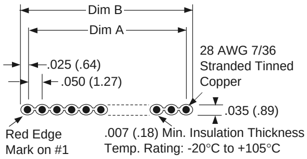
Flat Cable Cutter



- Handy cutting tool for flat cable
- Provides an even undistorted cut across all conductors up to 64 positions
- Always cuts at 90° angle

64FCC-ND	Flat Cable Cutter	**$120.71**
64ANV-ND	Cable Cutter Anvil	**$19.74**
64BLD-ND	Cable Cutter Blade	**$34.52**

.050” (1.27mm) Centerline IDC Ribbon Cable, PVC Insulation



Conductors	Dim. – Inch (mm) “A”	Dim. – Inch (mm) “B”
14	.650 (16.51)	.700 (17.78)
16	.750 (19.05)	.800 (20.32)
20	.950 (24.13)	1.000 (25.40)
24	1.150 (29.21)	1.200 (30.48)
26	1.250 (31.75)	1.300 (33.02)
34	1.650 (41.91)	1.700 (43.18)
37	1.800 (45.72)	1.850 (46.99)
40	1.950 (49.53)	2.000 (50.80)
60	2.950 (74.93)	3.000 (76.20)
64	3.150 (80.01)	3.200 (81.28)

.050” (1.27mm) Centerline Gray IDC Ribbon Cable

SPECIFICATIONS

Electrical Voltage Rating: 300 Volts. **Impedance:** 105 Ohms nom. (GND, SIG, GND). **Insulation Resistance:** 10^{10} Ohms/10 ft (3.048m). **Insulation Material:** Gray PVC, UL VW-1; CSA FT1. **Capacitance:** 15pt/ft at MHz max. **Propagation Delay:** 1.41 ns/ft nom. **Crosstalk:** 10 ft sample 5 ns rise time: Near End - 4.0% max., Far End - 6.0% max. **UL Style:** 2651.

No. of Con-tacts	Digi-Key Part No.	(Note: “X” in Digi-Key Part No. Represents No. of Feet) Pricing 5	10	25	50	100
20	AC20G-X-ND	1.67	2.98	7.18	13.85	17.44
37	AC37G-X-ND	3.28	5.85	14.11	27.22	43.34

.050” (1.27mm) Centerline Multi-Colored IDC Ribbon Cable

ELECTRICAL SPECIFICATIONS

Voltage Rating: 300V RMS. **Current Rating:** 1 AMP. **Conductor Resistance:** 68 Ohms/1000 ft. (304.8m). **Insulation Resistance:** >1x10^{10} Ohms/10 ft. (3.048m). **Impedance:** 105 Ohms. **Capacitance @ 1 MHz:** 15 pF/ft. (49 pF/m). **Inductance @ 1 MHz:** .20 µH/ft. (.66 µH/m). **Propagation Delay:** 1.4 ns/ft. (4.6 ns/m).

MECHANICAL SPECIFICATIONS

Conductor: 28 AWG (7x36) tinned copper. **Insulation:** .010” (.254mm) nom. wall color coded PVC. **Substrate:** .010” (.254mm) nom. wall clear PVC. **Pitch:** .050” ±.005” (1.27±0.13mm). **Color:** Brown, red, orange, yellow, green, blue, violet, grey, white, black, repeat.

UL File: E53793 Style: 2884

Temperature Rating:

CSA: -20°C to +80°C; UL: -20°C to +105°C

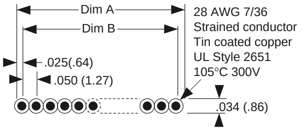
Flammability Rating:

UL: VW-1; **CSA:** FT-1

No. of Con-tacts	Digi-Key Part No.	(Note: “X” in Digi-Key Part No. Represents No. of Feet) Pricing 5	10	25	50	100
24	AC24M-X-ND	4.39	7.84	18.92	36.49	58.11
26	AC26M-X-ND	4.68	8.35	20.15	38.85	61.88
60	AC60M-X-ND	10.10	18.02	43.49	83.88	133.58
64	AC64M-X-ND	10.72	19.14	46.19	89.09	141.88

Ribbon Cable

Physical Specifications (Dimensions)



Conductors	Dim. – Inch (mm) “A”	Dim. – Inch (mm) “B”
10	.500 (12.70)	.450 (11.43)
14	.700 (17.78)	.650 (16.51)
16	.800 (20.32)	.750 (19.05)
20	1.000 (25.40)	.950 (24.13)
24	1.200 (30.48)	1.150 (29.21)
26	1.300 (33.02)	1.250 (31.75)
34	1.700 (43.18)	1.650 (41.91)
36	1.800 (45.72)	1.750 (44.45)
40	2.000 (50.80)	1.950 (49.53)
50	2.500 (63.50)	2.450 (62.23)
60	3.000 (76.20)	2.950 (74.93)
64	3.200 (81.28)	3.150 (80.01)

FLAT CABLE SPECIFICATIONS

Insulation Material: PVC, UL VW-1. **Capacitance pf1ft.:** 12.6. **Color:** Color-coded is standard 10 color repeat (brown, red, orange, yellow, green, blue, purple, gray, white, black). Gray has single-edge strip for pin one orientation. **Inductance µH/ft.:** 20. **Edge Marking:** None. **Propagation Delay ns1ft.:** 1.4. **Center Spacing - Inch (mm):** .050” (1.27mm). **Insulation Resistance:** 1x10^{10} ohms 110 ft. 10f (3m) sample used, measured at 500 V. **Conductor:** Stranded copper, tinned. **Rise Time ns:** 3. **Conductor Size:** #28 AWG 7x36. **Voltage Rating:** 300 V RMS. **Impedance, ohms:** 100. Impedance, capacitance, inductance, and propagation delay were measured Ground-Signal-Ground on a time-domain reflectometer. **Temperature Rating:** -20°C to + 105°C. Maximum storage temperature for unterminated bulk cable is 120°F (50°C). **UL Style Number:** 2651.

Multi-Color Ribbon Cable*

With Standard 10 Color Repeat Sequence

No. of Con-tacts	Digi-Key Part No.	(Note: “X” in Digi-Key Part No. Represents No. of Feet) Pricing 5	10	25	50	100
9	R012-X-ND	1.13	2.02	4.88	9.42	17.44
10	R000-X-ND	1.27	2.26	5.46	10.53	19.50
14	R001-X-ND	1.78	3.18	7.67	14.78	27.38
16	R002-X-ND	2.03	3.63	8.75	16.88	31.25
20	R003-X-ND	2.54	4.54	10.96	21.13	39.13
24	R004-X-ND	3.06	5.45	13.16	25.38	47.00
25	R011-X-ND	3.19	5.69	13.74	26.49	49.06
26	R005-X-ND	3.30	5.89	14.23	27.44	50.81
34	R006-X-ND	4.31	7.69	18.55	35.78	66.25
36	R010-X-ND	5.48	9.77	23.59	45.50	84.25
37	R013-X-ND	4.67	8.33	20.11	38.78	71.81
40	R007-X-ND	5.09	9.08	21.91	42.26	78.25
50	R008-X-ND	6.36	11.35	27.41	52.85	97.88
60	R009-X-ND	7.60	13.56	32.73	63.11	116.88
64	R014-X-ND	8.09	14.44	34.86	67.23	124.50

** Cable available in 200 ft reel , Please call for pricing*

Gray Ribbon Cable*

With Single Edge Red Strip For Pin One Orientation

No. of Con-tacts	Digi-Key Part No.	(Note: “X” in Digi-Key Part No. Represents No. of Feet) Pricing 5	10	25	50	100
9	R019-X-ND	.93	1.66	4.01	7.73	14.31
10	R020-X-ND	.87	1.55	3.75	7.22	13.38
14	R021-X-ND	1.24	2.20	5.32	10.26	19.00
16	R022-X-ND	1.40	2.49	6.02	11.61	21.50
20	R023-X-ND	1.76	3.13	7.56	14.58	27.00
24	R024-X-ND	2.10	3.74	9.03	17.42	32.25
26	R025-X-ND	2.29	4.09	9.87	19.04	35.25
34	R026-X-ND	2.99	5.34	12.88	24.84	46.00
40	R027-X-ND	3.51	6.27	15.14	29.19	54.06
50	R028-X-ND	4.39	7.83	18.90	36.45	67.50
60	R029-X-ND	5.25	9.37	22.63	43.64	80.81
64	R030-X-ND	10.08	17.98	43.40	83.70	155.00

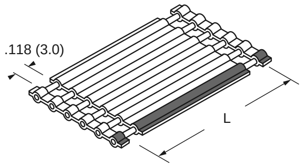
** Cable available in 200 ft reel , Please call for pricing*

A

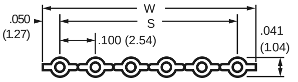
.100” (2.54mm) Round Conductor Flat Cable in Precut Lengths

26 AWG (7 x 34)
Stranded, Topcoat

Features:
- Gray PVC insulation
- U.L. temperature rating -20°C to 105°C
- U.L. voltage 300 V. max.
- U.L. flammability rating VW-1
- U.L. Style No. 2651
- U.L. recognized (File #E61522)
- CSA certification (File #LL61126)



Digi-Key Part No.	Dimension L In. (mm)
XXXX-02-ND	2” (50.80)
XXXX-04-ND	4” (50.80)
XXXX-06-ND	6” (50.80)

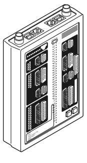


No. of Positions	Dim. S In. (mm)	Dim. W (Ref.) In. (mm)
3	.200 (5.08)	.300 (7.62)
4	.300 (7.62)	.400 (10.16)
5	.400 (10.16)	.500 (12.70)
6	.500 (12.70)	.600 (15.24)
7	.600 (15.24)	.700 (17.78)
8	.700 (17.78)	.800 (20.32)
9	.800 (20.32)	.900 (22.86)
10	.900 (22.86)	1.000 (25.40)

Pos.	Digi-Key Part No.	Pricing 1	10	Molex Part No.
3	WM03-02-ND	.44	3.94	28100-0264
3	WM03-04-ND	.54	4.77	28100-0265
3	WM03-06-ND	.65	5.80	28100-0266
4	WM04-02-ND	.62	5.52	28100-0268
4	WM04-04-ND	.77	6.85	28100-0269
4	WM04-06-ND	.96	8.53	28100-0270
5	WM05-02-ND	.65	5.74	28100-0272
5	WM05-04-ND	.81	7.19	28100-0273
5	WM05-06-ND	1.02	9.02	28100-0274
6	WM06-02-ND	.67	5.92	28100-0276
6	WM06-04-ND	.85	7.50	28100-0277
6	WM06-06-ND	1.08	9.55	28100-0278
7	WM07-02-ND	.68	6.05	28100-0280
7	WM07-04-ND	.89	7.87	28100-0281
7	WM07-06-ND	1.13	10.04	28100-0282
8	WM08-02-ND	.70	6.23	28100-0284
8	WM08-04-ND	.93	8.28	28100-0285
8	WM08-06-ND	1.20	10.60	28100-0286
9	WM09-02-ND	.72	6.42	28100-0288
9	WM09-04-ND	.97	8.59	28100-0289
9	WM09-06-ND	1.26	11.13	28100-0290
10	WM10-02-ND	.75	6.60	28100-0292
10	WM10-04-ND	1.02	9.02	28100-0293
10	WM10-06-ND	1.33	11.75	28100-0294

Paladin Tools

PC Cable Tester



Tests continuity of PC cables. Identifies open, shorted and cross connected wires. Tests combinations of coax: RG 58, 59, 62 BNC; RJ45 and RJ11 telephone cables; D-Sub 9 Pin (male/female); D-Sub 15 Pin (including H.D. and male/female); D-Sub 25 Pin (male/female). Tests shield continuity. Battery included. Now has USB connections.

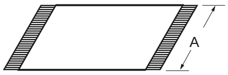
PAL1570-ND **$175.00**

0.5mm and 1mm Flat Flex Cable

Parlex custom jumper cables are available with flat conductors of desired length, stripped at both ends. The insulation has been stripped from one side only, exposing one surface of the conductors. Conductors have been pre-tinned for direct insertion into connectors.

Features:
• Superior Mechanical and Shielding Performance • Meets FCC, CIS PR/VDE effectivity requirements for inter connects • High flexibility rating of 10 million flex cycles on a .6” (15.24mm) radius with optimum design layout • Superior mechanical and abrasion resistance

Cable Characteristics:
• **Conductors:** Cu., tin/lead plated • **Current Rating:** 0.5A (0.5mm); 1.50A (1mm) • **Voltage Rating:** 90 volts • **Insulation:** polyester • **Temperature Rating:** -55°C to 105°C • **Dielectric Strength:** 2500 volts/mil • **U.L. Flame Rating:** VW-1 • **U.L. Styles:** 20890 & 20566



0.5mm Flat Flex Cable

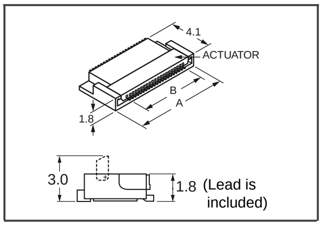
No. of Pos.	Dim. A (mm)	Digi-Key Part No.	Pricing				Parlex Part No.
			1	10	100	250	
2” (5.08cm) Unshielded Flat Flex Cable							
10	5.5	HFF-10U-02-ND	3.60	30.00	220.00	466.00	0.5MM-10-2-B
20	10.5	HFF-20U-02-ND	3.74	31.13	228.25	483.48	0.5MM-20-2-B
24	12.5	HFF-24U-02-ND	3.78	31.50	231.00	489.30	0.5MM-24-2-B
30	15.5	HFF-30U-02-ND	3.83	31.88	233.75	495.13	0.5MM-30-2-B
36	18.5	HFF-36U-02-ND	3.87	32.25	236.50	500.95	0.5MM-36-2-B
40	20.5	HFF-40U-02-ND	3.92	32.63	239.25	506.78	0.5MM-40-2-B
50	25.5	HFF-50U-02-ND	4.05	33.75	247.50	524.25	0.5MM-50-2-B
4” (10.16cm) Unshielded Flat Flex Cable							
10	5.5	HFF-10U-04-ND	4.05	33.75	247.50	524.25	0.5MM-10-4-B
20	10.5	HFF-20U-04-ND	4.28	35.63	261.25	553.38	0.5MM-20-4-B
24	12.5	HFF-24U-04-ND	4.37	36.38	266.75	565.03	0.5MM-24-4-B
30	15.5	HFF-30U-04-ND	4.50	37.50	275.00	582.50	0.5MM-30-4-B
36	18.5	HFF-36U-04-ND	4.64	38.63	283.25	599.98	0.5MM-36-4-B
40	20.5	HFF-40U-04-ND	4.73	39.38	288.75	611.63	0.5MM-40-4-B
50	25.5	HFF-50U-04-ND	4.95	41.25	302.50	640.75	0.5MM-50-4-B
6” (15.24cm) Unshielded Flat Flex Cable							
10	5.5	HFF-10U-06-ND	4.50	37.50	275.00	582.50	0.5MM-10-6-B
20	10.5	HFF-20U-06-ND	4.95	41.25	302.50	640.75	0.5MM-20-6-B
24	12.5	HFF-24U-06-ND	5.18	43.13	316.25	669.88	0.5MM-24-6-B
30	15.5	HFF-30U-06-ND	5.40	45.00	330.00	699.00	0.5MM-30-6-B
36	18.5	HFF-36U-06-ND	5.54	46.13	338.25	716.48	0.5MM-36-6-B
40	20.5	HFF-40U-06-ND	5.63	46.88	343.75	728.13	0.5MM-40-6-B
50	25.5	HFF-50U-06-ND	5.85	48.75	357.50	757.25	0.5MM-50-6-B

1mm Flat Flex Cable

No. of Pos.	Dim. A (mm)	Digi-Key Part No.	Pricing				Parlex Part No.
			1	10	100	250	
2” (5.08cm) Unshielded Flat Flex Cable							
6	7.15	HF06U-02-ND	2.25	18.75	137.50	291.25	1.00MM-6-2-B
8	9.15	HF08U-02-ND	2.48	20.63	151.25	320.38	1.00MM-8-2-B
10	11.15	HF10U-02-ND	2.70	22.50	165.00	349.50	1.00MM-10-2-B
12	13.15	HF12U-02-ND	2.93	24.38	178.75	378.63	1.00MM-12-2-B
14	15.15	HF14U-02-ND	3.15	26.25	192.50	407.75	1.00MM-14-2-B
16	17.15	HF16U-02-ND	3.38	28.13	206.25	436.88	1.00MM-16-2-B
18	19.15	HF18U-02-ND	3.60	30.00	220.00	466.00	1.00MM-18-2-B
20	21.15	HF20U-02-ND	3.83	31.88	233.75	495.13	1.00MM-20-2-B
22	23.15	HF22U-02-ND	4.05	33.75	247.50	524.25	1.00MM-22-2-B
24	25.15	HF24U-02-ND	4.28	35.63	261.25	553.38	1.00MM-24-2-B
26	27.15	HF26U-02-ND	4.50	37.50	275.00	582.50	1.00MM-26-2-B
28	29.15	HF28U-02-ND	4.73	39.38	288.75	611.63	1.00MM-28-2-B
30	31.15	HF30U-02-ND	4.95	41.25	302.50	640.75	1.00MM-30-2-B
3” (7.62cm) Unshielded Flat Flex Cable							
6	7.15	HF06U-03-ND	2.48	20.63	151.25	320.38	1.00MM-6-3-B
8	9.15	HF08U-03-ND	2.70	22.50	165.00	349.50	1.00MM-8-3-B
10	11.15	HF10U-03-ND	2.93	24.38	178.75	378.63	1.00MM-10-3-B
12	13.15	HF12U-03-ND	3.15	26.25	192.50	407.75	1.00MM-12-3-B
14	15.15	HF14U-03-ND	3.38	28.13	206.25	436.88	1.00MM-14-3-B
16	17.15	HF16U-03-ND	3.60	30.00	220.00	466.00	1.00MM-16-3-B
18	19.15	HF18U-03-ND	3.83	31.88	233.75	495.13	1.00MM-18-3-B
20	21.15	HF20U-03-ND	4.05	33.75	247.50	524.25	1.00MM-20-3-B
22	23.15	HF22U-03-ND	4.28	35.63	261.25	553.38	1.00MM-22-3-B
24	25.15	HF24U-03-ND	4.50	37.50	275.00	582.50	1.00MM-24-3-B
26	27.15	HF26U-03-ND	4.73	39.38	288.75	611.63	1.00MM-26-3-B
28	29.15	HF28U-03-ND	4.95	41.25	302.50	640.75	1.00MM-28-3-B
30	31.15	HF30U-03-ND	5.18	43.13	316.25	669.88	1.00MM-30-3-B
4” (10.16cm) Unshielded Flat Flex Cable							
6	7.15	HF06U-04-ND	2.70	22.50	165.00	349.50	1.00MM-6-4-B
8	9.15	HF08U-04-ND	2.93	24.38	178.75	378.63	1.00MM-8-4-B
10	11.15	HF10U-04-ND	3.15	26.25	192.50	407.75	1.00MM-10-4-B
12	13.15	HF12U-04-ND	3.38	28.13	206.25	436.88	1.00MM-12-4-B
14	15.15	HF14U-04-ND	3.60	30.00	220.00	466.00	1.00MM-14-4-B
16	17.15	HF16U-04-ND	3.83	31.88	233.75	495.13	1.00MM-16-4-B
18	19.15	HF18U-04-ND	4.05	33.75	247.50	524.25	1.00MM-18-4-B
20	21.15	HF20U-04-ND	4.28	35.63	261.25	553.38	1.00MM-20-4-B
22	23.15	HF22U-04-ND	4.50	37.50	275.00	582.50	1.00MM-22-4-B
24	25.15	HF24U-04-ND	4.73	39.38	288.75	611.63	1.00MM-24-4-B
26	27.15	HF26U-04-ND	4.95	41.25	302.50	640.75	1.00MM-26-4-B
28	29.15	HF28U-04-ND	5.18	43.13	316.25	669.88	1.00MM-28-4-B
30	31.15	HF30U-04-ND	5.40	45.00	330.00	699.00	1.00MM-30-4-B
5” (12.70cm) Unshielded Flat Flex Cable							
6	7.15	HF06U-05-ND	2.93	24.38	178.75	378.63	1.00MM-6-5-B
8	9.15	HF08U-05-ND	3.15	26.25	192.50	407.75	1.00MM-8-5-B
10	11.15	HF10U-05-ND	3.38	28.13	206.25	436.88	1.00MM-10-5-B
12	13.15	HF12U-05-ND	3.60	30.00	220.00	466.00	1.00MM-12-5-B
14	15.15	HF14U-05-ND	3.83	31.88	233.75	495.13	1.00MM-14-5-B
16	17.15	HF16U-05-ND	4.05	33.75	247.50	524.25	1.00MM-16-5-B
18	19.15	HF18U-05-ND	4.28	35.63	261.25	553.38	1.00MM-18-5-B
20	21.15	HF20U-05-ND	4.50	37.50	275.00	582.50	1.00MM-20-5-B
22	23.15	HF22U-05-ND	4.73	39.38	288.75	611.63	1.00MM-22-5-B
24	25.15	HF24U-05-ND	4.95	41.25	302.50	640.75	1.00MM-24-5-B
26	27.15	HF26U-05-ND	5.18	43.13	316.25	669.88	1.00MM-26-5-B
28	29.15	HF28U-05-ND	5.40	45.00	330.00	699.00	1.00MM-28-5-B
30	31.15	HF30U-05-ND	5.63	46.88	343.75	728.13	1.00MM-30-5-B
6” (15.24cm) Unshielded Flat Flex Cable							
6	7.15	HF06U-06-ND	3.15	26.25	192.50	407.75	1.00MM-6-6-B
8	9.15	HF08U-06-ND	3.38	28.13	206.25	436.88	1.00MM-8-6-B
10	11.15	HF10U-06-ND	3.60	30.00	220.00	466.00	1.00MM-10-6-B
12	13.15	HF12U-06-ND	3.83	31.88	233.75	495.13	1.00MM-12-6-B
14	15.15	HF14U-06-ND	4.05	33.75	247.50	524.25	1.00MM-14-6-B
16	17.15	HF16U-06-ND	4.28	35.63	261.25	553.38	1.00MM-16-6-B
18	19.15	HF18U-06-ND	4.50	37.50	275.00	582.50	1.00MM-18-6-B
20	21.15	HF20U-06-ND	4.73	39.38	288.75	611.63	1.00MM-20-6-B
22	23.15	HF22U-06-ND	4.95	41.25	302.50	640.75	1.00MM-22-6-B
24	25.15	HF24U-06-ND	5.18	43.13	316.25	669.88	1.00MM-24-6-B
26	27.15	HF26U-06-ND	5.40	45.00	330.00	699.00	1.00MM-26-6-B
28	29.15	HF28U-06-ND	5.63	46.88	343.75	728.13	1.00MM-28-6-B
30	31.15	HF30U-06-ND	5.85	48.75	357.50	757.25	1.00MM-30-6-B
8” (20.32cm) Unshielded Flat Flex Cable							
6	7.15	HF06U-08-ND	3.60	30.00	220.00	466.00	1.00MM-6-8-B
8	9.15	HF08U-08-ND	3.83	31.88	233.75	495.13	1.00MM-8-8-B
10	11.15	HF10U-08-ND	4.05	33.75	247.50	524.25	1.00MM-10-8-B
12	13.15	HF12U-08-ND	4.28	35.63	261.25	553.38	1.00MM-12-8-B
14	15.15	HF14U-08-ND	4.50	37.50	275.00	582.50	1.00MM-14-8-B
16	17.15	HF16U-08-ND	4.73	39.38	288.75	611.63	1.00MM-16-8-B
18	19.15	HF18U-08-ND	4.95	41.25	302.50	640.75	1.00MM-18-8-B
20	21.15	HF20U-08-ND	5.18	43.13	316.25	669.88	1.00MM-20-8-B
22	23.15	HF22U-08-ND	5.40	45.00	330.00	699.00	1.00MM-22-8-B
24	25.15	HF24U-08-ND	5.63	46.88	343.75	728.13	1.00MM-24-8-B
26	27.15	HF26U-08-ND	5.85	48.75	357.50	757.25	1.00MM-26-8-B
28	29.15	HF28U-08-ND	6.08	50.63	371.25	786.38	1.00MM-28-8-B
30	31.15	HF30U-08-ND	6.30	52.50	385.00	815.50	1.00MM-30-8-B
10” (25.40cm) Unshielded Flat Flex Cable							
6	7.15	HF06U-10-ND	4.05	33.75	247.50	524.25	1.00MM-6-10-B
8	9.15	HF08U-10-ND	4.28	35.63	261.25	553.38	1.00MM-8-10-B
10	11.15	HF10U-10-ND	4.50	37.50	275.00	582.50	1.00MM-10-10-B
12	13.15	HF12U-10-ND	4.73	39.38	288.75	611.63	1.00MM-12-10-B
14	15.15	HF14U-10-ND	4.95	41.25	302.50	640.75	1.00MM-14-10-B
16	17.15	HF16U-10-ND	5.18	43.13	316.25	669.88	1.00MM-16-10-B
18	19.15	HF18U-10-ND	5.40	45.00	330.00	699.00	1.00MM-18-10-B
20	21.15	HF20U-10-ND	5.63	46.88	343.75	728.13	1.00MM-20-10-B
22	23.15	HF22U-10-ND	5.85	48.75	357.50	757.25	1.00MM-22-10-B
24	25.15	HF24U-10-ND	6.08	50.63	371.25	786.38	1.00MM-24-10-B
26	27.15	HF26U-10-ND	6.30	52.50	385.00	815.50	1.00MM-26-10-B
28	29.15	HF28U-10-ND	6.53	54.38	398.75	844.63	1.00MM-28-10-B
30	31.15	HF30U-10-ND	6.75	56.25	412.50	873.75	1.00MM-30-10-B
12” (30.48cm) Unshielded Flat Flex Cable							
6	7.15	HF06U-12-ND	4.50	37.50	275.00	582.50	1.00MM-6-12-B
8	9.15	HF08U-12-ND	4.73	39.38	288.75	611.63	1.00MM-8-12-B
10	11.15	HF10U-12-ND	4.95	41.25	302.50	640.75	1.00MM-10-12-B
12	13.15	HF12U-12-ND	5.18	43.13	316.25	669.88	1.00MM-12-12-B
14	15.15	HF14U-12-ND	5.40	45.00	330.00	699.00	1.00MM-14-12-B
16	17.15	HF16U-12-ND	5.63	46.88	343.75	728.13	1.00MM-16-12-B
18	19.15	HF18U-12-ND	5.85	48.75	357.50	757.25	1.00MM-18-12-B
20	21.15	HF20U-12-ND	6.08	50.63	371.25	786.38	1.00MM-20-12-B
22	23.15	HF22U-12-ND	6.30	52.50	385.00	815.50	1.00MM-22-12-B
24	25.15	HF24U-12-ND	6.53	54.38	398.75	844.63	1.00MM-24-12-B
26	27.15	HF26U-12-ND	6.75	56.25	412.50	873.75	1.00MM-26-12-B
28	29.15	HF28U-12-ND	6.98	58.13	426.25	902.88	1.00MM-28-12-B
30	31.15	HF30U-12-ND	7.20	60.00	440.00	932.00	1.00MM-30-12-B
18” (45.72cm) Unshielded Flat Flex Cable							
6	7.15	HF06U-18-ND	5.85	48.75	357.50	757.25	1.00MM-6-18-B
8	9.15	HF08U-18-ND	6.08	50.63	371.25	786.38	1.00MM-8-18-B
10	11.15	HF10U-18-ND	6.30	52.50	385.00	815.50	1.00MM-10-18-B
12	13.15	HF12U-18-ND	6.53	54.38	398.75	844.63	1.00MM-12-18-B
14	15.15	HF14U-18-ND	6.75	56.25	412.50	873.75	1.00MM-14-18-B
16	17.15	HF16U-18-ND	6.98	58.13	426.25	902.88	1.00MM-16-18-B
18	19.15	HF18U-18-ND	7.20	60.00	440.00	932.00	1.00MM-18-18-B
20	21.15	HF20U-18-ND	7.43	61.88	453.75	961.13	1.00MM-20-18-B
22	23.15	HF22U-18-ND	7.65	63.75	467.50	990.25	1.00MM-22-18-B
24	25.15	HF24U-18-ND	7.88	65.63	481.25	1019.38	1.00MM-24-18-B
26	27.15	HF26U-18-ND	8.10	67.50	495.00	1048.50	1.00MM-26-18-B
28	29.15	HF28U-18-ND	8.33	69.38	508.75	1077.63	1.00MM-28-18-B
30	31.15	HF30U-18-ND	8.55	71.25	522.50	1106.75	1.00MM-30-18-B

HIROSE ELECTRIC CO.,LTD.

0.3mm Flex Connectors Low Profile - FH18 Series



Features: Contact spacing (pitch) 0.3mm. Flexible printed circuits (FPC) with contact spacing of 0.3mm are used with increased frequency. These connectors occupy less board space and are lighter than comparable connectors with contacts spaced at 0.5mm.

Applications: Consumer electronics, portable equipment, cameras, PDA's and other devices where board space and component packaging requires ultra small interconnection.

Ratings: Current: 0.15A Temp. range: -40°C to +70°C. Volt: 30V AC

No. of Pos.	Dimensions (mm) A	B	Digi-Key Part No.	Cut Tape Price Each 1	25	100	250	Digi-Key Part No.	Tape & Reel Pricing 2,500	5,000	10,000	Hirose Part No.
17	7.6	4.8	HFM17CT-ND	1.86	1.35	1.11	.94	HFM17TR-ND	637.00/M	624.75/M	612.50/M	FH18-17S-0.3SHW
21	8.8	6.0	HFM21CT-ND	1.63	1.25	1.00	.83	HFM21TR-ND	637.50/M	625.00/M	612.50/M	FH18-21S-0.3SHW
25	10.0	7.2	HFM25CT-ND	1.82	1.40	1.12	.93	HFM25TR-ND	714.00/M	700.00/M	686.00/M	FH18-25S-0.3SHW
27	10.6	7.8	HFM27CT-ND	1.82	1.40	1.12	.93	HFM27TR-ND	714.00/M	700.00/M	686.00/M	FH18-27S-0.3SHW
39	14.2	11.4	HFM39CT-ND	2.08	1.60	1.28	1.07	HFM39TR-ND	816.00/M	800.00/M	784.00/M	FH18-39S-0.3SHW
51	17.8	15.0	HFM51CT-ND	2.34	1.80	1.44	1.20	HFM51TR-ND	918.00/M	900.00/M	882.00/M	FH18-51S-0.3SHW

HIROSE ELECTRIC CO.,LTD.

0.5mm Flex Connectors

"Flip-Lock" SMT/ZIF Type Flexible Printed Circuit Board Connectors

The FH12 Series of miniature connectors for FPC/FFC use brings form to the newly developed "flip-lock" concept and can be used with SMT (surface mount technology) to eliminate the problems of the contemporary slide-lock system. These connectors have a contact spacing of 0.5mm, are suited to high density mounting, and are based on a single-action ZIF (zero insertion force) structure for easy connections. Types with top or bottom contacts, and vertical mounting are available to suit your applications.

Materials/Finish:

• Insulation: Polyimide resin, beige; PPS resin, dark brown (UL94V-0) • Contacts: Phosphor bronze, solder plating.

Electrical:

• Rated Current: 0.4A • Insulation Resistance: 500MΩ or greater at 100V DC • Withstand Voltage: 150V AC for one minute • Contact Resistance: 50mΩ or less (Note: When all conductors are to continuously carry the rated current, set the current to 70% of the rated current value.

Fig. 1

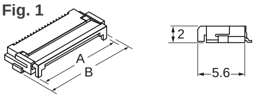


Fig. 2

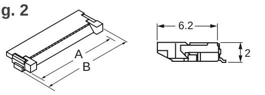


Fig. 3

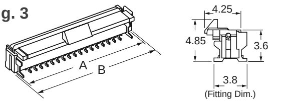


Fig.	No. of Pos.	Dimensions (mm) A	B	Digi-Key Part No.	Cut Tape Price Each 1	10	100	250	Digi-Key Part No.	Tape & Reel Pricing 1,000	2,000	6,000	Hirose Part No.
							Horizontal Mount — Bottom Contact Type						
1	10	8.1	9.1	HFJ10CT-ND	1.55	1.21	.92	.78	HFJ10TR-ND	—	529.10/M	518.93/M	FH12-10S-0.5SH
	20	13.1	14.1	HFJ20CT-ND	1.90	1.48	1.13	.95	HFJ20TR-ND	—	648.70/M	636.23/M	FH12-20S-0.5SH
	24	15.1	16.1	HFJ24CT-ND	1.75	1.46	1.08	.90	HFJ24TR-ND	—	686.59/M	673.13/M	FH12-24S-0.5SH
	30	18.1	19.1	HFJ30CT-ND	1.92	1.60	1.19	.99	HFJ30TR-ND	—	753.53/M	738.75/M	FH12-30S-0.5SH
	40	23.1	24.1	HFJ40CT-ND	2.35	1.96	1.45	1.20	HFJ40TR-ND	—	921.19/M	903.13/M	FH12-40S-0.5SH
	50	28.1	29.1	HFJ50CT-ND	2.65	2.20	1.63	1.36	HFJ50TR-ND	—	1037.85/M	1017.50/M	FH12-50S-0.5SH
							Horizontal Mount — Top Contact Type						
2	10	8.35	9.1	HFK10CT-ND	1.20	.93	.71	.60	HFK10TR-ND	—	409.50/M	401.63/M	FH12A-10S-0.5SH
	20	13.35	14.1	HFK20CT-ND	1.55	1.21	.92	.78	HFK20TR-ND	—	529.10/M	518.93/M	FH12A-20S-0.5SH
	24	15.35	16.1	HFK24CT-ND	1.70	1.32	1.01	.85	HFK24TR-ND	—	580.45/M	569.29/M	FH12A-24S-0.5SH
	30	18.35	19.1	HFK30CT-ND	1.66	1.39	1.03	.85	HFK30TR-ND	—	652.80/M	640.00/M	FH12A-30S-0.5SH
	40	23.35	24.1	HFK40CT-ND	2.01	1.67	1.24	1.03	HFK40TR-ND	—	786.68/M	771.25/M	FH12A-40S-0.5SH
	50	28.35	29.1	HFK50CT-ND	2.35	1.96	1.45	1.20	HFK50TR-ND	—	921.19/M	903.13/M	FH12A-50S-0.5SH
							Vertical Mount						
3	10	6.5	8.2	HFL10CT-ND	1.20	.93	.71	.60	HFL10TR-ND	418.95	409.50/M	—	FH12-10S-0.5SV
	20	11.5	13.2	HFL20CT-ND	1.60	1.24	.95	.80	HFL20TR-ND	558.60	546.00/M	—	FH12-20S-0.5SV
	24	13.5	15.2	HFL24CT-ND	1.75	1.36	1.04	.88	HFL24TR-ND	611.80	598.00/M	—	FH12-24S-0.5SV
	30	16.5	18.2	HFL30CT-ND	1.71	1.42	1.05	.88	HFL30TR-ND	698.25	669.38/M	—	FH12-30S-0.5SV
	40	21.5	23.2	HFL40CT-ND	2.09	1.74	1.29	1.07	HFL40TR-ND	855.19	819.83/M	—	FH12-40S-0.5SV
	50	26.5	28.2	HFL50CT-ND	2.43	2.03	1.50	1.25	HFL50TR-ND	996.17	954.98/M	—	FH12-50S-0.5SV

HIROSE ELECTRIC CO.,LTD.

1mm Flex Connectors

1mm Pitch Flexible Printed Circuit Connectors (Figures 1 and 2)

Features: • High-density packaging achieved by 1 mm pitch contacts • Dual-side contact construction allows FPC and FFC conductors to be inserted in either direction • Enhanced contact reliability through high contact pressure • Applicable to 0.25mm to 0.35mm thick flexible printed circuit boards • Uses PBT (UL94V-0) insulating materials which are highly resistant to solvents and high temperature • Kinked dip posts for board retention during wave soldering **Material/Finish:** • Insulator: Polybutylene phthalate, black • Contacts: Phosphor bronze, tin-lead plated **Electrical:** • Rated Current: 0.5A • Insulation Resistance: At 100V DC, 500MΩ min. • Withstanding Voltage: 150V AC for 1 minute • Contact Resistance: 40mΩ max.

SMT ZIF Type Flexible PCB Connectors (Figures 3 and 4)

Features: • Low profile type with 3mm packaged height; 1mm pitch permits high-density packaging • Excellent workability is offered by the ZIF structure which provides positive contact by only lightly inserting FPC/FFC and then pushing in the movable locking flap • Recommended thickness of flexible circuit board is 0.25mm to 0.30mm • PPS (UL94V-0) with excellent solvent resistance and high temperature resistance is used for the insulation material • The SMT type connectors permit high density and automatic packaging on circuit boards • Also available in embossed tape packaging **Material/Finish:** • Insulator: PPS resin, natural finish • Contact: Phosphor bronze, tin plating **Electrical:** • Rated Current: 0.5A • Insulator Resistance: 500MΩ at 100VDC min. • Withstanding Voltage: 150V AC for 1 minute at specified value • Contact Resistance: 25mΩ max.

Fig. 1

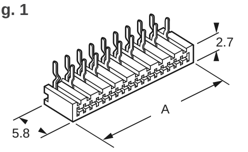


Fig. 2

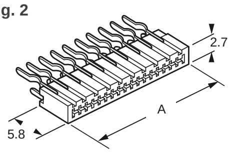


Fig. 3

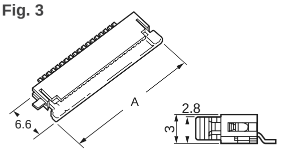


Fig. 4

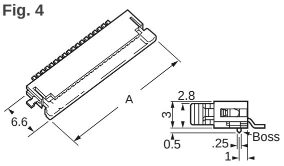


Fig.	No. of Pos.	Dim. A (mm)	Digi-Key Part No.	Price Each 1	10	100	250	Hirose Part No.
				Right Angle				
1	6	8	HFG06T-ND	.60	.42	.29	.24	FH21-6S-1DS
	8	10	HFG08T-ND	.70	.49	.33	.28	FH21-8S-1DS
	10	12	HFG10T-ND	.68	.56	.41	.35	FH21-10S-1DS
	12	14	HFG12T-ND	.76	.62	.45	.38	FH21-12S-1DS
	14	16	HFG14T-ND	.87	.72	.52	.44	FH21-14S-1DS
	16	18	HFG16T-ND	.99	.77	.59	.50	FH21-16S-1DS
	18	20	HFG18T-ND	1.06	.83	.63	.54	FH21-18S-1DS
	20	22	HFG20T-ND	1.22	.95	.72	.61	FH21-20S-1DS
	22	24	HFG22T-ND	1.25	.98	.75	.63	FH21-22S-1DS
	24	26	HFG24T-ND	1.37	1.07	.81	.69	FH21-24S-1DS
	26	28	HFG26T-ND	1.48	1.16	.88	.75	FH21-26S-1DS
	28	30	HFG28T-ND	1.63	1.27	.97	.82	FH21-28S-1DS
	30	32	HFG30T-ND	1.67	1.30	.99	.84	FH21-30S-1DS
				Straight				
2	6	8	HFF06T-ND	.55	.39	.26	.22	FH21-6S-1DSA
	8	10	HFF08T-ND	.65	.46	.31	.26	FH21-8S-1DSA
	10	12	HFF10T-ND	.61	.50	.36	.31	FH21-10S-1DSA
	12	14	HFF12T-ND	.68	.56	.41	.35	FH21-12S-1DSA
	14	16	HFF14T-ND	.76	.62	.45	.38	FH21-14S-1DSA
	16	18	HFF16T-ND	.87	.72	.52	.44	FH21-16S-1DSA
	18	20	HFF18T-ND	.95	.78	.57	.48	FH21-18S-1DSA
	20	22	HFF20T-ND	1.10	.86	.66	.56	FH21-20S-1DSA
	22	24	HFF22T-ND	1.14	.89	.68	.57	FH21-22S-1DSA
	24	26	HFF24T-ND	1.22	.95	.72	.61	FH21-24S-1DSA
	26	28	HFF26T-ND	1.29	1.01	.77	.65	FH21-26S-1DSA
	28	30	HFF28T-ND	1.44	1.13	.86	.73	FH21-28S-1DSA
	30	32	HFF30T-ND	1.48	1.16	.88	.75	FH21-30S-1DSA

Fig.	No. of Pos.	Dim. A (mm)	Digi-Key Part No.	Price Each 1	10	100	250	Hirose Part No.
				SMT Flex Without Board Mount Boss				
3	6	12.2	HFE06F-ND	1.03	.80	.61	.52	FH10A-6S-1SH
	8	14.2	HFE08F-ND	1.18	.92	.70	.59	FH10A-8S-1SH
	10	16.2	HFE10F-ND	1.29	1.01	.77	.65	FH10A-10S-1SH
	12	18.2	HFE12F-ND	1.41	1.10	.84	.71	FH10A-12S-1SH
	14	20.2	HFE14F-ND	1.48	1.16	.88	.75	FH10A-14S-1SH
	16	22.2	HFE16F-ND	1.67	1.30	.99	.84	FH10A-16S-1SH
	18	24.2	HFE18F-ND	1.82	1.42	1.08	.92	FH10A-18S-1SH
	20	26.2	HFE20F-ND	1.63	1.35	1.00	.83	FH10A-20S-1SH
	22	28.2	HFE22F-ND	1.69	1.41	1.04	.87	FH10A-22S-1SH
	24	30.2	HFE24F-ND	1.76	1.46	1.08	.90	FH10A-24S-1SH
	26	31.2	HFE26F-ND	2.05	1.71	1.26	1.05	FH10A-26S-1SH
	28	34.2	HFE28F-ND	2.11	1.76	1.30	1.08	FH10A-28S-1SH
	30	36.2	HFE30F-ND	2.18	1.81	1.34	1.12	FH10A-30S-1SH
				SMT Flex With Board Mount Boss				
4	6	12.2	HFH06T-ND	1.03	.80	.61	.52	FH10A-6S-1SHB
	8	14.2	HFH08T-ND	1.18	.92	.70	.59	FH10A-8S-1SHB
	10	16.2	HFH10T-ND	1.29	1.01	.77	.65	FH10A-10S-1SHB
	12	18.2	HFH12T-ND	1.41	1.10	.84	.71	FH10A-12S-1SHB
	14	20.2	HFH14T-ND	1.48	1.16	.88	.75	FH10A-14S-1SHB
	16	22.2	HFH16T-ND	1.67	1.30	.99	.84	FH10A-16S-1SHB
	18	24.2	HFH18T-ND	1.82	1.42	1.08	.92	FH10A-18S-1SHB
	20	26.2	HFH20T-ND	1.63	1.35	1.00	.83	FH10A-20S-1SHB
	22	28.2	HFH22T-ND	1.69	1.41	1.04	.87	FH10A-22S-1SHB
	24	30.2	HFH24T-ND	1.76	1.46	1.08	.90	FH10A-24S-1SHB
	26	32.2	HFH26T-ND	2.05	1.71	1.26	1.05	FH10A-26S-1SHB
	28	34.2	HFH28T-ND	2.11	1.76	1.30	1.08	FH10A-28S-1SHB
	30	36.2	HFH30T-ND	2.18	1.81	1.34	1.12	FH10A-30S-1SHB

1mm FFC/FPC Connectors

Fig. 1

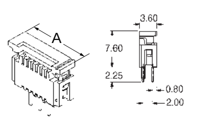
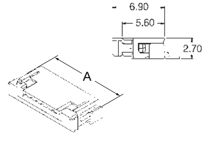


Fig. 2

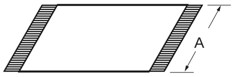


Features: • **Vertical:** For use with 0.30mm thick FFC/FPC. Tuning fork contacts assure stable, low contact resistance. Optional cable retention barbs provide cable strain relief and assure full retention of cable. Optional polarizing peg assures proper orientation to PCB and kinked outer solder tails offer PCB retention. SMT compatible. Material: Housing 4/6 nylon, UL 94V-0. Actuator: LCP, UL 94V-0. Contact: Phosphor Bronze Alloy. Plating: Tin/Lead, 90/10. Temp: -20 to +80°C. Electrical: Volt: 125V Current 1.0A. Contact Resistance: 20 MOhm max. Dielectric Withstanding Volt: 500V AC/1 min. Insulation Resistance: 100MOhm min. • **Right Angle:** For 0.30mm thick FFC/FPC. Metal solder tabs provide PCB hold-down and strain relief for SMT tails. Material: 4/6 nylon, UL 94V-0 Actuator: PPS, UL 94V-0 Contact: Phosphor Bronze. Plating: Tin Solder Tabs: Phosphor Bronze, Tin Plating Temp.: -20 to +85°C. Electrical: Volt.: 125V Current: 1.0A Contact Resistance: 20MOhm Max. Dielectric Withstanding Volt: 500V AC/1 min.

Fig.	No. of Pos.	Dim. A Inch (mm)	Digi-Key Part No.	Price Each				Molex Part No.
				1	10	100	250	
Vertical, ZIF - No Pegs								
1	4	.366 (9.30)	WM5300-ND	1.34	1.09	.77	.60	71226-0425
	6	.445 (11.30)	WM5301-ND	1.21	.99	.70	.55	71226-0625
	8	.524 (13.30)	WM5302-ND	1.41	1.16	.81	.64	71226-0825
	10	.602 (15.30)	WM5303-ND	1.62	1.32	.93	.73	71226-1025
	12	.681 (17.30)	WM5304-ND	1.83	1.49	1.05	.82	71226-1225
	14	.760 (19.30)	WM5305-ND	2.03	1.65	1.16	.91	71226-1425
	16	.839 (21.30)	WM5306-ND	2.23	1.82	1.28	1.00	71226-1625
	18	.917 (23.30)	WM5307-ND	2.43	1.99	1.39	1.09	71226-1825
	20	.996 (25.30)	WM5308-ND	2.63	2.15	1.51	1.18	71226-2025
	22	1.075 (27.30)	WM5309-ND	2.83	2.31	1.62	1.27	71226-2225
	24	1.154 (29.30)	WM5310-ND	3.03	2.48	1.74	1.36	71226-2425
	26	1.232 (31.30)	WM5311-ND	3.23	2.64	1.85	1.45	71226-2625
	28	1.311 (33.30)	WM5312-ND	3.44	2.81	1.97	1.54	71226-2825
	30	1.390 (35.30)	WM5313-ND	3.65	2.97	2.09	1.63	71226-3025

Fig.	No. of Pos.	Dim. A Inch (mm)	Digi-Key Part No.	Price Each				Molex Part No.
				1	10	100	250	
Right Angle, SMT, ZIF Top Contact Style								
2	4	.405 (10.30)	WM5700-ND	.93	.77	.54	.42	52207-0490
	6	.484 (12.30)	WM5701-ND	1.08	.89	.62	.49	52207-0690
	8	.562 (14.30)	WM5702-ND	1.21	.99	.70	.55	52207-0890
	10	.641 (16.30)	WM5703-ND	1.35	1.11	.78	.61	52207-1090
	12	.720 (18.30)	WM5704-ND	1.49	1.22	.86	.67	52207-1290
	14	.799 (20.30)	WM5705-ND	1.63	1.33	.94	.73	52207-1490
	16	.877 (22.30)	WM5706-ND	1.77	1.45	1.02	.79	52207-1690
	18	.956 (24.30)	WM5707-ND	1.89	1.55	1.09	.85	52207-1890
	20	1.035 (26.30)	WM5708-ND	2.11	1.72	1.21	.94	52207-2090
	22	1.114 (28.30)	WM5709-ND	2.16	1.77	1.24	.97	52207-2290
	24	1.192 (30.30)	WM5710-ND	2.32	1.90	1.33	1.04	52207-2490
	26	1.271 (32.30)	WM5711-ND	2.48	2.03	1.42	1.11	52207-2690
	28	1.350 (34.30)	WM5712-ND	2.51	2.05	1.44	1.12	52207-2890
	30	1.430 (36.30)	WM5713-ND	2.63	2.14	1.51	1.18	52207-3090

NEW! 1.00mm (.039”) Pitch Standard Length Jumpers



Features and Specifications: Molex introduces a complete line of 1.00 (.039”) pitch Flat Flex Cable jumpers. These jumpers are used to connect 2 PC boards and terminate to either ZIF or Non-ZIF FFC Connectors. • Reference Information: UL Style No.: 2896. Mates with: Any 1.00mm (.039”) Pitch Molex FFC/FPC Connector. Designed in: Millimeters. • Electrical: Voltage: 30V. Current: 1.3A. • Physical: Strip Length: 4.0mm (.157”). Reinforcement Length: 8.00mm (.315”). Conductor Width: 0.70mm (.028”). Conductor Thickness: 0.10mm (.004”). End Thickness: 0.30±0.05mm (.012±.002”). Temperature: -40° to 80° C. • Contacts on same side

No. of Pos.	Dim. A (mm)	Digi-Key Part No.	Price Each				Molex Part No.
			1	10	100	250	
2” (5.08cm) Unshielded Flat Flex Cable							
6	7.15	WM10000-ND	2.28	1.91	1.40	1.19	21039-0203
8	9.15	WM10001-ND	2.46	2.06	1.51	1.28	21039-0225
10	11.15	WM10002-ND	2.70	2.25	1.65	1.40	21039-0247
12	13.15	WM10003-ND	2.94	2.45	1.80	1.53	21039-0269
14	15.15	WM10004-ND	3.18	2.66	1.95	1.65	21039-0291
16	17.15	WM10005-ND	3.36	2.81	2.06	1.75	21039-0313
18	19.15	WM10006-ND	3.60	3.00	2.20	1.87	21039-0335
20	21.15	WM10007-ND	3.84	3.20	2.35	1.99	21039-0357
22	23.15	WM10008-ND	4.08	3.41	2.50	2.12	21039-0379
24	25.15	WM10009-ND	4.26	3.56	2.61	2.21	21039-0401
26	27.15	WM10010-ND	4.50	3.75	2.75	2.33	21039-0423
28	29.15	WM10011-ND	4.74	3.95	2.90	2.46	21039-0445
30	31.15	WM10012-ND	4.98	4.16	3.05	2.58	21039-0467
3” (7.62cm) Unshielded Flat Flex Cable							
6	7.15	WM10013-ND	2.46	2.06	1.51	1.28	21039-0205
8	9.15	WM10014-ND	2.70	2.25	1.65	1.40	21039-0227
10	11.15	WM10015-ND	2.94	2.45	1.80	1.53	21039-0249
12	13.15	WM10016-ND	3.18	2.66	1.95	1.65	21039-0271
14	15.15	WM10017-ND	3.36	2.81	2.06	1.75	21039-0293
16	17.15	WM10018-ND	3.60	3.00	2.20	1.87	21039-0315
18	19.15	WM10019-ND	3.84	3.20	2.35	1.99	21039-0337
20	21.15	WM10020-ND	4.08	3.41	2.50	2.12	21039-0359
22	23.15	WM10021-ND	4.26	3.56	2.61	2.21	21039-0381
24	25.15	WM10022-ND	4.50	3.75	2.75	2.33	21039-0403
26	27.15	WM10023-ND	4.74	3.95	2.90	2.46	21039-0425
28	29.15	WM10024-ND	4.98	4.16	3.05	2.58	21039-0447
30	31.15	WM10025-ND	5.16	4.31	3.16	2.68	21039-0469
4” (10.16cm) Unshielded Flat Flex Cable							
6	7.15	WM10026-ND	2.58	2.15	1.58	1.34	21039-0207
8	9.15	WM10027-ND	2.70	2.26	1.66	1.41	21039-0229
10	11.15	WM10028-ND	2.83	2.36	1.73	1.47	21039-0251
12	13.15	WM10029-ND	2.97	2.48	1.82	1.55	21039-0273
14	15.15	WM10030-ND	3.10	2.59	1.90	1.61	21039-0295
16	17.15	WM10031-ND	3.24	2.70	1.98	1.68	21039-0317
18	19.15	WM10032-ND	3.40	2.84	2.08	1.77	21039-0339
20	21.15	WM10033-ND	3.62	3.02	2.22	1.88	21039-0361
22	23.15	WM10034-ND	3.66	3.05	2.24	1.90	21039-0383
24	25.15	WM10035-ND	3.96	3.31	2.43	2.06	21039-0405
26	27.15	WM10036-ND	4.01	3.35	2.46	2.08	21039-0427
28	29.15	WM10037-ND	4.05	3.38	2.48	2.10	21039-0449
30	31.15	WM10038-ND	4.10	3.42	2.51	2.13	21039-0471
5” (12.70cm) Unshielded Flat Flex Cable							
6	7.15	WM10039-ND	2.96	2.47	1.81	1.54	21039-0209
8	9.15	WM10040-ND	3.11	2.60	1.91	1.62	21039-0231
10	11.15	WM10041-ND	3.28	2.74	2.01	1.70	21039-0253
12	13.15	WM10042-ND	3.47	2.90	2.13	1.80	21039-0275
14	15.15	WM10043-ND	3.64	3.04	2.23	1.89	21039-0297
16	17.15	WM10044-ND	3.82	3.18	2.34	1.98	21039-0319
18	19.15	WM10045-ND	4.04	3.37	2.47	2.10	21039-0341
20	21.15	WM10046-ND	4.33	3.61	2.65	2.25	21039-0363
22	23.15	WM10047-ND	4.39	3.66	2.69	2.28	21039-0385
24	25.15	WM10048-ND	4.81	4.01	2.94	2.49	21039-0407
26	27.15	WM10049-ND	4.86	4.05	2.97	2.52	21039-0429
28	29.15	WM10050-ND	4.92	4.11	3.01	2.55	21039-0451
30	31.15	WM10051-ND	4.97	4.15	3.04	2.58	21039-0473

No. of Pos.	Dim. A (mm)	Digi-Key Part No.	Price Each				Molex Part No.
			1	10	100	250	
6” (15.24cm) Unshielded Flat Flex Cable							
6	7.15	WM10052-ND	3.03	2.53	1.86	1.58	21039-0211
8	9.15	WM10053-ND	3.23	2.69	1.98	1.68	21039-0233
10	11.15	WM10054-ND	3.41	2.85	2.09	1.77	21039-0255
12	13.15	WM10055-ND	3.64	3.04	2.23	1.89	21039-0277
14	15.15	WM10056-ND	3.83	3.19	2.34	1.99	21039-0299
16	17.15	WM10057-ND	4.03	3.36	2.47	2.09	21039-0321
18	19.15	WM10058-ND	4.29	3.58	2.63	2.23	21039-0343
20	21.15	WM10059-ND	4.64	3.87	2.84	2.40	21039-0365
22	23.15	WM10060-ND	4.70	3.92	2.88	2.44	21039-0387
24	25.15	WM10061-ND	5.18	4.32	3.17	2.69	21039-0409
26	27.15	WM10062-ND	5.25	4.38	3.21	2.72	21039-0431
28	29.15	WM10063-ND	5.31	4.43	3.25	2.76	21039-0453
30	31.15	WM10064-ND	5.39	4.49	3.30	2.79	21039-0475
8” (20.32cm) Unshielded Flat Flex Cable							
6	7.15	WM10065-ND	3.21	2.68	1.97	1.67	21039-0215
8	9.15	WM10066-ND	3.45	2.88	2.11	1.79	21039-0237
10	11.15	WM10067-ND	3.68	3.07	2.25	1.91	21039-0259
12	13.15	WM10068-ND	3.98	3.32	2.44	2.07	21039-0281
14	15.15	WM10069-ND	4.21	3.51	2.58	2.19	21039-0303
16	17.15	WM10070-ND	4.48	3.74	2.74	2.33	21039-0325
18	19.15	WM10071-ND	4.81	4.01	2.94	2.50	21039-0347
20	21.15	WM10072-ND	5.25	4.38	3.21	2.72	21039-0369
22	23.15	WM10073-ND	5.34	4.45	3.27	2.77	21039-0391
24	25.15	WM10074-ND	5.95	4.97	3.64	3.09	21039-0413
26	27.15	WM10075-ND	6.03	5.03	3.69	3.12	21039-0435
28	29.15	WM10076-ND	6.11	5.10	3.74	3.17	21039-0457
30	31.15	WM10077-ND	6.20	5.17	3.79	3.22	21039-0479
10” (25.40cm) Unshielded Flat Flex Cable							
6	7.15	WM10078-ND	3.42	2.85	2.09	1.77	21039-0219
8	9.15	WM10079-ND	3.71	3.09	2.27	1.92	21039-0241
10	11.15	WM10080-ND	3.99	3.33	2.44	2.07	21039-0263
12	13.15	WM10081-ND	4.35	3.63	2.66	2.26	21039-0285
14	15.15	WM10082-ND	4.64	3.87	2.84	2.40	21039-0307
16	17.15	WM10083-ND	4.96	4.14	3.04	2.57	21039-0329
18	19.15	WM10084-ND	5.36	4.47	3.28	2.78	21039-0351
20	21.15	WM10085-ND	5.89	4.91	3.60	3.05	21039-0373
22	23.15	WM10086-ND	5.99	5.00	3.67	3.11	21039-0395
24	25.15	WM10087-ND	6.75	5.63	4.13	3.50	21039-0417
26	27.15	WM10088-ND	6.85	5.71	4.19	3.55	21039-0439
28	29.15	WM10089-ND	6.94	5.79	4.25	3.60	21039-0461
30	31.15	WM10090-ND	7.05	5.88	4.31	3.66	21039-0483
12” (30.48cm) Unshielded Flat Flex Cable							
6	7.15	WM10091-ND	3.63	3.03	2.22	1.89	21039-0221
8	9.15	WM10092-ND	3.96	3.31	2.43	2.06	21039-0243
10	11.15	WM10093-ND	4.29	3.58	2.63	2.23	21039-0265
12	13.15	WM10094-ND	4.72	3.93	2.89	2.45	21039-0287
14	15.15	WM10095-ND	5.05	4.22	3.09	2.62	21039-0309
16	17.15	WM10096-ND	5.44	4.53	3.33	2.82	21039-0331
18	19.15	WM10097-ND	5.92	4.94	3.62	3.07	21039-0353
20	21.15	WM10098-ND	6.09	5.08	3.73	3.16	21039-0375
22	23.15	WM10099-ND	6.21	5.18	3.80	3.22	21039-0397
24	25.15	WM10100-ND	6.57	5.48	4.02	3.40	21039-0419
26	27.15	WM10101-ND	6.75	5.63	4.13	3.50	21039-0441
28	29.15	WM10102-ND	6.97	5.81	4.26	3.61	21039-0463
30	31.15	WM10103-ND	7.16	5.97	4.38	3.71	21039-0485

Micro-Miniature 1.25mm Connectors

1.25mm CONNECTORS: Physical Specifications: • Housing: PBTP, UL 94V-0 • Temperature: -40° to +85°C. UL File No.: E29179 CSA File No.: LR19980 **1.25mm CRIMP TERMINAL: Electrical Specifications:** • Voltage: 125V • Current: 1.0A (0.8A for 32AWG) • Contact Resistance: 20mΩ max. • Dielectric Withstanding Volt.: 250V AC/1 min. • Insulation Resistance: 100MΩ min. **Physical Specifications:** • Contact: Phosphor Bronze • Plating: Tin • Wire Range: 28 to 32 AWG • Insulation Range: 1.00mm dia. max. • Strip Length: 1.40 to 1.90mm

Fig. 1 – 1.25mm Receptacle Housing

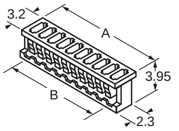


Fig. 2 – 1.25mm Straight Header

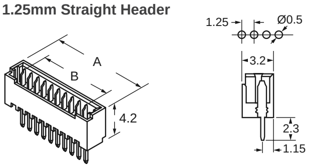


Fig. 3 – 1.25mm Right Angle Header

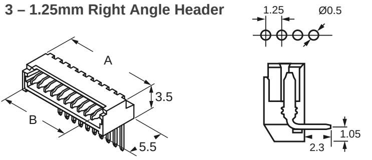


Fig. 4 – 1.25mm SMT Straight Header

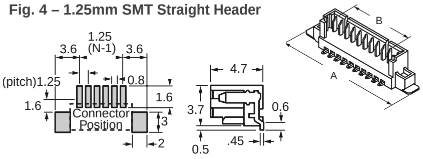


Fig. 5 – 1.25mm SMT Right Angle Header

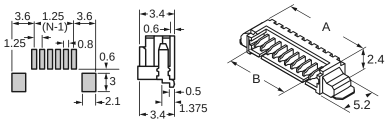
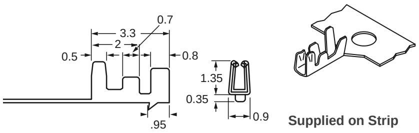


Fig. 6 – Crimp Terminal (Female)



Supplied on Strip

Fig.	Cir-cuits	Dimension (mm) A	B	Digi-Key Part No.	Price Each 1	10	100	500	Molex Part No.
Receptacle Housing									
1	2	4.25	1.25	WM1720-ND	.34	.28	.18	.14	51021-0200
	3	5.50	2.50	WM1721-ND	.40	.33	.21	.17	51021-0300
	4	6.75	3.75	WM1722-ND	.45	.38	.24	.19	51021-0400
	5	8.00	5.00	WM1723-ND	.53	.44	.28	.22	51021-0500
	6	9.25	6.25	WM1724-ND	.58	.49	.31	.24	51021-0600
	7	10.50	7.50	WM1725-ND	.61	.51	.33	.25	51021-0700
	8	11.75	8.75	WM1726-ND	.70	.59	.38	.29	51021-0800
	9	13.00	10.00	WM1727-ND	.76	.63	.41	.32	51021-0900
	10	14.25	11.25	WM1728-ND	.81	.68	.43	.34	51021-1000
	11	15.50	12.50	WM1729-ND	.88	.73	.47	.36	51021-1100
	12	16.75	13.75	WM1730-ND	.94	.78	.50	.39	51021-1200
	13	18.00	15.00	WM17000-ND	.98	.81	.52	.40	51021-1300
	14	19.25	16.25	WM17001-ND	1.07	.89	.57	.44	51021-1400
	15	20.50	17.50	WM17002-ND	1.11	.92	.59	.46	51021-1500
Straight Header									
2	2	4.25	1.25	WM1731-ND	.60	.50	.32	.25	53047-0210
	3	5.50	2.50	WM1732-ND	.72	.60	.39	.30	53047-0310
	4	6.75	3.75	WM1733-ND	.86	.72	.46	.36	53047-0410
	5	8.00	5.00	WM1734-ND	1.02	.85	.54	.42	53047-0510
	6	9.25	6.25	WM1735-ND	1.16	.96	.62	.48	53047-0610
	7	10.50	7.50	WM1736-ND	1.31	1.09	.70	.54	53047-0710
	8	11.75	8.75	WM1737-ND	1.46	1.22	.78	.60	53047-0810
	9	13.00	10.00	WM1738-ND	1.59	1.32	.85	.66	53047-0910
	10	14.25	11.25	WM1739-ND	1.75	1.45	.93	.72	53047-1010
	11	15.50	12.50	WM1740-ND	1.89	1.57	1.01	.78	53047-1110
	12	16.75	13.75	WM1741-ND	2.03	1.69	1.08	.83	53047-1210
	13	18.00	15.00	WM17003-ND	2.17	1.81	1.15	.89	53047-1310
	14	19.25	16.25	WM17004-ND	2.33	1.94	1.24	.96	53047-1410
	15	20.50	17.50	WM17005-ND	2.49	2.07	1.32	1.02	53047-1510
Right Angle Header									
3	2	4.25	1.25	WM1742-ND	.63	.53	.34	.26	53048-0210
	3	5.50	2.50	WM1743-ND	.77	.64	.41	.32	53048-0310
	4	6.75	3.75	WM1744-ND	.94	.78	.50	.39	53048-0410
	5	8.00	5.00	WM1745-ND	1.09	.91	.58	.45	53048-0510
	6	9.25	6.25	WM1746-ND	1.26	1.05	.67	.52	53048-0610
	7	10.50	7.50	WM1747-ND	1.40	1.16	.74	.58	53048-0710
	8	11.75	8.75	WM1748-ND	1.56	1.30	.83	.64	53048-0810
	9	13.00	10.00	WM1749-ND	1.72	1.43	.92	.71	53048-0910
3	10	14.25	11.25	WM1750-ND	1.86	1.54	.99	.76	53048-1010
	11	15.50	12.50	WM1751-ND	2.02	1.68	1.07	.83	53048-1110
	12	16.75	13.75	WM1752-ND	2.18	1.81	1.16	.90	53048-1210
	13	18.00	15.00	WM17006-ND	2.33	1.94	1.24	.96	53048-1310
	14	19.25	16.25	WM17007-ND	2.50	2.07	1.32	1.02	53048-1410
	15	20.50	17.50	WM17008-ND	2.63	2.18	1.39	1.08	53048-1510
SMT Straight Header									
4	2	7.65	1.25	WM1764-ND	2.35	1.95	1.25	.97	53398-0290
	3	8.90	2.50	WM1765-ND	2.52	2.09	1.34	1.03	53398-0390
	4	10.15	3.75	WM1766-ND	2.74	2.28	1.45	1.12	53398-0490
	5	11.40	5.00	WM1767-ND	2.77	2.30	1.47	1.14	53398-0590
	6	12.65	6.25	WM1768-ND	3.02	2.51	1.60	1.24	53398-0690
	7	13.90	7.50	WM1769-ND	3.18	2.64	1.68	1.30	53398-0790
	8	15.15	8.75	WM1770-ND	3.62	3.01	1.92	1.48	53398-0890
	9	16.40	10.00	WM1771-ND	3.80	3.16	2.02	1.56	53398-0990
	10	17.65	11.25	WM1772-ND	3.98	3.30	2.11	1.63	53398-1090
	11	18.90	12.50	WM1773-ND	4.84	4.01	2.56	1.98	53398-1190
	12	20.15	13.75	WM1774-ND	4.95	4.11	2.62	2.03	53398-1290
	13	21.40	15.00	WM17009-ND	5.08	4.21	2.69	2.08	53398-1390
	14	22.65	16.25	WM17010-ND	5.22	4.33	2.77	2.14	53398-1490
	15	23.90	17.50	WM17011-ND	5.39	4.47	2.85	2.21	53398-1590
SMT Right Angle Header									
5	2	7.65	1.25	WM1753-ND	1.74	1.44	.92	.71	53261-0290
	3	8.90	2.50	WM1754-ND	1.94	1.61	1.03	.80	53261-0390
	4	10.15	3.75	WM1755-ND	2.12	1.76	1.12	.87	53261-0490
	5	11.40	5.00	WM1756-ND	2.33	1.94	1.24	.96	53261-0590
	6	12.65	6.25	WM1757-ND	2.51	2.09	1.33	1.03	53261-0690
	7	13.90	7.50	WM1758-ND	2.71	2.25	1.44	1.11	53261-0790
	8	15.15	8.75	WM1759-ND	2.89	2.40	1.53	1.19	53261-0890
	9	16.40	10.00	WM1760-ND	3.10	2.57	1.64	1.27	53261-0990
	10	17.65	11.25	WM1761-ND	3.29	2.73	1.74	1.35	53261-1090
	11	18.90	12.50	WM1762-ND	3.48	2.89	1.84	1.43	53261-1190
	12	20.15	13.75	WM1763-ND	3.68	3.06	1.95	1.51	53261-1290
	14	22.65	16.25	WM17012-ND	4.09	3.39	2.17	1.68	53261-1490
	15	23.90	17.50	WM17013-ND	4.26	3.54	2.26	1.75	53261-1590
6	Crimp Term., 28-32 AWG			WM1775-ND	—	.10	.07	.05	50058-8000
Prototype Crimp Tool (Molex)				WM9931-ND	182.77 each				63811-0200
Production Crimp Tool (Molex)				WM9932-ND	481.85 each				63811-0000
Contact Extraction Tool (Molex)				WM9933-ND	141.24 each				57072-6000
Housing Extraction Tool (Molex)				WM9934-ND	124.62 each				11-03-0045

Panel Mate 1.25mm Connectors Ultra Low Profile

Physical Specifications:
• Housing: PBTP, UL 94V-0 • Temperature: -40 to +85°C • Contact: Phosphor Bronze • Plating: Gold (Tin/Lead on SMT tails) • Solder Tabs: Phosphor Bronze, Tin/Lead plating

Electrical Specifications:
• Voltage: 125V • Current: 1.0A • Contact Resistance: 20M ohm max. • Dielectric Withstanding Volt: 250V AC • Insulation Resistance: 100M ohm min.

Fig. 1

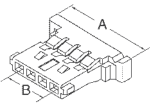


Fig. 2

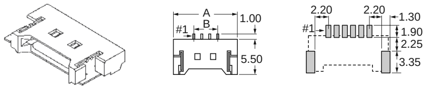


Fig.	Cir-cuits	Dim. (mm) A	B	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
Receptacle Housing - Ultra Low Profile								
1	2	5.72	1.25	WM5400-ND	.35	.29	.19	51146-0200
	3	6.97	2.50	WM5401-ND	.47	.40	.25	51146-0300
	4	8.22	3.75	WM5402-ND	.59	.49	.32	51146-0400
	5	9.47	5.00	WM5403-ND	.68	.57	.37	51146-0500
	6	10.72	6.25	WM5404-ND	.79	.66	.42	51146-0600
	7	11.97	7.50	WM5405-ND	.94	.78	.50	51146-0700
	9	14.47	10.00	WM5406-ND	1.18	.98	.63	51146-0900
	14	20.72	16.25	WM5407-ND	1.77	1.47	.94	51146-1400

Fig.	Cir-cuits	Dim. (mm) A	B	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
Right Angle, SMT 1.90mm Profile Header								
2	2	7.65	1.25	WM5500-ND	1.84	1.53	.98	53780-0290
	3	8.90	2.50	WM5501-ND	2.14	1.78	1.14	53780-0390
	5	11.40	5.00	WM5502-ND	2.82	2.34	1.50	53780-0590
	6	12.65	6.25	WM5503-ND	2.99	2.48	1.58	53780-0690
	7	13.90	7.50	WM5504-ND	3.30	2.74	1.75	53780-0790
	9	16.40	10.00	WM5505-ND	3.62	3.00	1.92	53780-0990
Crimp Terminal AWG 28-30				WM5506-ND	.53	.45	.29	50641-8141
Hand Crimper				WM9963-ND	796.36 each			57352-5000

FX6 Series - Surface Mount

0.8mm Connectors

Fig. 1

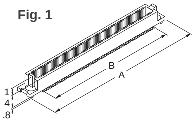
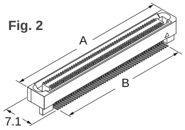


Fig. 2



Features: This small-sized, lightweight type has approximately one quarter the weight and one half the mounting volume compared to half-pitch connectors (1.27mm Pitch) available until now. Stacking height can be set from 5 to 9mm in 1mm steps. Though these are low profile type connectors, the effective length of engagement is long at 1.7mm, which affords a fit with leeway.
Applications: Notebook computers, personal terminals and other office automation equipment. Equipment that calls for miniaturization and lighter weight.
Material: • **Insulator:** PPS resign, Light brown, UL94V-0 • **Header/Recept. pins:** Phosphor bronze • **Contacts:** Gold plating • **Leads:** Tin plating
Electrical: • **Current capacity:** 0.5 A • **Rated voltage:** 100 V AC • **Insulation resistance:** 250 V DC, 1,000 MΩ or more • Withstand voltage for 1 minute at specified value 300V AC • **Contact resistance:** 100 mA DC 40mΩ or less

Fig.	No. of Pins	Dimensions (mm)		Digi-Key Part No.	Price Each			Hirose Part No.
		A	B		1	25	100	
4mm Vertical Header with Positioning Boss								
1	20	15.8	7.2	H2408-ND	2.15	1.65	1.32	FX6-20P-0.8SV
	40	23.8	15.2	H2409-ND	3.06	2.35	1.88	FX6-40P-0.8SV
	50	27.8	19.2	H2410-ND	3.00	2.40	1.86	FX6-50P-0.8SV
	60	31.8	23.2	H2411-ND	3.38	2.71	2.10	FX6-60P-0.8SV
	80	39.8	31.2	H2412-ND	4.10	3.28	2.54	FX6-80P-0.8SV
	100	47.8	39.2	H2413-ND	4.90	3.92	3.03	FX6-100P-0.8SV
4mm Vertical Header w/out Positioning Boss								
1	20	15.8	7.2	H2438-ND	2.15	1.65	1.32	FX6A-20P-0.8SV
	40	23.8	15.2	H2439-ND	3.06	2.35	1.88	FX6A-40P-0.8SV
	50	27.8	19.2	H2440-ND	3.00	2.40	1.86	FX6A-50P-0.8SV
	60	31.8	23.2	H2441-ND	3.38	2.71	2.10	FX6A-60P-0.8SV
	80	39.8	31.2	H2442-ND	4.10	3.28	2.54	FX6A-80P-0.8SV
	100	47.8	39.2	H2443-ND	4.90	3.92	3.03	FX6A-100P-0.8SV
5mm Vertical Header with Positioning Boss								
1	60	31.8	23.2	H2417-ND	4.13	3.30	2.55	FX6-60P-0.8SV1
5mm Vertical Header w/out Positioning Boss								
1	20	15.8	7.2	H2444-ND	2.89	2.23	1.78	FX6A-20P-0.8SV1
	40	23.8	15.2	H2445-ND	3.30	2.64	2.04	FX6A-40P-0.8SV1
	60	31.8	23.2	H2447-ND	4.13	3.30	2.55	FX6A-60P-0.8SV1
6mm Vertical Header with Positioning Boss								
1	100	47.8	39.2	H2425-ND	5.78	4.62	3.57	FX6-100P-0.8SV2
6mm Vertical Header w/out Positioning Boss								
1	50	27.8	19.2	H2452-ND	3.71	2.97	2.30	FX6A-50P-0.8SV2
	60	31.8	23.2	H2453-ND	4.13	3.30	2.55	FX6A-60P-0.8SV2
4mm Vertical Receptacle with Positioning Boss								
2	20	15.8	7.2	H2426-ND	2.31	1.78	1.42	FX6-20S-0.8SV
	40	23.8	15.2	H2427-ND	2.81	2.25	1.74	FX6-40S-0.8SV
	50	27.8	19.2	H2428-ND	3.22	2.58	1.99	FX6-50S-0.8SV
	60	31.8	23.2	H2429-ND	3.63	2.91	2.25	FX6-60S-0.8SV
	80	39.8	31.2	H2430-ND	4.51	3.61	2.79	FX6-80S-0.8SV
	100	47.8	39.2	H2431-ND	5.34	4.27	3.30	FX6-100S-0.8SV
4mm Vertical Receptacle w/out Positioning Boss								
2	20	15.8	7.2	H2456-ND	2.31	1.78	1.42	FX6A-20S-0.8SV
	40	23.8	15.2	H2457-ND	2.81	2.25	1.74	FX6A-40S-0.8SV
	50	27.8	19.2	H2458-ND	3.22	2.58	1.99	FX6A-50S-0.8SV
	60	31.8	23.2	H2459-ND	3.63	2.91	2.25	FX6A-60S-0.8SV
	80	39.8	31.2	H2460-ND	4.51	3.61	2.79	FX6A-80S-0.8SV
	100	47.8	39.2	H2461-ND	5.34	4.27	3.30	FX6A-100S-0.8SV
6mm Vertical Receptacle with Positioning Boss								
2	20	15.8	7.2	H2432-ND	3.08	2.47	1.91	FX6-20S-0.8SV2
	40	23.8	15.2	H2433-ND	3.99	3.19	2.47	FX6-40S-0.8SV2
	50	27.8	19.2	H2434-ND	4.43	3.55	2.74	FX6-50S-0.8SV2
	60	31.8	23.2	H2435-ND	4.90	3.92	3.03	FX6-60S-0.8SV2
	80	39.8	31.2	H2436-ND	5.78	4.62	3.57	FX6-80S-0.8SV2
	100	47.8	39.2	H2437-ND	6.71	5.37	4.15	FX6-100S-0.8SV2
6mm Vertical Receptacle w/out Positioning Boss								
2	40	23.8	15.2	H2463-ND	3.99	3.19	2.47	FX6A-40S-0.8SV2
	50	27.8	19.2	H2464-ND	4.43	3.55	2.74	FX6A-50S-0.8SV2
	60	31.8	23.2	H2465-ND	4.90	3.92	3.03	FX6A-60S-0.8SV2
	80	39.8	31.2	H2466-ND	5.78	4.62	3.57	FX6A-80S-0.8SV2
	100	47.8	39.2	H2467-ND	6.71	5.37	4.15	FX6A-100S-0.8SV2

FX11L Series -Surface Mount

0.5mm Conn. w/Ground Plate for 2mm Board-to-Board Connections

Fig.1

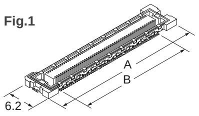
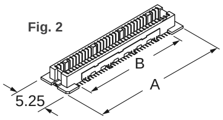


Fig. 2



Features: Low Profile Design. The board-to-board mating height of 2mm suits smaller, thinner case designs. Improved transmission efficiency between boards. Transmission characteristics have been improved through a design that fixes ground plates to both sides of the header and receptacle. Signal and ground are arranged in a ratio of 10:1 with the ground plate SMT connected to the board. The ground stability achieved serves to reduce noise. Suited to High-Density Applications. The signal contact pitch of 0.5mm produces a smaller connector utilizing less board area for mounting.
Applications: Notebook computers, PDA, and other miniature electronic equipment.
Material: • **Insulator:** LCP resign, Beige, UL94V-0 • **Contacts:** Copper alloy • **Header:** Phosphor bronze • **Receptacle:** Engagement area: Gold plating of 0.1 µm Termination Area: Flash plating Ground plate: Phosphor bronze solder plating • **Reinforced fitting/plate:** Phosphor bronze, Tin plating
Electrical: • **Rated current:** 0.3 A, operating temperature range -55 to 80°C • **Rated voltage:** 50 V AC • **Operating humidity range**: Relative humidity 95% or less (No condensation)

Fig.	No. of Contacts		Dimensions (mm)		Digi-Key Part No.	Price Each			Hirose Part No.
	Signal	Ground	A	B		1	25	100	
Headers with Ground Plate, with Guideposts									
2	60	6	22.6	17.5	H2517-ND	4.29	3.44	2.66	FX11LA-60P/6-SV
	80	8	28.6	23.5	H2518-ND	4.76	3.81	2.95	FX11LA-80P/8-SV
	100	10	34.6	29.5	H2519-ND	5.23	4.18	3.23	FX11LA-100P/10-SV
	120	12	40.6	35.5	H2520-ND	5.72	4.58	3.54	FX11LA-120P/12-SV
Headers with Ground Plate, w/out Guideposts									
2	60	6	22.6	17.5	H2521-ND	4.29	3.44	2.66	FX11LB-60P/6-SV
	80	8	28.6	23.5	H2522-ND	4.76	3.81	2.95	FX11LB-80P/8-SV
	100	10	34.6	29.5	H2523-ND	5.23	4.18	3.23	FX11LB-100P/10-SV
	120	12	40.6	35.5	H2524-ND	5.72	4.58	3.54	FX11LB-120P/12-SV
Headers w/out Ground Plate, with Guideposts									
2	68	–	22.6	16.5	H2533-ND	3.38	2.71	2.10	FX11LA-68P-SV
	92	–	28.6	22.5	H2534-ND	3.80	3.04	2.35	FX11LA-92P-SV
	116	–	34.6	28.5	H2535-ND	4.18	3.35	2.59	FX11LA-116P-SV
	140	–	40.6	34.5	H2536-ND	4.59	3.68	2.84	FX11LA-140P-SV
Headers w/out Ground Plate, w/out Guideposts									
2	68	–	22.6	16.5	H2537-ND	3.38	2.71	2.10	FX11LB-68P-SV
	92	–	28.6	22.5	H2538-ND	3.80	3.04	2.35	FX11LB-92P-SV
	116	–	34.6	28.5	H2539-ND	4.18	3.35	2.59	FX11LB-116P-SV
	140	–	40.6	34.5	H2540-ND	4.59	3.68	2.84	FX11LB-140P-SV
Receptacles with Ground Plate, with Guideposts									
1	60	6	25	17.5	H2525-ND	4.48	3.59	2.78	FX11LA-60S/6-SV
	80	8	31	23.5	H2526-ND	4.95	3.96	3.06	FX11LA-80S/8-SV
	100	10	37	29.5	H2527-ND	5.45	4.36	3.37	FX11LA-100S/10-SV
	120	12	43	35.5	H2528-ND	5.94	4.76	3.68	FX11LA-120S/12-SV
Receptacles with Ground Plate, w/out Guideposts									
1	60	6	25	17.5	H2529-ND	4.48	3.59	2.78	FX11LB-60S/6-SV
	80	8	31	23.5	H2530-ND	4.95	3.96	3.06	FX11LB-80S/8-SV
	100	10	37	29.5	H2531-ND	5.45	4.36	3.37	FX11LB-100S/10-SV
	120	12	43	35.5	H2532-ND	5.94	4.76	3.68	FX11LB-120S/12-SV
Receptacles w/out Ground Plate, with Guideposts									
1	68	–	25	16.5	H2541-ND	4.07	3.26	2.52	FX11LA-68S-SV
	92	–	31	22.5	H2542-ND	4.51	3.61	2.79	FX11LA-92S-SV
	116	–	37	28.5	H2543-ND	5.01	4.01	3.10	FX11LA-116S-SV
	140	–	43	34.5	H2544-ND	5.47	4.38	3.39	FX11LA-140S-SV
Receptacles w/out Ground Plate, w/out Guideposts									
1	68	–	25	16.5	H2545-ND	4.07	3.26	2.52	FX11LB-68S-SV
	92	–	31	22.5	H2546-ND	4.51	3.61	2.79	FX11LB-92S-SV
	116	–	37	28.5	H2547-ND	5.01	4.01	3.10	FX11LB-116S-SV
	140	–	43	34.5	H2548-ND	5.47	4.38	3.39	FX11LB-140S-SV

FX6 Series - Surface Mount 0.5mm Conn. w/Ground Plate for Board-to-Board Connectors

Fig. 1

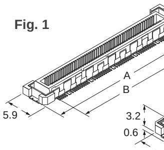
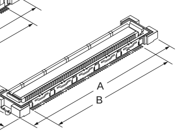


Fig. 2



Features: Transmission characteristics have been improved through a design that fixes ground plates to both sides of the header and receptacle.
Signal and ground are arranged in a ratio of 10:1 with the ground plate SMT connected to the board. The ground stability achieved serves to reduce noise. Suited to high-density applications. The single contact pitch of 0.5mm produces a smaller connector utilizing less board area for mounting. Board-to-Board dimensions of 4mm and 5mm are available.
Materials: • **Insulator:** LCP resin, Beige, UL94V-0 • **Contacts:** Phosphor bronze • **Header Engagement Area:** Gold plating of 0.1µm • **Termination Area:** Solder plating • **Receptacle Engagement Area:** Gold plating of 0.1m • **Termination Area:** Flash plating Ground plate: Phosphor bronze, solder plating • **Reinforced fitting:** Phosphor bronze, Tin plating
Electrical: • **Rated current:** 0.3A • **Operating temp.:** range -55 to 85°C • **Rated voltage:** 50 V AC • **Operating humidity range:** Relative humidity 95% or less (No condensation)
Note: The thickness of the solder paste is not included in the stack height.

Fig.	No. of Contacts		Dim. (mm)		Digi-Key Part No.	Price Each			Hirose Part No.	Digi-Key Part No.	T&R Pricing 1,000	Hirose Part No.
	Signal	Ground	A	B		1	25	100				
Headers 4mm Mounting Height with Guidepost												
1	80	8	31.1	23.5	H2476-ND	5.94	4.76	3.68	FX10A- 80P/8-SV	H2476TR-ND	2288.00	FX10A- 80P/8-SV(21)
	100	10	37.1	29.5	H2477-ND	6.57	5.26	4.07	FX10A-100P/10-SV	H2477TR-ND	2535.00	FX10A-100P/10-SV(21)
	120	12	43.1	35.5	H2478-ND	4.43	3.55	2.74	FX10A-120P/12-SV	H2478TR-ND	2769.00	FX10A-120P/12-SV(21)
	140	14	49.1	41.5	H2479-ND	7.13	5.99	4.71	FX10A-140P/14-SV	H2479TR-ND	3042.00	FX10A-140P/14-SV(21)
Headers 4mm Mounting Height w/out Guidepost												
1	80	8	31.1	23.5	H2480-ND	5.94	4.76	3.68	FX10B- 80P/8-SV	H2480TR-ND	2288.00	FX10B- 80P/8-SV(21)
	100	10	37.1	29.5	H2481-ND	6.57	5.26	4.07	FX10B-100P/10-SV	H2481TR-ND	2535.00	FX10B-100P/10-SV(21)
	120	12	43.1	35.5	H2482-ND	6.53	5.49	4.31	FX10B-120P/12-SV	H2482TR-ND	2769.00	FX10B-120P/12-SV(21)
	140	14	49.1	41.5	H2483-ND	7.13	5.99	4.71	FX10B-140P/14-SV	H2483TR-ND	3029.00	FX10B-140P/14-SV(21)
Headers 5mm Mounting Height with Guidepost												
1	80	8	31.1	23.5	H2484-ND	5.94	4.76	3.68	FX10A- 80P/8-SV1	H2484TR-ND	2288.00	FX10A- 80P/8-SV1(21)
	100	10	37.1	29.5	H2485-ND	6.57	5.26	4.07	FX10A-100P/10-SV1	H2485TR-ND	2535.00	FX10A-100P/10-SV1(21)
	120	12	43.1	35.5	H2486-ND	6.53	5.49	4.31	FX10A-120P/12-SV1	H2486TR-ND	2769.00	FX10A-120P/12-SV1(21)
	140	14	49.1	41.5	H2487-ND	7.13	5.99	4.71	FX10A-140P/14-SV1	H2487TR-ND	3042.00	FX10A-140P/14-SV1(21)
Headers 5mm Mounting Height w/out Guidepost												
1	80	8	31.1	23.5	H2488-ND	5.94	4.76	3.68	FX10B- 80P/8-SV1	H2488TR-ND	2288.00	FX10B- 80P/8-SV1(21)
	100	10	37.1	29.5	H2489-ND	6.57	5.26	4.07	FX10B-100P/10-SV1	H2489TR-ND	2535.00	FX10B-100P/10-SV1(21)
	120	12	43.1	35.5	H2490-ND	6.53	5.49	4.31	FX10B-120P/12-SV1	H2490TR-ND	2769.00	FX10B-120P/12-SV1(21)
	140	14	49.1	41.5	H2491-ND	7.13	5.99	4.71	FX10B-140P/14-SV1	H2491TR-ND	3042.00	FX10B-140P/14-SV1(21)
Receptacles with Guidepost												
2	80	8	31.1	23.5	H2468-ND	5.97	4.78	3.69	FX10A-80S/8-SV	H2468TR-ND	2314.00	FX10A-80S/8-SV(21)
	100	10	37.1	29.5	H2469-ND	6.68	5.35	4.14	FX10A-100S/10-SV	H2469TR-ND	2574.00	FX10A-100S/10-SV(21)
	120	12	43.1	35.5	H2470-ND	6.80	5.72	4.49	FX10A-120S/12-SV	H2470TR-ND	2873.00	FX10A-120S/12-SV(21)
	140	14	49.1	41.5	H2471-ND	7.48	6.28	4.94	FX10A-140S/14-SV	H2471TR-ND	3172.00	FX10A-140S/14-SV(21)
Receptacles w/out Guidepost												
2	80	8	31.1	23.5	H2472-ND	5.97	4.78	3.69	FX10B- 80S/8-SV	H2472TR-ND	2314.00	FX10B- 80S/8-SV(21)
	100	10	37.1	29.5	H2473-ND	6.68	5.35	4.14	FX10B-100S/10-SV	H2473TR-ND	2574.00	FX10B-100S/10-SV(21)
	120	12	43.1	35.5	H2474-ND	6.71	5.37	4.15	FX10B-120S/12-SV	H2474TR-ND	2873.00	FX10B-120S/12-SV(21)
	140	14	49.1	41.5	H2475-ND	7.48	6.28	4.94	FX10B-140S/14-SV	H2475TR-ND	3172.00	FX10B-140S/14-SV(21)

DF12 and DF17 Surface Mount Connectors

DF12 Series - 0.5mm Pitch

Features: • Connectors furnished with reinforcement fittings to prevent peeling of the solder joints (due to mechanical stress) are also available and these can be mounted to FPC with confidence • A specification with convenient guide posts for manual work is available as well as one without guide posts for automatic mounting.

Specifications: • Current Capacity: 0.3A/pin • Rated Voltage: 50V AC/pin • Insulation Resistance: 100V DC, 500 MΩ min. • Withstand Voltage: 1 min. at rated value, 150V AC • Contact Resistance: 100 mA DC, 50 mΩ max.

Material (receptacle/header): • Insulation: Heat-resistant resin, beige (natural), UL94V-0 • Contacts: Copper alloy with gold plating • Fittings: Copper alloy with solder plating.

Fig. 1

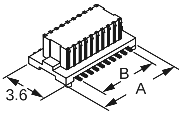


Fig. 2

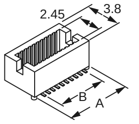


Fig. 3

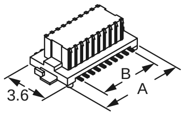


Fig. 4

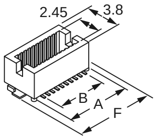


Fig.	No. of Contacts	Description	Dim. (mm) A	B	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
Receptacles									
3mm Stacking Height									
1	32	With Guide Posts	10.1	7.5	H2735-ND	1.75	1.27	1.04	DF12A(3.0)-32DS-0.5V(80)
	50		14.6	12.0	H2736-ND	2.15	1.65	1.32	DF12A(3.0)-50DS-0.5V(80)
	60		17.1	14.5	H2737-ND	2.34	1.80	1.44	DF12A(3.0)-60DS-0.5V(80)
3.5 To 5.0mm Stacking Height									
1	20	With Guide Posts	7.1	4.5	H2740-ND	1.56	1.13	.93	DF12A-20DS-0.5V(80)
	30		9.6	7.0	H2741-ND	1.66	1.28	1.02	DF12A-30DS-0.5V(80)
	36		11.1	8.5	H2742-ND	1.82	1.40	1.12	DF12A-36DS-0.5V(80)
	40		12.1	9.5	H2743-ND	1.95	1.50	1.20	DF12A-40DS-0.5V(80)
	50		14.6	12.0	H2744-ND	2.21	1.70	1.36	DF12A-50DS-0.5V(80)
3	20	With Guide Posts & Reinforced Fittings	8.0	4.5	H2745-ND	1.67	1.21	.99	DF12-20DS-0.5V(80)
	30		10.5	7.0	H2746-ND	1.69	1.30	1.04	DF12-30DS-0.5V(80)
	36		12.0	8.5	H2747-ND	1.85	1.43	1.14	DF12-36DS-0.5V(80)
	40		13.0	9.5	H2748-ND	1.95	1.50	1.20	DF12-40DS-0.5V(80)
	50		15.5	12.0	H2749-ND	2.28	1.75	1.40	DF12-50DS-0.5V(80)
Headers									
3mm Stacking Height									
2	32	With Guide Posts	10.2	7.5	H2750-ND	1.69	1.30	1.04	DF12D(3.0)-32DP-0.5V(80)
	50		14.7	12.0	H2751-ND	2.18	1.68	1.34	DF12D(3.0)-50DP-0.5V(80)
	60		17.2	14.5	H2752-ND	2.41	1.85	1.48	DF12D(3.0)-60DP-0.5V(80)
4	32	With Guide Posts & Reinforced Fittings	11.0	7.5	H2753-ND	1.82	1.32	1.08	DF12(3.0)-32DP-0.5V(80)
	50		15.5	12.0	H2754-ND	2.18	1.68	1.34	DF12(3.0)-50DP-0.5V(80)
	60		18.0	14.5	H2755-ND	2.41	1.85	1.48	DF12(3.0)-60DP-0.5V(80)
3.5mm Stacking Height									
2	20	With Guide Posts	7.2	4.5	H2756-ND	1.33	.97	.79	DF12D(3.5)-20DP-0.5V(80)
	36		11.2	8.5	H2757-ND	1.72	1.33	1.06	DF12D(3.5)-36DP-0.5V(80)
	40		12.2	9.5	H2758-ND	1.85	1.43	1.14	DF12D(3.5)-40DP-0.5V(80)
	50		14.7	12.0	H2759-ND	2.18	1.68	1.34	DF12D(3.5)-50DP-0.5V(80)
4	20	With Guide Posts & Reinforced Fittings	8.0	4.5	H2760-ND	1.41	1.02	.84	DF12(3.5)-20DP-0.5V(80)
	36		12.0	8.5	H2761-ND	1.79	1.38	1.10	DF12(3.5)-36DP-0.5V(80)
	40		13.0	9.5	H2762-ND	1.92	1.48	1.18	DF12(3.5)-40DP-0.5V(80)
	50		15.5	12.0	H2763-ND	2.18	1.68	1.34	DF12(3.5)-50DP-0.5V(80)
4.0mm Stacking Height									
2	30	With Guide Posts	9.7	7.0	H2764-ND	1.82	1.32	1.08	DF12D(4.0)-30DP-0.5V(80)
	36		11.2	8.5	H2765-ND	1.72	1.33	1.06	DF12D(4.0)-36DP-0.5V(80)
	40		12.2	9.5	H2766-ND	1.85	1.43	1.14	DF12D(4.0)-40DP-0.5V(80)
	50		14.7	12.0	H2767-ND	2.18	1.68	1.34	DF12D(4.0)-50DP-0.5V(80)
4	30	With Guide Posts & Reinforced Fittings	10.5	7.0	H2768-ND	1.86	1.35	1.11	DF12(4.0)-30DP-0.5V(80)
	36		12.0	8.5	H2769-ND	1.79	1.38	1.10	DF12(4.0)-36DP-0.5V(80)
	40		13.0	9.5	H2770-ND	1.92	1.48	1.18	DF12(4.0)-40DP-0.5V(80)
	50		15.5	12.0	H2771-ND	2.18	1.68	1.34	DF12(4.0)-50DP-0.5V(80)
5.0mm Stacking Height									
2	20	With Guide Posts	7.2	4.5	H2772-ND	1.56	1.13	.93	DF12D(5.0)-20DP-0.5V(80)
	50		14.7	12.0	H2773-ND	2.44	1.88	1.50	DF12D(5.0)-50DP-0.5V(80)
4	20	With Guide Posts & Reinforced Fittings	8.0	4.5	H2774-ND	1.33	.97	.79	DF12(5.0)-20DP-0.5V
	50		15.5	12.0	H2775-ND	2.47	1.90	1.52	DF12(5.0)-50DP-0.5V

DF17 Series - 0.5mm Pitch

Features: • Developed for portable electronic and mobile telecommunications equipment • Designed specifically for mobile electronic devices, these connectors withstand the shock and resist breakage and disconnection that can occur when subjected to drop impact.

Applications: Suited to a wide variety of mobile applications such as LCD-related equipment, miniature portable remote terminals, as well as portable telephones.

Specifications: • Rated Current: 0.3A • Rated Voltage: AC50 • Temperature Range: -35°C to +85°C • Storage Temperature: -10°C to +60°C • Humidity Range: 40-80% • Storage Humidity: 40-70% • Insulation Resistance: 500MΩ or more • Contact Resistance: 50mΩ or less • Vibration Resistance: No instantaneous electric disconnection of 1 µS or more • Humidity Resistance: Contact; 50mΩ or less, Insulation; 250MΩ or more • Temp. Cycle: Contact Resistance; 50mΩ or less, Insulation Resistance; 500MΩ or more • Duration Against Plugging/Unplugging: Contact resistance 50mΩ or less • Heat Resistance of Soldering: No fusion of resin section affecting performance.

Material (receptacle/header): • Insulator: Nylon resin, white, UL94V-0 • Contacts: Phosphor bronze, gold plating • Metal Fittings: Copper Alloy, solder plating.

Fig. 1

Shown with reinforced fittings

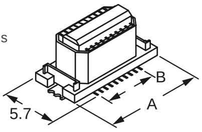


Fig. 2

Shown with reinforced fittings

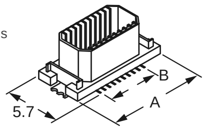


Fig.	No. of Contacts	Description	Dim. (mm) A	B	Digi-Key Part No.	Cut Tape Price Each 1	25	100	Tape & Reel* Pricing 1,000	Hirose Part No.
Receptacles										
3mm Stacking Height										
1	20	With Guide Posts & W/out Reinforced Fittings	8.2	4.5	H2354CT-ND	1.67	1.21	.99	585.00	DF17A(3.0)-20DS-0.5V(51)
	30		10.7	7.0	H2355CT-ND	1.79	1.38	1.10	732.00	DF17A(3.0)-30DS-0.5V(51)
	40		13.2	9.5	H2356CT-ND	2.11	1.63	1.30	865.00	DF17A(3.0)-40DS-0.5V(51)
	50		15.7	12.0	H2357CT-ND	2.44	1.88	1.50	998.00	DF17A(3.0)-50DS-0.5V(51)
	60		18.2	14.5	H2358CT-ND	2.80	2.15	1.72	1144.00	DF17A(3.0)-60DS-0.5V(51)
	70		20.7	17.0	H2359CT-ND	3.15	2.43	1.94	1290.00	DF17A(3.0)-70DS-0.5V(51)
	80		23.2	19.5	H2360CT-ND	3.10	2.41	1.93	1391.00	DF17A(3.0)-80DS-0.5V(51)
4mm Stacking Height										
1	20	With Guide Posts & W/out Reinforced Fittings	8.2	4.5	H2361CT-ND	1.63	1.19	.97	572.00	DF17A(4.0)-20DS-0.5V(51)
	30		10.7	7.0	H2362CT-ND	1.69	1.30	1.04	692.00	DF17A(4.0)-30DS-0.5V(51)
	40		13.2	9.5	H2363CT-ND	2.02	1.55	1.24	825.00	DF17A(4.0)-40DS-0.5V(51)
	50		15.7	12.0	H2364CT-ND	1.63	1.19	.97	572.00	DF17A(4.0)-50DS-0.5V(51)
	60		18.2	14.5	H2365CT-ND	1.69	1.30	1.04	692.00	DF17A(4.0)-60DS-0.5V(51)
	80		23.2	19.5	H2366CT-ND	2.90	2.25	1.80	1300.00	DF17A(4.0)-80DS-0.5V(51)
3mm Stacking Height										
1	20	With Guide Posts & With Reinforced Fittings	10.0	4.5	H2367CT-ND	1.75	1.27	1.04	612.00	DF17(3.0)-20DS-0.5V(51)
	30		12.5	7.0	H2368CT-ND	1.82	1.40	1.12	745.00	DF17(3.0)-30DS-0.5V(51)
	40		15.0	9.5	H2369CT-ND	2.15	1.65	1.32	878.00	DF17(3.0)-40DS-0.5V(51)
	50		17.5	12.0	H2370CT-ND	2.50	1.93	1.54	1024.00	DF17(3.0)-50DS-0.5V(51)
	60		20.0	14.5	H2371CT-ND	2.83	2.18	1.74	1157.00	DF17(3.0)-60DS-0.5V(51)
	70		22.5	17.0	H2372CT-ND	3.19	2.45	1.96	1303.00	DF17(3.0)-70DS-0.5V(51)
	80		25.0	19.5	H2373CT-ND	3.13	2.43	1.95	1404.00	DF17(3.0)-80DS-0.5V(51)
4mm Stacking Height										
1	20	With Guide Posts & With Reinforced Fittings	10.0	4.5	H2374CT-ND	1.67	1.21	.99	585.00	DF17(4.0)-20DS-0.5V(51)
	30		12.5	7.0	H2375CT-ND	1.76	1.35	1.08	718.00	DF17(4.0)-30DS-0.5V(51)
	40		15.0	9.5	H2376CT-ND	2.05	1.58	1.26	838.00	DF17(4.0)-40DS-0.5V(51)
	50		17.5	12.0	H2377CT-ND	2.34	1.80	1.44	958.00	DF17(4.0)-50DS-0.5V(51)
	60		20.0	14.5	H2378CT-ND	2.67	2.05	1.64	1091.00	DF17(4.0)-60DS-0.5V(51)
	80		25.0	19.5	H2379CT-ND	2.93	2.28	1.82	1313.00	DF17(4.0)-80DS-0.5V(51)
Headers										
2mm Stacking Height										
2	20	With Guide Posts & W/out Reinforced Fittings	8.2	4.5	H2380CT-ND	1.79	1.30	1.06	625.00	DF17A(2.0)-20DP-0.5V(51)
	30		10.7	7.0	H2381CT-ND	1.89	1.45	1.16	771.00	DF17A(2.0)-30DP-0.5V(51)
	40		13.2	9.5	H2382CT-ND	2.24	1.73	1.38	918.00	DF17A(2.0)-40DP-0.5V(51)
	50		15.7	12.0	H2383CT-ND	2.60	2.00	1.60	1064.00	DF17A(2.0)-50DP-0.5V(51)
	60		18.2	14.5	H2384CT-ND	2.96	2.28	1.82	1210.00	DF17A(2.0)-60DP-0.5V(51)
	70		20.7	17.0	H2385CT-ND	2.99	2.32	1.86	1339.00	DF17A(2.0)-70DP-0.5V(51)
	80		23.2	19.5	H2386CT-ND	3.31	2.57	2.06	1482.00	DF17A(2.0)-80DP-0.5V(51)
4mm Stacking Height										
2	20	With Guide Posts & W/out Reinforced Fittings	8.2	4.5	H2387CT-ND	1.86	1.35	1.11	652.00	DF17A(4.0)-20DP-0.5V(51)
	30		10.7	7.0	H2388CT-ND	1.95	1.50	1.20	798.00	DF17A(4.0)-30DP-0.5V(51)
	40		13.2	9.5	H2389CT-ND	2.34	1.80	1.44	958.00	DF17A(4.0)-40DP-0.5V(51)
	50		15.7	12.0	H2390CT-ND	2.86	2.20	1.76	1170.00	DF17A(4.0)-50DP-0.5V(51)
	60		18.2	14.5	H2391CT-ND	3.09	2.38	1.90	1264.00	DF17A(4.0)-60DP-0.5V(51)
	70		20.7	17.0	H2392CT-ND	3.13	2.43	1.95	1404.00	DF17A(4.0)-70DP-0.5V(51)
	80		23.2	19.5	H2393CT-ND	3.45	2.68	2.15	1547.00	DF17A(4.0)-80DP-0.5V(51)
2mm Stacking Height										
2	20	With Guide Posts & With Reinforced Fittings	10.0	4.5	H2394CT-ND	1.86	1.35	1.11	652.00	DF17(2.0)-20DP-0.5V(51)
	30		12.5	7.0	H2395CT-ND	1.95	1.50	1.20	798.00	DF17(2.0)-30DP-0.5V(51)
	40		15.0	9.5	H2396CT-ND	2.31	1.78	1.42	944.00	DF17(2.0)-40DP-0.5V(51)
	50		17.5	12.0	H2397CT-ND	2.67	2.05	1.64	1091.00	DF17(2.0)-50DP-0.5V(51)
	60		20.0	14.5	H2398CT-ND	3.02	2.33	1.86	1237.00	DF17(2.0)-60DP-0.5V(51)
	70		22.5	17.0	H2399CT-ND	3.02	2.34	1.88	1352.00	DF17(2.0)-70DP-0.5V(51)
	80		25.0	19.5	H2400CT-ND	3.34	2.59	2.07	1495.00	DF17(2.0)-80DP-0.5V(51)
4mm Stacking Height										
2	20	With Guide Posts & With Reinforced Fittings	10.0	4.5	H2401CT-ND	1.63	1.25	1.00	665.00	DF17(4.0)-20DP-0.5V(51)
	30		12.5	7.0	H2402CT-ND	2.02	1.55	1.24	825.00	DF17(4.0)-30DP-0.5V(51)
	40		15.0	9.5	H2403CT-ND	2.37	1.83	1.46	971.00	DF17(4.0)-40DP-0.5V(51)
	50		17.5	12.0	H2404CT-ND	2.93	2.25	1.80	1197.00	DF17(4.0)-50DP-0.5V(51)
	60		20.0	14.5	H2405CT-ND	3.12	2.40	1.92	1277.00	DF17(4.0)-60DP-0.5V(51)
	70		22.5	17.0	H2406CT-ND	3.16	2.46	1.97	1417.00	DF17(4.0)-70DP-0.5V(51)
	80		25.0	19.5	H2407CT-ND	3.51	2.73	2.18	1573.00	DF17(4.0)-80DP-0.5V(51)

* For Tape and Reel Part No., change “CT-ND” to “TR-ND”.

HIROSE ELECTRIC CO.,LTD.

DF4 and MDF7 Series Connectors

DF4 Series - 2mm Pitch Board-in Connector

Features: • Extractable socket and board-in connector provided with the dual-sided harness eliminate one of the two headers required for a dual-sided socket harness, with the board separating function remaining unchanged • Compact and multicontact • Temporary board fixing structure

Applications: • Notebook computers, compact OA equipment

Specifications: • Rated Current: Crimping - 24AWG: 3A, 26AWG: 2A, 28AWG: 1A. ID Termination - wire size 26/28AWG:1A • Operating Temperature: -30°C to 85°C • Rated Voltage: Crimping - AC250V ID termination - AC100V

Material: • Crimp Plug: Insulation, polyamide resin, black, UL94V-0 • Crimp Terminal for Plug: Terminal, brass, tin-plated • ID Termination Plug: • Insulation: Polyamide resin, black, UL94V-0 • Terminal: Phosphor bronze, tin-plated

Fig. 1

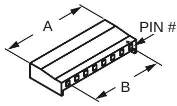


Fig. 2

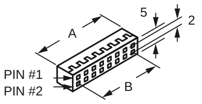


Fig.	No. of Contacts	Dimension (mm) A	B	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
Single-Row Crimp Plug								
1	2	4.5	2.0	H2582-ND	.30	.13	.10	DF4- 2P-2C
	3	6.5	4.0	H2583-ND	.31	.14	.10	DF4- 3P-2C
	4	8.5	6.0	H2584-ND	.32	.14	.10	DF4- 4P-2C
	5	10.5	8.0	H2585-ND	.33	.15	.11	DF4- 5P-2C
	6	12.5	10.0	H2586-ND	.34	.15	.11	DF4- 6P-2C
	7	14.5	12.0	H2587-ND	.35	.16	.11	DF4- 7P-2C
	8	16.5	14.0	H2588-ND	.28	.14	.11	DF4- 8P-2C
	9	18.5	16.0	H2589-ND	.29	.14	.11	DF4- 9P-2C
	10	20.5	18.0	H2590-ND	.30	.15	.11	DF4-10P-2C
	11	22.5	20.0	H2591-ND	.31	.15	.11	DF4-11P-2C
	12	24.5	22.0	H2592-ND	.31	.15	.12	DF4-12P-2C
	13	26.5	24.0	H2593-ND	.32	.16	.12	DF4-13P-2C
	14	28.5	26.0	H2594-ND	.33	.16	.12	DF4-14P-2C
	15	30.0	28.0	H2595-ND	.34	.17	.13	DF4-15P-2C
Double-Row Crimp Plug								
2	4	4.8	2.0	H2596-ND	.44	.22	.16	DF4- 4DP-2C
	6	6.8	4.0	H2597-ND	.45	.22	.17	DF4- 6DP-2C
	8	8.8	6.0	H2598-ND	.46	.23	.17	DF4- 8DP-2C
	10	10.8	8.0	H2599-ND	.47	.23	.17	DF4-10DP-2C
	12	12.8	10.0	H2600-ND	.48	.24	.18	DF4-12DP-2C
	14	14.8	12.0	H2601-ND	.53	.26	.19	DF4-14DP-2C
	16	16.8	14.0	H2602-ND	.54	.26	.20	DF4-16DP-2C
	18	18.8	16.0	H2603-ND	.55	.27	.20	DF4-18DP-2C
	20	20.8	18.0	H2604-ND	.44	.27	.21	DF4-20DP-2C
	22	22.8	20.0	H2605-ND	.45	.27	.22	DF4-22DP-2C
	24	24.8	22.0	H2606-ND	.46	.28	.22	DF4-24DP-2C
	26	26.8	24.0	H2607-ND	.46	.28	.22	DF4-26DP-2C
	28	28.8	26.0	H2608-ND	.50	.30	.24	DF4-28DP-2C
	30	30.8	28.0	H2609-ND	.52	.32	.25	DF4-30DP-2C
	32	32.8	30.0	H2610-ND	.53	.32	.25	DF4-32DP-2C

Crimp Terminal

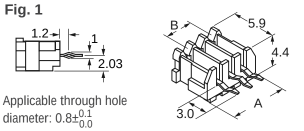
Description	Digi-Key Part No.	*Loose Piece* Pricing 100	Hirose Part No.	*Cut Tape** Pricing 10	25	100	*Tape & Reel* † Pricing 10,000	Hirose Part No.
24-28 AWG Tin Pltg.	H2612-ND	4.22	DF4-2428PC	.68	1.21	3.00	12.36/M	DF4-2428PCF
Tool								
Manual Crimper for Loose Contacts	H9993-ND				935.40 each			DF4-TA2428HC

* For Cut Tape, add “CT” to the Digi-Key Part No. (H2612CT-ND)

† For Tape & Reel, add “TR” to the Digi-Key Part No. (H2612TR-ND)

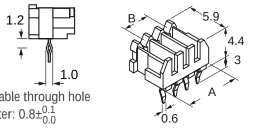
Termination Plugs

Fig. 1



Applicable through hole diameter: 0.8±$^{0.1}_{0.0}$

Fig. 2



Applicable through hole diameter: 0.8±$^{0.1}_{0.0}$

Fig.	No. of Contacts	Dimension (mm) A	B	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
Straight ID								
26 AWG								
1	2	6.0	2.0	H2613-ND	.52	.26	.19	DF4- 2P-2R26
	3	8.0	4.0	H2614-ND	.45	.28	.22	DF4- 3P-2R26
	4	10.0	6.0	H2615-ND	.53	.33	.26	DF4- 4P-2R26
	5	12.0	8.0	H2616-ND	.66	.40	.32	DF4- 5P-2R26
	6	14.0	10.0	H2617-ND	.57	.42	.34	DF4- 6P-2R26
	7	16.0	12.0	H2618-ND	.63	.46	.38	DF4- 7P-2R26
	8	18.0	14.0	H2619-ND	.69	.51	.41	DF4- 8P-2R26
	9	20.0	16.0	H2620-ND	.75	.55	.45	DF4- 9P-2R26
	10	22.0	18.0	H2621-ND	.81	.59	.49	DF4-10P-2R26
	11	24.0	20.0	H2622-ND	.96	.70	.58	DF4-11P-2R26
	12	26.0	22.0	H2623-ND	1.02	.75	.61	DF4-12P-2R26
	13	28.0	24.0	H2624-ND	1.09	.79	.65	DF4-13P-2R26
	14	30.0	26.0	H2625-ND	1.15	.84	.69	DF4-14P-2R26
	15	32.0	28.0	H2626-ND	1.21	.88	.72	DF4-15P-2R26
28 AWG								
1	2	6.0	2.0	H2627-ND	.52	.26	.19	DF4- 2P-2R28
	3	8.0	4.0	H2628-ND	.45	.28	.22	DF4- 3P-2R28
	4	10.0	6.0	H2629-ND	.53	.33	.26	DF4- 4P-2R28
	5	12.0	8.0	H2630-ND	.66	.40	.32	DF4- 5P-2R28
	6	14.0	10.0	H2631-ND	.57	.42	.34	DF4- 6P-2R28
	7	16.0	12.0	H2632-ND	.63	.46	.38	DF4- 7P-2R28
	8	18.0	14.0	H2633-ND	.69	.51	.41	DF4- 8P-2R28
	9	20.0	16.0	H2634-ND	.75	.55	.45	DF4- 9P-2R28
	10	22.0	18.0	H2635-ND	.81	.59	.49	DF4-10P-2R28
28 AWG (cont.)								
1	11	24.0	20.0	H2636-ND	.96	.70	.58	DF4-11P-2R28
	12	26.0	22.0	H2637-ND	1.02	.75	.61	DF4-12P-2R28
	13	28.0	24.0	H2638-ND	1.09	.79	.65	DF4-13P-2R28
	14	30.0	26.0	H2639-ND	1.15	.84	.69	DF4-14P-2R28
	15	32.0	28.0	H2640-ND	1.21	.88	.72	DF4-15P-2R28
Right-Angle ID								
26 AWG								
2	2	6.0	2.0	H2641-ND	.55	.27	.20	DF4- 2PA-2R26
	3	8.0	4.0	H2642-ND	.44	.27	.21	DF4- 3PA-2R26
	4	10.0	6.0	H2643-ND	.52	.32	.25	DF4- 4PA-2R26
	5	12.0	8.0	H2644-ND	.51	.31	.25	DF4- 5PA-2R26
	6	14.0	10.0	H2645-ND	.73	.45	.35	DF4- 6PA-2R26
	7	16.0	12.0	H2646-ND	.61	.45	.37	DF4- 7PA-2R26
	8	18.0	14.0	H2647-ND	.67	.49	.40	DF4- 8PA-2R26
	9	20.0	16.0	H2648-ND	.73	.53	.43	DF4- 9PA-2R26
	10	22.0	18.0	H2649-ND	.79	.58	.47	DF4-10PA-2R26
	11	24.0	20.0	H2650-ND	.94	.68	.56	DF4-11PA-2R26
	12	26.0	22.0	H2651-ND	1.00	.73	.59	DF4-12PA-2R26
	13	28.0	24.0	H2652-ND	1.05	.77	.63	DF4-13PA-2R26
	14	30.0	26.0	H2653-ND	1.11	.81	.66	DF4-14PA-2R26
	15	32.0	28.0	H2654-ND	1.16	.85	.69	DF4-15PA-2R26
28 AWG								
2	2	6.0	2.0	H2655-ND	.51	.25	.19	DF4- 2PA-2R28
	3	8.0	4.0	H2656-ND	.44	.27	.21	DF4- 3PA-2R28
	4	10.0	6.0	H2657-ND	.52	.32	.25	DF4- 4PA-2R28
	5	12.0	8.0	H2658-ND	.65	.39	.31	DF4- 5PA-2R28
	6	14.0	10.0	H2659-ND	.73	.45	.35	DF4- 6PA-2R28
	7	16.0	12.0	H2660-ND	.61	.45	.37	DF4- 7PA-2R28
	8	18.0	14.0	H2661-ND	.67	.49	.40	DF4- 8PA-2R28
	9	20.0	16.0	H2662-ND	.73	.53	.43	DF4- 9PA-2R28
	10	22.0	18.0	H2663-ND	.82	.60	.49	DF4-10PA-2R28
	11	24.0	20.0	H2664-ND	.94	.68	.56	DF4-11PA-2R28
	12	26.0	22.0	H2665-ND	1.00	.73	.59	DF4-12PA-2R28
	13	28.0	24.0	H2666-ND	1.05	.77	.63	DF4-13PA-2R28
	14	30.0	26.0	H2667-ND	1.03	.75	.61	DF4-14PA-2R28
	15	32.0	28.0	H2668-ND	1.16	.85	.69	DF4-15PA-2R28

MDF7 Series - 2.54mm Pitch Bottom Entry Connector

Features: • Board-to-board distance can be freely set. Pass-through construction header pins and many header variations allow you set the board-to-board steplessly • Arrangement of components sides. Components sides of two boards can be arranged on the same side, without facing each other.

Applications: Telephones, internal connections of OA/FA equipment, connection of IPM and IGBT to boards.

Specifications: • Rated Current: 3A • Rated Voltage: AC250V • Operating Temperature: -35°C to 85°C • Insulation Resistance: 1,000MΩ or more • Contact Resistance: 30 mΩ or less • Insertion and withdrawals force: MIN 0.4N (40gf), MAX 4.4N (450gf)

Materials: • Receptacle: Insulation; Polyamide resin, black, UL94V-0 and Terminal; Phosphor bronze, gold-plated • Pin Header: Insulation; PBT resin, Main body - Black / Locator: Grey, UL94V-0 and Terminal; Brass with gold-plated

Fig. 1

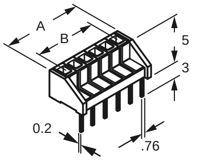


Fig. 2

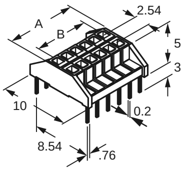


Fig.	No. of Contacts	Dimension (mm) A	B	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
Receptacle - Straight Dip								
Single Row								
1	3	7.62	5.08	H2549-ND	.95	.69	.57	MDF7- 3S-2.54DSA
	5	12.70	10.16	H2550-ND	1.11	.81	.66	MDF7- 5S-2.54DSA
	6	15.24	12.70	H2551-ND	1.17	.85	.70	MDF7- 6S-2.54DSA
	7	17.78	15.24	H2552-ND	1.24	.90	.74	MDF7- 7S-2.54DSA
	8	20.32	17.78	H2553-ND	1.31	.95	.78	MDF7- 8S-2.54DSA
	9	22.86	20.32	H2554-ND	1.38	1.00	.82	MDF7- 9S-2.54DSA
	10	25.40	22.86	H2555-ND	1.55	1.13	.92	MDF7-10S-2.54DSA
	11	27.94	25.40	H2556-ND	1.62	1.17	.96	MDF7-11S-2.54DSA
	12	30.48	27.94	H2557-ND	1.68	1.22	1.00	MDF7-12S-2.54DSA
	13	33.02	30.48	H2558-ND	1.70	1.23	1.01	MDF7-13S-2.54DSA
	14	35.56	33.02	H2559-ND	1.72	1.25	1.02	MDF7-14S-2.54DSA
	15	38.10	35.56	H2560-ND	1.77	1.29	1.05	MDF7-15S-2.54DSA
	16	40.64	38.10	H2561-ND	1.86	1.35	1.10	MDF7-16S-2.54DSA
	17	43.18	40.64	H2562-ND	1.65	1.27	1.02	MDF7-17S-2.54DSA
	18	45.72	43.18	H2563-ND	1.77	1.36	1.09	MDF7-18S-2.54DSA
	19	48.26	45.72	H2564-ND	1.79	1.38	1.11	MDF7-19S-2.54DSA
	20	50.80	48.26	H2565-ND	1.82	1.40	1.12	MDF7-20S-2.54DSA
	21	53.34	50.80	H2566-ND	1.93	1.49	1.19	MDF7-21S-2.54DSA
	22	55.88	53.34	H2567-ND	1.98	1.53	1.23	MDF7-22S-2.54DSA
	23	58.42	55.88	H2568-ND	2.04	1.58	1.26	MDF7-23S-2.54DSA
	24	60.96	58.42	H2569-ND	2.10	1.62	1.30	MDF7-24S-2.54DSA
	25	63.50	60.96	H2570-ND	2.27	1.75	1.40	MDF7-25S-2.54DSA
Double Row								
2	12	15.24	12.70	H2571-ND	2.80	2.16	1.73	MDF7-12D-2.54DSA
	14	17.78	15.24	H2572-ND	3.17	2.45	1.96	MDF7-14D-2.54DSA
	16	20.32	17.78	H2573-ND	2.88	2.31	1.79	MDF7-16D-2.54DSA
	20	25.40	22.86	H2574-ND	3.30	2.65	2.05	MDF7-20D-2.54DSA
	22	27.94	25.40	H2575-ND	3.39	2.72	2.10	MDF7-22D-2.54DSA
	26	33.02	30.48	H2577-ND	3.88	3.11	2.40	MDF7-26D-2.54DSA
	30	38.10	35.56	H2578-ND	4.42	3.54	2.74	MDF7-30D-2.54DSA
	34	43.18	40.64	H2579-ND	5.06	4.05	3.13	MDF7-34D-2.54DSA
	40	50.80	48.26	H2580-ND	5.83	4.67	3.61	MDF7-40D-2.54DSA
	46	58.42	55.88	H2581-ND	6.65	5.32	4.11	MDF7-46D-2.54DSA

HIROSE ELECTRIC CO.,LTD.

DF7 and DF22 Series Connectors

DF7 Series - 3.96mm Pitch Miniature Connectors for Secondary Power Supplies (C-UL and TÜV Approved Items)

Features: • Positive locking feature; a complete locking function utilizing an internal system is used in these connectors. This prevents release due to external shock • Usable at maximum current capacity. A maximum current carrying capacity of 10A is permitted when 16AWG wire is used.

Applications: Secondary power supply circuits of a wide variety of electronic, office, industrial, and consumer equipment.

Specifications: • Rated Current: 22AWG: 4A, 20AWG: 5A, 18AWG: 7A and 16AWG: 10A • Rated Voltage: C-UL; AC600V. TÜV; 7.92mm pitch - AC600V, 3.96mm pitch - AC300V • File No. C-UL: E52653 TUV: R9750437 • Contact Resistance: 10mΩ or less (initial) • Insulation Resistance: 1,000m Ω or greater • Single Unit Insertion & Withdrawal Life: 0.3 N min., 4.5 N max. • Insertion/ Withdrawal Life: 20 mΩ or less.

Materials: • Sockets: Insulation, polyamide resin, natural (white , UL94V-0 • Headers: Insulation, polyamide (glass strengthened product), natural (beige), UL94V-0. Contacts, brass, solder plating • In-Line Plugs: Insulation, polyamide resin, natural (white), UL94V-0 • Retainers: Insulation, polyamide resin, black, UL94V-0 • Crimp Terminals: Contacts, copper alloy, tin plating.

Fig. 1

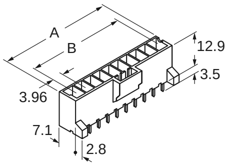


Fig. 2

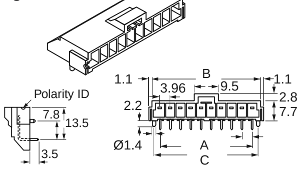


Fig. 3

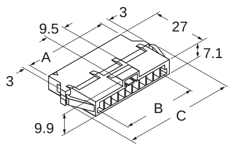


Fig. 4

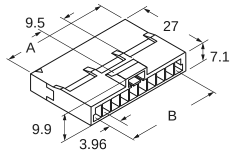


Fig. 5

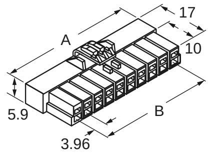


Fig. 6

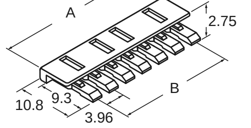


Fig.	No. of Contacts	Dimensions (mm) A	B	C	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
Pin Headers									
Straight									
1	2	10.40	3.96	—	H2669-ND	.47	.29	.23	DF7-2P-3.96DSA
	3	14.36	7.92	—	H2670-ND	.56	.34	.27	DF7-3P-3.96DSA
	4	18.32	11.88	—	H2671-ND	.66	.40	.32	DF7-4P-3.96DSA
	5	22.28	15.84	—	H2672-ND	.62	.45	.37	DF7-5P-3.96DSA
	6	26.24	19.80	—	H2673-ND	.69	.51	.42	DF7-6P-3.96DSA
	7	30.20	23.76	—	H2674-ND	.77	.56	.46	DF7-7P-3.96DSA
	8	34.16	27.72	—	H2675-ND	.93	.68	.56	DF7-8P-3.96DSA
	9	38.12	31.68	—	H2676-ND	1.01	.73	.60	DF7-9P-3.96DSA
	10	42.08	35.64	—	H2677-ND	1.09	.80	.65	DF710P-3.96DSA
	2*	14.36	7.92	—	H2678-ND	.56	.34	.27	DF7-2P-7.92DSA
	3*	22.28	15.84	—	H2679-ND	.58	.43	.35	DF7-3P-7.92DSA
Right-Angle									
2	2	3.96	10.40	8.40	H2680-ND	.55	.33	.26	DF7-2P-3.96DS
	3	7.92	14.36	12.36	H2681-ND	.65	.40	.31	DF7-3P-3.96DS
	4	11.88	18.32	16.32	H2682-ND	.58	.42	.35	DF7-4P-3.96DS
	5	15.84	22.28	20.28	H2683-ND	.71	.52	.43	DF7-5P-3.96DS
	6	19.80	26.24	24.24	H2684-ND	.79	.58	.47	DF7-6P-3.96DS
	7	23.76	30.20	28.20	H2685-ND	.88	.64	.52	DF7-7P-3.96DS
	8	27.72	34.16	32.16	H2686-ND	1.07	.78	.64	DF7-8P-3.96DS
	9	31.68	38.12	36.12	H2687-ND	1.15	.84	.69	DF7-9P-3.96DS
	10	35.64	42.08	40.08	H2688-ND	1.23	.90	.73	DF7-10P-3.96DS
	2†	7.92	14.36	12.36	H2689-ND	.68	.41	.33	DF7-2P-7.92DS
	3†	15.84	22.28	20.28	H2690-ND	.71	.52	.43	DF7-3P-7.92DS
Plugs									
In-Line — Panel Lock Type									
3	2	10.40	3.96	17.40	H2691-ND	.34	.17	.13	DF7-2EP-3.96C
	3	14.36	7.92	21.36	H2692-ND	.39	.19	.14	DF7-3EP-3.96C
	4	18.32	11.88	25.32	H2693-ND	.45	.22	.17	DF7-4EP-3.96C
	5	22.28	15.84	29.28	H2694-ND	.65	.47	.39	DF7-5EP-3.96C
	6	26.24	19.80	33.24	H2695-ND	.70	.51	.42	DF7-6EP-3.96C
	7	30.20	23.76	37.20	H2696-ND	.75	.54	.45	DF7-7EP-3.96C
	8	34.16	27.72	41.16	H2697-ND	.79	.58	.47	DF7-8EP-3.96C
	9	38.12	31.68	45.12	H2698-ND	.84	.61	.50	DF7-9EP-3.96C
	10	42.08	35.64	49.08	H2699-ND	.88	.64	.53	DF7-10EP-3.96C
In-Line									
4	2	10.40	3.96	—	H2700-ND	.34	.17	.13	DF7A-2EP-3.96C
	3	14.36	7.92	—	H2701-ND	.39	.19	.14	DF7A-3EP-3.96C
	4	18.32	11.88	—	H2702-ND	.45	.22	.17	DF7A-4EP-3.96C
	5	22.28	15.84	—	H2703-ND	.65	.47	.39	DF7A-5EP-3.96C
	6	26.24	19.80	—	H2704-ND	.80	.58	.48	DF7A -6EP-3.96C
	7	30.20	23.76	—	H2705-ND	.75	.54	.45	DF7A-7EP-3.96C
	9	38.12	31.68	—	H2707-ND	.84	.61	.50	DF7A-9EP-3.96C

Fig.	No. of Contacts	Dimensions (mm) A	B	C	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
Sockets									
5	2	10.00	3.96	—	H2709-ND	.33	.15	.11	DF7-2S-3.96C
	3	13.96	7.92	—	H2710-ND	.30	.15	.11	DF7-3S-3.96C
	4	17.92	11.88	—	H2711-ND	.35	.17	.13	DF7-4S-3.96C
	5	21.88	15.84	—	H2712-ND	.49	.24	.18	DF7-5S-3.96C
	6	25.84	19.80	—	H2713-ND	.53	.26	.20	DF7-6S-3.96C
	8	33.76	27.72	—	H2715-ND	.36	.16	.11	DF7-8S-3.96C
	9	37.72	31.68	—	H2716-ND	.65	.39	.31	DF7-9S-3.96C
	10	41.68	35.64	—	H2717-ND	.70	.42	.33	DF7-10S-3.96C
Retainers for both Sockets and In-Line Plugs									
6	2	10.00	3.96	—	H2718-ND	.33	.15	.10	DF7-2RS/P-3.96
	3	13.96	7.92	—	H2719-ND	.28	.14	.11	DF7-3RS/P-3.96
	4	17.92	11.88	—	H2720-ND	.31	.15	.12	DF7-4RS/P-3.96
	5	21.88	15.84	—	H2721-ND	.47	.23	.17	DF7-5RS/P-3.96
	6	25.84	19.80	—	H2722-ND	.51	.25	.19	DF7-6RS/P-3.96
	8	33.76	27.72	—	H2724-ND	.43	.26	.21	DF7-8RS/P-3.96
	9	37.72	31.68	—	H2725-ND	.46	.28	.22	DF7-9RS/P-3.96

* DF7-2P-7.92DSA is DF7-3P-3.96DSA with No. 2 pin removed and the number of contacts are indicated as 2. DF7-3P-7.92DSA is DF7-5P-3.96DSA with No.2 & 4 pins removed and the number of contacts are indicated as 3.

† DF7-2P-7.92DS is DF7-3P-3.96DS with No. 2 pin removed and the number of contacts are indicated as 2. DF7-3P-7.92DS is DF7-5P-3.96DS with No. 2 and 4 pins removed and the number of contacts are indicated as 3.

Crimp Terminal

Descrip-tion	Digi-Key Part No.	*Loose Piece* Price Each 100	Hirose Part No.	*Cut Tape** Price Each 10	25	100	*Tape & Reel* † Pricing 3,000	Hirose Part No.
Female - Tin Plating								
16-18	H2728-ND	.10	DF7-1618SC	.28	.20	.13	32.34/M	DF7-1618SCF
20-22	H2730-ND	.10	DF7-2022SC	.28	.20	.13	32.34/M	DF7-2022SCF
Male - Tin Plating								
16-18	H2732-ND	.10	DF7-1618PC	.25	.18	.13	37.09/M	DF7-1618PCF
20-22	H2734-ND	.10	DF7-2022PC	.25	.18	.13	37.09/M	DF7-2022PCF
Tool								
Manual Crimper for DF7 Series 16-18 AWG	H9986-ND			1520.10 each				HT104/DF7-1618
Manual Crimper for DF7 Series 20-22 AWG	H9987-ND			1520.10 each				HT104/DF7-2022

* For Cut Tape, add “CT” to the Digi-Key Part No. (H2728CT-ND)

† For Tape & Reel, add “TR” to the Digi-Key Part No. (H2728TR-ND)

DF22 Series - 7.92mm Pitch Connectors for High-Current Internal Power Supplies

Features: • 20A maximum current capacity. The connector can carry a maximum current of 20A with 12AWG wire • Complete Lock Function: Secure latch mechanism the fully shrouded latch mechanism is resistant to accidental unlatching from shock, and vibration.

Applications: Consumer-electronics and power supplies for electronic devices, business machines, and industrial machinery.

Specifications: • Operating Temperature Range: -35°C to 85°C • Contact Resistance: 5mΩ or less (initial) • Insulation Resistance: 1,000MΩ or more.

No. of Contact	Rated Current 12AWG	14AWG	16AWG
2	20A	18A	15A
3	20A	18A	15A
4	18A	15A	13A
5	18A	15A	13A

Material: • Crimp Socket: Insulation, polyamide resin, natural (white)†, UL94V-0 • Female Crimp Contact: Terminal, high conductivity copper alloy, tin (whiskers free) • Header Insulation: Polyamide resin (glass reinforced), natural (beige)†, UL94V-0 • Header Terminal: High-conductivity copper alloy, tin (whiskers free).

† Polarisation options are color coded: DF22R is black and DF22L is red

Fig. 1

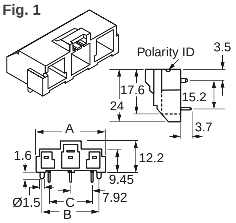


Fig. 2

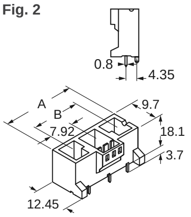


Fig. 3

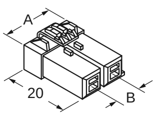


Fig.	No. of Contacts	Dimension (mm) A	B	C	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
Pin Headers									
Right-Angle									
1	2	19.80	15.00	7.92	H2776-ND	.70	.51	.42	DF22-2P-7.92DS
	3	27.72	22.92	15.84	H2777-ND	.95	.69	.57	DF22-3P-7.92DS
	4	35.64	30.84	23.76	H2778-ND	1.15	.83	.68	DF22-4P-7.92DS
	5	43.56	38.76	31.68	H2779-ND	1.34	.97	.80	DF22-5P-7.92DS
Straight									
2	2	17.22	7.92	—	H2780-ND	.71	.52	.42	DF22-2P-7.92DSA
	3	25.14	15.84	—	H2781-ND	.97	.70	.58	DF22-3P-7.92DSA
	4	33.06	23.76	—	H2782-ND	1.16	.85	.69	DF22-4P-7.92DSA
	5	40.98	31.68	—	H2783-ND	1.36	.99	.81	DF22-5P-7.92DSA
Crimp Socket Housing									
3	2	15.50	7.92	—	H2784-ND	.39	.19	.15	DF22-2S-7.92C
	3	23.42	15.84	—	H2785-ND	.48	.29	.23	DF22-3S-7.92C
	4	31.34	23.76	—	H2786-ND	.56	.34	.27	DF22-4S-7.92C
	5	39.26	31.68	—	H2787-ND	.64	.39	.30	DF22-5S-7.92C

Contacts

Description	Digi-Key Part No.	Cut Tape Price Each 10	25	100	Tape & Reel* Pricing	Hirose Part No.
14-16 AWG	H2788CT-ND	.22	.15	.11	134.58/2,500	DF22-1416SCF
12 AWG	H2789CT-ND	.18	.14	.11	111.35/2,000	DF22A-1416SCF

* For Tape and Reel Part Number change CT-ND to TR-ND

HIROSE
ELECTRIC
CO.,LTD.

1.25mm Connectors

DF13 Series

DF13 Series is 1.25mm pitch, compact "PCB-to-Wire" Nylon Connectors best suited for high density applications requiring reduced cost production, and light-weight.

Electrical Specifications: • Current Capacity: 1A • Rated Voltage: AC150V • Insulation Resistance: Condition: DC100, Standard Value: Minimum 500MΩ • Withstanding Voltage: Condition: At specified value, Standard Value: AC500V. • Contact Resistance: Condition: At DC0.1A, Standard Value: Max. 30mΩ.

Material & Finish: Pin Header Insulator: Polyimide resin, beige, UL94V-0. Pin Header Contact: Brass, tin plating. Pin Header Hardware: Brass, tin plating. Crimp Socket Insulator: Polyimide resin, beige, UL94V-0. Crimp Socket Contact: Phosphor bronze, tin plating.

Fig. 1

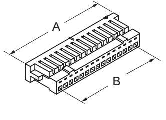


Fig. 2

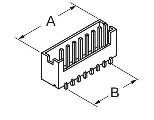


Fig. 3

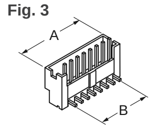


Fig. 4 — SMT

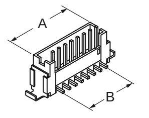


Fig. 5 — SMT

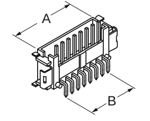


Fig. 6

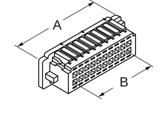


Fig. 7 — SMT

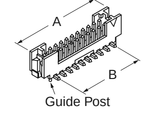


Fig. 8 — SMT

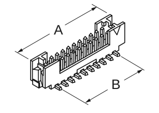
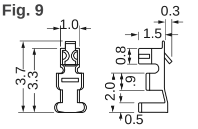


Fig. 9



No.of Pins	Dim. (mm) A	B	Digi-Key Part No.	Pricing 1	25	100	Hirose Part No.
Fig. 1 — Single Row Crimp Socket Connectors							
2	4.15	1.25	H2179-ND	.33	3.57	10.07	DF13-2S-1.25C
3	5.40	2.50	H2180-ND	.34	3.73	10.53	DF13-3S-1.25C
4	6.65	3.75	H2181-ND	.34	4.06	12.13	DF13-4S-1.25C
5	7.90	5.00	H2182-ND	.35	4.24	12.65	DF13-5S-1.25C
6	9.15	6.25	H2183-ND	.37	4.39	13.10	DF13-6S-1.25C
7	10.40	7.50	H2184-ND	.38	4.54	13.55	DF13-7S-1.25C
8	11.65	8.75	H2185-ND	.55	6.52	19.48	DF13-8S-1.25C
10	14.15	11.25	H2186-ND	.41	6.14	19.22	DF13-10S-1.25C
11	15.40	12.50	H2187-ND	.43	6.49	20.33	DF13-11S-1.25C
12	16.65	13.75	H2188-ND	.44	6.63	20.77	DF13-12S-1.25C
14	19.15	16.25	H2189-ND	.48	7.18	22.49	DF13-14S-1.25C
15	20.40	17.50	H2259-ND	.49	7.31	22.89	DF13-15S-1.25C
Fig. 2 — Single Row Connectors — Vertical Pin Header							
2	4.15	1.25	H2191-ND	.44	5.27	15.73	DF13-2P-1.25DSA
3	5.40	2.50	H2192-ND	.54	6.43	19.20	DF13-3P-1.25DSA
4	6.65	3.75	H2193-ND	.50	7.55	23.64	DF13-4P-1.25DSA
5	7.90	5.00	H2194-ND	.57	8.56	26.81	DF13-5P-1.25DSA
6	9.15	6.25	H2195-ND	.64	9.59	30.03	DF13-6P-1.25DSA
7	10.40	7.50	H2196-ND	.71	10.63	33.30	DF13-7P-1.25DSA
8	11.65	8.75	H2197-ND	.67	12.11	39.65	DF13-8P-1.25DSA
10	14.15	11.25	H2198-ND	.77	13.99	45.79	DF13-10P-1.25DSA
12	16.65	13.75	H2320-ND	1.03	18.63	60.98	DF13-12P-1.25DSA
14	19.15	16.25	H2321-ND	1.07	19.40	63.50	DF13-14P-1.25DSA
15	20.40	17.50	H2322-ND	1.22	22.05	72.16	DF13-15P-1.25DSA
Fig. 3 — Single Row Connectors — Right Angle Pin Header							
2	4.15	1.25	H2199-ND*	.48	5.78	17.25	DF13-2P-1.25DS(20)
3	5.40	2.50	H2260-ND*	.43	6.45	20.21	DF13-3P-1.25DS(20)
4	6.65	3.75	H2201-ND*	.56	8.40	26.32	DF13-4P-1.25DS(20)
5	7.90	5.00	H2202-ND*	.64	9.60	30.08	DF13-5P-1.25DS(20)
6	9.15	6.25	H2203-ND*	.72	10.80	33.84	DF13-6P-1.25DS(20)
7	10.40	7.50	H2204-ND*	.61	11.00	36.00	DF13-7P-1.25DS(20)
8	11.65	8.75	H2205-ND*	.74	13.48	44.10	DF13-8P-1.25DS(20)
10	14.15	11.25	H2206-ND*	.87	15.68	51.30	DF13-10P-1.25DS(20)
12	16.65	13.75	H2323-ND*	1.01	18.22	59.63	DF13-12P-1.25DS(20)
14	19.15	16.25	H2324-ND*	1.12	20.35	66.60	DF13-14P-1.25DS(20)
15	20.40	17.50	H2325-ND*	1.18	21.31	69.75	DF13-15P-1.25DS(20)
Fig. 4 — Single Row Connectors — SMT-Compatible Vertical Pin Header							
2	4.15	1.25	H2207-ND*	.69	10.28	32.20	DF13-2P-1.25V(20)
3	5.40	2.50	H2208-ND*	.71	10.65	33.37	DF13-3P-1.25V(20)
4	6.65	3.75	H2209-ND*	.60	10.86	35.55	DF13-4P-1.25V(20)
5	7.90	5.00	H2210-ND*	.62	11.21	36.68	DF13-5P-1.25V(20)
6	9.15	6.25	H2211-ND*	.69	12.44	40.73	DF13-6P-1.25V(20)
7	10.40	7.50	H2212-ND*	.76	13.68	44.78	DF13-7P-1.25V(20)
8	11.65	8.75	H2213-ND*	.90	16.36	53.55	DF13-8P-1.25V(20)
10	14.15	11.25	H2214-ND*	1.04	18.84	61.65	DF13-10P-1.25V(20)
11	15.40	12.50	H2215-ND*	1.12	20.28	66.38	DF13-11P-1.25V(20)
12	16.65	13.75	H2216-ND*	1.19	21.59	70.65	DF13-12P-1.25V(20)
14	19.15	16.25	H2217-ND*	1.35	24.34	79.65	DF13-14P-1.25V(20)
15	20.40	17.50	H2218-ND*	1.41	25.51	83.48	DF13-15P-1.25V(20)
Fig. 5 — Single Row Connectors — SMT-Compatible Right Angle Pin Header							
2	4.15	1.25	H2219-ND*	.53	7.95	24.91	DF13-2P-1.25H(20)
3	5.40	2.50	H2220-ND*	.60	8.93	27.97	DF13-3P-1.25H(20)
4	6.65	3.75	H2221-ND*	.71	10.65	33.37	DF13-4P-1.25H(20)
5	7.90	5.00	H2222-ND*	.59	10.66	34.88	DF13-5P-1.25H(20)
6	9.15	6.25	H2223-ND*	.65	11.83	38.70	DF13-6P-1.25H(20)
7	10.40	7.50	H2224-ND*	.71	12.93	42.30	DF13-7P-1.25H(20)
8	11.65	8.75	H2225-ND*	.86	15.54	50.85	DF13-8P-1.25H(20)
10	14.15	11.25	H2226-ND*	.99	17.94	58.73	DF13-10P-1.25H(20)
11	15.40	12.50	H2227-ND*	1.16	20.97	68.63	DF13-11P-1.25H(20)
12	16.65	13.75	H2228-ND*	1.13	20.49	67.05	DF13-12P-1.25H(20)
14	19.15	16.25	H2229-ND*	1.28	23.10	75.60	DF13-14P-1.25H(20)
15	20.40	17.50	H2230-ND*	1.33	24.13	78.98	DF13-15P-1.25H(20)
Fig. 6 — Dual Row Crimp Socket Connectors							
10	10.40	5.00	H2231-ND	.30	3.58	10.68	DF13-10DS-1.25C
20	16.65	11.25	H2232-ND	.36	4.35	12.98	DF13-20DS-1.25C
30	22.90	17.50	H2233-ND	.43	5.12	15.28	DF13-30DS-1.25C
40	29.15	23.75	H2234-ND	.49	5.83	17.40	DF13-40DS-1.25C
Fig. 7 — Dual Row Sockets, Straight Pin Headers with Guide Posts - SMT (gold)							
10	12.10	5.00	H2235-ND*	1.23	22.28	72.90	DF13-10DP-1.25V(50)
20	18.35	11.25	H2236-ND*	1.76	33.81	108.20	DF13-20DP-1.25V(50)
30	24.60	17.50	H2237-ND*	2.36	45.31	145.00	DF13-30DP-1.25V(50)
40	30.85	23.75	H2238-ND*	3.04	58.38	186.80	DF13-40DP-1.25V(50)
Fig. 8 — Dual Row Sockets, Straight Pin Headers with Guide Posts - SMT (gold)							
10	12.10	5.00	H2239-ND*	1.23	22.28	72.90	DF13A-10DP-1.25V(50)
20	18.35	11.25	H2240-ND*	1.76	33.81	108.20	DF13A-20DP-1.25V(50)
30	24.60	17.50	H2241-ND*	2.36	45.31	145.00	DF13A-30DP-1.25V(50)
40	30.85	23.75	H2242-ND*	3.04	58.38	186.80	DF13A-40DP-1.25V(50)
Fig. 9 — Socket Crimp Terminal							
Socket Crimp Contacts, Tin Plating, AWG 26-30			H9992-ND	3.56/100			DF13-2630SCF
Socket Crimp Contacts, Gold Plating, AWG 26-30			H9991-ND	5.49/100			DF13-2630SCFA
Crimp Tool for DF13			H9994-ND	1065.74 ea.			DF13-TB2630HC

* (20) indicates tin plating; (50) indicates gold plating.

1mm Connectors

DF9 Series

SMT (w/Reinforced Hardware) 1mm Center Line Board-to-Board Connector

Fig. 1

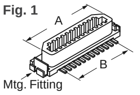
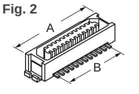


Fig. 2



• 4.3mm mated height between PCBs. Insulator is manufactured from polyimide to withstand the high temperatures resulting from VPS, IR, and Heat blow soldering. PCB contact is a "Gull-Wing" type design to ensure reliable performance. Designed to control and accept dimensional changes by thermo-elasticity. Reinforcement hardware is provided to eliminate mechanical stress to solder joints during mating and unmating cycles.

Electrical: • Rated Current: 0.5A • Rated Voltage: AC150V • Insulation Resistance: Condition: DC100V, Standard Value: Min. 500MΩ • Withstanding Voltage: Condition: At standard value, Standard Value: 50m or less • Contact Resistance: Condition: At 0.1 ADC, Standard Value: 50m or less.

Material & Finish: • Receptacle Header Insulator: Polyimide resin, beige (natural), UL94V-0 • Receptacle Header Connector: Phosphor bronze, tin plating • Receptacle Header Fitting: Brass, tin plating.

No.of Pins	Dim. (mm) A	B	Digi-Key Part No.	Pricing 1	25	100	Hirose Part No.*
Fig. 1 — Receptacle with Guide Post							
9	8.30	3.00	H2152-ND	1.76	33.75	108.00	DF9-9S-1V(20)
11	9.30	4.00	H2153-ND	1.69	32.50	104.00	DF9-11S-1V(20)
13	10.30	5.00	H2154-ND	1.98	38.13	122.00	DF9-13S-1V(20)
15	11.30	6.00	H2155-ND	1.79	32.31	105.75	DF9-15S-1V(20)
17	12.30	7.00	H2156-ND	2.24	43.13	138.00	DF9-17S-1V(20)
19	13.30	8.00	H2157-ND	2.31	44.38	142.00	DF9-19S-1V(20)
21	14.30	9.00	H2158-ND	2.44	46.88	150.00	DF9-21S-1V(20)
23	15.30	10.00	H2159-ND	1.76	33.75	108.00	DF9-23S-1V(20)
25	16.30	11.00	H2160-ND	2.63	50.63	162.00	DF9-25S-1V(20)
31	19.30	14.00	H2161-ND	1.88	36.13	115.60	DF9-31S-1V(20)
41	24.30	19.00	H2162-ND	2.91	55.94	179.00	DF9-41S-1V(20)
51	29.30	24.00	H2163-ND	3.93	78.65	243.10	DF9-51S-1V(54)
31	19.30	14.00	H2176-ND	2.18	41.88	134.00	DF9B-31S-1V(20)
41	24.30	19.00	H2177-ND	2.54	48.75	156.00	DF9B-41S-1V(20)
Fig. 2 — Pin Header with Reinforced Hardware							
9	8.30	3.00	H2258-ND	1.79	34.38	110.00	DF9-9P-1V(20)
11	9.30	4.00	H2165-ND	1.92	36.88	118.00	DF9-11P-1V(20)
13	10.30	5.00	H2166-ND	1.48	26.81	87.75	DF9-13P-1V(20)
15	11.30	6.00	H2167-ND	2.15	41.25	132.00	DF9-15P-1V(20)
17	12.30	7.00	H2168-ND	2.28	43.75	140.00	DF9-17P-1V(20)
19	13.30	8.00	H2169-ND	2.34	45.00	144.00	DF9-19P-1V(20)
21	14.30	9.00	H2170-ND	2.47	47.50	152.00	DF9-21P-1V(20)
23	15.30	10.00	H2171-ND	2.54	48.75	156.00	DF9-23P-1V(20)
25	16.30	11.00	H2172-ND	2.61	50.13	160.40	DF9-25P-1V(20)
31	19.30	14.00	H2173-ND	2.54	48.81	156.20	DF9-31P-1V(20)
41	24.30	19.00	H2174-ND	2.91	55.94	179.00	DF9-41P-1V(20)
51	29.30	24.00	H2175-ND	3.93	78.65	243.10	DF9-51P-1V(54)

* (20) indicates tin plating; (54) indicates gold plating.

1.27mm Connectors

FX2 Series – Surface Mount

Fig. 1

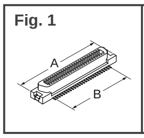


Fig. 2

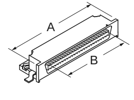
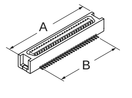


Fig. 3



FX2 Series is a 1.27mm mil spacing, 2 piece connector for use in board-to-board application • High performance PPS resin insulator is compatible to VPS, IR and hot air reflow • Gull wing-shaped lead is used for ease of checking soldered connection • Use of positioning boss for substrate packaging offers improved handling capability • Solder-fixing reinforcement bracket, which disperses inserting/extracting stress, is available for optional specification.

Electrical: • Rated Current: 0.5A • Rated Voltage: 125VAC • Insulation Resistance: More than 100MΩ at 250VDC • Withstanding Voltage: 300VAC • Contact Resistance: Less than 45 mΩ at 100mA DC • Durability: 500 times mating cycles.

Insulator Material & Finish: • Dip Type: Black polyimide resin, UL94V-0 • SMT Type: Light Brawn PPS resin, UL94V-0 • Socket: Black PBT resin and polyimide resin, UL94V-0.

Contact Material & Finish: • Receptacle Header: Phosphor bronze with selective gold plating • Socket: Beryllium copper with selective gold plating.

No.of Pins	Dim. (mm) A	B	Digi-Key Part No.	Pricing 1	25	100	Hirose Part No.
Fig. 1 — Straight Type Receptacle							
20	22.75	11.43	H2248-ND	3.25	64.90	200.60	FX2-20S-1.27SV
40	35.45	24.13	H2249-ND	4.15	83.05	256.70	FX2-40S-1.27SV
52	43.07	31.75	H2250-ND	4.70	94.05	290.70	FX2-52S-1.27SV
60	48.15	36.83	H2251-ND	5.06	101.20	312.80	FX2-60S-1.27SV
80	60.85	49.53	H2252-ND	5.78	115.50	357.00	FX2-80S-1.27SV
Fig. 2 — Right Angle Header							
20	22.75	12.065	H2243-ND	2.28	43.75	140.00	FX2-20P-0.635SH
40	35.45	24.765	H2244-ND	3.02	58.13	186.00	FX2-40P-0.635SH
52	43.07	32.385	H2245-ND	3.00	59.95	185.30	FX2-52P-0.635SH
60	48.15	37.465	H2246-ND	3.25	64.90	200.60	FX2-60P-0.635SH
80	60.85	50.165	H2247-ND	3.96	79.20	244.80	FX2-80P-0.635SH
Fig. 3 — Straight Header							
20	22.75	11.43	H2253-ND	3.11	62.15	192.10	FX2-20P-1.27SV
40	35.45	24.13	H2254-ND	3.93	78.65	243.10	FX2-40P-1.27SV
52	43.07	31.75	H2255-ND	4.48	89.65	277.10	FX2-52P-1.27SV
60	48.15	36.83	H2256-ND	4.81	96.25	297.50	FX2-60P-1.27SV
80	60.85	49.53	H2257-ND	5.67	113.30	350.20	FX2-80P-1.27SV

0.6mm Connectors

FX8 Series – Surface Mount

Fig. 1

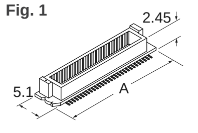
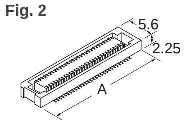


Fig. 2



The FX8 Series of 0.6mm pitch board mounting SMT connectors can be used with 3mm or greater distance between the boards. They are designed with the objectives of miniaturization, space-saving, and multiple contacts for internal mounting.

Features: • 3mm stacking height • The engagement portion is designed to prevent erroneous insertion and a bellows structure that is not susceptible to twisting has been used in the contacts. • The SMT soldering lead portion protrudes about 0.7mm beyond the outer surface of the housing, enabling image processing for automatic mounting and affording excellent repair qualities • Connectors are equipped with board positioning bosses which prevent incorrect insertion to the board by means of boss position and boss diameter.

Electrical: • Current Capacity: 0.4A per pin • Rated Voltage: 100V AC • Insulation Resistance: 100MΩ or greater at 250V DC • Withstand Voltage: 300V AC r.m.s. for one minute at specified value • Contact Resistance: 45mΩ or less at 100mA DC

Material and Finish: • Insulation: PPS resin, light brown, UL94V-0 • Header Contacts: Phosphor bronze, gold-plated contacts, solder-plated leads • Receptacle Contacts: Phosphor bronze, gold-plated contacts and leads

No.of Pins	Dim. A	Digi-Key Part No.	Pricing 1	25	100	Hirose Part No.
Fig. 1 — Single Row Vertical Pin Header						
60	24.60	H2326-ND	2.73	52.50	168.00	FX8-60P-SV
80	30.60	H2327-ND	3.15	60.63	194.00	FX8-80P-SV
90	33.60	H2328-ND	2.89	57.75	178.50	FX8-90P-SV
100	36.60	H2329-ND	3.08	61.60	190.40	FX8-100P-SV
120	42.60	H2330-ND	3.44	68.75	212.50	FX8-120P-SV
140	48.60	H2331-ND	3.82	76.45	236.30	FX8-140P-SV
Fig. 2 — Single Row Receptacles						
60	24.60	H2332-ND	3.03	60.50	187.00	FX8-60S-SV
80	30.60	H2333-ND	3.60	72.05	222.70	FX8-80S-SV
90	33.60	H2334-ND	3.91	78.10	241.40	FX8-90S-SV
100	36.60	H2335-ND	4.18	83.60	258.40	FX8-100S-SV
120	42.60	H2336-ND	4.73	94.60	292.40	FX8-120S-SV
140	48.60	H2337-ND	5.34	106.70	329.80	FX8-140S-SV

Sullins 2mm Connectors

SPECIFICATIONS: **Current Rating**: 1 Amp **Contact Resistance:** 20 milli Ohm Max. **Dielectric Withstanding**: 500 VAC **Operating Temperature:** -40°C to +105°C **Contact Material**: Headers: Brass, Receptacles: Phosphor Bronze. **Insulator Material:** Polyester, UL 94V-0 **Contact Finish:** Selective Plating, Gold/Tin

Fig. 1

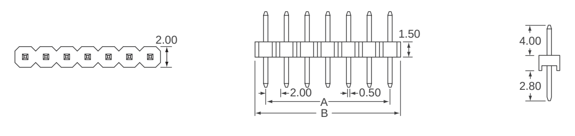


Fig. 2

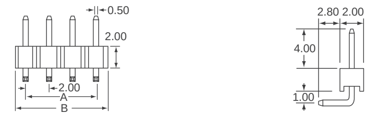


Fig. 3

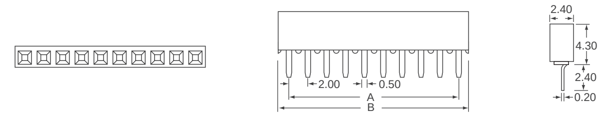


Fig. 4

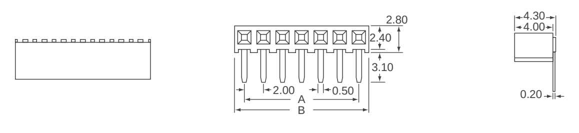


Fig.	Cir-cuits	Dimension (mm) A	B	Digi-Key Part No.	Price Each 1	10	100	Sullins Part No.
Single Row Header, Straight								
1	2	2.00	4.00	S2105-02-ND	.44	.38	.33	PRPN021PAEN
	3	4.00	6.00	S2105-03-ND	.46	.40	.34	PRPN031PAEN
	4	6.00	8.00	S2105-04-ND	.48	.42	.36	PRPN041PAEN
	5	8.00	10.00	S2105-05-ND	.50	.44	.37	PRPN051PAEN
	6	10.00	12.00	S2105-06-ND	.52	.45	.39	PRPN061PAEN
	7	12.00	14.00	S2105-07-ND	.54	.47	.40	PRPN071PAEN
	8	14.00	16.00	S2105-08-ND	.56	.49	.41	PRPN081PAEN
	9	16.00	18.00	S2105-09-ND	.58	.51	.43	PRPN091PAEN
	10	18.00	20.00	S2105-10-ND	.60	.52	.44	PRPN101PAEN
	11	20.00	22.00	S2105-11-ND	.62	.54	.46	PRPN111PAEN
	12	22.00	24.00	S2105-12-ND	.64	.56	.47	PRPN121PAEN
	13	24.00	26.00	S2105-13-ND	.66	.58	.49	PRPN131PAEN
	14	26.00	28.00	S2105-14-ND	.68	.59	.50	PRPN141PAEN
	15	28.00	30.00	S2105-15-ND	.70	.61	.52	PRPN151PAEN
	16	30.00	32.00	S2105-16-ND	.72	.63	.53	PRPN161PAEN
	17	32.00	34.00	S2105-17-ND	.74	.64	.55	PRPN171PAEN
	18	34.00	36.00	S2105-18-ND	.76	.66	.56	PRPN181PAEN
	19	36.00	38.00	S2105-19-ND	.78	.68	.58	PRPN191PAEN
	20	38.00	40.00	S2105-20-ND	.80	.70	.59	PRPN201PAEN
	21	40.00	42.00	S2105-21-ND	.82	.71	.61	PRPN211PAEN
	22	42.00	44.00	S2105-22-ND	.84	.73	.62	PRPN221PAEN
	23	44.00	46.00	S2105-23-ND	.86	.75	.63	PRPN231PAEN
	24	46.00	48.00	S2105-24-ND	.88	.77	.65	PRPN241PAEN
	25	48.00	50.00	S2105-25-ND	.90	.78	.66	PRPN251PAEN
	26	50.00	52.00	S2105-26-ND	.92	.80	.68	PRPN261PAEN
	27	52.00	54.00	S2105-27-ND	.94	.82	.69	PRPN271PAEN
	28	54.00	56.00	S2105-28-ND	.96	.84	.71	PRPN281PAEN
	29	56.00	58.00	S2105-29-ND	.98	.85	.72	PRPN291PAEN
	30	58.00	60.00	S2105-30-ND	1.00	.87	.74	PRPN301PAEN
	31	60.00	62.00	S2105-31-ND	1.02	.89	.75	PRPN311PAEN
	32	62.00	64.00	S2105-32-ND	1.04	.90	.77	PRPN321PAEN
	33	64.00	66.00	S2105-33-ND	1.06	.92	.78	PRPN331PAEN
	34	66.00	68.00	S2105-34-ND	1.08	.94	.80	PRPN341PAEN
	35	68.00	70.00	S2105-35-ND	1.10	.96	.81	PRPN351PAEN
	36	70.00	72.00	S2105-36-ND	1.12	.97	.83	PRPN361PAEN
	37	72.00	74.00	S2105-37-ND	1.14	.99	.84	PRPN371PAEN
	38	74.00	76.00	S2105-38-ND	1.16	1.01	.85	PRPN381PAEN
	39	76.00	78.00	S2105-39-ND	1.18	1.03	.87	PRPN391PAEN
	40	78.00	80.00	S2105-40-ND	1.11	.97	.82	PRPN401PAEN
Single Row Header, Right Angle								
2	2	2.00	4.00	S2106-02-ND	.38	.34	.29	PRPN021PARN
	3	4.00	6.00	S2106-03-ND	.41	.36	.31	PRPN031PARN
	4	6.00	8.00	S2106-04-ND	.44	.39	.33	PRPN041PARN
	5	8.00	10.00	S2106-05-ND	.47	.41	.35	PRPN051PARN
	6	10.00	12.00	S2106-06-ND	.50	.44	.37	PRPN061PARN
	7	12.00	14.00	S2106-07-ND	.53	.47	.40	PRPN071PARN
	8	14.00	16.00	S2106-08-ND	.56	.49	.42	PRPN081PARN
	9	16.00	18.00	S2106-09-ND	.59	.52	.44	PRPN091PARN
	10	18.00	20.00	S2106-10-ND	.62	.54	.46	PRPN101PARN
	11	20.00	22.00	S2106-11-ND	.65	.57	.48	PRPN111PARN
	12	22.00	24.00	S2106-12-ND	.68	.60	.51	PRPN121PARN
	13	24.00	26.00	S2106-13-ND	.71	.62	.53	PRPN131PARN
	14	26.00	28.00	S2106-14-ND	.74	.65	.55	PRPN141PARN
	15	28.00	30.00	S2106-15-ND	.77	.67	.57	PRPN151PARN
	16	30.00	32.00	S2106-16-ND	.80	.70	.59	PRPN161PARN
	17	32.00	34.00	S2106-17-ND	.83	.73	.62	PRPN171PARN
	18	34.00	36.00	S2106-18-ND	.86	.75	.64	PRPN181PARN
	19	36.00	38.00	S2106-19-ND	.89	.78	.66	PRPN191PARN
	20	38.00	40.00	S2106-20-ND	.92	.80	.68	PRPN201PARN
	21	40.00	42.00	S2106-21-ND	.95	.83	.70	PRPN211PARN
	22	42.00	44.00	S2106-22-ND	.98	.86	.73	PRPN221PARN
	23	44.00	46.00	S2106-23-ND	1.01	.88	.75	PRPN231PARN
	24	46.00	48.00	S2106-24-ND	1.04	.91	.77	PRPN241PARN
	25	48.00	50.00	S2106-25-ND	1.07	.93	.79	PRPN251PARN
	26	50.00	52.00	S2106-26-ND	1.10	.96	.81	PRPN261PARN
	27	52.00	54.00	S2106-27-ND	1.13	.99	.84	PRPN271PARN
	28	54.00	56.00	S2106-28-ND	1.16	1.01	.86	PRPN281PARN
	29	56.00	58.00	S2106-29-ND	1.19	1.04	.88	PRPN291PARN
	30	58.00	60.00	S2106-30-ND	1.22	1.06	.90	PRPN301PARN
	31	60.00	62.00	S2106-31-ND	1.25	1.09	.92	PRPN311PARN
	32	62.00	64.00	S2106-32-ND	1.28	1.12	.95	PRPN321PARN
	33	64.00	66.00	S2106-33-ND	1.31	1.14	.97	PRPN331PARN
	34	66.00	68.00	S2106-34-ND	1.34	1.17	.99	PRPN341PARN
	35	68.00	70.00	S2106-35-ND	1.37	1.19	1.01	PRPN351PARN
	36	70.00	72.00	S2106-36-ND	1.40	1.22	1.03	PRPN361PARN
	37	72.00	74.00	S2106-37-ND	1.43	1.25	1.06	PRPN371PARN
	38	74.00	76.00	S2106-38-ND	1.46	1.27	1.08	PRPN381PARN
	39	76.00	78.00	S2106-39-ND	1.49	1.30	1.10	PRPN391PARN
	40	78.00	80.00	S2106-40-ND	1.41	1.23	1.04	PRPN401PARN
Single Row Receptacle Straight								
3	4	6.00	8.50	S2103-04-ND	.60	.50	.32	PPPN041BFCN
	5	8.00	10.50	S2103-05-ND	.63	.53	.34	PPPN051BFCN
	6	10.00	12.50	S2103-06-ND	.67	.56	.36	PPPN061BFCN
	7	12.00	14.50	S2103-07-ND	.70	.58	.37	PPPN071BFCN
	8	14.00	16.50	S2103-08-ND	.77	.64	.41	PPPN081BFCN
	9	16.00	18.50	S2103-09-ND	.81	.67	.43	PPPN091BFCN
	10	18.00	20.50	S2103-10-ND	.84	.70	.45	PPPN101BFCN
	11	20.00	22.50	S2103-11-ND	.91	.76	.49	PPPN111BFCN
	12	22.00	24.50	S2103-12-ND	.98	.82	.52	PPPN121BFCN
	15	28.00	30.50	S2103-15-ND	1.23	1.02	.65	PPPN151BFCN
	18	34.00	36.50	S2103-18-ND	1.51	1.25	.80	PPPN181BFCN
	22	42.00	44.50	S2103-22-ND	1.82	1.51	.97	PPPN221BFCN
	25	48.00	50.50	S2103-25-ND	2.07	1.72	1.10	PPPN251BFCN
	30	58.00	60.50	S2103-30-ND	2.49	2.06	1.32	PPPN301BFCN
	36	70.00	72.50	S2103-36-ND	2.98	2.47	1.58	PPPN361BFCN
	40	78.00	80.50	S2103-40-ND	3.29	2.73	1.74	PPPN401BFCN
Single Row Receptacle, Right Angle								
4	4	6.00	8.50	S2104-04-ND	.84	.70	.45	PPPN041FGGN
	5	8.00	10.50	S2104-05-ND	.88	.73	.47	PPPN051FGGN
	6	10.00	12.50	S2104-06-ND	.95	.79	.50	PPPN061FGGN
	7	12.00	14.50	S2104-07-ND	1.05	.87	.56	PPPN071FGGN
	8	14.00	16.50	S2104-08-ND	1.12	.93	.60	PPPN081FGGN
	9	16.00	18.50	S2104-09-ND	1.16	.96	.62	PPPN091FGGN
	10	18.00	20.50	S2104-10-ND	1.19	.99	.63	PPPN101FGGN
	12	22.00	24.50	S2104-12-ND	1.40	1.16	.74	PPPN121FGGN
	15	28.00	30.50	S2104-15-ND	1.79	1.48	.95	PPPN151FGGN
	17	32.00	34.50	S2104-17-ND	2.00	1.66	1.06	PPPN171FGGN
Single Row Receptacle SMT Contacts, Pin 1 on Left Hand Side								
5A	4	6.00	8.50	S2101-04-ND	.70	.58	.37	PPPN041BFLC
	5	8.00	10.50	S2101-05-ND	.77	.64	.41	PPPN051BFLC
	6	10.00	12.50	S2101-06-ND	.84	.70	.45	PPPN061BFLC
	7	12.00	14.50	S2101-07-ND	.91	.76	.49	PPPN071BFLC
	8	14.00	16.50	S2101-08-ND	1.02	.85	.54	PPPN081BFLC
	9	16.00	18.50	S2101-09-ND	1.09	.90	.58	PPPN091BFLC
	10	18.00	20.50	S2101-10-ND	1.12	.93	.60	PPPN101BFLC
	12	22.00	24.50	S2101-12-ND	1.33	1.11	.71	PPPN121BFLC
	15	28.00	30.50	S2101-15-ND	1.68	1.40	.89	PPPN151BFLC
	18	34.00	36.50	S2101-18-ND	2.03	1.69	1.08	PPPN181BFLC
	20	38.00	40.50	S2101-20-ND	2.24	1.86	1.19	PPPN201BFLC
	22	42.00	44.50	S2101-22-ND	2.49	2.06	1.32	PPPN221BFLC
	25	48.00	50.50	S2101-25-ND	2.80	2.32	1.48	PPPN251BFLC

(Continued)

Fig. 5

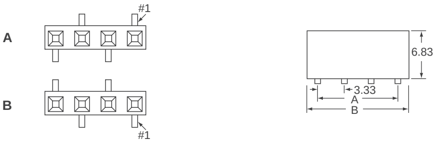


Fig. 6

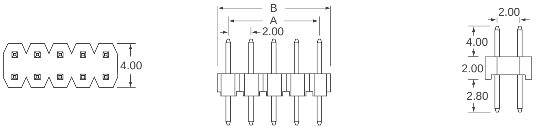


Fig. 7

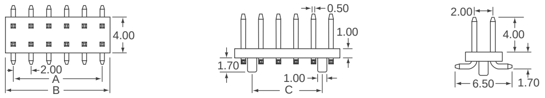


Fig. 8

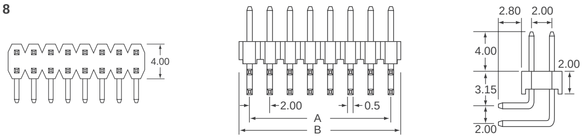


Fig. 9

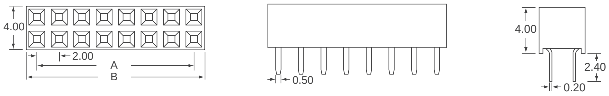


Fig. 10

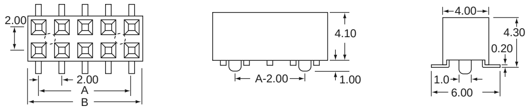


Fig.	Cir-cuits	Dimension (mm) A	Dimension (mm) B	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Sullins Part No.
Single Row Receptacle SMT Contacts, Pin 1 on Right Hand Side								
5B	4	6.00	8.50	S2102-04-ND	.70	.58	.37	PPPN041BFLD
	5	8.00	10.50	S2102-05-ND	.77	.64	.41	PPPN051BFLD
	6	10.00	12.50	S2102-06-ND	.84	.70	.45	PPPN061BFLD
	7	12.00	14.50	S2102-07-ND	.91	.76	.49	PPPN071BFLD
	8	14.00	16.50	S2102-08-ND	1.02	.85	.54	PPPN081BFLD
	9	16.00	18.50	S2102-09-ND	1.09	.90	.58	PPPN091BFLD
	10	18.00	20.50	S2102-10-ND	1.12	.93	.60	PPPN101BFLD
	12	22.00	24.50	S2102-12-ND	1.33	1.11	.71	PPPN121BFLD
	13	24.00	26.50	S2102-13-ND	1.47	1.22	.78	PPPN131BFLD
	15	28.00	30.50	S2102-15-ND	1.68	1.40	.89	PPPN151BFLD
	18	34.00	36.50	S2102-18-ND	2.03	1.69	1.08	PPPN181BFLD
	20	38.00	40.50	S2102-20-ND	2.24	1.86	1.19	PPPN201BFLD
	22	42.00	44.50	S2102-22-ND	2.49	2.06	1.32	PPPN221BFLD
	25	48.00	50.50	S2102-25-ND	2.80	2.32	1.48	PPPN251BFLD
Dual Row Headers, Straight								
6	8	6.00	8.00	S2210-04-ND	.96	.83	.71	PRPN042PAEN
	10	8.00	10.00	S2210-05-ND	1.00	.87	.74	PRPN052PAEN
	12	10.00	12.00	S2210-06-ND	1.04	.90	.77	PRPN062PAEN
	14	12.00	14.00	S2210-07-ND	1.08	.94	.80	PRPN072PAEN
	16	14.00	16.00	S2210-08-ND	1.12	.97	.82	PRPN082PAEN
	18	16.00	18.00	S2210-09-ND	1.16	1.01	.85	PRPN092PAEN
	20	18.00	20.00	S2210-10-ND	1.20	1.04	.88	PRPN102PAEN
	22	20.00	22.00	S2210-11-ND	1.24	1.08	.91	PRPN112PAEN
	24	22.00	24.00	S2210-12-ND	1.28	1.11	.94	PRPN122PAEN
	26	24.00	26.00	S2210-13-ND	1.32	1.15	.97	PRPN132PAEN
	28	26.00	28.00	S2210-14-ND	1.36	1.18	1.00	PRPN142PAEN
	30	28.00	30.00	S2210-15-ND	1.40	1.22	1.03	PRPN152PAEN
	32	30.00	32.00	S2210-16-ND	1.44	1.25	1.06	PRPN162PAEN
	36	34.00	36.00	S2210-18-ND	1.52	1.32	1.12	PRPN182PAEN
	38	36.00	38.00	S2210-19-ND	1.56	1.35	1.15	PRPN192PAEN
	40	38.00	40.00	S2210-20-ND	1.60	1.39	1.18	PRPN202PAEN
	42	40.00	42.00	S2210-21-ND	1.64	1.42	1.21	PRPN212PAEN
	44	42.00	44.00	S2210-22-ND	1.68	1.46	1.24	PRPN222PAEN
	46	44.00	46.00	S2210-23-ND	1.72	1.49	1.26	PRPN232PAEN
	48	46.00	48.00	S2210-24-ND	1.76	1.53	1.29	PRPN242PAEN
	50	48.00	50.00	S2210-25-ND	1.80	1.56	1.32	PRPN252PAEN
	60	58.00	60.00	S2210-30-ND	2.00	1.74	1.47	PRPN302PAEN
	72	70.00	72.00	S2210-36-ND	2.24	1.94	1.65	PRPN362PAEN
	80	78.00	80.00	S2210-40-ND	2.22	1.93	1.63	PRPN402PAEN
Dual Row Headers, SMT, with Locating Peg								
7	4	2.00	4.00	S2208-02-ND	.60	.50	.32	PRPN022MAMP
	6	4.00	6.00	S2208-03-ND	.88	.73	.47	PRPN032MAMP
	8	6.00	8.00	S2208-04-ND	1.12	.93	.60	PRPN042MAMP
	10	8.00	10.00	S2208-05-ND	1.30	1.08	.69	PRPN052MAMP
	12	10.00	12.00	S2208-06-ND	1.47	1.22	.78	PRPN062MAMP
	14	12.00	14.00	S2208-07-ND	1.68	1.40	.89	PRPN072MAMP
	16	14.00	16.00	S2208-08-ND	1.79	1.48	.95	PRPN082MAMP
	18	16.00	18.00	S2208-09-ND	1.86	1.54	.99	PRPN092MAMP
	20	18.00	20.00	S2208-10-ND	1.96	1.63	1.04	PRPN102MAMP
	24	22.00	24.00	S2208-12-ND	2.35	1.95	1.24	PRPN122MAMP
	30	28.00	30.00	S2208-15-ND	2.91	2.41	1.54	PRPN152MAMP
	36	34.00	36.00	S2208-18-ND	3.50	2.90	1.85	PRPN182MAMP
	44	42.00	44.00	S2208-22-ND	4.27	3.54	2.26	PRPN222MAMP
	50	48.00	50.00	S2208-25-ND	4.87	4.04	2.58	PRPN252MAMP
Dual Row Headers, SMT, without Locating Peg								
7	4	2.00	4.00	S2209-02-ND	.60	.50	.32	PRPN022MAMS
	6	4.00	6.00	S2209-03-ND	.88	.73	.47	PRPN032MAMS
	8	6.00	8.00	S2209-04-ND	1.12	.93	.60	PRPN042MAMS
	10	8.00	10.00	S2209-05-ND	1.30	1.08	.69	PRPN052MAMS
	12	10.00	12.00	S22 09-06-ND	1.47	1.22	.78	PRPN062MAMS
7	14	12.00	14.00	S2209-07-ND	1.68	1.40	.89	PRPN072MAMS
	16	14.00	16.00	S2209-08-ND	1.79	1.48	.95	PRPN082MAMS
	18	16.00	18.00	S2209-09-ND	1.86	1.54	.99	PRPN092MAMS
	20	18.00	20.00	S2209-10-ND	1.96	1.63	1.04	PRPN102MAMS
	22	20.00	22.00	S2209-11-ND	2.14	1.77	1.13	PRPN112MAMS
	24	22.00	24.00	S2209-12-ND	2.35	1.95	1.24	PRPN122MAMS
	26	24.00	26.00	S2209-13-ND	2.52	2.09	1.34	PRPN132MAMS
	28	26.00	28.00	S2209-14-ND	2.73	2.27	1.45	PRPN142MAMS
	30	28.00	30.00	S2209-15-ND	2.91	2.41	1.54	PRPN152MAMS
	32	30.00	32.00	S2209-16-ND	3.12	2.59	1.65	PRPN162MAMS
	34	32.00	34.00	S2209-17-ND	3.33	2.76	1.76	PRPN172MAMS
	36	34.00	36.00	S2209-18-ND	3.50	2.90	1.85	PRPN182MAMS
	38	36.00	38.00	S2209-19-ND	3.71	3.08	1.97	PRPN192MAMS
	40	38.00	40.00	S2209-20-ND	3.89	3.22	2.06	PRPN202MAMS
	42	40.00	42.00	S2209-21-ND	4.10	3.40	2.17	PRPN212MAMS
	44	42.00	44.00	S2209-22-ND	4.27	3.54	2.26	PRPN222MAMS
	46	44.00	46.00	S2209-23-ND	4.48	3.72	2.37	PRPN232MAMS
	48	46.00	48.00	S2209-24-ND	4.69	3.89	2.48	PRPN242MAMS
	50	48.00	50.00	S2209-25-ND	4.87	4.04	2.58	PRPN252MAMS
Dual Row Headers, Right Angle								
8	4	2.00	4.00	S2200-02-ND	1.32	1.15	.97	PRPN022PARN
	6	4.00	6.00	S2200-03-ND	1.38	1.20	1.01	PRPN032PARN
	8	6.00	8.00	S2200-04-ND	1.44	1.25	1.06	PRPN042PARN
	10	8.00	10.00	S2200-05-ND	1.50	1.30	1.10	PRPN052PARN
	12	10.00	12.00	S2200-06-ND	1.56	1.35	1.15	PRPN062PARN
	14	12.00	14.00	S2200-07-ND	1.62	1.41	1.19	PRPN072PARN
	16	14.00	16.00	S2200-08-ND	1.68	1.46	1.23	PRPN082PARN
	18	16.00	18.00	S2200-09-ND	1.74	1.51	1.28	PRPN092PARN
	20	18.00	20.00	S2200-10-ND	1.80	1.56	1.32	PRPN102PARN
	22	20.00	22.00	S2200-11-ND	1.86	1.61	1.37	PRPN112PARN
	24	22.00	24.00	S2200-12-ND	1.92	1.67	1.41	PRPN122PARN
	26	24.00	26.00	S2200-13-ND	1.98	1.72	1.45	PRPN132PARN
	28	26.00	28.00	S2200-14-ND	2.04	1.77	1.50	PRPN142PARN
	30	28.00	30.00	S2200-15-ND	2.10	1.82	1.54	PRPN152PARN
	32	30.00	32.00	S2200-16-ND	2.16	1.87	1.59	PRPN162PARN
	34	32.00	34.00	S2200-17-ND	2.22	1.93	1.63	PRPN172PARN
	36	34.00	36.00	S2200-18-ND	2.28	1.98	1.67	PRPN182PARN
	38	36.00	38.00	S2200-19-ND	2.34	2.03	1.72	PRPN192PARN
	40	38.00	40.00	S2200-20-ND	2.40	2.08	1.76	PRPN202PARN
	42	40.00	42.00	S2200-21-ND	2.46	2.13	1.81	PRPN212PARN
	44	42.00	44.00	S2200-22-ND	2.52	2.19	1.85	PRPN222PARN
	46	44.00	46.00	S2200-23-ND	2.58	2.24	1.89	PRPN232PARN
	48	46.00	48. 00	S2200-24-ND	2.64	2.29	1.94	PRPN242PARN
	50	48.00	50.00	S2200-25-ND	2.70	2.34	1.98	PRPN252PARN
	60	58.00	60.00	S2200-30-ND	3.00	2.60	2.20	PRPN302PARN
	80	78.00	80.00	S2200-40-ND	3.33	2.89	2.45	PRPN402PARN
Dual Row Receptacle Straight								
9	6	4.00	6.00	S2201-03-ND	.88	.73	.47	PPWN032AFCN
	8	6.00	8.00	S2201-04-ND	1.12	.93	.60	PPWN042AFCN
	10	8.00	10.00	S2201-05-ND	1.19	.99	.63	PPWN052AFCN
	12	10.00	12.00	S2201-06-ND	1.26	1.05	.67	PPWN062AFCN
	14	12.00	14.00	S2201-07-ND	1.37	1.14	.73	PPWN072AFCN
	16	14.00	16.00	S2201-08-ND	1.47	1.22	.78	PPWN082AFCN
	18	16.00	18.00	S2201-09-ND	1.58	1.31	.84	PPWN092AFCN
	20	18.00	20.00	S2201-10-ND	1.61	1.34	.86	PPWN102AFCN
	22	20.00	22.00	S2201-11-ND	1.79	1.48	.95	PPWN112AFCN
	24	22.00	24.00	S2201-12-ND	1.96	1.63	1.04	PPWN122AFCN
	26	24.00	26.00	S2201-13-ND	2.10	1.74	1.11	PPWN132AFCN
	30	28.00	30.00	S2201-15-ND	2.45	2.03	1.30	PPWN152AFCN
	40	38.00	40.00	S2201-20-ND	2.98	2.47	1.58	PPWN202AFCN
	44	42.00	44.00	S2201-22-ND	3.29	2.73	1.74	PPWN222AFCN
	50	48.00	50.00	S2201-25-ND	3.75	3.11	1.98	PPWN252AFCN
	60	58.00	60.00	S2201-30-ND	4.48	3.72	2.37	PPWN302AFCN
	80	78.00	80.00	S2201-40-ND	5.99	4.96	3.17	PPWN402AFCN

(Continued)

Fig. 11

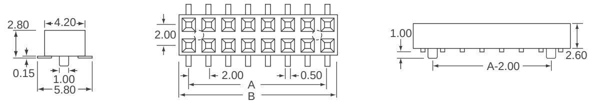


Fig. 12

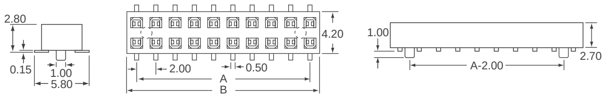


Fig. 13

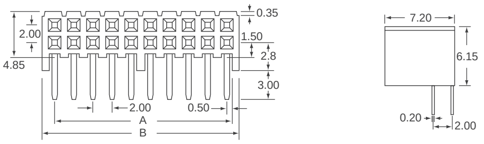


Fig. 14

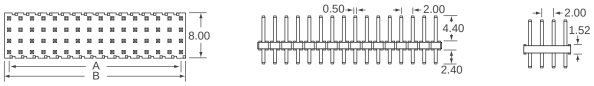


Fig. 15

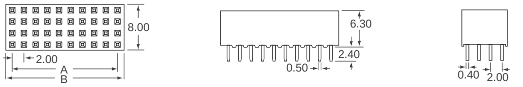


Fig. 16

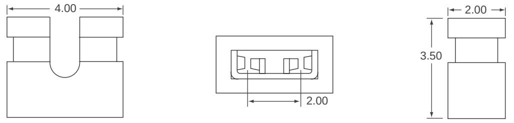


Fig.	Circuits	Dimension (mm) A	B	Digi-Key Part No.	Price Each 1	10	100	Sullins Part No.
				Dual Row Receptacle SMT without Locating Peg				
10	6	4.00	6.00	S2202-03-ND	.98	.82	.52	PPPN032FFKS
	8	6.00	8.00	S2202-04-ND	1.12	.93	.60	PPPN042FFKS
	10	8.00	10.00	S2202-05-ND	1.30	1.08	.69	PPPN052FFKS
	12	10.00	12.00	S2202-06-ND	1.47	1.22	.78	PPPN062FFKS
	14	12.00	14.00	S2202-07-ND	1.68	1.40	.89	PPPN072FFKS
	16	14.00	16.00	S2202-08-ND	1.89	1.57	1.00	PPPN082FFKS
	18	16.00	18.00	S2202-09-ND	2.14	1.77	1.13	PPPN092FFKS
	20	18.00	20.00	S2202-10-ND	2.24	1.86	1.19	PPPN102FFKS
	24	22.00	24.00	S2202-12-ND	2.70	2.24	1.43	PPPN122FFKS
	26	24.00	26.00	S2202-13-ND	2.91	2.41	1.54	PPPN132FFKS
	30	28.00	30.00	S2202-15-ND	3.36	2.79	1.78	PPPN152FFKS
	40	38.00	40.00	S2202-20-ND	4.48	3.72	2.37	PPPN202FFKS
	44	42.00	44.00	S2202-22-ND	4.94	4.09	2.61	PPPN222FFKS
	50	48.00	50.00	S2202-25-ND	5.60	4.64	2.96	PPPN252FFKS
	60	58.00	60.00	S2202-30-ND	6.72	5.57	3.56	PPPN302FFKS
				Dual Row Receptacle SMT with Locating Peg				
10	6	4.00	6.00	S2203-03-ND	.98	.82	.52	PPPN032FFKP
	8	6.00	8.00	S2203-04-ND	1.12	.93	.60	PPPN042FFKP
	10	8.00	10.00	S2203-05-ND	1.30	1.08	.69	PPPN052FFKP
	12	10.00	12.00	S2203-06-ND	1.47	1.22	.78	PPPN062FFKP
	14	12.00	14.00	S2203-07-ND	1.68	1.40	.89	PPPN072FFKP
	16	14.00	16.00	S2203-08-ND	1.89	1.57	1.00	PPPN082FFKP
	18	16.00	18.00	S2203-09-ND	2.14	1.77	1.13	PPPN092FFKP
	24	22.00	24.00	S2203-12-ND	2.70	2.24	1.43	PPPN122FFKP
	30	28.00	30.00	S2203-15-ND	3.36	2.79	1.78	PPPN152FFKP
	44	42.00	44.00	S2203-22-ND	4.94	4.09	2.61	PPPN222FFKP
	50	48.00	50.00	S2203-25-ND	5.60	4.64	2.96	PPPN252FFKP
	60	58.00	60.00	S2203-30-ND	6.72	5.57	3.56	PPPN302FFKP
				Dual Row Receptacle, Bottom Entry, SMT, with Locating Peg				
11	10	8.00	10.00	S2205-05-ND	1.82	1.51	.97	PPPN052GHNP
	12	10.00	12.00	S2205-06-ND	2.10	1.74	1.11	PPPN062GHNP
	14	12.00	14.00	S2205-07-ND	2.38	1.98	1.26	PPPN072GHNP
	16	14.00	16.00	S2205-08-ND	2.49	2.06	1.32	PPPN082GHNP
	18	16.00	18.00	S2205-09-ND	2.56	2.12	1.36	PPPN092GHNP
	20	18.00	20.00	S2205-10-ND	2.59	2.15	1.37	PPPN102GHNP
	24	22.00	24.00	S2205-12-ND	3.12	2.59	1.65	PPPN122GHNP
	26	24.00	26.00	S2205-13-ND	3.36	2.79	1.78	PPPN132GHNP
	30	28.00	30.00	S2205-15-ND	3.89	3.22	2.06	PPPN152GHNP
	36	34.00	36.00	S2205-18-ND	4.69	3.89	2.48	PPPN182GHNP
	44	42.00	44.00	S2205-22-ND	5.71	4.73	3.02	PPPN222GHNP
	56	54.00	56.00	S2205-28-ND	7.11	5.89	3.76	PPPN282GHNP
	60	58.00	60.00	S2205-30-ND	7.63	6.33	4.04	PPPN302GHNP
				Dual Row Receptacle, SMT, Top Entry Low Profile with Locating Peg				
12	10	8.00	10.40	S2206-05-ND	1.82	1.51	.97	PPPN052GFNP
	12	10.00	12.40	S2206-06-ND	2.10	1.74	1.11	PPPN062GFNP
	14	12.00	14.40	S2206-07-ND	2.38	1.98	1.26	PPPN072GFNP
	16	14.00	16.40	S2206-08-ND	2.49	2.06	1.32	PPPN082GFNP
	18	16.00	18.40	S2206-09-ND	2.56	2.12	1.36	PPPN092GFNP
	20	18.00	20.40	S2206-10-ND	2.59	2.15	1.37	PPPN102GFNP
	24	22.00	24.40	S2206-12-ND	3.12	2.59	1.65	PPPN122GFNP
	30	28.00	30.40	S2206-15-ND	3.89	3.22	2.06	PPPN152GFNP
	36	34.00	36.40	S2206-18-ND	4.69	3.89	2.48	PPPN182GFNP
	44	42.00	44.40	S2206-22-ND	5.71	4.73	3.02	PPPN222GFNP
	56	54.00	56.40	S2206-28-ND	7.11	5.89	3.76	PPPN282GFNP
	60	58.00	60.40	S2206-30-ND	7.63	6.33	4.04	PPPN302GFNP
	70	68.00	70.40	S2206-35-ND	8.89	7.37	4.70	PPPN352GFNP
	80	78.00	80.40	S2206-40-ND	10.15	8.41	5.37	PPPN402GFNP

Fig.	Circuits	Dimension (mm) A	B	Digi-Key Part No.	Price Each 1	10	100	Sullins Part No.
				Dual Row Receptacle, SMT, Top Entry Low Profile without Locating Peg				
12	8	6.00	8.40	S2207-04-ND	1.51	1.25	.80	PPPN042GFNS
	10	8.00	10.40	S2207-05-ND	1.82	1.51	.97	PPPN052GFNS
	12	10.00	12.40	S2207-06-ND	2.10	1.74	1.11	PPPN062GFNS
	14	12.00	14.40	S2207-07-ND	2.38	1.98	1.26	PPPN072GFNS
	16	14.00	16.40	S2207-08-ND	2.49	2.06	1.32	PPPN082GFNS
	18	16.00	18.40	S2207-09-ND	2.56	2.12	1.36	PPPN092GFNS
	20	18.00	20.40	S2207-10-ND	2.59	2.15	1.37	PPPN102GFNS
	24	22.00	24.40	S2207-12-ND	3.12	2.59	1.65	PPPN122GFNS
	30	28.00	30.40	S2207-15-ND	3.89	3.22	2.06	PPPN152GFNS
	36	34.00	36.40	S2207-18-ND	4.69	3.89	2.48	PPPN182GFNS
	44	42.00	44.40	S2207-22-ND	5.71	4.73	3.02	PPPN222GFNS
	56	54.00	56.40	S2207-28-ND	7.11	5.89	3.76	PPPN282GFNS
	60	58.00	60.40	S2207-30-ND	7.63	6.33	4.04	PPPN302GFNS
	70	68.00	70.40	S2207-35-ND	8.89	7.37	4.70	PPPN352GFNS
	80	78.00	80.40	S2207-40-ND	10.15	8.41	5.37	PPPN402GFNS
				Dual Row Receptacle Right Angle				
13	6	4.00	6.50	S2204-03-ND	.88	.73	.47	PPWN032FJFN
	8	6.00	8.50	S2204-04-ND	1.12	.93	.60	PPWN042FJFN
	10	8.00	10.50	S2204-05-ND	1.19	.99	.63	PPWN052FJFN
	12	10.00	12.50	S2204-06-ND	1.26	1.05	.67	PPWN062FJFN
	14	12.00	14.50	S2204-07-ND	1.37	1.14	.73	PPWN072FJFN
	16	14.00	16.50	S2204-08-ND	1.47	1.22	.78	PPWN082FJFN
	18	16.00	18.50	S2204-09-ND	1.58	1.31	.84	PPWN092FJFN
	20	18.00	20.50	S2204-10-ND	1.61	1.34	.86	PPWN102FJFN
	22	20.00	22.50	S2204-11-ND	1.79	1.48	.95	PPWN112FJFN
	24	22.00	24.50	S2204-12-ND	1.96	1.63	1.04	PPWN122FJFN
	26	24.00	26.50	S2204-13-ND	2.10	1.74	1.11	PPWN132FJFN
	28	26.00	28.50	S2204-14-ND	2.28	1.89	1.21	PPWN142FJFN
	30	28.00	30.50	S2204-15-ND	2.45	2.03	1.30	PPWN152FJFN
	32	30.00	32.50	S2204-16-ND	2.38	1.98	1.26	PPWN162FJFN
	34	32.00	34.50	S2204-17-ND	2.56	2.12	1.36	PPWN172FJFN
	36	34.00	36.50	S2204-18-ND	2.70	2.24	1.43	PPWN182FJFN
	38	36.00	38.50	S2204-19-ND	2.84	2.35	1.50	PPWN192FJFN
	40	38.00	40.50	S2204-20-ND	2.98	2.47	1.58	PPWN202FJFN
	42	40.00	42.50	S2204-21-ND	3.15	2.61	1.67	PPWN212FJFN
	44	42.00	44.50	S2204-22-ND	3.29	2.73	1.74	PPWN222FJFN
	46	44.00	46.50	S2204-23-ND	3.43	2.85	1.82	PPWN232FJFN
	48	46.00	48.50	S2204-24-ND	3.57	2.96	1.89	PPWN242FJFN
	50	48.00	50.50	S2204-25-ND	3.75	3.11	1.98	PPWN252FJFN
	60	58.00	60.50	S2204-30-ND	4.48	3.72	2.37	PPWN302FJFN
				Headers - Quad Row, Straight				
14	24	10.00	12.00	S2401-06-ND	8.06	6.99	5.91	PRPN064RCCN
	40	18.00	20.00	S2401-10-ND	8.22	7.13	6.03	PRPN104RCCN
	48	22.00	24.00	S2401-12-ND	8.30	7.19	6.09	PRPN124RCCN
	60	28.00	30.00	S2401-15-ND	8.42	7.30	6.18	PRPN154RCCN
	72	34.00	36.00	S2401-18-ND	8.54	7.40	6.26	PRPN184RCCN
	84	40.00	42.00	S2401-21-ND	8.66	7.51	6.35	PRPN214RCCN
	96	46.00	48.00	S2401-24-ND	8.78	7.61	6.44	PRPN244RCCN
	120	58.00	60.00	S2401-30-ND	9.02	7.82	6.62	PRPN304RCCN
				Quad Row, Receptacle Straight				
15	24	10.00	12.40	S2402-06-ND	2.73	2.27	1.45	PPRN064EFCN
	40	18.00	20.40	S2402-10-ND	4.55	3.77	2.41	PPRN104EFCN
	48	22.00	24.40	S2402-12-ND	5.46	4.53	2.89	PPRN124EFCN
	60	28.00	30.40	S2402-15-ND	6.83	5.66	3.61	PPRN154EFCN
	72	34.00	36.40	S2402-18-ND	8.19	6.79	4.33	PPRN184EFCN
	84	40.00	42.40	S2402-21-ND	9.56	7.92	5.06	PPRN214EFCN
	96	46.00	48.40	S2402-24-ND	10.92	9.05	5.78	PPRN244EFCN
	120	58.00	60.40	S2402-30-ND	13.65	11.31	7.22	PPRN304EFCN
				Shunt, Open Top				
16	2	Tin		S9003-ND	.70	.58	.37	STN02SYBN
	2	Gold		S9004-ND	.70	.58	.37	SPN02SYBN

2mm Connectors (interconnect wire available)

DF3 SERIES - Single Row Connectors

Specifications • Current Capacity: 3A with AWG24 cable • Rated Voltage: 250VAC • Insulation Res.: Min. 1000MΩ at 500VDC • Withstand Voltage: 650VAC • Contact Res.: Max. 30MΩ at 0.1ADC

Fig. 1

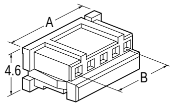
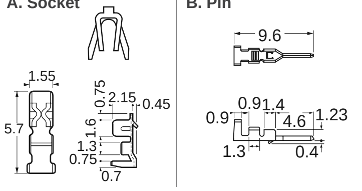


Fig. 2



A. Socket

B. Pin

Fig. 3

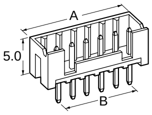


Fig. 4

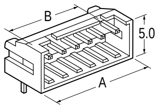


Fig. 5 — Surface Mount

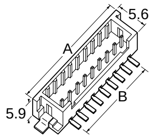


Fig. 6 — Surface Mount

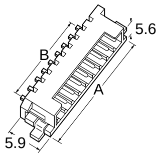


Fig.	No. of Pins	Dimensions (mm)		Digi-Key Part No.	Pricing			Hirose Part No.
		A	B		1	25	100	
Single Row Crimp Socket								
1	2	6.0	2.0	H2083-ND	.26	2.83	7.98	DF3-2S-2C
	3	8.0	4.0	H2084-ND	.28	3.02	8.53	DF3-3S-2C
	4	10.0	6.0	H2085-ND	.28	3.02	8.53	DF3-4S-2C
	5	12.0	8.0	H2086-ND	.30	3.22	9.08	DF3-5S-2C
	6	14.0	10.0	H2087-ND	.31	3.32	9.35	DF3-6S-2C
	7	16.0	12.0	H2088-ND	.32	3.51	9.90	DF3-7S-2C
	8	18.0	14.0	H2089-ND	.32	3.51	9.90	DF3-8S-2C
	9	20.0	16.0	H2146-ND	.28	3.35	10.00	DF3-9S-2C
	10	22.0	18.0	H2091-ND	.29	3.52	10.50	DF3-10S-2C
	11	24.0	20.0	H2092-ND	.30	3.60	10.75	DF3-11S-2C
	12	26.0	22.0	H2093-ND	.32	3.77	11.25	DF3-12S-2C
	13	28.0	24.0	H2290-ND	.32	3.77	11.25	DF3-13S-2C
	14	30.0	26.0	H2291-ND	.35	4.19	12.50	DF3-14S-2C
	15	32.0	28.0	H2292-ND	.35	4.19	12.50	DF3-15S-2C
2A	Crimp Contact for DF3 Socket, Tin			H2138-ND	—	—	3.57	DF3-2428SC
	Crimp Contact for DF3 Socket, Gold			H2305-ND	—	—	10.67	DF3-2428SCC
2B	Crimp Contact for DF3 Pin, Tin			H2306-ND	—	—	4.87	DF3-EP2428PC
	Crimp Contact for DF3 Pin, Gold			H2307-ND	—	—	19.88	DF3-EP2428PCA
—	Crimp Tool for DF3 Socket			H9997-ND	665.13	—	—	DF3-TA2428HC
	Crimp Tool for DF3 Pin			H2308-ND	797.39	—	—	DF3EP-TA2428HC
Vertical Protected Header								
3	2	6.0	2.0	H2094-ND	.24	2.58	7.27	DF3A-2P-2DSA
	3	8.0	4.0	H2095-ND	.28	3.08	8.69	DF3A-3P-2DSA
	4	10.0	6.0	H2096-ND	.33	3.54	9.98	DF3A-4P-2DSA
	5	12.0	8.0	H2097-ND	.34	4.08	12.17	DF3A-5P-2DSA
	6	14.0	10.0	H2098-ND	.35	4.20	12.55	DF3A-6P-2DSA
	7	16.0	12.0	H2099-ND	.37	4.37	13.06	DF3A-7P-2DSA
	8	18.0	14.0	H2147-ND	.52	6.16	18.40	DF3A-8P-2DSA
	9	20.0	16.0	H2101-ND	.40	6.05	18.96	DF3A-9P-2DSA
	10	22.0	18.0	H2102-ND	.43	6.39	20.03	DF3A-10P-2DSA
	11	24.0	20.0	H2103-ND	.43	6.52	20.41	DF3A-11P-2DSA
	12	26.0	22.0	H2104-ND	.45	6.68	20.92	DF3A-12P-2DSA
	13	28.0	24.0	H2293-ND	1.77	32.11	105.08	DF3-13P-2DSA
	14	30.0	26.0	H2294-ND	1.86	33.62	110.03	DF3-14P-2DSA
	15	32.0	28.0	H2295-ND	1.66	31.94	102.20	DF3-15P-2DSA
Right Angle Protected Header								
4	2	6.0	2.0	H2105-ND	.38	4.52	13.50	DF3-2P-2DS
	3	8.0	4.0	H2106-ND	.44	5.28	15.75	DF3-3P-2DS
	4	10.0	6.0	H2107-ND	.48	5.78	17.25	DF3-4P-2DS
	5	12.0	8.0	H2108-ND	.42	6.23	19.51	DF3-5P-2DS
	6	14.0	10.0	H2109-ND	.44	6.60	20.68	DF3-6P-2DS
4	7	16.0	12.0	H2110-ND	.48	7.13	22.33	DF3-7P-2DS
	8	18.0	14.0	H2111-ND	.50	7.50	23.50	DF3-8P-2DS
	9	20.0	16.0	H2112-ND	.57	8.48	26.56	DF3-9P-2DS
	10	22.0	18.0	H2113-ND	.60	8.93	27.97	DF3-10P-2DS
	11	24.0	20.0	H2114-ND	.70	10.50	32.90	DF3-11P-2DS
	12	26.0	22.0	H2115-ND	.73	10.95	34.31	DF3-12P-2DS
	13	28.0	24.0	H2310-ND	.58	10.45	34.20	DF3-13P-2DS
	14	30.0	26.0	H2311-ND	.60	10.93	35.78	DF3-14P-2DS
	15	32.0	28.0	H2312-ND	.63	11.34	37.13	DF3-15P-2DS
Surface Mount Vertical Header								
5	2	8.5	2.0	H2116-ND	.62	9.30	29.14	DF3-2P-2V(20)
	3	10.5	4.0	H2117-ND	.65	9.75	30.55	DF3-3P-2V(20)
	4	12.5	6.0	H2118-ND	.68	10.20	31.96	DF3-4P-2V(20)
	5	14.5	8.0	H2119-ND	.73	10.88	34.08	DF3-5P-2V(20)
	6	16.5	10.0	H2148-ND	.57	10.38	33.98	DF3-6P-2V(20)
	7	18.5	12.0	H2121-ND	.59	10.73	35.10	DF3-7P-2V(20)
	8	20.5	14.0	H2122-ND	.62	11.14	36.45	DF3-8P-2V(20)
	9	22.5	16.0	H2123-ND	.68	12.31	40.28	DF3-9P-2V(20)
	10	24.5	18.0	H2124-ND	.70	12.72	41.63	DF3-10P-2V(20)
	11	26.5	20.0	H2125-ND	.76	13.82	45.23	DF3-11P-2V(20)
	12	28.5	22.0	H2126-ND	.79	14.23	46.58	DF3-12P-2V(20)
	13	30.5	24.0	H2313-ND	.85	15.33	50.18	DF3-13P-2V(20)
	14	32.5	26.0	H2314-ND	.89	16.02	52.43	DF3-14P-2V(20)
	15	34.5	28.0	H2315-ND	.93	16.91	55.35	DF3-15P-2V(20)
Surface Mount Horizontal Right Angle Header								
6	2	8.5	2.0	H2127-ND	.63	9.45	29.61	DF3-2P-2H(20)
	3	10.5	4.0	H2128-ND	.66	9.90	31.02	DF3-3P-2H(20)
	4	12.5	6.0	H2129-ND	.69	10.35	32.43	DF3-4P-2H(20)
	5	14.5	8.0	H2130-ND	.74	11.03	34.55	DF3-5P-2H(20)
	6	16.5	10.0	H2131-ND	.58	10.52	34.43	DF3-6P-2H(20)
	7	18.5	12.0	H2149-ND	.60	10.93	35.78	DF3-7P-2H(20)
	8	20.5	14.0	H2133-ND	.63	11.34	37.13	DF3-8P-2H(20)
	9	22.5	16.0	H2134-ND	.69	12.51	40.95	DF3-9P-2H(20)
	10	24.5	18.0	H2135-ND	.71	12.93	42.30	DF3-10P-2H(20)
	11	26.5	20.0	H2136-ND	.78	14.09	46.13	DF3-11P-2H(20)
	12	28.5	22.0	H2137-ND	.80	14.44	47.25	DF3-12P-2H(20)
	13	30.5	24.0	H2316-ND	.86	15.61	51.08	DF3-13P-2H(20)
	14	32.5	26.0	H2317-ND	.90	16.29	53.33	DF3-14P-2H(20)
	15	34.5	28.0	H2318-ND	.95	17.26	56.48	DF3-15P-2H(20)

A3B/A4B SERIES - Crimp Connectors

Specifications: • Current Rating: 2A at 1P • Voltage: 200VAC at 1P • Insulation Res.: 1000MΩ or more at 500VDC • Withstanding Voltage: 650VAC r.m.s. for 1 minute • Contact Res.: 15mΩ or less at 100mADC.

Fig. 1

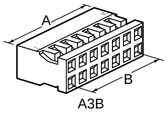


Fig. 2

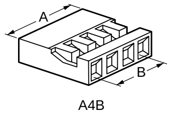


Fig. 3

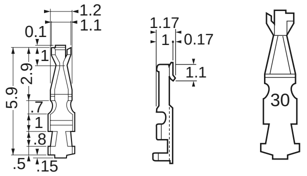


Fig. 4 ***Note:*** For use with all series.

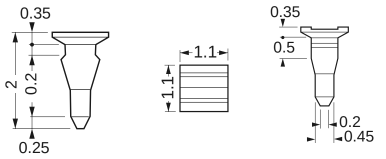


Fig.	No. of Pins	Dim. (mm)		Digi-Key Part No.	Pricing			Hirose Part No.
		A	B		1	25	100	
Dual Row Crimp Socket								
1	4	4.0	2.0	H2001-ND	.47	5.61	16.75	A3B-4D-2C
	6	6.0	4.0	H2002-ND	.50	5.95	17.75	A3B-6D-2C
	8	8.0	6.0	H2003-ND	.53	6.28	18.75	A3B-8D-2C
	10	10.0	8.0	H2004-ND	.55	6.62	19.75	A3B-10D-2C
	12	12.0	10.0	H2005-ND	.42	6.23	19.51	A3B-12D-2C
	14	14.0	12.0	H2006-ND	.44	6.53	20.45	A3B-14D-2C
	18	18.0	16.0	H2007-ND	.46	6.90	21.62	A3B-18D-2C
	20	20.0	18.0	H2008-ND	.48	7.20	22.56	A3B-20D-2C
	24	24.0	22.0	H2009-ND	.51	7.65	23.97	A3B-24D-2C
	28	28.0	26.0	H2010-ND	.54	8.03	25.15	A3B-28D-2C
Single Row Crimp Socket								
2	2	4.0	2.0	H2011-ND	.46	5.44	16.25	A4B-2S-2C
	3	6.0	4.0	H2012-ND	.46	5.53	16.50	A4B-3S-2C
	4	8.0	6.0	H2013-ND	.47	5.61	16.75	A4B-4S-2C
	5	10.0	8.0	H2014-ND	.48	5.70	17.00	A4B-5S-2C
	6	12.0	10.0	H2015-ND	.48	5.78	17.25	A4B-6S-2C
	8	16.0	14.0	H2016-ND	.50	6.03	18.00	A4B-8S-2C
	10	20.0	18.0	H2017-ND	.52	6.20	18.50	A4B-10S-2C
	12	24.0	22.0	H2018-ND	.53	6.37	19.00	A4B-12S-2C
3	Crimp Terminal for A3B-A4B Type			H9999-ND	—	—	7.32	A3B-2630SCC
	Crimp Tool for A3B-A4B Type			H9998-ND	958.40	—	—	A3B-TA2630HC
4	Polarizing Key for Socket Connectors			H2000-ND	3.23/10	—	18.58	A3-GPIN(A)

DF11 SERIES - Dual Row Connectors

Specifications: • Current Capacity: 3A with AWG24 cable • Rated Voltage: 250VAC • Insulation Res.: Min. 1000MΩ at 500VDC • Withstand Voltage: 650VAC • Contact Res.: Max. 30MΩ at 0.1ADC

Fig. 1

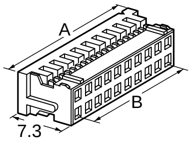
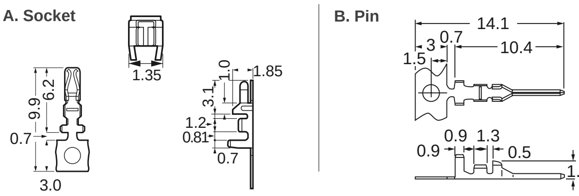


Fig. 2


A. Socket

B. Pin

Fig. 3

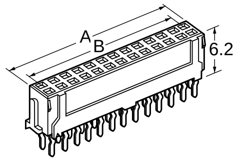


Fig. 4 — Surface Mount

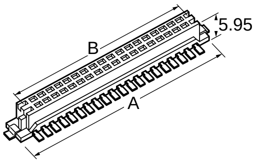


Fig. 5

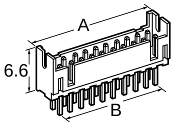


Fig. 6

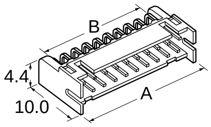


Fig. 7 — Surface Mount

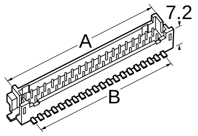


Fig.	No. of Pins	Dimensions (mm)		Digi-Key Part No.	Pricing			Hirose Part No.
		A	B		1	25	100	
Dual Row Crimp Socket								
1	4	6.0	2.0	H2019-ND	.44	5.28	15.75	DF11-4DS-2C
	6	8.0	4.0	H2021-ND	.50	5.95	17.75	DF11-6DS-2C
	8	10.0	6.0	H2022-ND	.48	5.78	17.25	DF11-8DS-2C
	10	12.0	8.0	H2023-ND	.40	6.00	18.80	DF11-10DS-2C
	12	14.0	10.0	H2024-ND	.54	6.45	19.25	DF11-12DS-2C
	14	16.0	12.0	H2140-ND	.40	6.00	18.80	DF11-14DS-2C
	16	18.0	14.0	H2025-ND	.41	4.86	14.50	DF11-16DS-2C
	18	20.0	16.0	H2026-ND	.44	6.53	20.45	DF11-18DS-2C
	20	22.0	18.0	H2027-ND	.43	5.11	15.25	DF11-20DS-2C
	22	24.0	20.0	H2028-ND	.49	7.28	22.80	DF11-22DS-2C
	24	26.0	22.0	H2029-ND	.50	7.50	23.50	DF11-24DS-2C
	26	28.0	24.0	H2261-ND	.52	7.80	24.44	DF11-26DS-2C
	28	30.0	26.0	H2262-ND	.54	8.10	25.38	DF11-28DS-2C
	30	32.0	28.0	H2263-ND	.56	8.40	26.32	DF11-30DS-2C
	32	34.0	30.0	H2264-ND	.58	8.63	27.03	DF11-32DS-2C
2A	Crimp Contact for DF11 Socket, Tin			H2139-ND	—	—	3.63	DF11-2428SC
	Crimp Contact for DF11 Socket, Gold			H2300-ND	—	—	10.98	DF11-2428SCA
2B	Crimp Contact for DF11 Pin, Tin			H2301-ND	—	—	9.46	DF11-EP2428PC
	Crimp Contact for DF11 Pin, Gold			H2302-ND	—	—	12.70	DF11-EP2428PCA
—	Crimp Tool for DF11 Socket			H9995-ND	828.06	—	—	DF11-TA2428HC
	Crimp Tool for DF11 Pin			H2304-ND	958.40	—	—	DF11EP-TA2428HC
	Extraction Tool for DF11 Socket			H9996-ND	9.91	—	—	DF-C-PO(B)
Vertical PCB Socket								
3	8	10.0	6.0	H2030-ND	1.07	19.39	63.45	DF11-8DS-2DSA
	10	12.0	8.0	H2031-ND	1.17	21.11	69.08	DF11-10DS-2DSA
	12	14.0	10.0	H2141-ND	1.27	22.89	74.93	DF11-12DS-2DSA
	14	16.0	12.0	H2033-ND	1.36	24.68	80.78	DF11-14DS-2DSA
	16	18.0	14.0	H2034-ND	1.49	27.02	88.43	DF11-16DS-2DSA
	18	20.0	16.0	H2035-ND	1.59	28.81	94.28	DF11-18DS-2DSA
	20	22.0	18.0	H2036-ND	1.73	31.35	102.60	DF11-20DS-2DSA
	22	24.0	20.0	H2037-ND	1.83	33.14	108.45	DF11-22DS-2DSA
	24	26.0	22.0	H2038-ND	1.65	31.75	101.60	DF11-24DS-2DSA
	26	28.0	24.0	H2265-ND	1.74	33.38	106.80	DF11-26DS-2DSA
	28	30.0	26.0	H2266-ND	1.43	27.50	88.00	DF11-28DS-2DSA
	30	32.0	28.0	H2267-ND	1.89	36.44	116.60	DF11-30DS-2DSA
	32	34.0	30.0	H2268-ND	1.99	38.19	122.20	DF11-32DS-2DSA
Surface Mount Vertical Socket								
4	4	8.5	2.0	H2039-ND	.96	17.39	56.93	DF11-4DS-2V(20)
	6	10.5	4.0	H2040-ND	1.08	19.46	63.68	DF11-6DS-2V(20)
	8	12.5	6.0	H2041-ND	1.20	21.66	70.88	DF11-8DS-2V(20)
	10	14.5	8.0	H2042-ND	1.31	23.65	77.40	DF11-10DS-2V(20)
	12	16.5	10.0	H2043-ND	1.44	25.99	85.05	DF11-12DS-2V(20)
	14	18.5	12.0	H2142-ND	1.55	27.98	91.58	DF11-14DS-2V(20)
	16	20.5	14.0	H2045-ND	1.68	30.39	99.45	DF11-16DS-2V(20)
	18	22.5	16.0	H2046-ND	1.79	32.45	106.20	DF11-18DS-2V(20)
	20	24.5	18.0	H2047-ND	1.63	31.38	100.40	DF11-20DS-2V(20)
	22	26.5	20.0	H2048-ND	1.73	33.19	106.20	DF11-22DS-2V(20)
4	24	28.5	22.0	H2049-ND	1.82	35.06	112.20	DF11-24DS-2V(20)
	26	30.5	24.0	H2270-ND	1.94	37.38	119.60	DF11-26DS-2V(20)
	28	32.5	26.0	H2271-ND	2.04	39.25	125.60	DF11-28DS-2V(20)
	30	34.5	28.0	H2272-ND	2.14	41.13	131.60	DF11-30DS-2V(20)
	32	36.5	30.0	H2273-ND	2.23	42.94	137.40	DF11-32DS-2V(20)
Vertical Protected Header								
5	4	6.0	2.0	H2143-ND	.54	8.03	25.15	DF11-4DP-2DSA(20)
	6	8.0	4.0	H2051-ND	.60	9.00	28.20	DF11-6DP-2DSA(20)
	8	10.0	6.0	H2052-ND	.64	9.60	30.08	DF11-8DP-2DSA(20)
	10	12.0	8.0	H2053-ND	.73	10.88	34.08	DF11-10DP-2DSA(20)
	12	14.0	10.0	H2054-ND	.62	11.14	36.45	DF11-12DP-2DSA(20)
	14	16.0	12.0	H2055-ND	.68	12.24	40.05	DF11-14DP-2DSA(20)
	16	18.0	14.0	H2056-ND	.59	10.66	34.88	DF11-16DP-2DSA(20)
	18	20.0	16.0	H2057-ND	.80	14.51	47.48	DF11-18DP-2DSA(20)
	20	22.0	18.0	H2058-ND	.75	13.54	44.33	DF11-20DP-2DSA(20)
	22	24.0	20.0	H2059-ND	.97	17.53	57.38	DF11-22DP-2DSA(20)
	24	26.0	22.0	H2060-ND	1.02	18.49	60.53	DF11-24DP-2DSA(20)
	26	28.0	24.0	H2275-ND	1.08	19.46	63.68	DF11-26DP-2DSA(20)
	28	30.0	26.0	H2276-ND	1.13	20.49	67.05	DF11-28DP-2DSA(20)
	30	32.0	28.0	H2277-ND	.95	17.19	56.25	DF11-30DP-2DSA(20)
	32	34.0	30.0	H2278-ND	1.25	22.62	74.03	DF11-32DP-2DSA(20)
Right Angle Protected Header								
6	4	6.0	2.0	H2061-ND	.58	8.70	27.26	DF11-4DP-2DS(22)
	6	8.0	4.0	H2062-ND	.66	9.90	31.02	DF11-6DP-2DS(22)
	8	10.0	6.0	H2063-ND	.71	10.58	33.14	DF11-8DP-2DS(22)
	10	12.0	8.0	H2145-ND	.60	10.93	35.78	DF11-10DP-2DS(22)
	12	14.0	10.0	H2065-ND	.68	12.38	40.50	DF11-12DP-2DS(22)
	14	16.0	12.0	H2066-ND	.75	13.54	44.33	DF11-14DP-2DS(22)
	16	18.0	14.0	H2067-ND	.68	12.31	40.28	DF11-16DP-2DS(22)
	18	20.0	16.0	H2068-ND	.90	16.23	53.10	DF11-18DP-2DS(22)
	20	22.0	18.0	H2069-ND	.98	17.67	57.83	DF11-20DP-2DS(22)
	22	24.0	20.0	H2070-ND	1.09	19.80	64.80	DF11-22DP-2DS(22)
	24	26.0	22.0	H2071-ND	1.16	20.90	68.40	DF11-24DP-2DS(22)
	26	28.0	24.0	H2280-ND	1.22	22.07	72.23	DF11-26DP-2DS(22)
	28	30.0	26.0	H2281-ND	1.28	23.17	75.83	DF11-28DP-2DS(22)
	30	32.0	28.0	H2282-ND	1.35	24.41	79.88	DF11-30DP-2DS(22)
	32	34.0	30.0	H2283-ND	1.41	25.51	83.48	DF11-32DP-2DS(22)
Surface Mount Protected Header								
7	4	2.0	8.5	H2072-ND	1.08	19.46	63.68	DF11-4DP-2V(20)
	6	4.0	10.5	H2073-ND	1.20	21.79	71.33	DF11-6DP-2V(20)
	8	6.0	12.5	H2074-ND	1.28	23.10	75.60	DF11-8DP-2V(20)
	10	8.0	14.5	H2075-ND	1.37	24.75	81.00	DF11-10DP-2V(20)
	12	10.0	16.5	H2076-ND	1.44	26.13	85.50	DF11-12DP-2V(20)
	14	12.0	18.5	H2077-ND	1.54	27.78	90.90	DF11-14DP-2V(20)
	16	14.0	20.5	H2078-ND	1.62	29.29	95.85	DF11-16DP-2V(20)
	18	16.0	22.5	H2079-ND	1.71	31.01	101.48	DF11-18DP-2V(20)
	20	18.0	24.5	H2080-ND	1.77	32.04	104.85	DF11-20DP-2V(20)
	22	20.0	26.5	H2081-ND	1.86	33.69	110.25	DF11-22DP-2V(20)
	24	22.0	28.5	H2082-ND	1.67	32.13	102.80	DF11-24DP-2V(20)
	26	24.0	30.5	H2285-ND	1.94	37.38	119.60	DF11-26DP-2V(20)
	28	26.0	32.5	H2286-ND	2.04	39.25	125.60	DF11-28DP-2V(20)
	30	28.0	34.5	H2287-ND	2.14	41.13	131.60	DF11-30DP-2V(20)
	32	30.0	36.5	H2288-ND	1.93	37.19	119.00	DF11-32DP-2V(20)

DF3 / DF11 Interconnect Wire (housing available)

CONTACT SPECIFICATIONS: • Rated Current: **DF3:** *24AWG:* 3A, *26 AWG:* 2A, *28AWG:* 1A **DF11:** *24-26 AWG:* 2A, *28 AWG:* 1A • Operating Temperature: -30°C to +85°C • Rated Voltage: AC250V • Insulation Resistance: 1000 MΩ or more • Contact Resistance: 30 mΩ or less • Insertion / Withdrawals Force: Min. 0.3 N (30gf), Max. 4.4 N (450gf) • Material (crimp terminal for socket): Phosphor bronze with tin or gold plating. **Safety Standards:** UL: E52653 and CSA: LR95109.

WIRE SPECIFICATIONS: • Stranded tinned copper conductor • Color coded PVC insulation • Flammability: Passes UL VW-1 flame test • Wire is ordered per EIA-359-A color specifications which allows for some variation in shade • Operating Temperature: -40°C to +90°C (CSA TR-64), -40°C to +80°C (UL AWM 1007)

H □ □ □ □ - □ □ □ □ □ - □ □ - ND

Hirose Cable Assembly

SERIES
2 = DF3 Series
3 = DF11 Series

CONTACT END
A = Male/Pin
B = Female/Socket
X = Single Ended

1 = Single Row
2 = Double Row

FINISH
T = Tin
G = Gold

LENGTH OF WIRE FOR THE JUMPER (Inch)
02 = 2 Inches
03 = 3 Inches
04 = 4 Inches
05 = 5 Inches
06 = 6 Inches
08 = 8 Inches
10 = 10 Inches
12 = 12 Inches

NO. OF CONDUCTORS
01 = One

COLOR OF WIRE
A = Orange
B = Black
G = Green
L = Blue
N = Brown
R = Red
S = Gray
V = Violet
W = White
Y = Yellow

WIRE GAGE SIZE
4 = 24 AWG
6 = 26 AWG
8 = 28 AWG

Fig. 1 — Socket to Socket

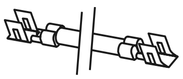


Fig. 2 — Pin to Socket

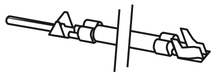


Fig. 3 — Pin to Pin

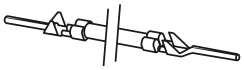


Fig. 4 — Socket Single End

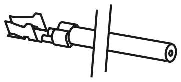
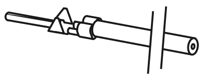


Fig. 5 — Pin Single End



* For □ in Digi-Key Part No. choose letter which represents color of your choice: **A** = Orange **B** = Black **G** = Green **L** = Blue **N** = Brown **R** = Red **S** = Gray **V** = Violet **W** = White **Y** = Yellow

Fig.	Cable Length (in.)	Digi-Key Part No.	Price Each 10	100	250
DF3 - TIN PLATED CONTACTS					
24 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H2BBT-10102-□4-ND	.54	.40	.35
	3	H2BBT-10103-□4-ND	.55	.41	.35
	4	H2BBT-10104-□4-ND	.55	.41	.35
	5	H2BBT-10105-□4-ND	.56	.41	.36
	6	H2BBT-10106-□4-ND	.56	.42	.36
	8	H2BBT-10108-□4-ND	.57	.42	.37
	10	H2BBT-10110-□4-ND	.58	.43	.37
	12	H2BBT-10112-□4-ND	.59	.44	.38
Fig. 2 (Pin to Socket)	2	H2ABT-10102-□4-ND	.55	.41	.35
	3	H2ABT-10103-□4-ND	.56	.41	.36
	4	H2ABT-10104-□4-ND	.56	.42	.36
	5	H2ABT-10105-□4-ND	.57	.42	.36
	6	H2ABT-10106-□4-ND	.58	.43	.37
	8	H2ABT-10108-□4-ND	.59	.43	.37
	10	H2ABT-10110-□4-ND	.60	.44	.38
	12	H2ABT-10112-□4-ND	.61	.45	.39
Fig. 3 (Pin to Pin)	2	H2AAT-10102-□4-ND	.57	.42	.36
	3	H2AAT-10103-□4-ND	.57	.42	.37
	4	H2AAT-10104-□4-ND	.58	.43	.37
	5	H2AAT-10105-□4-ND	.58	.43	.37
	6	H2AAT-10106-□4-ND	.59	.43	.37
	8	H2AAT-10108-□4-ND	.60	.44	.38
	10	H2AAT-10110-□4-ND	.61	.45	.39
	12	H2AAT-10112-□4-ND	.62	.46	.39
Fig. 4 (Socket Single End)	2	H2BXT-10102-□4-ND	.52	.39	.33
	3	H2BXT-10103-□4-ND	.53	.39	.34
	4	H2BXT-10104-□4-ND	.53	.39	.34
	5	H2BXT-10105-□4-ND	.54	.40	.34
	6	H2BXT-10106-□4-ND	.54	.40	.35
	8	H2BXT-10108-□4-ND	.55	.41	.35
	10	H2BXT-10110-□4-ND	.56	.42	.36
	12	H2BXT-10112-□4-ND	.57	.42	.37
Fig. 5 (Pin Single End)	2	H2AXT-10102-□4-ND	.53	.39	.34
	3	H2AXT-10103-□4-ND	.54	.40	.34
	4	H2AXT-10104-□4-ND	.54	.40	.35
	5	H2AXT-10105-□4-ND	.55	.41	.35
	6	H2AXT-10106-□4-ND	.55	.41	.35
	8	H2AXT-10108-□4-ND	.56	.42	.36
	10	H2AXT-10110-□4-ND	.57	.42	.37
	12	H2AXT-10112-□4-ND	.58	.43	.37
26 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H2BBT-10102-□6-ND	.54	.40	.35
	3	H2BBT-10103-□6-ND	.55	.41	.35
	4	H2BBT-10104-□6-ND	.55	.41	.35
	5	H2BBT-10105-□6-ND	.56	.41	.36
	6	H2BBT-10106-□6-ND	.56	.42	.36
	8	H2BBT-10108-□6-ND	.57	.42	.37
	10	H2BBT-10110-□6-ND	.58	.43	.37
	12	H2BBT-10112-□6-ND	.59	.44	.38
Fig. 2 (Pin to Socket)	2	H2ABT-10102-□6-ND	.55	.41	.35
	3	H2ABT-10103-□6-ND	.56	.41	.36
	4	H2ABT-10104-□6-ND	.56	.42	.36
	5	H2ABT-10105-□6-ND	.57	.42	.36
	6	H2ABT-10106-□6-ND	.57	.42	.37
	8	H2ABT-10108-□6-ND	.58	.43	.37
	10	H2ABT-10110-□6-ND	.59	.44	.38
	12	H2ABT-10112-□6-ND	.60	.45	.38
Fig. 3 (Pin to Pin)	2	H2AAT-10102-□6-ND	.57	.42	.36
	3	H2AAT-10103-□6-ND	.57	.42	.36
	4	H2AAT-10104-□6-ND	.58	.43	.37
	5	H2AAT-10105-□6-ND	.58	.43	.37
	6	H2AAT-10106-□6-ND	.58	.43	.37
	8	H2AAT-10108-□6-ND	.59	.44	.38
	10	H2AAT-10110-□6-ND	.60	.45	.39
	12	H2AAT-10112-□6-ND	.61	.45	.39

Fig.	Cable Length (in.)	Digi-Key Part No.	Price Each 10	100	250
Fig. 4 (Socket Single End)	2	H2BXT-10102-□6-ND	.52	.39	.33
	3	H2BXT-10103-□6-ND	.53	.39	.34
	4	H2BXT-10104-□6-ND	.53	.39	.34
	5	H2BXT-10105-□6-ND	.54	.40	.34
	6	H2BXT-10106-□6-ND	.54	.40	.35
	8	H2BXT-10108-□6-ND	.55	.41	.35
	10	H2BXT-10110-□6-ND	.56	.41	.36
	12	H2BXT-10112-□6-ND	.57	.42	.36
Fig. 5 (Pin Single End)	2	H2AXT-10102-□6-ND	.53	.39	.34
	3	H2AXT-10103-□6-ND	.54	.40	.34
	4	H2AXT-10104-□6-ND	.54	.40	.35
	5	H2AXT-10105-□6-ND	.55	.40	.35
	6	H2AXT-10106-□6-ND	.55	.41	.35
	8	H2AXT-10108-□6-ND	.56	.41	.36
	10	H2AXT-10110-□6-ND	.57	.42	.36
	12	H2AXT-10112-□6-ND	.58	.43	.37
28 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H2BBT-10102-□8-ND	.54	.40	.35
	3	H2BBT-10103-□8-ND	.55	.41	.35
	4	H2BBT-10104-□8-ND	.56	.41	.36
	5	H2BBT-10105-□8-ND	.56	.41	.36
	6	H2BBT-10106-□8-ND	.57	.42	.36
	8	H2BBT-10108-□8-ND	.58	.43	.37
	10	H2BBT-10110-□8-ND	.59	.43	.38
	12	H2BBT-10112-□8-ND	.60	.44	.38
Fig. 2 (Pin to Socket)	2	H2ABT-10102-□8-ND	.56	.41	.36
	3	H2ABT-10103-□8-ND	.56	.41	.36
	4	H2ABT-10104-□8-ND	.57	.42	.36
	5	H2ABT-10105-□8-ND	.57	.42	.37
	6	H2ABT-10106-□8-ND	.58	.43	.37
	8	H2ABT-10108-□8-ND	.59	.43	.38
	10	H2ABT-10110-□8-ND	.60	.44	.38
	12	H2ABT-10112-□8-ND	.61	.45	.39
Fig. 3 (Pin to Pin)	2	H2AAT-10102-□8-ND	.57	.42	.36
	3	H2AAT-10103-□8-ND	.57	.42	.37
	4	H2AAT-10104-□8-ND	.58	.43	.37
	5	H2AAT-10105-□8-ND	.58	.43	.37
	6	H2AAT-10106-□8-ND	.59	.44	.38
	8	H2AAT-10108-□8-ND	.60	.44	.38
	10	H2AAT-10110-□8-ND	.61	.45	.39
	12	H2AAT-10112-□8-ND	.62	.46	.40
Fig. 4 (Socket Single End)	2	H2BXT-10102-□8-ND	.52	.39	.33
	3	H2BXT-10103-□8-ND	.53	.39	.34
	4	H2BXT-10104-□8-ND	.53	.39	.34
	5	H2BXT-10105-□8-ND	.54	.40	.34
	6	H2BXT-10106-□8-ND	.54	.40	.35
	8	H2BXT-10108-□8-ND	.55	.41	.35
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	12	H2BXT-10112-□8-ND	.58	.43	.37
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	4	H2AXT-10104-□8-ND	.54	.40	.35
	5	H2AXT-10105-□8-ND	.55	.41	.35
	6	H2AXT-10106-□8-ND	.55	.41	.35
	8	H2AXT-10108-□8-ND	.57	.42	.36
	10	H2AXT-10110-□8-ND	.58	.43	.37
	12	H2AXT-10112-□8-ND	.59	.43	.38
DF3 - 15µ GOLD PLATED CONTACTS					
24 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H2BBG-10102-□4-ND	.61	.45	.39
	3	H2BBG-10103-□4-ND	.62	.45	.39
	4	H2BBG-10104-□4-ND	.62	.46	.40
	5	H2BBG-10105-□4-ND	.63	.46	.40
	6	H2BBG-10106-□4-ND	.63	.47	.40
	8	H2BBG-10108-□4-ND	.64	.47	.41
	10	H2BBG-10110-□4-ND	.65	.48	.42
	12	H2BBG-10112-□4-ND	.66	.49	.42

Fig.	Cable Length (in.)	Digi-Key Part No.	Price Each 10	100	250
Fig. 2 (Pin to Socket)	2	H2ABG-10102-□4-ND	.67	.49	.43
	3	H2ABG-10103-□4-ND	.67	.50	.43
	4	H2ABG-10104-□4-ND	.68	.50	.43
	5	H2ABG-10105-□4-ND	.68	.50	.43
	6	H2ABG-10106-□4-ND	.69	.51	.44
	8	H2ABG-10108-□4-ND	.70	.51	.44
	10	H2ABG-10110-□4-ND	.71	.52	.45
	12	H2ABG-10112-□4-ND	.72	.53	.46
Fig. 3 (Pin to Pin)	2	H2AAG-10102-□4-ND	.72	.53	.46
	3	H2AAG-10103-□4-ND	.73	.54	.46
	4	H2AAG-10104-□4-ND	.73	.54	.47
	5	H2AAG-10105-□4-ND	.74	.54	.47
	6	H2AAG-10106-□4-ND	.74	.55	.47
	8	H2AAG-10108-□4-ND	.75	.55	.48
	10	H2AAG-10110-□4-ND	.76	.56	.49
	12	H2AAG-10112-□4-ND	.77	.57	.49
Fig. 4 (Socket Single End)	2	H2BXG-10102-□4-ND	.55	.41	.35
	3	H2BXG-10103-□4-ND	.56	.41	.36
	4	H2BXG-10104-□4-ND	.56	.42	.36
	5	H2BXG-10105-□4-ND	.57	.42	.36
	6	H2BXG-10106-□4-ND	.57	.43	.37
	8	H2BXG-10108-□4-ND	.58	.43	.37
	10	H2BXG-10110-□4-ND	.59	.44	.38
	12	H2BXG-10112-□4-ND	.60	.45	.39
Fig. 5 (Pin Single End)	2	H2AXG-10102-□4-ND	.61	.45	.39
	3	H2AXG-10103-□4-ND	.61	.45	.39
	4	H2AXG-10104-□4-ND	.62	.46	.40
	5	H2AXG-10105-□4-ND	.62	.46	.40
	6	H2AXG-10106-□4-ND	.63	.47	.40
	8	H2AXG-10108-□4-ND	.64	.47	.41
	10	H2AXG-10110-□4-ND	.65	.48	.42
	12	H2AXG-10112-□4-ND	.66	.49	.42
26 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H2BBG-10102-□6-ND	.61	.45	.39
	3	H2BBG-10103-□6-ND	.61	.45	.39
	4	H2BBG-10104-□6-ND	.62	.46	.40
	5	H2BBG-10105-□6-ND	.62	.46	.40
	6	H2BBG-10106-□6-ND	.63	.46	.40
	8	H2BBG-10108-□6-ND	.64	.47	.41
	10	H2BBG-10110-□6-ND	.65	.48	.41
	12	H2BBG-10112-□6-ND	.66	.49	.42
Fig. 2 (Pin to Socket)	2	H2ABG-10102-□6-ND	.66	.49	.42
	3	H2ABG-10103-□6-ND	.67	.49	.43
	4	H2ABG-10104-□6-ND	.67	.50	.43
	5	H2ABG-10105-□6-ND	.68	.50	.43
	6	H2ABG-10106-□6-ND	.68	.51	.44
	8	H2ABG-10108-□6-ND	.69	.51	.44
	10	H2ABG-10110-□6-ND	.70	.52	.45
	12	H2ABG-10112-□6-ND	.71	.53	.46
Fig. 3 (Pin to Pin)	2	H2AAG-10102-□6-ND	.72	.53	.46
	3	H2AAG-10103-□6-ND	.72	.54	.46
	4	H2AAG-10104-□6-ND	.73	.54	.47
	5	H2AAG-10105-□6-ND	.73	.54	.47
	6	H2AAG-10106-□6-ND	.74	.55	.47
	8	H2AAG-10108-□6-ND	.75	.55	.48
	10	H2AAG-10110-□6-ND	.76	.56	.48
	12	H2AAG-10112-□6-ND	.77	.57	.49
Fig. 4 (Socket Single End)	2	H2BXG-10102-□6-ND	.55	.41	.35
	3	H2BXG-10103-□6-ND	.56	.41	.36
	4	H2BXG-10104-□6-ND	.56	.42	.36
	5	H2BXG-10105-□6-ND	.57	.42	.36
	6	H2BXG-10106-□6-ND	.57	.42	.37
	8	H2BXG-10108-□6-ND	.58	.43	.37
	10	H2BXG-10110-□6-ND	.59	.44	.38
	12	H2BXG-10112-□6-ND	.60	.44	.38
Fig. 5 (Pin Single End)	2	H2AXG-10102-□6-ND	.61	.45	.39
	3	H2AXG-10103-□6-ND	.61	.45	.39
	4	H2AXG-10104-□6-ND	.62	.46	.40
	5	H2AXG-10105-□6-ND	.62	.46	.40

(Continued)

DF3 / DF11 Interconnect Wire (housing available) *(Cont.)*

Fig.	Cable Length (In.)	Digi-Key Part No.	Price Each 10	100	250
Fig. 5 (Pin Single End)	6	H2AXG-10106-□6-ND	.63	.46	.40
	8	H2AXG-10108-□6-ND	.64	.47	.41
	10	H2AXG-10110-□6-ND	.65	.48	.41
	12	H2AXG-10112-□6-ND	.66	.49	.42
28 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H2BBG-10102-□8-ND	.61	.45	.39
	3	H2BBG-10103-□8-ND	.62	.46	.39
	4	H2BBG-10104-□8-ND	.62	.46	.40
	5	H2BBG-10105-□8-ND	.63	.46	.40
	6	H2BBG-10106-□8-ND	.63	.47	.40
	8	H2BBG-10108-□8-ND	.64	.48	.41
	10	H2BBG-10110-□8-ND	.65	.48	.42
	12	H2BBG-10112-□8-ND	.66	.49	.42
Fig. 2 (Pin to Socket)	2	H2ABG-10102-□8-ND	.67	.49	.43
	3	H2ABG-10103-□8-ND	.67	.50	.43
	4	H2ABG-10104-□8-ND	.68	.50	.43
	5	H2ABG-10105-□8-ND	.68	.50	.44
	6	H2ABG-10106-□8-ND	.69	.51	.44
	8	H2ABG-10108-□8-ND	.70	.52	.45
	10	H2ABG-10110-□8-ND	.71	.52	.45
	12	H2ABG-10112-□8-ND	.72	.53	.46
Fig. 3 (Pin to Pin)	2	H2AAG-10102-□8-ND	.72	.53	.46
	3	H2AAG-10103-□8-ND	.73	.54	.46
	4	H2AAG-10104-□8-ND	.73	.54	.47
	5	H2AAG-10105-□8-ND	.74	.55	.47
	6	H2AAG-10106-□8-ND	.74	.55	.47
	8	H2AAG-10108-□8-ND	.75	.56	.48
	10	H2AAG-10110-□8-ND	.76	.56	.49
	12	H2AAG-10112-□8-ND	.78	.57	.50
Fig. 4 (Socket Single End)	2	H2BXG-10102-□8-ND	.56	.41	.36
	3	H2BXG-10103-□8-ND	.56	.41	.36
	4	H2BXG-10104-□8-ND	.57	.42	.36
	5	H2BXG-10105-□8-ND	.57	.42	.37
	6	H2BXG-10106-□8-ND	.58	.43	.37
	8	H2BXG-10108-□8-ND	.59	.43	.38
	10	H2BXG-10110-□8-ND	.60	.44	.38
	12	H2BXG-10112-□8-ND	.61	.45	.39
Fig. 5 (Pin Single End)	2	H2AXG-10102-□8-ND	.61	.45	.39
	3	H2AXG-10103-□8-ND	.62	.46	.39
	4	H2AXG-10104-□8-ND	.62	.46	.40
	5	H2AXG-10105-□8-ND	.63	.46	.40
	6	H2AXG-10106-□8-ND	.63	.47	.40
	8	H2AXG-10108-□8-ND	.64	.48	.41
	10	H2AXG-10110-□8-ND	.65	.48	.42
	12	H2AXG-10112-□8-ND	.66	.49	.42
DF11 - TIN PLATED CONTACTS					
24 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H3BBT-10102-□4-ND	.55	.40	.35
	3	H3BBT-10103-□4-ND	.55	.41	.35
	4	H3BBT-10104-□4-ND	.56	.41	.36
	5	H3BBT-10105-□4-ND	.56	.42	.36
	6	H3BBT-10106-□4-ND	.57	.42	.36
	8	H3BBT-10108-□4-ND	.58	.43	.37
	10	H3BBT-10110-□4-ND	.59	.43	.38
	12	H3BBT-10112-□4-ND	.60	.44	.38
Fig. 2 (Pin to Socket)	2	H3ABT-10102-□4-ND	.56	.41	.36
	3	H3ABT-10103-□4-ND	.56	.42	.36
	4	H3ABT-10104-□4-ND	.57	.42	.36
	5	H3ABT-10105-□4-ND	.57	.42	.37
	6	H3ABT-10106-□4-ND	.58	.43	.37
	8	H3ABT-10108-□4-ND	.59	.44	.38
	10	H3ABT-10110-□4-ND	.60	.44	.38
	12	H3ABT-10112-□4-ND	.61	.45	.39
Fig. 3 (Pin to Pin)	2	H3AAT-10102-□4-ND	.57	.42	.36
	3	H3AAT-10103-□4-ND	.57	.42	.37
	4	H3AAT-10104-□4-ND	.58	.43	.37
	5	H3AAT-10105-□4-ND	.58	.43	.37
	6	H3AAT-10106-□4-ND	.59	.44	.38
	8	H3AAT-10108-□4-ND	.60	.44	.38
	10	H3AAT-10110-□4-ND	.61	.45	.39
	12	H3AAT-10112-□4-ND	.62	.46	.40
Fig. 4 (Socket Single End)	2	H3BXT-10102-□4-ND	.52	.39	.33
	3	H3BXT-10103-□4-ND	.53	.39	.34
	4	H3BXT-10104-□4-ND	.53	.39	.34
	5	H3BXT-10105-□4-ND	.54	.40	.34
	6	H3BXT-10106-□4-ND	.54	.40	.35
	8	H3BXT-10108-□4-ND	.55	.41	.35
	10	H3BXT-10110-□4-ND	.56	.42	.36
	12	H3BXT-10112-□4-ND	.57	.42	.37
Fig. 5 (Pin Single End)	2	H3AXT-10102-□4-ND	.53	.40	.34
	3	H3AXT-10103-□4-ND	.54	.40	.34
	4	H3AXT-10104-□4-ND	.54	.40	.35
	5	H3AXT-10105-□4-ND	.55	.41	.35
	6	H3AXT-10106-□4-ND	.55	.41	.35
	8	H3AXT-10108-□4-ND	.56	.42	.36
	10	H3AXT-10110-□4-ND	.57	.42	.37
	12	H3AXT-10112-□4-ND	.58	.43	.37
26 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H3BBT-10102-□6-ND	.55	.40	.35
	3	H3BBT-10103-□6-ND	.55	.41	.35
	4	H3BBT-10104-□6-ND	.56	.41	.36
	5	H3BBT-10105-□6-ND	.56	.41	.36
	6	H3BBT-10106-□6-ND	.57	.42	.36
	8	H3BBT-10108-□6-ND	.58	.43	.37
	10	H3BBT-10110-□6-ND	.58	.43	.37
	12	H3BBT-10112-□6-ND	.59	.44	.38
Fig. 2 (Pin to Socket)	2	H3ABT-10102-□6-ND	.56	.41	.36
	3	H3ABT-10103-□6-ND	.56	.42	.36
	4	H3ABT-10104-□6-ND	.57	.42	.36
	5	H3ABT-10105-□6-ND	.57	.42	.37
	6	H3ABT-10106-□6-ND	.58	.43	.37
	8	H3ABT-10108-□6-ND	.59	.43	.37
	10	H3ABT-10110-□6-ND	.60	.44	.38
	12	H3ABT-10112-□6-ND	.60	.45	.39
Fig. 3 (Pin to Pin)	2	H3AAT-10102-□6-ND	.57	.42	.36
	3	H3AAT-10103-□6-ND	.57	.42	.37
	4	H3AAT-10104-□6-ND	.58	.43	.37
	5	H3AAT-10105-□6-ND	.58	.43	.37
	6	H3AAT-10106-□6-ND	.59	.43	.38
	8	H3AAT-10108-□6-ND	.60	.44	.38
	10	H3AAT-10110-□6-ND	.61	.45	.39
	12	H3AAT-10112-□6-ND	.62	.46	.39
Fig. 4 (Socket Single End)	2	H3BXT-10102-□6-ND	.52	.39	.33
	3	H3BXT-10103-□6-ND	.53	.39	.34
	4	H3BXT-10104-□6-ND	.53	.39	.34
	5	H3BXT-10105-□6-ND	.54	.40	.34
	6	H3BXT-10106-□6-ND	.54	.40	.35
	8	H3BXT-10108-□6-ND	.55	.41	.35
	10	H3BXT-10110-□6-ND	.56	.41	.36
	12	H3BXT-10112-□6-ND	.57	.42	.36
Fig. 5 (Pin Single End)	2	H3AXT-10102-□6-ND	.53	.39	.34
	3	H3AXT-10103-□6-ND	.54	.40	.34
	4	H3AXT-10104-□6-ND	.54	.40	.35
	5	H3AXT-10105-□6-ND	.55	.41	.35
	6	H3AXT-10106-□6-ND	.55	.41	.35
	8	H3AXT-10108-□6-ND	.56	.42	.36
	10	H3AXT-10110-□6-ND	.57	.42	.37
	12	H3AXT-10112-□6-ND	.58	.43	.37
28 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H3BBT-10102-□8-ND	.55	.41	.35
	3	H3BBT-10103-□8-ND	.55	.41	.35
	4	H3BBT-10104-□8-ND	.56	.41	.36
	5	H3BBT-10105-□8-ND	.56	.42	.36
	6	H3BBT-10106-□8-ND	.57	.42	.36
	8	H3BBT-10108-□8-ND	.58	.43	.37
	10	H3BBT-10110-□8-ND	.59	.44	.38
	12	H3BBT-10112-□8-ND	.60	.45	.38
Fig. 2 (Pin to Socket)	2	H3ABT-10102-□8-ND	.56	.41	.36
	3	H3ABT-10103-□8-ND	.56	.42	.36
	4	H3ABT-10104-□8-ND	.57	.42	.36
	5	H3ABT-10105-□8-ND	.58	.43	.37
	6	H3ABT-10106-□8-ND	.58	.43	.37
	8	H3ABT-10108-□8-ND	.59	.44	.38
	10	H3ABT-10110-□8-ND	.60	.45	.38
	12	H3ABT-10112-□8-ND	.61	.45	.39
Fig. 3 (Pin to Pin)	2	H3AAT-10102-□8-ND	.57	.42	.36
	3	H3AAT-10103-□8-ND	.58	.43	.37
	4	H3AAT-10104-□8-ND	.58	.43	.37
	5	H3AAT-10105-□8-ND	.59	.43	.37
	6	H3AAT-10106-□8-ND	.59	.44	.38
	8	H3AAT-10108-□8-ND	.60	.45	.38
	10	H3AAT-10110-□8-ND	.61	.45	.39
	12	H3AAT-10112-□8-ND	.62	.46	.40
Fig. 4 (Socket Single End)	2	H3BXT-10102-□8-ND	.52	.39	.34
	3	H3BXT-10103-□8-ND	.53	.39	.34
	4	H3BXT-10104-□8-ND	.53	.40	.34
	5	H3BXT-10105-□8-ND	.54	.40	.35
	6	H3BXT-10106-□8-ND	.55	.40	.35
	8	H3BXT-10108-□8-ND	.56	.41	.36
	10	H3BXT-10110-□8-ND	.57	.42	.36
	12	H3BXT-10112-□8-ND	.58	.43	.37
Fig. 5 (Pin Single End)	2	H3AXT-10102-□8-ND	.53	.40	.34
	3	H3AXT-10103-□8-ND	.54	.40	.35
	4	H3AXT-10104-□8-ND	.55	.40	.35
	5	H3AXT-10105-□8-ND	.55	.41	.35
	6	H3AXT-10106-□8-ND	.56	.41	.36
	8	H3AXT-10108-□8-ND	.57	.42	.36
	10	H3AXT-10110-□8-ND	.58	.43	.37
	12	H3AXT-10112-□8-ND	.59	.44	.38
DF11 - 15μ GOLD PLATED CONTACTS					
24 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H3BBG-10102-□4-ND	.69	.51	.44
	3	H3BBG-10103-□4-ND	.70	.52	.45
	4	H3BBG-10104-□4-ND	.70	.52	.45
	5	H3BBG-10105-□4-ND	.71	.52	.45
	6	H3BBG-10106-□4-ND	.71	.53	.46
	8	H3BBG-10108-□4-ND	.72	.54	.46
	10	H3BBG-10110-□4-ND	.73	.54	.47
	12	H3BBG-10112-□4-ND	.75	.55	.48
Fig. 2 (Pin to Socket)	2	H3ABG-10102-□4-ND	.71	.53	.46
	3	H3ABG-10103-□4-ND	.72	.53	.46
	4	H3ABG-10104-□4-ND	.72	.54	.46
	5	H3ABG-10105-□4-ND	.73	.54	.47
	6	H3ABG-10106-□4-ND	.73	.54	.47
	8	H3ABG-10108-□4-ND	.74	.55	.48
	10	H3ABG-10110-□4-ND	.75	.56	.48
	12	H3ABG-10112-□4-ND	.76	.56	.49
Fig. 3 (Pin to Pin)	2	H3AAG-10102-□4-ND	.73	.54	.47
	3	H3AAG-10103-□4-ND	.74	.55	.47
	4	H3AAG-10104-□4-ND	.74	.55	.47
	5	H3AAG-10105-□4-ND	.75	.55	.48
	6	H3AAG-10106-□4-ND	.75	.56	.48
	8	H3AAG-10108-□4-ND	.76	.56	.49
	10	H3AAG-10110-□4-ND	.77	.57	.49
	12	H3AAG-10112-□4-ND	.78	.58	.50
Fig. 4 (Socket Single End)	2	H3BXG-10102-□4-ND	.60	.44	.38
	3	H3BXG-10103-□4-ND	.60	.45	.38
	4	H3BXG-10104-□4-ND	.61	.45	.39
	5	H3BXG-10105-□4-ND	.61	.45	.39
	6	H3BXG-10106-□4-ND	.62	.46	.39
	8	H3BXG-10108-□4-ND	.63	.46	.40
	10	H3BXG-10110-□4-ND	.64	.47	.41
	12	H3BXG-10112-□4-ND	.65	.48	.41
Fig. 5 (Pin Single End)	2	H3AXG-10102-□4-ND	.62	.46	.39
	3	H3AXG-10103-□4-ND	.62	.46	.40
	4	H3AXG-10104-□4-ND	.63	.46	.40
	5	H3AXG-10105-□4-ND	.63	.47	.40
	6	H3AXG-10106-□4-ND	.64	.47	.41
	8	H3AXG-10108-□4-ND	.65	.48	.41
	10	H3AXG-10110-□4-ND	.66	.49	.42
	12	H3AXG-10112-□4-ND	.67	.49	.43
26 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H3BBG-10102-□6-ND	.69	.51	.44
	3	H3BBG-10103-□6-ND	.70	.52	.45
	4	H3BBG-10104-□6-ND	.70	.52	.45
	5	H3BBG-10105-□6-ND	.71	.52	.45
	6	H3BBG-10106-□6-ND	.71	.53	.46
	8	H3BBG-10108-□6-ND	.72	.53	.46
	10	H3BBG-10110-□6-ND	.73	.54	.47
	12	H3BBG-10112-□6-ND	.74	.55	.47
Fig. 2 (Pin to Socket)	2	H3ABG-10102-□6-ND	.71	.53	.46
	3	H3ABG-10103-□6-ND	.72	.53	.46
	4	H3ABG-10104-□6-ND	.72	.53	.46
	5	H3ABG-10105-□6-ND	.73	.54	.46
	6	H3ABG-10106-□6-ND	.73	.54	.47
	8	H3ABG-10108-□6-ND	.74	.55	.47
	10	H3ABG-10110-□6-ND	.75	.56	.48
	12	H3ABG-10112-□6-ND	.76	.56	.49
Fig. 3 (Pin to Pin)	2	H3AAG-10102-□6-ND	.73	.54	.47
	3	H3AAG-10103-□6-ND	.74	.54	.47
	4	H3AAG-10104-□6-ND	.74	.55	.47
	5	H3AAG-10105-□6-ND	.75	.55	.48
	6	H3AAG-10106-□6-ND	.75	.56	.48
	8	H3AAG-10108-□6-ND	.76	.56	.49
	10	H3AAG-10110-□6-ND	.77	.57	.49
	12	H3AAG-10112-□6-ND	.78	.58	.50
Fig. 4 (Socket Single End)	2	H3BXG-10102-□6-ND	.60	.44	.38
	3	H3BXG-10103-□6-ND	.60	.44	.38
	4	H3BXG-10104-□6-ND	.61	.45	.39
	5	H3BXG-10105-□6-ND	.61	.45	.39
	6	H3BXG-10106-□6-ND	.62	.46	.39
	8	H3BXG-10108-□6-ND	.62	.46	.40
	10	H3BXG-10110-□6-ND	.63	.47	.41
	12	H3BXG-10112-□6-ND	.64	.48	.41
Fig. 5 (Pin Single End)	2	H3AXG-10102-□6-ND	.62	.46	.39
	3	H3AXG-10103-□6-ND	.62	.46	.40
	4	H3AXG-10104-□6-ND	.63	.46	.40
	5	H3AXG-10105-□6-ND	.63	.47	.40
	6	H3AXG-10106-□6-ND	.63	.47	.41
	8	H3AXG-10108-□6-ND	.64	.48	.41
	10	H3AXG-10110-□6-ND	.65	.48	.42
	12	H3AXG-10112-□6-ND	.66	.49	.42
28 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H3BBG-10102-□8-ND	.70	.51	.44
	3	H3BBG-10103-□8-ND	.70	.52	.45
	4	H3BBG-10104-□8-ND	.71	.52	.45
	5	H3BBG-10105-□8-ND	.71	.53	.45
	6	H3BBG-10106-□8-ND	.72	.53	.46
	8	H3BBG-10108-□8-ND	.73	.54	.46
	10	H3BBG-10110-□8-ND	.74	.55	.47
	12	H3BBG-10112-□8-ND	.75	.55	.48
Fig. 2 (Pin to Socket)	2	H3ABG-10102-□8-ND	.71	.53	.46
	3	H3ABG-10103-□8-ND	.72	.53	.46
	4	H3ABG-10104-□8-ND	.73	.54	.46
	5	H3ABG-10105-□8-ND	.73	.54	.47
	6	H3ABG-10106-□8-ND	.74	.54	.47
	8	H3ABG-10108-□8-ND	.75	.55	.48
	10	H3ABG-10110-□8-ND	.76	.56	.48
	12	H3ABG-10112-□8-ND	.77	.57	.49
Fig. 3 (Pin to Pin)	2	H3AAG-10102-□8-ND	.73	.54	.47
	3	H3AAG-10103-□8-ND	.74	.55	.47
	4	H3AAG-10104-□8-ND	.74	.55	.48
	5	H3AAG-10105-□8-ND	.75	.55	.48
	6	H3AAG-10106-□8-ND	.76	.56	.48
	8	H3AAG-10108-□8-ND	.77	.57	.49
	10	H3AAG-10110-□8-ND	.78	.57	.50
	12	H3AAG-10112-□8-ND	.79	.58	.50
Fig. 4 (Socket Single End)	2	H3BXG-10102-□8-ND	.60	.44	.38
	3	H3BXG-10103-□8-ND	.60	.45	.39
	4	H3BXG-10104-□8-ND	.61	.45	.39
	5	H3BXG-10105-□8-ND	.61	.45	.39
	6	H3BXG-10106-□8-ND	.62	.46	.40
	8	H3BXG-10108-□8-ND	.63	.47	.40
	10	H3BXG-10110-□8-ND	.64	.47	.41
	12	H3BXG-10112-□8-ND	.65	.48	.42
Fig. 5 (Pin Single End)	2	H3AXG-10102-□8-ND	.62	.46	.39
	3	H3AXG-10103-□8-ND	.62	.46	.40
	4	H3AXG-10104-□8-ND	.63	.46	.40
	5	H3AXG-10105-□8-ND	.63	.47	.40
	6	H3AXG-10106-□8-ND	.64	.47	.41
	8	H3AXG-10108-□8-ND	.65	.48	.41
	10	H3AXG-10110-□8-ND	.66	.49	.42
	12	H3AXG-10112-□8-ND	.67	.50	.43

2mm Milli-Grid™ Connectors

HEADERS: Electrical: • Current: 2.0A • Dielectric Withstanding Voltage: 500V (Shrouded Vertical, SMT, and Right Angle: 1000V) • Insulation Resistance: 1000MΩ min. **Physical:** • Housing: 4/6 nylon, UL 94V-0 (Right Angle: Black glass-filled polyester, UL 94V-0) • Contact: Phosphor Bronze • Plating: 15µ" Select Gold • Temperature: -55 to +105°C

RECEPTACLE: Electrical: • Voltage: 125V • Current: 1.0A • Contact Resistance: 25mΩ max. (Side Entry, Side Entry SMT, and Top/Bottom Entry: 15mΩ max.) • Dielectric Withstanding Voltage: 500V AC (Top/Bottom Entry: 1000V) • Insulation Resistance: 1000M Ω min. **Physical:** • Housing: Black glass-filled LCP, UL 94V-0 (Top/Bottom Entry: Black LCP, UL 94V-O, Side Entry and Side Entry SMT: Black nylon, UL 94V-0) • Contact: Phosphor Bronze • Plating: 15µ" Select Gold • Temperature: -55 to +105°C

CRIMP TERMINAL: Electrical: • Voltage: 125V • Current: **26AWG:** 1.5, **28AWG:** 1.0, and **30AWG:** 0.5 • Contact Resistance: 40mΩ max. **Physical:** • Contact: Phosphor Bronze • Plating: 15µ" Select Gold • Temperature: -40 to +105°C • Wire Range: 26-30AWG • Insulation Range: 1.40mm diameter max.

CRIMP HOUSING: Physical: • Housing: Black glass-filled polyester, UL 94V-0 • Temperature: -55 to +105°C

Fig. 1 – Vertical

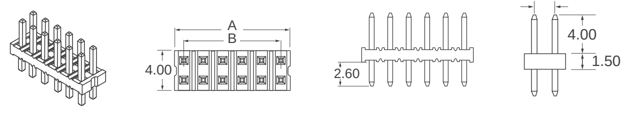


Fig. 4 – Shrouded Right Angle

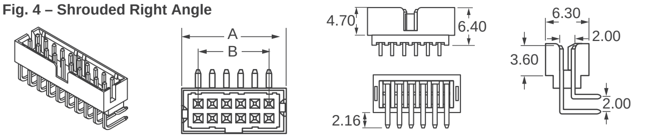


Fig. 2 – Right Angle

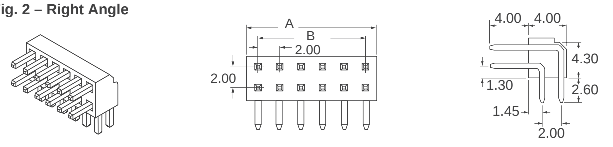


Fig. 5 – Shrouded SMT

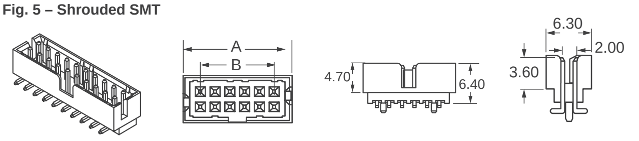


Fig. 3 – Shrouded Vertical

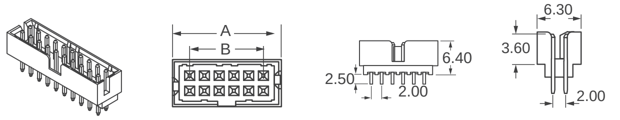


Fig. 6– Vertical SMT

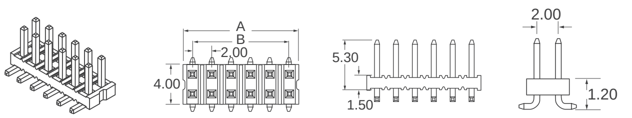


Fig.	Cir- cuits	Dimension (mm) A	B	Digi-Key Part No.	Pricing 1	10	100	Molex Part No.
Headers — Vertical								
1	4	3.90	2.00	WM18201-ND	1.27	10.51	67.02	87089-0416
	6	5.90	4.00	WM18202-ND	1.52	12.59	80.29	87089-0616
	8	7.90	6.00	WM18203-ND	1.76	14.57	92.92	87089-0816
	10	9.90	8.00	WM18204-ND	1.97	16.34	104.25	87089-1016
	12	11.90	10.00	WM18205-ND	2.38	19.69	125.62	87089-1216
	14	13.90	12.00	WM18206-ND	2.46	20.40	130.15	87089-1416
	16	15.90	14.00	WM18207-ND	2.81	23.29	148.60	87089-1616
	18	17.90	16.00	WM18208-ND	3.17	26.24	167.38	87089-1816
	20	19.90	18.00	WM18209-ND	3.53	29.23	186.48	87089-2016
	22	21.90	20.00	WM18210-ND	3.88	32.18	205.26	87089-2216
	24	23.90	22.00	WM18211-ND	4.23	35.07	223.71	87089-2416
	26	25.90	24.00	WM18212-ND	4.57	37.86	241.52	87089-2616
	28	27.90	26.00	WM18213-ND	4.92	40.80	260.30	87089-2816
	30	29.90	28.00	WM18214-ND	5.27	43.70	278.75	87089-3016
	32	31.90	30.00	WM18215-ND	4.92	40.80	260.30	87089-3216
	34	33.90	32.00	WM18216-ND	5.24	43.39	276.81	87089-3416
	36	35.90	34.00	WM18217-ND	5.54	45.88	292.67	87089-3616
	38	37.90	36.00	WM18218-ND	5.85	48.47	309.18	87089-3816
	40	39.90	38.00	WM18219-ND	6.16	51.00	325.37	87089-4016
	42	41.90	40.00	WM18220-ND	6.47	53.59	341.88	87089-4216
	44	43.90	42.00	WM18221-ND	6.77	56.08	357.74	87089-4416
	46	45.90	44.00	WM18222-ND	7.08	58.67	374.26	87089-4616
	48	47.90	46.00	WM18223-ND	7.38	61.15	390.12	87089-4816
	50	49.90	48.00	WM18224-ND	7.70	63.79	406.95	87089-5016
Headers — Right Angle								
2	4	4.00	2.00	WM18112-ND	1.49	12.38	79.00	87049-0416
	6	6.00	4.00	WM18113-ND	2.03	16.85	107.49	87049-0616
	8	8.00	6.00	WM18114-ND	1.90	15.73	100.36	87049-0816
	10	10.00	8.00	WM18115-ND	2.26	18.73	119.46	87049-1016
	12	12.00	10.00	WM18116-ND	2.44	20.20	128.85	87049-1216
	14	14.00	12.00	WM18117-ND	2.85	23.60	150.54	87049-1416
	16	16.00	14.00	WM18118-ND	2.71	22.48	143.42	87049-1616
	18	18.00	16.00	WM18119-ND	3.05	25.27	161.23	87049-1816
	20	20.00	18.00	WM18120-ND	3.39	28.12	179.36	87049-2016
	22	22.00	20.00	WM18121-ND	3.73	30.91	197.16	87049-2216
	24	24.00	22.00	WM18122-ND	4.07	33.70	214.97	87049-2416
	26	26.00	24.00	WM18123-ND	4.41	36.54	233.10	87049-2616
	28	28.00	26.00	WM18124-ND	4.75	39.33	250.91	87049-2816
	30	30.00	28.00	WM18125-ND	5.08	42.12	268.71	87049-3016
	32	32.00	30.00	WM18126-ND	5.43	44.96	286.84	87049-3216
	34	34.00	32.00	WM18127-ND	5.76	47.76	304.65	87049-3416
	36	36.00	34.00	WM18128-ND	6.10	50.55	322.46	87049-3616
	38	38.00	36.00	WM18129-ND	6.44	53.39	340.59	87049-3816
	40	40.00	38.00	WM18130-ND	6.78	56.18	358.39	87049-4016
	42	42.00	40.00	WM18131-ND	7.12	58.97	376.20	87049-4216
	44	44.00	42.00	WM18132-ND	7.46	61.81	394.33	87049-4416
	46	46.00	44.00	WM18133-ND	7.80	64.60	412.13	87049-4616
	48	48.00	46.00	WM18134-ND	8.13	67.40	429.94	87049-4816
	50	50.00	48.00	WM18135-ND	8.48	70.24	448.07	87049-5016
Headers — Shrouded Vertical								
3	4	6.65	2.00	WM18058-ND	1.38	11.47	73.17	87331-0420
	6	8.65	4.00	WM18059-ND	1.64	13.55	86.44	87331-0620
	8	10.65	6.00	WM18060-ND	1.84	15.28	97.45	87331-0820
	10	12.65	8.00	WM18061-ND	2.27	18.83	120.11	87331-1020
	12	14.65	10.00	WM18062-ND	2.73	22.58	144.07	87331-1220
	14	16.65	12.00	WM18063-ND	3.19	26.44	168.67	87331-1420
	16	18.65	14.00	WM18064-ND	3.64	30.20	192.63	87331-1620
	18	20.65	16.00	WM18065-ND	4.09	33.90	216.27	87331-1820
	20	22.65	18.00	WM18066-ND	4.54	37.66	240.22	87331-2020
	22	24.65	20.00	WM18067-ND	5.01	41.51	264.83	87331-2220
Headers — Shrouded Vertical (cont.)								
3	24	26.65	22.00	WM18068-ND	5.46	45.27	288.79	87331-2420
	30	32.65	28.00	WM18069-ND	6.82	56.48	360.33	87331-3020
	40	42.65	38.00	WM18070-ND	9.10	75.41	481.09	87331-4020
	44	46.65	42.00	WM18071-ND	10.01	82.93	529.01	87331-4420
	50	52.65	48.00	WM18072-ND	11.36	94.14	600.56	87331-5020
Headers — Shrouded Right Angle								
4	4	6.65	2.00	WM18088-ND	1.81	14.97	95.51	87333-0420
	6	8.65	4.00	WM18089-ND	2.39	19.79	126.26	87333-0620
	8	10.65	6.00	WM18090-ND	2.45	20.30	129.50	87333-0820
	10	12.65	8.00	WM18091-ND	2.52	20.91	133.39	87333-1020
	12	14.65	10.00	WM18092-ND	3.03	25.07	159.93	87333-1220
	14	16.65	12.00	WM18093-ND	3.54	29.33	187.13	87333-1420
	16	18.65	14.00	WM18094-ND	4.04	33.50	213.68	87333-1620
	18	20.65	16.00	WM18095-ND	4.54	37.66	240.22	87333-1820
	20	22.65	18.00	WM18096-ND	5.05	41.82	266.77	87333-2020
	22	24.65	20.00	WM18097-ND	5.56	46.08	293.97	87333-2220
	24	26.65	22.00	WM18098-ND	6.06	50.24	320.51	87333-2420
	30	32.65	28.00	WM18099-ND	7.57	62.73	400.16	87333-3020
	40	42.65	38.00	WM18100-ND	10.11	83.74	534.19	87333-4020
	44	46.65	42.00	WM18101-ND	11.11	92.06	587.28	87333-4420
	50	52.65	48.00	WM18102-ND	12.63	104.65	667.57	87333-5020
Headers — Shrouded SMT								
5	4	6.65	2.00	WM18073-ND	3.14	26.03	166.08	87332-0420
	6	8.65	4.00	WM18074-ND	3.26	27.05	172.56	87332-0620
	8	10.65	6.00	WM18075-ND	3.56	29.54	188.42	87332-0820
	10	12.65	8.00	WM18076-ND	3.64	30.20	192.63	87332-1020
	12	14.65	10.00	WM18077-ND	4.07	33.70	214.97	87332-1220
	14	16.65	12.00	WM18078-ND	4.40	36.44	232.45	87332-1420
	16	18.65	14.00	WM18079-ND	4.82	39.94	254.79	87332-1620
	18	20.65	16.00	WM18080-ND	5.20	43.09	274.86	87332-1820
	20	22.65	18.00	WM18081-ND	5.52	45.78	292.02	87332-2020
	22	24.65	20.00	WM18082-ND	6.08	50.34	321.16	87332-2220
	24	26.65	22.00	WM18083-ND	6.63	54.91	350.30	87332-2420
	30	32.65	28.00	WM18084-ND	7.91	65.57	418.29	87332-3020
	40	42.65	38.00	WM18085-ND	10.11	83.74	534.19	87332-4020
	44	46.65	42.00	WM18086-ND	11.11	92.06	587.28	87332-4420
	50	52.65	48.00	WM18087-ND	12.63	104.65	667.57	87332-5020
Headers — Vertical SMT								
6	8	7.90	6.00	WM18158-ND	3.01	24.97	159.29	87267-0850
	10	9.90	8.00	WM18159-ND	3.39	28.12	179.36	87267-1050
	12	11.90	10.00	WM18160-ND	3.77	31.21	199.11	87267-1250
	14	13.90	12.00	WM18161-ND	4.04	33.50	213.68	87267-1450
	16	15.90	14.00	WM18162-ND	4.42	36.64	233.75	87267-1650
	18	17.90	16.00	WM18163-ND	4.75	39.33	250.91	87267-1850
	20	19.90	18.00	WM18164-ND	5.02	41.62	265.48	87267-2050
	22	21.90	20.00	WM18165-ND	5.52	45.78	292.02	87267-2250
	24	23.90	22.00	WM18166-ND	6.03	49.94	318.57	87267-2450
	26	25.90	24.00	WM18167-ND	6.53	54.10	345.12	87267-2650
	28	27.90	26.00	WM18168-ND	7.03	58.26	371.67	87267-2850
	30	29.90	28.00	WM18169-ND	7.16	59.33	378.46	87267-3050
	32	31.90	30.00	WM18170-ND	7.63	63.23	403.39	87267-3250
	34	33.90	32.00	WM18171-ND	8.11	67.19	428.65	87267-3450
	36	35.90	34.00	WM18172-ND	8.59	71.15	453.90	87267-3650
	38	37.90	36.00	WM18173-ND	9.04	74.91	477.86	87267-3850
	40	39.90	38.00	WM18174-ND	9.27	76.78	489.83	87267-4050
	42	41.90	40.00	WM18175-ND	9.49	78.66	501.81	87267-4250
	44	43.90	42.00	WM18176-ND	9.95	82.42	525.77	87267-4450
	46	45.90	44.00	WM18177-ND	10.39	86.12	549.40	87267-4650
	48	47.90	46.00	WM18178-ND	10.85	89.88	573.36	87267-4850
	50	49.90	48.00	WM18179-ND	11.30	93.63	597.32	87267-5050

(Continued)

Fig. 7 – Vertical, Dual Row Through-Hole

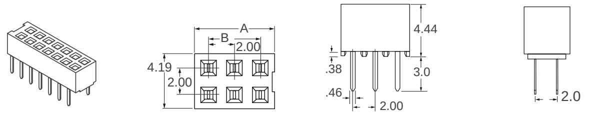


Fig. 10 – Top/Bottom Entry SMT (VLPR2)

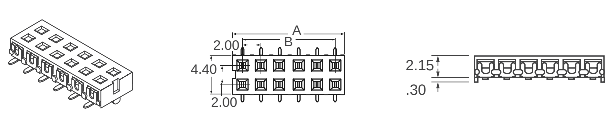


Fig. 8 –Side Entry

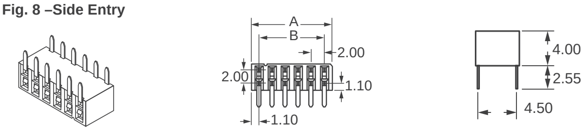


Fig. 11 – Vertical, Dual Row Top/Bottom Entry, SMT

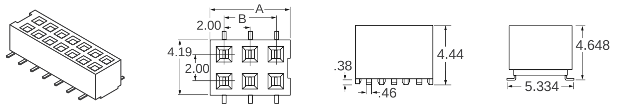


Fig. 9 – Side Entry SMT

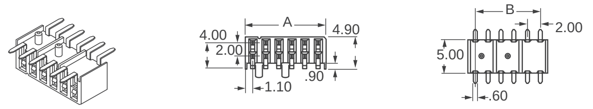


Fig. 12 – Crimp Housing

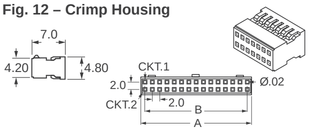


Fig. 13 – Crimp Terminal

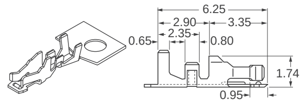
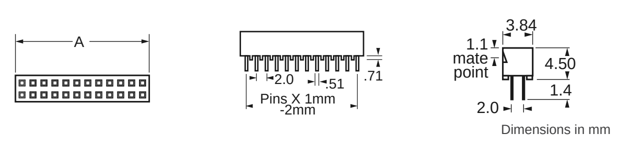


Fig.	Cir-cuits	Dimension (mm) A	B	Digi-Key Part No.	Pricing 1	10	100	Molex Part No.
				Board-to-Board Receptacle Vertical, Dual Row Through-Hole				
7	4	4.19	2.00	WM18000-ND	1.82	15.11	96.39	79107-0001
	6	6.19	4.00	WM18001-ND	2.08	17.26	110.08	79107-0002
	8	8.19	6.00	WM18002-ND	4.07	33.70	214.97	79107-0003
	10	10.19	8.00	WM18003-ND	4.51	37.35	238.28	79107-0004
	12	12.19	10.00	WM18004-ND	4.95	41.01	261.59	79107-0005
	14	14.19	12.00	WM18005-ND	5.27	43.70	278.75	79107-0006
	16	16.19	14.00	WM18006-ND	5.74	47.55	303.35	79107-0007
	18	18.19	16.00	WM18007-ND	6.18	51.21	326.66	79107-0008
	20	20.19	18.00	WM18008-ND	6.48	53.69	342.53	79107-0009
	22	22.19	20.00	WM18009-ND	6.77	56.08	357.74	79107-0010
	24	24.19	22.00	WM18010-ND	7.38	61.15	390.12	79107-0011
	30	30.19	28.00	WM18011-ND	5.27	43.70	278.80	79107-0014
	40	40.19	38.00	WM18012-ND	7.04	58.32	372.04	79107-0019
	44	44.19	42.00	WM18013-ND	7.74	64.15	409.22	79107-0021
	50	50.19	48.00	WM18014-ND	8.80	72.88	464.91	79107-0024
				Receptacle — Side Entry				
8	8	8.20	6.00	WM18136-ND	3.16	26.16	166.87	87264-0850
	10	10.20	8.00	WM18137-ND	3.23	26.77	170.76	87264-1050
	12	12.20	10.00	WM18138-ND	3.37	27.96	178.34	87264-1250
	14	14.20	12.00	WM18139-ND	3.52	29.15	185.93	87264-1450
	16	16.20	14.00	WM18140-ND	4.02	33.29	212.38	87264-1650
	18	18.20	16.00	WM18141-ND	4.52	37.47	239.02	87264-1850
	20	20.20	18.00	WM18142-ND	5.02	41.62	265.48	87264-2050
	22	22.20	20.00	WM18143-ND	5.53	45.79	292.12	87264-2250
	24	24.20	22.00	WM18144-ND	6.03	49.94	318.57	87264-2450
	26	26.20	24.00	WM18145-ND	6.53	54.11	345.21	87264-2650
	28	28.20	26.00	WM18146-ND	7.03	58.26	371.67	87264-2850
	30	30.20	28.00	WM18147-ND	7.54	62.44	398.31	87264-3050
	32	32.20	30.00	WM18148-ND	8.04	66.58	424.76	87264-3250
	34	34.20	32.00	WM18149-ND	8.54	70.76	451.40	87264-3450
	36	36.20	34.00	WM18150-ND	9.04	74.91	477.86	87264-3650
	38	38.20	36.00	WM18151-ND	9.54	79.08	504.50	87264-3850
	40	40.20	38.00	WM18152-ND	10.05	83.23	530.95	87264-4050
	42	42.20	40.00	WM18153-ND	10.55	87.41	557.59	87264-4250
	44	44.20	42.00	WM18154-ND	11.05	91.55	584.05	87264-4450
	46	46.20	44.00	WM18155-ND	11.55	95.73	610.69	87264-4650
	48	48.20	46.00	WM18156-ND	12.05	99.88	637.14	87264-4850
	50	50.20	48.00	WM18157-ND	12.56	104.05	663.78	87264-5050
				Receptacle — Side Entry SMT				
9	10	10.20	8.00	WM18180-ND	8.67	71.81	458.11	87368-1020
	12	12.20	10.00	WM18181-ND	8.89	73.64	469.76	87368-1220
	14	14.20	12.00	WM18182-ND	9.37	77.60	495.01	87368-1420
	16	16.20	14.00	WM18183-ND	9.79	81.15	517.68	87368-1620
	18	18.20	16.00	WM18184-ND	10.36	85.82	547.46	87368-1820
	20	20.20	18.00	WM18185-ND	10.61	87.90	560.74	87368-2020
	22	22.20	20.00	WM18186-ND	10.77	89.27	569.48	87368-2220
	24	24.20	22.00	WM18187-ND	11.75	97.39	621.28	87368-2420
	26	26.20	24.00	WM18188-ND	12.73	105.51	673.08	87368-2620
	28	28.20	26.00	WM18189-ND	13.71	113.63	724.88	87368-2820
	30	30.20	28.00	WM18190-ND	14.69	121.75	776.68	87368-3020
	32	32.20	30.00	WM18191-ND	15.67	129.82	828.15	87368-3220
	34	34.20	32.00	WM18192-ND	16.65	137.94	879.95	87368-3420
	36	36.20	34.00	WM18193-ND	17.63	146.06	931.75	87368-3620
	38	38.20	36.00	WM18194-ND	18.61	154.18	983.55	87368-3820
	40	40.20	38.00	WM18195-ND	19.59	162.30	1035.35	87368-4020
	42	42.20	40.00	WM18196-ND	20.57	170.42	1087.15	87368-4220
	44	44.20	42.00	WM18197-ND	21.55	178.54	1138.95	87368-4420
	46	46.20	44.00	WM18198-ND	22.53	186.66	1190.75	87368-4620
	48	48.20	46.00	WM18199-ND	23.51	194.78	1242.55	87368-4820
	50	50.20	48.00	WM18200-ND	24.50	203.00	1295.00	87368-5020

Fig.	Cir-cuits	Dimension (mm) A	B	Digi-Key Part No.	Pricing 1	10	100	Molex Part No.
				Receptacle — Top/Bottom Entry SMT (VLPR2)				
10	4	4.00	2.00	WM18103-ND	5.78	47.86	305.30	87340-0422
	6	6.00	4.00	WM18104-ND	6.63	54.91	350.30	87340-0622
	8	8.00	6.00	WM18105-ND	8.04	66.58	424.76	87340-0822
	10	10.00	8.00	WM18106-ND	10.05	83.23	530.95	87340-1022
	12	12.00	10.00	WM18107-ND	12.05	99.88	637.14	87340-1222
	14	14.00	12.00	WM18108-ND	14.06	116.52	743.33	87340-1422
	16	16.00	14.00	WM18109-ND	16.07	133.17	849.52	87340-1622
	18	18.00	16.00	WM18110-ND	18.08	149.81	955.71	87340-1822
	20	20.00	18.00	WM18111-ND	20.09	166.46	1061.90	87340-2022
				Board-to-Board Receptacle Vertical, Dual Row Top/Bottom Entry, SMT				
11	4	4.19	2.00	WM18015-ND	3.52	29.13	185.83	79109-0001
	6	6.19	4.00	WM18016-ND	3.99	33.09	211.09	79109-0002
	8	8.19	6.00	WM18017-ND	4.47	37.05	236.34	79109-0003
	10	10.19	8.00	WM18018-ND	4.96	41.11	262.24	79109-0004
	12	12.19	10.00	WM18019-ND	5.45	45.17	288.14	79109-0005
	14	14.19	12.00	WM18020-ND	5.80	48.06	306.59	79109-0006
	16	16.19	14.00	WM18021-ND	6.30	52.22	333.14	79109-0007
	18	18.19	16.00	WM18022-ND	6.79	56.28	359.04	79109-0008
	20	20.19	18.00	WM18023-ND	7.12	58.97	376.20	79109-0009
	22	22.19	20.00	WM18024-ND	7.45	61.71	393.68	79109-0010
	24	24.19	22.00	WM18025-ND	8.12	67.29	429.29	79109-0011
	30	30.19	28.00	WM18026-ND	5.81	48.11	306.92	79109-0014
	40	40.19	38.00	WM18027-ND	7.74	64.15	409.22	79109-0019
	44	44.19	42.00	WM18028-ND	8.52	70.56	450.11	79109-0021
	50	50.19	48.00	WM18029-ND	9.67	80.13	511.16	79109-0024
				Crimp Housing — Standard				
12	4	4.20	2.00	WM18030-ND	.66	5.43	34.64	51110-0450
	6	6.20	4.00	WM18031-ND	.67	5.53	35.29	51110-0650
	8	8.20	6.00	WM18032-ND	.67	5.53	35.29	51110-0850
	10	10.20	8.00	WM18033-ND	.78	6.45	41.12	51110-1050
	12	12.20	10.00	WM18034-ND	.81	6.75	43.06	51110-1250
	14	14.20	12.00	WM18035-ND	.96	7.92	50.51	51110-1450
	16	16.20	14.00	WM18036-ND	1.13	9.39	59.89	51110-1650
	18	18.20	16.00	WM18037-ND	1.23	10.20	65.07	51110-1850
	20	20.20	18.00	WM18038-ND	1.37	11.37	72.52	51110-2050
	22	22.20	20.00	WM18039-ND	1.51	12.48	79.64	51110-2250
	24	24.20	22.00	WM18040-ND	1.65	13.65	87.09	51110-2450
	26	26.20	24.00	WM18041-ND	1.77	14.67	93.56	51110-2650
	28	28.20	26.00	WM18042-ND	1.91	15.83	101.01	51110-2850
	30	30.20	28.00	WM18043-ND	2.05	16.95	108.13	51110-3050
				Crimp Housing — With Polarization Keys				
12	8	8.20	6.00	WM18044-ND	.73	6.04	38.53	51110-0851
	10	10.20	8.00	WM18045-ND	.78	6.45	41.12	51110-1051
	12	12.20	10.00	WM18046-ND	.81	6.75	43.06	51110-1251
	14	14.20	12.00	WM18047-ND	.96	7.92	50.51	51110-1451
	16	16.20	14.00	WM18048-ND	1.13	9.39	59.89	51110-1651
	18	18.20	16.00	WM18049-ND	1.23	10.20	65.07	51110-1851
	20	20.20	18.00	WM18050-ND	1.37	11.37	72.52	51110-2051
	22	22.20	20.00	WM18051-ND	1.51	12.48	79.64	51110-2251
	24	24.20	22.00	WM18052-ND	1.65	13.65	87.09	51110-2451
	26	26.20	24.00	WM18053-ND	1.77	14.67	93.56	51110-2651
	28	28.20	26.00	WM18054-ND	1.91	15.83	101.01	51110-2851
	30	30.20	28.00	WM18055-ND	2.05	16.95	108.13	51110-3051
13	Crimp Terminal (26-30AWG)			WM18056-ND	—	2.59	16.51	50394-8100
Hand Tool for 2mm Crimp Contacts				WM18057-ND	187.46	—	—	11-01-0204

3M 2mm x 2mm Vertical Socket



Features: • High temperature dielectric • IR, vapor & wave solder compatible • Available in thru hole • Industry standard compatible • Minimizes PC board stacking heights • End stackable feature • Side stackable feature

Physical Specifications: • **Insulation Material:** High Temperature Glass Filled Polyester (PCT) • Color: Natural • **Marking:** Molded orientation delta • **Contact Material:** Beryllium copper • **Contact Plating:** • Wiping area: 30µ" gold plate • Solder Tails: 100µ" 90/10 SnPb plate • Underplate: 50µ" nickel

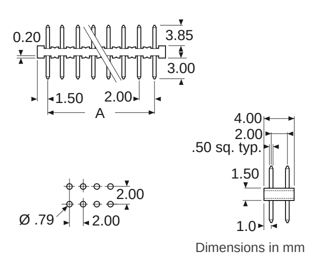
Electrical Specifications: • Current Rating: 1.5Amp • Insulation Resistance: 5000 Megohms @ 250 volts min. • Withstanding Voltage: 500 VDC @ Sea level

Environmental Specifications: • Operating Temperature: -55° to +105°C

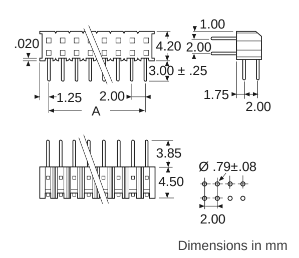
No. of Pos.	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	100	500	3M Part No.
Socket Vertical PC Mount						
8	.310 (7.87)	3M1008-ND	1.04	.79	.72	150208-6002-TB
10	.389 (9.88)	3M1010-ND	1.29	.98	.89	150210-6002-TB
12	.467 (11.86)	3M1012-ND	1.54	1.17	1.06	150212-6002-TB
20	.782 (19.86)	3M1020-ND	2.58	1.96	1.78	150220-6002-TB
24	.940 (23.88)	3M1024-ND	3.10	2.36	2.14	150224-6002-TB
30	1.176 (29.87)	3M1030-ND	3.87	2.94	2.66	150230-6002-TB
40	1.570 (39.88)	3M1040-ND	5.16	3.92	3.55	150240-6002-TB
44	1.727 (43.87)	3M1044-ND	5.68	4.32	3.91	150244-6002-TB
50	1.964 (49.88)	3M1050-ND	6.45	4.90	4.44	150250-6002-TB
60	2.357 (59.87)	3M1060-ND	7.74	5.88	5.32	150260-6002-TB

2mm x 2mm Pin Strip Headers

Dual Row – Straight Header



Dual Row – Right Angle Header



Features: • Industry standard compatible • High temperature dielectric • IR, vapor & wave solder compatible • Straight Solder Tail • Maximizes use of PC board space • Mates with boardmount and wiremount products • End stackable feature • Side stackable feature

Physical Specifications: • **Contact Plating:** • Wiping area: Gold - MIL-G-45204, Type II, Grade C • Solder Tails: 200µ" 90/10 Tin Lead - MIL-P-81728 • Underplate: 100µ" nickel - QQ-N-290, Class 2 • **Contact Material:** Copper Alloy • **Insulation Material:** • Right Angle: Glass Filled Polyester (PCT) • Straight: Liquid Crystal Polymer (LCP) • Flammability: UL 94V-0 • **Color:** • Natural

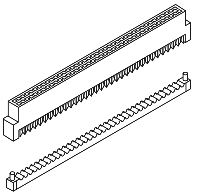
Electrical Specifications: • Current Rating: 1.5Amp • Insulation Resistance: >5x10^{9} Ohms @ 250 VDC • Withstanding Voltage: 500 VDC @ Sea level

Environmental Specifications: • Operating Temperature: -55° to +105°C

No. of Pos.	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	100	500	3M Part No.
Dual Row Straight Header						
8	.295 (7.49)	3M1108-ND	.83	.64	.58	151208-8422-TB
10	.374 (9.50)	3M1110-ND	1.04	.79	.72	151210-8422-TB
12	.453 (11.51)	3M1112-ND	1.25	.95	.86	151212-8422-TB
20	.768 (19.51)	3M1120-ND	2.08	1.58	1.43	151220-8422-TB
24	.925 (23.50)	3M1124-ND	2.50	1.90	1.72	151224-8422-TB
30	1.162 (29.51)	3M1130-ND	3.12	2.37	2.15	151230-8422-TB
40	1.556 (39.52)	3M1140-ND	4.16	3.16	2.86	151240-8422-TB
44	1.714 (43.54)	3M1144-ND	4.58	3.48	3.15	151244-8422-TB
50	1.950 (49.53)	3M1150-ND	5.20	3.95	3.58	151250-8422-TB
60	2.344 (59.54)	3M1160-ND	4.99	3.80	3.44	151260-8422-TB
Dual Row Right Angle Header						
8	.295 (7.49)	3M1208-ND	.94	.72	.65	151208-7422-TB
10	.374 (9.50)	3M1210-ND	1.16	.89	.81	151210-7422-TB
12	.453 (11.51)	3M1212-ND	1.41	1.08	.98	151212-7422-TB
20	.768 (19.51)	3M1220-ND	2.35	1.79	1.62	151220-7422-TB
24	.925 (23.50)	3M1224-ND	2.81	2.14	1.94	151224-7422-TB
30	1.162 (29.51)	3M1230-ND	3.52	2.68	2.42	151230-7422-TB
40	1.556 (39.52)	3M1240-ND	4.70	3.58	3.24	151240-7422-TB
44	1.714 (43.54)	3M1244-ND	5.16	3.92	3.55	151244-7422-TB
50	1.950 (49.53)	3M1250-ND	5.87	4.46	4.04	151250-7422-TB
60	2.344 (59.54)	3M1260-ND	5.87	4.46	4.04	151260-7422-TB

3M 2mm Wiremount Socket

2mm Wiremount Socket – 1mm Pitch Cable



Features: • Industry standard compatible • Mates with 2mm x 2mm grid pin strips • Low profile • Preassembled covers • Available with and without strain relief

Physical Specifications: • **Insulation Material:** Glass Filled Polyester (PBT), Flammability: UL94 V-0 • Color: Gray • **Contact Material:** Beryllium copper • **Contact Plating:** • Underplate and U-slot: 50-150µ" Nickel, QQ-N-290, Class 2 • Wiping area: Gold Mil-G-45204, Type II, Grade C • **Marking:** Orientation triangle and 3M logo

Electrical Specifications: • Current Rating: 1Amp • Insulation Resistance: >1x10Ω at 500 Vdc • Withstanding Voltage: 1000Vrms at Sea Level

Environmental Specifications: • Operating Temperature Rating: -55° to +105°C

Rating: UL File No. E86982, CSA File No. LR#48869

1.0mm Round Conductor Flat Cable – 28AWG Stranded, PVC

Features: • Close spacing permits high signal density • 28AWG wire on 1mm centers permits mass termination to 2 mm connectors • Zippable for branching or discrete termination • Stranded wire provides flexibility and extended product life

Physical Specifications: • Insulation Material: Polyvinyl Chloride (PVC) • Color: Gray • Marking: Red Edge • Conductors: 28 AWG, 7 x 36 Tinned Stranded Copper

Electrical Specifications: • Voltage Rating: 300V • Insulation Resistance: >1x10^{10}Ω/3m (10 ft) • Characteristic Impedance: 92Ω Unbalanced, 146Ω Balanced • Capacitance: 55.50 pF/m Unbalanced, 32.77 pF/m Balanced • Inductance: 0.47 µH/m Unbalanced, 0.70 µH/m Balanced • Propagation Delay: 4.95 ns/m Unbalanced, 4.78 ns/m Balanced

Environmental Specifications: • Temperature Rating Operating: -20°C to +105°C • Flammability Rating: *UL:* VW-1, *CSA:* FT1

Rating: UL File No. E42769, Style 2651 CSA File No. LL 53649 (optional)

No. of Pos.	Digi-Key Part No.	Price Each 1	100	500	3M Part No.
IDC Socket Gold					
10	MSA10A-ND	1.98	1.51	1.36	152210-0100-GB
12	MSA12A-ND	2.29	1.74	1.58	152212-0100-GB
44	MSA44A-ND	4.47	3.40	3.08	152244-0100-GB
50	MSA50A-ND	4.68	3.56	3.22	152250-0100-GB
IDC Socket Gold w/ Strain Relief					
10	MSE10A-ND	2.29	1.74	1.58	152210-0103-GB
12	MSE12A-ND	2.60	1.98	1.79	152212-0103-GB
44	MSE44A-ND	4.78	3.64	3.29	152244-0103-GB
50	MSE50A-ND	4.99	3.80	3.44	152250-0103-GB

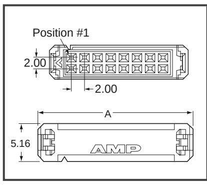
No. of Pos.	(NOTE: "X" in Digi-Key Part No. Represents Number of Meters.) Digi-Key Part No.	Price Per Meters 5	10	25	50	100	3M Part No.
Ribbon Cable Gray							
10	MC10L-X-ND	7.81	14.50	32.35	55.78	89.24	3625/10 100M
12	MC12L-X-ND	9.37	17.40	38.82	66.93	107.08	3625/12 100M
44	MC44L-X-ND	34.58	64.22	143.26	247.00	395.20	3625/44 100M
50	MC50L-X-ND	39.29	72.96	162.76	280.63	449.00	3625/50 100M

100m reel quantity may contain splices. Splice position will be marked on the reel.

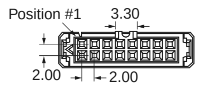
tyco / Electronics AMP

2mm Ribbon Connectors

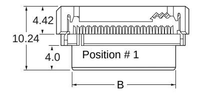
Dimensions in mm



Polarized



Non-polarized



The new 2.0 (.079) AMP-LATCH® receptacle connector family features contacts on a true 2.0 x 2.0 (.079 x .079) mating grid for 1.0 (.039) pitch ribbon. These receptacles feature insulation displacement contacts (IDC) with a top/bottom single beam contact orientation. Contacts are beryllium copper, duplex plated 30µ" gold in the mating area and 100µ" min. tin-lead on termination end all over 50µ" nickel underplating. Contact mating area is 1.54 (.061) from the face of the housing and they accept 0.50mm (.0197) round or square posts.

Product Facts:

- True hard metric 2.0 x 2.0 mating grid for 1.0 pitch ribbon cable
- Insulation displacement contacts (IDC), beryllium copper contacts, duplex plated gold-over-nickel
- U.L. 94V-0 rated thermoplastic components

Performance Data:

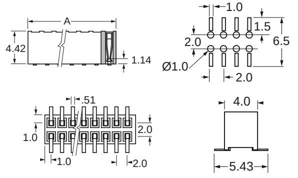
- Durability: 150 cycles
- Termination Resistance: 25 milliohms max.
- Mating Force: 1.67 N max.
- Unmating Force: 0.14 N min.
- Operating Temp. : -65°C to +105°C

No. of Pos.	Dimensions A	B	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Recept.-Feed Thru Cover Polarized						
10	15.16	10.41	AKA10K-ND	2.08	1.31	111623-1
14	19.18	14.40	AKA14K-ND	2.10	1.32	111623-2
16	21.18	16.41	AKA16K-ND	2.18	1.37	111623-3
20	25.17	20.40	AKA20K-ND	2.24	1.41	111623-4
24	29.18	24.41	AKA24K-ND	2.55	1.60	111623-5
26	31.17	26.42	AKA26K-ND	2.60	1.64	111623-6
30	35.18	30.40	AKA30K-ND	2.65	1.66	111623-7
40	45.19	40.41	AKA40K-ND	3.25	2.04	111623-9
44	49.17	44.40	AKA44K-ND	3.25	2.04	1-111623-0
50	55.17	50.39	AKA50K-ND	3.45	2.17	1-111623-1
Recept.-Feed Thru Cover Non-Polarized						
8	13.18	8.41	ASA08K-ND	2.39	1.50	1-111626-6
10	15.16	10.41	ASA10K-ND	2.08	1.31	111626-1
14	19.18	14.40	ASA14K-ND	2.10	1.32	111626-2
16	21.18	16.41	ASA16K-ND	2.18	1.37	111626-3
20	25.17	20.40	ASA20K-ND	2.24	1.41	111626-4
22	27.18	22.40	ASA22K-ND	2.29	1.44	1-111626-5
24	29.18	24.41	ASA24K-ND	2.55	1.60	111626-5
26	31.17	26.42	ASA26K-ND	2.60	1.64	111626-6
30	35.18	30.40	ASA30K-ND	2.69	1.69	111626-7
34	39.17	34.42	ASA34K-ND	2.76	1.73	111626-8
40	45.19	40.41	ASA40K-ND	3.25	2.04	1-111626-9
44	49.17	44.40	ASA44K-ND	3.25	2.04	1-111626-0
50	55.17	50.39	ASA50K-ND	3.45	2.17	1-111626-1

SPECIALTY ELECTRONICS

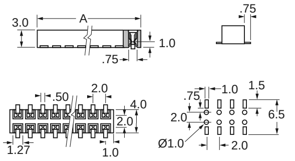
2mm SMT Headers / Receptacles

Fig. 1



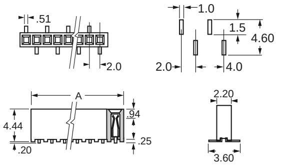
SPECIFICATIONS: • Housing Material: High temperature thermoplastic, UL flammability rating 94 V-O. • Color: Natural • Contact Material: Phosphor Bronze.

Fig. 2



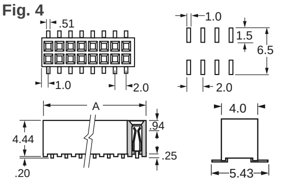
SPECIFICATIONS: • Housing Material: High temperature thermoplastic, UL flammability rating 94 V-O. • Color: Natural • Contact Material: Beryllium copper.

Fig. 3



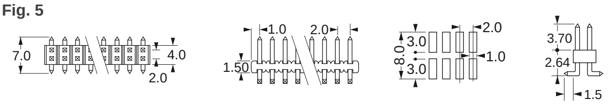
SPECIFICATIONS: • Housing Material: High temperature thermoplastic, UL flammability rating 94 V-O • Color: Natural • Contact Material: Phosphor Bronze.

Fig. 4



SPECIFICATIONS: • Housing Material: High temperature thermoplastic, UL flammability rating 94 V-O • Color: Natural • Contact Material: Phosphor Bronze.

Fig. 5



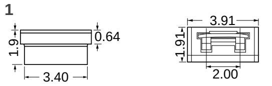
SPECIFICATIONS: • Housing Material: High temp. thermoplastic, UL flammability rating 94 V-O • Color: Black • Pin Material: Phosphor Bronze, drawn wire.

Fig.	No. of Pos.	Dim. "A"	Finish	Digi-Key Part No.	Pricing 1	10	100	500	Manufacturer Part No.
Dual Row, Bottom Entry (Receptacle)									
1	8	8.026	15µ Gold	SPE1017-ND	1.34	11.99	98.70	390.10	203-04-15-01
	12	12.040	15µ Gold	SPE1018-ND	1.85	16.58	136.50	539.50	203-06-15-01
	16	16.053	15µ Gold	SPE1019-ND	2.39	21.42	176.40	697.20	203-08-15-01
	20	20.066	15µ Gold	SPE1020-ND	2.91	26.01	214.20	846.60	203-10-15-01
	24	24.079	15µ Gold	SPE1021-ND	3.42	30.60	252.00	996.00	203-12-15-01
	26	26.086	15µ Gold	SPE1022-ND	3.71	33.15	273.00	1079.00	203-13-15-01
	30	30.099	15µ Gold	SPE1023-ND	4.22	37.74	310.80	1228.40	203-15-15-01
Dual Row, Bottom Entry, Ultra Low Profile (Receptacle)									
2	8	8.026	15µ Gold	SPE1010-ND	1.11	9.95	81.90	323.70	233-0433-01
	12	12.040	15µ Gold	SPE1011-ND	1.51	13.52	111.30	439.90	233-0633-01
	16	16.053	15µ Gold	SPE1012-ND	1.94	17.34	142.80	564.40	233-0833-01
	20	20.066	15µ Gold	SPE1013-ND	2.34	20.91	172.20	680.60	233-1033-01
	24	24.079	15µ Gold	SPE1014-ND	2.74	24.48	201.60	796.80	233-1233-01
	26	26.086	15µ Gold	SPE1015-ND	2.96	26.52	218.40	863.20	233-1333-01
	30	30.099	15µ Gold	SPE1016-ND	3.36	30.09	247.80	979.40	233-1533-01
Single Row, Top Entry (Receptacle)									
3	4	8.026	15µ Gold	SPE1024-ND	.80	7.14	58.80	232.40	204-04-15-01
	6	12.040	15µ Gold	SPE1025-ND	1.08	9.69	79.80	315.40	204-06-15-01
	8	16.053	15µ Gold	SPE1026-ND	1.34	11.99	98.70	390.10	204-08-15-01
	10	20.066	15µ Gold	SPE1027-ND	1.60	14.28	117.60	464.80	204-10-15-01
	12	24.079	15µ Gold	SPE1028-ND	1.85	16.58	136.50	539.50	204-12-15-01
	13	26.086	15µ Gold	SPE1029-ND	2.00	17.85	147.00	581.00	204-13-15-01
	15	30.099	15µ Gold	SPE1030-ND	2.25	20.15	165.90	655.70	204-15-15-01
Dual Row, Top Entry (Receptacle)									
4	8	8.026	15µ Gold	SPE1031-ND	1.34	11.99	98.70	390.10	205-04-1501
	12	12.040	15µ Gold	SPE1032-ND	1.85	16.58	136.50	539.50	205-06-1501
	16	16.053	15µ Gold	SPE1033-ND	2.39	21.42	176.40	697.20	205-08-1501
	20	20.066	15µ Gold	SPE1034-ND	2.91	26.01	214.20	846.60	205-10-1501
	24	24.079	15µ Gold	SPE1035-ND	3.42	30.60	252.00	996.00	205-12-1501
	26	26.086	15µ Gold	SPE1036-ND	3.71	33.15	273.00	1079.00	205-13-1501
	30	30.099	15µ Gold	SPE1037-ND	2.60	23.31	191.94	758.62	205-15-1501
36 Position, Dual Row									
5	—	—	Gold	SPE1211-ND	2.34	20.91	172.20	680.60	SM2MD18S15-01
	—	—	Tin	SPE1212-ND	1.62	14.54	119.70	473.10	SM2MD18S02-01

SPECIALTY ELECTRONICS

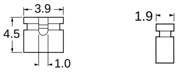
Shunts

Fig. 1



ULTRA LOW PROFILE. • 30µ" gold plated • Housing Material: Glass filled thermoplastic, UL flammability rating 94 V-O • Color: Black • Contact Material: Beryllium Copper.

Fig. 2



STANDARD PROFILE. • Housing Material: Glass filled thermoplastic, UL flammability rating 94 V-O • Contact Material: Phosphor Bronze.

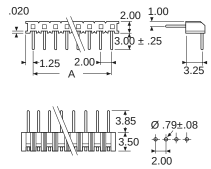
Fig.	Finish	Digi-Key Part No.	Pricing 1	10	100	500	Manufacturer Part No.
Shunts							
1	2mm Low Profile, Tin	SPE1303-ND	.26	2.28	19.50	92.63	2MS-19-02-01
	2mm Low Profile, Gold	SPE1304-ND	.52	4.55	39.00	185.25	2MS-19-33-01
2	Standard Profile, Gold	SPE1302-ND	.14	1.28	10.50	41.50	2JM-G

NORCOMP

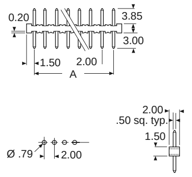
2mm Headers

Features: • 15 microinches selective gold plating • Insulator is glass filled thermoplastic UL Rating 94V0 • Color: Black • Contact material is phosphor bronze • "Post plated" contacts; no bare edges.

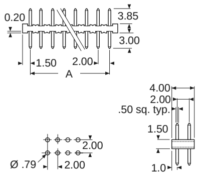
Single Row – Right Angle Header



Single Row – Straight Header



Dual Row – Straight Header



Manufacturer's Full Length Headers and Receptacles Available in Multiple Pin Versions

Dim. (mm) A	Digi-Key Part No.	Pricing 1	10	100	Manufacturer Part No.
Header Single Row Straight – 36 Pins					
70.0	2163S-36-ND	2.80	25.05	206.32	2163-36-01-P2
Header Single Row Right Angle – 36 Pins					
70.0	2163R-36-ND	2.84	25.41	209.26	2163-36-02-P2
Header Dual Row Straight – 72 Pins					
70.0	2164S-36-ND	5.41	48.41	398.63	2164-72-01-P2

Digi-Key's Cut Length to your Specification

Digi-Key Part No.	Base Price	Pin Adder
2163S-XX-ND	1.00	.05
2163R-XX-ND	1.04	.05
2164S-XX-ND	1.45	.11

How to Order 2mm Headers — 4 Easy Steps

Q. How do I order an 2163S header with 16 pins?

A. Call Digi-Key where you'll happily receive the price or determine the cost yourself.

Step 1. Select needed "Digi-Key Part Number" and number of pins desired.
Step 2. Begin with appropriate "Base Price" of your selected Part Number (refer to chart).
Step 3. Multiply the number of pins you desire by "Pin Adder" of your selected Part Number (refer to chart).
Step 4. Add Step 2 and Step 3 together for Final Cost.

2 ☐☐☐☐ - ☐☐ - ND

Base Part Number
Number of Desired Pins Per Row

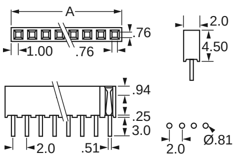
OUR EXAMPLE		*YOUR DIGI-KEY PART NUMBER*	
Step 1.	2163S-16-ND	Step 1.	2 _ _ _ _ - _ _ - ND
Step 2.	1.00	Step 2.	____
Step 3.	16 x .05 = .80	Step 3.	x = ____
Step 4.	Your Cost = $1.80	Step 4.	Your Cost = ____

NOTE: For Quantities of 10 or More, Call 1-800-DIGI-KEY

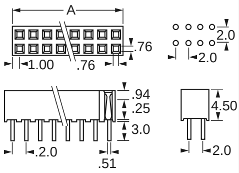
2mm Receptacles

Features: • Printed Circuit Board Mounted Receptacle • .079" (2mm) centers for real estate savings • Single and Dual Row Offerings • 15 microinches selective gold • Insulator, housing, material is glass filled thermoplastic, UL Rating 94VO • Color: Black • Contact material is phosphor bronze

Single Row – Vertical Receptacle



Dual Row – Vertical Receptacle



No. of Pos.	Digi-Key Part No.	Pricing 1	10	100	NorComp Part No.
Receptacle Single Row Vertical					
3	2063S-03-ND	1.43	12.75	105.00	2063-03-01-P2
4	2063S-04-ND	1.57	14.03	115.50	2063-04-01-P2
5	2063S-05-ND	1.71	15.30	126.00	2063-05-01-P2
6	2063S-06-ND	1.85	16.58	136.50	2063-06-01-P2
7	2063S-07-ND	2.02	18.11	149.10	2063-07-01-P2
8	2063S-08-ND	2.19	19.64	161.70	2063-08-01-P2
9	2063S-09-ND	2.34	20.91	172.20	2063-09-01-P2
10	2063S-10-ND	2.51	22.44	184.80	2063-10-01-P2
11	2063S-11-ND	2.65	23.72	195.30	2063-11-01-P2
12	2063S-12-ND	2.82	25.25	207.90	2063-12-01-P2
Receptacle Dual Row Vertical					
3	2064S-03-ND	1.88	16.83	138.60	2064-06-01-P2
4	2064S-04-ND	2.19	19.64	161.70	2064-08-01-P2
5	2064S-05-ND	2.51	22.44	184.80	2064-10-01-P2
6	2064S-06-ND	2.82	25.25	207.90	2064-12-01-P2
7	2064S-07-ND	3.14	28.05	231.00	2064-14-01-P2
8	2064S-08-ND	3.45	30.86	254.10	2064-16-01-P2
9	2064S-09-ND	3.79	33.92	279.30	2064-18-01-P2
10	2064S-10-ND	4.10	36.72	302.40	2064-20-01-P2
11	2064S-11-ND	4.42	39.53	325.50	2064-22-01-P2
12	2064S-12-ND	4.76	42.59	350.70	2064-24-01-P2

tyco Electronics AMP

MTA .100" (2.54mm) Receptacles and Post Headers

IDC RECEPTACLES: • Wire-to-post connectors preloaded with dual beam contacts • Connectors and headers are end-to-end stackable • Connectors preloaded with IDC contact • All contacts are slotted for insulation displacement (IDC) terminal technique • Contacts are lubricated to prevent fretting corrosion • Meets the material requirements of Table 23.1 of UL1410 Standards for Television Receiver and Video Products (wire-to-post connectors only) • Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 • Certified by Canadian Standards Association

PERFORMANCE DATA: Voltage Rating: 250 vac. **Current Rating:** 4 amp max. **Low-Level Resistance:** 5 mΩ max. initial **Dielectric Withstanding Voltage:** 750 vac./1 min. **Insulation Resistance:** 5000 MΩ min. initial. **Operating Temperature:** -55°C to +105°C**. MATERIAL AND FINISH: Receptacles:** UL94V-2 rated (unless otherwise noted), type 6/6 nylon (28 AWG - Green; 26 AWG - Blue; 24 AWG - White; 22 AWG - Red). **Contacts:** Phosphor bronze, post tin plated, 30µ.

REPLACEMENT IDC CONTACTS: MATERIAL AND FINISH: Phosphor bronze, post tin plated; 30µ.

CST-100 CRIMP CONTACTS AND HOUSINGS: • High current rating • Mates with MTA and similar competitive notched headers • Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 • Certified by Canadian Standards Association, File No. LR7189. **PERFORMANCE DATA: Voltage Rating:** 250 vac. **Current Rating:** 4 amp max. **Low-Level Resistance:** 6 mΩ max. initial, 10 mΩ max. final. **Insulation Resistance:** 1000 MΩ min. initial, 100 MΩ min. final. **Operating Temperature:** -55°C to +105°C**. MATERIAL AND FINISH:** Selective gold, 30µ gold over 127µ nickel or bright tin-lead on entire contact. **Wire Range:** 22-26 AWG. **Max. Ins. Diameter:** .065

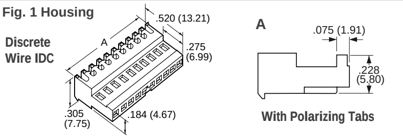
KEYING PLUG WITH CARRIER STRIP (10 plugs per strip): Material: UL94V-2 rated, type 6/6 nylon, natural color

LED CONNECTORS: Designed to mate with .36mm-.51mm diameter posts or square leads. **MATERIAL AND FINISH: Receptacles:** UL94V-2 rated, type 6/6 nylon (28 AWG - Green; 26 AWG - Blue; 24 AWG - White; 22 AWG - Red). **Contacts:** Phosphor bronze, post tin plated, 30µ.

REPLACEMENT LED CONTACTS: MATERIAL AND FINISH: Phosphor bronze, post tin plated; 30µ.

POST HEADERS: Material For Housing: Polyester UL94V-0 rated, natural. **Posts:** Tin plated copper alloy.

Fig. 1 Housing



Discrete Wire IDC

With Polarizing Tabs

Fig. 2 IDC & LED Contacts

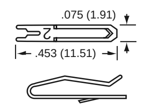


Fig. 3 CST-100 Housing

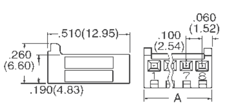


Fig. 4 CST-100 Crimp Contact

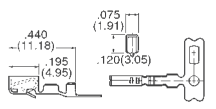


Fig. 5 Keying Plug

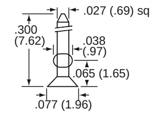


Fig. 6 Strain Relief Cover - Closed End

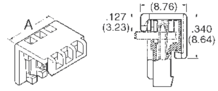


Fig. 7 Dust Cover - Closed End

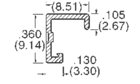


Fig. 8 Strain Relief Cover - Feed-Thru

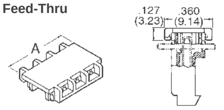


Fig. 9 Dust Cover - Feed-Thru

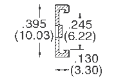


Fig. 10

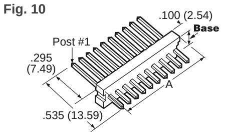


Fig. 11

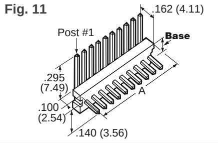


Fig. 12

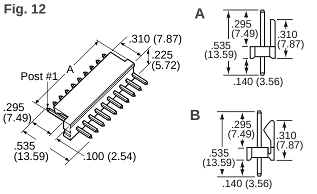


Fig. 13

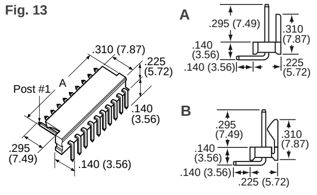


Fig. 14

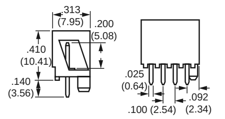
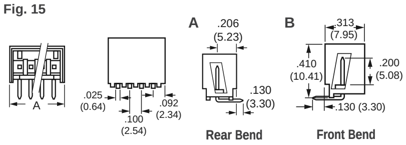


Fig. 15



Rear Bend

Front Bend

Fig.	Description	Cir-cuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
	Receptacles, .100" (2.54mm) Centers						
1	Closed End with Lock, w/out Polarizing Tabs, 28 AWG Green, Tin Plated	2	.200 (5.08)	A19050-ND	.12	.06	640443-2
		3	.300 (7.62)	A19051-ND	.12	.07	640443-3
		4	.400 (10.16)	A19052-ND	.20	.12	640443-4
		5	.500 (12.70)	A19053-ND	.26	.15	640443-5
		6	.600 (15.24)	A19054-ND	.28	.16	640443-6
		7	.700 (17.78)	A19055-ND	.33	.18	640443-7
		8	.800 (20.32)	A19056-ND	.37	.21	640443-8
		9	.900 (22.86)	A19057-ND	.92	.83	640443-9
		10	1.000 (25.40)	A19058-ND	.46	.26	1-640443-0
		11	1.100 (27.94)	A19059-ND	1.12	1.01	1-640443-1
		12	1.200 (30.48)	A19060-ND	.60	.33	1-640443-2
		13	1.300 (33.02)	A19061-ND	1.33	1.20	1-640443-3
		14	1.400 (35.56)	A19062-ND	1.43	1.29	1-640443-4
		15	1.500 (38.1)	A26193-ND	.98	.89	1-640443-5
1A	Closed End with Lock, with Polarizing Tabs, 28 AWG Green, Tin Plated	2	.200 (5.08)	A23773-ND	.12	.10	643816-2
		3	.300 (7.62)	A23774-ND	.14	.12	643816-3
		4	.400 (10.16)	A23775-ND	.20	.19	643816-4
		5	.500 (12.7)	A23776-ND	.26	.24	643816-5
		6	.600 (15.24)	A23777-ND	.28	.26	643816-6
		7	.700 (17.78)	A23778-ND	.33	.30	643816-7
		8	.800 (20.32)	A23779-ND	.37	.34	643816-8
		10	1.00 (25.4)	A23780-ND	.46	.42	1-643816-0
		12	1.200 (30.48)	A23781-ND	.60	.54	1-643816-2
		15	1.500 (38.1)	A23782-ND	.98	.89	1-643816-5
1	Feed-Thru with Lock, w/out Polarizing Tabs, 28 AWG Green, Tin Plated	2	.200 (5.08)	A19132-ND	.19	.09	640623-2
		3	.300 (7.62)	A19133-ND	.18	.10	640623-3
		4	.400 (10.16)	A19134-ND	.20	.12	640623-4
		5	.500 (12.70)	A19135-ND	.26	.15	640623-5
		6	.600 (15.24)	A19136-ND	.28	.16	640623-6
		7	.700 (17.78)	A19137-ND	.33	.18	640623-7
		8	.800 (20.32)	A19138-ND	.37	.21	640623-8
		9	.900 (22.86)	A19139-ND	.92	.83	640623-9
		10	1.000 (25.40)	A19140-ND	.46	.26	1-640623-0
		11	1.100 (27.94)	A19141-ND	1.12	1.01	1-640623-1
		12	1.200 (30.48)	A19142-ND	.60	.33	1-640623-2
		13	1.300 (33.02)	A19143-ND	1.33	1.20	1-640623-3
		14	1.400 (35.56)	A19144-ND	1.43	1.29	1-640623-4
		15	1.500 (38.1)	A26194-ND	.98	.89	1-640623-5
1A	Feed-Thru with Lock, with Polarizing Tabs, 28 AWG Green, Tin Plated	2	.200 (5.08)	A23783-ND	.16	.15	644565-2
		3	.300 (7.62)	A23784-ND	.18	.17	644565-3
		4	.400 (10.16)	A23785-ND	.20	.19	644565-4
		5	.500 (12.7)	A23786-ND	.26	.24	644565-5
		6	.600 (15.24)	A23787-ND	.28	.26	644565-6
		7	.700 (17.78)	A23788-ND	.33	.30	644565-7
		8	.800 (20.32)	A23789-ND	.37	.34	644565-8
		10	1.00 (25.4)	A23790-ND	.46	.42	1-644565-0
		12	1.200 (30.48)	A23791-ND	.60	.54	1-644565-2
		15	1.500 (38.1)	A23792-ND	.98	.89	1-644565-5
1	Closed End with Lock, w/out Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.200 (5.08)	A19030-ND	.12	.06	640442-2
		3	.300 (7.62)	A19031-ND	.12	.07	640442-3
		4	.400 (10.16)	A19032-ND	.20	.12	640442-4
		5	.500 (12.70)	A19033-ND	.26	.15	640442-5
		6	.600 (15.24)	A19034-ND	.28	.16	640442-6
		7	.700 (17.78)	A19035-ND	.33	.18	640442-7
		8	.800 (20.32)	A19036-ND	.37	.21	640442-8
		9	.900 (22.86)	A19037-ND	.92	.83	640442-9
		10	1.000 (25.40)	A19038-ND	.46	.26	1-640442-0
		11	1.100 (27.94)	A19039-ND	1.12	1.01	1-640442-1
		12	1.200 (30.48)	A19040-ND	.60	.33	1-640442-2
		13	1.300 (33.02)	A19041-ND	1.33	1.20	1-640442-3
		13	1.300 (33.02)	A26195-ND†	.75	.68	1-643828-3
		14	1.400 (35.56)	A19042-ND	1.43	1.29	1-640442-4
		15	1.500 (38.1)	A26196-ND	.98	.89	1-640442-5
1A	Closed End with Lock, with Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.200 (5.08)	A23793-ND	.12	.10	643815-2
		3	.300 (7.62)	A23794-ND	.14	.12	643815-3
		4	.400 (10.16)	A23795-ND	.20	.19	643815-4
		5	.500 (12.7)	A23796-ND	.26	.24	643815-5
		6	.600 (15.24)	A23797-ND	.28	.26	643815-6
		7	.700 (17.78)	A23798-ND	.33	.30	643815-7
		8	.800 (20.32)	A23799-ND	.37	.34	643815-8
		10	1.00 (25.4)	A23800-ND	.46	.42	1-643815-0
		12	1.200 (30.48)	A23801-ND	.60	.54	1-643815-2
		13	1.300 (33.02)	A23802-ND†	.75	.68	1-644313-3
		15	1.500 (38.1)	A23803-ND	.98	.89	1-643815-5
1	Feed-Thru with Lock, w/out Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.200 (5.08)	A19112-ND	.20	.10	640622-2
		3	.300 (7.62)	A19113-ND	.19	.11	640622-3
		4	.400 (10.16)	A19114-ND	.20	.12	640622-4
		5	.500 (12.70)	A19115-ND	.26	.15	640622-5
		6	.600 (15.24)	A19116-ND	.28	.16	640622-6
		7	.700 (17.78)	A19117-ND	.33	.18	640622-7
		8	.800 (20.32)	A19118-ND	.37	.21	640622-8
		9	.900 (22.86)	A19119-ND	.92	.83	640622-9
		10	1.000 (25.40)	A19120-ND	1.02	.92	1-640622-0
		11	1.100 (27.94)	A19121-ND	1.12	1.01	1-640622-1
		12	1.200 (30.48)	A19122-ND	.60	.33	1-640622-2
		13	1.300 (33.02)	A19130-ND	1.33	1.20	1-640622-3
		13	1.300 (33.02)	A26197-ND†	.75	.68	1-644577-3
		14	1.400 (35.56)	A19131-ND	1.43	1.29	1-640622-4
		15	1.500 (38.1)	A26198-ND	.98	.89	1-640622-5
1A	Feed-Thru with Lock, with Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.200 (5.08)	A23804-ND	.17	.15	644564-2
		3	.300 (7.62)	A23805-ND	.19	.17	644564-3
		4	.400 (10.16)	A23806-ND	.20	.19	644564-4
		5	.500 (12.7)	A23807-ND	.26	.24	644564-5
		6	.600 (15.24)	A23808-ND	.28	.26	644564-6
		7	.700 (17.78)	A23809-ND	.33	.30	644564-7
		8	.800 (20.32)	A23810-ND	.37	.34	644564-8
		12	1.200 (30.48)	A23811-ND	.60	.54	1-644564-2
		13	1.300 (33.02)	A23812-ND†	.75	.68	1-644497-3
		15	1.500 (38.1)	A23813-ND	.98	.89	1-644564-5
1	Closed End with Lock, w/out Polarizing Tabs, 24 AWG White, Tin Plated	2	.200 (5.08)	A1901-ND	.12	.06	640441-2
		3	.300 (7.62)	A19020-ND	.12	.07	640441-3
		4	.400 (10.16)	A1902-ND	.12	.07	640441-4
		5	.500 (12.70)	A19021-ND	.26	.15	640441-5
		6	.600 (15.24)	A1903-ND	.28	.16	640441-6
		7	.700 (17.78)	A19022-ND	.33	.18	640441-7
		8	.800 (20.32)	A1904-ND	.37	.21	640441-8
		9	.900 (22.86)	A19023-ND	.92	.83	640441-9
		10	1.000 (25.40)	A1905-ND	.46	.26	1-640441-0
		11	1.100 (27.94)	A19024-ND	1.12	1.01	1-640441-1
		12	1.200 (30.48)	A19025-ND	.60	.33	1-640441-2
		13	1.300 (33.02)	A19026-ND	1.33	1.20	1-640441-3
		13	1.300 (33.02)	A26199-ND†	.75	.68	1-644574-3
		14	1.400 (35.56)	A19027-ND	1.43	1.29	1-640441-4
		15	1.500 (38.1)	A23767-ND	.98	.89	1-640441-5
1A	Closed End with Lock, with Polarizing Tabs, 24 AWG White, Tin Plated	2	.200 (5.08)	A23814-ND	.12	.10	643814-2
		3	.300 (7.62)	A23815-ND	.14	.12	643814-3
		4	.400 (10.16)	A23816-ND	.20	.19	643814-4
		5	.500 (12.7)	A23817-ND	.26	.24	643814-5
		6	.600 (15.24)	A23818-ND	.28	.26	643814-6
		7	.700 (17.78)	A23819-ND	.33	.30	643814-7
		8	.800 (20.32)	A23820-ND	.37	.34	643814-8
		10	1.00 (25.4)	A23821-ND	.46	.42	1-643814-0
		12	1.200 (30.48)	A23822-ND	.60	.54	1-643814-2
		13	1.300 (33.02)	A23823-ND†	.75	.68	1-644312-3
		15	1.500 (38.1)	A23824-ND	.98	.89	1-643814-5

(Continued)

MTA .100” (2.54mm) Receptacles and Post Headers *(Cont.)*

Fig.	Description	Cir-cuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
1	Feed-Thru with Lock, w/out Polarizing Tabs, 24 AWG White, Tin Plated	2	.200 (5.08)	A19091-ND	.19	.10	640621-2
		3	.300 (7.62)	A19092-ND	.18	.10	640621-3
		4	.400 (10.16)	A19093-ND	.20	.12	640621-4
		5	.500 (12.70)	A19094-ND	.26	.15	640621-5
		6	.600 (15.24)	A19095-ND	.28	.16	640621-6
		7	.700 (17.78)	A19096-ND	.33	.18	640621-7
		8	.800 (20.32)	A19097-ND	.37	.21	640621-8
		9	.900 (22.86)	A19098-ND	1.77	1.59	640621-9
		10	1.000 (25.40)	A19099-ND	.46	.26	1-640621-0
		11	1.100 (27.94)	A19100-ND	1.12	1.01	1-640621-1
		12	1.200 (30.48)	A19101-ND	.60	.33	1-640621-2
		13	1.300 (33.02)	A19110-ND	1.33	1.20	1-640621-3
		13	1.300 (33.02)	A23768-ND†	.75	.68	1-644576-3
		14	1.400 (35.56)	A19111-ND	1.43	1.29	1-640621-4
		15	1.500 (38.1)	A23769-ND	.98	.89	1-640621-5
1A	Feed-Thru with Lock, w/ Polarizing Tabs, 24 AWG White, Tin Plated	2	.200 (5.08)	A23826-ND	.16	.15	644563-2
		3	.300 (7.62)	A23827-ND	.18	.17	644563-3
		4	.400 (10.16)	A23828-ND	.20	.19	644563-4
		5	.500 (12.7)	A23829-ND	.26	.24	644563-5
		6	.600 (15.24)	A23830-ND	.28	.26	644563-6
		7	.700 (17.78)	A23831-ND	.33	.30	644563-7
		8	.800 (20.32)	A23832-ND	.37	.34	644563-8
		10	1.00 (25.4)	A23833-ND	.46	.42	1-644563-0
		12	1.200 (30.48)	A23834-ND	.60	.54	1-644563-2
		13	1.300 (33.02)	A23835-ND†	.75	.68	1-644579-3
		15	1.500 (38.1)	A23836-ND	.98	.89	1-644563-5
1	Closed End with Lock, w/out Polarizing Tabs, 22 AWG Red, Tin Plated	2	.200 (5.08)	A1906-ND	.12	.06	640440-2
		3	.300 (7.62)	A19010-ND	.12	.07	640440-3
		4	.400 (10.16)	A1907-ND	.20	.12	640440-4
		5	.500 (12.70)	A19011-ND	.26	.15	640440-5
		6	.600 (15.24)	A1908-ND	.28	.16	640440-6
		7	.700 (17.78)	A19012-ND	.33	.18	640440-7
		8	.800 (20.32)	A1909-ND	.37	.21	640440-8
		9	.900 (22.86)	A19013-ND	.92	.83	640440-9
		10	1.000 (25.40)	A1910-ND	.46	.26	1-640440-0
		11	1.100 (27.94)	A19014-ND	1.12	1.01	1-640440-1
		12	1.200 (30.48)	A19015-ND	.60	.33	1-640440-2
		13	1.300 (33.02)	A19016-ND	1.33	1.20	1-640440-3
		14	1.400 (35.56)	A19017-ND	1.43	1.29	1-640440-4
		15	1.500 (38.1)	A23770-ND	.98	.89	1-640440-5
1A	Closed End with Lock, with Polarizing Tabs, 22 AWG Red, Tin Plated	2	.200 (5.08)	A23837-ND	.12	.10	643813-2
		2	.200 (5.08)	A29084-ND†	.32	.30	644083-2
		3	.300 (7.62)	A29085-ND†	.81	.73	644083-3
		4	.400 (10.16)	A23838-ND	.20	.19	643813-4
		5	.500 (12.7)	A23839-ND	.26	.24	643813-5
		7	.700 (17.78)	A23840-ND	.33	.30	643813-7
		8	.800 (20.32)	A23841-ND	.37	.34	643813-8
		10	1.00 (25.4)	A23842-ND	.46	.42	1-643813-0
		11	1.100 (27.94)	A23843-ND	2.16	1.95	1-643813-1
		12	1.200 (30.48)	A23844-ND	.60	.54	1-643813-2
		13	1.300 (33.02)	A23845-ND†	.75	.68	1-644083-3
		15	1.500 (38.1)	A23846-ND	.98	.89	1-643813-5
1	Feed-Thru with Lock, w/out Polarizing Tabs, 22 AWG Red, Tin Plated	2	.200 (5.08)	A19070-ND	.19	.10	640620-2
		3	.300 (7.62)	A19071-ND	.18	.11	640620-3
		4	.400 (10.16)	A19072-ND	.20	.12	640620-4
		5	.500 (12.70)	A19073-ND	.26	.15	640620-5
		6	.600 (15.24)	A19074-ND	.28	.16	640620-6
		7	.700 (17.78)	A19075-ND	.33	.18	640620-7
		8	.800 (20.32)	A19076-ND	.37	.21	640620-8
		9	.900 (22.86)	A19077-ND	.92	.83	640620-9
		10	1.000 (25.40)	A19078-ND	.46	.26	1-640620-0
		11	1.100 (27.94)	A19079-ND	1.12	1.01	1-640620-1
		12	1.200 (30.48)	A19080-ND	.60	.33	1-640620-2
		13	1.300 (33.02)	A19081-ND	1.33	1.20	1-640620-3
		13	1.300 (33.02)	A23771-ND†	.75	.68	1-644575-3
		14	1.400 (35.56)	A19090-ND	1.43	1.29	1-640620-4
		15	1.500 (38.1)	A23772-ND	.98	.89	1-640620-5
1A	Feed-Thru with Lock, with Polarizing Tabs, 22 AWG Red, Tin Plated	2	.200 (5.08)	A23847-ND	.17	.15	644540-2
		3	.300 (7.62)	A23848-ND	.18	.17	644540-3
		4	.400 (10.16)	A23849-ND	.20	.19	644540-4
		5	.500 (12.7)	A23850-ND	.26	.24	644540-5
		6	.600 (15.24)	A23851-ND	.28	.26	644540-6
		7	.700 (17.78)	A23852-ND	.33	.30	644540-7
		8	.800 (20.32)	A23853-ND	.37	.34	644540-8
		10	1.00 (25.4)	A23854-ND	.46	.42	1-644540-0
		12	1.200 (30.48)	A23855-ND	.60	.54	1-644540-2
		13	1.300 (33.02)	A23856-ND†	.75	.68	1-644578-3
		15	1.500 (38.1)	A23857-ND	.98	.89	1-644540-5
Replacement IDC Contacts							
2	Std. 28 AWG, Tin Plated	—	—	A19313-ND	1.40/25	2.49/50	640639-1
	Std. 26 AWG, Tin Plated	—	—	A19290-ND	1.58/25	2.81/50	640638-2
	Std. 24 AWG, Tin Plated	—	—	A19312-ND	1.58/25	2.81/50	640637-1
	Std. 22 AWG, Tin Plated	—	—	A19311-ND	1.58/25	2.81/50	640636-1
CST-100 Crimp Housings (Contacts Sold Separately)							
3	22-26 AWG White, Tin Plated	2	.220 (5.59)	A19490-ND	.26	.11	770602-2
		3	.320 (8.13)	A19491-ND	.27	.17	770602-3
		4	.420 (10.67)	A19492-ND	.28	.22	770602-4
		5	.520 (13.21)	A19493-ND	.30	.28	770602-5
		6	.620 (15.75)	A19494-ND	.36	.33	770602-6
		7	.720 (18.29)	A19495-ND	.42	.39	770602-7
		8	.820 (20.83)	A19496-ND	.48	.44	770602-8
		9	.920 (23.37)	A19497-ND	.54	.49	770602-9
		10	1.020 (25.91)	A19498-ND	.61	.55	1-770602-0
		11	1.120 (28.45)	A19499-ND	.67	.60	1-770602-1
		12	1.220 (30.99)	A19500-ND	.73	.66	1-770602-2
		13	1.320 (33.53)	A19510-ND	.79	.71	1-770602-3
		14	1.420 (36.07)	A19511-ND	.85	.77	1-770602-4
		15	1.520 (38.61)	A23961-ND	.91	.82	1-770602-5
CST-100 Crimp Contact							
4	Tin Plated, Loose	—	—	A19520-ND	1.63/25	2.90/50	770666-1
	Gold Plated, Loose	—	—	A23962-ND	9.73/25	17.29/50	770666-2
	Gold Plated, Strip	—	—	A23963-ND	5.07/25	9.00/50	770601-2
LED Receptacles (mate with .36 - .51mm diameter posts), .100” (2.54mm) centers							
1	Closed End with Lock, w/out Polarizing Tabs, 28 AWG Green, Tin Plated	2	.200 (5.08)	A19180-ND	.12	.06	641537-2
		3	.300 (7.62)	A19181-ND	.12	.07	641537-3
	Feed-Thru with Lock, w/out Polarizing Tabs, 28 AWG Green, Tin Plated	2	.200 (5.08)	A19220-ND	.19	.09	641656-2
		3	.300 (7.62)	A19221-ND	.18	.10	641656-3
	Closed End with Lock, w/out Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.200 (5.08)	A19170-ND	.12	.06	641536-2
		3	.300 (7.62)	A19171-ND	.12	.07	641536-3
1	Feed-Thru with Lock, w/out Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.200 (5.08)	A19210-ND	.19	.10	641655-2
		3	.300 (7.62)	A19211-ND	.19	.11	641655-3
	Closed End with Lock, w/out Polarizing Tabs, 24 AWG White, Tin Plated	2	.200 (5.08)	A19160-ND	.12	.06	641535-2
		3	.300 (7.62)	A19161-ND	.12	.07	641535-3
		5	.500 (12.7)	A23920-ND	.26	.24	641535-5
		6	.600 (15.24)	A23921-ND	.28	.26	641535-6
1A	Closed End w/Lock, w/Polarizing Tabs, 24 AWG White, Tin Plated	2	.200 (5.08)	A23922-ND	.12	.10	644795-2
1	Feed-Thru w/ Lock, w/out Polarizing Tabs, 24 AWG White, Tin Plated	2	.200 (5.08)	A19200-ND	.19	.10	641654-2
		3	.300 (7.62)	A19201-ND	.18	.10	641654-3
	Closed End w/ Lock, w/out Polarizing Tabs, 22 AWG Red, Tin Plated	2	.200 (5.08)	A19150-ND	.12	.06	641534-2
		3	.300 (7.62)	A19151-ND	.12	.07	641534-3
		8	.800 (20.32)	A23923-ND	.37	.34	641534-8
	Feed-Thru w/ Lock, w/out Polarizing Tabs, 22 AWG Red, Tin Plated	2	.200 (5.08)	A19190-ND	.19	.10	641653-2
		3	.300 (7.62)	A19191-ND	.18	.11	641653-3
		8	.800 (20.32)	A23924-ND	.37	.34	641653-8
Replacement LED Contacts							
2	28 AWG, Tin Plated	—	—	A19317-ND	1.58/25	2.81/50	641646-1
	26 AWG, Tin Plated	—	—	A19316-ND	1.58/25	2.81/50	641645-1
	24 AWG, Tin Plated	—	—	A19315-ND	1.58/25	2.81/50	641644-1
	22 AWG, Tin Plated	—	—	A19314-ND	1.58/25	2.81/50	641643-1
Keying Plugs with Carrier Strip							
5	10 Plugs per Strip	—	—	A19310-ND	.52	.29	641994-1
Accessories, .100” (2.54mm) Centers							
6	Closed End Strain Relief Covers, White	2	.200 (5.08)	A19230-ND	.30	.17	643075-2
		3	.300 (7.62)	A19231-ND	.99	.90	643075-3
		4	.400 (10.16)	A19232-ND	.33	.19	643075-4
		5	.500 (12.70)	A19233-ND	1.00	.90	643075-5
		6	.600 (15.24)	A19234-ND	.34	.19	643075-6
		7	.700 (17.78)	A19235-ND	1.01	.91	643075-7
		8	.800 (20.32)	A19236-ND	1.01	.91	643075-8
		9	.900 (22.86)	A19237-ND	1.01	.92	643075-9
		10	1.000 (25.40)	A19238-ND	1.02	.92	1-643075-0
		11	1.100 (27.94)	A19239-ND	1.02	.92	1-643075-1
		12	1.200 (30.48)	A19240-ND	1.02	.93	1-643075-2
		13	1.300 (33.02)	A19241-ND	.98	.88	1-643075-3
		14	1.400 (35.56)	A19242-ND	1.03	.93	1-643075-4
		15	1.500 (38.1)	A23892-ND	1.04	.94	1-643075-5
7	Closed End Dust Covers, White	2	.200 (5.08)	A19250-ND	.06	.06	640550-2
		3	.300 (7.62)	A19251-ND	.17	.07	640550-3
		4	.400 (10.16)	A19252-ND	.33	.15	640550-4
		5	.500 (12.70)	A19253-ND	.22	.10	640550-5
		6	.600 (15.24)	A19254-ND	.40	.20	640550-6
		7	.700 (17.78)	A19255-ND	.43	.22	640550-7
		8	.800 (20.32)	A19256-ND	.45	.25	640550-8
		9	.900 (22.86)	A19257-ND	.49	.27	640550-9
		10	1.000 (25.40)	A19258-ND	.53	.29	1-640550-0
		11	1.100 (27.94)	A19259-ND	.57	.31	1-640550-1
		12	1.200 (30.48)	A19260-ND	.63	.35	1-640550-2
		13	1.300 (33.02)	A19261-ND	.66	.36	1-640550-3
		14	1.400 (35.56)	A19262-ND	.71	.39	1-640550-4
		15	1.500 (38.1)	A23893-ND	.45	.41	1-640550-5
8	Feed-Thru Strain Relief Covers, White	2	.200 (5.08)	A19270-ND	.38	.34	643077-2
		3	.300 (7.62)	A19271-ND	.15	.14	643077-3
		4	.400 (10.16)	A19272-ND	.40	.37	643077-4
		5	.500 (12.70)	A19273-ND	.50	.46	643077-5
		6	.600 (15.24)	A19274-ND	.55	.50	643077-6
		7	.700 (17.78)	A19275-ND	.57	.52	643077-7
		8	.800 (20.32)	A19276-ND	.65	.59	643077-8
		9	.900 (22.86)	A19277-ND	1.09	.98	643077-9
		10	1.000 (25.40)	A19278-ND	1.02	.92	1-643077-0
		11	1.100 (27.94)	A19279-ND	1.02	.92	1-643077-1
		12	1.200 (30.48)	A19280-ND	1.02	.93	1-643077-2
		13	1.300 (33.02)	A19281-ND	1.03	.93	1-643077-3
		14	1.400 (35.56)	A19282-ND	1.03	.93	1-643077-4
		15	1.500 (38.1)	A23894-ND	1.04	.94	1-643077-5
9	Feed-Thru Dust Covers, White	3	.300 (7.62)	A19291-ND	.16	.07	640642-3
		4	.400 (10.16)	A19292-ND	.16	.09	640642-4
		5	.500 (12.70)	A19293-ND	.18	.10	640642-5
		6	.600 (15.24)	A19294-ND	.36	.20	640642-6
		7	.700 (17.78)	A19295-ND	.40	.22	640642-7
		8	.800 (20.32)	A19296-ND	.45	.25	640642-8
		9	.900 (22.86)	A19297-ND	.49	.27	640642-9
		10	1.000 (25.40)	A19298-ND	.53	.29	1-640642-0
		11	1.100 (27.94)	A19299-ND	.57	.31	1-640642-1
		12	1.200 (30.48)	A19300-ND	.63	.35	1-640642-2
		13	1.300 (33.02)	A19301-ND	.66	.36	1-640642-3
		14	1.400 (35.56)	A19302-ND	.71	.39	1-640642-4
		15	1.500 (38.1)	A23895-ND	.45	.41	1-640642-5
Post Headers, .100 (2.54mm) Centers (.200 (5.08) Wide Base)							
10	Straight Post .64 (.025) Square, Tin Plated	2	.200 (5.08)	A1911-ND	.23	.18	640452-2
		3	.300 (7.62)	A19330-ND	.20	.16	640452-3
		4	.400 (10.16)	A1912-ND	.27	.24	640452-4
		5	.500 (12.70)	A19331-ND	.33	.30	640452-5
		6	.600 (15.24)	A1913-ND	.36	.33	640452-6
		7	.700 (17.78)	A19332-ND	.42	.39	640452-7
		8	.800 (20.32)	A1914-ND	.48	.44	640452-8
		9	.900 (22.86)	A19333-ND	.54	.49	640452-9
		10	1.000 (25.40)	A1915-ND	.60	.55	1-640452-0
		15	1.500 (38.1)	A24931-ND	1.13	1.02	1-640452-5
11	Right Angle Post .64 (.025) Square, Tin Plated	2	.200 (5.08)	A1916-ND	.21	.13	640453-2
		3	.300 (7.62)	A19340-ND	.24	.19	640453-3
		4	.400 (10.16)	A1917-ND	.28	.25	640453-4
		5	.500 (12.70)	A19341-ND	.35	.32	640453-5
		6	.600 (15.24)	A1918-ND	.38	.34	640453-6
		7	.700 (17.78)	A19342-ND	.44	.40	640453-7
		8	.800 (20.32)	A1919-ND	.50	.46	640453-8
		9	.900 (22.86)	A19343-ND	.57	.51	640453-9
		10	1.000 (25.40)	A1920-ND	.63	.57	1-640453-0
		12	1.200 (30.48)	A23927-ND	.75	.68	1-640453-2
		15	1.500 (38.1)	A23896-ND	3.26	2.94	1-640453-5
Narrow Base Post Headers, .100” (2.54mm) Centers (2.34mm Wide Base)							
10	Straight Post .64 (.025) Square w/o Retentive Legs, Tin Plated	2	.188 (4.78)	A19350-ND	.19	.13	644456-2
		3	.288 (7.32)	A19351-ND	.20	.16	644456-3
		4	.388 (9.86)	A19352-ND	.27	.24	644456-4
		5	.488 (12.40)	A19353-ND	.33	.30	644456-5
		6	.588 (14.94)	A19354-ND	.36	.33	644456-6

(Continued)

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each		AMP Part No.
					1	25	
10	Straight Post .64 (.025) Square w/o Retentive Legs, Tin Plated (cont.)	7	.688 (17.48)	A19355-ND	.42	.39	644456-7
		8	.788 (20.02)	A19356-ND	.48	.44	644456-8
		9	.888 (22.56)	A19357-ND	.54	.49	644456-9
		10	.988 (25.10)	A19358-ND	.60	.55	1-644456-0
		11	1.088 (27.64)	A19359-ND	.66	.60	1-644456-1
		12	1.188 (30.18)	A19360-ND	.73	.66	1-644456-2
		13	1.288 (32.72)	A19361-ND	.79	.71	1-644456-3
		14	1.388 (35.26)	A19362-ND	.85	.77	1-644456-4
	Straight Post .64 (.025) Square with Retentive Legs, Tin Plated	2	.200 (5.08)	A19370-ND	.18	.14	644695-2
		3	.300 (7.62)	A19371-ND	.19	.18	644695-3
		4	.400 (10.16)	A19372-ND	.29	.27	644695-4
		5	.500 (12.70)	A19373-ND	.37	.33	644695-5
		6	.600 (15.24)	A19374-ND	.40	.36	644695-6
		7	.700 (17.78)	A19375-ND	.47	.42	644695-7
		8	.800 (20.32)	A19376-ND	.53	.48	644695-8
		9	.900 (22.86)	A19377-ND	.63	.57	644695-9
		10	1.000 (25.40)	A19378-ND	.66	.60	1-644695-0
		11	1.100 (27.94)	A19379-ND	.73	.66	1-644695-1
		12	1.200 (30.48)	A19380-ND	2.21	1.99	1-644695-2
		13	1.300 (33.02)	A19381-ND	.86	.78	1-644695-3
		14	1.400 (35.56)	A19382-ND	.93	.84	1-644695-4
11	Right Angle Post .64 (.025) Square w/o Retentive Legs, Tin Plated	2	.200 (5.08)	A19390-ND	.18	.11	644457-2
		3	.300 (7.62)	A19391-ND	.21	.17	644457-3
		4	.400 (10.16)	A19392-ND	.28	.25	644457-4
		5	.500 (12.70)	A19393-ND	.35	.32	644457-5
		6	.600 (15.24)	A19394-ND	.38	.34	644457-6
		7	.700 (17.78)	A19395-ND	1.22	1.10	644457-7
		8	.800 (20.32)	A19396-ND	.50	.46	644457-8
		9	.900 (22.86)	A19397-ND	.57	.51	644457-9
		10	1.000 (25.40)	A19398-ND	.63	.57	1-644457-0
		11	1.100 (27.94)	A19399-ND	.69	.63	1-644457-1
		12	1.200 (30.48)	A19400-ND	.75	.68	1-644457-2
		13	1.300 (33.02)	A19401-ND	.82	.74	1-644457-3
		14	1.400 (35.56)	A19402-ND	.88	.80	1-644457-4
	Right Angle Post .64 (.025) Square with Retentive Legs, Tin Plated	2	.200 (5.08)	A19410-ND	.18	.12	644694-2
		3	.300 (7.62)	A19411-ND	.20	.18	644694-3
		4	.400 (10.16)	A19412-ND	.30	.28	644694-4
		5	.500 (12.70)	A19413-ND	.38	.35	644694-5
		6	.600 (15.24)	A19414-ND	.41	.38	644694-6
		7	.700 (17.78)	A19415-ND	.48	.44	644694-7
		8	.800 (20.32)	A19416-ND	.55	.50	644694-8
		9	.900 (22.86)	A19417-ND	.62	.56	644694-9
		10	1.000 (25.40)	A19418-ND	.69	.63	1-644694-0
		11	1.100 (27.94)	A19419-ND	.76	.69	1-644694-1
		12	1.200 (30.48)	A19420-ND	.83	.75	1-644694-2
		13	1.300 (33.02)	A19421-ND	.90	.81	1-644694-3
		14	1.400 (35.56)	A19422-ND	.97	.88	1-644694-4
Polarized Headers, .100” (2.54mm) Centers							
12A	Straight Post .64 (.025) Square, TIn Plated	2	.200 (5.08)	A19423-ND	.10	.04	640454-2
		3	.300 (7.62)	A19430-ND	.09	.06	640454-3
		4	.400 (10.16)	A19431-ND	.12	.07	640454-4
		5	.500 (12.70)	A19432-ND	.15	.09	640454-5
		6	.600 (15.24)	A19433-ND	.17	.10	640454-6
		7	.700 (17.78)	A19434-ND	.19	.11	640454-7
		8	.800 (20.32)	A19435-ND	.20	.12	640454-8
		9	.900 (22.86)	A19436-ND	.60	.54	640454-9
		10	1.000 (25.40)	A19437-ND	.24	.14	1-640454-0
		11	1.100 (27.94)	A19438-ND	.73	.66	1-640454-1
		12	1.200 (30.48)	A19439-ND	.37	.21	1-640454-2
		13	1.300 (33.02)	A19440-ND	.86	.78	1-640454-3
		14	1.400 (35.56)	A19441-ND	.93	.84	1-640454-4
		15	1.500 (38.1)	A23929-ND	1.25	1.13	1-640454-5
	Straight Post .64 (.025) Square, 30µ Gold Plated	2	.200 (5.08)	A23897-ND	.44	.40	641213-2
		3	.300 (7.62)	A23898-ND	.68	.62	641213-3
		4	.400 (10.16)	A23899-ND	.84	.76	641213-4
		5	.500 (12.7)	A23900-ND	.80	.73	641213-5
		6	.600 (15.24)	A23901-ND	1.16	1.05	641213-6
		7	.700 (17.78)	A23902-ND	1.29	1.16	641213-7
		8	.800 (20.32)	A23931-ND	.80	.73	641213-8
		9	.900 (22.86)	A23903-ND	1.62	1.46	641213-9
		10	1.00 (25.4)	A23904-ND	1.69	1.52	1-641213-0
		11	1.100 (27.94)	A23905-ND	1.96	1.77	1-641213-1
		12	1.200 (30.48)	A23906-ND	2.06	1.86	1-641213-2
		13	1.300 (33.02)	A23907-ND	2.26	2.04	1-641213-3
		14	1.400 (35.56)	A23908-ND	2.40	2.16	1-641213-4
		15	1.500 (38.1)	A23909-ND	2.46	2.22	1-641213-5
13A	Right Angle Post .64 (.025) Square, Tin Plated	2	.200 (5.08)	A19450-ND	.10	.04	640455-2
		3	.300 (7.62)	A19451-ND	.09	.06	640455-3
		4	.400 (10.16)	A19452-ND	.12	.07	640455-4
		5	.500 (12.70)	A19453-ND	.15	.09	640455-5
		6	.600 (15.24)	A19454-ND	.17	.10	640455-6
		7	.700 (17.78)	A19455-ND	.19	.11	640455-7
		8	.800 (20.32)	A19456-ND	.20	.12	640455-8
		9	.900 (22.86)	A19457-ND	.60	.54	640455-9
		10	1.000 (25.40)	A19458-ND	.24	.14	1-640455-0
		11	1.100 (27.94)	A19459-ND	.73	.66	1-640455-1
		12	1.200 (30.48)	A19460-ND	.37	.21	1-640455-2
		13	1.300 (33.02)	A19461-ND	.86	.78	1-640455-3
		14	1.400 (35.56)	A19462-ND	.93	.84	1-640455-4
		15	1.500 (38.1)	A23932-ND	1.25	1.13	1-640455-5
	Right Angle Post .64 (.025) Square, 30µ Gold Plated	2	.200 (5.08)	A23910-ND	.74	.67	641214-2
		3	.300 (7.62)	A23911-ND	1.01	.92	641214-3
		4	.400 (10.16)	A23912-ND	1.25	1.13	641214-4
		5	.500 (12.7)	A23913-ND	1.45	1.31	641214-5
		6	.600 (15.24)	A23914-ND	1.65	1.49	641214-6
		7	.700 (17.78)	A23915-ND	1.79	1.61	641214-7
		8	.800 (20.32)	A23933-ND	.80	.73	641214-8
		9	.900 (22.86)	A23916-ND	1.96	1.77	641214-9
		10	1.00 (25.4)	A23917-ND	2.04	1.84	1-641214-0
		11	1.100 (27.94)	A23918-ND	2.13	1.92	1-641214-1
		12	1.200 (30.48)	A23919-ND	2.29	2.07	1-641214-2
		13	1.300 (33.02)	A24927-ND	2.53	2.28	1-641214-3
		14	1.400 (35.56)	A24928-ND	2.63	2.37	1-641214-4
		15	1.500 (38.1)	A24929-ND	2.66	2.40	1-641214-5
Post Headers, .100” (2.54mm) Centers, Friction Lock Header							
12B	Straight Post .64 (.025) Square, Tin Plated	2	.200 (5.08)	A1921-ND	.10	.04	640456-2
		3	.300 (7.62)	A19470-ND	.09	.06	640456-3
		4	.400 (10.16)	A1922-ND	.12	.07	640456-4
		5	.500 (12.70)	A19471-ND	.15	.09	640456-5
		6	.600 (15.24)	A1923-ND	.17	.10	640456-6
		7	.700 (17.78)	A19472-ND	.19	.11	640456-7
12B	Straight Post .64 (.025) Square, Tin Plated (cont.)	8	.800 (20.32)	A1924-ND	.20	.12	640456-8
		9	.900 (22.86)	A19473-ND	.60	.54	640456-9
		10	1.000 (25.40)	A1925-ND	.24	.14	1-640456-0
		11	1.100 (27.94)	A19474-ND	.73	.66	1-640456-1
		12	1.200 (30.48)	A19475-ND	.37	.21	1-640456-2
		13	1.300 (33.02)	A19476-ND	.86	.78	1-640456-3
		14	1.400 (35.56)	A19477-ND	.93	.84	1-640456-4
		15	1.500 (38.1)	A24930-ND	1.25	1.13	1-640456-5
12A	Straight Post .64 (.025) Square, 30µ Gold Plated	2	.200 (5.08)	A24932-ND	.24	.22	641215-2
		3	.300 (7.62)	A24933-ND	.68	.61	641215-3
		4	.400 (10.16)	A24934-ND	.84	.76	641215-4
		5	.500 (12.7)	A24935-ND	1.09	.99	641215-5
		6	.600 (15.24)	A24936-ND	1.22	1.10	641215-6
		7	.700 (17.78)	A24937-ND	1.35	1.22	641215-7
		8	.800 (20.32)	A23941-ND	.80	.73	641215-8
		9	.900 (22.86)	A24938-ND	1.61	1.45	641215-9
		10	1.00 (25.4)	A24939-ND	1.70	1.54	1-641215-0
		11	1.100 (27.94)	A24940-ND	1.96	1.77	1-641215-1
		12	1.200 (30.48)	A24941-ND	2.06	1.86	1-641215-2
		14	1.400 (35.56)	A24942-ND	2.41	2.17	1-641215-4
		15	1.500 (38.1)	A24943-ND	2.64	2.38	1-641215-5
13B	Right Angle Post .64 (.025) Square, Tin Plated	2	.200 (5.08)	A1926-ND	.10	.04	640457-2
		3	.300 (7.62)	A19480-ND	.09	.06	640457-3
		4	.400 (10.16)	A1927-ND	.12	.07	640457-4
		5	.500 (12.70)	A19481-ND	.15	.09	640457-5
		6	.600 (15.24)	A1928-ND	.17	.10	640457-6
		7	.700 (17.78)	A19482-ND	.19	.11	640457-7
		8	.800 (20.32)	A1929-ND	.20	.12	640457-8
		9	.900 (22.86)	A19483-ND	.60	.54	640457-9
		10	1.000 (25.40)	A1930-ND	.24	.14	1-640457-0
		11	1.100 (27.94)	A19484-ND	.73	.66	1-640457-1
		12	1.200 (30.48)	A19485-ND	.37	.21	1-640457-2
		13	1.300 (33.02)	A19486-ND	.86	.78	1-640457-3
		14	1.400 (35.56)	A19487-ND	.93	.84	1-640457-4
	Right Angle Post .64 (.025) Square, 30µ Gold Plated	2	.200 (5.08)	A24944-ND	.68	.61	641216-2
		3	.300 (7.62)	A24945-ND	.93	.84	641216-3
		4	.400 (10.16)	A23943-ND	1.13	1.02	641216-4
		5	.500 (12.7)	A24946-ND	1.35	1.22	641216-5
		6	.600 (15.24)	A24947-ND	1.48	1.34	641216-6
		7	.700 (17.78)	A24948-ND	1.54	1.39	641216-7
		8	.800 (20.32)	A23944-ND	.80	.73	641216-8
		9	.900 (22.86)	A24949-ND	1.70	1.54	641216-9
		10	1.00 (25.4)	A24950-ND	1.90	1.71	1-641216-0
		11	1.100 (27.94)	A24951-ND	2.06	1.86	1-641216-1
		12	1.200 (30.48)	A24952-ND	2.53	2.28	1-641216-2
		13	1.300 (33.02)	A24953-ND	2.44	2.20	1-641216-3
		14	1.400 (35.56)	A24954-ND	2.60	2.35	1-641216-4
		15	1.500 (38.1)	A24955-ND	2.66	2.40	1-641216-5
Shrouded Headers, .100” (2.54mm)							
14	Straight Post .64 (.025) Square w/ Pegs, TIn Plated	2	.284 (7.21)	A23945-ND	.38	.34	644486-2
		3	.384 (9.75)	A23946-ND	.43	.39	644486-3
		4	.484 (12.29)	A23925-ND	.73	.66	644486-4
		5	.584 (14.83)	A23926-ND	.91	.83	644486-5
		6	.684 (17.37)	A23928-ND	1.00	.90	644486-6
		7	.784 (19.91)	A23930-ND	1.16	1.05	644486-7
		8	.884 (22.45)	A23957-ND	.59	.54	644486-8
		9	.984 (24.99)	A23934-ND	1.42	1.28	644486-9
		10	1.084 (27.53)	A23935-ND	1.66	1.50	1-644486-0
		11	1.184 (30.07)	A23936-ND	1.83	1.65	1-644486-1
		12	1.284 (32.61)	A23937-ND	1.99	1.80	1-644486-2
		13	1.384 (35.15)	A23938-ND	2.16	1.95	1-644486-3
		14	1.484 (37.69)	A23939-ND	2.33	2.10	1-644486-4
	Straight Post .64 (.025) Square w/out Pegs, Tin Plated	2	.284 (7.21)	A23958-ND	.45	.41	644861-2
		3	.384 (9.75)	A23959-ND	.64	.58	644861-3
		4	.484 (12.29)	A23940-ND	.73	.66	644861-4
		5	.584 (14.83)	A23825-ND	.91	.83	644861-5
		6	.684 (17.37)	A23858-ND	1.00	.90	644861-6
		7	.784 (19.91)	A23859-ND	1.11	1.00	644861-7
		8	.884 (22.45)	A23960-ND	.59	.54	644861-8
		9	.984 (24.99)	A23860-ND	1.80	1.63	644861-9
		10	1.084 (27.53)	A23861-ND	1.66	1.50	1-644861-0
		11	1.184 (30.07)	A23862-ND	1.83	1.65	1-644861-1
		12	1.284 (32.61)	A23863-ND	1.99	1.80	1-644861-2
		13	1.384 (35.15)	A23864-ND	2.16	1.95	1-644861-3
		14	1.484 (37.69)	A23865-ND	2.33	2.10	1-644861-4
15	Right-Angle Posts .64 (.025) Square, Front Bend w/out Pegs, Tin Plated	2	.284 (7.21)	A23866-ND	.77	.69	644488-2
		3	.384 (9.75)	A23867-ND	.77	.69	644488-3
		4	.484 (12.29)	A23868-ND	.76	.69	644488-4
		5	.584 (14.83)	A23869-ND	1.01	.91	644488-5
		6	.684 (17.37)	A23870-ND	1.03	.93	644488-6
		7	.784 (19.91)	A23871-ND	1.20	1.09	644488-7
		8	.884 (22.45)	A23872-ND	1.38	1.24	644488-8
		9	.984 (24.99)	A23873-ND	1.55	1.40	644488-9
		10	1.084 (27.53)	A23874-ND	1.72	1.55	1-644488-0
		11	1.184 (30.07)	A23875-ND	1.89	1.71	1-644488-1
		12	1.284 (32.61)	A23876-ND	2.06	1.86	1-644488-2
		13	1.384 (35.15)	A23877-ND	2.24	2.02	1-644488-3
		14	1.484 (37.69)	A23878-ND	2.42	2.18	1-644488-4
	Right-Angle Posts .64 (.025) Square, Rear Bend w/out Pegs, Tin Plated	2	.284 (7.21)	A23879-ND	.77	.69	644803-2
		3	.384 (9.75)	A23880-ND	.77	.69	644803-3
		4	.484 (12.29)	A23881-ND	.76	.69	644803-4
		5	.584 (14.83)	A23882-ND	.61	.55	644803-5
		6	.684 (17.37)	A23883-ND	1.03	.93	644803-6
		7	.784 (19.91)	A23884-ND	1.58	1.43	644803-7
		8	.884 (22.45)	A23885-ND	1.38	1.24	644803-8
		9	.984 (24.99)	A23886-ND	1.55	1.40	644803-9
		10	1.084 (27.53)	A23887-ND	1.72	1.55	1-644803-0
		11	1.184 (30.07)	A23888-ND	1.89	1.71	1-644803-1
		12	1.284 (32.61)	A23889-ND	2.06	1.86	1-644803-2
		13	1.384 (35.15)	A23890-ND	2.24	2.02	1-644803-3
		14	1.484 (37.69)	A23891-ND	2.42	2.18	1-644803-4

A9982-ND	T-Handle Tool for MTA .100” (2.54mm)	**$17.78 each**	59803-1
A1998-ND	Crimp Die for MTA .100” (2.54mm) Receptacles (Must be used with handle A2031-ND)	**$103.74 each**	58246-1
A2031-ND	Manual Pistol Grip Handle for Metal & All-Plastic Shell Connectors. (Must order crimp die separately.)	**$55.50 each**	58074-1
A19530-ND	Crimp Tool for CST-100 w/Die	**$201.00 each**	58517-1
A19531-ND	Die Set for CST-100 (use with A9996)	**$159.00 each**	58517-2
A9996-ND	Crimp Tool Handle for CST-100	**$75.00 each**	354940-1

† UL94V-0

tyco | Electronics **AMP**

MTA .156” (3.96mm) Receptacles and Post Headers

IDC CONNECTORS: • Wire-to-post connectors preloaded with dual beam contacts • Connectors and headers are end-to-end stackable • Connectors preloaded with IDC contacts • All contacts are slotted for insulation displacement (IDC) terminal technique • Contacts are lubricated to prevent fretting corrosion • Meets the material requirements of Table 23.1 of UL1410 Standards for Television Receiver and Video Products (wire-to-post connectors only) • Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 • Certified by Canadian Standards Association, File No. LR7189. **PERFORMANCE DATA: Voltage Rating:** 250 VAC. **Current Rating:** 5 amp max. for Connector. **Low-Level Resistance:** 3 mΩ max. initial. **Dielectric Withstanding Voltage:** 1250 VAC/1 min. **Insulation Resistance:** 5000 MΩ min. initial. **Operating Temperature:** -55°C to +105°C**. MATERIAL AND FINISH – Housing:** UL94V-2 rated, type 6/6 nylon (24 AWG - White; 22 AWG - Red: 20 AWG - Yellow; 18 AWG - Orange). **Contacts:** Phosphor bronze, post tin plated, 30µ.

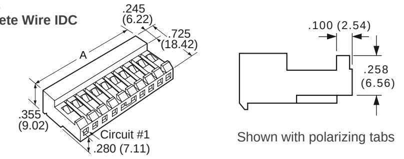
REPLACEMENT IDC CONTACTS: MATERIAL AND FINISH: Phosphor bronze, post tin plated; 30µ.

SL-156 CRIMP CONTACTS AND HOUSINGS: • High current rating • Mates with MTA and similar competitive notched headers • Rugged wire-to-board interconnection to mate with .045 square or round post headers • Housing made of flame retardant 6/6 nylon • Connectors are end-to-end stackable • Wire-to-board system offers polarization with friction lock for positive mating • Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 • Certified by Canadian Standards Association, File No. LR7189. **PERFORMANCE DATA: Voltage Rating:** 250 VAC. **Current Rating:** 10 amp max. @ 250 VAC. **Low-Level Resistance:** 3.0 mΩ max. initial. **Dielectric Withstanding Voltage:** 2000 VAC/1 min. **Insulation Resistance:** 1000 MΩ min. initial. **Operating Temperature:** -55°C to +105°C. **MATERIAL AND FINISH (CONTACTS):** Bright tin plated brass or phosphor bronze; .012 (0.3) pre-tin or 30µ over nickel. **Wire Range:** 18-24 AWG. **Max. Insulation Diameter:** .110 (2.79mm).

KEYING PLUG WITH CARRIER STRIP (10 plugs per strip): MATERIAL: UL94V-2 rated, type 6/6 nylon, natural color

POST HEADERS: Material For Housing: Polyester 94V-0 rated, white. **Posts:** Copper alloy.

Fig. 1
Discrete Wire IDC



Shown with polarizing tabs

Fig. 2

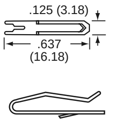


Fig. 3

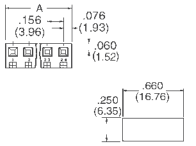


Fig. 4

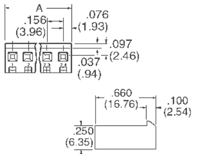


Fig. 5

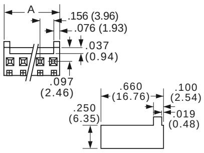


Fig. 6 High Force

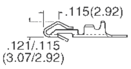


Fig. 7 Low Force

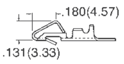


Fig. 8 Hooded

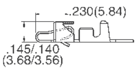


Fig. 9 Strain Relief Cover - Closed End

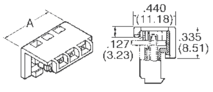


Fig. 10 Dust Cover - Closed End

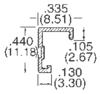


Fig. 11 Strain Relief Cover - Feed Thru

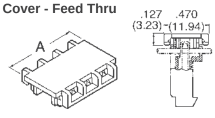


Fig. 12 Dust Cover - Feed Thru

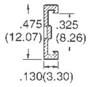


Fig. 13

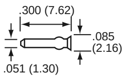


Fig. 14

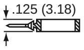


Fig. 15

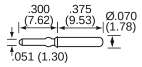


Fig. 16

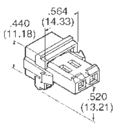


Fig. 17

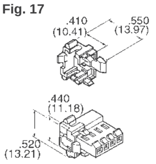


Fig. 18

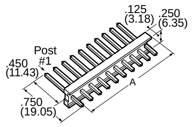


Fig. 19

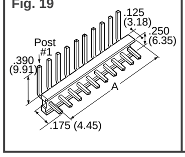


Fig. 20

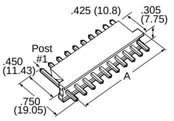


Fig. 21

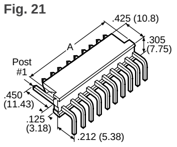
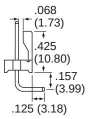


Fig. 22



Description	Digi-Key Part No.	Price Each	AMP Part No.
Tools			
Crimp Tool w/Die	A19996-ND	400.28	90123-5
T-Handle Tool for MTA .156” (3.96mm)	A9981-ND	18.54	59804-1
MATE-N-LOCK® Crimp Tool for 24-18 AWG	A9987-ND	347.95	90123-2
Crimp Die for MTA .156” (3.96mm) Receptacles (Must be used with handle A2031-ND.)	A1999-ND	103.74	58247-1
Manual Pistol Grip Tool for Metal & All-Plastic Shell Connectors. (Must order crimp die separately.)	A2031-ND	55.50	58074-1

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each		AMP Part No.
					1	25	
Receptacles, .156” (3.96mm) centers							
1	Closed End with Lock w/out Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.312 (7.92)	A23988-ND	.54	.49	640430-2
		3	.468 (11.89)	A23964-ND	.25	.13	640430-3
		4	.624 (15.85)	A23965-ND	.26	.24	640430-4
		5	.780 (19.81)	A23995-ND	.52	.48	640430-5
		6	.936 (23.77)	A23966-ND	.34	.31	640430-6
		7	1.092 (27.74)	A24019-ND	.67	.60	640430-7
		8	1.248 (31.7)	A24131-ND	.76	.69	640430-8
		9	1.404 (35.66)	A24132-ND	.86	.78	640430-9
		10	1.560 (39.62)	A24133-ND	.95	.86	1-640430-0
		11	1.716 (43.59)	A24134-ND	1.05	.95	1-640430-1
		12	1.872 (47.55)	A24135-ND	1.14	1.03	1-640430-2
		17	2.652 (67.36)	A23967-ND	.76	.69	1-640430-7
1	Closed End with Lock with Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.312 (7.92)	A24136-ND	.21	.19	643821-2
		3	.468 (11.89)	A23968-ND	.25	.13	643821-3
		4	.624 (15.85)	A23969-ND	.27	.25	643821-4
		5	.780 (19.81)	A24137-ND	.52	.48	643821-5
		6	.936 (23.77)	A23970-ND	.34	.31	643821-6
		7	1.092 (27.74)	A24138-ND	.67	.60	643821-7
		8	1.248 (31.7)	A26135-ND	.76	.69	643821-8
		9	1.404 (35.66)	A24829-ND	1.11	1.01	643821-9
		10	1.560 (39.62)	A26041-ND	.95	.86	1-643821-0
		11	1.716 (43.59)	A26042-ND	1.05	.95	1-643821-1
		12	1.872 (47.55)	A26043-ND	1.14	1.03	1-643821-2
		17	2.652 (67.36)	A23971-ND	.76	.69	1-643821-7
1	Closed End w/out Lock w/out Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.312 (7.92)	A24044-ND	.13	.12	640435-2
		3	.468 (11.89)	A23972-ND	.25	.13	640435-3
		4	.624 (15.85)	A23973-ND	.26	.24	640435-4
		5	.780 (19.81)	A26045-ND	.52	.48	640435-5
		6	.936 (23.77)	A23974-ND	.34	.31	640435-6
		7	1.092 (27.74)	A26046-ND	.67	.60	640435-7
		8	1.248 (31.7)	A26048-ND	.76	.69	640435-8
		9	1.404 (35.66)	A26049-ND	.86	.78	640435-9
		10	1.560 (39.62)	A26050-ND	.95	.86	1-640435-0
		11	1.716 (43.59)	A26051-ND	1.05	.95	1-640435-1
		12	1.872 (47.55)	A26052-ND	1.14	1.03	1-640435-2
		17	2.652 (67.36)	A23975-ND	.76	.69	1-640435-7
1	Feed-Thru with Lock w/out Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.312 (7.92)	A24098-ND	.13	.12	640595-2
		3	.468 (11.89)	A24045-ND	.24	.22	640595-3
		4	.624 (15.85)	A24046-ND	.27	.25	640595-4
		5	.780 (19.81)	A24099-ND	.52	.48	640595-5
		6	.936 (23.77)	A24047-ND	.34	.31	640595-6
		7	1.092 (27.74)	A24100-ND	.67	.60	640595-7
		8	1.248 (31.7)	A24101-ND	.76	.69	640595-8
		9	1.404 (35.66)	A24102-ND	.86	.78	640595-9
		10	1.560 (39.62)	A24103-ND	.95	.86	1-640595-0
		11	1.716 (43.59)	A24104-ND	1.14	1.03	1-640595-1
		12	1.872 (47.55)	A24105-ND	1.14	1.03	1-640595-2
		17	2.652 (67.36)	A24048-ND	.76	.69	1-640595-7
1	Feed-Thru w/out Lock w/out Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.312 (7.92)	A24106-ND	.13	.12	640608-2
		3	.468 (11.89)	A24049-ND	.24	.22	640608-3
		4	.624 (15.85)	A24050-ND	.27	.25	640608-4
		5	.780 (19.81)	A24107-ND	.52	.48	640608-5
		6	.936 (23.77)	A24051-ND	.34	.31	640608-6
		7	1.092 (27.74)	A24956-ND	.67	.60	640608-7
		8	1.248 (31.7)	A24957-ND	.76	.69	640608-8
		9	1.404 (35.66)	A24958-ND	.86	.78	640608-9
		10	1.560 (39.62)	A24959-ND	.95	.86	1-640608-0
		11	1.716 (43.59)	A24960-ND	1.05	.95	1-640608-1
		12	1.872 (47.55)	A24961-ND	1.14	1.03	1-640608-2
		17	2.652 (67.36)	A24052-ND	.76	.69	1-640608-7
1	Closed End with Lock w/out Polarizing Tabs, 24 AWG White, Tin Plated	2	.312 (7.92)	A19630-ND	.13	.12	640429-2
		3	.468 (11.89)	A19631-ND	.25	.08	640429-3
		4	.624 (15.85)	A19632-ND	.26	.15	640429-4
		5	.780 (19.81)	A19633-ND	1.26	1.14	640429-5
		6	.936 (23.77)	A19634-ND	.34	.19	640429-6
		7	1.092 (27.74)	A19635-ND	.67	.60	640429-7
		8	1.248 (31.70)	A19636-ND	1.01	.91	640429-8
		9	1.404 (35.66)	A19637-ND	.86	.78	640429-9
		10	1.560 (39.62)	A19638-ND	.95	.86	1-640429-0
		11	1.716 (43.59)	A19639-ND	1.05	.95	1-640429-1
		12	1.872 (47.55)	A19640-ND	1.14	1.03	1-640429-2
		17	2.652 (67.36)	A23976-ND	.76	.69	1-640429-7
1	Closed End with Lock with Polarizing Tabs, 24 AWG White, Tin Plated	2	.312 (7.92)	A26053-ND	.21	.19	643820-2
		3	.468 (11.89)	A23977-ND	.25	.13	643820-3
		4	.624 (15.85)	A23978-ND	.26	.24	643820-4
		5	.780 (19.81)	A26054-ND	.52	.48	643820-5
		6	.936 (23.77)	A23979-ND	.34	.31	643820-6
		7	1.092 (27.74)	A26055-ND	.67	.60	643820-7
		8	1.248 (31.7)	A26056-ND	.76	.69	643820-8
		9	1.404 (35.66)	A26057-ND	.86	.78	643820-9
		10	1.560 (39.62)	A26058-ND	.95	.86	1-643820-0
		11	1.716 (43.59)	A26059-ND	1.05	.95	1-643820-1
		12	1.872 (47.55)	A26060-ND	1.14	1.03	1-643820-2
		17	2.652 (67.36)	A23980-ND	.76	.69	1-643820-7
1	Closed End w/out Lock w/out Polarizing Tabs, 24 AWG White, Tin Plated	2	.312 (7.92)	A26061-ND	.13	.12	640434-2
		3	.468 (11.89)	A23981-ND	.25	.13	640434-3
		4	.624 (15.85)	A23982-ND	.26	.24	640434-4
		5	.780 (19.81)	A26062-ND	.52	.48	640434-5
		6	.936 (23.77)	A23983-ND	.34	.31	640434-6
		7	1.092 (27.74)	A26063-ND	1.60	1.45	640434-7
		8	1.248 (31.7)	A26064-ND	.76	.69	640434-8
		9	1.404 (35.66)	A26065-ND	.86	.78	640434-9
		10	1.560 (39.62)	A26066-ND	.95	.86	1-640434-0
		11	1.716 (43.59)	A26067-ND	1.05	.95	1-640434-1
		12	1.872 (47.55)	A26068-ND	1.14	1.03	1-640434-2
		17	2.652 (67.36)	A23984-ND	.76	.69	1-640434-7

(Continued)

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Receptacles, .156" (3.96mm) centers (Cont.)							
1	Closed End w/out Lock with Polarizing Tabs, 24 AWG White, Tin Plated	2	.312 (7.92)	A26069-ND	.21	.19	644464-2
		3	.468 (11.89)	A23985-ND	.23	.21	644464-3
		4	.624 (15.85)	A23986-ND	.26	.24	644464-4
		5	.780 (19.81)	A26070-ND	.52	.48	644464-5
		6	.936 (23.77)	A23987-ND	.34	.31	644464-6
		7	1.092 (27.74)	A26071-ND	.67	.60	644464-7
		8	1.248 (31.7)	A26072-ND	.76	.69	644464-8
		9	1.404 (35.66)	A26073-ND	.86	.78	644464-9
		10	1.560 (39.62)	A26074-ND	.95	.86	1-644464-0
		11	1.716 (43.59)	A26075-ND	1.05	.95	1-644464-1
		12	1.872 (47.55)	A26076-ND	1.14	1.03	1-644464-2
1	Feed-Thru with Lock w/out Polarizing Tabs, 24 AWG White, Tin Plated	2	.312 (7.92)	A19720-ND	.13	.12	640602-2
		3	.468 (11.89)	A19721-ND	.24	.14	640602-3
		4	.624 (15.85)	A19722-ND	.26	.15	640602-4
		5	.780 (19.81)	A19723-ND	.52	.48	640602-5
		6	.936 (23.77)	A19724-ND	.34	.19	640602-6
		7	1.092 (27.74)	A19725-ND	.67	.60	640602-7
		8	1.248 (31.70)	A19726-ND	.76	.69	640602-8
		9	1.404 (35.66)	A19727-ND	.86	.78	640602-9
		10	1.560 (39.62)	A19728-ND	.95	.86	1-640602-0
		11	1.716 (43.59)	A19729-ND	1.05	.95	1-640602-1
		12	1.872 (47.55)	A19730-ND	1.14	1.03	1-640602-2
		17	2.652 (67.36)	A24053-ND	.76	.69	1-640602-7
1	Feed-Thru with Lock with Polarizing Tabs, 24 AWG White, Tin Plated	2	.312 (7.92)	A24962-ND	.17	.16	644468-2
		3	.468 (11.89)	A24054-ND	.23	.22	644468-3
		4	.624 (15.85)	A24055-ND	.26	.24	644468-4
		5	.780 (19.81)	A24963-ND	.52	.48	644468-5
		6	.936 (23.77)	A24056-ND	.34	.31	644468-6
		7	1.092 (27.74)	A24964-ND	.67	.60	644468-7
		8	1.248 (31.7)	A24965-ND	.76	.69	644468-8
		9	1.404 (35.66)	A24966-ND	.86	.78	644468-9
		10	1.560 (39.62)	A24967-ND	.95	.86	1-644468-0
		11	1.716 (43.59)	A24968-ND	1.05	.95	1-644468-1
		12	1.872 (47.55)	A24969-ND	1.14	1.03	1-644468-2
1	Feed-Thru w/out Lock w/out Polarizing Tabs, 24 AWG White, Tin Plated,	2	.312 (7.92)	A24970-ND	.13	.12	640607-2
		3	.468 (11.89)	A24057-ND	.24	.22	640607-3
		4	.624 (15.85)	A24058-ND	.26	.24	640607-4
		5	.780 (19.81)	A24971-ND	.52	.48	640607-5
		6	.936 (23.77)	A24059-ND	.34	.31	640607-6
		7	1.092 (27.74)	A24972-ND	.67	.60	640607-7
		8	1.248 (31.7)	A24973-ND	.76	.69	640607-8
		10	1.560 (39.62)	A24974-ND	.95	.86	1-640607-0
		12	1.872 (47.55)	A24975-ND	1.14	1.03	1-640607-2
		17	2.652 (67.36)	A24060-ND	.76	.69	1-640607-7
1	Feed-Thru w/out Lock with Polarizing Tabs, 24 AWG White, Tin Plated	2	.312 (7.92)	A24976-ND	.21	.19	644472-2
		3	.468 (11.89)	A24061-ND	.24	.22	644472-3
		4	.624 (15.85)	A24062-ND	.27	.24	644472-4
		5	.780 (19.81)	A24977-ND	.52	.48	644472-5
		6	.936 (23.77)	A24063-ND	.34	.31	644472-6
		7	1.092 (27.74)	A24978-ND	.67	.60	644472-7
		8	1.248 (31.7)	A24979-ND	.76	.69	644472-8
		9	1.404 (35.66)	A24980-ND	.86	.78	644472-9
		10	1.560 (39.62)	A24981-ND	.95	.86	1-644472-0
		11	1.716 (43.59)	A24982-ND	1.05	.95	1-644472-1
		12	1.872 (47.55)	A24983-ND	1.14	1.03	1-644472-2
1	Closed End with Lock w/out Polarizing Tabs, 22 AWG Red, Tin Plated	2	.312 (7.92)	A19610-ND	.15	.14	640428-2
		3	.468 (11.89)	A19611-ND	.25	.08	640428-3
		4	.624 (15.85)	A19612-ND	.26	.15	640428-4
		5	.780 (19.81)	A19613-ND	.52	.48	640428-5
		6	.936 (23.77)	A19614-ND	.34	.19	640428-6
		7	1.092 (27.74)	A19615-ND	1.60	1.45	640428-7
		8	1.248 (31.70)	A19616-ND	.76	.69	640428-8
		9	1.404 (35.66)	A19617-ND	.86	.78	640428-9
		10	1.560 (39.62)	A19618-ND	.95	.86	1-640428-0
		11	1.716 (43.59)	A19619-ND	1.05	.95	1-640428-1
		12	1.872 (47.55)	A19620-ND	1.14	1.03	1-640428-2
		17	2.652 (67.36)	A23990-ND	.78	.70	1-640428-7
1	Closed End with Lock with Polarizing Tabs, 22 AWG Red, Tin Plated	2	.312 (7.92)	A26077-ND	.13	.12	643819-2
		3	.468 (11.89)	A23991-ND	.25	.13	643819-3
		4	.624 (15.85)	A23992-ND	.26	.24	643819-4
		5	.780 (19.81)	A26078-ND	1.26	1.14	643819-5
		6	.936 (23.77)	A23993-ND	.34	.31	643819-6
		7	1.092 (27.74)	A23994-ND	1.14	1.03	643819-7
		8	1.248 (31.7)	A26079-ND	.76	.69	643819-8
		9	1.404 (35.66)	A26080-ND	.86	.78	643819-9
		10	1.560 (39.62)	A26081-ND	.95	.86	1-643819-0
		11	1.716 (43.59)	A26082-ND	1.05	.95	1-643819-1
		12	1.872 (47.55)	A26083-ND	1.14	1.03	1-643819-2
		17	2.652 (67.36)	A23996-ND	.78	.70	1-643819-7
1	Closed End w/out Lock without Polarizing Tabs, 22 AWG Red, Tin Plated	2	.312 (7.92)	A26084-ND	.13	.12	640433-2
		3	.468 (11.89)	A23997-ND	.25	.13	640433-3
		4	.624 (15.85)	A23998-ND	.26	.24	640433-4
		5	.780 (19.81)	A26085-ND	.52	.48	640433-5
		6	.936 (23.77)	A23999-ND	.34	.31	640433-6
		7	1.092 (27.74)	A26086-ND	.67	.60	640433-7
		8	1.248 (31.7)	A24000-ND	1.03	.93	640433-8
		9	1.404 (35.66)	A26087-ND	.86	.78	640433-9
		10	1.560 (39.62)	A24001-ND	1.18	1.07	1-640433-0
		11	1.716 (43.59)	A26088-ND	1.05	.95	1-640433-1
		12	1.872 (47.55)	A24002-ND	1.38	1.25	1-640433-2
		17	2.652 (67.36)	A24003-ND	1.27	1.15	1-640433-7
1	Closed End w/out Lock with Polarizing Tabs, 22 AWG Red, Tin Plated	2	.312 (7.92)	A26089-ND	.21	.19	644463-2
		3	.468 (11.89)	A24004-ND	.24	.23	644463-3
		4	.624 (15.85)	A24005-ND	.26	.24	644463-4
		5	.780 (19.81)	A26090-ND	.52	.48	644463-5
		6	.936 (23.77)	A24006-ND	.34	.31	644463-6
		7	1.092 (27.74)	A26091-ND	.67	.60	644463-7
		8	1.248 (31.7)	A26092-ND	.76	.69	644463-8
		9	1.404 (35.66)	A26093-ND	.86	.78	644463-9
		10	1.560 (39.62)	A26094-ND	.95	.86	1-644463-0
		11	1.716 (43.59)	A26096-ND	1.05	.95	1-644463-1
		12	1.872 (47.55)	A26097-ND	1.14	1.03	1-644463-2
1	Feed-Thru with Lock w/out Polarizing Tabs, 22 AWG Red, Tin Plated	2	.312 (7.92)	A19700-ND	.54	.49	640601-2
		3	.468 (11.89)	A19701-ND	.24	.14	640601-3
		4	.624 (15.85)	A19702-ND	.27	.15	640601-4
		5	.780 (19.81)	A19703-ND	1.03	.93	640601-5
		6	.936 (23.77)	A19704-ND	.34	.19	640601-6
		7	1.092 (27.74)	A19705-ND	.67	.60	640601-7
		8	1.248 (31.70)	A19706-ND	.76	.69	640601-8
		9	1.404 (35.66)	A19707-ND	.86	.78	640601-9
		10	1.560 (39.62)	A19708-ND	1.39	1.26	1-640601-0
		11	1.716 (43.59)	A19709-ND	1.05	.95	1-640601-1
		12	1.872 (47.55)	A19710-ND	1.14	1.03	1-640601-2
		17	2.652 (67.36)	A24064-ND	.78	.70	1-640601-7
1	Feed-Thru with Lock with Polarizing Tabs, 22 AWG Red, Tin Plated	2	.312 (7.92)	A24984-ND	.21	.19	644467-2
		3	.468 (11.89)	A24065-ND	.24	.23	644467-3
		4	.624 (15.85)	A24066-ND	.27	.25	644467-4
		5	.780 (19.81)	A24985-ND	.52	.48	644467-5
		6	.936 (23.77)	A24067-ND	.34	.31	644467-6
		7	1.092 (27.74)	A24986-ND	.67	.60	644467-7
		8	1.248 (31.7)	A24987-ND	.76	.69	644467-8
		9	1.404 (35.66)	A24988-ND	.86	.78	644467-9
		10	1.560 (39.62)	A24989-ND	.95	.86	1-644467-0
		11	1.716 (43.59)	A24990-ND	1.05	.95	1-644467-1
		12	1.872 (47.55)	A24991-ND	1.14	1.03	1-644467-2
1	Feed-Thru w/out Lock w/out Polarizing Tabs, 22 AWG Red, Tin Plated	2	.312 (7.92)	A24992-ND	.13	.12	640606-2
		3	.468 (11.89)	A24068-ND	.25	.23	640606-3
		4	.624 (15.85)	A24069-ND	.27	.25	640606-4
		5	.780 (19.81)	A24993-ND	.52	.48	640606-5
		6	.936 (23.77)	A24070-ND	.34	.31	640606-6
		7	1.092 (27.74)	A24994-ND	.67	.60	640606-7
		8	1.248 (31.7)	A24995-ND	.76	.69	640606-8
		9	1.404 (35.66)	A24996-ND	.86	.78	640606-9
		10	1.560 (39.62)	A24997-ND	.95	.86	1-640606-0
		11	1.716 (43.59)	A24998-ND	1.05	.95	1-640606-1
		12	1.872 (47.55)	A24999-ND	1.82	1.64	1-640606-2
		17	2.652 (67.36)	A24071-ND	.78	.70	1-640606-7
1	Feed-Thru w/out Lock with Polarizing Tabs, 22 AWG Red, Tin Plated	2	.312 (7.92)	A24199-ND	.21	.19	644471-2
		3	.468 (11.89)	A24072-ND	.25	.23	644471-3
		4	.624 (15.85)	A24073-ND	.27	.25	644471-4
		5	.780 (19.81)	A24139-ND	.52	.48	644471-5
		6	.936 (23.77)	A24074-ND	.34	.31	644471-6
		7	1.092 (27.74)	A24140-ND	.67	.60	644471-7
		8	1.248 (31.7)	A24141-ND	.76	.69	644471-8
		9	1.404 (35.66)	A24142-ND	.86	.78	644471-9
		10	1.560 (39.62)	A24143-ND	.95	.86	1-644471-0
		11	1.716 (43.59)	A24144-ND	1.05	.95	1-644471-1
		12	1.872 (47.55)	A24145-ND	1.14	1.03	1-644471-2
1	Closed End with Lock w/out Polarizing Tabs, 20 AWG Yellow, Tin Plated	2	.312 (7.92)	A19590-ND	.13	.12	640427-2
		3	.468 (11.89)	A19591-ND	.25	.08	640427-3
		4	.624 (15.85)	A19592-ND	.26	.15	640427-4
		5	.780 (19.81)	A19593-ND	.52	.48	640427-5
		6	.936 (23.77)	A19594-ND	.37	.21	640427-6
		7	1.092 (27.74)	A19595-ND	.67	.60	640427-7
		8	1.248 (31.70)	A19596-ND	.76	.69	640427-8
		9	1.404 (35.66)	A19597-ND	1.10	.99	640427-9
		10	1.560 (39.62)	A19598-ND	.95	.86	1-640427-0
		11	1.716 (43.59)	A19599-ND	1.05	.95	1-640427-1
		12	1.872 (47.55)	A19600-ND	1.14	1.03	1-640427-2
		17	2.652 (67.36)	A24007-ND	.78	.70	1-640427-7
1	Closed End with Lock with Polarizing Tabs, 20 AWG Yellow, Tin Plated	2	.312 (7.92)	A26098-ND	.21	.19	643818-2
		3	.468 (11.89)	A24008-ND	.25	.13	643818-3
		4	.624 (15.85)	A24009-ND	.26	.24	643818-4
		5	.780 (19.81)	A26099-ND	.52	.48	643818-5
		6	.936 (23.77)	A24010-ND	.34	.31	643818-6
		7	1.092 (27.74)	A26100-ND	.67	.60	643818-7
		8	1.248 (31.7)	A26101-ND	.76	.69	643818-8
		9	1.404 (35.66)	A26102-ND	.86	.78	643818-9
		10	1.560 (39.62)	A26103-ND	1.18	1.07	1-643818-0
		11	1.716 (43.59)	A26104-ND	1.05	.95	1-643818-1
		12	1.872 (47.55)	A26105-ND	1.14	1.03	1-643818-2
		17	2.652 (67.36)	A24011-ND	.99	.89	1-643818-7
1	Closed End w/out Lock without Polarizing Tabs, 20 AWG Yellow, Tin Plated	2	.312 (7.92)	A24012-ND	.54	.49	640432-2
		3	.468 (11.89)	A26106-ND	.25	.13	640432-3
		4	.624 (15.85)	A24013-ND	.26	.24	640432-4
		5	.780 (19.81)	A26107-ND	.52	.48	640432-5
		6	.936 (23.77)	A24014-ND	.34	.31	640432-6
		7	1.092 (27.74)	A26108-ND	.67	.60	640432-7
		8	1.248 (31.7)	A26109-ND	.76	.69	640432-8
		9	1.404 (35.66)	A26110-ND	.86	.78	640432-9
		10	1.560 (39.62)	A26111-ND	.95	.86	1-640432-0
		11	1.716 (43.59)	A26112-ND	1.05	.95	1-640432-1
		12	1.872 (47.55)	A26113-ND	1.14	1.03	1-640432-2
		17	2.652 (67.36)	A24015-ND	.78	.70	1-640432-7

(Continued)

MTA .156” (3.96mm) Receptacles and Post Headers *(Cont.)*

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Receptacles, .156” (3.96mm) centers (Cont.)							
1	Closed End w/out Lock with Polarizing Tabs, 20 AWG Yellow, Tin Plated	2	.312 (7.92)	A26114-ND	.21	.19	644462-2
		3	.468 (11.89)	A24016-ND	.25	.23	644462-3
		4	.624 (15.85)	A24017-ND	.26	.24	644462-4
		5	.780 (19.81)	A26115-ND	.52	.48	644462-5
		6	.936 (23.77)	A24018-ND	.34	.31	644462-6
		7	1.092 (27.74)	A26116-ND	.67	.60	644462-7
		8	1.248 (31.7)	A26117-ND	.76	.69	644462-8
		9	1.404 (35.66)	A26118-ND	.86	.78	644462-9
		10	1.560 (39.62)	A26119-ND	.95	.86	1-644462-0
		11	1.716 (43.59)	A26120-ND	1.05	.95	1-644462-1
		12	1.872 (47.55)	A26121-ND	1.14	1.03	1-644462-2
1	Feed-Thru with Lock w/out Polarizing Tabs, 20 AWG Yellow, Tin Plated	2	.312 (7.92)	A19680-ND	.54	.49	640600-2
		3	.468 (11.89)	A19681-ND	.25	.14	640600-3
		4	.624 (15.85)	A19682-ND	.27	.15	640600-4
		5	.780 (19.81)	A19683-ND	.52	.48	640600-5
		6	.936 (23.77)	A19684-ND	.34	.19	640600-6
		7	1.092 (27.74)	A19685-ND	.67	.60	640600-7
		8	1.248 (31.70)	A19686-ND	.76	.69	640600-8
		9	1.404 (35.66)	A19687-ND	1.31	1.19	640600-9
		10	1.560 (39.62)	A19688-ND	.95	.86	1-640600-0
		11	1.716 (43.59)	A19689-ND	1.05	.95	1-640600-1
		12	1.872 (47.55)	A19690-ND	1.14	1.03	1-640600-2
		17	2.652 (67.36)	A24075-ND	.78	.70	1-640600-7
1	Feed-Thru with Lock with Polarizing Tabs, 20 AWG Yellow, Tin Plated	2	.312 (7.92)	A24146-ND	.21	.19	644466-2
		3	.468 (11.89)	A24076-ND	.25	.23	644466-3
		4	.624 (15.85)	A24077-ND	.27	.25	644466-4
		5	.780 (19.81)	A24147-ND	.52	.48	644466-5
		6	.936 (23.77)	A24078-ND	.34	.31	644466-6
		7	1.092 (27.74)	A24148-ND	.67	.60	644466-7
		8	1.248 (31.7)	A24149-ND	.76	.69	644466-8
		9	1.404 (35.66)	A24150-ND	.86	.78	644466-9
		10	1.560 (39.62)	A24151-ND	.95	.86	1-644466-0
		11	1.716 (43.59)	A26000-ND	1.05	.95	1-644466-1
		12	1.872 (47.55)	A26001-ND	1.14	1.03	1-644466-2
1	Feed-Thru w/out Lock w/out Polarizing Tabs, 20 AWG Yellow, Tin Plated	2	.312 (7.92)	A26002-ND	.13	.12	640605-2
		3	.468 (11.89)	A24079-ND	.24	.22	640605-3
		4	.624 (15.85)	A24080-ND	.27	.25	640605-4
		5	.780 (19.81)	A26003-ND	.52	.48	640605-5
		6	.936 (23.77)	A24081-ND	.34	.31	640605-6
		7	1.092 (27.74)	A26047-ND	.67	.60	640605-7
		8	1.248 (31.7)	A26004-ND	.76	.69	640605-8
		9	1.404 (35.66)	A26005-ND	.86	.78	640605-9
		10	1.560 (39.62)	A26006-ND	.95	.86	1-640605-0
		11	1.716 (43.59)	A26007-ND	1.05	.95	1-640605-1
		12	1.872 (47.55)	A26008-ND	1.14	1.03	1-640605-2
		17	2.652 (67.36)	A24082-ND	.78	.70	1-640605-7
1	Feed-Thru w/out Lock with Polarizing Tabs, 20 AWG Yellow, Tin Plated	2	.312 (7.92)	A26009-ND	.21	.19	644470-2
		3	.468 (11.89)	A24083-ND	.24	.22	644470-3
		4	.624 (15.85)	A24084-ND	.26	.24	644470-4
		5	.780 (19.81)	A26010-ND	.52	.48	644470-5
		6	.936 (23.77)	A24085-ND	.34	.31	644470-6
		7	1.092 (27.74)	A26011-ND	.67	.60	644470-7
		8	1.248 (31.7)	A26012-ND	.76	.69	644470-8
		9	1.404 (35.66)	A26013-ND	.86	.78	644470-9
		10	1.560 (39.62)	A26014-ND	.95	.86	1-644470-0
		11	1.716 (43.59)	A26015-ND	1.05	.95	1-644470-1
		12	1.872 (47.55)	A26016-ND	1.14	1.03	1-644470-2
1	Closed End with Lock w/out Polarizing Tabs, 18 AWG Orange, Tin Plated	2	.312 (7.92)	A1951-ND	.21	.19	640426-2
		3	.468 (11.89)	A19580-ND	.38	.12	640426-3
		4	.624 (15.85)	A1952-ND	.26	.15	640426-4
		5	.780 (19.81)	A19581-ND	.52	.48	640426-5
		6	.936 (23.77)	A1953-ND	.34	.19	640426-6
		7	1.092 (27.74)	A19582-ND	.67	.60	640426-7
		8	1.248 (31.70)	A1954-ND	.76	.69	640426-8
		9	1.404 (35.66)	A19583-ND	.86	.78	640426-9
		10	1.560 (39.62)	A1955-ND	.95	.86	1-640426-0
		11	1.716 (43.59)	A19584-ND	1.05	.95	1-640426-1
		12	1.872 (47.55)	A19585-ND	1.14	1.03	1-640426-2
		17	2.652 (67.36)	A24020-ND	.76	.69	1-640426-7
1	Closed End with Lock with Polarizing Tabs, 18 AWG Orange, Tin Plated	2	.312 (7.92)	A26122-ND	.37	.19	643817-2
		3	.468 (11.89)	A24021-ND	.25	.13	643817-3
		4	.624 (15.85)	A24022-ND	.26	.24	643817-4
		5	.780 (19.81)	A26123-ND	.52	.48	643817-5
		6	.936 (23.77)	A24023-ND	.34	.31	643817-6
		7	1.092 (27.74)	A24024-ND	1.12	1.02	643817-7
		8	1.248 (31.7)	A26124-ND	.76	.69	643817-8
		9	1.404 (35.66)	A24025-ND	1.07	.97	643817-9
		10	1.560 (39.62)	A26125-ND	.95	.86	1-643817-0
		11	1.716 (43.59)	A26126-ND	1.45	1.31	1-643817-1
		12	1.872 (47.55)	A24026-ND	1.36	1.23	1-643817-2
		17	2.652 (67.36)	A24027-ND	.76	.69	1-643817-7
1	Closed End w/out Lock w/out Polarizing Tabs, 18 AWG Orange, Tin Plated	2	.312 (7.92)	A1956-ND	.13	.12	640431-2
		3	.468 (11.89)	A19650-ND	.25	.08	640431-3
		4	.624 (15.85)	A1957-ND	.26	.15	640431-4
		5	.780 (19.81)	A19651-ND	.52	.48	640431-5
		6	.936 (23.77)	A1958-ND	.34	.19	640431-6
		7	1.092 (27.74)	A19652-ND	.67	.60	640431-7
		8	1.248 (31.70)	A1959-ND	.76	.69	640431-8
1	Closed End w/out Lock w/out Polarizing Tabs, 18 AWG Orange, Tin Plated (cont.)	9	1.404 (35.66)	A19653-ND	.86	.78	640431-9
		10	1.560 (39.62)	A1960-ND	.95	.86	1-640431-0
		11	1.716 (43.59)	A19654-ND	1.05	.95	1-640431-1
		12	1.872 (47.55)	A19655-ND	1.14	1.03	1-640431-2
		17	2.652 (67.36)	A24028-ND	.76	.69	1-640431-7
1	Closed End w/out Lock with Polarizing Tabs, 18 AWG Orange, Tin Plated	2	.312 (7.92)	A26127-ND	.21	.19	644461-2
		3	.468 (11.89)	A24029-ND	.24	.22	644461-3
		4	.624 (15.85)	A24030-ND	.26	.24	644461-4
		5	.780 (19.81)	A26128-ND	.52	.48	644461-5
		6	.936 (23.77)	A24031-ND	.34	.31	644461-6
		7	1.092 (27.74)	A26129-ND	.67	.60	644461-7
		8	1.248 (31.7)	A26130-ND	.76	.69	644461-8
		9	1.404 (35.66)	A26131-ND	.86	.78	644461-9
		10	1.560 (39.62)	A26132-ND	.95	.86	1-644461-0
		11	1.716 (43.59)	A26133-ND	1.05	.95	1-644461-1
		12	1.872 (47.55)	A26134-ND	1.14	1.03	1-644461-2
1	Feed-Thru with Lock w/out Polarizing Tabs, 18 AWG Orange, Tin Plated	2	.312 (7.92)	A19660-ND	.13	.12	640599-2
		3	.468 (11.89)	A19661-ND	.24	.14	640599-3
		4	.624 (15.85)	A19662-ND	.27	.15	640599-4
		5	.780 (19.81)	A19663-ND	.52	.48	640599-5
		6	.936 (23.77)	A19664-ND	.34	.19	640599-6
		7	1.092 (27.74)	A19665-ND	1.12	1.02	640599-7
		8	1.248 (31.70)	A19666-ND	.76	.69	640599-8
		9	1.404 (35.66)	A19667-ND	.86	.78	640599-9
		10	1.560 (39.62)	A19668-ND	.95	.86	1-640599-0
		11	1.716 (43.59)	A19669-ND	1.45	1.31	1-640599-1
		12	1.872 (47.55)	A19670-ND	1.14	1.03	1-640599-2
		17	2.652 (67.36)	A24086-ND	.76	.69	1-640599-7
1	Feed-Thru with Lock with Polarizing Tabs, 18 AWG Orange, Tin Plated	2	.312 (7.92)	A26017-ND	.21	.19	644465-2
		3	.468 (11.89)	A24087-ND	.24	.22	644465-3
		4	.624 (15.85)	A24088-ND	.27	.25	644465-4
		5	.780 (19.81)	A26018-ND	.52	.48	644465-5
		6	.936 (23.77)	A24089-ND	.34	.31	644465-6
		7	1.092 (27.74)	A26019-ND	.67	.60	644465-7
		8	1.248 (31.7)	A26020-ND	.76	.69	644465-8
		9	1.404 (35.66)	A26021-ND	.86	.78	644465-9
		10	1.560 (39.62)	A26022-ND	.95	.86	1-644465-0
		11	1.716 (43.59)	A26023-ND	1.05	.95	1-644465-1
		12	1.872 (47.55)	A26024-ND	1.14	1.03	1-644465-2
1	Feed-Thru w/out Lock without Polarizing Tabs, 18 AWG Orange, Tin Plated	2	.312 (7.92)	A26025-ND	.13	.12	640604-2
		3	.468 (11.89)	A24090-ND	.24	.22	640604-3
		4	.624 (15.85)	A24091-ND	.27	.25	640604-4
		5	.780 (19.81)	A24092-ND	1.01	.92	640604-5
		6	.936 (23.77)	A24093-ND	.34	.31	640604-6
		7	1.092 (27.74)	A26026-ND	.67	.60	640604-7
		8	1.248 (31.7)	A26027-ND	1.22	1.10	640604-8
		9	1.404 (35.66)	A26028-ND	.86	.78	640604-9
		10	1.560 (39.62)	A26029-ND	.95	.86	1-640604-0
		11	1.716 (43.59)	A26030-ND	1.05	.95	1-640604-1
		12	1.872 (47.55)	A24031-ND	.34	.31	1-640604-2
		17	2.652 (67.36)	A24094-ND	.76	.69	1-640604-7
1	Feed-Thru w/out Lock with Polarizing Tabs, 18 AWG Orange, Tin Plated	2	.312 (7.92)	A26032-ND	.21	.19	644469-2
		3	.468 (11.89)	A24095-ND	.24	.22	644469-3
		4	.624 (15.85)	A24096-ND	.27	.25	644469-4
		5	.780 (19.81)	A26033-ND	.52	.48	644469-5
		6	.936 (23.77)	A24097-ND	.34	.31	644469-6
		7	1.092 (27.74)	A26034-ND	.67	.60	644469-7
		8	1.248 (31.7)	A26035-ND	.76	.69	644469-8
		9	1.404 (35.66)	A26036-ND	.86	.78	644469-9
		10	1.560 (39.62)	A26037-ND	.95	.86	1-644469-0
		11	1.716 (43.59)	A26038-ND	1.05	.95	1-644469-1
		12	1.872 (47.55)	A26039-ND	1.14	1.03	1-644469-2
Replacement IDC Contacts, .156” (3.96mm) Centers							
2	Tin Plated, 18 AWG	—	—	A19820-ND	.26	.10	640631-2
	Tin Plated, 20 AWG	—	—	A19825-ND	.26	.10	640632-2
	Tin Plated, 22 AWG	—	—	A19830-ND	.26	.10	640633-2
	Tin Plated, 24 AWG	—	—	A19835-ND	.26	.10	640634-2
SL-156 Crimp Housings (Contacts Sold Separately)							
3	Without Lock Ramp Without Polarizing Tabs, UL94V-0 White	2	.308 (7.82)	A19970-ND	.32	.13	640251-2
		3	.465 (11.81)	A19971-ND	.29	.15	640251-3
		4	.620 (15.75)	A19972-ND	.32	.20	640251-4
		5	.777 (19.74)	A19973-ND	.36	.25	640251-5
		6	.933 (23.70)	A19974-ND	.27	.13	640251-6
		7	1.090 (27.69)	A19975-ND	.44	.34	640251-7
		8	1.246 (31.65)	A19976-ND	.47	.39	640251-8
		9	1.402 (35.61)	A19977-ND	.49	.44	640251-9
		10	1.558 (39.57)	A19978-ND	.54	.49	1-640251-0
		11	1.715 (43.56)	A19979-ND	.59	.54	1-640251-1
		12	1.871 (47.52)	A19980-ND	1.01	.91	1-640251-2
		13	2.027 (51.49)	A24128-ND	.70	.64	1-640251-3
		14	2.183 (55.45)	A24129-ND	.75	.68	1-640251-4
		16	2.496 (63.40)	A24130-ND	.86	.78	1-640251-6
4	With Lock Ramp Without Polarizing Tabs, UL94V-0 White	2	.308 (7.82)	A19950-ND	.32	.13	640250-2
		3	.465 (11.81)	A19951-ND	.18	.06	640250-3
		4	.620 (15.75)	A19952-ND	.32	.20	640250-4
		5	.777 (19.74)	A19953-ND	.22	.10	640250-5
		6	.933 (23.70)	A19954-ND	.23	.11	640250-6

(Continued)

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
SL-156 Crimp Housings (Contacts Sold Separately) Continued							
4	With Lock Ramp Without Polarizing Tabs, UL94V-0 White (cont.)	7	1.090 (27.69)	A19955-ND	.24	.12	640250-7
		8	1.246 (31.65)	A19956-ND	.29	.15	640250-8
		9	1.402 (35.61)	A19957-ND	.49	.44	640250-9
		10	1.558 (39.57)	A19958-ND	.54	.49	1-640250-0
		11	1.715 (43.56)	A19959-ND	.59	.54	1-640250-1
		12	1.871 (47.52)	A19960-ND	.40	.22	1-640250-2
		13	2.027 (51.49)	A28761-ND	.70	.64	1-640250-3
		14	2.183 (55.45)	A24126-ND	.75	.68	1-640250-4
		16	2.496 (63.40)	A24127-ND	.86	.78	1-640250-6
5	With Lock Ramp With Polarizing Tabs, UL94V-0 White	2	.308 (7.82)	A24111-ND	.25	.10	770849-2
		3	.465 (11.81)	A24112-ND	.24	.15	770849-3
		4	.620 (15.75)	A24113-ND	.22	.20	770849-4
		5	.777 (19.74)	A24114-ND	.18	.16	770849-5
		6	.933 (23.70)	A24115-ND	.32	.30	770849-6
		7	1.090 (27.69)	A24116-ND	.38	.34	770849-7
		8	1.246 (31.65)	A24117-ND	.43	.39	770849-8
		9	1.402 (35.61)	A24118-ND	.49	.44	770849-9
		10	1.558 (39.57)	A24119-ND	.54	.49	1-770849-0
		11	1.715 (43.56)	A24120-ND	.59	.54	1-770849-1
		12	1.871 (47.52)	A24121-ND	.65	.59	1-770849-2
		13	2.027 (51.49)	A24122-ND	.70	.64	1-770849-3
		14	2.183 (55.45)	A24123-ND	.75	.68	1-770849-4
		16	2.496 (63.40)	A24124-ND	.86	.78	1-770849-6

Fig.	Description	Digi-Key Part No.	Loose Pc. Price Each 1	25	AMP Part No.	Digi-Key Part No.	Strip Form Pricing 1,000	3,000	Amp Part No.
SL-156 Crimp Contacts									
6	Brass, Tin Plated, 6.5 A	A19990-ND	.31	.23	640706-1	A24200-ND	22.34	18.15/M	640252-1
	Brass, Pre-Tin Pltd., 6.5 A	A19991-ND	.26	.17	640706-2	A24201-ND	17.89	14.54/M	640252-2
7	Brass, Tin Plated, 6.5 A	A19992-ND	.32	.22	640707-1	A24202-ND	22.34	18.15/M	350980-1
	Brass, Pre-Tin Pltd. 6.5 A	—	—	—	—	A24203-ND	17.89	14.54/M	350980-2
	Brass, Gold Plated, 6.5 A	A24205-ND	.60	.41	770258-1	A24204-ND	108.64	88.27/M	350980-3
8	Phosphor Bronze, Tin Plated, Hooded, 10 A	A19993-ND	.32	.22	770522-1	A24206-ND	24.53	19.93/M	770476-1
	Phosphor Bronze, Gold Plated, Hooded, 10 A	A24208-ND	.38	.26	770522-2	A24207-ND	69.87	56.77/M	770476-2

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
SL-156 Keying Plugs and Pins							
—	Plug, Keying	—	—	A19994-ND	.21	.05	640254-1
—	Pin, Keying	—	—	A19995-ND	.23	.08	640255-1
Accessories, .156" (3.96mm) Centers							
9	Closed End Strain Relief Covers, White	2	.312 (7.92)	A19740-ND	.33	.19	643067-2
		3	.468 (11.89)	A19741-ND	1.06	.96	643067-3
		4	.624 (15.85)	A19742-ND	1.06	.96	643067-4
		5	.780 (19.81)	A19743-ND	1.07	.97	643067-5
		6	.936 (23.77)	A19744-ND	1.07	.97	643067-6
		7	1.092 (27.74)	A19745-ND	1.08	.97	643067-7
		8	1.248 (31.70)	A19746-ND	1.08	.98	643067-8
		9	1.404 (35.66)	A19747-ND	1.08	.98	643067-9
		10	1.560 (39.62)	A19748-ND	1.09	.98	1-643067-0
		11	1.716 (43.59)	A19749-ND	1.17	1.06	1-643067-1
		12	1.872 (47.55)	A19750-ND	1.10	.99	1-643067-2
		13	2.028 (51.51)	A24108-ND	1.18	1.06	1-643067-3
		17	2.652 (67.36)	A24109-ND	1.17	1.06	1-643067-7
10	Closed End Dust Covers, White	2	.312 (7.92)	A19760-ND	.25	.12	640551-2
		3	.468 (11.89)	A19761-ND	.29	.15	640551-3
		4	.624 (15.85)	A19762-ND	.34	.18	640551-4
		5	.780 (19.81)	A19763-ND	.26	.20	640551-5
		6	.936 (23.77)	A19764-ND	.28	.23	640551-6
		7	1.092 (27.74)	A19765-ND	.29	.26	640551-7
		8	1.248 (31.70)	A19766-ND	.31	.29	640551-8
		9	1.404 (35.66)	A19767-ND	.35	.32	640551-9
		10	1.560 (39.62)	A19768-ND	.38	.34	1-640551-0
		11	1.716 (43.59)	A19769-ND	.23	.21	1-640551-1
		12	1.872 (47.55)	A19770-ND	.25	.23	1-640551-2
11	Feed-Thru Strain Relief Covers, White	2	.312 (7.92)	A19780-ND	.24	.22	643071-2
		3	.468 (11.89)	A19781-ND	.18	.17	643071-3
		4	.624 (15.85)	A19782-ND	.47	.43	643071-4
		5	.780 (19.81)	A19783-ND	.88	.80	643071-5
		6	.936 (23.77)	A19784-ND	.57	.52	643071-6
		7	1.092 (27.74)	A19785-ND	1.12	1.01	643071-7
		8	1.248 (31.70)	A19786-ND	.71	.65	643071-8
		9	1.404 (35.66)	A19787-ND	.75	.68	643071-9
		10	1.560 (39.62)	A19788-ND	1.17	1.06	1-643071-0
		11	1.716 (43.59)	A19789-ND	1.09	.99	1-643071-1
		12	1.872 (47.55)	A19790-ND	1.17	1.06	1-643071-2
		15	2.340 (59.44)	A24110-ND	1.19	1.07	1-643071-5
		17	2.652 (67.36)	A26040-ND	1.11	1.01	1-643071-7
12	Feed-Thru Dust Covers, White	3	.468 (11.89)	A19801-ND	.26	.15	640643-3
		4	.624 (15.85)	A19802-ND	.28	.18	640643-4
		5	.780 (19.81)	A19803-ND	.32	.20	640643-5
		6	.936 (23.77)	A19804-ND	.19	.14	640643-6
		7	1.092 (27.74)	A19805-ND	.38	.26	640643-7
		8	1.248 (31.70)	A19806-ND	.24	.17	640643-8
		9	1.404 (35.66)	A19807-ND	.46	.32	640643-9
		10	1.560 (39.62)	A19808-ND	.50	.34	1-640643-0
		11	1.716 (43.59)	A19809-ND	.54	.37	1-640643-1
		12	1.872 (47.55)	A19810-ND	.58	.39	1-640643-2

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Keying Plugs							
13	Loose Piece, Flush Used w/Keyed Headers	—	—	A19845-ND	.14	.07	640629-1
14	On Carrier Strip, Flush 10 per Strip	—	—	A19840-ND	1.39	.65	641623-1
15	Long Nose Used with Staked Post	—	—	A19850-ND	.24	.12	640630-1
Panel Mount End Caps							
16	Black Nylon	2	—	A19860-ND	.48	.43	641533-1
17	Black Nylon	3-24	—	A19855-ND	.66	.60	641440-1
Flat Post Headers, .156" (3.96mm) Centers							
18	Straight Post .045" (1.14mm) Square, Standard UL94V-0, Tin Plated, .125" (3.18mm) Soldertail, White	2	.312 (7.92)	A1961-ND	.25	.15	640383-2
		3	.468 (11.89)	A19870-ND	.53	.41	640383-3
		4	.624 (15.85)	A1962-ND	.31	.29	640383-4
		5	.780 (19.81)	A19871-ND	.39	.36	640383-5
		6	.936 (23.77)	A1963-ND	.43	.39	640383-6
		7	1.092 (27.74)	A19872-ND	.50	.45	640383-7
		8	1.248 (31.70)	A1964-ND	.57	.52	640383-8
		9	1.404 (35.66)	A19873-ND	.64	.58	640383-9
		10	1.560 (39.62)	A1965-ND	.71	.65	1-640383-0
		11	1.716 (43.59)	A19874-ND	.79	.71	1-640383-1
		12	1.872 (47.55)	A19875-ND	.86	.78	1-640383-2
		17	2.652 (67.36)	A26167-ND	1.52	1.37	1-640383-7
18	Straight Post .045" (1.14mm) Round, Standard UL94V-0, Tin Plated, .125" (3.18mm) Soldertail, White	2	.312 (7.92)	A26168-ND	.30	.28	640384-2
		3	.468 (11.89)	A26169-ND	.24	.22	640384-3
		4	.624 (15.85)	A24152-ND	.60	.55	640384-4
		5	.780 (19.81)	A26170-ND	.39	.36	640384-5
		6	.936 (23.77)	A26171-ND	.82	.75	640384-6
		7	1.092 (27.74)	A26172-ND	.50	.45	640384-7
		8	1.248 (31.7)	A24153-ND	1.10	.99	640384-8
		9	1.404 (35.66)	A26173-ND	1.24	1.12	640384-9
		10	1.560 (39.62)	A24154-ND	1.37	1.24	1-640384-0
		12	1.872 (47.55)	A26174-ND	.93	.84	1-640384-2
19	Right Angle Post .045" (1.14mm) Square, Standard UL94V-0, Tin Plated, .125" (3.18mm) Soldertail, White	2	.312 (7.92)	A1966-ND	.10	.05	640385-2
		3	.468 (11.89)	A19876-ND	.10	.06	640385-3
		4	.624 (15.85)	A1967-ND	.14	.08	640385-4
		5	.780 (19.81)	A19877-ND	.18	.11	640385-5
		6	.936 (23.77)	A1968-ND	.21	.12	640385-6
		7	1.092 (27.74)	A19878-ND	.23	.13	640385-7
		8	1.248 (31.70)	A1969-ND	.29	.17	640385-8
		9	1.404 (35.66)	A19879-ND	.86	.78	640385-9
		10	1.560 (39.62)	A1970-ND	.33	.19	1-640385-0
		11	1.716 (43.59)	A19880-ND	1.05	.95	1-640385-1
		12	1.872 (47.55)	A19881-ND	.40	.22	1-640385-2
18	Right Angle Post .045" (1.14mm) Square, Standard UL94V-0, Tin Plated, .175" (4.45mm) Soldertail, White	2	.312 (7.92)	A24155-ND	.09	.08	644751-2
		3	.468 (11.89)	A24156-ND	.10	.09	644751-3
		4	.624 (15.85)	A24157-ND	.14	.13	644751-4
		5	.780 (19.81)	A24158-ND	.18	.17	644751-5
		6	.936 (23.77)	A24159-ND	.21	.20	644751-6
		7	1.092 (27.74)	A24160-ND	.23	.21	644751-7
		8	1.248 (31.7)	A24161-ND	.29	.27	644751-8
		10	1.560 (39.62)	A24162-ND	.33	.31	1-644751-0
		12	1.872 (47.55)	A24163-ND	.40	.36	1-644751-2
Straight Post Headers, .156" (3.96mm) Centers, Friction Lock Header							
20	Square Post .045" (1.14mm) Square, Standard UL94V-0, Tin Plated, .125" (3.18mm) Soldertail, White	2	.312 (7.92)	A1971-ND	.10	.05	640445-2
		3	.468 (11.89)	A19890-ND	.11	.07	640445-3
		4	.624 (15.85)	A1972-ND	.14	.08	640445-4
		5	.780 (19.81)	A19891-ND	.18	.11	640445-5
		6	.936 (23.77)	A1973-ND	.21	.12	640445-6
		7	1.092 (27.74)	A19892-ND	.23	.13	640445-7
		8	1.248 (31.70)	A1974-ND	.29	.17	640445-8
		9	1.404 (35.66)	A19893-ND	.86	.78	640445-9
		10	1.560 (39.62)	A1975-ND	.33	.19	1-640445-0
		11	1.716 (43.59)	A19894-ND	1.05	.95	1-640445-1
		12	1.872 (47.55)	A19895-ND	.40	.22	1-640445-2
20	Square Post .045" (1.14mm) Square, Standard UL94V-0, Tin Plated, .175" (4.45mm) Soldertail, White	2	.312 (7.92)	A24164-ND	.10	.09	644752-2
		3	.468 (11.89)	A24165-ND	.10	.09	644752-3
		4	.624 (15.85)	A24166-ND	.14	.13	644752-4
		5	.780 (19.81)	A24167-ND	.18	.17	644752-5
		6	.936 (23.77)	A24168-ND	.21	.20	644752-6
		7	1.092 (27.74)	A24169-ND	.23	.21	644752-7
		8	1.248 (31.7)	A24170-ND	.29	.27	644752-8
		9	1.404 (35.66)	A26175-ND	.86	.78	644752-9
		10	1.560 (39.62)	A24171-ND	.33	.31	1-644752-0
		12	1.872 (47.55)	A24172-ND	.40	.36	1-644752-2
20	Square Post .045" (1.14mm) Square, Standard UL94V-0, 30μ Gold Plated, .125" (3.18mm) Soldertail, White	2	.312 (7.92)	A24173-ND	.79	.71	641208-2
		3	.468 (11.89)	A26176-ND	1.06	.96	641208-3
		4	.624 (15.85)	A26177-ND	1.38	1.25	641208-4
		5	.780 (19.81)	A26178-ND	1.77	1.60	641208-5
		6	.936 (23.77)	A26179-ND	2.15	1.94	641208-6
		7	1.092 (27.74)	A26180-ND	2.44	2.20	641208-7
		8	1.248 (31.70)	A26181-ND	2.83	2.55	641208-8
		9	1.404 (35.66)	A26182-ND	3.18	2.87	641208-9
		10	1.560 (39.62)	A26183-ND	3.50	3.16	1-641208-0
		11	1.716 (43.59)	A26184-ND	3.86	3.48	1-641208-1
		12	1.872 (47.55)	A26185-ND	4.21	3.79	1-641208-2
		17	2.652 (67.36)	A26186-ND	6.07	5.47	1-641208-7

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MTA .156" (3.96mm) Receptacles and Post Headers *(Cont.)*

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Straight Post Headers, .156" (3.96mm) Centers, Friction Lock Header							
20	Round Post .045" (1.14mm) Square, Standard UL94V-0, Tin Plated, .125" (3.18mm) Soldertail, White	2	.312 (7.92)	A19900-ND	.10	.05	640388-2
		3	.468 (11.89)	A19901-ND	.10	.06	640388-3
		4	.624 (15.85)	A19902-ND	.14	.08	640388-4
		5	.780 (19.81)	A19903-ND	.18	.11	640388-5
		6	.936 (23.77)	A19904-ND	.21	.12	640388-6
		7	1.092 (27.74)	A19905-ND	.23	.13	640388-7
		8	1.248 (31.70)	A19906-ND	.29	.17	640388-8
		9	1.404 (35.66)	A19907-ND	.86	.78	640388-9
		10	1.560 (39.62)	A19908-ND	.33	.19	1-640388-0
		11	1.716 (43.59)	A19909-ND	2.01	1.82	1-640388-1
		12	1.872 (47.55)	A19910-ND	.40	.22	1-640388-2
20	Round Post .045" (1.14mm) Square, Standard UL94V-0, Tin Plated, .175" (4.45mm) Soldertail, White	2	.312 (7.92)	A24176-ND	.09	.08	644753-2
		3	.468 (11.89)	A24177-ND	.10	.09	644753-3
		4	.624 (15.85)	A24178-ND	.14	.13	644753-4
		5	.780 (19.81)	A24179-ND	.18	.17	644753-5
		6	.936 (23.77)	A24180-ND	.21	.20	644753-6
		7	1.092 (27.74)	A24181-ND	.23	.21	644753-7
		8	1.248 (31.7)	A24182-ND	.29	.27	644753-8
		10	1.560 (39.62)	A24183-ND	.33	.31	1-644753-0
		12	1.872 (47.55)	A24184-ND	.40	.36	1-644753-2
Right Angle Post Headers, .156" (3.96mm) Centers, Friction Lock Header							
21	Right Angle Post 045 (1.14mm) Square, Front Bend, Standard UL94V-0, Tin-Plated, .125" (3.18mm) Soldertail, White	2	.312 (7.92)	A1976-ND	.16	.15	640389-2
		3	.468 (11.89)	A19920-ND	.47	.43	640389-3
		4	.624 (15.85)	A1977-ND	.63	.57	640389-4
		5	.780 (19.81)	A19921-ND	.79	.71	640389-5
		6	.936 (23.77)	A1978-ND	.86	.78	640389-6
		7	1.092 (27.74)	A19922-ND	1.00	.90	640389-7
		8	1.248 (31.70)	A1979-ND	1.14	1.03	640389-8
		9	1.404 (35.66)	A19923-ND	1.29	1.16	640389-9
		10	1.560 (39.62)	A1980-ND	1.43	1.29	1-640389-0
		11	1.716 (43.59)	A19924-ND	1.57	1.42	1-640389-1
		12	1.872 (47.55)	A19925-ND	1.71	1.55	1-640389-2
21	Right Angle Post .045" (1.14mm) Square, Front Bend, Standard UL94V-0, 30µ Gold Plated, .125" (3.18mm) Soldertail, White	2	.312 (7.92)	A24174-ND	1.05	.95	641210-2
		3	.468 (11.89)	A24175-ND	1.22	1.10	641210-3
		4	.624 (15.85)	A26187-ND	1.57	1.42	641210-4
		5	.780 (19.81)	A26188-ND	1.90	1.71	641210-5
		6	.936 (23.77)	A26189-ND	2.31	2.09	641210-6
		8	1.248 (31.70)	A26190-ND	2.96	2.67	641210-8
		9	1.404 (35.66)	A26191-ND	3.28	2.95	641210-9
		10	1.560 (39.62)	A24186-ND	3.48	3.14	1-641210-0
		12	1.872 (47.55)	A26192-ND	4.40	3.97	1-641210-2
22	Right Angle Post .045" (1.14mm) Square, Rear Bend, Standard UL94V-0, Tin-Plated, .125" (3.18mm) Soldertail, White	2	.312 (7.92)	A19930-ND	.60	.55	640387-2
		3	.468 (11.89)	A19931-ND	.47	.43	640387-3
		4	.624 (15.85)	A19932-ND	.63	.57	640387-4
		5	.780 (19.81)	A19933-ND	.79	.71	640387-5
		6	.936 (23.77)	A19934-ND	.86	.78	640387-6
		7	1.092 (27.74)	A19935-ND	1.00	.90	640387-7
		8	1.248 (31.70)	A19936-ND	1.14	1.03	640387-8
		9	1.404 (35.66)	A19937-ND	1.29	1.16	640387-9
		10	1.560 (39.62)	A19938-ND	1.43	1.29	1-640387-0
		11	1.716 (43.59)	A19939-ND	1.57	1.42	1-640387-1
		12	1.872 (47.55)	A19940-ND	1.71	1.55	1-640387-2

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2-Position, Low Profile Post Shunts

Material: Housing: Glass-filled thermoplastic, 94V-0 rated **Contact:** Beryllium copper or phosphor bronze **Finish:** (50µ) nickel with gold plate in contact area or tin plate overall

Fig. 1

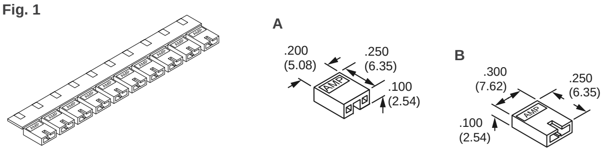


Fig. 2

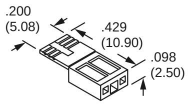


Fig. 3

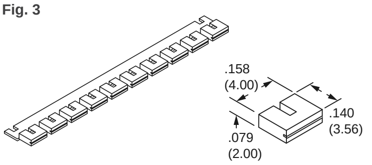


Fig.	Description	Housing Color	Digi-Key Part No.	Price Each 10	Price Each 50	AMP Part No.
Economy, .100 (2.54) Centerline						
1A	Strip of 10, Gold Flash, (5µ) over Nickel	Black	A26228-ND	.09	.08	382811-8
	Strip of 10, Gold Plate, (15µ) over Nickel	Blue	A26226-ND	.33	.26	382811-2
	Strip of 10, Gold Plate, (15µ) over Nickel	Black	A26227-ND	.09	.07	382811-6
	Strip of 10, Gold Plate, (15µ) over Nickel	Red	A26230-ND	.12	.09	382811-9
	Loose Piece, Gold Plate, (15µ) over Nickel	Black	A26231-ND	.34	.27	1-382811-6
	Strip of 10, Tin Plate, (100µ) over Nickel	Black	A26229-ND	.10	.08	382811-5
Standard Housing, .200 (5.08) Centerline						
1B	Strip of 10, Gold Plate, (15µ) over Nickel	Black	A26232-ND	.49	.40	531230-2
	Strip of 10, Gold Plate, (30µ) over Nickel	Black	A26233-ND	.57	.45	531230-3
	Strip of 10, Tin Plate, (100µ) over Nickel	Black	A26234-ND	.42	.33	531230-1
Handle, .100 (2.54) Centerline						
2	Open Top & Gold Plate, (30µ) over Nickel	Black	A26242-ND	.12	.10	881545-2
	Open Top & Tin Plate, (100µ) over Nickel	Black	A26243-ND	.13	.11	881545-4
2mm Mini-Shunt, .079 (2.00) Centerline						
3	Strip of 10, Gold Plate, (15µ) over Nickel	Black	A26244-ND	.26	.21	382575-2

3M

Board Mount Interconnect Products

Finish Options: • 10-microinch selective gold over 50-microinch nickel on contact post; 100-microinch 90/10 solder plate on tail portion • 100-microinch 90/0 solder plate on posts and tails

2400 Series:
• Material: Glass filled polyester • Flammability: UL94V-O • Color: Gray • Phosphor bronze plating • 100-microinch nickel underplating • Gold wiping area • 200-microinch 60/40 tin on solder tails • Current Rating: 3 Amps • Withstanding Voltage: 100 Vac. • Temperature Rating: -55°C to +105°C • UL File No. E88080, CSA File No. LR 40971

Fig.	No. of Posts	Dimensions (Inch) L	A(ref)	B	C	D	Solder Plated Digi-Key Part No.	Solder Plated Price Each	Gold Plated Digi-Key Part No.	Gold Plated Price Each
1	36	.235	.480	.145	—	—	N/A	—	929647-09-36-ND	1.83
			.545	.210	—	—	929834-02-36-ND	1.02	929647-02-36-ND	1.93
			.745	.410	—	—	929834-03-36-ND	1.08	929647-03-36-ND	2.43
			.845	.510	—	—	929834-04-36-ND	1.44	929647-04-36-ND	2.68
			.945	.610	—	—	929834-05-36-ND	1.21	929647-05-36-ND	2.95
			12.45	.910	—	—	929834-07-36-ND	1.39	929647-07-36-ND	4.12
	36	.295	.535	.130	—	—	929400-01-36-ND	.96	929450-01-36-ND	1.93
2	72	.235	.480	.145	—	—	929836-09-36-ND	2.02	929665-09-36-ND	3.87
			.545	.210	—	—	929836-02-36-ND	2.20	929665-02-36-ND	4.08
			.645	.310	—	—	929836-08-36-ND	2.25	929665-08-36-ND	4.72
			.745	.410	—	—	N/A	—	929665-03-36-ND	5.08
			.845	.510	—	—	929836-04-36-ND	3.08	929665-04-36-ND	5.57
			.945	.610	—	—	929836-05-36-ND	2.60	929665-05-36-ND	6.14
	72	.318	.593	.175	—	—	929710-10-36-ND	2.27	929715-10-36-ND	4.49
			.828	.410	—	—	929710-03-36-ND	2.60	929715-03-36-ND	5.64
3	36	.235	.180	.105	.070	.075	929835-01-36-ND	.89	N/A	—
4	72	.235	.215	.140	.070	.075	929838-04-36-ND	2.37	929667-04-36-ND	5.03
			.480	.405	.070	.075	929838-02-36-ND	3.04	929667-02-36-ND	6.88
5	36	.295	3.600	—	—	—	929500-01-36-ND	1.06	929550-01-36-ND	2.41
6	36	N/A	—	.125	—	—	929974-01-36-ND	1.23	929850-01-36-ND	1.91
7	72	N/A	—	—	—	—	929975-01-36-ND	2.04	929852-01-36-ND	3.35
8	2	N/A	***SHUNTS!!***				929950-00-ND	1.04 per 10	929955-06-ND (10µ in. gold) 929957-08-ND (30µ in. gold)	1.46 per 10 1.87 per 10

Fig. 1 – Straight, Single Row Male

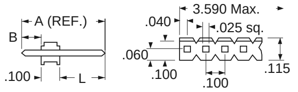


Fig. 2 – Straight, Dual Row Male (.1" x .1" Matrix)

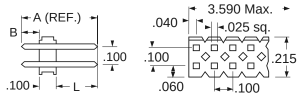


Fig. 3 – Right Angle, Single Row Male

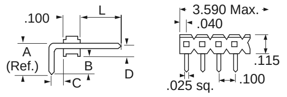


Fig. 4 – Right Angle, Dual Row Male (.1" x .1" Matrix)

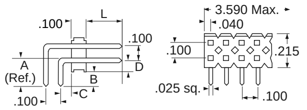


Fig. 5 – Right Angle, Polarized Male (36 Circuits)

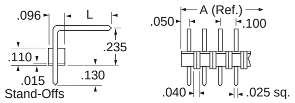


Fig. 6 – Straight, Single Row Female

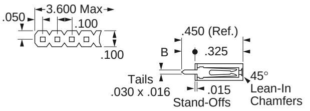


Fig. 7 – Straight, Dual Row Female (.1" x .1" Matrix)

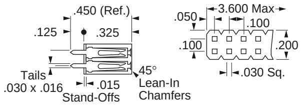
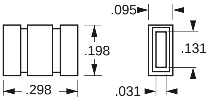
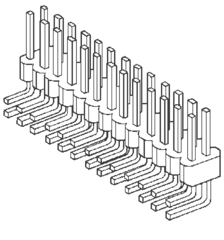


Fig. 8 – Shorting Jumpers



Sullins .025” (.64mm) Square Headers



Available in 1 to 36 Pin Versions!

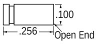
Features

- Available in 36-pin version or 1 to 35 size to meet your application.
- Temperature: -65°C to + 125°C.
- UL Flammability Rating: 94V-0.
- Current Rating: 3 amperes.

Materials

- Insulator Material: Black thermoplastic polyester.
- Contact Material: CA510, phosphor bronze.
- Contact Plating: Gold — .000010 Gold (Head Only); Tin — .000100 Tin.

TO PURCHASE A 36 PIN HEADER...

Contact Finish	Dimensions Inch (mm) A	B	Digi-Key Part No.	Pricing 1	10	100	Sullins Part No.
Single Row Straight (36 Pins)							
Tin	.230 (5.84)	.120 (3.05)	S1012-36-ND	1.03	9.18	75.60	PTC36SAAN
	.230 (5.84)	.220 (5.59)	S1022-36-ND	1.77	15.81	130.20	PTC36SABN
	.230 (5.84)	.320 (8.13)	S1032-36-ND	1.91	17.09	140.70	PTC36SACN
	.230 (5.84)	.420 (10.67)	S1042-36-ND	2.08	18.62	153.30	PTC36SADN
	.230 (5.84)	.520 (13.21)	S1052-36-ND	2.22	19.89	163.80	PTC36SAEN
	.230 (5.84)	.620 (15.75)	S1062-36-ND	2.76	24.74	203.70	PTC36SAFN
	.230 (5.84)	.720 (18.29)	S1072-36-ND	2.94	26.27	216.30	PTC36SAGN
	.230 (5.84)	.820 (20.83)	S1082-36-ND	3.11	27.80	228.90	PTC36SAHN
	.318 (8.08)	.120 (3.05)	S1212-36-ND	1.28	11.48	94.50	PTC36SFAN
	.318 (8.08)	.220 (5.59)	S1222-36-ND	2.11	18.87	155.40	PTC36SFBN
	.318 (8.08)	.320 (8.13)	S1232-36-ND	2.28	20.40	168.00	PTC36SFCN
	.318 (8.08)	.420 (10.67)	S1242-36-ND	2.45	21.93	180.60	PTC36SFDN
	.318 (8.08)	.520 (13.21)	S1252-36-ND	3.31	29.58	243.60	PTC36SFEN
Gold	.230 (5.84)	.120 (3.05)	S1011-36-ND	1.28	11.48	94.50	PZC36SAAN
	.230 (5.84)	.220 (5.59)	S1021-36-ND	2.14	19.13	157.50	PZC36SABN
	.230 (5.84)	.320 (8.13)	S1031-36-ND	2.59	23.49	198.45	PZC36SACN
	.230 (5.84)	.420 (10.67)	S1041-36-ND	2.45	21.93	180.60	PZC36SADN
	.230 (5.84)	.520 (13.21)	S1051-36-ND	2.62	23.46	193.20	PZC36SAEN
	.230 (5.84)	.620 (15.75)	S1061-36-ND	3.19	28.56	235.20	PZC36SAFN
	.230 (5.84)	.720 (18.29)	S1071-36-ND	3.36	30.09	247.80	PZC36SAGN
	.230 (5.84)	.820 (20.83)	S1081-36-ND	3.53	31.62	260.40	PZC36SAHN
	.318 (8.08)	.120 (3.05)	S1211-36-ND	1.62	14.54	119.70	PZC36SFAN
	.318 (8.08)	.220 (5.59)	S1221-36-ND	2.59	23.21	191.10	PZC36SFBN
	.318 (8.08)	.320 (8.13)	S1231-36-ND	2.76	24.74	203.70	PZC36SFCN
	.318 (8.08)	.420 (10.67)	S1241-36-ND	2.94	26.27	216.30	PZC36SFDN
	.318 (8.08)	.520 (13.21)	S1251-36-ND	3.85	34.43	283.50	PZC36SFEN
Single Row Right-Angle (36 Pins)							
Tin	.230 (5.84)	.100 (2.54)	S1112-36-ND	1.51	13.52	111.30	PTC36SBAN
	.230 (5.84)	.200 (5.08)	S1122-36-ND	1.94	17.34	142.80	PTC36SBBN
	.230 (5.84)	.300 (7.62)	S1132-36-ND	2.79	24.99	205.80	PTC36SBCN
	.230 (5.84)	.400 (10.16)	S1142-36-ND	3.76	33.66	277.20	PTC36SBDN
	.230 (5.84)	.500 (12.70)	S1152-36-ND	4.02	35.96	296.10	PTC36SBEN
	.318 (8.08)	.100 (2.54)	S1312-36-ND	1.94	17.34	142.80	PTC36SGAN
	.318 (8.08)	.200 (5.08)	S1322-36-ND	3.48	31.11	256.20	PTC36SGBN
Gold	.230 (5.84)	.100 (2.54)	S1111-36-ND	1.82	16.32	134.40	PZC36SBAN
	.230 (5.84)	.200 (5.08)	S1121-36-ND	2.28	20.40	168.00	PZC36SBBN
	.230 (5.84)	.300 (7.62)	S1131-36-ND	3.22	28.82	237.30	PZC36SBCN
	.230 (5.84)	.400 (10.16)	S1141-36-ND	4.25	38.00	312.90	PZC36SBDN
	.230 (5.84)	.500 (12.70)	S1151-36-ND	4.50	40.29	331.80	PZC36SBEN
	.318 (8.08)	.100 (2.54)	S1311-36-ND	2.34	20.91	172.20	PZC36SGAN
	.318 (8.08)	.200 (5.08)	S1321-36-ND	4.02	35.96	296.10	PZC36SGBN
Dual Row Straight (72 Pins)							
Tin	.230 (5.84)	.120 (3.05)	S2012-36-ND	1.85	16.58	136.50	PTC36DAAN
	.230 (5.84)	.220 (5.59)	S2022-36-ND	2.76	24.74	203.70	PTC36DABN
	.230 (5.84)	.320 (8.13)	S2032-36-ND	3.96	35.45	291.90	PTC36DACN
	.230 (5.84)	.420 (10.67)	S2042-36-ND	4.30	38.51	317.10	PTC36DADN
	.230 (5.84)	.520 (13.21)	S2052-36-ND	4.65	41.57	342.30	PTC36DAEN
	.230 (5.84)	.620 (15.75)	S2062-36-ND	5.96	53.30	438.90	PTC36DAFN
	.230 (5.84)	.720 (18.29)	S2072-36-ND	6.33	56.61	466.20	PTC36DAGN
	.230 (5.84)	.820 (20.83)	S2082-36-ND	6.70	59.93	493.50	PTC36DAHN
	.318 (8.08)	.120 (3.05)	S2212-36-ND	2.34	20.91	172.20	PTC36DFAN
	.318 (8.08)	.220 (5.59)	S2222-36-ND	3.65	32.64	268.80	PTC36DFBN
	.318 (8.08)	.320 (8.13)	S2232-36-ND	3.99	35.70	294.00	PTC36DFCN
	.318 (8.08)	.420 (10.67)	S2242-36-ND	4.33	38.76	319.20	PTC36DFDN
	.318 (8.08)	.520 (13.21)	S2252-36-ND	5.59	49.98	411.60	PTC36DFEN
Gold	.230 (5.84)	.120 (3.05)	S2011-36-ND	2.37	21.17	174.30	PZC36DAAN
	.230 (5.84)	.220 (5.59)	S2021-36-ND	3.48	31.11	256.20	PZC36DABN
	.230 (5.84)	.320 (8.13)	S2031-36-ND	4.82	43.10	354.90	PZC36DACN
	.230 (5.84)	.420 (10.67)	S2041-36-ND	5.16	46.16	380.10	PZC36DADN
	.230 (5.84)	.520 (13.21)	S2051-36-ND	5.50	49.22	405.30	PZC36DAEN
	.230 (5.84)	.620 (15.75)	S2061-36-ND	6.90	61.71	508.20	PZC36DAFN
	.230 (5.84)	.720 (18.29)	S2071-36-ND	7.27	65.03	535.50	PZC36DAGN
	.230 (5.84)	.820 (20.83)	S2081-36-ND	7.67	68.60	564.90	PZC36DAHN
	.318 (8.08)	.120 (3.05)	S2211-36-ND	3.02	27.03	222.60	PZC36DFAN
	.318 (8.08)	.220 (5.59)	S2221-36-ND	4.62	41.31	340.20	PZC36DFBN
	.318 (8.08)	.320 (8.13)	S2231-36-ND	4.96	44.37	365.40	PZC36DFCN
	.318 (8.08)	.420 (10.67)	S2241-36-ND	5.30	47.43	390.60	PZC36DFDN
	.318 (8.08)	.520 (13.21)	S2251-36-ND	6.67	59.67	491.40	PZC36DFEN
Dual Row Right-Angle (72 Pins)							
Tin	.230 (5.84)	.120 (3.05)	S2112-36-ND	2.79	24.99	205.80	PTC36DBAN
	.230 (5.84)	.220 (5.59)	S2122-36-ND	4.05	36.21	298.20	PTC36DBBN
	.230 (5.84)	.320 (8.13)	S2132-36-ND	6.10	54.57	449.40	PTC36DBCN
	.230 (5.84)	.420 (10.67)	S2142-36-ND	6.70	59.93	493.50	PTC36DBDN
	.230 (5.84)	.520 (13.21)	S2152-36-ND	7.30	65.28	537.60	PTC36DBEN
	.318 (8.08)	.120 (3.05)	S2312-36-ND	5.33	47.69	392.70	PTC36DGAN
	.318 (8.08)	.220 (5.59)	S2322-36-ND	6.58	58.91	485.10	PTC36DGBN
Gold	.230 (5.84)	.120 (3.05)	S2111-36-ND	3.42	30.60	252.00	PZC36DBAN
	.230 (5.84)	.220 (5.59)	S2121-36-ND	4.79	42.84	352.80	PZC36DBBN
	.230 (5.84)	.320 (8.13)	S2131-36-ND	7.07	63.24	520.80	PZC36DBCN
	.230 (5.84)	.420 (10.67)	S2141-36-ND	7.64	68.34	562.80	PZC36DBDN
	.230 (5.84)	.520 (13.21)	S2151-36-ND	8.24	73.70	606.90	PZC36DBEN
	.318 (8.08)	.120 (3.05)	S2311-36-ND	6.30	56.36	464.10	PZC36DGAN
	.318 (8.08)	.220 (5.59)	S2321-36-ND	7.67	68.60	564.90	PZC36DGBN
Shorting Jumpers							
Tin	 .100 .256 Open End		S9000-ND	—	.93	—	STC02SYAN
Au Flash			S9001-ND	—	1.16	—	SPC02SYAN
Gold			S9002-ND	—	1.31	—	SSC02SYAN

TO PURCHASE A 1-35 PIN HEADER...

STEP 1 Digi-Key Part No.	STEP 2 Base Price	STEP 3 Pin Adder
Single Row Straight (36 Pins)		
S1012-XX-ND	.39	.02
S1022-XX-ND	.83	.03
S1032-XX-ND	.98	.03
S1042-XX-ND	.81	.04
S1052-XX-ND	.96	.04
S1062-XX-ND	1.18	.05
S1072-XX-ND	1.38	.05
S1082-XX-ND	1.20	.06
S1212-XX-ND	.66	.02
S1222-XX-ND	.84	.04
S1232-XX-ND	1.02	.04
S1242-XX-ND	1.21	.04
S1252-XX-ND	1.41	.06
S1011-XX-ND	.66	.02
S1021-XX-ND	.87	.04
S1031-XX-ND	1.05	.04
S1041-XX-ND	1.21	.04
S1051-XX-ND	1.03	.05
S1061-XX-ND	1.29	.06
S1071-XX-ND	1.47	.06
S1081-XX-ND	1.65	.06
S1211-XX-ND	.67	.03
S1221-XX-ND	1.00	.05
S1231-XX-ND	1.18	.05
S1241-XX-ND	1.38	.05
S1251-XX-ND	1.64	.07
Single Row Right-Angle (36 Pins)		
S1112-XX-ND	.55	.03
S1122-XX-ND	.66	.04
S1132-XX-ND	1.21	.05
S1142-XX-ND	1.54	.07
S1152-XX-ND	1.82	.07
S1312-XX-ND	.66	.04
S1322-XX-ND	1.60	.06
S1111-XX-ND	.89	.03
S1121-XX-ND	1.02	.04
S1131-XX-ND	1.32	.06
S1141-XX-ND	1.71	.08
S1151-XX-ND	1.98	.08
S1311-XX-ND	1.09	.04
S1321-XX-ND	1.82	.07
Dual Row Straight (72 Pins)		
S2012-XX-ND	.92	.03
S2022-XX-ND	1.18	.05
S2032-XX-ND	1.76	.07
S2042-XX-ND	1.76	.08
S2052-XX-ND	2.14	.08
S2062-XX-ND	2.48	.11
S2072-XX-ND	2.52	.12
S2082-XX-ND	2.92	.12
S2212-XX-ND	1.09	.04
S2222-XX-ND	1.42	.07
S2232-XX-ND	1.79	.07
S2242-XX-ND	1.80	.08
S2252-XX-ND	2.44	.10
S2011-XX-ND	1.12	.04
S2021-XX-ND	1.60	.06
S2031-XX-ND	1.97	.09
S2041-XX-ND	2.33	.09
S2051-XX-ND	2.34	.10
S2061-XX-ND	2.77	.13
S2071-XX-ND	3.17	.13
S2081-XX-ND	3.24	.14
S2211-XX-ND	1.46	.05
S2221-XX-ND	2.11	.08
S2231-XX-ND	2.12	.09
S2241-XX-ND	2.12	.10
S2251-XX-ND	2.88	.12
Dual Row Right-Angle (72 Pins)		
S2112-XX-ND	1.21	.05
S2122-XX-ND	1.85	.07
S2132-XX-ND	2.63	.11
S2142-XX-ND	2.92	.12
S2152-XX-ND	3.20	.13
S2312-XX-ND	2.16	.10
S2322-XX-ND	2.79	.12
S2111-XX-ND	1.53	.06
S2121-XX-ND	1.93	.09
S2131-XX-ND	2.96	.13
S2141-XX-ND	3.21	.14
S2151-XX-ND	3.50	.15
S2311-XX-ND	2.84	.11
S2321-XX-ND	3.24	.14

HOW TO ORDER - 4 EASY STEPS

How do I order an S1012 header with 16 pins?

Call Digi-Key where you’ll happily receive the price.

or

Determine the cost yourself

S ☐ ☐ ☐ ☐ - ☐ ☐ - ND

Base Part Number

Number of Desired Pins per row

Step 1. Select needed “Digi-Key Part Number” and number of pins desired.

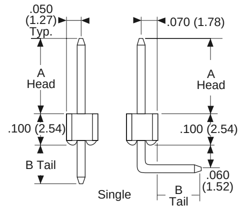
Step 2. Begin with appropriate “Base Price” of your selected Part Number (refer to chart).

Step 3. Multiply the number of pins you desire by “Pin Adder” of your selected Part Number (refer to chart).

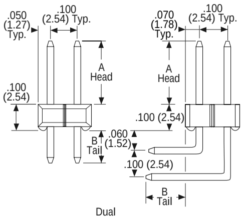
Step 4. Add Step 2 & Step 3 together for Final Cost!

	Our Example	Your Digi-Key Part Number
Step 1.	S1012-16-ND	S __ __ __ __ - __ __ - ND
Step 2.	.39	_______
Step 3.	16 x .02 = .32	____ x ____ = _______
Step 4.	Your Cost = $.71	Your Cost = $______

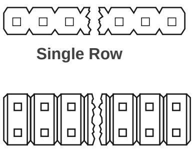
NOTE: For quantities of 10 or more, call 1-800-DIGI-KEY.



Single

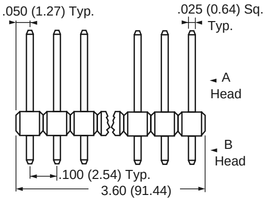


Dual



Single Row

Dual Row



P.C. Board Connectors

.100 (2.54mm) P.C. Board Connectors

94V-O Material, Mates with .025" (.64mm) square pins, end-to-end stackable.

Fig. 1 – Side Entry

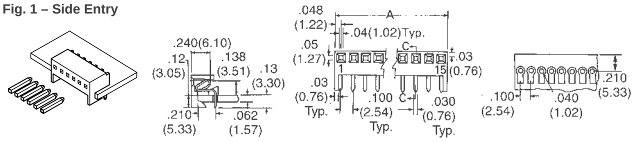


Fig. 2 – Bottom Entry

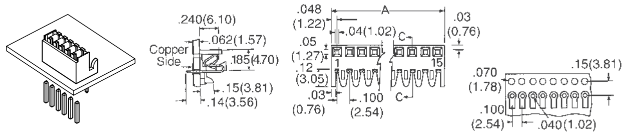
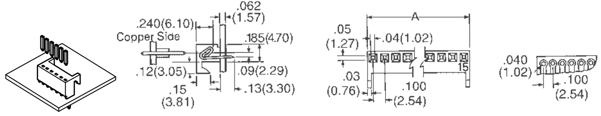


Fig. 3 – Top Entry



.156 (3.96mm) P.C. Board Connectors

94V-2 Nylon Housing. Mates with .045" (1.14mm) pins.

Fig. 4 – Side Entry

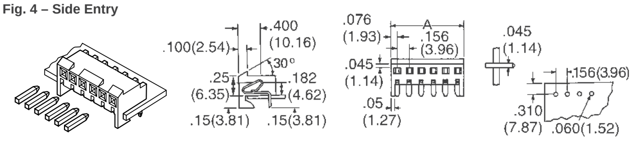


Fig. 5 – Bottom Entry

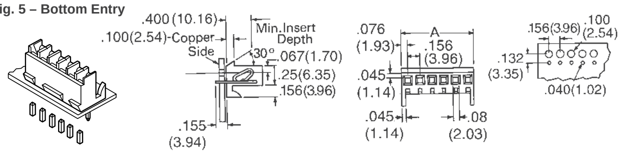


Fig. 6 – Top Entry

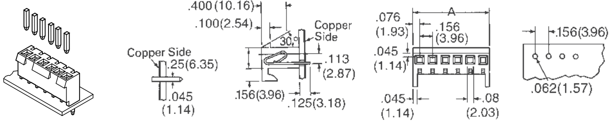


Fig.	Cir-cuits	Dim. A Inch (mm)	Digi-Key Part No.	Pricing			Molex Part No.
				1	10	100	
.100 (2.54mm) P.C. Board Connectors							
1	2	.196 (4.98)	WM3000-ND	.26	2.32	18.00	22-15-2026
	3	.296 (7.52)	WM3001-ND	.39	3.45	26.78	22-15-2036
	4	.396 (10.06)	WM3002-ND	.53	4.64	36.00	22-15-2046
	5	.496 (12.60)	WM3003-ND	.66	5.77	44.78	22-15-2056
	6	.596 (15.14)	WM3004-ND	.79	6.96	54.00	22-15-2066
	7	.696 (17.68)	WM3005-ND	.92	8.09	62.78	22-15-2076
	8	.796 (20.22)	WM3006-ND	1.06	9.28	72.00	22-15-2086
	9	.896 (22.76)	WM3007-ND	1.18	10.41	80.78	22-15-2096
	10	.996 (25.30)	WM3008-ND	1.32	11.60	90.00	22-15-2106
	11	1.096 (27.84)	WM3009-ND	1.45	12.73	98.78	22-15-2116
	12	1.196 (30.38)	WM3010-ND	1.58	13.92	108.00	22-15-2126
2	2	.196 (4.98)	WM3100-ND	.29	2.60	16.80	22-14-2024
	3	.296 (7.52)	WM3101-ND	.44	3.94	25.40	22-14-2034
	4	.396 (10.06)	WM3102-ND	.59	5.21	33.60	22-14-2044
	5	.496 (12.60)	WM3103-ND	.75	6.60	42.60	22-14-2054
	6	.596 (15.14)	WM3104-ND	.88	7.81	50.40	22-14-2064
	7	.696 (17.68)	WM3105-ND	1.05	9.27	59.80	22-14-2074
	8	.796 (20.22)	WM3106-ND	1.18	10.42	67.20	22-14-2084
	9	.896 (22.76)	WM3107-ND	1.32	11.69	75.40	22-14-2094
	10	.996 (25.30)	WM3108-ND	1.47	13.02	84.00	22-14-2104
	11	1.096 (27.84)	WM3109-ND	1.61	14.29	92.20	22-14-2114
	12	1.196 (30.38)	WM3110-ND	1.76	15.62	100.80	22-14-2124
3	2	.196 (4.98)	WM3200-ND	.28	2.48	16.00	22-02-2025
	3	.296 (7.52)	WM3201-ND	.42	3.69	23.80	22-02-2035
	4	.396 (10.06)	WM3202-ND	.56	4.96	32.00	22-02-2045
	5	.496 (12.60)	WM3203-ND	.71	6.29	40.60	22-02-2055
	6	.596 (15.14)	WM3204-ND	.84	7.44	48.00	22-02-2065
	7	.696 (17.68)	WM3205-ND	.98	8.65	55.80	22-02-2075
	8	.796 (20.22)	WM3206-ND	1.12	9.92	64.00	22-02-2085
	9	.896 (22.76)	WM3207-ND	1.28	11.35	73.20	22-02-2095
	10	.996 (25.30)	WM3208-ND	1.40	12.40	80.00	22-02-2105
	11	1.096 (27.84)	WM3209-ND	1.56	13.86	89.40	22-02-2115
	12	1.196 (30.38)	WM3210-ND	1.68	14.88	96.00	22-02-2125
.100 (2.54mm) P.C. Board Connectors - Gold							
1	2	.196 (4.98)	WM3211-ND	.35	3.13	20.20	22-16-2020
	3	.296 (7.52)	WM3212-ND	.53	4.65	30.00	22-16-2030
	4	.396 (10.06)	WM3213-ND	.70	6.17	39.80	22-16-2040
	5	.496 (12.60)	WM3214-ND	.87	7.69	49.60	22-16-2050
	6	.596 (15.14)	WM3215-ND	1.05	9.27	59.80	22-16-2060
	7	.696 (17.68)	WM3216-ND	1.22	10.82	69.80	22-16-2070
	8	.796 (20.22)	WM3217-ND	1.39	12.34	79.60	22-16-2080
	9	.896 (22.76)	WM3218-ND	1.56	13.86	89.40	22-16-2090
	10	.996 (25.30)	WM3219-ND	1.74	15.44	99.60	22-16-2100
	11	1.096 (27.84)	WM3220-ND	1.91	16.96	109.40	22-16-2110
	12	1.196 (30.38)	WM3221-ND	2.09	18.51	119.40	22-16-2120
2	2	.196 (4.98)	WM3222-ND	.37	3.26	21.00	22-17-3022
	3	.296 (7.52)	WM3223-ND	.55	4.84	31.20	22-17-3032
	4	.396 (10.06)	WM3224-ND	.73	6.48	41.80	22-17-3042
	5	.496 (12.60)	WM3225-ND	.91	8.06	52.00	22-17-3052
	6	.596 (15.14)	WM3226-ND	1.10	9.73	62.80	22-17-3062
	7	.696 (17.68)	WM3227-ND	1.28	11.32	73.00	22-17-3072
	8	.796 (20.22)	WM3228-ND	1.46	12.96	83.60	22-17-3082
	9	.896 (22.76)	WM3229-ND	1.65	14.57	94.00	22-17-3092
	10	.996 (25.30)	WM3230-ND	1.83	16.21	104.60	22-17-3102
	11	1.096 (27.84)	WM3231-ND	2.01	17.79	114.80	22-17-3112
	12	1.196 (30.38)	WM3232-ND	2.19	19.44	125.40	22-17-3122
3	2	.196 (4.98)	WM3233-ND	.35	3.13	20.20	22-18-2021
	3	.296 (7.52)	WM3234-ND	.53	4.65	30.00	22-18-2031
	4	.396 (10.06)	WM3235-ND	.70	6.17	39.80	22-18-2041
	5	.496 (12.60)	WM3236-ND	.87	7.69	49.60	22-18-2051
	6	.596 (15.14)	WM3237-ND	1.05	9.27	59.80	22-18-2061
	7	.696 (17.68)	WM3238-ND	1.22	10.82	69.80	22-18-2071
	8	.796 (20.22)	WM3239-ND	1.39	12.34	79.60	22-18-2081
	9	.896 (22.76)	WM3240-ND	1.56	13.86	89.40	22-18-2091
3	10	.996 (25.30)	WM3241-ND	1.74	15.44	99.60	22-18-2101
	11	1.096 (27.84)	WM3242-ND	1.91	16.96	109.40	22-18-2111
	12	1.196 (30.38)	WM3243-ND	2.09	18.51	119.40	22-18-2121
.156 (3.96mm) P.C. Board Connectors							
4	3	.46 (11.68)	WM3300-ND	.50	4.46	28.80	09-52-3031
	4	.62 (15.75)	WM3301-ND	.68	5.98	38.60	09-52-3041
	5	.78 (19.81)	WM3302-ND	.83	7.38	47.60	09-52-3051
	6	.93 (23.62)	WM3303-ND	1.00	8.84	57.00	09-52-3061
	7	1.09 (27.69)	WM3304-ND	1.17	10.35	66.80	09-52-3071
	8	1.24 (31.50)	WM3305-ND	1.33	11.81	76.20	09-52-3081
	9	1.40 (35.56)	WM3306-ND	1.51	13.33	86.00	09-52-3091
	10	1.56 (39.62)	WM3307-ND	1.67	14.82	95.60	09-52-3101
	11	1.71 (43.43)	WM3308-ND	1.84	16.28	105.00	09-52-3111
	12	1.87 (47.50)	WM3309-ND	2.01	17.79	114.80	09-52-3121
5	3	.46 (11.68)	WM3400-ND	.53	4.65	30.00	09-52-3032
	4	.62 (15.75)	WM3401-ND	.70	6.23	40.20	09-52-3042
	5	.78 (19.81)	WM3402-ND	.88	7.75	50.00	09-52-3052
	6	.93 (23.62)	WM3403-ND	1.05	9.27	59.80	09-52-3062
	7	1.09 (27.69)	WM3404-ND	1.37	12.09	78.00	09-52-3072
	8	1.24 (31.50)	WM3405-ND	1.41	12.46	80.40	09-52-3082
	9	1.40 (35.56)	WM3406-ND	1.58	13.98	90.20	09-52-3092
	10	1.56 (39.62)	WM3407-ND	1.76	15.56	100.40	09-52-3102
	11	1.71 (43.43)	WM3408-ND	1.93	17.08	110.20	09-52-3112
	12	1.87 (47.50)	WM3409-ND	2.11	18.69	120.60	09-52-3122
6	3	.46 (11.68)	WM3500-ND	.50	4.46	28.80	09-52-3033
	4	.62 (15.75)	WM3501-ND	.68	5.98	38.60	09-52-3043
	5	.78 (19.81)	WM3502-ND	.83	7.38	47.60	09-52-3053
	6	.93 (23.62)	WM3503-ND	1.00	8.84	57.00	09-52-3063
	7	1.09 (27.69)	WM3504-ND	1.17	10.35	66.80	09-52-3073
	8	1.24 (31.50)	WM3505-ND	1.33	11.81	76.20	09-52-3083
	9	1.40 (35.56)	WM3506-ND	1.51	13.33	86.00	09-52-3093
	10	1.56 (39.62)	WM3507-ND	1.67	14.82	95.60	09-52-3103
	11	1.71 (43.43)	WM3508-ND	1.84	16.28	105.00	09-52-3113
	12	1.87 (47.50)	WM3509-ND	2.01	17.79	114.80	09-52-3123
.156 (3.96mm) P.C. Board Connectors - Gold							
4	3	.46 (11.68)	WM3510-ND	.82	7.25	46.80	09-62-3031
	4	.62 (15.75)	WM3511-ND	1.09	9.67	62.40	09-62-3041
	5	.78 (19.81)	WM3512-ND	1.37	12.15	78.40	09-62-3051
	6	.93 (23.62)	WM3513-ND	1.64	14.54	93.80	09-62-3061
	7	1.09 (27.69)	WM3514-ND	1.91	16.90	109.00	09-62-3071
	8	1.24 (31.50)	WM3515-ND	2.19	19.38	125.00	09-62-3081
	9	1.40 (35.56)	WM3516-ND	2.46	21.79	140.60	09-62-3091
	10	1.56 (39.62)	WM3517-ND	2.74	24.27	156.60	09-62-3101
	12	1.87 (47.50)	WM3519-ND	3.28	29.05	187.40	09-62-3121
5	3	.46 (11.68)	WM3520-ND	.86	7.63	49.20	09-62-3032
	4	.62 (15.75)	WM3521-ND	1.15	10.17	65.60	09-62-3042
	5	.78 (19.81)	WM3522-ND	1.44	12.71	82.00	09-62-3052
	6	.93 (23.62)	WM3523-ND	1.72	15.25	98.40	09-62-3062
	7	1.09 (27.69)	WM3524-ND	2.01	17.79	114.80	09-62-3072
	8	1.24 (31.50)	WM3525-ND	2.30	20.34	131.20	09-62-3082
	9	1.40 (35.56)	WM3526-ND	2.58	22.88	147.60	09-62-3092
	10	1.56 (39.62)	WM3527-ND	2.88	25.48	164.40	09-62-3102
	11	1.71 (43.43)	WM3528-ND	3.16	27.96	180.40	09-62-3112
	12	1.87 (47.50)	WM3529-ND	3.44	30.50	196.80	09-62-3122
6	3	.46 (11.68)	WM3530-ND	.82	7.25	46.80	09-62-3033
	4	.62 (15.75)	WM3531-ND	1.09	9.67	62.40	09-62-3043
	5	.78 (19.81)	WM3532-ND	1.37	12.15	78.40	09-62-3053
	6	.93 (23.62)	WM3533-ND	1.65	14.57	94.00	09-62-3063
	7	1.09 (27.69)	WM3534-ND	1.91	16.90	109.00	09-62-3073
	8	1.24 (31.50)	WM3535-ND	2.19	19.38	125.00	09-62-3083
	9	1.40 (35.56)	WM3536-ND	2.46	21.79	140.60	09-62-3093
	10	1.56 (39.62)	WM3537-ND	2.74	24.27	156.60	09-62-3103
	11	1.71 (43.43)	WM3538-ND	3.01	26.63	171.80	09-62-3113
	12	1.87 (47.50)	WM3539-ND	3.28	29.05	187.40	09-62-3123

.100” (2.54mm) Center Headers

.025” (.64mm) Square Pins The Molex KK® Concept utilizes a double cantilever contact design in mating with P.C. board pins. UL Recognized (File #29179), CSA Recognized (File 19980). **Voltage Rating:** 250 VAC Max. **Current Rating:** Up to 2.5 Amps (w/22 AWG wire) **Resistance:** 20 milliohms max. **Dielectric Withstanding Voltage:** 1500 VAC for 60 seconds **Storage Temp.:** -40°C to 105°C **Material:** 94V-0

Fig. 1 - Straight Header

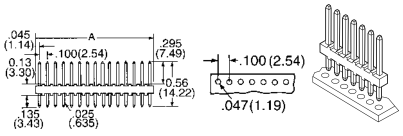


Fig. 2 - Right Angle Header

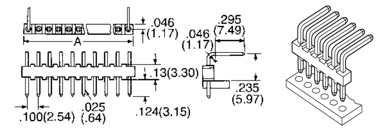


Fig. 3 - Straight-Friction Lock Header

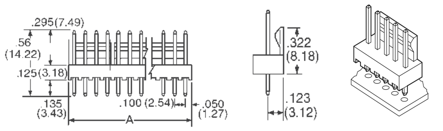


Fig. 4 - Right Angle-Friction Lock Header

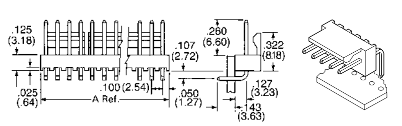


Fig. 5 - Center Crimp Terminal Housing
(contacts sold separately)

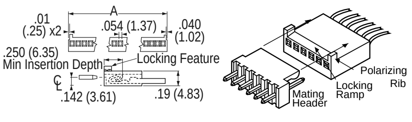
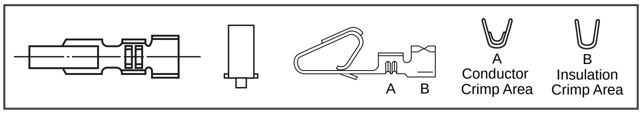


Fig.	Cir-cuits	Dim. A In. (mm)	Digi-Key Part No.	Pricing 1	10	100	500	1,000	Molex Part No.
.100” (2.54mm) Center Headers Tin Plating									
1	2	.190 (4.83)	WM4000-ND	.25	1.77	11.40	40.76	75.98	22-03-2021
	3	.290 (7.37)	WM4001-ND	.31	2.73	17.60	62.92	117.30	22-03-2031
	4	.390 (9.91)	WM4002-ND	.41	3.63	23.40	83.66	155.96	22-03-2041
	5	.490 (12.45)	WM4003-ND	.51	4.53	29.20	104.39	194.62	22-03-2051
	6	.590 (14.99)	WM4004-ND	.61	5.39	34.80	124.41	231.94	22-03-2061
	7	.690 (17.53)	WM4005-ND	.72	6.36	41.00	146.58	273.27	22-03-2071
	8	.790 (20.07)	WM4006-ND	.72	6.36	41.00	146.58	273.27	22-03-2081
	9	.890 (22.61)	WM4007-ND	.81	7.13	46.00	164.45	306.59	22-03-2091
	10	.990 (25.15)	WM4008-ND	.81	7.19	46.40	165.88	309.26	22-03-2101
	11	1.090 (27.69)	WM4009-ND	.90	7.94	51.20	183.04	341.25	22-03-2111
	12	1.190 (30.23)	WM4010-ND	.98	8.71	56.20	200.92	374.57	22-03-2121
2	2	.190 (4.83)	WM4100-ND	.23	2.05	13.20	47.19	87.98	22-05-2021
	3	.290 (7.37)	WM4101-ND	.34	2.98	19.20	68.64	127.97	22-05-2031
	4	.390 (9.91)	WM4102-ND	.45	4.00	25.80	92.24	171.96	22-05-2041
	5	.490 (12.45)	WM4103-ND	.57	5.02	32.40	115.83	215.95	22-05-2051
	6	.590 (14.99)	WM4104-ND	.68	6.05	39.00	139.43	259.94	22-05-2061
	7	.690 (17.53)	WM4105-ND	.79	7.01	45.20	161.59	301.26	22-05-2071
	8	.790 (20.07)	WM4106-ND	.91	8.06	52.00	185.90	346.58	22-05-2081
	9	.890 (22.61)	WM4107-ND	1.03	9.08	58.60	209.50	390.57	22-05-2091
	10	.990 (25.15)	WM4108-ND	1.03	9.15	59.00	210.93	393.24	22-05-2101
	11	1.090 (27.69)	WM4109-ND	1.14	10.11	65.20	233.09	434.56	22-05-2111
	12	1.190 (30.23)	WM4110-ND	1.24	10.94	70.60	252.40	470.55	22-05-2121
3	2	.200 (5.08)	WM4200-ND	.29	2.60	16.80	60.06	111.97	22-23-2021
	3	.300 (7.62)	WM4201-ND	.44	3.88	25.00	89.38	166.63	22-23-2031
	4	.400 (10.16)	WM4202-ND	.48	4.25	27.40	97.96	182.62	22-23-2041
	5	.500 (12.70)	WM4203-ND	.60	5.33	34.40	122.98	229.28	22-23-2051
	6	.600 (15.24)	WM4204-ND	.63	5.58	36.00	128.70	239.94	22-23-2061
	7	.700 (17.78)	WM4205-ND	.66	5.86	37.80	135.14	251.94	22-23-2071
	8	.800 (20.32)	WM4206-ND	.76	6.73	43.40	155.16	289.26	22-23-2081
	9	.900 (22.86)	WM4207-ND	.85	7.56	48.80	174.46	325.25	22-23-2091
	10	1.000 (25.40)	WM4208-ND	.86	7.63	49.20	175.89	327.92	22-23-2101
	11	1.100 (27.94)	WM4209-ND	.95	8.40	54.20	193.77	361.24	22-23-2111
	12	1.200 (30.48)	WM4210-ND	1.03	9.15	59.00	210.93	393.24	22-23-2121
4	2	.200 (5.08)	WM4300-ND	.61	5.39	34.80	124.41	231.94	22-05-3021
	3	.300 (7.62)	WM4301-ND	.70	6.17	39.80	142.29	265.27	22-05-3031
	4	.400 (10.16)	WM4302-ND	.78	6.91	44.60	159.45	297.26	22-05-3041
	5	.500 (12.70)	WM4303-ND	.85	7.56	48.80	174.46	325.25	22-05-3051
	6	.600 (15.24)	WM4304-ND	.96	8.46	54.60	195.20	363.91	22-05-3061
	7	.700 (17.78)	WM4305-ND	1.11	9.86	63.60	227.37	423.89	22-05-3071
	8	.800 (20.32)	WM4306-ND	1.16	10.29	66.40	237.38	442.56	22-05-3081
	9	.900 (22.86)	WM4307-ND	1.20	10.66	68.80	245.96	458.55	22-05-3091
	10	1.000 (25.40)	WM4308-ND	1.22	10.82	69.80	249.54	465.22	22-05-3101
	11	1.100 (27.94)	WM4309-ND	1.34	11.87	76.60	273.85	510.54	22-05-3111
	12	1.200 (30.48)	WM4310-ND	1.38	12.21	78.80	281.71	525.20	22-05-3121
.100” (2.54mm) Center Header Gold Plating									
1	2	.190 (4.83)	WM2722-ND	.52	4.59	29.60	105.82	197.28	22-10-2021
	3	.290 (7.37)	WM2723-ND	.75	6.67	43.00	153.73	286.60	22-10-2031
	4	.390 (9.91)	WM2724-ND	1.00	8.90	57.40	205.21	382.57	22-10-2041
	5	.490 (12.45)	WM2725-ND	1.26	11.13	71.80	256.69	478.55	22-10-2051
	6	.590 (14.99)	WM2726-ND	1.50	13.27	85.60	306.02	570.52	22-10-2061
	7	.690 (17.53)	WM2727-ND	1.67	14.82	95.60	341.77	637.17	22-10-2071
	8	.790 (20.07)	WM2728-ND	1.91	16.96	109.40	391.11	729.15	22-10-2081
	9	.890 (22.61)	WM2729-ND	2.15	19.07	123.00	439.73	819.80	22-10-2091
	10	.990 (25.15)	WM2730-ND	2.39	21.17	136.60	488.35	910.44	22-10-2101
	11	1.090 (27.69)	WM2731-ND	2.63	23.25	150.00	536.25	999.75	22-10-2111
	12	1.190 (30.23)	WM2732-ND	2.87	25.42	164.00	586.30	1093.06	22-10-2121

Fig.	Cir-cuits	Dim. A In. (mm)	Digi-Key Part No.	Pricing 1	10	100	500	1,000	Molex Part No.
2	2	.190 (4.83)	WM2733-ND	.55	4.90	31.60	112.97	210.61	22-12-2021
	3	.290 (7.37)	WM2734-ND	.81	7.13	46.00	164.45	306.59	22-12-2031
	4	.390 (9.91)	WM2735-ND	1.03	9.15	59.00	210.93	393.24	22-12-2041
	5	.490 (12.45)	WM2736-ND	1.29	11.44	73.80	263.84	491.88	22-12-2051
	6	.590 (14.99)	WM2737-ND	1.56	13.80	89.00	318.18	593.19	22-12-2061
	7	.690 (17.53)	WM2738-ND	1.82	16.09	103.80	371.09	691.83	22-12-2071
	8	.790 (20.07)	WM2739-ND	2.08	18.38	118.60	424.00	790.47	22-12-2081
	9	.890 (22.61)	WM2740-ND	2.34	20.71	133.60	477.62	890.44	22-12-2091
	10	.990 (25.15)	WM2741-ND	2.59	22.94	148.00	529.10	986.42	22-12-2101
	11	1.090 (27.69)	WM2742-ND	2.85	25.23	162.80	582.01	1085.06	22-12-2111
	12	1.190 (30.23)	WM2743-ND	3.11	27.53	177.60	634.92	1183.70	22-12-2121
3	2	.200 (5.08)	WM2700-ND	.58	5.15	33.20	118.69	221.28	22-11-2022
	3	.300 (7.62)	WM2701-ND	.94	8.34	53.80	192.34	358.58	22-11-2032
	4	.400 (10.16)	WM2702-ND	.98	8.65	55.80	199.49	371.91	22-11-2042
	5	.500 (12.70)	WM2703-ND	1.39	12.28	79.20	283.14	527.87	22-11-2052
	6	.600 (15.24)	WM2704-ND	1.53	13.55	87.40	312.46	582.52	22-11-2062
	7	.700 (17.78)	WM2705-ND	1.78	15.75	101.60	363.22	677.16	22-11-2072
	8	.800 (20.32)	WM2706-ND	1.86	16.46	106.20	379.67	707.82	22-11-2082
	9	.900 (22.86)	WM2707-ND	2.10	18.57	119.80	428.29	798.47	22-11-2092
	10	1.000 (25.40)	WM2708-ND	2.32	20.58	132.80	474.76	885.11	22-11-2102
	11	1.100 (27.94)	WM2709-ND	2.56	22.69	146.40	523.38	975.76	22-11-2112
	12	1.200 (30.48)	WM2710-ND	2.79	24.71	159.40	569.86	1062.40	22-11-2122
4	2	.200 (5.08)	WM2711-ND	1.06	9.39	60.60	216.65	403.90	22-12-2024
	3	.300 (7.62)	WM2712-ND	1.37	12.09	78.00	278.85	519.87	22-12-2034
	4	.400 (10.16)	WM2713-ND	1.61	14.29	92.20	329.62	614.51	22-12-2044
	5	.500 (12.70)	WM2714-ND	1.78	15.75	101.60	363.22	677.16	22-12-2054
	6	.600 (15.24)	WM2715-ND	1.94	17.17	110.80	396.11	738.48	22-12-2064
	7	.700 (17.78)	WM2716-ND	2.11	18.69	120.60	431.15	803.80	22-12-2074
	8	.800 (20.32)	WM2717-ND	2.20	19.50	125.80	449.74	838.46	22-12-2084
	9	.900 (22.86)	WM2718-ND	2.47	21.92	141.40	505.51	942.43	22-12-2094
	10	1.000 (25.40)	WM2719-ND	2.75	24.40	157.40	562.71	1049.07	22-12-2104
	11	1.100 (27.94)	WM2720-ND	3.03	26.82	173.00	618.48	1153.05	22-12-2114
	12	1.200 (30.48)	WM2721-ND	3.31	29.30	189.00	675.68	1259.69	22-12-2124
.100” (2.54mm) Center Crimp Terminal Housing (Contacts Sold Separately Below) With Locking Ramp and Polarizing Ribs									
5	2	.220 (5.59)	WM2000-ND	.25	2.22	14.35	59.19	95.64	22-01-3027
	3	.320 (8.13)	WM2001-ND	.21	1.89	12.20	50.33	81.31	22-01-3037
	4	.420 (10.67)	WM2002-ND	.29	2.54	16.40	67.65	109.31	22-01-3047
	5	.520 (13.21)	WM2003-ND	.35	3.10	20.00	82.50	133.30	22-01-3057
	6	.620 (15.75)	WM2004-ND	.42	3.75	24.20	99.83	161.29	22-01-3067
	7	.720 (18.29)	WM2005-ND	.49	4.37	28.20	116.33	187.95	22-01-3077
	8	.820 (20.83)	WM2006-ND	.57	5.05	32.60	134.48	217.28	22-01-3087
	9	.920 (23.37)	WM2007-ND	.64	5.70	36.80	151.80	245.27	22-01-3097
	10	1.020 (25.91)	WM2008-ND	.70	6.23	40.20	165.83	267.93	22-01-3107
	11	1.120 (28.45)	WM2009-ND	.77	6.85	44.20	182.33	294.59	22-01-3117
	12	1.220 (30.99)	WM2010-ND	.86	7.60	49.00	202.13	326.59	22-01-3127
With Locking Ramp									
5	2	.220 (5.59)	WM2011-ND	.22	1.95	12.60	45.05	83.98	22-01-2027
	3	.320 (8.13)	WM2012-ND	.32	2.88	18.55	66.32	123.64	22-01-2037
	4	.420 (10.67)	WM2013-ND	.25	2.20	14.20	50.77	94.64	22-01-2047
	5	.520 (13.21)	WM2014-ND	.31	2.73	17.60	62.92	117.30	22-01-2057
	6	.620 (15.75)	WM2015-ND	.37	3.32	21.40	76.51	142.63	22-01-2067
	7	.720 (18.29)	WM2016-ND	.44	3.88	25.00	89.38	166.63	22-01-2077
	8	.820 (20.83)	WM2017-ND	.49	4.37	28.20	100.82	187.95	22-01-2087
	9	.920 (23.37)	WM2018-ND	.56	4.99	32.20	115.12	214.61	22-01-2097
	10	1.020 (25.91)	WM2019-ND	.62	5.46	35.20	125.84	234.61	22-01-2107
	11	1.120 (28.45)	WM2020-ND	.69	6.08	39.20	140.14	261.27	22-01-2117
	12	1.220 (30.99)	WM2021-ND	.75	6.67	43.00	153.73	286.60	22-01-2127
Polarizing Key for .100” Housings			WM2400-ND		1.90/10	11.66/100	45.30/500		15-04-9209
Polarizing Peg for .100” Housings			WM2401-ND		1.68/10	10.85/100	44.76/500		15-04-9210

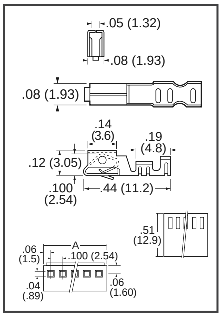
Crimp Terminals For .100” (2.54mm) Center Housings

Material: Brass, Plating: 200-300µ inch Hot-Tin Dip tin plating.



Description	Wire Size	Insulation Dia. (Inch)	Finish	Digi-Key Part No.	Pricing 10	100	500	Molex Part No.
For .100” Housings	22-30	.062 Max.	Tin	WM2200-ND	1.37	11.38	45.50	08-50-0114
	22-30	.062 Max.	Gold	WM2312-ND	2.85	23.75	95.00	08-55-0102
Universal Crimp Tool (Molex)...............				WM9999-ND	33.81 each			63811-1000
Production Tool (Molex)				WM9915-ND	226.53 each			11-01-0185
Extraction Tool (Molex)				WM9927-ND	9.22 each			11-03-0022

.100” (2.54mm) High Pressure Terminal Housings



- Standard with locking ramp
- 94V-0 material
- Mates with .025” (0.64mm) Pins
- Up to 425 grams normal force
- Multiple contacting points
- Patented double cantilever with box shroud
- Accepts #22 to 30 AWG wire, .062” insulation dia.

Circuits	Dim. A Inch (mm)	Digi-Key Part No.	Pricing 1	10	100	Molex Part No.
1	.120 (3.05)	WM2600-ND	.44	2.88	18.55	10-11-2013
2	.220 (5.59)	WM2601-ND	.43	2.06	13.30	10-11-2023
3	.320 (8.13)	WM2602-ND	.44	2.98	19.25	10-11-2033
4	.420 (10.67)	WM2603-ND	.27	2.36	15.20	10-11-2043
5	.520 (13.21)	WM2604-ND	.33	2.91	18.80	10-11-2053
6	.620 (15.75)	WM2605-ND	.40	3.50	22.60	10-11-2063
7	.720 (18.29)	WM2606-ND	.46	4.06	26.20	10-11-2073
8	.820 (20.83)	WM2607-ND	.53	4.65	30.00	10-11-2083
9	.920 (23.37)	WM2608-ND	.59	5.21	33.60	10-11-2093
10	1.020 (25.91)	WM2609-ND	.66	5.86	37.80	10-11-2103
11	1.120 (28.45)	WM2610-ND	.72	6.42	41.40	10-11-2113
12	1.220 (30.99)	WM2611-ND	.81	7.13	46.00	10-11-2123
Crimp Terminal, 22-30, Tin/Copper Plating		WM2612-ND	—	3.47	28.88	08-50-0005

molex GC/Waldom

.156” Center Headers
.045” Square Pins

Dimensions Shown in Inches

The Molex KK® Concept utilizes a double cantilever contact design in mating with P.C. board pins. UL Recognized (File #29179), CSA Recognized (File 19980).

Voltage Rating: 250 VAC Max.
Current Rating: Up to 7 Amps (w/18 AWG wire)
Resistance: 20 milliohms max.

Dielectric Withstanding Voltage: 1500 VAC for 60 seconds
Storage Temperature: -40°C to 105°C
Material: 94V-0

Fig. 1 - **Straight Header**

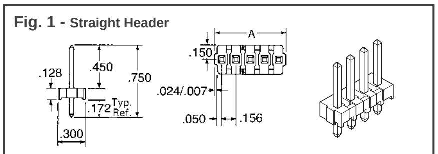


Fig. 2 - **Right Angle Header**

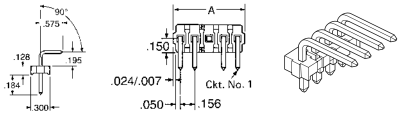


Fig. 3 - **Straight-Friction Lock Header for use with Locking Ramp only**

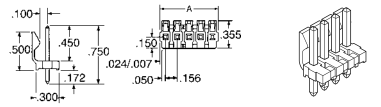


Fig. 4 - **Right Angle-Friction Lock Header for use with Locking Ramp only**

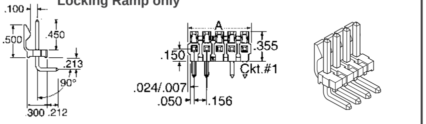


Fig. 5 - **Straight Friction Lock Header for use with Locking Ramp & Polarizing Ribs**

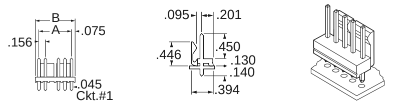


Fig. 6 - **Right Angle Friction Lock Header for use with Locking Ramp & Polarizing Ribs**

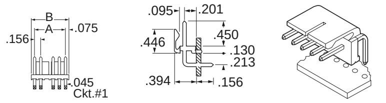


Fig. 7 - **Center Crimp Terminal Housing (contacts sold separately)**

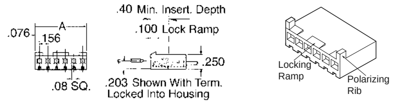
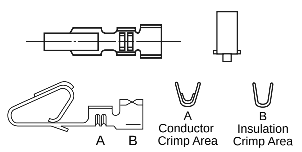


Fig.	Cir-cuits	Dim. (Inch) A	B	Digi-Key Part No.	Pricing 1	10	100	Molex Part No.
.156” Center Headers								
1	2	.267	—	WM4400-ND	.25	1.26	7.56	26-48-1021
	3	.423	—	WM4401-ND	.26	1.92	11.52	26-48-1031
	4	.579	—	WM4402-ND	.29	2.58	15.48	26-48-1041
	5	.735	—	WM4403-ND	.36	3.21	19.26	26-48-1051
	6	.891	—	WM4404-ND	.44	3.87	23.22	26-48-1061
	7	1.047	—	WM4405-ND	.51	4.53	27.18	26-48-1071
	8	1.203	—	WM4406-ND	.58	5.13	30.78	26-48-1081
	9	1.359	—	WM4407-ND	.66	5.85	35.10	26-48-1091
	10	1.515	—	WM4408-ND	.74	6.51	39.06	26-48-1101
	11	1.671	—	WM4409-ND	.81	7.11	42.66	26-48-1111
	12	1.827	—	WM4410-ND	.88	7.77	46.62	26-48-1121
2	2	.267	—	WM4500-ND	.25	1.47	8.82	26-48-1022
	3	.423	—	WM4501-ND	.25	2.19	13.14	26-48-1032
	4	.579	—	WM4502-ND	.33	2.94	17.64	26-48-1042
	5	.735	—	WM4503-ND	.41	3.60	21.60	26-48-1052
	6	.891	—	WM4504-ND	.50	4.38	26.28	26-48-1062
	7	1.047	—	WM4505-ND	.58	5.10	30.60	26-48-1072
	8	1.203	—	WM4506-ND	.66	5.85	35.10	26-48-1082
	9	1.359	—	WM4507-ND	.74	6.57	39.42	26-48-1092
	10	1.515	—	WM4508-ND	.83	7.32	43.92	26-48-1102
	11	1.671	—	WM4509-ND	.91	8.04	48.24	26-48-1112
	12	1.827	—	WM4510-ND	1.00	8.79	52.74	26-48-1122
3	2	.310	—	WM4600-ND	.25	1.62	9.72	26-48-1025
	3	.466	—	WM4601-ND	.28	2.43	14.58	26-48-1035
	4	.622	—	WM4602-ND	.37	3.24	19.44	26-48-1045
	5	.778	—	WM4603-ND	.47	4.11	24.66	26-48-1055
	6	.934	—	WM4604-ND	.56	4.92	29.52	26-48-1065
	7	1.090	—	WM4605-ND	.65	5.76	34.56	26-48-1075
	8	1.246	—	WM4606-ND	.75	6.60	39.60	26-48-1085
	9	1.402	—	WM4607-ND	.84	7.41	44.46	26-48-1095
	10	1.558	—	WM4608-ND	.94	8.25	49.50	26-48-1105
	11	1.714	—	WM4609-ND	1.03	9.06	54.36	26-48-1115
	12	1.870	—	WM4610-ND	1.12	9.87	59.22	26-48-1125
4	2	.310	—	WM4700-ND	.25	1.13	6.77	26-48-1026
	3	.466	—	WM4701-ND	.32	2.79	16.74	26-48-1036
	4	.622	—	WM4702-ND	.43	3.75	22.50	26-48-1046
	5	.778	—	WM4703-ND	.53	4.68	28.08	26-48-1056
	6	.934	—	WM4704-ND	.63	5.58	33.48	26-48-1066
	7	1.090	—	WM4705-ND	.75	6.60	39.60	26-48-1076
	8	1.246	—	WM4706-ND	.85	7.53	45.18	26-48-1086
	9	1.402	—	WM4707-ND	.96	8.49	50.94	26-48-1096
	10	1.558	—	WM4708-ND	1.07	9.42	56.52	26-48-1106
	11	1.714	—	WM4709-ND	1.18	10.38	62.28	26-48-1116
	12	1.870	—	WM4710-ND	1.28	11.28	67.68	26-48-1126
5	2	.156	.306	WM4620-ND	.29	2.16	12.96	26-60-4020
	3	.312	.462	WM4621-ND	.37	3.27	19.62	26-60-4030
	4	.468	.618	WM4622-ND	.43	3.81	22.86	26-60-4040
	5	.624	.774	WM4623-ND	.54	4.74	28.44	26-60-4050
	6	.780	.930	WM4624-ND	.64	5.67	34.02	26-60-4060
	7	.936	1.086	WM4625-ND	.75	6.63	39.78	26-60-4070
	8	1.092	1.242	WM4626-ND	.86	7.62	45.72	26-60-4080
	9	1.248	1.398	WM4627-ND	.98	8.61	51.66	26-60-4090
	10	1.404	1.554	WM4628-ND	1.08	9.54	57.24	26-60-4100
	11	1.560	1.710	WM4629-ND	1.19	10.53	63.18	26-60-4110
	12	1.716	1.866	WM4630-ND	1.30	11.43	68.58	26-60-4120
6	2	.156	.306	WM4640-ND	.27	2.34	14.04	26-60-5020
	3	.312	.462	WM4641-ND	.40	3.51	21.06	26-60-5030
	4	.468	.618	WM4642-ND	.47	4.11	24.66	26-60-5040
	5	.624	.774	WM4643-ND	.58	5.16	30.96	26-60-5050
	6	.780	.930	WM4644-ND	.70	6.21	37.26	26-60-5060
	7	.936	1.086	WM4645-ND	.83	7.32	43.92	26-60-5070
	8	1.092	1.242	WM4646-ND	.94	8.31	49.86	26-60-5080
	9	1.248	1.398	WM4647-ND	1.06	9.36	56.16	26-60-5090
	10	1.404	1.554	WM4648-ND	1.18	10.38	62.28	26-60-5100
	11	1.560	1.710	WM4649-ND	1.30	11.43	68.58	26-60-5110
	12	1.716	1.866	WM4650-ND	1.41	12.48	74.88	26-60-5120
.156” Center Headers - Gold								
1	2	.267	—	WM5002-ND	.66	5.85	35.10	26-48-2021
	3	.423	—	WM5003-ND	.99	8.70	52.20	26-48-2031
	4	.579	—	WM5004-ND	1.32	11.64	69.84	26-48-2041
	5	.735	—	WM5005-ND	1.65	14.55	87.30	26-48-2051
	6	.891	—	WM5006-ND	1.98	17.49	104.94	26-48-2061
	7	1.047	—	WM5007-ND	2.31	20.40	122.40	26-48-2071
	8	1.203	—	WM5008-ND	2.64	23.28	139.68	26-48-2081
	9	1.359	—	WM5009-ND	2.97	26.19	157.14	26-48-2091
	10	1.515	—	WM5010-ND	3.30	29.13	174.78	26-48-2101
	11	1.671	—	WM5011-ND	3.63	32.04	192.24	26-48-2111
	12	1.827	—	WM5012-ND	3.96	34.98	209.88	26-48-2121
2	2	.267	—	WM5102-ND	.79	6.96	41.76	26-48-2022
	3	.423	—	WM5103-ND	1.19	10.47	62.82	26-48-2032
	4	.579	—	WM5104-ND	1.58	13.92	83.52	26-48-2042
	5	.735	—	WM5105-ND	1.98	17.43	104.58	26-48-2052
	6	.891	—	WM5106-ND	2.37	20.91	125.46	26-48-2062
	7	1.047	—	WM5107-ND	2.77	24.42	146.52	26-48-2072
	8	1.203	—	WM5108-ND	3.15	27.81	166.86	26-48-2082
	9	1.359	—	WM5109-ND	3.55	31.32	187.92	26-48-2092
	10	1.515	—	WM5110-ND	3.94	34.77	208.62	26-48-2102
	11	1.671	—	WM5111-ND	4.34	38.28	229.68	26-48-2112
	12	1.827	—	WM5112-ND	4.74	41.79	250.74	26-48-2122
3	2	.310	—	WM5200-ND	.68	6.00	36.00	26-48-2025
	3	.466	—	WM5201-ND	1.02	9.00	54.00	26-48-2035
	4	.622	—	WM5202-ND	1.37	12.06	72.36	26-48-2045
	5	.778	—	WM5203-ND	1.71	15.06	90.36	26-48-2055
	6	.934	—	WM5204-ND	2.04	18.00	108.00	26-48-2065
	7	1.090	—	WM5205-ND	2.39	21.06	126.36	26-48-2075
	8	1.246	—	WM5206-ND	2.73	24.06	144.36	26-48-2085
	9	1.402	—	WM5207-ND	3.06	27.00	162.00	26-48-2095
	10	1.558	—	WM5208-ND	3.41	30.06	180.36	26-48-2105
	11	1.714	—	WM5209-ND	3.75	33.06	198.36	26-48-2115
	12	1.870	—	WM5210-ND	4.09	36.09	216.54	26-48-2125
4	2	.310	—	WM5212-ND	.91	8.04	48.24	26-48-2026
	3	.466	—	WM5213-ND	1.36	12.00	72.00	26-48-2036
	4	.622	—	WM5214-ND	1.82	16.02	96.12	26-48-2046
	5	.778	—	WM5215-ND	2.26	19.98	119.88	26-48-2056
	6	.934	—	WM5216-ND	2.73	24.06	144.36	26-48-2066
	7	1.090	—	WM5217-ND	3.18	28.02	168.12	26-48-2076
	8	1.246	—	WM5218-ND	3.62	31.98	191.88	26-48-2086
	9	1.402	—	WM5219-ND	4.08	36.00	216.00	26-48-2096
	10	1.558	—	WM5220-ND	4.54	40.02	240.12	26-48-2106
	11	1.714	—	WM5221-ND	4.98	43.98	263.88	26-48-2116
	12	1.870	—	WM5222-ND	5.44	48.00	288.00	26-48-2126
5	2	.156	.306	WM5224-ND	.91	8.01	48.06	26-61-4020
	3	.312	.462	WM5225-ND	1.35	11.94	71.64	26-61-4030
	4	.468	.618	WM5226-ND	1.74	15.39	92.34	26-61-4040
	5	.624	.774	WM5227-ND	2.17	19.14	114.84	26-61-4050
	6	.780	.930	WM5228-ND	2.60	22.95	137.70	26-61-4060
	7	.936	1.086	WM5229-ND	3.04	26.82	160.92	26-61-4070
	8	1.092	1.242	WM5230-ND	3.46	30.57	183.42	26-61-4080
	9	1.248	1.398	WM5231-ND	3.90	34.38	206.28	26-61-4090
	10	1.404	1.554	WM5232-ND	4.34	38.25	229.50	26-61-4100
	11	1.560	1.710	WM5233-ND	4.77	42.06	252.36	26-61-4110
	12	1.716	1.866	WM5234-ND	5.21	45.93	275.58	26-61-4120
6	2	.156	.306	WM5235-ND	1.03	9.09	54.54	26-61-5020
	3	.312	.462	WM5236-ND	1.55	13.65	81.90	26-61-5030
	4	.468	.618	WM5237-ND	2.01	17.70	106.20	26-61-5040
	5	.624	.774	WM5238-ND	2.50	22.08	132.48	26-61-5050
	6	.780	.930	WM5239-ND	3.01	26.58	159.48	26-61-5060
	7	.936	1.086	WM5240-ND	3.51	30.93	185.58	26-61-5070
	8	1.092	1.242	WM5241-ND	4.00	35.31	211.86	26-61-5080
	9	1.248	1.398	WM5242-ND	4.51	39.78	238.68	26-61-5090
	10	1.404	1.554	WM5243-ND	5.00	44.16	264.96	26-61-5100
	11	1.560	1.710	WM5244-ND	5.51	48.60	291.60	26-61-5110
	12	1.716	1.866	WM5245-ND	6.01	53.01	318.06	26-61-5120
.156” Center Crimp Terminal Housing (Contacts Sold Separately Below) w/Locking Ramp – 94V-2 Nylon								
7	2	.310	—	WM2100-ND	.44	2.44	15.75	09-50-3021
	3	.460	—	WM2101-ND	.25	2.11	13.60	09-50-3031
	4	.620	—	WM2102-ND	.32	2.79	18.00	09-50-3041
	5	.780	—	WM2103-ND	.40	3.50	22.60	09-50-3051
	6	.930	—	WM2104-ND	.47	4.19	27.00	09-50-3061
	7	1.090	—	WM2105-ND	.55	4.90	31.60	09-50-3071
	8	1.240	—	WM2106-ND	.63	5.58	36.00	09-50-3081
	9	1.400	—	WM2107-ND	.71	6.29	40.60	09-50-3091
	10	1.560	—	WM2108-ND	.79	7.01	45.20	09-50-3101
	11	1.710	—	WM2109-ND	.87	7.69	49.60	09-50-3111
	12	1.870	—	WM2110-ND	.95	8.40	54.20	09-50-3121
With Locking Ramp and Polarizing Ribs – 94V-0 Polyester								
7	2	.340	—	WM2111-ND	.44	2.55	16.45	09-50-8023
	3	.500	—	WM2112-ND	.25	2.23	14.40	09-50-8033
	4	.650	—	WM2113-ND	.33	2.91	18.80	09-50-8043
	5	.810	—	WM2114-ND	.42	3.69	23.80	09-50-8053
	6	.970	—	WM2115-ND	.49	4.37	28.20	09-50-8063
	7	1.120	—	WM2116-ND	.58	5.15	33.20	09-50-8073
	8	1.280	—	WM2117-ND	.65	5.80	37.40	09-50-8083
	9	1.430	—	WM2118-ND	.74	6.54	42.20	09-50-8093
	10	1.600	—	WM2119-ND	.82	7.25	46.80	09-50-8103
	11	1.750	—	WM2120-ND	.90	8.00	51.60	09-50-8113
	12	1.900	—	WM2121-ND	.99	8.77	56.60	09-05-8123
With Locking Ramp – 94V-0 Polyester								
7	2	.340	—	WM2122-ND	.44	2.33	15.05	09-50-8021
	3	.500	—	WM2123-ND	.25	2.11	13.60	09-50-8031
	4	.650	—	WM2124-ND	.31	2.73	17.60	09-50-8041
	5	.810	—	WM2125-ND	.39	3.44	22.20	09-50-8051
	6	.970	—	WM2126-ND	.46	4.06	26.20	09-50-8061
	7	1.120	—	WM2127-ND	.55	4.84	31.20	09-50-8071
	8	1.280	—	WM2128-ND	.62	5.46	35.20	09-50-8081
	9	1.430	—	WM2129-ND	.70	6.17	39.80	09-50-8091
	10	1.600	—	WM2130-ND	.77	6.79	43.80	09-50-8101
	11	1.750	—	WM2131-ND	.85	7.50	48.40	09-50-8111
	12	1.900	—	WM2132-ND	.92	8.18	52.80	09-50-8121
Polarizing key for .156” Housings				WM2402-ND	.29/1	2.55/10		15-04-0219
Polarizing peg for .156” Housings				WM2403-ND	.29/1	2.55/10		15-04-0220
Polarizing key for .156” Friclock Housings				WM2404-ND	.26/1	2.26/10		15-04-0297

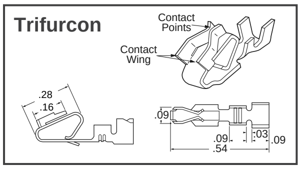
molex GC/Waldom

Crimp Terminals For .156” Center Housings

Plating: 200-300µ” Hot-Tin Dip tin plating or 15µ” of Select Gold



Trifurcon



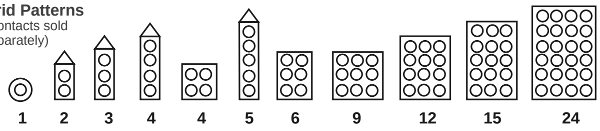
Description	Material	Wire Size	Insulation Dia. (Inch)	Finish	Digi-Key Part No.	Pricing 10	100	500	Molex Part No.
For .156” Housings	Brass	18-24	.110 Max.	Tin	WM2300-ND	1.37	11.38	45.50	08-50-0106
	Brass	22-26	.065 Max.	Tin	WM2301-ND	1.37	11.38	45.50	08-50-0108
	Bronze	18-24	.110	Tin	WM2302-ND	1.52	12.69	50.75	08-52-0072
	Bronze	22-26	.065	Tin	WM2303-ND	1.52	12.69	50.75	08-50-0134
	Brass	18-24	.110	Gold	WM2305-ND	4.25	35.44	141.75	08-56-0106
	Brass	22-26	.065	Gold	WM2306-ND	4.04	33.69	134.75	08-56-0108
	Bronze	18-20	.110	Gold	WM2304-ND	8.67	72.25	289.00	08-58-0122
	Bronze	22-26	.065	Gold	WM2307-ND	8.67	72.25	289.00	08-58-0126
	Trifurcon	18-24	.110	Tin	WM2313-ND	1.79	14.88	59.50	08-52-0113
	Trifurcon	22-26	.065	Tin	WM2314-ND	1.79	14.88	59.50	08-52-0125
Hand Tool (Waldom)................................					WM9903-ND		13.57 each		W-HT-1919
Universal Crimp Tool (Molex).......................					WM9999-ND		33.81 each		63811-1000
Production Tool (Molex)					WM9916-ND		226.53 each		11-01-0026
Extraction Tool (Molex)					WM9928-ND		9.22 each		11-03-0016

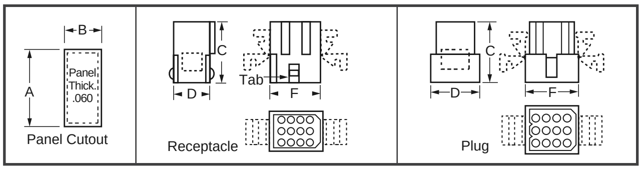
Power Connectors

.062" Diameter Connectors

• UL File Number E-29179; CSA File Number LR-19980. • Up to 5 amperes per circuit.* • 250 Volt rating.* • Friction lock. • Standard color is natural. (** Ratings based on fully loaded housings.)*

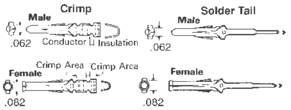
Grid Patterns
(Contacts sold separately)





.062" Terminals

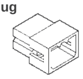
Use with .062" housings. **Temperature Range:** -40°C to 105°C • .008" stock 70/30 brass. **High Volt. Test:** Withstands 1500 volts RMS for 60 seconds. **Current Rating:** Amperage rating 5 amps. **Storage Temp. Range:** -40°C to 125°C. **Plating:** 200-300µ" Hot-Tin Dip tin plating.



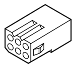
Description	Wire Size	Insulation Dia. (Inch)	Digi-Key Part No.	Pricing 10	100	500	Molex Part No.
Male, Crimp Type	18-24	.060/.120	WM1000-ND	2.21	18.38	73.50	02-06-2103
Female, Crimp Type	18-24	.060/.120	WM1001-ND	2.21	18.38	73.50	02-06-1103
Male, Crimp Type	24-30	.040/.090	WM1002-ND	2.21	18.38	73.50	02-06-2132
Female, Crimp Type	24-30	.040/.090	WM1003-ND	2.21	18.38	73.50	02-06-1132
Male, PCB Solder-Tail	—	—	WM1004-ND	3.31	27.56	110.25	02-06-8103
Female, PCB Solder-Tail	—	—	WM1005-ND	3.31	27.56	110.25	02-06-7103
Male, Crimp Type	18-24	.060/.120	WM1006-ND*	7.82	65.19	260.75	02-06-6103
Male, Crimp Type	24-30	.040/.090	WM1007-ND*	7.04	58.63	234.50	02-06-6135
Female, Crimp Type	18-24	.060/.120	WM1008-ND*	7.82	65.19	260.75	02-06-5103
Female, Crimp Type	24-30	.040/.090	WM1009-ND*	7.04	58.63	234.50	02-06-5135
Male, PCB	—	—	WM1010-ND*	8.13	67.75	271.00	02-06-6122
Female, PCB	—	—	WM1011-ND*	8.13	67.75	271.00	02-06-7104
Hand Tool (Waldom)	—	—	WM9900-ND	13.57 each			W-HT-1921
Universal Crimp Tool (Molex)	—	—	WM9999-ND	33.81 each			63811-1000
Production Tool (Molex)	—	—	WM9922-ND	223.17 each			11-01-0008
Extraction Tool (Molex)	—	—	WM9929-ND	18.42 each			11-03-0002

* 15µ Select Gold Finish

Plug



Receptacle



Cable Connector Designer Kit

WM9800-ND — Contains all parts needed to assemble male and female connectors from single-circuit to 36-circuit designs (250V and up to 5A/circuit); totals 56 connectors. All have pin terminal size .062" dia. with crimping tool, pin terminal ejector and case **$54.30**

Grid. Space	Circ. (a)	Type	Max. Amp	V.	Dimensions (Inch) A	B	C	D	F	Digi-Key Part No.	Pricing 1	10	100	Molex Part No.
.062" Diameter Connector Housings — With Detent Only, Free Hanging														
.145"	1	Plug	5	250	—	—	.750	—	—	WM1201-ND	.44	3.12	19.19	03-06-2011
		Receptacle	5	250	—	—	.780	—	.183	WM1200-ND	.44	3.12	19.19	03-06-1011
	2	Plug	5	250	.609	.318	.780	.300	.440	WM1220-ND	.33	3.08	18.92	03-06-2023
		Receptacle	5	250	.505	.265	.810	.192	.340	WM1230-ND	.35	3.29	20.21	03-06-1023
	3	Plug	5	250	.754	.318	.750	.300	.590	WM1221-ND	.40	3.75	23.01	03-06-2032
		Receptacle	5	250	.650	.265	.780	.192	.484	WM1231-ND	.40	3.75	23.01	03-06-1032
	4	Plug	5	250	.865	.312	.750	.295	.730	WM1222-ND	.56	5.32	32.68	03-06-2042
		Receptacle	5	250	.785	.260	.780	.192	.630	WM1232-ND	.56	5.32	32.68	03-06-1042
	4 (b)	Plug	5	250	.615	.465	.750	.442	.442	WM1223-ND	.57	5.39	33.11	03-06-2044
		Receptacle	5	250	.506	.400	.750	.339	.339	WM1233-ND	.57	5.39	33.11	03-06-1044
	5	Plug	5	250	1.044	.318	.750	.310	.890	WM1224-ND	.58	5.53	33.97	03-06-2055
		Receptacle	5	250	.940	.265	.780	.192	.775	WM1234-ND	.74	6.97	42.79	03-06-1056
	6	Plug	5	250	.615	.607	.750	.600	.450	WM1225-ND	.60	5.67	34.83	03-06-2061
		Receptacle	5	250	.552	.505	.780	.494	.344	WM1235-ND	.60	5.67	34.83	03-06-1062
	9	Plug	5	250	.752	.615	.750	.590	.590	WM1226-ND	.61	5.74	35.26	03-06-2092
		Receptacle	5	250	.650	.552	.780	.494	.489	WM1236-ND	.61	5.74	35.26	03-06-1092
	12	Plug	5	250	.903	.614	.750	.590	.740	WM1227-ND	.64	6.02	36.98	03-06-2122
		Receptacle	5	250	.795	.563	.780	.494	.634	WM1237-ND	.66	6.27	38.49	03-06-1122
	15	Plug	5	250	1.042	.614	.750	.590	.880	WM1228-ND	.86	8.12	49.88	03-06-2152
		Receptacle	5	250	.934	.563	.780	.487	.776	WM1238-ND	1.02	9.66	59.34	03-06-1152
	24	Plug	5	250	1.182	.765	.750	.740	1.040	WM1229-ND	2.09	19.74	121.26	03-06-2242
.062" Diameter Connector Housings – W/Mounting Ears & Detent, Panel Mount														
.145"	2	Plug	5	250	.609	.318	.780	.300	.440	WM1203-ND	.33	3.08	18.92	03-06-2024
		Receptacle	5	250	.505	.265	.810	.192	.340	WM1202-ND	.35	3.29	20.21	03-06-1022
	3	Plug	5	250	.754	.318	.750	.300	.590	WM1205-ND	.40	3.75	23.01	03-06-2033
		Receptacle	5	250	.650	.265	.780	.192	.484	WM1204-ND	.40	3.75	23.01	03-06-1038
	4	Plug	5	250	.865	.312	.750	.295	.730	WM1207-ND	.56	5.32	32.68	03-06-2041
		Receptacle	5	250	.785	.260	.780	.192	.630	WM1206-ND	.56	5.32	32.68	03-06-1041
	4 (b)	Plug	5	250	.615	.465	.750	.442	.442	WM1209-ND	.57	5.39	33.11	03-06-2043
		Receptacle	5	250	.506	.400	.750	.339	.339	WM1208-ND	.57	5.39	33.11	03-06-1043
	5	Plug	5	250	1.044	.318	.750	.310	.890	WM1240-ND	.58	5.53	33.97	03-06-2054
		Receptacle	5	250	.940	.265	.780	.192	.775	WM1241-ND	.74	6.97	42.79	03-06-1055
	6	Plug	5	250	.615	.607	.750	.600	.450	WM1211-ND	.60	5.67	34.83	03-06-2062
		Receptacle	5	250	.552	.505	.780	.494	.344	WM1210-ND	.60	5.67	34.83	03-06-1061
	9	Plug	5	250	.752	.615	.750	.590	.590	WM1213-ND	.61	5.74	35.26	03-06-2091
		Receptacle	5	250	.650	.552	.780	.494	.489	WM1212-ND	.61	5.74	35.26	03-06-1091
	12	Plug	5	250	.903	.614	.750	.590	.740	WM1215-ND	.64	6.02	36.98	03-06-2121
		Receptacle	5	250	.795	.563	.780	.494	.634	WM1214-ND	.66	6.27	38.49	03-06-1121
	15	Plug	5	250	1.042	.614	.750	.590	.880	WM1217-ND	.86	8.12	49.88	03-06-2151
	24	Plug	5	250	1.182	.765	.750	.740	1.040	WM1219-ND	2.09	19.74	121.26	03-06-2241
		Receptacle	5	250	1.079	.715	.750	.634	.918	WM1218-ND	2.09	19.74	121.26	03-06-1241

(a) Electrical ratings are per circuit. (b) 4 circuits in square grid pattern.

.084" Power Connectors

Features: • Intermateable, intermountable, and interchangeable with industry standard versions. • Cross tested to assure industry compatibility. • UL recognized, CSA certified. • Up to 13.5 amperes per circuit (30°C rise)*. • 600 Volt rating*. • Positive locks. • Fully isolated contacts. • Circuit I.D. grooves to reduce assembly errors. • Anti-stress positioning tabs to reduce breakage.

Grid Pattern

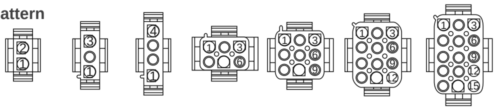


Fig. 1 - Plug

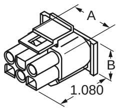


Fig. 2 - Cap

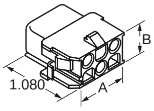
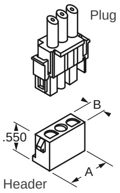
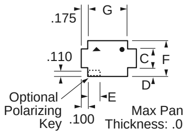


Fig. 3 - Vertical Header



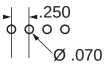
Cap Panel Cutout



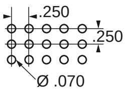
▲ - Circuit #1 location when using polarizing key option with 2, 3, and 4 circuit housing.

● - Circuit #1 location when using polarizing key option with 6, 9, 12 and 15 circuit housing.

Vertical Header P.C. Board Layout Dim.



6, 9, 12, & 15 Position Header Assemblies

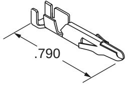


Pos.	Des.	Amperes/ Circuit (Max.)*	Voltage Rating (Max.)*	Panel Cutout Dimension (Inch) A	B	C††	D	E	F	G	Digi-Key Part No.	Pricing 1	10	100	500	Molex Part No.
Fig. 1 – Plug																
2	Plug	13.5	600	.300	.550	—	—	—	—	—	WM1242-ND	.51	4.47	28.49	110.11	50-84-1020
3	Plug	13.5	600	.300	.800	—	—	—	—	—	WM1244-ND	.55	4.87	31.08	120.12	50-84-1030
4	Plug	13.5	600	.300	1.050	—	—	—	—	—	WM1246-ND	.58	5.10	32.56	125.84	50-84-1040
6	Plug	11.0	600	.800	.550	—	—	—	—	—	WM1248-ND	.68	6.00	38.30	148.01	50-84-1060
9	Plug	11.0	600	.800	.800	—	—	—	—	—	WM1250-ND	.73	6.41	40.89	158.02	50-84-1090
12	Plug	—	600	.800	.800	—	—	—	—	—	WM1252-ND	1.27	11.17	71.23	275.28	50-84-1120
15	Plug	—	600	.800	1.050	—	—	—	—	—	WM1254-ND	1.33	11.72	74.74	288.86	50-84-1150
Fig. 2 – Cap																
2	Cap	13.5	600	.300	.550	.340	.095	.250	.530	.565	WM1243-ND	.53	4.70	29.97	115.83	50-84-2020
3	Cap	13.5	600	.300	.800	.340	.095	.250	.530	.815	WM1245-ND	.59	5.16	32.93	127.27	50-84-2030
9	Cap	11.0	600	.800	.800	.480	.275	.250	1.030	.815	WM1251-ND	.82	7.19	45.88	177.32	50-84-2090
12	Cap	—	600	.800	1.050	.480	.275	.350	1.030	1.065	WM1253-ND	1.48	12.96	82.70	319.61	50-84-2120
15	Cap	—	600	.800	1.300	.480	.275	.350	1.030	1.315	WM1255-ND	1.58	13.86	88.43	341.77	50-84-2150
Fig. 3 – Vertical Header																
2	Male	—	—	.300	.550	—	—	—	—	—	WM1256-ND	.93	8.28	53.40	190.91	10-84-4020
2	Female	—	—	.300	.550	—	—	—	—	—	WM1263-ND	.88	7.75	50.00	178.75	10-84-4022
3	Male	—	—	.300	.800	—	—	—	—	—	WM1257-ND	1.08	9.55	61.60	220.22	10-84-4030
3	Female	—	—	.300	.800	—	—	—	—	—	WM1264-ND	1.03	9.15	59.00	210.93	10-84-4032
4	Male	—	—	.300	1.050	—	—	—	—	—	WM1258-ND	1.29	11.44	73.80	263.84	10-84-4040
4	Female	—	—	.300	1.050	—	—	—	—	—	WM1265-ND	1.25	11.07	71.40	255.26	10-84-4042
6	Male	—	—	.800	.550	—	—	—	—	—	WM1259-ND	1.72	15.25	98.40	351.78	10-84-4060
6	Female	—	—	.800	.550	—	—	—	—	—	WM1266-ND	1.80	15.90	102.60	366.80	10-84-4062
9	Male	—	—	.800	.800	—	—	—	—	—	WM1260-ND	2.23	19.72	127.20	454.74	10-84-4090
9	Female	—	—	.800	.800	—	—	—	—	—	WM1267-ND	2.58	22.88	147.60	527.67	10-84-4092
12	Male	—	—	.800	1.050	—	—	—	—	—	WM1261-ND	2.66	23.53	151.80	542.69	10-84-4120
12	Female	—	—	.800	1.050	—	—	—	—	—	WM1268-ND	3.30	29.23	188.60	674.25	10-84-4122
15	Male	—	—	.800	1.300	—	—	—	—	—	WM1262-ND	3.30	29.23	188.60	674.25	10-84-4150
15	Female	—	—	.800	1.300	—	—	—	—	—	WM1269-ND	3.73	33.05	213.20	762.19	10-84-4152

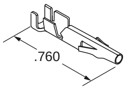
* Ratings are per circuit, based on fully loaded housings.
†† Cap housing should be installed into panel in the same direction as the panel cutout is punched.

.084" Terminals

Split Pin (Male)



Socket (Female)

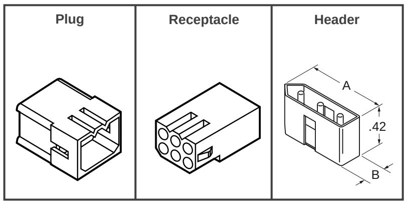


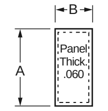
Description	Wire Size AWG Tin Plated	Insulation Dia. (Inch) Min.	Max.	Digi-Key Part No.	Pricing 10	100	500	1,000	Molex Part No.
Male Crimp	#14 to 20	.060	.130	WM1270-ND	1.79	14.88	59.50	89.25	02-08-2004
Female Crimp	#14 to 20	.060	.130	WM1271-ND	1.79	14.88	59.50	89.25	02-08-1002
Hand Tool	#14 to 20	—	—	WM9920-ND	204.82 each				11-01-0167
Extraction Tool	#14 to 20	—	—	WM9921-ND	58.21 each				11-01-0168

Power Connectors

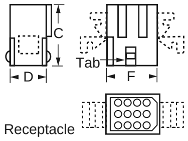
.093” Diameter Connectors

- UL File Number E-29179; CSA File Number LR-19980.
- Up to 12 amperes per circuit (ratings based on fully loaded housings).
- 250 Volt rating for 03-09 series; 600 Volt rating for 19-09 series
- Friction lock for 03-09 series; Positive lock for 19-09 series

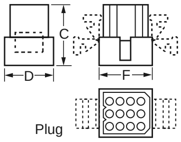




Panel Cutout

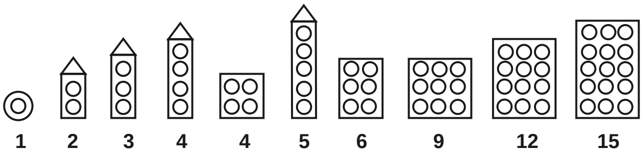


.198” x .198” Grid



.198” x .198” Grid

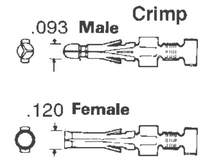
Grid Patterns

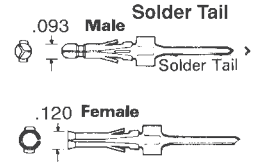


(contacts sold separately)

.093” Terminals

- Use with .093" housing
- **Temperature Range:** 40°C to 105°C • .010" stock 70/30 brass
- **High Voltage Test:** Withstands 1500 volts RMS for 60 seconds min. applied between adjacent terminals
- **Current Rating:** Amperage rating up to 12 amps on some sizes
- **Storage Temperature Range:** -40°C to 125°C
- **Plating:** 200-300µ Inch Hot-Tin Dip tin plating





Description	Wire Size	Insulation Dia. (Inch)	Digi-Key Part No.	Pricing 10	100	500	Molex Part No.
Male, Crimp Type	14-20	.065/.160	WM1100-ND	2.31	19.25	77.00	02-09-2103
Female, Crimp Type	14-20	.065/.160	WM1101-ND	2.31	19.25	77.00	02-09-1104
Male, Crimp Type	18-22	.060/.120	WM1102-ND	2.26	18.81	75.25	02-09-2118
Female, Crimp Type	18-22	.060/.120	WM1103-ND	2.31	19.25	77.00	02-09-1119
Male, Solder-Tail	—	—	WM1104-ND	1.98	16.50	66.00	02-09-2133
Female, Solder-Tail	—	—	WM1105-ND	1.98	16.50	66.00	02-09-1134
Male, Crimp Type	18-22	.060/.120	WM1106-ND*	9.66	80.50	322.00	02-09-6123
Female, Crimp Type	18-22	.060/.120	WM1107-ND*	14.04	117.00	468.00	02-09-5142
Male, Crimp Type	24-30	.030/.060	WM1108-ND*	15.36	128.00	512.00	02-09-6145
Female, Crimp Type	24-30	.030/.060	WM1109-ND*	15.36	128.00	512.00	02-09-5147
Male, Solder-Tail	—	—	WM1110-ND*	16.22	135.19	540.75	02-09-6132
Female, Solder-Tail	—	—	WM1111-ND*	18.63	155.25	621.00	02-09-5132
Hand Tool (Waldom)	—	—	WM9903-ND	13.57 each			W-HT-1919
(18-22 AWG) (Molex)	—	—	WM9923-ND	223.17 each			11-01-0084
Universal Crimp Tool (Molex)	—	—	WM9999-ND	33.81 each			63811-1000
Production Tool							
(24-30 AWG) (Molex)	—	—	WM9924-ND	179.55 each			11-01-0006
Extraction Tool (Molex)	—	—	WM9930-ND	18.42 each			11-03-0006

* 15µ Select Gold Finish

Cable Connector Designer Kits

WM9801-ND — Contains same as WM9800-ND but covers from single to 15-circuit designs (250V and up to 12A/circuit. 45 complete connectors with .093" (2.36mm) dia. pin size. Crimping tool, pin terminal ejector and case included **$51.57**

Grid Space	Circ. (a)	Type	Max. Amps	Volts	Dimensions (Inch) A	B	C	D	F	Digi-Key Part No.	Pricing 1	10	100	Molex Part No.
.093” Diameter Connector Housings — With Detent Only, Free Hanging														
.198”	1	Plug	12	5000	—	—	2.250	.437	—	WM1301-ND	.41	3.89	23.87	03-09-2014
		Receptacle	12	5000	—	—	1.859	.312	—	WM1300-ND	.40	3.82	23.44	03-09-1014
	1	Plug	12	250	—	—	1.000	.358	—	WM1303-ND	.36	3.37	20.69	03-09-2011
		Receptacle	12	250	—	—	1.000	.234	—	WM1302-ND	.36	3.37	20.69	03-09-1011
	2	Plug	12	250	.800	.375	1.000	.352	.639	WM1324-ND	.38	3.61	22.15	03-09-2022
		Receptacle	12	250	.725	.312	1.030	.250	.536	WM1331-ND	.38	3.61	22.15	03-09-1022
	3	Plug	12	250	.933	.375	.970	.340	.770	WM1325-ND	.48	4.52	27.74	03-09-2032
		Receptacle	12	250	.840	.312	1.015	.236	.670	WM1332-ND	.51	4.80	29.46	03-09-1032
	4	Plug	12	250	1.131	.375	1.000	.338	.971	WM1326-ND	.49	4.66	28.60	03-09-2042
		Receptacle	12	250	1.038	.312	1.000	.236	.868	WM1333-ND	.49	4.66	28.60	03-09-1042
	4(c)	Plug	12	250	.555	.695	1.024	.538	.538	WM1327-ND	.92	8.72	53.54	03-09-2049
		Receptacle	12	250	.500	.600	1.000	.434	.434	WM1334-ND	.94	8.93	54.83	03-09-1049
	5(d)	Plug	12	250	—	—	.969	.350	1.170	WM1315-ND	.66	6.23	38.27	03-09-2057
		Receptacle	12	250	—	—	1.000	.240	1.070	WM1314-ND	.66	6.23	38.27	03-09-1057
	6	Plug	9	250	.750	.695	1.000	.733	.536	WM1328-ND	.57	5.39	33.11	03-09-2062
		Receptacle	9	250	.718	.600	1.015	.632	.434	WM1335-ND	.57	5.39	33.11	03-09-1064
	9(e)	Plug	9	250	.937	.660	.970	.730	.770	WM1329-ND	.71	6.69	41.07	03-09-2092
		Receptacle	9	250	.828	.725	1.015	.625	.666	WM1336-ND	.71	6.69	41.07	03-09-1094
	12	Plug	7.5	250	1.155	.760	1.000	.737	.770	WM1330-ND	.79	7.46	45.80	03-09-2121
		Receptacle	7.5	250	1.050	.655	1.015	.633	.871	WM1337-ND	.77	7.32	44.94	03-09-1126
.248”	2(b)	Plug	12	600	—	—	1.031	.359	.656	WM1401-ND	.62	5.88	36.12	03-09-2028
		Receptacle	12	600	—	—	1.063	.265	.531	WM1400-ND	.62	5.88	36.12	03-09-1028
	4(b)	Plug	9	600	—	—	1.031	.359	1.156	WM1405-ND	.77	7.25	44.51	03-09-2048
		Receptacle	9	600	—	—	1.063	.265	1.032	WM1404-ND	.77	7.25	44.51	03-09-1047
.093” Diameter Connector Housings — With Mounting Ears & Detent, Panel Mount														
.198”	3	Plug	12	250	.933	.375	.970	.340	.770	WM1307-ND	.48	4.52	27.74	03-09-2031
		Receptacle	12	250	.840	.312	1.015	.236	.670	WM1338-ND	.52	4.90	30.10	03-09-1081
	4	Plug	12	250	1.131	.375	.969	.338	.971	WM1309-ND	.49	4.66	28.60	03-09-2041
		Receptacle	12	250	1.038	.312	1.000	.236	.868	WM1308-ND	.49	4.66	28.60	03-09-1041
	4(c)	Plug	12	250	.555	.695	.969	.538	.538	WM1311-ND	.77	7.32	44.94	03-09-2040
		Receptacle	12	250	.500	.600	1.000	.434	.434	WM1310-ND	.77	7.32	44.94	03-09-1040
	6	Plug	9	250	.750	.695	.969	.733	.536	WM1317-ND	.57	5.39	33.11	03-09-2061
		Receptacle	9	250	.718	.600	1.015	.632	.434	WM1316-ND	.57	5.39	33.11	03-09-1061
	9(e)	Plug	9	250	.937	.660	.970	.730	.770	WM1319-ND	.72	6.79	41.71	03-09-2091
		Receptacle	9	250	.828	.725	1.015	.625	.666	WM1318-ND	.71	6.69	41.07	03-09-1091
	12	Plug	7.5	250	1.155	.760	.969	.737	.975	WM1321-ND	.79	7.46	45.80	03-09-2122
		Receptacle	7.5	250	1.050	.665	1.015	.633	.871	WM1320-ND	.77	7.32	44.94	03-09-1125
	15	Receptacle	7.5	250	1.240	.655	1.015	.632	1.066	WM1322-ND	1.15	10.92	67.08	03-09-1154
.248”	2(b)	Plug	12	250	.800	.375	.968	.352	.639	WM1305-ND	.40	3.75	23.01	03-09-2021
		Receptacle	12	250	.725	.312	1.000	.250	.536	WM1304-ND	.38	3.61	22.15	03-09-1027
.250”	3	Plug	11	600	1.022	.365	1.100	.350	.862	WM1501-ND	.71	6.27	44.41	19-09-2031
		Receptacle	11	600	.920	.310	1.140	.250	.760	WM1776-ND	.75	7.00	44.94	19-09-1030
	4	Receptacle	9	600	1.168	.311	1.140	.250	.760	WM1502-ND	1.00	8.85	62.69	19-09-1041
	6	Plug	9	600	1.048	.658	1.100	.640	.886	WM1505-ND	1.02	9.03	63.96	19-09-2061
		Receptacle	9	600	.946	.608	1.140	.540	.790	WM1504-ND	1.02	9.03	63.96	19-09-1061
	9	Plug	8	600	1.048	.910	1.100	.890	.890	WM1507-ND	1.14	10.02	70.98	19-09-2091
		Receptacle	8	600	.948	.850	1.140	.790	.790	WM1506-ND	1.14	10.02	70.98	19-09-1091
	12	Plug	6	600	1.300	.910	1.100	.890	1.140	WM1509-ND	1.77	15.63	110.71	19-09-2122
		Receptacle	6	600	1.094	.850	1.140	.790	1.034	WM1508-ND	1.77	15.63	110.71	19-09-1121
	15	Plug	6	600	1.552	.910	1.100	.890	1.388	WM1511-ND	2.27	20.04	141.95	19-09-2153
		Receptacle	6	600	1.422	.850	1.140	.790	1.282	WM1510-ND	2.27	20.04	141.95	19-09-1151
.264”	1	Plug	12	600	.485	.343	.320	.320	.320	WM1601-ND	.33	3.15	19.35	19-09-2018
		Receptacle	12	600	—	—	—	.300	.400	WM1600-ND	.33	3.15	19.35	19-09-1019
	2	Plug	12	600	.800	.365	.635	.320	.580	WM1603-ND	.54	5.11	31.39	19-09-2028
		Receptacle	12	600	—	—	—	.300	.560	WM1602-ND	.54	5.11	31.39	19-09-1029
	3	Plug	11	600	1.022	.365	.862	.320	.848	WM1605-ND	.60	5.67	34.83	19-09-2038
		Receptacle	11	600	—	—	—	.300	.830	WM1604-ND	.60	5.67	34.83	19-09-1039
	4	Plug	9	600	1.270	.365	1.109	.321	1.110	WM1607-ND	.62	5.88	36.12	19-09-2048
		Receptacle	9	600	—	—	—	.300	1.090	WM1606-ND	.62	5.88	36.12	19-09-1049
	6	Plug	9	600	1.048	.658	.888	.604	.850	WM1609-ND	.70	6.62	40.64	19-09-2068
		Receptacle	9	600	—	—	—	.560	.830	WM1608-ND	.73	6.90	42.36	19-09-1069
	9	Plug	8	600	1.048	.909	.883	.868	.850	WM1611-ND	.80	7.53	46.23	19-09-2098
		Receptacle	8	600	—	—	—	.560	.830	WM1610-ND	.81	7.67	47.09	19-09-1099
	12	Plug	7	600	1.100	.910	1.140	.668	1.112	WM1613-ND	1.59	15.07	92.56	19-09-2128
		Receptacle	7	600	—	—	—	.830	.900	WM1612-ND	.95	8.96	55.04	19-09-1129
	15	Plug	6	600	1.552	.910	1.392	.868	1.380	WM1615-ND	1.32	12.50	76.76	19-09-2158
		Receptacle	6	600	—	—	—	.868	1.380	WM1614-ND	1.40	13.27	81.49	19-09-1159
.093” Diameter Shrouded Male Pin Header														
.198”	3	Header	5	250	.770	.330	—	—	—	WM1625-ND	2.40	19.92	127.10	10-18-1032
	4	Header	5	250	.970	.330	—	—	—	WM1626-ND	2.55	21.11	134.68	10-18-1041
	6	Header	5	250	.740	.540	—	—	—	WM1627-ND	2.71	22.48	143.38	10-18-1061
	9	Header	5	250	.770	.730	—	—	—	WM1628-ND	3.87	32.10	204.80	10-18-1090
	12	Header	5	250	.980	.740	—	—	—	WM1629-ND	5.17	42.80	273.06	10-18-1120

(a) Electrical ratings are per circuit.

(b) Center spacing .248” (6.30mm) will accommodate: 14, 16,and 18 AWG with 1/32” (.79mm) insulation – 16 with 18 AWG (double crimp), each with 1/32” (.79mm) insulation. WM1400-WM1405 housing have positive locking rather than detent lock.

(c) 4 circuits in square grid pattern.

(d) Has positive lock rather than detent lock.

(e) Mounting ears are molded flush with back edge of wire end. Not centered on side.

molex GC/Waldom Mini-Fit, Jr. Connectors

Positive Locking Hi-Density Power Connector

Current Carrying Capabilities: The Mini-Fit, Jr. can handle standard equipment I/O currents despite its small size. For example, the 2 circuit PCB connector can handle up to 9 amps at 250 volts.

Features: • UL recognized, CSA certified, and TUV licensed • Up to 9 amperes/circuit • 250 volt rating

Specifications: • **Material:** Terminal: Brass; Plating: Tin; Housing: UL 94V-2 nylon 6/6 • **Voltage Current:** 250V (Vertical Header with Pegs: 600V) • **Contact Resistance:** 10mΩ max. • **Insulation Resistance:** 1,000MΩ min. • **Dielectric Strength:** 1,500V AC

Fig. 1 – Receptacle Housing

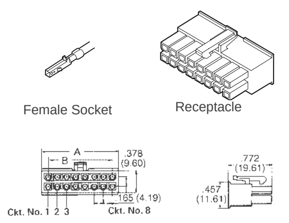


Fig. 2 – Plug Housing

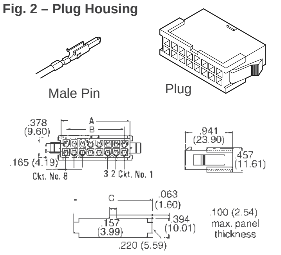


Fig. 3 – Vertical Header Assembly

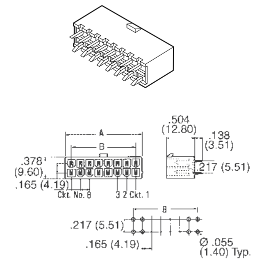


Fig. 4 – Right Angle Header

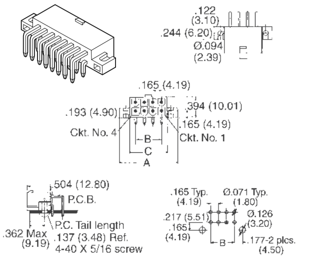


Fig. 5 – Single Row Receptacle

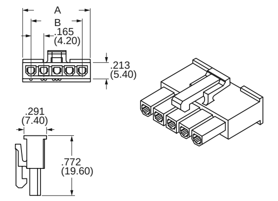
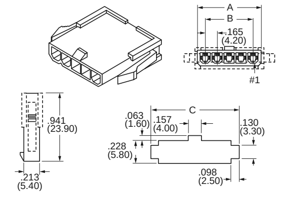
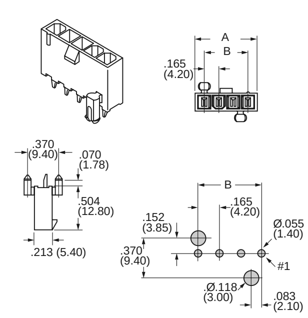


Fig. 6 – Single Row Plug



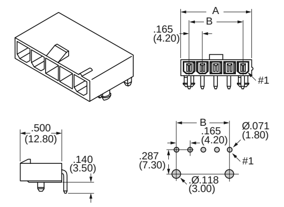
Max. Panel Thickness: .079" (2.00mm)

Fig. 7 – Vertical Header with Pegs



Panel Thickness: .070" (1.78mm)

Fig. 8 – Right Angle Header with Pegs



Panel Thickness: .070" (1.78mm)

Fig. 9 – Strain Relief use with 5557 Receptacle Series

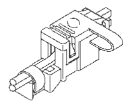
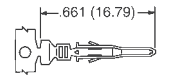


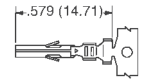
Fig.	Cir-cuits	Amps	Dim. – Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
1	2	9	.213 (5.40)	—	—	WM3700-ND	.44	.42	.27	39-01-2020
	4	8	.378 (9.60)	.165 (4.20)	—	WM3701-ND	.52	.49	.31	39-01-2040
	6	8	.543 (13.80)	.331 (8.40)	—	WM3702-ND	.62	.58	.37	39-01-2060
	8	7	.709 (18.00)	.496 (12.60)	—	WM3703-ND	.71	.66	.43	39-01-2080
	10	7	.874 (22.20)	.661 (16.80)	—	WM3704-ND	.79	.74	.48	39-01-2100
	12	6	1.039 (26.40)	.827 (21.00)	—	WM3705-ND	.84	.79	.51	39-01-2120
	14	6	1.205 (30.60)	.992 (25.20)	—	WM3706-ND	1.08	1.01	.65	39-01-2140
	16	6	1.370 (34.80)	1.158 (29.40)	—	WM3707-ND	1.32	1.23	.79	39-01-2160
	18	6	1.535 (39.00)	1.323 (33.60)	—	WM3708-ND	1.67	1.56	1.00	39-01-2180
	20	6	1.701 (43.20)	1.488 (37.80)	—	WM3709-ND	1.85	1.73	1.11	39-01-2200
	22	6	1.866 (47.40)	1.654 (42.00)	—	WM3710-ND	2.03	1.90	1.22	39-01-2220
	24	6	2.031 (51.60)	1.819 (46.20)	—	WM3711-ND	2.22	2.07	1.33	39-01-2240
2	2	9	.213 (5.40)	—	.425 (10.80)	WM3600-ND	.46	.43	.28	39-01-2021
	4	8	.378 (9.60)	.165 (4.20)	.591 (15.00)	WM3601-ND	.51	.48	.31	39-01-2041
	6	8	.543 (13.80)	.331 (8.40)	.756 (19.20)	WM3602-ND	.59	.55	.36	39-01-2061
	8	7	.709 (18.00)	.496 (12.60)	.921 (23.40)	WM3603-ND	.64	.60	.39	39-01-2081
	10	7	.874 (22.20)	.661 (16.80)	1.087 (27.60)	WM3604-ND	.71	.66	.43	39-01-2101
	12	6	1.039 (26.40)	.827 (21.00)	1.252 (31.80)	WM3605-ND	.75	.70	.45	39-01-2121
	14	6	1.205 (30.60)	.992 (25.20)	1.417 (36.00)	WM3606-ND	1.01	.95	.61	39-01-2141
	16	6	1.370 (34.80)	1.158 (29.40)	1.583 (40.20)	WM3607-ND	1.31	1.23	.79	39-01-2161
Tin Plated										
3	2	9	.210 (5.40)	—	—	WM3800-ND	.89	.83	.53	39-28-1023
	4	8	.380 (9.60)	.170 (4.20)	—	WM3801-ND	1.22	1.14	.74	39-28-1043
	6	8	.540 (13.80)	.330 (8.40)	—	WM3802-ND	1.56	1.46	.94	39-28-1063
	8	7	.710 (18.00)	.500 (12.60)	—	WM3803-ND	1.89	1.76	1.13	39-28-1083
	10	7	.870 (22.20)	.660 (16.80)	—	WM3804-ND	2.21	2.06	1.33	39-28-1103
	12	6	1.040 (26.40)	.825 (20.96)	—	WM3805-ND	2.54	2.37	1.52	39-28-1123
	14	6	1.200 (31.60)	.990 (25.20)	—	WM3806-ND	2.88	2.68	1.72	39-28-1143
	16	6	1.370 (34.80)	1.160 (29.40)	—	WM3807-ND	3.20	2.99	1.92	39-28-1163
	18	6	1.540 (39.00)	1.320 (33.60	—	WM3808-ND	4.05	3.78	2.43	39-28-1183
	20	6	1.700 (43.20)	1.490 (37.80)	—	WM3809-ND	4.50	4.20	2.69	39-28-1203
	22	6	1.870 (47.40)	1.650 (42.00)	—	WM3810-ND	4.95	4.61	2.96	39-28-1223
	24	6	2.030 (51.60)	1.820 (46.20)	—	WM3811-ND	5.40	5.03	3.23	39-28-1243
30 Gold Plated										
3	2	9	.210 (5.40)	—	—	WM3820-ND	1.83	1.70	1.10	39-29-0023
	4	8	.380 (9.60)	.170 (4.20)	—	WM3821-ND	3.20	2.98	1.91	39-29-0043
	6	8	.540 (13.80)	.330 (8.40)	—	WM3822-ND	4.60	4.29	2.75	39-29-0063
	8	7	.710 (18.00)	.500 (12.60)	—	WM3823-ND	5.97	5.56	3.57	39-29-0083
	10	7	.870 (22.20)	.660 (16.80)	—	WM3824-ND	7.34	6.84	4.39	39-29-0103
	12	6	1.040 (26.40)	.830 (21.00)	—	WM3825-ND	8.71	8.11	5.21	39-29-0123
	14	6	1.200 (30.60)	.990 (25.20)	—	WM3826-ND	10.11	9.41	6.04	39-29-0143
	16	6	1.370 (34.80)	1.160 (29.40)	—	WM3827-ND	11.49	10.70	6.87	39-29-0163
	18	6	1.540 (39.00)	1.320 (33.60	—	WM3828-ND	12.93	12.04	7.73	39-29-0183
	20	6	1.700 (43.20)	1.490 (37.80)	—	WM3829-ND	14.37	13.37	8.59	39-29-0203
	22	6	1.870 (47.40)	1.650 (42.00)	—	WM3830-ND	15.80	14.71	9.44	39-29-0223
	24	6	2.030 (51.60)	1.820 (46.20)	—	WM3831-ND	17.24	16.04	10.30	39-29-0243
Tin Plated										
4	2	9	.606 (15.40)	—	.213 (5.40)	WM3900-ND	1.08	1.01	.65	39-29-1028
	4	8	.772 (19.60)	.165 (4.20)	.378 (9.60)	WM3901-ND	1.48	1.38	.89	39-29-1048
	6	8	.937 (23.80)	.331 (23.80)	.543 (13.80)	WM3902-ND	1.88	1.75	1.13	39-29-1068
	8	7	1.102 (28.00)	12.60 (.496)	.709 (18.00)	WM3903-ND	2.29	2.14	1.37	39-29-1088
	10	7	1.268 (32.20)	.661 (16.80)	.874 (22.20)	WM3904-ND	2.68	2.50	1.60	39-29-1108
	12	6	1.433 (36.40)	.827 (21.00	1.039 (26.40)	WM3905-ND	3.08	2.87	1.84	39-29-1128
	14	6	1.598 (40.60)	.992 (25.20)	1.205 (30.60)	WM3906-ND	3.48	3.24	2.08	39-29-1148
	16	6	1.764 (44.80)	1.158 (29.40)	1.370 (34.80)	WM3907-ND	3.87	3.61	2.32	39-29-1168
	18	6	1.929 (49.00)	1.323 (33.60)	1.535 (39.00)	WM3908-ND	4.91	4.57	2.94	39-29-1188
	20	6	2.094 (53.20)	1.488 (37.80)	1.701 (43.20)	WM3909-ND	5.45	5.08	3.26	39-29-1208
	22	6	2.260 (57.40)	1.654 (42.00)	1.866 (47.40)	WM3910-ND	6.00	5.59	3.59	39-29-1228
	24	6	2.425 (61.60)	1.819 (46.20)	2.031 (51.60)	WM3911-ND	6.54	6.09	3.91	39-29-1248
Gold Plated										
4	2	9	.606 (15.40)	—	.213 (5.40)	WM3920-ND	2.97	2.76	1.78	39-29-5023
	4	8	.772 (19.60)	.165 (4.20)	.378 (9.60)	WM3921-ND	5.50	5.12	3.29	39-29-5043
	6	8	.937 (23.80)	.331 (8.40)	.543 (13.80)	WM3922-ND	6.77	6.30	4.05	39-29-5063
	8	7	1.102 (28.00)	.496 (12.60)	.709 (18.00)	WM3923-ND	8.93	8.31	5.34	39-29-5083
	10	7	1.268 (32.20)	.661 (16.80)	.874 (22.20)	WM3924-ND	11.09	10.32	6.63	39-29-5103
	12	6	1.433 (36.40)	.827 (21.00)	1.039 (26.40)	WM3925-ND	13.24	12.33	7.91	39-29-5123
	14	6	1.598 (40.60)	.992 (25.20)	1.205 (30.60)	WM3926-ND	15.31	14.26	9.15	39-29-5143
	16	6	1.764 (44.80)	1.158 (29.40)	1.370 (34.80)	WM3927-ND	17.56	16.34	10.49	39-29-5163
	18	6	1.929 (49.00)	1.323 (33.60)	1.535 (39.00)	WM3928-ND	19.04	17.73	11.38	39-29-5183
	20	6	2.094 (53.20)	1.488 (37.80)	1.701 (43.20)	WM3929-ND	21.95	20.43	13.11	39-29-5203
	22	6	2.260 (57.40)	1.654 (42.00)	1.866 (47.40)	WM3930-ND	24.14	22.47	14.42	39-29-5223
	24	6	2.425 (61.60)	1.819 (46.20)	2.031 (51.60)	WM3931-ND	27.02	25.15	16.14	39-29-5243
5	3	9	.543 (13.80)	.331 (8.40)	—	WM18434-ND*	.49	.46	.30	39-01-4030
	4	8	.709 (18.01)	.496 (12.60)	—	WM18435-ND	.55	.52	.34	39-01-4040
	5	8	.874 (22.20)	.661 (16.80)	—	WM18436-ND	.58	.55	.35	39-01-4050
6	3	9	.543 (13.80)	.331 (8.40)	.756 (19.20)	WM18437-ND*†	.49	.46	.30	39-01-4032
	3	9	.543 (13.80)	.331 (8.40)	.756 (19.20)	WM18439-ND*§	.49	.46	.30	39-01-4036
	4	8	.709 (18.01)	.496 (12.60)	.921 (23.40)	WM18440-ND§	.55	.51	.33	39-01-4046
	5	8	.874 (22.20)	.661 (16.80)	1.087 (27.60)	WM18438-ND§	.56	.53	.34	39-01-4052
	5	8	.874 (22.20)	.661 (16.80)	1.087 (27.60)	WM18441-ND§	.56	.53	.34	39-01-4056
7	3	9	.543 (13.80)	.331 (8.40)	—	WM18442-ND	1.18	1.10	.71	39-30-1039
	3	9	.543 (13.80)	.331 (8.40)	—	WM18443-ND	1.11	1.04	.67	39-30-2035
	4	8	.709 (18.01)	.496 (12.60)	—	WM18444-ND	1.81	1.69	1.09	39-30-2045
	5	8	.874 (22.20)	.661 (16.80)	—	WM18445-ND	2.02	1.88	1.21	39-30-2056
8	3	9	.543 (13.80)	.331 (8.40)	—	WM18446-ND	1.42	1.32	.85	39-30-3035
	4	8	.709 (18.01)	.496 (12.60)	—	WM18447-ND	1.59	1.49	.96	39-30-3045
	5	8	.874 (22.20)	.661 (16.80)	—	WM18448-ND	1.81	1.69	1.08	39-30-3055
Strain Relief (use with Fig. 1)										
9	6	—	—	—	—	WM13702-ND	2.91	—	—	15-04-0296
	8	—	—	—	—	WM13703-ND	3.04	—	—	15-04-0343
	12	—	—	—	—	WM13705-ND	3.29	—	—	15-04-0345

***** 3-circuit receptacle designed for first-mate/last-break applications † Panel Mount § Free-Hanging

Mini-Fit Jr. Terminals

Plating: Tin Plated Brass
(† High copper alloy)



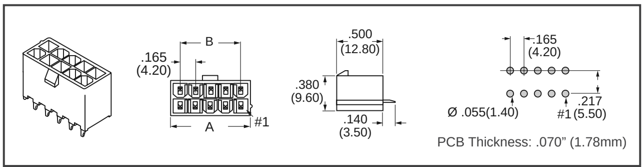


Description	Wire Size	Insulation Dia. Inch (mm)	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
Male	AWG # 18-24	.051 - .118 (1.30 - 3.00)	WM2500-ND	—	.37	.22	39-00-0041
Female	AWG # 18-24	.051 - .118 (1.30 - 3.00)	WM2501-ND	—	.37	.22	39-00-0039
Male	AWG # 22-28	.035 - .071 (.89 - 1.80)	WM2502-ND	—	.37	.22	39-00-0049
Female	AWG # 22-28	.035 - .071 (.89 - 1.80)	WM2503-ND	—	.37	.22	39-00-0047
Male	16	.071 - .122 (1.80 - 3.10)	WM1911-ND†	.34	.32	.21	44478-3112
Female	16	.071 - .122 (1.80 - 3.10)	WM1913-ND†	.34	.32	.21	44476-3112
Male	18-24	.051 - .122 (1.30 - 3.10)	WM1912-ND†	.34	.32	.21	44478-1112
Female	18-24	.051 - .122 (1.30 - 3.10)	WM1914-ND†	.34	.32	.21	44476-1112
Male	18-24	.051 - .122 (1.30 - 3.10)	WM3940-ND*	.24	.23	.15	30490-2012
Male	18-24	.051 - .122 (1.30 - 3.10)	WM3941-ND*§	1.03	.96	.62	30490-1012
Universal Crimp Tool (Molex)			WM9999-ND	33.81	—	—	63811-1000
Mini-Fit Jr. Crimp Tool, 18-24 AWG			WM9912-ND	234.93	—	—	11-01-0197
Mini-Fit Jr. Crimp Tool, 22-28 AWG			WM9913-ND	234.93	—	—	11-01-0198
Extraction Tool			WM9918-ND	30.40	—	—	11-03-0044

† High copper alloy plating — offers another 3 amps of current ***** Grounding pin § Gold

Mini-Fit, HCS Connectors

Dual Row, Vertical, Without Pegs



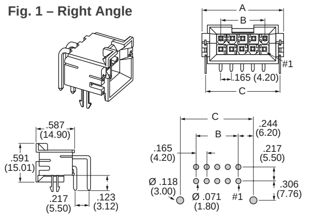
PCB Thickness: .070" (1.78mm)

Cir-cuits	Amps	Dimensions Inch (mm) A	B	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
2	12	.210 (5.40)	—	WM18449-ND	1.22	1.14	.74	44472-0254
4	11	.380 (9.60)	.170 (4.20)	WM18450-ND	1.90	1.78	1.14	44472-0454
6	11	.540 (13.80)	.330 (8.40)	WM18451-ND	2.57	2.40	1.54	44472-0654
8	10	.710 (18.00)	.500 (12.60)	WM18452-ND	3.25	3.03	1.94	44472-0854
10	10	.870 (22.20)	.660 (16.80)	WM18453-ND	3.91	3.65	2.34	44472-1054
12	9	1.040 (26.40)	.830 (21.00)	WM18454-ND	4.58	4.26	2.74	44472-1254
14	9	1.200 (30.60)	.990 (25.20)	WM18455-ND	5.26	4.90	3.14	44472-1454
16	9	1.370 (34.80)	1.160 (29.40)	WM18456-ND	5.92	5.51	3.54	44472-1654

Mini-Fit, SMC Connectors

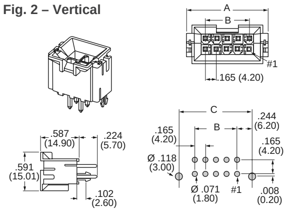
Surface Mount Compatible Headers, Dual Row

Fig. 1 – Right Angle



PCB Thickness: .063" (1.60mm)

Fig. 2 – Vertical



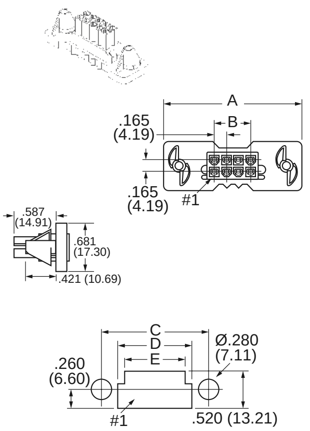
PCB Thickness: .063" (1.60mm)

Fig.	Cir-cuits	Dim. – Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
1	4	.740 (18.81)	.165 (4.20)	.653 (16.60)	WM18457-ND	2.37	2.21	1.42	43810-0001
	6	.906 (23.01)	.331 (8.40)	.819 (20.80)	WM18458-ND	3.59	3.35	2.15	43810-0002
	10	1.237 (31.41)	.661 (16.80)	1.150 (29.20)	WM18459-ND	5.14	4.79	3.08	43810-0004
2	4	.740 (18.81)	.165 (4.20)	.653 (16.60)	WM18460-ND	2.59	2.42	1.55	44068-0001
	6	.906 (23.01)	.331 (8.40)	.819 (20.80)	WM18461-ND	3.34	3.12	2.00	44068-0002
	10	1.237 (31.41)	.661 (16.80)	1.150 (29.20)	WM18462-ND	4.26	3.97	2.55	44068-0004

molex GC/Waldom

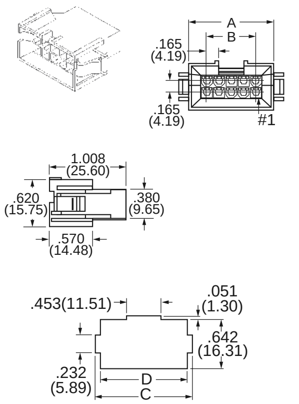
Mini-Fit BMI Connectors

Fig. 1 - Receptacle w/Panel Mount Ears



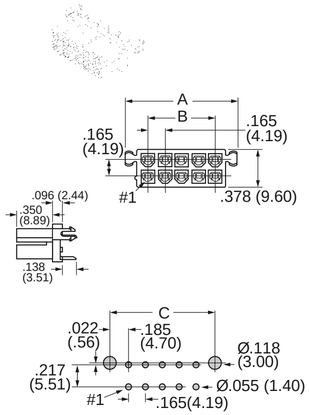
PCB Thickness: .050 (1.27)
PCB Cutout

Fig. 2 - Plug w/Panel Mount Ears



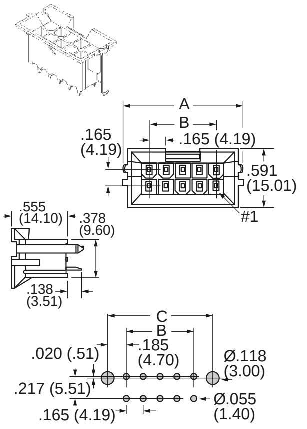
PCB Thickness: .063 (1.60)
PCB Cutout

Fig. 3 - Vertical Receptacle Header



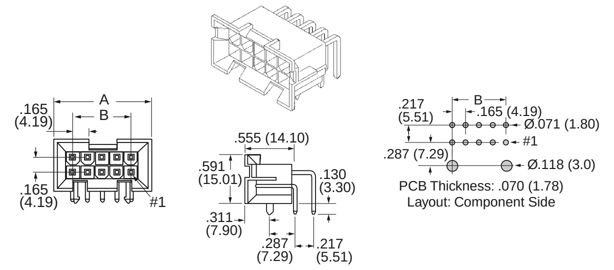
PCB Thickness: .070 (1.78)
Layout: Component Side

Fig. 4 - Vertical Header



PCB Thickness: .070 (1.78)
Layout: Component Side

Fig. 5 - Right Angle Header



PCB Thickness: .070 (1.78)
Layout: Component Side

Features and Benefits: • Blind mating • Will mate with Mini-Fit, Jr. • Fully isolated terminals to protect contacts from damage • Uses standard Mini-Fit series terminals • UL File No.: E29179 • CSA File No.: LR19980 • TUV License No.: R75142

Specifications: • **Voltage:** 600V • **Current:** 9.0A • **Contact Resistance:** 10mΩ min. **Dielectric Withstanding Voltage:** 1500V **Insulation Resistance:** 1000 mΩ min.

Physical: • **Housing:** 6/6 nylon, UL 94V-2 • **Temperature:** -40°C to +105°C

Fig.	Cir-cuits	Dimensions – Inch (mm) A	B	C	D	E	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
Receptacle w/Panel Mount Ears											
1	4	1.583 (40.21)	.165 (4.19)	1.150 (29.21)	.693 (17.60)	.508 (12.90)	WM17500-ND	.95	.89	.57	15-06-0040
	6	1.748 (44.40)	.331 (8.41)	1.315 (33.40)	.858 (21.79)	.673 (17.09)	WM17501-ND	1.15	1.08	.69	15-06-0060
	10	2.078 (52.78)	.661 (16.79)	1.645 (41.78)	1.189 (30.20)	1.004 (25.50)	WM17502-ND	1.46	1.36	.88	15-06-0100
	14	2.409 (61.19)	.992 (25.20)	1.976 (50.19)	1.520 (38.61)	1.335 (33.91)	WM17503-ND	2.00	1.87	1.20	15-06-0140
Plug w/Panel Mount Ears											
2	4	.622 (15.80)	.165 (4.19)	.779 (19.79)	.642 (16.31)	—	WM17700-ND	.72	.67	.43	15-06-0045
	6	.787 (19.99)	.331 (8.41)	.945 (20.50)	.807 (20.50)	—	WM17701-ND	.84	.78	.50	15-06-0065
	10	1.118 (52.78)	.661 (16.79)	1.276 (28.91)	1.138 (28.91)	—	WM17702-ND	1.00	.93	.60	15-06-0105
	14	1.449 (36.80)	.992 (25.20)	1.606 (38.61)	1.469 (37.31)	—	WM17703-ND	1.41	1.32	.85	15-06-0145
Vertical Receptacle Header											
3	4	.615 (15.62)	.165 (4.19)	.535 (13.59)	—	—	WM17600-ND	2.21	2.06	1.32	15-24-7040
	6	.780 (19.81)	.331 (8.41)	.701 (17.81)	—	—	WM17601-ND	2.51	2.34	1.50	15-24-7060
	10	1.111 (28.22)	.661 (16.79)	1.031 (26.19)	—	—	WM17602-ND	3.56	3.32	2.13	15-24-7100
	14	1.442 (36.63)	.992 (25.20)	1.362 (34.59)	—	—	WM17603-ND	4.63	4.31	2.77	15-24-7140
Vertical Header											
4	4	.685 (17.40)	.170 (4.32)	.535 (13.59)	—	—	WM17900-ND	1.92	1.79	1.15	15-24-6046
	10	1.181 (30.00)	.660 (16.76)	1.031 (26.19)	—	—	WM17901-ND	3.10	2.89	1.86	15-24-6106
	14	1.512 (38.40)	.990 (25.15)	1.362 (34.59)	—	—	WM17902-ND	4.02	3.75	2.41	15-24-6146
Right Angle Header											
5	4	.165 (4.19)	.590 (14.99)	—	—	—	WM17800-ND	2.07	1.93	1.24	15-24-6040
	6	.760 (19.30)	.331 (8.41)	—	—	—	WM17801-ND	2.63	2.45	1.57	15-24-6060
	10	1.090 (27.69)	.661 (16.79)	—	—	—	WM17802-ND	3.75	3.49	2.24	15-24-6100
	14	1.420 (36.07)	.992 (25.20)	—	—	—	WM17803-ND	4.86	4.53	2.91	15-24-6140

Micro-Fit 3.0™ Connectors

Dimensions in mm

Features:
• Fully isolated contacts • Fully polarized to mating receptacle • Integral pull tabs for ease in unmating.

Electrical:
Voltage: 250V. *Current:* 5.0A maximum. *Contact Resistance*: 10mΩ maximum. *Dielectric Withstanding Voltage:* 1500V AC. *Insulation Resistance*: 1,000MΩ mininum.

Physical:
Housing: Polyester, UL 94V-0. *Contact:* Phosphor Bronze. *Plating:* Tin or Gold.

Fig. 1 – Plug

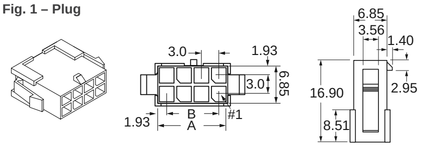


Fig. 2 – Receptacle

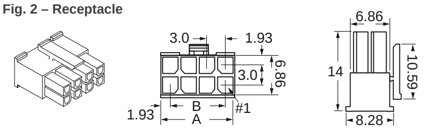


Fig. 3 – Vertical Header

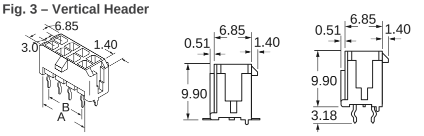


Fig. 4 – Right Angle Header

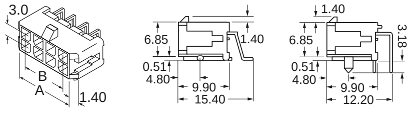


Fig. 5 – Micro-Fit Receptacle

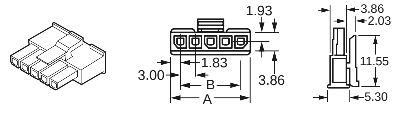


Fig. 6 – Micro-Fit Plug without Panel Mounts

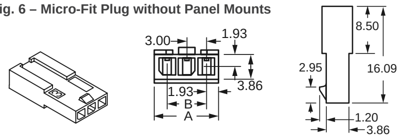


Fig. 7 – Micro-Fit Plug with Panel Mounts

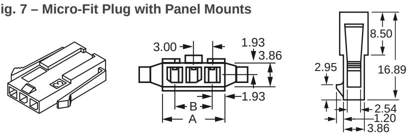


Fig. 8 – Micro-Fit Header - Right Angle

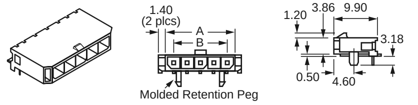


Fig. 9 – Micro-Fit Header - Right Angle with Retention Clip

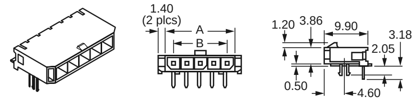


Fig. 10 – Micro-Fit Header - Right Angle, SMT with Retention Clip

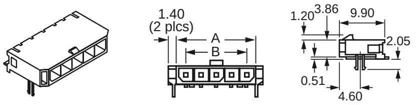


Fig. 11 – Micro-Fit Header - Right Angle, SMT with Fitting Nail

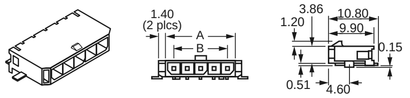


Fig. 12 – Micro-Fit Header - Right Angle, SMT with Retention Peg

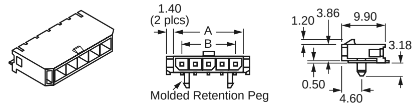


Fig. 13 – Micro-Fit Header - Vertical Wire-to-Board

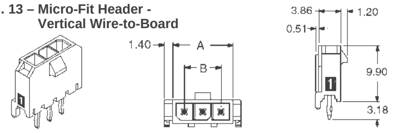


Fig.	Cir- cuits	Dim. (mm)		Plating	Digi-Key Part No.	Price Each			Molex Part No.
		A	B			1	10	100	
Plug - Panel Mount (uses male terminal)									
1	2	3.85	—	—	WM1777-ND	.53	.50	.32	43020-0200
	4	6.85	3.00	—	WM1778-ND	.62	.58	.37	43020-0400
	6	9.85	6.00	—	WM1779-ND	.75	.70	.45	43020-0600
	8	12.85	9.00	—	WM1780-ND	.85	.80	.51	43020-0800
	10	15.85	12.00	—	WM1781-ND	.99	.93	.60	43020-1000
	12	18.85	15.00	—	WM1782-ND	1.17	1.09	.70	43020-1200
Receptacle (uses female terminal)									
2	2	3.85	—	—	WM1783-ND	.53	.50	.32	43025-0200
	4	6.85	3.00	—	WM1784-ND	.62	.58	.37	43025-0400
	6	9.85	6.00	—	WM1785-ND	.75	.70	.45	43025-0600
	8	12.85	9.00	—	WM1786-ND	.85	.80	.51	43025-0800
	10	15.85	12.00	—	WM1787-ND	.99	.93	.60	43025-1000
	12	18.85	15.00	—	WM1788-ND	1.17	1.09	.70	43025-1200
Vertical Header - Through-Hole with Offset Terminal Retention									
3	2	3.85	—	Tin	WM1789-ND	1.15	1.08	.69	43045-0212
	4	6.85	3.00	Tin	WM1790-ND	1.59	1.49	.96	43045-0412
	6	9.85	6.00	Tin	WM1791-ND	2.02	1.89	1.21	43045-0612
	8	12.85	9.00	Tin	WM1792-ND	2.46	2.29	1.47	43045-0812
	10	15.85	12.00	Tin	WM1793-ND	2.88	2.68	1.72	43045-1012
	12	18.85	15.00	Tin	WM1794-ND	3.30	3.07	1.97	43045-1212
3	2	3.85	—	Gold, 30µ"	WM1795-ND	1.81	1.69	1.09	43045-0214
	4	6.85	3.00	Gold, 30µ"	WM1796-ND	2.51	2.34	1.50	43045-0414
	6	9.85	6.00	Gold, 30µ"	WM1797-ND	3.19	2.97	1.91	43045-0614
	8	12.85	9.00	Gold, 30µ"	WM1798-ND	3.87	3.60	2.31	43045-0814
	10	15.85	12.00	Gold, 30µ"	WM1799-ND	4.55	4.24	2.72	43045-1014
	12	18.85	15.00	Gold, 30µ"	WM1800-ND	5.21	4.85	3.12	43045-1214
Vertical Header - SMT with Fitting Nail									
3	2	3.85	—	Tin	WM1801-ND	3.10	2.89	1.86	43045-0218
	4	6.85	3.00	Tin	WM1802-ND	3.59	3.35	2.15	43045-0418
	6	9.85	6.00	Tin	WM1803-ND	4.08	3.80	2.44	43045-0618
	8	12.85	9.00	Tin	WM1804-ND	4.67	4.35	2.80	43045-0818
	10	15.85	12.00	Tin	WM1805-ND	5.14	4.79	3.08	43045-1018
	12	18.85	15.00	Tin	WM1806-ND	5.62	5.23	3.36	43045-1218
3	2	3.85	—	Gold, 30µ"	WM1807-ND	3.84	3.58	2.30	43045-0220
	4	6.85	3.00	Gold, 30µ"	WM1808-ND	4.62	4.30	2.76	43045-0420
	6	9.85	6.00	Gold, 30µ"	WM1809-ND	5.38	5.01	3.22	43045-0620
	8	12.85	9.00	Gold, 30µ"	WM1810-ND	6.25	5.82	3.74	43045-0820
	10	15.85	12.00	Gold, 30µ"	WM1811-ND	7.01	6.53	4.19	43045-1020
	12	18.85	15.00	Gold, 30µ"	WM1812-ND	7.76	7.22	4.64	43045-1220
Right Angle Header - Through-Hole									
4	2	3.85	—	Tin	WM1813-ND	1.40	1.31	.84	43045-0200
	4	6.85	3.00	Tin	WM1814-ND	1.93	1.80	1.16	43045-0400
	6	9.85	6.00	Tin	WM1815-ND	2.44	2.27	1.46	43045-0600
	8	12.85	9.00	Tin	WM1816-ND	2.97	2.77	1.78	43045-0800
	10	15.85	12.00	Tin	WM1817-ND	3.48	3.25	2.09	43045-1000
	12	18.85	15.00	Tin	WM1818-ND	4.00	3.73	2.39	43045-1200
4	2	3.85	—	Gold, 30µ"	WM1819-ND	2.21	2.06	1.33	43045-0202
	4	6.85	3.00	Gold, 30µ"	WM1820-ND	3.03	2.83	1.82	43045-0402
	6	9.85	6.00	Gold, 30µ"	WM1821-ND	3.84	3.58	2.30	43045-0602
	8	12.85	9.00	Gold, 30µ"	WM1822-ND	4.69	4.37	2.80	43045-0802
	10	15.85	12.00	Gold, 30µ"	WM1823-ND	5.48	5.11	3.28	43045-1002
	12	18.85	15.00	Gold, 30µ"	WM1824-ND	6.30	5.87	3.77	43045-1202
Right Angle Header - SMT with Fitting Nail									
4	2	3.85	—	Tin	WM1825-ND	3.00	2.79	1.79	43045-0209
	4	6.85	3.00	Tin	WM1826-ND	3.63	3.38	2.17	43045-0409
	6	9.85	6.00	Tin	WM1827-ND	4.21	3.92	2.52	43045-0609
	8	12.85	9.00	Tin	WM1828-ND	4.93	4.59	2.95	43045-0809
	10	15.85	12.00	Tin	WM1829-ND	5.51	5.13	3.30	43045-1009
	12	18.85	15.00	Tin	WM1830-ND	6.08	5.66	3.64	43045-1209
4	2	3.85	—	Gold, 30µ"	WM1831-ND	3.91	3.64	2.34	43045-0211
	4	6.85	3.00	Gold, 30µ"	WM1832-ND	4.87	4.54	2.91	43045-0411
	6	9.85	6.00	Gold, 30µ"	WM1833-ND	5.77	5.37	3.45	43045-0611
	8	12.85	9.00	Gold, 30µ"	WM1834-ND	6.85	6.38	4.09	43045-0811
	10	15.85	12.00	Gold, 30µ"	WM1835-ND	7.74	7.21	4.63	43045-1011
	12	18.85	15.00	Gold, 30µ"	WM1836-ND	8.67	8.07	5.18	43045-1211
Micro-Fit Receptacle									
5	2	6.85	3.00	—	WM1845-ND	.53	.50	.32	43645-0200
	3	9.85	6.00	—	WM1846-ND	.58	.54	.35	43645-0300
	4	12.85	9.00	—	WM1847-ND	.62	.58	.37	43645-0400
	5	15.85	12.00	—	WM1848-ND	.69	.64	.42	43645-0500
	6	18.85	15.00	—	WM1849-ND	.75	.70	.45	43645-0600
Micro-Fit Plug without Panel Mounts									
6	2	6.85	3.00	—	WM1855-ND	.53	.50	.32	43640-0201
	3	9.85	6.00	—	WM1856-ND	.58	.54	.35	43640-0301
	4	12.85	9.00	—	WM1857-ND	.62	.58	.37	43640-0401
	5	15.85	12.00	—	WM1858-ND	.69	.64	.42	43640-0501
	6	18.85	15.00	—	WM1859-ND	.75	.70	.45	43640-0601
Micro-Fit Plug with Panel Mounts									
7	2	6.85	3.00	—	WM1850-ND	.53	.50	.32	43640-0200
	3	9.85	6.00	—	WM1851-ND	.58	.54	.35	43640-0300
	4	12.85	9.00	—	WM1852-ND	.62	.58	.37	43640-0400
	5	15.85	12.00	—	WM1853-ND	.69	.64	.42	43640-0500
	6	18.85	15.00	—	WM1854-ND	.75	.70	.45	43640-0600
Micro-Fit Header - Right Angle									
8	2	6.85	3.00	Tin	WM1860-ND	1.93	1.80	1.16	43650-0200
	3	9.85	6.00	Tin	WM1861-ND	2.20	2.05	1.32	43650-0300
	4	12.85	9.00	Tin	WM1862-ND	2.46	2.29	1.47	43650-0400
	5	15.85	12.00	Tin	WM1863-ND	2.71	2.53	1.63	43650-0500
	6	18.85	15.00	Tin	WM1864-ND	2.97	2.76	1.78	43650-0600
8	2	6.85	3.00	Gold	WM1865-ND	2.29	2.14	1.37	43650-0201
	3	9.85	6.00	Gold	WM1866-ND	2.61	2.44	1.57	43650-0301
	4	12.85	9.00	Gold	WM1867-ND	2.94	2.74	1.76	43650-0401
	5	15.85	12.00	Gold	WM1868-ND	3.26	3.04	1.95	43650-0501
	6	18.85	15.00	Gold	WM1869-ND	3.58	3.33	2.14	43650-0601
Micro-Fit Header - Right Angle with Retention Clip									
9	2	6.85	3.00	Tin	WM1870-ND	2.95	2.75	1.77	43650-0203
	3	9.85	6.00	Tin	WM1871-ND	3.27	3.05	1.96	43650-0303
	4	12.85	9.00	Tin	WM1872-ND	3.59	3.34	2.15	43650-0403
	5	15.85	12.00	Tin	WM1873-ND	3.87	3.61	2.32	43650-0503
	6	18.85	15.00	Tin	WM1874-ND	4.16	3.88	2.49	43650-0603
9	2	6.85	3.00	Gold	WM1875-ND	3.35	3.12	2.01	43650-0204
	3	9.85	6.00	Gold	WM1876-ND	3.74	3.49	2.24	43650-0304
	4	12.85	9.00	Gold	WM1877-ND	4.13	3.84	2.47	43650-0404
	5	15.85	12.00	Gold	WM1878-ND	4.49	4.18	2.68	43650-0504
	6	18.85	15.00	Gold	WM1879-ND	4.85	4.52	2.90	43650-0604
Micro-Fit Header - Right Angle, SMT with Retention Clip									
10	2	6.85	3.00	Tin	WM1880-ND	3.38	3.15	2.02	43650-0209
	3	9.85	6.00	Tin	WM1881-ND	3.70	3.44	2.21	43650-0309
	4	12.85	9.00	Tin	WM1882-ND	4.01	3.74	2.40	43650-0409
	5	15.85	12.00	Tin	WM1883-ND	4.30	4.01	2.57	43650-0509
	6	18.85	15.00	Tin	WM1884-ND	4.59	4.28	2.75	43650-0609
10	2	6.85	3.00	Gold	WM1885-ND	3.78	3.52	2.26	43650-0210
	3	9.85	6.00	Gold	WM1886-ND	4.17	3.88	2.49	43650-0310
	4	12.85	9.00	Gold	WM1887-ND	4.55	4.24	2.72	43650-0410
	5	15.85	12.00	Gold	WM1888-ND	4.91	4.58	2.94	43650-0510
	6	18.85	15.00	Gold	WM1889-ND	5.28	4.92	3.16	43650-0610

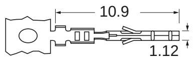
(Continued)

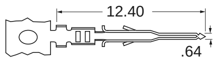
Micro-Fit 3.0™ Connectors (Cont.)

Fig.	Cir-cuits	Dim. (mm) A	B	Plating	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
Micro-Fit Header - Right Angle, SMT with Fitting Nail									
11	2	6.85	3.00	Tin	WM1890-ND	3.53	3.29	2.11	43650-0212
	3	9.85	6.00	Tin	WM1891-ND	3.84	3.58	2.30	43650-0312
	4	12.85	9.00	Tin	WM1892-ND	4.16	3.88	2.49	43650-0412
	5	15.85	12.00	Tin	WM1893-ND	4.45	4.15	2.66	43650-0512
	6	18.85	15.00	Tin	WM1894-ND	4.74	4.41	2.83	43650-0612
11	2	6.85	3.00	Gold	WM1895-ND	3.93	3.66	2.35	43650-0213
	3	9.85	6.00	Gold	WM1896-ND	4.32	4.02	2.58	43650-0313
	4	12.85	9.00	Gold	WM1897-ND	4.70	4.38	2.81	43650-0413
	5	15.85	12.00	Gold	WM1898-ND	5.06	4.71	3.03	43650-0513
	6	18.85	15.00	Gold	WM1899-ND	5.43	5.05	3.25	43650-0613
Micro-Fit Header - Right Angle, SMT with Retention Peg									
12	2	6.85	3.00	Tin	WM1900-ND	2.64	2.46	1.58	43650-0206
	3	9.85	6.00	Tin	WM1901-ND	2.96	2.76	1.77	43650-0306
	4	12.85	9.00	Tin	WM1902-ND	3.28	3.05	1.96	43650-0406
	5	15.85	12.00	Tin	WM1903-ND	3.56	3.32	2.13	43650-0506
	6	18.85	15.00	Tin	WM1904-ND	3.85	3.59	2.31	43650-0606
12	2	6.85	3.00	Gold	WM1905-ND	3.04	2.84	1.82	43650-0207
	3	9.85	6.00	Gold	WM1906-ND	3.43	3.20	2.05	43650-0307
	4	12.85	9.00	Gold	WM1907-ND	3.82	3.56	2.28	43650-0407
	5	15.85	12.00	Gold	WM1908-ND	4.18	3.89	2.50	43650-0507
	6	18.85	15.00	Gold	WM1909-ND	4.54	4.23	2.72	43650-0607
Micro-Fit Header - Vertical, Wire-to-Board									
13	2	6.85	3.00	Tin	WM1917-ND	1.93	1.80	1.16	43650-0215
	3	9.85	6.00	Tin	WM1918-ND	2.20	2.05	1.32	43650-0315
	4	12.85	9.00	Tin	WM1919-ND	2.46	2.29	1.47	43650-0415
	5	15.85	12.00	Tin	WM1920-ND	2.71	2.53	1.63	43650-0515
	6	18.85	15.00	Tin	WM1921-ND	2.97	2.76	1.78	43650-0615

Fig.	Cir-cuits	Dim. (mm) A	B	Plating	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
13	2	6.85	3.00	Gold, 15µ"	WM1922-ND	2.29	2.14	1.37	43650-0216
	3	9.85	6.00	Gold, 15µ"	WM1923-ND	2.61	2.44	1.57	43650-0316
	4	12.85	9.00	Gold, 15µ"	WM1924-ND	2.94	2.74	1.76	43650-0416
	5	15.85	12.00	Gold, 15µ"	WM1925-ND	3.26	3.04	1.95	43650-0516
	6	18.85	15.00	Gold, 15µ"	WM1926-ND	3.58	3.33	2.14	43650-0616

Micro-Fit 3.0™ Terminals





Description	Wire Size AWG	Insul. Dia. (mm)	Digi-Key Part No.	Price Each 10	100	500	Molex Part No.
Loose Female-Tin	20-24	1.85	WM1837-ND	.36	.22	.18	43030-0007
Loose Female-Tin	26-30	1.27	WM1838-ND	.36	.22	.18	43030-0010
Loose Female-30µ" Gold	20-24	1.85	WM1839-ND	.31	.18	.15	43030-0009
Loose Female-30µ" Gold	26-30	1.27	WM1840-ND	.31	.18	.15	43030-0012
Loose Male-Tin	20-24	1.85	WM1841-ND	.36	.22	.18	43031-0007
Loose Male-Tin	26-30	1.27	WM1842-ND	.36	.22	.18	43031-0010
Loose Male-30µ" Gold	20-24	1.85	WM1843-ND	.35	.21	.17	43031-0009
Loose Male-30µ" Gold	26-30	1.27	WM1844-ND	.35	.21	.17	43031-0012
Universal Crimp Tool (Molex)........................			WM9999-ND	33.81 each			63811-1000
Crimp Tool			WM9935-ND	213.23 each			63811-2800
Extraction Tool.......................................			WM9937-ND	19.39 each			11-03-0043

Mini-Fit, Sr.™ Connectors (50 Amps)

Features: • High current (50 amp) • Fully polarized • Positive locks • Low engagement force • Wire-to-wire, wire-to-board.**Electrical:** *Voltage:* 600V. *Current:* 50A max. **Physical:** *Housing:* Polyester. *Contact:* Copper alloy. *Plating:* Tin/lead over nickel. *Temperature:* -40°C to +105°C **Approvals:** UL File No.: E29179, CSA File No.: LR19980, TUV License No.: R9751144

Fig. 1 — Mini-Fit, Sr. Receptacle Housing

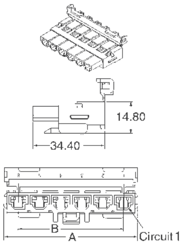


Fig. 2 — Mini-Fit, Sr. Plug Housing

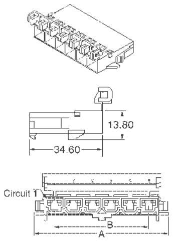


Fig. 3 — Mini-Fit, Sr. Header - Vertical with Metal Clip Mount SMC

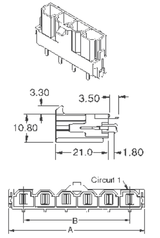


Fig. 4 — Mini-Fit, Sr. Header - Right Angle with Metal Clip Mount SMC

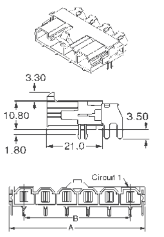


Fig.	Cir-cuits	Dim. (mm) A	B	Plating	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
Mini-Fit, Sr. Receptacle Housing									
1	2	23.50	10.00	Tin	WM1927-ND	1.77	1.65	1.06	42816-0212
	3	33.50	20.00	Tin	WM1928-ND	1.99	1.86	1.20	42816-0312
	4	43.50	30.00	Tin	WM1929-ND	2.21	2.06	1.33	42816-0412
	5	53.50	40.00	Tin	WM1930-ND	2.44	2.27	1.46	42816-0512
	6	63.50	50.00	Tin	WM1931-ND	2.66	2.48	1.59	42816-0612
Mini-Fit, Sr. Plug Housing — Panel Mount									
2	2	31.30	10.00	Tin	WM1932-ND	1.77	1.65	1.06	42818-0212
	3	41.30	20.00	Tin	WM1933-ND	1.99	1.86	1.20	42818-0312
	4	51.30	30.00	Tin	WM1934-ND	2.21	2.06	1.33	42818-0412
	5	61.30	40.00	Tin	WM1935-ND	2.44	2.27	1.46	42818-0512
	6	71.30	50.00	Tin	WM1936-ND	2.66	2.48	1.59	42818-0612
Mini-Fit, Sr. Header — Vertical with Metal Clip Mount, SMC									
3	2	23.82	10.00	Tin	WM1937-ND	4.06	3.78	2.43	42819-2212
	3	33.82	20.00	Tin	WM1938-ND	5.27	4.91	3.15	42819-3212
	4	43.82	30.00	Tin	WM1939-ND	6.05	5.64	3.62	42819-4212
	5	53.82	40.00	Tin	WM1940-ND	6.92	6.45	4.14	42819-5212
	6	63.82	50.00	Tin	WM1941-ND	8.19	7.63	4.90	42819-6212
Mini-Fit, Sr. Header — Right Angle with Metal Clip Mount, SMC									
4	2	23.82	10.00	Tin	WM1942-ND	5.48	5.11	3.28	42820-2212
	3	33.82	20.00	Tin	WM1943-ND	7.46	6.94	4.46	42820-3212
	4	43.82	30.00	Tin	WM1944-ND	8.90	8.29	5.32	42820-4212
	5	53.82	40.00	Tin	WM1945-ND	10.35	9.63	6.18	42820-5212
	6	63.82	50.00	Tin	WM1946-ND	12.47	11.61	7.45	42820-6212

Mini-Fit, Sr.™ Terminals

Fig. 1 — Mini-Fit, Sr. Terminal, Female

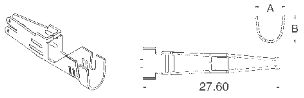


Fig. 2 — Mini-Fit, Sr. Terminal, Male

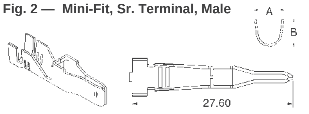


Fig.	Wire Size AWG	Dim. (mm) A	B	Plating	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
Mini-Fit, Sr. Terminal — Female									
1	12 and 10	5.90	6.60	Tin	WM1947-ND	.87	.82	.53	42815-0011
	8	6.00	5.50	Tin	WM1915-ND	.87	.82	.53	42815-0031
Mini-Fit, Sr. Terminal — Male									
2	12 and 10	5.90	6.60	Tin	WM1948-ND	.87	.82	.53	42817-0011
	8	6.00	5.50	Tin	WM1916-ND	.87	.82	.53	42817-0031
Crimp Tool, 8 AWG.......................					WM9960-ND	414.35	—	—	63811-1500
Crimp Tool, 10-12 AWG..................					WM9962-ND	414.35	—	—	63811-1600
Extraction Tool............................					WM9961-ND	138.12	—	—	63813-0400

MicroCross™ DVI (Digital Visual Interface) Connector System

Fig. 1 – DVI-Digital to DVI-Digital, Single Link

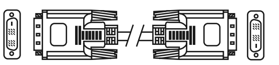


Fig. 2 – DVI-Analog to DVI-Analog

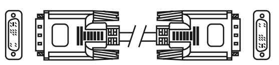


Fig. 3 – DVI-Analog to VGA

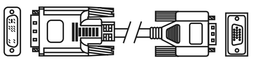


Fig. 4 – DVI-Digital to DFP

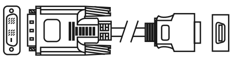


Fig. 5 – DVI-Analog Plug to VGA Receptacle

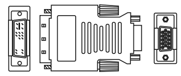


Fig. 6 – DVI-Digital Plug to DFP Receptacle

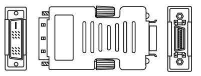


Fig. 7 – DVI-I-Analog/Digital Receptacle to VGA Plug

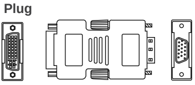


Fig. 8 – DVI-Digital Receptacle to DFP Plug

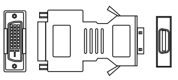


Fig. 9 – DVI-I Right Angle Receptacle, Gold Flash

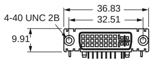
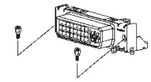
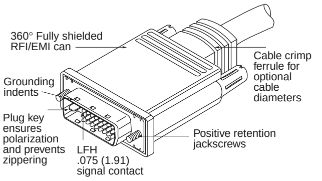


Fig. 10 – DVI-D Right Angle Receptacle, Gold Flash




360° Fully shielded RFI/EMI can
Cable crimp ferrule for optional cable diameters
Grounding indents
Plug key ensures polarization and prevents zippering
LFH .075 (1.91) signal contact
Positive retention jackscrews

The MicroCross DVI I/O Connectors from Molex are leading the way in support of the DDWG (Digital Display Working Group) DVI interface standard. MicroCross DVI has been chosen by the DDWG as the standard digital interface for connecting a host device and display device to support high-resolution video applications. Supporting one or two digital channels driven by TMDS (Transition Minimized Differential Signaling) and/or a high bandwidth analog interface, the MicroCross was chosen by the DDWG for its size, performance and cost. No other interface in the industry compares.

The innovative crossing ground blade design and LFH™ (Low Force Helix) contact interface design provides the industry with a video interface design that will support over 1.65Gb/s per differential pair (for a total 9.9Gb/s over a dual link implementation) and 2.5GHz support for the analog interface. This provides the industry the performance head room it needs for future growth and development of video products.

This innovative approach addresses the problem of an industry in transition. By providing a single high performance interface, precious board I/O space is saved and lower system costs are achieved. The interface provides added benefits of a high cycle life interface for mobile applications and the improved EMI performance needed for high speed links. The EMI performance is achieved through the 360° shielding of the MicroCross DVI cable and connector design. The MicroCross DVI connector system and the DVI standard are moving the graphics industry to the next level by providing unmatched electrical and mechanical performance while allowing for low cost implementation.

Fig.	Description	Digi-Key Part No.	Price Each 1	25	50	Molex Part No.
1	DVI-Digital to DVI-Digital, Single Link......	WM18509-ND	34.13	31.86	28.83	88741-8000
2	DVI-Analog to DVI-Analog	WM18510-ND	33.91	31.65	28.64	88741-8200
3	DVI-Analog to VGA.........................	WM18511-ND	27.68	25.83	23.37	88741-8300
4	DVI-Digital to DFP..........................	WM18512-ND	36.90	34.44	31.16	88741-8600
5	DVI-Analog Plug to VGA Receptacle	WM18513-ND	10.37	9.69	8.76	88741-8700
6	DVI-Digital Plug to DFP Receptacle........	WM18514-ND	15.23	14.22	12.87	88741-8800
7	DVI-I-Analog/Digital Recept. to VGA Plug .	WM18515-ND	17.53	16.36	14.81	88741-9100
8	DVI-Digital Receptacle to DFP Plug........	WM18516-ND	20.52	19.16	17.33	88741-9300
9	DVI-I R/Angle Recept, Gold Flash	WM5600-ND	4.66	4.35	3.94	74320-1004
10	DVI-D R/Angle Recept, Gold Flash	WM5601-ND	4.48	4.18	3.79	74320-4004

molex GC/Waldom "Toy Car" Battery Connector

Fig. 1 – Plug

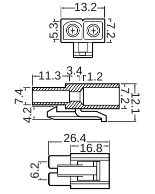


Fig. 2 – Socket

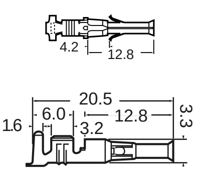


Fig. 3 – Receptacle

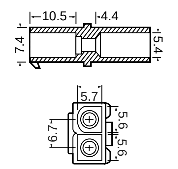
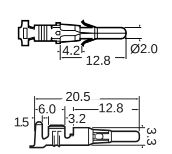


Fig. 4 – Pin

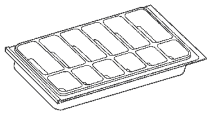


- 15 Amp current rating per circuit
- 300V voltage rating
- 14-20 AWG wire range
- Nylon 6/6 housing 94V-2
- Industry standard product for radio controlled toy cars

Fig.	Digi-Key Part No.	Pricing 1	10	50	100	Molex Part No.
1	WM2308-ND	.34	3.17	13.68	19.20	351-43-0201
2	WM2311-ND	.18	1.67	7.23	10.15	357-28-0201
3	WM2309-ND	.32	3.04	13.11	18.40	351-41-0201
4	WM2310-ND	.21	1.96	8.48	11.90	357-27-0201

WM9999-ND Universal Crimp Tool (Waldom) .... **$33.81 each**

molex GC/Waldom Crimp Terminal Connector Kits



WM9803 Kit Qty.	Item	WM9804 Kit Qty.
36	Crimp Terminal Housings	48
18	Straight Headers	24
18	Right Angle Headers	24
10	Shunts	—
100	Crimp Term (22-30 AWG)	—
—	Crimp Term (18-24 AWG)	100
—	Crimping Tool HT-1919	1
1	Crimping Tool HT-1921	—
1	Extractor Tool HT-1884	1

Description	Digi-Key Part No.	Price	Molex Part No.
.100" Connector Kit	WM9803-ND	52.14	KK-100
.156" Connector Kit	WM9804-ND	52.58	KK-156

molex GC/Waldom C-Grid™ SL .100 Pocket Headers

• **Plating:** 15 microinches min. gold. **MATERIAL:** • **Pins:** .025"square, phosphor bronze. • **Insulator**: UL 94V-0 glass filled PCT, black; Vapor phase and infrared process compatible. **ELECTRICAL**: • **Current Rating**: 3 amps. • **Insulation Resistance:** 1,000 megaohms. • **Dielectric Strength:** 600 VAC r.m.s for 1 minute. **ENVIRONMENTAL**: • **Operating Temperature:** -40°C to +125°C. • UL Listed & CSA Certified.

Fig. 1 – Straight Header,
Mates with "G" Version

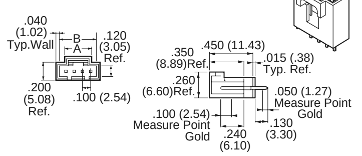


Fig. 2 – Right Angle Header,
Mates with "G" Version

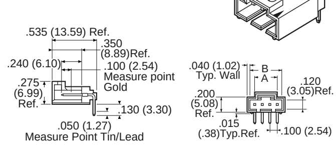


Fig. 3 – "G" Version, End-to-End Stackable (Use C-Grid Crimp Terminals sold below)

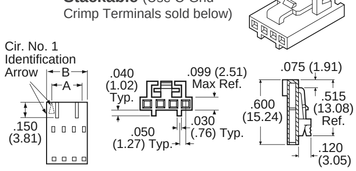


Fig. 4 – "A" Version
(Use C-Grid Crimp Terminals sold below)

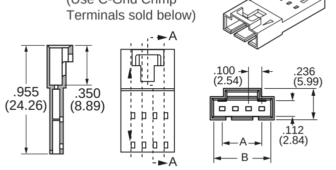


Fig.	Circuits	Dim. – Inch (mm) A	B	Digi-Key Part No.	Pricing 1	10	100	500	Molex Part. No.
1	2	.100 (2.54)	.210 (5.33)	WM4800-ND	1.02	8.50	61.20	246.50	705-43-0001
	3	.200 (5.08)	.320 (8.13)	WM4801-ND	1.13	9.38	67.50	271.88	705-43-0002
	4	.300 (7.62)	.420 (10.67)	WM4802-ND	1.25	10.45	75.24	303.05	705-43-0003
	5	.400 (10.16)	.520 (13.21)	WM4803-ND	1.35	11.28	81.18	326.98	705-43-0004
	6	.500 (12.70)	.620 (15.75)	WM4804-ND	1.46	12.20	87.84	353.80	705-43-0005
	7	.600 (15.24)	.720 (18.29)	WM4805-ND	1.57	13.08	94.14	379.18	705-43-0006
	8	.700 (17.78)	.820 (20.83)	WM4806-ND	1.68	14.00	100.80	406.00	705-43-0007
	9	.800 (20.32)	.920 (23.37)	WM4807-ND	1.79	14.93	107.46	432.83	705-43-0008
	10	.900 (22.86)	1.020 (25.91)	WM4808-ND	1.90	15.83	113.94	458.93	705-43-0009
2	2	.100 (2.54)	.210 (5.33)	WM4900-ND	1.02	8.50	61.20	246.50	705-53-0001
	3	.200 (5.08)	.320 (8.13)	WM4901-ND	1.13	9.38	67.50	271.88	705-53-0002
	4	.300 (7.62)	.420 (10.67)	WM4902-ND	1.25	10.45	75.24	303.05	705-53-0003
	5	.400 (10.16)	.520 (13.21)	WM4903-ND	1.35	11.28	81.18	326.98	705-53-0004
	6	.500 (12.70)	.620 (15.75)	WM4904-ND	1.46	12.20	87.84	353.80	705-53-0005
	7	.600 (15.24)	.720 (18.29)	WM4905-ND	1.57	13.08	94.14	379.18	705-53-0006
	8	.700 (17.78)	.820 (20.83)	WM4906-ND	1.68	14.00	100.80	406.00	705-53-0007
	9	.800 (20.32)	.920 (23.37)	WM4907-ND	1.79	14.93	107.46	432.83	705-53-0008
	10	.900 (22.86)	1.020 (25.91)	WM4908-ND	1.90	15.83	113.94	458.93	705-53-0009
3	2	.100 (2.54)	.199 (5.05)	WM2900-ND	.50	4.41	28.12	108.68	50-57-9402
	3	.200 (5.08)	.299 (7.59)	WM2901-ND	.65	5.71	36.45	140.86	50-57-9403
	4	.300 (7.62)	.399 (10.13)	WM2902-ND	.68	5.95	37.93	146.58	50-57-9404
	5	.400 (10.16)	.499 (12.67)	WM2903-ND	.70	6.18	39.41	152.30	50-57-9405
	6	.500 (12.70)	.599 (15.21)	WM2904-ND	.75	6.61	42.18	163.02	50-57-9406
	7	.600 (15.24)	.699 (17.75)	WM2905-ND	.80	7.02	44.77	173.03	50-57-9407
	8	.700 (17.78)	.799 (20.29)	WM2906-ND	.84	7.42	47.36	183.04	50-57-9408
	9	.800 (20.32)	.899 (22.83)	WM2907-ND	.91	7.98	50.88	196.63	50-57-9409
	10	.900 (22.86)	.999 (25.37)	WM2908-ND	.95	8.38	53.47	206.64	50-57-9410
4	2	.100 (2.54)	.220 (5.59)	WM2533-ND	.95	8.38	53.47	206.64	70107-0001
	3	.200 (5.08)	.320 (8.13)	WM2534-ND	.97	8.50	54.21	209.50	70107-0002
	4	.300 (7.62)	.420 (10.67)	WM2535-ND	.99	8.73	55.69	215.22	70107-0003
	5	.400 (10.16)	.520 (13.21)	WM2536-ND	1.48	12.96	82.70	319.61	70107-0004
	6	.500 (12.70)	.620 (15.75)	WM2537-ND	1.52	13.37	85.29	329.62	70107-0005
	7	.600 (15.24)	.720 (18.29)	WM2538-ND	1.54	13.54	86.40	333.91	70107-0006
	8	.700 (17.78)	.820 (20.83)	WM2539-ND	1.58	13.92	88.80	343.20	70107-0007
	9	.800 (20.32)	.920 (23.37)	WM2540-ND	1.62	14.21	90.65	350.35	70107-0008
	10	.900 (22.86)	1.020 (25.91)	WM2541-ND	1.68	14.79	94.35	364.65	70107-0009

molex GC/Waldom C-Grid™ Crimp Connector Housings

Fig. 1 – "A" Version

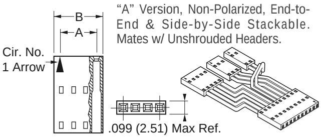

"A" Version, Non-Polarized, End-to-End & Side-by-Side Stackable. Mates w/ Unshrouded Headers.
B
A
Cir. No. 1 Arrow
.099 (2.51) Max Ref.

Fig. 2 – "A" Version

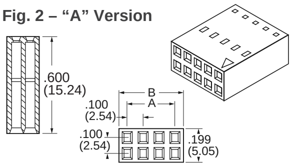


Fig.	Circuits	Dim. – Inch (mm) A	B	Digi-Key Part No.	Pricing 1	10	100	500	Molex Part. No.
1	2	.100 (2.54)	.199 (5.05)	WM2800-ND	.50	4.41	28.12	108.68	50-57-9002
	3	.200 (5.08)	.299 (7.59)	WM2801-ND	.65	5.71	36.45	140.86	50-57-9003
	4	.300 (7.62)	.399 (10.13)	WM2802-ND	.68	5.95	37.93	146.58	50-57-9004
	5	.400 (10.16)	.499 (12.67)	WM2803-ND	.70	6.18	39.41	152.30	50-57-9005
	6	.500 (12.70)	.599 (15.21)	WM2804-ND	.75	6.61	42.18	163.02	50-57-9006
	7	.600 (15.24)	.699 (17.75)	WM2805-ND	.80	7.02	44.77	173.03	50-57-9007
	8	.700 (17.78)	.799 (20.29)	WM2806-ND	.84	7.42	47.36	183.04	50-57-9008
	9	.800 (20.32)	.899 (22.83)	WM2807-ND	.91	7.98	50.88	196.63	50-57-9009
	10	.900 (22.86)	.999 (25.37)	WM2808-ND	.95	8.38	53.47	206.64	50-57-9010
2	4	.100 (2.54)	.199 (5.05)	WM2519-ND	1.96	17.23	109.89	424.71	22-55-2041
	6	.200 (5.08)	.299 (7.59)	WM2520-ND	2.06	18.13	115.63	446.88	22-55-2061
	8	.300 (7.62)	.399 (10.13)	WM2521-ND	2.15	18.94	120.81	466.90	22-55-2081
	10	.400 (10.16)	.499 (12.67)	WM2522-ND	2.26	19.84	126.54	489.06	22-55-2101
	12	.500 (12.70)	.599 (15.21)	WM2523-ND	2.35	20.65	131.72	509.08	22-55-2121
	14	.600 (15.24)	.699 (17.75)	WM2524-ND	2.45	21.55	137.46	531.25	22-55-2141
	16	.700 (17.78)	.799 (20.29)	WM2525-ND	2.54	22.30	142.27	549.84	22-55-2161
	18	.800 (20.32)	.899 (22.83)	WM2526-ND	2.65	23.26	148.37	573.43	22-55-2181
	20	.900 (22.86)	.999 (25.37)	WM2527-ND	2.74	24.04	153.37	592.74	22-55-2201
	22	1.000 (25.40)	1.099 (27.91)	WM2528-ND	2.83	24.85	158.55	612.76	22-55-2221
	24	1.100 (27.95)	1.199 (30.45)	WM2529-ND	2.94	25.87	165.02	637.78	22-55-2241
	30	1.400 (35.56)	1.499 (38.07)	WM2530-ND	3.23	28.42	181.30	700.70	22-55-2301
	40	1.900 (48.26)	1.999 (50.77)	WM2531-ND	3.72	32.65	208.31	805.09	22-55-2401
	50	2.400 (60.96)	2.499 (63.47)	WM2532-ND	4.19	36.86	235.14	908.77	22-55-2501

molex GC/Waldom C-Grid™ Box Crimp Terminals

Loose Form. • **Terminal Material:** Phosphor Bronze. • **Current Rating:** 3.0 Amps (24AWG) 30°C Rise Over Ambient, UL Listed & CSA Certified.

Fig. 1

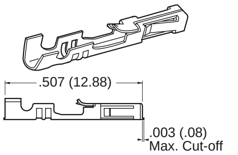


Fig. 2

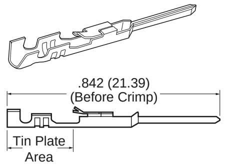


Fig.	Wire Range	Insul. Dia. Inch (mm)	Plating	Digi-Key Part No.	Pricing 10	100	500	1,000	Molex Part No.
1	22-24	.064 (1.63)	Tin‡	WM2510-ND	1.13	9.00	37.13	59.99	16-02-0102
	24-30	.060 (1.52)	Tin‡	WM2511-ND	1.13	9.00	37.13	59.99	16-02-0096
	22-24	.064 (1.63)	Gold†	WM2512-ND	1.53	12.20	50.33	81.31	16-02-0103
	24-30	.060 (1.52)	Gold†	WM2513-ND	1.53	12.20	50.33	81.31	16-02-0097
	22-24	.064 (1.63)	Tin‡	WM2556-ND*	1.35	10.80	44.55	71.98	16-02-1114
	24-30	.060 (1.52)	Tin‡	WM2557-ND*	1.35	10.80	44.55	71.98	16-02-1116
	22-24	.064 (1.63)	Gold†	WM2554-ND*	2.20	17.60	72.60	117.30	16-02-1125
	24-30	.060 (1.52)	Gold†	WM2555-ND*	2.20	17.60	72.60	117.30	16-02-1109
2	22-24	.064 (1.63)	Tin‡	WM2517-ND	1.13	9.00	37.13	59.99	16-02-0114
	24-30	.060 (1.52)	Tin‡	WM2518-ND	1.13	9.00	37.13	59.99	16-02-0108
	22-24	.064 (1.63)	Gold†	WM2515-ND	1.65	13.20	54.45	87.98	16-02-0115
	24-30	.060 (1.52)	Gold†	WM2516-ND	1.65	13.20	54.45	87.98	16-02-0109
Universal Crimp Tool (Molex)				WM9999-ND	33.81 each				63811-1000
C-Grid Hand Crimper 22-24 & 32-36 AWG				WM9917-ND	218.15 each				11-01-0208
C-Grid Hand Crimper 24 - 30 AWG				WM9919-ND	218.15 each				11-01-0209
Insertion Tool				WM9911-ND	15.26 each				11-02-0022

‡ 150 µ in. tin/lead over 50 µ in. nickel overall.
† 15 µ in. min. gold in select area over 50 µ in. min. nickel overall with 75 µ in. min. tin/lead in select area.
* High pressure type for low pin count.

molex GC/Waldom

7.50 Pitch Sabre™ Connectors

Features and Benefits: • Patented new integral Terminal Position Assurance (TPA) on mated male and female terminal • Virtually eliminates terminal backout • Wire-to-wire and wire-to-board connector system • Polarized housing assures proper mating • Terminals are fully isolated in housing • Positive latch reduces accidental disengagement from plug

Electrical Specifications: • **Voltage:** 1000V • **Current:** 18A • **Contact Resistance:** 10mΩ max. • **Dielectric Withstanding Voltage:** 6000V • **Insulation Resistance:** 1000 mΩ min.

Mechanical: • **Contact Insertion Force:** 2 lb. max. • **Contact Retention to Housing:** 20 lb. min. • **Wire Pull-Out Force:** 20 lb. min. • **Mating Force:** 3 lb. max. • **Unmating Force:** 1 lb. min. • **Normal Force:** 3 lb. nominal • **Durability:** 25 cycles

Physical: • **Housing:** Nylon, 94V-0 • **Temperature:** -40°C to +130°C

Approvals: UL File No.: E29179 and Ul1950; CSA File No.: LR19980

Fig. 1 – Receptacle

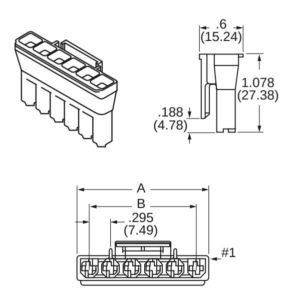


Fig. 2 – Wire-to-Wire Plug

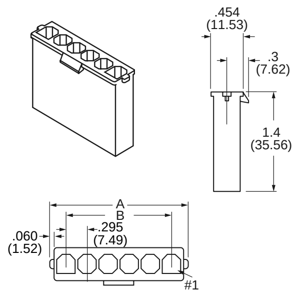
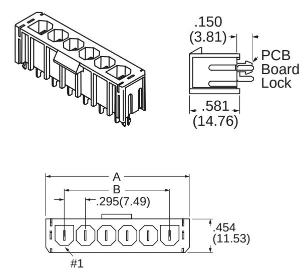
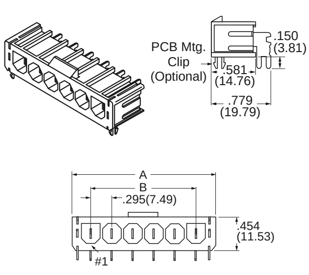


Fig. 3 – Vertical Wire-to-Board Header



.002” (.062mm) PCB thickness on headers with board lock

Fig. 4 – Right Angle Wire-to-Board Header



.002” (.062mm) PCB thickness on headers with board lock

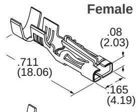
Fig.	Cir-cuits	Dimensions Inch (mm) A	Dimensions Inch (mm) B	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Molex Part No.
				Single Row Receptacle				
1	2	.623 (15.82)	.295 (7.49)	WM18463-ND	1.00	.93	.60	44441-2002
	3	.918 (23.32)	.590 (14.99)	WM18464-ND	1.18	1.10	.71	44441-2003
	4	1.213 (30.81)	.885 (22.48)	WM18465-ND	1.37	1.28	.82	44441-2004
	5	1.508 (38.30)	1.180 (29.97)	WM18466-ND	1.61	1.50	.97	44441-2005
	6	1.803 (45.80)	1.475 (37.47)	WM18467-ND	1.83	1.71	1.10	44441-2006
				Single Row Plug				
2	2	.745 (18.92)	.295 (7.49)	WM18468-ND	1.00	.93	.60	43680-2002
	3	1.040 (26.42)	.590 (14.99)	WM18469-ND	1.18	1.10	.71	43680-2003
	4	1.335 (33.91)	.885 (22.48)	WM18470-ND	1.37	1.28	.82	43680-2004
	5	1.630 (41.40)	1.180 (29.97)	WM18471-ND	1.61	1.50	.97	43680-2005
	6	1.925 (48.90)	1.475 (37.47)	WM18472-ND	1.83	1.71	1.10	43680-2006
				Vertical Header, SMC — Without Board Lock				
3	2	.830 (21.08)	.295 (7.49)	WM18473-ND	2.06	1.92	1.23	43160-0102
	3	1.125 (28.58)	.590 (14.99)	WM18474-ND	2.88	2.68	1.72	43160-0103
	4	1.420 (36.07)	.885 (22.48)	WM18475-ND	3.03	2.82	1.81	43160-0104
	5	1.715 (43.56)	1.180 (29.97)	WM18476-ND	3.51	3.27	2.10	43160-0105
	6	2.010 (51.05)	1.475 (37.47)	WM18477-ND	3.99	3.72	2.39	43160-0106
				Vertical Header, SMC — With Board Lock				
3	2	.830 (21.08)	.295 (7.49)	WM18478-ND	2.39	2.23	1.43	43160-2102
	3	1.125 (28.58)	.590 (14.99)	WM18479-ND	2.88	2.68	1.72	43160-2103
	4	1.420 (36.07)	.885 (22.48)	WM18480-ND	3.42	3.19	2.05	43160-2104
	5	1.715 (43.56)	1.180 (29.97)	WM18481-ND	3.93	3.67	2.35	43160-2105
	6	2.010 (51.05)	1.475 (37.47)	WM18482-ND	4.43	4.13	2.65	43160-2106
				Right Angle Header, SMC — Without Board Lock				
4	2	.830 (21.08)	.295 (7.49)	WM18483-ND	2.29	2.14	1.37	43160-1102
	3	1.125 (28.58)	.590 (14.99)	WM18484-ND	2.80	2.61	1.68	43160-1103
	4	1.420 (36.07)	.885 (22.48)	WM18485-ND	3.32	3.10	1.99	43160-1104
	5	1.715 (43.56)	1.180 (29.97)	WM18486-ND	3.84	3.58	2.30	43160-1105
	6	2.010 (51.05)	1.475 (37.47)	WM18487-ND	4.36	4.06	2.61	43160-1106
				Right Angle Header, SMC — With Board Lock				
4	2	.830 (21.08)	.295 (7.49)	WM18488-ND	2.66	2.48	1.59	43160-3102
	3	1.125 (28.58)	.590 (14.99)	WM18489-ND	3.18	2.96	1.90	43160-3103
	4	1.420 (36.07)	.885 (22.48)	WM18490-ND	3.69	3.44	2.21	43160-3104
	5	1.715 (43.56)	1.180 (29.97)	WM18491-ND	4.21	3.92	2.52	43160-3105
	6	2.010 (51.05)	1.475 (37.47)	WM18492-ND	4.72	4.40	2.83	43160-3106

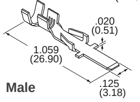
7.50 Pitch Sabre™ Terminals

Tin Plating

Description	Wire Size	Maximum Insulation Diameter Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Molex Part No.
Female	AWG #14-18	.130 (3.30)	WM18493-ND	.31	.29	.19	43375-0001
Male	AWG #14-18	.130 (3.30)	WM18495-ND	.43	.40	.26	43178-1002
Female	AWG #14-18	.180 (4.57)	WM18494-ND	.31	.29	.19	43375-1001
Male	AWG #14-18	.180 (4.57)	WM18496-ND	.43	.40	.26	43178-2002

Female





Male

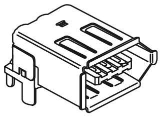
Firewire 1394 I/O Connectors

Headers are offered in high temperature plastic for true SMT processing.

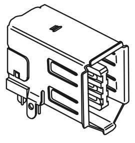
Full metal shielding design supports ESD protection.

Rugged gold plated leaf contacts withstands up to 1500 cycles.

Right Angle Flat Header



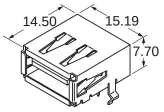
Right Angle Upright Header



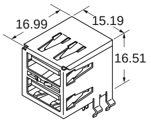
Digi-Key Part No.	Pricing 1	Pricing 10	Pricing 100	Molex Part No.
		Firewire, Right Angle Flat		
WM17300-ND	10.07	83.40	532.06	53462-0611
		Firewire, Right Angle Upright		
WM17301-ND	10.07	83.40	532.06	53460-0611

USB Connectors

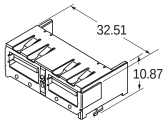
Single PCB Receptacle



Stacked PCB Receptacle



SideXSide PCB Receptacle



USB Standard Features:

- Broad industry support from computer and telecom leaders.
- 12 Mbit/sec low-cost data transfer rates.
- Provides PC/telephone integration and digital connectivity
- Standard serial port connector for all devices.
- Supports daisy chaining and up to 127 devices.
- Windows ‘95 Operating Driver support.

Applications:

- Desktop & Notebook PCs.
- Peripherals.
- Keyboard, Mouse.
- Telephony, ISDN, PBX’s, Handsets.

Molex PCB Receptacle Features (Series A):

- Right-angle single, dual-stack and sideXside versions.
- Positive polarization.
- 1,500 mating cycles.
- Metal shielding.
- Four positions with gold-plated contacts: Two for signal on 2mm centerline and two for power on 2.5 mm centerline.
- Rated for 1.0 Amp max. per contact.

Description	Digi-Key Part No.	Pricing 1	Pricing 10	Pricing 100	Molex Part No.
Single PCB Receptacle	WM17100-ND	2.10	17.40	111.00	87531-0001
Stacked PCB Receptacle	WM17101-ND	2.80	23.20	148.00	87525-0001
SideXSide Receptacle	WM17102-ND	9.15	75.84	483.78	73601-0180

Mezzanine IEEE 1386 Connectors

ELECTRICAL:

Voltage: 250V. **Current:** 0.5A. **Contact Resistance:** 30mΩ max. **Dielectric Withstanding Voltage:** 250V. **Insulation Resistance:** 1000 MΩ min.

MECHANICAL:

Contact Retention to Housing: 0.4kgf min. **Mating Force:** 60g max. per contact. **Unmating Force:** 35g min. per contact. **Durability:** 100 cycles.

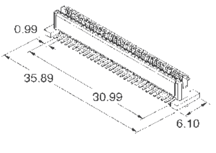
PHYSICAL:

Housing: Glass-filled LCP, UL 94V-O. **Contact:** Phosphor bronze. **Plating:** 0.76µm (30µ”) Gold min. **Temperature:** -15°C to +85°C.

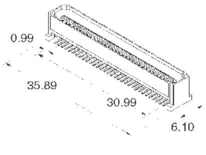
FEATURES:

Mated height on these parts are only 10 millimeters.

Receptacle



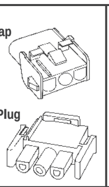
Plug



Circuits	Digi-Key Part No.	Pricing 1	Pricing 10	Pricing 100	Molex Part No.
		Receptacle, Dual Row, SMT, Vertical Stacking			
64	WM17201-ND	10.13	83.90	535.21	71439-0164
		Plug, Dual Row, SMT, Vertical Stacking			
64	WM17200-ND	10.95	90.71	578.68	71436-2164

Soft Shell Connectors

Universal MATE-N-LOK® Connectors



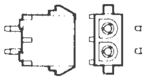
• Pins and sockets can be intermixed in the same housing. • Positive polarization. • Pin or socket contact can be hot. • Positive locking housings. • Removable, crimp snap-in contacts. • Low contact mating force. • Dual locking lances provide optimum contact stability. • Panel-mount or free-hanging.• Harness to PC board capability using pin or socket header assemblies.

Features: • Rated to 600 volts. • Insulation capacity to .200" (5.08 mm) diameter. • Contacts are on .250" (6.35 mm) centerline spacing. • Housing Material: UL rated 94V-2, natural nylon.

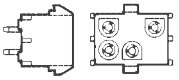
Printed Circuit Board Pin Header Assemblies

Housing Material: 94V-2 rating, natural color. **Contact Material:** Phosphor bronze pre-tin plated or .000030 (0.0008 mm) min. gold over .000050 (0.0013 mm) min. nickel.

2, 3, 4
In-Line Circuits

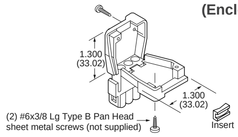


6, 9, 12 & 15
Multiple Row Circuits



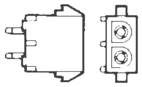
Plug Housing Strain Relief

(Enclosed)

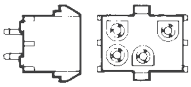

1.300
(33.02)
1.300
(33.02)
(2) #6x3/8 Lg Type B Pan Head
sheet metal screws (not supplied)
Insert

Printed Circuit Board Socket Header Assemblies

2, 3, 4 In-Line Circuits

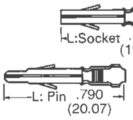


6, 9, 12, & 15 Multiple Row Circuits



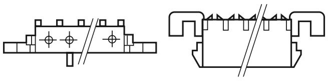
Contacts

(Pins & Sockets)



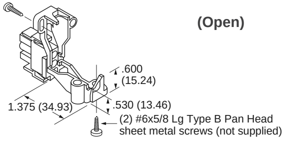
Right-Angle Pin Header Assemblies

Contact Material: Phosphor bronze. **Housing Material:** 94V-2 rated, natural nylon.



Plug Housing Strain Relief

(Open)


.600
(15.24)
1.375 (34.93)
.530 (13.46)
(2) #6x5/8 Lg Type B Pan Head
sheet metal screws (not supplied)

No. of Circuits	Description	Mates With	Digi-Key Part No.	Pricing		AMP Part No.
				1	100	
Universal MATE-N-LOK® UL 94V-2 Connectors (Contacts Sold Separately)						
1	Plug In-Line	A14271-ND	A14270-ND	.09	7.40	1-350867-0
1	Cap In-Line	A14270-ND	A14271-ND	.10	7.80	770421-1
2	Plug In-Line	A1449-ND	A1448-ND	.17	13.22	1-480698-0
2	Cap In-Line	A1448-ND	A1449-ND	.15	12.07	1-480699-0
3	Plug In-Line	A1451-ND	A1450-ND	.16	12.63	1-480700-0
3	Cap In-Line	A1450-ND	A1451-ND	.17	13.24	1-480701-0
4	Plug In-Line	A1453-ND	A1452-ND	.17	13.57	1-480702-0
4	Cap In-Line	A1452-ND	A1453-ND	.17	13.44	1-480703-0
5	Plug In-Line	A1455-ND	A1454-ND	.21	16.87	1-480763-0
5	Cap In-Line	A1454-ND	A1455-ND	.24	19.03	1-480764-0
6	Plug Matrix	A1457-ND	A1456-ND	.21	16.44	1-480704-0
6	Cap Matrix	A1456-ND	A1457-ND	.20	15.68	1-480705-0
6	Plug In-Line	A14273-ND	A14272-ND	.42	33.48	640585-1
6	Cap In-Line	A14272-ND	A14273-ND	1.55	125.53	926307-1
8	Plug In-Line	A14275-ND	A14274-ND	.64	51.55	640586-1
8	Cap In-Line	A14274-ND	A14275-ND	1.22	98.98	926308-1
9	Plug Matrix	A1459-ND	A1458-ND	.24	18.66	1-480706-0
9	Cap Matrix	A1458-ND	A1459-ND	.21	16.79	1-480707-0
12	Plug Matrix	A1461-ND	A1460-ND	.27	21.58	1-480708-0
12	Cap Matrix	A1460-ND	A1461-ND	.24	19.03	1-480709-0
15	Plug Matrix	A1463-ND	A1462-ND	.40	31.32	1-480710-0
15	Cap Matrix	A1462-ND	A1463-ND	.35	27.95	1-480711-0
Universal MATE-N-LOK® UL 94V-0 Connectors (Contacts Sold Separately)						
1	Plug In-Line	A14277-ND	A14276-ND	.24	19.22	350865-1
1	Cap In-Line	A14276-ND	A14277-ND	.24	19.22	350866-1
2	Plug In-Line	A14279-ND	A14278-ND	.28	22.43	350777-1
2	Cap In-Line	A14278-ND	A14279-ND	.33	25.88	350778-1
3	Plug In-Line	A14281-ND	A14280-ND	.28	21.91	350766-1
3	Cap In-Line	A14280-ND	A14281-ND	.33	26.40	350767-1
4	Plug In-Line	A14283-ND	A14282-ND	.29	22.85	350779-1
4	Cap In-Line	A14282-ND	A14283-ND	.37	28.93	350780-1
5	Plug In-Line	A14285-ND	A14284-ND	.31	24.41	350809-1
5	Cap In-Line	A14284-ND	A14285-ND	.37	29.50	350810-1
6	Plug In-Line	A14287-ND	A14286-ND	.66	51.88	640581-1
6	Cap In-Line	A14286-ND	A14287-ND	1.71	138.08	926307-3
6	Plug Matrix	A14289-ND	A14288-ND	.41	32.78	350715-1
6	Cap Matrix	A14288-ND	A14289-ND	.37	28.89	350781-1
8	Plug In-Line	A14291-ND	A14290-ND	.56	42.73	640582-1
8	Cap In-Line	A14290-ND	A14291-ND	1.74	141.03	926308-3
9	Plug Matrix	A14293-ND	A14292-ND	.36	28.43	350720-1
9	Cap Matrix	A14292-ND	A14293-ND	.44	35.09	350782-1
12	Plug Matrix	A14295-ND	A14294-ND	.46	36.30	350735-1
12	Cap Matrix	A14294-ND	A14295-ND	.54	42.98	350783-1
15	Plug Matrix	A14297-ND	A14296-ND	.59	46.64	350736-1
15	Cap Matrix	A14296-ND	A14297-ND	.90	73.15	350784-1
Keying Plug 94V-2			A14304-ND	.19	15.35	1-640415-1
Keying Plug 94V-0			A14305-ND	.20	15.99	1-640415-0

No. of Circuits	Description	Insert Supplied	Digi-Key Part No.	Pricing		AMP Part No.
				1	100	
Enclosed Plug Housing Strain Relief UL94V-2						
2	Nylon, Natural	Yes	A14348-ND•	.81	64.31	1-640719-0
3	Nylon, Natural	Yes	A14349-ND•	.82	66.65	1-640720-0
3	Nylon, Natural	No	A14350-ND•	1.26	112.63	641763-1
4	Nylon, Natural	No	A14351-ND•	1.35	121.17	641775-2
5	Nylon, Natural	No	A14352-ND•	.84	68.24	643030-2
6	Nylon, Natural	Yes	A14353-ND•	.85	67.36	1-640721-0
9	Nylon, Natural	Yes	A14354-ND•	.88	71.40	1-640722-0
12	Nylon, Natural	Yes	A14355-ND•	.91	73.78	1-640723-0
15	Nylon, Natural	Yes	A14356-ND•	.94	76.16	1-640724-0
Enclosed Plug Housing Strain Relief UL94V-0						
2	Nylon	Yes	A14338-ND•	.90	73.10	640713-1
3	Nylon	Yes	A14339-ND•	.84	66.51	640714-1
4	Nylon	Yes	A14340-ND•	.92	74.86	641776-1
5	Nylon	Yes	A14341-ND•	.94	75.75	643030-1
6	Nylon	Yes	A14342-ND•	.95	76.62	643313-1
8	Nylon	Yes	A14343-ND•	.97	78.26	643314-1
6	Nylon	Yes	A14344-ND•	.87	68.54	640715-1
9	Nylon	Yes	A14345-ND•	.90	71.23	640716-1
12	Nylon	Yes	A14346-ND•	1.01	81.90	640717-1
15	Nylon	Yes	A14347-ND•	1.00	79.21	640718-1
Open Plug Housing Strain Reliefs						
2, 3, 4, 5, 6 and 8 Circuit, In-Line			A14336-ND•	.50	40.44	350811-1
6, 9, 12 and 15 Circuit, Matrix			A14337-ND•	.57	46.50	350812-1
Contact Insertion Tool			A1444-ND	23.11	—	455830-1

• Note: Two strain reliefs required per housing.

† Socket Contact - .010" (.25mm) stock thickness.

No. of Circuits	Plating	Material	Digi-Key Part No.	Pricing		AMP Part No.
				1	100	
Pin Header Assemblies — PCB Mount						
2	Pre-Tin	UL94V-2	A1466-ND	.25	19.80	350428-1
2	Gold	UL94V-2	A1467-ND	1.14	92.16	350428-2
2	Pre-Tin	UL94V-0	A14314-ND	.41	32.55	350786-1
3	Pre-Tin	UL94V-2	A1468-ND	.32	25.30	350429-1
3	Pre-Tin	UL94V-0	A14315-ND	.50	39.67	350789-1
4	Pre-Tin	UL94V-2	A1470-ND	.42	33.00	350430-1
4	Gold	UL94V-2	A1471-ND	1.99	161.10	350430-2
4	Pre-Tin	UL94V-0	A14316-ND	.59	46.79	350792-1
5	Pre-Tin	UL94V-2	A14317-ND	.64	50.78	640466-1
5	Pre-Tin	UL94V-0	A14318-ND	.95	74.97	640900-1
6	Pre-Tin	UL94V-2	A1472-ND	.41	32.21	350431-1
6	Gold	UL94V-2	A1473-ND	2.81	227.65	350431-2
6	Pre-Tin	UL94V-2	A14319-ND	2.30	206.25	641832-1
6	Pre-Tin	UL94V-0	A14322-ND	.97	77.01	350711-1
6	Gold	UL94V-0	A14323-ND	2.78	220.01	350711-2
8	Pre-Tin	UL94V-2	A14320-ND	1.65	133.30	641825-1
8	Pre-Tin	UL94V-0	A14321-ND	3.42	306.35	641828-1
9	Pre-Tin	UL94V-2	A1474-ND	.75	59.40	350432-1
9	Gold	UL94V-2	A1475-ND	3.95	319.64	350432-2
9	Pre-Tin	UL94V-0	A14324-ND	.91	71.94	350712-1
12	Pre-Tin	UL94V-2	A1476-ND	.90	71.50	350433-1
12	Gold	UL94V-2	A1477-ND	5.11	413.53	350433-2
12	Pre-Tin	UL94V-0	A14325-ND	1.10	86.81	350713-1
12	Gold	UL94V-0	A14326-ND	3.76	297.02	350713-2
15	Pre-Tin	UL94V-2	A1478-ND	.99	78.11	350434-1
15	Gold	UL94V-2	A1479-ND	6.32	511.96	350434-2
15	Pre-Tin	UL94V-0	A14327-ND	1.38	108.91	350714-1
Socket Header Assemblies — PCB Mount						
2	Pre-Tin	UL94V-2	A1490-ND	.35	28.37	350759-4
2	Gold	UL94V-2	A1491-ND	.97	78.89	350759-3
3	Pre-Tin	UL94V-2	A1492-ND	.44	35.80	350760-4
3	Gold	UL94V-2	A1493-ND	1.79	144.63	350760-3
3	Pre-Tin	UL94V-0	A14328-ND	.47	37.43	350825-1
4	Pre-Tin	UL94V-2	A1494-ND	.37	29.48	350761-4
4	Gold	UL94V-2	A1495-ND	2.29	206.86	350761-3
4	Pre-Tin	UL94V-0	A14329-ND	.64	50.65	350826-1
6	Pre-Tin	UL94V-2	A1496-ND	.61	48.18	350762-4
6	Gold	UL94V-2	A1497-ND	3.40	275.44	350762-3
6	Pre-Tin	UL94V-0	A14330-ND	.87	68.58	350827-1
9	Pre-Tin	UL94V-2	A1498-ND	.70	55.51	350763-4
9	Pre-Tin	UL94V-0	A14331-ND	.97	76.29	350828-1
12	Pre-Tin	UL94V-2	A1200-ND	1.02	80.39	350764-4
12	Gold	UL94V-2	A1201-ND	4.80	388.27	350764-3
12	Pre-Tin	UL94V-0	A14332-ND	1.29	101.72	350829-1
12	Gold	UL94V-0	A14333-ND	5.09	412.36	350829-2
15	Pre-Tin	UL94V-2	A1202-ND	1.59	128.35	350765-4
15	Pre-Tin	UL94V-0	A14334-ND	1.57	123.80	350830-1
15	Gold	UL94V-0	A14335-ND	6.22	503.35	350830-2
Pin Header Assemblies, Right-Angle — PCB Mount						
2	Pre-Tin	UL94V-0	A14306-ND	1.03	81.37	1-350942-0
2	Gold	UL94V-0	A1481-ND	1.80	142.41	2-350942-0
3	Pre-Tin	UL94V-0	A14307-ND	1.05	83.00	1-350943-0
3	Gold	UL94V-0	A14308-ND	2.76	223.06	2-350943-0
4	Pre-Tin	UL94V-0	A1484-ND	1.07	84.73	1-350944-0
4	Gold	UL94V-0	A14309-ND	2.73	215.64	2-350944-0
5	Pre-Tin	UL94V-0	A1486-ND	1.29	101.72	1-350945-0
5	Gold	UL94V-0	A14310-ND	3.44	278.70	2-350945-0
6	Pre-Tin	UL94V-0	A14311-ND	1.96	155.32	640583-1
8	Pre-Tin	UL94V-0	A14312-ND	2.10	166.15	640584-1
8	Gold	UL94V-0	A14313-ND	5.25	415.36	640584-2
Contacts (Pins & Sockets) — For Use With Universal MATE-N-LOK® Connectors						
Pin, 24-18AWG, Brass - Pre-Tin			A1436-ND	1.02/10	6.86	350706-1
Socket, 24-18AWG, Brass - Pre-Tin			A1437-ND†	.95/10	6.38	350689-1
Pin, 24-18AWG, Brass - Gold			A1438-ND	7.12/10	47.88	350706-2
Socket, 24-18AWG, Brass - Gold			A1439-ND†	7.65/10	46.18	350689-2
Pin, 20-14AWG, Brass - Pre-Tin			A1440-ND	.95/10	6.38	350705-1
Socket, 20-14AWG, Brass - Pre-Tin			A1441-ND	.84/10	5.64	350550-1
Pin, 20-14AWG, Brass - Gold			A1442-ND	7.12/10	47.88	350705-2
Socket, 20-14AWG, Brass - Gold			A1443-ND	8.09/10	54.42	350550-2
Pin, 24-18AWG, Brass - Pre-Tin 20.07mm			A14298-ND	.89/10	5.40	350690-1
Pin, 24-18AWG, Brass - Gold 20.07mm			A14299-ND	7.47/10	45.08	350690-2
Pin, 20-14AWG, Brass - Pre-Tin 20.07mm			A14300-ND	.87/10	5.88	350547-1
Pin, 20-14AWG, Brass - Gold 20.07mm			A14301-ND	7.94/10	53.44	350547-2
Pin, 20-14AWG, Brass - Pre-Tin 20.57mm			A14303-ND	1.10/10	7.39	350552-1
Socket, 20-14AWG, Brass - Pre-Tin 19.81mm			A14302-ND	1.24/10	8.36	350551-1
Universal MATE-N-LOK® Crimp Tool for 24-18AWG			A9985-ND	415.77	—	90300-2
Universal MATE-N-LOK® Crimp Tool for 20-14AWG			A9984-ND	415.77	—	90296-2
PRO-CRIMPER II Hand Tool w/o Dies			A9996-ND	75.00	—	354940-1
Die Set 14-20 AWG			A9943-ND	127.50	—	90546-2
Die Set 18-24 AWG			A9944-ND	127.50	—	90548-2

tyco Electronics AMP

Commercial MATE-N-LOK® Connectors

Fig. 1 — Panel Mount Rectangular Connectors

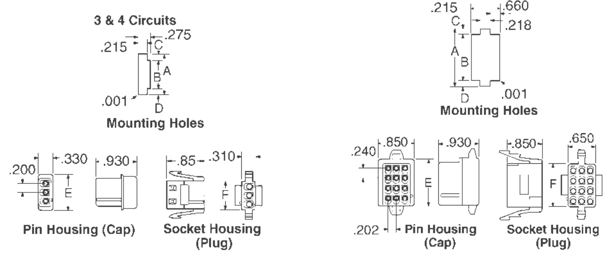


Fig. 2 — Free Hanging Rectangular Connectors

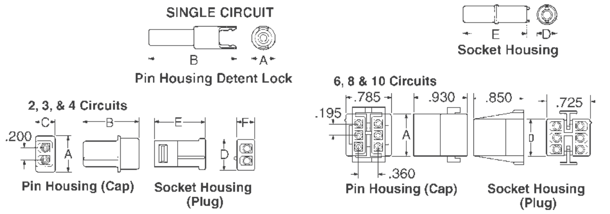


Fig. 3 — Printed Circuit Board Pin Header Assemblies

(Mate with Free Hanging Socket Connectors)
Housing Material: Natural nylon
Pin Material: Copper alloy.
Note: *Use standard pin for .062" (1.57 mm) thick PC board.*

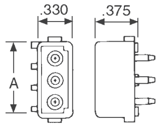


Fig. 4 — Positive Lock Socket Housing

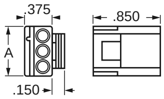


Fig. 5 — Motor Mount Pin/Socket Housing - 6, 16 Circuit Positive Lock

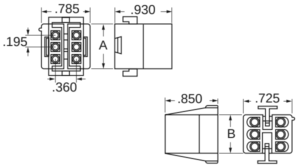


Fig. 6 — Contacts

- Carries up to 15 amps maximum (based on 30°C temperature rise) • Low insertion/extraction forces • UL recognized for 250 volts, AC/DC • CSA certified

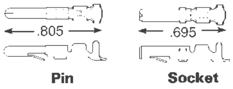
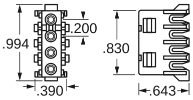


Fig. 7 — Insulation Displacement Connector, 4 Circuit



No.of Cir.	Description	Dimensions – Inch A	B	C	D	E	F	Digi-Key Part No.	Pricing 1	100	AMP Part No.
Fig.1 – MATE-N-LOK® Panel-Mount Rectangular Connectors (Contacts Sold Separately)											
3	Pin Housing	.890	.645	.123	.123	.810	—	A1400-ND	.18	14.05	1-480305-0
3	Socket Housing	.890	.645	.123	.123	—	.630	A1401-ND	.21	16.31	1-480304-0
4	Pin Housing	1.090	.845	.123	.123	1.010	—	A1402-ND	.22	17.06	1-480426-0
4	Socket Housing	1.090	.845	.123	.123	—	.830	A1403-ND	.46	37.23	1-480425-0
6	Pin Housing	.850	.575	.138	.138	.655	—	A1404-ND	.36	28.16	1-480276-0
6	Socket Housing	.850	.575	.138	.138	—	.565	A1405-ND	.58	47.20	1-480273-0
9	Pin Housing	1.085	.815	.135	.135	.905	—	A1406-ND	.62	50.10	1-480277-0
9	Socket Housing	1.085	.815	.135	.135	—	.805	A1407-ND	.69	56.18	1-480274-0
12	Pin Housing	1.320	1.050	.135	.135	1.145	—	A1424-ND	.74	59.86	1-480278-0
12	Socket Housing	1.320	1.050	.135	.135	—	1.045	A1425-ND	.80	64.83	1-480275-0
15	Pin Housing	1.555	1.290	.133	.133	1.382	—	A1426-ND	1.04	84.51	1-480324-0
15	Socket Housing	1.555	1.290	.133	.133	—	1.280	A1427-ND	1.17	95.04	1-480323-0
Fig. 2 – MATE-N-LOK® Free-Hanging Rectangular Connectors (Contacts Sold Separately)											
1	Pin Housing	.300	1.240	—	—	—	—	A1204-ND*	.09	7.48	1-480350-0
1	Pin Housing	.300	1.240	—	—	—	—	A1408-ND	.09	6.92	1-480351-0
1	Socket Housing	—	—	—	2.60	.870	—	A1409-ND	.08	6.16	1-480349-0
2	Pin Housing	.610	.930	.330	—	—	—	A1410-ND	.10	7.83	1-480319-0
2	Socket Housing	—	—	—	.530	.860	.295	A1411-ND	.10	7.80	1-480318-0
3	Pin Housing	.810	.930	.325	—	—	—	A1400-ND	.18	14.05	1-480305-0
3	Socket Housing	—	—	—	.825	.850	.310	A1429-ND	.19	14.74	1-480303-0
4	Pin Housing	1.090	.845	.123	.123	1.010	—	A1402-ND	.22	17.06	1-480426-0
4	Socket Housing	—	—	—	—	—	—	A1431-ND	.18	14.36	1-480424-0
6	Pin Housing	.705	—	—	—	—	—	A1412-ND	.52	41.69	1-480340-0
6	Socket Housing	—	—	—	.610	—	—	A1413-ND	.36	28.75	1-480270-0
8	Pin Housing	.900	—	—	—	—	—	A1206-ND	.56	45.73	1-480345-0
8	Socket Housing	—	—	—	—	.805	—	A1207-ND	.38	30.14	1-480283-0
10	Pin Housing	1.095	—	—	—	—	—	A1414-ND	.65	52.42	1-480339-0
10	Socket Housing	—	—	—	1.00	—	—	A1415-ND	.73	59.00	1-480285-0

No. of Cir.	Description	Dim. – Inch A	B	Digi-Key Part No.	Pricing 1	100	AMP Part No.
Fig. 3 – Printed Circuit Board Pin Header Assemblies – Mate w/Free Hanging Socket Connectors							
2	Tin Plated Contacts with Detent Lock	.515	—	A1208-ND	.32	25.05	350209-1
	Gold Plated Contacts with Detent Lock	.515	—	A1209-ND	1.07	86.72	350209-2
	Pre-Tin Pin Finish Positive Lock	.515	—	A14364-ND	.42	33.00	350539-1
	Gold Pin Finish Positive Lock	.515	—	A14365-ND	1.28	103.82	350539-2
	Pre-Tin Pin Finish Positive Lock Long Tail	.515	—	A14366-ND	.90	73.21	350540-1
	Pre-Tin Pin Finish Detent Lock Long Tail	.515	—	A14367-ND	.55	44.51	350422-1
3	Tin Plated Contacts with Detent Lock	.715	—	A1210-ND	.50	39.85	350210-1
	Gold Plated Contacts with Detent Lock	.715	—	A1211-ND	1.63	132.06	350210-2
	Pre-Tin Pin Finish Positive Lock	.715	—	A14368-ND	.96	77.44	350541-1
	Gold Pin Finish Positive Lock	.715	—	A14369-ND	1.84	149.16	350541-2
	Pre-Tin Pin Finish Detent Lock Long Tail	.715	—	A14370-ND	.72	58.28	350423-1
4	Tin Plated Contacts with Detent Lock	.915	—	A1212-ND	.47	37.33	350211-1
	Gold Plated Contacts with Detent Lock	.915	—	A1213-ND	1.30	103.03	350211-2
	Pre-Tin Pin Finish Positive Lock	.915	—	A14371-ND	.91	72.26	350543-1
	Gold Pin Finish Positive Lock	.915	—	A14372-ND	2.53	204.89	350543-2

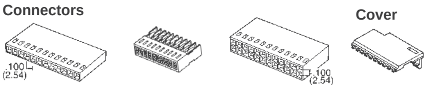
No. of Cir.	Description	Dim. – Inch A	B	Digi-Key Part No.	Pricing 1	100	AMP Part No.
4	Pre-Tin Pin Finish Positive Lock Long Tail	.915	—	A14373-ND	1.62	131.04	350544-1
	Pre-Tin Pin Finish Detent Lock Long Tail	.915	—	A14374-ND	.84	68.17	350424-1
	Gold Pin Finish Detent Lock Long Tail	.915	—	A14375-ND	4.31	348.50	350424-2
6	Tin Plated Contacts Positive Lock Dual Row	.705	—	A1214-ND	.65	51.18	1-380999-0
	Gold Plated Contacts Positive Lock Dual Row	.705	—	A1215-ND	2.74	222.02	2-380999-0
	Pre-Tin Pin Finish Positive Lock Long Tail Dual Row	.705	—	A14376-ND	1.01	81.79	350425-1
8	Tin Plated Contacts Positive Lock Dual Row	.900	—	A1216-ND	.75	59.40	350212-1
	Pre-Tin Pin Finish Positive Lock Long Tail	.900	—	A14377-ND	1.14	92.53	350426-1
	Gold Plated Contacts Positive Lock Dual Row	.900	—	A1217-ND	3.15	255.37	350212-2
10	Tin Plated Contacts Positive Lock Dual Row	1.095	—	A1218-ND	.89	70.08	1-380991-0
	Gold Plated Contacts Positive Lock Dual Row	1.095	—	A1219-ND	4.16	337.09	2-380991-0
	Pre-Tin Pin Finish Positive Lock Long Tail	1.095	—	A14378-ND	1.64	132.87	350219-1
12	Pre-Tin Pin Finish Positive Lock	1.290	—	A14379-ND	1.66	134.49	350213-1
	Pre-Tin Pin Finish Positive Lock Long Tail	1.290	—	A14380-ND	1.73	140.31	350220-1
16	Pre-Tin Pin Finish Positive Lock	1.680	—	A14381-ND	2.05	165.79	350214-1
	Pre-Tin Pin Finish Positive Lock Long Tail	1.680	—	A14382-ND	2.68	216.65	350427-1
Fig. 4 – Positive Lock Socket Housing							
2	Socket Housing	.435	—	A14357-ND	.32	24.93	1-480720-0
3	Socket Housing	.630	—	A14358-ND	.66	53.37	1-480721-0
4	Socket Housing	.830	—	A14359-ND	.72	58.25	1-480722-0
Fig. 5 – Motor Mount Housing (Positive Lock)							
6	Pin Housing	.705	.610	A14361-ND	.54	43.58	1-480271-0
6	Socket Housing	.610	—	A1413-ND	.36	28.75	1-480270-0
16	Pin Housing	1.680	1.585	A14363-ND	.90	73.02	1-480439-0
16	Socket Housing	1.680	1.585	A14362-ND	1.18	95.60	1-480438-0
Fig. 6 – MATE-N-LOK® Contacts (Pins & Sockets)							
	Pin, 24-18AWG, Tin Finish #			A1422-ND	1.02/10	6.89	60618-1
	Socket, 24-18AWG, Tin Finish #			A1423-ND	1.01/10	6.80	60617-1
	Pin, 24-18AWG, Gold Finish ‡			A1432-ND	9.67/10	58.39	60618-5
	Socket, 24-18AWG, Gold Finish ‡			A1433-ND	9.67/10	65.07	60617-5
	Pin, 20-14AWG, Tin Finish #			A1420-ND	1.01/10	6.80	60620-1
	Socket, 20-14AWG, Tin Finish #			A1421-ND	1.01/10	6.80	60619-1
	Pin, 20-14AWG, Gold Finish ‡			A1434-ND	11.84/10	79.66	60620-5
	Socket, 20-14AWG, Gold Finish ‡			A1435-ND	9.67/10	58.39	60619-5
Fig. 7 – Insulation Displacement Connector							
	Pre-Tin Pin Finish AWG 20, Yellow			A14384-ND	.47	37.48	770156-4
	Pre-Tin Pin Finish AWG 18, Orange			A14385-ND	.47	37.48	770156-3
Tools							
	MATE-N-LOK® Crimp Tool for 24-18 AWG			A9987-ND	347.95	—	90123-2
	MATE-N-LOK® Crimp Tool for 20-14 AWG			A9986-ND	347.95	—	90124-2
	PRO-CRIMPER II Hand Tool w/o Dies			A9996-ND	75.00	—	354940-1
	Die Set 18-24 AWG			A9940-ND	105.00	—	90574-2
	Die Set 14-20 AWG			A9939-ND	105.00	—	90575-2
	Pin Extraction Tool			A1419-ND	14.36	—	465644-1
	Pin Insertion Tool			A9998-ND	15.82	—	91002-1
	Contact Insertion Tool			A1444-ND	23.11	—	455830-1

* Detent Lock. # Tin: Brass - Tin Plated; ‡ Gold: Brass - Gold Over Nickel Plated.

tyco / Electronics AMP

MT Connectors

DOUBLE ROW MT RECEPTACLE CONNECTORS .100" (2.54mm) CENTERS. Housings Preloaded with Standard Pressure Contacts. Insulation Diameter: .050" (1.27mm) **Mating Post Length:** .222-.273" (5.64-6.94mm) max. Housing and Cover: Black thermoplastic, flame retardant **Contacts:** Copper alloy **Housing Features:** • Capable of connecting up to 100 wires simultaneously. • Available in single and double row configurations in .100" (2.54mm)centerline spacing.



AMPMODU® HOUSINGS

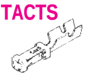
No. of Positions	Digi-Key Part No.	Pricing 1	Pricing 25	AMP Part No.
AMPMODU® MT Connectors – IDC Crimp Type				
6	A3047-ND	1.96	44.40	102398-1
8	A3048-ND	2.20	49.80	102398-2
10	A3049-ND	2.70	61.20	102398-3
12	A3050-ND	3.21	72.60	102398-4
14	A3051-ND	3.74	84.60	102398-5
16	A3052-ND	3.77	84.28	102398-6
18	A3053-ND	4.00	89.61	102398-7
20	A3054-ND	5.33	120.60	102398-8
24	A3055-ND	6.44	145.80	1-102398-0
34	A3057-ND	9.06	205.20	1-102398-5
40	A3058-ND	7.92	179.40	1-102398-8
50	A3059-ND	9.65	218.40	2-102398-3
60	A3060-ND	11.37	257.40	2-102398-8
64	A3061-ND	17.09	387.00	3-102398-0

A2031-ND Man. Pistol GripTool for use with Head Assembly.....**$55.50 each**
A2040-ND Head Assembly Tool for AMP MT Conn. ....**$162.26 each**

No. of Positions	Digi-Key Part No.	Pricing 1	Pricing 25	AMP Part No.
AMPMODU® MT Covers – 2 Required for each Connector				
6	A3062-ND	1.83/2	41.52/50	102396-1
8	A3063-ND	2.16/2	48.80/50	102396-2
10	A3064-ND	1.09/2	24.63/50	102396-3
12	A3065-ND	1.64/2	37.08/50	102396-4
14	A3066-ND	3.87/2	87.56/50	102396-5
16	A3067-ND	1.64/2	37.05/50	102396-6
20	A3069-ND	2.97/2	67.16/50	102396-8
24	A3070-ND	3.31/2	74.85/50	1-102396-0
34	A3072-ND	2.13/2	48.34/50	1-102396-5
40	A3073-ND	2.51/2	56.81/50	1-102396-8
50	A3074-ND	4.45/2	100.70/50	2-102396-3
64	A3076-ND	2.85/2	64.45/50	3-102396-0
Keying Plug	A3077-ND	1.46/10	4.57/50	86286-1
AMPMODU® Housings – Single Row (Order Contacts Sep.)				
2	A3011-ND	.84	13.14	87499-3
3	A3012-ND	.59	9.30	87499-5
4	A3013-ND	.52	8.21	87499-7
5	A3014-ND	.42	6.57	87499-9
6	A3015-ND	.52	8.21	1-87499-1
7	A3016-ND	.70	10.95	87499-1
8	A3017-ND	.56	8.76	1-87499-3
9	A3018-ND	.73	11.49	1-87499-5
10	A3019-ND	.66	10.40	1-87499-7
11	A3020-ND	1.57	24.63	1-87499-9
12	A3021-ND	.70	10.95	2-87499-1
13	A3022-ND	.94	14.78	2-87499-3
14	A3023-ND	.84	13.14	2-87499-5
15	A3024-ND	.87	13.68	2-87499-7
16	A3025-ND	.91	14.23	2-87499-9
18	A3027-ND	.94	14.78	3-87499-4
20	A3029-ND	1.08	16.97	3-87499-7

No. of Positions	Digi-Key Part No.	Pricing 1	Pricing 25	AMP Part No.
AMPMODU® Housings – Double Row (Order Contacts Sep.)				
4	A3031-ND	.87	13.68	4-87456-9
6	A3032-ND	.94	14.78	87456-1
8	A3033-ND	1.01	15.87	87456-3
10	A3034-ND	1.12	17.51	87456-6
12	A3035-ND	1.19	18.61	87456-8
14	A3036-ND	1.22	19.16	1-87456-0
16	A3037-ND	1.29	20.25	1-87456-2
18	A3038-ND	1.85	29.01	1-87456-4
20	A3039-ND	1.54	24.08	1-87456-6
24	A3040-ND	1.99	31.20	2-87456-0
26	A3041-ND	1.82	28.46	2-87456-2
28	A3042-ND	1.99	31.20	2-87456-4
34	A3043-ND	2.41	37.77	3-87456-0
40	A3044-ND	2.73	42.69	3-87456-6
50	A3045-ND	3.29	51.45	4-87456-0
60	A3046-ND	3.66	57.27	5-87456-2

CONTACTS



SPECIFICATIONS: Contact Current Rating: 3 amperes. **Terminal Resistance:** 12 milliohms max. **Contact Material:** Be-Cu. **CONTACT FEATURES:** Available in a variety of platings and contact pressures; Dual cantilever contact beam with built-in overstress assures reliable connection.

Wire Size (AWG)	Insul. Dia. (Max.)	Plating	Con. Pres. Type	Digi-Key Part No.	Pricing 10	Pricing 100	AMP Part No.
26-22	.061" (1.55mm)	Nickel	Stand.	A3000-ND	1.85	15.75	87667-3
		Gold	Stand.	A3001-ND	2.63	21.86	87667-2
		Nickel	High	A3003-ND	1.43	12.12	102128-2
		Gold	High	A3004-ND	2.27	18.83	102128-1
24-20	.069" (1.75mm)	Nickel	Intermed.	A3005-ND	2.22	18.83	87046-4
		Gold	Intermed.	A3006-ND	2.97	25.26	87046-3
		Nickel	High	A3007-ND	1.43	12.12	1-87309-3
		Gold	High	A3008-ND	2.32	19.23	1-87309-4
Crimp Tool MT Conn. 26-22 AWG....				A9983-ND	478.10 each		90418-1
Crimp Tool MT Conn. 24-20 AWG....				A9978-ND	478.10 each		90202-2
Keying Plug...........................				A3077-ND	1.46	—	86286-1

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tyco / Electronics AMP

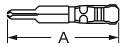
Soft Shell Connectors

Universal MATE-N-LOK II® Connectors

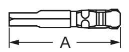
Product Facts: • Ultimate reliability • Pins and sockets can be intermixed in the same housing • Available in 2 thru 15 Circuit sizes for free hanging or panel mount wire-to-wire connection • Polarized housings available in UL94V-0 flammability rated material • Crimp terminals accept 24-10 AWG wire sizes, 10 Amps • Tin or duplex gold plated contacts • Contacts are on .250" (6.35mm) centerline spacing • Recognized under the Component Program of Underwriters Laboratories, Inc. File No. E28476 • Certified by Canadian Standards Association File No. LR 16455-113 • Passed test by VDE under their Test Report No. 4751-1431-4016/A8E

Performance Characteristics: • **Dielectric Withstanding Voltage:** 5.0 KVAC or 10 KVDC between adjacent circuits • **Insulation Resistance:** 1000 megohms minimum between adjacent circuits • **Voltage Rating:** 600V AC or DC • **Connector Mating:** Split Pin — 1.5 lb. max. per circuit • **Connector Unmating:** Split Pin — .5 lb min. per circuit • **Contact Insertion Force:** 3.0 lb max. per contact unassembled • **Contact Retention:** 35 lb min. per contact • **Durability:** 50 cycles, mating and unmating

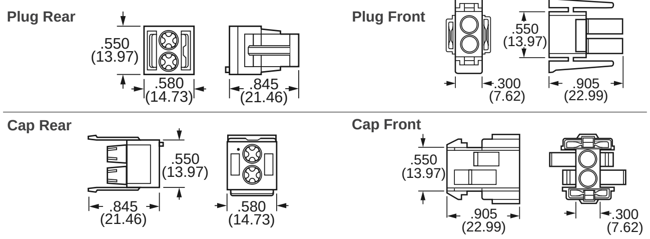
Pin Connector



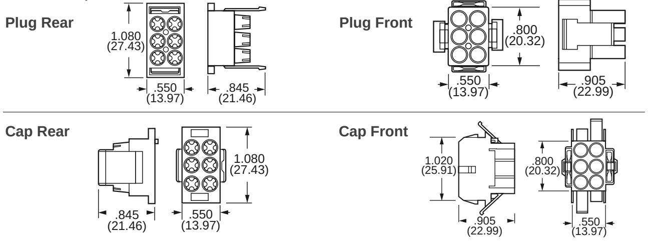
Socket Connector



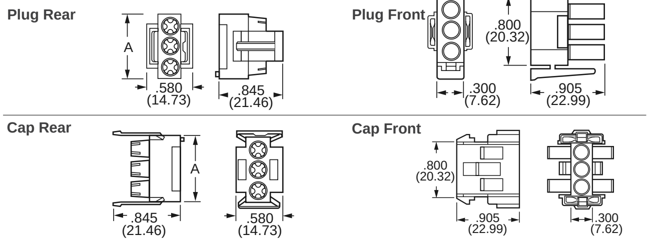
2 Circuit, In-Line



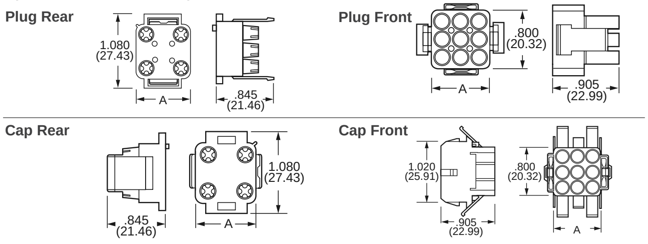
6 Circuit, Matrix



3, 4 Circuit, In-Line



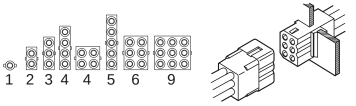
9, 12 and 15 Circuit, Matrix



No. of Circuits	Description	Dim. A Inch (mm)	Digi-Key Part No.	Pricing 1	Pricing 100	AMP Part No.
Connector Housing Kits						
2	Plug	—	A14240-ND	.46	36.74	770017-1
2	Cap	—	A14247-ND	.47	37.49	770024-1
3	Plug	.800 (20.32)	A14241-ND	.51	40.15	770018-1
3	Cap	.800 (20.32)	A14248-ND	.56	44.56	770025-1
4	Plug	1.050 (26.67)	A14242-ND	.57	45.41	770019-1
4	Cap	1.050 (26.67)	A14249-ND	.61	48.43	770026-1
6	Plug	—	A14243-ND	.65	51.74	770020-1
6	Cap	—	A14250-ND	.64	50.89	770027-1
9	Plug	.800 (20.32)	A14244-ND	.70	55.05	770021-1
9	Cap	.800 (20.32)	A14251-ND	.69	54.45	770028-1
12	Plug	1.050 (26.67)	A14245-ND	1.24	100.42	770022-1
12	Cap	1.050 (26.67)	A14252-ND	1.20	96.77	770029-1
15	Plug	1.300 (33.02)	A14246-ND	1.02	80.34	770023-1
15	Cap	1.300 (33.02)	A14253-ND	.97	76.54	770030-1
Contact Insertion Tool.................			A1444-ND	23.11	—	455830-1

Description	Ins. Diameter Range Inch (mm)	Dim. A Inch (mm)	Digi-Key Part No.	Pricing 10	Pricing 100	AMP Part No.
Pin Contacts						
24-18AWG — Brass, Pre-Tin	.040-.100 (1.02-2.54)	1.005 (25.53)	A14254-ND	1.47	9.86	770252-1
24-18AWG — Brass, Gold	.040-.100 (1.02-2.54)	1.005 (25.53)	A14255-ND	6.72	45.22	770252-2
20-14AWG — Brass, Pre-Tin	.060-.130 (1.52-3.30)	1.005 (25.53)	A14256-ND	1.47	9.86	770250-1
20-14AWG — Brass, Gold	.060-.130 (1.52-3.30)	1.005 (25.53)	A14257-ND	6.72	45.22	770250-2
20-14AWG — Brass, Pre-Tin	.130-.200 (3.30-5.08)	.995 (25.27)	A14258-ND	1.93	12.99	770248-1
20-14AWG — Brass, Gold	.130-.200 (3.30-5.08)	.995 (25.27)	A14259-ND	8.15	54.82	770248-2
12-10AWG — Brass, Pre-Tin	.200 max. (5.08 max.)	1.005 (25.53)	A14260-ND	3.09	20.78	770246-3
12-10AWG — Brass, Gold	.200 max. (5.08 max.)	1.005 (25.53)	A14261-ND	14.66	98.62	770246-4
Socket Contacts						
24-18AWG — Brass, Pre-Tin	.040-.100 (1.02-2.54)	.980 (24.89)	A14262-ND	1.70	11.42	770253-3
24-18AWG — Brass, Gold	.040-.100 (1.02-2.54)	.980 (24.89)	A14263-ND	10.49	70.55	770253-4
20-14AWG — Brass, Pre-Tin	.060-.130 (1.52-3.30)	.980 (24.89)	A14264-ND	1.79	12.01	770251-3
20-14AWG — Brass, Gold	.060-.130 (1.52-3.30)	.980 (24.89)	A14265-ND	11.04	74.27	770251-4
20-14AWG — Brass, Pre-Tin	.130-.200 (3.30-5.08)	.970 (24.64)	A14266-ND	2.33	15.71	770249-3
20-14AWG — Brass, Gold	.130-.200 (3.30-5.08)	.970 (24.64)	A14267-ND	13.42	90.28	770249-4
12-10AWG — Brass, Pre-Tin	.200 max. (5.08 max.)	.980 (24.89)	A14268-ND	3.09	20.78	770247-3
12-10AWG — Brass, Gold	.200 max. (5.08 max.)	.980 (24.89)	A14269-ND	14.86	99.98	770247-4
PRO-CRIMPER II Hand Tool without Dies..................................			A9996-ND	75.00 each		354940-1
Die Set AWG 24-18			A9944-ND	127.50 each		90548-2
Die Set AWG 20-14, 1.52mm-3.30mm......................................			A9943-ND	127.50 each		90546-2
Die Set AWG 20-14, 3.30mm-5.08mm......................................			A9924-ND	127.50 each		90547-2
Die Set AWG 12-10			A9923-ND	127.50 each		58530-2

.062” (1.57mm) & .093” (2.36mm) Soft-Shell Commercial Pin & Socket Connectors



PRODUCT FACTS: • Polarized • Cavity Identification • Low contact-mating force • Detent and positive locking • Tin plating • Free-hanging styles • Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 • Certified by Canadian Standards Association, File No. LR7189

AMP.093” (2.36mm) and .062” (1.57mm) Soft-Shell Commercial Pin and Socket connectors form a total system of economical commercial-grade connectors and offer compatibility with competitive soft shells.

GENERAL SPECIFICATIONS: • **Thermal Shock:** -55°C to +105°C • **Temperature-Humidity Cycling:** +25°C to +65°C at 90-95% RH • **Durability:** 50 mating cycles • **Dielectric Withstanding Voltage:** 1.0kVAC • **Insulation Resistance:** 1000 megohms minimum initial • **Voltage Rating:** 250VAC • **Contact Rating:** • .062” (1.57mm) Connector: AWG 30-24 — .5-1.5 Amps, AWG 18-24 — 1.5-6 Amps • .093” (2.36mm) Connector: AWG 14-24 — 2.0-10.0 Amps

No. of Pos.	Description	Digi-Key Part No.	Pricing 10	50	AMP Part No.
.062” (1.57mm) Diameter Housings					
1	Recept with Detent	A14001-ND	.96	3.74	770277-1
2	Recept with Detent	A14002-ND	1.50	4.30	770342-1
3	Recept with Detent	A14003-ND	1.49	5.79	770333-1
4	Recept with Detent	A14004-ND	7.06	27.40	770274-1
4	Recept Square with Detent	A14005-ND	3.32	12.87	770442-1
6	Recept with Detent	A14006-ND	3.11	12.08	770356-1
9	Recept with Detent	A14007-ND	3.52	13.65	770429-1
1	Plug without Mt Ears	A14008-ND	1.12	4.33	770278-1
2	Plug without Mt Ears	A14009-ND	1.13	3.23	770340-1
3	Plug without Mt Ears	A14010-ND	2.04	7.91	770331-1
4	Plug without Mt Ears	A14011-ND	7.12	27.61	770275-1
4	Plug Square without Mt Ears	A14012-ND	3.32	12.87	770433-1
6	Plug without Mt Ears	A14013-ND	2.67	10.34	770355-1
9	Plug without Mt Ears	A14014-ND	3.09	12.00	770428-1
	Description	**Digi-Key Part No.**	**Pricing 100**	**500**	**AMP Part No.**
	18-24 Awg .062” (1.57mm) Pin Tin	A14015-ND	4.08	17.65	794017-1
	24-30 Awg .062” (1.57mm) Pin Tin	A14016-ND	4.08	17.65	794018-1
	18-24 Awg .062” (1.57mm) Socket Tin	A14049-ND	4.08	17.65	794016-1
	24-30 Awg .062” (1.57mm) Socket Tin	A14048-ND	4.08	17.65	794019-1
	Crimp Tool .062” (1.57mm) Awg 30 w/Die	A9819-ND	162.00 each		90870-1
	Crimp Tool .062” (1.57mm) Awg 24 w/Die	A9820-ND	162.00 each		90869-1
	PRO-CRIMPER Hand Tool without Die	A9996-ND	75.00 each		354940-1
	Die Set 24-18 Awg, Use with A9996	A9957-ND	105.00 each		90869-2
	Die Set 30-24 Awg, Use with A9996	A9956-ND	105.00 each		90870-2

No. of Pos.	Description	Digi-Key Part No.	Pricing 10	50	AMP Part No.
.093” (2.36mm) Diameter Housings					
1	Recept with Detent	A14050-ND	.93	3.60	770063-1
2	Recept with Detent	A14051-ND	1.38	3.96	770065-1
2	Recept with Detent	A14386-ND	1.81	7.02	770066-1
3	Recept with Detent	A14052-ND	2.41	9.35	770070-1
3	Recept with Detent	A14388-ND	2.54	9.84	770071-1
4	Recept with Detent	A14053-ND	2.75	10.66	770075-1
4	Recept with Detent	A14389-ND	2.75	10.66	770076-1
4	Recept Square with Detent	A14054-ND	5.47	21.23	770843-1
5	Recept with Detent	A14055-ND	2.78	7.94	770083-1
6	Recept with Detent	A14056-ND	3.21	12.45	770086-1
9	Recept with Detent	A14057-ND	4.04	15.67	770092-1
1	Plug without Mt Ears	A14058-ND	1.19	4.61	770064-1
2	Plug Panel Mt	A14387-ND	5.74	22.28	770068-1
2	Plug without Mt Ears	A14059-ND	2.47	7.06	770069-1
3	Plug without Mt Ears	A14060-ND	2.34	9.09	770074-1
4	Plug without Mt Ears	A14061-ND	2.61	10.12	770078-1
4	Plug Square without Mt Ears	A14062-ND	9.00	34.90	770842-1
5	Plug without Mt Ears	A14063-ND	2.13	6.10	770084-1
6	Plug without Mt Ears	A14064-ND	3.63	14.06	770090-1
9	Plug without Mt Ears	A14065-ND	3.97	15.42	770096-1
	Description	**Digi-Key Part No.**	**Pricing 100**	**500**	**AMP Part No.**
	20-14 Awg .093” (2.36mm) Pin Tin	A14099-ND	4.12	17.82	770145-1
	24-18 Awg .093” (2.36mm) Pin Tin	A14098-ND	4.12	17.82	770147-1
	20-14 Awg .093” (2.36mm) Socket Tin	A14097-ND	4.12	17.82	770144-1
	24-18 Awg .093” (2.36mm) Socket Tin	A14096-ND	4.12	17.82	770146-1
	Crimp Tool .093” (2.36mm) AWG 24 w/Die	A9817-ND	162.00 each		90872-1
	Crimp Tool .093” (2.36mm) AWG 20 w/Die	A9818-ND	162.00 each		90871-1
	PRO-CRIMPER II Hand Tool without Die	A9996-ND	75.00 each		354940-1
	Die Set 20-14 AWG use with A9996	A9953-ND	105.00 each		90871-2
	Die Set 24-18 AWG use with A9996	A9952-ND	105.00 each		90872-2

(MR) Miniature Rectangular Connectors

Product Facts: • Housings positively lock to prevent accidental disengagement • Either cap or plug housing can be mounted in same rectangular panel cutout without additional hardware • Brick red UL94V-0 housings • Plug and cap design includes molded-in polarizing feature to assure proper mating • High density achieved through .165” (4.19mm) contact centerline spacing • Recognized under the Component Program of Underwriters Laboratories, Inc. File No. E28476 • Certified by Canadian Standards Association File No. LR 7189

Performance Characteristics: • **Dielectric Withstanding Voltage:** 2.5 KVAC between adjacent circuits • **Insulation Resistance:** 1500 megohms minimum initial between adjacent circuits • **Voltage Rating:** 250V AC • **Contact Rating:** AWG 26-18 — Test Current 1-6 Amps

Fig. 1

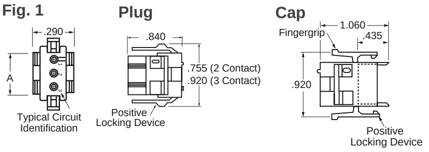


Fig. 2

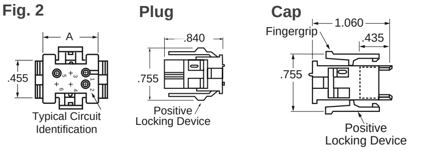


Fig. 3

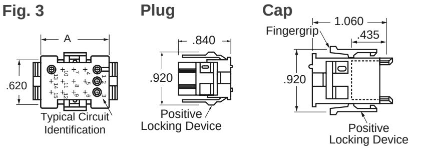


Fig. 4

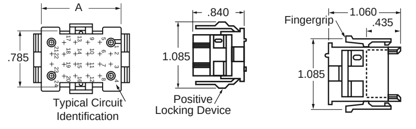


Fig. 5

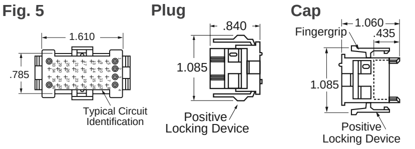


Fig. 6 - Strain Relief

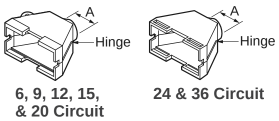


Fig. 7 - Grommet

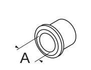


Fig. 8

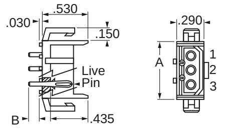


Fig. 9

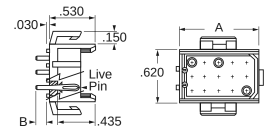


Fig. 10

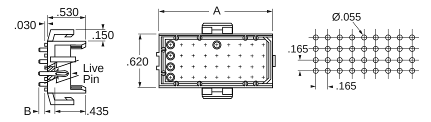


Fig. 11 - Pin

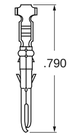


Fig. 12 - Socket

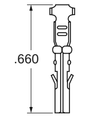


Fig. 13 - Keying Plug

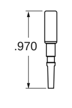


Fig.	No. of Pos.	Type	Dim. A (Inch)	Digi-Key Part No.	Pricing 1	25	AMP Part No.
In-Line Housing (Contacts Sold Separately)							
1	2	Cap	.455	A14100-ND	.47	10.18	1-640507-0
1	3	Cap	.620	A14101-ND	.69	14.98	1-640508-0
1	2	Plug	.455	A14110-ND	.38	8.51	1-640517-0
1	3	Plug	.620	A14111-ND	.68	14.76	1-640518-0
Matrix Housing (Contacts Sold Separately)							
2	4	Cap	.455	A14102-ND	.75	16.17	1-640509-0
2	6	Cap	.620	A14103-ND	.85	18.29	1-640510-0
2	4	Plug	.455	A14112-ND	.71	15.98	1-640519-0
2	6	Plug	.620	A14113-ND	.62	13.89	1-640520-0
3	9	Cap	.620	A14104-ND	.91	19.59	1-640511-0
3	12	Cap	.785	A14105-ND	1.01	21.80	1-640512-0
3	15	Cap	.950	A14106-ND	1.11	24.01	1-640513-0
3	9	Plug	.620	A14114-ND	.92	20.64	1-640521-0
3	12	Plug	.785	A14115-ND	1.01	21.70	1-640522-0
3	15	Plug	.950	A14116-ND	1.08	23.28	1-640523-0
4	20	Cap	.950	A14107-ND	1.76	37.95	1-640514-0
4	24	Cap	1.115	A14108-ND	1.87	40.35	1-640515-0
4	20	Plug	.950	A14117-ND	1.76	37.98	1-640524-0
4	24	Plug	1.115	A14118-ND	1.88	40.47	1-640525-0
5	36	Cap	—	A14109-ND	2.35	50.57	1-640516-0
5	36	Plug	—	A14119-ND	1.94	41.92	1-640526-0
Fig. No.	**No. of Pos.**		**Dim. A (Inch)**	**Digi-Key Part No.**	**Pricing 1**	**25**	**AMP Part No.**
Strain Relief (Grommet - Sold Separately)							
6	6		.374	A14120-ND	2.08	44.87	350373-1
6	9		.420	A14121-ND	1.37	29.60	350522-1
6	12		.420	A14122-ND	1.73	37.32	350374-1
6	15		.420	A14123-ND	2.63	56.71	350523-1
6	20		.560	A14124-ND	2.72	58.62	480634-1
6	24		.560	A14125-ND	2.78	59.90	350524-1
6	36		.560	A14126-ND	3.65	78.75	480594-1

Fig. No.	No. of Pos.	Dim. A (Inch)	Digi-Key Part No.	Pricing 1	25	AMP Part No.
Adapting Grommet (Flexible PVC - Black)						
7	6	.156	A14130-ND	1.01	21.79	1-350377-0
7	6	.218	A14131-ND	1.20	25.82	1-350376-0
7	6	.296	A14132-ND	.97	20.83	1-350375-0
7	9, 12, 15	.218	A14133-ND	.99	21.31	1-350378-1
7		.250	A14134-ND	.98	21.13	1-350379-1
7		.281	A14135-ND	1.24	26.79	1-350380-1
7	20, 24, 36	.437	A14136-ND	1.08	23.17	1-380935-0
7		.375	A14137-ND	1.03	22.19	1-380936-0
7		.312	A14138-ND	1.47	31.72	1-380937-0

Fig.	No. of Pos.	Plating	Dim. (In.) A	B	Digi-Key Part No.	Pricing 1	25	AMP Part No.
PCB Board Vertical Headers, .062” (1.57mm) Board Thickness								
8	2	Tin	.455	.120	A14200-ND	.63	13.52	640497-1
8	2	Gold	.455	.120	A14201-ND	1.77	38.09	640497-2
8	3	Tin	.620	.120	A14202-ND	.94	20.17	640498-1
8	3	Gold	.620	.120	A14203-ND	2.62	56.45	640498-2
8	4	Tin	.455	.120	A14204-ND	1.72	37.14	640499-1
8	4	Gold	.455	.120	A14205-ND	3.27	70.50	640499-2
8	6	Tin	.620	.120	A14206-ND	1.72	36.99	640500-1
8	6	Gold	.620	.120	A14207-ND	4.49	96.76	640500-2
9	9	Tin	.620	.120	A14208-ND	2.23	48.05	640501-1
9	9	Gold	.620	.120	A14209-ND	6.23	134.23	640501-2
9	12	Tin	.785	.120	A14210-ND	2.86	61.74	640502-1
9	12	Gold	.785	.120	A14211-ND	8.11	181.49	640502-2
9	15	Tin	.950	.120	A14212-ND	3.51	75.54	640503-1
9	15	Gold	.950	.120	A14213-ND	10.98	245.74	640503-2
10	20	Tin	.950	.120	A14214-ND	4.55	98.05	640504-1
10	20	Gold	.950	.120	A14215-ND	12.92	278.38	640504-2
10	24	Tin	1.115	.120	A14216-ND	5.06	109.14	640505-1
10	24	Gold	1.115	.120	A14217-ND	14.34	308.97	640505-2
10	36	Tin	1.610	.120	A14218-ND	8.20	176.80	640506-1
10	36	Gold	1.610	.120	A14219-ND	30.49	682.61	640506-2

Fig.	No. of Pos.	Plating	Dim. (In.) A	B	Digi-Key Part No.	Pricing 1	25	AMP Part No.
PCB Board Vertical Headers, .120” (3.05mm) Board Thickness								
8	2	Tin	.455	.180	A14220-ND	1.42	30.67	640497-3
8	2	Gold	.455	.180	A14221-ND	1.77	38.09	640497-4
8	3	Tin	.620	.180	A14222-ND	1.50	32.36	640498-3
8	3	Gold	.620	.180	A14223-ND	2.62	56.45	640498-4
8	4	Tin	.455	.180	A14224-ND	1.75	37.80	640499-3
8	4	Gold	.455	.180	A14225-ND	3.27	70.50	640499-4
8	6	Tin	.620	.180	A14226-ND	1.72	36.99	640500-3
8	6	Gold	.620	.180	A14227-ND	4.49	96.76	640500-4
9	9	Tin	.620	.180	A14228-ND	2.23	48.05	640501-3
9	9	Gold	.620	.180	A14229-ND	5.74	128.49	640501-4
9	12	Tin	.785	.180	A14230-ND	2.86	61.74	640502-3
9	12	Gold	.785	.180	A14231-ND	8.08	174.07	640502-4
9	15	Tin	.950	.180	A14232-ND	3.51	75.54	640503-3
9	15	Gold	.950	.180	A14233-ND	9.83	211.87	640503-4
10	20	Tin	.950	.180	A14234-ND	4.55	98.05	640504-3
10	20	Gold	.950	.180	A14235-ND	12.92	278.38	640504-4
10	24	Tin	1.115	.180	A14236-ND	5.06	109.14	640505-3
10	24	Gold	1.115	.180	A14237-ND	14.54	325.56	640505-4
10	36	Tin	1.610	.180	A14238-ND	8.20	176.80	640506-3
10	36	Gold	1.610	.180	A14239-ND	30.49	682.61	640506-4
Live Split Pin (Caps)								
11	—	Tin	—	—	A14199-ND	—	5.40	640545-1
11	—	Gold	—	—	A14198-ND	—	11.51	640545-2
Standard Socket (Plugs)								
12	—	Tin	—	—	A14197-ND	—	5.08	641300-1
12	—	Gold	—	—	A14196-ND	—	10.60	641300-2
Keying Plug								
13	—	—	—	—	A14195-ND	42.25/100		350591-1
Tools								
Die Set MR, Use with A9996					A9949-ND	120.00 each		58514-2
PRO-CRIMPER II Hand Tool					A9996-ND	75.00 each		354940-1
Extraction Tool					A9954-ND	17.78 each		455822-2
CERTI-CRIMP Tool MR					A9936-ND	523.76 each		90325-1

EDAC INC Rack and Panel Connectors — 516 Series

Features: • UL Recognized • Plug and receptacle in 20, 38, 56, 90 or 120 contact sizes • Contact termination options include crimp, P.C. tail, wire hole and wire wrap • Mating and unmating simplified with use of actuating screws • Contacts suitable for either plug or receptacle

Specifications: • Insulator Material: Diallyl Phthalate, Color: Green, or Polycarbonate color: Grey • Contact Material: Phosphor Bronze Alloy CA-510 • Contact Plating: Gold over nickel for entire contact • Cover Material: Die-cast zinc, finished with grey enamel paint • Current Rating: 8.5 Amperes • Contact Resistance: 10 Milliohms maximum • Dielectric Withstanding Voltage: 2000 V AC rms at sea level • Insulation Resistance: 5000 Megohms minimum • Operating Temperature: -65°C to +125°C • Insertion and Withdrawal Force: 2 to 16 oz. (0.56 to 4.45 N) per contact position

Fig. 1 – 20 Pin Plug & Receptacle, Grey

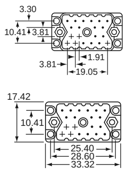


Fig. 2 – 38 Pin Plug & Receptacle, Grey

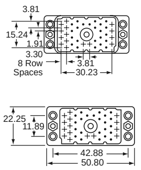


Fig. 3 – 56 Pin Plug & Receptacle, Grey

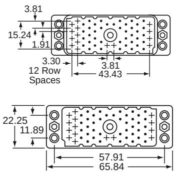


Fig. 4 – 90 Pin Plug & Receptacle, Grey

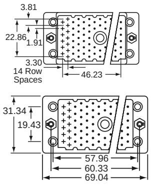


Fig. 5 – 120 Pin Plug & Receptacle, Green

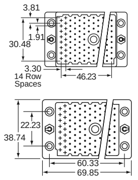


Fig. 7 – Contacts

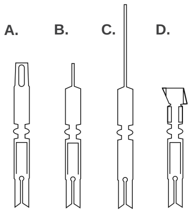
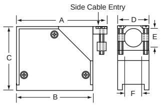


Fig. 6 – Metal Connector Cover



No. of Cont.	Dimensions A	B	C	D	E	F
20	39.09	33.66	23.01	17.42	11.33	12.45
38	56.03	50.95	39.78	22.23	18.29	14.61
56	71.17	66.09	39.78	22.23	18.29	14.61
90	79.20	69.04	45.09	31.34	22.35	22.86
120	80.65	69.85	51.31	38.89	22.61	27.43

Fig.	No. Contacts	Description	Digi-Key Part No.	Price Each 1	25	EDAC Part No.
1	20	Plug w/Screw	151-1024-ND	8.00	6.00	516-020-000-301
	20	Plug w/Nut	151-1025-ND	5.81	4.36	516-020-000-302
	20	Recept. w/Screw	151-1026-ND	7.62	5.71	516-020-000-401
	20	Recept. w/Nut	151-1027-ND	5.71	4.29	516-020-000-402
2	38	Plug w/Screw	151-1028-ND	8.10	6.08	516-038-000-301
	38	Plug w/Nut	151-1029-ND	5.71	4.29	516-038-000-302
	38	Recept. w/Screw	151-1030-ND	8.00	6.00	516-038-000-401
	38	Recept. w/Nut	151-1031-ND	5.52	4.14	516-038-000-402
3	56	Plug w/Screw	151-1032-ND	8.10	6.08	516-056-000-301
	56	Plug w/Nut	151-1033-ND	5.90	4.43	516-056-000-302
	56	Recept. w/Screw	151-1034-ND	8.10	6.07	516-056-000-401
	56	Recept. w/Nut	151-1035-ND	5.71	4.29	516-056-000-402
4	90	Plug w/Screw	151-1036-ND	15.71	11.79	516-090-000-301
	90	Plug w/Nut	151-1037-ND	7.14	5.36	516-090-000-302
	90	Recept. w/Screw	151-1038-ND	15.43	11.57	516-090-000-401
	90	Recept. w/Nut	151-1039-ND	6.95	5.21	516-090-000-402
5	120	Plug w/Screw	151-1040-ND	18.38	13.79	516-120-000-101
	120	Plug w/Nut	151-1041-ND	9.52	7.14	516-120-000-102
	120	Recept. w/Screw	151-1042-ND	18.76	14.07	516-120-000-201
	120	Recept. w/Nut	151-1043-ND	9.90	7.43	516-120-000-202
6	—	Cover for 20 Pos.	151-1044-ND	13.05	9.79	516-230-520
	—	Cover for 38 Pos.	151-1045-ND	14.00	10.50	516-230-538
	—	Cover for 56 Pos.	151-1046-ND	15.33	11.50	516-230-556
	—	Cover for 90 Pos.	151-1047-ND	15.71	11.79	516-230-590
	—	Cover for 120 Pos.	151-1048-ND	17.33	11.93	516-230-512
7A	—	Solder Eyelet	151-1049-ND	—	3.39	516-290-500
7B	—	Soldertail	151-1050-ND	—	3.21	516-290-520
7C	—	Wirewrap	151-1051-ND	—	4.11	516-290-541
7D	—	Crimp Type	151-1052-ND	—	3.75	516-290-590
—	—	Crimp Tool	151-1058-ND	159.00	—	516-280-201
—	—	Extraction Tool	151-1059-ND	49.00	—	516-280-300

tyco Electronics AMP Board Mount Headers – .050" (1.27mm) Spacing

Board Mount Headers (*Figures 1 & 2 mate with Figure 3*)

Fig. 1

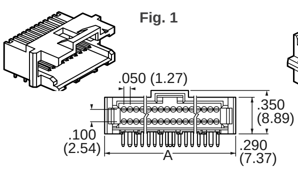


Fig. 2

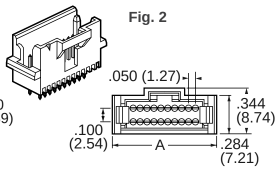
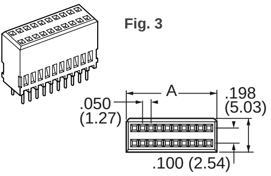


Fig. 3



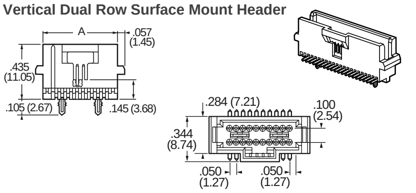
MATERIAL & FINISH: • **Housing:** Black thermoplastic, 94V-0 rated • **Contacts:** Copper Alloy, plated gold in mating area.

Fig.	Description	No. of Pos.	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Board Mount Headers (Figures 1 & 2 mate with Figure 3)							
1	Protected Dual Row Rt. Angle Header	24	.730 (18.54)	A24196-ND	5.20	4.66	1-104069-2
	Protected Dual Row Rt. Angle Header	30	.880 (22.35)	A3205-ND	5.79	5.18	104069-5
	Protected Dual Row Rt. Angle Header	40	1.130 (28.70)	A3206-ND	7.44	6.65	104069-6
	Protected Dual Row Rt. Angle Header	50	1.380 (35.05)	A3207-ND	9.00	8.07	104069-2
	Protected Dual Row Rt. Angle Header	60	1.630 (41.40)	A3208-ND	9.46	8.47	104069-7
	Protected Dual Row Rt. Angle Header	80	2.130 (54.10)	A24197-ND	13.33	11.94	104069-3
	Protected Dual Row Rt. Angle Header	100	2.630 (66.80)	A3209-ND	15.67	14.03	1-104069-7
2	Protected Dual Row Vertical Header	16	.530 (13.46)	A24198-ND	3.97	3.56	1-104068-0
	Protected Dual Row Vertical Header	20	.630 (16.00)	A3210-ND	4.08	3.66	104068-1
	Protected Dual Row Vertical Header	24	.730 (18.54)	A24832-ND	4.75	4.25	1-104068-1
	Protected Dual Row Vertical Header	30	.880 (22.35)	A3211-ND	5.59	4.99	104068-3
	Protected Dual Row Vertical Header	40	1.130 (28.70)	A3212-ND	6.76	6.06	104068-4
	Protected Dual Row Vertical Header	50	1.380 (35.05)	A3213-ND	8.19	7.34	104068-5
	Protected Dual Row Vertical Header	60	1.630 (41.40)	A3214-ND	9.46	8.47	104068-6
	Protected Dual Row Vertical Header	68	1.830 (46.48)	A24833-ND	11.31	10.13	1-104068-8
	Protected Dual Row Vertical Header	80	2.130 (54.10)	A24834-ND	13.98	12.52	1-104068-6
	Protected Dual Row Vertical Header	100	2.630 (66.80)	A3215-ND	14.40	12.90	1-104068-7
3	Dual Row Vertical Receptacle	20	.544 (13.82)	A3216-ND	3.98	3.60	104078-1
	Dual Row Vertical Receptacle	30	.794 (20.17)	A3217-ND	5.43	4.92	104078-4
	Dual Row Vertical Receptacle	40	1.044 (26.52)	A3218-ND	6.60	5.98	104078-2
	Dual Row Vertical Receptacle	50	1.294 (32.87)	A3219-ND	8.00	7.25	104078-5
	Dual Row Vertical Receptacle	60	1.544 (39.22)	A3220-ND	9.25	8.38	104078-6
	Dual Row Vertical Receptacle	100	2.544 (64.62)	A3221-ND	14.10	12.77	104078-8

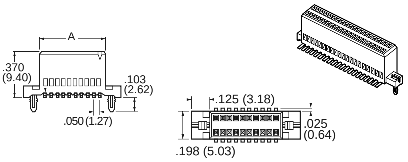
AMP SMT Headers and Receptacles – .050" (1.27mm) Spacing

MATERIAL & FINISH: • **Housing:** Glass Filled, black thermoplastic, 94V-0 rated • **Contacts:** Phosphor bronze, plated gold in mating area.

Vertical Dual Row Surface Mount Header



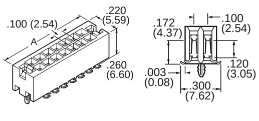
Vertical Dual Row Surface Mount Receptacle



No. of Pos.	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Vertical Dual Row Surface Mount Headers					
20	.630 (16.00)	A3250-ND	4.21	3.78	104549-2
30	.880 (22.35)	A3252-ND	6.76	6.06	104549-5
40	1.130 (28.70)	A3254-ND	6.79	6.09	104549-6
50	1.380 (35.05)	A3256-ND	10.14	9.08	104549-7
100	2.630 (66.80)	A3260-ND	12.32	11.16	1-104549-0

No. of Pos.	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Vertical Dual Row Surface Mount Receptacles					
20	.544 (13.82)	A3251-ND	4.24	3.84	104550-2
30	.794 (20.17)	A3253-ND	5.75	5.21	104550-4
40	1.044 (26.52)	A3255-ND	6.97	6.32	104550-5
50	1.294 (32.87)	A3257-ND	8.40	7.61	104550-6
100	2.544 (64.62)	A3261-ND	17.01	15.73	104550-9

AMPMODU® Surface Mount Receptacles – .100" (2.54mm) Spacing

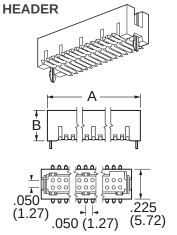


MATERIAL & FINISH:
Housing: Black polyphenylene sulfide, 94V-0 rate
Contacts: Phosphor bronze, duplex plated min. gold on contact area.

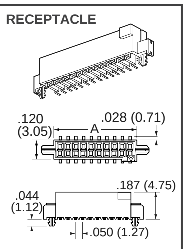
No. of Pos.	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Vertical Mount, Bottom Entry with Holddowns					
10	.700 (17.78)	A3100-ND	4.05	3.68	535959-1
20	1.200 (30.48)	A3101-ND	5.04	4.56	535959-3
26	1.500 (38.10)	A3102-ND	5.72	5.19	535959-2

AMPMODU® .050" (1.27mm) Grid Surface Mount Connectors

HEADER



RECEPTACLE



Housing: Black glass filled thermoplastic, 94V-0 rated.
Contacts: Phosphor Bronze (headers), Beryllium Copper (receptacles), both with duplex plated gold in mating area.

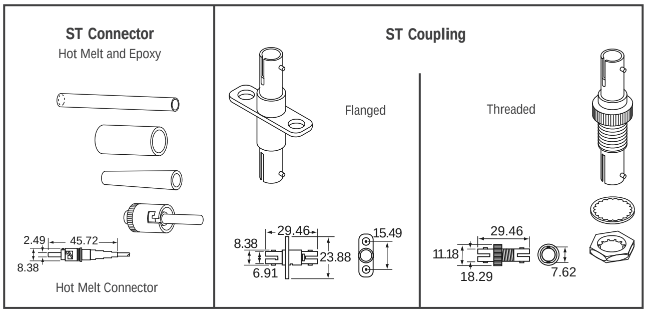
No. of Pos.	Dim. – Inch (mm) A	B*	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Vertical Dual Row Surface Mount Headers						
20	.622 (15.80)	.250 (6.35)	A3107-ND	4.40	3.99	104655-3
50	1.372 (34.85)	.250 (6.35)	A3108-ND	7.21	6.53	104655-6
70	1.872 (47.55)	.250 (6.35)	A3109-ND	8.19	7.42	104655-8
100	2.622 (66.60)	.250 (6.35)	A3110-ND	6.63	6.00	1-104655-1
20	.622 (15.80)	.320 (8.13)	A3111-ND	4.40	3.99	104656-2
50	1.372 (34.85)	.320 (8.13)	A3112-ND	7.21	6.53	104656-5
70	1.872 (47.55)	.320 (8.13)	A3113-ND	5.04	4.56	104656-7
100	2.622 (66.60)	.320 (8.13)	A3114-ND	10.76	9.75	1-104656-0
20	.622 (15.80)	.390 (9.91)	A3115-ND	2.73	2.48	104693-2
50	1.372 (34.85)	.390 (9.91)	A3116-ND	4.43	4.01	104693-5
70	1.872 (47.55)	.390 (9.91)	A3117-ND	8.19	7.42	104693-7
100	2.622 (66.60)	.390 (9.91)	A3118-ND	8.16	7.31	1-104693-0
Vertical Dual Row Surface Mount Receptacles						
20	.516 (13.11)	—	A3103-ND	3.38	3.03	104652-2
50	1.266 (32.16)	—	A3104-ND	7.05	6.32	104652-5
70	1.766 (44.86)	—	A3105-ND	8.55	7.68	104652-7
100	2.516 (63.91)	—	A3106-ND	10.43	9.35	1-104652-0

* Mated Height

3M Fiber Optics

ST* Connectors and Accessories

The design of the 3M ST* Connector product line is compatible with AT&T ST* Connectors, Systimax* components, and other ST* connector products. The 3M products are made with a high quality PC finish on zirconia ceramic ferrules.



ST* Bayonet Connectors

Mode	Type	Fiber Size (µm)	Attenuation	Reflection	Digi-Key Part No.	Price Each 1	10	25
Multi	Hot Melt	125	<0.2 dB typ.	≤-25 dB typ.	MF6100-ND	9.56	8.50	6.38
Multi	Crimplok	125	<0.2 dB typ.	≤-29 dB typ.	MF6901-ND	10.12	8.67	8.10
Single	Epoxy	126	<0.3 dB typ.	≤-45 dB typ.	MF8106-ND	11.23	9.98	7.49
Single	Epoxy	127	<0.3 dB typ.	≤-45 dB typ.	MF8107-ND	20.79	18.48	13.86

ST* Couplings

• **Op. Temp.:** -40°C to 85°C/-40°F to 185°F • **Housing Material:** Nickel Plated Zinc

Mode	Description	Sleeve Material	Digi-Key Part No.	Price Each 1	10
Multi	Threaded Coupling w/Panel Nut & Lock Washer	Beryllium Copper	MF6112-ND	2.48	2.20
Multi	Duplex Threaded	Beryllium Copper	MF6113-ND	5.31	4.72
Single	Threaded Coupling w/Panel Nut & Lock Washer	Zirconia Ceramic	MF8119-ND	8.87	7.88
Single	Duplex Threaded Coupling	Zirconia Ceramic	MF8113-ND	13.48	11.98

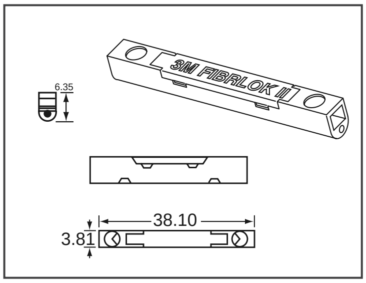
MF8250-ND Epoxy Termination Kit for ST* Connectors.....................................**$1675.80**

Universal Optical Fiber Splice

The Fibrlok II 2529 Universal Optical Fiber Splice can be used with either single-mode or multimode fibers with a (nominal) glass cladding diameter of 125 microns. The 2529 splice can be used with any combination of fibers with coating diameters from 250 to 900 microns.

Specifications:

- **Fiber Diameter:** 125µm
- **Mean Insertion Loss:** <0.1 dB
- **Reflectance:** <-35 dB from -40° to 80°C (-40°F to 176°F)
- **Tensile Strength:** 1.0 lb. (.45kg) min.; >3.0 lbs. (1.36kg) typical



Description	Digi-Key Part No.	Price Each
Universal Optical Fiber Splice	MF2529-ND	12.86
Universal Optical Fiber Splice Kit	MF2529-K-ND	354.38
Fiber Optic Assembly Tool	MF2501-ND	90.04
Fiber Splice Preparation Kit (includes MF2501 Assembly Tool and Thomas & Betts Cleaving Tool)	MF2530-ND	1779.75

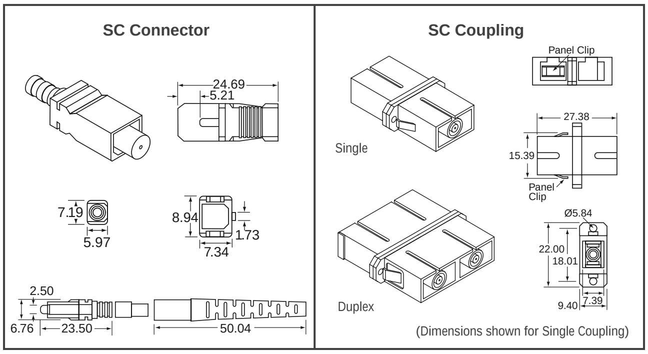
SC Connectors and Accessories

SC Connectors comply with NTT, JIS, ISO/IEC, and TIA/EIA component and ISO/IEC, CENELEC, ANSI, TIA/EIA-568A and BISCI system and cabling level standards.

Epoxy SC Connectors are available in single-mode and multimode utilizing epoxy adhesive.

Hot-Melt SC Connectors are available in multimode, preloaded with hot melt adhesive, enabling a field termination in less than two minutes for multiple terminations.

Crimplok SC Connectors combine the speed of non-adhesive connectors with the performance characteristics of epoxy and hot-melt connectors. They are the ideal solution for emergency restoration work or for quickly making fiber connections at a desk.



SC Connectors

Mode	Type	Fiber Size (µm)	Attenuation	Reflection	Digi-Key Part No.	Price Each 1	10	25
Multi	Hot Melt	125	<0.2 dB typ.	≤-25 dB typ.	MF6300-ND	9.56	8.50	6.38
Multi	Crimplok	125	<0.3 dB typ.	≤-27 dB typ.	MF6900-ND	11.95	10.25	9.57
Single	Epoxy	126	<0.3 dB typ.	≤-45 dB typ.	MF8306-ND	12.06	10.72	8.04
Single	Epoxy	127	<0.3 dB typ.	≤-45 dB typ.	MF8307-ND	17.12	15.22	11.42

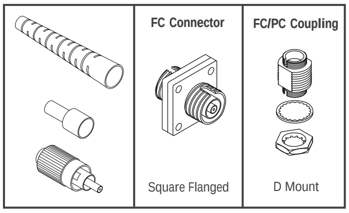
SC Couplings

Description	Operating Temperature	Digi-Key Part No.	Price Each 1	10	25
Standard Density	-40°C – 85°C / -40°F – 185°F	MF8310-ND	7.56	6.72	5.04
Duplex, Standard Density	-40°C – 75°C / -40°F – 167°F	MF8313-ND	14.90	13.24	9.93

MF6955-ND Crimplok Field Termination Kit for SC Connectors **$558.60**

FC/PC Connectors and Accessories

The 3M PC/FC Connector is designed for advanced fiber optic systems requiring exceptional stability and low reflections. It is a field mountable, pull-proof connector that is fully compatible with all PC connectors adhering to NTT specifications.



FC/PC Connectors

Mode	Type	Fiber Size (µm)	Attenuation	Reflection	Digi-Key Part No.	Price Each 1	10	25
Multi	Hot Melt	125	<0.2 dB typ.	≤-25 dB typ.	MF6200-ND	12.76	11.34	8.51
Single	Epoxy	126	<0.3 dB typ.	≤-45 dB typ.	MF8203-ND	14.18	12.60	9.45
Single	Epoxy	127	<0.3 dB typ.	≤-45 dB typ.	MF8204-ND	18.20	16.18	12.14

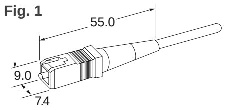
FC/PC Couplings

Mode	Housing Design	Operating Temperature	Digi-Key Part No.	Price Each 1	10	25
Multi	Square Flanged	-40° to 85°C/-40° to 185°F	MF6210-ND	9.45	8.40	6.30
Single	Square Flanged	-40° to 85°C/-40° to 185°F	MF8210-ND	10.64	9.46	7.10
Single	D-Mount	-40° to 85°C/-40° to 185°F	MF8211-ND	10.64	9.46	7.10

MF8350-ND Epoxy Termination Kit for SC and FC/PC Connectors **$1748.42**

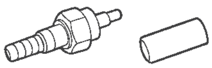
Amphenol® Fiber Optics Connectors and Adapters

Fig. 1



- **Connection Loss:** 0.27 dB typical; single mode

Fig. 2



Specifications: • **Use with Fiber Sizes:** 50/125, 62.5/125, 85/125 • **Max Buffer Dia.:** 2.46mm • **Crimp Female Inner Dia.:** 4.42mm (Part No. AFP1004-ND: 2.92 + 4.44, 4.42)

Material: • **Boot:** Santoprene • **O-Ring:** Buna-n • **Half & Full Sleeve:** Delrin • **Crimp Female:** Nickel plated copper alloy #122 (DHP)

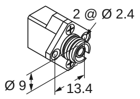
Fig.	Description	Typ. Insert. Loss (dB)	Digi-Key Part No.	Pricing 1	10	50
	954 SC Series Connector					
1	SC Ceramic, 125µm hole dia.	—	AFP1011-ND	7.80	75.00	360.00
	906 SMArt Series Connector					
2	SMA Steel, 128µm, hole dia.	<1.0	AFP1004-ND	6.70	64.38	309.00

HIROSE ELECTRIC CO., LTD.

Fiber Optics

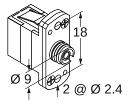
Adapters - Split Sleeve

Fig. 1



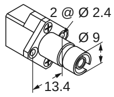
(Cut-out Dim)

Fig. 2



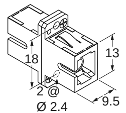
(Cutout Dim.)

Fig. 3



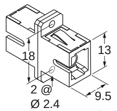
(Cut-out Dim)

Fig. 4



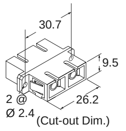
(Cutout Dim.)

Fig. 5



(Cutout Dim.)

Fig. 6



(Cut-out Dim.)

Fig. 7

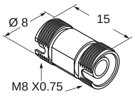


Fig. 8

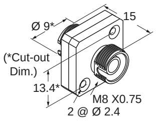


Fig.	Description	External Color	Digi-Key Part No.	Price Each 1	10	50	Hirose Part No.
1	SC Hybrid SC/FC, Angled	—	H2492-ND	13.50	12.71	11.52	HSCJ-HRFCJ-B
2	SC Hybrid SC/FC, Straight	—	H2493-ND	15.52	14.61	13.24	HSCJ-HRFCJ-C
3	SC Hybrid SC/ST, Angled	—	H2494-ND	17.06	16.49	15.35	HSCJ-HSTJ-B
4	Panel Mount, Die Cast, Zirconia	—	H2495-ND	13.60	12.80	11.60	HSC-A2-D1
5	Panel Mount, Plastic, Zirconia	Blue	H2496-ND	9.05	7.92	7.17	HSC-A3-D1(02)
6	F-type, Zirconia	Blue	H2497-ND	15.25	14.36	13.01	HSCF-2A-D(P)
7	Non-Flange, Phosphor Bronze	—	H2498-ND	14.03	12.36	11.09	HRFC-A2-SF(01)
8	Cost-Effective, Phosphor Bronze	—	H2499-ND	10.69	9.42	8.45	HRFC-PA11-G1

Terminator

Fig. 1

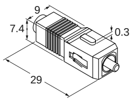


Fig. 2

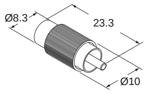


Fig.	Description	Digi-Key Part No.	Price Each 1	10	50	Hirose Part No.
1	Plug, SC type	H2512-ND	57.34	54.48	52.23	HSC-TM-P1
2	Plug, FC type	H2513-ND	66.91	63.57	60.94	HRFC-TM-P1

MU Connectors and Adapters

Fig. 1

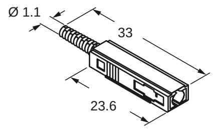


Fig. 2

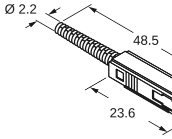


Fig. 3

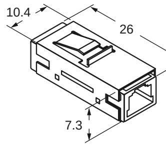


Fig. 4

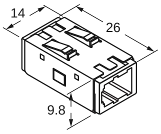


Fig.	Description	Boot Color	Digi-Key Part No.	Price Each 1	10	50	Hirose Part No.
1	Simplex Plug for 0.9 Buffered fiber	Blue	H2500-ND	6.83	6.01	5.33	HMUA-P1-H1
2	Simplex Plug for 2 Cable	Blue	H2501-ND	6.83	6.01	5.33	HMUA-P2-H1
3	Simplex Patch Panel Mount Adapter	—	H2502-ND	12.77	12.02	10.89	HMUA-A-3
4	Duplex Patch Panel Mount Adapter	—	H2503-ND	15.35	14.45	13.10	HMUA-2A-3

Attenuators (Maximum Input Power 10mW)

Fig. 1

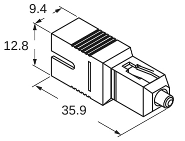


Fig. 2

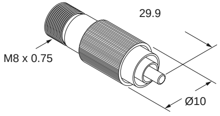
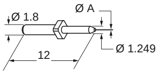


Fig.	Description	Attenuation =1.31 m	Digi-Key Part No.	Price Each 1	10	50	Hirose Part No.
1	SC Attenuator	5dB	H2504-ND	91.76	87.17	83.57	HSC-AT8K-A05A
	SC Attenuator	10dB	H2505-ND	91.76	87.17	83.57	HSC-AT8K-A10A
	SC Attenuator	15dB	H2506-ND	91.76	87.17	83.57	HSC-AT8K-A15A
	SC Attenuator	20dB	H2507-ND	91.76	87.17	83.57	HSC-AT8K-A20A
2	FC Attenuator	5dB	H2508-ND	124.25	118.04	113.16	HRFC-AT5K-A05A
	FC Attenuator	10dB	H2509-ND	124.25	118.04	113.16	HRFC-AT5K-A10A
	FC Attenuator	15dB	H2510-ND	124.25	118.04	113.16	HRFC-AT5K-A15A
	FC Attenuator	20dB	H2511-ND	124.25	118.04	113.16	HRFC-AT5K-A20A

Ferrule

Dimension A	Digi-Key Part No.	Price Each 1	10	50	Hirose Part No.
0.125	H2514-ND	6.53	5.75	5.09	HMUA-F3-A125
0.1255	H2515-ND	6.53	5.75	5.09	HMUA-F3-A1255
0.126	H2516-ND	6.53	5.75	5.09	HMUA-F3-A126



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tyco Electronics AMP

Dimensions in mm.

Fiber Optics OPTIMATE® DNP (Dry Non-Polish) Connectors

Fig. 1
Single Position Plug Assembly

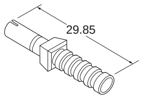


Fig. 2
Single Position Device Mounts

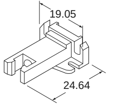
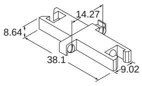


Fig. 3
Single Position Bulkhead Receptacle



2.39 Dia. - 2 Holes

Fig. 4
Dual Position Plug Assembly

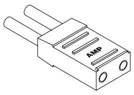


Fig. 5
Dual Position Bulkhead Receptacle

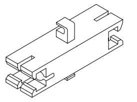
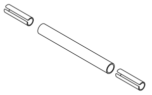
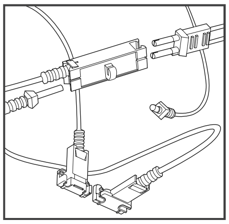


Fig. 6
Splice and Retention Clip





Optical Characteristics: • Insertion Loss: 2dB • Ref.: FOTP 34 Method C
Environmental Characteristics: • Temperature Range: -40°C to +60°C
Mechanical Characteristics: • Insertion Force: 13.34N [3 lb] (plug to receptacle) • Cable retention plug: 8.89N [12 lb.]

Materials: • Retention Clip: Copper alloy, plated • Splice: Copper alloy, plated • Connectors: Thermoplastic

The economics of using fiber-optic systems is a complex subject. Comparisons of the costs of fiber-optic systems and copper-wired systems are difficult and open to debate. Proper evaluations must be based on the users' needs.

Widespread application of fiber-optic technology will depend on its providing performance equal to or superior to copper cable, and at a lower cost. That fiber-optics can outperform cable in some areas seems established. That it can do so more cheaply, is not the rule. As with many new technologies, the prices of fiber-optic components have been dropping, often dramatically. Better products at cheaper prices have been introduced continually, and manufacturers' volume production and maturity of experience are combining to produce significant price reductions. In contrast, prices have been rising for copper cable and associated hardware. Although the point at which fiber-optic systems become less expensive than copper cable systems depends on the application, fiber-optics are becoming more attractive every day.

Users evaluating fiber-optics should consider costs beyond those for the components themselves. Considerations include the education needed to design a fiber-optic system and the costs of training craftsmen and technicians to handle, install, and maintain fiber-optic systems. On the other hand, the small size, light weight, and flexibility may present offsetting cost advantages. Handling, storage, and installation costs may be reduced.

Fig.	Description	Digi-Key Part No.	Pricing 1	25	AMP Part No.
1	Single Position Plug Assembly	A1703-ND	1.09	23.50	228087-1
2	Single Position Device Mounts	A1705-ND	.96	20.77	228043-1
3	Single Position Bulkhead Receptacle	A1707-ND	1.69	36.56	228042-1
4	Dual Position Plug Assembly	A20128-ND	2.39	51.75	228088-1
5	Dual Position Bulkhead Receptacle	A20129-ND	1.74	37.69	228045-1
6	Plastic Fiber Splice Connector	A20130-ND	1.42	21.34	228051-1
6	Plastic Fiber Retention Clip	A20131-ND	.23	4.07	228046-1

Description	Digi-Key Part No.	Pricing 1	5	AMP Part No.
Hot Knife, Plastic Fiber	A99100-ND	63.35	271.50	228085-1
Single Position Plastic Cutting Fixture	A99102-ND	87.01	372.90	228837-1
Plastic Fiber Designer Kit	A9824-ND	621.78	2664.75	501218-1

Note: X in Part No. = Meter Per Roll
FIBER OPTIC CABLE (O.D. = .089)

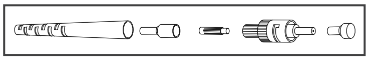
Digi-Key Part No.	Price (Meter) 5	10	15	25	50	100
A1700-X-ND	11.37	21.11	30.24	48.72	81.20	146.16

A1799-ND Technicians Guide to Fiber Optics -
For more information on the technical aspect of fiber optics **$43.04**

tyco / Electronics AMP

Fiber Optic Connectors

ST Style LightCrimp XTC Connectors

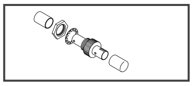


Features: • Singlemode or multimode • Just crimp it on the fiber • 2-minute termination • Epoxyless or quick-cure epoxy types • Pre-radiused PC finish (epoxy type) • Body Material: Epoxyless - aluminum; Epoxy - polymer • Coupling Nut Material: multimode epoxyless - polymer; Singlemode Epoxyless - die cast; Epoxy - die cast zinc • Storage Temp. Range: -40°C to +85°C

Fiber Size (µm)	Mode Type	Ferrule Material	Insertion Loss dB, Avg.	Oper. Temp. Range (°C)	Durability cycles, <.20 (dB) change	Digi-Key Part No.	Price Each 1	10	AMP Part No.
LightCrimp Epoxyless ST Style Connectors									
125	Multi	Plastic	0.4	-40° to +65°	500	A20100-ND	9.38	8.34	492168-1
125	Multi	St. Steel	0.4	-10° to +65°	500	A20101-ND	12.06	10.72	504034-1
125	Multi	Ceramic	0.4	-40° to +65°	1000	A20102-ND	14.65	13.02	504001-1
126	Single	Ceramic	0.2	-40° to +65°	1000	A20103-ND	35.60	31.64	504000-1
Epoxy ST Style Connectors									
125	Multi	Ceramic	0.4	-20° to +75°	1000	A20104-ND	7.45	6.62	501380-1
125	Multi	Ceramic	0.4	-20° to +75°	1000	A20105-ND	3.47	3.08	503571-1
125,140	Multi	St. Steel	0.3	-20° to +75°	500	A20106-ND	8.01	7.12	504008-3
125	Multi	Composite	0.3	-20° to +75°	5000	A20107-ND	2.61	2.32	503415-1
126	Single	Zircon/Ceramic	0.3	-20° to +75°	200	A20108-ND	7.07	6.28	502579-2

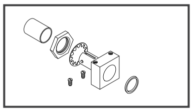
ST Style Coupling Receptacles

Free-Hanging or Panel Mount Design



Type	Sleeve Material	Digi-Key Part No.	Price Each 1	10	AMP Part No.
Multimode	Composite	A20109-ND	2.03	1.80	501381-1
Single- or Multimode	Metal	A20110-ND	2.97	2.64	504021-1
Single- or Multimode	Ceramic	A20111-ND	5.83	5.18	502750-1

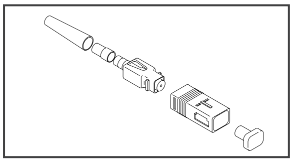
ST Style Active Device Mounts



Designed to accept multimode TO-18, TO-46, and TO-52 active devices • Nickel plated, die cast zinc • Mount to PCB or through panel • Includes positioning ring

Description	Digi-Key Part No.	Price Each 1	10	AMP Part No.
Standard Height	A20142-ND	6.55	5.82	501474-1
Low Profile	A20143-ND	6.41	5.70	502585-2

SC Style Connectors



LightCrimp Epoxyless Type

Features: • Innovative crimp design • Compliant with EIA/TIA 568A • No epoxy or adhesives • Shorter assembly time • Reduced polishing time • Lower installed cost • Secure repeatable matings • No need for curing oven or power supply • Consistent p.erformance over a wide range of temperatures **Specifications:** • **Attenuation @1300 nm:** Mean 0.12 dB • **Operational Temperature Cable Dependent:** 40°C to 65°C **Materials:** • **Connector Ferrule:** Zirconia Ceramic • **Connector Body:** Thermoplastic • **Strain Relief:** Thermoplastic

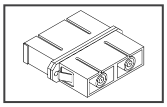
Epoxy Type

Features: • Easy to install • Singlemode or Multimode • Two versions available to match various assembly techniques • Compliant with Bellcore 326, JIS C-5973, Fibre Channel, TIA 568 • Pre-radiused ferrules **Performance Characteristics:** • **Insertion Loss:** 0.2dB typ. Return Loss: <-59dB typ. • **Temperature Range:** -40°C to +85°C; 0.1dB change typ. • **Durability:** Singlemode: 0.1dB typ. change after 200 cycles; Multimode: <0.1dB typ. change after 500 cycles

Description	Fiber Size (µm)	Digi-Key Part No.	Price Each 1	10	AMP Part No.
LightCrimp Epoxyless SC Style Connectors — 3.0mm Cable Dia.					
Simplex Multimode Connector	125	A20117-ND	16.88	15.00	503692-1
Duplex Multimode Connector	125	A20118-ND	35.17	31.26	503693-1
Epoxy SC Style Connectors — 3.0mm Cable Dia.					
Simplex Multimode Connector	125	A20112-ND	5.81	5.16	503948-1
Simplex Singlemode Connector	125	A20113-ND	9.47	8.42	504646-1
Simplex Singlemode Connector	126	A20114-ND	9.47	8.42	504646-2
Duplex Multimode Connector	125	A20115-ND	12.44	11.06	504657-1
Duplex Singlemode Connector	126	A20116-ND	19.89	17.68	504655-1

SC Coupling Adapters

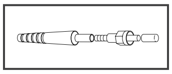
Features: • Suitable for any SC Type connector • Choice of housing colors • Metal Alignment Sleeve



Description	Color	Digi-Key Part No.	Price Each 1	10	AMP Part No.
SC Simplex Adapter	Blue	A20144-ND	7.72	6.86	502632-8
SC Simplex Adapter	Beige	A20145-ND	7.72	6.86	502632-9
SC Duplex Adapter	Blue	A20146-ND	13.75	12.22	502776-8
SC Duplex Adapter	Beige	A20147-ND	13.75	12.22	502776-9

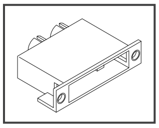
FSMA Connectors

Features: • Industry compatible with 905 and 906 style connectors • Design parameters conform to NATO and IEC interface standards • **Ferrule Material:** Stainless steel • **Connector Body Material:** Nickel-Plated brass • **Fiber Diameter:** 125µm **Performance Characteristics:** • **Insertion Loss:** 1.5dB typical • **Temperature Range:** -55°C to +105°C • **Durability:** 200 mating cycles



Description	Digi-Key Part No.	Price Each 1	10	AMP Part No.
FSMA Connector (905)	A20126-ND	15.01	13.34	504566-1
FSMA Connector (906)	A20127-ND	17.03	15.14	504014-1

FSD Style Connectors



FSD Connector **Specifications:** • Multimode • Meets specifications of FDDI PMD – ANSI X3.166 • **Insertion Loss:** typ. 0.5dB Ceramic Ferrule, 0.5 dB Polymer Ferrule • **Durability:** Ceramic Ferrule ≤0.2dB Change after 500 cycles; Polymer Ferrule ≤0.2 dB Change after 250 cycles • **Operating Temperature:** -40°C to +85°C

FSD-MC Connector Plug **Specifications:** • **Insertion Loss:** typ. 0.5dB • **Durability:** typ. ≤0.2dB Change after 500 cycles • **Operating Temperature:** -40°C to +85°C

Fiber Size (µm)	Ferrule Material	Digi-Key Part No.	Price Each 1	10	AMP Part No.
FSD Connector - Multimode - Duty Dual ZIP Cable					
125	Ceramic	A20119-ND	22.50	20.00	502015-1
125	Polymer Composite	A20120-ND	22.12	19.66	503347-5
FSD-MC Connector Plug - Singlemode - Zipcord Cable					
125	Steel/Ceramic	A20121-ND	41.67	37.04	503345-2
Field Keyable FSD-ST Receptacles					
Metal Multimode Receptacle		A20122-ND	20.39	18.12	502808-2
Ceramic Singlemode Receptacle		A20123-ND	28.28	25.14	502809-1

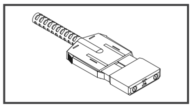
Loopback Connectors

SC Low Loss Loopback Connector **Features:** • Multimode • Use for equipment testing • 0.6 dB Insertion loss • 0.5" (12.7mm) Ferrule centerline

FSD Low Loss Loopback Connector, 1.5 dB Max. The FSD Loopback connector connects the transmit side of the FDDI transceiver to the receive side. The ceramic ferrules and glass fiber provide a maximum loss of 1.5 dB. This device is used as a test unit in a fiber-to-fiber application.

Description	Digi-Key Part No.	Price Each 1	10	AMP Part No.
SC Loopback Connector..................	A20140-ND	72.16	64.14	503141-1
FSD Loopback Connector	A20141-ND	98.78	87.80	502556-1

RSD (Retractable Shroud Duplex) Connectors



RSD Connector **Features:** • Designed to meet the requirements of the SBCON section of the ANSI X3Ts11 Fiber Channel specification currently under development • Designed to meet the intermateability details defined in the IBM Enterprise Systems Architecture/390, ESCON I/O Interface, Physical Layer specification SA23-0394-01

RSD Connector Plug Kit **Features:** • Multimode • Compatible with IBM ESCON connector system • Simple field assembly. **Performance Characteristics:** • **Insertion Loss:** typical 0.5dB • **Durability:** ≤0.2dB change after 500 cycles • **Temperature Range:** -20°C to +70°C

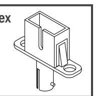
Description	Digi-Key Part No.	Price Each 1	10	AMP Part No.
ESCON Multimode DUALAN Connector Kit	A20124-ND	35.82	31.84	492181-1
ESCON Curing Fixture Kit	A9823-ND	17.35	15.42	492236-2
RSD-ST Style Receptacle	A20125-ND*	31.97	28.42	502826-2

* Inter-mateable with IBM ESCON type connectors

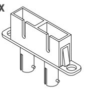
Hybrid Adapters

Features: • Use for Multimode or Singlemode • Available with mounting screws • Adapt various connector interfaces • Metal alignment sleeve

Simplex Style



Duplex Style



Description	Housing Material	Housing Color	Digi-Key Part No.	Price Each 1	10	AMP Part No.
Simplex Style						
SC to ST	Plastic	Black	A20148-ND	6.98	6.20	502780-1
SC to ST	Plastic	Blue	A20149-ND	6.98	6.20	502780-2
SC to ST	Plastic	Beige	A20150-ND	6.98	6.20	502780-3
SC to ST	Nickel Plated	Die Cast	A20151-ND	9.05	8.04	503638-1
SC to FC	Plastic	Black	A20152-ND	7.72	6.86	502781-1
SC to FC	Plastic	Blue	A20153-ND	7.72	6.86	502781-2
SC to FC	Plastic	Beige	A20154-ND	7.72	6.86	502781-3
SC to FC	Nickel Plated	Die Cast	A20155-ND	12.29	10.92	503480-1
Duplex Style						
SC to ST	Plastic	Black	A20157-ND	12.31	10.94	503137-1
SC to ST	Plastic	Blue	A20158-ND	12.31	10.94	503137-2
SC to ST	Plastic	Beige	A20159-ND	12.31	10.94	503137-3
SC to FC	Plastic	Beige	A20162-ND	18.36	16.32	503135-3

tyco / Electronics AMP

Fiber Optic Cable

Fig.	Cable Type	Cable Style	Installation Tensile Load Lb. (Kg)	Long Term Tensile Load Lb. (Kg)	Installation Bend Radius Inch (mm)	Long Term Bend Radius Inch (mm)	Digi-Key Part No.	*Note:* "X" In Part No.= Ft. Per Roll Price Per Roll 500 ft.	1,000 ft.	AMP Part No.
Simplex Cable										
1	Riser	Simplex	113 (51.26)	68 (30.84)	1.80 (45.72)	1.20 (30.48)	AG101-X-ND	126.88	253.76	503016-1
Multi Cable										
2	Riser	Dualan	316 (143.34)	135 (61.24)	2.80 (71.12)	1.90 (48.26)	AG301-X-ND	266.43	532.87	502984-1
2	Plenum	Dualan	316 (143.34)	135 (61.24)	2.80 (71.12)	1.90 (48.26)	AG401-X-ND	291.81	583.63	502987-1
3	Riser	4 Fiber	316 (143.34)	135 (61.24)	2.80 (71.12)	1.90 (48.26)	AG302-X-ND	482.12	964.24	502985-1
3	Plenum	4 Fiber	316 (143.34)	135 (61.24)	2.80 (71.12)	1.90 (48.26)	AG402-X-ND	520.19	1040.38	502988-1
4	Plenum	6 Fiber	341 (154.68)	171 (77.57)	3.90 (99.06)	2.40 (60.96)	AG403-X-ND	729.53	1459.06	502993-1

Fig. 1 — Simplex Cable

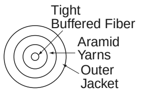


Fig. 2 — Dualan Cable

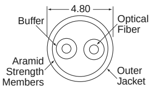


Fig. 3 — 4-Fiber Cable

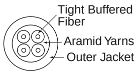
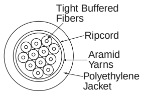


Fig. 4 — 6-Fiber Cable
(Orange PVC Jacket)



Kits, Tools and Accessories

Termination Kits

For AMP SC, FSMA, ST Style, and FSD Styles
Termination kits provide all the materials and tools (except epoxy) required to terminate a particular type of fiber optic connector. Tools are conveniently packaged in a handy carrying case. The kits contain polishing materials for approximately 60 connectors. The consumable items in the kit can be purchased separately.

For LightCrimp ST Style
Termination Kits include all the tools required to prepare and terminate all LightCrimp ST Style connectors.

Polishing (Lapping) Film Packets

Polishing film sheets are used with polishing bushings for hand polishing of fiber optic connectors. Most part numbers consist of a packet of ten 8.5" x 11.0" (21.59cm x 27.94cm) sheets. Each packet will polish between 60 and 80 connectors.

Consumables Kits

Contains all consumable supplies for at least 100 connectors. Epoxy (general purpose), polish film, epoxy applicators and polish pad.

Inspection Microscope Kits

The complete microscope kit includes a handy carrying case, tripod stand, AC adapter and all adapters needed to inspect the FSMA, FSD, ST Style and SC Type Connectors.

Features: • Pre-centered adapter mount provides quick, easy focusing, and changing of connectors • Kg-3 infrared filter to protect the user • Durable, lightweight A.B.S. plastic microscope body • Lockable, high density polyethylene, double-well carrying case with antistatic foam cut-outs

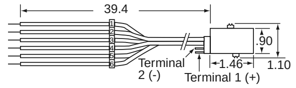
Description	Digi-Key Part No.	Price Each	AMP Part No.
LightCrimp Epoxy Type Termination Kits (Epoxy Sold Separately)			
ST Style	A9828-ND	785.56	503746-1
FSMA	A9835-ND	786.24	503746-2
FSD	A9834-ND	1227.47	503746-6
SC	A9829-ND	845.67	503746-7
Epoxies (Tra-Con Epoxy-Bipax)			
General Purpose Use, High Impact	A20219-ND	143.29	501195-4
LightCrimp XTC Termination Tool Kit			
Mini Tool Kit	A9825-ND	619.33	492322-1
Tool Kit Without Microscope	A9826-ND	996.29	503330-1
Tool Kit With Premium Microscope	A9827-ND	2342.11	503330-2
LightCrimp SC Style Termination Tool Kit			
LightCrimp SC Termination Kit Without Microscope	A9830-ND	1018.29	503706-1
Microscope Adapter (Universal 2.5mm)	A20215-ND	42.63	502977-1
LightCrimp SC/Ceramic With Inspection Microscope	A9831-ND	2072.74	503706-2
LightCrimp SC (Upgrade) Kit (Add to an ST Style Kit for SC Terminations)	A9832-ND	562.29	503707-1
Scribing Tools			
Sapphire-Tipped Scribe Tool	A99109-ND	61.74	504064-1
Replacement Blades for A99109-ND	A99110-ND	46.32	504290-1
Pro-Crimper II Hand Tool			
For use with FSMA – With Die Set	A99108-ND	151.38	58551-1
For use with FSMA – Die Set Only (hex die)	A20218-ND	73.50	58552-1
For use with ST and SC Style – With Die Set	A99105-ND	136.50	58433-4
For use with ST Style – Die Set Only	A20214-ND	52.50	58424-1
For use with FSD (ceramic) – With Die Set	A99107-ND	291.38	58519-1
For use with FSD (ceramic) – Die Set Only	A20217-ND	215.25	58510-1
For LightCrimp XTC (ST) – With Die Set	A99104-ND	270.81	503568-1
For LightCrimp XTC (ST) – Die Set Only	A20213-ND	206.40	503567-1
For LightCrimp SC (ceramic) – With Die Set	A99106-ND	318.38	503699-1
For LightCrimp SC (ceramic) – Die Set Only	A20216-ND	246.82	503698-1
Crimp Tool – Handle Only	A9996-ND	75.00	354940-1
Polishing Bushing			
For ST Style (Polymer Composite) - Beige Polymer	A99111-ND	4.55	503304-2
For ST Style (Ceramic, Stainless Steel) - Black Polymer	A99112-ND	6.46	503304-1
Duplex Curing Fixture Kit w/Polishing Bushing	A9833-ND	145.92	501795-1
Polishing (Lapping) Film Packets			
FSMA, FSD, RSD – 5µm, Lt. Gray, (pkg. of 10)	A20221-ND	16.87	228433-8
FC Type, D4 Type – 1µm, Green, (pkg. of 10)	A20222-ND	16.87	228433-7
ST Style, AMP SC – 0.3µm, White (pkg. of 10)	A20223-ND	16.87	228433-5
Consumables Kits			
FSMA, FSD, ST Style	A9836-ND	253.63	502306-1
FC Type, D4 Type, AMP SC, Singlemode ST Style	A9837-ND	349.55	502306-2
LightCrimp	A9838-ND	106.14	502306-3
Epoxy Curing Oven			
110 VAC Oven w/Adapter Block - Universal Block*	A20220-ND	736.70	502134-1
Microscope Kits			
100x Microscope (10x Eyepiece)	A20224-ND	1452.82	502970-1
SC Adapter	A20227-ND	31.97	503958-1
FSMA Adapter	A20228-ND	31.97	504086-1

* Universal block 12 single and 4 FSD Connectors

Fiber Optic Multimode Switches

Low Profile Fiber Optic Switches are miniature, board mountable devices that permit the switching of an optical signal from one fiber to another. Switching is accomplished by a slight pivoting motion of a spherical mirror which reflects the optical signal to the appropriate fiber. This patented imaging technology provides very low optical loss. Fiber Optic Switches can be terminated with any fiber optic connector.

Specifications: • **Switching Speed:** 5 msec typ. • **Operating wavelength:** 750-1450 nm • **Insertion loss at 1300nm:** 0.5 dB typical, 0.8 dB max. per FOTP-34 • **Crosstalk:** -45 dB typical per FOTP-42 • **Switch Driver:** 5V at 80mA max., 12V option available • **Fiber Type:** Graded Index 62.5/125 • **Lead Length:** 1 meter • **Operating Temperature Range:** -10°C to +65°C per FOTP-3, C2 • **Connector Style:** ST Style • **Durability:** >1 million cycles



Switch	Fiber Leads Used
1x2 SPDT	1, 2, 3
Dual 1x2 DPDT	1, 2, 3, 4, 5, 6
2x2 Bypass	1, 2, 3, 4

Switch Type	Circuit	Electrical Interface	Fiber Connector	Digi-Key Part No.	Price Each	AMP Part No.
1 x 2	SPDT	Straight Pin	ST Style	A20163-ND	691.25	99427-2
Dual 1 x 2	DPDT	Straight Pin	ST Style	A20164-ND	691.25	99982-2
2 x 2	Bypass	Straight Pin	ST Style	A20165-ND	691.25	99429-2

FDDI 2000 Bypass Switches

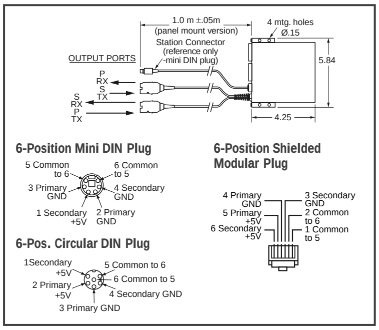
The FDDI 2000 bypass switch is a second-generation device that allows a dual-attach station to be bypassed without loss of ring integrity. The switch module contains two fully reversing optical bypass switches that direct the optical signals to the appropriate fiber according to signals on the device's electrical interface.

Features:

• Increases reliability of mission-critical network applications • Meets or exceeds all ANSI standards • Low insertion loss — 1.1 dB typical, including connectors • Meets ANSI FDDI power output specification of -20 dBm

Specifications:

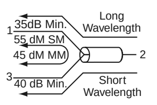
• **Switching Speed:** 10 ms max. • **Operating Wavelength:** 750-1450 nm • **Insertion Loss:** 1.1 dB typ., 1.8 dB max. (FOTP-34, Method B – Long Launch) • **Crosstalk:** -45 dB typical (FOTP-42) • **Switch Driver:** 5V at 160mA • **Fiber Type:** 62.5/125 µm • **Operating Temp. Range:** -10°C to +65°C • **Durability:** >1 million cycles



Description	Port Interface	Mounting	Digi-Key Part No.	Price Each	AMP Part No.
6-Pos. Shielded Mini Circular DIN Plug	FSD MIC	Panel	A20166-ND	1439.38	209161-4
6-Pos. Shielded Modular Plug	FSD MIC	Panel	A20167-ND	1439.38	209161-3
6-Pos. Shielded Circular DIN Plug	FSD MIC	Panel	A20168-ND	1439.38	209161-2

Multiplexers and Demultiplexers

Multiplexers allow use of a single fiber for simultaneous transmission of two signals of different wavelengths. Demultiplexers separate the combined wavelengths from the single fiber into individual fibers. Both the multiplexers and demultiplexers are available for multimode as well as singlemode applications.



1 = Transmitter; 2 = Trunk Line; 3 = Receiver

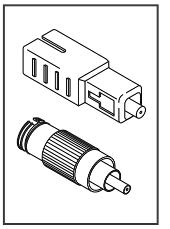
Multimode Specifications: • **Insertion Loss:** MUX: 0.9dB typ., 1.2dB max.; DEMUX: 0.9dB typ., 1.3dB max. (per FOTP-34, Method A) • **Directivity:** >55dB typ. • **Wavelength Bandpass:** 120 nm typ. • **Return Loss (Reflectance):** MUX: 35dB Min.; DEMUX: Port 1 – ≤-13dB; Port 2 – ≤-15dB; Port 3 – ≤-35dB • **Isolation:** Bi-Directional MUX and DEMUX: 35dB Min., 42dB typ.; Unidirectional MUX and DEMUX: 35 dB Min., 42dB typ. • **Operating Temperature:** -40°C to +65°C

Singlemode Specifications: • **Insertion Loss:** DEMUX: 0.9dB typ., 1.3dB max. (per FOTP-180) • **Directivity:** >65dB typ. • **Wavelength Bandpass:** 120 nm typ. • **Return Loss (Reflectance):** DEMUX: Port 1 – ≤-40dB; Ports 2 & 3 – ≤-55dB • **Isolation:** Unidirectional DEMUX: 35 dB Min., 42dB typ. • **Polarization Sensitivity:** <0.1dB • **Operating Temperature:** -20°C to +60°C

Fiber	Mode	.5m Cable Length	Connector	nm	Digi-Key Part No.	Price Each	AMP Part No.
62.5/125	Multimode	3mm	ST Style	850/1310	A20169-ND	358.75	99102-3
62.5/125	Multimode	3mm	ST Style	1310/1550	A20170-ND	358.75	99105-3
9/125	Singlemode	3mm	FC/SPC	1310/1550	A20171-ND	588.00	99717-6
9/125	Singlemode	3mm	SC/SPC	1310/1550	A20172-ND	588.00	99717-8

Singlemode Fiber Optic Attenuators

Singlemode High Performance Attenuators utilize unique all fiber mechanisms to increase the loss of an optical signal. These designs minimize reflectance. High Performance Attenuators use no filters, air-gaps, or core mismatches. **Specifications:** • **Fixed Attenuation Values:** 3- 20dB • **Reflectance:** ≤-45 dB, -50, -55 and -60dB • **Operating Temperature:** -40°C to +75°C • **Vibration Resistance:** ≤0.1 x attenuation



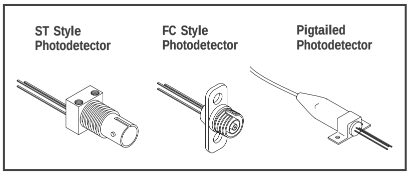
Attenuation (dB)	Digi-Key Part No.	Price Each	AMP Part No.
FC Dual Window Attenuators			
3	A20173-ND	246.71	209948-3
5	A20174-ND	246.71	209948-5
10	A20175-ND	246.71	1-209948-0
15	A20176-ND	246.71	1-209948-5
20	A20177-ND	246.71	2-209948-0
SC Dual Window Attenuators			
3	A20178-ND	246.71	209943-3
5	A20179-ND	246.71	209943-5
10	A20180-ND	246.71	1-209943-0
15	A20181-ND	246.71	1-209943-5
20	A20182-ND	246.71	2-209943-0

Fiber Optic Cable Assemblies and Accessories

Multimode InGaAs Photodetector

ST Style: The multimode design using InGaAs PIN photodetectors offer high responsitivity for nearly all digital and analog fiber optic applications. The unique design balances high-speed performance with noise-free linear output. Spectral response has been optimized for the long wavelength region of 1150 nm to 1600 nm.

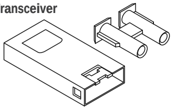
Features: • High reliability passivated planar structure • High responsitivity • Low dark current • Low capacitance • Hermetically sealed TO-18 style package installed in industry standard ADMs • -40° to +85°C operating temperature range **Pigtailed:** Pigtailed InGaAs PIN photodetectors offer high responsitivity for nearly all digital and analog fiber optic applications. Spectral response has been optimized for the long wavelength region of 1150 nm to 1600 nm. The modules are designed for board mounting.



Description	Digi-Key Part No.	Price Each 1	10	AMP Part No.
ST Style				
Multimode, Standard	A20197-ND	87.21	77.52	259013-1
Multimode, Premium	A20198-ND	75.74	67.32	259013-2
Singlemode, Elite	A20199-ND	78.03	69.36	259013-3
Multimode, High Responsitivity	A20201-ND	89.51	79.56	259013-6
FC Style				
Multimode, Standard	A20202-ND	68.85	61.20	259015-1
Multimode, Premium	A20203-ND	94.10	83.64	259015-2
Pigtailed				
Singlemode, SC Style	A20207-ND	227.21	141.38	269046-3

1300nm Transceivers

9-Pin Singlemode OC-3 ATM Laser Transceiver



The family of 9-pin singlemode laser transceivers offer immediate solutions to SONET/ATM OC-3 intermediate reach and long reach applications. The common 9-pin footprint allows the board designer to create a single 9-pin layout to permit for operation over either multimode 62.5/125 micron or singlemode 9/125 micron optical fiber.

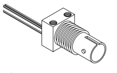
Features: • Class 1 Laser Safe per FDA and IEC • Multisourced 9-pin single row footprint • Drops into 9-pin multimode footprint • Internally shielded plastic package with low EMI/RFI emission • SC Duplex singlemode connector interface • Compatible with all standard ATM chipsets • Utilizes feedback stabilized 1300nm laser • Wide dynamic range receiver with AGC • Compatible with raised or standard ECL

9-Pin Singlemode FDDI Laser Transceiver

Features: 125 Mb/s FDDI SMF PMD Category 1 • Compatible with all standard FDDI chipsets

Color	Digi-Key Part No.	Price Each 1	5	AMP Part No.
9 Pin Singlemode Transceiver, Intermediate Reach				
Black	A20189-ND	233.63	200.25	269085-1
Blue	A20190-ND	233.63	200.25	269085-2
9-Pin Singlemode FDDI Transceiver, Category 1				
Black	A20191-ND	401.63	344.25	269087-1
Blue	A20192-ND	401.63	344.25	269087-2

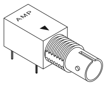
1.3µm LED



ST Style: The InGaAsP SLED products offer high coupled powers for digital fiber optic transmission applications. Compatible with industry standards, the LED ADMs consist of hermetically sealed TO-18 style SLEDs which have been actively aligned for maximum coupled power. The ST connectors are suitable for both panel/bulk-head and PC board mounting. **Features:** • High coupled power, typ. 75 µW into 62.5 µm fiber • High reliability MTTW 2.3 x 10^8 hours • Wavelength centered at 1320 nm • Hermetically sealed TO-18 style package installed in industry standard ADMs

Description	Digi-Key Part No.	Price Each 1	10	AMP Part No.
Standard	A20193-ND	75.74	67.32	259012-1
Premium	A20194-ND	82.62	73.44	259012-2

Short Wavelength LED Transmitter

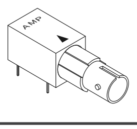


This transmitter contains a high speed 840 nm GaAlAs LED. This LED in conjunction with the package lensing is designed to efficiently couple light into optical fibers ranging in size from 50/125µm up to 200 µm PCS. These devices were designed to work together with the 125 MHz PIN/Preamp Receiver to make up a complete high speed fiber optic link.

Features: • ST-Style port • Wave solderable

Description	Digi-Key Part No.	Price Each 1	10	AMP Part No.
ST Board Mt., High Speed	A20209-ND	24.73	21.98	269110-1
ST Panel Mt., High Speed	A20210-ND	17.33	15.40	269110-2

Short Wavelength PIN/Preamp Receiver



This receiver is a low cost solution for high speed short wavelength fiber optic communication designs. The lensing of the device optimizes response for fiber sizes between 50 and 100µm. The output of the receiver is an analog, low impedance, emitter follower voltage source capable of driving an amplifier or level translating circuitry.

The device can be used in either the analog mode or translated to ECL/TTL levels for use in a digital mode at data rates up to 155MBaud. **Features:** • Data rates up to 155 MBd • Link distances up to 4 km • ST-style ports • Wave solderable

Description	Digi-Key Part No.	Price Each 1	10	AMP Part No.
ST Board Mount	A20211-ND	30.53	27.14	269111-1
ST Panel Mount	A20212-ND	30.53	27.14	269111-2

Fiber Optic Cable Assemblies

- Multimode
- 62.5/125 Micron Fiber Size
- Orange

Fig. 1 — ST-ST Zip Style Cable. Duplex Connector

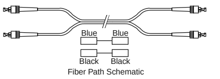


Fig. 2 — ST-FSD Zip Style Cable. Duplex Connector

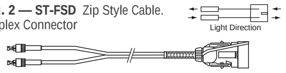


Fig. 3 — FSD-FSD Zip Style Cable. Duplex Connector

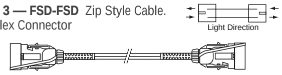


Fig. 4 — SC-SC Zip Style Cable. Duplex Connector

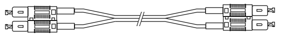


Fig. 5 — SC-ST Zip Style Cable. Duplex Connector

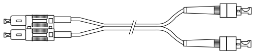


Fig. 6 — SC-SC Riser Rated Cable. Simplex Connector

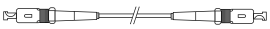


Fig. 7 — SC-ST Riser Rated Cable. Simplex Connector

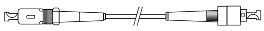
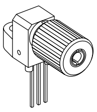


Fig.	Length (meter)	Digi-Key Part No.	Price Each 1	10	AMP Part No.
1	1	A11BBC-0201D-ND*	31.14	27.68	503995-1
	2	A11BBC-0202D-ND*	35.10	31.20	503995-2
	3	A11BBC-0203D-ND*	35.82	31.84	503995-3
	5	A11BBC-0205D-ND*	42.35	37.64	503995-4
	10	A11BBC-0210D-ND*	55.15	49.02	503995-5
1	1	A11BBP-0201D-ND†	28.98	25.76	503994-1
	2	A11BBP-0202D-ND†	30.65	27.24	503994-2
	3	A11BBP-0203D-ND†	32.99	29.32	503994-3
	5	A11BBP-0205D-ND†	36.97	32.86	503994-4
	10	A11BBP-0210D-ND†	46.71	41.52	503994-5
2	1	A11BFC-0201D-ND*	63.83	56.74	504610-1
	2	A11BFC-0202D-ND*	67.28	59.80	504610-2
	3	A11BFC-0203D-ND*	70.72	62.86	504610-3
	5	A11BFC-0205D-ND*	77.58	68.96	504610-4
	10	A11BFC-0210D-ND*	94.77	84.24	504610-5
2	1	A11BFP-0201D-ND†	52.40	46.58	504609-1
	2	A11BFP-0202D-ND†	55.87	49.66	504609-2
	3	A11BFP-0203D-ND†	59.29	52.70	504609-3
	5	A11BFP-0205D-ND†	66.15	58.80	504609-4
	10	A11BFP-0210D-ND†	83.34	74.08	504609-5
3	1	A11FFC-0201D-ND*	77.60	68.98	504626-1
	2	A11FFC-0202D-ND*	81.09	72.08	504626-2
	3D	A11FFC-0203D-ND*	84.60	75.20	504626-3
	5	A11FFC-0205D-ND*	91.55	81.38	504626-4
	10	A11FFC-0210D-ND*	108.99	96.88	504626-5
3	1	A11FFP-0201D-ND†	66.04	58.70	504625-1
	2	A11FFP-0202D-ND†	69.55	61.82	504625-2
	3	A11FFP-0203D-ND†	73.04	64.92	504625-3
	5	A11FFP-0205D-ND†	80.01	71.12	504625-4
	10	A11FFP-0210D-ND†	97.45	86.62	504625-5
4	1	A11DDC-0201D-ND*	52.90	47.02	504971-1
	2	A11DDC-0202D-ND*	54.68	48.60	504971-2
	3	A11DDC-0203D-ND*	57.15	50.80	504971-3
	5	A11DDC-0205D-ND*	61.34	54.52	504971-4
	10	A11DDC-0210D-ND*	71.66	63.70	504971-5
5	1	A11DBC-0201D-ND*	41.45	36.84	504958-1
	2	A11DBC-0202D-ND*	38.59	34.30	504958-2
	3	A11DBC-0203D-ND*	45.23	40.20	504958-3
	5	A11DBC-0205D-ND*	49.82	44.28	504958-4
	10	A11DBC-0210D-ND*	60.01	53.34	504958-5
6	1	A11DDC-0101B-ND*	17.24	15.32	504970-1
	2	A11DDC-0102B-ND*	18.43	16.38	504970-2
	3	A11DDC-0103B-ND*	19.62	17.44	504970-3
	5	A11DDC-0105B-ND*	22.01	19.56	504970-4
	10	A11DDC-0110B-ND*	27.97	24.86	504970-5
7	1	A11DBC-0101B-ND*	34.49	30.66	504972-1
	2	A11DBC-0102B-ND*	36.09	32.08	504972-2
	3	A11DBC-0103B-ND*	37.71	33.52	504972-3
	5	A11DBC-0105B-ND*	40.95	36.40	504972-4
	10	A11DBC-0110B-ND*	49.03	43.58	504972-5

* Ceramic † Polymer Composite

Industrial Fiber Optics

Fiber Optic LEDs & Detectors



Fiber Optic family of low-cost, medium frequency, short distance fiber optic LEDs and photo detectors.

- Connector-less interface
- No optical design required
- Simple fiber termination and connection.

Each LED and detector consists of a PBT housing, an internal active element such as an LED or photodetector, and a cinch nut to hold the fiber in place. The PBT housing retains the active element and the cinch nut while optimizing coupling between the active element and the jacketed 1000µm plastic fiber.

Shared Ratings:
Max. Ratings and Characteristics (T_A=25°C): Operating and Storage Temperature Range (T_{OP},T_{STG}): -40° to 85°C. De-rated above 25°C: 1.33mW/°C.

Description	Reverse Voltage V_R	Power Dissipation P_{TOT} T_A=25°C	Forward Current DC I_F	Rise/Fall Time tr,tf †	Max. Photo–sensitivity PEAK	Output Power Coupled*	Digi-Key Part No.	Price Each	IFO Part No.
Infrared LED	3.0V	100mW	50mA	1.0/1.0 µs	950nm	100µW	FB118-ND	3.48	IF-E91A
Blue LED	5.0V	60mW	35mA	0.5/0.5 µs	430nm	25µW	FB125-ND	14.38	IF-E92A
Blue LED	5.0V	60mW	35mA	0.6/0.6 µs	470nm	75µW	FB126-ND	14.38	IF-E92B
Green LED	5.0V	60mW	35mA	3.5/16 ns	530nm	75µW	FB127-ND	10.63	IF-E93
Red LED	5.0V	60mW	35mA	0.1/0.1 µs	660nm	<50µW	FB128-ND	4.88	IF-E96
Plastic Fiber Optic Super-Bright LED	5.0V	100mW	40mA	0.5/0.5 µs	660nm	<100µW	FB129-ND	6.50	IF-E97

Description	Rise/Fall Time tr, tf †	Total Capacitance CT	Dark Current (VR=30 Volts, EE=0) ID	Reverse Breakdown Voltage B(BR)R	Max. Photo–sensitivity PEAK	Power Dissipa–tion P_{TOT}	Digi-Key Part No.	Price Each	IFO Part No.
Active Photodiode	5/5 ns	4pF	<60nA	60.0V	850nm	100mW	FB120-ND	4.18	IF-D91

Description	Rise/Fall Time tr,tf †	Collector Emitter Voltage VCEO	Emitter Collector Voltage VECO	Collector Current IC	Collector Peak Current ICM t=1ms	Max. Photo–sensitivity PEAK	Digi-Key Part No.	Price Each	IFO Part No.
Active Phototransister	20/20 µs	30.0V	5.0V	50mA	100mA	850nm	FB121-ND	3.65	IF-D92
Active Photodarlington	5/2.5 ms	15.0V	5.0V	50mA	100mA	850nm	FB122-ND	5.65	IF-D93

Description	Rise/Fall Time tr,tf †	Supply Voltages VS	Voltage@ Output Lead	Propagation delay time tP	Max. Photo–sensitivity PEAK	Power Dissipa–tion P_{TOT}	Digi-Key Part No.	Price Each	IFO Part No.
Photologic Detector w/Totem-pole Output	70/70 ns	18.0V	—	8 µs	800nm	100mW	FB123-ND	6.55	IF-D95T
Photologic Detector w/Open Collector Output	0.1/0.1 µs	18.0V	35.0V	8 µs	800nm	100mW	FB124-ND	6.55	IF-D95OC
Photologic Detector w/Open Collector Output	—	7.0V	18.0V	65 ns	850nm	40mW	FB132-ND	6.55	IF-D96
Photologic Detector w/Totem-Pole Output	0.1/0.1 µs	7.0V	—	12 ns	800nm	100mW	FB133-ND	18.75	IF-D97

* Into plastic fiber (1mm core dia.). Distance lens to fiber <0.1 mm, 10cm polished fiber, IF=10mA † Rise time and fall times–measured from the 10% to 90% to 10% points respectively

.050” (1.27mm) Connectors

Fig. 1

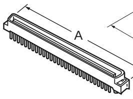


Fig. 2

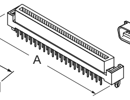


Fig. 3

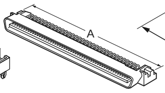
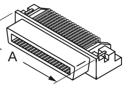
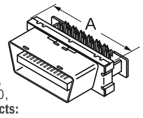


Fig. 4



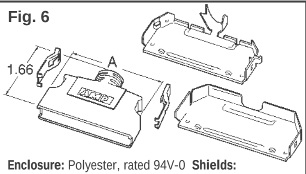
Housing & Tine Plate: Glass-filled nylon, rated 94V-0, black for standard, LCP, rated 94V-0, black for High Temp. **Contacts:** Phosphor bronze, selectively plated with min. of 30µ gold in mating area and tin-lead in solder tail area **Retention Leg (Board Lock):** Brass, tin-lead plated

Fig. 5



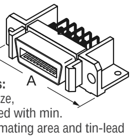
Housing: Glass-filled polyester, rated 94V-0, black **Contacts:** Phosphor bronze, selectively plated with min. of 30µ gold in mating area and tin-lead in solder tail area **Retention Leg (Board Lock):** Brass, tin-lead plated

Fig. 6



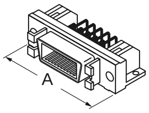
Enclosure: Polyester, rated 94V-0 **Shields:** Brass, nickel plated **Locking Spring:** Stainless Steel

Fig. 7



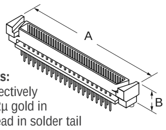
Housing: Glass-filled polyester, rated 94V-0, black **Contacts:** Phosphor bronze, selectively plated with min. of 30µ gold in mating area and tin-lead in solder tail area **Retention Leg (Board Lock):** Brass, tin-lead plated

Fig. 8



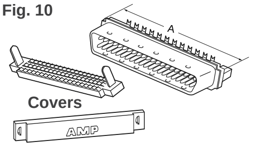
Housing: LCP, rated 94V-0, black **Contacts:** Phosphor bronze, selectively plated with min. of 30µ gold in mating area and tin-lead in solder tail area **Shield:** Carbon steel, tin-cobalt plated

Fig. 9



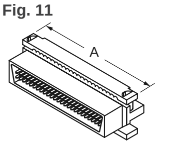
Housing: Glass filled nylon, rated 94V-0, black **Contacts:** Phosphor bronze, selectively plated with min. of 12µ gold in mating area and tin-lead in solder tail area **Shield:** Carbon steel, tin-cobalt plated

Fig. 10



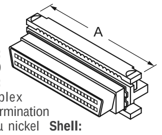
Covers

Fig. 11



Housing and Covers: Thermoplastic, 94V-0 rated, black or gray **Contacts:** Phosphor bronze, duplex plated 30µ gold on mating end; 50µ tin-lead on termination end; all underplated 50µ nickel **Shell:** Steel, plated 20µ bright tin-lead over 50µ copper **Recommended Wire Size:** 28 AWG or 30 AWG, solid or stranded, with a .029-.036 (0.74-0.89) insulation diameter

Fig. 12



Housing and Covers: Thermoplastic, 94V-0 rated, black **Contacts:** Phosphor bronze, duplex plated 30µ tin-lead on termination end; all underplated 50µ nickel **Shell:** Steel, plated 200µ bright tin-lead over 50µ copper

Fig. 13

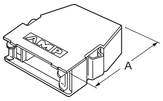


Fig. 14

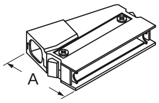
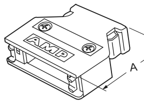
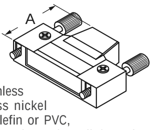


Fig. 15



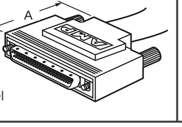
Backshell: Zinc, plated nickel over copper **Spring Latch:** Stainless steel **2-56 Screws:** Stainless steel **Strain Relief Staple:** Steel, plated tin-lead over nickel

Fig. 16



Backshell: Zinc, plated nickel over copper **Jackscrews:** Stainless steel or steel, black electroless nickel plated **Jackscrew Caps:** Polyolefin or PVC, black **2-56 Screws:** Stainless steel Strain Relief Staple: Steel, plated tin-lead over nickel

Fig. 17



Backshells: Zinc **Boot:** PVC, Black **Jackscrews:** Stainless steel and PVC, black **Staple:** Carbon steel, plated 50µ tin-lead over 50µ nickel **2-56 Screws:** Stainless steel

Fig. 18

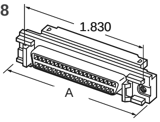


Fig. 19

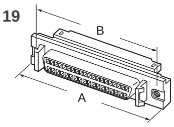
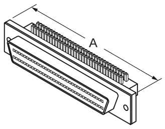


Fig. 20

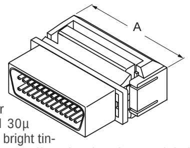


Covers: Thermoplastic, 94V-0 rated, black **Shell:** Steel, plated 200µ bright tin over 50µ copper **Bracket:** Zinc, plated nickel over copper **Contacts:** Phosphor bronze, duplex plated 30µ gold on mating end; 50µ bright tin-lead in termination area, all underplated 50µ nickel

Fig.	No. of Pos.	Description	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
CHAMP® .050” (1.27mm) Series I (VESA Media Bus Standard)							
1	20	Vert. Plug, w/ Locks, Standard	.949 (24.05)	A26151-ND	4.35	3.52	5-175473-1
1	40	Vert. Plug, w/ Locks, High Temp.	1.447 (36.75)	A26152-ND	1.88	1.52	557102-5
1	50	Vert. Plug, w/ Locks, Standard	1.697 (43.10)	A26153-ND	6.63	5.36	5-175473-6
1	68	Vertical Plug	2.147 (54.53)	A15022-ND	3.41	3.06	1-557102-7
1	80	Vert. Plug, w/ Locks, Standard	2.447 (62.15)	A26154-ND	7.97	6.45	5-175473-9
1	80	Vert. Plug, w/ Locks, High Temp.	2.947 (74.85)	A15020-ND	3.45	3.09	2-557102-1
2	80	Vert. Recept., w/ Locks, High Temp.	2.447 (62.15)	A26157-ND	2.19	1.77	2-557103-1
1	100	Vert. Recept., w/ Locks, High Temp.	2.947 (74.85)	A26155-ND	9.94	8.04	6-175473-0
1	100	Vert. Plug, w/ Locks, High Temp.	2.947 (74.85)	A26156-ND	3.24	2.63	2-557102-5
2	100	Vert. Recept. w/ Locks, Standard	2.947 (74.85)	A26158-ND	9.94	8.04	6-175475-0
2	100	Vert. Recept. w/ Locks, High Temp.	2.947 (74.85)	A26159-ND	2.75	2.23	2-557103-5
3	40	Right Angle Plug, High Temp.	1.391 (35.33)	A26160-ND	1.74	1.41	557100-5
4	40	Right Angle Recept., High Temp.	1.391 (35.33)	A26161-ND	1.93	1.56	557101-5
3	50	Right Angle Plug, High Temp.	1.641 (41.68)	A26149-ND	1.93	1.56	557100-9
4	50	Right Angle Plug, Standard	1.641 (41.68)	A24225-ND	7.29	5.89	5-175474-6
4	50	Right Angle Recept., High Temp.	1.641 (41.68)	A26150-ND	2.12	1.71	557101-9
3	68	Right Angle Plug, Standard	2.091 (53.11)	A26162-ND	7.43	6.01	5-175472-8
3	68	Right Angle Plug, High Temp.	2.091 (53.11)	A15023-ND	3.15	2.82	1-557100-7
3	80	Right Angle Plug, High Temp.	2.391 (60.73)	A15021-ND	3.58	3.21	2-557100-1
4	80	Right Angle Recept., High Temp.	2.391 (60.73)	A24228-ND	2.33	1.89	2-557101-1
3	100	Right Angle Plug, High Temp.	2.891 (73.43)	A24229-ND	3.27	2.65	2-557100-5
4	100	Right Angle Recept., High Temp.	2.891 (73.43)	A24230-ND	3.06	2.47	2-557101-5
4	140	Right Angle Recept., High Temp.	3.891 (98.83)	A24231-ND	4.44	3.60	4-557101-9
CHAMP® .050” (1.27mm) Series II (Wire-To-Board)							
5	26	Plug Cable Connector	1.024 (26.00)	A26163-ND	5.19	4.20	2-175677-4
5	50	Plug Cable Connector	1.626 (41.30)	A26164-ND	8.01	6.48	2-175677-7
6	26	Enclosure Kits	1.319 (33.50)	A26138-ND	4.42	3.58	176793-4
7	14	Right Angle Recept., Board Lock	1.163 (29.54)	A26139-ND	4.02	3.25	2-178238-1
7	20	Right Angle Recept., Board Lock	1.313 (33.35)	A26140-ND	4.16	3.37	2-178238-2
7	26	Right Angle Recept., Board Lock	1.463 (37.16)	A26141-ND	5.05	4.09	2-178238-4
7	50	Right Angle Recept., Board Lock	2.063 (52.40)	A26142-ND	6.91	5.59	2-178238-7
7	68	Right Angle Recept., Board Lock	2.513 (63.83)	A26143-ND	8.06	6.52	2-178238-8
8	14	Right Angle Recept., High Temp.	1.163 (29.54)	A26144-ND	5.03	4.07	557153-3
CHAMP® .050” (1.27mm) FH Connectors							
9	60	Vert. Recept., 18mm, B=.62 (15.70)	1.953 (49.60)	A26145-ND	9.68	7.83	176378-2
9	80	Vert. Recept., 12mm, B=.38 (9.70)	2.453 (62.30)	A26146-ND	9.99	8.08	176372-3
9	80	Vert. Recept., 13mm, B=.42 (10.70)	2.453 (62.30)	A26147-ND	10.20	8.25	176373-3
9	100	Vert. Recept., 16mm, B=.54 (13.70)	2.953 (75.00)	A26148-ND	13.49	10.91	176376-4
AMPLIMITE® .050 (1.27mm) Series (SCSI-2, SCSI-3, IPI-2, HIPPI)							
Cable Plug Connectors							
10	26	w/ Wire Lacing Term. Covers, Black	.979 (24.87)	A23677-ND	7.03	5.62	750913-2
10	26	w/ Wire Lacing Term. Covers. Gray	.979 (24.87)	A26136-ND	7.03	5.62	1-750913-2
10	50	w/ Wire Lacing Term. Covers, Black	1.579 (40.11)	A23678-ND	6.95	5.56	750913-5
10	50	w/ Wire Lacing Term. Covers, Gray	1.579 (40.11)	A3302-ND	7.25	6.49	1-750913-5
10	68	w/ Wire Lacing Term. Covers, Black	2.029 (51.54)	A23679-ND	5.80	4.64	750913-7
10	68	w/ Wire Lacing Term. Covers, Gray	2.029 (51.54)	A3305-ND	7.54	6.76	1-750913-7
10	100	w/ Wire Lacing Term. Covers, Gray	2.829 (71.86)	A23676-ND	17.98	14.38	1-750913-9
10	20	w/ Assembled Terminal Covers	.829 (21.06)	A23687-ND	4.70	3.76	749111-1
10	26	w/ Assembled Terminal Covers	.979 (24.87)	A23686-ND	6.40	5.12	1-749111-0
10	26	w/o Assembled Terminal Covers	.979 (24.87)	A23690-ND	4.70	3.76	749621-2
10	28	w/o Assembled Terminal Covers	1.029 (26.14)	A23691-ND	7.25	5.80	749621-3
10	40	w/o Assembled Terminal Covers	1.329 (33.76)	A23692-ND	4.70	3.76	749621-4
10	50	w/ Assembled Terminal Covers	1.579 (40.11)	A15029-ND	4.37	3.54	749111-4
10	50	w/o Assembled Terminal Covers	1.579 (40.11)	A3301-ND	5.62	5.04	749621-5
10	68	w/ Assembled Terminal Covers	2.029 (51.54)	A3303-ND	6.50	5.20	749111-6
10	68	w/o Assembled Terminal Covers	2.029 (51.54)	A3304-ND	6.11	5.46	749621-7
10	80	w/ Assembled Terminal Covers	2.329 (59.16)	A23688-ND	14.58	11.66	749111-7
10	80	w/o Assembled Terminal Covers	2.329 (59.16)	A23693-ND	14.05	11.24	749621-8
10	100	w/ Assembled Terminal Covers	2.829 (71.86)	A23689-ND	17.98	14.38	749111-8
10	100	w/o Assembled Terminal Covers	2.829 (71.86)	A23694-ND	12.50	10.00	749621-9
10	26	w/ Wire Lacing Term. Covers, Gray	.965(24.51)	A23680-ND	.45	.36	1-750877-2
10	50	w/ Wire Lacing Term. Covers, Black	1.565 (39.75)	A23684-ND	.40	.32	750877-5
10	50	w/ Wire Lacing Term. Covers, Gray	1.565 (39.75)	A23681-ND	.40	.32	1-750877-5
10	68	w/ Wire Lacing Term. Covers, Black	2.015 (51.18)	A23685-ND	.48	.38	750877-7
10	68	w/ Wire Lacing Term. Covers, Gray	2.015 (51.18)	A23682-ND	.48	.38	1-750877-7
10	100	w/ Wire Lacing Term. Covers, Gray	2.815 (71.50)	A23683-ND	.53	.42	1-750877-9
11	50	w/ Assembled Terminal Covers	1.579 (40.11)	A23695-ND	6.25	5.00	749925-3
11	68	w/ Assembled Terminal Covers	2.029 (51.54)	A23696-ND	8.30	6.64	749925-5
Shielded Receptacles							
12	40	w/o Assembled Terminal Covers	1.329 (33.76)	A23699-ND	9.58	7.66	749699-4
12	50	w/ Assembled Terminal Covers	1.579 (40.11)	A23697-ND	7.48	5.98	749210-5
12	50	w/o Assembled Terminal Covers	1.579 (40.11)	A23700-ND	7.48	5.98	749699-5
12	68	w/ Assembled Terminal Covers	2.029 (51.54)	A23698-ND	9.28	7.42	749210-7
12	68	w/o Assembled Terminal Covers	2.029 (51.54)	A23701-ND	6.25	5.00	749699-7
12	68	w/ Wire Lacing Assort. Term. Covers	2.029 (51.54)	A23703-ND	7.20	5.76	786860-7
12	100	w/o Assembled Terminal Covers	2.829 (71.86)	A23702-ND	19.40	15.52	749699-8
Straight and Angled Exit RFI/EMI Shielded Backshell Kits							
13	20	Straight with Spring Latches	1.290 (32.77)	A23546-ND	8.23	6.58	749190-1
14	20	Angled with Spring Latches	1.290 (32.77)	A23551-ND	7.98	6.38	749199-1
15	26	Straight with Spring Latches	1.290 (32.77)	A23589-ND	5.08	4.06	749608-1
14	26	Angled with Spring Latches	1.290 (32.77)	A23590-ND	9.30	7.44	749609-1
13	40	Straight with Spring Latches	1.290 (32.77)	A23547-ND	9.48	7.58	749192-1
13	50	Straight w/ Spring Latches, ø.355 (9.02)	1.395 (35.43)	A23548-ND	6.85	5.48	749193-1
13	50	Straight w/ Spring Latches, ø.400 (10.16)	1.395 (35.43)	A3306-ND	6.21	5.56	749193-2
14	50	Angled with Spring Latches	1.395 (35.43)	A23552-ND	10.15	8.12	749202-2
15	50	Straight with Spring Latches	1.800 (45.72)	A3307-ND	8.09	7.28	749889-3
14	68	Angled with Spring Latches	1.405 (35.69)	A23585-ND	11.83	9.46	749204-1
13	68	Straight with Spring Latches	1.405 (35.69)	A3308-ND	10.99	9.84	749195-2
14	68	Angled with Spring Latches	1.405 (35.69)	A23586-ND	12.00	9.60	749204-2
14	80	Angled with Spring Latches	1.600 (40.64)	A23587-ND	13.05	10.44	749205-1
13	80	Straight with Spring Latches	1.600 (40.64)	A23549-ND	11.30	9.04	749196-2
13	100	Straight with Spring Latches	1.725 (43.82)	A23550-ND	13.40	10.72	749197-1
14	100	Angled with Spring Latches	1.725 (43.82)	A23588-ND	14.73	11.78	749206-1
Shielded Backshell Kits							
16	50	Straight w/ Male #2-56 Jackscrews	1.270 (32.26)	A23543-ND	11.73	9.38	749080-1
17	68	Straight w/ Male #2-56 Jackscrews	1.887 (47.93)	A3309-ND	16.19	14.55	750752-1
17	68	Straight w/ Female #4-40 Jackscrews	1.887 (47.93)	A23591-ND	13.38	10.70	750752-2
16	100	Straight w/ Male #2-56 Jackscrews	1.695 (43.05)	A23544-ND	14.93	11.94	749081-1
16	100	Straight w/ Male #2-56 Jackscrews	2.082 (52.88)	A23545-ND	14.93	11.94	749654-1
Panel Mount Receptacle Assemblies							
18	26	With Rails, 2-56 Threaded Holes	1.465 (37.21)	A23619-ND	7.75	6.20	749611-1
18	50	With Rails, 2-56 Threaded Holes	2.065 (52.45)	A3310-ND	11.30	9.04	749611-5
18	50	With Rails, 4-40 Threaded Holes	2.065 (52.45)	A3311-ND	9.91	8.88	750450-1
19	50	w/o Rails, 2-56 Threaded Holes Unassembled Wire Lacing B: 1.830” (46.48mm)	2.065 (52.45)	A23620-ND	6.95	5.56	786862-5
19	68	w/o Rails, 2-56 Threaded Holes Assembled Standard B: 2.280” (57.91mm)	2.515 (63.88)	A23624-ND	14.00	11.20	749656-7
19	50	w/o Rails, 2-56 Threaded Holes B: 1.830” (46.48mm)	2.065 (52.45)	A3312-ND	9.13	8.18	749656-5
19	50	w/o Rails, 4-40 Threaded Holes B: 1.830” (46.48mm)	2.065 (52.45)	A3313-ND	7.45	5.96	750640-1
20	68	Without Rails and Latch Blocks	2.515 (63.88)	A26137-ND	12.83	10.26	749877-7
20	100	Without Rails and Latch Blocks	3.315 (84.20)	A23724-ND	19.88	15.90	749877-9
20	50	Without Rails and Latch Blocks, Plug	2.065 (52.45)	A23725-ND	17.60	14.08	749879-5
19	50	Without Rails, with Latch Blocks for .025 (0.64) Centerline Ribbon Cable B: 1.835” (46.61mm)	2.065 (52.45)	A23707-ND	9.33	7.46	786161-5
19	68	Without Rails, with Latch Blocks for .025 (0.64) Centerline Ribbon Cable B: 2.295” (58.29mm)	2.515 (63.88)	A23708-ND	8.40	6.72	786161-7

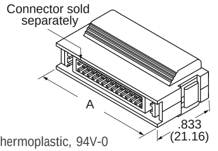
(Continued)

Fig. 21



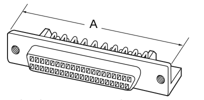
Covers: Thermoplastic, 94V-0 rated, black **Contacts:** Phosphor bronze, duplex plated 30µ gold on mating end; 50µ bright tin-lead in termination area, all underplated 50µ nickel **Recommended Wire Size:** .025 (.64) centerline, 30 AWG solid or stranded, PVC, flat ribbon cable

Fig. 22



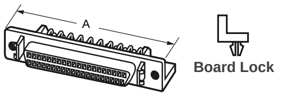
Backshell: Thermoplastic, 94V-0 rated, black **Spring Latches:** Stainless steel

Fig. 23



Housing: Thermoplastic, 94V-0 rated, black, SMT compatible **Shell:** Steel, plated 200µ bright tin over 50µ copper **Bracket:** Zinc, plated nickel over copper **Contacts:** Phosphor bronze, duplex plated 30µ gold on mating end; 120µ tin-lead on solder end; all underplated 50µ nickel

Fig. 24



Housing: Thermoplastic, 94V-0 rated, black **Contacts:** Phosphor bronze, duplex plated 8µ gold on contact area; 2540µ tin-lead on solder area; all underplated 50µ nickel

Fig. 25

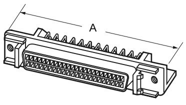
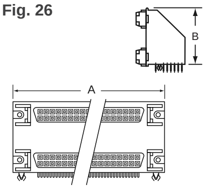


Fig. 26



Housing: Thermoplastic, 94V-0 rated, black, SMT compatible **Shell:** Steel, plated 200µ bright tin over 50µ copper **Bracket:** Zinc, plated nickel over copper **Contacts:** Phosphor bronze, duplex plated 30µ gold on mating end; 120µ tin-lead on solder end; all underplated 50µ nickel

Fig. 27

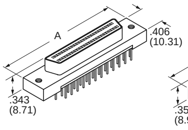


Fig. 28

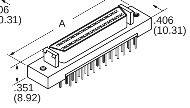
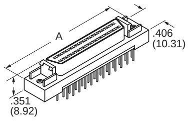
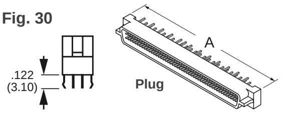


Fig. 29



Housing: Thermoplastic, 94V-0 rated, black, SMT compatible **Shell:** Steel, plated 200µ bright tin over 50µ copper **Bracket:** Zinc, plated nickel over copper **Contacts:** Phosphor bronze, duplex plated 30µ gold on mating end, 120µ (for .125) 150 (for .173) tin-lead on solder end; all underplated 50µ nickel

Fig. 30



High density interface PCB mount connectors meet the requirements of Versa Module Europe (VME) bussing per SBus standards. Available in configurations for parallel board stacking as required by SBus specifications.

Housing: Thermoplastic, 94V-0 rated, black **Contacts:** Phosphor bronze, plated; 30µ gold on mating end, 150µ tin-lead on solder tail, all over 50µ nickel underplating

Fig.	No. of Pos.	Description	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
19	68	w/o Rails and Latch Blocks for .025 (0.64) Centerline Ribbon Cable B: 2.285" (58.04mm)	2.515 (63.88)	A23709-ND	7.48	5.98	786096-7
		Unshielded Plug Assemblies and Backshell Kit					
21	50	Unshielded for .025 (0.64) Centerline Ribbon Cable	1.573 (39.95)	A23710-ND	9.55	7.64	786090-5
21	68	Unshielded for .025 (0.64) Centerline Ribbon Cable	2.023 (51.30)	A23711-ND	3.18	2.55	786090-7
22	50	Backshell Kit for .025 (0.64) Centerline Ribbon Cable	1.965 (49.91)	A23712-ND	5.48	4.38	787032-5
		Right Angle Receptacle Headers					
23	40	Without Rails, with Boardlocks, .100 (2.54) Solder Tails	1.815 (46.10)	A23726-ND	5.73	4.58	787170-4
23	50	Without Rails, without Boardlocks, .100 (2.54) Solder Tails	2.065 (52.45)	A3320-ND	5.55	4.44	787169-5
23	50	Without Rails, with Boardlocks, .100 (2.54) Solder Tails	2.065 (52.45)	A23727-ND	6.13	4.90	787170-5
23	50	Without Rails, with Boardlocks, .120 (3.05) Solder Tails	2.065 (52.45)	A23728-ND	8.38	6.70	787362-5
23	68	Without Rails, without Boardlocks, .100 (2.54) Solder Tails	2.065 (52.45)	A23729-ND	5.33	4.26	787169-7
23	68	Without Rails, with Boardlocks, .100 (2.54) Solder Tails	2.515 (63.88)	A3324-ND	6.76	6.06	787170-7
23	100	Without Rails, without Boardlocks, .100 (2.54) Solder Tails	3.315 (84.20)	A3325-ND	14.85	13.30	787169-9
23	100	Without Rails, with Boardlocks, .120 (3.05) Solder Tails	3.315 (84.20)	A23730-ND	12.53	10.02	787362-9
24	26	Without Rails, with Boardlocks, .100 (2.54) Solder Tails	1.465 (37.21)	A3314-ND	6.57	5.88	787082-2
24	28	Without Rails, with Boardlocks, .100 (2.54) Solder Tails	1.515 (38.48)	A23731-ND	6.98	5.58	787082-3
24	50	Without Rails, with Boardlocks, .100 (2.54) Solder Tails	2.065 (52.45)	A3316-ND	4.16	3.76	787082-5
24	50	Without Rails, with Boardlocks, .100 (2.54) Solder Tails	2.065 (52.45)	A3317-ND	7.15	6.41	787394-5
24	50	Without Rails, with Boardlocks, .100 (2.54) Solder Tails, 4-40 Threaded Holes	2.065 (52.45)	A23732-ND	4.90	3.92	787395-5
24	68	Without Rails, with Boardlocks, .100 (2.54) Solder Tails	2.515 (63.88)	A3321-ND	6.70	6.00	787082-7
24	68	Without Rails, without Boardlocks, .100 (2.54) Solder Tails	2.515 (63.88)	A3322-ND	7.10	5.68	787394-7

Fig.	No. of Pos.	Description	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
24	68	With Self Retaining Posts, 8µ Gold	2.100 (53.20)	A23705-ND	6.03	4.82	3-174682-7
24	68	With Self Retaining Posts, 30µ Gold	2.100 (53.20)	A23706-ND	8.40	6.72	8-174682-7
25	26	With Rails, without Boardlocks	1.465 (37.21)	A3315-ND	4.78	3.82	787190-2
25	26	With Rails, with Boardlocks	1.465 (37.21)	A23733-ND	5.80	4.64	787171-2
25	40	With Rails, with Boardlocks	1.815 (46.10)	A23734-ND	5.95	4.76	787171-4
25	50	With Rails, with Boardlocks	2.065 (52.45)	A3318-ND	7.67	6.87	787171-5
25	50	With Rails, with Boardlocks	2.065 (52.45)	A3319-ND	7.28	6.55	787190-5
25	50	With Rails, with Boardlocks, 4-40 Threaded Holes	2.065 (52.45)	A23735-ND	6.03	4.82	787266-5
25	68	With Rails, without Boardlocks	2.515 (63.88)	A23736-ND	7.48	5.98	787190-7
25	68	With Rails, with Boardlocks	2.515 (63.88)	A3323-ND	8.35	7.48	787171-7
26	50/50	Right Angle Stacked with Rails, B: .906 (23.01)	2.065 (52.45)	A23737-ND	20.68	16.54	787656-1
26	68/68	Right Angle Stacked with Rails, B: 1.156 (29.36)	2.515 (63.88)	A23738-ND	33.88	27.10	787678-1
26	68/68	Right Angle Stacked with Rails, Flat Top, B: 1.156 (29.36)	2.515 (63.88)	A23739-ND	36.03	28.82	787679-1
		Vertical Receptacle Headers Without Rails and Latch Blocks					
27	50	.125 (3.18) Solder Tail	2.065 (52.45)	A23740-ND	6.58	5.26	749070-5
27	50	.173 (4.39) ACTION PIN Tail	2.065 (52.45)	A23741-ND	9.03	7.22	786555-5
27	68	.125 (3.18) Solder Tail	2.515 (63.88)	A23742-ND	6.73	5.38	749070-7
27	68	.173 (4.39) ACTION PIN Tail	2.515 (63.88)	A23743-ND	9.55	7.64	786555-7
27	68	.280 (7.11) ACTION PIN Tail	2.515 (63.88)	A23744-ND	18.03	14.42	786557-7
27	100	.125 (3.18) Solder Tail	3.315 (84.20)	A23745-ND	13.50	10.80	749070-9
27	100	.173 (4.39) ACTION PIN Tail	3.315 (84.20)	A23746-ND	26.05	20.84	786555-9
		Vertical Receptacle Headers Without Rails and With Latch Blocks					
28	28	.125 (3.18) Solder Tail	1.515 (38.48)	A23747-ND	5.55	4.44	749721-3
28	50	.125 (3.18) Solder Tail	2.065 (52.45)	A23748-ND	7.38	5.90	749721-5
28	68	.125 (3.18) Solder Tail	2.515 (63.88)	A23749-ND	5.68	4.54	749721-7
28	68	.173 (4.39) ACTION PIN Tail	2.515 (63.88)	A23750-ND	8.58	6.86	786155-7
		Vertical Receptacle Headers With Rails and Latch Blocks					
29	20	.173 (4.39) ACTION PIN Tail	1.315 (33.40)	A23751-ND	5.95	4.76	786554-1
29	26	.125 (3.18) Solder Tail	1.465 (37.21)	A23752-ND	5.38	4.30	749069-2
29	26	.173 (4.39) ACTION PIN Tail	1.465 (37.21)	A23753-ND	6.13	4.90	786554-2
29	50	.125 (3.18) Solder Tail	2.065 (52.45)	A23754-ND	6.43	5.14	749069-5
29	50	.173 (4.39) ACTION PIN Tail	2.065 (52.45)	A23755-ND	7.90	6.32	786554-5
29	68	.125 (3.18) Solder Tail	2.515 (63.88)	A23756-ND	7.38	5.90	749069-7
29	68	.173 (4.39) ACTION PIN Tail	2.515 (63.88)	A23757-ND	11.50	9.20	786554-7
29	68	.280 (7.11) ACTION PIN Tail	2.515 (63.88)	A23758-ND	18.05	14.44	786556-7
29	100	.125 (3.18) Solder Tail	3.315 (84.20)	A23759-ND	13.50	10.80	749069-9
		SBUS Connectors					
30	96	Receptacle Header w/o Polarization	2.795 (70.99)	A23704-ND	14.33	11.46	750350-2
30	96	Plug Header without Polarization	2.80 (71.00)	A23618-ND	9.20	7.36	174683-8

Shielded .050" (1.27mm) Slimline Connectors Right-Angle Headers

Fig. 1

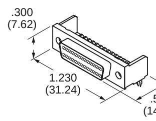
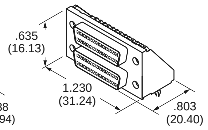


Fig. 2



Housing: UL 94V-0 rated thermoplastic, black **Contact Footprints:** .100 x .050 (2.54 x 1.27) staggered centerlines **Bracket:** Zinc, plated 200µ min. tin or tin-lead over 200µ min. copper **Metal-Shell:** Carbon steel, plated 200µ min. tin over 50µ min. copper **Boardlocks:** Copper alloy, tin-lead plated **Contacts:** Phosphor bronze, duplex plated 30µ min. gold on mating end, tin-lead plated 120µ min. on solder end, all over 50µ min. nickel

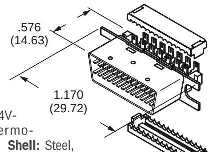
Fig.	No. of Pos.	Description	Digi-Key Part No.	Price Each 1	25	AMP Part No.
1	26	Receptacle	A23760-ND	14.26	11.54	750823-1
2	26/26	Stacked Receptacle w/o Rear Contact Shield, Unkeyed	A23761-ND*	31.09	25.14	786200-1
	26/26	Stacked Receptacle with Rear Contact Shield, Keyed	A23762-ND†	18.66	15.09	750821-1
	26/26	Stacked Receptacle with Rear Contact Shield, Unkeyed	A23763-ND*	18.80	15.20	750820-1

* Both headers unkeyed with 4-40 threaded holes.

† Lower header unkeyed with 4-40 threaded holes, upper header keyed in keying position 1.

Shielded .050" (1.27mm) Slimline Cable Connectors, Plug

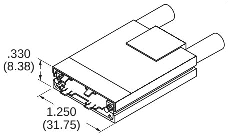
Fig. 1



Covers: UL 94V-0 rated thermoplastic, black **Shell:** Steel, plated 200µ min. bright tin-lead over 50µ min. copper **Contacts:** Phosphor bronze, duplex plated 30µ min. gold on mating end, 50µ min. bright tin-lead on termination end, all underplated 50µ nickel **Bracket:** Zinc, plated 200µ min. nickel over 200µ min. copper **Recommended Wire Size:** 28 AWG, PVC or polyolefin insulation

Fig. 2

Connector shown partially assembled. Given dimensions reflect full assembly.



Backshells: Copper-nickel alloy **Jackscrews:** Steel, plated 100µ min. tin over 50µ min. copper, handles covered with ABS, gray **Inserts:** Zinc, plated 200µ min. tin over 200µ min. copper **Outside Covers:** Gray and black

Fig. No.	Description	Cable Dia. Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
1	Plug Connector	w/max. O.D. .032 (0.813)	A23764-ND	10.06	8.14	750833-1
2	Backshell Kit, Unkeyed	.250-.280 (6.35-7.11)	A23765-ND	11.28	9.12	750850-1
	Backshell Kit, Unkeyed	.280-.310 (7.11-7.87)	A23766-ND	9.92	8.02	750850-3

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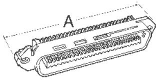
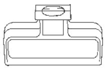
CHAMP® Parallel Interface Connectors

For Discrete Wire Termination





180° Strain Relief

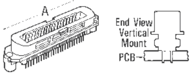
90° Strain Relief

No. of Pos.	Dim. A Inch (mm)	Description	Digi-Key Part No.	Price Each		AMP Part No.
				1	25	
22 AWG, Solid or Stranded						
14	1.750 (44.45)	Plug, Screw Lock	A24234-ND	2.27	1.75	552300-1
24	2.175 (55.25)	Plug, Screw Lock	A24235-ND	2.97	2.28	552301-1
		Plug, Bail Lock	A24236-ND	2.50	1.92	552317-1
36	2.685 (68.20)	Plug, Bail Lock	A24237-ND	2.52	1.94	552318-1
50	3.280 (83.31)	Plug, Screw Lock	A24238-ND	2.36	1.81	552173-1
		Plug, Bail Lock	A24239-ND	3.94	3.02	552319-1
		Receptacle, Screw or Bail Lock	A24240-ND	2.61	2.01	552064-1
64	3.875 (98.43)	Plug, Screw Lock	A24241-ND	3.62	2.78	552303-1
		Receptacle, Screw or Bail Lock	A24242-ND	3.42	2.63	552307-1
Large Insulation Wire Connectors, 22 AWG Solid or Stranded						
36	2.685 (68.20)	Receptacle, Screw or Bail Lock	A24257-ND	3.17	2.44	5-555037-1
50	3.280 (83.31)	Plug, Screw Lock	A24258-ND	3.62	2.78	556039-1
		Receptacle, Screw or Bail Lock	A24259-ND	3.62	2.78	555227-1
64	3.671 (93.24)	Plug, Bail Lock	A24260-ND	4.41	3.39	555753-1
	3.875 (98.43)	Receptacle, Panel Mt., Screw or Bail Lock	A24261-ND	5.81	4.46	555151-1
24-26 AWG, Solid or 24 AWG Stranded						
14	1.750 (44.45)	Plug, Screw Lock	A24243-ND	2.27	1.75	552282-1
		Plug, Bail Lock	A24244-ND	2.09	1.61	552270-1
		Receptacle, Screw or Bail Lock	A24245-ND	2.03	1.56	552312-1
		Receptacle, Panel Mt., Screw or Bail Lock	A24246-ND	2.32	1.78	2-552271-1
24	2.175 (55.25)	Plug, Screw Lock	A24247-ND	2.78	2.13	552283-1
		Plug, Bail Lock	A1502-ND	2.46	2.00	552272-1
		Receptacle, Screw or Bail Lock	A24248-ND	3.06	2.35	552313-1
		Receptacle, Panel Mt., Screw or Bail Lock	A1508-ND	2.44	1.98	2-552273-1
36	2.685 (68.20)	Plug, Screw Lock	A24249-ND	2.52	1.94	552284-1
		Plug, Bail Lock	A1503-ND	4.00	3.59	552274-1
		Receptacle, Screw or Bail Lock	A24250-ND	2.52	1.94	552314-1
		Receptacle, Panel Mt., Screw or Bail Lock	A1509-ND	2.63	2.13	2-552275-1
50	3.280 (83.31)	Plug, Screw Lock, Thick Flange	A1540-ND	2.66	2.39	229974-1
		Receptacle, Screw Lock, Thick Flange	A1541-ND	2.66	2.39	229975-1
		Plug, Bail Lock	A1542-ND	2.65	2.38	552032-1
		Receptacle, Panel Mt., Screw or Bail Lock	A1543-ND	3.13	2.80	2-552001-1
64	3.875 (98.43)	Plug, Screw Lock	A24252-ND	3.22	2.47	552285-1
		Plug, Bail Lock	A24253-ND	3.49	2.68	552276-1
		Receptacle, Screw or Bail Lock	A24254-ND	3.94	3.02	552315-1
		Receptacle, Panel Mt., Screw or Bail Lock	A24255-ND	3.51	2.70	2-552277-1
26-28 AWG, Stranded						
24	3.875 (98.43)	Plug, Screw Lock	A1530-ND	2.34	1.80	552443-1
		Plug, Bail Lock	A1531-ND	4.21	3.23	552469-1
		Receptacle, Panel Mt., Screw or Bail Lock	A1533-ND	6.53	5.01	2-552474-1
36	2.685 (68.20)	Plug, Screw Lock	A1534-ND	4.14	3.18	552444-1
		Plug, Bail Lock	A1535-ND	2.54	1.95	552470-1
		Receptacle, Panel Mt., Screw or Bail Lock	A1537-ND	5.04	3.87	2-552475-1
50	3.280 (83.31)	Plug, Screw Lock, Thick Flange	A1544-ND	2.59	2.07	552390-1
		Receptacle, Screw Lock, Thick Flange	A1545-ND	2.58	2.06	552391-1
		Plug, Bail Lock	A1546-ND	2.63	2.10	552471-1
		Receptacle, Panel Mt., Screw or Bail Lock	A1547-ND	3.30	2.64	2-552476-1
64	3.875 (98.43)	Plug, Screw Lock	A24256-ND	5.96	4.58	552488-1
Accessories						
Integral Locking Latch, Preassembled						
50	3.280 (83.31)	Receptacle, Black	A24262-ND	1.99	1.53	553921-1
50	3.280 (83.31)	Receptacle, Gray	A24251-ND	2.54	1.95	553921-2
64	3.875 (98.43)	Receptacle	A24263-ND	3.80	2.92	554381-2
Dust Covers						
24	—	Position, Receptacle, Red	A24285-ND	.50	.39	229969-4
36	—	Position, Receptacle, Red	A24286-ND	.50	.39	229969-3
50	—	Position, Receptacle, Red	A24287-ND	.12	.09	229969-1
64	—	Position, Receptacle, Red	A24289-ND	.60	.46	229969-2
24	—	Position, Plug, Blue	A24192-ND	.76	.62	229968-4
36	—	Position, Plug, Blue	A24193-ND	.55	.45	229968-3
50	—	Position, Plug, Blue	A24194-ND	.13	.11	229968-1
64	—	Position, Plug, Blue	A24288-ND	.60	.46	229968-2
Hardware Kits						
Screw Lock Hardware Kit			A1525-ND	2.09	1.61	552568-1
Bail Lock Hardware Kit			A1526-ND	1.94	1.49	552567-1
Bent Bail Lock Hardware Kit use w/90° Strain Relief Cover			A24224-ND	1.91	1.47	552567-2
CHAMP-LOK Hardware Kit for 36 & 50 Pos. Thin Flange			A24226-ND	2.41	1.85	553359-1
Tools						
Insertion Tool for CHAMP IDC Connector			A1528-ND	174.90	—	229764-2
T-Handle Wire Insertion Tool			A1529-ND	8.82	—	229384-1
Portable Hand Operated Tool (MI-1)			A24382-ND	806.65	—	229378-1
Palm Grip Tool			A24383-ND	131.00	—	229451-1

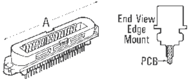
No. of Positions	Cable Diameter Inch (mm)	Digi-Key Part No.	Price Each		AMP Part No.
			1	25	
Strain Relief Covers					
180° Snap-On					
14	.175 - .220 (4.45 - 5.59)	A24264-ND	.88	.68	552079-1
	.265 - .310 (6.73 - 7.87)	A24265-ND	1.63	1.26	2-552079-1
24	.230 - .280 (5.84 - 7.11)	A24266-ND	1.30	1.00	552076-1
	.280 - .320 (7.11 - 8.13)	A1506-ND	1.71	1.32	1-552076-1
	.320 - .380 (8.13 - 9.65)	A24267-ND	1.51	1.16	2-552076-1
36	.290 - .360 (7.37 - 9.14)	A24268-ND	1.51	1.16	552073-1
	.360 -.430 (9.14 - 10.92)	A1507-ND	1.27	.98	552073-5
	.430 - .500 (10.92 - 12.70)	A24269-ND	1.52	1.17	552073-6
50	.330 - .380 (8.38 - 9.65)	A24270-ND	2.12	1.63	3-552008-1
	.380 - .430 (9.65 - 10.92)	A24271-ND	1.31	1.01	2-552008-1
	.430 -.490 (10.92 - 12.45)	A1548-ND	1.81	1.63	552008-1
	.480 - .550 (12.19 - 13.97)	A24272-ND	1.31	1.01	4-552008-1
	.430 - .500 (10.92 - 12.70)	A24273-ND	2.07	1.59	552003-1
64	.480 - .540 (12.19 - 13.72)	A24274-ND	1.87	1.44	552082-1

No. of Positions	Cable Diameter Inch (mm)	Digi-Key Part No.	Price Each		AMP Part No.
			1	25	
90° Snap-On					
14	.185 - .230 (4.70 - 5.84)	A24275-ND	2.00	1.54	552412-1
	.250 - .300 (6.35 - 7.62)	A24276-ND	1.06	.82	1-552412-1
24	.250 - .300 (6.35 - 7.62)	A1538-ND	.90	.70	552413-1
	.305 - .360 (7.75 - 9.14)	A24277-ND	1.92	1.48	1-552413-1
36	.305 - .360 (7.75 - 9.14)	A1539-ND	.85	.65	552414-1
	.330 - .380 (8.38 - 9.65)	A24278-ND	2.12	1.63	3-552414-1
50	.340 - .400 (8.64 - 10.16)	A24279-ND	.89	.69	552014-1
	.315 - .415 (8.00 - 10.54)	A24280-ND	.65	.51	1-552011-1
	.415 - .465 (10.54 - 11.81)	A1549-ND	.50	.41	552011-1
	.475 - .540 (12.07 - 13.72)	A24281-ND	.80	.62	552731-1
64	.410 - .475 (10.41 - 12.07)	A24282-ND	.89	.69	552496-1
	.475 - .540 (12.07 - 13.72)	A24283-ND	1.29	1.00	1-552496-1
	.540 - .605 (13.72 - 15.37)	A24284-ND	1.29	1.00	2-552496-1
No. of Positions	**Description**	**Digi-Key Part No.**	**Price Each 1**	**25**	**AMP Part No.**
Cable to Panel Mount (2 required per assembly)					
24	Snap-On	A24290-ND	1.02	.79	1-552298-1
50	Snap-On	A24291-ND	.27	.21	1-552027-1
64	Snap-On	A24292-ND	.57	.44	1-552296-1
50	Snap-In	A24293-ND	.41	.32	552962-3

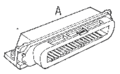
Vertical Mount



Edge Mount



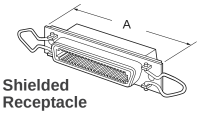
Right Angle



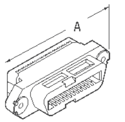
No. of Pos.	Dim. A Inch (mm)	Description	Digi-Key Part No.	Price Each		AMP Part No.
				1	25	
Vertical Mount Connectors						
14	1.750 (44.45)	Receptacle, Screw or Bail Lock	A26165-ND	5.70	4.56	552212-1
24	2.175 (55.25)	Plug, Screw Lock	A24350-ND	6.18	4.94	552221-1
		Receptacle, Screw or Bail Lock	A1510-ND	4.16	3.73	552224-1
36	2.685 (68.20)	Receptacle, Screw or Bail Lock	A1511-ND	7.33	5.86	522235-1
50	3.280 (83.31)	Plug, Screw Lock	A1550-ND	5.66	5.07	552116-1
		Receptacle, Screw or Bail Lock	A1552-ND	5.69	5.10	552118-1
64	3.875 (98.43)	Plug, Screw Lock	A24351-ND	10.73	8.58	552243-1
		Receptacle, Screw or Bail Lock	A24352-ND	9.40	7.52	552246-1
Edge Mount Connectors						
24	2.175 (55.25)	Receptacle, Screw or Bail Lock	A1512-ND	5.83	4.66	552230-1
36	2.685 (68.20)	Receptacle, Screw or Bail Lock	A1513-ND	6.83	5.46	552241-1
50	3.280 (83.31)	Receptacle, Screw or Bail Lock	A1553-ND	7.80	6.24	552130-1
Edge Mount With ACTION PIN Connectors						
24	2.175 (55.25)	Receptacle	A24387-ND	6.65	5.32	553443-2
36	2.685 (68.20)	Plug	A24388-ND	9.05	7.24	553444-3
		Receptacle	A24389-ND	8.03	6.42	553443-3
50	3.280 (83.31)	Receptacle	A24390-ND	4.60	3.68	553443-4
		Receptacle	A24391-ND†	8.50	6.80	553443-6
		Plug	A24392-ND	4.60	3.68	553444-4
		Recept., Self-Retained Terminals	A24393-ND	5.20	4.16	554753-1
		Plug, Self-Retained Terminals	A24394-ND	5.85	4.68	554758-1
		Receptacle, Shielded for Screw Lock	A24395-ND	8.28	6.62	557984-1
64	3.875 (98.43)	Plug	A24396-ND	12.50	10.00	554759-1
		Receptacle	A24397-ND	9.60	7.68	553443-5
Right-Angle Mount Connectors						
14	1.750 (44.45)	Receptacle, Standard, Self-Tapping	A24353-ND	5.83	4.66	552738-1
24	2.175 (55.25)	Receptacle, Standard, Self-Tapping	A1514-ND	6.05	4.84	552740-1
		Receptacle, Standard, Self-Tapping	A24354-ND*	4.55	3.64	552791-1
		Plug, Standard, Self-Tapping	A24355-ND	6.70	5.36	552741-1
		Receptacle, Reverse, Self-Tapping	A24356-ND	6.28	5.02	552740-2
36	2.685 (68.20)	Receptacle, Standard, Self-Tapping	A1515-ND	6.53	5.22	552742-1
50	3.280 (83.31)	Plug, Standard, Self-Tapping	A1555-ND	7.88	5.85	552726-1
		Receptacle, Standard, Self-Tapping	A1554-ND	7.87	6.49	552725-1
		Receptacle, Reverse, Self-Tapping	A24357-ND	5.40	4.32	552725-3
		Plug, Reverse, Self-Tapping	A24358-ND	6.78	5.42	552726-3
		Receptacle, Standard, Thru-Bolt	A24359-ND	7.53	6.02	552725-2
64	3.875 (98.43)	Receptacle, Standard, Self-Tapping	A24360-ND	9.03	7.22	552744-1
		Plug, Standard, Self-Tapping	A24361-ND	16.88	13.50	552745-1
No. of Pos.	**Cable Range Inch (mm)**	**Description**	**Digi-Key Part No.**	**Price Each 1**	**25**	**AMP Part No.**
90° Slide-On Strain Relief Cover Kits & Accessories						
50	.425 - .500 (10.80 - 12.70)	Tapered Cover Kit	A24341-ND	1.83	1.47	552560-5
		Cable Clamp	A24342-ND	.20	.17	1-229910-1
	.350 - .425 (8.89 - 10.80)	Standard Cover Kit	A24343-ND	1.46	1.17	552960-2
		Tapered Cover Kit	A24344-ND	.47	.38	552560-1
	.500 - .550 (12.70 - 13.97)	Standard Cover Kit	A24345-ND	1.27	1.02	552960-5
		Cable Clamp	A24346-ND	.46	.37	4-229910-1
	.425 - .550 (10.80 - 13.97)	90° Slide-On Cover	A24347-ND	.55	.44	552617-1
	.425 Max. (10.80)	Std. Slide-On Cvr. use w/Adj. Clamp	A24348-ND	.63	.51	552760-1
		Adjustable Cable Clamp,	A24349-ND	.35	.29	552763-1
Hardware Kits						
Screw Lock Hardware Kit, Vertical Mount			A1523-ND	3.45	2.76	552563-1
Bail Lock Hardware Kit, Vertical Mount			A1520-ND	1.78	1.42	552562-1
J-Hook Screw Lock, Vertical Mount Kit			A24364-ND	4.23	3.38	552690-1
Screw Lock Hardware Kit, Edge Mount			A1521-ND	4.53	3.62	552675-1
Bail Lock Hardware Kit, Edge Mount			A1522-ND	5.33	4.26	552676-1
Screw Lock Hardware Kit, Right Angle Mount			A1524-ND	1.60	1.28	552631-1
Metric Front Mount Kit, Right Angle			A24362-ND	4.10	3.28	552633-3
Metric Rear Mount Kit, Right Angle			A24363-ND	4.10	3.28	552633-4
Bent Bail Lock, use with 90° Strain Relief			A24340-ND	1.67	1.35	552561-4
Bail Lock, with Hex Nut 4-40			A24232-ND	1.19	.95	552561-6
Bail Lock, 90° Bail Clip			A24233-ND	1.80	1.44	552561-8
Accessories						
Metric Standoff Studs			A24381-ND	1.94	1.56	552634-3
Standoff Mounting Studs 4-40, Length .640 (16.26)			A24398-ND	.57	.46	229995-2
Standoff Mounting Studs 4-40, Length 1.000 (25.40)			A24399-ND	.75	.61	552113-1
4-40 Pan Head Screw - Length .425” (10.80)			A26166-ND	.10	.06	229996-2
4-40 Pan Head Screw - Length .350” (8.89)			A24385-ND	.12	.07	229996-3
J-Hook Latch for Panel Mount Recpt. to 90° Cable			A24386-ND	.50	.41	552655-1
4-40 Mounting Screw			A1516-ND	.90/10		229911-1

* For IEEE-488 applications † Mounting holes .125” (3.175)

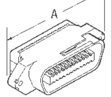
CHAMP® Latch Parallel Interface and Ribbon Cable Connectors



Shielded Receptacle



Receptacle

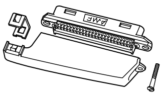


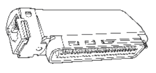
Plug

No. of Pos.	Dim. A Inch (mm)	Description	Digi-Key Part No.	Price Each 1	25	AMP Part No.
CHAMP® Latch Low Profile Connectors - Plastic						
Screw Lock						
14	1.750 (44.45)	Plug	A24213-ND	4.09	3.72	553596-1
14	1.750 (44.45)	Receptacle	A24214-ND	4.09	3.72	553597-1
24	2.175 (55.25)	Plug	A1559-ND	4.68	4.26	553598-1
24	2.175 (55.25)	Receptacle	A1561-ND	4.68	4.26	553599-1
36	2.685 (68.20)	Plug	A1563-ND	5.80	5.27	553600-1
36	2.685 (68.20)	Receptacle	A1565-ND	5.80	5.27	553601-1
50	3.280 (83.31)	Plug	A1567-ND	8.87	7.95	553602-1
50	3.280 (83.31)	Receptacle	A1569-ND	4.91	4.47	553603-1
64	3.875 (98.43)	Plug	A24220-ND	20.90	18.99	552837-1
64	3.875 (98.43)	Receptacle	A24190-ND	20.90	18.99	552838-1
Bail Lock						
24	2.175 (55.25)	Receptacle	A1561-ND	4.68	4.26	553599-1
36	2.685 (68.20)	Plug	A1564-ND	5.26	4.78	554084-1
36	2.685 (68.20)	Receptacle	A1565-ND	5.80	5.27	553601-1
50	3.280 (83.31)	Receptacle	A1569-ND	4.91	4.47	553603-1
64	3.651 (92.74)	Plug	A24221-ND	20.81	18.91	552933-1
64	3.875 (98.43)	Receptacle	A24190-ND	20.90	18.99	552838-1
Panel Mount						
24	2.175 (55.25)	Plug	A24215-ND	4.77	4.34	554103-1
24	2.175 (55.25)	Receptacle	A24216-ND	4.77	4.34	554088-1
36	2.685 (68.20)	Receptacle	A1566-ND	5.40	4.91	554089-1
50	3.280 (83.31)	Receptacle	A1570-ND	7.41	6.62	554090-1
64	3.875 (98.43)	Receptacle	A24191-ND	34.83	27.86	552843-1
Shielded CHAMP® Latch Panel Mount Connectors - Plastic						
Screw Lock, Preassembled						
24	2.205 (56.01)	Receptacle, 6-32	A1556-ND	6.66	6.05	554434-1
50	3.310 (84.07)	Receptacle, 4-40	A1557-ND	14.33	12.84	554436-2
Bail Lock, Preassembled						
36	2.715 (68.96)	Receptacle, 4-40	A1575-ND	7.25	6.59	554346-2
36	2.715 (68.96)	Receptacle, 4-40	A24218-ND*	7.25	6.59	555983-1
50	3.310 (84.07)	Receptacle, 4-40	A24219-ND*	4.32	3.93	554902-1
Screw Lock, Loose Pieces						
24	2.380 (60.45)	Receptacle	A1558-ND	5.44	4.94	554349-1
36	2.380 (60.45)	Receptacle	A24217-ND	7.15	6.50	554348-1
50	3.475 (88.27)	Receptacle	A1574-ND	8.24	7.49	554350-1
Hardware Kits						
Bail Lock, 4-40 UNC x .625"(15.88)			A24384-ND	1.75	1.59	552567-3
Ball Lock, 4-40 UNC x .500"(12.70)			A1517-ND	1.92	1.60	552561-3
Front Panel Mount Metric Screw Lock			A24222-ND	2.11	1.92	553636-2
Rear Panel Mount Metric Screw Lock			A24223-ND	3.42	3.11	553636-3
Shielded Screw Lock, Rear Mount 4-40			A1578-ND	1.67	1.53	554272-1
Shielded Screw Lock, Rear Mount Metric			A1579-ND	2.91	2.61	554808-1
Accessories						
Latch Cable Strain Relief Clip, 50 Pos. for Low Profile			A24227-ND	1.76	1.61	554099-1

* Does not have boss feature. Boss is a .040" (1.02) shoulder on front of shield.

CHAMP® Connector Kits





Modular Adapter

Cable Range Inch (mm)	Description	Digi-Key Part No.	Price Each 1	25	AMP Part No.
50 Postion with Tapered Cover Solid and Stranded Kits					
0.550 max. (13.97)	Plug, Black	A24324-ND	3.34	2.70	552382-1
0.550 max. (13.97)	Receptacle, Black	A24325-ND	3.06	2.47	552383-1
.350 - .425 (8.89 - 10.80)	Plug, Black	A1571-ND	3.31	3.02	229912-1
.350 - .425 (8.89 - 10.80)	Receptacle, Black	A1572-ND	3.31	3.02	229913-1
.350 - .425 (8.89 - 10.80)	Plug, Gray	A24326-ND	2.70	2.19	229912-4
.350 - .425 (8.89 - 10.80)	Receptacle, Gray	A24327-ND	2.70	2.19	229913-4
.350 - .425 (8.89 - 10.80)	Plug with Dust Cover, Black	A24328-ND	2.53	2.05	1-229912-1
.350 - .425 (8.89 - 10.80)	Recept. with Dust Cover, Black	A24329-ND	2.53	2.05	1-229913-1
.350 - .425 (8.89 - 10.80)	Recept. with Dust Cover, Gray	A24330-ND	2.80	2.27	1-229912-4
.350 - .425 (8.89 - 10.80)	Recept. with Dust Cover, Gray	A24331-ND	2.77	2.25	1-229913-4
.425 - .500 (10.80 - 12.70)	Plug, Black	A24332-ND	2.70	2.19	2-229912-1
.425 - .500 (10.80 - 12.70)	Receptacle, Black	A24333-ND	2.70	2.19	2-229913-1
.425 - .500 (10.80 - 12.70)	Plug with Dust Cover, Black	A24334-ND	2.80	2.27	3-229912-1
.425 - .500 (10.80 - 12.70)	Receptacle with Dust Cover, Black	A24335-ND	2.80	2.27	3-229913-1
.350 - .425 (8.89 - 10.80)	Plug, Black	A24336-ND	3.67	2.97	552402-1
.350 - .425 (8.89 - 10.80)	Receptacle, Black	A24337-ND	4.28	3.46	552403-1
50 Postion CHAMP System 5 Connectors					
.51 (12.95)	Plug, 24 AWG Solid, Red	A24365-ND	14.01	11.33	1-558693-1
.350 - .680 (8.89 - 17.27)	120° Strain Relief , Light Almond	A24366-ND	2.07	1.68	569336-1
.350 - .680 (8.89 - 17.27)	120° Strain Relief , Black	A24367-ND	2.07	1.68	569336-3
.650 - .750 (16.51 - 19.05)	90° Strain Relief , Lt. Almond Cvr.	A24368-ND	3.36	2.72	569335-1
50 Postion CHAMP Connector With Crimp Cable Clamp					
—	Plug , 24-26 AWG Solid or Stranded	A24369-ND	2.44	1.98	553213-3
—	Recept., 24-26 AWG Solid or Strand.	A24370-ND	2.44	1.98	553212-3
—	Recept., 24-26 AWG Solid or Strand.	A24371-ND†	3.03	2.46	554886-2
—	Wear Adapter (Plug to Recep. Assy.)	A24372-ND	14.85	12.01	552705-1
CHAMP-LOK Hardware Kits					
Locking Latch, 36 or 50 Postions		A24338-ND	.36	.29	552723-1
Locking Latch, 14 or 24 Postions		A24339-ND	.79	.63	552723-2

† Integral locking latch

Cable Range Inch (mm)	Description	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Back-to-Back Connector Assembly					
.380 - .400 (9.65 - 10.16)	24 AWG Cable to Cable Kit, 50 Pos.	A24373-ND	23.50	19.00	553257-1
.300 - .375 (7.62 - 9.53)	Back to Back Kit, 24 Pos.	A24374-ND	13.72	11.10	555182-1
.300 - .375 (7.62 - 9.53)	Snap-on-Cover, 24 Pos.	A24375-ND	2.49	2.02	554831-1
Interface Bus Connector					
—	24 Position with 2 Jackscrews	A24376-ND	7.92	6.41	554815-1
50 Positions Gender Menders					
—	Receptacle with J-Hook Hardware	A24377-ND	14.59	11.80	554875-1
—	Receptacle w/out J-Hook Hardware	A24378-ND	16.26	13.15	554875-2
—	Plug with J-Hook Hardware	A24379-ND	28.98	23.43	554876-1
—	Plug w/out J-Hook Hardware	A24380-ND	21.27	17.20	554876-2

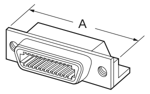
Description	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Modular Champ Adapter - Prewired Assembly* (conn. / 90° cover / hardware)	A1573-ND*	10.88	8.80	552789-1

*Wiring is as follows: Pin 1 – Green; Pin 2 – Black; Pin 26 – Red; Pin 27 – Yellow.

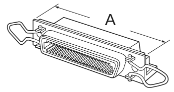
CHAMP® Shielded Connectors

Terminals: Selectively plated gold over nickel plated high strength copper alloy, tin plated tails. **Housing & Cover Material:** Thermoplastic, black

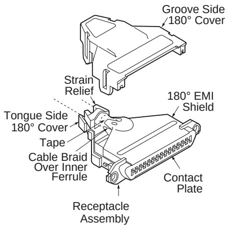
Screw-Lock



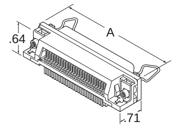
Bail Lock



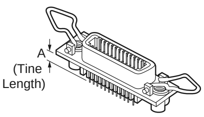
Cable Connector Kits



Board Lock Grounding



Vertical Mount



No. of Pos.	Dim. A Inch (mm)	Description	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Right Angle, Preassembled Screw Lock						
24	2.205 (56.01)	Receptacle, Standard, 6-32	A15016-ND	8.26	7.37	553811-1
24	2.205 (56.01)	Receptacle, Reverse, 6-32	A24294-ND	20.00	16.00	553811-2
50	3.305 (83.95)	Receptacle, Reverse, 4-40	A24295-ND	8.40	6.72	553813-4
50	3.305 (83.95)	Receptacle, Standard, 4-40	A15001-ND	9.07	8.12	553813-3
Right Angle, Preassembled Bail Lock						
36	2.710 (68.83)	Receptacle, Standard, 4-40	A24298-ND	14.55	11.64	555233-1
50	3.305 (83.95)	Receptacle, Standard, 4-40	A15002-ND	8.53	6.82	554901-1
Right Angle, Board Lock Grounding						
24	2.205 (56.01)	Screw Lock, 6-32, Standard	A24299-ND	6.18	4.94	554923-2
24	2.205 (56.01)	Screw Lock, 6-32, Reverse	A24300-ND	7.05	5.64	554923-1
24	2.205 (56.01)	Screw Lock, 6-32, Low Pro., Reverse	A24301-ND	9.68	7.74	555139-1
24	2.205 (56.01)	Screw Lock, 6-32, Low Profile, Std.	A24302-ND	24.83	19.86	555139-2
36	2.715 (68.96)	Bail Lock, 4-40, Standard	A24303-ND	6.35	5.08	555119-1
36	2.715 (68.96)	Bail Lock, 4-40, Standard	A15004-ND*	5.60	4.48	555520-2
50	3.320 (84.33)	Bail Lock, 4-40, Standard	A15003-ND	9.28	7.42	555057-1
50	3.320 (84.33)	Screw Lock, 4-40, Standard	A24304-ND	11.43	9.14	557932-2
50	3.310 (84.07)	IBM Compatible, Bail Lock, 4-40	A15005-ND	10.82	9.70	555149-1
Vertical Mount						
24	.150 (3.81)	Screw Lock, 6-32	A24305-ND	9.33	7.46	554501-1
24	.215 (5.46)	Screw Lock, 6-32	A24306-ND	12.08	9.66	554501-2
36	.215 (5.46)	Bail Lock, 4-40	A24307-ND	9.60	7.68	554145-4
50	.135 (3.43)	Bail Lock, 4-40	A15008-ND	13.00	11.64	554216-3
50	.200 (5.08)	Screw Lock, 4-40	A24308-ND	10.40	8.32	554217-4
Cover Kits & Accessories						
24	—	180° Cover	A15013-ND	7.40	5.92	554944-1
36	—	180° Cover	A15014-ND	3.13	2.50	554945-1
50	—	180° Cover - Cab. dia. ≤ .500 (12.70)	A15015-ND	3.24	2.91	554946-1
50	—	180° Cover - Cab. dia. ≥ .500 (12.70)	A24320-ND	2.27	1.82	554946-2
—	—	Cap. Pan Head Screw, 4-40 (2 req.)	A24321-ND	.15	.12	554726-1
—	—	Inner Ferrule .350 (8.89) Inside Dia.	A24322-ND	.29	.23	554725-3
—	—	Inner Ferrule .500 (12.7) Inside Dia.	A24323-ND	.32	.26	554725-6
Hardware Kits						
—	—	Bail Lock, Short, 4-40UNC-2Ax.25"	A24296-ND	1.78	1.42	554818-2
—	—	Bail Lock, Short, 4-40UNC-2Ax.50"	A24297-ND	3.65	2.92	554818-1
—	—	Vert. Mt., Pan Head Screws (2 req.)	A24309-ND	3.10	2.48	554043-2
—	—	Vert. Mt., Metric Standoff Screws (panhead screw & standoff)	A24310-ND	6.15	4.92	554858-1

* Has drawn metal shield

No. of Pos.	Cable Range Inch (mm)	Description	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Cable Connector Kits						
Plug — Solid or Stranded						
24	.250 - .500 (6.35 - 12.70)	Screw Lock, 24-26 AWG	A24311-ND	6.25	5.00	554948-4
24	.250 - .500 (6.35 - 12.70)	Screw Lock, 26-28 AWG	A15009-ND	13.05	10.44	554948-3
24	.250 - .500 (6.35 - 12.70)	Bail Lock, 24-26 AWG	A24312-ND	5.08	4.06	554947-2
36	.250 - .500 (6.35 - 12.70)	Screw Lock, 24-26 AWG	A24313-ND	14.35	11.48	554951-2
36	.250 - .500 (6.35 - 12.70)	Bail Lock, 24-26 AWG	A24314-ND	4.93	3.94	554950-2
36	.250 - .500 (6.35 - 12.70)	Bail Lock, 26-28 AWG	A15010-ND	5.78	4.62	554950-1
50	.350 - .625 (8.89 - 15.88)	Screw Lock, 24-26 AWG	A24315-ND	6.33	5.06	554954-2
50	.350 - .625 (8.89 - 15.88)	Screw Lock, 26-28 AWG	A15012-ND	6.18	4.94	554954-1
50	.350 - .625 (8.89 - 15.88)	Bail Lock, 26-28 AWG	A15011-ND	5.92	5.30	554953-1
50	.350 - .625 (8.89 - 15.88)	Bail Lock, 24-26 AWG	A24316-ND	5.65	4.52	554953-2
Receptacle — Solid or Stranded						
50	.350 - .625 (8.89 - 15.88)	Screw or Bail Lock, 24-26 AWG	A24317-ND	13.90	11.12	554955-2
50	.350 - .625 (8.89 - 15.88)	Screw or Bail Lock, 26-28 AWG	A24318-ND	5.93	4.74	554955-1
50	.370 max. (9.40)	Bail Lock, 90° Exit, Gray	A24319-ND	6.95	5.56	5-555012-2

tyco Electronics AMP 1mm Card Edge Connectors Slot 1 / AGP / NLX

1mm Standard Edge Connectors have been developed specifically to meet the interconnection requirements for the latest technological advances in personal computers. These include Intel's Pentium II™ processor (Slot 1), Accelerated Graphics Port (AGP), and the new NLX Form Factor motherboard.

FEATURES:
- 1mm contact spacing compatible with latest interconnection technology for Slot 1, AGP and NLX
- High temperature housings suitable for surface mount reflow processes
- Pivoting board lock feature offering connector centering before contacts enter pc board holes
- Certified by Canadian Standards Association to Canadian and United States Requirements
- Produced under a Quality Management System certified to ISO 9001

PERFORMANCE CHARACTERISTICS:
• **Operating Temp.:** 0°C to 85°C • **Voltage:** 250 VAC • **Characteristic Impedance:** 35<20<80 ohms • **Termination Resistance:** 20mΩ max. (initial) • **Insulation Resistance:** 1000MΩ min. • **Dielectric Withstanding Voltage:** 400VAC @ sea level • **Durability:** 50 cycles min. • **Engaging Force:** 3.3 oz. (.917 N) max. average per contact pair • **Separating Force:** 1.98 to .35 oz. (.550 to .097N) per contact pair

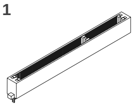
Fig. 1

Fully compatible with Intel Pentium II processor module

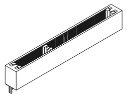
Fig. 2

Brings high performance 3-D graphics and full motion video to the desktop

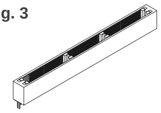
Fig. 3

Riser Card Interconnect for new NLX Form Factor motherboard

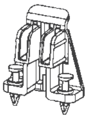
Fig. 4

Complete 2 module kit. Required for one processor.

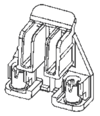
Fig. 5

Complete 2 module kit. Required for one processor.

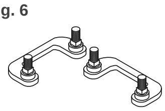
Fig. 6

Housing: Nylon, black. **Hardware:** Brass, copper alloy finish.

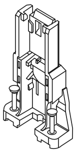
Fig. 7


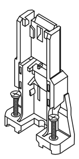
Fig. 8


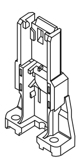
Fig. 9


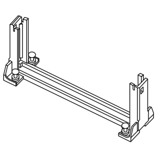
Fig. 10


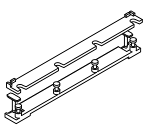
Fig. 11


Fig.	Description	Solder Tail Length	Digi-Key Part No.	Price Each 1	25	AMP Part No.
	1mm Standard Edge Connector					
1	242 Pos. Slot 1 Connector for Pentium II and Celeron processors	.100 (2.54)	A15102-ND	5.07	4.54	145251-2
2	124 Pos. AGP (Accelerated Graphics Port) Connector for AGP card.	.085 (2.16) .100 (2.54)	A15103-ND A15104-ND	3.67 3.67	3.29 3.29	145263-1 145263-2
3	340 Pos. NLX Riser Card Interconnect	.100 (2.16)	A15106-ND	6.92	6.20	145275-2
	Celeron Retention Modules					
4	Module Kit w/Fastex plastic fasteners, 2 pieces		A15107-ND	2.67	1.34	145333-1
5	Module Kit w/Captive brass Fasteners, 2 pieces (Use with 145312-1 Bridge/Stud Assembly)		A15108-ND	4.00	2.01	145342-1
6	Bridge/Stud Assembly for #145342-1. One bridge/stud assembly required for each retention module		A15109-ND	2.55	1.54	145312-1
	Universal Retention Modules (URM)					
7	URM w/Straight pin plastic fasteners. Compatible with .159" (4.04mm) holes. 2 pieces		A15115-ND	2.06	1.18	145417-2
8	URM w/screw down fasteners. Compatible with .140 (3.56mm) or .159" (4.04mm) holes. 2 pieces		A15116-ND	2.06	1.18	145418-2
9	URM w/Clearance hole for #6 screw. Customer supplies fastener hardware. 2 pieces		A15117-ND	2.06	1.18	145419-2
	Integrated Retention Modules					
10	Pentium II Retention Module w/Fastex plastic fasteners		A15113-ND	5.22	2.61	145327-1
10	Pentium II Retention Module w/Slotted, captive nuts		A15118-ND	5.10	2.56	145286-1
	Heat Sink Support Kit					
11	Heat Sink Support Base with plastic fasteners for use with Integrated Retention Module #145327-1		A15114-ND	6.55	3.28	145308-1

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SCSI Terminators

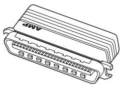
Fig. 1


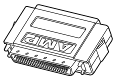
Fig. 2


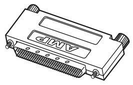
Fig. 3


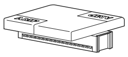
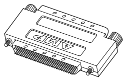
Fig. 4


Fig. 5


SCSI TYPES:

Single-Ended: Allows up to 5 megabytes per second **A. Passive:** 220/330Ω; for lower data transmission rates • Termination of each signal consists of 220Ω to Term Power Line and 330Ωto ground • 36 resistors • Ideal impedance match, 132Ω **B. Active:** Also referred to as "Regulated" or "Boulay." These terminators include a voltage regulator along with resistors and capacitors. They support applications requiring longer cable lengths and faster data transmission rates. • Eighteen 110Ω resistors • 3 or more capacitors • 2 voltage reference resistors • One voltage regulator

Differential: Allows up to 10 megabytes per second, cable lengths up to 25 meter • Requires more powerful drivers than single-ended • Ideal impedance match, 122Ω

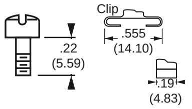
Force Perfect: Use with near non-SCSI applications wherein the larger bandwidth and faster risetimes create special problems; compensates for variances by averaging the impedance mismatches through diode switching and biasing techniques. Circuitry: Thick film resistors and/or discreet components on aluminum substrate or plastic laminate

Active Negation: Used by SCSI-2 and SCSI-3 Drivers and Receivers in single ended active applications to help ensure clean, noise-free transitions of the signals. These terminators can source as well as sink current, thereby maintaining voltage control.

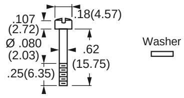
Fig.	No. of Pos.	Description	Digi-Key Part No.	Price Each 1	25	AMP Part No.
		Single Ended Passive				
1	50	CHAMP® Style Plug, Mate w/ .085" (2.16mm) Center-Line SCSI-1	A15032-ND	34.87	28.20	556578-1
2	50	AMPLIMITE® .050" (1.27mm) Series Plug; "A" Cable SCSI-2, Low Profile, ABS	A15036-ND	31.04	27.80	750881-1
2	50	AMPLIMITE® .050" (1.27mm) Series Plug; "A" Cable SCSI-2, Zinc	A23538-ND	43.64	35.29	749535-2
		Single Ended Active				
2	50	AMPLIMITE® .050" (1.27mm) Series Plug; "A" Cable SCSI-2, Zinc	A23540-ND	57.55	46.54	750381-1
2	50	AMPLIMITE® .050" (1.27mm) Series Plug; "A" Cable SCSI-2, Low Profile, ABS	A15037-ND	49.56	44.38	869546-1
3	68	AMPLIMITE® .050" (1.27mm) Series Plug; "P&Q" Cable SCSI-3	A15039-ND	46.87	41.97	869516-1
5	68	Plug Feed-Thru To 68 Position Receptacle	A15043-ND	83.24	67.30	869684-1
6	68	Receptacle Feed-Thru To 50 Position Plug	A15045-ND	68.22	55.16	869680-1
		Differential				
1	50	CHAMP® Style Plug, Mate w/ .085" (2.16mm) Center-Line SCSI-1	A15033-ND	71.96	58.18	555867-1
2	50	AMPLIMITE® .050" (1.27mm) Series Plug; "A" Cable SCSI-2	A15038-ND	54.83	44.33	869545-1
3	68	AMPLIMITE® .050" (1.27mm) Series Plug; "P&Q" Cable SCSI-3	A15040-ND	38.06	34.08	869515-1
5	68	Plug Feed-Thru To 68 Position Receptacle	A15044-ND	78.68	70.46	869682-1
6	68	Receptacle Feed-Thru To 50 Position Plug	A15046-ND	60.72	49.10	869678-1
2	50	AMPLIMITE® .050" (1.27mm) Series Plug; "A" Cable SCSI-2	A23539-ND	54.97	44.45	749541-1
3	68	AMPLIMITE® .050" (1.27mm) Series Plug; "P&Q" Cable SCSI-2	A23542-ND	43.76	35.38	750897-1
		Force Perfect				
3	68	.050" (1.27mm) Series Plug	A23541-ND	44.53	36.01	869867-1
		Active Negation Compatible				
4	68	.025" (.64mm) Center-Line Ribbon Cable SCSI-3	A15041-ND	33.80	30.27	869705-1
4	68	.050" (1.27mm) Center-Line Ribbon Cable SCSI-3	A24211-ND	42.02	33.98	869725-1

3M D-Sub Mounting Hardware

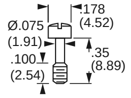
Fig.	Description	Digi-Key Part No.	Price Each 1	100	500	3M Part No.
1	Jack Screw Kit	MDVS22-ND	1.00	.76	.69	3342-1
2	Jack Screw Kit	MDVS62-ND	1.04	.79	.72	3342-2
3	Jack Screw Kit	MDVS35-ND	.71	.54	.49	3342-4
4	Screw Mount Kit	MDSMK1-ND	.79	.61	.55	3342-3
5	Jack Socket Kit	MDVS44-ND	1.77	1.35	1.22	3341-1S
6	Jack Socket Kit	MDVS73-ND	1.60	1.22	1.11	3341-2
7	Jack Socket Kit	MDVS50-ND	1.77	1.35	1.22	3341-1L
8	Jack Socket Kit	MDVS81-ND	1.85	1.41	1.28	3341-4

Fig. 1 – Jack Screw Kit


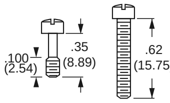
Kit includes 2 screws and 2 clips.

Fig. 2 – Jack Screw Kit


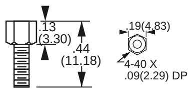
Kit includes 2 screws and 2 flat washers.

Fig. 3 – Jack Screw Kit


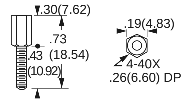
Kit includes 2 screws.

Fig. 4 – Screw Mount Kit


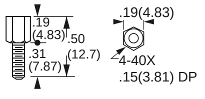
Kit includes 2 screws.

Fig. 5 – Jack Socket Kit


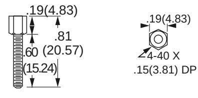
Kit includes 2 sockets, 4 flat washers, 2 lock washers, and 2 nuts.

Fig. 6 – Jack Socket Kit


Kit includes 2 sockets, 2 lock washers, and 2 nuts.

Fig. 7 – Jack Socket Kit


Kit includes 2 sockets, 4 flat washers, 2 lock washers, and 2 nuts.

Fig. 8 – Jack Socket Kit


Kit includes 2 sockets, 4 flat washers, 2 lock washers, and 2 nuts.

tyco Electronics AMP

AMPLIMITE® D-Sub Connectors

All connectors are preloaded with size 20 DF posted contacts; plugs with pin contacts and receptacles with socket contacts.

Steel Tin Plated Shell HD-20 Series (Figure 1): • Contact Mating Area Plating: 30µ gold • Eyelets: Brass, Tin Plated • Threaded Inserts: Zinc • Female Screwlock: Zinc • Boardlocks: Copper Alloy, Tin-Lead Plated • Pin Contacts: Brass

Zinc Plated Shell HDP-20 Series Crimp Snap (Figure 2): • Contact Mating Area Plating: Gold Flash • Grounding Indents: Without • Recommended PCB Thickness: .062 (1.57mm)

Steel Tin Plated Shell HD-20 Series Solder Cup (Figure 2): • Contact Mating Area Plating: 30µ gold • Grounding Indents: On Male Plug • Recommended PCB Thickness: .093 (2.36mm)

Fig. 1

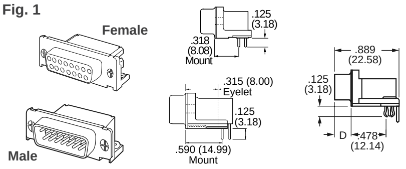


Fig. 2

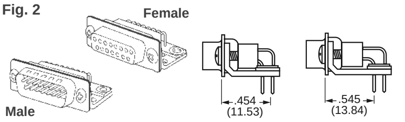


Fig.	No. of Pos.	Sex	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Steel, Tin Plated Shell, .318" (8.08mm) Mount, Without Boardlocks, With Threaded Inserts						
1	9	Male	A2096-ND*	2.72	2.44	747250-4
	9	Female	A2100-ND*	2.36	2.12	745781-4
	9	Male	A23272-ND‡	5.31	4.43	747250-3
	9	Female	A23292-ND‡	2.67	2.23	745781-3
	15	Male	A2097-ND*	3.03	2.42	747236-4
	15	Female	A2101-ND*	2.89	2.59	745782-4
	25	Male	A2098-ND*	4.84	4.34	747238-4
	25	Female	A2102-ND*	3.42	3.06	745783-4
	25	Female	A23297-ND‡	3.18	2.65	745783-3
	37	Male	A2099-ND*	6.15	4.92	747252-4
	37	Female	A2103-ND*	5.45	4.36	745784-4
Steel, Tin Plated Shell, .318" (8.08mm) Mount, Without Boardlocks, With Standard Mounting Holes						
1	9	Female	A23291-ND*	2.85	2.38	745781-2
	15	Male	A23270-ND*	4.65	3.88	747236-2
	15	Female	A23294-ND*	3.33	2.78	745782-2
	25	Male	A23271-ND*	5.22	4.35	747238-2
	25	Female	A23296-ND*	3.99	3.33	745783-2
	37	Male	A23274-ND*	7.11	5.93	747252-2
Steel, Tin Plated Shell, .318" (8.08mm) Mount, Without Boardlocks, With Fixed Female Screwlocks						
1	9	Male	A23273-ND*	3.15	2.63	747250-6
	9	Female	A23293-ND‡	3.06	2.55	745781-6
	15	Female	A23295-ND*	3.57	2.98	745782-6
	25	Female	A23299-ND*	4.23	3.53	745783-6
	25	Female	A23298-ND‡	2.23	1.86	745783-5
	37	Female	A23300-ND*	7.98	6.65	745784-6
Steel, Tin Plated Shell, .318" (8.08mm) Mount With Boardlocks, With Standard Mounting Holes						
1	9	Male	A23275-ND*	3.15	2.63	747840-2
	9	Female	A23301-ND*	1.94	1.62	747844-2
	25	Male	A23283-ND*	4.29	3.58	747842-2
	25	Female	A23310-ND*	3.64	3.04	747846-2
	37	Male	A23288-ND*	7.44	6.20	747843-2
Steel, Tin Plated Shell, .318" (8.08mm) Mount, With Boardlocks, With Threaded Inserts						
1	9	Male	A23277-ND*	1.64	1.37	747840-4
	9	Female	A23303-ND*	1.94	1.62	747844-4
	9	Male	A23276-ND‡	2.04	1.70	747840-3
	9	Female	A23302-ND‡	2.03	1.70	747844-3
	15	Male	A23281-ND*	2.13	1.78	747841-4
	15	Female	A23307-ND*	1.68	1.40	747845-4
	15	Female	A23324-ND*#	3.03	2.53	748876-1
	15	Female	A23325-ND‡#	6.21	5.18	748876-2
	15	Female	A23723-ND*#	7.50	6.25	748876-4
1	15	Male	A23280-ND‡	3.18	2.65	747841-3
	15	Female	A23306-ND‡	1.60	1.34	747845-3
	25	Male	A23285-ND*	3.73	3.11	747842-4
	25	Female	A23312-ND*	2.98	2.49	747846-4
	25	Male	A23284-ND‡	3.42	2.85	747842-3
	25	Female	A23311-ND‡	2.66	2.22	747846-3
	37	Male	A23289-ND*	4.17	3.48	747843-4
	37	Female	A23315-ND*	6.54	5.45	747847-4
Steel, Tin Plated Shell, .318" (8.08mm) Mount, With Boardlocks, With Fixed Female Screwlocks						
1	9	Male	A23279-ND*	2.33	1.95	747840-6
	9	Female	A23305-ND*	1.94	1.62	747844-6
	9	Male	A23278-ND‡	2.94	2.45	747840-5
	9	Female	A23304-ND‡	2.03	1.70	747844-5
	9	Female	A23330-ND‡	2.71	2.26	748955-2
	15	Male	A23282-ND*	2.13	1.78	747841-6
	15	Female	A23309-ND*	3.75	3.13	747845-6
	15	Female	A23308-ND‡	3.15	2.63	747845-5
	25	Male	A23287-ND*	4.47	3.73	747842-6
	25	Female	A23314-ND*	2.98	2.49	747846-6
	25	Male	A23286-ND‡	3.42	2.85	747842-5
	25	Female	A23313-ND‡	2.46	2.06	747846-5
	37	Male	A23290-ND*	7.71	6.43	747843-6
	37	Female	A23316-ND*	6.54	5.45	747847-6
All-Plastic .318" (8.08mm) Mount, With Boardlocks, With Threaded Inserts						
1	25	Female	A23342-ND*	6.33	5.28	748901-1
All-Plastic .318" (8.08mm) Mount, With Boardlocks, With Fixed Female Screwlocks						
1	9	Female	A23343-ND*	8.07	6.73	748979-1
All-Plastic .318" (8.08mm) Mount, Without Boardlocks, With Threaded Inserts						
1	9	Female	A23338-ND*	5.34	4.45	745394-2
	25	Female	A23337-ND*	6.42	5.35	745392-2
All-Plastic .318" (8.08mm) Mount, Without Boardlocks, With Fixed Female Screwlocks						
1	9	Female	A23339-ND*	6.00	5.00	745395-2
	15	Female	A23340-ND*	6.78	5.65	745396-2
	25	Female	A23341-ND*	7.38	6.15	745397-2
All-Plastic .318" (8.08mm) Mount, Without Boardlocks, With Standard Mounting Holes						
1	9	Female	A23334-ND‡	4.17	3.48	745131-1
	15	Female	A23336-ND*	5.04	4.20	745271-2
	25	Female	A23335-ND*	5.55	4.63	745132-2
Steel, Tin Plated Shell .478" (12.14mm) Mount, With Boardlocks, With Threaded Inserts						
1	9	Female	A23384-ND*	14.46	12.05	747852-4
	15	Male	A23383-ND*	16.68	13.90	747849-4
	25	Female	A23385-ND*	26.64	22.20	747854-4
Steel, Tin Plated .590" (14.99mm) Mount, Without Boardlocks, With Threaded Inserts						
1	9	Male	A2104-ND*	8.60	6.88	745990-4
	9	Female	A2108-ND*	12.70	10.16	745988-4
	9	Male	A23344-ND‡	12.81	10.68	745990-3
	15	Female	A2109-ND*	14.55	11.64	745984-4
	25	Male	A2106-ND*	15.43	12.34	745994-4
	25	Female	A2110-ND*	16.80	13.44	745992-4
	25	Female	A23349-ND‡	16.53	13.78	745992-3
	37	Female	A2111-ND*	19.65	15.72	745996-4
Steel, Tin Plated .590" (14.99mm) Mount, With Boardlocks, With Threaded Inserts						
1	9	Male	A23346-ND*	3.66	3.05	747832-4
	9	Female	A23351-ND*	3.60	3.00	747836-4
	9	Male	A23345-ND‡	13.41	11.18	747832-3
	9	Female	A23350-ND‡	13.23	11.03	747836-3
	15	Male	A2105-ND*	6.80	5.44	747833-4
	25	Male	A23348-ND*	4.89	4.08	747834-4
	25	Female	A23354-ND*	4.20	3.50	747838-4
	25	Female	A23353-ND‡	17.16	14.30	747838-3
	37	Male	A2107-ND*	6.68	5.34	747835-4
Steel, Tin Plated .590" (14.99mm) Mount, With Boardlocks, With Fixed Female Screwlocks						
1	9	Male	A23347-ND*	16.14	13.45	747832-6
	9	Female	A23352-ND*	6.93	5.78	747836-6
	25	Female	A23355-ND*	19.11	15.93	747838-6
All-Plastic .590" (14.99mm) Mount, Without Boardlocks, With Threaded Inserts						
1	9	Male	A23375-ND*	5.34	4.45	747467-4
	9	Female	A23359-ND*	5.34	4.45	747459-4
	9	Female	A23358-ND‡	5.04	4.20	747459-3
	15	Female	A23363-ND*	6.03	5.03	747460-4
	15	Female	A23371-ND‡	5.49	4.58	747460-3
	25	Male	A23381-ND*	7.89	6.58	748873-1
	25	Female	A23366-ND‡	5.97	4.98	747461-3
All-Plastic .590" (14.99mm) Mount, Without Boardlocks, With Fixed Female Screwlocks						
1	9	Female	A23370-ND*	6.15	5.13	747459-6
	9	Female	A23360-ND‡	5.73	4.78	747459-5
	15	Male	A23382-ND*	8.25	6.88	748952-1
	25	Female	A23368-ND*	7.38	6.15	747461-6
	25	Female	A23367-ND‡	6.90	5.75	747461-5
All-Plastic .590" (14.99mm) Mount, Without Boardlocks, With Standard Mounting Holes						
1	9	Male	A23374-ND*	4.86	4.05	747467-2
	9	Female	A23357-ND*	4.59	3.83	747459-2
	9	Male	A23373-ND‡	4.17	3.48	747467-1
	9	Female	A23356-ND‡	4.26	3.55	747459-1
	15	Male	A23376-ND*	5.07	4.23	747468-2
	15	Female	A23362-ND*	5.07	4.23	747460-2
	15	Female	A23361-ND‡	4.59	3.83	747460-1
	25	Male	A23379-ND*	6.72	5.60	748826-1
	25	Female	A23365-ND*	5.55	4.63	747461-2
	25	Male	A23380-ND‡	4.65	3.88	748826-2
	25	Female	A23364-ND‡	5.01	4.18	747461-1
	37	Male	A23378-ND*	6.90	5.75	747470-2
	37	Female	A23369-ND*	6.90	5.75	747462-2
All-Plastic .590" (14.99mm) Mount, With Boardlocks, With Threaded Inserts						
1	25	Male	A23372-ND‡	7.02	5.85	748913-2
Steel, Tin Plated Shell, .454" (11.53mm) Mount						
2	9	Male	A23386-ND	17.34	14.45	745434-8
	15	Female	A23390-ND	20.19	16.83	745439-4
	25	Female	A23391-ND	24.33	20.28	745440-4
	37	Female	A23392-ND	29.34	24.45	745441-4
	37	Male	A23388-ND‡	26.46	22.05	745437-3
Zinc Plated Shell, .545" (13.84mm) Mount						
2	9	Male	A1020-ND	11.25	9.00	205865-1
	9	Female	A1021-ND	12.13	9.70	205866-1
	15	Female	A1023-ND	13.75	11.00	205868-1
	25	Male	A1024-ND*	15.15	12.12	205857-1
	25	Female	A1025-ND†	16.38	13.10	205858-1
	37	Male	A1026-ND†	18.03	14.42	205859-1
	37	Female	A1027-ND	19.43	15.54	205860-1
Steel, Tin Plated Shell, .545" (13.84mm) Mount, With Standard Mounting Screws						
2	15	Male	A1022-ND	14.03	11.22	745352-4
	15	Female	A23399-ND	17.19	14.33	745113-2
	25	Male	A23393-ND	20.16	16.80	745353-4
	25	Female	A23401-ND	20.70	17.25	745114-2
	37	Male	A23394-ND	24.12	20.10	745354-4
	37	Female	A23402-ND	24.96	20.80	745115-2
	50	Male	A23395-ND	30.66	25.55	745355-4
	50	Female	A23404-ND	32.91	27.43	745116-2
	50	Female	A23403-ND‡	29.58	24.65	745116-1
Steel, Tin Plated Shell, .545" (13.84mm) Mount, With Female Screwlocks						
2	9	Male	A23397-ND	17.43	14.53	747197-4
	9	Female	A23406-ND	16.50	13.75	747020-2
	15	Female	A23407-ND	19.83	16.53	747021-2
	25	Male	A23396-ND	22.77	18.98	747022-2
	25	Female	A23405-ND	22.92	19.10	745536-2
	50	Male	A23398-ND	33.18	27.65	747497-4
	50	Female	A23409-ND	34.26	28.55	747193-2
	50	Female	A23408-ND‡	32.10	26.75	747193-1

* 30µ Gold † Tin shell ‡ Gold flash on mating end

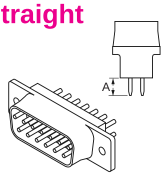
# Housing 94V-0 rated thermoplastic compatible with standard wave, vapor phase, and infra-red reflow (SMT) soldering, black

tyco Electronics AMP

AMPLIMITE®

D-Sub Connectors

HD-20 All-Plastic Straight Posted

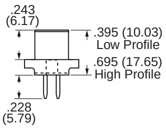


Material and Finish: Housing: 94V-0 rated thermoplastic, black **Threaded Inserts:** Brass, unplated **Female Screwlocks:** Brass, nickel plated **Pin Contacts:** Brass plated, tin-lead on termination end, with entire contact 50µ (min.) nickel underplated

No. of Pos.	Sex	Dim. A In. (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
With Standard Mounting Holes						
9	Male	.125 (3.18)	A23218-ND*	3.87	3.23	208006-2
9	Female	.125 (3.18)	A23238-ND*	3.99	3.33	207826-4
9	Male	.125 (3.18)	A23217-ND‡	3.54	2.95	208006-1
9	Female	.125 (3.18)	A23237-ND‡	3.72	3.10	207826-3
15	Male	.125 (3.18)	A23220-ND*	4.71	3.93	208007-2
15	Female	.125 (3.18)	A23240-ND*	4.95	4.13	207827-4
15	Female	.125 (3.18)	A23239-ND‡	4.41	3.68	207827-3
15	Female	.170 (4.32)	A23241-ND*	4.89	4.08	207827-6
25	Male	.125 (3.18)	A23222-ND*	6.15	5.13	208008-2
25	Female	.125 (3.18)	A23243-ND*	6.45	5.38	207828-4
25	Male	.125 (3.18)	A23221-ND‡	5.34	4.45	208008-1
25	Female	.125 (3.18)	A23242-ND‡	5.76	4.80	207828-3
37	Female	.125 (3.18)	A23245-ND*	9.66	8.05	207829-4
37	Male	.125 (3.18)	A23223-ND‡	7.65	6.38	208009-1
37	Female	.125 (3.18)	A23244-ND‡	10.32	8.60	207829-3
50	Male	.125 (3.18)	A23225-ND*	11.46	9.55	208010-2
50	Female	.125 (3.18)	A23246-ND*	12.27	10.23	207830-4
50	Male	.125 (3.18)	A23224-ND‡	9.75	8.13	208010-1
With Threaded Inserts						
9	Female	.125 (3.18)	A23248-ND*	5.49	4.58	207841-4
9	Female	.125 (3.18)	A23247-ND‡	5.19	4.33	207841-3
15	Male	.125 (3.18)	A23227-ND*	6.15	5.13	745052-2
15	Female	.125 (3.18)	A23250-ND*	6.48	5.40	745057-4
15	Male	.125 (3.18)	A23226-ND‡	5.67	4.73	745052-1
15	Female	.125 (3.18)	A23249-ND‡	5.91	4.93	745057-3
25	Male	.125 (3.18)	A23228-ND*	7.71	6.43	745053-2
25	Female	.125 (3.18)	A23252-ND*	8.10	6.75	745058-4
25	Female	.125 (3.18)	A23251-ND‡	7.29	6.08	745058-3
25	Female	.170 (4.32)	A23253-ND*	8.28	6.90	745058-6
With Fixed Female Screwlocks						
9	Male	.125 (3.18)	A23230-ND*	5.97	4.98	745071-2
9	Female	.125 (3.18)	A23255-ND*	5.46	4.55	745076-4
9	Male	.125 (3.18)	A23229-ND‡	5.67	4.73	745071-1
9	Female	.125 (3.18)	A23254-ND‡	4.77	3.98	745076-3
9	Male	.170 (4.32)	A23231-ND*	5.97	4.98	745071-4
9	Female	.170 (4.32)	A23256-ND*	6.09	5.08	745076-6
15	Female	.125 (3.18)	A23258-ND*	7.02	5.85	745077-4
15	Female	.125 (3.18)	A23257-ND‡	6.57	5.48	745077-3
15	Male	.170 (4.32)	A23232-ND*	6.78	5.65	745072-4
15	Female	.170 (4.32)	A23259-ND‡	7.08	5.90	745077-5
25	Male	.125 (3.18)	A23234-ND*	8.31	6.93	745073-2
25	Female	.125 (3.18)	A23261-ND*	8.37	6.98	745078-4
25	Male	.125 (3.18)	A23233-ND‡	7.53	6.28	745073-1
25	Female	.125 (3.18)	A23260-ND‡	6.96	5.80	745078-3
25	Female	.170 (4.32)	A23264-ND*	8.73	7.28	745078-6
25	Female	.170 (4.32)	A23263-ND‡	7.92	6.60	745078-5
37	Female	.125 (3.18)	A23265-ND*	11.67	9.73	745079-4
37	Male	.170 (4.32)	A23236-ND*	14.37	11.98	745074-4
37	Female	.170 (4.32)	A23266-ND*	11.67	9.73	745079-6

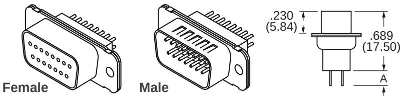
⁎ 30µ gold on mating end
‡ Gold flash on mating end

HD-20 All-Plastic Straight Posted With ACTION PIN



No. of Pos.	Sex	Profile	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
With Standard Mounting Holes						
37	Female	Low	A23135-ND	12.33	10.28	745337-2
With Fixed Female Screwlocks						
9	Female	Low	A23136-ND	7.02	5.85	745454-2
25	Female	Low	A23137-ND	11.04	9.20	745458-2
25	Female	High	A23134-ND	11.46	9.55	745031-2
37	Female	Low	A23138-ND	14.16	11.80	745459-2

HD-20 Full Metal-Shell Straight Posted

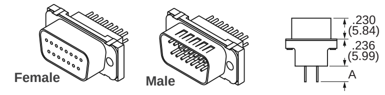


Material and Finish: Shell: Steel, tin plated **Insert:** 94V-0 rated thermoplastic, black **Pin Contacts:** Brass plated, tin-lead on termination end, with entire contact 50µ (min.) nickel underplated

No. of Pos.	Sex	Dim. A In. (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Without Grounding Indents						
9	Male	.125 (3.18)	A23139-ND‡	4.17	3.48	745182-2
25	Male	.125 (3.18)	A23140-ND‡	6.84	5.70	745186-2
With Grounding Indents						
9	Male	.125 (3.18)	A23141-ND*	4.95	4.13	745410-1
9	Male	.188 (4.78)	A23142-ND*	5.01	4.18	745410-7
25	Male	.125 (3.18)	A23143-ND*	5.31	4.43	745412-1
25	Male	.188 (4.78)	A23144-ND*	8.04	6.70	745412-7
37	Male	.125 (3.18)	A23145-ND*	11.73	9.78	745413-1
50	Male	.125 (3.18)	A23146-ND*	15.93	13.28	745414-1
50	Male	.188 (4.78)	A23147-ND*	14.88	12.40	745414-7
With .120" (3.05mm) Mounting Holes						
9	Female	.125 (3.18)	A23149-ND‡	4.80	4.00	745183-2
9	Female	.188 (4.78)	A23150-ND*	5.04	4.20	745183-7
15	Female	.188 (4.78)	A23148-ND*	6.33	5.28	745185-7
25	Female	.125 (3.18)	A23151-ND*	8.37	6.98	745187-1
25	Female	.188 (4.78)	A23152-ND*	8.40	7.00	745187-7
25	Female	.188 (4.78)	A23153-ND‡	7.71	6.43	745187-8
37	Female	.125 (3.18)	A23154-ND*	12.30	10.25	745189-1
37	Female	.188 (4.78)	A23155-ND*	12.27	10.23	745189-7
50	Female	.125 (3.18)	A23156-ND*	15.63	13.03	745191-1
50	Female	.188 (4.78)	A23157-ND*	15.66	13.05	745191-7
With Clinch Nuts						
9	Female	.125 (3.18)	A23164-ND*	6.90	5.75	747190-2
9	Female	.125 (3.18)	A23163-ND‡	6.84	5.70	747190-1
9	Female	.188 (4.78)	A23165-ND*	7.08	5.90	747190-4
15	Female	.125 (3.18)	A23158-ND*	8.34	6.95	745820-1
15	Female	.125 (3.18)	A23159-ND‡	7.95	6.63	745820-2
15	Female	.188 (4.78)	A23160-ND*	13.92	11.60	745820-7
25	Female	.125 (3.18)	A23161-ND*	9.63	8.03	745886-1
25	Female	.125 (3.18)	A23162-ND‡	9.72	8.10	745886-2
37	Female	.125 (3.18)	A23167-ND*	13.59	11.33	747315-1
50	Female	.125 (3.18)	A23166-ND*	17.82	14.85	747302-1

⁎ 30µ gold on mating end
‡ Gold flash on mating end

HD-20 Front Metal-Shell Straight Posted



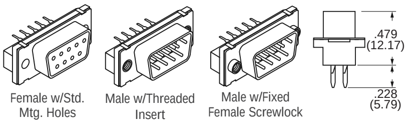
Material and Finish: Shell: Steel, tin plated **Housing:** 94V-0 rated thermoplastic, black **Threaded Inserts:** Brass, unplated **Female Screwlocks:** Zinc **Pin Contacts:** Brass plated, tin-lead on termination end, with entire contact 50µ (min.) nickel underplated

No. of Pos.	Sex	Dim. A In. (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
With Standard Mounting Holes						
9	Male	.125 (3.18)	A23183-ND*	3.66	3.05	747871-2
9	Female	.125 (3.18)	A23206-ND*	3.78	3.15	747150-2
9	Female	.170 (4.32)	A23207-ND*	8.91	7.43	747150-4
15	Female	.125 (3.18)	A23211-ND*	4.50	3.75	747299-2
15	Male	.170 (4.32)	A23185-ND*	4.41	3.68	747872-4
25	Male	.125 (3.18)	A23177-ND*	5.67	4.73	745968-2
25	Female	.125 (3.18)	A23203-ND*	6.18	5.15	745967-2
25	Male	.170 (4.32)	A23178-ND*	5.67	4.73	745968-4
37	Male	.125 (3.18)	A23181-ND*	8.85	7.38	747375-2
37	Female	.125 (3.18)	A23214-ND*	10.86	9.05	747301-2
With 4-40 Threaded Inserts						
9	Male	.125 (3.18)	A23184-ND*	4.98	4.15	747871-8
9	Female	.125 (3.18)	A23209-ND*	4.68	3.90	747150-8
9	Female	.125 (3.18)	A23208-ND‡	3.27	2.73	747150-7
9	Female	.170 (4.32)	A23210-ND‡	4.77	3.98	747150-9
15	Male	.125 (3.18)	A23186-ND*	5.64	4.70	747872-8
15	Female	.125 (3.18)	A23213-ND*	5.85	4.88	747299-8
15	Female	.125 (3.18)	A23212-ND‡	5.46	4.55	747299-7
15	Female	.170 (4.32)	A23195-ND*	5.88	4.90	1-747299-0
25	Male	.125 (3.18)	A23180-ND*	6.93	5.78	745968-8
25	Female	.125 (3.18)	A23205-ND*	7.26	6.05	745967-8
25	Male	.125 (3.18)	A23179-ND‡	6.21	5.18	745968-7
25	Female	.125 (3.18)	A23204-ND‡	6.03	5.03	745967-7
25	Female	.170 (4.32)	A23188-ND*	6.84	5.70	1-745967-0
37	Male	.125 (3.18)	A23182-ND*	12.00	10.00	747375-8
37	Female	.125 (3.18)	A23216-ND*	10.80	9.00	747301-8
37	Female	.125 (3.18)	A23215-ND‡	9.66	8.05	747301-7
With Retention 4-40 Inserts (for .062" [1.58mm] PCB)						
9	Male	.125 (3.18)	A23176-ND*	4.29	3.58	2-748003-0
9	Female	.125 (3.18)	A23199-ND*	4.68	3.90	2-747706-0
15	Female	.125 (3.18)	A23200-ND*	4.50	3.75	2-747707-0
25	Male	.125 (3.18)	A23175-ND*	5.85	4.88	2-747704-0
25	Female	.125 (3.18)	A23201-ND*	6.84	5.70	2-747708-0
37	Female	.125 (3.18)	A23202-ND*	10.80	9.00	2-747709-0
With Fixed Female Screwlocks						
9	Male	.125 (3.18)	A23172-ND*	5.46	4.55	1-747871-4
9	Female	.125 (3.18)	A23193-ND*	5.67	4.73	1-747150-4
9	Male	.125 (3.18)	A23171-ND‡	5.25	4.38	1-747871-3
9	Female	.125 (3.18)	A23192-ND‡	5.37	4.48	1-747150-3
9	Female	.170 (4.32)	A23194-ND*	5.46	4.55	1-747150-6
9	Male	.170 (4.32)	A23173-ND*	5.49	4.58	1-747871-6
15	Female	.125 (3.18)	A23196-ND*	5.85	4.88	1-747299-4
15	Male	.170 (4.32)	A23174-ND*	6.21	5.18	1-747872-6
15	Female	.170 (4.32)	A23197-ND*	6.27	5.23	1-747299-6
25	Male	.125 (3.18)	A23169-ND*	7.50	6.25	1-745968-4
25	Female	.125 (3.18)	A23189-ND*	5.85	4.88	1-745967-4
25	Male	.125 (3.18)	A23168-ND‡	6.78	5.65	1-745968-3
25	Male	.170 (4.32)	A23170-ND*	7.50	6.25	1-745968-6
25	Female	.170 (4.32)	A23191-ND*	7.02	5.85	1-745967-6
25	Female	.170 (4.32)	A23190-ND‡	7.17	5.98	1-745967-5
37	Female	.170 (4.32)	A23198-ND*	13.35	11.13	1-747301-6
With Retention 4-40 Screwlocks (for .062" [1.58mm] PCB)						
25	Male	.125 (3.18)	A23187-ND*	9.12	7.60	748027-1

⁎ 30µ gold on mating end
‡ Gold flash on mating end

HD-20 Front Metal-Shell Straight Posted w/ACTION PIN

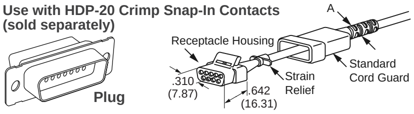
Material and Finish: Front Shell: Steel, tin plated **Housing:** 94V-0 rated thermoplastic, black **Threaded Inserts:** Brass, unplated **Female Screwlocks:** Zinc **Action Pin Contacts:** Copper alloy duplex plated **Plating (except 749892-1):** 30µ gold on mating end, tin-lead on Action Pin post surface, with entire contact 50µ (min.) nickel underplated; **Plating for 749892-1 only:** Gold flash on mating end, tin-lead on Action Pin post surface, with entire contact 50µ (min.) nickel underplated



No. of Pos.	Sex	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
With Standard Mounting Holes					
9	Female	A23116-ND	6.03	5.03	747089-2
15	Female	A23119-ND	8.67	7.23	747140-2
37	Female	A23125-ND	15.00	12.50	747713-2
50	Female	A23122-ND	21.36	17.80	747143-2
With Threaded Inserts					
9	Female	A23117-ND	5.31	4.43	747090-2
9	Male	A23132-ND	13.02	10.85	786830-1
15	Female	A23120-ND	7.98	6.65	747141-2
25	Female	A23114-ND	7.80	6.50	745925-2
25	Male	A23128-ND	13.74	11.45	748146-4
37	Female	A23126-ND	14.13	11.78	747714-2
37	Male	A23131-ND	18.24	15.20	786534-1
50	Female	A23123-ND	16.23	13.53	747144-2
50	Male	A23130-ND	21.96	18.30	749892-1
With Fixed Female Screwlocks					
9	Female	A23118-ND	7.77	6.48	747091-2
15	Female	A23121-ND	8.58	7.15	747142-2
15	Male	A23133-ND	13.50	11.25	787177-1
25	Female	A23115-ND	8.37	6.98	745928-2
25	Male	A23129-ND	12.36	10.30	748146-6
37	Female	A23127-ND	13.89	11.58	747715-2
50	Female	A23124-ND	17.52	14.60	747145-2

HDJ-20 All Plastic Jacketed Cable Connector

Use with HDP-20 Crimp Snap-In Contacts (sold separately)

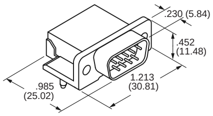


No. of Pos.	Description	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
9	Receptacle	A23471-ND*	.79	.66	207752-3
9	Plug	A23472-ND	2.58	2.15	745018-1
—	Steel Stain Relief	A23464-ND	.15	.13	61831-1

No. of Pos.	Dim. Inch (mm) A	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
HDJ-20 Standard Cord Guards - Black Thermoplastic					
9	.234 (5.94)	A23465-ND	.86	.72	207753-1
HDJ-20 Squeeze-to-Release Cord Guards - Black Thermoplastic					
9	.200 (5.08)	A23466-ND	1.18	.99	745002-1
9	.265 (6.73)	A23467-ND	.87	.73	745002-2

* 94V-0 rated thermoplastic black

Plug Assemblies



HDJ-20 All-Plastic Plug Assemblies with Right-Angle Posted Contacts

Material and Finish: Housing and Post Spacer: Black thermoplastic, 94V-2 rated **Pin Contacts (Posted):** Brass, plated as follows: **A:** 30µ min. gold on mating end, tin-lead on solder posts, entire contact nickel underplatd **B:** Gold flash on mating end, tin-lead on solder posts, entire contact nickel underplated

No. of Positions	Plating Type	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
9	A	A23473-ND	7.32	6.10	745001-2
9	B	A23474-ND	7.17	5.98	745001-3

tyco / Electronics AMP

AMPLIMITE®

D-Sub Connectors

HDP-20 Zinc and Tin Plated Metal Shell

Crimp Type

Pins and Sockets Sold Separately

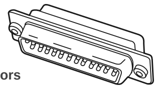
Material and Finish: Shell: Steel, zinc or tin plated **Insert:** 94V-0 rated thermoplastic, black **Mounting Holes: Standard:** .120" (3.05mm) Dia. **Clinch Nut:** 4-40 threads with self-locking feature

Mounting Method: 1: Standard; **2:** Clinch Nut; **3:** Floating Bushing

No. of Pos.	Sex	Mtg. Meth.	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Zinc Plated Shell						
9	Male	1	A1000-ND	1.01	.91	205204-1
9	Female	1	A1001-ND	1.18	1.06	205203-1
9	Female	3	A23410-ND	6.24	5.20	205439-1
15	Male	1	A1002-ND	1.47	1.32	205206-1
15	Female	1	A1003-ND	1.31	1.18	205205-1
25	Male	1	A1004-ND	1.30	1.17	205208-1
25	Female	1	A1005-ND	1.05	.95	205207-1
37	Male	1	A1006-ND	1.83	1.58	205210-1
37	Female	1	A1007-ND	1.83	1.58	205209-1
50	Male	1	A2037-ND	2.23	1.93	205212-1
50	Female	1	A2041-ND	2.23	1.93	205211-1
Tin Plated Shell Without Grounding Indents						
9	Male	1	A1030-ND	1.35	1.21	205204-3
9	Female	1	A1031-ND	.84	.76	205203-3
9	Female	2	A23416-ND	4.09	3.42	745907-1
15	Male	1	A1032-ND	1.57	1.35	205206-2
15	Female	1	A1033-ND	.93	.84	205205-2
15	Female	2	A23417-ND	3.93	3.28	745909-1
25	Male	1	A1034-ND	.99	.86	207464-1
25	Female	1	A1035-ND	1.05	.95	207463-1
25	Female	2	A23411-ND	3.90	3.25	207516-3
37	Male	1	A1036-ND	1.83	1.58	205210-2
37	Female	1	A1037-ND	1.26	1.14	205209-2
37	Female	2	A23412-ND	5.61	4.68	207661-3
50	Male	1	A2038-ND	4.99	4.30	205212-2
50	Female	1	A2042-ND	2.23	1.93	205211-2
Tin Plated Shell With Grounding Indents						
9	Male	1	A1038-ND	.88	.80	205204-4
9	Male	2	A23415-ND	3.82	3.19	745906-2
15	Male	1	A1039-ND	1.05	.95	205206-3
25	Male	1	A1040-ND	.93	.83	207464-2
25	Male	2	A23413-ND	5.10	4.25	745036-2
37	Male	2	A23414-ND	5.19	4.33	745135-2
37	Male	1	A1041-ND	1.77	1.59	205210-3
50	Male	1	A2039-ND	1.89	1.70	205212-3

Series 109 Connectors for Crimp, Snap-In Contacts

(Per MIL-C-24308 Qualified Connectors)



Class G steel shell has cadmium plating per ASTM-B633.

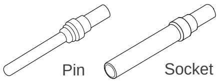
Pins and Sockets Sold Separately
Only use sockets for Series 109 Connectors

No. of Pos.	Sex	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Crimp Type					
9	Male	A2150-ND	4.35	3.75	205162-1
9	Female	A2155-ND	4.35	3.75	205161-1
15	Male	A2151-ND	4.79	4.13	205164-1
15	Female	A2156-ND	4.79	4.13	205163-1
25	Male	A2152-ND	5.51	4.75	205166-1
25	Female	A2157-ND	5.51	4.75	205165-1
37	Male	A2153-ND	7.11	6.13	205168-1
37	Female	A2158-ND	7.11	6.13	205167-1
50	Male	A2154-ND	8.56	7.38	205170-1
50	Female	A2159-ND	8.56	7.38	205169-1

Series 109 Screw-Machined Pins & Sockets

CRIMP TYPE

Pin Diameter: .040" (1.02mm)



MATERIAL: • **Pin Body** – Copper Alloy • **Socket Body** – Beryllium Copper • **Finish:** 50µ Gold • **Contact Size:** 20 DM • **Pin Diameter:** .040" (1.02mm) • **Test Current:** 7.5 amperes

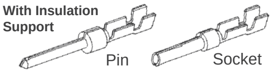
Description	Digi-Key Part No.	Price Each 10	100	AMP Part No.
50µ Gold				
Pin (24-20 AWG)	A2160-ND	.99	.61	205089-1
Socket (24-20 AWG)	A2161-ND	1.47	.91	205090-1

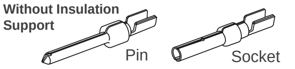
Description	Digi-Key Part No.	Price Each	AMP Part No.
Insertion/Extraction Tool for Series 109 D-Sub Crimp Contacts	A9979-ND	15.75	91285-1
Hand Crimping Tool for Screw-Machined Contacts (20DM)	A9977-ND	453.53	601966-1
Positioner (Use with A9977-ND)	A9797-ND	112.50	601966-5

HDP-20 Pins & Sockets

Crimp Type

Pin Dia.: .040" (1.02mm)





Material: Pin: Brass – Phosphor bronze per QQ-B-750

Plated: A: Select – Gold flash over nickel on entire contact, with additional 30µ gold on mating end; **B:** Duplex – 30µ gold on mating end, tin-lead on termination end, with entire contact nickel underplated; **C:** Gold flash over nickel on entire contact; **D:** Duplex – Gold flash on mating end, tin-lead on termination end, with entire contact nickel underplated

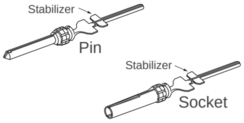
Desc.	AWG (mm)	Ins.Dia. In. (mm)	Cont. Fin.	Digi-Key Part No.	Price Each 10	100	AMP Part No.	Digi-Key Part No.	Strip Form Pricing 1,000	AMP Part No.
With Insulation Support										
Pin	28-24	.040 (1.02)	A	A1630-ND	.30	.21	66507-9	A23713-ND	53.89	66507-3
Socket	28-24	.040 (1.02)	A	A1632-ND	.34	.24	66505-9	A23718-ND	58.03	66505-3
Pin	28-24	.040 (1.02)	B	A23039-ND	.27	.19	5-66507-7	A23020-ND	39.71	3-66507-0
Socket	28-24	.040 (1.02)	B	—	—	—	6-66505-2	A23024-ND	51.98	6-66505-0
Pin	28-24	.040 (1.02)	C	A23004-ND	.27	.19	1-66507-0	A23714-ND	51.98	66507-4
Socket	28-24	.040 (1.02)	C	A23003-ND	.30	.21	1-66505-0	A23022-ND	72.54	66505-4
Pin	28-24	.040 (1.02)	D	—	—	—	—	A23021-ND	33.26	3-66507-1
Socket	28-24	.040 (1.02)	D	—	—	—	—	A23040-ND	51.98	5-66505-7
Pin	28-24	.060 (1.52)	A	A23027-ND	.31	.22	66682-4	A23026-ND	43.52	66682-2
Socket	28-24	.060 (1.52)	A	A23031-ND	.34	.24	66683-4	A23030-ND	82.21	66683-2
Pin	28-24	.060 (1.52)	B	—	—	—	1-66682-1	A23029-ND	66.38	66682-9
Socket	28-24	.060 (1.52)	B	—	—	—	—	A23005-ND	96.64	1-66683-0
Pin	28-24	.060 (1.52)	D	—	—	—	—	A23028-ND	57.14	66682-6
Socket	28-24	.060 (1.52)	D	—	—	—	—	A23053-ND	69.55	66683-7
Pin	26-22	.050 (1.27)	A	A24209-ND	.31	.22	745254-6	A24210-ND	67.90	745254-2
Socket	26-22	.050 (1.27)	A	A23722-ND	.32	.23	745253-6	A23034-ND	96.50	745253-2
Pin	26-22	.050 (1.27)	B	A23015-ND	.28	.20	1-745254-6	A23014-ND	115.47	1-745254-4
Socket	26-22	.050 (1.27)	B	A23011-ND	.30	.21	1-745253-6	A23010-ND	90.42	1-745253-4
Pin	26-22	.050 (1.27)	C	A23038-ND	.28	.20	745254-7	A23037-ND	81.55	745254-3
Socket	26-22	.050 (1.27)	C	A23036-ND	.30	.21	745253-7	A23035-ND	98.66	745253-3
Pin	26-22	.050 (1.27)	D	A23013-ND	.25	.18	1-745254-3	A23012-ND	57.14	1-745254-1
Socket	26-22	.050 (1.27)	D	A23009-ND	.27	.19	1-745253-3	A23008-ND	83.74	1-745253-1
Pin	24-20	.060 (1.52)	A	A1679-ND	.18	.17	66506-9	A23715-ND	42.29	66506-3
Socket	24-20	.060 (1.52)	A	A1680-ND	.19	.17	66504-9	A23719-ND	58.03	66504-3
Pin	24-20	.060 (1.52)	B	A23042-ND	.27	.19	5-66506-7	A23716-ND	38.26	2-66506-4
Socket	24-20	.060 (1.52)	B	A23023-ND	.30	.21	6-66504-0	A23720-ND	43.66	5-66504-9
Pin	24-20	.060 (1.52)	C	A1008-ND	.18	.17	1-66506-0	A23717-ND	62.37	66506-4
Socket	24-20	.060 (1.52)	C	A1009-ND	.19	.17	1-66504-0	A23721-ND	54.05	66504-4
Pin	24-20	.060 (1.52)	D	A23043ND	.24	.17	5-66506-9	A23044-ND	35.34	2-66506-5
Socket	24-20	.060 (1.52)	D	—	—	—	—	A23606-ND	39.50	5-66504-6

Desc.	AWG (mm)	Ins.Dia. In. (mm)	Cont. Fin.	Digi-Key Part No.	Strip Form Pricing 10	100	AMP Part No.
Without Insulation Support							
Pin	28-24	.068 (1.73)	A	A23019-ND	1.65	11.50	205310-2
Socket	28-24	.068 (1.73)	A	A23055-ND	3.45	24.09	205311-3
Pin	24-20	.068 (1.73)	A	A23017-ND	1.65	11.51	205202-2
Socket	24-20	.068 (1.73)	A	A23016-ND	1.96	13.68	205201-3
Pin	24-20	.068 (1.73)	C	A23018-ND	1.57	11.00	205202-6
Socket	24-20	.068 (1.73)	C	A23054-ND	1.66	11.63	205201-6
Pin	22-18	.068 (1.73)	A	A23032-ND	1.65	11.51	745229-2
Socket	22-18	.068 (1.73)	A	A23033-ND	1.48	10.32	745230-2
Pin	22-18	.068 (1.73)	B	A23006-ND	1.27	8.84	1-745229-1
Socket	22-18	.068 (1.73)	B	A23007-ND	1.98	13.83	1-745230-1

Description	Digi-Key Part No.	Price Each	AMP Part No.
Crimp Tool for D-Sub Contacts w/Die	A9990-ND	154.50	58448-2
Die Set for D-Sub Contacts, use w/A9996	A9814-ND	117.00	58448-3
Pro-Crimper II Hand Tool w/o Die	A9996-ND	75.00	354940-1
Pin Insertion/Extraction Tool for Snap-In Contacts	A1010-ND	5.44	91067-2

HDP-20 Solder Post Pins & Sockets

.025" (0.64mm) Square Posted, Snap-In, Precision Formed
Pin Dia.: .040" (1.02mm)



Material: Pin: Brass **Socket:** Phosphor bronze

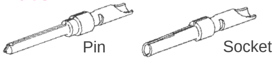
Plated: A: Duplex plated 30µ gold on mating end with entire contact 50µ min. nickel underplated; **B:** Duplex plated gold flash on mating end with entire contact 50µ min. nickel underplated

Desc.	Cont. Fin.	Post Length*	Digi-Key Part No.	Price Each 10	100	AMP Part No.
Pin	A	.125" (3.18mm)	A23056-ND	.33	.23	745287-4
Socket	A	.125" (3.18mm)	A23048-ND	.33	.23	745288-4
Socket	B	.188" (4.78mm)	A23047-ND	.29	.21	1-745288-8
Pin	A	.427" (10.85mm)	A23058-ND	.32	.22	745287-8
Socket	A	.427" (10.85mm)	A23050-ND	.36	.25	745288-8
Pin	B	.427" (10.85mm)	A23057-ND	.26	.19	745287-6
Socket	B	.427" (10.85mm)	A23049-ND	.32	.23	745288-6
Pin	A	.651" (16.54mm)	A23059-ND	.35	.24	1-745287-2
Socket	A	.651" (16.54mm)	A23046-ND	.40	.28	1-745288-2
Pin	B	.651" (16.54mm)	A23045-ND	.27	.19	1-745287-0
Socket	B	.651" (16.54mm)	A23060-ND	.32	.22	1-745288-0

* Length of post extending from rear of HDP-20 metal-shell Connector.

HDP-20 Solder Cup Type Pins & Sockets

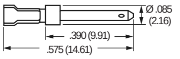
Pin Diameter: .040" (1.02mm)



Material: Pin – Brass per MIL-C-50; Socket – Phosphor bronze per QQ-B-750
Finish: Selective gold, 30µ gold over 30µ nickel

Description	Digi-Key Part No.	Price Each 10	100	AMP Part No.
Pin, 24-20 AWG	A1028-ND	.25	.15	66570-3
Socket, 24-20 AWG	A1029-ND	.29	.27	66569-3
Pin Insertion/Extraction Tool for Snap-In Contacts	A1010-ND	5.44 Each		91067-2

HDP-20 Front Connector Pins

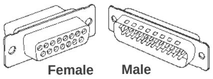


Precision Formed

Material: Brass **Finish:** Duplex plated 10µ min. gold in the mating area, 30µ min. tin in the termination area, all over 30µ min. nickel underplating

AWG (mm)	Ins Dia. In. (mm)	Digi-Key Part No.	Pricing 10	100	AMP Part No.
28-24	.040 (1.02)	A23052-ND	.87	6.06	6-66507-2
24-20	.060 (1.52)	A23051-ND	.57	3.96	6-66506-2

HD-20 Solder Cup



Connector comes complete with pins & sockets.

Accepts 20 AWG or smaller solid or solid or stranded wire.

Material and Finish: Shell: Steel, tin or zinc plated **Insert:** 94V-0 rated thermoplastic, black **Contacts:** Phosphor bronze; duplex plated with gold flash on mating end, tin-lead on solder cup, with entire contact nickel underplated

No. of Pos.	Sex	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Tin Plated Shell					
9	Male	A2043-ND	1.77	1.59	747904-2
9	Female	A2047-ND	2.39	2.15	747905-2
15	Male	A2044-ND	2.88	2.59	747908-2
15	Female	A2048-ND	3.54	3.05	747909-2
25	Male	A2045-ND	3.37	3.02	747912-2
25	Female	A2049-ND	4.21	3.78	747913-2
37	Male	A2046-ND	5.51	4.75	747916-2
37	Female	A2050-ND	6.79	5.85	747917-2
Zinc Plated Shell					
9	Male	A23108-ND	1.95	1.63	747904-4
9	Female	A23109-ND	2.70	2.25	747905-4
15	Male	A23110-ND	2.70	2.25	747908-4
25	Male	A23111-ND	3.81	3.18	747912-4
25	Female	A23112-ND	4.89	4.08	747913-4
37	Male	A23113-ND	5.58	4.65	747916-4

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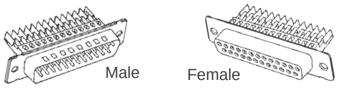
AMPLIMITE®

D-Sub Connectors

HDE-20 IDC Discrete Wire Type, Metal/Plastic Shell



Material and Finish: Metal Shell: Steel, tin plated **Insert:** 94V-0 rated thermoplastic, black **Contacts:** Phosphor bronze

Plastic Housing: 94V-0 rated thermoplastic, black **Contacts:** Phosphor bronze

Contact Finish: Duplex plated; **A:** 30µ gold on mating end, tin-lead on termination end, with entire contact nickel underplated; **B:** Gold flash on mating end, tin-lead on termination end, with entire contact nickel underplated; **C:** 50µ gold on mating end

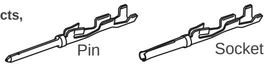
No. of Pos.	Sex	Cont. Fin.	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Metal Shell for 30-26 AWG Wire						
9	Male	A	A23081-ND	2.85	2.38	745492-1
9	Female	A	A23095-ND	3.60	3.00	745491-1
15	Male	A	A23085-ND	4.92	4.10	745494-1
15	Female	A	A23099-ND	8.19	6.83	745493-1
25	Male	A	A23088-ND	4.95	4.13	745496-1
25	Female	A	A23101-ND	6.63	5.53	745495-1
25	Male	B	A23090-ND	5.55	4.63	745496-4
37	Male	A	A23093-ND	9.18	7.65	745498-1
37	Female	A	A23105-ND	8.25	6.88	745497-1
Metal Shell for 26-22 AWG Wire						
9	Male	A	A1042-ND	3.16	2.84	745492-2
9	Female	A	A1043-ND	3.13	2.80	745491-2
9	Male	B	A23083-ND	2.61	2.18	745492-5
9	Female	B	A23097-ND	3.39	2.83	745491-5
9	Male	C	A23079-ND	4.29	3.58	1-745492-3
15	Male	A	A1044-ND	4.32	3.86	745494-2
15	Female	A	A1045-ND	4.32	3.86	745493-2
15	Male	B	A23086-ND	3.99	3.33	745494-5
15	Female	B	A23100-ND	4.38	3.65	745493-5
25	Male	A	A1046-ND	4.42	3.98	745496-2
25	Female	A	A1047-ND	6.86	6.14	745495-2
25	Male	B	A23091-ND	4.68	3.90	745496-5
25	Female	B	A23103-ND*	6.33	5.28	745495-5
25	Male	B	A23106-ND†	2.85	2.38	747740-1
25	Female	B	A23107-ND	4.95	4.13	747741-1
25	Female	C	A23080-ND	8.40	7.00	1-745495-4
37	Male	A	A1048-ND	6.89	6.17	745498-2
37	Female	A	A1049-ND	7.51	6.48	745497-2
37	Male	B	A23094-ND	6.48	5.40	745498-5
Metal Shell for 22-20 AWG Wire						
9	Male	A	A23082-ND	3.54	2.95	745492-3
9	Female	A	A23096-ND	3.93	3.28	745491-3
9	Male	B	A23084-ND	3.93	3.28	745492-6
9	Female	B	A23098-ND	5.55	4.63	745491-6
15	Male	B	A23087-ND	4.08	3.40	745494-6
25	Male	A	A23089-ND	5.97	4.98	745496-3
25	Female	A	A23102-ND	5.64	4.70	745495-3
25	Male	B	A23092-ND	6.90	5.75	745496-6
25	Female	B	A23104-ND	9.21	7.68	745495-6
Plastic Shell for 30-26 AWG Wire						
9	Male	A	A23074-ND	3.36	2.80	745203-1
25	Male	A	A23076-ND	5.01	4.18	745211-1
Plastic Shell for 26-22 AWG Wire						
9	Male	A	A2000-ND	2.92	2.62	745203-2
9	Female	A	A2001-ND	2.96	2.55	745201-2
15	Male	A	A2002-ND	4.70	4.05	745207-2
15	Female	A	A2003-ND	3.89	3.35	745205-2
15	Male	B	A23075-ND	3.36	2.80	745207-5
25	Male	A	A2004-ND	4.84	4.18	745211-2
25	Female	A	A2005-ND	5.48	4.73	745209-2
25	Male	B	A23077-ND	4.68	3.90	745211-5
25	Female	B	A23078-ND	12.00	10.00	745209-5
37	Male	A	A2006-ND	6.67	5.75	745215-2
37	Female	A	A2007-ND	13.17	11.35	745213-2

* 20µ gold on mating end
† Without grounding indents

Description	Digi-Key Part No.	Price Each	AMP Part No.
T-Handle Tool for IDC D-Subs	A9980-ND	3.95	91287-1
Manual Pistol Grip Tool for Metal & All-Plastic Shell Connectors	A2031-ND	55.50	58074-1
Head Assembly Tool for D-Sub IDC Connectors	A2032-ND	175.56	58063-2
Contact Extraction Tool for Metal and All-Plastic Shell Connectors	A2033-ND	10.58	91232-1

HDE-20 Pins & Sockets

Interchangeable Contacts,
Crimp Snap-In
Precision Formed



Material: Phosphor bronze **Finish:** Duplex plated 30µ gold on mating end, tin-lead on termination end, with entire contact nickel underplated **Wire Size:** 22-18 AWG **Insulation Diameter:** Single Wire: .075” (1.91mm), Two Wire: .054” (1.37mm)

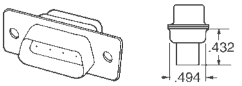
Desc.	Digi-Key Part No.	Price Each 10	100	1,000	AMP Part No.
Pin	A23001-ND	.30	.21	.15	745267-3

Desc.	Digi-Key Part No.	Strip Form Pricing 10	100	1,000	AMP Part No.
Socket	A23002-ND	1.55	10.80	76.11	745270-2

High Density D-Sub Connectors

HD-22 Crimp Type — Tin Plated Shell

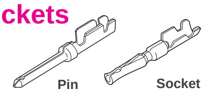
ELECTRICAL CHAR.: • **Contact Rating:** 5.0 amperes • **Dielectric Strength:** 1000 VAC min. • **Insulation Resist.:** 5000 megohms min. **MECHANICAL CHAR.:** • **Contact Insertion Force:** 3 lb. max. • **Durability:** 30µ gold – 500 cycles; Gold Flash - 100 cycles



No. of Pos.	Sex	Digi-Key Part No.	Price Each 1	25	AMP Part No.
15	Male	A2076-ND	2.53	2.27	748364-1
15	Female	A2081-ND	2.74	2.46	748565-1
26	Male	A2077-ND	5.07	4.54	748365-1
26	Female	A2082-ND	5.69	5.10	748566-1
44	Male	A2078-ND	5.66	5.07	748366-1
44	Female	A2083-ND	6.41	5.53	748567-1
62	Male	A2079-ND	5.49	4.92	748367-1
62	Female	A2084-ND	7.51	6.48	748568-1
78	Male	A2080-ND	6.34	5.68	748368-1
78	Female	A2085-ND	7.83	6.75	748569-1

HD-22 Pins & Sockets

CRIMP TYPE
Pin Diameter: .030” (.76mm)



Material: Pin – Brass **Socket –** Phosphor bronze **Finish: 30µ Gold –** Duplex plated 30µ gold on mating end, tin-lead on crimp barrel, with entire contact nickel underplated **Gold Flash –** Duplex plated gold flash on mating end, tin-lead on crimp barrel, with entire contact nickel underplated

Description	Digi-Key Part No.	Price Each 10	100	AMP Part No.
Pin (22-28 AWG), 30µ Gold	A2088-ND	.15	.09	748333-4
Socket (22-28 AWG), 30µ Gold	A2089-ND	.24	.15	748610-4
Pin (22-28 AWG), Gold Flash	A2086-ND	.18	.12	748333-7
Socket (22-28 AWG), Gold Flash	A2090-ND	.27	.17	748610-7
Socket (22-28 AWG), Gold Flash	A23000-ND*	.15	.11	748610-5

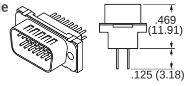
Description	Digi-Key Part No.	Price Each	AMP Part No.
Insertion/Extraction Tool for High Density D-Sub Crimp Contacts	A9979-ND	15.75	91285-1
Crimp Tool for High Density D-Sub w/Die	A9815-ND	174.75	90800-1
Die Set for High Density D-Sub Crimp Contact, use w/A9996	A9816-ND	131.25	90800-2
Pro-Crimper II Hand Tool w/o Die	A9996-ND	75.00	354940-1
Crimp Tool for High Density D-Sub Pins & Sockets	A2112-ND	428.48	90430-1

* Strip Form only.

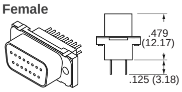
HD-22 Front Metal-Shell Straight Posted

• **Shell:** steel, tin plated • **Housing:** 94V-O rated themoplastic, black • **Pin Contacts (Posted) Brass:** .30µ gold on mating end, tin-lead, with entire contact 50µ min. nickel underplated

Male



Female

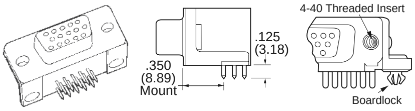


No. of Pos.	Sex	Digi-Key Part No.	Price Each 1	25	AMP Part No.
4-40 Threaded Inserts					
15	Male	A23071-ND	8.10	6.75	749798-1
26	Female	A23073-ND	16.71	13.93	749030-1
62	Female	A23072-ND	28.29	23.58	747786-6

High Density D-Sub Connectors

HD-22 Right Angle

Connector Type: • **ELECTRICAL CHAR.:** • **Single Contact Current Rating:** 2.0 amperes • **Dielectric Withstanding Voltage:** 1000 VAC min. • **MATERIAL AND FINISH:** • **Front Shell –** Steel, tin plated • **Housing –** 94 V-0 rated († VESA Std. 15 postion Receptacle Housing Material - Thermoplastic 94V-0 blue per VESA Std.) • **Socket Contacts –** Phosphor bronze • **Contact Finish –** Duplex Plated: 30µ gold mating end, tin-lead on termination end, with entire contact nickel underplated



No. of Pos.	Sex	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Threaded Inserts With Boardlocks					
15/VESA/VGA	Female	A23068-ND†	2.19	1.83	787066-1
15	Female	A23061-ND	1.64	1.37	1-748390-1
15	Female	A2091-ND	3.07	2.94	748390-5
26	Female	A2092-ND	9.03	7.79	748481-5
44	Female	A2093-ND	5.31	4.58	748482-5
62	Female	A2094-ND	12.01	10.35	748394-5
78	Female	A23067-ND	20.52	17.10	748483-5
15	Male	A23070-ND	2.72	2.27	749767-1
62	Male	A23069-ND	19.65	16.38	749639-1
Screwlocks With Boardlocks					
15	Female	A23064-ND	1.64	1.37	748390-6
15	Female	A23062-ND	5.91	4.93	1-748390-2
26	Female	A23066-ND	15.60	13.00	748481-6
62	Female	A23065-ND	11.73	9.78	748394-6
Threaded Inserts Without Boardlocks					
26	Female	A23063-ND*	16.14	13.45	1-748481-9

* .125” (3.18mm) diameter holes

HD-20 Right-Angle Stacked

Front Shells and Brackets: Steel, tin plated **Housings**: 94V-0 rated thermoplastic, black **PC Board**: 94V-0 flame retardant glass/epoxy

Socket: Phosphor Bronze **Contacts:** 30µ gold on mating end, tin-lead on termination end, with entire contact nickel underplated

Fig. 1

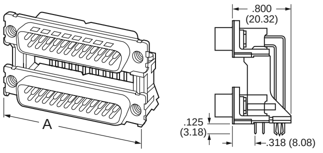


Fig. 2

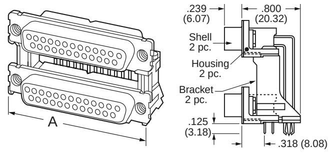
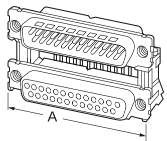
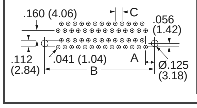


Fig. 3





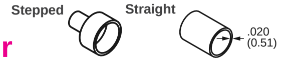
No.of Con-tacts	PC Board Dimensions Inch (mm) A	B	C
18	.276 (7.01)	.984 (24.99)	.108 (2.74)
30	.278 (7.06)	1.312 (33.32)	.108 (2.74)
50	.274 (6.96)	1.852 (47.04)	.109 (2.77)
74	.272 (6.91)	2.500 (63.50)	.109 (2.77)

Fig.	No. of Pos.	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
1	9-9 M-M	1.222 (31.04)	A1584-ND*	12.22	10.95	750593-4
	9-9 M-M	1.222 (31.04)	A23269-ND†	12.81	10.68	750594-4
2	9-9 F-F	1.222 (31.04)	A23267-ND†	11.28	9.40	750586-4
	9-9 F-F	1.222 (31.04)	A1580-ND*	12.22	10.95	750585-4
	15-15 F-F	1.550 (39.37)	A1581-ND*	16.06	14.38	750587-4
	25-25 F-F	2.090 (53.09)	A23268-ND*	15.60	13.00	750589-6
	25-25 F-F	2.090 (53.09)	A1582-ND*	17.32	15.52	750589-4
	37-37 F-F	2.738 (69.55)	A1583-ND*	16.82	14.50	750591-4
3	25-25 M-F	2.090 (53.09)	A1594-ND	14.79	13.25	750601-4

* With Threaded Inserts † With Female Screwlocks

AMPLIMITE®

Die Sets and Ferrules for Shielding Hardware Kits



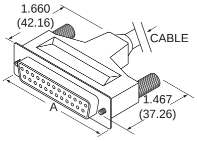
Material and Finish:
Steel (annealed), tin plated

Cable Diameter Inch (mm)	Dimension - Length Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Stepped Ferrules					
.165 - .246 (4.19 - 6.25)	.440 (11.18)	A23558-ND	.32	.27	747579-8
.230 - .265 (5.84 - 6.73)	.625 (15.88)	A23557-ND	.69	.58	1-747580-0
.246 - .324 (6.25 - 8.23)	.440 (11.18)	A23553-ND	.24	.20	1-747579-0
.324 - .375 (8.23 - 9.53)	.440 (11.18)	A23554-ND	.26	.22	1-747579-1
.375 - .432 (9.53 - 10.97)	.625 (15.88)	A23559-ND	.48	.40	747580-4
.422 - .490 (10.72 - 12.45)	.625 (15.88)	A23560-ND	.48	.40	747580-5
Straight Ferrules					
.375 - .435 (9.53 - 11.05)	.440 (11.18)	A23555-ND	.33	.28	1-747579-2
.400 - .455 (10.16 - 11.56)	.440 (11.18)	A23556-ND	.42	.35	1-747579-4
.480 - .562 (12.19 - 14.28)	.625 (15.88)	A23561-ND	.48	.40	747580-6

Cable Diameter Inch (mm)	Dimension - Length Inch (mm)	Digi-Key Part No.	Price Each	AMP Part No.
Crimp Tooling Stepped Ferrule Die Sets				
.165 - .190 (4.19 - 4.83)	.440 (11.18)	A23577-ND	455.85	543424-3
.190 - .217 (4.83 - 5.51)	.440 (11.18)	A23578-ND	455.85	543424-2
.217 - .246 (5.51 - 6.25)	.440 (11.18)	A23579-ND	455.85	543424-8
.246 - .284 (6.25 - 7.21)	.440 (11.18)	A23580-ND	455.85	543424-1
.284 - .324 (7.21 - 8.23)	.440 (11.18)	A23581-ND	455.85	543424-7
.324 - .375 (8.23 - 9.53)	.440 (11.18)	A23582-ND	455.85	543424-6
Crimp Tooling Straight Ferrule Die Sets				
.375 - .435 (9.53 - 11.05)	.440 (11.18)	A23583-ND	455.85	543424-5
.400 - .455 (10.16 - 11.56)	.440 (11.18)	A23584-ND	455.85	543424-4
Hand Crimping Tool (for above die sets)		A23576-ND	557.87	543344-1

Shielding Hardware Kits

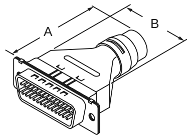
HD-20 Shielding Hardware Enclosure Kits - Solder Cup:



Kit Contents (unassembled): Connector with preloaded, nonremovable contacts, inner shield, outer shield, enclosure, and two jackscrews **(ferrules must be purchased separately). Material and FInish:** • Connector Shell: Steel, tin plated • Connector Insert: 94V-0 rated thermoplastic, black • Shield: Steel, tin plated • Enclosure: PVC, black • Jackscrews: Zinc alloy • Contacts: Phosphor bronze.

No. of Pos.	Cable Insulation Dia. Inch (mm)	Max. Cable Dia. Inch (mm) †	Sex	Dimension A Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
9	.190 - .375 (4.83 - 9.53)	.350 (8.89)	Male	1.350 (34.29)	A23513-ND	8.58	7.15	748046-1
15	.190 - .375 (4.83 - 9.53)	.350 (8.89)	Male	1.680 (42.67)	A23514-ND	9.54	7.95	748048-1
15	.190 - .375 (4.83 - 9.53)	.350 (8.89)	Female	1.680 (42.67)	A23515-ND	10.41	8.68	748049-1
25	.217 - .435 (5.51 - 11.05)	.350 (8.89)	Male	2.205 (56.01)	A23516-ND	10.83	9.03	748050-1
25	.217 - .435 (5.51 - 11.05)	.350 (8.89)	Female	2.205 (56.01)	A23517-ND	11.85	9.88	748051-1

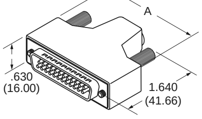
HDE-20 Basic Shielding Hardware Kits:



Kit Contents (unassembled): Connector, inner shield, outer shield **(ferrules must be purchased separately). Material and FInish:** • Connector Shell: Steel, tin plated • Connector Insert: 94V-0 rated thermoplastic, black • Shield: Steel, tin plated • Contacts: Phosphor bronze • Contact Finish- Duplex Plated: **A:** 30µ gold on mating end, tin-lead on termination end, with entire contact nickel underplated. **B:** Gold flash on mating end, tin-lead on termination end, with entire contact nickel underplated.

No. of Pos.	Max. Cable Diameter Inch (mm) †	Sex	Contact Finish	AWG	Dimensions - Inch (mm) A	B	Digi-Key Part No.	Price Each 1	25	AMP Part No.
9	.350 (8.89)	Male	A	26-22	1.520 (38.61)	.678 (17.22)	A23518-ND	5.10	4.25	747515-2
9	.350 (8.89)	Female	A	26-22	1.520 (38.61)	.678 (17.22)	A23522-ND	5.40	4.50	747516-2
15	.350 (8.89)	Male	A	26-22	1.520 (38.61)	1.002 (25.45)	A23519-ND	6.18	5.15	747531-2
25	.350 (8.89)	Male	A	26-22	1.520 (38.61)	1.550 (39.37)	A23520-ND	7.98	6.65	747547-2
25	.350 (8.89)	Female	A	26-22	1.520 (38.61)	1.550 (39.37)	A23523-ND	8.61	7.18	747548-2
25	.350 (8.89)	Male	B	26-22	1.520 (38.61)	1.550 (39.37)	A23521-ND	7.53	6.28	747547-5
25	.350 (8.89)	Female	B	26-22	1.520 (38.61)	1.550 (39.37)	A23524-ND	7.08	5.90	747548-5
37	.450 (11.43)	Female	B	26-22	1.867 (47.42)	2.205 (56.01)	A23525-ND	11.22	9.35	747564-5

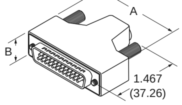
HDE-20 Basic Shielding Hardware Kits:



Kit Contents (unassembled): Connector, inner shield, outer shield, enclosure, two jackscrews **(ferrules must be purchased separately). Material and FInish:** • Connector Shell: Steel, tin plated • Connector Insert: 94V-0 rated thermoplastic, black • Shield: Steel, tin plated • Enclosure: PVC, black • Jackscrews: Zinc alloy • Contacts: Phosphor bronze • Contact Finish - Duplex Plated: **A:** 30µ gold on mating end, tin-lead on termination end, with entire contact nickel underplated **B:** Gold flash on mating end, tin-lead on termination end, with entire contact nickel underplated.

No. of Pos.	Max. Cable Dia. Inch (mm) †	Sex	Contact Finish	AWG	Dimension A Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
9	.350 (8.89)	Male	A	26-22	1.355 (34.42)	A23526-ND	9.18	7.65	747944-2
9	.350 (8.89)	Male	B	26-22	1.355 (34.42)	A23527-ND	9.06	7.55	747944-5
9	.350 (8.89)	Female	A	30-26	1.355 (34.42)	A23533-ND	9.39	7.83	747943-1
9	.350 (8.89)	Female	A	26-22	1.355 (34.42)	A23534-ND	9.39	7.83	747943-2
15	.350 (8.89)	Male	A	30-26	1.685 (42.80)	A23528-ND	12.18	10.15	747946-1
15	.350 (8.89)	Male	B	26-22	1.685 (42.80)	A23529-ND	10.29	8.58	747946-5
15	.350 (8.89)	Female	A	30-26	1.685 (42.80)	A23535-ND	10.47	8.73	747945-1
25	.350 (8.89)	Male	A	30-26	2.210 (56.13)	A23530-ND	5.73	4.78	747948-1
25	.350 (8.89)	Male	A	26-22	2.210 (56.13)	A23531-ND	11.91	9.93	747948-2
25	.350 (8.89)	Male	B	26-22	2.210 (56.13)	A23532-ND	5.73	4.78	747948-5
25	.350 (8.89)	Female	A	26-22	2.210 (56.13)	A23536-ND	12.45	10.38	747947-2
25	.350 (8.89)	Female	B	26-22	2.210 (56.13)	A23537-ND	12.00	10.00	747947-5

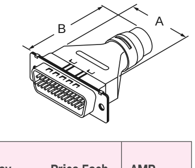
HDP-20 Shielding Hardware Enclosure Kits:



Kit Contents (unassembled): Connector, inner shield, outer shield, enclosure, two jackscrews **(contacts and ferrules must be purchased separately). Material and FInish:** • Connector Shell: Steel, tin plated • Connector Insert: 94V-0 rated thermoplastic, black • Shield: Steel, tin plated • Enclosure: PVC, black • Jackscrews: Zinc alloy.

No. of Pos.	Max. Cable Dia. Inch (mm) †	Sex	Dimensions - Inch (mm) A	B	Digi-Key Part No.	Price Each 1	25	AMP Part No.
9	.350 (8.89)	Male	1.355 (34.42)	.630 (16.00)	A23488-ND	6.21	5.18	747952-1
9	.350 (8.89)	Female	1.355 (34.42)	.630 (16.00)	A23487-ND	6.81	5.68	747951-1
15	.350 (8.89)	Male	1.685 (42.80)	.630 (16.00)	A23490-ND	6.21	5.18	747954-1
15	.350 (8.89)	Female	1.685 (42.80)	.630 (16.00)	A23489-ND	6.69	5.58	747953-1
25	.350 (8.89)	Male	2.210 (56.13)	.630 (16.00)	A23492-ND	7.77	6.48	747956-1
25	.350 (8.89)	Female	2.210 (56.13)	.630 (16.00)	A23491-ND	8.37	6.98	747955-1
37	.450 (11.43)	Male	2.865 (72.77)	.730 (18.54)	A23494-ND	9.75	8.13	747958-1
37	.450 (11.43)	Female	2.865 (72.77)	.730 (18.54)	A23493-ND	9.84	8.20	747957-1
50	.450 (11.43)	Male	2.775 (70.49)	.730 (18.54)	A23496-ND	11.16	9.30	747960-1
50	.450 (11.43)	Female	2.775 (70.49)	.730 (18.54)	A23495-ND	15.54	12.95	747959-1

HDP-20 Basic Shielding Hardware Kits:



Kit Contents (unassembled): Connector, inner shield, outer shield **(contacts and ferrules must be purchased separately). Material and FInish:** • Connector Shell: Steel, tin plated • Connector Insert: 94V-0 rated thermoplastic, black • Shield: Steel, tin plated.

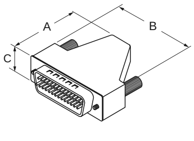
No. of Pos.	Max. Cable Diameter Inch (mm) †	Sex	Mounting Method	Dimensions - Inch (mm) A	B	Digi-Key Part No.	Price Each 1	25	AMP Part No.
9	.350(8.89)	Male	Standard	.700 (17.78)	1.535 (38.99)	A23475-ND	1.75	1.46	747522-1
9	.350 (8.89)	Female	Standard	.700 (17.78)	1.535 (38.99)	A23476-ND	1.55	1.30	747523-1
9	.350 (8.89)	Male	Clinch Nut	.700 (17.78)	1.535 (38.99)	A23485-ND	6.90	5.75	748526-1
15	.350 (8.89)	Male	Standard	1.024 (26.01)	1.535 (38.99)	A23477-ND	1.87	1.56	748538-1
15	.350 (8.89)	Female	Standard	1.024 (26.01)	1.535 (38.99)	A23478-ND	1.95	1.63	747539-1
25	.350 (8.89)	Male	Standard	1.576 (40.03)	1.535 (38.99)	A23479-ND	1.94	1.62	747554-1
25	.350 (8.89)	Female	Standard	1.576 (40.03)	1.535 (38.99)	A23480-ND	1.94	1.62	747555-1
25	.350 (8.89)	Female	Clinch Nut	1.576 (40.03)	1.535 (38.99)	A23486-ND	7.20	6.00	749763-1
37	.450 (11.43)	Male	Standard	2.215 (56.26)	1.892 (48.03)	A23481-ND	3.12	2.60	747570-1
37	.450 (11.43)	Female	Standard	2.215 (56.26)	1.892 (48.03)	A23482-ND	4.65	3.88	747571-1
50	.450 (11.43)	Male	Standard	2.120 (53.85)	1.876 (47.65)	A23483-ND	5.34	4.45	747577-1
50	.450 (11.43)	Female	Standard	2.120 (53.85)	1.876 (47.65)	A23484-ND	6.21	5.18	747578-1

HDP-20 Basic Shielding Hardware Kit:

Preassembled connector kits are available in Subminiature D, shell size 2, 15-position configuration and accept crimp, snap-in HD-20 contacts. Contacts are available separately and allow for selective positioning.

No. of Pos.	Max. Cable Diameter Inch (mm) †	Sex	Digi-Key Part No.	Price Each 1	25	AMP Part No.
15	.0350 (8.89)	Female	A23497-ND	10.65	8.88	749246-1

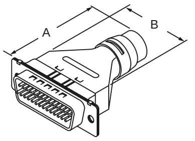
HDP-22 Shielding Hardware Enclosure Kits - Crimp Snap-In Contact Connectors:



Kit Contents (unassembled): Connector, inner shield, outer shield, enclosure, two jackscrews **(contacts and ferrules must be purchased separately). Material and FInish:** • Connector Shell: Steel, tin plated • Connector Insert: 94V-0 rated thermoplastic, black • Shield: Steel, tin plated • Enclosure: PVC, black • Jackscrews: Zinc alloy.
Plugs accept size 22 DF pin contacts and receptacles accept size 22 DF socket contacts.

No. of Pos.	Max. Cable Diameter Inch (mm) †	Sex	Dimensions - Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	25	AMP Part No.
15	.350 (8.89)	Male	1.640 (41.66)	1.355 (34.42)	.630 (16.00)	A23506-ND	10.08	8.40	748473-1
15	.350 (8.89)	Female	1.640 (41.66)	1.355 (34.42)	.630 (16.00)	A23510-ND	10.89	9.08	748639-1
26	.350 (8.89)	Male	1.640 (41.66)	1.685 (42.80)	.630 (16.00)	A23507-ND	10.92	9.10	748474-1
26	.350 (8.89)	Female	1.640 (41.66)	1.685 (42.80)	.630 (16.00)	A23511-ND	11.79	9.83	748640-1
62	.450 (11.43)	Male	2.010 (51.05)	2.860 (72.64)	.730 (18.54)	A23508-ND	14.22	11.85	748476-1
62	.450 (11.43)	Female	2.010 (51.05)	2.860 (72.64)	.730 (72.64)	A23512-ND	15.27	12.73	748642-1
78	.450 (11.43)	Male	2.010 (51.05)	2.770 (70.36)	.730 (18.54)	A23509-ND	15.48	12.90	748477-1

HDP-22 Basic Shielding Hardware Kits - Crimp Snap-In Contact Connectors:

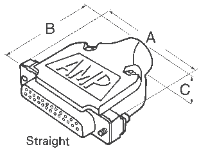


Kit Contents (unassembled): Connector, inner shield, outer shield **(contacts and ferrules must be purchased separately). Material and FInish:** • Connector Shell: Steel, tin plated • Connector Insert: 94V-0 rated thermoplastic, black • Shield: Steel, tin plated.
Plugs accept size 22 DF pin contacts and receptacles accept size 22 DF socket contacts.

No. of Pos.	Max. Cable Dia. Inch (mm) †	Sex	Dimensions - Inch (mm) A	B	Digi-Key Part No.	Price Each 1	25	AMP Part No.
15	.350 (8.89)	Male	1.535 (38.99)	.700 (17.78)	A23498-ND	1.87	1.56	748468-1
15	.350 (8.89)	Female	1.535 (38.99)	.700 (17.78)	A23503-ND	2.61	2.18	748634-1
26	.350 (8.89)	Male	1.535 (38.99)	1.024 (26.01)	A23499-ND	7.35	6.13	748469-1
26	.350 (8.89)	Female	1.535 (38.99)	1.024 (26.01)	A23504-ND	8.31	6.93	748635-1
44	.350 (8.89)	Male	1.535 (38.99)	1.576 (40.03)	A23500-ND	8.37	6.98	748470-1
62	.450 (11.43)	Male	1.892 (48.06)	2.215 (56.26)	A23501-ND	10.08	8.40	748471-1
78	.450 (11.43)	Male	1.876 (47.65)	2.120 (53.85)	A23502-ND	10.50	8.75	748472-1
78	.450 (11.43)	Female	1.876 (47.65)	2.120 (53.85)	A23505-ND	22.35	18.63	748638-1

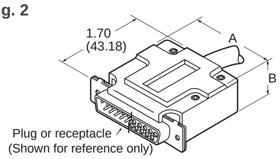
† Maximium cable diameter after jacket and braid removed.

Fig. 1



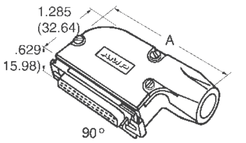
Die Cast Shield: Zinc alloy, plated nickel over copper. **Metal-Plated Plastic Shield:** Thermoplastic, plated nickel over copper. **Plastic Shield:** Thermoplastic, black.

Fig. 2



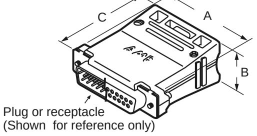
Cable Clamp Housing: Thermoplastic, black with textured finish. **Gates:** Thermoplastic, black. **Flat Head Screws:** Steel, black, zinc plated.

Fig. 3



ETHERNET Slide-locking hood. 90° exit RFI/EMI die cast shields. **Shield:** Zinc alloy, plated nickel over copper.

Fig. 4



Cable Clamp Housing: Thermoplastic **4-40 Mounting Screws:** Steel, zinc plated. **Flat 4-40 Housing Screws:** Steel, zinc plated.

Fig. 5

Plastic Shield: Each kit contains: 1-Hinged Plastic Clamp, 2-Retention Screws, 2-Retention Clips, 1-Cable Gate Plug, 1-Strain Relief Clip, 2-Self Tapping Screws, 1-Connector and Contacts. **Material and Finish: Cover:** Polypropylene, black. **Retention/Self-Tapping Screws:** Steel, zinc plated. **Retention Clips/Strain Relief Clip:** Stainless steel. **Cable Gate Plug:** Polypropylene.

Plastic Shield w/ Connector: Each kit contains: 1-Hinged Plastic Clamp, 2-Self Tapping Screws, 1-Strain Relief Clip, 1-Cable exit gate plug (used to close unused exit). **Material and Finish: Cover:** Polypropylene, black. **Strain Relief Clip:** Stainless steel. **Retainer Clip:** Stainless steel. **Screws:** Carbon steel, zinc plated.

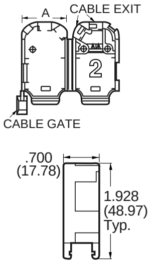
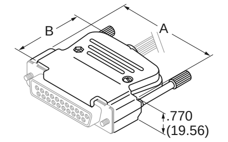
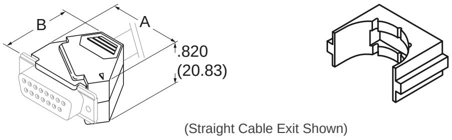


Fig. 6



Cable Clamp Housing: Polyester, black. **4-40 Fillister Head Screws & Hex Nuts:** Steel, clear zinc plated. **Jackscews:** Steel, black zinc plated

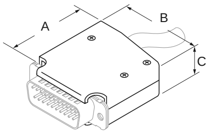
Fig. 7



(Straight Cable Exit Shown)

Straight/90° Exit Cable Clamps can be used on a plug or receptacle and will not interfere with commonly used mating hardware. Their three-piece construction allows easy assembly to a cable harness. Also, the same cable clamp components are used for both straight and 90° cable exit applications. This is accomplished by simply positioning the Male and Female Panels on the Yoke for the desired angle. **Material:** Thermoplastic, black.

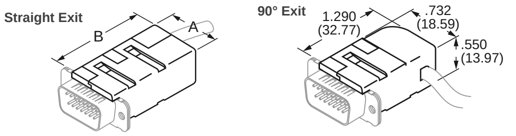
Fig. 8



Straight/45° Exit Cable Clamps can be used on either a plug or receptacle and will not interfere with commonly used hardware, such as Male Screw Retainers, Female Screw-locks or Spring Latches and Latching Blocks. Their hinged construction allows easy assembly to a harness. Also, the staight or 45° angle of the cable exit is achieved by merely positioning the Cable Support Gate for the desired angle prior to installing the assembly onto the plug or receptable.

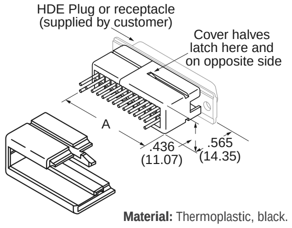
Material and Finish: Cable Clamp Housing: Thermoplastic, black with textured finish. **Gates:** Thermoplastic, black. **Pan Head Screw, 6-32 Set Screw and 6-32 Square Nut:** Steel, zinc plated (9 & 15 postions include self-tapping screws only).

Fig. 9



Low Profile Cable Clamps feature a two piece construction which allows the two cover halves to be snapped together, no hardware is required for assembly. They can be used on plugs or receptacles and will not interfere with commonly used mating hardware. Sufficient Cable Support Gates (or a Cable Support Latch) are supplied with each cable clamp kit to achieve adjustable clamping over a wide range of jacketed cable diameters. **Material:** Thermoplastic, black.

Fig. 10



Material: Thermoplastic, black.

Fig.	No. of Pos.	Dimensions Inch (mm) A	B	C	Max. Cable Diameter Inch (mm)	Description (Type)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Shielded Straight Shell with Grommets (Hardware Included)										
1	9	1.215 (30.86)	1.910 (48.51)	.550 (13.97)	.320 (8.13)	Die Cast	A2061-ND†	5.98	5.38	748676-1
						Metal Plated	A2066-ND†	3.90	3.50	748677-1
	15	1.545 (39.24)	1.910 (48.51)	.620 (15.75)	.320 (8.13)	Die Cast	A2062-ND†	5.98	5.38	748676-2
						Metal Plated	A2067-ND†	5.92	5.10	748677-2
	25	2.090 (53.09)	1.920 (48.77)	.680 (17.27)	.470 (11.94)	Metal Plated	A2068-ND†	4.12	3.69	748677-3
						Die Cast	A2063-ND†	6.21	5.58	748676-3
	37	2.738 (69.55)	1.920 (48.77)	.800 (20.32)	.470 (11.94)	Die Cast	A2064-ND†	8.97	8.04	748676-4
						Metal Plated	A2069-ND†	9.43	8.13	748677-4
	50	2.644 (67.16)	1.920 (48.77)	.900 (22.86)	.470 (11.94)	Die Cast	A2065-ND†	10.12	8.73	748676-5
						Metal Plated	A2070-ND†	15.60	13.45	748677-5
Shielded Straight Shell (Must Order Ferrule & Grommets Separately)										
1	9	1.215 (30.86)	1.910 (48.51)	.550 (13.97)	.200 (5.08)	Die Cast	A2008-ND	7.05	6.32	745171-2
						Metal Plated	A23656-ND	4.23	3.53	745854-5
					.250 (6.35)	Die Cast	A2009-ND	6.27	5.62	745171-1
						Metal Plated	A23655-ND	3.80	3.17	745854-3
					.370 (9.40)	Die Cast	A23637-ND	7.41	6.18	745171-5
						Metal Plated	A23654-ND	4.20	3.50	745854-1
	15	1.545 (39.24)	1.910 (48.51)	.620 (15.75)	.225 (5.72)	Die Cast	A2012-ND	7.28	6.50	745172-3
						Metal Plated	A23662-ND	5.82	4.85	747099-7
					.300 (7.62)	Die Cast	A2013-ND	8.03	7.22	745172-2
						Metal Plated	A23661-ND	5.82	4.85	747099-5
					.375 (9.53)	Die Cast	A2014-ND	6.96	6.21	745172-1
						Metal Plated	A23660-ND	4.11	3.43	747099-3
					.430 (10.92)	Die Cast	A23638-ND	6.90	5.75	1-745172-3
						Metal Plated	A23659-ND	5.82	4.85	747099-1
		1.545 (39.24)	1.805 (45.85)	.620 (15.75)	.300 (7.72)	Die Cast	A23674-ND	9.42	7.85	745919-3
					.375 (9.53)	Die Cast	A23673-ND	7.83	6.53	745919-2
	25	2.090 (53.09)	1.920 (48.77)	.680 (17.27)	.280 (7.11)	Die Cast	A2020-ND	8.42	7.54	745173-5
						Metal Plated	A23653-ND	3.80	3.17	745833-9
					.350 (8.89)	Die Cast	A2021-ND	6.63	5.96	745173-4
						Metal Plated	A23652-ND	4.38	3.65	745833-7
					.430 (10.92)	Die Cast	A2022-ND	6.63	5.96	745173-3
						Metal Plated	A23651-ND	4.23	3.53	745833-5
					.480 (12.19)	Die Cast	A23640-ND	8.13	6.78	745173-2
						Metal Plated	A23650-ND	5.88	4.90	745833-3
					.530 (13.46)	Metal Plated	A23649-ND	5.97	4.98	745833-1
Shielded Straight Shell (Must Order Ferrule & Grommets Separately) cont.										
1	37	2.738 (69.55)	1.920 (48.77)	.800 (20.32)	.350 (8.89)	Die Cast	A2028-ND	6.63	5.94	745174-5
						Metal Plated	A23667-ND	8.85	7.38	747100-9
					.425 (10.80)	Die Cast	A2029-ND	8.97	8.04	745174-4
						Metal Plated	A23666-ND	6.03	5.03	747100-7
					.500 (12.70)	Die Cast	A2030-ND	5.17	4.63	745174-3
						Metal Plated	A23665-ND	6.90	5.75	747100-5
					.530 (13.46)	Die Cast	A23639-ND	10.44	8.70	2-745174-7
					.575 (14.61)	Die Cast	A23642-ND	8.22	6.85	745174-2
						Metal Plated	A23664-ND	8.79	7.33	747100-3
					.650 (16.51)	Die Cast	A23641-ND	8.28	6.90	745174-1
						Metal Plated	A23663-ND	6.03	5.03	747100-1
	50	2.644 (67.16)	1.920 (48.77)	.900 (22.86)	.375 (9.53)	Die Cast	A23648-ND	8.37	6.98	745175-6
					.450 (11.43)	Die Cast	A23647-ND	8.61	7.18	745175-5
						Metal Plated	A23658-ND	6.21	5.18	747098-9
					.525 (13.34)	Die Cast	A23646-ND	8.43	7.03	745175-4
					.600 (15.24)	Die Cast	A23645-ND	8.61	7.18	745175-3
						Metal Plated	A23657-ND	6.21	5.18	747098-5
					.675 (17.15)	Die Cast	A23644-ND	8.52	7.10	745175-2
					.750 (19.05)	Die Cast	A23643-ND	8.37	6.98	745175-1
Straight Shield with Gromments (Hardware Included)										
1	9	1.215 (30.86)	1.910 (48.51)	.570 (14.48)	.320 (8.13)	Plastic, Black	A2071-ND†	3.22	2.89	748678-1
	15	1.545 (39.24)	1.910 (48.51)	.620 (15.75)	.320 (8.13)	Plastic, Black	A2072-ND†	4.38	3.78	748678-2
	25	2.090 (53.09)	1.920 (48.77)	.680 (17.27)	.470 (11.94)	Plastic, Black	A2073-ND†	3.44	3.08	748678-3
	37	2.738 (69.55)	1.920 (48.77)	.800 (20.32)	.470 (11.94)	Plastic, Black	A2074-ND†	3.65	3.15	748678-4
	50	2.644 (67.16)	1.920 (48.77)	.900 (22.86)	.470 (11.94)	Plastic, Black	A2075-ND†	6.26	5.40	748678-5

† Sold as a kit; complete with Ferrule and Grommets.

(Continued)

Fig.	No. of Pos.	Dimensions Inch (mm) A	B	Max. Cable Diameter Inch (mm)	Descrip. (Type)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Straight / 90° Shield (Hardware Included)									
2	9	.755 (19.18)	.635 (16.13)	.160 (4.06)	Plastic	A9001-ND	2.78	2.50	207467-1
	15	1.078 (27.38)	.635 (16.13	.320 (8.13)	Plastic	A9002-ND	3.43	3.07	207470-1
	25	1.620 (41.15)	.770 (19.56)	.390 (9.91)	Plastic	A9003-ND	3.51	3.15	207345-1
	37	2.268 (57.61)	.770 (19.56)	.640 (16.26) Straight .405 (10.29) 90°	Plastic Plastic	A9004-ND	2.11	1.92	207473-1
	50	2.178 (55.32)	.880 (22.35)	.490 (12.45)		A2060-ND	3.25	2.80	207476-1
Plastic Shield with Male Screw Retainers (Hardware Included)									
2	9	.755 (19.18)	.635 (16.13)	.160 (4.06)	Plastic	A23621-ND	2.97	2.48	207908-1
	15	1.078 (27.38)	.635 (16.13	.320 (8.13)	Plastic	A23622-ND	3.73	3.11	207908-4
	25	1.620 (41.15)	.770 (19.56)	.390 (9.91)	Plastic	A23623-ND	3.37	2.81	207908-7
	37	2.268 (57.61)	.770 (19.56)	.640 (16.26) Straight .405 (10.29) 90°	Plastic	A23617-ND	3.93	3.28	1-207908-0

Fig.	No. of Pos.	Dimension Inch (mm) A	Max. Cable Diameter Inch (mm)	Description (Type)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
90° Shell - Hardware Included (Must Order Ferrule Separately)								
3	15	2.310 (58.67)	.225 (5.72)	Die Cast	A2015-ND	11.12	9.95	745652-4
			.300 (7.62)	Die Cast	A2016-ND	8.13	7.28	745652-3
			.375 (9.53)	Die Cast	A2017-ND	8.17	7.31	745652-2
			.430 (10.92)	Die Cast	A2036-ND	7.94	7.11	745652-1
	25	2.850 (72.39)	.280 (7.11)	Die Cast	A2023-ND	9.67	8.66	745653-5
			.355 (9.02)	Die Cast	A2024-ND	9.71	8.69	745653-4
			.430 (10.92)	Die Cast	A2025-ND	16.41	14.70	745653-3
			.480 (12.19)	Die Cast	A23672-ND	17.01	14.18	745653-2
			.530 (13.46)	Die Cast	A23671-ND	15.27	12.73	745653-1
90° Shell without Slide Latch (Must Order Ferrule Separately)								
3	15	2.310 (58.67)	.375 (9.53)	Die Cast	A23670-ND	8.88	7.40	745918-2

Fig.	No. of Pos.	Dimensions Inch (mm) A	B	C	Max. Cable Diameter Inch (mm)	Description (Type)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Straight / 90° Shield (Hardware Included)										
4	15	1.550 (39.37)	.826 (20.98)	1.750 (44.45)	.350 (8.89)	Plastic, Gray	A2055-ND	3.36	2.90	206471-1
	25	2.090 (53.09)	.826 (20.98)	1.750 (44.45)	.335 (8.51)	Plastic, Gray	A2056-ND	3.36	2.90	206472-1
		2.090 (53.09)	.826 (20.98)	1.750 (44.45)	.460 (11.68)	Plastic, Gray	A2057-ND	3.34	2.88	745134-1
		2.090 (53.09)	.740 (18.80)	2.100 (53.34)	.530 (13.46)	Plastic, Black	A23636-ND	5.76	4.80	747824-1
	37	2.738 (69.55)	.826 (20.98)	1.750 (44.45)	.675 (17.15)	Plastic, Gray	A2058-ND	3.51	3.03	745081-1
	50	2.644 (67.16)	.938 (23.83)	1.750 (44.45)	.775 (19.69)	Plastic, Gray	A2059-ND	3.65	3.15	745082-1

Fig.	No. of Pos.	Dimension Inch (mm) A	Max. Cable Diameter Inch (mm)	Description (Type)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Plastic Shield (Hardware Included)								
5	9	.782 (19.86)	.250 (6.35)	w/Screws	A2051-ND	1.74	1.50	749914-2
				w/out Screws	A23608-ND	2.37	1.98	750100-1
	15	1.105 (28.07)	.380 (9.65)	w/Screws	A2052-ND	1.71	1.48	749915-2
				w/out Screws	A23609-ND	2.40	2.00	750101-1
	25	1.650 (41.91)	.460 (11.68)	w/Screws	A2053-ND	1.77	1.53	749626-2
				w/out Screws	A23607-ND	1.35	1.13	750078-1
	37	2.296 (58.32)	.550 (13.97)	w/Screws	A2054-ND	1.89	1.63	749916-2
Plastic Shield with Connector (Hardware Included)								
5	9	.782 (19.86)	.250 (6.35)	Plug/HDP-20	A23610-ND	6.18	5.15	749808-4
	15	1.105 (28.07)	.380 (9.65)	Plug/HDE-20	A23613-ND	10.17	8.48	749809-2
	25	1. 650 (41.91)	.460 (11.68)	Plug/HDP-20	A23612-ND	6.54	5.45	749808-6
				Recep./HDP-20	A23615-ND	4.44	3.70	749812-3
				Plug/HDE-20	A23614-ND	5.85	4.88	749809-3
				Recep./HDE-20	A23616-ND	5.94	4.95	749813-3

Fig.	No. of Pos.	Dimensions Inch (mm) A	B	Max. Cable Diameter Inch (mm)	Description (Type)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Unshielded Dataphone									
6	15	1.575 (40.01)	1.312 (33.32)	.400 (10.16)	Straight	A23603-ND	9.54	7.95	745122-2
	25	2.115 (53.72)	1.421 (36.09)	.500 (12.7)	Straight	A23602-ND	8.46	7.05	745121-2
7	25	1.906 (48.41) 2.066 (52.48)	1.672 (42.47) 1.396 (35.46)	.550 (13.97) .550 (13.97)	Straight 90°	A23604-ND	4.20	3.50	745306-1
	37	2.424 (61.57) 2.638 (67.01)	1.820(46.23) 1.596 (40.54)	.750 (19.05) .750 (19.05)	Straight 90°	A23605-ND	10.62	8.85	745311-1

Fig.	No. of Pos.	Dimensions Inch (mm) A	B	C	Max. Cable Diameter Inch (mm)	Description (Type)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Straight / 45° Exit Unshielded Shell (Hardware Included)										
8	9	1.625 (41.28)	.750 (19.05)	.620 (15.75)	.256 (6.50)	Plastic	A23627-ND	2.37	1.98	205729-1
	15	1.250 (31.75)	1.073 (27.25)	.580 (14.73)	.320 (8.13)	Plastic	A23632-ND	3.69	3.08	206393-1
	15	1.625 (41.28)	1.073 (27.25)	.620 (15.75)	.320 (8.13)	Plastic	A23628-ND	2.88	2.40	205730-1
	25	1.250 (31.75)	1.615 (41.02)	.580 (14.73)	.420 (10.67)	Plastic	A23631-ND	3.60	3.00	206390-1
	25	1.625 (41.28)	1.615 (41.02)	.620 (15.75)	.420 (10.67)	Plastic	A23626-ND	2.17	1.82	205718-1
	37	1.625 (41.28)	2.263 (57.48)	.620 (15.75)	.490 (12.45)	Plastic	A23629-ND	3.00	2.50	205731-1
	50	1.625 (41.28)	2.168 (55.07)	.730 (18.54)	.600 (15.24)	Plastic	A23630-ND	3.33	2.78	205732-1
Straight / 45° Exit Shell with Male Screw Retainers (Hardware Included)										
8	9	1.625 (41.28)	.750 (19.05)	.620 (15.75)	.256 (6.50)	Plastic	A23633-ND	2.45	2.05	206478-1
	25	1.250 (31.75)	1.615 (41.02)	.580 (14.73)	.420 (10.67)	Plastic	A23625-ND	4.14	3.45	1-206478-2
	25	1.625 (41.28)	1.615 (41.02)	.620 (15.75)	.420 (10.67)	Plastic	A23635-ND	2.57	2.15	206478-3

Fig.	No. of Pos.	Dimensions Inch (mm) A	B	Max. Cable Diameter Inch (mm)	Description (Type)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Unshielded Low Profile for Jacketed Cable									
9	9	.732 (18.59)	1.582 (40.18)	.330 (8.38)	Straight	A23592-ND	6.93	5.78	745547-1
		—	—	.330 (8.38)	90°	A23594-ND	3.06	2.55	745550-1
	15	1.056 (26.82)	1.582 (40.18)	.425 (10.80)	Straight	A23595-ND	9.15	7.63	745553-1
	25	1.604 (40.74)	1.700 (43.18)	.550 (13.97)	Straight	A23596-ND	2.88	2.40	745560-1

Fig.	No. of Positions	Dimension Inch (mm) A	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Unshielded Plastic Slide-On Back Covers						
10	9	.610 (15.49)	A23598-ND	1.54	1.29	745530-1
	15	.934 (23.72)	A23599-ND	4.29	3.58	745530-2
	25	1.482 (37.64)	A23600-ND	4.35	3.63	745530-3
	37	2.134 (54.20)	A23601-ND	4.42	3.69	745530-4

AMPLIMITE® Ferrules For Metal Shell Hoods

Split-Ring Ferrules for Foil or Braided Cable Shield

- Material: Aluminum

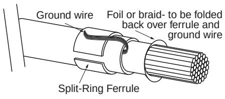
Crimp Ferrules for Braided Cable Shield

- Material and Finish:
  Outer Ferrule: Copper, plated 100µ min. tin
  Inner Ferrule: .023” (0.58mm) thick brass, plated 50µ tin over copper

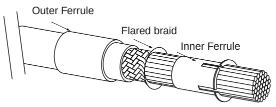
No. of Pos.	Cable Diameter Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Split-Ring Ferrules					
9	.200 (5.08)	A2010-ND	.22	.20	745508-2
9/15	.225 - .240 (5.72 - 6.10)	A2011-ND	.22	.21	745508-3
9/15/50	.370 - .375 (9.40 - 9.53)	A2019-ND	.22	.21	745508-6
15/25	.280 - .300 (7.11 - 7.62)	A2026-ND	.22	.21	745508-4
25/37	.350 (8.89)	A2027-ND	.22	.21	745508-5
15/25/37	.430 (10.92)	A2034-ND	.38	.35	745508-1
25/37	.480 - .500 (12.19 - 12.70)	A2035-ND	.22	.21	745508-8
50	.525 (13.34)	A23575-ND	1.22	1.02	745508-9

No. of Pos.	Cable Diameter Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Inner Crimp Ferrules					
9/50	.240 (6.10)	A23564-ND	.88	.74	1-745129-8
9	.280 (7.11)	A23572-ND	.96	.81	3-745129-4
9/50	.365 - .370 (9.27 - 9.40)	A23563-ND	1.42	1.19	1-745129-7
15/37	.280 (7.11)	A23571-ND	1.75	1.47	3-745129-2
15/37	.350 (8.90)	A23570-ND	.61	.51	2-745129-0
15/37	.430 (10.92)	A23565-ND	.61	.51	1-745129-9
37	.525 (13.34)	A23597-ND	2.80	2.34	2-745129-6
Outer Crimp Ferrules					
9/50	.240 (6.10)	A23573-ND	.81	.68	745130-8
9/15/37	.280 (7.11)	A23569-ND	.91	.76	1-745130-6
9/50	.365 - .370 (9.27 - 9.40)	A23566-ND	1.86	1.55	1-745130-0
15/37	.350 (8.90)	A23574-ND	.55	.47	745130-9
15/37/50	.430 (10.92)	A23567-ND	.72	.61	1-745130-1
37	.240 (6.10)	A23562-ND	.48	.40	747580-8
37	.650 (16.51)	A23568-ND	1.46	1.22	1-745130-3

SPLIT RING FERRULE


Ground wire
Foil or braid- to be folded back over ferrule and ground wire
Split-Ring Ferrule

CRIMP FERRULE



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AMPLIMITE®

Accessories / Hardware

(Sold In Packages of 2 unless otherwise noted)

Fig. 1

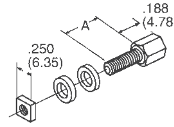


Fig. 2

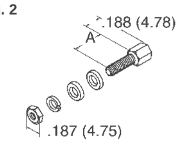


Fig. 3

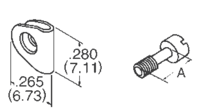


Fig. 4

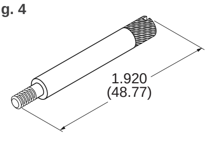


Fig. 5

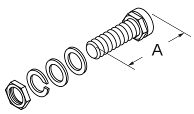


Fig. 6

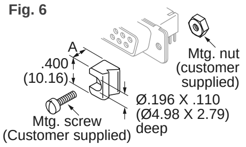


Fig. 7

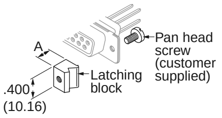


Fig. 8

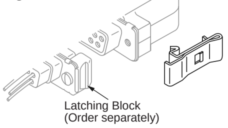


Fig. 9

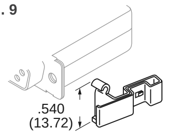


Fig. 10

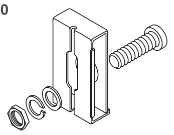
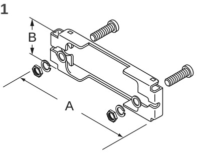


Fig. 11



Style 1: Can be used with cable clamps that do not extend beyond the front flange of the connector or on connectors without cable clamps.

Style 2: Can be used with any cable clamp that has the mounting ear configuration.

Style 3: Can be used on connectors without cable clamps or with cable clamps that do not have the mounting ear configuration.

Fig. 12

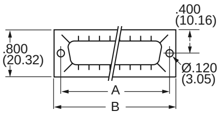


Fig. 13

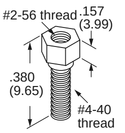


Fig. 14

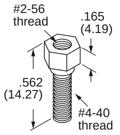


Fig. 15

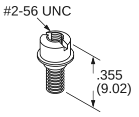


Fig. 16

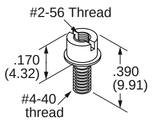


Fig. 17

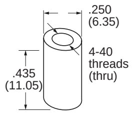


Fig.	Connector Used w/ AMP Series	Finish	Thread	Dim. – A Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Female Screw Locks - Steel, Zinc Plated								
1	HD Plastic	Yellow Chromate	4-40	.250 (6.35)	A9005-ND	1.58	1.42	207952-1
2	HDE	Yellow Chromate	4-40	.250 (6.35)	A23427-ND	1.78	1.49	745563-1
	HDE	Clear Chromate	4-40	.250 (6.35)	A23428-ND	1.59	1.33	745563-3
	HDP/HDF	Yellow Chromate	4-40	.312 (7.92)	A9006-ND	1.41	1.27	205817-1
	HDP/HDF	Clear Chromate	4-40	.312 (7.92)	A23422-ND	1.31	1.10	205817-3
	HDP/HDF	Yellow Chromate	4-40, MIL-C24308	.312 (7.92)	A24835-ND	.79	.67	205817-8
	HDP/HDF	Yellow Chromate	M3 (Metric)	.312 (7.92)	A23424-ND	1.92	1.60	207872-1
	HDP/HDF	Clear Chromate	M3 (Metric)	.312 (7.92)	A23425-ND	2.88	2.40	207872-3
	HD/HDF	Yellow Chromate	4-40	.560 (14.22)	A9007-ND	1.71	1.54	207719-1
	HD/HDF	Clear Chromate	4-40	.560 (14.22)	A23423-ND	1.51	1.26	207719-3
	HD/HDF	Clear Chromate	2-56 Male (4-40 Female)	.560 (14.22)	A23429-ND	2.61	2.18	747223-3
Individual Screwlocks - Steel, Zinc Plated (washers and nuts not included)								
1	HD	Clear Chromate	4-40	.250 (6.35)	A23426-ND	1.41	1.18	207952-3
2	HDP/HDF	Clear Chromate	M2.6 (Metric) Female, (4-40 Male)	.312 (7.92)	A23432-ND	.96	.80	749765-3
	HDP/HDF	Clear Chromate	4-40	.312 (7.92)	A23430-ND	.91	.76	748270-2
	HDP/HDF	Clear Chromate	4-40	.312 (7.92)	A23431-ND†	442.50/500		748558-4
Male Screw Retainers for Plastic Shell Connectors - Steel, Zinc Plated (material)								
3	HDE	Yellow Chromate	4-40	.220 (5.59)	A1236-ND	.41	.38	745647-1
Male Screw Retainers for Metal Shell Connectors - Steel, Zinc Plated (material)								
3	HDE/ HDP	Yellow Chromate	4-40	.220 (5.59)	A9008-ND	.60	.54	205980-1
		Yellow Chromate	4-40	.200 (5.08)	A23420-ND	1.07	.90	745136-1
		Yellow Chromate	M3 (Metric)	.225 (5.72)	A23419-ND	1.92	1.60	207871-1
		Clear Chromate	4-40	.220 (5.59)	A23418-ND	.67	.56	205980-4
		Clear Chromate	4-40	.200 (5.08)	A23421-ND	1.07	.90	745136-3
Male Jack Screw - Steel, Zinc Plated								
4	HDE/HDP	Clear Chromate	4-40	—	A23593-ND†	2.57	2.15	747784-3
Locking Post Assembly - Steel, Zinc Plated (2 complete assemblies)								
5	HD/HDE HDF/HDP	Yellow Chromate	4-40	.410 (10.41)	A23439-ND	2.37	1.98	206514-1
		Clear Chromate	4-40	.410 (10.41)	A24836-ND	2.25	1.88	206514-4
		Yellow Chromate	4-40	.560 (14.22)	A23440-ND	2.53	2.11	206514-6
		Yellow Chromate	2-56	.615 (15.62)	A23442-ND	2.25	1.88	747242-1
		Clear Chromate	2-56	.615 (15.62)	A23443-ND	2.25	1.88	747242-3

† Bulk packed and with captivated star washer. No additional hardware included.

Fig.	No. Of Positions	Description	Thread	Dim. – A Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Latching Blocks - Slot Recess & Thru-Hole - Zinc								
6	9-37	Rear-Panel Latching	—	.160 (4.06)	A23453-ND	4.03	3.36	747080-2
	9-37	Rear-Panel Latching	—	.190 (4.83)	A23451-ND	.80	.67	745245-2
	9-37	Front-Panel Latching	—	.250 (6.35)	A23452-ND	.77	.64	745286-2
Latching Blocks - Threaded Hole - Zinc								
7	9-37	Rear-Panel Latching	4-40	.190 (4.83)	A23449-ND	2.44	2.04	745403-8
	9-37	Rear-Panel Latching	4-40	.220 (5.59)	A23450-ND	6.47	5.40	747717-2
	9-37	Front-Panel Latching	M3	.250 (6.35)	A23447-ND	1.18	.99	208101-1
	9-37	Front-Panel Latching	4-40	.250 (6.35)	A23448-ND	1.18	.99	208101-8

Fig.	No. Of Positions	Description	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Spring Latches - Stainless Steel						
8	—	With Mounting Ears	A23445-ND	1.50	1.26	745255-2
9	9-37	Spring Latch	A23446-ND	1.58	1.32	745779-2
Slide Latch Clips - Steel, Zinc Plated (clip stainless steel, screws/washers/nuts - steel, zinc plated)						
10	—	Thread 4-40, Screw Length .415 (10.54mm)	A23441-ND	2.13	1.78	206942-1
	—	Thread 2-56, Screw Length .547 (13.89mm)	A23444-ND	4.86	4.05	748078-1

Fig.	No. Of Positions	Style #	Thread Size	Dimensions Inches (mm) A	B	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Slide Latch Clips - Stainless Steel (screws/washers/nuts - steel, zinc plated)									
11	9	1	4-40	1.397 (35.48)	.490 (12.45)	A23433-ND	2.97	2.48	745404-1
	15	2	2-56	1.725 (43.82)	.470 (11.94)	A23436-ND	4.38	3.65	745583-1
	15	2	4-40	1.725 (43.82)	.470 (11.94)	A24837-ND	4.17	3.48	745583-7
	25	2	2-56	2.265 (57.53)	.470 (11.94)	A23437-ND	7.17	5.98	745584-1
	25	3	4-40	2.265 (57.53)	.470 (11.94)	A23438-ND	3.99	3.33	745584-3
	37	1	4-40	2.913 (73.99)	.490 (12.45)	A23434-ND	4.80	4.00	745407-1
	50	3	4-40	2.819 (71.60)	.575 (14.61)	A23435-ND	6.33	5.28	745578-3

Fig.	No. Of Positions	Dimensions Inches (mm) A	B	Digi-Key Part No.	Price Each 1	25	AMP Part No.
EMI/RFI Gaskets - Brass .006” (0.15mm) Thick, Bright Tin Plated							
12	9	.984 (24.99)	1.220 (30.99)	A23457-ND	1.20	1.00	747024-3
	15	1.312 (33.32)	1.555 (39.50)	A23458-ND	1.23	1.03	747025-3
	25	1.852 (47.04)	2.100 (53.34)	A23455-ND	1.32	1.10	745776-3
	37	2.500 (63.50)	2.730 (69.34)	A23456-ND	1.50	1.25	745777-3
	50	2.406 (61.11)	2.640 (67.06)	A23459-ND	2.13	1.78	747412-3
13	Screwlock Kits for .050 Series, stainless steel			A23468-ND*	1.84	1.54	749087-2
14	Screwlock Kits for .050 Series, stainless steel			A24212-ND*	4.41	3.68	749087-4
15	Screwlock Kits for .050 Series, stainless steel, Thread 4-40			A23469-ND	2.51	2.10	750644-1
15	Screwlock Kits for .050 Series, stainless steel, Thread 2-56			A23470-ND	2.50	2.09	786585-2
16	Screwlock Kits for .050 Series, stainless steel			A23675-ND	3.78	3.15	750831-1
17	Standoff Bushings, Aluminum			A23454-ND	.71	.60	205933-4
—	Grommet Set (4 per set), 9-15 positions			A23668-ND	.72	.60	747746-1
—	Grommet Set (4 per set), 25-50 positions			A23669-ND	.81	.68	747973-1

* Recommended for right-angle board mount connectors.

KEYSTONE ELECTRONICS CORP.

Connector Hardware

Material: Steel, Zinc Plate and Gold Iridite.
Threads: 4-40

Fig.	Description	Digi-Key Part No.	Price Each 1	5	50	Keystone No.
1	Jack Screws 4/40 thread, (1 pkg = 2 screws) 2 pc. required per connector	2073K-ND	5.75	5.18	3.22	2073
2	Jack Screws 4/40 thd. slim line, 1.25”, (1 pkg = 2 screws) 2 pc. required per conn.	2069K-ND	4.45	4.01	2.49	2069
2	Jack Screws 4/40 thd. slim line, 1.75”, (1 pkg = 2 screws) 2 pc. required per conn.	2071K-ND	4.68	4.21	2.62	2071
3	Jack Screws 4/40 x 250” (10 pieces = 4 flat washers, 2 lock washers, 2 nuts, 2 jack screws)	7229K-ND	.84	.76	.45	7229
3	Jack Screws 4/40 x 312” (10 pieces = 4 flat washers, 2 lock washers, 2 nuts, 2 jack screws)	7231K-ND	.68	.62	.37	7231
3	Jack Screws 4/40 x .625” (10 piecest = 4 flat washes, 2 lock washers, 2 nuts, 2 jack screws)	7233K-ND	1.50	1.35	.80	7233
4	“U” Clip Set (4 pieces = 2 screws and 2 clips)	2062K-ND	.85	.77	.48	2062
5	Saddle Washer Set (4 pieces = 2 screws and 2 clips)	2063K-ND	.96	.87	.54	2063
6	4/40 x .250” Bow Tie Clip Set (4 pieces = 2 screws and 2 clips)	2060K-ND	1.06	.96	.60	2060
6	4/40 x .562” Bow Tie Clip Set (4 pieces = 2 Sscrews and 2 clips)	2061K-ND	1.17	1.06	.66	2061

Fig. 1

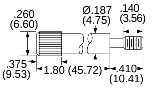


Fig. 2

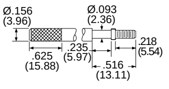


Fig. 3

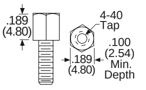


Fig. 4

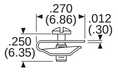


Fig. 5

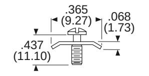
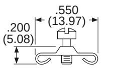


Fig. 6

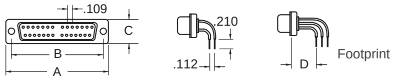


NORCOMP Right Angle D-Sub Connectors

173, 174, 175 and 176 Series:

Materials:
- **Shell:** Steel, zinc plated with yellow chromate
- **Insulator:** Glass-filled thermoplastic, UL rated 94V-0
- **Machined Contacts:** Male: Brass; Female: Phosphor bronze
- **Plating:** Gold flash on entire contact

Connector Size	Dimensions (Inch) A	B	C
9	1.213	.984	.494
15	1.541	1.312	.494
25	2.088	1.852	.494
37	2.729	2.50	.494
50	2.635	2.406	.605



No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
*173 Series (.283” Footprint) - Yellow Chromate **						
9	Male	173-09M-ND	5.34	4.60	3.13	173-009-111-141
9	Female	173-09F-ND	6.53	5.63	3.83	173-009-211-141
15	Male	173-15M-ND	9.54	8.23	5.60	173-015-111-141
15	Female	173-15F-ND	10.09	8.70	5.92	173-015-211-141
25	Male	173-25M-ND	9.63	8.30	5.65	173-025-111-141
25	Female	173-25F-ND	13.46	11.60	7.89	173-025-211-141
37	Male	173-37M-ND	13.11	11.30	7.69	173-037-111-141
37	Female	173-37F-ND	18.71	16.13	10.97	173-037-211-141
50	Male	173-50M-ND	16.18	13.95	9.49	173-050-111-141
50	Female	173-50F-ND	25.61	22.08	15.02	173-050-211-141
173 Series (.283” Footprint) - Tin						
9	Male	173-109M-ND	5.16	4.45	3.03	173-009-112-141
9	Female	173-109F-ND	12.47	10.75	7.31	173-009-212-141
15	Male	173-115M-ND	6.35	5.48	3.73	173-015-112-141
15	Female	173-115F-ND	12.24	10.55	7.18	173-015-212-141
25	Male	173-125M-ND	6.79	5.85	3.98	173-025-112-141
25	Female	173-125F-ND	17.37	14.98	10.19	173-025-212-141
37	Male	173-137M-ND	8.70	7.50	5.10	173-037-112-141
37	Female	173-137F-ND	15.52	13.38	9.10	173-037-212-141
50	Male	173-150M-ND	9.31	8.03	5.46	173-050-112-141
50	Female	173-150F-ND	24.13	20.80	14.15	173-050-212-141
*174 Series (.370” Footprint) - Yellow Chromate **						
9	Male	174-09M-ND	5.34	4.60	3.13	174-009-111-141
9	Female	174-09F-ND	6.76	5.83	3.97	174-009-211-141
15	Male	174-15M-ND	7.08	6.10	4.15	174-015-111-141
15	Female	174-15F-ND	8.82	7.60	5.17	174-015-211-141
25	Male	174-25M-ND	9.45	8.15	5.55	174-025-111-141
25	Female	174-25F-ND	12.01	10.35	7.04	174-025-211-141
37	Male	174-37M-ND	12.91	11.13	7.57	174-037-111-141
37	Female	174-37F-ND	16.21	13.98	9.51	174-037-211-141
50	Male	174-50M-ND	16.36	14.10	9.59	174-050-111-141
50	Female	174-50F-ND	21.66	18.68	12.70	174-050-211-141
174 Series (.370” Footprint) - Tin						
9	Male	174-109M-ND	4.96	4.28	2.91	174-009-112-141
9	Female	174-109F-ND	10.90	9.40	6.40	174-009-212-141
15	Male	174-115M-ND	6.12	5.28	3.59	174-015-112-141
15	Female	174-115F-ND	11.98	10.33	7.03	174-015-212-141
25	Male	174-125M-ND	6.58	5.68	3.86	174-025-112-141
25	Female	174-125F-ND	9.89	8.53	5.80	174-025-212-141
37	Male	174-137M-ND	8.18	7.05	4.80	174-037-112-141
37	Female	174-137F-ND	15.28	13.18	8.96	174-037-212-141
50	Male	174-150M-ND	9.11	7.85	5.34	174-050-112-141
50	Female	174-150F-ND	20.36	17.55	11.94	174-050-212-141
175 Series (.454” Footprint) - Yellow Chromate †						
9	Male	175-09M-ND	5.95	5.13	3.49	175-009-111-151
9	Female	175-09F-ND	6.70	5.78	3.93	175-009-211-151
15	Male	175-15M-ND	8.27	7.13	4.85	175-015-111-151
15	Female	175-15F-ND	9.60	8.28	5.63	175-015-211-151
25	Male	175-25M-ND	12.09	10.43	7.09	175-025-111-151
25	Female	175-25F-ND	14.59	12.58	8.56	175-025-211-151
37	Male	175-37M-ND	16.91	14.58	9.92	175-037-111-151
37	Female	175-37F-ND	20.88	18.00	12.24	175-037-211-151
50	Male	175-50M-ND	18.21	15.70	10.68	175-050-111-151
50	Female	175-50F-ND	27.17	23.43	15.93	175-050-211-151
175 Series (.454” Footprint) - Tin						
9	Male	175-109M-ND	5.77	4.98	3.39	175-009-112-151
9	Female	175-109F-ND	13.51	11.65	7.93	175-009-212-151
15	Male	175-115M-ND	6.53	5.63	3.83	175-015-112-151
15	Female	175-115F-ND	15.75	13.58	9.24	175-015-212-151
25	Male	175-125M-ND	8.03	6.93	4.71	175-025-112-151
25	Female	175-125F-ND	19.78	17.05	11.60	175-025-212-151
37	Male	175-137M-ND	9.37	8.08	5.50	175-037-112-151
37	Female	175-137F-ND	17.17	14.80	10.07	175-037-212-151
50	Male	175-150M-ND	11.60	10.00	6.80	175-050-112-151
50	Female	175-150F-ND	25.78	22.23	15.12	175-050-212-151
176 Series (.545” Footprint) - Yellow Chromate †						
9	Male	176-09M-ND	5.34	4.60	3.13	176-009-111-151
9	Female	176-09F-ND	6.58	5.68	3.86	176-009-211-151
15	Male	176-15M-ND	7.08	6.10	4.15	176-015-111-151
15	Female	176-15F-ND	8.82	7.60	5.17	176-015-211-151
25	Male	176-25M-ND	9.57	8.25	5.61	176-025-111-151
25	Female	176-25F-ND	12.24	10.55	7.18	176-025-211-151
37	Male	176-37M-ND	13.17	11.35	7.72	176-037-111-151
37	Female	176-37F-ND	17.11	14.75	10.03	176-037-211-151
50	Male	176-50M-ND	17.08	14.73	10.02	176-050-111-151
50	Female	176-50F-ND	24.07	20.75	14.11	176-050-211-151
176 Series (.545” Footprint) - Tin						
9	Male	176-109M-ND	4.96	4.28	2.91	176-009-112-151
9	Female	176-109F-ND	11.37	9.80	6.67	176-009-212-151
15	Male	176-115M-ND	6.12	5.28	3.59	176-015-112-151
15	Female	176-115F-ND	12.30	10.60	7.21	176-015-212-151
25	Male	176-125M-ND	6.61	5.70	3.88	176-025-112-151
25	Female	176-125F-ND	15.89	13.70	9.32	176-025-212-151
37	Male	176-137M-ND	8.18	7.05	4.80	176-037-112-151
37	Female	176-137F-ND	15.92	13.73	9.34	176-037-212-151
50	Male	176-150M-ND	9.25	7.98	5.43	176-050-112-151
50	Female	176-150F-ND	22.68	19.55	13.30	176-050-212-151

* Short mounting bracket attached with 4-40 female screw lock.
† Long mounting bracket attached with 4-40 female screw lock.

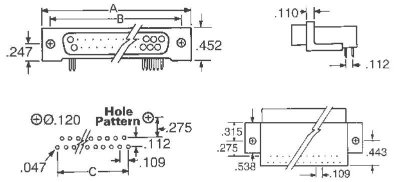
NORCOMP

Right Angle D-Sub Connectors

177 Series with 4-40 Flush Insert

Materials:
- **Shell:** Steel, zinc with tin plating
- **Insulator:** Glass-filled thermoplastic, UL rated 94V-0
- **Stamped Contacts:** Cupro-nickel alloys
- **Plating:** Gold over nickel on mating area, tin/lead on solder tails

Connector Size	Dimensions (Inch) A	B	C
9	1.228	.984	.436
15	1.556	1.312	.763
25	2.100	1.852	1.308
37	2.742	2.500	1.962



No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
177 Series (.590” Footprint) *Plastic Shielded (Metal Face on plastic connector)*						
9	Male	309M-ND	4.96	4.28	2.91	177-009-112-171
9	Female	309F-ND	5.48	4.73	3.22	177-009-212-171
15	Male	315M-ND	5.80	5.00	3.40	177-015-112-171
15	Female	315F-ND	6.38	5.50	3.74	177-015-212-171
25	Male	325M-ND	6.99	6.03	4.10	177-025-112-171
25	Female	325F-ND	7.71	6.65	4.53	177-025-212-171
37	Male	337M-ND	9.02	7.78	5.29	177-037-112-171
37	Female	337F-ND	9.89	8.53	5.80	177-037-212-171
177 Series (.590” Footprint) — Plastic Unshielded						
9	Male	409M-ND	4.06	3.50	2.38	177-009-110-071
9	Female	409F-ND	4.61	3.98	2.71	177-009-210-071
15	Male	415M-ND	4.96	4.28	2.91	177-015-110-071
15	Female	415F-ND	5.48	4.73	3.22	177-015-210-071
25	Male	425M-ND	6.29	5.43	3.69	177-025-110-071
25	Female	425F-ND	6.93	5.98	4.07	177-025-210-071
37	Male	437M-ND	7.60	6.55	4.46	177-037-110-071
37	Female	437F-ND	8.38	7.23	4.92	177-037-210-071

NORCOMP

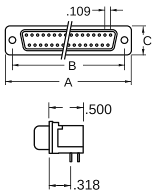
Right Angle D-Sub Connectors

182 and 183 Economy Series

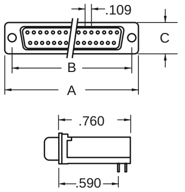
Materials:
- **Shell:** Steel, tin plating
- **Insulator:** Glass-filled thermoplastic, UL rated 94V-0
- **Stamped Contacts:** Brass
- **Plating:** Gold flash on entire contact

Connector Size	Dim. (Inch) A	B	C
9	1.213	.984	.494
15	1.541	1.312	.494
25	2.088	1.852	.494
37	2.729	2.500	.494

182 Series

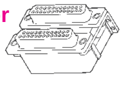


183 Series



No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
182 Series (.318” Footprint)						
9	Male	182-09M-ND	.81	.70	.48	182-009-112-531
9	Female	182-09F-ND	.81	.70	.48	182-009-212-531
15	Male	182-15M-ND	.96	.83	.57	182-015-112-531
15	Female	182-15F-ND	1.04	.90	.62	182-015-212-531
25	Male	182-25M-ND	1.10	.95	.65	182-025-112-531
25	Female	182-25F-ND	1.04	.90	.62	182-025-212-531
37	Male	182-37M-ND	1.86	1.60	1.09	182-037-112-531
37	Female	182-37F-ND	1.86	1.60	1.09	182-037-212-531
183 Series (.590” Footprint)						
9	Male	183-09M-ND	1.48	1.28	.87	183-009-112-531
9	Female	183-09F-ND	1.48	1.28	.87	183-009-212-531
15	Male	183-15M-ND	1.94	1.68	1.14	183-015-112-531
15	Female	183-15F-ND	2.20	1.90	1.30	183-015-212-531
25	Male	183-25M-ND	2.26	1.95	1.33	183-025-112-531
25	Female	183-25F-ND	2.49	2.15	1.47	183-025-212-531
37	Male	183-37M-ND	3.63	3.13	2.13	183-037-112-531
37	Female	183-37F-ND	3.63	3.13	2.13	183-037-212-531

Dual-Port D-Sub Connector



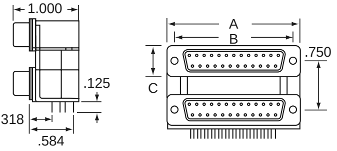
T2325-ND **$12.71/1**
$109.60/10
$745.28/100

NORCOMP Dual Port Right Angle D-Sub Connectors

178, 179 and 189 Series

Materials:
- **Shell:** Steel, zinc with tin plating
- **Insulator:** Glass-filled thermoplastic, UL 94V-0 rated, black .

Conn. Size	Dim. (Inch) A	B	C
9	1.204	.984	.494
15	1.535	1.312	.494
25	2.078	1.850	.494
37	2.724	2.500	.494



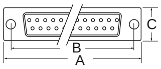
No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
.625 Centers						
9/9	M/M	1009MM-ND	5.48	4.73	3.22	189-009-612-571
15/15	M/M	1015MM-ND	8.24	7.10	4.83	189-015-612-571
25/25	M/M	1025MM-ND	8.85	7.63	5.19	189-025-612-571
37/37	M/M	1037MM-ND	13.40	11.55	7.86	189-037-612-571
9/9	M/F	1009MF-ND	5.48	4.73	3.22	189-009-412-571
15/15	M/F	1015MF-ND	8.24	7.10	4.83	189-015-412-571
25/25	M/F	1025MF-ND	8.85	7.63	5.19	189-025-412-571
37/37	M/F	1037MF-ND	13.40	11.55	7.86	189-037-412-571
9/9	F/F	1009FF-ND	5.48	4.73	3.22	189-009-512-571
15/15	F/F	1015FF-ND	8.24	7.10	4.83	189-015-512-571
25/25	F/F	1025FF-ND	8.85	7.63	5.19	189-025-512-571
37/37	F/F	1037FF-ND	13.40	11.55	7.86	189-037-512-571
9/9	F/M	1009FM-ND	5.48	4.73	3.22	189-009-312-571
15/15	F/M	1015FM-ND	8.24	7.10	4.83	189-015-312-571
25/25	F/M	1025FM-ND	8.85	7.63	5.19	189-025-312-571
37/37	F/M	1037FM-ND	13.40	11.55	7.86	189-037-312-571

No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
.750 Centers						
9/9	M/M	1109MM-ND	5.48	4.73	3.22	178-009-612-571
15/15	M/M	1115MM-ND	8.24	7.10	4.83	178-015-612-571
25/25	M/M	1125MM-ND	8.85	7.63	5.19	178-025-612-571
37/37	M/M	1137MM-ND	13.40	11.55	7.86	178-037-612-571
9/9	M/F	1109MF-ND	5.48	4.73	3.22	178-009-412-571
15/15	M/F	1115MF-ND	8.24	7.10	4.83	178-015-412-571
25/25	M/F	1125MF-ND	8.85	7.63	5.19	178-025-412-571
37/37	M/F	1137MF-ND	13.40	11.55	7.86	178-037-412-571
9/9	F/F	1109FF-ND	5.48	4.73	3.22	178-009-512-571
15/15	F/F	1115FF-ND	8.24	7.10	4.83	178-015-512-571
25/25	F/F	1125FF-ND	8.85	7.63	5.19	178-025-512-571
37/37	F/F	1137FF-ND	13.40	11.55	7.86	178-037-512-571
9/9	F/M	1109FM-ND	5.48	4.73	3.22	178-009-312-571
15/15	F/M	1115FM-ND	8.24	7.10	4.83	178-015-312-571
25/25	F/M	1125FM-ND	8.85	7.63	5.19	178-025-312-571
37/37	F/M	1137FM-ND	13.40	11.55	7.86	178-037-312-571
.900 Centers						
9/9	M/M	1209MM-ND	5.48	4.73	3.22	179-009-612-571
15/15	M/M	1215MM-ND	8.24	7.10	4.83	179-015-612-571
25/25	M/M	1225MM-ND	8.85	7.63	5.19	179-025-612-571
37/37	M/M	1237MM-ND	13.40	11.55	7.86	179-037-612-571
9/9	M/F	1209MF-ND	5.48	4.73	3.22	179-009-412-571
15/15	M/F	1215MF-ND	8.24	7.10	4.83	179-015-412-571
25/25	M/F	1225MF-ND	8.85	7.63	5.19	179-025-412-571
37/37	M/F	1237MF-ND	13.40	11.55	7.86	179-037-412-571
9/9	F/F	1209FF-ND	5.48	4.73	3.22	179-009-512-571
15/15	F/F	1215FF-ND	8.24	7.10	4.83	179-015-512-571
25/25	F/F	1225FF-ND	8.85	7.63	5.19	179-025-512-571
37/37	F/F	1237FF-ND	13.40	11.55	7.86	179-037-512-571
9/9	F/M	1209FM-ND	5.48	4.73	3.22	179-009-312-571
15/15	F/M	1215FM-ND	8.24	7.10	4.83	179-015-312-571
25/25	F/M	1225FM-ND	8.85	7.63	5.19	179-025-312-571
37/37	F/M	1237FM-ND	13.40	11.55	7.86	179-037-312-571

NORCOMP

D-Sub Connectors

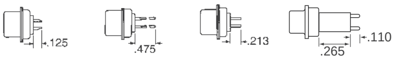
Series 171 – Stamped Contacts
Series 172 – Machined Contacts



Conn. Size	Dim. (Inch) A	B	C
9	1.213	.984	.494
15	1.541	1.312	.494
25	2.088	1.852	.494
37	2.729	2.500	.494
50	2.635	2.406	.605

Features: • Available in 5 industry sizes/positions • Non-removable contacts • Tin or Yellow Chromate shells available • Tin shells have indents to provide grounding and additional retention • Screw machine contacts offer high reliability. **Materials:** • Shell: Steel, zinc plated with yellow chromate or bright tin over nickel • Insulator: Glass-filled thermoplastic, UL rated 94V-O • Contacts: Brass male pins; Phosphor bronze female pins • Plating: Gold flash on entire contact

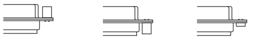
Original D-Subminiature



Solder Cup **2-Level Wire Wrap** **Straight PC Mount** **High Profile**

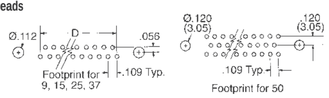
Clinch Nut Hardware

Clinch Nuts: Brass, clear zinc plating with 4-40 threads



.250" Mating Side **.250" Board Side** **.065" Board Side**

Hole Patterns



Footprint for 9, 15, 25, 37

Footprint for 50

Series 171 — Stamped Contacts

No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
Tin Shells – Solder Cup						
9	Male	209M-ND	.63	.55	.38	171-009-102-001
9	Female	209F-ND	.67	.58	.40	171-009-202-001
15	Male	215M-ND	.92	.79	.54	171-015-102-001
15	Female	215F-ND	1.13	.98	.67	171-015-202-001
25	Male	225M-ND	1.08	.93	.64	171-025-102-001
25	Female	225F-ND	1.26	1.09	.75	171-025-202-001
37	Male	237M-ND	1.94	1.68	1.14	171-037-102-001
37	Female	237F-ND	2.29	1.98	1.35	171-037-202-001
50	Male	250M-ND	4.07	3.51	2.39	171-050-102-001
50	Female	250F-ND	4.42	3.81	2.60	171-050-202-001
Tin Shells with .065" Clinch Nuts, Board Side – Solder Cup						
9	Male	1209M-ND	1.57	1.35	.92	171-009-102-011
9	Female	1209F-ND	1.62	1.40	.96	171-009-202-011
15	Male	1215M-ND	1.91	1.65	1.13	171-015-102-011
15	Female	1215F-ND	2.15	1.85	1.26	171-015-202-011
25	Male	1225M-ND	2.09	1.80	1.23	171-025-102-011
25	Female	1225F-ND	2.32	2.00	1.36	171-025-202-011
37	Male	1237M-ND	3.05	2.63	1.79	171-037-102-011
37	Female	1237F-ND	3.48	3.00	2.04	171-037-202-011
50	Male	1250M-ND	5.42	4.68	3.18	171-050-102-011
50	Female	1250F-ND	5.83	5.03	3.42	171-050-202-011
Tin Shells with .250" Clinch Nuts, Board Side –Solder Cup						
9	Male	2209M-ND	1.57	1.35	.92	171-009-102-021
9	Female	2209F-ND	1.62	1.40	.96	171-009-202-021
15	Male	2215M-ND	1.91	1.65	1.13	171-015-102-021
15	Female	2215F-ND	2.15	1.85	1.26	171-015-202-021
25	Male	2225M-ND	2.09	1.80	1.23	171-025-102-021
25	Female	2225F-ND	2.32	2.00	1.36	171-025-202-021
37	Male	2237M-ND	3.05	2.63	1.79	171-037-102-021
37	Female	2237F-ND	3.48	3.00	2.04	171-037-202-021
50	Male	2250M-ND	5.42	4.68	3.18	171-050-102-021
50	Female	2250F-ND	5.83	5.03	3.42	171-050-202-021
Tin Shells with .250" Clinch Nuts, Mating Side – Solder Cup						
9	Male	3209M-ND	1.57	1.35	.92	171-009-102-031
9	Female	3209F-ND	1.62	1.40	.96	171-009-202-031
15	Male	3215M-ND	1.91	1.65	1.13	171-015-102-031
15	Female	3215F-ND	2.15	1.85	1.26	171-015-202-031
25	Male	3225M-ND	2.09	1.80	1.23	171-025-102-031
25	Female	3225F-ND	2.32	2.00	1.36	171-025-202-031
37	Male	3237M-ND	3.05	2.63	1.79	171-037-102-031
37	Female	3237F-ND	3.48	3.00	2.04	171-037-202-031
50	Male	3250M-ND	5.42	4.68	3.18	171-050-102-031
50	Female	3250F-ND	5.83	5.03	3.42	171-050-202-031
Tin Shells – Dip Solder						
9	Male	4209M-ND	1.13	.98	.67	171-009-112-001
9	Female	4209F-ND	1.28	1.10	.75	171-009-212-001
15	Male	4215M-ND	1.80	1.55	1.06	171-015-112-001
15	Female	4215F-ND	1.39	1.20	.82	171-015-212-001
25	Male	4225M-ND	2.52	2.18	1.48	171-025-112-001
25	Female	4225F-ND	1.77	1.53	1.04	171-025-212-001
37	Male	4237M-ND	4.32	3.73	2.54	171-037-112-001
37	Female	4237F-ND	2.87	2.48	1.69	171-037-212-001
50	Male	4250M-ND	4.55	3.93	2.67	171-050-112-001
50	Female	4250F-ND	4.38	3.78	2.57	171-050-212-001
Tin Shells with .065" Clinch Nuts, Board Side –Dip Solder						
9	Male	5209M-ND	2.00	1.73	1.18	171-009-112-011
9	Female	5209F-ND	2.15	1.85	1.26	171-009-212-011
15	Male	5215M-ND	2.67	2.30	1.57	171-015-112-011
15	Female	5215F-ND	2.26	1.95	1.33	171-015-212-011
25	Male	5225M-ND	3.39	2.93	1.99	171-025-112-011
25	Female	5225F-ND	2.64	2.28	1.55	171-025-212-011
37	Male	5237M-ND	5.19	4.48	3.05	171-037-112-011
37	Female	5237F-ND	3.74	3.23	2.20	171-037-212-011
50	Male	5250M-ND	5.42	4.68	3.18	171-050-112-011
50	Female	5250F-ND	5.25	4.53	3.08	171-050-212-011
Tin Shells with .250" Clinch Nuts, Board Side – Dip Solder						
9	Male	6209M-ND	2.00	1.73	1.18	171-009-112-021
9	Female	6209F-ND	2.15	1.85	1.26	171-009-212-021
15	Male	6215M-ND	2.67	2.30	1.57	171-015-112-021
15	Female	6215F-ND	2.26	1.95	1.33	171-015-212-021
25	Male	6225M-ND	3.39	2.93	1.99	171-025-112-021
25	Female	6225F-ND	2.64	2.28	1.55	171-025-212-021
37	Male	6237M-ND	5.19	4.48	3.05	171-037-112-021
37	Female	6237F-ND	3.74	3.23	2.20	171-037-212-021
50	Male	6250M-ND	5.42	4.68	3.18	171-050-112-021
50	Female	6250F-ND	5.25	4.53	3.08	171-050-212-021
Tin Shells with .250" Clinch Nuts, Mating Side – Dip Solder						
9	Male	7209M-ND	2.00	1.73	1.18	171-009-112-031
9	Female	7209F-ND	2.15	1.85	1.26	171-009-212-031
15	Male	7215M-ND	2.67	2.30	1.57	171-015-112-031
15	Female	7215F-ND	2.26	1.95	1.33	171-015-212-031
25	Male	7225M-ND	3.39	2.93	1.99	171-025-112-031
25	Female	7225F-ND	2.64	2.28	1.55	171-025-212-031
37	Male	7237M-ND	5.19	4.48	3.05	171-037-112-031
37	Female	7237F-ND	3.74	3.23	2.20	171-037-212-031
50	Male	7250M-ND	5.42	4.68	3.18	171-050-112-031
50	Female	7250F-ND	5.25	4.53	3.08	171-050-212-031

Series 172 — Machined Contacts

No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
Tin Shells – Solder Cup						
9	Male	1109M-ND	2.09	1.80	1.23	172-009-102-001
9	Female	1109F-ND	2.41	2.08	1.42	172-009-202-001
15	Male	1115M-ND	2.67	2.30	1.57	172-015-102-001
15	Female	1115F-ND	3.22	2.78	1.89	172-015-202-001
25	Male	1125M-ND	3.45	2.98	2.03	172-025-102-001
25	Female	1125F-ND	4.76	4.10	2.79	172-025-202-001
37	Male	1137M-ND	4.61	3.98	2.71	172-037-102-001
37	Female	1137F-ND	6.44	5.55	3.78	172-037-202-001
50	Male	1150M-ND	5.83	5.03	3.42	172-050-102-001
50	Female	1150F-ND	8.61	7.43	5.05	172-050-202-001
Tin Shells with .065" Clinch Nuts, Board Side – Solder Cup						
9	Male	2109M-ND	2.96	2.55	1.74	172-009-102-011
9	Female	2109F-ND	3.28	2.83	1.93	172-009-202-011
15	Male	2115M-ND	3.54	3.05	2.08	172-015-102-011
15	Female	2115F-ND	4.09	3.53	2.40	172-015-202-011
25	Male	2125M-ND	4.32	3.73	2.54	172-025-102-011
25	Female	2125F-ND	5.63	4.85	3.30	172-025-202-011
37	Male	2137M-ND	5.48	4.73	3.22	172-037-102-011
37	Female	2137F-ND	7.31	6.30	4.29	172-037-202-011
50	Male	2150M-ND	6.70	5.78	3.93	172-050-102-011
50	Female	2150F-ND	9.48	8.18	5.56	172-050-202-011
Tin Shells with .250" Clinch Nuts, Board Side – Solder Cup						
9	Male	3109M-ND	2.96	2.55	1.74	172-009-102-021
9	Female	3109F-ND	3.28	2.83	1.93	172-009-202-021
15	Male	3115M-ND	3.54	3.05	2.08	172-015-102-021
15	Female	3115F-ND	4.09	3.53	2.40	172-015-202-021
25	Male	3125M-ND	4.32	3.73	2.54	172-025-102-021
25	Female	3125F-ND	5.63	4.85	3.30	172-025-202-021
37	Male	3137M-ND	5.48	4.73	3.22	172-037-102-021
37	Female	3137F-ND	7.31	6.30	4.29	172-037-202-021
50	Male	3150M-ND	6.70	5.78	3.93	172-050-102-021
50	Female	3150F-ND	9.48	8.18	5.56	172-050-202-021
Tin Shells with .250" Clinch Nuts, Mating Side – Solder Cup						
9	Male	4109M-ND	2.96	2.55	1.74	172-009-102-031
9	Female	4109F-ND	3.28	2.83	1.93	172-009-202-031
15	Male	4115M-ND	3.54	3.05	2.08	172-015-102-031
15	Female	4115F-ND	4.09	3.53	2.40	172-015-202-031
25	Male	4125M-ND	4.32	3.73	2.54	172-025-102-031
25	Female	4125F-ND	5.63	4.85	3.30	172-025-202-031
37	Male	4137M-ND	5.48	4.73	3.22	172-037-102-031
37	Female	4137F-ND	7.31	6.30	4.29	172-037-202-031
50	Male	4150M-ND	6.70	5.78	3.93	172-050-102-031
50	Female	4150F-ND	9.48	8.18	5.56	172-050-202-031
Yellow Chromate – Solder Cup						
9	Male	109M-ND	1.75	1.51	1.03	172-009-101-001
9	Female	109F-ND	2.13	1.84	1.25	172-009-201-001
15	Male	115M-ND	2.26	1.96	1.33	172-015-101-001
15	Female	115F-ND	2.99	2.58	1.76	172-015-201-001
25	Male	125M-ND	3.05	2.63	1.79	172-025-101-001
25	Female	125F-ND	4.42	3.81	2.60	172-025-201-001
37	Male	137M-ND	4.42	3.81	2.60	172-037-101-001
37	Female	137F-ND	6.14	5.30	3.60	172-037-201-001
50	Male	150M-ND	4.87	4.20	2.86	172-050-101-001
50	Female	150F-ND	7.41	6.39	4.35	172-050-201-001
Yellow Chromate with .065" Clinch Nuts, Board Side – Solder Cup						
9	Male	5109M-ND	2.84	2.45	1.67	172-009-101-011
9	Female	5109F-ND	3.28	2.83	1.93	172-009-201-011
15	Male	5115M-ND	3.42	2.95	2.01	172-015-101-011
15	Female	5115F-ND	4.23	3.65	2.49	172-015-201-011
25	Male	5125M-ND	4.29	3.70	2.52	172-025-101-011
25	Female	5125F-ND	5.83	5.03	3.42	172-025-201-011
37	Male	5137M-ND	5.83	5.03	3.42	172-037-101-011
37	Female	5137F-ND	7.77	6.70	4.56	172-037-201-011
50	Male	5150M-ND	6.47	5.58	3.80	172-050-101-011
50	Female	5150F-ND	9.16	7.90	5.38	172-050-201-011
Yellow Chromate with .250" Clinch Nuts, Board Side – Solder Cup						
9	Male	6109M-ND	2.84	2.45	1.67	172-009-101-021
9	Female	6109F-ND	3.28	2.83	1.93	172-009-201-021
15	Male	6115M-ND	3.42	2.95	2.01	172-015-101-021
15	Female	6115F-ND	4.23	3.65	2.49	172-015-201-021
25	Male	6125M-ND	4.29	3.70	2.52	172-025-101-021
25	Female	6125F-ND	5.83	5.03	3.42	172-025-201-021
37	Male	6137M-ND	5.83	5.03	3.42	172-037-101-021
37	Female	6137F-ND	7.77	6.70	4.56	172-037-201-021
50	Male	6150M-ND	6.47	5.58	3.80	172-050-101-021
50	Female	6150F-ND	9.16	7.90	5.38	172-050-201-021
Yellow Chromate with .250" Clinch Nuts, Mating Side – Solder Cup						
9	Male	7109M-ND	2.84	2.45	1.67	172-009-101-031
9	Female	7109F-ND	3.28	2.83	1.93	172-009-201-031
15	Male	7115M-ND	3.42	2.95	2.01	172-015-101-031
15	Female	7115F-ND	4.23	3.65	2.49	172-015-201-031
25	Male	7125M-ND	4.29	3.70	2.52	172-025-101-031
25	Female	7125F-ND	5.83	5.03	3.42	172-025-201-031
37	Male	7137M-ND	5.83	5.03	3.42	172-037-101-031
37	Female	7137F-ND	7.77	6.70	4.56	172-037-201-031
50	Male	7150M-ND	6.47	5.58	3.80	172-050-101-031
50	Female	7150F-ND	9.16	7.90	5.38	172-050-201-031
Straight PCB Mount						
9	Male	509M-ND	1.73	1.49	1.02	172-009-111-001
9	Female	509F-ND	2.51	2.16	1.47	172-009-211-001
15	Male	515M-ND	2.21	1.91	1.30	172-015-111-001
15	Female	515F-ND	3.50	3.02	2.06	172-015-211-001
25	Male	525M-ND	3.07	2.65	1.81	172-025-111-001
25	Female	525F-ND	4.81	4.15	2.83	172-025-211-001
37	Male	537M-ND	4.55	3.93	2.67	172-037-111-001
37	Female	537F-ND	6.96	6.00	4.08	172-037-211-001
50	Male	550M-ND	5.39	4.65	3.17	172-050-111-001
50	Female	550F-ND	9.43	8.13	5.53	172-050-211-001
Tin Shells – Dip Solder						
9	Male	1509M-ND	2.18	1.88	1.28	172-009-112-001
9	Female	1509F-ND	2.73	2.35	1.60	172-009-212-001
15	Male	1515M-ND	2.84	2.45	1.67	172-015-112-001
15	Female	1515F-ND	3.80	3.28	2.23	172-015-212-001
25	Male	1525M-ND	3.63	3.13	2.13	172-025-112-001
25	Female	1525F-ND	5.66	4.88	3.32	172-025-212-001
37	Male	1537M-ND	4.96	4.28	2.91	172-037-112-001
37	Female	1537F-ND	7.98	6.88	4.68	172-037-212-001
50	Male	1550M-ND	6.26	5.40	3.68	172-050-112-001
50	Female	1550F-ND	10.70	9.23	6.28	172-050-212-001
Tin Shells with .065" Clinch Nuts, Board Side – Dip Solder						
9	Male	2509M-ND	3.05	2.63	1.79	172-009-112-011
9	Female	2509F-ND	3.60	3.10	2.11	172-009-212-011
15	Male	2515M-ND	3.71	3.20	2.18	172-015-112-011
15	Female	2515F-ND	4.67	4.03	2.74	172-015-212-011
25	Male	2525M-ND	4.50	3.88	2.64	172-025-112-011
25	Female	2525F-ND	6.53	5.63	3.83	172-025-212-011
37	Male	2537M-ND	5.83	5.03	3.42	172-037-112-011
37	Female	2537F-ND	8.85	7.63	5.19	172-037-212-011
50	Male	2550M-ND	7.13	6.15	4.19	172-050-112-011
50	Female	2550F-ND	11.57	9.98	6.79	172-050-212-011
Tin Shells with .250" Clinch Nuts, Board Side – Dip Solder						
9	Male	3509M-ND	3.05	2.63	1.79	172-009-112-021
9	Female	3509F-ND	3.60	3.10	2.11	172-009-212-021
15	Male	3515M-ND	3.71	3.20	2.18	172-015-112-021
15	Female	3515F-ND	4.67	4.03	2.74	172-015-212-021
25	Male	3525M-ND	4.50	3.88	2.64	172-025-112-021
25	Female	3525F-ND	6.53	5.63	3.83	172-025-212-021
37	Male	3537M-ND	5.83	5.03	3.42	172-037-112-021
37	Female	3537F-ND	8.85	7.63	5.19	172-037-212-021
50	Male	3550M-ND	7.13	6.15	4.19	172-050-112-021
50	Female	3550F-ND	11.57	9.98	6.79	172-050-212-021
Tin Shells with .250" Clinch Nuts, Mating Side – Dip Solder						
9	Male	4509M-ND	3.05	2.63	1.79	172-009-112-031
9	Female	4509F-ND	3.60	3.10	2.11	172-009-212-031
15	Male	4515M-ND	3.71	3.20	2.18	172-015-112-031
15	Female	4515F-ND	4.67	4.03	2.74	172-015-212-031
25	Male	4525M-ND	4.50	3.88	2.64	172-025-112-031
25	Female	4525F-ND	6.53	5.63	3.83	172-025-212-031
37	Male	4537M-ND	5.83	5.03	3.42	172-037-112-031
37	Female	4537F-ND	8.85	7.63	5.19	172-037-212-031
50	Male	4550M-ND	7.13	6.15	4.19	172-050-112-031
50	Female	4550F-ND	11.57	9.98	6.79	172-050-212-031
Yellow Chromate with .065" Clinch Nuts, Board Side – Dip Solder						
9	Male	5509M-ND	2.84	2.45	1.67	172-009-111-011
9	Female	5509F-ND	3.68	3.18	2.16	172-009-211-011
15	Male	5515M-ND	3.36	2.90	1.98	172-015-111-011
15	Female	5515F-ND	4.52	3.90	2.66	172-015-211-011
25	Male	5525M-ND	4.21	3.63	2.47	172-025-111-011
25	Female	5525F-ND	6.24	5.38	3.66	172-025-211-011
37	Male	5537M-ND	6.00	5.18	3.52	172-037-111-011
37	Female	5537F-ND	8.67	7.48	5.09	172-037-211-011
50	Male	5550M-ND	6.96	6.00	4.08	172-050-111-011
50	Female	5550F-ND	11.25	9.70	6.60	172-050-211-011
Yellow Chromate with .250" Clinch Nuts, Board Side – Dip Solder						
9	Male	6509M-ND	2.84	2.45	1.67	172-009-111-021
9	Female	6509F-ND	3.68	3.18	2.16	172-009-211-021
15	Male	6515M-ND	3.36	2.90	1.98	172-015-111-021
15	Female	6515F-ND	4.52	3.90	2.66	172-015-211-021
25	Male	6525M-ND	4.21	3.63	2.47	172-025-111-021
25	Female	6525F-ND	6.24	5.38	3.66	172-025-211-021
37	Male	6537M-ND	6.00	5.18	3.52	172-037-111-021
37	Female	6537F-ND	8.67	7.48	5.09	172-037-211-021
50	Male	6550M-ND	6.96	6.00	4.08	172-050-111-021
50	Female	6550F-ND	11.25	9.70	6.60	172-050-211-021
Yellow Chromate with .250" Clinch Nuts, Mating Side – Dip Solder						
9	Male	7509M-ND	2.84	2.45	1.67	172-009-111-031
9	Female	7509F-ND	3.68	3.18	2.16	172-009-211-031
15	Male	7515M-ND	3.36	2.90	1.98	172-015-111-031
15	Female	7515F-ND	4.52	3.90	2.66	172-015-211-031
25	Male	7525M-ND	4.21	3.63	2.47	172-025-111-031
25	Female	7525F-ND	6.24	5.38	3.66	172-025-211-031
37	Male	7537M-ND	6.00	5.18	3.52	172-037-111-031
37	Female	7537F-ND	8.67	7.48	5.09	172-037-211-031
50	Male	7550M-ND	6.96	6.00	4.08	172-050-111-031
50	Female	7550F-ND	11.25	9.70	6.60	172-050-211-031
Yellow Chromate with .065" Clinch Nuts, Board Side – Wire Wrap						
9	Male	5609M-ND	3.77	3.25	2.21	172-009-141-011
9	Female	5609F-ND	4.44	3.83	2.61	172-009-241-011

(Continued)

NorComp D-Sub Connectors *(Cont.)*

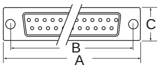
No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
15	Male	5615M-ND	5.86	5.05	3.44	172-015-141-011
15	Female	5615F-ND	6.35	5.48	3.73	172-015-241-011
25	Male	5625M-ND	7.48	6.45	4.39	172-025-141-011
25	Female	5625F-ND	9.22	7.95	5.41	172-025-241-011
37	Male	5637M-ND	10.38	8.95	6.09	172-037-141-011
37	Female	5637F-ND	13.08	11.28	7.67	172-037-241-011
50	Male	5650M-ND	13.49	11.63	7.91	172-050-141-011
50	Female	5650F-ND	17.08	14.73	10.02	172-050-241-011
Yellow Chromate with .250” Clinch Nuts, Board Side – Wire Wrap						
9	Male	6609M-ND	3.77	3.25	2.21	172-009-141-021
9	Female	6609F-ND	4.44	3.83	2.61	172-009-241-021
15	Male	6615M-ND	5.86	5.05	3.44	172-015-141-021
15	Female	6615F-ND	6.35	5.48	3.73	172-015-241-021
25	Male	6625M-ND	7.48	6.45	4.39	172-025-141-021
25	Female	6625F-ND	9.22	7.95	5.41	172-025-241-021
37	Male	6637M-ND	10.38	8.95	6.09	172-037-141-021
37	Female	6637F-ND	13.08	11.28	7.67	172-037-241-021
50	Male	6650M-ND	13.49	11.63	7.91	172-050-141-021
50	Female	6650F-ND	17.08	14.73	10.02	172-050-241-021
Yellow Chromate with .250” Clinch Nuts, Mating Side – Wire Wrap						
9	Male	7609M-ND	3.77	3.25	2.21	172-009-141-031
9	Female	7609F-ND	4.44	3.83	2.61	172-009-241-031
15	Male	7615M-ND	5.86	5.05	3.44	172-015-141-031
15	Female	7615F-ND	6.35	5.48	3.73	172-015-241-031
25	Male	7625M-ND	7.48	6.45	4.39	172-025-141-031
25	Female	7625F-ND	9.22	7.95	5.41	172-025-241-031
37	Male	7637M-ND	10.38	8.95	6.09	172-037-141-031
37	Female	7637F-ND	13.08	11.28	7.67	172-037-241-031
50	Male	7650M-ND	13.49	11.63	7.91	172-050-141-031
50	Female	7650F-ND	17.08	14.73	10.02	172-050-241-031
Yellow Chromate Shells – Wire Wrap						
9	Male	609M-ND	2.58	2.23	1.52	172-009-141-001
9	Female	609F-ND	3.15	2.72	1.85	172-009-241-001
15	Male	615M-ND	3.83	3.30	2.25	172-015-141-001
15	Female	615F-ND	4.71	4.07	2.77	172-015-241-001
25	Male	625M-ND	6.55	5.65	3.85	172-025-141-001
25	Female	625F-ND	7.27	6.27	4.27	172-025-241-001
37	Male	637M-ND	8.38	7.23	4.92	172-037-141-001
37	Female	637F-ND	10.88	9.38	6.38	172-037-241-001
50	Male	650M-ND	10.32	8.90	6.05	172-050-141-001
50	Female	650F-ND	13.87	11.96	8.14	172-050-241-001
Tin Shells – Wire Wrap						
9	Male	1609M-ND	3.07	2.65	1.81	172-009-142-001
9	Female	1609F-ND	3.71	3.20	2.18	172-009-242-001
15	Male	1615M-ND	4.73	4.08	2.78	172-015-142-001
15	Female	1615F-ND	5.54	4.78	3.25	172-015-242-001
25	Male	1625M-ND	6.82	5.88	4.00	172-025-142-001
25	Female	1625F-ND	10.96	9.45	6.43	172-025-242-001
37	Male	1637M-ND	9.74	8.40	5.72	172-037-142-001
37	Female	1637F-ND	12.21	10.53	7.16	172-037-242-001
50	Male	1650M-ND	12.76	11.00	7.48	172-050-142-001
50	Female	1650F-ND	16.65	14.35	9.76	172-050-242-001
Tin Shells with .065” Clinch Nuts, Board Side – Wire Wrap						
9	Male	2609M-ND	3.94	3.40	2.32	172-009-142-011
9	Female	2609F-ND	4.58	3.95	2.69	172-009-242-011
15	Male	2615M-ND	5.60	4.83	3.29	172-015-142-011
15	Female	2615F-ND	6.41	5.53	3.76	172-015-242-011
25	Male	2625M-ND	7.69	6.63	4.51	172-025-142-011
25	Female	2625F-ND	11.83	10.20	6.94	172-025-242-011
37	Male	2637M-ND	10.61	9.15	6.23	172-037-142-011
37	Female	2637F-ND	13.08	11.28	7.67	172-037-242-011
50	Male	2650M-ND	13.63	11.75	7.99	172-050-142-011
50	Female	2650F-ND	17.52	15.10	10.27	172-050-242-011
Tin Shells with .250” Clinch Nuts, Board Side – Wire Wrap						
9	Male	3609M-ND	3.94	3.40	2.32	172-009-142-021
9	Female	3609F-ND	4.58	3.95	2.69	172-009-242-021
15	Male	3615M-ND	5.60	4.83	3.29	172-015-142-021
15	Female	3615F-ND	6.41	5.53	3.76	172-015-242-021
25	Male	3625M-ND	7.69	6.63	4.51	172-025-142-021
25	Female	3625F-ND	11.83	10.20	6.94	172-025-242-021
37	Male	3637M-ND	10.61	9.15	6.23	172-037-142-021
37	Female	3637F-ND	13.08	11.28	7.67	172-037-242-021
50	Male	3650M-ND	13.63	11.75	7.99	172-050-142-021
50	Female	3650F-ND	17.52	15.10	10.27	172-050-242-021
Tin Shells with .250” Clinch Nuts, Mating Side – Wire Wrap						
9	Male	4609M-ND	3.94	3.40	2.32	172-009-142-031
9	Female	4609F-ND	4.58	3.95	2.69	172-009-242-031
15	Male	4615M-ND	5.60	4.83	3.29	172-015-142-031
15	Female	4615F-ND	6.41	5.53	3.76	172-015-242-031
25	Male	4625M-ND	7.69	6.63	4.51	172-025-142-031
25	Female	4625F-ND	11.83	10.20	6.94	172-025-242-031
37	Male	4637M-ND	10.61	9.15	6.23	172-037-142-031
37	Female	4637F-ND	13.08	11.28	7.67	172-037-242-031
50	Male	4650M-ND	13.63	11.75	7.99	172-050-142-031
50	Female	4650F-ND	17.52	15.10	10.27	172-050-242-031

Series 172 High Profile — Machined Contacts

No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
Yellow Chromate						
9	Male	8609M-ND	3.77	3.25	2.21	172-009-181-001
9	Female	8609F-ND	4.41	3.80	2.59	172-009-281-001
15	Male	8615M-ND	5.42	4.68	3.18	172-015-181-001
15	Female	8615F-ND	6.90	5.95	4.05	172-015-281-001
25	Male	8625M-ND	8.03	6.93	4.71	172-025-181-001
25	Female	8625F-ND	10.67	9.20	6.26	172-025-281-001
37	Male	8637M-ND	11.48	9.90	6.74	172-037-181-001
37	Female	8637F-ND	15.28	13.18	8.96	172-037-281-001
50	Male	8650M-ND	14.65	12.63	8.59	172-050-181-001
50	Female	8650F-ND	19.95	17.20	11.70	172-050-281-001
Yellow Chromate w/ .065” Clinch Nuts, Board Side						
9	Male	9609M-ND	4.64	4.00	2.72	172-009-181-011
9	Female	9609F-ND	5.28	4.55	3.10	172-009-281-011
15	Male	9615M-ND	6.29	5.43	3.69	172-015-181-011
15	Female	9615F-ND	7.77	6.70	4.56	172-015-281-011
25	Male	9625M-ND	8.90	7.68	5.22	172-025-181-011
25	Female	9625F-ND	11.54	9.95	6.77	172-025-281-011
37	Male	9637M-ND	12.35	10.65	7.25	172-037-181-011
37	Female	9637F-ND	16.15	13.93	9.47	172-037-281-011
50	Male	9650M-ND	15.52	13.38	9.10	172-050-181-011
50	Female	9650F-ND	20.82	17.95	12.21	172-050-281-011
Yellow Chromate w/ .250” Clinch Nuts, Board Side						
9	Male	10609M-ND	4.64	4.00	2.72	172-009-181-021
9	Female	10609F-ND	5.28	4.55	3.10	172-009-281-021
15	Male	10615M-ND	6.29	5.43	3.69	172-015-181-021
15	Female	10615F-ND	7.77	6.70	4.56	172-015-281-021
25	Male	10625M-ND	8.90	7.68	5.22	172-025-181-021
25	Female	10625F-ND	11.54	9.95	6.77	172-025-281-021
37	Male	10637M-ND	12.35	10.65	7.25	172-037-181-021
37	Female	10637F-ND	16.15	13.93	9.47	172-037-281-021
50	Male	10650M-ND	15.52	13.38	9.10	172-050-181-021
50	Female	10650F-ND	20.82	17.95	12.21	172-050-281-021
Yellow Chromate w/ .250” Clinch Nuts,Mating Side						
9	Male	11609M-ND	4.64	4.00	2.72	172-009-181-031
9	Female	11609F-ND	5.28	4.55	3.10	172-009-281-031
15	Male	11615M-ND	6.29	5.43	3.69	172-015-181-031
15	Female	11615F-ND	7.77	6.70	4.56	172-015-281-031
25	Male	11625M-ND	8.90	7.68	5.22	172-025-181-031
25	Female	11625F-ND	11.54	9.95	6.77	172-025-281-031
37	Male	11637M-ND	12.35	10.65	7.25	172-037-181-031
37	Female	11637F-ND	16.15	13.93	9.47	172-037-281-031
50	Male	11650M-ND	15.52	13.38	9.10	172-050-181-031
50	Female	11650F-ND	20.82	17.95	12.21	172-050-281-031
Tin Shells						
9	Male	12609M-ND	3.31	2.85	1.94	172-009-182-001
9	Female	12609F-ND	4.35	3.75	2.55	172-009-282-001
15	Male	12615M-ND	4.90	4.23	2.88	172-015-182-001
15	Female	12615F-ND	6.44	5.55	3.78	172-015-282-001
25	Male	12625M-ND	7.48	6.45	4.39	172-025-182-001
25	Female	12625F-ND	10.06	8.68	5.90	172-025-282-001
37	Male	12637M-ND	15.11	13.03	8.86	172-037-182-001
37	Female	12637F-ND	14.85	12.80	8.71	172-037-282-001
50	Male	12650M-ND	14.88	12.83	8.73	172-050-182-001
50	Female	12650F-ND	19.95	17.20	11.70	172-050-282-001
Tin Shells with .065” Clinch Nuts, Board Side						
9	Male	13609M-ND	4.18	3.60	2.45	172-009-182-011
9	Female	13609F-ND	5.22	4.50	3.06	172-009-282-011
15	Male	13615M-ND	5.77	4.98	3.39	172-015-182-011
15	Female	13615F-ND	7.31	6.30	4.29	172-015-282-011
25	Male	13625M-ND	8.35	7.20	4.90	172-025-182-011
25	Female	13625F-ND	10.93	9.43	6.41	172-025-282-011
37	Male	13637M-ND	15.98	13.78	9.37	172-037-182-011
37	Female	13637F-ND	15.72	13.55	9.22	172-037-282-011
50	Male	13650M-ND	15.75	13.58	9.24	172-050-182-011
50	Female	13650F-ND	20.82	17.95	12.21	172-050-282-011
Tin Shells with .250” Clinch Nuts, Board Side						
9	Male	14609M-ND	4.18	3.60	2.45	172-009-182-021
9	Female	14609F-ND	5.22	4.50	3.06	172-009-282-021
15	Male	14615M-ND	5.77	4.98	3.39	172-015-182-021
15	Female	14615F-ND	7.31	6.30	4.29	172-015-282-021
25	Male	14625M-ND	8.35	7.20	4.90	172-025-182-021
25	Female	14625F-ND	10.93	9.43	6.41	172-025-282-021
37	Male	14637M-ND	15.98	13.78	9.37	172-037-182-021
37	Female	14637F-ND	15.72	13.55	9.22	172-037-282-021
50	Male	14650M-ND	15.75	13.58	9.24	172-050-182-021
50	Female	14650F-ND	20.82	17.95	12.21	172-050-282-021
Tin Shells with .250” Clinch Nuts, Mating Side						
9	Male	15609M-ND	4.18	3.60	2.45	172-009-182-031
9	Female	15609F-ND	5.22	4.50	3.06	172-009-282-031
15	Male	15615M-ND	5.77	4.98	3.39	172-015-182-031
15	Female	15615F-ND	7.31	6.30	4.29	172-015-282-031
25	Male	15625M-ND	8.35	7.20	4.90	172-025-182-031
25	Female	15625F-ND	10.93	9.43	6.41	172-025-282-031
37	Male	15637M-ND	15.98	13.78	9.37	172-037-182-031
37	Female	15637F-ND	15.72	13.55	9.22	172-037-282-031
50	Male	15650M-ND	15.75	13.58	9.24	172-050-182-031
50	Female	15650F-ND	20.82	17.95	12.21	172-050-282-031

NorComp

Series 170 Crimp and Poke D-Sub Connectors

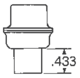


Conn. Size	Dimensions (Inch) A	B	C
9	1.213	.984	.496
15	1.541	1.312	.496
25	2.087	1.852	.496
37	2.732	2.500	.496
50	2.638	2.406	.602

Uses Snap-In Contacts (sold separately)

Features: • Available in 5 industry sizes/positions • Low cost commercial version of military standard • Tin or Yellow Chromate shells • Allows for easy loading of only the positions required using Crimp and Snap-in contacts • Tin-plated connector shells have indents to provide grounding and additional retention • Nylon insulator has a minimum contact retention of 10 lbs. • Contact current rating: 5 amps

Materials: • Shell: Steel, zinc-plated with yellow chromate or bright tin plating • Insulator: Glass-filled thermoplastic, UL rated 94V-0



Snap-In Contacts for Crimp D-Sub Connectors

Features: Low cost and high performance stamped contacts features insulation support for increased holding power • Contact range: 20-24 AWG • Contacts are commercial quality stamped and are compatible with industry tooling. **Material:** • Male Pins: Brass • Female Pins: Phosphor bronze

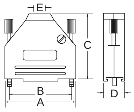
No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
Tin Shells – Crimp D-Sub Standard						
9	Male	709M-ND	.67	.58	.40	170-009-172-000
9	Female	709F-ND	.67	.58	.40	170-009-272-000
15	Male	715M-ND	.78	.68	.46	170-015-172-000
15	Female	715F-ND	.86	.75	.51	170-015-272-000
25	Male	725M-ND	.78	.68	.46	170-025-172-000
25	Female	725F-ND	.84	.72	.49	170-025-272-000
37	Male	737M-ND	1.54	1.33	.91	170-037-172-000
37	Female	737F-ND	1.62	1.40	.96	170-037-272-000
50	Male	750M-ND	2.08	1.79	1.22	170-050-172-000
50	Female	750F-ND	2.12	1.83	1.25	170-050-272-000
Tin Shell Crimp with .065” Clinch Nuts, Board Side						
9	Male	5709M-ND	1.71	1.48	1.01	170-009-172-010
9	Female	5709F-ND	1.71	1.48	1.01	170-009-272-010
15	Male	5715M-ND	1.83	1.58	1.08	170-015-172-010
15	Female	5715F-ND	1.94	1.68	1.14	170-015-272-010
25	Male	5725M-ND	1.83	1.58	1.08	170-025-172-010
25	Female	5725F-ND	1.89	1.63	1.11	170-025-272-010
37	Male	5737M-ND	2.76	2.38	1.62	170-037-172-010
37	Female	5737F-ND	2.73	2.35	1.60	170-037-272-010
50	Male	5750M-ND	3.54	3.05	2.08	170-050-172-010
50	Female	5750F-ND	3.19	2.75	1.87	170-050-272-010
Tin Shell Crimp with .250” Clinch Nuts, Board Side						
9	Male	6709M-ND	1.71	1.48	1.01	170-009-172-020
9	Female	6709F-ND	1.71	1.48	1.01	170-009-272-020
15	Male	6715M-ND	1.83	1.58	1.08	170-015-172-020
15	Female	6715F-ND	1.94	1.68	1.14	170-015-272-020
25	Male	6725M-ND	1.83	1.58	1.08	170-025-172-020
25	Female	6725F-ND	1.89	1.63	1.11	170-025-272-020
37	Male	6737M-ND	2.76	2.38	1.62	170-037-172-020
37	Female	6737F-ND	2.73	2.35	1.60	170-037-272-020
50	Male	6750M-ND	3.54	3.05	2.08	170-050-172-020
50	Female	6750F-ND	3.19	2.75	1.87	170-050-272-020
Tin Shell Crimp with .250” Clinch Nuts, Mating Side						
9	Male	7709M-ND	1.71	1.48	1.01	170-009-172-030
9	Female	7709F-ND	1.71	1.48	1.01	170-009-272-030
15	Male	7715M-ND	1.83	1.58	1.08	170-015-172-030
15	Female	7715F-ND	1.94	1.68	1.14	170-015-272-030
25	Male	7725M-ND	1.83	1.58	1.08	170-025-172-030
25	Female	7725F-ND	1.89	1.63	1.11	170-025-272-030
37	Male	7737M-ND	2.76	2.38	1.62	170-037-172-030
37	Female	7737F-ND	2.73	2.35	1.60	170-037-272-030
50	Male	7750M-ND	3.54	3.05	2.08	170-050-172-030
50	Female	7750F-ND	3.19	2.75	1.87	170-050-272-030
Yellow Chromate – Crimp D-Sub Standard						
9	Male	1709M-ND	1.25	1.08	.74	170-009-171-000
9	Female	1709F-ND	1.36	1.18	.80	170-009-271-000
15	Male	1715M-ND	1.39	1.20	.82	170-015-171-000
15	Female	1715F-ND	1.36	1.18	.80	170-015-271-000
25	Male	1725M-ND	1.45	1.25	.85	170-025-171-000
25	Female	1725F-ND	1.51	1.30	.89	170-025-271-000
37	Male	1737M-ND	1.89	1.63	1.11	170-037-171-000
37	Female	1737F-ND	2.00	1.73	1.18	170-037-271-000
50	Male	1750M-ND	1.74	1.50	1.02	170-050-171-000
50	Female	1750F-ND	1.89	1.63	1.11	170-050-271-000
Yellow Chromate Crimp with .065” Clinch Nuts, Board Side						
9	Male	2709M-ND	2.12	1.83	1.25	170-009-171-010
9	Female	2709F-ND	2.23	1.93	1.31	170-009-271-010
15	Male	2715M-ND	2.26	1.95	1.33	170-015-171-010
15	Female	2715F-ND	2.23	1.93	1.31	170-015-271-010
25	Male	2725M-ND	2.32	2.00	1.36	170-025-171-010
25	Female	2725F-ND	2.38	2.05	1.40	170-025-271-010
37	Male	2737M-ND	2.76	2.38	1.62	170-037-171-010
37	Female	2737F-ND	2.87	2.48	1.69	170-037-271-010
50	Male	2750M-ND	2.61	2.25	1.53	170-050-171-010
50	Female	2750F-ND	2.76	2.38	1.62	170-050-271-010
Yellow Chromate Crimp with .250” Clinch Nuts, Board Side						
9	Male	3709M-ND	2.12	1.83	1.25	170-009-171-020
9	Female	3709F-ND	2.23	1.93	1.31	170-009-271-020
15	Male	3715M-ND	2.26	1.95	1.33	170-015-171-020
15	Female	3715F-ND	2.23	1.93	1.31	170-015-271-020
25	Male	3725M-ND	2.32	2.00	1.36	170-025-171-020
25	Female	3725F-ND	2.38	2.05	1.40	170-025-271-020
37	Male	3737M-ND	2.76	2.38	1.62	170-037-171-020
37	Female	3737F-ND	2.87	2.48	1.69	170-037-271-020
50	Male	3750M-ND	2.61	2.25	1.53	170-050-171-020
50	Female	3750F-ND	2.76	2.38	1.62	170-050-271-020
Yellow Chromate Crimp with .250” Clinch Nuts, Mating Side						
9	Male	4709M-ND	2.12	1.83	1.25	170-009-171-030
9	Female	4709F-ND	2.23	1.93	1.31	170-009-271-030
15	Male	4715M-ND	2.26	1.95	1.33	170-015-171-030
15	Female	4715F-ND	2.23	1.93	1.31	170-015-271-030
25	Male	4725M-ND	2.32	2.00	1.36	170-025-171-030
25	Female	4725F-ND	2.38	2.05	1.40	170-025-271-030
37	Male	4737M-ND	2.76	2.38	1.62	170-037-171-030
37	Female	4737F-ND	2.87	2.48	1.69	170-037-271-030
50	Male	4750M-ND	2.61	2.25	1.53	170-050-171-030
50	Female	4750F-ND	2.76	2.38	1.62	170-050-271-030
Contacts						
—	Pin	82P-ND	—	.16	.11	170-001-170-002
—	Socket	82S-ND	—	.18	.13	170-002-170-002
—	Pin	82PSF-ND*	—	.12	.08	170-001-170-001
—	Socket	82SSF-ND*	—	.14	.10	170-002-170-001
Insertion/ Removal Tool		T1010-ND	6.38	—	—	170-901-170-000

*Pins and Sockets are selectively gold plated

D-Sub Backshells

970 Series — Straight/Top Entry: • Die Cast: Lightweight zinc. Plating: Nickel over copper or black • Metalized Plastic: High temperature plastic UL 94V-0. Plating: Nickel over copper • Plastic: High temperature plastic UL 94V-2 • Hardware: Nickel plated steel

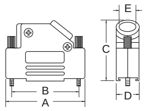
Conn. Size	Dimensions (Inch)				
	A	B	C	D	E
9	1.228	.984	1.571	.610	.465
15	1.555	1.312	1.634	.610	.465
25	2.102	1.852	1.913	.610	.465
37	2.744	2.500	2.110	.610	.465



No. of Pins	Type	Digi-Key Part No.	Price Each			NorComp Part No.
			1	10	100	
9	Die Cast Nickel	970-09N-ND	5.80	5.00	3.40	970-009-030-121
15		970-15N-ND	6.90	5.95	4.05	970-015-030-121
25		970-25N-ND	6.90	5.95	4.05	970-025-030-121
37		970-37N-ND	10.56	9.10	6.19	970-037-030-121
9	Black Die Cast	970-09BC-ND	7.34	6.33	4.31	970-009-040-011
15		970-15BC-ND	8.44	7.28	4.95	970-015-040-011
25		970-25BC-ND	8.44	7.28	4.95	970-025-040-011
37		970-37BC-ND	11.22	9.68	6.58	970-037-040-011
9	Metalized Plastic	970-09MP-ND	5.42	4.68	3.18	970-009-020-121
15		970-15MP-ND	5.63	4.85	3.30	970-015-020-121
25		970-25MP-ND	5.86	5.05	3.44	970-025-020-121
37		970-37MP-ND	6.53	5.63	3.83	970-037-020-121
9	Black Plastic	970-09BP-ND	2.64	2.28	1.55	970-009-010-011
15		970-15BP-ND	2.64	2.28	1.55	970-015-010-011
25		970-25BP-ND	2.76	2.38	1.62	970-025-010-011
37		970-37BP-ND	2.87	2.48	1.69	970-037-010-011

971 Series — 45° Entry: • Die Cast: Lightweight zinc. Plating: Nickel over copper or black • Metalized Plastic: High temperature plastic UL 94V-0. Plating: Nickel over copper • Plastic: High temperature plastic UL 94V-2 • Hardware: Nickel plated steel

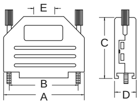
Conn. Size	Dimensions (Inch)				
	A	B	C	D	E
9	1.220	.984	1.496	.610	.465
15	1.595	1.312	1.618	.610	.465
25	2.114	1.852	1.646	.610	.465
37	2.748	2.500	1.646	.610	.465



No. of Pins	Type	Digi-Key Part No.	Price Each			NorComp Part No.
			1	10	100	
9	Nickel	971-09N45-ND	5.80	5.00	3.40	971-009-030-121
15		971-15N45-ND	6.90	5.95	4.05	971-015-030-121
25		971-25N45-ND	6.90	5.95	4.05	971-025-030-121
37		971-37N45-ND	10.56	9.10	6.19	971-037-030-121
9	Black Die Cast	971-09CB45-ND	7.34	6.33	4.31	971-009-040-011
15		971-15CB45-ND	8.44	7.28	4.95	971-015-040-011
25		971-25CB45-ND	8.44	7.28	4.95	971-025-040-011
37		971-37CB45-ND	11.22	9.68	6.58	971-037-040-011
9	Metalized Plastic	971-09MP45-ND	5.42	4.68	3.18	971-009-020-121
15		971-15MP45-ND	5.63	4.85	3.30	971-015-020-121
25		971-25MP45-ND	5.86	5.05	3.44	971-025-020-121
37		971-37MP45-ND	6.53	5.63	3.83	971-037-020-121
9	Black Plastic	971-09BP45-ND	2.64	2.28	1.55	971-009-010-011
15		971-15BP45-ND	2.64	2.28	1.55	971-015-010-011
25		971-25BP45-ND	2.76	2.38	1.62	971-025-010-011
37		971-37BP45-ND	2.87	2.48	1.69	971-037-010-011

972 Series — Colored Clam Shell Style: • High temperature plastic UL rated 94V-2 (various colors) • Harware: Nickel plated steel

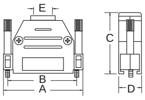
Conn. Size	Dimensions (Inch)				
	A	B	C	D	E
9	1.378	.984	2.106	.669	.331
15	1.614	1.312	2.106	.630	.472
25	2.145	1.852	2.106	.591	.472
37	2.795	2.500	2.106	.669	.551



No. of Pins	Type	Digi-Key Part No.	Price Each			NorComp Part No.
			1	10	100	
9	Black/ Plastic	972-09B-ND	2.64	2.28	1.55	972-009-010-011
15		972-15B-ND	2.64	2.28	1.55	972-015-010-011
25		972-25B-ND	2.64	2.28	1.55	972-025-010-011
37		972-37B-ND	3.10	2.68	1.82	972-037-010-011
9	Grey/ Plastic	972-09G-ND	2.64	2.28	1.55	972-009-010-031
15		972-15G-ND	2.64	2.28	1.55	972-015-010-031
25		972-25G-ND	2.64	2.28	1.55	972-025-010-031
37		972-37G-ND	3.10	2.68	1.82	972-037-010-031
9	Red/ Plastic	972-09R-ND	2.64	2.28	1.55	972-009-010-061
15		972-15R-ND	2.64	2.28	1.55	972-015-010-061
25		972-25R-ND	2.64	2.28	1.55	972-025-010-061
37		972-37R-ND	3.10	2.68	1.82	972-037-010-061
9	Yellow/ Plastic	972-09Y-ND	2.64	2.28	1.55	972-009-010-081
15		972-15Y-ND	2.64	2.28	1.55	972-015-010-081
25		972-25Y-ND	2.64	2.28	1.55	972-025-010-081
37		972-37Y-ND	3.10	2.68	1.82	972-037-010-081

973 Series — Straight/Top Entry: • Metalized Plastic: High temperature plastic UL 94V-0. Plating: Nickel over copper • Plastic: High temperature plastic UL 94V-2 (black) • Hardware: Nickel plated steel

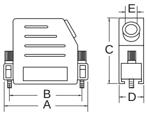
Conn. Size	Dimensions (Inch)				
	A	B	C	D	E
9	1.240	.984	1.221	.598	.335
15	1.575	1.312	1.378	.598	.335
25	2.106	1.852	1.496	.598	.433
37	2.756	2.500	1.575	.598	.433



No. of Pins	Type	Digi-Key Part No.	Price Each			NorComp Part No.
			1	10	100	
9	Metalized Plastic	973-09MP-ND	7.25	6.25	4.25	973-009-020-121
15		973-15MP-ND	7.51	6.48	4.41	973-015-020-121
25		973-25MP-ND	7.69	6.63	4.51	973-025-020-121
37		973-37MP-ND	10.41	8.98	6.11	973-037-020-121
9	Black Plastic	973-09BP-ND	3.86	3.33	2.27	973-009-010-011
15		973-15BP-ND	4.03	3.48	2.37	973-015-010-011
25		973-25BP-ND	4.23	3.65	2.49	973-025-010-011
37		973-37BP-ND	5.13	4.43	3.01	973-037-010-011

974 Series — 40° Entry: • Metalized Plastic: High temperature plastic UL 94V-0. Plating: Nickel over copper • Plastic: High temperature plastic UL 94V-0 (black) • Hardware: Nickel plated steel

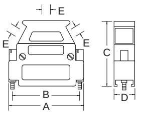
Conn. Size	Dimensions (Inch)				
	A	B	C	D	E
9	1.240	.984	1.457	.598	.335
15	1.575	1.312	1.457	.598	.335
25	2.106	1.852	1.614	.598	.433
37	2.756	2.500	1.614	.598	.433



No. of Pins	Type	Digi-Key Part No.	Price Each			NorComp Part No.
			1	10	100	
9	Metalized Plastic	974-09MP40-ND	7.25	6.25	4.25	974-009-020-121
15		974-15MP40-ND	7.51	6.48	4.41	974-015-020-121
25		974-25MP40-ND	7.69	6.63	4.51	974-025-020-121
37		974-37MP40-ND	10.41	8.98	6.11	974-037-020-121
9	Black Plastic	974-09BP40-ND	3.86	3.33	2.27	974-009-010-011
15		974-15BP40-ND	4.03	3.48	2.37	974-015-010-011
25		974-25BP40-ND	4.23	3.65	2.49	974-025-010-011
37		974-37BP40-ND	5.13	4.43	3.01	974-037-010-011

975 Series — 3-Way Entry: • Metalized Plastic: High temperature plastic UL 94V-0. Plating: Nickel over copper • Plastic: High temperature plastic UL 94V-2 (black) • Hardware: Nickel plated steel

Conn. Size	Dimensions (Inch)				
	A	B	C	D	E
9	1.213	.984	1.800	.600	.300
15	1.541	1.312	1.800	.600	.335
25	2.088	1.852	1.800	.600	.375
37	2.735	2.500	1.800	.600	.400

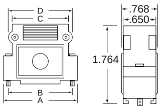


No. of Pins	Type	Digi-Key Part No.	Price Each			NorComp Part No.
			1	10	100	
9	Metalized Plastic	975-09MP-ND*	7.25	6.25	4.25	975-009-020-121
15		975-15MP-ND	7.51	6.48	4.41	975-015-020-121
25		975-25MP-ND	7.69	6.63	4.51	975-025-020-121
37		975-37MP-ND	10.41	8.98	6.11	975-037-020-121
9	Black Plastic	975-09BP-ND*	6.09	5.25	3.57	975-009-010-011
15		975-15BP-ND	6.09	5.25	3.57	975-015-010-011
25		975-25BP-ND	6.09	5.25	3.57	975-025-010-011
37		975-37BP-ND	8.29	7.15	4.87	975-037-010-011

* Digi-Key Part# 975-09MP-ND & 975-09BP-ND do not have the side cable exits.

976 Series — Plastic, Flat Ribbon: • **Material:** ABS high temperature plastic 94HB. Complete with 4-40 mating screws, housing screws, and housing nuts.

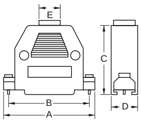
Conn. Size	Dimensions (Inch)			
	A	B	C	D
9	1.319	.984	.758	.946
15	1.622	1.312	1.102	1.289
25	2.157	1.852	1.642	1.874
37	2.815	2.500	2.283	2.470



No. of Pins	Type	Digi-Key Part No.	Price Each			NorComp Part No.
			1	10	100	
9	Metalized Plastic (Grey)	976-09RP-ND	1.39	1.20	.82	976-009-010-031
15		976-15RP-ND	1.57	1.35	.92	976-015-010-031
25		976-25RP-ND	1.86	1.60	1.09	976-025-010-031
37		976-37RP-ND	1.97	1.70	1.16	976-037-010-031

977 Series — Plastic or Metalized: • Available in both plain plastic and metalized for EMI/RFI suppression • Over 60 dB shielding • Materials: Shell – Thermoplastic polyester; UL rated 94V-0; Screw locks – brass; EMI/RFI plating – Electroplated with nickel over copper

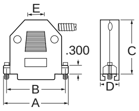
Conn. Size	Dimensions (Inch)				
	A	B	C	D	E
9	1.213	.984	1.594	.646	.275
15	1.563	1.312	1.453	.646	.400
25	2.165	1.852	1.752	.646	.435
37	2.736	2.500	2.096	.984	.535
50	2.640	2.406	1.750	.731	.450



No. of Pins	Type	Digi-Key Part No.	Price Each			NorComp Part No.
			1	10	100	
9	Shielded Metalized Plastic (for EMI/ RFI)	909GM-ND	.75	.65	.45	977-009-020-121
15		915GM-ND	.89	.77	.53	977-015-020-121
25		925GM-ND	.89	.77	.53	977-025-020-121
37		937GM-ND	2.23	1.93	1.31	977-037-020-121
50		950GM-ND	1.75	1.51	1.03	977-050-020-121
9	Plain Plastic	909GP-ND	.54	.47	.32	977-009-010-031
15		915GP-ND	.67	.58	.40	977-015-010-031
25		925GP-ND	.73	.63	.43	977-025-010-031
37		937GP-ND	1.00	.86	.59	977-037-010-031
50		950GP-ND	1.51	1.30	.89	977-050-010-031

978 Series — Plastic or Metalized: • Available in both plain plastic and metalized for EMI/RFI suppression • Over 60 dB shielding • EMI/RFI Plating - Electroplated with nickel over copper • Materials: Shell – Thermoplastic polyester; UL rated 94V-0; Screw locks – brass

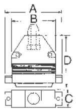
Conn. Size	Dimensions (Inch)				
	A	B	C	D	E
9	1.220	.984	1.693	.655	.276
15	1.535	1.312	1.693	.655	.315
25	2.118	1.852	1.929	.655	.374
37	2.756	2.500	1.929	.655	.433
50	2.650	2.406	1.909	.655	.551



No. of Pins	Type	Digi-Key Part No.	Price Each			NorComp Part No.
			1	10	100	
9	Un-shielded	909C-ND	1.10	.96	.65	978-009-010-031
15		915C-ND	1.19	1.03	.70	978-015-010-031
25		925C-ND	1.24	1.07	.73	978-025-010-031
37		937C-ND	1.73	1.49	1.02	978-037-010-031
50		950C-ND	1.75	1.51	1.03	978-050-010-031
9	Shielded	909CA-ND	1.37	1.19	.81	978-009-020-121
15		915CA-ND	1.54	1.33	.91	978-015-020-121
25		925CA-ND	1.67	1.44	.98	978-025-020-121

979 Series — Die-Cast Zinc: • Conductive rubber grommet/ strain relief for complete EMI/RFI shielding (over 70db) • Solid die-cast ZINC construction • Supplied complete with rubber grommet kit and male screw locks.

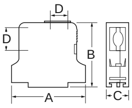
Conn. Size	Dimensions (Inch)				Max. Cable Dia.
	A	B	C	D	
9	1.22	.79	.63	1.9	.42
15	1.55	1.11	.63	1.9	.42
25	2.10	1.64	.63	1.9	.42
37	2.73	2.27	.63	1.9	.43



No. of Pins	Type	Digi-Key Part No.	Price Each			NorComp Part No.
			1	10	100	
9	Die Cast Zinc	909Z-ND	2.64	2.28	1.55	979-009-030-121
15		915Z-ND	3.10	2.68	1.82	979-015-030-121
25		925Z-ND	3.91	3.37	2.29	979-025-030-121
37		937Z-ND	5.28	4.55	3.10	979-037-030-121

982 Series — Plastic or Metalized: • Cable Exit Top or Side • Available in both plain plastic and metalized for EMI/RFI suppression • Over 60dB shielding • Operating Temperature: -35°C to +95°C **UHD9 Does not have a side cable exit.* • Materials: Shell: Thermoplastic polyester; UL rated 94V-0; Screw locks: brass; EMI/RFI plating: Electroplated with nickel over copper. Electroplated parts not UL rated

Connector Size	Dimensions (Inch)			
	A	B	C	D
9*	1.23	1.38	.630	.350
15	1.56	1.61	.630	.374
25	2.10	1.81	.630	.444
37	2.74	1.81	.630	.444
50	2.65	1.81	.735	.543

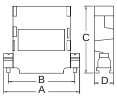


No. of Pins	Type	Digi-Key Part No.	Price Each			NorComp Part No.
			1	10	100	
9	Gray Plastic	909U-ND*	3.39	2.93	1.99	982-009-010-031
15		915U-ND	3.39	2.93	1.99	982-015-010-031
25		925U-ND	3.66	3.16	2.15	982-025-010-031
37		937U-ND	4.28	3.70	2.52	982-037-010-031
50		950U-ND	5.12	4.42	3.01	982-050-010-031
9	Shielded Metalized Plastic	909UA-ND*	6.39	5.51	3.75	982-009-020-121
15		915UA-ND	6.50	5.60	3.81	982-015-020-121
25		925UA-ND	6.92	5.97	4.06	982-025-020-121
37		937UA-ND	8.05	6.95	4.73	982-037-020-121
50		950UA-ND	8.83	7.62	5.18	982-050-020-121

* Digi-Key Part# 909UA-ND does not have a side cable exit.

983 Series — Plain Plastic or Metalized Plastic: • May be used as a "Gender Changer," pin-out changer, or standard backshell • Snap-together assembly • Half-clamp with self-tapping screws provides positive strain-relief • Available in plain plastic or metalized for EMI/RFI shielding

Conn. Size	Dimensions (Inch)				Max. Cable Dia.
	A	B	C	D	
9	1.28	.80	1.77	.65	.27
15	1.63	1.13	1.77	.65	.47
25	2.10	1.67	1.77	.65	.47
37	2.79	2.32	1.77	.65	.47
50	2.64	2.22	1.77	.75	.75



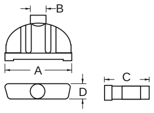
No. of Pins	Type	Digi-Key Part No.	Price Each			NorComp Part No.
			1	10	100	
50	Shielded Plastic Fiber (for EMI/RFI)	950M-ND	4.21	3.63	2.47	TT50NA
9	Plain Plastic	909P-ND	1.13	.98	.67	983-009-010-031
15		915P-ND	1.37	1.19	.81	983-015-010-031
25		925P-ND	1.71	1.48	1.01	983-025-010-031
37		937P-ND	2.78	2.40	1.64	983-037-010-031
50		950P-ND	2.93	2.53	1.72	983-050-010-031
9	Metalized Plastic	909M2-ND	1.73	1.50	1.02	983-009-020-121
15		915M2-ND	1.86	1.60	1.09	983-015-020-121
25		925M2-ND	2.37	2.05	1.39	983-025-020-121
37		937M2-ND	3.07	2.65	1.81	983-037-020-121
50		950M2-ND	3.77	3.25	2.21	983-050-020-121

(Continued)

NORCOMP D-Sub Backshells *(Cont.)*

986 Series — One-Piece Overmold Cans: • Cold rolled steel • Plating: Tin

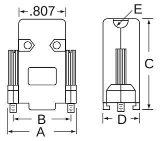
Conn. Size	Dimensions (Inch) A	B	C	D
9	.815	.410	1.200	.490
15	1.150	.410	1.200	.490
25	1.690	.410	1.200	.490
37	2.340	.610	1.650	.490
50	2.240	.580	1.650	.600



No. of Pins	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
9	986-09T-ND	.73	.63	.43	986-009-020-121
15	986-15T-ND	.93	.80	.55	986-015-020-121
25	986-25T-ND	.99	.85	.58	986-025-020-121
37	986-37T-ND	2.76	2.38	1.62	986-037-020-121
50	986-50T-ND	3.51	3.03	2.06	986-050-020-121

993 Series — 45° Economy: • **Material:** Metalized Plastic and Plastic: ABS high temperature plastic, 94HB. Metalized Plating: Chrome.

Includes housing screws, housing nuts, 4-40 thumbscrews, strain relief clamps, and strain relief screws.

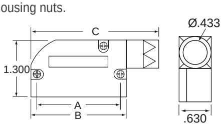


Conn. Size	Dimensions (Inch) A	B	C	D	E
9	1.213	.984	1.595	.630	.260
25	2.165	1.852	2.095	.641	.400

No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
9	Metalized Plastic	993-09MP45-ND	1.86	1.60	1.09	993-009-020-121
25		993-25MP45-ND	2.00	1.73	1.18	993-025-020-121
9	Plastic	993-109P45-ND	1.31	1.13	.77	993-009-010-031
25		993-125P45-ND	1.45	1.25	.85	993-025-010-031

980 / 981 Series — Ethernet: • **Material:** Die-cast zinc alloy, nickel plated. Complete with housing screws and housing nuts.

Conn. Size	Dimensions (Inch) A	B	C
9	.984	1.240	1.850
15	1.312	1.555	2.323
25	1.852	2.106	2.835

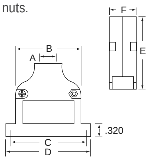


(Series 981 - Right Angle shown)

No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
15	Series 980 Straight	915ES-ND	4.01	3.46	2.36	980-015-030-121
9	Series 981 Right Angle	909ER-ND	4.09	3.53	2.40	981-009-030-121
15		915ER-ND	4.36	3.76	2.56	981-015-030-121
25		925ER-ND	4.29	3.70	2.52	981-025-030-121

994 Series — Die Cast, Ethernet: • **Material:** Die cast zinc alloy, nickel plated. Included are housing screw and housing nuts.

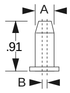
Conn. Size	Dimensions (Inch) A	B	C	D	E	F
9	.433	.790	.984	1.244	1.82	.614
15	.433	1.135	1.312	1.575	1.82	.665
25	.433	1.640	1.852	2.106	1.82	.630



No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
9	Straight	994-09DC-ND	3.31	2.85	1.94	994-009-030-121
15		994-15DC-ND	3.57	3.08	2.10	994-015-030-121
25		994-25DC-ND	3.94	3.40	2.32	994-025-030-121

Non-Conductive Rubber Grommet Sets: For better EMI/RFI Shielding and/or strain relief. For use with D-Sub Backshells. **Note:** Grom-9/25 and Grom-50 have four grommets per set and Grom-37 has three per set.

Digi-Key Part No.	Outside Dia. A (Inch)	Inside Diameter B (Inch)			
901G-ND	.400	.185	.248	.290	.335
902G-ND	.620	.320	.410	.500	—
903G-ND	.730	.340	.425	.495	.650



Description	Digi-Key Part No.	Price Each 5	25	100	NorComp Part No.
DB 9/25 Grom. Set	901G-ND	.40	.34	.24	162-000-925-000
DB 37 Grom. Set	902G-ND	1.06	.92	.63	162-000-037-000
DB 50 Grom. Set	903G-ND	1.45	1.25	.85	162-000-050-000

112 Series – Solder Cup w/Right Angle Backshell (Centronics Type): • **Material:** Insulator: Glass-filled thermoplastic, UL Rated 94V-0. Contacts: Copper alloy. Shell: Steel, nickel plated. Contact Plating: Gold plated.

Fig. 1

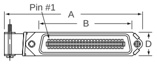


Fig. 2

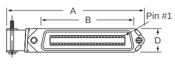


Fig. 3

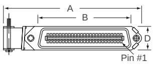
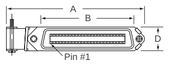
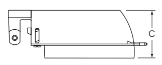


Fig. 4





Conn. Size	Dimensions (Inch) A	B	C	D
36	3.178	1.943	1.075	.646
50	3.780	2.538	1.325	.646

Fig.	No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
1	50	Male	1550RM-ND	9.19	7.93	5.39	112-050-103-011
2	50	Female	1550RF-ND	9.19	7.93	5.39	112-050-203-011
3	50	Male	1550LM-ND	9.19	7.93	5.39	112-050-103-021
4	50	Female	1550LF-ND	9.19	7.93	5.39	112-050-203-021

NORCOMP

Parallel Interface Connectors (Centronics Type)

Material: Insulator: Glass filled thermoplastic, UL rated 94V-0. Shell: Nickel plated steel. Contacts: Copper alloy, 10µ gold over 30µ nickel.

Male Cable Plug (Fig. 1):
• Compatible with industry standard • Solder eyelets accept 24 AWG wire • Complete with cable boot, shell & hardware

Female Cable Receptacle (Fig. 2):
• Compatible with industry standard • Complete with spring latches and cable boot • Solder eyelets accept 24 AWG wire • Can be used as panel mount

Panel Mount Male Plug (Fig. 3):
• 0.103" (2.62mm) Mounting hole accepts #3 screw (not included) • Compatible with industry standard • Solder eyelets accept 24 AWG wire • Insulator color: Blue

Panel Mount Female Receptacle (Fig. 4):
• Compatible with industry standard • Complete with spring latches • Solder eyelets accept 24 AWG wire • Insulator color: Blue

Straight DIP Solder (Fig. 5):
• For standard .062" (1.57mm) PC mount • Latch locks standard • Insulator color: Blue

Right Angle PCB Mount (Fig. 6):
• Compatible with industry standard • Metal shell for EMI/RFI shielding • Insulator color: Blue

Discrete Wire IDC Solderless (Fig. 7):
• Compatible with standard terminating tools • Quick solderless termination for #24 or 26 AWG • Insulator color: Gray

Fig. 1

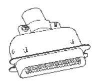


Fig. 2

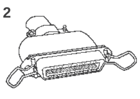


Fig. 3

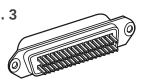


Fig. 4

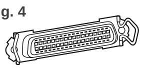


Fig. 5

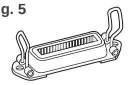


Fig. 6

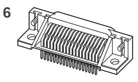


Fig. 7

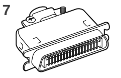


Fig.	No. of Con-tacts	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
1	14	Male	T1501-ND	3.48	3.00	2.04	110-014-103-001
	24	Male	T1502-ND	5.66	4.88	3.32	110-024-103-001
	36	Male	T1503-ND	3.56	3.07	2.09	110-036-103-001
	50	Male	T1504-ND	6.30	5.44	3.70	110-050-103-001
2	14	Female	T1507-ND	4.00	3.45	2.35	110-014-203-001
	24	Female	T1508-ND	4.45	3.84	2.61	110-024-203-001
	36	Female	T1509-ND	4.66	4.02	2.74	110-036-203-001
	50	Female	T1510-ND	7.00	6.04	4.11	110-050-203-001
3	14	Male	1014M-ND	2.51	2.16	1.47	111-014-103-001
	24	Male	1024M-ND	2.69	2.33	1.58	111-024-103-001
	36	Male	1036M-ND	2.61	2.26	1.54	111-036-103-001
	50	Male	1050M-ND	3.96	3.42	2.33	111-050-103-001
4	14	Female	1014F-ND	2.64	2.28	1.55	111-014-203-001
	24	Female	1024F-ND	4.26	3.68	2.50	111-024-203-001
	36	Female	1036F-ND	3.05	2.63	1.79	111-036-203-001
	50	Female	1050F-ND	4.93	4.25	2.89	111-050-203-001
5	14	Male	1014PM-ND	2.97	2.57	1.75	111-014-113-001
	24	Male	1024PM-ND	4.52	3.90	2.66	111-024-113-001
	36	Male	1036PM-ND	4.88	4.21	2.86	111-036-113-001
	50	Male	1050PM-ND	5.39	4.65	3.17	111-050-113-001
	14	Female	1014PF-ND	2.75	2.37	1.61	111-014-213-001
	24	Female	1024PF-ND	2.97	2.57	1.75	111-024-213-001
	36	Female	1036PF-ND	4.38	3.78	2.57	111-036-213-001
	50	Female	1050FPF-ND	6.78	5.85	3.98	111-050-213-001
6	14	Male	1014RM-ND	3.18	2.74	1.87	112-014-113-001
	24	Male	1024RM-ND	3.58	3.09	2.10	112-024-113-001
	36	Male	1036RM-ND	5.31	4.58	3.12	112-036-113-001
	50	Male	1050RM-ND	6.39	5.51	3.75	112-050-113-001
	14	Female	1014RF-ND	3.69	3.19	2.17	112-014-213-001
	24	Female	1024RF-ND	3.66	3.16	2.15	112-024-213-001
	36	Female	1036RF-ND	4.66	4.02	2.74	112-036-213-001
	50	Female	1050RF-ND	6.68	5.76	3.92	112-050-213-001
7	36	Male	1036CM-ND	10.18	8.78	5.97	110-036-193-001
	36	Female	1036CF-ND	8.53	7.35	5.00	110-036-293-001

NORCOMP Hardware

Fig. 1

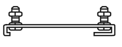


Fig. 2

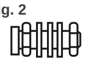


Fig. 3

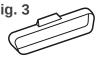


Fig. 4

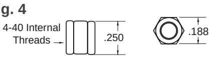


Fig. 5

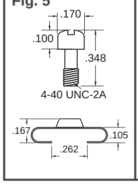


Fig. 6

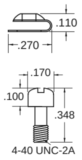


Fig. 7

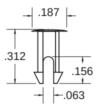


Fig. 8

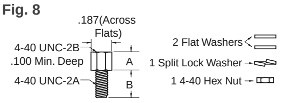


Fig. 9

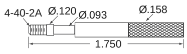


Fig.	Description	Dim. (inch) A	B	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
Slide Lock Posts for Ethernet Hoods (994 Series)								
1	9-Pin, D-Sub, or Ethernet	—	—	160-09SL-ND	1.77	1.53	1.04	160-009-002-031
	15-Pin, D-Sub, or Ethernet			T2040-ND	1.29	1.12	.76	160-015-003-031
	25-Pin, D-Sub, or Ethernet			160-25SL-ND	2.15	1.85	1.26	160-025-004-031
2	2 connectors required	—	—	T2042-ND	1.34/2	.58	.40	160-000-005-041
Dust Covers								
3	Female, 9-Position D-Sub	—	—	909DC-ND	.52	.45	.31	160-000-209-00
	Female, 15-Position D-Sub	—	—	915DC-ND	.52	.45	.31	160-000-215-00
	Female, 25-Position D-Sub	—	—	925DC-ND	.52	.45	.31	160-000-225-00
	Male, 9-Position D-Sub	—	—	160-09M-ND	.55	.48	.33	160-000-109-000
	Male, 15-Position D-Sub	—	—	160-15M-ND	.55	.48	.33	160-000-115-000
	Male, 25-Position D-Sub	—	—	160-25M-ND	.55	.48	.33	160-000-125-000
4-40 Female Coupling Nut								
4	Brass, Plating Yellow Chromate	—	—	160-06YC-ND	.25	.15	.11	160-000-006-042
	Brass, Plating Nickel	—	—	160-06N-ND	.25	.15	.11	160-000-006-032
4-40 Male Screwlock with Slip-On Retainer								
5	Steel, Plating Tin	—	—	160-01MT-ND	.87	.75	.51	160-000-001-051
	Steel, Plating Yellow Chromate	—	—	160-01MYC-ND	.81	.70	.48	160-000-001-041
4-40 Male Screwlock with Clip-On Retainer (2 screws, 2 clips)								
6	Screw - Steel, Tin Plating Clip - Stainless Steel	— —	— —	160-02M-ND	.81	.70	.48	160-000-002-051
Plastic Clips for Retaining Connectors to PC .062" Board								
7	Nylon	—	—	163-01P-ND	.25	.15	.11	163-001-000-000
4-40 Female Screwlock Assembly								
8	Steel, Plating Yellow Chromate	.187	.312	160-10F-ND	.70	.60	.41	160-000-010-041
	Steel, Plating Nickel	.187	.625	160-11F-ND	.99	.85	.58	160-000-011-041
	Steel, Plating Nickel	.250	.156	160-12F-ND	.81	.70	.48	160-000-012-041
	Steel, Plating Yellow Chromate	.197	.197	160-13F-ND	.55	.48	.33	160-000-013-041
	Steel, Plating Yellow Chromate	.197	.323	160-15F-ND	.55	.48	.33	160-000-015-041
	Steel, Plating Yellow Chromate	.197	.433	160-16F-ND	.64	.55	.38	160-000-016-041
	Steel, Plating Yellow Chromate	.197	.520	160-17F-ND	.67	.58	.40	160-000-017-041
	Steel, Plating Yellow Chromate	.197	.669	160-18F-ND	.70	.60	.41	160-000-018-041
4-40 Thumbscrew - Nickel Plated Steel Finish								
9	For 977/978/979 Series Backshells			160-02TS-ND	.26	.23	.16	160-000-050-031
2.6mm Thumbscrew - Nickel Plated Steel Finish								
9	For 970/972 Series Backshells			160-03TS-ND	.70	.60	.41	160-000-060-031

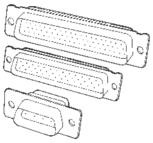
T2020-ND Insertion/Removal Tool...**$8.76 each**

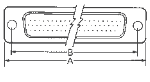
NORCOMP

High Density D-Sub Connectors

• Compatible with new generation systems from several computer manufacturers • Shells have bright tin finish for EMI/RFI shielding • Male connector shells have grounding indents • Reliable crimp snap-in contacts feature insulation grip for increased holding power • Contacts compatible with industry standard crimp tools.

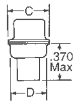
Materials: Shell: Steel, with bright tin over nickel. Insulator: Glass-filled thermoplastic, UL rated 94V-0. Male Pin: Brass. Female Contact: Phosphor bronze. Contact Plating: gold over nickel (gold flash on entire contact for solder cup and dip solder)



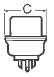


Contacts Sold Separately Below

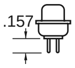
Crimp



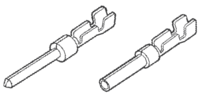
Solder Cup



Dip Solder



Stamped Contacts For High Density D-Sub Connectors
Pin Dia: .030"
(.76mm)



Wire Size: 22-26 AWG.

No. of Pins	Shell Size	Dimensions (Inch)			
		A	B	C	D
15	DB-9	1.213	.984	.496	.422
26	DB-15	1.543	1.312	.496	.422
44	DB-25	2.087	1.852	.496	.422
62	DB-37	2.732	2.500	.496	.422
78	DB-50	2.638	2.406	.606	.550

Note: Contacts sold separately (below) for Crimp Type.

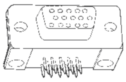
No. of Pins	Type	Digi-Key Part No.	Price Each					NorComp Part No.
			1	10	100	500	1,000	
Crimp								
15	Male	815M-ND	1.91	1.65	1.13	.96	.83	180-015-172-000
15	Female	815F-ND	1.91	1.65	1.13	.96	.83	180-015-272-000
26	Male	826M-ND	5.90	5.09	3.46	2.95	2.55	180-026-172-000
26	Female	826F-ND	6.39	5.51	3.75	3.20	2.76	180-026-272-000
44	Male	844M-ND	6.87	5.93	4.03	3.44	2.97	180-044-172-000
44	Female	844F-ND	6.99	6.03	4.10	3.50	3.02	180-044-272-000
62	Male	862M-ND	8.76	7.55	5.14	4.38	3.78	180-062-172-000
62	Female	862F-ND	8.35	7.20	4.90	4.18	3.60	180-062-272-000
78	Male	878M-ND	15.65	13.49	9.18	7.83	6.75	180-078-172-000
78	Female	878F-ND	10.72	9.25	6.29	5.37	4.63	180-078-272-000
Crimp with .065" Clinch Nuts, Board Side								
15	Male	1815M-ND	3.02	2.60	1.77	1.51	1.30	180-015-172-010
15	Female	1815F-ND	3.02	2.60	1.77	1.51	1.30	180-015-272-010
26	Male	1826M-ND	7.48	6.45	4.39	3.75	3.23	180-026-172-010
26	Female	1826F-ND	7.74	6.68	4.54	3.88	3.34	180-026-272-010
44	Male	1844M-ND	8.27	7.13	4.85	4.14	3.57	180-044-172-010
44	Female	1844F-ND	8.27	7.13	4.85	4.14	3.57	180-044-272-010
62	Male	1862M-ND	10.21	8.80	5.99	5.11	4.40	180-062-172-010
62	Female	1862F-ND	10.21	8.80	5.99	5.11	4.40	180-062-272-010
78	Male	1878M-ND	18.39	15.85	10.78	9.20	7.93	180-078-172-010
78	Female	1878F-ND	14.09	12.15	8.27	7.05	6.08	180-078-272-010
Crimp with .250" Clinch Nuts, Board Side								
15	Male	2815M-ND	3.02	2.60	1.77	1.51	1.30	180-015-172-020
15	Female	2815F-ND	3.02	2.60	1.77	1.51	1.30	180-015-272-020
26	Male	2826M-ND	7.48	6.45	4.39	3.75	3.23	180-026-172-020
26	Female	2826F-ND	7.74	6.68	4.54	3.88	3.34	180-026-272-020
44	Male	2844M-ND	8.27	7.13	4.85	4.14	3.57	180-044-172-020
44	Female	2844F-ND	8.27	7.13	4.85	4.14	3.57	180-044-272-020
62	Male	2862M-ND	10.21	8.80	5.99	5.11	4.40	180-062-172-020
62	Female	2862F-ND	10.21	8.80	5.99	5.11	4.40	180-062-272-020
78	Male	2878M-ND	18.39	15.85	10.78	9.20	7.93	180-078-172-020
78	Female	2878F-ND	14.09	12.15	8.27	7.05	6.08	180-078-272-020
Crimp with .250" Clinch Nuts, Mating Side								
15	Male	3815M-ND	3.02	2.60	1.77	1.51	1.30	180-015-172-030
15	Female	3815F-ND	3.02	2.60	1.77	1.51	1.30	180-015-272-030
26	Male	3826M-ND	7.48	6.45	4.39	3.75	3.23	180-026-172-030
26	Female	3826F-ND	7.74	6.68	4.54	3.88	3.34	180-026-272-030
44	Male	3844M-ND	8.27	7.13	4.85	4.14	3.57	180-044-172-030
44	Female	3844F-ND	8.27	7.13	4.85	4.14	3.57	180-044-272-030
62	Male	3862M-ND	10.21	8.80	5.99	5.11	4.40	180-062-172-030
62	Female	3862F-ND	10.21	8.80	5.99	5.11	4.40	180-062-272-030
78	Male	3878M-ND	18.39	15.85	10.78	9.20	7.93	180-078-172-030
78	Female	3878F-ND	14.09	12.15	8.27	7.05	6.08	180-078-272-030
Contacts								
—	Pin	85P-ND	—	.13	.09	.08	.07	180-001-170-001
—	Socket	85S-ND	—	.13	.09	.08	.07	180-002-170-001
Insertion/Removal Tool		T2020-ND	8.76	7.55	5.14	4.38	3.78	180-901-170-000
Solder Cup								
15	Male	T815M-ND	2.13	1.84	1.25	1.07	.92	180-015-102-001
15	Female	T815F-ND	2.45	2.12	1.44	1.23	1.06	180-015-202-001
26	Male	T826M-ND	6.92	5.97	4.06	3.47	2.99	180-026-102-001
26	Female	T826F-ND	7.35	6.34	4.31	3.68	3.17	180-026-202-001
44	Male	T844M-ND	8.35	7.20	4.90	4.18	3.60	180-044-102-001
44	Female	T844F-ND	9.67	8.34	5.67	4.84	4.17	180-044-202-001
62	Male	T862M-ND	10.40	8.97	6.10	5.20	4.49	180-062-102-001
62	Female	T862F-ND	11.74	10.13	6.89	5.88	5.07	180-062-202-001
Solder Cup with .065" Clinch Nuts, Board Side								
15	Male	4815M-ND	3.28	2.83	1.93	1.64	1.42	180-015-102-011
15	Female	4815F-ND	3.63	3.13	2.13	1.82	1.57	180-015-202-011
26	Male	4826M-ND	11.51	9.93	6.75	5.76	4.97	180-026-102-011
26	Female	4826F-ND	9.11	7.85	5.34	4.56	3.93	180-026-202-011
44	Male	4844M-ND	10.21	8.80	5.99	5.11	4.40	180-044-102-011
44	Female	4844F-ND	11.69	10.08	6.86	5.85	5.04	180-044-202-011
62	Male	4862M-ND	12.53	10.80	7.35	6.27	5.40	180-062-102-011
62	Female	4862F-ND	17.63	15.20	10.34	8.82	7.60	180-062-202-011
78	Male	4878M-ND	17.63	15.20	10.34	8.82	7.60	180-078-102-011
78	Female	4878F-ND	18.42	15.88	10.80	9.21	7.94	180-078-202-011

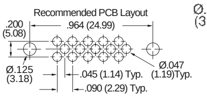
No. of Pins	Type	Digi-Key Part No.	Price Each					NorComp Part No.
			1	10	100	500	1,000	
Solder Cup with .250" Clinch Nuts, Board Side								
15	Male	5815M-ND	3.28	2.83	1.93	1.64	1.42	180-015-102-021
15	Female	5815F-ND	3.63	3.13	2.13	1.82	1.57	180-015-202-021
26	Male	5826M-ND	11.51	9.93	6.75	5.76	4.97	180-026-102-021
26	Female	5826F-ND	9.11	7.85	5.34	4.56	3.93	180-026-202-021
44	Male	5844M-ND	10.21	8.80	5.99	5.11	4.40	180-044-102-021
44	Female	5844F-ND	11.69	10.08	6.86	5.85	5.04	180-044-202-021
62	Male	5862M-ND	12.53	10.80	7.35	6.27	5.40	180-062-102-021
62	Female	5862F-ND	17.63	15.20	10.34	8.82	7.60	180-062-202-021
78	Male	5878M-ND	17.63	15.20	10.34	8.82	7.60	180-078-102-021
78	Female	5878F-ND	18.42	15.88	10.80	9.21	7.94	180-078-202-021
Solder Cup with .250" Clinch Nuts, Mating Side								
15	Male	6815M-ND	3.28	2.83	1.93	1.64	1.42	180-015-102-031
15	Female	6815F-ND	3.63	3.13	2.13	1.82	1.57	180-015-202-031
26	Male	6826M-ND	11.51	9.93	6.75	5.76	4.97	180-026-102-031
26	Female	6826F-ND	9.11	7.85	5.34	4.56	3.93	180-026-202-031
44	Male	6844M-ND	10.21	8.80	5.99	5.11	4.40	180-044-102-031
44	Female	6844F-ND	11.69	10.08	6.86	5.85	5.04	180-044-202-031
62	Male	6862M-ND	12.53	10.80	7.35	6.27	5.40	180-062-102-031
62	Female	6862F-ND	17.63	15.20	10.34	8.82	7.60	180-062-202-031
78	Male	6878M-ND	17.63	15.20	10.34	8.82	7.60	180-078-102-031
78	Female	6878F-ND	18.42	15.88	10.80	9.21	7.94	180-078-202-031
Dip Solder High Density								
15	Male	180-15M-ND	2.38	2.05	1.40	1.19	1.03	180-015-112-001
15	Female	180-15F-ND	2.00	1.73	1.18	1.01	.87	180-015-212-001
26	Male	180-26M-ND	3.68	3.18	2.16	1.85	1.59	180-026-112-001
26	Female	180-26F-ND	4.18	3.60	2.45	2.09	1.80	180-026-212-001
44	Male	180-44M-ND	6.55	5.65	3.85	3.28	2.83	180-044-112-001
44	Female	180-44F-ND	6.53	5.63	3.83	3.27	2.82	180-044-212-001
62	Male	180-62M-ND	8.90	7.68	5.22	4.46	3.84	180-062-112-001
62	Female	180-62F-ND	9.02	7.78	5.29	4.51	3.89	180-062-212-001
78	Male	180-78M-ND	13.05	11.25	7.65	6.53	5.63	180-078-112-001
78	Female	180-78F-ND	12.76	11.00	7.48	6.38	5.50	180-078-212-001
Dip Solder High Density with .065" Clinch Nuts, Board Side								
15	Male	7815M-ND	3.48	3.00	2.04	1.74	1.50	180-015-112-011
15	Female	7815F-ND	3.07	2.65	1.81	1.54	1.33	180-015-212-011
26	Male	7826M-ND	4.90	4.23	2.88	2.46	2.12	180-026-112-011
26	Female	7826F-ND	5.45	4.70	3.20	2.73	2.35	180-026-212-011
44	Male	7844M-ND	8.06	6.95	4.73	4.04	3.48	180-044-112-011
44	Female	7844F-ND	8.03	6.93	4.71	4.02	3.47	180-044-212-011
62	Male	7862M-ND	10.64	9.18	6.24	5.33	4.59	180-062-112-011
62	Female	7862F-ND	10.79	9.30	6.33	5.40	4.65	180-062-212-011
78	Male	7878M-ND	15.23	13.13	8.93	7.62	6.57	180-078-112-011
78	Female	7878F-ND	14.88	12.83	8.73	7.44	6.42	180-078-212-011
Dip Solder High Density with .250" Clinch Nuts, Board Side								
15	Male	8815M-ND	3.48	3.00	2.04	1.74	1.50	180-015-112-021
15	Female	8815F-ND	3.07	2.65	1.81	1.54	1.33	180-015-212-021
26	Male	8826M-ND	4.90	4.23	2.88	2.46	2.12	180-026-112-021
26	Female	8826F-ND	5.45	4.70	3.20	2.73	2.35	180-026-212-021
44	Male	8844M-ND	8.06	6.95	4.73	4.04	3.48	180-044-112-021
44	Female	8844F-ND	8.03	6.93	4.71	4.02	3.47	180-044-212-021
62	Male	8862M-ND	10.64	9.18	6.24	5.33	4.59	180-062-112-021
62	Female	8862F-ND	10.79	9.30	6.33	5.40	4.65	180-062-212-021
78	Male	8878M-ND	15.23	13.13	8.93	7.62	6.57	180-078-112-021
78	Female	8878F-ND	14.88	12.83	8.73	7.44	6.42	180-078-212-021
Dip Solder High Density with .250" Clinch Nuts, Mating Side								
15	Male	9815M-ND	3.48	3.00	2.04	1.74	1.50	180-015-112-031
15	Female	9815F-ND	3.07	2.65	1.81	1.54	1.33	180-015-212-031
26	Male	9826M-ND	4.90	4.23	2.88	2.46	2.12	180-026-112-031
26	Female	9826F-ND	5.45	4.70	3.20	2.73	2.35	180-026-212-031
44	Male	9844M-ND	8.06	6.95	4.73	4.04	3.48	180-044-112-031
44	Female	9844F-ND	8.03	6.93	4.71	4.02	3.47	180-044-212-031
62	Male	9862M-ND	10.64	9.18	6.24	5.33	4.59	180-062-112-031
62	Female	9862F-ND	10.79	9.30	6.33	5.40	4.65	180-062-212-031
78	Male	9878M-ND	15.23	13.13	8.93	7.62	6.57	180-078-112-031
78	Female	9878F-ND	14.88	12.83	8.73	7.44	6.42	180-078-212-031

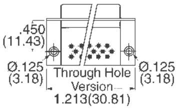
NORCOMP

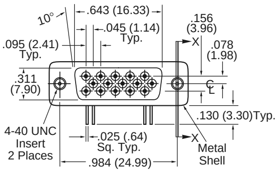
High Density 90° PC Mount D-Sub Connector

SPECIFICATIONS:
- **Contact Rating:** 5 Amps
- **Dielectric Strength:** 1000V AC RMS
- **Insulation Resistance:** 1000 meg ohms
- **Contact Material:** Phosphor Bronze
- **Contact Finish:** Gold over Nickel
- **Operating Temperature:** -55°C to 150°C
- **Shell Material:** Steel, Tin Plated
- **Insulations Material:** Glass-Filled Polyester (UL 94V-0)
- **Gender:** Receptacle (female)









No. of Pins	Type	Digi-Key Part No.	Price Each					NorComp Part No.
			1	10	100	500	1,000	
181Series (.590" Footprint)								
15	Female	815RF-ND	2.91	2.51	1.71	1.46	1.26	181-015-212-171
26	Female	826RF-ND	8.45	7.29	4.96	4.23	3.65	181-026-212-171
44	Female	844RF-ND	9.13	7.88	5.36	4.57	3.94	181-044-212-171
62	Female	862RF-ND	12.17	10.50	7.14	6.09	5.25	181-062-212-171

HIROSE
ELECTRIC
CO.,LTD.

“TM” Modular Connectors

Fig. 1

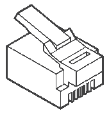


Fig. 2

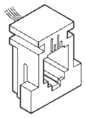


Fig. 3

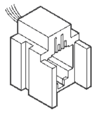


Fig. 4

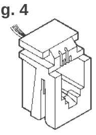


Fig. 5

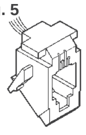


Fig. 6

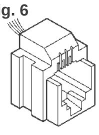


Fig. 7

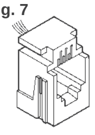


Fig. 8

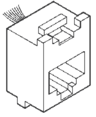


Fig. 9
(Bezel Included)

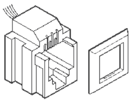


Fig. 10

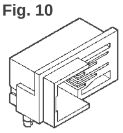


Fig. 11

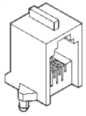


Fig. 12

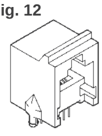


Fig. 13

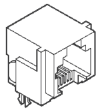


Fig. 14

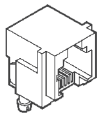


Fig. 15

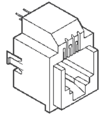


Fig. 16

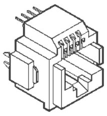


Fig. 17

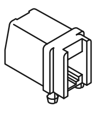


Fig. 18

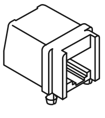


Fig. 19

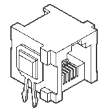


Fig. 20

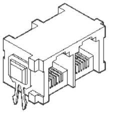


Fig. 21

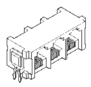


Fig. 22

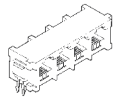


Fig. 23

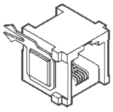


Fig. 24

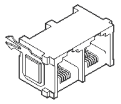


Fig. 25

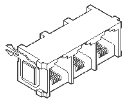


Fig. 26

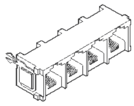


Fig. 27

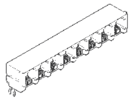


Fig. 28

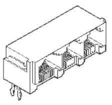


Fig. 29

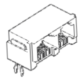


Fig. 30

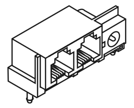


Fig. 31

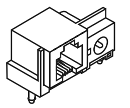


Fig. 32

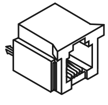


Fig. 33

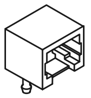


Fig. 34

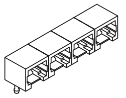


Fig. 35

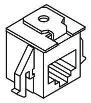


Fig. 36

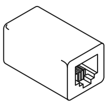


Fig.	Positions-Contacts	Description	Dimensions (mm)			Digi-Key Part No.	Pricing			Hirose Part No.
			W	H	D		1	10	100	
Plugs (for IDC Termination with Flat Line Cord)										
1	4-4	Plugs	7.7	6.6	13.4	H9091-ND	.76	6.20	45.00	TM3P-44P
1	6-4	Plugs	9.7	6.6	13.4	H9092-ND	.76	6.20	45.00	TM3P-64P
1	6-6	Plugs	9.7	6.6	13.4	H9093-ND	.95	7.75	56.25	TM3P-66P
1	8-8	Plugs	11.7	6.6	22.5	H9094-ND	1.60	12.39	94.50	TM8P-88P
Receptacles — Jack with 6” (152.4mm) Wire Leads; Color: Gray										
2	4-4	Jack	17.5	20.5	10.2	H9001-ND	2.02	16.74	124.00	TM1R-616B44-35S-150
3	4-4	Jack	12.4	17.4	14.3	H9002-ND	2.08	17.28	128.00	TM1R-616M44-35S-150A
4	4-4	Jack	12.4	21.3	12.5	H9003-ND	2.02	16.74	124.00	TM1R-616P44-35S-150
5	4-4	Jack	15.3	20.5	10.2	H9018-ND	2.57	21.33	158.00	TM1R-616W44-4S-150
6	6-4	Jack	14.9	18.3	13.7	H9009-ND*	2.08	17.28	128.00	TM1RV-623K64-35S-150
7	6-4	Jack	12.4	21.4	12.5	H9010-ND*	2.15	17.82	132.00	TM1RV-623P64-35S-150
6	6-6	Jack	14.9	18.3	13.7	H9015-ND*	1.95	16.20	120.00	TM1RV-623K66-35S-150
7	6-6	Jack	12.4	21.4	12.5	H9016-ND*	2.70	22.41	166.00	TM1RV-623P66-35S-150
8	8-8	Jack	16.0	18.4	12.5	H9021-ND*	4.48	39.12	277.10	TM1RV-647AF88-35S150
Receptacles — Panel Mount w/ 6” (152.4mm) Wire Leads (Bezel Included); Color: Brown										
9	6-2	Jack - Panel Mount	14.9	18.3	13.7	H9061-ND	2.31	19.17	142.00	TM2RG-L62-5S-150
9	6-4	Jack - Panel Mount	14.9	18.3	13.7	H9062-ND	2.96	24.57	182.00	TM2RG-L64-5S-150
9	6-6	Jack - Panel Mount	14.9	18.3	13.7	H9063-ND	2.89	25.20	178.50	TM2RG-L66-5S-150
Receptacles — Jack P.C. Board Mount; Color: Gray										
10	4-4	Jack - PC Mount	20.0	11.0	10.5	H9031-ND	1.85	15.39	114.00	TM5RF-44
10	6-4	Jack - PC Mount	24.6	13.0	14.0	H9032-ND	2.41	19.98	148.00	TM5RF-64
10	6-6	Jack - PC Mount	24.6	13.0	14.0	H9033-ND	2.34	19.44	144.00	TM5RF-66
11	4-4	Jack - PC Mount	18.0	18.6	14.3	H9041-ND	1.82	15.12	112.00	TM5RC-44
11	6-4	Jack - PC Mount	18.0	21.1	14.3	H9042-ND	1.92	15.93	118.00	TM5RC-64
11	6-6	Jack - PC Mount	18.0	21.1	14.3	H9043-ND	2.11	17.55	130.00	TM5RC-66(01)
12	8-8	Jack - PC Mount	18.1	21.2	17.5	H9044-ND	2.81	24.48	173.40	TM5RC-88
13	4-4	Jack - PC Mount	12.8	14.0	14.0	H9081-ND	1.69	14.04	104.00	TM5RJ3-44
13	6-4	Jack - PC Mount	14.8	14.0	14.0	H9082-ND	1.95	16.20	120.00	TM5RJ1-64
13	6-6	Jack - PC Mount	14.8	14.0	14.0	H9083-ND	2.24	18.63	138.00	TM5RJ1-66
13	8-8	Jack (Keyed)	19.2	14.0	16.0	H9084-ND	3.09	25.65	190.00	TM5RJ1-88
14	8-8	Receptacle (Keyed)	19.2	14.0	16.0	H9085-ND	2.89	24.03	178.00	TM5RJ-88
14	6-4	Jack - PC Mount	14.8	14.0	14.0	H9126-ND	1.98	16.47	122.00	TM5RJ2-64
14	6-6	Jack - PC Mount	14.8	14.0	14.0	H9127-ND	2.34	19.44	144.00	TM5RJ2-66
14	8-8	Jack (Keyed)	18.6	14.0	14.0	H9128-ND	3.19	27.84	197.20	TM5RJ2-88
17	6-2	Jack - PC Mount	13.0	14.5	18.0	H9122-ND	1.59	13.23	98.00	TM5RE1-62(50)
17	4-4	Jack - PC Mount	13.0	14.5	18.0	H9123-ND	2.08	17.28	128.00	TM5RE1-44
17	6-4	Jack - PC Mount	15.0	14.5	18.0	H9124-ND	2.11	17.55	130.00	TM5RE1-64
18	6-6	Jack - PC Mount	15.0	14.5	18.0	H9125-ND	2.47	20.52	152.00	TM5RE1-66
Receptacles — Top Entry P.C. Board Mount; Color: White										
15	4-4	Jack - Low Profile	12.9	18.3	15.0	H9071-ND	2.11	17.55	130.00	TM3RA-44
15	6-4	Jack - Low Profile	14.9	18.3	15.0	H9072-ND	2.11	17.55	130.00	TM3RA-64
15	6-6	Jack - Low Profile	14.9	18.3	15.0	H9073-ND	2.34	19.44	144.00	TM3RA-66
16	8-8	Jack - Low Profile	16.9	18.3	15.0	H9074-ND	2.81	24.48	173.40	TM3RA-88
Receptacles — P.C. Board Mount With Tin Hold-Down Tabs; Color: Gray										
10	4-4	PC Mount	20.0	11.0	10.5	H9034-ND	2.08	17.28	128.00	TM5RF1-44
19	6-2	PC Mount	18.0	15.4	16.0	H9064-ND	2.76	22.95	170.00	TM2REA-0602
19	6-4	PC Mount	18.0	15.4	16.0	H9057-ND	3.12	25.92	192.00	TM2REA-0604
19	6-6	PC Mount	18.0	15.4	16.0	H9058-ND	2.92	25.44	180.20	TM2REA-0606
20	2 x 6-2	PC Mount	28.2	15.4	16.0	H9051-ND	3.08	26.88	190.40	TM2REA-1204
20	2 x 6-4	PC Mount	28.2	15.4	16.0	H9052-ND	3.69	32.16	227.80	TM2REA-1208
20	2 x 6-6	PC Mount	28.2	15.4	16.0	H9065-ND	4.48	39.12	277.10	TM2REA-1212

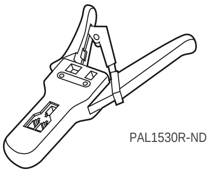
* 50µ Gold Plating

Fig.	Positions-Contacts	Description	Dimensions (mm)			Digi-Key Part No.	Pricing			Hirose Part No.
			W	H	D		1	10	100	
21	3 x 6-2	PC Mount	39.2	15.4	16.0	H9053-ND	3.77	32.88	232.90	TM2REA-1806
21	3 x 6-4	PC Mount	39.2	15.4	16.0	H9054-ND	4.70	41.04	290.70	TM2REA-1812
21	3 x 6-6	PC Mount	39.2	15.4	16.0	H9066-ND	5.91	51.60	365.50	TM2REA-1818
22	4 x 6-2	PC Mount	50.2	15.4	16.0	H9055-ND	4.37	38.16	270.30	TM2REA-2408
22	4 x 6-4	PC Mount	50.2	15.4	16.0	H9056-ND	6.13	53.52	379.10	TM2REA-2416
22	4 x 6-6	PC Mount	50.2	15.4	16.0	H9059-ND	7.33	64.46	483.45	TM2REA-2424
23	6-2	PC Top Entry	17.2	16.0	15.4	H9110-ND	2.80	23.22	172.00	TM2RE-0602
23	6-4	PC Top Entry	17.2	16.0	15.4	H9111-ND	3.02	25.11	186.00	TM2RE-0604
23	6-6	PC Top Entry	17.2	16.0	15.4	H9112-ND	3.22	26.73	198.00	TM2RE-0606
24	2 x 6-2	PC Top Entry	28.2	16.0	15.4	H9113-ND	3.00	26.16	185.30	TM2RE-1204
24	2 x 6-4	PC Top Entry	28.2	16.0	15.4	H9114-ND	3.82	33.36	236.30	TM2RE-1208
24	2 x 6-6	PC Top Entry	28.2	16.0	15.4	H9115-ND	4.70	41.04	290.70	TM2RE-1212
25	3 x 6-2	PC Top Entry	39.2	16.0	15.4	H9116-ND	3.60	31.44	222.70	TM2RE-1806
25	3 x 6-4	PC Top Entry	39.2	16.0	15.4	H9117-ND	4.79	41.76	295.80	TM2RE-1812
25	3 x 6-6	PC Top Entry	39.2	16.0	15.4	H9118-ND	6.08	53.04	375.70	TM2RE-1818
26	4 x 6-2	PC Top Entry	50.2	16.0	15.4	H9119-ND	4.70	41.04	290.70	TM2RE-2408
26	4 x 6-4	PC Top Entry	50.2	16.0	15.4	H9120-ND	6.44	56.16	397.80	TM2RE-2416
26	4 x 6-6	PC Top Entry	50.2	16.0	15.4	H9121-ND	6.58	57.86	433.95	TM2RE-2424
27	8 x 6-6	Side Entry 8 x 6-6	93.0	14.0	14.0	H9086-ND	11.76	102.90	784.00	TM5RJ1-4848
28	3 x 8-8	3 x 8-8	43.3	14.0	14.7	H9075-ND	7.78	68.42	513.15	TM5RSA-2424
28	—	3 x (1) 8-8, (2) 6-6	30.0	14.0	13.5	H9076-ND	7.03	61.82	463.65	TM5RQ-2020
29	—	2 x (1) 8-8, (1) 6-6	28.0	14.0	13.5	H9077-ND	6.11	53.28	377.40	TM5RQ-1414
30	2 x 6-2	Jack w/ Power Plug	35	15	13.7	H9129-ND	2.75	24.00	170.00	TM5RT-1204PWJ
30	2 x 6-2	Jack w/ Power Plug	35	15	13.7	H9130-ND	2.75	24.00	170.00	TM5RT1-1204PWJ
31	6-2	Jack w/ Power Plug	24	15	13.7	H9131-ND	2.76	22.95	170.00	TM5RT-62PWJ
31	6-2	Jack w/ Power Plug	24	15	13.7	H9132-ND	2.76	22.95	170.00	TM5RT1-62PWJ
31	6-4	Jack w/ Power Plug	24	15	13.7	H9133-ND	3.03	26.40	187.00	TM5RT1-64PWJ
31	6-6	Jack w/ Power Plug	24	15	13.7	H9134-ND	3.16	27.60	195.50	TM5RT1-66PWJ
32	4-4	Jack Top Entry SMT	13	17	12.5	H9135-ND	2.31	19.17	142.00	TM15R-44(30)
32	6-4	Jack Top Entry SMT	14	17	12.5	H9136-ND	2.63	21.87	162.00	TM15R-64(30)
33	8-8	Receptacle	14	11.7	17	H9138-ND	3.16	27.60	195.50	TM5RL-88
34	4 x 8-8	Receptacle	56	11.7	17	H9139-ND	7.88	69.30	519.75	TM5RL-3232
35	8-8	Wire Lead Jack 12” (30.48cm)	24	20	15	H9140-ND	6.60	58.08	435.60	TM11R-88-35S-300
36	8-8	Adapter Plug to Plug	18.6	17	37.5	H9141-ND	11.05	97.31	815.30	TM5RL-88-JJ

Weidmüller
Paladin Tools

Crimp Tools

• Fully Ratcheting Cycle • Adjustable Crimp Tension • Hardened Dies for Long Life • Crimp 4, 6, & 8 Position • Cuts and Strips Cable • RJ45, RJ11



PAL1530R-ND

Description	Digi-Key Part No.	Price Each
Modular Crimp Tool	PAL1530R-ND	124.58
Replacement Blade Set (for 1530R)	PAL2530-ND	9.85

Modular Connectors and Jacks

PRODUCT FACTS: • Meets or exceeds FCC Part 68 rules and regulations; REA PE-76; and UL 1863, Communication Circuit Accessories • Meets 1000 volt dielectric requirement • Designed for direct mounting on pc boards • Designed for ease of soldering and board cleaning • Selectively gold plated contacts for lower cost • Surface mount jacks compatible with vapor phase environment • All jacks are flame retardant polyester, standard color black, unless specified otherwise • Listed by Underwriters Laboratories Inc., File No. E81956 • Certified by Canadian Standards Association File No. LR82669

ELECTRICAL SPECIFICATIONS: • Current Rating – 1.5 amp max. @ 25°C, derated to 0.2 amp max. @ 70°C ambient • Voltage Rating – 150 volts ac max. • Dielectric Withstanding Voltage – 1000 VAC, RMS, 60 Hz, 1 min. • Insulation Resistance – 500 megaohms min. • Surge Test – to 1000 volts **MECHANICAL SPECIFICATIONS:** • PC Board Retention – will not dislodge from pc board when subjected to 1 lb. (4.4 N) pull before soldering and 10 lbs. (44 N) pull after soldering • Durability – 750 mating cycles **MATERIAL AND FINISH:** • Housing – Thru-hole: Polyester, UL 94V-0 rated surface mount: Polyphenylene Sulfide, UL 94V-0 rated • Contact – .014 (0.36) thick phosphor bronze; plated .50µ gold in contact area and 150µ tin-lead on solder tails, over .50µ nickel underplate

FIG. 2 PRODUCT FACTS: • True mass displacement termination of jacketed cable with tinsel, solid or stranded conductors • Available for round or flat-oval cable • One piece construction with preloaded contacts • FCC and EIA/TIA industry standard size and performance • Selectively gold plated terminals • Recognized by Underwriters Laboratories Inc., File No. E81956 • Certified by Canadian Standards Association Certificate No. LR 7189A

MATERIAL AND FINISH: • Housing: Polycarbonate, UL 94V-2 flammability rating • Terminal: .014 (.36) thick, phosphor bronze; underplated with 100 µin nickel and plated with 50 µin gold in contact region and gold flash on remainder of terminal **ELECTRICAL SPECIFICATIONS:** • Applications: 150 VAC max. at 1.5 A @ 25°C, derated to .2 A @ 70°C • Dielectric Withstanding Voltage: 1000 Volts AC • Insulation Resistance: 500 Megaohms. **MECHANICAL SPECIFICATIONS:** • Cable-to-Plug Tensile Strength: 17 lbs (76N) min. • Durability: 750 mating cycles

EXTERNAL STRAIN RELIEF: • Positively engaged to the plug housing • Improved shield contact path redundant contact points • 360° wrap on cable jacket and shield foil, extraordinary strain relief • Improved shield coverage at housing

FIG. 9 PRODUCT FACTS: • Performance exceeds Near End Crosstalk (NEXT) requirements of -40dB at 100 MHz per EIA/TIA 568A • Available in single port or multiple port configurations, shielded or unshielded • Eliminate need for customized printed circuit board compensation to achieve high performance

MATERIAL AND FINISH: • Housing: Polyester, black UL 94V-0 rated • Contact: Phosphor bronze, gold over nickel plated in contact area, tin-lead over nickel in solder area • Shield: Brass, bright tin-lead plated **SPECIFICATIONS:** • Current: 1.5 amp max. @ 25°C • Voltage: 150 VAC maximum • Operating Temperature: -40°C to 70°C • Mating/Unmating Forces: 5 pounds maximum

Fig. 1

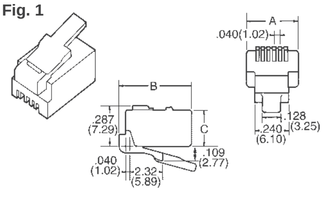


Fig. 2

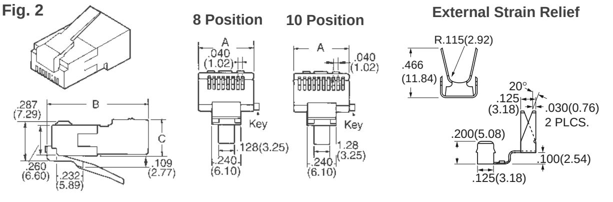


Fig. 3

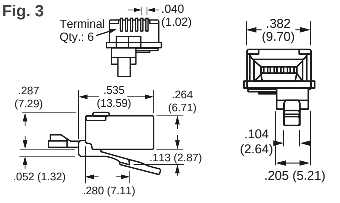


Fig. 4 – Side Entry

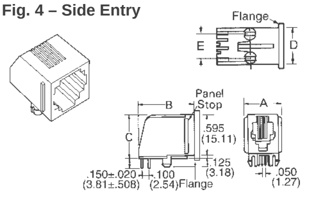


Fig. 5 – Top Entry

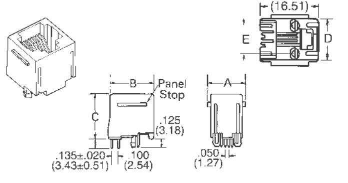


Fig. 6 – Side Entry, Low Profile

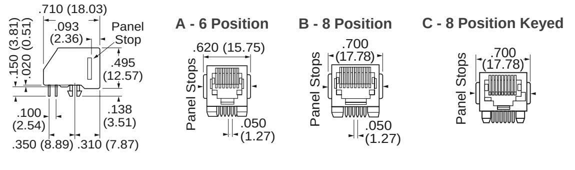


Fig.	Description	Positions Contacts	Dimensions - Inch (mm) A	B	C	D	E	Digi-Key Part No.	Price Each 1	25	AMP Part No.
1	Plug, Handset, Stranded, Flat Oval	4-4	.300 (7.62)	.525 (13.33)	.260 (6.60)	—	—	A9091-ND	.30	.29	5-641334-3
	Plug, Stranded, Flat Oval	6-4	.380 (9.65)	.525 (13.33)	.260 (6.60)	—	—	A9092-ND	.30	.29	5-641335-3
	Plug, Solid, Flat Oval	6-4	.380 (9.65)	.525 (13.33)	.260 (6.60)	—	—	A9116-ND	.38	.31	5-556384-3
	Plug, Stranded, Flat Oval	6-6	.380 (9.65)	.525 (13.33)	.260 (6.60)	—	—	A9093-ND	.36	.33	5-641337-3
	Plug, Solid, Flat Oval	6-6	.380 (9.65)	.900 (22.86)	.325 (8.25)	—	—	A9118-ND	.38	.31	5-555042-3
	Plug, Stranded, Round	6-6	.380 (9.65)	.900 (22.86)	.325 (8.25)	—	—	A9117-ND	.31	.26	5-554710-3
	Plug, Small Solid, Flat Oval	6-6	.380 (9.65)	.900 (22.86)	.325 (8.25)	—	—	A9119-ND	.58	.47	5-557970-3
	Plug, Long Body, Solid, Flat Oval	6-6	.380 (9.65)	.900 (22.86)	.325 (8.25)	—	—	A9120-ND	.78	.63	5-555426-3
	Plug, Stranded, Flat Oval, Long	6-6	.380 (9.65)	.900 (22.86)	.325 (8.25)	—	—	A9121-ND	.72	.58	5-555176-3
	Plug, Stranded, Round Long	6-6	.380 (9.65)	.900 (22.86)	.325 (8.25)	—	—	A9122-ND	.72	.58	5-555177-3
	Plug, Stranded, Shielded, Round Long	6-6	.380 (9.65)	.900 (22.86)	.325 (8.25)	—	—	A9128-ND	1.84	1.48	5-555175-3
	Plug, Shielded, Long Body, Oval	6-6	.380 (9.65)	.900 (22.86)	.325 (8.25)	—	—	A9027-ND	1.84	1.68	5-555174-2
	Plug, Stranded, Flat Oval	6-2	.384 (9.76)	.530 (13.47)	.264 (6.71)	—	—	A24921-ND	.27	.22	5-641333-2
	Plug, Solid, Flat Oval, Small	6-4	.384 (9.76)	.530 (13.47)	.264 (6.71)	—	—	A24922-ND†	.74	.60	5-557965-2
2	Plug, Stranded, Flat Oval	8-8	.460 (11.68)	.845(21.46)	.312 (7.92)	—	—	A9094-ND	.69	.66	5-554739-3
	Plug, Keyed, Stranded, Flat Oval	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A9058-ND	.54	.44	5-554743-3
	Plug, Solid, Flat Oval	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A9126-ND	.58	.47	5-554720-3
	Plug, Solid, Round	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A9123-ND	.58	.47	5-557315-3
	Plug, Stranded, Round	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A9125-ND	.54	.44	5-554169-3
	Plug, Stranded, Small, Round, Cable	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A24923-ND	.38	.31	5-557961-2
	Plug, Solid, Round, Keyed	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A9127-ND	.54	.44	5-554170-3
	Plug, High Performance, Stranded, Round	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A9059-ND	.80	.64	5-558530-3
	Plug, Stranded, Shielded, High Performance, Round	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A9111-ND	1.93	1.55	5-569552-3
	Plug, Solid, Shielded, High Performance, Round	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A9112-ND	2.07	1.66	5-569550-3
	Plug, Solid, Unshielded, High Performance	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A24920-ND	.86	.69	5-569278-3
	Plug, Solid, Flat Oval, Small	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A24924-ND†	.58	.47	5-557972-2
	Plug, Stranded, Flat Oval, Small	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A24925-ND†	.60	.48	5-557973-3
	Plug, Solid Keyed, Flat Oval	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A24926-ND	1.35	1.08	5-555417-2
	Plug, Stranded, Shielded, Flat Oval	8-8	.464 (11.79)	.915(23.24)	.330 (8.38)	—	—	A9113-ND	1.84	1.48	5-569542-3
	Plug, Stranded, Shielded, Round Long	8-8	.464 (11.79)	.915(23.24)	.330 (8.38)	—	—	A9114-ND	1.84	1.48	5-569532-3
	Plug, Solid, Shielded, Round	8-8	.464 (11.79)	.915(23.24)	.330 (8.38)	—	—	A9115-ND	1.84	1.48	5-569530-3
	Plug, Stranded, Round	10-10	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A9129-ND	1.56	1.25	5-557963-3
	External Strain Relief Modular Connector	—	—	—	—	—	—	A9130-ND	—	.72	558527-1
	Crimp Tool Assembly, External Strain Relief	—	—	—	—	—	—	A9800-ND	192.75	—	224928-1
	Die Set, Strain Relief Modular, use with A9996	—	—	—	—	—	—	A9801-ND	140.25	—	224928-2
	Pro-Crimper II Hand Tool Without Die	—	—	—	—	—	—	A9996-ND	75.00	—	354940-1
3	Plug With Offset Latch	6-6	.382 (9.70)	.535 (13.59)	.264 (6.71)	—	—	A9057-ND	.81	.65	5-555237-2
	Plug, Round, Stranded, Offset	6-6	.382 (9.70)	.535 (13.59)	.264 (6.71)	—	—	A24918-ND	.70	.57	5-555238-2
	Plug, Flat Oval, Solid, Offset	6-6	.382 (9.70)	.535 (13.59)	.264 (6.71)	—	—	A24919-ND	.70	.57	5-555236-2
4	Jack, Side Entry With Panel Stops	4-4	.540 (13.72)	.810 (20.57)	.630 (16.00)	.440 (11.18)	.300 (7.62)	A9041-ND	1.09	1.03	520249-2
	Jack, Side Entry With Panel Stops	6-2	.620 (15.75)	.815 (20.70)	.630 (16.00)	.520 (13.21)	.400 (10.16)	A9082-ND	.65	.52	520250-1
	Jack, Side Entry With Panel Stops	6-4	.620 (15.75)	.815 (20.70)	.630 (16.00)	.520 (13.21)	.400 (10.16)	A9042-ND	.67	.61	520250-2
	Jack, Side Entry With Panel Stops	6-6	.620 (15.75)	.815 (20.70)	.630 (16.00)	.520 (13.21)	.400 (10.16)	A9043-ND	.69	.63	520250-3
	Jack, Side Entry With Panel Stops	8-8	.700 (17.78)	.810 (20.57)	.630 (16.00)	.600 (15.24)	.450 (11.43)	A9044-ND	.70	.65	520251-4
	Jack, Side Entry With Panel Stops, Keyed	8-8	.700 (17.78)	.810 (20.57)	.630 (16.00)	.600 (15.24)	.450 (11.43)	A9046-ND	.71	.57	520252-4
	Jack, Side Entry With Flange	4-4	.570 (14.48)	.810 (20.57)	.680 (17.27)	.440 (11.18)	.300 (7.62)	A9077-ND	.85	.69	520241-2
	Jack, Side Entry With Flange	6-4	.650 (16.51)	.810 (20.57)	.680 (17.27)	.520 (13.21)	.400 (10.16)	A9078-ND	1.82	1.46	520242-2
	Jack, Side Entry With Flange	6-6	.650 (16.51)	.810 (20.57)	.680 (17.27)	.520 (13.21)	.400 (10.16)	A9079-ND	.67	.54	520242-3
	Jack, Side Entry With Flange	8-8	.730 (18.54)	.810 (20.57)	.680 (17.27)	.600 (15.24)	.450 (11.43)	A9080-ND	1.31	1.06	520243-4
	Jack Without Panel Stops and Flange	4-4	.440 (11.18)	.810 (20.57)	.630 (16.00)	—	.300 (7.62)	A9047-ND	.67	.54	555980-1
	Jack Without Panel Stops and Flange	6-4	.520 (13.21)	.810 (20.57)	.630 (16.00)	—	.400 (10.16)	A9048-ND	.68	.61	555979-1
	Jack Without Panel Stops and Flange	6-6	.520 (13.21)	.815 (20.70)	.630 (16.00)	—	.400 (10.16)	A9049-ND	.72	.58	520470-3
	Jack Without Panel Stops and Flange	8-8	.600 (15.24)	.810 (20.57)	.630 (16.00)	—	.450 (11.43)	A9050-ND	.76	.61	520426-4
	Jack Without Panel Stops and Flange, Keyed	8-8	.600 (15.24)	.810 (20.57)	.630 (16.00)	—	.450 (11.43)	A9051-ND	1.46	1.18	554517-1

(Continued)

Fig. 7

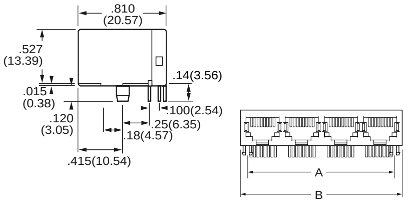


Fig. 8

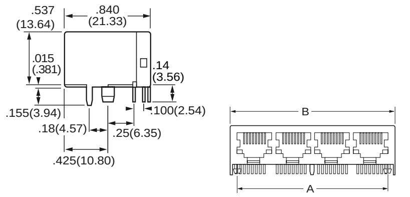


Fig. 9 – Side Entry with Panel Stops

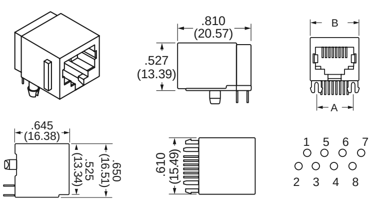


Fig. 10 – Modular Jack

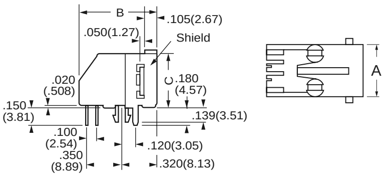


Fig. 11 – Surface Mount

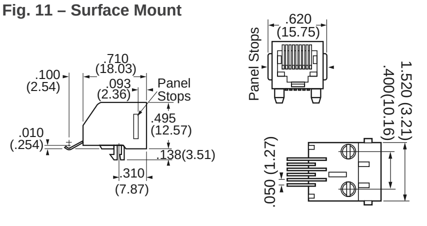


Fig. 12 – Surface Mount

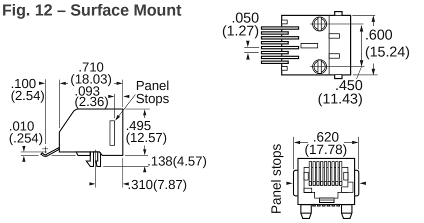


Fig.	Description	Positions Contacts	Dimensions - Inch (mm) A	B	C	D	E	Digi-Key Part No.	Price Each 1	25	AMP Part No.
5	Jack With Stops	4-4	.550 (13.97)	.625 (15.88)	.645 (16.38)	.450 (11.43)	—	A9071-ND	.63	.57	520257-2
	Jack With Stops	6-4	.630 (16.00)	.625 (15.88)	.645 (16.38)	.530 (13.46)	—	A9072-ND	.67	.61	520258-2
	Jack With Panel Stops	6-6	.630 (16.00)	.625 (15.88)	.645 (16.38)	.530 (13.46)	—	A9073-ND	.69	.63	520258-3
	Jack With Stops	8-8	.710 (18.03)	.625 (15.88)	.645 (16.38)	.610 (15.49)	—	A9074-ND	.70	.65	520259-4
	Jack With Stops, Keyed	8-8	.710 (18.03)	.625 (15.88)	.645 (16.38)	.610 (15.49)	—	A9052-ND	.71	.57	520260-4
	Jack, Top Entry Without Stops	4-4	.455 (11.43)	.630 (16.00)	.650 (16.51)	—	.300 (7.62)	A24915-ND	.63	.51	558872-1
	Jack, Top Entry Without Stops	6-4	.530 (13.46)	.625 (15.88)	.645 (16.38)	—	.400 (10.16)	A9083-ND	1.19	.96	520425-2
	Jack, Top Entry Without Stops	6-6	.530 (13.46)	.625 (15.88)	.645 (16.38)	—	.400 (10.16)	A9084-ND	.70	.63	520425-3
	Jack, Top Entry Without Stops	8-8	.615 (15.62)	.630 (16.00)	.645 (16.38)	—	.450 (11.43)	A9085-ND	.72	.65	556416-1
	Jack, Top Entry Without Stops, Keyed	8-8	.615 (15.62)	.630 (16.00)	.645 (16.38)	—	.450 (11.43)	A9086-ND	.96	.78	555799-1
	Jack, Top Entry With Stops, Shielded	8-8	.710 (18.03)	.625 (15.88)	.645 (16.38)	.610 (15.49)	.450 (11.43)	A9087-ND	1.08	.87	557969-1
	Jack, Top Entry With Stops, Shielded, Keyed	8-8	.715 (18.17)	.660 (16.77)	.660 (16.77)	.650 (16.51)	.450 (11.43)	A24916-ND	1.08	.87	557730-1
6A	Jack With Stops	6-6	—	—	—	—	—	A9010-ND	.91	.86	555163-1
6A	Jack With Stops	6-4	—	—	—	—	—	A9011-ND	1.51	1.42	555163-2
6B	Jack With Stops	8-8	—	—	—	—	—	A9012-ND	.96	.91	555162-1
6C	Jack With Stops, Keyed	8-8	—	—	—	—	—	A9034-ND	.80	.72	555166-1
6A	Jack Without Stops	6-6	—	—	—	—	—	A9031-ND	.74	.66	555165-1
6A	Jack Without Stops	6-4	—	—	—	—	—	A9032-ND	.72	.65	555165-2
6A	Jack Without Stops	6-2	—	—	—	—	—	A24907-ND	.91	.86	555165-5
6A	Jack Without Stops	6-6	—	—	—	—	—	A24908-ND	1.07	1.01	569026-1
6B	Jack Without Stops	8-8	—	—	—	—	—	A9033-ND	.80	.72	555164-1
6B	Jack Without Stops, Keyed	8-6	—	—	—	—	—	A24909-ND	1.16	1.09	569118-1
6C	Jack Without Stops, Keyed	8-8	—	—	—	—	—	A9035-ND	.80	.72	555167-1
7	Jack, 2 Position, Unshielded	8-8	1.00 (25.40)	1.200 (30.48)	—	—	—	A9013-ND	1.68	1.17	557560-1
	Jack, 3 Position, Unshielded	8-8	1.550 (39.37)	1.750 (44.45)	—	—	—	A9014-ND	2.53	1.76	557561-1
	Jack, 4 Position, Unshielded	8-8	2.100 (53.34)	2.300 (58.42)	—	—	—	A9015-ND	3.36	2.34	557562-1
	Jack, 5 Position, Unshielded	8-8	2.650 (67.31)	2.850 (72.39)	—	—	—	A9016-ND	4.19	2.92	557563-1
	Jack, 6 Position, Unshielded	8-8	3.200 (81.28)	3.400 (86.36)	—	—	—	A9017-ND	5.04	3.51	557564-1
	Jack, 8 Position, Unshielded	8-8	4.300 (109.22)	4.500 (114.30)	—	—	—	A9019-ND	6.72	4.68	557566-1
	Jack, 1 Position, Unshielded	8-8	.450 (11.43)	.595 (15.11)	—	—	—	A9063-ND	1.18	.94	557785-1
	Jack, 1 Position, Unshielded	10-10	.450 (11.43)	.595 (15.11)	—	—	—	A9064-ND	2.01	1.61	558065-1
	Jack, 1 Position, Unshielded, Keyed	10-10	.450 (11.43)	.595 (15.11)	—	—	—	A9065-ND	2.51	2.01	558066-1
8	Jack, 6 Position, Shielded, PCB Ground	8-8	3.200 (81.28)	3.430 (87.12)	—	—	—	A9022-ND	6.51	4.53	557572-1
	Jack, 10 Position, Shielded, Keyed, PCB Ground	8-8	.450 (11.43)	.625(15.88)	—	—	—	A9132-ND	3.99	3.20	558068-1
	Jack, 1 Position, Shielded, PCB Ground	10-10	.450 (11.43)	.625(15.88)	—	—	—	A9067-ND	3.19	2.56	558067-1
	Jack, 1 Position, Shielded, Panel Ground	10-10	.450 (11.43)	.625(15.88)	—	—	—	A9068-ND	3.99	3.20	558070-1
	Jack, 6 Position, Shielded, Panel Ground	8-8	3.20 (81.28)	3.43 (87.12)	—	—	—	A9075-ND	8.13	7.28	557572-3
	Jack, 8 Position, Shielded, Panel Ground	8-8	4.30 (109.22)	4.53 (115.06)	—	—	—	A9076-ND	10.34	9.26	557573-2
9	Jack, 1 Position, Unshielded With Panel Stops	8-8	.625 (15.88)	.840 (21.34)	.537 (13.64)	—	—	A9088-ND	2.45	1.96	558343-1
	Jack, 1 Position, Unshielded Without Panel Stops	8-8	.625 (15.88)	.840 (21.34)	.537 (13.64)	—	—	A9089-ND	1.65	1.32	558341-1
	Jack, 4 Position, Unshielded Without Panel Stops	8-8	2.3 (58.42)	.810 (20.57)	.527 (13.39)	—	—	A9096-ND	7.98	6.38	558500-1
	Jack, 6 Position, Unshielded Without Panel Stops	8-8	3.40 (86.36)	.810 (20.57)	.527 (13.39)	—	—	A9099-ND	9.20	7.36	558501-1
	Jack, 8 Position, Unshielded Without Panel Stops	8-8	4.50 (114.30)	.810 (20.57)	.527 (13.39)	—	—	A9102-ND	12.33	9.86	558502-1
	Jack, 1 Position, Shielded, PC Ground	8-8	.625 (15.875)	.840 (21.34)	.537 (13.64)	—	—	A9090-ND	2.01	1.62	558342-1
	Jack, 1 Position, Shielded, Panel Ground	8-8	.625 (15.875)	.840 (21.34)	.537 (13.64)	—	—	A9095-ND	2.58	2.06	558344-1
	Jack, 4 Position, Shielded, PC Ground	8-8	2.33 (59.18)	.840 (21.34)	.537 (13.64)	—	—	A9097-ND	9.93	7.94	558503-1
	Jack, 4 Position, Shielded, Panel Ground	8-8	2.33 (59.18)	.840 (21.34)	.537 (13.64)	—	—	A9098-ND	9.93	7.94	558524-1
	Jack, 6 Position, Shielded, PC Ground	8-8	3.43 (87.12)	.840 (21.34)	.537 (13.64)	—	—	A9100-ND	9.38	7.50	558504-1
	Jack, 6 Position, Shielded, Panel Ground	8-8	3.40 (86.36)	.810 (20.57)	.527 (13.39)	—	—	A9101-ND	11.43	9.14	558525-1
	Jack, 8 Position, Shielded, PC Ground	8-8	4.53 (115.06)	.840 (21.34)	.537 (13.64)	—	—	A9103-ND	11.95	9.56	558505-1
	Jack, 8 Position, Shielded, Panel Ground	8-8	4.53 (115.06)	.840 (21.34)	.537 (13.64)	—	—	A9104-ND	15.23	12.18	558526-1
10	Jack, PC Ground	6-6	.537 (13.64)	.720 (18.29)	.495 (12.57)	—	—	A9024-ND	1.06	.97	555154-1
	Jack, PC Ground	6-4	.537 (13.64)	.720 (18.29)	.495 (12.57)	—	—	A9025-ND	.87	.61	555154-2
	Jack, PC Ground	8-8	.625 (15.88)	.720 (18.29)	.495 (12.57)	—	—	A9026-ND	1.14	1.04	555153-1
	Jack, PC Ground, Keyed	8-8	.625 (15.88)	.720 (18.29)	.495 (12.57)	—	—	A9056-ND	1.15	.93	556591-1
	Jack, Panel Ground	6-6	.545 (13.84)	.720 (18.29)	.495 (12.57)	—	—	A9053-ND	.98	.78	555140-1
	Jack, Panel Ground	6-4	.545 (13.84)	.720 (18.29)	.495 (12.57)	—	—	A9054-ND	.98	.78	555140-2
	Jack, Panel Ground	8-8	.625 (15.88)	.720 (18.29)	.495 (12.57)	—	—	A9055-ND	1.15	1.04	555141-1
11	Jack With Stops	6-6	—	—	—	—	—	A9036-ND	1.32	1.06	555077-1
	Jack With Stops	6-4	—	—	—	—	—	A9037-ND	1.31	1.05	555077-2
	Jack Without Stops	6-6	—	—	—	—	—	A24910-ND	1.32	1.06	557314-1
12	Jack, 8 Position With Stops	8-8	—	—	—	—	—	A9039-ND	1.40	1.13	555248-1
	Jack, 8 Position With Stops, Keyed	8-8	—	—	—	—	—	A9038-ND	1.75	1.41	555078-1
	Jack, 8 Position Without Stops	8-8	—	—	—	—	—	A9045-ND	1.40	1.13	555764-1
	Jack, 8 Position With Stops, Keyed, Shielded	8-8	—	—	—	—	—	A9131-ND	1.90	1.52	558178-1

† Small conductor products are for .029 - .034 (.737 - .864) OD conductors. Small conductor product housings are tinted blue to differentiate from standard product.

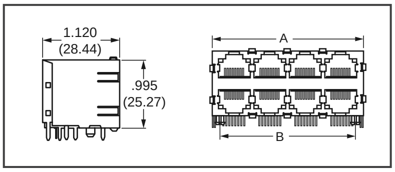
Stacked Modular Jacks

Housing: Polysulfone, black, UL 94V-0 rated

Contact: .013 (0.33) phosphor bronze; plated .000050 (0.00127) gold in localized area and .00150 (0.00381) tin-lead on solder tails, over .000050 (0.00127) nickel underplate

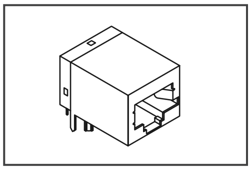
Shield: .010 (0.25) copper alloy tin-lead plated

Terminals per port: 8 X 8



Description	Ports Terminals	Dimensions – Inch (mm) A	B	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Shielded With Panel Ground							
2x1 Ports	2-8	.68 (17.27)	.45 (11.43)	A24917-ND	7.48	5.98	569381-1
2x3 Ports	6-8	1.78 (45.21)	1.55 (39.37)	A24189-ND	14.20	11.36	569261-1
2x4 Ports	8-8	2.33 (59.18)	2.10 (53.34)	A24911-ND	11.53	9.22	569262-1
2x6 Ports	12-8	3.43 (87.12)	3.20 (81.28)	A24912-ND	13.98	11.18	569263-1
2x8 Ports	16-8	4.53 (115.06)	4.30 (109.22)	A24913-ND	22.05	17.64	569264-1

Modular Jack with Shorting Bar



Housing:

Polysulfone, black, UL 94V-0 rated

Contact:

.013 (0.33) phosphor bronze; plated .000050 (0.00127) gold in localized area and .00150 (0.00381) tin-lead on solder tails, over .000050 (0.00127) nickel underplate

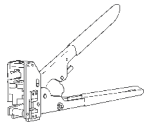
Shield:

.010 (0.25) copper Alloy tin-lead plated

Description	No. of Positions	Shorting Configurations	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Shielded PCB Ground Jack						
8-Position RJ-48-X Shorting	8	1 to 4 & 2 to 5	A24914-ND	6.55	5.24	557789-1

Modular Crimp Tooling:

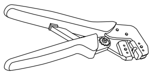
Now with one efficient tool you can cut, strip, crimp and terminate modular plug connectors. Features include: color-coded dies, a cable jacket stripper, smooth ratcheting action to assure positive connector termination and spring-actuated and cushioned handles for fatigue-free use. Available as entire crimping tool, or dies may be purchased separately. Overall size: 7"



Pro-Crimper II Hand Tool:

Ratchet control provides complete termination cycle Interchangeable die sets. Easily adjustable contact insertion height.

Hand Tool Kit:



Contents included: Carrying case with frame; RJ-11 (4-&-6) RJ-45 (8)-Position die sets, blade replacement kit and small screwdriver.

A9040-ND Production Tool Kit **$178.39**

Production Tool Kit:

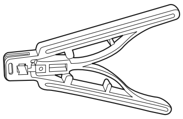
Carry case with frame; 4-Position handset, RJ-11 (4-&-6) RJ-45 (8)-Position die sets, blade replacements kit and small screwdriver.

A9967-ND Production Tool Kit.. **$210.95**

Description	Digi-Key Part No.	Price Each	AMP Part No.
8-Position Crimper w/die	A9900-ND	113.99	2-231652-1
6-Position Crimper w/die	A9901-ND	113.99	2-231652-8
4-Position Crimper w/die	A9902-ND	113.99	1-231652-3
6-Position Hand Tool Long Body	A9029-ND	113.99	2-9231652-7
6-Position Crimp Offset	A9930-ND	113.99	2-231652-6
8-Position High Performance	A9929-ND	113.99	3-231652-0
10-Position, Pro-Crimper II	A9798-ND	201.00	58560-1
Crimp Tool, External Strain Relief	A9800-ND	192.75	224928-1
8-Position Hand Set Only	A9904-ND	38.25	853400-1
6-Position Die Set Only	A9905-ND	38.25	853400-8
4-Position Die Set Only	A9906-ND	38.25	853400-3
6-Position Die Set Long Body	A9030-ND	38.25	853400-7
6-Position Die Set Only, Offset	A9927-ND	38.25	853400-6
8-Position Die Set Only, High Perform.	A9926-ND	38.25	1-853400-0
Die Set, External Strain Relief	A9801-ND	140.25	224928-2
10-Position Die Set Only, Pro-Crimper II (Use with A9996-ND)	A9799-ND	168.00	58560-2
Crimp Tool w/out Dies	A9996-ND	75.00	354940-1
Crimp Tool Mod. Plugs w/out Dies	A9931-ND	83.39	2-231652-0
Replace. Wire Strip. Blade	A9976-ND	34.43	231662-4
Wire Strip. Blade Set	A9928-ND	4.64	231662-5

Modular Plugs Tooling

- Strips & terminates cable
- Lightweight
- Low cost



A9989-ND	Crimp Tool for RJ-11 (2, 4, & 6) Position Modular Plugs	**$24.48**
A9988-ND	Crimp Tool for 4-Position Handset Plugs	**$24.48**

Four Position Data Connector for the IEEE 802.5 Local Area Network

Kit Description:

Connector (top & bottom cover assemblies), stuffer box, ferrule, dust cover, latch lock & strain relief bushings for 45, 90 & 180 degree cable exit.

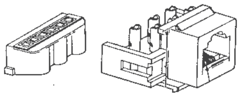
Cableless Balun Kit:

A four position cableless balun kit is available which allows the customer to assemble his own electronic components which are required to convert the balanced twisted-pair cable to unbalanced coaxial cables. This kit contains a single BNC jack receptacle, but will accept a second BNC receptacle which can be ordered separately to provide the dual port version.

Material for A9105 & A9106:

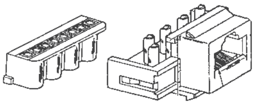
Stuffer Cap: Clear polycarbonate. **AMP-BARREL Terminal:** Tin plated phosphor bronze. **Label:** Adhesive backed polyester. **Contacts:** Nickel plated high strength copper alloy having selective gold plating in contact area and selective tin plating in AMP-BARREL terminal area. **Housing:** Black thermoplastic, 94V-0 rated. **Conductor Type:** Solid or stranded having .048 max. insulation O.D.

Fig. 1 A4004



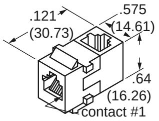
Three Pair Modular Jack (6 Pos.)
IBM Equivalent P/N: 831575

Fig. 2 A4005



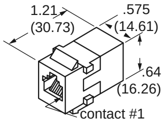
Four Pair Modular Jack (8 Pos.)
IBM Equivalent P/N: 6091030

Fig. 3



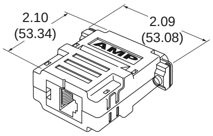
Compact couplers for two modular plugs; couplers snap into 0.585" x 0.765" (14.86mm x 19.43mm) rectangular wallplate cutouts. Wired one-to-one.

Fig. 4



Compact couplers for two modular plugs; couplers snap into 0.585" x 0.765" (14.86mm x 19.43mm) rectangular wallplate cutouts. Wired one-to-one.

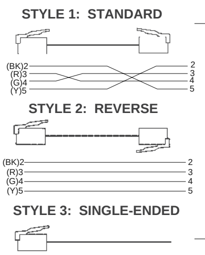
Fig. 5



These versatile connectors convert a 25 position plug or receptacle interface to modular jack interface. Transition Connectors are used most often with data, data-over-voice, and on the dropside or output device side of mainframes, personal or business computers.

Fig.	# of Pos.	Description	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Category 3 Modular Telephone Jack						
1	6	IBM	A4004-ND	6.57	5.88	553983-1
2	8	IBM	A4005-ND	5.01	3.49	554546-1
1	6	Commercial	A9105-ND	5.15	4.12	554171-1
2	8	Commercial	A9106-ND	5.38	4.30	554578-1
Category 3 Panel Mount Coupler						
3	6	Right Angle	A9107-ND	3.88	3.10	555049-1
3	8	Right Angle	A9108-ND	4.13	3.30	555051-1
4	6	In-Line	A9109-ND	3.83	3.06	555050-1
4	8	In-Line	A9110-ND	4.58	4.11	555052-1
RS-232 to Modular Jack						
5	6	DB25P to RJ11 (6-6)	A23462-ND	11.58	10.14	748100-1
5	6	DB25S to RJ11 (6-6)	A23463-ND	34.72	30.38	748152-1
5	8	DB25P to RJ45 (8-8)	A23460-ND	17.76	14.80	747772-1
5	8	DB25S to RJ45 (8-8)	A23461-ND	11.78	10.31	747868-1

IDC Modular Cable Assemblies



H □ □ □ □ - □ □ □ - ND

Wire Type: (Color)
1 = White
2 = Black
3 = Silver Satin

C = Designates Coil Cord

CONNECTOR(S):
44 = 4-Position, 4-Contact (Black on Pin 1)
64 = 6-Position, 4-Contact (Black on Pin 1)
66 = 6-Position, 6-Contact (White on Pin 1)
88 = 8-Position, 8-Contact (Gray on Pin 1)

LENGTH* *(Use "Feet" Only)*
Straight:
07 = 7 Feet (2.13 Meters)
14 = 14 Feet (4.27 Meters)
25 = 25 Feet (7.62 Meters)
Coiled:
05 = 5 Feet (1.52 Meters)
07 = 7 Feet (2.13 Meters)
10 = 10 Feet (3.05 Meters)
14 = 14 Feet (4.27 Meters)
******All cable lengths are ± 1%*

Straight Cable Assembly

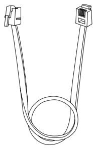
Example: H 1 4 4 1 - 0 7 - ND
Style 1
4-Position 4-Contact
White Wire
7 Feet Long (2.13 Meters)

Coil Cord Assembly

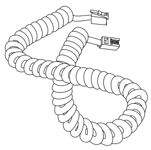
Example: H 1 4 4 1 - 1 0 C - ND
Style 1
4-Position 4-Contact
White Wire
10 Feet Long (3.05 M)
Optimum Extended Length

HOW TO ORDER: 1) You choose your part number simply by substituting the corresponding code to indicate the following: Style, Connector(s), Wire Type, and Length (*in feet – not meters*).

Straight



Coiled



Straight Cable Assemblies

Style	Digi-Key* Part No.	Price Each 1	10	50	100
4-Position, 4-Contact Assemblies					
1	H144□-07-ND	1.98	1.69	1.43	1.22
	H144□-14-ND	2.37	2.02	1.71	1.46
	H144□-25-ND	2.99	2.54	2.15	1.84
2	H244□-07-ND	1.98	1.69	1.43	1.22
	H244□-14-ND	2.37	2.02	1.71	1.46
	H244□-25-ND	2.99	2.54	2.15	1.84
3	H344□-07-ND	1.19	1.01	.86	.73
	H344□-14-ND	1.58	1.34	1.14	.97
	H344□-25-ND	2.19	1.86	1.57	1.35
6-Position, 4-Contact Assemblies					
1	H164□-07-ND	2.62	2.23	1.88	1.61
	H164□-14-ND	3.04	2.59	2.19	1.87
	H164□-25-ND	3.58	3.05	2.57	2.20
2	H264□-07-ND	2.58	2.20	1.86	1.59
	H264□-14-ND	2.97	2.53	2.13	1.83
	H264□-25-ND	3.58	3.05	2.57	2.20
3	H364□-07-ND	1.49	1.27	1.07	.92
	H364□-14-ND	1.87	1.60	1.35	1.15
	H364□-25-ND	2.49	2.12	1.79	1.53
6-Position, 6-Contact Assemblies					
1	H166□-07-ND	3.08	2.62	2.21	1.89
	H166□-14-ND	3.68	3.13	2.64	2.26
	H166□-25-ND	4.63	3.93	3.32	2.84
2	H266□-07-ND	3.08	2.62	2.21	1.89
	H266□-14-ND	3.68	3.13	2.64	2.26
	H266□-25-ND	4.63	3.93	3.32	2.84
3	H366□-07-ND	1.84	1.57	1.32	1.13
	H366□-14-ND	2.44	2.08	1.76	1.50
	H366□-25-ND	3.39	2.88	2.44	2.08
8-Position, 8-Contact Assemblies					
1	H188□-07-ND	4.20	3.57	3.02	2.58
	H188□-14-ND	5.02	4.26	3.60	3.08
	H188□-25-ND	6.30	5.35	4.52	3.87
2	H288□-07-ND	4.20	3.57	3.02	2.58
	H288□-14-ND	5.02	4.26	3.60	3.08
	H288□-25-ND	6.30	5.35	4.52	3.87
3	H388□-07-ND	2.51	2.13	1.80	1.54
	H388□-14-ND	3.32	2.83	2.39	2.04
	H388□-25-ND	4.61	3.92	3.31	2.83

* **1** = White, **2** = Black, **3** = Silver Satin.
Note: Custom length also available — minimum order required.

Coil Cord Assemblies

Style	Digi-Key* Part No.	Price Each 1	10	50	100
4-Position, 4-Contact Assemblies					
1	H144□-05C-ND	3.37	2.87	2.42	2.07
	H144□-07C-ND	3.82	3.25	2.74	2.35
	H144□-10C-ND	4.62	3.92	3.31	2.84
	H144□-14C-ND	6.07	5.16	4.36	3.73
2	H244□-05C-ND	3.37	2.87	2.42	2.07
	H244□-07C-ND	3.82	3.25	2.74	2.35
	H244□-10C-ND	4.62	3.92	3.31	2.84
	H244□-14C-ND	6.07	5.16	4.36	3.73
3	H344□-05C-ND	2.57	2.19	1.85	1.58
	H344□-07C-ND	3.02	2.57	2.17	1.86
	H344□-10C-ND	3.82	3.25	2.74	2.35
	H344□-14C-ND	5.28	4.48	3.79	3.24
6-Position, 4-Contact Assemblies					
1	H164□-05C-ND	3.97	3.37	2.85	2.44
	H164□-07C-ND	4.42	3.76	3.17	2.71
	H164□-10C-ND	5.21	4.43	3.74	3.20
	H164□-14C-ND	6.67	5.67	4.79	4.09
2	H264□-05C-ND	3.97	3.37	2.85	2.44
	H264□-07C-ND	4.42	3.76	3.17	2.71
	H264□-10C-ND	5.21	4.43	3.74	3.20
	H264□-14C-ND	6.67	5.67	4.79	4.09
3	H364□-05C-ND	2.87	2.44	2.06	1.77
	H364□-07C-ND	3.32	2.82	2.39	2.04
	H364□-10C-ND	4.12	3.50	2.96	2.53
	H364□-14C-ND	5.57	4.74	4.00	3.42
6-Position, 6-Contact Assemblies					
1	H166□-05C-ND	4.73	4.02	3.39	2.90
	H166□-07C-ND	5.02	4.27	3.60	3.08
	H166□-10C-ND	6.26	5.32	4.50	3.85
	H166□-14C-ND	7.30	6.20	5.24	4.48
2	H266□-05C-ND	4.73	4.02	3.39	2.90
	H266□-07C-ND	5.02	4.27	3.60	3.08
	H266□-10C-ND	6.26	5.32	4.50	3.85
	H266□-14C-ND	7.30	6.20	5.24	4.48
3	H366□-05C-ND	3.49	2.97	2.51	2.15
	H366□-07C-ND	3.78	3.22	2.72	2.32
	H366□-10C-ND	5.03	4.27	3.61	3.09
	H366□-14C-ND	6.06	5.15	4.35	3.72
8-Position, 8-Contact Assemblies					
1	H188□-05C-ND	7.52	6.39	5.40	4.61
	H188□-07C-ND	7.28	6.19	5.22	4.47
	H188□-10C-ND	9.16	7.78	6.57	5.62
	H188□-14C-ND	9.88	8.39	7.09	6.06
2	H288□-05C-ND	7.52	6.39	5.40	4.61
	H288□-07C-ND	7.28	6.19	5.22	4.47
	H288□-10C-ND	9.16	7.78	6.57	5.62
	H288□-14C-ND	9.88	8.39	7.09	6.06
3	H388□-05C-ND	5.83	4.95	4.18	3.58
	H388□-07C-ND	5.59	4.75	4.01	3.43
	H388□-10C-ND	7.47	6.35	5.36	4.58
	H388□-14C-ND	8.18	6.95	5.87	5.02

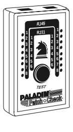
* **1** = White, **2** = Black, **3** = Silver Satin.

Weidmüller Paladin Tools

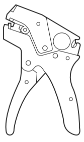
Tools

The modular cable tester is a hand held instrument designed to test telephone (RJ11) and computer data-link (RJ45) wiring.

Stripping and cutting wires in the range of 10-28 AWG • Solid and fine stranded conductors with all grades of PVC insulation hardness • P.T.F.E. (Teflon®) insulation • Stranded conductors (even several conductors in one work cycle) • Self-adjusting cable cutter • Strips both modular and discrete wires



Cable Tester

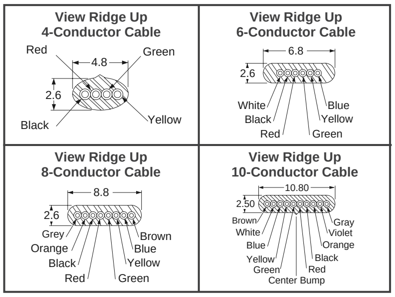


Mini-Wire Stripper

Description	Digi-Key Part No.	Price Each	Mfg. Part No.
Modular Cable Tester	PAL1529-ND	66.36	1529
Wire Stripper (12-20 AWG)	PA904893-ND	54.36	904893
Mini Wire Stripper (28-18 AWG)	PAL1115-ND	80.33	1115P
Replacement Blade for PAL115-ND	PAL2108-ND	20.06	2108

Modular Cable

Flat modular line cord is available in either straight or coiled. **Straight:** H004 is sold in hanks of 100, 500 and 1,000 feet, spools of 2,000 feet; H006, H008 and H010 are sold in hanks of 100 and 500 feet, spools of 1,000 feet. **Coiled:** Hxx4□C, Hxx6□C, Hxx8□C and Hxx10 are sold in 5, 7, 10 and 14 feet approximate optimum extended lengths. Extension beyond the optimum extended length can degrade the retractability of the cord. Both types are available in three colors—white (designated by 1 for □ in part number), black (designated by 2 for □ in part number) and silver satin (designated by 3 for □ in part number).



No. of Cond.	Length Ft.(Meter)	Digi-Key* Part No.	Price Each 1	10	100
Coiled Line Cord — 5 ft. (1.52 meter), 7 ft. (2.13 meter), 10 ft. (3.05 meter) and 14 ft. (4.27 meter) approximate extended lengths					
4	5 (1.52)	H054□C-ND	2.01	1.81	1.61
4	7 (2.13)	H074□C-ND	2.52	2.27	2.02
4	10 (3.05)	H104□C-ND	3.42	3.08	2.74
4	14 (4.27)	H144□C-ND	5.07	4.57	4.06
6	5 (1.52)	H056□C-ND	2.55	2.30	2.04
6	7 (2.13)	H076□C-ND	2.88	2.60	2.31
6	10 (3.05)	H106□C-ND	4.29	3.87	3.44
6	14 (4.27)	H146□C-ND	5.46	4.92	4.37
8	5 (1.52)	H058□C-ND	4.68	4.22	3.75
8	7 (2.13)	H078□C-ND	4.41	3.97	3.53
8	10 (3.05)	H108□C-ND	6.54	5.89	5.24
8	14 (4.27)	H148□C-ND	7.35	6.62	5.88
10	5 (1.52)	H0510□C-ND	5.37	4.84	4.30
10	7 (2.13)	H0710□C-ND	5.58	5.03	4.47
10	10 (3.05)	H1010□C-ND	7.14	6.43	5.72
10	14 (4.27)	H1410□C-ND	7.95	7.16	6.36

(Note: "X" in Digi-Key Part No. Represents Number of Feet)

No. of Cond.	Digi-Key* Part No.	Pricing 100 ft.	500 ft.	1,000 ft.	2,000 ft.
Straight Line Cord — 26 AWG					
4	H004□-X-ND	6.30	28.88	52.50	84.00
6	H006□-X-ND	9.75	44.69	65.00	—
8	H008□-X-ND	13.20	60.50	88.00	—
10	H010□-X-ND	18.90	86.63	126.00	—

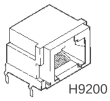
* **1** = White, **2** = Black, **3** = Silver Satin

HIROSE ELECTRIC CO.,LTD.

Data-Link Shielded Jack & Cable Assembly

FEATURES: Plug; • One piece body struct. of the shell and cable clamp make perfect "EMI" protection • A metal shell offers "ESD" protection and a plastic cover is provided for enhanced aesthetics • Using the specified tooling, will provide quick and easy cable assembly. **Jack;** • In order to protect the circuit inside the equip., the jack is constructed to allow the shielding to engage first upon mating.

TM11 "EMI" protection connector is designed to fulfill the requirement of noise and "ESD" protection. The design is in conformance with the F.C.C. regulation as specified in "476 C.F.R., Part 68, subpart F."



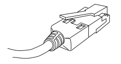
H9200

Shielded Jack — PCB Mount

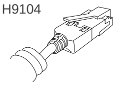
Positions-Contacts	Digi-Key Part No.	Price Each 1	10	100
8-8	H9200-ND	4.48	3.92	2.78

Standard Style Cable Assemblies

H9102 - H9103



H9104



Positions-Contacts	Length Ft. (M)	Cable Type	Termination	Digi-Key Part No.	Price Each
8-8	4 (1.22)	Straight	Double-Ended	H9102-ND	18.21
8-8	7 (2.13)	Straight	Double-Ended	H9103-ND	21.23
8-8	6 (1.83)	Coiled	Double-Ended	H9104-ND	29.04

CII Technologies

Corcom Division

Filtered Modular Jacks

Jack design and component selection compatible with equipment registered under FCC Part 68. UL Recognized. CSA Certified. U.S. Patent No. 4,695,115 and U.S. Patent No. 4,772,224 and a variety of international patents. **RJ11 / RJ45 SERIES, Shielded:** The metal shield provides additional protection, and is available with RFI gasket style spring fingers to provide a low impedance ground path across the interface.

A

Fig. 1

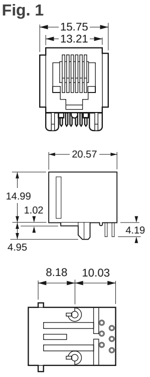


Fig. 2

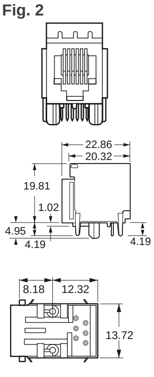


Fig. 3

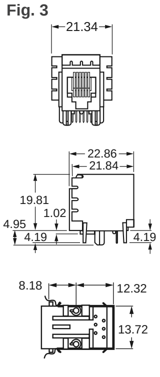


Fig. 4

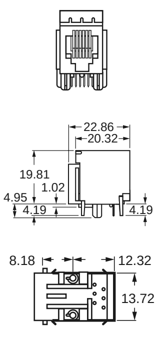


Fig. 5

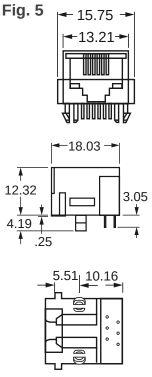


Fig. 6

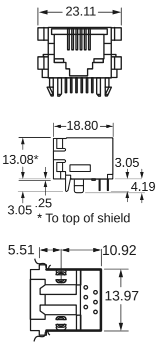


Fig. 7

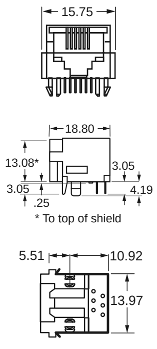


Fig. 8

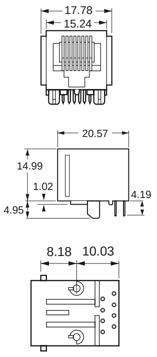


Fig. 9

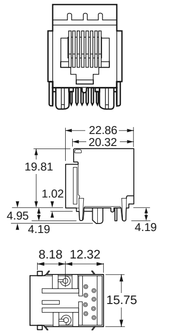


Fig. 10

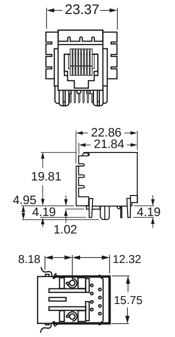


Fig. 11

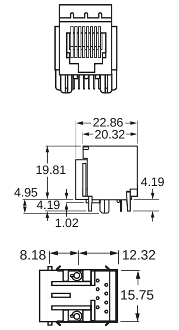


Fig. 12

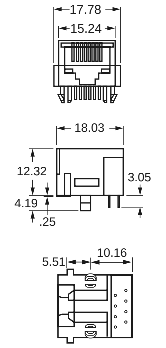


Fig. 13

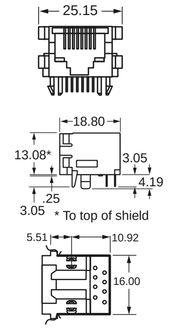


Fig. 14

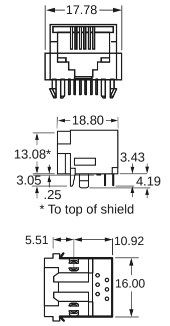


Fig. 15

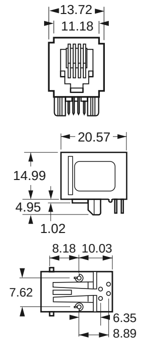


Fig.	Description	Position Con-tacts	Ferrites	Digi-Key Part No.	Price Each 1	25	100	CII Technologies Part No.
				RJ11 Series				
1	Unshielded	6-2	Sleeves	CCM9000-ND	2.57	1.80	1.50	RJ11-2L-S
	Unshielded	6-4	Sleeves	CCM9001-ND	2.86	2.00	1.66	RJ11-4L-S
	Unshielded	6-6	Sleeves	CCM9002-ND	3.14	2.20	1.83	RJ11-6L-S
	Unshielded	6-2	Block	CCM9003-ND	2.71	1.90	1.58	RJ11-2L-B
	Unshielded	6-4	Block	CCM9004-ND	2.86	2.00	1.66	RJ11-4L-B
	Unshielded	6-6	Block	CCM9005-ND	3.00	2.10	1.75	RJ11-6L-B
2	Shielded	6-4	Sleeves*	CCM9010-ND	3.80	2.66	2.21	RJ11-4L2-S
	Shielded	6-6	Sleeves*	CCM9011-ND	4.09	2.86	2.38	RJ11-6L2-S
	Shielded	6-4	Block*	CCM9012-ND	3.80	2.66	2.21	RJ11-4L2-B
	Shielded	6-6	Block*	CCM9013-ND	3.94	2.76	2.30	RJ11-6L2-B
3	Shielded	6-6	Sleeves	CCM1386-ND	7.51	5.26	4.37	RJ11-6LCT1-S
	Shielded	6-6	Block	CCM1387-ND	7.37	5.16	4.29	RJ11-6LCT1-B
4	Shielded	6-6	Sleeves	CCM1388-ND	7.51	5.26	4.37	RJ11-6LCT2-S
	Shielded	6-6	Block	CCM1389-ND	7.37	5.16	4.29	RJ11-6LCT2-B
5	Unshielded	6-6	Block	CCM1394-ND	2.63	1.84	1.53	RJ11-6N-B
	Unshielded	6-6	Sleeves	CCM1395-ND	2.80	1.96	1.63	RJ11-6N-S
6	Shielded	6-6	Block	CCM1396-ND	3.09	2.16	1.80	RJ11-6N3-B
	Shielded	6-6	Sleeves	CCM1397-ND	3.23	2.26	1.88	RJ11-6N3-S
7	Shielded	6-6	Block	CCM1398-ND	3.09	2.16	1.80	RJ11-6N4-B
	Shielded	6-6	Sleeves	CCM1399-ND	3.23	2.26	1.88	RJ11-6N4-S

Fig.	Description	Position Con-tacts	Ferrites	Digi-Key Part No.	Price Each 1	25	100	CII Technologies Part No.
				RJ45 Series				
8	Unshielded	8-8	Sleeves	CCM9050-ND	3.66	2.56	2.13	RJ45-8L-S
	Unshielded	8-8	Block	CCM9052-ND	3.31	2.32	1.93	RJ45-8L-B
9	Shielded	8-8	Sleeves*	CCM9051-ND	4.80	3.36	2.79	RJ45-8L2-S
	Shielded	8-8	Block*	CCM9053-ND	4.49	3.14	2.61	RJ45-8L2-B
10	Shielded	8-8	Sleeves	CCM1390-ND	9.34	6.54	5.43	RJ45-8LCT1-S
	Shielded	8-8	Block	CCM1391-ND	9.03	6.32	5.25	RJ45-8LCT1-B
11	Shielded	8-8	Sleeves	CCM1392-ND	9.34	6.54	5.43	RJ45-8LCT2-S
	Shielded	8-8	Block	CCM1393-ND	9.03	6.32	5.25	RJ45-8LCT2-B
12	Unshielded	8-8	Block	CCM1500-ND	2.63	1.84	1.53	RJ45-8N-B
	Unshielded	8-8	Sleeves	CCM1501-ND	3.00	2.10	1.75	RJ45-8N-S
13	Shielded	8-8	Block	CCM1502-ND	3.09	2.16	1.80	RJ45-8N3-B
	Shielded	8-8	Sleeves	CCM1503-ND	3.54	2.48	2.06	RJ45-8N3-S
14	Shielded	8-8	Block	CCM1504-ND	3.09	2.16	1.80	RJ45-8N4-B
	Shielded	8-8	Sleeves	CCM1505-ND	3.54	2.48	2.06	RJ45-8N4-S
				RJH Series				
15	Filtered	4-4	Block	CCM9060-ND	2.91	2.04	1.70	RJH-4L-B

* Board Ground (pins only).

Note: LCT Version incorporates 82Pf capacitors.

CUI STACK

Modular Components

Fig. 1

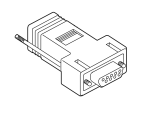


Fig. 2

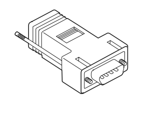


Fig. 3

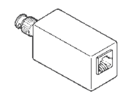


Fig. 4

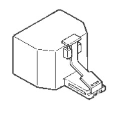


Fig. 5

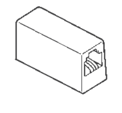


Fig. 6

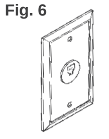


Fig. 7

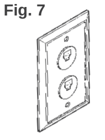


Fig.	Description	Digi-Key Part No.	Pricing 1	10	50	100	1,000
2	DB9P to RJ45 Jack (8-8)	046-0000-ND*	4.13	37.13	165.00	288.75	2062.50
1	DB9S to RJ45 Jack (8-8)	046-0001-ND*	4.13	37.13	165.00	288.75	2062.50
2	DB9P to RJ11 Jack (6-6)	046-0002-ND*	4.13	37.13	165.00	288.75	2062.50
1	DB9S to RJ11 Jack (6-6)	046-0003-ND*	4.13	37.13	165.00	288.75	2062.50
2	DB15P to RJ45 (8-8)	046-0004-ND*	4.63	41.63	185.00	323.75	2312.50
1	DB15S to RJ45 (8-8)	046-0005-ND*	4.63	41.63	185.00	323.75	2312.50
2	DB25P to RJ11 (6-6)	046-0008-ND*	4.38	39.38	175.00	306.25	2187.50
1	DB25S to RJ11 (6-6)	046-0009-ND*	4.38	39.38	175.00	306.25	2187.50
2	DB25P to RJ45 (8-8)	046-0010-ND*	4.38	39.38	175.00	306.25	2187.50
1	DB25S to RJ45 (8-8)	046-0011-ND*	4.38	39.38	175.00	306.25	2187.50
2	DB15P to RJ11 (6-6)	046-0016-ND*	4.63	41.63	185.00	323.75	2312.50
1	DB15S to RJ11 (6-6)	046-0017-ND*	4.63	41.63	185.00	323.75	2312.50
3	BNC RG62 to RJ11 Converter (6-6)	048-0000-ND	16.58	149.18	663.00	1160.25	8287.50
4	4 Wire TEE Adapter 1M-2F	048-0050-ND	2.00	18.00	80.00	140.00	1000.00
4	6 Wire TEE Adapter 1M-2F	048-0051-ND	2.98	26.78	119.00	208.25	1487.50
5	6-6 Modular Coupling (crossed) #1 to #6	048-0056-ND	1.50	13.50	60.00	105.00	750.00
5	6-6 Modular Coupling (straight) #1 to #1	048-0103-ND	1.50	13.50	60.00	105.00	750.00
6	4 Wire Wall Plate (6-4)	048-0059-ND	1.73	15.53	69.00	120.75	862.50
7	6 Wire Dual Wall Plate (6-6)	048-0060-ND	2.53	22.73	101.00	176.75	1262.50
6	6 Wire Wall Plate (6-6)	048-0061-ND	2.70	24.30	108.00	189.00	1350.00
6	8 Wire Wall Plate (8-8)	048-0062-ND	3.35	30.15	134.00	234.50	1675.00

* User Configurable

Weidmüller Terminal Blocks

Plugs and Headers

Specifications	UL		CSA*		VDE		
Pitch	3.50 mm	All Others	3.50 mm	All Others	3.50 mm	5.00/5.08 mm	7.50/7.62 mm
Rated Voltage	300V	300V	300V	300V	125V-Gr.C	250V-Gr.C	3500V-Gr.C
Rated Current	10A	10A	10A	10A	12A	12A	15A
Wire Size	22…14 AWG	22…12 AWG	28…14 AWG	26…12 AWG	1.5 mm^2	2.5 mm^2	2.5 mm^2
Strip Length mm (in.)	7 (.24)	7 (.24)	7 (.24)	7 (.24)	7 (.24)	7 (.24)	7 (.24)
Torque Nm (lb. in.)	.25 (2.25)	.50 (4.50)	.25 (2.25)	.50 (4.50)	.25 (2.25)	.50 (4.50)	.50 (4.50)

* Standard UL 1050 Standard CSA C22.2 No. 158 VDE Standard 0110b 2.79

SPECIFICATIONS

Molding Material: PBT
Temperature Range: –50°C to +130°C (–58°F to +266°F)
Contact: CuSn
Plating: Tin-Plated
Solder Pin Length: 4.5 mm (Standard)
Connection: Screw Clamp, Tension Clamp
Color: Black

PCB Terminal Blocks

Specifications	UL			CSA*			VDE		
Pitch	LM 3.50	LM 5.00/5.08	LP 5.00/5.08	LM 3.50	LM 5.00/5.08	LP 5.00/5.08	LM 3.50	LM 5.00/5.08	LP 5.00/5.08
Rated Voltage	300V	300V	300V	300V	300V	300V	125V	250V	250V
Rated Current	10A	10A	10A	10A	10A	10A	12A	17.5A	24A
Wire Size	28…14 AWG	24…14 AWG	26…12 AWG	28…16 AWG	24…12 AWG	26…12 AWG	1.5 mm^2	1.5 mm^2	2.5 mm^2
Strip Length mm (in.)	5 (.197)	6 (.236)	7 (.275)	5 (.197)	6 (.236)	7 (.275)	5 (.197)	6 (.236)	7 (.24)
Torque Nm (lb. in.)	0.4 (4.4)	0.4 (4.4)	0.5 (4.4)	0.4 (4.4)	0.4 (4.4)	0.5 (4.4)	0.4 (4.4)	0.4 (4.4)	0.5 (4.4)

* CSA Pending for LP Series

SPECIFICATIONS

Molding Material: Polyimide
Temperature Range: –50°C to +100°C (–58°F to +212°F)
Contact: Copper alloy
Plating: Tin-Plated
Solder Pin Length: 4.5 mm
Connection: Screw Clamp
Color: LM Series – Black; LP Series – Orange

Dimensions in mm

Fig. 1
LM 3.5/90/… BK

- Screw Clamp
- 90° Orientation without test point

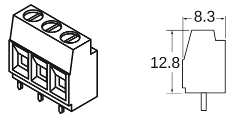


Fig. 2
LM 3.5/1350/… BK

- Screw Clamp
- 130° Orientation without test point

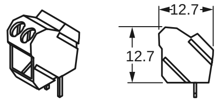


Fig. 3
BLZF 3.5/… BK

- Tension Clamp
- 180° Orientation
- Non-Locking

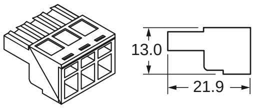


Fig. 4
BLZF 3.5/… F BK

- Tension Clamp
- 180° Orientation
- Locking

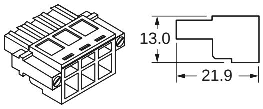


Fig. 5
BL 3.5/90/… BK

- Screw Clamp
- 90° Orientation
- Non-Locking

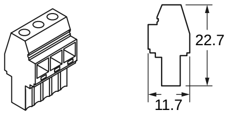


Fig. 6
BL 3.5/90/… F BK

- Screw Clamp
- 90° Orientation
- Locking

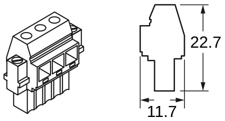


Fig. 7
BL 3.5/270/… BK

- Screw Clamp
- 270° Orientation
- Non-Locking

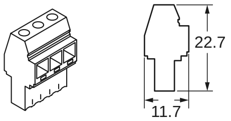


Fig. 8
BL 3.5/270/… F BK

- Screw Clamp
- 270° Orientation
- Locking

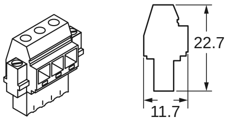


Fig. 9
BL 3.5/… BK

- Screw Clamp
- 180° Orientation
- Non-Locking

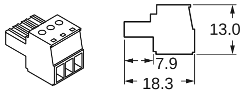


Fig. 10
BL 3.5/… F BK

- Screw Clamp
- 180° Orientation
- Locking

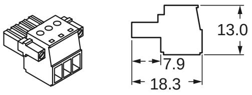


Fig. 11
BL 3.5/… LH BK

- Screw Clamp
- 180° Orientation
- Non-Locking
- Quick Release Mechanism

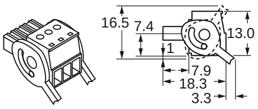


Fig. 12
SLD 3.5V/90/… G BK

- Double-Level Recessed
- 90° Orientation
- Closed End
- Non-Locking

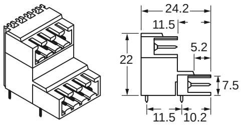


Fig.	No. of Poles	Block Length (mm)	Digi-Key Part No.	Price Each			Mfg. Part No.
				1	10	100	
3.50 mm PCB Terminal Blocks							
1	2	7.6	281-1400-ND	.73	.66	.58	169967
	3	11.1	281-1401-ND	1.08	.97	.86	169968
	4	14.6	281-1402-ND	1.53	1.38	1.22	996770
	6	21.6	281-1403-ND	2.28	2.05	1.82	996772
	8	28.6	281-1404-ND	3.03	2.73	2.42	996774
	10	35.6	281-1405-ND	3.78	3.40	3.02	996776
	12	42.6	281-1406-ND	4.55	4.10	3.64	996778
2	2	7.59	281-1407-ND	.85	.77	.68	171501
	3	11.09	281-1408-ND	1.28	1.15	1.02	171505
	4	14.59	281-1409-ND	1.70	1.53	1.36	999568
	6	21.59	281-1410-ND	2.53	2.28	2.02	999570
	8	28.59	281-1411-ND	3.40	3.06	2.72	999572
	10	35.59	281-1412-ND	4.23	3.81	3.38	999574
	12	42.59	281-1413-ND	5.08	4.57	4.06	999576
3.50 mm Lead Spacing – Plugs							
3	2	7.0	281-1000-ND	1.48	1.33	1.18	169042
	3	10.5	281-1001-ND	2.23	2.01	1.78	169043
	4	14.0	281-1002-ND	2.95	2.66	2.36	169044
	6	21.0	281-1003-ND	4.45	4.01	3.56	169046
	8	28.0	281-1004-ND	5.90	5.31	4.72	169048
	10	35.0	281-1005-ND	7.40	6.66	5.92	169050
	12	42.0	281-1006-ND	8.88	7.99	7.10	169052
	16	56.0	281-1007-ND	11.83	10.65	9.46	169056
	24	84.0	281-1008-ND	17.73	15.96	14.18	169064
4	2	14.0	281-1009-ND	1.55	1.40	1.24	169111
	3	17.5	281-1010-ND	2.33	2.10	1.86	169112
	4	21.0	281-1011-ND	3.10	2.79	2.48	169113
	6	28.0	281-1012-ND	4.68	4.21	3.74	169115
	8	35.0	281-1013-ND	6.33	5.70	5.06	169117
	10	42.0	281-1014-ND	7.90	7.11	6.32	169119
	12	49.0	281-1015-ND	9.48	8.53	7.58	169121
	16	63.0	281-1016-ND	12.65	11.39	10.12	169125
	24	91.0	281-1017-ND	19.00	17.10	15.20	169133
5	2	7.0	281-1018-ND	1.65	1.49	1.32	163878
	3	10.5	281-1019-ND	2.48	2.23	1.98	163879
	4	14.0	281-1020-ND	3.30	2.97	2.64	163880
	6	21.0	281-1021-ND	4.95	4.46	3.96	163882
	8	28.0	281-1022-ND	6.60	5.94	5.28	163884
	10	35.0	281-1023-ND	8.25	7.43	6.60	163886
	12	42.0	281-1024-ND	9.90	8.91	7.92	163888
	16	56.0	281-1025-ND	13.20	11.88	10.56	163892
	24	84.0	281-1026-ND	19.80	17.82	15.84	163900
6	2	14.0	281-1027-ND	1.78	1.60	1.42	163924
	3	17.5	281-1028-ND	2.65	2.39	2.12	163925
	4	21.0	281-1029-ND	3.53	3.18	2.82	163926
	6	28.0	281-1030-ND	5.30	4.77	4.24	163928
	8	35.0	281-1031-ND	7.05	6.35	5.64	163930
	10	42.0	281-1032-ND	8.83	7.95	7.06	163932
	12	49.0	281-1033-ND	10.60	9.54	8.48	163934
	16	63.0	281-1034-ND	14.13	12.72	11.30	163938
	24	91.0	281-1035-ND	21.18	19.06	16.94	163946
7	2	7.0	281-1036-ND	1.65	1.49	1.32	163970
	3	10.5	281-1037-ND	2.48	2.23	1.98	163971
	4	14.0	281-1038-ND	3.30	2.97	2.64	163972
	6	21.0	281-1039-ND	4.95	4.46	3.96	163974
	8	28.0	281-1040-ND	6.60	5.94	5.28	163976
	10	35.0	281-1041-ND	8.25	7.43	6.60	163978
	12	42.0	281-1042-ND	9.90	8.91	7.92	163980
	16	56.0	281-1043-ND	13.20	11.88	10.56	163984
	24	84.0	281-1044-ND	19.80	17.82	15.84	163992
8	2	14.0	281-1045-ND	1.78	1.60	1.42	164016
	3	17.5	281-1046-ND	2.65	2.39	2.12	164017
	4	21.0	281-1047-ND	3.53	3.18	2.82	164018
	6	28.0	281-1048-ND	5.30	4.77	4.24	164020
	8	35.0	281-1049-ND	7.05	6.35	5.64	164022
	10	42.0	281-1050-ND	8.83	7.95	7.06	164024
	12	49.0	281-1051-ND	10.60	9.54	8.48	164026
	16	63.0	281-1052-ND	14.13	12.72	11.30	164030
	24	91.0	281-1053-ND	21.18	19.06	16.94	164038
9	2	7.0	281-1054-ND	1.58	1.42	1.26	161567
	3	10.5	281-1055-ND	2.35	2.12	1.88	161568
	4	14.0	281-1056-ND	3.13	2.82	2.50	161569
	6	21.0	281-1057-ND	4.73	4.26	3.78	161018
	8	28.0	281-1058-ND	6.30	5.67	5.04	161570
	10	35.0	281-1059-ND	7.88	7.09	6.30	161020
	12	42.0	281-1060-ND	9.43	8.49	7.54	161573
	16	56.0	281-1061-ND	12.58	11.32	10.06	161577
	24	84.0	281-1062-ND	18.85	16.97	15.08	162044
10	2	14.0	281-1063-ND	1.65	1.49	1.32	161578
	3	17.5	281-1064-ND	2.48	2.23	1.98	161579
	4	21.0	281-1065-ND	3.30	2.97	2.64	161580
	6	28.0	281-1066-ND	4.98	4.48	3.98	161582
	8	35.0	281-1067-ND	6.73	6.06	5.38	161584
	10	42.0	281-1068-ND	8.43	7.59	6.74	161586
	12	49.0	281-1069-ND	10.10	9.09	8.08	161588
10	16	63.0	281-1070-ND	13.48	12.13	10.78	161592
	24	91.0	281-1071-ND	20.20	18.18	16.16	162091
11	2	14.0	281-1072-ND	2.63	2.37	2.10	168788
	3	17.5	281-1073-ND	3.48	3.13	2.78	168789
	4	21.0	281-1074-ND	4.33	3.90	3.46	168790
	6	28.0	281-1075-ND	6.05	5.45	4.84	168792
	8	35.0	281-1076-ND	7.78	7.00	6.22	168794
	10	42.0	281-1077-ND	9.50	8.55	7.60	168796
	12	49.0	281-1078-ND	11.23	10.11	8.98	168798
	16	63.0	281-1079-ND	14.65	13.19	11.72	168802
	24	91.0	281-1080-ND	21.55	19.40	17.24	168810
3.50 mm Lead Spacing – Headers							
12	4	8.4	281-1081-ND	1.53	1.38	1.22	164286
	6	11.9	281-1082-ND	2.28	2.05	1.82	169927
	8	15.4	281-1083-ND	3.03	2.73	2.42	164287
	12	22.4	281-1084-ND	4.55	4.10	3.64	164288
	16	29.4	281-1085-ND	6.05	5.45	4.84	164289
	20	36.4	281-1086-ND	7.60	6.84	6.08	164290
	24	43.4	281-1087-ND	9.10	8.19	7.28	164291
	32	57.4	281-1088-ND	12.13	10.92	9.70	164293
	48	85.4	281-1089-ND	18.20	16.38	14.56	164297
13	4	14.0	281-1090-ND	2.53	2.28	2.02	164310
	6	17.5	281-1091-ND	3.33	3.00	2.66	169938
	8	21.0	281-1092-ND	4.13	3.72	3.30	164311
	12	28.0	281-1093-ND	5.33	4.80	4.26	164312
	16	35.0	281-1094-ND	7.10	6.39	5.68	164313
	20	42.0	281-1095-ND	8.88	7.99	7.10	164314
	24	49.0	281-1096-ND	10.63	9.57	8.50	164315
	32	63.0	281-1097-ND	14.18	12.76	11.34	164317
	48	91.0	281-1098-ND	21.25	19.13	17.00	164321
14	4	8.4	281-1099-ND	1.53	1.38	1.22	164173
	6	11.9	281-1100-ND	2.28	2.05	1.82	169895
	8	15.4	281-1101-ND	3.03	2.73	2.42	164174
	12	22.4	281-1102-ND	4.55	4.10	3.64	164175
	16	29.4	281-1103-ND	6.05	5.45	4.84	164176
	20	36.4	281-1104-ND	7.60	6.84	6.08	164177
	24	43.4	281-1105-ND	9.10	8.19	7.28	164178
	32	57.4	281-1106-ND	12.13	10.92	9.70	164180
	48	85.4	281-1107-ND	18.20	16.38	14.56	164184
15	4	14.0	281-1108-ND	2.53	2.28	2.02	164197
	6	17.5	281-1109-ND	3.33	3.00	2.66	169906
	8	21.0	281-1110-ND	4.13	3.72	3.30	164198
	12	28.0	281-1111-ND	5.33	4.80	4.26	164199

(Continued)

Fig. 13
SLD 3.5V/90/… F BK
- Double-Level Recessed
- 90° Orientation
- Closed End
- Locking

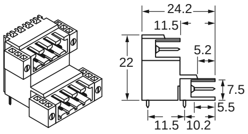


Fig. 14
SLD 3.5V/180/… G BK
- Double-Level Recessed
- 180° Orientation
- Closed End
- Non-Locking

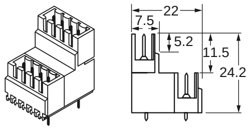


Fig. 15
SLD 3.5V/180/… F BK
- Double-Level Recessed
- 180° Orientation
- Closed End
- Locking

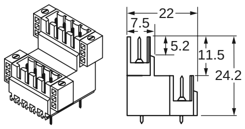


Fig. 16
SL 3.5/90/… G BK
- Single-Level
- 90° Orientation
- Closed End
- Non-Locking

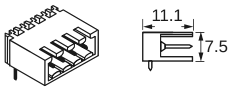


Fig. 17
SL 3.5/90/… F BK
- Single-Level
- 90° Orientation
- Closed End
- Non-Locking

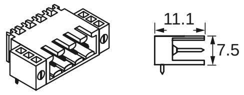


Fig. 18
SL 3.5/135/… BK
- Single-Level
- 135° Orientation
- Closed End
- Locking

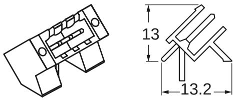


Fig. 19
SL 3.5/180/… G BK
- Single-Level
- 180° Orientation
- Closed End
- Non-Locking

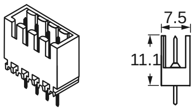


Fig. 20
SL 3.5/180/… F BK
- Single-Level
- 180° Orientation
- Closed End
- Locking

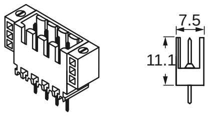


Fig. 21
LM 5.00/90/… BK
- Screw Clamp
- 90° Orientation without test point

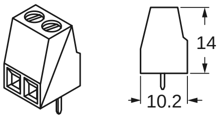


Fig. 22
LM 5.00/135/… BK
- Screw Clamp
- 135° Orientation without test point

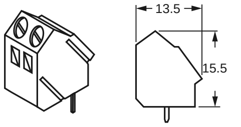


Fig. 23
LM 5.00/180/… BK
- Screw Clamp
- 180° Orientation without test point

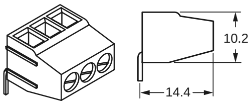


Fig. 24
LP 2N/5.00/… BK
- Double-Level
- 90° Orientation
- Low Profile/Offset Left

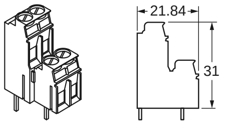


Fig. 25
BLZ 5.00/… BK
- Screw Clamp
- 180° Orientation
- Non-Locking

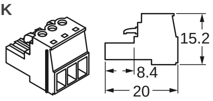


Fig. 26
BLZ 5.00/90/… BK
- Screw Clamp
- 90° Orientation
- Non-Locking

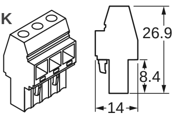


Fig. 27
BLZ 5.00/270/… BK
- Screw Clamp
- 270° Plug
- Non-Locking

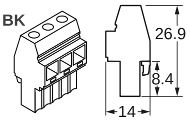


Fig. 28
BLZF 5.00/… BK
- Tension Clamp
- 180° Orientation
- Non-Locking

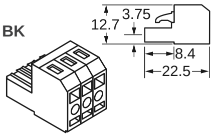


Fig. 29
SL 5.00/90/… B BK
- Single-Level
- 90° Orientation
- Closed End
- Locking

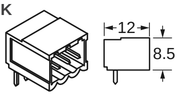


Fig. 30
SL 5.00/135/… B BK
- Single-Level
- 135° Orientation
- Closed End
- Locking

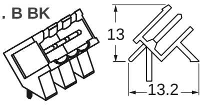


Fig. 31
SL 5.00/180/… B BK
- Single-Level
- 180° Orientation
- Closed End
- Locking

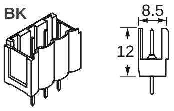


Fig. 32
LM 5.08/90/… BK
- Screw Clamp
- 90° Orientation

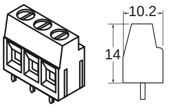


Fig.	No. of Poles	Block Length (mm)	Digi-Key Part No.	Price Each			Mfg. Part No.
				1	10	100	
15	16	35.0	281-1112-ND	7.10	6.39	5.68	164200
	20	42.0	281-1113-ND	8.88	7.99	7.10	164201
	24	49.0	281-1114-ND	10.63	9.57	8.50	164202
	32	63.0	281-1115-ND	14.18	12.76	11.34	164204
	48	91.0	281-1116-ND	21.25	19.13	17.00	164208
16	2	8.4	281-1117-ND	.55	.50	.44	161416
	3	11.9	281-1118-ND	.80	.72	.64	161542
	4	15.4	281-1119-ND	1.10	.99	.88	161543
	6	22.4	281-1120-ND	1.63	1.47	1.30	161544
	8	29.4	281-1121-ND	2.20	1.98	1.76	161418
	10	36.4	281-1122-ND	2.73	2.46	2.18	161547
	12	43.4	281-1123-ND	3.23	2.91	2.58	161549
	16	57.4	281-1124-ND	4.38	3.94	3.50	161419
	24	85.4	281-1125-ND	6.55	5.90	5.24	161805
17	2	14.0	281-1126-ND	.83	.75	.66	161553
	3	17.5	281-1127-ND	1.38	1.24	1.10	161554
	4	21.0	281-1128-ND	1.25	1.13	1.00	161555
	6	28.0	281-1129-ND	1.90	1.71	1.52	161557
	8	35.0	281-1130-ND	2.53	2.28	2.02	161420
	10	42.0	281-1131-ND	3.15	2.84	2.52	161560
	12	49.0	281-1132-ND	3.78	3.40	3.02	161562
	16	63.0	281-1133-ND	5.03	4.53	4.02	161566
	24	91.0	281-1134-ND	7.53	6.78	6.02	161835
18	2	7.0	281-1135-ND	.60	.54	.48	164381
	3	10.5	281-1136-ND	.90	.81	.72	164382
	4	14.0	281-1137-ND	1.23	1.11	.98	164383
	6	21.0	281-1138-ND	1.85	1.67	1.48	164385
	8	28.0	281-1139-ND	2.45	2.21	1.96	164387
	10	35.0	281-1140-ND	3.10	2.79	2.48	164389
	12	42.0	281-1141-ND	3.73	3.36	2.98	164391
	16	56.0	281-1142-ND	4.98	4.48	3.98	164395
	24	84.0	281-1143-ND	7.48	6.73	5.98	164403
19	2	8.4	281-1144-ND	.55	.50	.44	161424
	3	11.9	281-1145-ND	.80	.72	.64	161602
	4	15.4	281-1146-ND	1.10	.99	.88	161603
	6	22.4	281-1147-ND	1.63	1.47	1.30	161605
	8	29.4	281-1148-ND	2.20	1.98	1.76	161425
	10	36.4	281-1149-ND	2.73	2.46	2.18	161608
	12	43.4	281-1150-ND	3.28	2.95	2.62	161610
	16	57.4	281-1151-ND	4.38	3.94	3.50	161426
	24	85.4	281-1152-ND	6.55	5.90	5.24	161868
20	2	14.0	281-1153-ND	.83	.75	.66	164614
	3	17.5	281-1154-ND	1.38	1.24	1.10	161615
	4	21.0	281-1155-ND	1.25	1.13	1.00	161616
	6	28.0	281-1156-ND	1.90	1.71	1.52	161618
	8	35.0	281-1157-ND	2.53	2.28	2.02	161427
	10	42.0	281-1158-ND	3.15	2.84	2.52	161621
	12	49.0	281-1159-ND	3.78	3.40	3.02	161623
20	16	63.0	281-1160-ND	5.03	4.53	4.02	161627
	24	91.0	281-1161-ND	7.53	6.78	6.02	161898
5.00 mm PCB Terminal Blocks							
21	2	10.6	281-1414-ND	.58	.52	.46	171525
	3	15.6	281-1415-ND	.85	.77	.68	171526
	4	20.6	281-1416-ND	1.15	1.04	.92	999330
	6	30.6	281-1417-ND	1.70	1.53	1.36	999332
	8	40.6	281-1418-ND	2.28	2.05	1.82	999334
	10	50.6	281-1419-ND	2.85	2.57	2.28	999336
	12	60.6	281-1420-ND	3.43	3.09	2.74	999338
22	2	10.6	281-1421-ND	.63	.57	.50	171529
	3	15.6	281-1422-ND	.93	.84	.74	171530
	4	20.6	281-1423-ND	1.25	1.13	1.00	999351
	6	30.6	281-1424-ND	1.85	1.67	1.48	999353
	8	40.6	281-1425-ND	2.50	2.25	2.00	999355
	10	50.6	281-1426-ND	3.10	2.79	2.48	999357
	12	60.6	281-1427-ND	3.73	3.36	2.98	999359
23	2	10.6	281-1428-ND	.63	.57	.50	171527
	3	15.6	281-1429-ND	.93	.84	.74	171528
	4	20.6	281-1430-ND	1.25	1.13	1.00	999372
	6	30.6	281-1431-ND	1.85	1.67	1.48	999374
	8	40.6	281-1432-ND	2.50	2.25	2.00	999376
	10	50.6	281-1433-ND	3.10	2.79	2.48	999378
	12	60.6	281-1434-ND	3.73	3.36	2.98	999380
24	4	17.5	281-1456-ND	1.93	1.74	1.54	163517
	6	27.5	281-1457-ND	2.90	2.61	2.32	162557
	8	37.5	281-1458-ND	3.85	3.47	3.08	159644
	10	47.5	281-1459-ND	4.83	4.35	3.86	159648
	12	57.5	281-1460-ND	5.80	5.22	4.64	163271
5.00 mm Lead Spacing – Plugs							
25	2	10.0	281-1180-ND	1.15	1.04	.89	162561
	3	15.0	281-1181-ND	1.70	1.53	1.32	162562
	4	20.0	281-1182-ND	2.26	2.03	1.74	159608
	6	30.0	281-1183-ND	3.41	3.06	2.63	159609
	8	40.0	281-1184-ND	4.63	4.15	3.58	159611
	10	50.0	281-1185-ND	5.76	5.16	4.44	159612
	12	60.0	281-1186-ND	7.51	6.73	5.80	160299
	16	80.0	281-1187-ND	10.03	8.99	7.74	160330
	24	120.0	281-1188-ND	15.00	13.44	11.57	161147
26	2	10.0	281-1189-ND	1.27	1.14	.99	163689
	3	15.0	281-1190-ND	1.97	1.77	1.52	163690
	4	20.0	281-1191-ND	2.62	2.35	2.02	163691
	6	30.0	281-1192-ND	3.82	3.42	2.95	163693
	8	40.0	281-1193-ND	5.09	4.56	3.93	163695
	10	50.0	281-1194-ND	6.34	5.68	4.89	163697
	12	60.0	281-1195-ND	7.61	6.82	5.87	163699
	16	80.0	281-1196-ND	10.13	9.08	7.81	163703
	24	120.0	281-1197-ND	15.74	14.11	12.14	163711
27	2	10.0	281-1198-ND	1.27	1.14	.99	163781
	3	15.0	281-1199-ND	1.92	1.72	1.48	163782
	4	20.0	281-1200-ND	2.54	2.28	1.97	163783
	6	30.0	281-1201-ND	3.82	3.42	2.95	163785
	8	40.0	281-1202-ND	5.09	4.56	3.93	163787
	10	50.0	281-1203-ND	6.34	5.68	4.89	163789
	12	60.0	281-1204-ND	7.61	6.82	5.87	163791
	16	80.0	281-1205-ND	10.13	9.08	7.81	163795
	24	120.0	281-1206-ND	15.43	13.83	11.90	163803
28	2	10.0	281-1207-ND	1.20	1.08	.93	169660
	3	15.0	281-1208-ND	1.73	1.55	1.34	169661
	4	20.0	281-1209-ND	2.26	2.03	1.74	169662
	6	30.0	281-1210-ND	3.36	3.01	2.59	169664
	8	40.0	281-1211-ND	4.44	3.98	3.43	169666
	10	50.0	281-1212-ND	5.42	4.86	4.19	169668
	12	60.0	281-1213-ND	6.50	5.83	5.02	169670
	16	80.0	281-1214-ND	8.66	7.77	6.68	169674
	24	120.0	281-1215-ND	12.86	11.53	9.92	169682
5.00 mm Lead Spacing – Headers							
29	2	12.0	281-1216-ND	.46	.41	.36	162621
	3	17.0	281-1217-ND	.67	.61	.52	162622
	4	22.0	281-1218-ND	.91	.82	.71	159615
	6	32.0	281-1219-ND	1.32	1.19	1.02	162624
	8	42.0	281-1220-ND	1.75	1.57	1.36	162625
	10	52.0	281-1221-ND	2.23	2.00	1.73	159617
	12	62.0	281-1222-ND	2.66	2.39	2.06	160332
	16	82.0	281-1223-ND	3.58	3.21	2.76	160333
	24	122.0	281-1224-ND	5.21	4.67	4.02	162638
30	2	10.08	281-1225-ND	.36	.33	.28	163105
	3	15.08	281-1226-ND	.53	.48	.41	163106
	4	20.08	281-1227-ND	.70	.63	.54	163107
	6	30.08	281-1228-ND	1.06	.95	.82	163109
	8	40.08	281-1229-ND	1.39	1.25	1.08	163111
	10	50.08	281-1230-ND	1.75	1.57	1.36	163113
	12	60.08	281-1231-ND	2.09	1.88	1.61	163115
	16	80.08	281-1232-ND	2.78	2.50	2.15	163119
	24	120.08	281-1233-ND	4.15	3.72	3.21	163127
31	2	12.0	281-1234-ND	.46	.41	.36	162662
	3	17.0	281-1235-ND	.67	.61	.52	162663
	4	22.0	281-1236-ND	.89	.80	.69	159613
	6	32.0	281-1237-ND	1.32	1.19	1.02	162665
	8	42.0	281-1238-ND	1.78	1.60	1.37	159614
	10	52.0	281-1239-ND	2.18	1.96	1.69	162668
	12	62.0	281-1240-ND	2.66	2.39	2.06	160331
	16	82.0	281-1241-ND	3.58	3.21	2.76	162673
	24	122.0	281-1242-ND	5.21	4.67	4.02	162681
5.08 mm PCB Terminal Blocks							
32	2	10.76	281-1435-ND	.58	.52	.46	171602
	3	15.84	281-1436-ND	.85	.77	.68	171603

(Continued)

Weidmüller Terminal Blocks *(Cont.)*

Fig. 33
LM 5.08/135/… BK
- Screw Clamp
- 135° Orientation

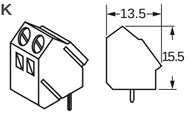


Fig. 34
LM 5.08/180/… BK
- Screw Clamp
- 180° Orientation

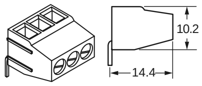


Fig. 35
LP 2N/5.08/… BK
- Double Level
- 90° Orientation
- Low Profile/Offset Left

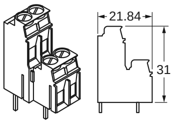


Fig. 36
BLZ 5.08/…
- Screw Clamp
- 180° Orientation
- Non-Locking

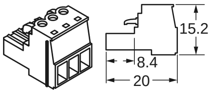


Fig. 37
BLZ 5.08/90/…
- Screw Clamp
- 90° Orientation
- Non-Locking

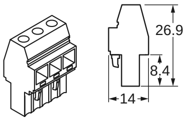


Fig. 38
BLZ 5.08/270/…
- Screw Clamp
- 270° Orientation
- Non-Locking

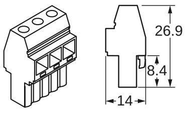


Fig. 39
BLZF 5.08/…
- Tension Clamp
- 180° Orientation
- Non-Locking

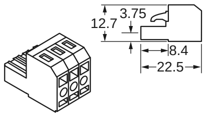


Fig. 40
SL 5.08/90/… B
- Single-Level
- 90° Orientation
- Closed End
- Locking

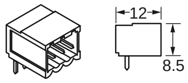


Fig. 41
SL 5.08/135/… B
- Single-Level
- 135° Orientation
- Closed End
- Locking

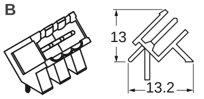


Fig. 42
SL 5.08/180/… B
- Single-Level
- 180° Orientation
- Closed End
- Locking

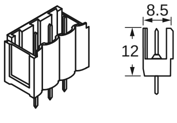


Fig. 43
BLZ 7.50/90/… BK
- Screw Clamp
- 90° Orientation
- Non-Locking

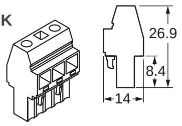


Fig. 44
BLZ 7.50/270/… BK
- Screw Clamp
- 270° Orientation
- Non-Locking

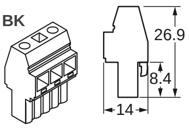


Fig. 45
BLZ 7.50/… BK
- Screw Clamp
- 180° Orientation
- Non-Locking

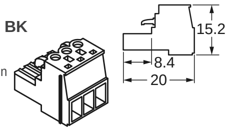


Fig. 46
SL 7.50/90/… B BK
- Single-Level
- 90° Orientation
- Closed End
- Locking

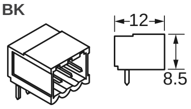


Fig. 47
SL 7.50/180/… B BK
- Single-Level
- 180° Orientation
- Closed End
- Locking

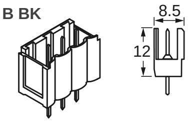


Fig. 48
BLZ 7.62/90/… BK
- Screw Clamp
- 90° Orientation
- Non-Locking

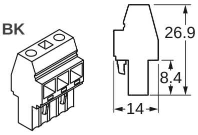


Fig. 49
BLZ 7.62/270/… BK
- Screw Clamp
- 270° Orientation
- Non-Locking

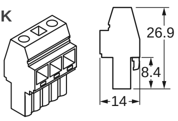


Fig. 50
BLZ 7.62/… BK
- Screw Clamp
- 180° Orientation
- Non-Locking

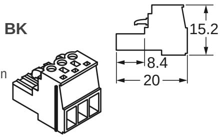


Fig. 51
SL 7.62/90/… B BK
- Single-Level
- 90° Orientation
- Closed End
- Locking

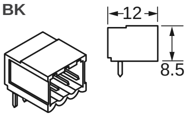


Fig. 52
SL 7.62/180/… B BK
- Single-Level
- 180° Orientation
- Closed End
- Locking

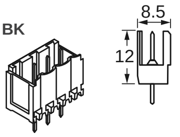


Fig.	No. of Poles	Block Length (mm)	Digi-Key Part No.	Price Each			Mfg. Part No.
				1	10	100	
32	4	20.92	281-1437-ND	1.15	1.04	.92	999392
	6	31.08	281-1438-ND	1.70	1.53	1.36	999394
	8	41.24	281-1439-ND	2.28	2.05	1.82	999396
	10	51.4	281-1440-ND	2.85	2.57	2.28	999398
	12	61.56	281-1441-ND	3.43	3.09	2.74	999400
33	2	10.76	281-1442-ND	.63	.57	.50	171606
	3	15.84	281-1443-ND	.93	.84	.74	171607
	4	20.92	281-1444-ND	1.25	1.13	1.00	999434
	6	31.08	281-1445-ND	1.85	1.67	1.48	999436
	8	41.24	281-1446-ND	2.50	2.25	2.00	999438
	10	51.4	281-1447-ND	3.10	2.79	2.48	999440
	12	61.56	281-1448-ND	3.73	3.36	2.98	999442
34	2	10.76	281-1449-ND	.63	.57	.50	171604
	3	15.84	281-1450-ND	.93	.84	.74	171605
	4	20.92	281-1451-ND	1.25	1.13	1.00	999476
	6	31.08	281-1452-ND	1.85	1.67	1.48	999478
	8	41.24	281-1453-ND	2.50	2.25	2.00	999480
	10	51.4	281-1454-ND	3.10	2.79	2.48	999482
	12	61.56	281-1455-ND	3.73	3.36	2.98	999484
35	4	17.78	281-1461-ND	1.93	1.74	1.54	163515
	6	27.94	281-1462-ND	2.90	2.61	2.32	162555
	8	38.1	281-1463-ND	3.85	3.47	3.08	159647
	10	48.26	281-1464-ND	4.83	4.35	3.86	159650
	12	58.42	281-1465-ND	5.80	5.22	4.64	163256
5.08 mm Lead Spacing – Plugs							
36	2	10.16	281-1243-ND	1.18	1.06	.91	152641
	3	15.24	281-1244-ND	1.75	1.57	1.36	152651
	4	20.32	281-1245-ND	2.33	2.09	1.80	152661
	6	30.48	281-1246-ND	3.46	3.10	2.67	152681
	8	40.64	281-1247-ND	4.63	4.15	3.58	152701
	10	50.80	281-1248-ND	5.76	5.16	4.44	152721
	12	60.96	281-1249-ND	6.89	6.18	5.31	152741
	16	81.28	281-1250-ND	9.02	8.09	6.96	152781
	24	121.92	281-1251-ND	13.80	12.37	10.64	152861
37	2	10.16	281-1252-ND	1.32	1.19	1.02	155271
	3	15.24	281-1253-ND	1.97	1.77	1.52	155281
	4	20.32	281-1254-ND	2.62	2.35	2.02	155291
	6	30.48	281-1255-ND	3.89	3.49	3.00	155311
	8	40.64	281-1256-ND	5.21	4.67	4.02	155331
	10	50.80	281-1257-ND	6.48	5.81	5.00	155351
	12	60.96	281-1258-ND	7.78	6.97	6.00	155371
	16	81.28	281-1259-ND	10.37	9.29	8.00	155411
	24	121.92	281-1260-ND	15.43	13.83	11.90	155491
38	2	10.16	281-1261-ND	1.27	1.14	.99	155731
	3	15.24	281-1262-ND	1.92	1.72	1.48	155741
	4	20.32	281-1263-ND	2.62	2.35	2.02	155751
	6	30.48	281-1264-ND	3.82	3.42	2.95	155771
	8	40.64	281-1265-ND	5.21	4.67	4.02	155791
	10	50.80	281-1266-ND	6.34	5.68	4.89	155811
	12	60.96	281-1267-ND	7.78	6.97	6.00	155831
	16	81.28	281-1268-ND	10.37	9.29	8.00	155871
	24	121.92	281-1269-ND	15.43	13.83	11.90	155951
39	2	10.16	281-1270-ND	1.20	1.08	.93	168916
	3	15.24	281-1271-ND	1.73	1.55	1.34	168917
	4	20.32	281-1272-ND	2.26	2.03	1.74	168918
	6	30.48	281-1273-ND	3.36	3.01	2.59	168920

Fig.	No. of Poles	Block Length (mm)	Digi-Key Part No.	Price Each			Mfg. Part No.
				1	10	100	
39	8	40.64	281-1274-ND	4.44	3.98	3.43	168922
	10	50.80	281-1275-ND	5.42	4.86	4.19	168924
	12	60.96	281-1276-ND	6.50	5.83	5.02	168926
	16	81.28	281-1277-ND	8.66	7.77	6.68	168930
	24	121.92	281-1278-ND	12.86	11.53	9.92	168938
5.08 mm Lead Spacing – Headers							
40	2	12.16	281-1279-ND	.46	.41	.36	151491
	3	17.24	281-1280-ND	.67	.61	.52	151501
	4	22.32	281-1281-ND	.91	.82	.71	151511
	6	32.48	281-1282-ND	1.34	1.21	1.04	151531
	8	42.64	281-1283-ND	1.78	1.60	1.37	151551
	10	52.80	281-1284-ND	2.23	2.00	1.73	151571
	12	62.96	281-1285-ND	2.66	2.39	2.06	151591
	16	83.28	281-1286-ND	3.58	3.21	2.76	151631
	24	123.92	281-1287-ND	5.21	4.67	4.02	151711
41	2	12.16	281-1288-ND	.36	.33	.28	163550
	3	17.24	281-1289-ND	.53	.48	.41	163551
	4	22.32	281-1290-ND	.70	.63	.54	163552
	6	32.48	281-1291-ND	1.06	.95	.82	163554
	8	42.64	281-1292-ND	1.39	1.25	1.08	163556
	10	52.80	281-1293-ND	1.75	1.57	1.36	163558
	12	62.96	281-1294-ND	2.09	1.88	1.61	163560
	16	83.28	281-1295-ND	2.78	2.50	2.15	163564
	24	123.92	281-1296-ND	4.15	3.72	3.21	163572
42	2	12.16	281-1297-ND	.46	.41	.36	152411
	3	17.24	281-1298-ND	.67	.61	.52	152421
	4	22.32	281-1299-ND	.91	.82	.71	152431
	6	32.48	281-1300-ND	1.34	1.21	1.04	152451
	8	42.64	281-1301-ND	1.78	1.60	1.37	152471
	10	52.80	281-1302-ND	2.23	2.00	1.73	152491
	12	62.96	281-1303-ND	2.66	2.39	2.06	152511
	16	83.28	281-1304-ND	3.58	3.21	2.76	152551
	24	123.92	281-1305-ND	5.33	4.78	4.11	152631
7.50 mm Lead Spacing – Plugs							
43	2	15.0	281-1306-ND	2.03	1.83	1.62	170190
	3	22.5	281-1307-ND	3.03	2.73	2.42	170191
	4	30.0	281-1308-ND	4.05	3.65	3.24	170192
	6	45.0	281-1309-ND	6.05	5.45	4.84	170194
	8	60.0	281-1310-ND	8.08	7.27	6.46	170196
	10	75.0	281-1311-ND	10.10	9.09	8.08	170198
44	2	15.0	281-1313-ND	2.03	1.83	1.62	170234
	3	22.5	281-1314-ND	3.03	2.73	2.42	170235
	4	30.0	281-1315-ND	4.05	3.65	3.24	170236
	6	45.0	281-1316-ND	6.05	5.45	4.84	170238
	8	60.0	281-1317-ND	8.08	7.27	6.46	170240
	10	75.0	281-1318-ND	10.10	9.09	8.08	170242
	12	90.0	281-1319-ND	12.13	10.92	9.70	170244
45	2	15.0	281-1320-ND	1.78	1.60	1.42	162803
	3	22.5	281-1321-ND	2.68	2.41	2.14	162804
	4	30.0	281-1322-ND	3.58	3.22	2.86	162805
	6	45.0	281-1323-ND	5.35	4.82	4.28	162807
	8	60.0	281-1324-ND	7.15	6.44	5.72	162809
	10	75.0	281-1325-ND	8.93	8.04	7.14	162811
	12	90.0	281-1326-ND	10.70	9.63	8.56	162813

Fig.	No. of Poles	Block Length (mm)	Digi-Key Part No.	Price Each			Mfg. Part No.
				1	10	100	
7.50 mm Lead Spacing – Headers							
46	2	15.0	281-1327-ND	.60	.54	.48	162891
	3	22.5	281-1328-ND	.88	.79	.70	162892
	4	30.0	281-1329-ND	1.18	1.06	.94	162893
	6	45.0	281-1330-ND	1.78	1.60	1.42	162895
	8	60.0	281-1331-ND	2.35	2.12	1.88	162897
	10	75.0	281-1332-ND	2.95	2.66	2.36	162899
	12	90.0	281-1333-ND	3.58	3.22	2.86	162901
47	2	15.0	281-1334-ND	.60	.54	.48	162957
	3	22.5	281-1335-ND	.88	.79	.70	162958
	4	30.0	281-1336-ND	1.18	1.06	.94	162959
	6	45.0	281-1337-ND	1.78	1.60	1.42	162961
	8	60.0	281-1338-ND	2.35	2.12	1.88	162963
	10	75.0	281-1339-ND	2.95	2.66	2.36	162965
	12	90.0	281-1340-ND	3.58	3.22	2.86	162967
7.62 mm Lead Spacing – Plugs							
48	2	15.12	281-1341-ND	2.03	1.83	1.62	170278
	3	22.74	281-1342-ND	3.03	2.73	2.42	170279
	4	30.36	281-1343-ND	4.05	3.65	3.24	170280
	6	45.60	281-1344-ND	6.05	5.45	4.84	170282
	8	60.84	281-1345-ND	8.08	7.27	6.46	170284
	10	76.08	281-1346-ND	10.10	9.09	8.08	170286
	12	91.32	281-1347-ND	12.13	10.92	9.70	170288
49	2	15.12	281-1348-ND	2.03	1.83	1.62	170322
	3	22.74	281-1349-ND	3.03	2.73	2.42	170323
	4	30.36	281-1350-ND	4.05	3.65	3.24	170324
	6	45.60	281-1351-ND	6.05	5.45	4.84	170326
	8	60.84	281-1352-ND	8.08	7.27	6.46	170328
	10	76.08	281-1353-ND	10.10	9.09	8.08	170330
	12	91.32	281-1354-ND	12.13	10.92	9.70	170332
50	2	15.12	281-1355-ND	1.78	1.60	1.42	162316
	3	22.74	281-1356-ND	2.68	2.41	2.14	162317
	4	30.36	281-1357-ND	3.58	3.22	2.86	162318
	6	45.60	281-1358-ND	5.35	4.82	4.28	162320
	8	60.84	281-1359-ND	7.15	6.44	5.72	162322
	10	76.08	281-1360-ND	8.93	8.04	7.14	162324
	12	91.32	281-1361-ND	10.70	9.63	8.56	162326
7.62 mm Lead Spacing – Headers							
51	2	15.24	281-1362-ND	.60	.54	.48	162404
	3	22.86	281-1363-ND	.88	.79	.70	162405
	4	30.48	281-1364-ND	1.18	1.06	.94	162406
	6	45.72	281-1365-ND	1.78	1.60	1.42	162408
	8	60.96	281-1366-ND	2.35	2.12	1.88	162410
	10	76.20	281-1367-ND	2.95	2.66	2.36	162412
	12	91.44	281-1368-ND	3.58	3.22	2.86	162414
52	2	15.24	281-1369-ND	.60	.54	.48	162492
	3	22.86	281-1370-ND	.88	.79	.70	162493
	4	30.48	281-1371-ND	1.18	1.06	.94	162494
	6	45.72	281-1372-ND	1.78	1.60	1.42	162496
	8	60.96	281-1373-ND	2.35	2.12	1.88	162498
	10	76.20	281-1374-ND	2.95	2.66	2.36	162500
	12	91.44	281-1375-ND	3.58	3.22	2.86	162502

281-1376-ND	Screwdriver for 3.5mm Plugs	$11.76
281-1377-ND	Screwdriver for 5.0, 5.08, 7.5, & 7.62mm Plugs	$8.43

AMERICAN
ELECTRICAL INC.

NEW! Din Rail

Features: • Steel Design • CE Aproved • Zinc Chromate Plating • No Markings on Rail

PART NUMBERING SYSTEM

ADR☐☐☐☐-☐☐☐☐☐-ND

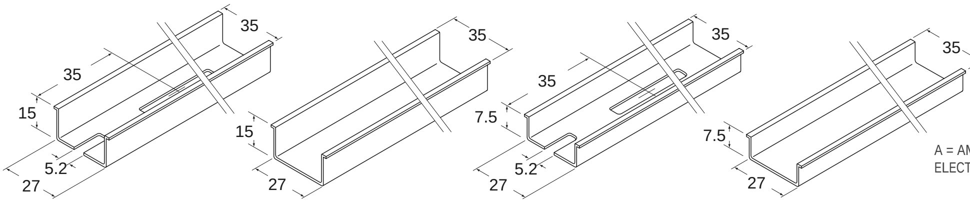
A = AMERICAN ELECTRICAL INC

DR = DIN RAIL

Width and height in MM
3575 = 35MM X 7.55MM
3515 = 35MM X 15MM

S = Slotted
U = Unslotted

Length in inches with an implied decimal point after the second digit. Example:
3 IN = 0300



Note: Lengths exceeding 48" may incur additional shipping charges.

Length (In.)	Digi-Key Part No.	"U" Price Each 1	"U" Price Each 10	"U" Price Each 100	"S" Price Each 1	"S" Price Each 10	"S" Price Each 100
	U = Unslotted S = Slotted						
3	ADR3575-☐0300-ND	1.44	1.08	.75	1.44	1.08	.75
4	ADR3575-☐0400-ND	1.61	1.22	.88	1.61	1.22	.88
5	ADR3575-☐0500-ND	1.63	1.26	.94	1.63	1.26	.94
6	ADR3575-☐0600-ND	1.88	1.45	1.09	1.88	1.45	1.09
7	ADR3575-☐0700-ND	2.15	1.66	1.25	2.15	1.66	1.25
8	ADR3575-☐0800-ND	2.40	1.87	1.40	2.40	1.87	1.40
9	ADR3575-☐0900-ND	2.65	2.07	1.55	2.65	2.07	1.55
10	ADR3575-☐1000-ND	2.89	2.25	1.69	2.89	2.25	1.69
11	ADR3575-☐1100-ND	3.11	2.44	1.83	3.11	2.44	1.83
12	ADR3575-☐1200-ND	3.32	2.61	1.96	3.32	2.61	1.96
13	ADR3575-☐1300-ND	3.52	2.77	2.08	3.52	2.77	2.08
14	ADR3575-☐1400-ND	3.71	2.93	2.20	3.71	2.93	2.20
15	ADR3575-☐1500-ND	3.88	3.08	2.31	3.88	3.08	2.31
16	ADR3575-☐1600-ND	4.04	3.22	2.42	4.04	3.22	2.42
17	ADR3575-☐1700-ND	4.20	3.36	2.52	4.20	3.36	2.52
18	ADR3575-☐1800-ND	4.34	3.48	2.61	4.34	3.48	2.61
19	ADR3575-☐1900-ND	4.48	3.59	2.69	4.48	3.59	2.69
20	ADR3575-☐2000-ND	4.61	3.69	2.77	4.61	3.69	2.77
21	ADR3575-☐2100-ND	4.73	3.79	2.84	4.73	3.79	2.84
22	ADR3575-☐2200-ND	4.84	3.88	2.91	4.84	3.88	2.91
23	ADR3575-☐2300-ND	4.94	3.95	2.97	4.94	3.95	2.97
24	ADR3575-☐2400-ND	5.02	4.02	3.02	5.02	4.02	3.02
25	ADR3575-☐2500-ND	5.10	4.09	3.07	5.10	4.09	3.07
26	ADR3575-☐2600-ND	5.17	4.14	3.10	5.17	4.14	3.10
27	ADR3575-☐2700-ND	5.27	4.22	3.17	5.27	4.22	3.17
28	ADR3575-☐2800-ND	5.42	4.34	3.26	5.42	4.34	3.26
29	ADR3575-☐2900-ND	5.58	4.47	3.36	5.58	4.47	3.36
30	ADR3575-☐3000-ND	5.73	4.59	3.45	5.73	4.59	3.45
31	ADR3575-☐3100-ND	5.88	4.70	3.54	5.88	4.70	3.54
32	ADR3575-☐3200-ND	6.02	4.82	3.63	6.02	4.82	3.63
33	ADR3575-☐3300-ND	6.16	4.93	3.72	6.16	4.93	3.72
34	ADR3575-☐3400-ND	6.30	5.05	3.81	6.30	5.05	3.81
35	ADR3575-☐3500-ND	6.44	5.16	3.90	6.44	5.16	3.90
36	ADR3575-☐3600-ND	6.57	5.26	3.98	6.57	5.26	3.98
37	ADR3575-☐3700-ND	6.71	5.37	4.06	6.71	5.37	4.06
38	ADR3575-☐3800-ND	6.83	5.47	4.15	6.83	5.47	4.15
39	ADR3575-☐3900-ND	6.96	5.57	4.23	6.96	5.57	4.23
40	ADR3575-☐4000-ND	7.08	5.67	4.30	7.08	5.67	4.30
41	ADR3575-☐4100-ND	7.20	5.77	4.38	7.20	5.77	4.38
42	ADR3575-☐4200-ND	7.32	5.86	4.46	7.32	5.86	4.46
43	ADR3575-☐4300-ND	7.44	5.95	4.53	7.44	5.95	4.53
44	ADR3575-☐4400-ND	7.55	6.04	4.61	7.55	6.04	4.61
45	ADR3575-☐4500-ND	7.66	6.13	4.68	7.66	6.13	4.68
46	ADR3575-☐4600-ND	7.77	6.22	4.75	7.77	6.22	4.75
47	ADR3575-☐4700-ND	7.87	6.30	4.82	7.87	6.30	4.82
48	ADR3575-☐4800-ND	7.97	6.38	4.88	7.97	6.38	4.88
49	ADR3575-☐4900-ND	8.07	6.46	4.95	8.07	6.46	4.95
50	ADR3575-☐5000-ND	8.17	6.54	5.01	8.17	6.54	5.01
51	ADR3575-☐5100-ND	8.26	6.61	5.07	8.26	6.61	5.07
52	ADR3575-☐5200-ND	8.35	6.68	5.14	8.35	6.68	5.14
53	ADR3575-☐5300-ND	8.44	6.75	5.20	8.44	6.75	5.20
54	ADR3575-☐5400-ND	8.55	6.84	5.27	8.55	6.84	5.27
55	ADR3575-☐5500-ND	8.67	6.93	5.34	8.67	6.93	5.34
56	ADR3575-☐5600-ND	8.79	7.02	5.41	8.79	7.02	5.41
57	ADR3575-☐5700-ND	8.91	7.11	5.49	8.91	7.11	5.49
58	ADR3575-☐5800-ND	9.02	7.20	5.56	9.02	7.20	5.56
59	ADR3575-☐5900-ND	9.14	7.29	5.63	9.14	7.29	5.63
60	ADR3575-☐6000-ND	9.25	7.38	5.70	9.25	7.38	5.70
61	ADR3575-☐6100-ND	9.36	7.46	5.77	9.36	7.46	5.77
62	ADR3575-☐6200-ND	9.47	7.54	5.83	9.47	7.54	5.83
63	ADR3575-☐6300-ND	9.58	7.62	5.90	9.58	7.62	5.90
64	ADR3575-☐6400-ND	9.69	7.71	5.97	9.69	7.71	5.97
65	ADR3575-☐6500-ND	9.80	7.79	6.03	9.80	7.79	6.03
66	ADR3575-☐6600-ND	9.90	7.86	6.10	9.90	7.86	6.10
67	ADR3575-☐6700-ND	10.01	7.94	6.16	10.01	7.94	6.16
68	ADR3575-☐6800-ND	10.11	8.02	6.22	10.11	8.02	6.22
69	ADR3575-☐6900-ND	10.21	8.09	6.29	10.21	8.09	6.29
70	ADR3575-☐7000-ND	10.31	8.16	6.35	10.31	8.16	6.35
71	ADR3575-☐7100-ND	10.41	8.24	6.41	10.41	8.24	6.41
72	ADR3575-☐7200-ND	10.50	8.31	6.47	10.50	8.31	6.47
73	ADR3575-☐7300-ND	10.60	8.38	6.53	10.60	8.38	6.53
74	ADR3575-☐7400-ND	10.69	8.44	6.58	10.69	8.44	6.58
75	ADR3575-☐7500-ND	10.79	8.51	6.64	10.79	8.51	6.64
76	ADR3575-☐7600-ND	10.88	8.58	6.70	10.88	8.58	6.70
77	ADR3575-☐7700-ND	10.97	8.64	6.75	10.97	8.64	6.75
78	ADR3575-☐7800-ND	11.06	8.70	6.80	11.06	8.70	6.80
—	**ADR3575-☐7874-ND***	11.12	8.75	6.84	11.12	8.75	6.84

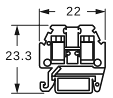
Length (In.)	Digi-Key Part No.	"U" Price Each 1	"U" Price Each 10	"U" Price Each 100	"S" Price Each 1	"S" Price Each 10	"S" Price Each 100
	U = Unslotted S = Slotted						
3	ADR3515-☐0300-ND	1.51	1.14	.80	1.51	1.14	.80
4	ADR3515-☐0400-ND	1.64	1.25	.91	1.64	1.25	.91
5	ADR3515-☐0500-ND	1.74	1.34	1.01	1.74	1.34	1.01
6	ADR3515-☐0600-ND	2.05	1.58	1.19	2.05	1.58	1.19
7	ADR3515-☐0700-ND	2.34	1.81	1.36	2.34	1.81	1.36
8	ADR3515-☐0800-ND	2.61	2.03	1.53	2.61	2.03	1.53
9	ADR3515-☐0900-ND	2.87	2.24	1.68	2.87	2.24	1.68
10	ADR3515-☐1000-ND	3.12	2.44	1.83	3.12	2.44	1.83
11	ADR3515-☐1100-ND	3.35	2.63	1.98	3.35	2.63	1.98
12	ADR3515-☐1200-ND	3.57	2.81	2.11	3.57	2.81	2.11
13	ADR3515-☐1300-ND	3.77	2.98	2.24	3.77	2.98	2.24
14	ADR3515-☐1400-ND	3.96	3.15	2.36	3.96	3.15	2.36
15	ADR3515-☐1500-ND	4.13	3.30	2.47	4.13	3.30	2.47
16	ADR3515-☐1600-ND	4.29	3.44	2.58	4.29	3.44	2.58
17	ADR3515-☐1700-ND	4.45	3.56	2.68	4.45	3.56	2.68
18	ADR3515-☐1800-ND	4.60	3.68	2.76	4.60	3.68	2.76
19	ADR3515-☐1900-ND	4.73	3.79	2.84	4.73	3.79	2.84
20	ADR3515-☐2000-ND	4.85	3.88	2.91	4.85	3.88	2.91
21	ADR3515-☐2100-ND	4.95	3.97	2.98	4.95	3.97	2.98
22	ADR3515-☐2200-ND	5.05	4.04	3.03	5.05	4.04	3.03
23	ADR3515-☐2300-ND	5.13	4.11	3.08	5.13	4.11	3.08
24	ADR3515-☐2400-ND	5.20	4.16	3.12	5.20	4.16	3.12
25	ADR3515-☐2500-ND	5.36	4.29	3.22	5.36	4.29	3.22
26	ADR3515-☐2600-ND	5.53	4.43	3.33	5.53	4.43	3.33
27	ADR3515-☐2700-ND	5.70	4.56	3.43	5.70	4.56	3.43
28	ADR3515-☐2800-ND	5.86	4.69	3.53	5.86	4.69	3.53
29	ADR3515-☐2900-ND	6.02	4.82	3.63	6.02	4.82	3.63
30	ADR3515-☐3000-ND	6.18	4.95	3.73	6.18	4.95	3.73
31	ADR3515-☐3100-ND	6.33	5.07	3.83	6.33	5.07	3.83
32	ADR3515-☐3200-ND	6.48	5.19	3.92	6.48	5.19	3.92
33	ADR3515-☐3300-ND	6.63	5.31	4.02	6.63	5.31	4.02
34	ADR3515-☐3400-ND	6.77	5.42	4.11	6.77	5.42	4.11
35	ADR3515-☐3500-ND	6.92	5.54	4.20	6.92	5.54	4.20
36	ADR3515-☐3600-ND	7.05	5.65	4.28	7.05	5.65	4.28
37	ADR3515-☐3700-ND	7.19	5.75	4.37	7.19	5.75	4.37
38	ADR3515-☐3800-ND	7.32	5.86	4.45	7.32	5.86	4.45
39	ADR3515-☐3900-ND	7.44	5.96	4.54	7.44	5.96	4.54
40	ADR3515-☐4000-ND	7.57	6.06	4.62	7.57	6.06	4.62
41	ADR3515-☐4100-ND	7.69	6.15	4.69	7.69	6.15	4.69
42	ADR3515-☐4200-ND	7.80	6.25	4.77	7.80	6.25	4.77
43	ADR3515-☐4300-ND	7.92	6.34	4.85	7.92	6.34	4.85
44	ADR3515-☐4400-ND	8.03	6.43	4.92	8.03	6.43	4.92
45	ADR3515-☐4500-ND	8.13	6.51	4.99	8.13	6.51	4.99
46	ADR3515-☐4600-ND	8.24	6.59	5.06	8.24	6.59	5.06
47	ADR3515-☐4700-ND	8.34	6.67	5.13	8.34	6.67	5.13
48	ADR3515-☐4800-ND	8.43	6.75	5.19	8.43	6.75	5.19
49	ADR3515-☐4900-ND	8.56	6.85	5.27	8.56	6.85	5.27
50	ADR3515-☐5000-ND	8.69	6.95	5.36	8.69	6.95	5.36
51	ADR3515-☐5100-ND	8.83	7.05	5.44	8.83	7.05	5.44
52	ADR3515-☐5200-ND	8.95	7.15	5.52	8.95	7.15	5.52
53	ADR3515-☐5300-ND	9.08	7.25	5.59	9.08	7.25	5.59
54	ADR3515-☐5400-ND	9.21	7.34	5.67	9.21	7.34	5.67
55	ADR3515-☐5500-ND	9.33	7.44	5.75	9.33	7.44	5.75
56	ADR3515-☐5600-ND	9.45	7.53	5.82	9.45	7.53	5.82
57	ADR3515-☐5700-ND	9.58	7.62	5.90	9.58	7.62	5.90
58	ADR3515-☐5800-ND	9.69	7.71	5.97	9.69	7.71	5.97
59	ADR3515-☐5900-ND	9.81	7.80	6.04	9.81	7.80	6.04
60	ADR3515-☐6000-ND	9.93	7.88	6.11	9.93	7.88	6.11
61	ADR3515-☐6100-ND	10.04	7.97	6.18	10.04	7.97	6.18
62	ADR3515-☐6200-ND	10.15	8.05	6.25	10.15	8.05	6.25
63	ADR3515-☐6300-ND	10.26	8.13	6.32	10.26	8.13	6.32
64	ADR3515-☐6400-ND	10.37	8.21	6.39	10.37	8.21	6.39
65	ADR3515-☐6500-ND	10.48	8.29	6.45	10.48	8.29	6.45
66	ADR3515-☐6600-ND	10.59	8.37	6.52	10.59	8.37	6.52
67	ADR3515-☐6700-ND	10.69	8.44	6.58	10.69	8.44	6.58
68	ADR3515-☐6800-ND	10.79	8.51	6.64	10.79	8.51	6.64
69	ADR3515-☐6900-ND	10.89	8.59	6.70	10.89	8.59	6.70
70	ADR3515-☐7000-ND	10.99	8.66	6.77	10.99	8.66	6.77
71	ADR3515-☐7100-ND	11.09	8.73	6.83	11.09	8.73	6.83
72	ADR3515-☐7200-ND	11.18	8.79	6.88	11.18	8.79	6.88
73	ADR3515-☐7300-ND	11.28	8.86	6.94	11.28	8.86	6.94
74	ADR3515-☐7400-ND	11.37	8.92	7.00	11.37	8.92	7.00
75	ADR3515-☐7500-ND	11.46	8.99	7.05	11.46	8.99	7.05
76	ADR3515-☐7600-ND	11.55	9.05	7.11	11.55	9.05	7.11
77	ADR3515-☐7700-ND	11.64	9.11	7.16	11.64	9.11	7.16
78	ADR3515-☐7800-ND	11.72	9.17	7.21	11.72	9.17	7.21
—	**ADR3515-☐7874-ND***	11.78	9.21	7.25	11.78	9.21	7.25

Note: ☐ S = Slotted, U = Unslotted **Note:** Sold in 1" increments from 3 to 78". Call for custom lengths and pricing!

***** 2 meter length

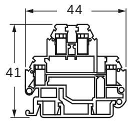
PHOENIX CONTACT DIN Rail-Mounted Terminal Blocks and Accessories

Fig. 1 — MT 1.5



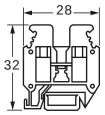
• Termination Block Width: 4.2mm • Terminations per Linear Meter: 476 • Wire Size (UL): 30-14 AWG • Voltage Approval (UL): 300V • Current Approval (UL): 15A

Fig. 2 — MTTB 1.5



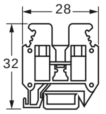
• Termination Block Width: 4.2mm • Terminations per Linear Meter: 952 • Wire Size (UL): 30-14 AWG • Voltage Approval (UL): 300V • Current Approval (UL): 15A

Fig. 3 — MBK 3/E-Z



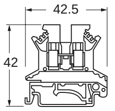
• Termination Block Width: 5.2mm • Terminations per Linear Meter: 384 • Wire Size (UL): 28-12 AWG • Voltage Approval (UL): 600V • Current Approval (UL): 20A

Fig. 4 — MBK 5/E-Z



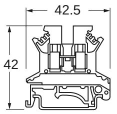
• Termination Block Width: 6.2mm • Terminations per Linear Meter: 322 • Wire Size (UL): 26-10 AWG • Voltage Approval (UL): 600V • Current Approval (UL): 30A

Fig. 5 — UK 1.5 N



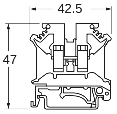
• Termination Block Width: 4.2mm • Terminations per Linear Meter: 476 • Wire Size (UL): 30-14 AWG • Voltage Approval (UL): 300V • Current Approval (UL): 15A

Fig. 6 — UK 2.5 N



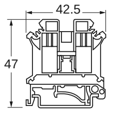
• Term. Block Width: 5.2mm • Terminations/Linear Meter: 384 • Wire Size (UL): 30-12 AWG • Voltage Approval (UL): 300V • Current Approval (UL): 20A

Fig. 7 — UK 5 N



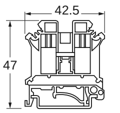
• Term. Block Width: 6.2mm • Terminations/Linear Meter: 322 • Wire Size (UL): 30-10 AWG • Voltage Approval (UL): 600V • Current Approval (UL): 30A

Fig. 8 — UK 6 N



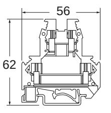
• Term. Block Width: 8.2mm • Terminations/Linear Meter: 242 • Wire Size (UL): 26-8 AWG • Voltage Approval (UL): 600V • Current Approval (UL): 50A

Fig. 9 — UK 10 N



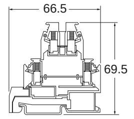
• Term. Block Width: 10.2mm • Terminations per Linear Meter: 196 • Wire Size (UL): 24-6 AWG • Voltage Approval (UL): 600V • Current Approval (UL): 65A

Fig. 10 — UKK 5



• Term. Block Width: 6.2mm • Terminations/Linear Meter: 644 • Wire Size (UL): 26-10 AWG • Voltage Approval (UL): 600V • Current Approval (UL): 30A

Fig. 11 — SLKK 5

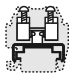


• Term. Block Width: 6.2mm • Terminations/Linear Meter: 805 • Wire Size (UL): 26-10 AWG • Volt. Approval (UL): 600V • Current Approval (UL): 30A

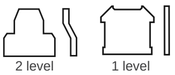
TERMINAL BLOCKS							*ACCESSORIES (See Descriptions and Prices Below)*											
			Price Each										Marker Strip (See Styles Below)					
Fig.	Series	Digi-Key Part No.	1	10	100	Phoenix-Contact Part No.	Grounding Block	End Cover	Spacer Cover	Spacer Plate	Fixed Bridge	Insertion Bridge	Unprinted	Printed	Marker Pen	Screwdriver	End Bracket	DIN Rail
1	MT 1.5	277-1506-ND	1.93	1.74	1.54	3100305	277-1507-ND	277-1508-ND	—	—	277-1494-ND	—	A	B	277-1474-ND	277-1477-ND	277-1485-ND	277-1509-ND
2	MTTB 1.5	277-1483-ND	4.73	4.26	3.79	1414129	—	277-1495-ND	277-1496-ND	277-1497-ND	277-1494-ND	—	A	B	277-1474-ND	277-1477-ND	277-1485-ND 277-1523-ND	277-1509-ND 277-1510-ND
3	MBK 3/E-Z	277-1481-ND	2.35	2.12	1.89	1413036	277-1482-ND	277-1484-ND	—	—	277-1488-ND	277-1486-ND	D	H, L	277-1474-ND	277-1478-ND	277-1485-ND	277-1509-ND
4	MBK 5/E-Z	277-1480-ND	2.26	2.03	1.81	1402940	277-1520-ND	277-1484-ND	—	—	277-1514-ND	277-1511-ND	E	I, M	277-1474-ND	277-1478-ND	277-1485-ND	277-1509-ND
5	UK 1.5 N	277-1504-ND	1.58	1.43	1.27	3005837	277-1505-ND	277-1493-ND	—	—	277-1494-ND	—	C	P, Q	277-1474-ND	277-1477-ND	277-1523-ND	277-1510-ND
6	UK 2.5 N	277-1499-ND	1.38	1.24	1.10	3003347	277-1517-ND	277-1493-ND	—	—	277-1488-ND	277-1486-ND	D	H, L	277-1474-ND	277-1478-ND	277-1523-ND	277-1510-ND
7	UK 5 N	277-1501-ND	1.68	1.51	1.35	3004362	277-1518-ND	277-1498-ND	—	—	277-1514-ND	277-1511-ND	E	I, M	277-1474-ND	277-1478-ND	277-1523-ND	277-1510-ND
8	UK 6 N	277-1502-ND	2.15	1.94	1.72	3004524	277-1519-ND	277-1498-ND	—	—	277-1515-ND	277-1512-ND	F	J, N	277-1474-ND	277-1479-ND	277-1523-ND	277-1510-ND
9	UK 10 N	277-1503-ND	2.74	2.47	2.19	3005073	277-1500-ND	277-1498-ND	—	—	277-1516-ND	277-1513-ND	G	K, O	277-1474-ND	277-1479-ND	277-1523-ND	277-1510-ND
10	UKK 5	277-1491-ND	4.28	3.85	3.43	2774017	277-1492-ND	277-1487-ND	277-1490-ND	277-1489-ND	277-1514-ND	277-1511-ND	E	I, M	277-1474-ND	277-1478-ND	277-1523-ND	277-1510-ND
11	SLKK 5	277-1521-ND	7.99	7.19	6.40	0461018	—	277-1487-ND	277-1490-ND	277-1489-ND	277-1514-ND	277-1511-ND	E	I, O	277-1474-ND	277-1478-ND	277-1523-ND	277-1510-ND

Accessories

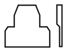
Grounding Block — Grounds connected wires to DIN rail



End Cover — Covers open end of terminal block

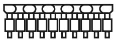


Spacer Cover — Covers open end of 2 level terminal block and compensates for level offset

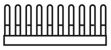


Spacer Plate — Compensates for level offset on closed end of 2 level terminal block

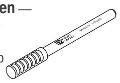
Fixed Bridge — For cross connections between terminal blocks in terminal center bridging cavity, 10 position, divisible



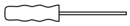
Insertion Bridge — For cross connections between terminal blocks in wire entry cavity, 10 position, divisible



Marker Pen — To label the unprinted marker strip

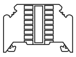


Screwdriver — Fully insulated blade shaft, straight blade design



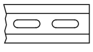
End Bracket — Clamps terminal blocks into place on DIN rail

For 15mm wide DIN rail

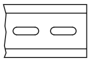


For 35mm wide DIN rail

DIN Rail — with elongated mounting holes



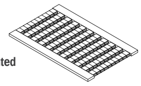
15mm wide
5.5mm deep
1 meter long



35mm wide
7.5mm deep
1 meter long

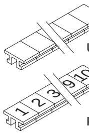
Marker Strip — Unprinted or printed, will mark termination points

ZBFM Type



(Unprinted shown)

ZB Type



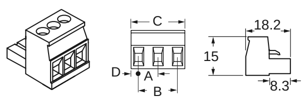
Description, Width	Digi-Key Part No.	Price Each 1	10	100	Phoenix-Contact Part No.
Grounding Blocks					
MT 1.5-PE, 4.2mm	277-1507-ND	6.06	5.46	4.86	3100318
MBK 3/E-Z-PE, 5.2mm	277-1482-ND	5.45	4.91	4.36	1413117
MBK 5/E-Z-PE, 6.2mm	277-1520-ND	5.87	5.29	4.70	0452043
USLKG 1.5 N, 4.2mm	277-1505-ND	5.29	4.77	4.24	3005853
USLKG 2.5 N, 5.2mm	277-1517-ND	6.12	5.51	4.90	0441119
USLKG 5, 6.2mm	277-1518-ND	6.02	5.42	4.82	0441504
USLKG 6 N, 8.2mm	277-1519-ND	6.59	5.93	5.27	0442079
USLKG 10 N, 10.2mm	277-1500-ND	7.18	6.46	5.75	3003923
UKK 5-PE, 6.2mm	277-1492-ND	13.45	12.11	10.76	2774211
End Covers					
D-MT 1.5, 1mm	277-1508-ND	.54	.49	.43	3100321
D-MTTB 1.5, 1mm	277-1495-ND	.84	.76	.68	3002665
D-MBK/E, 1mm	277-1484-ND	.65	.59	.52	1415021
D-UK 2.5, 1.5mm	277-1493-ND	.87	.78	.70	3001022
D-UK 4/10, 1.5mm	277-1498-ND	.89	.81	.72	3003020
D-UKK 3/5, 2.5mm	277-1487-ND	1.33	1.20	1.07	2770024
Spacer Covers					
DG-MTTB 1.5, 2mm	277-1496-ND	1.00	.91	.81	3002678
DG-UKK 3/5, 2.5mm	277-1490-ND	1.46	1.32	1.17	2770817
Spacer Plates					
DP-MTTB 1.5, 2mm	277-1497-ND	.95	.86	.76	3002681
DP-UKK 3/5, 2.5mm	277-1489-ND	.98	.88	.79	2770794

Description, Width	Digi-Key Part No.	Price Each 1	10	100	Phoenix-Contact Part No.
Fixed Bridge					
FBRN 10-4 N	277-1494-ND	5.64	5.08	4.51	3001624
FBRI 10-5 N	277-1488-ND	7.78	7.01	6.23	2770642
FBI 10-6	277-1514-ND	6.64	5.98	5.32	0203250
FBI 10-8	277-1515-ND	7.76	6.98	6.21	0203263
FBI 10-10	277-1516-ND	10.05	9.05	8.05	0203276
Insertion Bridge					
EBL 10-5	277-1486-ND	2.31	2.08	1.85	2303132
EB 10-6	277-1511-ND	3.70	3.33	2.96	0201139
EB 10-8	277-1512-ND	4.58	4.13	3.67	0202138
EB 10-10	277-1513-ND	6.15	5.54	4.92	0203137
Marker Pen					
M-PEN, black	277-1474-ND	12.73	11.46	10.19	1051993
Screwdrivers					
SZS 0.4 x 2.5	277-1477-ND	13.33	12.00	10.66	1205037
SZS 0.6 x 3.5	277-1478-ND	13.33	12.00	10.66	1205053
SZS 1.0 x 4.0	277-1479-ND	20.17	18.15	16.14	1205066
End Brackets					
E/MK 1, 6mm	277-1485-ND	.84	.76	.68	1421659
E/NS 35 N, 9.5mm	277-1523-ND	1.25	1.13	1.01	0800886
DIN Rail					
NS 15 PERF 1 METER	277-1509-ND	8.13	7.32	6.50	5602099
NS 35/7.5 PERF 1 METER	277-1510-ND	9.75	8.78	7.80	5602100

Style	Description	Digi-Key Part No.	Price Each 1	10	100	Phoenix-Contact Part No.
	Marker Strips					
A	ZBFM 4/WH: UNPRINTED — Unprinted, will mark 100 termination points	277-1524-ND	8.59	7.74	6.88	0803579
B	ZBFM 4/WH, LGS: 1-100 — Preprinted 1-100, will mark 100 termination points	277-1522-ND	12.05	10.85	9.64	0800268
C	ZB 4: UNPRINTED — Unprinted, will mark 10 termination points	277-1525-ND	.92	.83	.74	0805001
D	ZB 5: UNPRINTED — Unprinted, will mark 10 termination points	277-1472-ND	.92	.83	.74	1050004
E	ZB 6: UNPRINTED — Unprinted, will mark 10 termination points	277-1473-ND	.92	.83	.74	1051003
F	ZB 8: UNPRINTED — Unprinted, will mark 10 termination points	277-1475-ND	.92	.83	.74	1052002
G	ZB 10: UNPRINTED — Unprinted, will mark 10 termination points	277-1476-ND	.92	.83	.74	1053001
H	ZB 5, LGS: 1-10 — Preprinted 1-10, will mark 10 termination points	277-1528-ND	1.28	1.16	1.03	1050017:0001
I	ZB 6, LGS: 1-10 — Preprinted 1-10, will mark 10 termination points	277-1530-ND	1.28	1.16	1.03	1051016:0001
J	ZB 8, LGS: 1-10 — Preprinted 1-10, will mark 10 termination points	277-1532-ND	1.28	1.16	1.03	1052015:0001
K	ZB 10, LGS: 1-10 — Preprinted 1-10, will mark 10 termination points	277-1534-ND	1.28	1.16	1.03	1053014:0001
L	ZB 5, LGS: 11-20 — Preprinted 11-20, will mark 10 termination points	277-1529-ND	1.28	1.16	1.03	1050017:0011
M	ZB 6, LGS: 11-20 — Preprinted 11-20, will mark 10 termination points	277-1531-ND	1.28	1.16	1.03	1051016:0011
N	ZB 8, LGS: 11-20 — Preprinted 11-20, will mark 10 termination points	277-1533-ND	1.28	1.16	1.03	1052015:0011
O	ZB 10, LGS: 11-20 — Preprinted 11-20, will mark 10 termination points	277-1535-ND	1.28	1.16	1.03	1053014:0011
P	ZB 4, QR: 1-10 — Preprinted 1-10, will mark 10 termination points	277-1526-ND	1.28	1.16	1.03	0805807:0001
Q	ZB 4, QR: 11-20 — Preprinted 11-20, will mark 10 termination points	277-1527-ND	1.28	1.16	1.03	0805807:0011

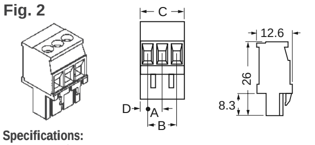
Terminal Blocks — PCB Plugs and Headers

Fig. 1



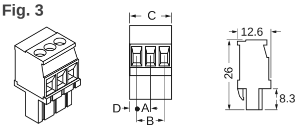
Specifications:
UL: 300 V @ 10 A. 12-30 AWG.
IEC: 250 V @ 12 A. 12-24 AWG. **Color:** Green

Fig. 2



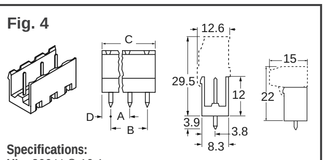
Specifications:
UL: 300 V @ 10 A. 12-30 AWG.
IEC: 250 V @ 12 A. 12-24 AWG. **Color:** Green

Fig. 3



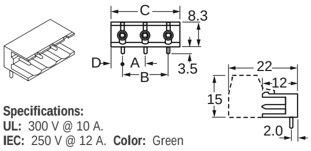
Specifications:
UL: 300 V @ 10 A. 12-30 AWG.
IEC: 250 V @ 12 A. 12-24 AWG. **Color:** Green

Fig. 4



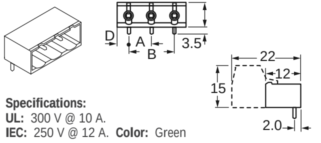
Specifications:
UL: 300 V @ 10 A.
IEC: 250 V @ 12 A. **Color:** Green

Fig. 5



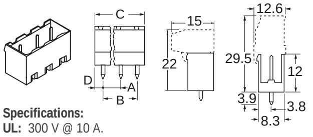
Specifications:
UL: 300 V @ 10 A.
IEC: 250 V @ 12 A. **Color:** Green

Fig. 6



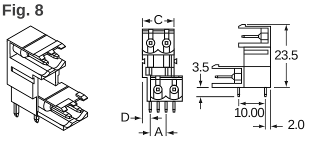
Specifications:
UL: 300 V @ 10 A.
IEC: 250 V @ 12 A. **Color:** Green

Fig. 7



Specifications:
UL: 300 V @ 10 A.
IEC: 250 V @ 12 A. **Color:** Green

Fig. 8



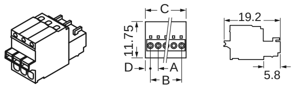
Specifications:
UL: 300 V @ 10 A. **IEC:** 250 V @ 10 A. **Color:** Green

No. of Pos.	Dimensions (mm)				Digi-Key Part No.	Price Each			Phoenix Contact Type No.	Phoenix Contact Part No.
	A	B	C	D		1	10	100		
Fig. 1 — 5mm Connector Terminal Block Plug										
2	5.0	5	10	2.5	277-1000-ND	1.38	1.24	1.06	MSTB 2.5/2-ST	1754449
3	5.0	10	15	2.5	277-1001-ND	2.07	1.86	1.59	MSTB 2.5/3-ST	1754465
4	5.0	15	20	2.5	277-1002-ND	2.76	2.48	2.12	MSTB 2.5/4-ST	1754481
5	5.0	20	25	2.5	277-1003-ND	3.42	3.08	2.63	MSTB 2.5/5-ST	1754504
6	5.0	25	30	2.5	277-1004-ND	4.11	3.70	3.16	MSTB 2.5/6-ST	1754520
7	5.0	30	35	2.5	277-1005-ND	4.81	4.33	3.70	MSTB 2.5/7-ST	1754546
8	5.0	35	40	2.5	277-1006-ND	5.46	4.92	4.20	MSTB 2.5/8-ST	1754562
9	5.0	40	45	2.5	277-1007-ND	6.18	5.56	4.75	MSTB 2.5/9-ST	1754588
10	5.0	45	50	2.5	277-1008-ND	6.86	6.18	5.28	MSTB 2.5/10-ST	1754601
11	5.0	50	55	2.5	277-1009-ND	7.53	6.78	5.79	MSTB 2.5/11-ST	1754627
12	5.0	55	60	2.5	277-1010-ND	8.22	7.40	6.32	MSTB 2.5/12-ST	1754643
Fig. 1 — 5.08mm Connector Terminal Block Plug										
2	5.08	5.08	10.16	2.54	277-1011-ND	1.38	1.24	1.06	MSTB 2.5/2-ST-5.08	1757019
3	5.08	10.16	15.24	2.54	277-1012-ND	2.07	1.86	1.59	MSTB 2.5/3-ST-5.08	1757022
4	5.08	15.24	20.32	2.54	277-1013-ND	2.76	2.48	2.12	MSTB 2.5/4-ST-5.08	1757035
5	5.08	20.32	25.40	2.54	277-1014-ND	3.42	3.08	2.63	MSTB 2.5/5-ST-5.08	1757048
6	5.08	25.40	30.48	2.54	277-1015-ND	4.11	3.70	3.16	MSTB 2.5/6-ST-5.08	1757051
7	5.08	30.48	35.56	2.54	277-1016-ND	4.81	4.33	3.70	MSTB 2.5/7-ST-5.08	1757064
8	5.08	35.56	40.64	2.54	277-1017-ND	5.46	4.92	4.20	MSTB 2.5/8-ST-5.08	1757077
9	5.08	40.64	45.72	2.54	277-1018-ND	6.18	5.56	4.75	MSTB 2.5/9-ST-5.08	1757080
10	5.08	45.72	50.80	2.54	277-1019-ND	6.86	6.18	5.28	MSTB 2.5/10-ST-5.08	1757093
11	5.08	50.80	55.88	2.54	277-1020-ND	7.53	6.78	5.79	MSTB 2.5/11-ST-5.08	1757103
12	5.08	55.88	60.96	2.54	277-1021-ND	8.22	7.40	6.32	MSTB 2.5/12-ST-5.08	1757116
Fig. 2 — 5mm Connector Terminal Block Plug										
2	5.0	5	10	2.5	277-1029-ND	1.59	1.43	1.22	MVSTBR 2.5/2-ST	1792016
3	5.0	10	15	2.5	277-1030-ND	2.34	2.11	1.80	MVSTBR 2.5/3-ST	1792029
4	5.0	15	20	2.5	277-1031-ND	3.16	2.85	2.43	MVSTBR 2.5/4-ST	1792032
5	5.0	20	25	2.5	277-1032-ND	3.95	3.56	3.04	MVSTBR 2.5/5-ST	1792045
6	5.0	25	30	2.5	277-1033-ND	4.75	4.28	3.65	MVSTBR 2.5/6-ST	1792058
7	5.0	30	35	2.5	277-1034-ND	5.54	4.99	4.26	MVSTBR 2.5/7-ST	1792061
8	5.0	35	40	2.5	277-1035-ND	6.31	5.68	4.85	MVSTBR 2.5/8-ST	1792074
9	5.0	40	45	2.5	277-1036-ND	7.11	6.40	5.47	MVSTBR 2.5/9-ST	1792087
10	5.0	45	50	2.5	277-1037-ND	7.88	7.09	6.06	MVSTBR 2.5/10-ST	1792090
11	5.0	50	55	2.5	277-1038-ND	8.68	7.82	6.68	MVSTBR 2.5/11-ST	1792100
12	5.0	55	60	2.5	277-1039-ND	9.46	8.52	7.28	MVSTBR 2.5/12-ST	1792113
Fig. 2 — 5.08mm Connector Terminal Block Plug										
2	5.08	5.08	10.16	2.54	277-1040-ND	1.59	1.43	1.22	MVSTBR 2.5/2-ST-5.08	1792249
3	5.08	10.16	15.24	2.54	277-1041-ND	2.34	2.11	1.80	MVSTBR 2.5/3-ST-5.08	1792252
4	5.08	15.24	20.32	2.54	277-1042-ND	3.16	2.85	2.43	MVSTBR 2.5/4-ST-5.08	1792265
5	5.08	20.32	25.40	2.54	277-1043-ND	3.95	3.56	3.04	MVSTBR 2.5/5-ST-5.08	1792278
6	5.08	25.40	30.48	2.54	277-1044-ND	4.75	4.28	3.65	MVSTBR 2.5/6-ST-5.08	1792281
7	5.08	30.48	35.56	2.54	277-1045-ND	5.54	4.99	4.26	MVSTBR 2.5/7-ST-5.08	1792294
8	5.08	35.56	40.64	2.54	277-1046-ND	6.31	5.68	4.85	MVSTBR 2.5/8-ST-5.08	1792304
9	5.08	40.64	45.72	2.54	277-1047-ND	7.11	6.40	5.47	MVSTBR 2.5/9-ST-5.08	1792317
10	5.08	45.72	50.80	2.54	277-1048-ND	7.88	7.09	6.06	MVSTBR 2.5/10-ST-5.08	1792320
11	5.08	50.80	55.88	2.54	277-1049-ND	8.68	7.82	6.68	MVSTBR 2.5/11-ST-5.08	1792333
12	5.08	55.88	60.96	2.54	277-1050-ND	9.46	8.52	7.28	MVSTBR 2.5/12-ST-5.08	1792346
Fig. 3 — 5mm Connector Terminal Block Plug										
2	5.0	5	10	2.5	277-1051-ND	1.59	1.43	1.22	MVSTBW 2.5/2-ST	1792524
3	5.0	10	15	2.5	277-1052-ND	2.34	2.11	1.80	MVSTBW 2.5/3-ST	1792537
4	5.0	15	20	2.5	277-1053-ND	3.16	2.85	2.43	MVSTBW 2.5/4-ST	1792540
5	5.0	20	25	2.5	277-1054-ND	3.95	3.56	3.04	MVSTBW 2.5/5-ST	1792553
6	5.0	25	30	2.5	277-1055-ND	4.75	4.28	3.65	MVSTBW 2.5/6-ST	1792566
7	5.0	30	35	2.5	277-1056-ND	5.54	4.99	4.26	MVSTBW 2.5/7-ST	1792579
8	5.0	35	40	2.5	277-1057-ND	6.31	5.68	4.85	MVSTBW 2.5/8-ST	1792582
9	5.0	40	45	2.5	277-1058-ND	7.11	6.40	5.47	MVSTBW 2.5/9-ST	1792595
10	5.0	45	50	2.5	277-1059-ND	7.88	7.09	6.06	MVSTBW 2.5/10-ST	1792605
11	5.0	50	55	2.5	277-1060-ND	8.68	7.82	6.68	MVSTBW 2.5/11-ST	1792618
12	5.0	55	60	2.5	277-1061-ND	9.46	8.52	7.28	MVSTBW 2.5/12-ST	1792621
Fig. 3 — 5.08mm Connector Terminal Block Plug										
2	5.08	5.08	10.16	2.54	277-1062-ND	1.59	1.43	1.22	MVSTBW 2.5/2-ST-5.08	1792757
3	5.08	10.16	15.24	2.54	277-1063-ND	2.34	2.11	1.80	MVSTBW 2.5/3-ST-5.08	1792760
4	5.08	15.24	20.32	2.54	277-1064-ND	3.16	2.85	2.43	MVSTBW 2.5/4-ST-5.08	1792773
5	5.08	20.32	25.40	2.54	277-1065-ND	3.95	3.56	3.04	MVSTBW 2.5/5-ST-5.08	1792786
6	5.08	25.40	30.48	2.54	277-1066-ND	4.75	4.28	3.65	MVSTBW 2.5/6-ST-5.08	1792799
7	5.08	30.48	35.56	2.54	277-1067-ND	5.54	4.99	4.26	MVSTBW 2.5/7-ST-5.08	1792809
8	5.08	35.56	40.64	2.54	277-1068-ND	6.31	5.68	4.85	MVSTBW 2.5/8-ST-5.08	1792812
9	5.08	40.64	45.72	2.54	277-1069-ND	7.11	6.40	5.47	MVSTBW 2.5/9-ST-5.08	1792825
10	5.08	45.72	50.80	2.54	277-1070-ND	7.88	7.09	6.06	MVSTBW 2.5/10-ST-5.08	1792838
11	5.08	50.80	55.88	2.54	277-1071-ND	8.68	7.82	6.68	MVSTBW 2.5/11-ST-5.08	1792841
12	5.08	55.88	60.96	2.54	277-1072-ND	9.46	8.52	7.28	MVSTBW 2.5/12-ST-5.08	1792854
Fig. 4 — 5mm Connector Header — Vertical										
2	5.0	5	10	2.5	277-1073-ND	.48	.44	.37	MSTBV 2.5/2-G	1753437
3	5.0	10	15	2.5	277-1074-ND	.72	.65	.55	MSTBV 2.5/3-G	1753453
4	5.0	15	20	2.5	277-1075-ND	.96	.87	.74	MSTBV 2.5/4-G	1753479
5	5.0	20	25	2.5	277-1076-ND	1.20	1.08	.92	MSTBV 2.5/5-G	1753495
6	5.0	25	30	2.5	277-1077-ND	1.43	1.29	1.10	MSTBV 2.5/6-G	1753518
7	5.0	30	35	2.5	277-1078-ND	1.66	1.50	1.28	MSTBV 2.5/7-G	1753534
8	5.0	35	40	2.5	277-1079-ND	1.90	1.71	1.46	MSTBV 2.5/8-G	1753550
9	5.0	40	45	2.5	277-1080-ND	2.15	1.94	1.65	MSTBV 2.5/9-G	1753576
10	5.0	45	50	2.5	277-1081-ND	2.38	2.15	1.83	MSTBV 2.5/10-G	1753592
11	5.0	50	55	2.5	277-1082-ND	2.63	2.37	2.02	MSTBV 2.5/11-G	1753615
12	5.0	55	60	2.5	277-1083-ND	2.86	2.58	2.20	MSTBV 2.5/12-G	1753631
Fig. 4 — 5.08mm Connector Header — Vertical										
2	5.08	5.08	10.16	2.54	277-1128-ND	.48	.44	.37	MSTBV 2.5/2-G-5.08	1758018
3	5.08	10.16	15.24	2.54	277-1129-ND	.72	.65	.55	MSTBV 2.5/3-G-5.08	1758021
4	5.08	15.24	20.32	2.54	277-1130-ND	.96	.87	.74	MSTBV 2.5/4-G-5.08	1758034
5	5.08	20.32	25.40	2.54	277-1131-ND	1.20	1.08	.92	MSTBV 2.5/5-G-5.08	1758047
6	5.08	25.40	30.48	2.54	277-1132-ND	1.43	1.29	1.10	MSTBV 2.5/6-G-5.08	1758050
7	5.08	30.48	35.56	2.54	277-1133-ND	1.66	1.50	1.28	MSTBV 2.5/7-G-5.08	1758063
8	5.08	35.56	40.64	2.54	277-1134-ND	1.90	1.71	1.46	MSTBV 2.5/8-G-5.08	1758076
9	5.08	40.64	45.72	2.54	277-1135-ND	2.15	1.94	1.65	MSTBV 2.5/9-G-5.08	1758089
10	5.08	45.72	50.80	2.54	277-1136-ND	2.38	2.15	1.83	MSTBV 2.5/10-G-5.08	1758092
11	5.08	50.80	55.88	2.54	277-1137-ND	2.63	2.37	2.02	MSTBV 2.5/11-G-5.08	1758102
12	5.08	55.88	60.96	2.54	277-1138-ND	2.86	2.58	2.20	MSTBV 2.5/12-G-5.08	1758115
Fig. 5 — 5mm Connector Header — Right Angle										
2	5.0	5	10	2.5	277-1084-ND	.48	.44	.37	MSTB 2.5/2-G	1754436
3	5.0	10	15	2.5	277-1085-ND	.72	.65	.55	MSTB 2.5/3-G	1754452
4	5.0	15	20	2.5	277-1086-ND	.96	.87	.74	MSTB 2.5/4-G	1754478
5	5.0	20	25	2.5	277-1087-ND	1.20	1.08	.92	MSTB 2.5/5-G	1754494
6	5.0	25	30	2.5	277-1088-ND	1.43	1.29	1.10	MSTB 2.5/6-G	1754517
7	5.0	30	35	2.5	277-1089-ND	1.66	1.50	1.28	MSTB 2.5/7-G	1754533
8	5.0	35	40	2.5	277-1090-ND	1.90	1.71	1.46	MSTB 2.5/8-G	1754559
9	5.0	40	45	2.5	277-1091-ND	2.15	1.94	1.65	MSTB 2.5/9-G	1754575
10	5.0	45	50	2.5	277-1092-ND	2.38	2.15	1.83	MSTB 2.5/10-G	1754591
11	5.0	50	55	2.5	277-1093-ND	2.63	2.37	2.02	MSTB 2.5/11-G	1754614
12	5.0	55	60	2.5	277-1094-ND	2.86	2.58	2.20	MSTB 2.5/12-G	1754630
Fig. 5 — 5.08mm Connector Header — Right Angle										
2	5.08	5.08	10.16	2.54	277-1095-ND	.48	.44	.37	MSTB 2.5/2-G-5.08	1759017
3	5.08	10.16	15.24	2.54	277-1096-ND	.72	.65	.55	MSTB 2.5/3-G-5.08	1759020
4	5.08	15.24	20.32	2.54	277-1097-ND	.96	.87	.74	MSTB 2.5/4-G-5.08	1759033
5	5.08	20.32	25.40	2.54	277-1098-ND	1.20	1.08	.92	MSTB 2.5/5-G-5.08	1759046
6	5.08	25.40	30.48	2.54	277-1099-ND	1.43	1.29	1.10	MSTB 2.5/6-G-5.08	1759059
7	5.08	30.48	35.56	2.54	277-1100-ND	1.66	1.50	1.28	MSTB 2.5/7-G-5.08	1759062
8	5.08	35.56	40.64	2.54	277-1101-ND	1.90	1.71	1.46	MSTB 2.5/8-G-5.08	1759075
9	5.08	40.64	45.72	2.54	277-1102-ND	2.15	1.94	1.65	MSTB 2.5/9-G-5.08	1759088
10	5.08	45.72	50.80	2.54	277-1103-ND	2.38	2.15	1.83	MSTB 2.5/10-G-5.08	1759091
11	5.08	50.80	55.88	2.54	277-1104-ND	2.63	2.37	2.02	MSTB 2.5/11-G-5.08	1759101
12	5.08	55.88	60.96	2.54	277-1105-ND	2.86	2.58	2.20	MSTB 2.5/12-G-5.08	1759114
Fig. 6 — 5mm Connector Header — Right Angle										
2	5.0	5	12	3.5	277-1117-ND	.48	.44	.37	MSTBA 2.5/2-G	1757475
3	5.0	10	17	3.5	277-1118-ND	.72	.65	.55	MSTBA 2.5/3-G	1757488
4	5.0	15	22	3.5	277-1119-ND	.96	.87	.74	MSTBA 2.5/4-G	1757491
5	5.0	20	27	3.5	277-1120-ND	1.20	1.08	.92	MSTBA 2.5/5-G	1757501
6	5.0	25	32	3.5	277-1121-ND	1.43	1.29	1.10	MSTBA 2.5/6-G	1757514
7	5.0	30	37	3.5	277-1122-ND	1.66	1.50	1.28	MSTBA 2.5/7-G	1755493
8	5.0	35	42	3.5	277-1123-ND	1.90	1.71	1.46	MSTBA 2.5/8-G	1757527
9	5.0	40	47	3.5	277-1124-ND	2.15	1.94	1.65	MSTBA 2.5/9-G	1757530
10	5.0	45	52	3.5	277-1125-ND	2.38	2.15	1.83	MSTBA 2.5/10-G	1757543
11	5.0	50	57	3.5	277-1126-ND	2.63	2.37	2.02	MSTBA 2.5/11-G	1757556
12	5.0	55	62	3.5	277-1127-ND	2.86	2.58	2.20	MSTBA 2.5/12-G	1757569
Fig. 6 — 5.08mm Connector Header — Right Angle										
2	5.08	5.08	12.16	3.54	277-1106-ND	.48	.44	.37	MSTBA 2.5/2-G-5.08	1757242
3	5.08	10.16	17.24	3.54	277-1107-ND	.72	.65	.55	MSTBA 2.5/3-G-5.08	1757255
4	5.08	15.24	22.32	3.54	277-1108-ND	.96	.87	.74	MSTBA 2.5/4-G-5.08	1757268
5	5.08	20.32	27.40	3.54	277-1109-ND	1.20	1.08	.92	MSTBA 2.5/5-G-5.08	1757271
6	5.08	25.40	32.48	3.54	277-1110-ND	1.43	1.29	1.10	MSTBA 2.5/6-G-5.08	1757284
7	5.08	30.48	37.56	3.54	277-1111-ND	1.66	1.50	1.28	MSTBA 2.5/7-G-5.08	1757297
8	5.08	35.56	42.64	3.54	277-1112-ND	1.90	1.71	1.46	MSTBA 2.5/8-G-5.08	1757307
9	5.08	40.64	47.72	3.54	277-1113-ND	2.15	1.94	1.65	MSTBA 2.5/9-G-5.08	1757310
10	5.08	45.72	52.80	3.54	277-1114-ND	2.38	2.15	1.83	MSTBA 2.5/10-G-5.08	1757323
11	5.08	50.80	57.88	3.54	277-1115-ND	2.63	2.37	2.02	MSTBA 2.5/11-G-5.08	1757336
12	5.08	55.88	62.96	3.54	277-1116-ND	2.86	2.58	2.20	MSTBA 2.5/12-G-5.08	1757349
Fig. 7 — 5mm Connector Header — Vertical										
2	5.0	5	12	3.5	277-1140-ND	.48	.44	.37	MSTBVA 2.5/2-G	1755516
3	5.0	10	17	3.5	277-1141-ND	.72	.65	.55	MSTBVA 2.5/3-G	1755529
4	5.0	15	22	3.5	277-1142-ND	.96	.87	.74	MSTBVA 2.5/4-G	1755532
5	5.0	20	27	3.5	277-1143-ND	1.20	1.08	.92	MSTBVA 2.5/5-G	1755545
6	5.0	25	32	3.5	277-1144-ND	1.43	1.29	1.10	MSTBVA 2.5/6-G	1755558
7	5.0	30	37	3.5	277-1145-ND	1.66	1.50	1.28	MSTBVA 2.5/7-G	1755561
8	5.0	35	42	3.5	277-1146-ND	1.90	1.71	1.46	MSTBVA 2.5/8-G	1755574
9	5.0	40	47	3.5	277-1147-ND	2.15	1.94	1.65	MSTBVA 2.5/9-G	1755587
10	5.0	45	52	3.5	277-1139-ND	2.38	2.15	1.83	MSTBVA 2.5/10-G	1755503
11	5.0	50	57	3.5	277-1148-ND	2.63	2.37	2.02	MSTBVA 2.5/11-G	1755590
12	5.0	55	62	3.5	277-1149-ND	2.86	2.58	2.20	MSTBVA 2.5/12-G	1755600

(Continued)

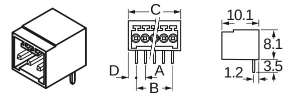
Terminal Blocks — PCB Plugs and Headers *(Cont.)*

Fig. 9



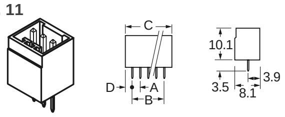
Specifications:
UL: 125 V @ 4 A, 20-28 AWG.
IEC: 100 V @ 4 A, 20-28 AWG. **Color:** Green

Fig. 10



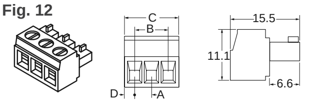
Specifications:
UL: 125 V @ 4 A. **IEC:** 80 V @ 4 A. **Color:** Green

Fig. 11



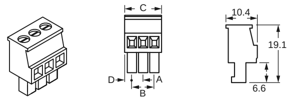
Specifications:
UL: 125 V @ 4 A. **IEC:** 80 V @ 4 A. **Color:** Green

Fig. 12



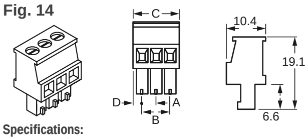
Specifications:
UL: 300 V @ 8 A. 14-30 AWG.
IEC: 125 V @ 8 A. 16-28 AWG. **Color:** Green

Fig. 13



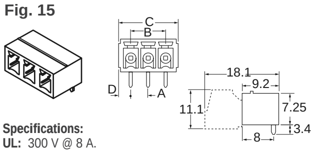
Specifications:
UL: 300 V @ 8 A. 14-30 AWG.
IEC: 125 V @ 8 A. 16-28 AWG. **Color:** Green

Fig. 14



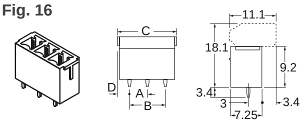
Specifications:
UL: 300 V @ 8 A. 14-30 AWG.
IEC: 125 V @ 8 A. 16-28 AWG. **Color:** Green

Fig. 15



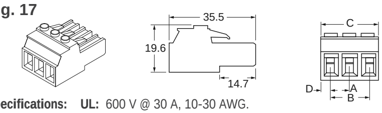
Specifications:
UL: 300 V @ 8 A.
IEC: 125 V @ 8 A. **Color:** Green

Fig. 16



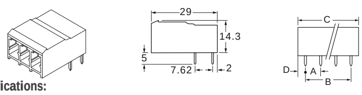
Specifications:
UL: 300 V @ 8 A.
IEC: 125 V @ 8 A. **Color:** Green

Fig. 17



Specifications: **UL:** 600 V @ 30 A, 10-30 AWG.
IEC: 800 V @ 20 A, 10-24 AWG. **Color:** Green

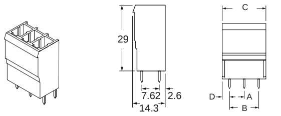
Fig. 18



Specifications:
UL: 600 V @ 30 A. **IEC:** 400 V @ 20 A. **Color:** Green

Fig. 19

Specifications:
UL: 600 V @ 30 A.
IEC: 400 V @ 20 A.
Color: Green



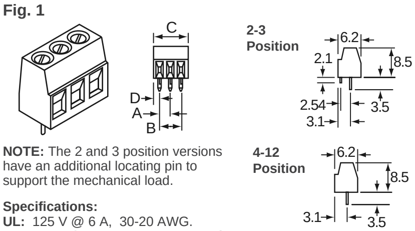
No. of Pos.	Dimensions (mm)				Digi-Key Part No.	Price Each			Phoenix Contact Type No.	Phoenix Contact Part No.
	A	B	C	D		1	10	100		
Fig. 7 — 5.08mm Connector Header — Vertical										
2	5.08	5.08	12.16	3.54	277-1150-ND	.48	.44	.37	MSTBVA 2.5/2-G-5.08	1755736
3	5.08	10.16	17.24	3.54	277-1151-ND	.72	.65	.55	MSTBVA 2.5/3-G-5.08	1755749
4	5.08	15.24	22.32	3.54	277-1152-ND	.96	.87	.74	MSTBVA 2.5/4-G-5.08	1755752
5	5.08	20.32	27.40	3.54	277-1153-ND	1.20	1.08	.92	MSTBVA 2.5/5-G-5.08	1755765
6	5.08	25.40	32.48	3.54	277-1154-ND	1.43	1.29	1.10	MSTBVA 2.5/6-G-5.08	1755778
7	5.08	30.48	37.56	3.54	277-1155-ND	1.66	1.50	1.28	MSTBVA 2.5/7-G-5.08	1755781
8	5.08	35.56	42.64	3.54	277-1156-ND	1.90	1.71	1.46	MSTBVA 2.5/8-G-5.08	1755794
9	5.08	40.64	47.72	3.54	277-1157-ND	2.15	1.94	1.65	MSTBVA 2.5/9-G-5.08	1755804
10	5.08	45.72	52.80	3.54	277-1158-ND	2.38	2.15	1.83	MSTBVA 2.5/10-G-5.08	1755817
11	5.08	50.80	57.88	3.54	277-1159-ND	2.63	2.37	2.02	MSTBVA 2.5/11-G-5.08	1755820
12	5.08	55.88	62.96	3.54	277-1160-ND	2.86	2.58	2.20	MSTBVA 2.5/12-G-5.08	1755833
Fig. 8 — 5.0mm & 5.08mm Double Level PCB Header without Side Panels										
2	5.00	—	10.00	2.50	277-1379-ND	1.74	1.57	1.34	MDSTB 2.5/2-G	1762046
3	5.00	—	15.00	2.50	277-1380-ND	2.50	2.25	1.92	MDSTB 2.5/3-G	1762059
2	5.08	—	10.16	2.54	277-1381-ND	1.74	1.57	1.34	MDSTB 2.5/2-G-5.08	1762062
3	5.08	—	15.24	2.54	277-1382-ND	2.50	2.25	1.92	MDSTB 2.5/3-G-5.08	1762075
Fig. 9 — 2.5mm Spring Cage Terminal Block Plug										
2	2.5	2.5	5.6	1.55	277-1430-ND	2.56	2.31	2.05	FK-MC 0.5/2-ST-2.5	1881325
3	2.5	5.0	8.1	1.55	277-1431-ND	3.46	3.12	2.77	FK-MC 0.5/3-ST-2.5	1881338
4	2.5	7.5	10.6	1.55	277-1432-ND	4.37	3.94	3.50	FK-MC 0.5/4-ST-2.5	1881341
5	2.5	10.0	13.1	1.55	277-1433-ND	5.23	4.71	4.19	FK-MC 0.5/5-ST-2.5	1881354
6	2.5	12.5	15.6	1.55	277-1434-ND	6.15	5.54	4.92	FK-MC 0.5/6-ST-2.5	1881367
7	2.5	15.0	18.1	1.55	277-1435-ND	7.03	6.33	5.63	FK-MC 0.5/7-ST-2.5	1881370
8	2.5	17.5	20.6	1.55	277-1436-ND	7.98	7.19	6.39	FK-MC 0.5/8-ST-2.5	1881383
9	2.5	20.0	23.1	1.55	277-1437-ND	8.84	7.96	7.08	FK-MC 0.5/9-ST-2.5	1881396
10	2.5	22.5	25.6	1.55	277-1438-ND	9.76	8.79	7.82	FK-MC 0.5/10-ST-2.5	1881406
11	2.5	25.0	28.1	1.55	277-1439-ND	10.62	9.56	8.50	FK-MC 0.5/11-ST-2.5	1881419
12	2.5	27.5	30.6	1.55	277-1440-ND	11.56	10.41	9.25	FK-MC 0.5/12-ST-2.5	1881422
Fig. 10 — 2.5mm Connector Header - Right Angle										
2	2.5	2.5	6.9	2.2	277-1441-ND	.61	.55	.49	MC 0.5/2-G-2.5	1881448
3	2.5	5.0	9.4	2.2	277-1442-ND	.87	.79	.70	MC 0.5/3-G-2.5	1881451
4	2.5	7.5	11.9	2.2	277-1443-ND	1.14	1.03	.92	MC 0.5/4-G-2.5	1881464
5	2.5	10.0	14.4	2.2	277-1444-ND	1.42	1.28	1.14	MC 0.5/5-G-2.5	1881477
6	2.5	12.5	16.9	2.2	277-1445-ND	1.68	1.51	1.35	MC 0.5/6-G-2.5	1881480
7	2.5	15.0	19.4	2.2	277-1446-ND	1.94	1.75	1.55	MC 0.5/7-G-2.5	1881493
8	2.5	17.5	21.9	2.2	277-1447-ND	2.21	1.99	1.77	MC 0.5/8-G-2.5	1881503
9	2.5	20.0	24.4	2.2	277-1448-ND	2.47	2.23	1.98	MC 0.5/9-G-2.5	1881516
10	2.5	22.5	26.9	2.2	277-1449-ND	2.76	2.48	2.21	MC 0.5/10-G-2.5	1881529
11	2.5	25.0	29.4	2.2	277-1450-ND	3.00	2.71	2.41	MC 0.5/11-G-2.5	1881532
12	2.5	27.5	31.9	2.2	277-1451-ND	3.28	2.95	2.63	MC 0.5/12-G-2.5	1881545
Fig. 11 — 2.5mm Connector Header - Vertical										
2	2.5	2.5	6.9	2.2	277-1452-ND	.61	.55	.49	MCV 0.5/2-G-2.5	1881558
3	2.5	5.0	9.4	2.2	277-1453-ND	.87	.79	.70	MCV 0.5/3-G-2.5	1881561
4	2.5	7.5	11.9	2.2	277-1454-ND	1.14	1.03	.92	MCV 0.5/4-G-2.5	1881574
5	2.5	10.0	14.4	2.2	277-1455-ND	1.42	1.28	1.14	MCV 0.5/5-G-2.5	1881587
6	2.5	12.5	16.9	2.2	277-1456-ND	1.68	1.51	1.35	MCV 0.5/6-G-2.5	1881590
7	2.5	15.0	19.4	2.2	277-1457-ND	1.94	1.75	1.55	MCV 0.5/7-G-2.5	1881600
8	2.5	17.5	21.9	2.2	277-1458-ND	2.21	1.99	1.77	MCV 0.5/8-G-2.5	1881613
9	2.5	20.0	24.4	2.2	277-1459-ND	2.47	2.23	1.98	MCV 0.5/9-G-2.5	1881626
10	2.5	22.5	26.9	2.2	277-1460-ND	2.76	2.48	2.21	MCV 0.5/10-G-2.5	1881639
11	2.5	25.0	29.4	2.2	277-1461-ND	3.00	2.71	2.41	MCV 0.5/11-G-2.5	1881642
12	2.5	27.5	31.9	2.2	277-1462-ND	3.28	2.95	2.63	MCV 0.5/12-G-2.5	1881655
Fig. 12 — 3.81mm Connector Terminal Block Plug										
2	3.81	3.81	8.41	2.3	277-1161-ND	1.63	1.47	1.25	MC 1.5/2-ST-3.81	1803578
3	3.81	7.62	12.22	2.3	277-1162-ND	2.41	2.17	1.85	MC 1.5/3-ST-3.81	1803581
4	3.81	11.43	16.03	2.3	277-1163-ND	3.20	2.88	2.46	MC 1.5/4-ST-3.81	1803594
5	3.81	15.24	19.84	2.3	277-1164-ND	4.04	3.64	3.11	MC 1.5/5-ST-3.81	1803604
6	3.81	19.05	23.65	2.3	277-1165-ND	4.82	4.35	3.71	MC 1.5/6-ST-3.81	1803617
7	3.81	22.86	27.46	2.3	277-1166-ND	5.63	5.07	4.33	MC 1.5/7-ST-3.81	1803620
8	3.81	26.67	31.27	2.3	277-1167-ND	6.41	5.77	4.93	MC 1.5/8-ST-3.81	1803633
9	3.81	30.48	35.08	2.3	277-1168-ND	7.23	6.51	5.56	MC 1.5/9-ST-3.81	1803646
10	3.81	34.29	38.89	2.3	277-1169-ND	8.03	7.24	6.18	MC 1.5/10-ST-3.81	1803659
11	3.81	38.10	42.70	2.3	277-1170-ND	8.83	7.95	6.79	MC 1.5/11-ST-3.81	1803662
12	3.81	41.91	46.51	2.3	277-1171-ND	9.62	8.66	7.40	MC 1.5/12-ST-3.81	1803675
13	3.81	45.72	50.32	2.3	277-1172-ND	10.44	9.40	8.03	MC 1.5/13-ST-3.81	1803688
14	3.81	49.53	54.13	2.3	277-1173-ND	11.25	10.13	8.65	MC 1.5/14-ST-3.81	1803691
15	3.81	53.34	57.94	2.3	277-1174-ND	12.04	10.84	9.26	MC 1.5/15-ST-3.81	1803701
16	3.81	57.15	61.75	2.3	277-1175-ND	12.83	11.55	9.87	MC 1.5/16-ST-3.81	1803714
Fig. 13 — 3.81mm Connector Terminal Block Plug										
2	3.81	3.81	8.41	2.3	277-1176-ND	1.74	1.57	1.34	MCVW 1.5/2-ST-3.81	1826979
3	3.81	7.62	12.22	2.3	277-1177-ND	2.59	2.33	1.99	MCVW 1.5/3-ST-3.81	1826982
4	3.81	11.43	16.03	2.3	277-1178-ND	3.45	3.11	2.65	MCVW 1.5/4-ST-3.81	1826995
5	3.81	15.24	19.84	2.3	277-1179-ND	4.33	3.90	3.33	MCVW 1.5/5-ST-3.81	1827004
6	3.81	19.05	23.65	2.3	277-1180-ND	5.19	4.67	3.99	MCVW 1.5/6-ST-3.81	1827017
7	3.81	22.86	27.46	2.3	277-1181-ND	6.05	5.45	4.65	MCVW 1.5/7-ST-3.81	1827020
8	3.81	26.67	31.27	2.3	277-1182-ND	6.92	6.23	5.32	MCVW 1.5/8-ST-3.81	1827033
9	3.81	30.48	35.08	2.3	277-1183-ND	7.80	7.02	6.00	MCVW 1.5/9-ST-3.81	1827046
10	3.81	34.29	38.89	2.3	277-1184-ND	8.63	7.77	6.64	MCVW 1.5/10-ST-3.81	1827059
11	3.81	38.10	42.70	2.3	277-1185-ND	9.52	8.57	7.32	MCVW 1.5/11-ST-3.81	1827062
12	3.81	41.91	46.51	2.3	277-1186-ND	10.40	9.36	8.00	MCVW 1.5/12-ST-3.81	1827075
13	3.81	45.72	50.32	2.3	277-1187-ND	11.25	10.13	8.65	MCVW 1.5/13-ST-3.81	1827088
14	3.81	49.53	54.13	2.3	277-1188-ND	12.12	10.91	9.32	MCVW 1.5/14-ST-3.81	1827091
15	3.81	53.34	57.94	2.3	277-1189-ND	12.99	11.69	10.03	MCVW 1.5/15-ST-3.81	1827101
16	3.81	57.15	61.75	2.3	277-1190-ND	13.85	12.47	10.65	MCVW 1.5/16-ST-3.81	1827114
Fig. 14 — 3.81mm Connector Terminal Block Plug										
2	3.81	3.81	8.41	2.3	277-1191-ND	1.74	1.57	1.34	MCVR 1.5/2-ST-3.81	1827127
3	3.81	7.62	12.22	2.3	277-1192-ND	2.59	2.33	1.99	MCVR 1.5/3-ST-3.81	1827130
4	3.81	11.43	16.03	2.3	277-1193-ND	3.45	3.11	2.65	MCVR 1.5/4-ST-3.81	1827143
5	3.81	15.24	19.84	2.3	277-1194-ND	4.33	3.90	3.33	MCVR 1.5/5-ST-3.81	1827156
6	3.81	19.05	23.65	2.3	277-1195-ND	5.19	4.67	3.99	MCVR 1.5/6-ST-3.81	1827169
7	3.81	22.86	27.46	2.3	277-1196-ND	6.05	5.45	4.65	MCVR 1.5/7-ST-3.81	1827172
8	3.81	26.67	31.27	2.3	277-1197-ND	6.92	6.23	5.32	MCVR 1.5/8-ST-3.81	1827185
9	3.81	30.48	35.08	2.3	277-1198-ND	7.80	7.02	6.00	MCVR 1.5/9-ST-3.81	1827198
10	3.81	34.29	38.89	2.3	277-1199-ND	8.63	7.77	6.64	MCVR 1.5/10-ST-3.81	1827208
11	3.81	38.10	42.70	2.3	277-1200-ND	9.52	8.57	7.32	MCVR 1.5/11-ST-3.81	1827211
12	3.81	41.91	46.51	2.3	277-1201-ND	10.40	9.36	8.00	MCVR 1.5/12-ST-3.81	1827224
13	3.81	45.72	50.32	2.3	277-1202-ND	11.25	10.13	8.65	MCVR 1.5/13-ST-3.81	1827237
14	3.81	49.53	54.13	2.3	277-1203-ND	12.12	10.91	9.32	MCVR 1.5/14-ST-3.81	1827240
15	3.81	53.34	57.94	2.3	277-1204-ND	12.99	11.69	9.99	MCVR 1.5/15-ST-3.81	1827253
16	3.81	57.15	61.75	2.3	277-1205-ND	13.85	12.47	10.65	MCVR 1.5/16-ST-3.81	1827266
Fig. 15 — 3.81mm Connector Header — Right Angle										
2	3.81	3.81	9.01	2.6	277-1206-ND	.56	.51	.43	MC 1.5/2-G-3.81	1803277
3	3.81	7.62	12.82	2.6	277-1207-ND	.85	.77	.65	MC 1.5/3-G-3.81	1803280
4	3.81	11.43	16.63	2.6	277-1208-ND	1.12	1.01	.86	MC 1.5/4-G-3.81	1803293
5	3.81	15.24	20.44	2.6	277-1209-ND	1.39	1.26	1.07	MC 1.5/5-G-3.81	1803303
6	3.81	19.05	24.25	2.6	277-1210-ND	1.68	1.51	1.29	MC 1.5/6-G-3.81	1803316
7	3.81	22.86	28.06	2.6	277-1211-ND	1.95	1.76	1.50	MC 1.5/7-G-3.81	1803329
8	3.81	26.67	31.87	2.6	277-1212-ND	2.22	2.01	1.71	MC 1.5/8-G-3.81	1803332
9	3.81	30.48	35.68	2.6	277-1213-ND	2.54	2.29	1.95	MC 1.5/9-G-3.81	1803345
10	3.81	34.29	39.49	2.6	277-1214-ND	2.81	2.53	2.16	MC 1.5/10-G-3.81	1803358
11	3.81	38.10	43.30	2.6	277-1215-ND	3.07	2.77	2.36	MC 1.5/11-G-3.81	1803361
12	3.81	41.91	47.11	2.6	277-1216-ND	3.37	3.03	2.59	MC 1.5/12-G-3.81	1803374
13	3.81	45.72	50.92	2.6	277-1217-ND	3.63	3.27	2.79	MC 1.5/13-G-3.81	1803387
14	3.81	49.53	54.73	2.6	277-1218-ND	3.90	3.51	3.00	MC 1.5/14-G-3.81	1803390
15	3.81	53.34	58.54	2.6	277-1219-ND	4.19	3.77	3.22	MC 1.5/15-G-3.81	1803400
16	3.81	57.15	62.35	2.6	277-1220-ND	4.46	4.02	3.43	MC 1.5/16-G-3.81	1803413
Fig. 16 — 3.81mm Connector Header — Vertical										
2	3.81	3.81	9.01	2.6	277-1221-ND	.56	.51	.43	MCV 1.5/2-G-3.81	1803426
3	3.81	7.62	12.82	2.6	277-1222-ND	.85	.77	.65	MCV 1.5/3-G-3.81	1803439
4	3.81	11.43	16.63	2.6	277-1223-ND	1.12	1.01	.86	MCV 1.5/4-G-3.81	1803442
5	3.81	15.24	20.44	2.6	277-1224-ND	1.39	1.26	1.07	MCV 1.5/5-G-3.81	1803455
6	3.81	19.05	24.25	2.6	277-1225-ND	1.68	1.51	1.29	MCV 1.5/6-G-3.81	1803468
7	3.81	22.86	28.06	2.6	277-1226-ND	1.95	1.76	1.50	MCV 1.5/7-G-3.81	1803471
8	3.81	26.67	31.87	2.6	277-1227-ND	2.22	2.01	1.71	MCV 1.5/8-G-3.81	1803484
9	3.81	30.48	35.68	2.6	277-1228-ND	2.54	2.29	1.95	MCV 1.5/9-G-3.81	1803497
10	3.81	34.29	39.49	2.6	277-1229-ND	2.81	2.53	2.16	MCV 1.5/10-G-3.81	1803507
11	3.81	38.10	43.30	2.6	277-1230-ND	3.07	2.77	2.36	MCV 1.5/11-G-3.81	1803510
12	3.81	41.91	47.11	2.6	277-1231-ND	3.37	3.03	2.59	MCV 1.5/12-G-3.81	1803523
13	3.81	45.72	50.92	2.6	277-1232-ND	3.63	3.27	2.79	MCV 1.5/13-G-3.81	1803536
14	3.81	49.53	54.73	2.6	277-1233-ND	3.90	3.51	3.00	MCV 1.5/14-G-3.81	1803549
15	3.81	53.34	58.54	2.6	277-1234-ND	4.19	3.77	3.22	MCV 1.5/15-G-3.81	1803552
16	3.81	57.15	62.35	2.6	277-1235-ND	4.46	4.02	3.43	MCV 1.5/16-G-3.81	1803565
Fig. 17 — 7.62mm Connector Terminal Block Plug										
2	7.62	7.62	15.22	3.8	277-1463-ND	3.89	3.50	3.11	PC 4 HV/2-ST-7.62	1848892
3	7.62	15.24	22.84	3.8	277-1464-ND	5.85	5.27	4.68	PC 4 HV/3-ST-7.62	1848902
4	7.62	22.86	30.46	3.8	277-1465-ND	7.77	7.00	6.22	PC 4 HV/4-ST-7.62	1848915
Fig. 18 — 7.62mm Connector Header - Right Angle										
2	7.62	7.62	15.22	3.8	277-1466-ND	2.52	2.27	2.02	PC 4/2-G-7.62	1804797
3	7.62	15.24	22.84	3.8	277-1467-ND	3.78	3.41	3.03	PC 4/3-G-7.62	1804807
4	7.62	22.86	30.46	3.8	277-1468-ND	4.99	4.50	4.00	PC 4/4-G-7.62	1804810
Fig. 19 — 7.62mm Connector Header - Vertical										
2	7.62	7.62	15.22	3.8	277-1469-ND	2.52	2.27	2.02	PCV 4/2-G-7.62	1804687
3	7.62	15.24	22.84	3.8	277-1470-ND	3.78	3.41	3.03	PCV 4/3-G-7.62	1804690
4	7.62	22.86	30.46	3.8	277-1471-ND	4.99	4.50	4.00	PCV 4/4-G-7.62	1804700

Terminal Blocks

Micro-Pitch Terminal Blocks: The MPT 0.5 is the smallest screw terminal block available. With a micro-pitch of 2.54mm, the MPT 0.5 is ideal for high density applications.

Press Fit Terminal Blocks: The Press-Fit printed circuit board terminal block line is the perfect solution when wave soldering is not an option. The Press-Fit line is available in both fixed and pluggable styles.

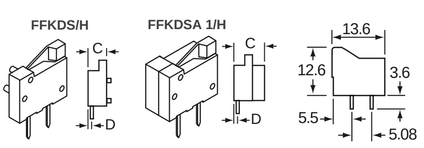
Fig. 1



NOTE: The 2 and 3 position versions have an additional locating pin to support the mechanical load.

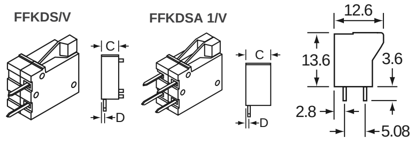
Specifications:
UL: 125 V @ 6 A, 30-20 AWG.
IEC: 63 V @ 6 A, 26-20 AWG. **Color:** Green

Fig. 2



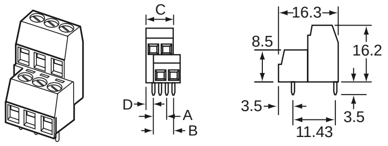
Specifications:
UL: 150 V @ 6 A, 26-20 AWG. **IEC:** 63 V @ 6 A, 26-20 AWG.
Color: Green

Fig. 3



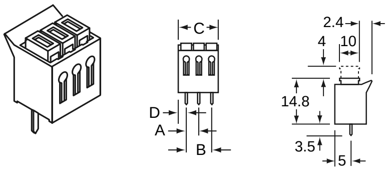
Specifications:
UL: 150 V @ 6 A, 26-20 AWG. **IEC:** 63 V @ 6 A, 26-20 AWG.
Color: Green

Fig. 4



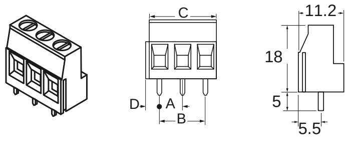
Specifications:
UL: 300 V @ 10 A. 30-16 AWG. **IEC:** 125 V @ 10 A. 26-16 AWG.
Color: Green

Fig. 5



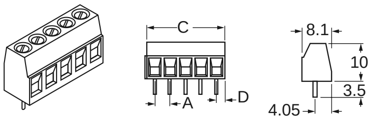
Specifications:
UL: 300 V @ 5 A. 28-22 AWG.
IEC: 125 V @ 5 A. 26-22 AWG. **Color:** Green

Fig. 6



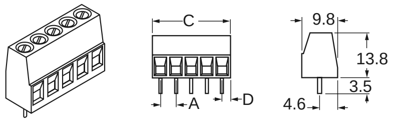
Specifications:
UL: 300 V @ 10 A. 12-30 AWG.
IEC: 250 V @ 32 A. 12-24 AWG. **Color:** Green

Fig. 7



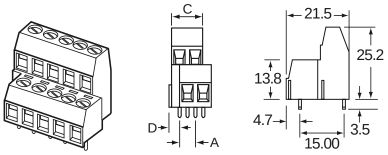
Specifications:
UL: 300 V @ 10 A. 14-30 AWG.
IEC: 250 V @ 16 A. 16-26 AWG. **Color:** Green

Fig. 8



Specifications:
UL: 300 V @ 15 A. 14-30 AWG.
IEC: 250 V @ 24 A. 14-26 AWG. **Color:** Green

Fig. 9



Specifications:
UL: 300 V @ 10 A. 30-14 AWG. **IEC:** 250 V @ 24 A. 26-14 AWG.
Color: Green

No. of Pos.	Dimensions (mm)				Digi-Key Part No.	Price Each			Phoenix Contact Type No.	Phoenix Contact Part No.
	A	B	C	D		1	10	100		
Fig. 1 — 2.54mm Micro-Pitch Terminal Blocks										
2	2.54	2.54	5.54	1.50	277-1273-ND	1.07	.96	.86	MPT 0.5/2-2.54	1725656
3	2.54	5.08	8.08	1.50	277-1274-ND	1.59	1.43	1.27	MPT 0.5/3-2.54	1725669
4	2.54	7.62	10.62	1.50	277-1275-ND	2.15	1.94	1.72	MPT 0.5/4-2.54	1725672
5	2.54	10.16	13.16	1.50	277-1276-ND	2.67	2.40	2.14	MPT 0.5/5-2.54	1725685
6	2.54	12.70	15.70	1.50	277-1277-ND	3.20	2.88	2.56	MPT 0.5/6-2.54	1725698
7	2.54	15.24	18.24	1.50	277-1278-ND	3.71	3.34	2.97	MPT 0.5/7-2.54	1725708
8	2.54	17.78	20.78	1.50	277-1279-ND	4.26	3.84	3.42	MPT 0.5/8-2.54	1725711
9	2.54	20.32	23.32	1.50	277-1280-ND	4.78	4.31	3.83	MPT 0.5/9-2.54	1725724
10	2.54	22.86	25.86	1.50	277-1281-ND	5.33	4.80	4.27	MPT 0.5/10-2.54	1725737
11	2.54	25.40	28.40	1.50	277-1282-ND	5.86	5.28	4.70	MPT 0.5/11-2.54	1725740
12	2.54	27.94	30.94	1.50	277-1283-ND	6.41	5.77	5.13	MPT 0.5/12-2.54	1725753
Fig. 2 — Modular 2.54mm PCB Spring Cage Fixed Terminal Block - Horizontal Wire Entry										
1	—	—	2.54	0.90	277-1310-ND	.72	.65	.58	FFKDS/H-2.54	1791826
Fig. 2 — End Terminal Block for FFKDS/H-2.54										
1	—	—	5.08	0.90	277-1311-ND	1.14	1.03	.92	FFKDSA 1/H-5.08	1791868
Fig. 3 — Modular 2.54mm PCB Spring Cage Fixed Terminal Block - Vertical Wire Entry										
1	—	—	2.54	0.90	277-1312-ND	.72	.65	.58	FFKDS/V-2.54	1791813
Fig. 3 — End Terminal Block for FFKDS/V-2.54										
1	—	—	5.08	0.90	277-1313-ND	1.09	.99	.88	FFKDSA 1/V-5.08	1791855
Fig. 4 — 3.81mm Double Level Terminal Blocks										
2	3.81	3.81	7.62	1.90	277-1356-ND	2.65	2.39	2.13	MKKDS 1/2-3.81	1708026
3	3.81	7.62	11.43	1.90	277-1357-ND	3.97	3.57	3.18	MKKDS 1/3-3.81	1708039
4	3.81	11.43	15.24	1.90	277-1358-ND	5.30	4.78	4.25	MKKDS 1/4-3.81	1708042
5	3.81	15.24	19.05	1.90	277-1359-ND	6.62	5.96	5.30	MKKDS 1/5-3.81	1708055
6	3.81	19.05	22.86	1.90	277-1360-ND	7.94	7.15	6.36	MKKDS 1/6-3.81	1708068
7	3.81	22.86	26.67	1.90	277-1361-ND	9.28	8.36	7.43	MKKDS 1/7-3.81	1708071
8	3.81	26.67	30.48	1.90	277-1362-ND	10.61	9.55	8.49	MKKDS 1/8-3.81	1708084
9	3.81	30.48	34.29	1.90	277-1363-ND	11.93	10.75	9.55	MKKDS 1/9-3.81	1708107
10	3.81	34.29	38.10	1.90	277-1364-ND	13.26	11.94	10.61	MKKDS 1/10-3.81	1708110
11	3.81	38.10	41.91	1.90	277-1365-ND	14.59	13.13	11.67	MKKDS 1/11-3.81	1708123
12	3.81	41.91	45.72	1.90	277-1366-ND	15.91	14.33	12.73	MKKDS 1/12-3.81	1708136

No. of Pos.	Dimensions (mm)				Digi-Key Part No.	Price Each			Phoenix Contact Type No.	Phoenix Contact Part No.
	A	B	C	D		1	10	100		
Fig. 5 — 3.81mm Insulation Displacement Terminal Blocks										
2	3.81	3.81	8.81	2.50	277-1417-ND	.82	.74	.66	IDC 0.3/2-3.81	1706170
3	3.81	7.62	12.62	2.50	277-1418-ND	1.17	1.06	.94	IDC 0.3/3-3.81	1706183
4	3.81	11.43	16.43	2.50	277-1419-ND	1.50	1.35	1.20	IDC 0.3/4-3.81	1706196
5	3.81	15.24	20.24	2.50	277-1420-ND	1.86	1.68	1.49	IDC 0.3/5-3.81	1706206
6	3.81	19.06	24.05	2.50	277-1421-ND	2.18	1.97	1.75	IDC 0.3/6-3.81	1706219
7	3.81	22.86	27.86	2.50	277-1422-ND	2.55	2.30	2.04	IDC 0.3/7-3.81	1706222
8	3.81	26.67	31.67	2.50	277-1423-ND	2.87	2.59	2.30	IDC 0.3/8-3.81	1706235
9	3.81	30.48	35.48	2.50	277-1424-ND	3.22	2.91	2.58	IDC 0.3/9-3.81	1706248
10	3.81	34.29	39.29	2.50	277-1425-ND	3.56	3.21	2.85	IDC 0.3/10-3.81	1706251
11	3.81	38.10	43.10	2.50	277-1426-ND	3.91	3.53	3.14	IDC 0.3/11-3.81	1706264
12	3.81	41.91	46.91	2.50	277-1427-ND	4.25	3.83	3.41	IDC 0.3/12-3.81	1706277
Fig. 6 — 5mm PCB Connector Terminal Block										
2	5.0	5	10	2.5	277-1022-ND	1.35	1.22	1.04	MKDS 3/2	1711026
3	5.0	10	15	2.5	277-1023-ND	2.05	1.85	1.58	MKDS 3/3	1711039
4	5.0	15	20	2.5	277-1024-ND	2.72	2.45	2.09	MKDS 3/4	1711042
8	5.0	35	40	2.5	277-1025-ND	5.43	4.90	4.18	MKDS 3/8	1711084
12	5.0	55	60	2.5	277-1026-ND	8.11	7.31	6.24	MKDS 3/12	1711123
Fig. 7 — 5mm PCB Connector Terminal Block										
2	5.0	—	10	2.5	277-1236-ND	.72	.65	.55	MKDSN 1.5/2	1729018
3	5.0	—	15	2.5	277-1237-ND	1.09	.99	.84	MKDSN 1.5/3	1729021
4	5.0	—	20	2.5	277-1238-ND	1.46	1.31	1.12	MKDSN 1.5/4	1729034
5	5.0	—	25	2.5	277-1239-ND	1.81	1.63	1.39	MKDSN 1.5/5	1729047
6	5.0	—	30	2.5	277-1240-ND	2.17	1.96	1.67	MKDSN 1.5/6	1729050
7	5.0	—	35	2.5	277-1241-ND	2.55	2.30	1.96	MKDSN 1.5/7	1729063
8	5.0	—	40	2.5	277-1242-ND	2.90	2.61	2.23	MKDSN 1.5/8	1729076
9	5.0	—	45	2.5	277-1243-ND	3.26	2.94	2.51	MKDSN 1.5/9	1729089
10	5.0	—	50	2.5	277-1244-ND	3.63	3.27	2.79	MKDSN 1.5/10	1729092
11	5.0	—	55	2.5	277-1245-ND	3.98	3.58	3.06	MKDSN 1.5/11	1729102
12	5.0	—	60	2.5	277-1246-ND	4.36	3.92	3.35	MKDSN 1.5/12	1729115
Fig. 8 — 5mm PCB Connector Terminal Block										
2	5.0	—	10	2.5	277-1258-ND	.86	.78	.66	MKDS 1.5/2	1715022
3	5.0	—	15	2.5	277-1259-ND	1.29	1.16	.99	MKDS 1.5/3	1715035
4	5.0	—	20	2.5	277-1260-ND	1.73	1.56	1.33	MKDS 1.5/4	1715048
8	5.0	—	40	2.5	277-1261-ND	3.42	3.08	2.63	MKDS 1.5/8	1715080
12	5.0	—	60	2.5	277-1262-ND	5.17	4.66	3.98	MKDS 1.5/12	1715129

(Continued)

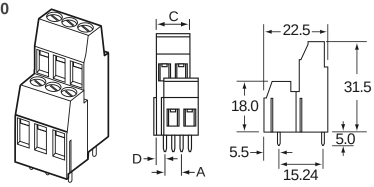
Multi-Level Terminal Blocks:

With their small pitch, the two and three level MKKDS and MK3DS are ideal solutions due to the increasing packing and connection density on printed circuit boards.

Insulation Displacement Terminal Blocks:

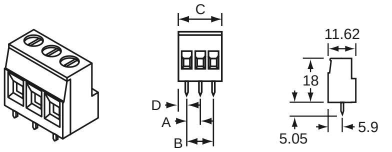
The IDC printed circuit board terminal blocks mass terminate insulated conductors quickly without the need for tools.

Fig. 10



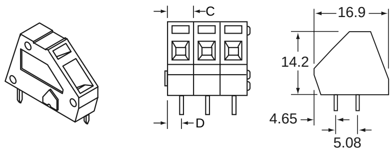
Specifications:
UL: 300 V @ 10 A. 30-12 AWG.
IEC: 250 V @ 32 A. 24-12 AWG. **Color:** Green

Fig. 11



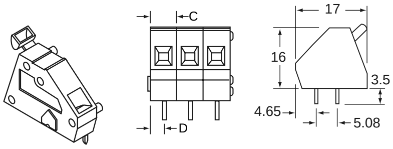
Specifications:
UL: 300 V @ 10 A, 30-12 AWG. **IEC:** 250 V @ 12 A, 28-14 AWG.
Color: Green

Fig. 12



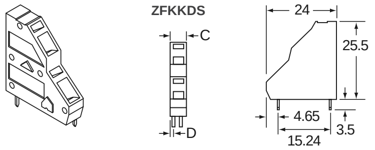
Specifications:
UL: 300 V @ 6 A. **IEC:** 250 V @ 6 A. **Color:** Green

Fig. 13



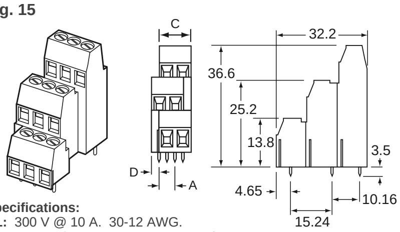
Specifications:
UL: 300 V @ 6 A. **IEC:** 250 V @ 6 A. **Color:** Green

Fig. 14



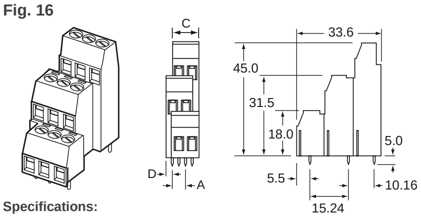
Specifications:
UL: 300 V @ 10 A, 26-12 AWG.
IEC: 250 V @ 12 A, 24-14 AWG. **Color:** Green

Fig. 15



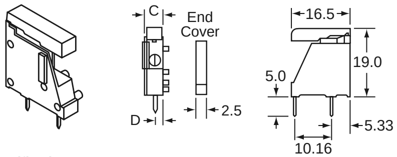
Specifications:
UL: 300 V @ 10 A. 30-12 AWG.
IEC: 250 V @ 22 A. 26-14 AWG. **Color:** Green

Fig. 16



Specifications:
UL: 300 V @ 10 A. 30-12 AWG.
IEC: 250 V @ 32 A. 24-12 AWG. **Color:** Green

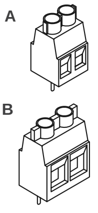
Fig. 17

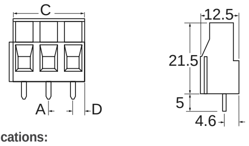


Specifications:
UL: 300 V @ 7 A. 30-18 AWG.
IEC: 250 V @ 10 A. 28-18 AWG. **Color:** Green

Fig. 18

Specifications:
UL: 300 V @ 10 A. 10-30 AWG.
IEC: 500 V @ 32 A. 10-24 AWG. **Color:** Green





Specifications:
UL: 300 V @ 30 A, 10-30 AWG; and 600 V @ 5A
IEC: 690 V @ 32 A. 10-24 AWG. **Color:** Green

No. of Pos.	Dimensions (mm) A	B	C	D	Digi-Key Part No.	Price Each 1	10	100	Phoenix Contact Type No.	Phoenix Contact Part No.
Fig. 9 — 5.0mm & 5.08mm Double Level Terminal Blocks										
2	5.00	—	10.00	2.50	277-1367-ND	2.05	1.85	1.65	MKKDS 1.5/2	1725012
3	5.00	—	15.00	2.50	277-1368-ND	3.07	2.77	2.46	MKKDS 1.5/3	1725025
2	5.08	—	10.16	2.54	277-1369-ND	2.05	1.85	1.65	MKKDS 1.5/2-5.08	1725038
3	5.08	—	15.24	2.54	277-1370-ND	3.07	2.77	2.46	MKKDS 1.5/3-5.08	1725041
Fig. 10 — 5.0mm and 5.08mm Double Level Terminal Blocks										
2	5.00	—	10.00	2.50	277-1371-ND	3.47	3.13	2.78	MKKDS 3/2	1721029
3	5.00	—	15.00	2.50	277-1372-ND	5.21	4.70	4.18	MKKDS 3/3	1721032
2	5.08	—	10.16	2.54	277-1373-ND	3.47	3.13	2.78	MKKDS 3/2-5.08	1721728
3	5.08	—	15.24	2.54	277-1374-ND	5.21	4.70	4.18	MKKDS 3/3-5.08	1721731
Fig. 11 — 5.08mm Press-Fit PCB Terminal Blocks										
2	5.08	5.08	11.34	3.13	277-1284-ND	1.56	1.41	1.25	EMKDS 2.5/2-5.08	1730612
3	5.08	10.16	16.42	3.13	277-1285-ND	2.33	2.10	1.87	EMKDS 2.5/3-5.08	1730625
4	5.08	15.24	21.50	3.13	277-1286-ND	3.13	2.82	2.51	EMKDS 2.5/4-5.08	1730638
5	5.08	20.32	26.58	3.13	277-1287-ND	3.90	3.51	3.12	EMKDS 2.5/5-5.08	1730641
6	5.08	25.40	31.66	3.13	277-1288-ND	4.69	4.23	3.76	EMKDS 2.5/6-5.08	1730654
7	5.08	30.48	36.74	3.13	277-1289-ND	5.46	4.92	4.37	EMKDS 2.5/7-5.08	1730667
8	5.08	35.56	41.82	3.13	277-1290-ND	6.21	5.60	4.98	EMKDS 2.5/8-5.08	1730670
9	5.08	40.64	46.90	3.13	277-1291-ND	7.03	6.33	5.63	EMKDS 2.5/9-5.08	1730683
10	5.08	45.72	51.98	3.13	277-1292-ND	7.79	7.01	6.23	EMKDS 2.5/10-5.08	1730696
11	5.08	50.80	57.06	3.13	277-1293-ND	8.59	7.74	6.88	EMKDS 2.5/11-5.08	1730706
12	5.08	55.88	62.14	313	277-1294-ND	9.37	8.44	7.50	EMKDS 2.5/12-5.08	1730719
Fig. 6 — 5.08mm PCB Connector Terminal Block										
2	5.08	5.08	10.16	2.54	277-1027-ND	1.35	1.22	1.04	MKDS 3/2-5.08	1711725
3	5.08	10.16	15.24	2.54	277-1028-ND	2.05	1.85	1.58	MKDS 3/3-5.08	1711738
Fig. 7 — 5.08mm PCB Connector Terminal Block										
2	5.08	—	10.16	2.54	277-1247-ND	.72	.65	.55	MKDSN 1.5/2-5.08	1729128
3	5.08	—	15.24	2.54	277-1248-ND	1.09	.99	.84	MKDSN 1.5/3-5.08	1729131
4	5.08	—	20.32	2.54	277-1249-ND	1.46	1.31	1.12	MKDSN 1.5/4-5.08	1729144
5	5.08	—	25.40	2.54	277-1250-ND	1.81	1.63	1.39	MKDSN 1.5/5-5.08	1729157
6	5.08	—	30.48	2.54	277-1251-ND	2.17	1.96	1.67	MKDSN 1.5/6-5.08	1729160
7	5.08	—	35.56	2.54	277-1252-ND	2.55	2.30	1.96	MKDSN 1.5/7-5.08	1729173
8	5.08	—	40.64	2.54	277-1253-ND	2.90	2.61	2.23	MKDSN 1.5/8-5.08	1729186
9	5.08	—	45.72	2.54	277-1254-ND	3.26	2.94	2.51	MKDSN 1.5/9-5.08	1729199
10	5.08	—	50.80	2.54	277-1255-ND	3.63	3.27	2.79	MKDSN 1.5/10-5.08	1729209
11	5.08	—	55.88	2.54	277-1256-ND	3.98	3.58	3.06	MKDSN 1.5/11-5.08	1729212
12	5.08	—	60.96	2.54	277-1257-ND	4.36	3.92	3.35	MKDSN 1.5/12-5.08	1729225

No. of Pos.	Dimensions (mm) A	B	C	D	Digi-Key Part No.	Price Each 1	10	100	Phoenix Contact Type No.	Phoenix Contact Part No.
Fig. 8 — 5.08mm PCB Connector Terminal Block										
2	5.08	—	10.16	2.54	277-1263-ND	.86	.78	.66	MKDS 1.5/2-5.08	1715721
3	5.08	—	15.24	2.54	277-1264-ND	1.29	1.16	.99	MKDS 1.5/3-5.08	1715734
4	5.08	—	20.32	2.54	277-1265-ND	1.73	1.56	1.33	MKDS 1.5/4-5.08	1715747
8	5.08	—	40.64	2.54	277-1266-ND	3.42	3.08	2.63	MKDS 1.5/8-5.08	1715789
10	5.08	—	50.80	2.54	277-1267-ND	4.32	3.89	3.32	MKDS 1.5/10-5.08	1715802
12	5.08	—	60.96	2.54	277-1268-ND	5.17	4.66	3.98	MKDS 1.5/12-5.08	1715828
Fig. 12 — Modular 5.08mm PCB Spring Cage Fixed Terminal Block - Single Level without Lever										
1	—	—	5.08	2.54	277-1314-ND	.31	.29	.25	ZFKDS 1.5-5.08	1706701
Fig. 12 — End Terminal Block for ZFKDS 1.5-5.08										
1	—	—	7.62	2.54	277-1315-ND	.44	.40	.36	ZFKDSA1.5-7.62	1706727
Fig. 13 — Modular 5.08mm PCB Spring Cage Fixed Terminal Block - Single Level with Lever										
1	—	—	5.08	2.54	277-1316-ND	.39	.36	.32	ZFKDS 1.5-W-5.08	1706714
Fig. 13 — End Terminal Block for ZFKDS 1.5-W-5.08										
1	—	—	7.62	2.54	277-1317-ND	.51	.46	.41	ZFKDSA 1.5-W-7.62	1706730
Fig. 14 — Modular 5.08mm PCB Spring Cage Fixed Terminal Block - Double Level without Lever										
1	—	—	5.08	1.27	277-1318-ND	.86	.78	.69	ZFKKDS 1.5-5.08	1704402
Fig. 15 — 5.08mm Triple Level Terminal Blocks										
2	5.08	—	10.16	2.54	277-1375-ND	5.42	4.88	4.34	MK3DS 1.5/2-5.08	1724013
3	5.08	—	15.24	2.54	277-1376-ND	8.14	7.33	6.52	MK3DS 1.5/3-5.08	1724026
Fig. 16 — 5.08mm Triple Level Terminal Blocks										
2	5.08	—	10.16	2.54	277-1377-ND	4.90	4.42	3.93	MK3DS 3/2-5.08	1723014
3	5.08	—	15.24	2.54	277-1378-ND	7.37	6.64	5.90	MK3DS 3/3-5.08	1723027
Fig. 17 — End Cover for IDC 0.8-DP										
—	—	—	2.50	2.16	277-1429-ND	.29	.26	.21	D-IDC	1728255
Fig. 18A — 6.35mm PCB Connector Terminal Block										
2	6.35	—	12.69	3.17	277-1269-ND	1.37	1.23	1.05	MKDS 5/2-6.35	1714955
3	6.35	—	19.04	3.17	277-1270-ND	1.91	1.72	1.47	MKDS 5/3-6.35	1714968
Fig. 18B — 9.52mm PCB Connector Terminal Block										
2	9.52	—	19.02	4.76	277-1271-ND	1.37	1.23	1.05	MKDS 5/2-9.5	1714971
3	9.52	—	28.52	4.76	277-1272-ND	2.00	1.81	1.54	MKDS 5/3-9.5	1714984

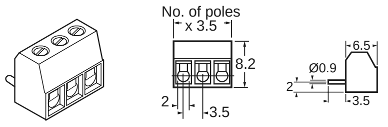
ON-SHORE TECHNOLOGY, INC.

Terminal Blocks

UL# E101811, 86ME2081
CSA# 068503X0000

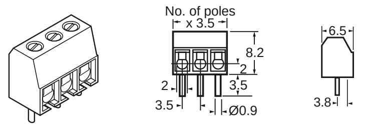
These On-Shore Technology Terminal Blocks are Stackable for any number of contacts. 4.5mm Lead Length.

Fig. 1



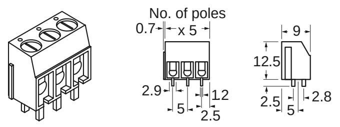
SPECIFICATIONS: • Rated Voltage: 125V • Rated Current: 6A • Wire Size: 28-16AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Grey

Fig. 2



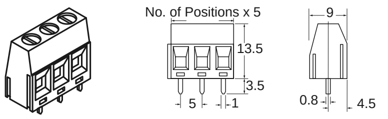
SPECIFICATIONS: • Rated Voltage: 125V • Rated Current: 6A • Wire Size: 28-16AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Grey

Fig. 3



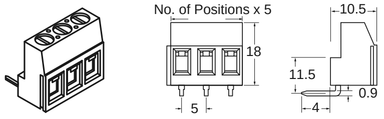
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: 22-12AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Grey

Fig. 4



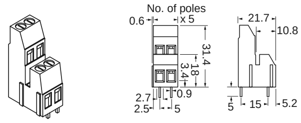
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 16A • Wire Size: 28-12AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Green

Fig. 5



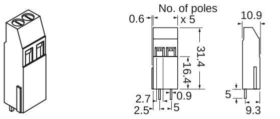
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 20A • Wire Size: 22-14AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Green

Fig. 6



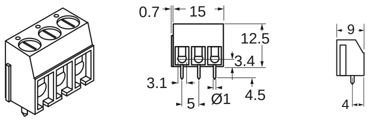
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 20A • Wire Size: 30-12AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Green

Fig. 7



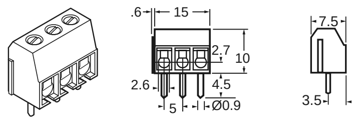
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 20A • Wire Size: 30-12AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Green

Fig. 8



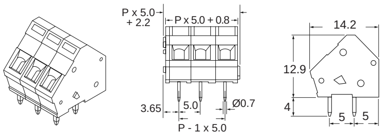
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: AWG 22-14 • Temp.: -30°C/+105°C • Flammability: UL94V-O • Color: Blue

Fig. 9



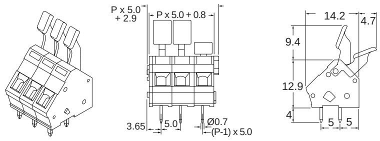
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: AWG 22-14 • Temp.: -30°C/+105°C • Flammability: UL94V-O • Color: Blue

Fig. 10



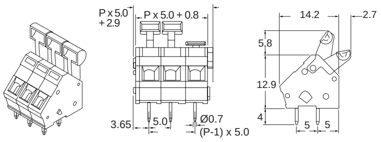
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: 28-14AWG • Temp.: -30°C/+105°C • Flammability: UL94V-O • Color: Slade Gray

Fig. 11



SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: 28-14AWG • Temp.: -30°C/+105°C • Flammability: UL94V-O • Color: Slade Gray

Fig. 12



SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: 28-14AWG • Temp.: -30°C/+105°C • Flammability: UL94V-O • Color: Slade Gray

Fig.	No. of Pos.	Block Length (mm)	Digi-Key Part No.	Price Each 1	10	100
3.5mm Lead Spacing - Terminal Blocks						
1	2	7.0	ED1501-ND	.40	.36	.32
	3	10.5	ED1502-ND	.60	.54	.48
	4	14.0	ED1503-ND	.80	.72	.64
	5	17.5	ED1504-ND	1.00	.90	.80
	6	21.0	ED1505-ND	1.20	1.08	.96
	7	24.5	ED1506-ND	1.40	1.26	1.12
	8	28.0	ED1507-ND	1.60	1.44	1.28
	9	31.5	ED1508-ND	1.80	1.62	1.44
	10	35.0	ED1509-ND	2.00	1.80	1.60
	11	38.5	ED1510-ND	2.20	1.98	1.76
	12	42.0	ED1511-ND	2.40	2.16	1.92
	14	49.0	ED1512-ND	2.80	2.52	2.24
	16	56.0	ED1513-ND	3.20	2.88	2.56
2	2	7.0	ED1514-ND	.40	.36	.32
	3	10.5	ED1515-ND	.60	.54	.48
	4	14.0	ED1516-ND	.80	.72	.64
	5	17.5	ED1517-ND	1.00	.90	.80
	6	21.0	ED1518-ND	1.20	1.08	.96
	7	24.5	ED1519-ND	1.40	1.26	1.12
	8	28.0	ED1520-ND	1.60	1.44	1.28
	9	31.5	ED1521-ND	1.80	1.62	1.44
	10	35.0	ED1522-ND	2.00	1.80	1.60
	11	38.5	ED1523-ND	2.20	1.98	1.76
	12	42.0	ED1524-ND	2.40	2.16	1.92
	14	49.0	ED1525-ND	2.80	2.52	2.24
	16	56.0	ED1526-ND	3.20	2.88	2.56
5.0mm Lead Spacing - Terminal Blocks						
3	2	10.0	ED1556-ND	.78	.70	.62
	3	15.0	ED1557-ND	1.16	1.05	.93
	4	20.0	ED1558-ND	1.55	1.40	1.24
	5	25.0	ED1559-ND	1.94	1.75	1.55
	6	30.0	ED1560-ND	2.33	2.10	1.86
	7	35.0	ED1561-ND	2.71	2.45	2.17
	8	40.0	ED1562-ND	3.10	2.79	2.48
	9	45.0	ED1563-ND	3.49	3.14	2.79
	10	50.0	ED1564-ND	3.88	3.49	3.10
	11	55.0	ED1565-ND	4.26	3.84	3.41
	12	60.0	ED1566-ND	4.65	4.19	3.72

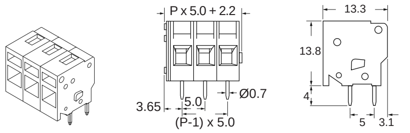
Fig.	No. of Pos.	Block Length (mm)	Digi-Key Part No.	Price Each 1	10	100
4	2	10.0	ED1930-ND	.63	.57	.51
	3	15.0	ED1931-ND	.94	.85	.75
5	2	10.0	ED1932-ND	1.02	.92	.82
	3	15.0	ED1933-ND	1.52	1.37	1.22
6	2	10.0	ED1578-ND	2.20	1.98	1.76
	4	20.0	ED1580-ND	4.40	3.96	3.52
	5	25.0	ED1581-ND	5.50	4.95	4.40
	6	30.0	ED1582-ND	6.60	5.94	5.28
	7	35.0	ED1583-ND	7.70	6.93	6.16
	8	40.0	ED1584-ND	8.80	7.92	7.04
	9	45.0	ED1585-ND	9.90	8.91	7.92
	10	50.0	ED1586-ND	11.00	9.90	8.80
	11	55.0	ED1587-ND	11.21	10.09	8.97
	12	60.0	ED1588-ND	13.20	11.88	10.56
7	2	10.0	ED1589-ND	1.35	1.22	1.08
	4	20.0	ED1591-ND	2.70	2.43	2.16
	6	30.0	ED1593-ND	4.05	3.65	3.24
	8	40.0	ED1595-ND	5.40	4.86	4.32
	10	50.0	ED1597-ND	6.75	6.08	5.40
	12	60.0	ED1599-ND	8.10	7.29	6.48
8	2	10.0	ED1601-ND	.34	.31	.28
	3	15.0	ED1602-ND	.51	.47	.41
	4	20.0	ED2233-ND	.69	.63	.56
	6	30.0	ED2234-ND	1.04	.94	.83
	8	40.0	ED2235-ND	1.38	1.25	1.11
	12	60.0	ED2236-ND	2.07	1.87	1.66
9	2	10.0	ED1623-ND	.37	.34	.30
	3	15.0	ED1624-ND	.56	.51	.45
	4	20.0	ED2221-ND	.74	.67	.60
	5	25.0	ED2222-ND	.93	.84	.74
	6	30.0	ED2223-ND	1.11	1.00	.89
	7	35.0	ED2224-ND	1.30	1.17	1.04
	10	50.0	ED2225-ND	1.85	1.67	1.48
	12	60.0	ED2226-ND	2.22	2.00	1.78
10	2	10.0	ED2237-ND	.65	.59	.52
	3	15.0	ED2238-ND	.98	.88	.78
	4	20.0	ED2239-ND	1.30	1.17	1.04
	5	25.0	ED2240-ND	1.63	1.47	1.30

Fig.	No. of Pos.	Block Length (mm)	Digi-Key Part No.	Price Each 1	10	100
10	6	30.0	ED2241-ND	1.95	1.76	1.56
	7	35.0	ED2242-ND	2.28	2.05	1.82
	8	40.0	ED2243-ND	2.60	2.34	2.08
	9	45.0	ED2244-ND	2.93	2.64	2.34
	10	50.0	ED2245-ND	3.25	2.93	2.60
	11	55.0	ED2246-ND	3.58	3.22	2.86
	12	60.0	ED2247-ND	3.90	3.51	3.12
11	2	10.0	ED2248-ND	.80	.72	.64
	3	15.0	ED2249-ND	1.20	1.08	.96
	4	20.0	ED2250-ND	1.60	1.44	1.28
	5	25.0	ED2251-ND	2.00	1.80	1.60
	6	30.0	ED2252-ND	2.40	2.16	1.92
	7	35.0	ED2253-ND	2.80	2.52	2.24
	8	40.0	ED2254-ND	3.20	2.88	2.56
	9	45.0	ED2255-ND	3.60	3.24	2.88
	10	50.0	ED2256-ND	4.00	3.60	3.20
	11	55.0	ED2257-ND	4.40	3.96	3.52
	12	60.0	ED2258-ND	4.80	4.32	3.84
12	2	10.0	ED2259-ND	.80	.72	.64
	3	15.0	ED2260-ND	1.20	1.08	.96
	4	20.0	ED2261-ND	1.60	1.44	1.28
	5	25.0	ED2262-ND	2.00	1.80	1.60
	6	30.0	ED2263-ND	2.40	2.16	1.92
	7	35.0	ED2265-ND	2.80	2.52	2.24
	8	40.0	ED2266-ND	3.20	2.88	2.56
	9	45.0	ED2267-ND	3.60	3.24	2.88
	10	50.0	ED2268-ND	4.00	3.60	3.20
	11	55.0	ED2269-ND	4.40	3.96	3.52
	12	60.0	ED2270-ND	4.80	4.32	3.84
13	2	10.0	ED2282-ND	.65	.59	.52
	3	15.0	ED2283-ND	.98	.88	.78
	4	20.0	ED2284-ND	1.30	1.17	1.04
	5	25.0	ED2285-ND	1.63	1.47	1.30
	6	30.0	ED2286-ND	1.95	1.76	1.56
	7	35.0	ED2287-ND	2.28	2.05	1.82
	8	40.0	ED2288-ND	2.60	2.34	2.08
	9	45.0	ED2289-ND	2.93	2.64	2.34

(Continued)

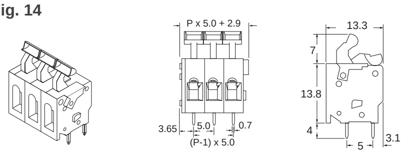
Terminal Blocks *(Cont.)*

Fig. 13



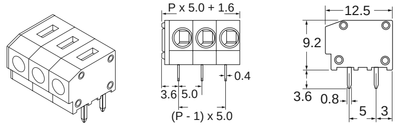
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: 28-14AWG • Temp.: -30°C/+105°C • Flammability: UL94V-O • Color: Slade Gray

Fig. 14



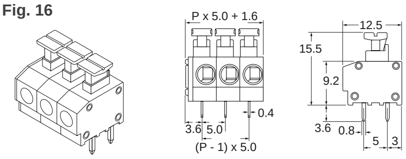
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: 28-14AWG • Temp.: -30°C/+105°C • Flammability: UL94V-O • Color: Slade Gray

Fig. 15



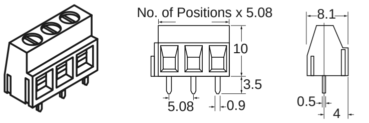
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 10A • Wire Size: 20-14AWG • Temp.: -30°C/+105°C • Flammability: UL94V-O • Color: Slade Gray

Fig. 16



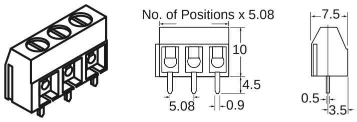
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 10A • Wire Size: 20-14AWG • Temp.: -30°C/+105°C • Flammability: UL94V-O • Color: Slade Gray

Fig. 17



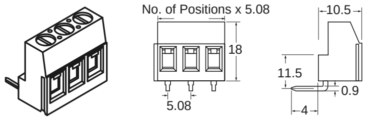
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: 28-14AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Green

Fig. 18



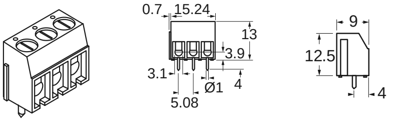
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: 22-14AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Blue

Fig. 19



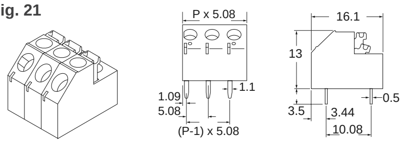
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 20A • Wire Size: 22-14AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Green

Fig. 20



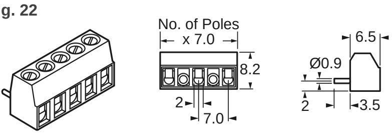
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: 22-14AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Blue

Fig. 21



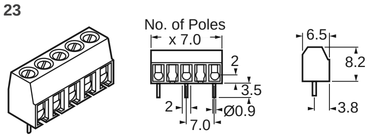
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: 22-15AWG • Temp.: -30°C/+105°C • Flammability: UL94V-O • Color: Slade Gray

Fig. 22



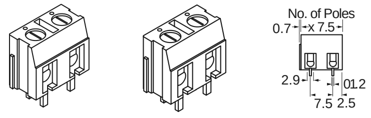
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 6A • Wire Size: 28-16AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Grey

Fig. 23



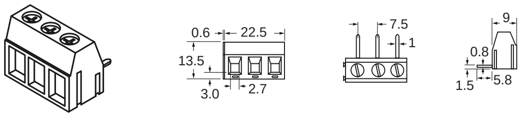
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 6A • Wire Size: 28-16AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Grey

Fig. 24



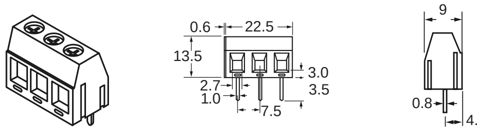
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: 22-14AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Blue

Fig. 25



SPECIFICATIONS: • Rated Voltage: 600V • Rated Current: 16A • Wire Size: 22-12AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Green

Fig. 26



SPECIFICATIONS: • Rated Voltage: 600V • Rated Current: 16A • Wire Size: 22-12AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Green

Fig.	No. of Pos.	Block Length (mm)	Digi-Key Part No.	Price Each 1	10	100
13	10	50.0	ED2290-ND	3.25	2.93	2.60
	11	55.0	ED2291-ND	3.58	3.22	2.86
	12	60.0	ED2292-ND	3.90	3.51	3.12
14	2	10.0	ED2293-ND	.75	.68	.60
	3	15.0	ED2294-ND	1.13	1.02	.90
	4	20.0	ED2295-ND	1.50	1.35	1.20
	5	25.0	ED2296-ND	1.88	1.69	1.50
	6	30.0	ED2297-ND	2.25	2.03	1.80
	7	35.0	ED2298-ND	2.63	2.37	2.10
	8	40.0	ED2299-ND	3.00	2.70	2.40
	9	45.0	ED2300-ND	3.38	3.04	2.70
	10	50.0	ED2301-ND	3.75	3.38	3.00
	11	55.0	ED2302-ND	4.13	3.72	3.30
	12	60.0	ED2303-ND	4.50	4.05	3.60
15	2	10.0	ED2304-ND	.75	.68	.60
	3	15.0	ED2305-ND	1.13	1.02	.90
	4	20.0	ED2306-ND	1.50	1.35	1.20
	5	25.0	ED2307-ND	1.88	1.69	1.50
	6	30.0	ED2308-ND	2.25	2.03	1.80
	7	35.0	ED2309-ND	2.63	2.37	2.10
	8	40.0	ED2310-ND	3.00	2.70	2.40
	9	45.0	ED2311-ND	3.38	3.04	2.70
	10	50.0	ED2312-ND	3.75	3.38	3.00
	11	55.0	ED2313-ND	4.13	3.72	3.30
	12	60.0	ED2314-ND	4.50	4.05	3.60
16	2	10.0	ED2315-ND	.80	.72	.64
	3	15.0	ED2316-ND	1.20	1.08	.96
	4	20.0	ED2317-ND	1.60	1.44	1.28
	5	25.0	ED2318-ND	2.00	1.80	1.60
	6	30.0	ED2319-ND	2.40	2.16	1.92
	7	35.0	ED2320-ND	2.80	2.52	2.24
	8	40.0	ED2321-ND	3.20	2.88	2.56
	9	45.0	ED2322-ND	3.60	3.24	2.88
	10	50.0	ED2323-ND	4.00	3.60	3.20
	11	55.0	ED2324-ND	4.40	3.96	3.52
	12	60.0	ED2325-ND	4.80	4.32	3.84

Fig.	No. of Pos.	Block Length (mm)	Digi-Key Part No.	Price Each 1	10	100
5.08mm Lead Spacing - Terminal Blocks						
17	2	10.16	ED1973-ND	.70	.63	.56
	3	15.24	ED1974-ND	1.05	.95	.84
18	2	10.16	ED1975-ND	.40	.36	.32
	3	15.24	ED1976-ND	.60	.54	.48
19	2	10.16	ED1977-ND	1.02	.92	.82
	3	15.24	ED1978-ND	1.52	1.37	1.22
20	2	10.16	ED1609-ND	.37	.34	.30
	3	15.24	ED1610-ND	.55	.50	.45
	4	20.32	ED2227-ND	.74	.67	.60
	5	25.40	ED2228-ND	.93	.84	.74
	6	30.48	ED2229-ND	1.11	1.00	.89
	7	35.56	ED2230-ND	1.30	1.17	1.04
	10	50.80	ED2231-ND	1.85	1.67	1.48
	12	60.96	ED2232-ND	2.22	2.00	1.78
21	2	10.16	ED2326-ND	.85	.77	.68
	3	15.24	ED2327-ND	1.28	1.15	1.02
	4	20.32	ED2328-ND	1.70	1.53	1.36
	5	25.40	ED2329-ND	2.13	1.92	1.70
	6	30.48	ED2330-ND	2.55	2.30	2.04
	7	35.56	ED2331-ND	2.98	2.68	2.38
7.0mm Lead Spacing - Terminal Blocks						
22	2	14.0	ED1527-ND	.44	.40	.36
	3	21.0	ED1528-ND	.66	.60	.53
	4	28.0	ED1529-ND	.88	.80	.71
	5	35.0	ED1530-ND	1.10	.99	.88
	7	49.0	ED1532-ND	1.54	1.39	1.24
	8	56.0	ED1533-ND	1.76	1.59	1.41
23	2	14.0	ED1534-ND	.44	.40	.36
	3	21.0	ED1535-ND	.66	.60	.53
	4	28.0	ED1536-ND	.88	.80	.71
	5	35.0	ED1537-ND	1.10	.99	.88
	6	42.0	ED1538-ND	1.32	1.19	1.06
	7	49.0	ED1539-ND	1.54	1.39	1.24
	8	56.0	ED1540-ND	1.76	1.59	1.41

Fig.	No. of Pos.	Block Length (mm)	Digi-Key Part No.	Price Each 1	10	100
7.5mm Lead Spacing - Terminal Blocks						
24	2	15.0	ED1567-ND	.88	.79	.70
	3	22.5	ED1568-ND	1.31	1.19	1.05
	4	30.0	ED1569-ND	1.75	1.58	1.40
	5	37.5	ED1570-ND	2.19	1.97	1.75
	6	45.0	ED1571-ND	2.63	2.37	2.10
	7	52.5	ED1572-ND	3.06	2.76	2.45
	8	60.0	ED1573-ND	3.50	3.15	2.80
	9	67.5	ED1574-ND	3.94	3.55	3.15
	10	75.0	ED1575-ND	4.38	3.94	3.50
	11	82.5	ED1576-ND	4.81	4.34	3.85
	12	90.0	ED1577-ND	5.25	4.73	4.20
25	2	15.0	ED2343-ND	.85	.77	.68
	3	22.5	ED2344-ND	1.28	1.15	1.02
	4	30.0	ED2345-ND	1.70	1.53	1.36
	5	37.5	ED2346-ND	2.13	1.92	1.70
	6	45.0	ED2347-ND	2.55	2.30	2.04
	7	52.5	ED2348-ND	2.98	2.68	2.38
	8	60.0	ED2349-ND	3.40	3.06	2.72
	9	67.5	ED2350-ND	3.83	3.45	3.06
	10	75.0	ED2351-ND	4.25	3.83	3.40
	11	82.5	ED2352-ND	4.68	4.21	3.74
	12	90.0	ED2353-ND	5.10	4.59	4.08
26	2	15.0	ED2354-ND	.80	.72	.64
	3	22.5	ED2355-ND	1.20	1.08	.96
	4	30.0	ED2356-ND	1.60	1.44	1.28
	5	37.5	ED2357-ND	2.00	1.80	1.60
	6	45.0	ED2358-ND	2.40	2.16	1.92
	7	52.5	ED2359-ND	2.80	2.52	2.24
	8	60.0	ED2360-ND	3.20	2.88	2.56
	9	67.5	ED2361-ND	3.60	3.24	2.88
	10	75.0	ED2362-ND	4.00	3.60	3.20
	11	82.5	ED2363-ND	4.40	3.96	3.52
	12	90.0	ED2364-ND	4.80	4.32	3.84

ON-SHORE TECHNOLOGY, INC.

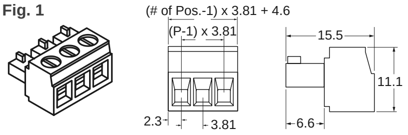
Two-Piece Terminal Blocks

FEATURES

• Modularity:
Fixed and Pluggable PCB Terminals are available in both metric and inch pin spacings. The key feature of our modular terminal housings is their tongue and groove joint design that permits individual 2 or 3 pole terminal modules to be joined together to produce multi-pole terminal assemblies.

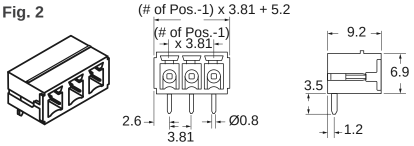
• Housings:
PCB Mini-Terminal Block housings are precision molded from self-extinguishing 6.6 polyimide (nylon) molding material. All housings have funnel shaped wire entry guides to prevent wire fraying and minimize misconnections.

Fig. 1



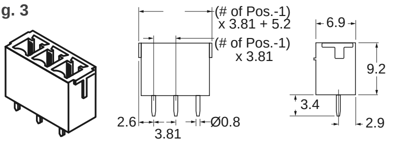
SPECIFICATIONS: • **Rated Voltage:** 125V • **Rated Current:** 8A • **Temperature Range:** -30°C/+105°C • **Flammability:** UL94V-O • **Color:** Green

Fig. 2



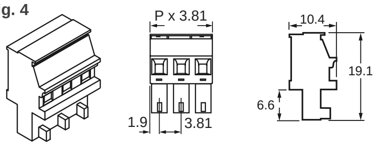
SPECIFICATIONS: • **Rated Voltage:** 125V • **Rated Current:** 8A • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-O • **Color:** Green

Fig. 3



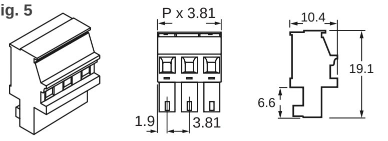
SPECIFICATIONS: • **Rated Voltage:** 125V • **Rated Current:** 8A • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-O • **Color:** Green

Fig. 4



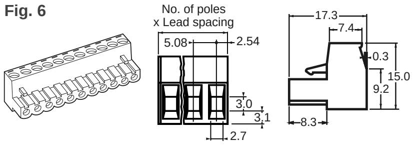
SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 8A • **Wire Size:** 28-16AWG • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-0 • **Color:** Green

Fig. 5



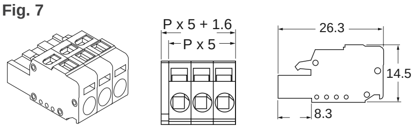
SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 8A • **Wire Size:** 28-16AWG • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-0 • **Color:** Green

Fig. 6



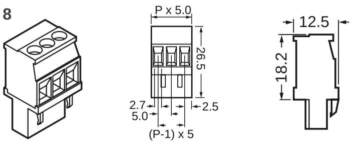
SPECIFICATIONS: • **Rated Voltage:** 250V • **Rated Current:** 12A • **Temperature:** -30°C/+100°C • **Flammability:** UL94V-0 • **Color:** Green

Fig. 7



SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 15A • **Wire Size:** 28-12AWG • **Temperature:** -30°C/+105°C • **Flammability:** UL94 V-0 • **Color:** Green

Fig. 8



SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 15A • **Wire Size:** 22-10AWG • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-0 • **Color:** Green

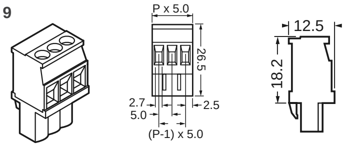
Fig.	No. of Poles	Block Length (mm)	Digi-Key Part No.	Price Each 1	10	100
3.81mm Lead Spacing – Plugs						
1	2	3.81	ED1960-ND	1.30	1.17	1.04
	3	7.62	ED1961-ND	1.95	1.76	1.56
	4	11.43	ED1962-ND	2.60	2.34	2.08
	5	15.24	ED1963-ND	3.25	2.93	2.60
	6	19.05	ED1964-ND	3.90	3.51	3.12
	7	22.86	ED1965-ND	4.55	4.10	3.64
	8	26.67	ED1966-ND	5.20	4.68	4.16
	9	30.48	ED1967-ND	5.85	5.27	4.68
	10	34.29	ED1968-ND	6.50	5.85	5.20
	11	38.10	ED1969-ND	7.15	6.44	5.72
	12	41.91	ED1970-ND	7.80	7.02	6.24
	14	49.53	ED1971-ND	9.10	8.19	7.28
	16	57.15	ED1972-ND	10.40	9.36	8.32
3.81mm Lead Spacing — Horizontal Header						
2	2	3.81	ED1934-ND	.60	.54	.48
	3	7.62	ED1935-ND	.90	.81	.72
	4	11.43	ED1936-ND	1.20	1.08	.96
	5	15.24	ED1937-ND	1.50	1.35	1.20
	6	19.05	ED1938-ND	1.80	1.62	1.44
	7	22.86	ED1939-ND	2.10	1.89	1.68
	8	26.67	ED1940-ND	2.40	2.16	1.92
	9	30.48	ED1941-ND	2.70	2.43	2.16
	10	34.29	ED1942-ND	3.00	2.70	2.40
	11	38.10	ED1943-ND	3.30	2.97	2.64
	12	41.91	ED1944-ND	3.60	3.24	2.88
	14	49.53	ED1945-ND	4.20	3.78	3.36
	16	57.15	ED1946-ND	4.80	4.32	3.84
3.81mm Lead Spacing — Vertical Header						
3	2	3.81	ED1947-ND	.60	.54	.48
	3	7.62	ED1948-ND	.90	.81	.72
	4	11.43	ED1949-ND	1.20	1.08	.96
	5	15.24	ED1950-ND	1.50	1.35	1.20
	6	19.05	ED1951-ND	1.80	1.62	1.44
	7	22.86	ED1952-ND	2.10	1.89	1.68
	8	26.67	ED1953-ND	2.40	2.16	1.92
	9	30.48	ED1954-ND	2.70	2.43	2.16
	10	34.29	ED1955-ND	3.00	2.70	2.40
	11	38.10	ED1956-ND	3.30	2.97	2.64
	12	41.91	ED1957-ND	3.60	3.24	2.88
	14	49.53	ED1958-ND	4.20	3.78	3.36
	16	57.15	ED1959-ND	4.80	4.32	3.84

Fig.	No. of Poles	Block Length (mm)	Digi-Key Part No.	Price Each 1	10	100
3.81mm Lead Spacing — Plugs						
4	2	7.62	ED2454-ND	1.00	.90	.80
	3	11.43	ED2455-ND	1.50	1.35	1.20
	4	15.24	ED2456-ND	2.00	1.80	1.60
	5	19.05	ED2457-ND	2.50	2.25	2.00
	6	22.86	ED2458-ND	3.00	2.70	2.40
	7	26.67	ED2459-ND	3.50	3.15	2.80
	8	30.48	ED2460-ND	4.00	3.60	3.20
	9	34.29	ED2461-ND	4.50	4.05	3.60
	10	38.10	ED2462-ND	5.00	4.50	4.00
	12	45.72	ED2463-ND	6.00	5.40	4.80
	14	53.34	ED2464-ND	7.00	6.30	5.60
	16	60.96	ED2465-ND	8.00	7.20	6.40
3.81mm Lead Spacing —Plugs						
5	2	7.62	ED2466-ND	1.00	.90	.80
	3	11.43	ED2467-ND	1.50	1.35	1.20
	4	15.24	ED2468-ND	2.00	1.80	1.60
	5	19.05	ED2469-ND	2.50	2.25	2.00
	6	22.86	ED2470-ND	3.00	2.70	2.40
	7	26.67	ED2471-ND	3.50	3.15	2.80
	8	30.48	ED2472-ND	4.00	3.60	3.20
	9	34.29	ED2473-ND	4.50	4.05	3.60
	10	38.10	ED2474-ND	5.00	4.50	4.00
	12	45.72	ED2475-ND	6.00	5.40	4.80
	14	53.34	ED2476-ND	7.00	6.30	5.60
	16	60.96	ED2477-ND	8.00	7.20	6.40
5mm Lead Spacing — Plugs						
6	2	10	ED1701-ND*	1.05	.94	.82
	3	15	ED1702-ND*	1.58	1.41	1.23
	4	20	ED1703-ND*	1.80	1.62	1.44
	5	25	ED1704-ND*	2.25	2.03	1.80
	6	30	ED1705-ND*	2.70	2.43	2.16
	7	35	ED1706-ND*	3.15	2.84	2.52
	8	40	ED1707-ND*	3.60	3.24	2.88
	9	45	ED1708-ND*	4.05	3.65	3.24
	10	50	ED1709-ND*	4.50	4.05	3.60
	11	55	ED1710-ND*	4.95	4.46	3.96
	12	60	ED1711-ND*	5.40	4.86	4.32
	14	70	ED1712-ND*	6.30	5.67	5.04
	16	80	ED1713-ND*	7.20	6.48	5.76
	18	90	ED1714-ND*	8.10	7.29	6.48
	20	100	ED1715-ND*	9.00	8.10	7.20
	24	120	ED1716-ND*	10.80	9.72	8.64

Fig.	No. of Poles	Block Length (mm)	Digi-Key Part No.	Price Each 1	10	100
5mm Lead Spacing — Plugs						
7	2	10	ED2271-ND	.85	.77	.68
	3	15	ED2272-ND	1.28	1.15	1.02
	4	20	ED2273-ND	1.70	1.53	1.36
	5	25	ED2274-ND	2.13	1.92	1.70
	6	30	ED2275-ND	2.55	2.30	2.04
	7	35	ED2276-ND	2.98	2.68	2.38
	8	40	ED2277-ND	3.40	3.06	2.72
	9	45	ED2278-ND	3.83	3.45	3.06
	10	50	ED2279-ND	4.25	3.83	3.40
	11	55	ED2280-ND	4.68	4.21	3.74
	12	60	ED2281-ND	5.10	4.59	4.08
5mm Lead Spacing — Plugs						
8	2	10	ED2376-ND	1.40	1.26	1.12
	3	15	ED2377-ND	2.10	1.89	1.68
	4	20	ED2378-ND	2.80	2.52	2.24
	5	25	ED2379-ND	3.50	3.15	2.80
	6	30	ED2380-ND	4.20	3.78	3.36
	7	35	ED2381-ND	4.90	4.41	3.92
	8	40	ED2382-ND	5.60	5.04	4.48
	9	45	ED2383-ND	6.30	5.67	5.04
	10	50	ED2384-ND	7.00	6.30	5.60
	12	60	ED2385-ND	8.40	7.56	6.72
	14	70	ED2386-ND	9.80	8.82	7.84
	16	80	ED2387-ND	11.20	10.08	8.96
5mm Lead Spacing — Plugs						
9	2	10	ED2388-ND	1.40	1.26	1.12
	3	15	ED2389-ND	2.10	1.89	1.68
	4	20	ED2390-ND	2.80	2.52	2.24
	5	25	ED2391-ND	3.50	3.15	2.80
	6	30	ED2392-ND	4.20	3.78	3.36
	7	35	ED2393-ND	4.90	4.41	3.92
	8	40	ED2394-ND	5.60	5.04	4.48
	9	45	ED2395-ND	6.30	5.67	5.04
	10	50	ED2396-ND	7.00	6.30	5.60
	12	60	ED2397-ND	8.40	7.56	6.72
	14	70	ED2398-ND	9.80	8.82	7.84
	16	80	ED2399-ND	11.20	10.08	8.96
5mm Lead Spacing — Plugs						
10	2	10	ED2400-ND	1.40	1.26	1.12
	3	15	ED2401-ND	2.10	1.89	1.68
	4	20	ED2402-ND	2.80	2.52	2.24
	5	25	ED2403-ND	3.50	3.15	2.80
	6	30	ED2404-ND	4.20	3.78	3.36

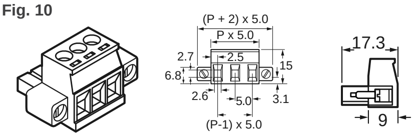
Two-Piece Terminal Blocks (cont'd)

Fig. 9



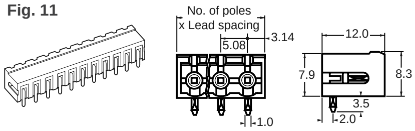
SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 15A • **Wire Size:** 22-10AWG • **Temperature:** -30°C/+105°C • **Flammability:** UL94 V-0 • **Color:** Green

Fig. 10



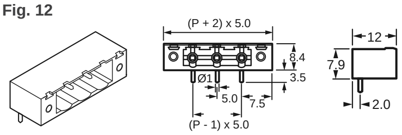
SPECIFICATIONS: • **Rated Voltage:** 300VB • **Rated Current:** 15A • **Wire Size:** 28-12AWG • **Temperature:** -30°C/+105°C • **Flammability:** UL94 V-0 • **Color:** Green

Fig. 11



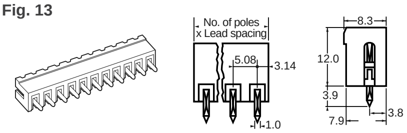
SPECIFICATIONS: • **Rated Voltage:** 250V • **Rated Current:** 12A • **Temperature:** -30°C/+100°C • **Flame Class:** UL 94 V-0 • **Color:** Green

Fig. 12



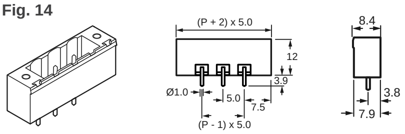
SPECIFICATIONS: • **Rated Voltage:** 300VB • **Rated Current:** 15A • **Temperature:** -30°C/+105°C • **Flammability:** UL94 V-0 • **Color:** Green

Fig. 13



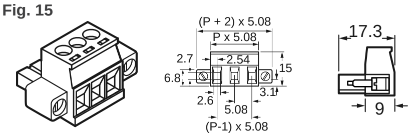
SPECIFICATIONS: • **Rated Voltage:** 250V • **Rated Current:** 12A • **Temperature:** -30°C/+100°C • **Flammability:** UL94V-0 • **Color:** Green

Fig. 14



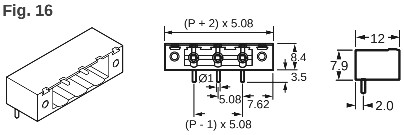
SPECIFICATIONS: • **Rated Voltage:** 300VB • **Rated Current:** 15A • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-0 • **Color:** Green

Fig. 15



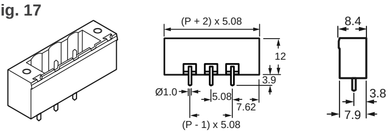
SPECIFICATIONS: • **Rated Voltage:** 300VB • **Rated Current:** 15A • **Wire Size:** 28-12AWG • **Temperature:** -30°C/+105°C • **Flammability:** UL94 V-0 • **Color:** Green

Fig. 16



SPECIFICATIONS: • **Rated Voltage:** 300VB • **Rated Current:** 15A • **Temperature:** -30°C/+105°C • **Flammability:** UL94 V-0 • **Color:** Green

Fig. 17



SPECIFICATIONS: • **Rated Voltage:** 300VB • **Rated Current:** 15A • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-0 • **Color:** Green

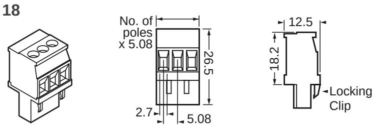
Fig.	No. of Poles	Block Length (mm)	Digi-Key Part No.	Price Each 1	10	100
10	7	35	ED2405-ND	4.90	4.41	3.92
	8	40	ED2406-ND	5.60	5.04	4.48
	9	45	ED2407-ND	6.30	5.67	5.04
	10	50	ED2408-ND	7.00	6.30	5.60
5mm Lead Spacing — Horizontal Headers						
11	2	10	ED1801-ND†	.37	.33	.29
	3	15	ED1802-ND†	.56	.50	.44
	4	20	ED1803-ND†	.74	.66	.58
	5	25	ED1804-ND†	.93	.83	.73
	6	30	ED1805-ND†	1.11	.99	.87
	7	35	ED1806-ND†	1.30	1.16	1.02
	8	40	ED1807-ND†	1.48	1.32	1.16
	9	45	ED1808-ND†	1.67	1.49	1.31
	10	50	ED1809-ND†	1.85	1.65	1.45
	11	55	ED1810-ND†	2.04	1.82	1.60
	12	60	ED1811-ND†	2.22	1.98	1.74
	14	70	ED1812-ND†	2.59	2.31	2.03
	16	80	ED1813-ND†	2.96	2.64	2.32
	18	90	ED1814-ND†	3.33	2.97	2.61
	20	100	ED1815-ND†	3.70	3.30	2.90
	24	120	ED1816-ND†	4.44	3.96	3.48
5mm Lead Spacing — Horizontal Headers						
12	2	10	ED2418-ND	1.10	.99	.88
	3	15	ED2419-ND	1.65	1.49	1.32
	4	20	ED2420-ND	2.20	1.98	1.76
	5	25	ED2421-ND	2.75	2.48	2.20
	6	30	ED2422-ND	3.30	2.97	2.64
	7	35	ED2423-ND	3.85	3.47	3.08
	8	40	ED2424-ND	4.40	3.96	3.52
	9	45	ED2425-ND	4.95	4.46	3.96
	10	50	ED2426-ND	5.50	4.95	4.40
5mm Lead Spacing — Vertical Headers						
13	2	10	ED1833-ND†	.37	.33	.29
	3	15	ED1834-ND†	.56	.50	.44
	4	20	ED1835-ND†	.74	.66	.58
	5	25	ED1836-ND†	.93	.83	.73
	6	30	ED1837-ND†	1.11	.99	.87
	7	35	ED1838-ND†	1.30	1.16	1.02
	8	40	ED1839-ND†	1.48	1.32	1.16
	9	45	ED1840-ND†	1.67	1.49	1.31
	10	50	ED1841-ND†	1.85	1.65	1.45
	11	55	ED1842-ND†	2.04	1.82	1.60

Fig.	No. of Poles	Block Length (mm)	Digi-Key Part No.	Price Each 1	10	100
13	12	60	ED1843-ND†	2.22	1.98	1.74
	14	70	ED1844-ND†	2.59	2.31	2.03
	16	80	ED1845-ND†	2.96	2.64	2.32
	18	90	ED1846-ND†	3.33	2.97	2.61
	20	100	ED1847-ND†	3.70	3.30	2.90
	24	120	ED1848-ND†	4.44	3.96	3.48
5mm Lead Spacing —Vertical Headers						
14	2	10	ED2436-ND	1.10	.99	.88
	3	15	ED2437-ND	1.65	1.49	1.32
	4	20	ED2438-ND	2.20	1.98	1.76
	5	25	ED2439-ND	2.75	2.48	2.20
	6	30	ED2440-ND	3.30	2.97	2.64
	7	35	ED2441-ND	3.85	3.47	3.08
	8	40	ED2442-ND	4.40	3.96	3.52
	9	45	ED2443-ND	4.95	4.46	3.96
	10	50	ED2444-ND	5.50	4.95	4.40
5.08mm Lead Spacing — Plugs						
6	2	10.16	ED1717-ND*	1.05	.94	.82
	3	15.24	ED1718-ND*	1.58	1.41	1.23
	4	20.32	ED1719-ND*	2.10	1.87	1.64
	5	25.40	ED1720-ND*	2.63	2.34	2.05
	6	30.48	ED1721-ND*	3.15	2.81	2.46
	7	35.56	ED1722-ND*	3.68	3.28	2.87
	8	40.64	ED1723-ND*	4.20	3.74	3.28
	9	45.72	ED1724-ND*	4.73	4.21	3.69
	10	50.80	ED1725-ND*	5.25	4.68	4.10
	11	55.88	ED1726-ND*	5.78	5.15	4.51
	12	60.96	ED1727-ND*	6.30	5.61	4.92
	14	71.12	ED1728-ND*	7.35	6.47	5.74
	16	81.28	ED1729-ND*	8.40	7.40	6.56
	18	91.44	ED1730-ND*	9.45	8.32	7.38
	20	101.60	ED1731-ND*	10.50	9.25	8.20
	24	121.92	ED1732-ND*	12.60	11.09	9.84
5.08mm Lead Spacing — Plugs						
15	2	10.16	ED2409-ND	1.40	1.40	1.12
	3	15.24	ED2410-ND	2.10	2.10	1.68
	4	20.32	ED2411-ND	2.80	2.80	2.24
	5	25.40	ED2412-ND	3.50	3.50	2.80
	6	30.48	ED2413-ND	4.20	4.20	3.36
	7	35.56	ED2414-ND	4.90	4.90	3.92
	8	40.64	ED2415-ND	5.60	5.60	4.48
	9	45.72	ED2416-ND	6.30	6.30	5.04
	10	50.80	ED2417-ND	7.00	7.00	5.60

Fig.	No. of Poles	Block Length (mm)	Digi-Key Part No.	Price Each 1	10	100
5.08mm Lead Spacing — Horizontal Headers						
11	2	10.16	ED1817-ND†	.37	.33	.29
	3	15.24	ED1818-ND†	.56	.50	.44
	4	20.32	ED1819-ND†	.74	.66	.58
	5	25.40	ED1820-ND†	.93	.83	.73
	6	30.48	ED1821-ND†	1.11	.99	.87
	7	35.56	ED1822-ND†	1.30	1.16	1.02
	8	40.64	ED1823-ND†	1.48	1.32	1.16
	9	45.72	ED1824-ND†	1.67	1.49	1.31
	10	50.80	ED1825-ND†	1.85	1.65	1.45
	11	55.88	ED1826-ND†	2.04	1.82	1.60
	12	60.96	ED1827-ND†	2.22	1.98	1.74
	14	71.12	ED1828-ND†	2.59	2.31	2.03
	16	81.28	ED1829-ND†	2.96	2.64	2.32
	18	91.44	ED1830-ND†	3.33	2.97	2.61
	20	101.60	ED1831-ND†	3.70	3.30	2.90
	24	121.92	ED1832-ND†	4.44	3.96	3.48
5.08mm Lead Spacing — Horizontal Headers						
16	2	10.16	ED2427-ND	1.10	.99	.88
	3	15.24	ED2428-ND	1.65	1.49	1.32
	4	20.32	ED2429-ND	2.20	1.98	1.76
	5	25.40	ED2430-ND	2.75	2.48	2.20
	6	30.48	ED2431-ND	3.30	2.97	2.64
	7	35.56	ED2432-ND	3.85	3.47	3.08
	8	40.64	ED2433-ND	4.40	3.96	3.52
	9	45.72	ED2434-ND	4.95	4.46	3.96
	10	50.80	ED2435-ND	5.50	4.95	4.40
5.08mm Lead Spacing — Vertical Headers						
13	2	10.16	ED1849-ND†	.37	.33	.29
	3	15.24	ED1850-ND†	.56	.50	.44
	4	20.32	ED1851-ND†	.74	.66	.58
	5	25.40	ED1852-ND†	.93	.83	.73
	6	30.48	ED1853-ND†	1.11	.99	.87
	7	35.56	ED1854-ND†	1.30	1.16	1.02
	8	40.64	ED1855-ND†	1.48	1.32	1.16
	9	45.72	ED1856-ND†	1.67	1.49	1.31
	10	50.80	ED1857-ND†	1.85	1.65	1.45
	11	55.88	ED1858-ND†	2.04	1.82	1.60
	12	60.96	ED1859-ND†	2.22	1.98	1.74
	14	71.12	ED1860-ND†	2.59	2.31	2.03
	16	81.28	ED1861-ND†	2.96	2.64	2.32
	18	91.44	ED1862-ND†	3.33	2.97	2.61
	20	101.60	ED1863-ND†	3.70	3.30	2.90
	24	121.92	ED1864-ND†	4.44	3.96	3.48

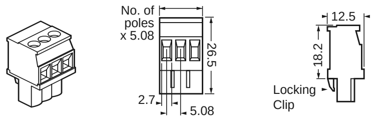
Two-Piece Terminal Blocks (cont'd)

Fig. 18



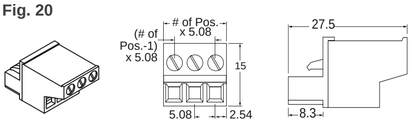
SPECIFICATIONS: • **Rated Voltage:** 250V • **Rated Current:** 12A • **Temperature:** -30°C/+100°C • **Flammability:** UL94V-0 • **Color:** Green

Fig. 19



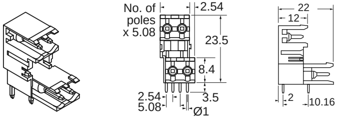
SPECIFICATIONS: • **Rated Voltage:** 300VB • **Rated Current:** 15A • **Temperature:** -30°C/+105°C • **Flammability:** UL94 V-0 • **Color:** Green

Fig. 20



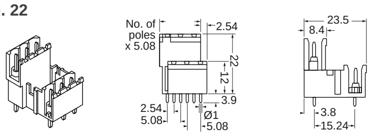
SPECIFICATIONS: • **Rated Voltage:** 250V • **Rated Current:** 12A • **Temperature:** -30°C/+100°C • **Flammability:** UL94V-0 • **Color:** Green

Fig. 21



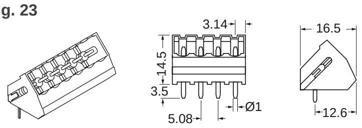
SPECIFICATIONS: • **Rated Voltage:** 250V • **Rated Current:** 12A • **Temperature:** -30°C/+100°C • **Flammability:** UL94V-0 • **Color:** Green

Fig. 22



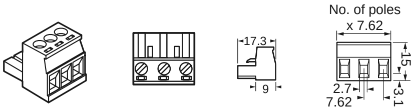
SPECIFICATIONS: • **Rated Voltage:** 250V • **Rated Current:** 12A • **Temperature:** -30°C/+100°C • **Flammability:** U 94V-0 • **Color:** Green

Fig. 23



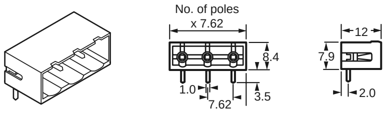
SPECIFICATIONS: • **Rated Voltage:** 250V • **Rated Current:** 12A • **Temperature:** -30°C/+100°C • **Flammability:** UL94V-0 • **Color:** Green

Fig. 24



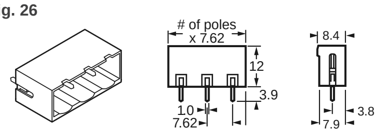
SPECIFICATIONS: • **Rated Voltage:** 400V • **Rated Current:** 12A • **Temperature:** -30°C/+100°C • **Flammability:** UL94V-O • **Color:** Green

Fig. 25



SPECIFICATIONS: • **Rated Voltage:** 400V • **Rated Current:** 12A • **Temperature:** -30°C/+100°C • **Flammability:** UL94V-O • **Color:** Green

Fig. 26



SPECIFICATIONS: • **Rated Voltage:** 400V • **Rated Current:** 12A • **Temperature:** -30°C/+100°C • **Flammability:** UL94V-O • **Color:** Green

Fig.	No. of Poles	Block Length (mm)	Digi-Key Part No.	Price Each 1	10	100
5.08mm Lead Spacing — Vertical Headers						
17	2	10.16	ED2445-ND	1.10	.99	.88
	3	15.24	ED2446-ND	1.65	1.49	1.32
	4	20.32	ED2447-ND	2.20	1.98	1.76
	5	25.40	ED2448-ND	2.75	2.48	2.20
	6	30.48	ED2449-ND	3.30	2.97	2.64
	7	35.56	ED2450-ND	3.85	3.47	3.08
	8	40.64	ED2451-ND	4.40	3.96	3.52
	9	45.72	ED2452-ND	4.95	4.46	3.96
	10	50.80	ED2453-ND	5.50	4.95	4.40
5.08mm Lead Spacing — Vertical Plug						
18	2	10.16	ED1746-ND†	1.48	1.33	1.18
	3	15.24	ED1747-ND†	2.21	2.00	1.77
	4	20.32	ED1748-ND†	2.95	2.66	2.36
	5	25.40	ED1749-ND†	3.68	3.31	2.94
	6	30.48	ED1750-ND†	4.43	3.99	3.54
	7	35.56	ED1751-ND†	5.15	4.64	4.12
	8	40.64	ED1752-ND†	5.90	5.31	4.72
	9	45.72	ED1753-ND†	6.63	5.97	5.30
	10	50.80	ED1754-ND†	7.38	6.64	5.90
	11	55.88	ED1755-ND†	8.10	7.29	6.48
	12	60.96	ED1756-ND†	8.85	7.97	7.08
	14	71.12	ED1757-ND†	10.33	9.30	8.26
	16	81.28	ED1758-ND†	11.80	10.62	9.44
5.08mm Lead Spacing — Vertical Plug						
19	2	10.16	ED1759-ND†	1.48	1.33	1.18
	3	15.24	ED1760-ND†	2.21	2.00	1.77
	4	20.32	ED1761-ND†	2.95	2.66	2.36
	5	25.40	ED1762-ND†	3.68	3.31	2.94
	6	30.48	ED1763-ND†	4.43	3.99	3.54
	7	35.56	ED1764-ND†	5.15	4.64	4.12
	8	40.64	ED1765-ND†	5.90	5.31	4.72
	9	45.72	ED1766-ND†	6.63	5.97	5.30
	10	50.80	ED1767-ND†	7.38	6.64	5.90
	11	55.88	ED1768-ND†	8.10	7.29	6.48
	12	60.96	ED1769-ND†	8.85	7.97	7.08
	14	71.12	ED1770-ND†	10.33	9.30	8.26
	16	81.28	ED1771-ND†	11.80	10.62	9.44
5.08mm Lead Spacing – Plugs						
20	2	5.08	ED1983-ND	2.20	1.98	1.76
	3	10.16	ED1984-ND	3.30	2.97	2.64
	4	15.24	ED1985-ND	4.40	3.96	3.52

Fig.	No. of Poles	Block Length (mm)	Digi-Key Part No.	Price Each 1	10	100
20	5	20.32	ED1986-ND	5.50	4.95	4.40
	6	25.40	ED1987-ND	6.60	5.94	5.28
	7	30.48	ED1988-ND	7.70	6.93	6.16
	8	35.56	ED1989-ND	8.80	7.92	7.04
	9	40.64	ED1990-ND	9.90	8.91	7.92
	10	45.72	ED1991-ND	11.00	9.90	8.80
	11	50.80	ED1992-ND	12.10	10.89	9.68
	12	55.88	ED1993-ND	13.20	11.88	10.56
	14	66.04	ED1994-ND	15.40	13.86	12.32
	16	76.20	ED1995-ND	17.60	15.84	14.08
	18	86.36	ED1996-ND	19.80	17.82	15.84
	20	96.52	ED1997-ND	22.00	19.80	17.60
	24	116.84	ED1998-ND	26.40	23.76	21.12
5.08mm Lead Spacing — Horizontal Headers						
21	4	5.08	ED1903-ND	1.70	1.53	1.36
	6	10.16	ED1904-ND	2.55	2.30	2.04
5.08mm Lead Spacing — Vertical Headers						
22	4	5.08	ED1905-ND	1.70	1.53	1.36
	6	10.16	ED1906-ND	2.55	2.30	2.04
5.08mm Lead Spacing — 45° Header						
23	2	5.08	ED1907-ND	.50	.45	.40
	3	10.16	ED1908-ND	.75	.68	.60
	4	15.24	ED1909-ND	1.00	.90	.80
	5	20.32	ED1910-ND	1.25	1.13	1.00
	6	25.40	ED1911-ND	1.50	1.35	1.20
	7	30.48	ED1912-ND	1.75	1.58	1.40
	8	35.56	ED1913-ND	2.00	1.80	1.60
	9	40.64	ED1914-ND	2.25	2.03	1.80
	10	45.72	ED1915-ND	2.50	2.25	2.00
	11	50.80	ED1916-ND	2.75	2.48	2.20
	12	55.88	ED1917-ND	3.00	2.70	2.40
	13	60.96	ED1918-ND	3.25	2.93	2.60
	14	66.04	ED1919-ND	3.50	3.15	2.80
	15	71.12	ED1920-ND	3.75	3.38	3.00
	16	76.20	ED1921-ND	4.00	3.60	3.20
	17	81.28	ED1922-ND	4.25	3.83	3.40
	18	86.36	ED1923-ND	4.50	4.05	3.60
	19	91.44	ED1924-ND	4.75	4.28	3.80
	20	96.52	ED1925-ND	5.00	4.50	4.00
	21	101.60	ED1926-ND	5.25	4.73	4.20
	22	106.68	ED1927-ND	5.50	4.95	4.40
	23	111.76	ED1928-ND	5.75	5.18	4.60
	24	116.84	ED1929-ND	6.00	5.40	4.80

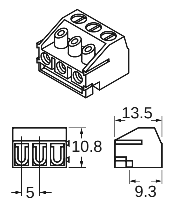
Fig.	No. of Poles	Block Length (mm)	Digi-Key Part No.	Price Each 1	10	100
7.62mm Lead Spacing — Plugs						
24	2	15.24	ED1733-ND*	1.47	1.32	1.18
	3	22.86	ED1734-ND*	2.20	1.98	1.76
	4	30.48	ED1735-ND*	2.93	2.64	2.34
	5	38.10	ED1736-ND*	3.65	3.29	2.92
	6	45.72	ED1737-ND*	4.40	3.96	3.52
	7	53.34	ED1738-ND*	5.13	4.62	4.10
	8	60.96	ED1739-ND*	5.85	5.27	4.68
	9	68.58	ED1740-ND*	6.60	5.94	5.28
	10	76.20	ED1741-ND*	7.33	6.60	5.86
	11	83.82	ED1742-ND*	8.05	7.25	6.44
	12	91.44	ED1743-ND*	8.80	7.92	7.04
	14	106.68	ED1744-ND*	10.25	9.23	8.20
	16	121.92	ED1745-ND*	11.73	10.56	9.38
7.62mm Lead Spacing — Horizontal Header						
25	2	15.24	ED1865-ND†	.48	.43	.38
	3	22.86	ED1866-ND†	.71	.65	.57
	4	30.48	ED1867-ND†	.95	.86	.76
	5	38.10	ED1868-ND†	1.19	1.07	.95
	6	45.72	ED1869-ND†	1.43	1.29	1.14
	7	53.34	ED1870-ND†	1.66	1.50	1.33
	8	60.96	ED1871-ND†	1.90	1.71	1.52
	9	68.58	ED1872-ND†	2.14	1.93	1.71
	10	76.20	ED1873-ND†	2.38	2.14	1.90
	11	83.82	ED1874-ND†	2.60	2.34	2.08
	12	91.44	ED1875-ND†	2.85	2.57	2.28
	14	106.68	ED1876-ND†	3.33	3.00	2.66
	16	121.92	ED1877-ND†	3.80	3.42	3.04
7.62mm Lead Spacing — Vertical Header						
26	2	15.24	ED1878-ND†	.48	.43	.38
	3	22.86	ED1879-ND†	.71	.65	.57
	4	30.48	ED1880-ND†	.95	.86	.76
	5	38.10	ED1881-ND†	1.19	1.07	.95
	6	45.72	ED1882-ND†	1.43	1.29	1.14
	7	53.34	ED1883-ND†	1.66	1.50	1.33
	8	60.96	ED1884-ND†	1.90	1.71	1.52
	9	68.58	ED1885-ND†	2.14	1.93	1.71
	10	76.20	ED1886-ND†	2.38	2.14	1.90
	11	83.82	ED1887-ND†	2.61	2.36	2.09
	12	91.44	ED1888-ND†	2.85	2.57	2.28
	14	106.68	ED1890-ND†	3.33	3.00	2.66
	16	121.92	ED1891-ND†	3.80	3.42	3.04
Keying Star			ED1901-ND	.70	.63	.56
Keying Star			ED1902-ND	.70	.63	.56

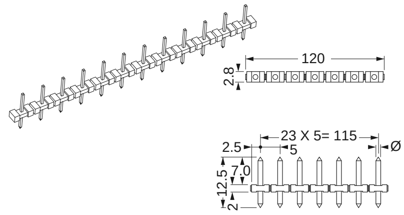
* Use Keying Star ED1901-ND † Use Keying Star ED1902-ND

ON-SHORE TECHNOLOGY, INC.

Pluggable Terminal Blocks and Pin Headers

• **Recommended Hole Diameter in Printed Circuit Board:** 1.5mm • **Spacing:** 5mm • **Rated Voltage:** 300V • **Rated Current:** 10A • **Rated Temperature:** -30°C/+105°C • **Flame Class:** 94V-0 • **Rated Cross Section:** 1.5mm² • **Terminal Plating:** tin • **Resistance to Tracking:** KB380 • **Wire Guard Material:** BeCu • **Wire Size:** 22-14AWG





No. of Pos.	Digi-Key Part No.	Pricing 1	10	100
Pluggable Terminal Blocks				
2	ED1613-ND	.62	5.56	49.40
3	ED1614-ND	.93	8.33	74.00
4	ED2214-ND	1.24	11.16	99.20
5	ED2215-ND	1.55	13.95	124.00
6	ED2216-ND	1.86	16.74	148.80
7	ED2217-ND	2.17	19.53	173.60
10	ED2218-ND	3.10	27.90	248.00
12	ED2219-N]D	3.72	33.48	297.60
Pin Headers				
2	ED1660-ND	.28	2.50	22.25
3	ED1661-ND	.31	2.77	24.58
4	ED1662-ND	.34	3.06	27.16
5	ED1663-ND	.38	3.38	30.02
6	ED1664-ND	.41	3.73	33.17
7	ED1665-ND	.46	4.12	36.65

No. of Pos.	Digi-Key Part No.	Pricing 1	10	100
8	ED1666-ND	.51	4.56	40.50
9	ED1667-ND	.56	5.03	44.75
10	ED1668-ND	.62	5.56	49.44
11	ED1669-ND	.68	6.15	54.63
12	ED1670-ND	.75	6.79	60.37
13	ED1671-ND	.83	7.50	66.71
14	ED1672-ND	.92	8.29	73.71
15	ED1673-ND	1.02	9.16	81.45
16	ED1674-ND	1.12	10.12	90.00
17	ED1675-ND	1.24	11.19	99.44
18	ED1676-ND	1.37	12.36	109.88
19	ED1677-ND	1.52	13.66	121.42
20	ED1678-ND	1.68	15.09	134.16
21	ED1679-ND	1.85	16.68	148.24
22	ED1680-ND	2.05	18.43	163.81
23	ED1681-ND	2.26	20.36	181.00
24	ED1682-ND	2.50	22.50	200.00

Terminal Blocks

UL# E101811, 86ME2081 CSA# 068503X0000

SPECIFICATIONS:

• **Rated Current:** 16A • **Insulator:** PA 6 GV/PBTP • **Temperature Range:** -30°C to +105°C • **Flame Class:** 94V-0

Fig. 1
Cable Inlet: Front

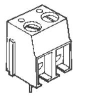


Fig. 2
Cable Inlet: Top

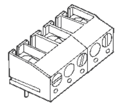


Fig. 3
Cable Inlet: 45°

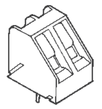
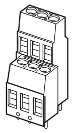


Fig. 4
Double Terminal Block



These On-Shore Technology Terminal Blocks are Stackable for any number of contacts. 4.5mm Lead Length.

Fig.	No. Of Pos.	Lead Spacing (mm)	Rated Volt. (V-) VDE 0110	Term-inal Plating	Block Length (mm)	Digi-Key Part No.	Pricing 1	10	100
1	2	5.0	250	Nickel	10	ED1631-ND	.75	6.75	60.00
	2	5.08	300	Tin	10.16	ED1643-ND	.63	5.69	50.60
	2	7.5	380	Tin	15	ED1605-ND	.53	4.73	42.00
	2	10.0	500	Tin	15	ED1615-ND	.53	4.73	42.00
	2	10.0	250	Tin	15	ED1627-ND	.53	4.73	42.00
	2	10.0	500	Nickel	15	ED1633-ND	.80	7.20	64.00
1	3	5.0	250	Nickel	15	ED1632-ND	1.13	10.13	90.00
	3	5.08	300	Tin	15.24	ED1644-ND	.94	8.44	75.00
	3	7.5	380	Tin	22.5	ED1606-ND	.79	7.09	63.00
	3	10.0	500	Tin	25	ED1616-ND	.79	7.09	63.00
	3	10.0	250	Tin	25	ED1628-ND	.79	7.09	63.00
	3	10.0	500	Nickel	25	ED1634-ND	1.20	10.80	96.00
2	2	5.0	250	Tin	10	ED1603-ND	.53	4.73	42.00
	2	5.0	125	Tin	10	ED1625-ND	.53	4.73	42.00
	2	5.08	250	Tin	10.16	ED1611-ND	.53	4.73	42.00

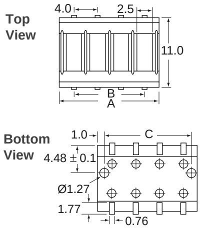
Fig.	No. Of Pos.	Lead Spacing (mm)	Rated Volt. (V-) VDE 0110	Term-inal Plating	Block Length (mm)	Digi-Key Part No.	Pricing 1	10	100
2	2	7.5	380	Tin	15	ED1607-ND	.60	5.40	48.00
	2	10.0	250	Tin	15	ED1617-ND	.60	5.40	48.00
	2	10.0	250	Tin	15	ED1629-ND	.60	5.40	48.00
2	3	5.0	250	Tin	15	ED1604-ND	.79	7.09	63.00
	3	5.0	125	Tin	15	ED1626-ND	.79	7.09	63.00
	3	5.08	250	Tin	15.25	ED1612-ND	.79	7.09	63.00
	3	7.5	380	Tin	22.5	ED1608-ND	.90	8.10	72.00
	3	10.0	250	Tin	25	ED1618-ND	.90	8.10	72.00
	3	10.0	250	Tin	25	ED1630-ND	.90	8.10	72.00
3	2	5.0	250	Nickel	10	ED1619-ND	.59	5.27	46.80
	2	10.0	250	Nickel	15	ED1621-ND	.75	6.75	60.00
3	3	5.0	250	Nickel	15	ED1620-ND	.88	7.88	70.00
	3	10.0	250	Nickel	25	ED1622-ND	1.13	10.13	90.00
4	2	5.0	300	Tin	10	ED1653-ND	1.41	12.71	113.00
4	3	5.0	300	Tin	15	ED1654-ND	2.13	19.17	170.40

70AD Modular Contacts

The **Model 70AD Modular Contact** is a low profile modular design connector that makes a high integrity, yet quickly removable connection. **Applications:** Rechargeable batteries and battery packs, battery chargers, cellular and portable phones, two-way radios, laptop computers, etc. **Materials and Finishes: Insulator:** Glass reinforced thermoplastic; UL 94V-0 rated, black **Contact:** Copper alloy **Finish Underplating:** Nickel **Finish Contact Area:** 30µ in. Au over Ni (male), Precious metal (female) **Finish Termination:** Tin alloy (meets MIL-STD202, method 208) **Electrical Operating Characteristics: Current Rating:** DC 3A/contact **Voltage Rating:** DC 30V (male) **Contact Resistance:** 25mΩ max **Dielectric Voltage:** AC 500V **Insulating Resistance:** 400MΩ min. (male), 500MΩ min. (female) **Operating Temperature:** -55°C to 125°C **Mechanical Characteristics: Normal Force:** 100 grams min. (male) **Durability:** 5,000 cycles

Fig.	No. of Pos.	Digi-Key Part No.	Price Each 1	10	50	100	Bourns Part No.
Female SMT							
1	2	70ADJ-2-F-ND	1.23	.98	.76	.72	70ADJ-002-FL0
	3	70ADJ-3-F-ND	1.45	1.16	.90	.85	70ADJ-003-FL0
	4	70ADJ-4-F-ND	1.83	1.46	1.13	1.06	70ADJ-004-FL0
	5	70ADJ-5-F-ND	2.18	1.74	1.34	1.27	70ADJ-005-FL0
	6	70ADJ-6-F-ND	2.55	2.04	1.57	1.48	70ADJ-006-FL0
Female SMT w/Locator Pin							
1	2	70ADJ-2-F1-ND	1.23	.98	.76	.72	70ADJ-002-FL1
	3	70ADJ-3-F1-ND	1.45	1.16	.90	.85	70ADJ-003-FL1
	4	70ADJ-4-F1-ND	1.83	1.46	1.13	1.06	70ADJ-004-FL1
	5	70ADJ-5-F1-ND	2.18	1.74	1.34	1.27	70ADJ-005-FL1
	6	70ADJ-6-F1-ND	2.55	2.04	1.57	1.48	70ADJ-006-FL1
Female Through-Hole							
2	2	70ADH-2-F-ND	1.23	.98	.76	.72	70ADH-002-FL0
	3	70ADH-3-F-ND	1.45	1.16	.90	.85	70ADH-003-FL0
	4	70ADH-4-F-ND	1.83	1.46	1.13	1.06	70ADH-004-FL0
	5	70ADH-5-F-ND	2.18	1.74	1.34	1.27	70ADH-005-FL0
	6	70ADH-6-F-ND	2.55	2.04	1.57	1.48	70ADH-006-FL0
Male SMT							
3	2	70ADJ-2-M-ND	1.30	1.04	.80	.76	70ADJ-002-ML0
	3	70ADJ-3-M-ND	1.63	1.30	1.00	.95	70ADJ-003-ML0
	4	70ADJ-4-M-ND	2.03	1.62	1.25	1.18	70ADJ-004-ML0
	5	70ADJ-5-M-ND	2.45	1.96	1.51	1.43	70ADJ-005-ML0
	6	70ADJ-6-M-ND	2.85	2.28	1.76	1.66	70ADJ-006-ML0
Male SMT w/Locator Pin							
3	2	70ADJ-2-M1-ND	1.30	1.04	.80	.76	70ADJ-002-ML1
	3	70ADJ-3-M1-ND	1.63	1.30	1.00	.95	70ADJ-003-ML1
	4	70ADJ-4-M1-ND	2.03	1.62	1.25	1.18	70ADJ-004-ML1
	5	70ADJ-5-M1-ND	2.45	1.96	1.51	1.43	70ADJ-005-ML1
	6	70ADJ-6-M1-ND	2.85	2.28	1.76	1.66	70ADJ-006-ML1
Male Through-Hole							
4	2	70ADH-2-M-ND	1.30	1.04	.80	.76	70ADH-002-ML0
	3	70ADH-3-M-ND	1.63	1.30	1.00	.95	70ADH-003-ML0
	4	70ADH-4-M-ND	2.03	1.62	1.25	1.18	70ADH-004-ML0
	5	70ADH-5-M-ND	2.45	1.96	1.51	1.43	70ADH-005-ML0
	6	70ADH-6-M-ND	2.85	2.28	1.76	1.66	70ADH-006-ML0

Female Modular Contact



No. of Contacts	Dim. (mm) A	B	C
2	9.0	4.0	7.0
3	13.0	8.0	11.0
4	17.0	12.0	15.0
5	21.0	16.0	19.0
6	25.0	20.0	23.0

Fig. 1 - Female Surface Mount

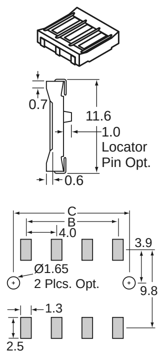
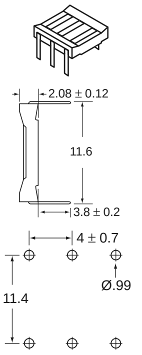
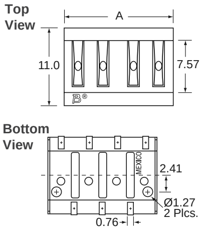


Fig. 2 - Female Through Hole



Male Modular Contact



No. of Contacts	Dim. (mm) A	B
2	7.7	5.11
3	11.7	9.11
4	15.7	13.11
5	19.7	17.11
6	23.7	21.11

Fig. 3 - Male Surface Mount

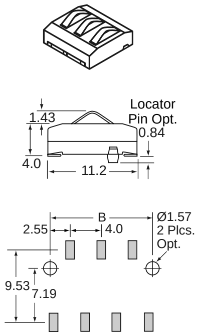


Fig. 4 - Male Through Hole

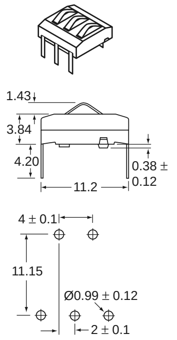
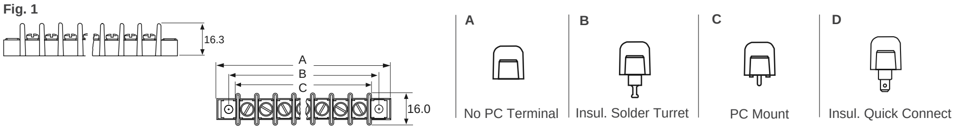


Fig. 1



A No PC Terminal
B Insul. Solder Turret
C PC Mount
D Insul. Quick Connect

Fig. 2

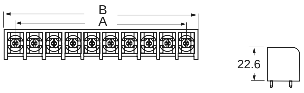


Fig. 3

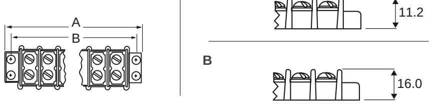


Fig. 4

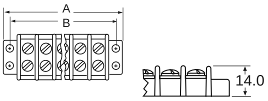


Fig. 5

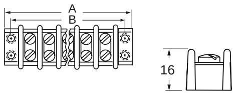
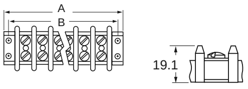


Fig. 6



.375" PCB Single Barrier Terminal Strip
Ratings: #6-32 Binding Head Screw: UL: Class B - 15Amps @ 300V 14AWG. Class C - 15 Amps @ 150V 14AWG. CSA: Class B & C - 20 Amps @ 300V 14AWG, Mechanical: Torque - 12 in-lbs. Strip length - 5/16". Wire range - 12 to 24AWG, Materials: Insulator: Thermoplastic, UL94V-0, black. Terminal: Brass, tin-lead plate. Screws: #6-32, phillips/slotted, steel, zinc chromate plate

Tri-Barrier and Double Row Barrier Terminal Strips
PCB Tri-Barrier Terminal Strip, 600V
Ratings: M4 Wire Clamp Screw: UL & CSA: Class B & C: 45 Amps @ 600V 8 AWG Mechanical: Torque - 16 in-lbs. Wire Range: 8 to 18 AWG Strip length - 5/16" Insulator : Thermoplastic, UL94V-0, black. Terminal: High copper brass, tin-lead plate. Screws: M4, steel, zinc chromate plate with clamp washer. UL File No. E48521, CSA File No. 025562 for all the Tri-Barrier, Double Row and Single Row

.375" Double Row Low Profile Barrier Terminal Strip
Ratings: #6-32 Binding Head Screw: UL: Class B - 15Amps @ 300V 14 AWG, Class C - 15Amps @ 150V 14 AWG. CSA: Class B & C - 20 Amps @ 150V 14AWG Mechanical: Torque - 8in-lbs. Strip length - 5/16" Wire range - 12 to 24 AWG Insulator: Thermoplastic, UL94V0, black. Terminal: Brass, nickel plate. Screws: #6-32, phillips/slotted, steel, zinc chromate plate

.375" Double Row Barrier Terminal Strip
Same as the Low Profile except the CSA ratings Class B & C: 20 Amps @ 300V 14AWG

.478" Double Row Barrier Terminal Strip
Ratings: #6-32 Binding Head Screw. UL: Class B & C 15 Amps @ 300V 14AWG CSA: Class B & C 20 Amps @ 300V 14AWG Mechanical: Torque - 8in-lbs. Strip length - 5/16: Wire range - 12 to 24AWG Material: Same as the .375" Terminal Strips

.563" Double Row Phenolic Barrier Terminal Strip
Ratings: #8-32 Binding Head Screw: UL & CSA: Class B & C: 30Amps @ 300V 10AWG Mechanical: Torque - 16in-lbs. Strip length - 5/16" Wire range - 10 to 18AWG Materials: Insulator: General purpose phenolic, UL94V-0, black. Terminal: Brass, nickel plate. Screws: #8-32, phillips/slotted, steel, zinc chromate plate

.688" Double Row Phenolic Barrier Terminal Strip
Ratings: #10-32 Screw UL: Class B - 50 Amps @ 300V 6AWG (lugged). Class C - 50 Amps @ 150V, 6AWG (lugged). CSA: Class B - 50 Amps @ 300V 6AWG (lugged). Mechanical: Torque - 20 in-lbs. Torque - 22 in-lbs. Strip length - 5/16" Wire range - 6AWG lugged. Max. Materials: Same as the .562" except the screw size which is #10-32

Fig.	No. of Contacts	Dim.– Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
.375" Single Row, PCB Barrier Terminal Strip									
1A	2	1.58 (78.3)	1.13 (28.6)	.83 (21.1)	WM5720-ND	2.11	1.87	1.12	72102
	3	1.96 (49.7)	1.50 (38.1)	1.21 (30.7)	WM5721-ND	2.60	2.30	1.38	72103
	4	2.33 (59.2)	1.88 (47.6)	1.58 (40.2)	WM5722-ND	2.95	2.61	1.57	72104
	5	2.71 (68.8)	2.25 (57.2)	1.96 (49.7)	WM5723-ND	3.46	3.06	1.84	72105
	6	3.08 (78.3)	2.63 (66.7)	2.33 (59.2)	WM5724-ND	8.21	7.25	4.35	72106
	8	3.83 (97.3)	3.38 (85.7)	3.08 (78.3)	WM5725-ND	4.76	4.21	2.53	72108
	10	4.58 (116)	4.13 (105)	3.83 (97.3)	WM5726-ND	5.68	5.02	3.01	72110
	12	5.33 (135)	4.88 (124)	4.58 (116)	WM5727-ND	6.47	5.72	3.43	72112
1B	2	1.58 (78.3)	1.13 (28.6)	.83 (21.1)	WM5728-ND	2.42	2.14	1.29	72202
	3	1.96 (49.7)	1.50 (38.1)	1.21 (30.7)	WM5729-ND	3.05	2.70	1.62	72203
	4	2.33 (59.2)	1.88 (47.6)	1.58 (40.2)	WM5730-ND	3.68	3.25	1.95	72204
	5	2.71 (68.8)	2.25 (57.2)	1.96 (49.7)	WM5731-ND	4.24	3.75	2.25	72205
	6	3.08 (78.3)	2.63 (66.7)	2.33 (59.2)	WM5732-ND	4.76	4.21	2.53	72206
	7	3.46 (87.8)	3.00 (76.2)	2.71 (68.8)	WM5733-ND	5.32	4.70	2.82	72207
	8	3.83 (97.3)	3.38 (85.7)	3.08 (78.3)	WM5734-ND	5.96	5.26	3.16	72208
	10	4.58 (116)	4.13 (105)	3.83 (97.3)	WM5735-ND	7.19	6.35	3.81	72210
	11	4.96 (126)	4.50 (114)	4.21 (107)	WM5736-ND	7.71	6.81	4.09	72211
	12	5.33 (135)	4.88 (124)	4.58 (116)	WM5737-ND	8.32	7.35	4.41	72212
1C	2	1.58 (78.3)	1.13 (28.6)	.83 (21.1)	WM5738-ND	2.22	1.96	1.18	72502
	3	1.96 (49.7)	1.50 (38.1)	1.21 (30.7)	WM5739-ND	2.75	2.43	1.46	72503
	3	1.96 (49.7)	1.50 (38.1)	1.21 (30.7)	WM5740-ND*	2.27	2.01	1.21	72503-C
	4	2.33 (59.2)	1.88 (47.6)	1.58 (40.2)	WM5741-ND	3.18	2.81	1.69	72504
	4	2.33 (59.2)	1.88 (47.6)	1.58 (40.2)	WM5742-ND*	2.66	2.35	1.41	72504-C
	5	2.71 (68.8)	2.25 (57.2)	1.96 (49.7)	WM5743-ND	3.78	3.34	2.00	72505
	5	2.71 (68.8)	2.25 (57.2)	1.96 (49.7)	WM5744-ND*	3.20	2.83	1.70	72505-C
	6	3.08 (78.3)	2.63 (66.7)	2.33 (59.2)	WM5745-ND	4.23	3.74	2.25	72506
	6	3.08 (78.3)	2.63 (66.7)	2.33 (59.2)	WM5746-ND*	3.65	3.22	1.94	72506-C
	8	3.83 (97.3)	3.38 (85.7)	3.08 (78.3)	WM5747-ND	5.28	4.66	2.80	72508
	10	4.58 (116)	4.13 (105)	3.83 (97.3)	WM5748-ND	6.33	5.59	3.35	72510
1D	2	1.58 (78.3)	1.13 (28.6)	.83 (21.1)	WM5749-ND	2.27	2.01	1.21	72902
	3	1.96 (49.7)	1.50 (38.1)	1.21 (30.7)	WM5750-ND	2.83	2.50	1.50	72903
	4	2.33 (59.2)	1.88 (47.6)	1.58 (40.2)	WM5751-ND	3.28	2.90	1.74	72904
	6	3.08 (78.3)	2.63 (66.7)	2.33 (59.2)	WM5752-ND	4.37	3.86	2.32	72906

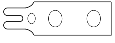
*No mounting ends

Fig.	No. of Contacts	Dim.– Inch (mm) A	B	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
.500" Single Row, PCB Tri-Barrier Terminal Strip, 600V								
2	3	1.00 (25.4)	1.61 (40.9)	WM5754-ND	7.64	6.75	4.05	66503
	4	1.50 (38.1)	2.11 (53.6)	WM5755-ND	9.57	8.45	5.07	66504
	5	2.00 (50.8)	2.61 (66.3)	WM5756-ND	11.51	10.16	6.10	66505
	6	2.50 (63.5)	3.11 (79.0)	WM5757-ND	13.44	11.86	7.12	66506
	7	3.00 (76.2)	3.61 (91.7)	WM5758-ND	15.37	13.57	8.14	66507
.375" Double Row Low Profile Barrier Terminal Strip								
3A	2	1.41 (35.8)	1.13 (28.7)	WM5759-ND	1.99	1.76	1.06	77002
	3	1.78 (45.2)	1.50 (38.1)	WM5760-ND	2.16	1.91	1.15	77003
	4	2.16 (54.9)	1.88 (47.8)	WM5761-ND	2.52	2.23	1.34	77004
	5	2.53 (64.3)	23.25 (57.2)	WM5762-ND	3.15	2.78	1.67	77005
	6	2.91 (73.9)	2.63 (66.8)	WM5763-ND	3.58	3.17	1.90	77006
	7	3.28 (83.3)	3.00 (76.3)	WM5764-ND	3.74	3.31	1.99	77007
	8	3.66 (93.1)	3.38 (85.9)	WM5765-ND	4.37	3.86	2.32	77008
	10	4.41 (112)	4.13 (105)	WM5766-ND	5.17	4.57	2.74	77010
	12	5.16 (131)	4.88 (124)	WM5767-ND	5.78	5.11	3.07	77012
	13	5.53 (140)	5.25 (133)	WM5768-ND	6.32	5.58	3.35	77013
	14	5.91 (150)	5.63 (143)	WM5769-ND	6.77	5.98	3.59	77014
	16	6.66 (169)	6.38 (162)	WM5770-ND	7.54	6.66	4.00	77016
	18	7.41 (188)	7.13 (181)	WM5771-ND	8.27	7.30	4.38	77018
	20	8.16 (207)	7.88 (200)	WM5772-ND	9.23	8.15	4.89	77020
	30	11.91 (303)	11.63 (295)	WM5773-ND	13.25	11.70	7.02	77030
.375" Double Row Barrier Terminal Strip								
3B	2	1.41 (35.8)	1.13 (28.7)	WM5774-ND	1.99	1.76	1.06	76002
	3	1.78 (45.2)	1.50 (38.1)	WM5775-ND	2.16	1.91	1.15	76003
3B	4	2.16 (54.9)	1.88 (47.8)	WM5776-ND	2.54	2.24	1.35	76004
	5	2.53 (64.3)	23.25 (57.2)	WM5777-ND	3.15	2.78	1.67	76005
	6	2.91 (73.9)	2.63 (66.8)	WM5778-ND	3.58	3.17	1.90	76006
	7	3.28 (83.3)	3.00 (76.3)	WM5779-ND	3.74	3.31	1.99	76007
	8	3.66 (93.1)	3.38 (85.9)	WM5780-ND	4.36	3.85	2.31	76008
	10	4.41 (112)	4.13 (105)	WM5781-ND	5.17	4.57	2.74	76010
	12	5.16 (131)	4.88 (124)	WM5782-ND	5.78	5.11	3.07	76012
	14	5.91 (150)	5.63 (143)	WM5783-ND	1.11	.99	.59	76014
	16	6.66 (169)	6.38 (162)	WM5784-ND	7.54	6.66	4.00	76016
	18	7.41 (188)	7.13 (181)	WM5785-ND	8.27	7.30	4.38	76018
	20	8.16 (207)	7.88 (200)	WM5786-ND	9.23	8.15	4.89	76020
	22	8.91 (226)	8.63 (219)	WM5787-ND	9.78	8.63	5.18	76022
	24	9.66 (245)	9.38 (238)	WM5788-ND	10.83	9.56	5.74	76024
	30	11.91 (303)	11.63 (295)	WM5789-ND	13.60	12.00	7.20	76030
.438" Double Row Barrier Terminal Strip								
4	2	1.63 (41.4)	1.31 (33.3)	WM5790-ND	2.02	1.79	1.08	78002
	3	2.06 (52.3)	1.75 (44.5)	WM5791-ND	2.44	2.16	1.30	78003
	4	2.50 (63.5)	2.19 (55.6)	WM5792-ND	3.23	2.85	1.71	78004
	5	2.94 (74.7)	2.63 (66.8)	WM5793-ND	3.56	3.15	1.89	78005
	6	3.38 (85.9)	3.06 (77.7)	WM5794-ND	4.08	3.60	2.16	78006
	7	3.81 (96.8)	3.50 (88.9)	WM5795-ND	4.85	4.28	2.57	78007
	8	4.25 (108)	3.94 (100)	WM5796-ND	5.11	4.51	2.71	78008
	10	5.13 (130)	4.81 (122)	WM5797-ND	6.05	5.34	3.21	78010
	12	6.00 (152)	5.69 (145)	WM5798-ND	7.18	6.34	3.80	78012
	14	6.88 (175)	6.56 (167)	WM5799-ND	8.28	7.31	4.39	78014
	16	7.75 (197)	7.44 (189)	WM5800-ND	9.13	8.06	4.84	78016
	18	8.63 (219)	8.31 (211)	WM5801-ND	9.98	8.81	5.29	78018
	20	9.50 (241)	9.19 (233)	WM5802-ND	10.84	9.57	5.74	78020
.563" Double Row Phenolic Barrier Terminal Strip with Closed Bottom								
5	2	2.09 (53.9)	1.69 (42.9)	WM5803-ND	2.92	2.58	1.55	21002-CB
	3	2.66 (67.6)	2.25 (57.2)	WM5804-ND	4.11	3.63	2.18	21003-CB
	4	3.22 (81.8)	2.81 (71.4)	WM5805-ND	4.83	4.27	2.56	21004-CB
	5	3.78 (96.0)	3.38 (85.9)	WM5806-ND	5.93	5.24	3.15	21005-CB
	6	4.34 (110)	3.94 (100)	WM5807-ND	6.79	6.00	3.60	21006-CB
	7	4.91 (125)	4.50 (114)	WM5808-ND	7.36	6.50	3.90	21007-CB
	8	5.47 (139)	5.06 (129)	WM5809-ND	7.98	7.05	4.23	21008-CB
	10	6.59 (167)	6.19 (157)	WM5810-ND	10.15	8.96	5.38	21010-CB
	12	7.72 (196)	7.31 (186)	WM5811-ND	12.22	10.78	6.47	21012-CB
	16	9.97 (253)	9.56 (243)	WM5812-ND	15.84	13.98	8.39	21016-CB
	20	12.22 (310)	11.81 (300)	WM5813-ND	19.74	17.42	10.46	21020-CB
	24	14.47 (368)	14.06 (357)	WM5814-ND	23.35	20.61	12.37	21024-CB
.688" Double Row Phenolic Barrier Terminal Strip								
6	2	2.50 (63.5)	2.06 (52.4)	WM5815-ND	5.87	5.18	3.11	28002
	3	3.19 (81)	2.75 (69.9)	WM5816-ND	7.76	6.85	4.11	28003
	4	3.88 (98.4)	3.44 (87.3)	WM5817-ND	10.02	8.85	5.31	28004
	5	4.56 (116)	4.13 (105)	WM5818-ND	12.20	10.77	6.46	28005
	6	5.25 (133)	4.81 (122)	WM5819-ND	15.10	13.33	8.00	28006
	8	6.63 (168)	6.19 (157)	WM5820-ND	18.78	16.58	9.95	28008
	10	8.00 (203)	7.56 (192)	WM5821-ND	19.94	17.60	10.56	28010
	12	9.38 (238)	8.94 (227)	WM5822-ND	27.64	24.39	14.64	28012

NEW! Style 1, 2, and 3 Solder Terminals

Series	Style	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
.375	1	WM5918-ND	.23	.21	.13	141
	2	WM5919-ND	.30	.27	.17	142
	3	WM5920-ND	.13	.12	.08	143
.438	1	WM5921-ND	.30	.27	.17	181
	2	WM5922-ND	.39	.35	.21	182
	3	WM5923-ND	.25	.23	.14	183
.563	1	WM5924-ND	.54	.48	.29	211
	2	WM5925-ND	.54	.48	.29	212
	3	WM5926-ND	.57	.51	.31	213

Style 1



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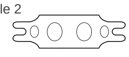
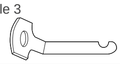


Style 3



Barrier Terminal Blocks

Fig. 1

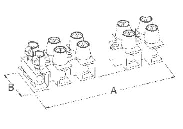


Fig. 2

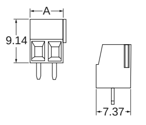


Fig. 3

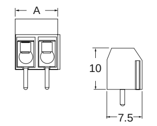


Fig. 4

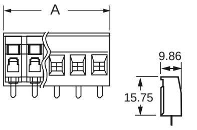


Fig. 5

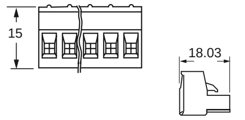


Fig. 6

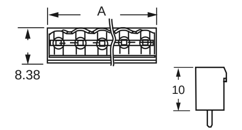


Fig. 7

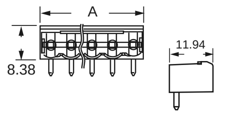


Fig. 8

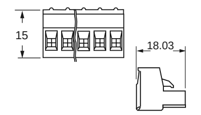


Fig. 9

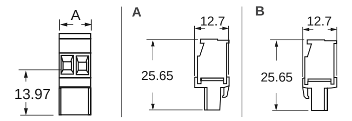


Fig. 10

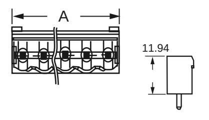
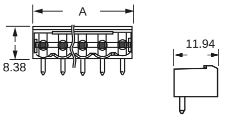


Fig. 11



8.0mm Two-Screw Terminal Strip

Ratings UL: Class B: 10Amps @ 250V 12AWG Class C: 10Amps @ 300V 12AWG CSA: Class B & C: 10Amps @300 V 12AWG Safety Agencies: UL File No. E82573 CSA: Files No. 25562 Mechanical: Torque - 4 in-lbs. Wire range - 12 to 24 AWG Materials: Insulator - Nylon 6.6, UL94V-2, white. Inserts - Brass, chemically tinned. Wire protector - 18/18 stainless band steel. Screws - Zinc-plated steel. Terminals - Nickel-plated brass

10.0mm Two-Screw Terminal Strip

Ratings UL: Class B: 16 Amps @ 250V 10AWG Class C: 16Amps @ 300V 10AWG CSA: Class B & Class C - 25Amps @300V 10AWG Safety Agencies: UL: File No. E82573 CSA: File No. 25562 Mechanical: Torque - 5in-lbs. Wire Range - 10 to 24 AWG Materials: Same as 8.00mm

12.0mm Two-Screw Terminal Strip

Ratings UL & CSA - Class B & C - 25Amps @ 600V 8AWG Mechanical: Torque 10 in-lbs. Wire Range 8 to 24 AWG Materials: Same as 8.00mm & 10.0mm

3.5mm Eurostyle Fixed PCB Terminal Block

Ratings: UL: Class B: 8 Amps @ 150V 16AWG CSA: Same as the UL Safety Agencies: UL & CSA are pending Mechanical: Torque - 2in-lbs. Strip length - .250" (6mm). Wire Range - 16 to 26AWG. Materials: Insulator: Polyamide, UL94V-0, green. Terminal: Brass, tin plate. Clamp: Brass, nickel plate. Screws: Steel, zinc chromate plate

5.0mm Eurostyle Economy Screw Terminal Block

Ratings: UL: Class B: 15Amps @ 250V 14AWG. Class C: 10Amps @ 300V 14AWG. CSA: 15Amps @300V 14AWG. Safety Agencies: UL: File No. E150931 Mechanical: Torque - 3in-lbs. Strip length - .250" (6mm). Wire Range - 14 to 24AWG Materials: Insulator: Polyamide, UL94V-0, grey. Terminal: Brass, tin plate. Wire Protector: Phosphor bronze, tin plate. Screws: Steel, zinc chromate plate

5.08mm Eurostyle Pluggable PCB Terminal Block

Ratings: UL: Class B: 15Amps @ 300V 12AWG Class C: 10Amps @ 300V 12AWG CSA: Class B: 15Amps @ 300V 12AWG. Safety Agencies: UL: File No. E48521 CSA: File No. 025562 Mechanical: Torque - 5in-lbs. Strip length - .250" (6mm). Wire Range - 12 to 26AWG Materials: Insulator: Polyamide, UL94V-0, black. Pressure clamp: Brass, nickel plate. Contacts: Phosphor bronze, tin plate. Header pins: Brass, tin plate. Screws: 2.5mm, steel, zinc chromate plate

5.08mm Eurostyle Pluggable PCB Header, Closed Ends

Ratings: UL and CSA - Class B: 15Amps @ 300V UL: Class C: 10 Amps @ 300V
File No. Same as the other 5.08mm
Materials: Nylon 6.6, UL94V-0, black. Header pins: Brass, tin plate

5.0mm Eurostyle Pluggable PCB Terminal Block

Everything the same as 5.08mm pluggables

5.0mm Eurostyle Pluggable PCB Header, Closed Ends

Everything the same as 5.08mm pluggable header, closed ends

5.08mm Eurostyle Single-Piece (Fixed) Block

Ratings: UL: Class B: 20 Amps @ 300V 12AWG Class C: 10 Amps @ 300V 12AWG CSA: 15 Amps @ 300V 12AWG Mechanical: Torque - 5in-lbs. Strip length-1/4" (6mm) Wire Range - 12 to 26 AWG Materials: Insulator: Polyamide, UL94V-0, black. Pressure Clamp: Brass, nickel plate. Contacts: Phosphor bronze, hot tin dip. Screws: Steel, zinc chromate plate

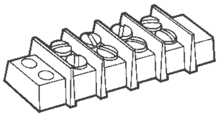
Fig.	No. of Contacts	Dim. – Inch (mm)		Digi-Key Part No.	Price Each			Molex Part No.
		A	B		1	10	100	
8.0mm Two-Screw Terminal Strip, with Wire Protector								
1	2	.54 (13.8)	.630 (16.0)	WM5900-ND	2.02	1.79	1.08	C1502-151
	3	.86 (21.8)	.630 (16.0)	WM5901-ND	2.71	2.40	1.44	C1503-151
	4	1.17 (29.8)	.630 (16.0)	WM5902-ND	3.40	3.01	1.81	C1504-151
	5	1.49 (37.8)	.630 (16.0)	WM5903-ND	4.77	4.21	2.53	C1505-151
	6	1.80 (45.8)	.630 (16.0)	WM5904-ND	4.77	4.21	2.53	C1506-151
	6	1.80 (45.8)	.630 (16.0)	WM5905-ND*	3.44	3.04	1.83	C1506-L
	8	2.43 (61.8)	.630 (16.0)	WM5906-ND	6.14	5.43	3.26	C1508-151
	12	3.69 (93.8)	.630 (16.0)	WM5907-ND	8.37	7.39	4.44	C1512-151
10.0mm Two-Screw Terminal Strip, with Wire Protector								
1	3	1.04 (26.5)	.787 (20.0)	WM5908-ND	2.81	2.48	1.49	C4003-401
	3	1.04 (26.5)	.787 (20.0)	WM5909-ND*	2.74	2.42	1.46	C4003-L-401
	4	1.44 (36.5)	.787 (20.0)	WM5910-ND	2.99	2.64	1.59	C4004-401
	5	1.83 (46.5)	.787 (20.0)	WM5911-ND	4.95	4.37	2.62	C4005-401
	6	2.22 (56.5)	.787 (20.0)	WM5912-ND	4.95	4.37	2.62	C4006-401
	8	3.01 (76.5)	.787 (20.0)	WM5913-ND	6.37	5.63	3.38	C4008-401
	10	3.80 (96.5)	.787 (20.0)	WM5914-ND	9.04	7.98	4.79	C4010-401
	12	4.59 (116.5)	.787 (20.0)	WM5915-ND	8.70	7.68	4.61	C4012-401
12.0mm Two-Screw Terminal Strip, with Wire Protector								
1	10	4.57 (116)	.944 (24.0)	WM5916-ND	12.81	11.31	6.79	C6010-601
	12	5.51 (140)	.944 (24.0)	WM5917-ND	12.33	10.88	6.53	C6012-601

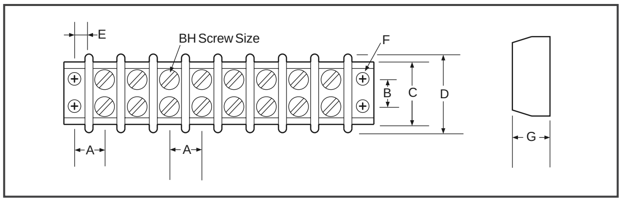
* Low Profile

Fig.	No. of Contacts	Dim. – Inch (mm)		Digi-Key Part No.	Price Each			Molex Part No.
		A	B		1	10	100	
3.5mm Fixed PCB Terminal Block								
2	2	.275 (7)	—	WM5823-ND	1.93	1.71	1.03	830502
	3	.413 (10.5)	—	WM5824-ND	2.65	2.34	1.41	830503
5.0mm Economy Screw Terminal Block								
3	2	.394 (10)	—	WM5825-ND	1.43	1.26	.76	840502
	3	.591 (15)	—	WM5826-ND	1.90	1.68	1.01	840503
5.08mm Single-Piece (Fixed) Block								
4	2	.20 (5.1)	.42 (10.7)	WM5892-ND	1.80	1.59	.96	880502
	3	.40 (10.2)	.62 (15.7)	WM5893-ND	2.45	2.16	1.30	880503
	4	.60 (15.2)	.82 (20.8)	WM5894-ND	3.10	2.74	1.65	880504
	5	.80 (20.3)	1.02 (25.9)	WM5895-ND	3.76	3.32	2.00	880505
	6	1.00 (25.4)	1.22 (31)	WM5896-ND	4.41	3.90	2.34	880506
	8	1.40 (35.6)	1.62 (41.1)	WM5897-ND	5.73	5.06	3.04	880508
	10	1.80 (45.7)	2.02 (51.3)	WM5898-ND	7.03	6.21	3.73	880510
5.0mm Pluggable PCB Terminal Block								
5	2	.20 (5)	.39 (9.9)	WM5862-ND	2.17	1.92	1.15	870502
	3	.39 (10)	.59 (14.9)	WM5863-ND	3.52	3.11	1.87	870503
	4	.59 (15)	.78 (19.9)	WM5864-ND	4.53	4.00	2.40	870504
	5	.79 (20)	.98 (24.9)	WM5865-ND	5.41	4.78	2.87	870505
	6	.99 (25)	1.18 (29.9)	WM5866-ND	6.55	5.78	3.47	870506
	7	1.18 (30)	1.37 (34.9)	WM5867-ND	7.56	6.68	4.01	870507
	8	1.38 (35)	1.57 (39.9)	WM5868-ND	8.57	7.56	4.54	870508
	9	1.58 (40)	1.77 (44.9)	WM5869-ND	9.57	8.45	5.07	870509
	10	1.77 (45)	1.97 (49.9)	WM5870-ND	10.58	9.34	5.61	870510
	12	2.17 (55)	2.36 (59.9)	WM5871-ND	12.99	11.46	6.88	870512
5.00mm Pluggable PCB Header, Closed Ends, Vert.								
6	2	.20 (5)	.45 (11.3)	WM5872-ND	.82	.73	.44	871602
	3	.39 (10)	.64 (16.3)	WM5873-ND	1.24	1.10	.66	871603
	4	.59 (15)	.84 (21.3)	WM5874-ND	1.65	1.46	.88	871604
	5	.79 (20)	1.04 (26.3)	WM5875-ND	2.07	1.83	1.10	871605
6	6	.99 (25)	1.23 (31.3)	WM5876-ND	2.48	2.19	1.32	871606
	7	1.18 (30)	1.45 (36.9)	WM5877-ND	2.89	2.56	1.54	871607
	8	1.38 (35)	1.65 (41.9)	WM5878-ND	3.31	2.92	1.76	871608
	9	1.58 (40)	1.85 (46.9)	WM5879-ND	3.72	3.29	1.97	871609
	10	1.77 (45)	2.05 (51.9)	WM5880-ND	4.13	3.65	2.19	871610
	12	2.17 (55)	2.44 (62.0)	WM5881-ND	4.96	4.38	2.63	871612
5.00mm Pluggable PCB Header, Closed Ends, Right-Angle								
7	2	.20 (5)	.45 (11.3)	WM5882-ND	.82	.73	.44	871902
	3	.39 (10)	.64 (16.3)	WM5883-ND	1.24	1.10	.66	871903
	4	.59 (15)	.84 (21.3)	WM5884-ND	1.65	1.46	.88	871904
	5	.79 (20)	1.04 (26.3)	WM5885-ND	2.07	1.83	1.10	871905
	6	.99 (25)	1.23 (31.3)	WM5886-ND	2.48	2.19	1.32	871906
	7	1.18 (30)	1.45 (36.9)	WM5887-ND	2.89	2.56	1.54	871907
	8	1.38 (35)	1.65 (41.9)	WM5888-ND	3.31	2.92	1.76	871908
	9	1.58 (40)	1.85 (46.9)	WM5889-ND	3.72	3.29	1.97	871909
	10	1.77 (45)	2.05 (51.9)	WM5890-ND	4.13	3.65	2.19	871910
	12	2.17 (55)	2.44 (62.0)	WM5891-ND	4.96	4.38	2.63	871912
5.08mm Pluggable PCB Terminal Block, Right-Angle								
8	2	.20 (5.1)	.39 (10)	WM5827-ND	2.51	2.22	1.33	860502
	3	.40 (10.2)	.59 (15.1)	WM5828-ND	3.52	3.11	1.87	860503
	4	.60 (15.2)	.79 (20.2)	WM5829-ND	4.53	4.00	2.40	860504
	5	.80 (20.3)	.99 (25.3)	WM5830-ND	5.54	4.89	2.94	860505
	6	1.00 (25.4)	1.19 (30.4)	WM5831-ND	6.55	5.78	3.47	860506
	8	1.40 (35.6)	1.59 (40.5)	WM5832-ND	8.57	7.56	4.54	860508
	10	1.80 (45.7)	1.99 (50.7)	WM5833-ND	10.58	9.34	5.61	860510
	12	2.20 (55.9)	2.39 (60.8)	WM5834-ND	12.60	11.13	6.68	860512
5.08mm Pluggable PCB Terminal Block, Vert.								
9A	2	.20 (5.1)	.395 (10)	WM5835-ND	2.81	2.48	1.49	860802
	3	.40 (10.2)	.595 (15.1)	WM5836-ND	3.97	3.51	2.11	860803
	4	.60 (15.2)	.795 (20.2)	WM5837-ND	5.13	4.53	2.72	860804
	5	.80 (20.3)	.995 (25.3)	WM5838-ND	6.30	5.56	3.34	860805
	6	1.00 (25.4)	1.19 (30.4)	WM5839-ND	7.45	6.58	3.95	860806
	8	1.40 (35.6)	1.59 (40.5)	WM5840-ND	9.78	8.63	5.18	860808
	10	1.80 (45.7)	1.99 (50.7)	WM5841-ND	12.10	10.68	6.41	860810
9B	2	.200 (5.1)	.395 (10)	WM5842-ND	2.81	2.48	1.49	860902
	3	.400 (10.2)	.595 (15.1)	WM5843-ND	3.97	3.51	2.11	860903
	4	.600 (15.2)	.795 (20.2)	WM5844-ND	5.13	4.53	2.72	860904
	6	1.00 (25.4)	1.19 (30.4)	WM5845-ND	7.45	6.58	3.95	860906
5.08mm Pluggable PCB Header, Closed Ends, Vert.								
10	2	.20 (5.1)	.45 (11.4)	WM5846-ND	1.25	1.11	.67	861602
	3	.40 (10.2)	.65 (16.5)	WM5847-ND	1.64	1.45	.87	861603
	4	.60 (15.2)	.85 (21.6)	WM5848-ND	2.02	1.79	1.08	861604
	5	.80 (20.3)	1.05 (26.7)	WM5849-ND	2.42	2.14	1.28	861605
	6	1.00 (25.4)	1.25 (31.8)	WM5850-ND	2.80	2.48	1.49	861606
	8	1.40 (35.6)	1.67 (42.5)	WM5851-ND	3.57	3.16	1.90	861608
	10	1.80 (45.7)	2.07 (52.7)	WM5852-ND	4.34	3.83	2.30	861610
	12	2.20 (55.9)	2.47 (62.8)	WM5853-ND	5.11	4.52	2.71	861612
5.08mm Pluggable PCB Header, Closed Ends, Right-Angle								
11	2	.20 (5.1)	.45 (11.4)	WM5854-ND	1.25	1.11	.67	861902
	3	.40 (10.2)	.65 (16.5)	WM5855-ND	1.64	1.45	.87	861903
	4	.60 (15.2)	.85 (21.6)	WM5856-ND	2.02	1.79	1.08	861904
	5	.80 (20.3)	1.05 (26.7)	WM5857-ND	2.42	2.14	1.28	861905
	6	1.00 (25.4)	1.25 (31.8)	WM5858-ND	2.80	2.48	1.49	861906
	8	1.40 (35.6)	1.67 (42.5)	WM5859-ND	3.57	3.16	1.90	861908
	10	1.80 (45.7)	2.07 (52.7)	WM5860-ND	4.34	3.83	2.30	861910
	12	2.20 (55.9)	2.47 (62.8)	WM5861-ND	5.11	4.52	2.71	861912

CINCH/GC/Waldom

Barrier Blocks



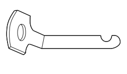


Terminal Spacing	Dimensions – Inch (mm)							BH Screw Size
	A	B	C	D	E	F	G	
.375 (9.52)	.375 (9.52)	.313 (7.95)	.688 (17.48)	.875 (22.23)	.141 (3.58)	.160 (4.06)	.406 (10.31)	5-40x3/16
.438 (11.13)	.438 (11.13)	.422 (10.72)	.875 (22.23)	1.125 (28.58)	.156 (3.96)	.175/.180 (4.44/4.57)	.500 (12.70)	6-32x1/4
.563 (14.30)	.563 (14.30)	.500 (12.70)	1.062 (26.97)	1.312 (33.32)	.203 (5.16)	.209 (5.31)	.625 (15.88)	8-32x5/16

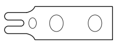
Features:
• Interposing barriers between terminals • Can be equipped with binder head screws only, or with binder head screws and W, 3/4W and Y solder terminals • UL recognized

Performance Data:
Insulation Material: Molded monoblock, general purpose phenolic
Eyelet Material: Brass
Eyelet Plating: Nickel
Screw Material: Steel or brass
Screw Plating: Nickel over copper flash
Solder Terminal Material: Brass
Solder Terminal Plating: Tin
Operating Temperature: -55°F to +300°F (-48°C to +149°C)
Maximum Wire Size: .375” (9.53mm) - #16; .438” (11.13mm) - #15; .563” (14.30mm) - #10
Voltage Rating: .375” and .438” (9.53mm and 11.13mm) - 1100VAC rms max.; .563” (14.30mm) - 1600VAC rms max.
Current Rating: .375” (9.53mm) - 15A max.; .438” (11.13mm) - 20A max.; .563” (14.30mm) - 30A max.
Max. Watts per Terminal: .375” (9.53mm) – 3750; .438” (11.13mm) – 5000; .563” (14.30mm) – 7500

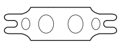
Y Type



3/4W Type



W Type



Terminal Spacing	No. of Contacts	Digi-Key Part No.	Pricing 1	25	50	100	250	500	Cinch Part No.
.375” (9.53 mm)	2	CBB102-ND	1.13	21.54	39.18	70.80	168.15	313.88	2-140
	3	CBB103-ND	1.49	28.29	51.46	93.00	220.88	412.30	3-140
	4	CBB104-ND	1.61	30.57	55.61	100.50	238.69	445.55	4-140
	5	CBB105-ND	1.48	28.20	51.29	92.70	220.16	410.97	5-140
	6	CBB106-ND	2.32	44.12	80.26	145.05	344.49	643.06	6-140
	7	CBB107-ND	2.50	47.54	86.49	156.30	371.21	692.93	7-140
	8	CBB108-ND	2.86	54.29	98.77	178.50	423.94	791.35	8-140
	9	CBB109-ND	3.28	62.32	113.38	204.90	486.64	908.39	9-140
	10	CBB110-ND	3.63	69.03	125.58	226.95	539.01	1006.15	10-140
	11	CBB111-ND	4.13	78.43	142.68	257.85	612.39	1143.14	11-140
	12	CBB112-ND	4.17	79.34	144.34	260.85	619.52	1156.44	12-140
.438” (11.13 mm)	2	CBB202-ND	1.02	19.35	35.19	63.60	151.05	281.96	2-141
	3	CBB203-ND	1.80	34.22	62.25	112.50	267.19	498.75	3-141
	4	CBB204-ND	1.80	34.22	62.25	112.50	267.19	498.75	4-141
	5	CBB205-ND	2.04	38.74	70.47	127.35	302.46	564.59	5-141
	6	CBB206-ND	2.33	44.30	80.59	145.65	345.92	645.72	6-141
	7	CBB207-ND	2.87	54.57	99.27	179.40	426.08	795.34	7-141
	8	CBB208-ND	3.01	57.31	104.25	188.40	447.45	835.24	8-141
	9	CBB209-ND	3.41	64.74	117.78	212.85	505.52	943.64	9-141
	10	CBB210-ND	3.56	67.62	123.01	222.30	527.96	985.53	10-141
	11	CBB211-ND	3.89	73.91	134.46	243.00	577.13	1077.30	11-141
	12	CBB212-ND	4.23	80.35	146.16	264.15	627.36	1171.07	12-141
.563” (14.30 mm)	2	CBB302-ND	1.67	31.71	57.69	104.25	247.59	462.18	2-142
	3	CBB303-ND	2.00	38.01	69.14	124.95	296.76	553.95	3-142
	4	CBB304-ND	2.30	43.75	79.60	143.85	341.64	637.74	4-142
	5	CBB305-ND	3.33	63.33	115.20	208.20	494.48	923.02	5-142
	6	CBB306-ND	4.77	90.70	165.00	298.20	708.23	1322.02	6-142
	7	CBB307-ND	5.21	99.10	180.28	325.80	773.78	1444.38	7-142
	8	CBB308-ND	5.44	103.43	188.16	340.05	807.62	1507.56	8-142
	9	CBB309-ND	8.33	158.32	288.01	520.50	1236.19	2307.55	9-142
	10	CBB310-ND	8.75	166.26	302.45	546.60	1298.18	2423.26	10-142
	11	CBB311-ND	9.15	173.92	316.40	571.80	1358.03	2534.98	11-142
	12	CBB312-ND	9.19	174.70	317.81	574.35	1364.08	2546.29	12-142

W, 3/4W and Y Solder Terminals

Series	Type	Digi-Key Part No.	Pricing 1	25	50	100	250	500	Cinch Part No.
.375” (9.53mm)	Y	CBB001-ND	.40	7.67	13.94	25.20	59.85	111.72	Y-140
	3/4W	CBB002-ND	.36	6.89	12.53	22.65	53.79	100.42	3/4W-140
	W	CBB003-ND	.40	7.67	13.94	25.20	59.85	111.72	W-140
.438” (11.13mm)	Y	CBB004-ND	.66	12.50	22.74	41.10	97.61	182.21	Y-141
	3/4W	CBB005-ND	.50	9.54	17.35	31.35	74.46	138.99	3/4W-141
	W	CBB006-ND	.56	10.59	19.26	34.80	82.65	154.28	W-141
.563” (14.30mm)	Y	CBB007-ND	.76	14.51	26.39	47.70	113.29	211.47	Y-142
	3/4W	CBB008-ND	.69	13.05	23.74	42.90	101.89	190.19	3/4W-142
	W	CBB009-ND	.76	14.51	26.39	47.70	113.29	211.47	W-142

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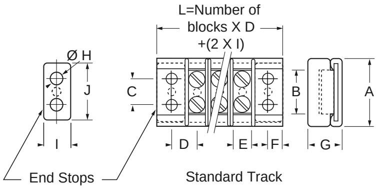
tyco Electronics AMP

FLEXI-BLOCK®

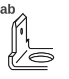
Terminal Block System



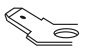
Accessories

Jumper Tab

90° Tab

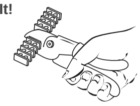


45° Tab

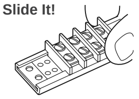


Flat Tab

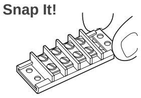
Snip It!



Slide It!



Snap It!



Product Specifications: • Blocks and End Stops: Nylon • Track: NORYL EN 265 • FASTON Tab and Jumper Tab: Tin plated brass • Screws: Nickel plated brass Ratings: • 6000 Breakdown voltage, rms line-to-line • 6000 Breakdown voltage, rms line-to-ground • Operating Temperature: 105°C Max.

Max. Size	Max. Amps	Volts	Wire Range	Dimensions (Inch)									
				A	B	C	D	E	F	G	H	I	J
6	15	300	22-14	1.125	.750	.422	.438	.343	.219	.563	.171	.437	.96
8	30	600	22-10	1.312	.875	.500	.563	.437	.281	.656	.203	.557	1.15

Size	Description	Digi-Key Part No.	Pricing 1	10	AMP Part No.
6	#6 Block Assembly, 100pcs/pkg	A0130-ND	41.76/pkg (100 pcs/pkg)		1-604102-1
8	#8 Block Assembly, 100pcs/pkg	A0131-ND	47.34/pkg (100 pcs/pkg)		1-604152-1
6	Track 36” long, 80 positions	A0132-ND	5.75	51.75	1-601805-1
8	Track 36” long, 60 positions	A0133-ND	5.33	47.93	1-601806-1
6	End Stop, 2 required per assembly	A0134-ND	—	.79	604111-1
8	End Stop, 2 required per assembly	A0135-ND	—	1.09	604161-1
6, 8	Flat Tab	A0136-ND	—	10.91	601989-1
6, 8	45° Tab	A0137-ND	—	9.51	601989-2
6, 8	90° Tab	A0138-ND	—	6.48	601989-3
6	Jumper Tab	A0139-ND	—	2.00	601985-2
8	Jumper Tab	A0140-ND	—	2.82	604591-1
6	#6 Terminal Block Kit	A0150-ND*	80.53	724.73	601804-8
8	#8 Terminal Block Kit	A0151-ND†	107.08	963.68	604336-1
6, 8	Cutting Tool (Track & Tape)	A9958-ND	34.61	—	604008-1

* Kit consists of 1 ea. 100-block assembly, 25 end stops, 2 tracks
† Kit consists of 1 ea. 100-block assembly, 50 end stops, 8 tracks

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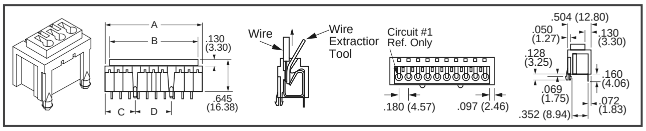
molex GC/Waldom

Wire Trap - LITE



FEATURES: • Allows fast interconnect to PCB • Mounting pegs for PCB polarization • Wire insertion/extraction from vertical direction • Accommodates 16-20 AWG wire (see chart for wire types) • Can be robotically inserted into PCB

SPECIFICATIONS: Physical: • Terminal: Phosphor bronze • Plating: Tin • Housing: 94V-0 Polyester. **Mechanical:** • Temperature Rise: 30°C max. (per U.L. specifications) • Storage Temperature: -40°C to +105°C max. • Wire pullout force: 10 lbs. min (18 AWG wire) • Wire Insertion/Extraction cycles: 5 max. **Electrical:** • Voltage Rating: 600V (RMS) • Current Rating: 6.0 amperes per circuit (18 AWG wire) • Contact Resistance: 10 milliohm max. • Insulation Resistance: 1,000 Megohm min. • Dielectric Strength: 1,500VAC. **Agency Approvals:** UL file #: E29179. CSA File #: LR19980. **Wire Types:** • Conductor Diameter Range: .038” – .060” (.97mm – 1.52mm). Insulation Outside Dia. Range: .079” – .118” (2.01mm – 3.00mm). **Suggested Wire Types:** 16 AWG. 18 AWG solid or standard with top coat. 20 AWG stranded with top coat.

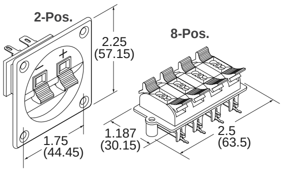
Pos.	Dimension – Inch (mm) A	B	C	D	Digi-Key Part No.	Pricing 1	10	100	500	Molex Part No.
3	.714 (18.14)	.520 (13.21)	.067 (1.70)	.580 (14.73)	WM1272-ND	1.55	13.73	88.60	365.48	22-45-4036
4	.894 (22.71)	.700 (17.78)	.067 (1.70)	.720 (18.29)	WM1273-ND	2.56	22.66	146.20	603.08	22-45-4046
5	1.074 (27.28)	.800 (20.32)	.247 (6.27)	.720 (18.29)	WM1274-ND	2.23	19.72	127.20	524.70	22-45-4056
6	1.254 (31.85)	1.060 (26.92)	.247 (6.27)	.720 (18.29)	WM1275-ND	2.48	21.98	141.80	584.93	22-45-4066
8	1.614 (41.00)	1.420 (36.07)	.427 (10.85)	.720 (18.29)	WM1276-ND	3.28	29.02	187.20	772.20	22-45-4086
10	1.974 (50.14)	1.780 (45.21)	.607 (15.42)	.720 (18.29)	WM1277-ND	3.85	34.13	220.20	908.33	22-45-4106
Wire Trap LITE Extraction Tool**					WM1278-ND	43.92	—	—	—	11-03-0040

** The extraction tool allows the wires to be removed either one at a time or all at once.

The power should be removed before servicing the product.

GC ELECTRONICS™

Spring Push Terminals



These terminals have spring loaded posts for easy connection with Red and Black color codes. Designed for various audio applications such as surround sound and speaker connections, amplifiers and more.

GC399-ND 2 Pos. for panel mounting to speakers, mounts in 2” (50.80mm) hole **$1.78**
GC400-ND 4 Pos. for mounting directly to chassis or panels ... **$1.92**
GC401-ND 8 Pos. with right angle PCB terminals, with Mounting. Ears.............................. **$2.90**

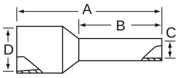
AMERICAN ELECTRICAL INC.

Crimp Wire Ferrules

For Use with European Style Terminal Blocks

CE

Wire Ferrules – Insulated



Material: Copper/Plastic. Surface: Tin-plated.

Size mm^2	AWG	Type	Color Code	Dimensions (mm) A	B	C	D	Digi-Key Part No.	Pricing 10	50	100	AE Part No.
0.14	26	DIN	Gray	10.5	6	0.8	2.0	288-1001-ND*	2.32	10.15	17.40	1161014
				12.5	8	0.8	2.0	288-1002-ND*	2.48	10.85	18.60	1181014
		W	Gray	10.5	6	0.8	2.0	288-1039-ND*	2.32	10.15	17.40	1162014
				12.5	8	0.8	2.0	288-1040-ND*	2.48	10.85	18.60	1182014
0.25	24	DIN	Yellow	10.5	6	0.8	2.0	288-1003-ND*	2.32	10.15	17.40	11610025
				12.5	8	0.8	2.0	288-1004-ND*	2.48	10.85	18.60	11810025
		W	Blue	10.5	6	0.8	2.0	288-1041-ND*	2.32	10.15	17.40	11620025
				12.5	8	0.8	2.0	288-1042-ND*	2.48	10.85	18.60	11820025
0.34	22	DIN	Turquoise	10.5	6	0.8	2.0	288-1005-ND*	2.32	10.15	17.40	1161034
				12.5	8	0.8	2.0	288-1006-ND*	2.48	10.85	18.60	1181034
		W	Turquoise	10.5	6	0.8	2.0	288-1043-ND*	2.32	10.15	17.40	1162034
				12.5	8	0.8	2.0	288-1044-ND*	2.48	10.85	18.60	1182034
0.50	20	DIN	White	11.5	6	1.1	2.5	288-1007-ND	1.68	7.35	12.60	1161050
				13.5	8	1.1	2.5	288-1008-ND	1.20	5.25	9.00	1181050
				15.5	10	1.1	2.5	288-1009-ND	1.68	7.35	12.60	11101050
		W	Orange	11.5	6	1.1	2.5	288-1045-ND	1.68	7.35	12.60	1162050
				13.5	8	1.1	2.5	288-1046-ND	1.20	5.25	9.00	1182050
				15.5	10	1.1	2.5	288-1047-ND	1.68	7.35	12.60	11102050
0.75	20	DIN	Gray	12.0	6	1.3	2.8	288-1010-ND	1.76	7.70	13.20	1161075
				14.0	8	1.3	2.8	288-1011-ND	1.20	5.25	9.00	1181075
				16.0	10	1.3	2.8	288-1012-ND	1.76	7.70	13.20	11101075
				18.0	12	1.3	2.8	288-1013-ND	1.76	7.70	13.20	11121075
		W	White	12.0	6	1.3	2.8	288-1048-ND	1.76	7.70	13.20	1162075
				14.0	8	1.3	2.8	288-1049-ND	1.20	5.25	9.00	1182075
				16.0	10	1.3	2.8	288-1050-ND	1.76	7.70	13.20	11102075
				18.0	12	1.3	2.8	288-1051-ND	1.76	7.70	13.20	11122075
1.00	18	DIN	Red	12.5	6	1.5	3.0	288-1014-ND	2.00	8.75	15.00	1161010
				14.5	8	1.5	3.0	288-1015-ND	1.28	5.60	9.60	1181010
				16.5	10	1.5	3.0	288-1016-ND	2.00	8.75	15.00	11101010
				18.5	12	1.5	3.0	288-1017-ND	2.00	8.75	15.00	11121010
		W	Yellow	12.5	6	1.5	3.0	288-1052-ND	2.00	8.75	15.00	1162010
				14.5	8	1.5	3.0	288-1053-ND	1.28	5.60	9.60	1182010
				16.5	10	1.5	3.0	288-1054-ND	2.00	8.75	15.00	11102010
				18.5	12	1.5	3.0	288-1055-ND	2.00	8.75	15.00	11122010
1.50	16	DIN	Black	12.5	6	1.8	3.4	288-1018-ND*	2.80	12.25	21.00	1161015
				14.5	8	1.8	3.4	288-1019-ND	1.76	7.70	13.20	1181015
				16.5	10	1.8	3.4	288-1020-ND	2.80	12.25	21.00	11101015
				18.5	12	1.8	3.4	288-1021-ND	2.80	12.25	21.00	11121015
				24.5	18	1.8	3.4	288-1022-ND	2.80	12.25	21.00	11181015
		W	Red	12.5	6	1.8	3.4	288-1056-ND*	2.80	12.25	21.00	1162015
				14.5	8	1.8	3.4	288-1057-ND	1.76	7.70	13.20	1182015
				16.5	10	1.8	3.4	288-1058-ND	2.80	12.25	21.00	11102015
				18.5	12	1.8	3.4	288-1059-ND	2.80	12.25	21.00	11122015
				24.5	18	1.8	3.4	288-1060-ND	2.80	12.25	21.00	11182015
2.08	14	DIN	Yellow	14.5	8	2.05	3.6	288-1023-ND*	2.20	9.63	16.50	1181208
		W	Yellow	14.5	8	2.05	3.6	288-1061-ND*	2.20	9.63	16.50	1182208
2.50	14	DIN	Blue	15.0	8	2.3	4.2	288-1024-ND	1.76	7.70	13.20	1181025
				19.0	12	2.3	4.2	288-1025-ND	2.40	10.50	18.00	11121025
				25.0	18	2.3	4.2	288-1026-ND	3.20	14.00	24.00	11181025
		W	Blue	15.0	8	2.3	4.2	288-1062-ND	1.76	7.70	13.20	1182025
				19.0	12	2.3	4.2	288-1063-ND	2.40	10.50	18.00	11122025
				25.0	18	2.3	4.2	288-1064-ND	3.20	14.00	24.00	11182025
4.00	12	DIN	Gray	17.5	10	2.9	4.8	288-1027-ND	2.88	12.60	21.60	11101040
				20.0	12	2.9	4.8	288-1028-ND	2.88	12.60	21.60	11121040
				26.0	18	2.9	4.8	288-1029-ND	3.68	13.80	18.40	11181040
		W	Gray	17.5	10	2.9	4.8	288-1065-ND	2.88	10.80	14.40	11102040
				20.0	12	2.9	4.8	288-1066-ND	2.88	10.80	14.40	11122040
				26.0	18	2.9	4.8	288-1067-ND	3.68	13.80	18.40	11182040
6.00	10	DIN	Yellow	20.0	12	3.6	6.2	288-1030-ND	3.80	14.25	19.00	11121060
				25.0	18	3.6	6.2	288-1031-ND	4.40	16.50	22.00	11181060
		W	Black	20.0	12	3.6	6.2	288-1068-ND	3.80	14.25	19.00	11122060
				25.0	18	3.6	6.2	288-1069-ND	4.40	16.50	22.00	11182060
10.00	8	DIN	Red	21.0	12	4.6	7.5	288-1032-ND	3.80	14.25	19.00	11121100
				27.0	18	4.6	7.5	288-1033-ND	6.40	24.00	32.00	11181100
		W	Ivory	21.0	12	4.6	7.5	288-1070-ND	3.80	14.25	19.00	11122100
				27.0	18	4.6	7.5	288-1071-ND	6.40	24.00	32.00	11182100
16.00	6	DIN	Blue	23.0	12	6.0	8.8	288-1034-ND	5.20	19.50	26.00	11121160
				29.0	18	6.0	8.8	288-1035-ND	8.00	30.00	40.00	11181160
		W	Green	23.0	12	6.0	8.8	288-1072-ND	5.20	19.50	26.00	11122160
				29.0	18	6.0	8.8	288-1073-ND	8.00	30.00	40.00	11182160
25.00	4	DIN	Yellow	29.0	16	7.5	11.0	288-1036-ND	13.20	49.50	66.00	11161250
				31.0	18	7.5	11.0	288-1037-ND	13.20	49.50	66.00	11181250
				35.0	22	7.5	11.0	288-1038-ND	18.00	67.50	90.00	11221250
		W	Brown	29.0	16	7.5	11.0	288-1074-ND	13.20	49.50	66.00	11162250
				31.0	18	7.5	11.0	288-1075-ND	13.20	49.50	66.00	11182250
				35.0	22	7.5	11.0	288-1076-ND	18.00	67.50	90.00	11222250

* Does not conform to DIN 46228 Part 4

Assortment Boxes

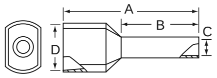
Assortment Box 1 **150 pieces** (30 pieces each of sizes 0.25, 0.34, 0.50, 0.75, and 1.00) **DIN Type** 288-1147-ND ....**$50.00** **W Type** 288-1153-ND **$50.00**	**Assortment Box 2** **400 pieces** (50 pieces each of sizes 0.50 and 2.50; 100 pieces each of sizes 0.75, 1.00, and 1.50) **DIN Type** 288-1148-ND ....**$75.00** **W Type** 288-1154-ND **$75.00**	**Assortment Box 3** **100 pieces** (50 pieces each of size 4.00; 20 pieces each of sizes 6.00 and 10.00, 10 pieces of size 16.00) **DIN Type** 288-1149-ND ....**$62.50** **W Type** 288-1155-ND **$62.50**

Crimp Tools

288-1163-ND	Protrotype Tool For 10-22 AWG Ferrules (AE Part # Trap 24-10)	**$43.73**
288-1158-ND	For 10-24 AWG Ferrules (AE Part # TRAP 24-10)	**$175.00**
288-1159-ND	For 4-8 AWG Ferrules (AE Part #. TRAP 8-4)	**$188.46**
288-1161-ND	For 10-28 AWG Ferrules (AE Part # SQ 28-10)	**$210.00**
288-1162-ND	For 8-12 AWG Ferrules (AE Part # TRAP 12-8 TW)	**$250.72**

Twin-Wire Ferrules for Two Wires

Material: Copper/Plastic.
Surface: Tin-plated.



Size mm^2	AWG	Color	Dimensions (mm) A	B	C	D	Digi-Key Part No.	Pricing 10	50	100	AE Part No.
2 x 0.50	2 x 20	White	15.0	8.0	1.5	2.3 / 4.5	288-1124-ND	1.60	7.00	12.00	1381050
2 x 0.75	2 x 20	Gray	15.0	8.0	1.8	2.6 / 5.1	288-1125-ND	1.60	7.00	12.00	1381075
2 x 0.75	2 x 20	Gray	17.0	10.0	1.8	2.6 / 5.1	288-1126-ND	2.04	8.93	15.30	13101075
2 x 1.00	2 x 18	Red	15.0	8.0	2.05	3.2 / 5.1	288-1127-ND	1.88	8.23	14.10	1381010
2 x 1.00	2 x 18	Red	17.0	10.0	2.05	3.2 / 5.1	288-1128-ND	2.60	11.38	19.50	13101010
2 x 1.50	2 x 16	Black	16.0	8.0	2.3	3.5 / 6.4	288-1129-ND	2.24	9.80	16.80	1381015
2 x 1.50	2 x 16	Black	20.0	12.0	2.3	3.5 / 6.4	288-1130-ND	3.20	14.00	24.00	13121015
2 x 2.50	2 x 14	Blue	18.5	10.0	2.9	4.0 / 7.5	288-1131-ND	3.20	14.00	24.00	13101025
2 x 2.50	2 x 14	Blue	21.5	13.0	2.9	4.0 / 7.5	288-1132-ND	3.20	14.00	24.00	13131025
2 x 4.00	2 x 12	Gray	23.0	12.0	3.8	4.9 / 8.6	288-1133-ND	5.80	21.75	29.00	13121040
2 x 6.00	2 x 10	Yellow	25.0	14.0	4.9	5.8 / 9.6	288-1134-ND	6.20	23.25	31.00	13141060
2 x 10.0	2 x 8	Red	26.0	14.0	6.5	7.0 / 12.6	288-1135-ND	7.60	28.50	38.00	13141100
2 x 16.0	2 x 6	Blue	31.0	16.0	8.5	8.8 / 16.6	288-1136-ND	20.00	87.50	150.00	13161160

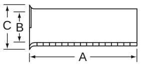
Assortment Boxes

288-1150-ND	**Asst. Box 4 — 200 pieces** (50 pieces each of sizes 0.50, 0.75, 1.00, 1.50)	**$50.00**
288-1151-ND	**Asst. Box 5 — 200 pieces** (50 pieces each of sizes 0.50, 1.00, 1.50, 2.50)	**$55.00**
288-1152-ND	**Asst. Box 6 — 90 pieces** (30 pieces each of sizes 1.50 and 2.50, 20 pieces of size 4.00, 10 pieces of size 6.00)	**$62.50**

Wire Ferrules on Strips

Size mm^2	AWG	Type	Color Code	Digi-Key Part No.	Pricing 10	50	100	AE Part No.
0.50	20	DIN	White	288-1142-ND	1.50	6.56	11.25	101050
		W	Orange	288-1137-ND	1.50	6.56	11.25	102050
0.75	20	DIN	Gray	288-1143-ND	1.50	6.56	11.25	101075
		W	White	288-1138-ND	1.50	6.56	11.25	102075
1.00	18	DIN	Red	288-1144-ND	1.60	7.00	12.00	101100
		W	Yellow	288-1139-ND	1.60	7.00	12.00	102100
1.50	16	DIN	Black	288-1145-ND	2.20	9.63	16.50	101150
		W	Red	288-1140-ND	2.20	9.63	16.50	102150
2.50	14	DIN	Blue	288-1146-ND	2.20	9.63	16.50	101250
		W	Blue	288-1141-ND	2.20	9.63	16.50	102250

Wire Ferrules – Non-Insulated



Material: Copper. Surface: Tin-plated.

Size mm^2	AWG	Dimensions (mm) A	B	C	Digi-Key Part No.	Pricing 10	50	100	AE Part No.
0.25	24	5	0.8	1.7	288-1077-ND*	.60	2.63	4.50	12510025
		7	0.8	1.7	288-1078-ND*	.60	2.63	4.50	12710025
0.34	22	5	0.9	1.8	288-1079-ND*	.64	2.80	4.80	12510034
		7	0.9	1.8	288-1080-ND*	.64	2.80	4.80	12710034
0.50	20	6	1.0	2.1	288-1081-ND	.68	2.98	5.10	12610050
		8	1.0	2.1	288-1082-ND*	.72	3.15	5.40	12810050
		10	1.0	2.1	288-1083-ND	.72	3.15	5.40	121010050
0.75	20	6	1.2	2.3	288-1084-ND	.84	3.68	6.30	12610075
		8	1.2	2.3	288-1085-ND*	.84	3.68	6.30	12810075
		10	1.2	2.3	288-1086-ND	.88	3.85	6.60	121010075
		12	1.2	2.3	288-1087-ND	.96	4.20	7.20	121210075
1.00	18	6	1.4	2.5	288-1088-ND	.88	3.85	6.60	12610100
		7	1.4	2.5	288-1089-ND	.88	3.85	6.60	12710100
		8	1.4	2.5	288-1090-ND*	.88	3.85	6.60	12810100
		10	1.4	2.5	288-1091-ND	.88	3.85	6.60	121010100
		12	1.4	2.5	288-1092-ND*	1.00	4.38	7.50	121210100
1.50	16	7	1.7	2.8	288-1093-ND	.92	4.03	6.90	12710150
		8	1.7	2.8	288-1094-ND	.92	4.03	6.90	12810150
		10	1.7	2.8	288-1095-ND	.96	4.20	7.20	121010150
		12	1.7	2.8	288-1096-ND	1.08	4.73	8.10	121210150
		15	1.7	2.8	288-1097-ND*	1.08	4.73	8.10	121510150
		18	1.7	2.8	288-1098-ND	1.12	4.90	8.40	121810150
2.50	14	7	2.2	3.4	288-1099-ND	1.16	5.08	8.70	12710250
		8	2.2	3.4	288-1100-ND	1.16	5.08	8.70	12810250
		10	2.2	3.4	288-1101-ND	1.16	5.08	8.70	121010250
		12	2.2	3.4	288-1102-ND	1.16	5.08	8.70	121210250
		15	2.2	3.4	288-1103-ND*	1.28	5.60	9.60	121510250
		18	2.2	3.4	288-1104-ND	1.28	5.60	9.60	121810250
4.00	12	9	2.8	4.0	288-1105-ND	1.12	4.90	8.40	12910400
		10	2.8	4.0	288-1106-ND	1.12	4.90	8.40	121010400
		12	2.8	4.0	288-1107-ND	1.00	4.38	7.50	121210400
		15	2.8	4.0	288-1108-ND	1.28	5.60	9.60	121510400
		18	2.8	4.0	288-1109-ND	1.32	5.78	9.90	121810400
6.00	10	10	3.5	4.7	288-1110-ND	2.24	9.80	16.80	121010600
		12	3.5	4.7	288-1111-ND	2.24	9.80	16.80	121210600
		15	3.5	4.7	288-1112-ND	2.40	10.50	18.00	121510600
		18	3.5	4.7	288-1113-ND	2.40	10.50	18.00	121810600
10.00	8	12	4.5	5.8	288-1114-ND	2.00	8.75	15.00	1212110
		15	4.5	5.8	288-1115-ND	2.00	8.75	15.00	1215110
		18	4.5	5.8	288-1116-ND	2.40	10.50	18.00	1218110
		20	4.5	5.8	288-1117-ND*	2.40	10.50	18.00	1220110
16.00	6	12	5.8	7.5	288-1118-ND	2.88	12.60	21.60	1212116
		15	5.8	7.5	288-1119-ND	2.88	12.60	21.60	1215116
		18	5.8	7.5	288-1120-ND	2.88	12.60	21.60	1218116
25.00	4	12	7.3	9.5	288-1121-ND*	10.40	45.50	78.00	1212125
		15	7.3	9.5	288-1122-ND	10.40	45.50	78.00	1215125
		18	7.3	9.5	288-1123-ND	10.40	45.50	78.00	1218125

* Does not conform to DIN 46228 Part 1

Assortment Boxes

288-1156-ND	**Assortment Box 7 — 1,800 pieces** (500 pieces of size 0.50; 400 pieces each of sizes 0.75 and 1.00; 300 pieces of size 1.50; 200 pieces of Size 2.50)	**$87.50**
288-1157-ND	**Assortment Box 8 — 370 pieces** (150 pieces of size 4.00; 100 pieces of size 6.00; 80 pieces of size 10.00; 40 pieces of size 16.00)	**$75.00**

3M Terminals, Tools, Lugs and Connectors

Insulated

Fig. 1

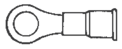


Fig. 2

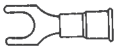


Fig. 3

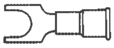


Fig. 4

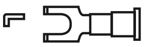


Fig. 5

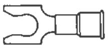
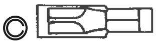
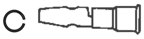


Fig. 6



Round

Fig. 7



Round

Fig. 8

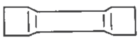


Fig. 9

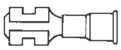


Fig. 10

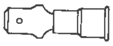


Fig. 11

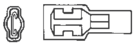


Fig. 12

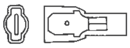
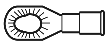


Fig. 13 — Multi-Stud



Uninsulated

Fig. 14

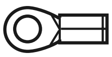


Fig. 15

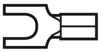


Fig. 16

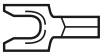


Fig. 17

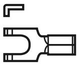


Fig. 18

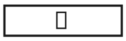


Fig. 19

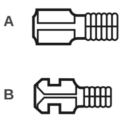


Fig. 20

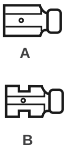
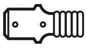


Fig. 21



Heat Shrink

Fig. 22

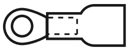


Fig. 23

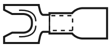


Fig. 24

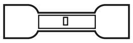


Fig. 25

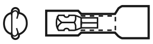
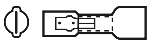


Fig. 26



Miscellaneous

Fig. 27 – Female T-Tap Connector

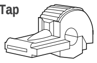


Fig. 28

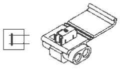


Fig. 29

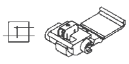


Fig. 30

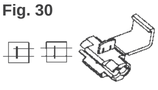


Fig. 31

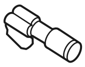


Fig. 32

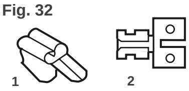


Fig. 33 – Closed End

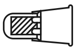


Fig. 35

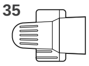


Fig. 34 – Electrical Spring Connector

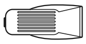
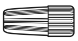


Fig. 36



AWG	Fig.	Stud Size	Insul. Dia. Inch (mm)	Digi-Key Part No.	Price Each 10	50	100	500	3M Part No.
Insulated									
26-24 Yellow	1	#2	.145 (3.68)	920010-30-ND	1.05	.94	.78	.61	MNG24-2RK
	1	#4	.145 (3.68)	920010-31-ND	1.05	.94	.78	.61	MNG24-4RK
	1	#6	.145 (3.68)	920010-32-ND	1.05	.94	.78	.61	MNG24-6RK
	1	#8	.145 (3.68)	920010-33-ND	1.05	.94	.78	.61	MNG24-8RK
	1	#10	.145 (3.68)	920010-34-ND	1.05	.94	.78	.61	MNG24-10RK
26-20 Yellow	11	—	.145 (3.68)	920044-17-ND	.54	.48	.40	.31	MNU20-110DFIK
22-18 Red	1	#4	.145 (3.68)	920010-35-ND	.29	.26	.21	.17	MVU18-4R/SK
	1	#6	.145 (3.68)	920010-01-ND	.29	.26	.21	.17	MVU18-6R/SK
	1	#8	.145 (3.68)	920010-02-ND	.29	.26	.21	.17	MVU18-8R/LK
	1	#10	.145 (3.68)	920010-03-ND	.29	.26	.21	.17	MVU18-10R/LK
	1	1/4	.145 (3.68)	920010-04-ND	.33	.30	.25	.20	MVU18-14R/SK
	1	5/16	.145 (3.68)	920010-36-ND	.42	.38	.31	.25	MVU18-516R/SK
	1	3/8	.145 (3.68)	920010-37-ND	.42	.38	.31	.25	MVU18-38RK
	3	#4	.145 (3.68)	920020-16-ND	.29	.26	.21	.17	MVU18-4FB/SK
	3	#6	.145 (3.68)	920022-01-ND	.29	.26	.21	.17	MVU18-6FB/SK
	3	#8	.145 (3.68)	920022-02-ND	.29	.26	.21	.17	MVU18-8FBK
	3	#10	.145 (3.68)	920020-17-ND	.29	.26	.21	.17	MVU18-10FBK
	4	#6	.145 (3.68)	920022-14-ND	.33	.30	.25	.20	MVU18-6FFBK
	4	#8	.145 (3.68)	920022-15-ND	.33	.30	.25	.20	MVU18-8FFBK
	4	#10	.145 (3.68)	920022-16-ND	.33	.30	.25	.20	MVU18-10FFBK
	5	#4	.145 (3.68)	920024-01-ND	.31	.28	.23	.18	MVU18-4FLK
	5	#6	.145 (3.68)	920024-02-ND	.31	.28	.23	.18	MVU18-6FLK
	5	#8	.145 (3.68)	920024-03-ND	.31	.28	.23	.18	MVU18-8FLK
	5	#10	.145 (3.68)	920024-10-ND	.31	.28	.23	.18	MVU18-10FLK
	7	.156”	.145 (3.68)	920050-01-ND	.31	.27	.23	.18	MVU18-156DMK
	8	—	.145 (3.68)	920030-01-ND	.30	.27	.23	.18	MVU18-BCK
	9	.187”	.145 (3.68)	920040-01-ND	.30	.27	.22	.18	MVU18-187DFK
	9	.250”	.145 (3.68)	920040-02-ND	.30	.27	.22	.18	MVU18-250DFK
	10	.187”	.145 (3.68)	920042-01-ND	.30	.27	.22	.17	MVU18-187DMK
	10	.250”	.145 (3.68)	920042-02-ND	.28	.25	.21	.16	MVU18-250DMK
	11	.187”	.145 (3.68)	920044-01-ND	.44	.39	.32	.26	MNU18-187DFIK
	11	.250”	.145 (3.68)	920044-02-ND	.44	.39	.32	.26	MNU18-250DFIK
	11	.250”	.145 (3.68)	920044-23-ND	.43	.39	.32	.25	FDI18-250C
	12	.187”	.145 (3.68)	920046-01-ND	.49	.44	.36	.29	MNU18-187DMIK
	12	.250”	.145 (3.68)	920046-02-ND	.49	.44	.36	.29	MNU18-250DMIK
	13	6/8/10	.145 (3.68)	920010-57-ND	.39	.35	.29	.23	MV18-610R
16-14 Blue	1	#4	.170 (4.32)	920010-38-ND	.29	.26	.21	.17	MVU14-4R/SK
	1	#8	.170 (4.32)	920010-39-ND	.29	.26	.21	.17	MVU14-8RK
	1	#6	.170 (4.32)	920010-05-ND	.29	.26	.21	.17	MVU14-6R/SK
	1	#8	.170 (4.32)	920010-06-ND	.29	.26	.21	.17	MVU14-8R/SK
	1	#10	.170 (4.32)	920010-07-ND	.29	.26	.21	.17	MVU14-10RK
	1	1/4	.170 (4.32)	920010-08-ND	.33	.30	.25	.20	MVU14-14R/SK
	1	5/16	.170 (4.32)	920010-40-ND	.42	.38	.31	.25	MVU14-156R/SK
	1	3/8	.170 (4.32)	920010-41-ND	.42	.38	.31	.25	MVU14-38RK
	2	#6	.170 (4.32)	920020-01-ND	.29	.26	.21	.17	MVU14-6FK
	2	#8	.170 (4.32)	920020-02-ND	.29	.26	.21	.17	MVU14-8FK
	3	#4	.170 (4.32)	920020-18-ND	.29	.26	.21	.17	MVU14-4FB/SK
	3	#6	.170 (4.32)	920022-03-ND	.29	.26	.21	.17	MVU14-6FB/SK
	3	#8	.170 (4.32)	920022-04-ND	.29	.26	.21	.17	MVU14-8FBK
	3	#10	.170 (4.32)	920020-19-ND	.29	.26	.21	.17	MVU14-10FBK
	4	#6	.170 (4.32)	920022-17-ND	.33	.30	.25	.20	MVU14-6FFBK
	4	#8	.170 (4.32)	920022-18-ND	.33	.30	.25	.20	MVU14-8FFBK
	4	#10	.170 (4.32)	920022-19-ND	.33	.30	.25	.20	MVU14-10FFBK
	5	#4	.170 (4.32)	920024-11-ND	.31	.28	.23	.18	MVU14-4FLK
	5	1/4	.170 (4.32)	920024-12-ND	.38	.34	.28	.22	MVU14-14FLK
	5	#6	.170 (4.32)	920024-04-ND	.31	.28	.23	.18	MVU14-6FLK
16-14 Blue	5	#8	.170 (4.32)	920024-05-ND	.31	.28	.23	.18	MVU14-8FLK
	5	#10	.170 (4.32)	920024-06-ND	.31	.28	.23	.18	MVU14-10FLK
	6	—	.170 (4.32)	920048-02-ND	.49	.44	.36	.28	MNU14-156DFIK
	7	—	.170 (4.32)	920050-02-ND	.31	.27	.23	.18	MVU14-156DMK
	8	—	.170 (4.32)	920030-02-ND	.30	.27	.23	.18	MVU14-BCK
	9	.187”	.170 (4.32)	920040-03-ND	.30	.27	.22	.18	MVU14-187DFK
	9	.250”	.170 (4.32)	920040-04-ND	.30	.27	.22	.18	MVU14-250DFK
	10	.187”	.170 (4.32)	920042-03-ND	.30	.27	.22	.17	MVU14-187DMK
	10	.250”	.170 (4.32)	920042-04-ND	.30	.27	.22	.17	MVU14-250DMK
	11	.187”	.170 (4.32)	920044-03-ND	.44	.39	.32	.26	MNU14-187DFIK
	11	.250”	.170 (4.32)	920044-04-ND	.44	.39	.32	.26	MNU14-250DFIK
	11	.250”	.170 (4.32)	920044-22-ND	.43	.39	.32	.25	FDI14-250C
	12	.187”	.170 (4.32)	920046-03-ND	.49	.44	.36	.29	MNU14-187DMIK
	12	.250”	.170 (4.32)	920046-04-ND	.49	.44	.36	.29	MNU14-250DMIK
	13	6/8/10	.170 (4.32)	920010-58-ND	.39	.35	.29	.23	MV14-610R
12-10 Yellow	1	#4	.250 (6.35)	920010-42-ND	.35	.31	.26	.20	MVU10-4R/SK
	1	#6	.250 (6.35)	920010-43-ND	.35	.31	.26	.20	MVU10-6RK
	1	#8	.250 (6.35)	920010-09-ND	.35	.31	.26	.20	MVU10-8RK
	1	#10	.250 (6.35)	920010-10-ND	.35	.31	.26	.20	MVU10-10RK
	1	1/4	.250 (6.35)	920010-11-ND	.46	.42	.34	.27	MVU10-14R/SK
	1	5/16	.250 (6.35)	920010-44-ND	.46	.42	.34	.27	MVU10-516R/SK
	1	3/8	.250 (6.35)	920010-12-ND	.46	.42	.34	.27	MVU10-38R/SK
	2	#6	.250 (6.35)	920020-03-ND	.35	.31	.26	.20	MVU10-6FK
	2	#8	.250 (6.35)	920020-04-ND	.35	.31	.26	.20	MVU10-8FK
	2	#10	.250 (6.35)	920020-05-ND	.35	.31	.26	.20	MVU10-10FK
	4	#6	.250 (6.35)	920022-20-ND	.41	.36	.30	.24	MVU10-6FFBK
	4	#8	.250 (6.35)	920022-21-ND	.41	.36	.30	.24	MVU10-8FFBK
	4	#10	.250 (6.35)	920022-22-ND	.41	.36	.30	.24	MVU10-10FFBK
	5	#6	.250 (6.35)	920024-07-ND	.44	.40	.33	.26	MVU10-6FLK
	5	#8	.250 (6.35)	920024-08-ND	.44	.40	.33	.26	MVU10-8FLK
	5	#10	.250 (6.35)	920024-09-ND	.44	.40	.33	.26	MVU10-10FLK
	5	1/4	.250 (6.35)	920024-13-ND	.51	.46	.38	.30	MVU10-14FLK
	8	—	.250 (6.35)	920030-03-ND	.37	.34	.28	.22	MVU10BCK
	9	.250”	.250 (6.35)	920040-06-ND	.56	.50	.41	.33	MVI10-250DFK
	10	.250”	.250 (6.35)	920042-05-ND	.37	.33	.27	.22	MVU10-250DMK
	11	.250”	.250 (6.35)	920044-21-ND	.61	.55	.45	.36	MNI10-250DFIK
	12	.250”	.250 (6.35)	920046-05-ND	.66	.59	.49	.39	MNU10-250DMIK
	13	6/8/10	.250 (6.35)	920010-59-ND	.51	.46	.38	.30	MV10-610R
Uninsulated									
22-18	14	#4	—	920010-13-ND	.15	.14	.11	.09	MU18-4R/SK
	14	#6	—	920010-14-ND	.15	.14	.11	.09	MU18-6R/SK
	14	#8	—	920010-15-ND	.15	.14	.11	.09	MU18-8R/LK
	14	#10	—	920010-16-ND	.14	.13	.11	.08	MU18-10R/LK
	14	1/4	—	920010-17-ND	.23	.21	.17	.14	MU18-14R/SK
	14	3/8	—	920010-18-ND	.26	.23	.19	.15	MU18-38RK
	15	#4	—	920020-06-ND	.15	.14	.11	.09	MU18-4FB/SK
	15	#6	—	920020-07-ND	.15	.14	.11	.09	MU18-6FB/SK
	15	#8	—	920020-08-ND	.15	.14	.11	.09	MU18-8FBK
	15	#10	—	920020-09-ND	.15	.14	.11	.09	MU18-10FBK
	16	#4	—	920024-14-ND	.16	.14	.12	.09	MU18-4FLK
	16	#6	—	920024-15-ND	.16	.14	.12	.09	MU18-6FLK
	16	#8	—	920024-16-ND	.16	.14	.12	.09	MU18-8FLK
	16	#10	—	920024-17-ND	.16	.14	.12	.09	MU18-10FLK
	17	#6	—	920022-05-ND	.16	.14	.12	.09	MU18-6FFBK
	17	#8	—	920022-06-ND	.16	.14	.12	.09	MU18-8FFBK
	17	#10	—	920022-07-ND	.16	.14	.12	.09	MU18-10FFBK
	18	—	—	920030-07-ND	.24	.21	.18	.14	M18BCK

(Continued)

3M Terminals, Tools, Lugs and Connectors *(Cont.)*

AWG	Fig.	Stud Size	Insul. Dia. Inch (mm)	Digi-Key Part No.	Price Each 10	50	100	500	3M Part No.
16-14	14	#4	—	920010-19-ND	.15	.14	.11	.09	MU14-4R/SK
	14	#6	—	920010-20-ND	.15	.14	.11	.09	MU14-6R/SK
	14	#8	—	920010-21-ND	.15	.14	.11	.09	MU14-8R/LK
	14	#10	—	920010-22-ND	.15	.14	.11	.09	MU14-10RK
	14	1/4	—	920010-23-ND	.23	.21	.17	.14	MU14-14R/SK
	15	#4	—	920020-10-ND	.15	.14	.11	.09	MU14-4FB/SK
	15	#8	—	920020-11-ND	.15	.14	.11	.09	MU14-8FBK
	15	#10	—	920020-12-ND	.15	.14	.11	.09	MU14-10FBK
	16	#4	—	920024-18-ND	.16	.14	.12	.09	MU14-4FLK
	16	#6	—	920024-19-ND	.16	.14	.12	.09	MU14-6FLK
	16	#8	—	920024-20-ND	.16	.14	.12	.09	MU14-8FLK
	16	#10	—	920024-21-ND	.16	.14	.12	.09	MU14-10FLK
	16	1/4	—	920024-22-ND	.25	.23	.19	.15	MU14-14FLK
	17	#6	—	920022-08-ND	.16	.14	.12	.09	MU14-6FFBK
	17	#8	—	920022-09-ND	.16	.14	.12	.09	MU14-8FFBK
	17	#10	—	920022-10-ND	.16	.14	.12	.09	MU14-10FFBK
	18	—	—	920030-08-ND	.24	.21	.18	.14	M14BCK
12-10	14	#4	—	920010-24-ND	.23	.20	.17	.13	MU10-4R/SK
	14	#6	—	920010-25-ND	.23	.20	.17	.13	MU10-6RK
	14	#8	—	920010-26-ND	.23	.20	.17	.13	MU10-8RK
	14	#10	—	920010-27-ND	.23	.20	.17	.13	MU10-10RK
	14	1/4	—	920010-28-ND	.27	.24	.20	.16	MU10-14R/SK
	14	5/16	—	920010-29-ND	.27	.24	.20	.16	MU10-516R/SK
	15	#6	—	920020-13-ND	.23	.20	.17	.13	MU10-6FBK
	15	#8	—	920020-14-ND	.23	.20	.17	.13	MU10-8FBK
	15	#10	—	920020-15-ND	.23	.20	.17	.13	MU10-10FBK
	16	#6	—	920024-23-ND	.22	.20	.16	.13	MU10-6FLK
	16	#8	—	920024-24-ND	.22	.20	.16	.13	MU10-8FLK
	16	#10	—	920024-25-ND	.22	.20	.16	.13	MU10-10FLK
	16	1/4	—	920024-26-ND	.38	.34	.28	.22	MU10-14FLK
	17	#6	—	920022-11-ND	.23	.20	.17	.13	MU10-6FFBK
	17	#8	—	920022-12-ND	.23	.20	.17	.13	MU10-8FFBK
	17	#10	—	920022-13-ND	.23	.20	.17	.13	MU10-10FFBK
	18	—	—	920030-09-ND	.36	.32	.26	.21	M10BCK
26-20	19A	.110”	—	920044-06-ND	.16	.15	.12	.10	MU20-110/32DFK
22-18	19B	.187”	—	920044-07-ND	.16	.15	.12	.10	MU18-187DFK
	19A	.250”	—	920044-08-ND	.16	.15	.12	.10	MU18-250DFK
16-14	19A	.110”	—	920044-09-ND	.16	.15	.12	.10	MU14-110DFK
	19B	.187”	—	920044-10-ND	.16	.15	.12	.10	MU14-187DFK
	19A	.250”	—	920044-11-ND	.16	.15	.12	.10	MU14-250DFK
22-18	20A	.187”	—	920044-12-ND	.20	.18	.15	.12	MU18-187DF/FLAGK
	20B	.250”	—	920044-13-ND	.20	.18	.15	.12	MU18-250DF/FLAGK
16-14	20A	.187”	—	920044-14-ND	.20	.18	.15	.12	MU14-187DF/FLAGK
	20B	.250”	—	920044-15-ND	.20	.18	.15	.12	MU14-250DF/FLAGK
12-10	20A	.250”	—	920044-16-ND	.39	.35	.29	.23	MU10-250DF/FLAGK
22-18	21	.187”	—	920042-06-ND	.16	.14	.12	.09	MU18-187DMK
	21	.250”	—	920042-07-ND	.15	.14	.11	.09	MU18-250DMK
16-14	21	.187”	—	920042-08-ND	.16	.14	.12	.09	MU14-187DMK
	21	.250”	—	920042-09-ND	.16	.14	.12	.09	MU14-250DMK
12-10	21	.250”	—	920042-10-ND	.21	.19	.15	.12	MU10-250DMK
Multi-Stack Adapters									
22-18	31	.250”	—	920084-01-ND	.50	.45	.37	.29	MVU18-250DMFK
16-14	31	.250”	—	920084-02-ND	.50	.45	.37	.29	MVU14-250DMFK
—	32A	.250”	—	920082-01-ND	.40	.36	.29	.23	MA250DMFMK
	32B	.250”	—	920082-02-ND	.27	.24	.20	.16	MA250DMMFK
Heat Shrink Insulated									
22-18 Red	22	#6	.145 (3.68)	920010-45-ND	1.31	1.18	.97	.76	MH18-6R/LK
	22	#8	.145 (3.68)	920010-46-ND	1.31	1.18	.97	.76	MH18-8R/LK
	22	#10	.145 (3.68)	920010-47-ND	1.31	1.18	.97	.76	MH18-10R/LK

AWG	Fig.	Stud Size	Insul. Dia. Inch (mm)	Digi-Key Part No.	Price Each 10	50	100	500	3M Part No.
22-18 Red	23	#6	.145 (3.68)	920024-27-ND	1.31	1.18	.97	.76	MH18-6FLK
	23	#8	.145 (3.68)	920024-28-ND	1.31	1.18	.97	.76	MH18-8FLK
	23	#10	.145 (3.68)	920024-29-ND	1.31	1.18	.97	.76	MH18-10FLK
	24	—	.145 (3.68)	920030-10-ND	1.84	1.65	1.36	1.07	MH18BCK
	25	—	.145 (3.68)	920044-18-ND	1.86	1.67	1.38	1.08	MNHU18-250DFIK
	26	—	.145 (3.68)	920042-11-ND	1.83	1.64	1.36	1.07	MNHU18-250DMIK
16-14 Blue	22	#6	.170 (4.32)	920010-48-ND	1.31	1.18	.97	.76	MH14-6R/LK
	22	#8	.170 (4.32)	920010-49-ND	1.31	1.18	.97	.76	MH14-8R/LK
	22	#10	.170 (4.32)	920010-50-ND	1.31	1.18	.97	.76	MH14-10R/LK
	22	1/4	.170 (4.32)	920010-51-ND	1.42	1.28	1.05	.83	MH14-14R/SK
	22	5/16	.170 (4.32)	920010-52-ND	1.42	1.28	1.05	.83	MH14-516R/SK
	22	3/8	.170 (4.32)	920010-53-ND	1.42	1.28	1.05	.83	MH14-38RK
	23	#6	.170 (4.32)	920024-30-ND	1.31	1.18	.97	.76	MH14-6FLK
	23	#8	.170 (4.32)	920024-31-ND	1.31	1.18	.97	.76	MH14-8FLK
	23	#10	.170 (4.32)	920024-32-ND	1.31	1.18	.97	.76	MH14-10FLK
	23	1/4	.170 (4.32)	920024-33-ND	1.42	1.28	1.05	.83	MH14-14FLK
	24	—	.170 (4.32)	920030-11-ND	1.84	1.65	1.36	1.07	MH14BCK
	25	—	.170 (4.32)	920044-19-ND	1.86	1.67	1.38	1.08	MNHU14-250DFIK
	26	—	.170 (4.32)	920042-12-ND	1.83	1.64	1.36	1.07	MNHU14-250DMIK
12-10 Yellow	22	#10	.250 (6.35)	920010-54-ND	1.52	1.36	1.12	.88	MH10-10RK
	22	1/4	.250 (6.35)	920010-55-ND	1.77	1.59	1.31	1.03	MH10-14RK
	22	3/8	.250 (6.35)	920010-56-ND	1.77	1.59	1.31	1.03	MH10-38RK
	23	#8	.250 (6.35)	920024-34-ND	1.65	1.48	1.22	.96	MH10-8FLK
	23	#10	.250 (6.35)	920024-35-ND	1.65	1.48	1.22	.96	MH10-10FLK
	23	1/4	.250 (6.35)	920024-36-ND	1.82	1.64	1.35	1.06	MH10-14FLK
	24	—	.250 (6.35)	920030-12-ND	1.99	1.79	1.47	1.16	MH10BCK
	25	—	.250 (6.35)	920044-20-ND	2.02	1.81	1.49	1.17	MNHU10-250DFIK
	26	—	.250 (6.35)	920042-13-ND	2.02	1.81	1.49	1.17	MNHU10250DMIK
22-18	27	—	.150 (3.81)	920074-01-ND	.35	.32	.26	.21	951K
16-14	27	—	.150 (3.81)	920074-02-ND	.35	.32	.26	.21	952K
12	27	—	.150 (3.81)	920074-03-ND	.38	.34	.28	.22	953K
22-16 Red	28	—	.120 (3.05)	920074-06-ND	.51	.46	.38	.30	557 (BOXED)
	29	—	.120 (3.05)	920074-07-ND	.53	.48	.40	.31	558 (BOXED)
18-14 Blue	30	—	.145 (3.68)	920074-08-ND	.32	.29	.24	.19	560 (BOXED)

923000-I-ND 3M Insulated Terminal Kit — 650 assorted terminals (14 sizes), 200 cable ties (100 each, 2 sizes), one wire marker dispenser, one crimping tool, one reusable metal box, one reordering information card........**$108.08**

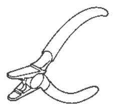
AWG	Fig.	Description	Digi-Key Part No.	Price Each 10	50	100	500	3M Part No.
Scotchlok Connectors								
22-14	33	Closed End	920030-13-ND	.28	.25	.21	.16	MN14CEC/STK
18-10	33		920030-14-ND	.28	.25	.21	.16	MN10CEC/STK
8-14	34	Electrical Connector	920090-01-ND	.70	.63	.52	.41	GK (Gray)
10-18	34		920090-02-ND	.32	.28	.23	.19	RK (Red)
12-22	34		920090-03-ND	.24	.22	.18	.14	YK (Yellow)
8-12	35	Spring Connector	920090-04-ND	.87	.78	.64	.51	B/G (Box)
12-22	35		920090-05-ND	.21	.19	.15	.12	O/B (Box)
8-18	35		920090-06-ND	.33	.29	.24	.19	R/Y (Box)
12-22	34	Nylon Spring Connector	920074-04-ND	.24	.22	.18	.14	312 (Yellow)
10-18	34		920074-05-ND	.31	.28	.23	.18	512 (Red)
Highland™ Connectors - High Temperature 302°F (150°C)								
22-16	36	Spring Connector	920091-01-ND	.16	.14	.12	.10	H-30B(BIN)
18-12	36		920091-03-ND	.22	.20	.16	.13	H-33B(BIN)
18-10	36		920091-04-ND	.30	.27	.23	.18	H-35B(BIN)

3M Scotchlok™ Discrete Connectors and Tools

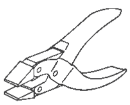
3M Insulated Terminal Kit — 650 assorted terminals (14 sizes), 200 cable ties (100 each, 2 sizes), one wire marker dispenser, one crimping tool, one reusable metal box, one reordering information card.

923000-I-ND..**$108.08**

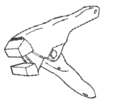
E-9Y-ND



E-9E-ND



E-9BM-ND



E-9C-ND

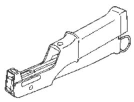


Fig. 1

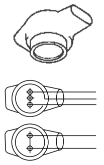


Fig. 2

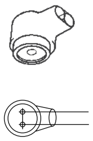


Fig. 3

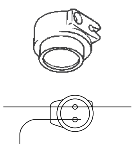


Fig. 4

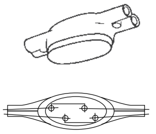


Fig.	Color	Max. Insul. O.D. (mm)	Cable Type PIC-Unfilled AWG	PIC-Filled AWG	Pulp or Paper AWG	How Pkg.	Digi-Key Part No.	Price Each 1	10	100	E-9Y-ND $32.34	E-9E-ND $29.58	E-9BM-ND $75.39	E-9C-ND $144.33
1	Red	1.67	19-26	22-26*	19-26	Loose	UR20074-ND	.35	.27	.20	√ (2 Wire)	√ (3 Wire)	—	—
	Grey Grey	2.08 (out.) 1.93 (cntr.)	19-24 17-20	19-24 19-24	19-24 19-24	Loose Cartridge	UAL27827-ND UAL27828-ND	.53 —	.41 .45	.29 .33	√ (2 Wire) —	√ (3 Wire) —	√ —	√ √
	Green	2.08 (out.)	19-24	19-24	19-24	Loose	ULG30198-ND	.44	.33	.24	√ (2 Wire)	√ (3 Wire)	√	√
2	Yellow	1.52	22-26	22-26	22-26	Loose	UY14911-ND	.32	.25	.17	√	√	√	√
3	Green	1.67	19-26	22-26	19-26	Loose	UG20082-ND	.48	.37	.27	√	√	√	—
4	Red	3.18	19-24	19-24	19-24	Loose	U1R20017-ND	3.38	2.93	2.54	—	—	√	—

* Can be used on 19AWG (.9mm) Foam Insulated Cable.

Fig. 1 – Ring

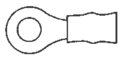


Fig. 2 – Offset Ring Tongue

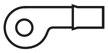


Fig. 3 – Slotted Ring

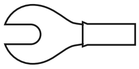


Fig. 4 – Spade

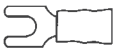


Fig. 5 – Flanged Spade

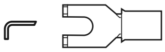


Fig. 6 – Spring Spade

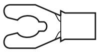


Fig. 7 – Knife Disconnect

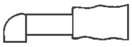


Fig. 8 – Butt Splice

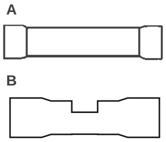


Fig. 9 – FASTON®

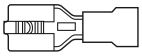
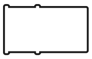


Fig. 10

For Unstripped Wire



For Stripped Wire

Fig. 11 – Adapter Insert

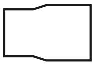


Fig. 12 – Terminyl

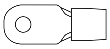


Fig. 13 – Ring Tongue Uninsulated

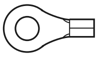


Fig. 14 – Spade Tongue Uninsulated

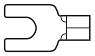


Fig. 15 – Flanged Spade Uninsulated

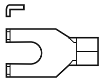


Fig. 16 – Spring Spade Uninsulated

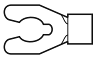
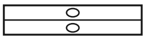
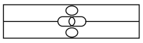


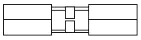
Fig. 17 – Butt Splice Uninsulated



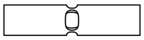
A – Standard



B – Sight Hole



C – Strap



D

Fig. 18 – Splice Conn. (nylon insulation)

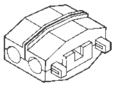


Fig. 19 – Vinyl Splices

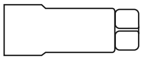
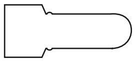


Fig. 20 – Nylon Splices



PIDG (Pre-Insulated Diamond Grip) Terminals

Meet or exceed the requirements of MIL-T-7928, Type II, Class 1 and 2. **Product Facts: • Temperature Rating:** 105°C Max. • **AMP Wire:** Solid or Stranded • **Terminal Material:** The basic terminal is conducted of fine grade high conductivity copper per ASTM B-152 and tin-plated per MIL-T-10727. Basic material for Spring Spade Tongue Terminals is phosphur bronze per ASTM B-139 and tin-plated per MIL-T-10727. AMP's special plating process creates durable corrosion resistance to salt spray and most chemical fumes. • **Copper Sleeve:** The specially designed copper sleeve, fitted over the terminal barrel, provides circumferential insulation suppport to the wire and allows the wire to be bent in any direction, without fraying the wire's insulation or breaking the conductor. • **Nylon Insulation (unless otherwise noted):** Nylon sleeve assures high dielectric strength.

PIDG Insulation Restricting Terminals: **Material:** • Insulation: Nylon • Terminal Body and Metallic Sleeve: Copper per ASTM B-152 • Plating: Nickel per QQ-N-290 or Tin per MIL-T-10727. Insulation Restriction Terminals prevent the insulation of thin-wall insulation wire from entering the terminal's wire crimp area during the crimping process.

PIDG Radiation Resistant: **Temp. Rating:** 150°C Max. **Material:** • Insulation: Polyvinylidene Flouride (PVF_2) • Terminal, Splice Body & Metallic Sleeve: Copper per ASTM B-152 • Plating: Tin per MIL-T-10727.

PIDG - Spare Wire Caps: **Material:** Copper Tin Plated, Insulation: Nylon

PIDG - Butt Splice Step Down Adapter Inserts: **Material:** • Adapter Body: Copper per ASTM B-152 • Plating: Zinc/DyeChromate

PIDG - Ring

Fig.	Stud Size	Dim. - Inch W x L	Insul. Dia. Inch	Digi-Key Part No.	Price Each 10	100	AMP Part No.
26-24 AWG Yellow							
1	4	.203 x .736	.105	A27492-ND	1.29	1.14	52189
	6	.250 x .792	.105	A27493-ND	.35	.31	53073
26-22 AWG Yellow							
1	0	.140 x .525	.082	A27224-ND	.83	.73	321013
	2	.140 x .525	.082	A0879-ND	.22	.20	323912
	2	.140 x .615	.082	A27225-ND	.26	.23	329951
	4	.203 x .646	.082	A0880-ND	.23	.20	323914
	6	.203 x .646	.082	A0881-ND	.22	.20	323915
	6	.250 x .740	.082	A27226-ND	.23	.20	326875
	8	.250 x .740	.082	A0882-ND	.27	.24	323916
	10	.250 x .740	.082	A0883-ND	.31	.27	324075
24-20 AWG Natural							
1	2	.160 x .589	.100	A27495-ND	1.30	1.14	329636
	6	.281 x .774	.100	A27496-ND	.28	.25	323986
	8	.312 x .821	.100	A27497-ND	.28	.25	323989
	10	.312 x .821	.100	A27498-ND	.32	.28	323990
22-16 AWG Red							
1	2	.182 x .669	.125	A27499-ND	.83	.73	324158
	2	.182 x .669	.140	A27500-ND	.22	.20	320773
	2	.218 x .672	.125	A0884-ND	.22	.20	328657
	4	.182 x .669	.140	A27228-ND	.22	.20	320882
	4	.218 x .672	.125	A27227-ND	.23	.20	320553
	4	.218 x .672	.140	A1087-ND	.23	.20	31880
	4	.250 x .844	.125	A27229-ND	.32	.28	323758
	4	.250 x .844	.140	A27230-ND	.32	.28	330648
	6	.218 x .672	.125	A27231-ND	.23	.20	36149
	6	.218 x .672	.140	A27232-ND	.23	.20	36150
	6	.250 x .782	.125	A27233-ND	.16	.14	51863
	6	.281 x .797	.125	A27234-ND	.16	.14	36151
	6	.281 x .797	.140	A1060-ND	.16	.07	36152
	6	.312 x .844	.125	A27235-ND	.28	.25	323008
	6	.312 x .844	.140	A27236-ND	.22	.20	326878
	8	.281 x .797	.125	A27239-ND	.22	.20	320554
	8	.281 x .797	.140	A27238-ND	.22	.20	31886
	8	.312 x .844	.140	A1061-ND	.16	.08	31890
	8	.312 x .844	.125	A27511-ND*	.23	.20	31888
	8	.312 x .844	.125	A27237-ND	.16	.14	320551
	8	.344 x .876	.140	A27240-ND	1.03	.91	32835
	10	.281 x .797	.125	A27243-ND	.22	.20	320552
	10	.281 x .797	.140	A27242-ND	.20	.18	31887
1	10	.312 x .844	.125	A27241-ND	.16	.14	36153
	10	.312 x .844	.140	A1062-ND	.16	.08	36154
	10	.344 x .876	.125	A27244-ND	1.02	.90	32836
	10	.344 x .876	.140	A27245-ND	.22	.19	32837
	1/4	.469 x 1.078	.125	A27246-ND	.27	.24	320571
	1/4	.469 x 1.078	.140	A0885-ND	.27	.24	31894
	5/16	.469 x 1.078	.125	A27247-ND	.27	.24	320572
	5/16	.469 x 1.078	.140	A0886-ND	.26	.23	31895
	3/8	.531 x 1.218	.140	A0887-ND	.33	.29	31897
	3/8	.531 x 1.218	.125	A27248-ND	.28	.24	320573
	1/2	.713 x 1.293	.140	A0888-ND	.69	.61	328975
16-14 AWG Blue							
1	4	.250 x .703	.150	A27249-ND	.23	.20	324159
	4	.250 x .703	.170	A1091-ND	.22	.20	328996
	4	.250 x .813	.150	A27502-ND	1.32	1.17	323676
	6	.250 x .703	.150	A27253-ND	.23	.20	320561
	6	.250 x .703	.170	A1070-ND	.16	.07	320619
	6	.250 x .813	.170	A27504-ND	.35	.31	50881
	6	.312 x .813	.170	A27254-ND	.22	.20	326882
	6	.312 x .844	.150	A27250-ND	.23	.20	51864
	6	.343 x .859	.150	A27251-ND	.22	.20	36157
	6	.343 x .859	.170	A27252-ND	.22	.20	36158
	8	.312 x .813	.170	A27257-ND	.34	.30	53941-1
	8	.312 x .844	.150	A27255-ND	.23	.20	51864-1
	8	.343 x .859	.150	A27256-ND	.22	.20	320560
	8	.343 x .859	.170	A1071-ND	.16	.07	320565
	10	.312 x .813	.170	A27260-ND	.22	.20	53942-1
	10	.312 x .844	.150	A27258-ND	.23	.20	51864-2
	10	.343 x .859	.150	A27259-ND	.22	.20	320574
	10	.343 x .859	.170	A1072-ND	.16	.07	36160
	10	.343 x .859	.170	A27512-ND*	.26	.23	31903
	10	.469 x 1.078	.170	A27261-ND	.44	.39	324533
	1/4	.469 x 1.078	.150	A27262-ND	.27	.24	320563
	1/4	.469 x 1.078	.170	A0889-ND	.18	.09	321045
	5/16	.469 x 1.078	.150	A27263-ND	.27	.24	320575
	5/16	.469 x 1.078	.170	A0890-ND	.26	.23	328998
	3/8	.531 x 1.218	.150	A27264-ND	.28	.24	320564
	3/8	.531 x 1.218	.170	A0891-ND	.31	.27	328999
	1/2	.713 x 1.293	.150	A27265-ND	.87	.76	328976
	1/2	.713 x 1.293	.170	A0892-ND	.84	.74	328849
16-14 AWG Yellow/Black †							
1	6	.281 x .953	.230	A27267-ND	.39	.34	320631
	6	.281 x .953	.250	A27266-ND	.49	.43	35634
	8	.343 x 1.046	.230	A09035-ND	.38	.34	320627
	8	.343 x 1.046	.250	A27268-ND	.42	.37	35106
	10	.343 x 1.046	.230	A09036-ND	.48	.42	320630
	10	.343 x 1.046	.250	A27269-ND	.43	.38	34805
	1/4	.500 x 1.188	.230	A27270-ND	.38	.34	34974
	1/4	.500 x 1.188	.250	A27506-ND	.54	.47	323682
	1/4	.531 x 1.296	.230	A27271-ND	.29	.26	327743
	1/4	.531 x 1.296	.250	A09037-ND	.47	.42	34806
	5/16	.531 x 1.296	.250	A27507-ND	.53	.46	34810
	3/4	1.25 x 2.219	.250	A27509-ND	1.81	1.59	322724
	3/8	.531 x 1.296	.230	A27508-ND	.54	.48	330896
	1/2	.750 x 1.594	.250	A09038-ND	.76	.67	35316
12-10 AWG Yellow							
1	4	.281 x .953	.250	A27272-ND	.47	.41	35148
	6	.281 x .953	.230	A27273-ND	.33	.29	320634
	6	.281 x .953	.250	A0893-ND	.29	.26	35149
	6	.312 x 1.052	.230	A27274-ND	.43	.38	326886
	6	.375 x 1.083	.230	A27276-ND	.30	.27	320567
	6	.375 x 1.083	.250	A27275-ND	.30	.27	35107
	8	.312 x 1.031	.230	A27277-ND	.33	.29	35787
	8	.312 x 1.052	.230	A27278-ND	.43	.38	324915
	8	.375 x 1.083	.230	A27280-ND	.30	.27	320568
	8	.375 x 1.083	.250	A1081-ND	.20	.10	35108
	8	.375 x 1.172	.300	A27279-ND*	1.07	.95	35605

*Vinyl Insulation † Heavy duty for extra mechanical strength.

(Continued)

Terminals, Tools, Lugs and Connectors *(Cont.)*

Fig.	Stud Size	Dim. - Inch W x L	Insul. Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
1	10	.312 x 1.052	.230	A27282-ND	.43	.38	324918
		.343 x 1.046	.230	A27281-ND	.33	.29	32883
		.375 x 1.083	.230	A27284-ND	.20	.18	36161
		.375 x 1.083	.250	A1082-ND	.20	.10	35109
		.375 x 1.172	.300	A27283-ND*	.62	.55	35364
	1/4	.500 x 1.188	.230	A27285-ND	.32	.28	35273
		.500 x 1.277	.300	A27286-ND*	1.15	1.01	323763
		.531 x 1.322	.230	A27288-ND	.35	.31	320569
		.531 x 1.322	.250	A1083-ND	.35	.28	35110
		.531 x 1.416	.300	A27287-ND*	.67	.59	35345
	3/8	.593 x 1.414	.250	A1084-ND	.35	.28	35112
		.593 x 1.414	.230	A27291-ND	.35	.31	320577
		.593 x 1.510	.300	A28077-ND*	1.21	1.07	35478
		.750 x 1.594	.250	A27510-ND	1.04	.92	35150
	1/2	.750 x 1.594	.250	A0894-ND	.55	.48	35151
	5/16	.531 x 1.322	.250	A1095-ND	.35	.28	35111
		.531 x 1.322	.230	A27290-ND	.35	.31	320576
		.531 x 1.416	.300	A27289-ND*	1.15	1.01	35346

*Vinyl Insulation † Heavy duty for extra mechanical strength.

PIDG Ring Tongue Radiation Resistant

AWG	Fig.	Stud Size	Dimensions - Inch W x L	Insul. Dia. Inch (mm)	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
22-16 Red	1	6	.218 x .672	.125	A27292-ND	.35	.31	53406-1
		6	.250 x .782	.125	A27293-ND	.35	.31	53407-1
		8	.312 x .844	.125	A27294-ND	.40	.36	53408-1
		10	.312 x .844	.125	A27295-ND	.40	.36	53409-1
16-14 Blue	1	6	.250 x .703	.150	A27296-ND	.41	.36	53415-1
		6	.312 x .844	.150	A27297-ND	.39	.35	53416-1
		8	.312 x .844	.150	A27298-ND	.45	.39	53417-1
		10	.312 x .844	.150	A27299-ND	.40	.36	53418-1
12-10 Yellow	1	8	.375 x 1.083	.230	A27300-ND	.67	.59	53424-1
		10	.375 x 1.083	.230	A27301-ND	.63	.55	53425-1

PIDG Ring Tongue Insulation Restricting Terminals

AWG	Fig.	Stud Size	Dim. – Inch W x L	Insulation Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
22 Red/Green	1	4	.218 x .734	.038 - .110	A27334-ND	.31	.28	52273
		6	.250 x .844	.038 - .110	A27335-ND	.31	.28	51863-2
		8	.312 x .906	.038 - .110	A27336-ND	.31	.28	1-320551-2
		10	.312 x .906	.038 - .110	A27337-ND	.31	.28	2-36153-3
20 Red/Red	1	4	.218 x .734	.046 - .110	A27338-ND	.28	.25	52273-1
		6	.218 x .734	.046 - .110	A27339-ND	.31	.28	2-36149-4
		6	.250 x .844	.046 - .110	A27340-ND	.31	.28	51863-3
		8	.312 x .906	.046 - .110	A27341-ND	.31	.28	1-320551-3
		10	.312 x .906	.046 - .110	A27342-ND	.31	.28	2-36153-4
18 Red/White	1	6	.218 x .734	.056 - .110	A27343-ND	.31	.28	2-36149-5
		6	.250 x .844	.056 - .110	A27344-ND	.31	.28	51863-4
		8	.312 x .906	.056 - .110	A27345-ND	.31	.28	1-320551-4
		10	.312 x .906	.056 - .110	A27346-ND	.31	.28	2-36153-5
16 Blue/Blue	1	6	.250 x .765	.063 - .130	A27347-ND	.36	.32	2-320561-3
		6	.312 x .906	.063 - .130	A27348-ND	.31	.28	51864-6
		8	.312 x .906	.063 - .130	A27349-ND	.36	.32	1-51864-0
		10	.312 x .906	.063 - .130	A27350-ND	.28	.25	51864-7
		1/4	.469 x 1.140	.063 - .130	A27513-ND	.60	.53	2-320563-3
14 Blue/Green	1	6	.312 x .906	.078 - .130	A27351-ND	1.18	1.04	51864-8
		8	.312 x .906	.078 - .130	A27352-ND	.28	.25	1-51864-1
		10	.312 x .906	.078 - .130	A27353-ND	.31	.28	51864-9
		1/4	.469 x 1.140	.078 - .130	A27514-ND	.50	.44	2-320563-4
12 Yellow/Yellow	1	6	.375 x 1.148	.095 - .200	A27354-ND	.55	.49	2-36161-5
		8	.375 x 1.148	.095 - .200	A27355-ND	.42	.37	2-320568-2
		10	.375 x 1.148	.095 - .200	A27356-ND	.42	.37	2-36161-3
		1/4	.531 x 1.392	.095 - .200	A27515-ND	1.10	.97	2-320569-5
10 Yellow/Brown	1	8	.375 x 1.148	.119 - .200	A27357-ND	.48	.42	2-320568-3
		10	.375 x 1.148	.119 - .200	A27358-ND	.50	.44	2-36161-4
		1/4	.531 x 1.392	.119 - .200	A27516-ND	1.96	1.73	2-320569-6
		5/16	.531 x 1.392	.119 - .200	A27517-ND	.69	.61	2-320576-3

PIDG Offset Ring Tongue Terminals

AWG	Fig.	Stud Size	Dim. – Inch W x L	Insulation Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
22-16 Red	2	6	.375 x .906	.125	A27526-ND	.36	.32	323039
		10	.375 x .906	.125	A27527-ND	.51	.45	324011
16-14 Blue	2	6	.375 x .906	.150	A27528-ND	.51	.45	323817
		10	.375 x .906	.150	A27529-ND	.47	.41	323818

PIDG Slotted Ring Tongue

AWG	Fig.	Stud Size	Dim. – Inch W x L	Insulation Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
26-22 Yellow	3	6	.250 x .719	.082	A27448-ND	.26	.23	323011
22-16 Red	3	8	.281 x .770	.140	A27449-ND	.96	.85	36954

PIDG Spade Tongue

Fig.	Stud Size	Dim. - Inch W x L	Insul. Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
26-22 AWG Yellow							
4	4	.203 x .627	.082	A27415-ND	.24	.21	321035
22-16 AWG Red							
4	2	.182 x .727	.140	A0895-ND	.22	.20	328394
	4	.218 x .674	.140	A0896-ND	.27	.24	327717
	6	.250 x .846	.140	A1063-ND	.16	.07	34541
4	6	.297 x .753	.125	A27416-ND	.22	.20	34080
	6	.297 x .753	.140	A27417-ND	.22	.20	326861
	8	.375 x .908	.125	A27418-ND	.31	.27	32050
	8	.375 x .908	.140	A1064-ND	.22	.20	32053
	10	.375 x .908	.125	A27419-ND	1.00	.88	32051
	10	.375 x .908	.140	A1065-ND	.22	.20	32054
16-14 AWG Blue							
4	6	.244 x .846	.170	A27421-ND	.24	.21	328281
	6	.297 x .753	.170	A1073-ND	.22	.20	35559
	6	.385 x .908	.170	A27420-ND	.22	.20	32058
	8	.297 x .753	.170	A1074-ND	.26	.23	321233
	8	.312 x 1.034	.170	A27519-ND	.30	.26	325199
	8	.385 x .908	.150	A27422-ND	.40	.35	32056
	8	.385 x .908	.170	A0897-ND	.22	.20	32059
	10	.385 x .908	.150	A27520-ND	.41	.37	32057
	10	.385 x .908	.170	A1075-ND	.26	.23	32060
12-10 AWG Yellow							
4	6	.290 x .954	.230	A27423-ND	.47	.41	322985
	6	.312 x 1.095	.230	A27424-ND	.44	.39	326859
	8	.406 x 1.095	.230	A0898-ND	.33	.29	32588
	10	.406 x 1.095	.230	A1085-ND	.33	.27	32589

PIDG Flanged Spade Tongue

Fig.	Stud Size	Dim. - Inch W x L	Insul. Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
26-22 AWG Yellow							
5	2	.182 x .649	.082	A27426-ND	.68	.60	324597
	4	.196 x .649	.082	A27427-ND	1.92	1.69	52369
	6	.250 x .649	.082	A27428-ND	.59	.52	51874
22-16 AWG Red							
5	2	.182 x .727	.125	A27429-ND	1.09	.96	2-324608-2
	2	.182 x .727	.140	A0899-ND	.29	.26	324608
	6	.250 x .737	.125	A27431-ND	.25	.22	322777
	6	.296 x .737	.125	A27430-ND	.25	.22	32561
	6	.296 x .737	.140	A1066-ND	.24	.22	32562
	8	.416 x .830	.140	A1088-ND	.53	.47	32498
16-14 AWG Blue							
5	6	.294 x .737	.170	A1076-ND	.25	.22	320861
	8	.294 x .737	.170	A1077-ND	.25	.22	320862
	8	.416 x .830	.170	A27518-ND	1.20	1.06	33156
	10	.294 x .737	.170	A1092-ND	.24	.21	320863
12-10 Yellow							
5	6	.296 x 1.017	.250	A0900-ND	.64	.56	325150
	6	.328 x 1.017	.230	A27432-ND	.73	.64	324587
	8	.416 x 1.017	.230	A09039-ND	.32	.28	32510
	10	.416 x 1.017	.250	A0901-ND	1.18	1.04	324015

PIDG Spring Spade Tongue

Fig.	Stud Size	Dim. - Inch W x L	Insul. Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
Short							
26-22 AWG Yellow							
6	4	.203 x .695	.082	A27434-ND	.39	.35	52922
	6	.250 x .679	.082	A27435-ND	.26	.23	52924
	8	.375 x .787	.082	A27436-ND	1.24	1.09	52925
22-16 AWG Red							
6	4	.203 x .799	.125	A0902-ND	.23	.20	52927
	5	.250 x .799	.125	A27437-ND	.35	.31	52928
	6	.250 x .799	.125	A1067-ND	.26	.23	52929
	8	.375 x .860	.125	A1089-ND	.26	.23	52930
	10	.406 x .908	.125	A1099-ND	.37	.32	52931
16-14 AWG Blue							
6	5	.250 x .799	.170	A28166-ND	.36	.32	52934
	6	.250 x .799	.170	A1078-ND	.26	.23	52935
	6	.250 x .799	.182	A27438-ND	.26	.23	52935-2
	8	.375 x .860	.170	A1093-ND	.29	.26	52936
	8	.375 x.860	.182	A28167-ND	.44	.39	52936-2
	10	.406 x .908	.170	A1094-ND	.29	.26	52937
	10	.406 x .908	.182	A28168-ND	.95	.84	52937-2
12-10 AWG Yellow							
6	6	.250 x .959	.250	A1096-ND	.33	.26	52941
	8	.375 x 1.052	.250	A1097-ND	.38	.30	52942
	10	.406 x 1.100	.250	A1098-ND	.38	.30	52943
	1/4	.625 x 1.225	.250	A27439-ND	.77	.68	52945
Long							
22-16 AWG Red							
6	6	.250 x .933	.125	A09040-ND	.47	.41	52409
	6	.250 x .933	.140	A28156-ND	.46	.40	52409-2
	8	.281 x .979	.125	A09041-ND	.41	.36	52410
	10	.343 x 1.005	.125	A09042-ND	.95	.84	52411
16-14 AWG Blue							
6	6	.250 x .933	.150	A09043-ND	.29	.26	52420
	6	.250 x .933	.170	A27446-ND	.55	.48	52420-1
	8	.281 x .979	.150	A0944-ND	.49	.43	52421
	8	.281 x .979	.170	A27447-ND	.29	.26	52421-1
	10	.343 x 1.005	.170	A09045-ND	.29	.26	52422-1
12-10 AWG Yellow							
6	6	.312 x 1.131	.250	A27521-ND	.59	.52	52430-1
	8	.375 x 1.174	.250	A27522-ND	.60	.53	52431-1
	10	.375 x 1.219	.250	A27523-ND	.70	.62	52432-1
	1/4	.437 x 1.289	.250	A27524-ND	.65	.57	52433-1

(Continued)

PIDG Knife Disconnect Splices

AWG	Fig.	Dim. - Inch Length	Insulation Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
22-16 Red	7	.878	.125	A27473-ND	.49	.43	320555
		.878	.140	A1068-ND	.44	.31	32446
16-14 Blue	7	.878	.150	A27474-ND	.49	.43	320566
		.878	.170	A1079-ND	.44	.31	32448
12-10 Yellow	7	1.260	.250	A09046-ND	1.33	1.17	35762

PIDG Butt Splices

AWG	Fig.	Dim. - Inch Length	Insulation Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
26-22 Yellow	8a	—	.082	A0913-ND	.58	.51	2-323994-2
22-16 Red‡		1.265	.125	A1069-ND	.55	.27	320559
16-14 Blue		1.265	.150	A1080-ND	.55	.27	320562
12-10 Yellow		1.656	.220	A1086-ND	.93	.45	320570
26-22 Yellow†	8b	.890	.082	A27450-ND	.56	.50	323994
24-20 Trans.		1.035	.100	A27451-ND	.44	.39	323975
Step Down Type (with adapter insert)							
16-14 to 22-16 Blue	8b	1.265	.150/.115	A27452-ND*	1.05	.93	327583
12-10 to 16-14 Yellow		1.656	.220/.170	A27453-ND	1.62	1.43	327638
12-10 to 22-16 Yellow		1.656	.220/.140	A27454-ND	2.01	1.77	327639
Radiation Resistant							
22-16 Red Stripe	8b	1.265	.125	A27455-ND	1.02	.90	53548-1
16-14 Blue Stripe		1.265	.150	A27456-ND	1.02	.90	53549-1
12-10 Yellow Stripe		1.656	.220	A27457-ND	1.54	1.36	53550-1

* Includes adapter insert. † 26-22 splices are 26-24 range in accordance with MIL-T-7928.
‡ 22-16 splices are 22-18 range in accordance with MIL-T-7928

PIDG FASTON

AWG	Fig.	Insul. Color	Fits Tab Size (Inch)	Insul. Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
22-18	9	Trans.	.110 x .020†	.100	A09049-ND‡	.25	.12	61060-1
			.110 x .032†	.100	A0911-ND	.25	.12	60894-1
22-18	9	Red	.110 x .020††	.140	A09050-ND	.23	.11	640923-1
			.110 x .032††	.140	A09051-ND	.23	.11	640925-1
			.205 x .020	.135	A09047-ND	.23	.11	640909-1
			.205 x .032	.135	A0907-ND	.23	.11	640911-1
			.187 x .020	.135	A0909-ND	.17	.09	640917-1
			.250 x .032	.140	A0903-ND	.17	.09	640903-1
16-14	9	Blue	.250 x .032	.170	A0904-ND	.17	.09	640905-1
			.205 x .020	.170	A0908-ND	.23	.11	640915-1
			.187 x .020	.170	A0910-ND	.23	.11	640919-1
			.110 x .020	.170	A0912-ND	.23	.11	640929-1
			.205 x .020	.170	A09048-ND	.23	.11	640913-1
14-12	9	Green	.250 x .032	.250	A0905-ND	.33	.16	42844-1
12-10	9	Yellow	.250 x .032	.250	A0906-ND	.25	.12	640907-1

† Standard †† Low Insertion ‡ Not UL or CSA approved or listed [1] Short [2] Long

PIDG - Spare Wire Caps

AWG	Fig.	Insulation Diameter Inch	Cap Insulation Color	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
Unstripped Wire							
—	10	.048 - .075	Transparent	A27478-ND	.25	.22	324484
—		.080 - .115	Red	A27479-ND	.27	.24	324485
—		.120 - .145	Blue	A27480-ND	.31	.28	324486
—		.080 - .115	Red	A27569-ND*	.39	.35	324694
—		.120 - .145	Blue	A27570-ND*	.44	.39	324695
Stripped Wire							
22-18	10	.124	Red	A27481-ND	.29	.26	328307
16-14		.149	Blue	A27482-ND	.37	.32	328308
12-10		.210	Yellow	A27483-ND	.41	.36	328309

* Moisture Resistant

PIDG - Butt Splice Step Down Adapter Inserts

AWG	Fig.	Use With Butt Splices	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
22-18 Red	11	A1080-ND	A27458-ND	.21	.19	327635
22-18 Red		A1086-ND	A27459-ND	.58	.51	327636
16-14 Blue		A1086-ND	A27460-ND	.37	.33	327637

Plasti-Bond Ring Tongue Terminal

Temperature Rating: 85°C Max. **Material:** • Insulation: Vinyl • Terminal Body and Metallic Sleeve: Copper per ASTM B-152 • Plating: Tin per MIL-T-10727.

AWG	Fig.	Stud Size	Insulation Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
20-16	1	14	.170	A27549-ND	.83	.73	36273
		14	.200	A27550-ND	1.40	1.23	320699
16-14	1	14	.190	A27551-ND	1.11	.98	35626
		1/4	.215	A27552-ND	1.06	.94	35628
12-10	1	1/4	.230	A27553-ND	1.57	1.38	35627

Plasti-Grip™ Terminals and Splices

Temperature Rating: 90°C Max. **Material:** • Insulation: Vinyl • Terminal Body: Copper per QQ-C-576 • Plating: Tin per MIL-T-10727. **AMP Wire Range:** 22-16 Terminals, Butt & Parallel Splices 22-16 Solid or Stranded, 16-14 Terminals, Butt & Parallel Splices 16-14 Solid or Stranded, 12-10 Terminals, Butt & Parallel Splices 12-10 Solid or Stranded. 600V Max (1000V Fixture or Sign). Recognized under the component program of Underwriters Laboratories Incorporated File No. E13288.

AWG	Fig.	Stud Size	Insul. Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
22-16 Red	1	2	.140	A0954-ND	.21	.18	34140
	1	4	.140	A0955-ND	.21	.18	34141
	1	6	.140	A0956-ND[2]	.21	.18	34144
	1	6	.140	A09016-ND[1]	.21	.18	34142
	1	8	.140	A0957-ND[2]	.11	.06	34148
	1	8	.140	A09017-ND[1]	.11	.06	34145
	1	10	.140	A0958-ND[2]	.20	.18	34149
	1	10	.140	A09018-ND[1]	.21	.18	34146
	1	10	.125	A09019-ND	.21	.18	32952
	1	1/4	.140	A0959-ND	.24	.21	34150
	1	5/16	.140	A0960-ND	.24	.21	34151
	1	3/8	.140	A0961-ND	.25	.22	34152
	4	6	.140	A0974-ND	.21	.18	320665
	4	8	.140	A0975-ND	.21	.18	34155
	4	10	.140	A0976-ND	.21	.18	34156
	5	6	.140	A0982-ND	.23	.20	322249
	5	8	.140	A0983-ND	.77	.68	324169
	5	10	.140	A0984-ND	.45	.39	328516
	6	4	.140	A0988-ND	.24	.21	52947
	6	6	.140	A0989-ND[1]	.23	.21	52949
	6	6	.140	A09027-ND[2]	.41	.36	52453
	6	8	.140	A0990-ND[1]	.29	.26	52950
	6	8	.140	A09028-ND[2]	.40	.36	52454
	6	10	.140	A0991-ND[1]	.35	.31	52951
	6	10	.140	A09029-ND[2]	.34	.30	52455
	8A	—	.120	A09033-ND	.24	.21	34067
	8A	—	.140	A0997-ND	.14	.07	34070
16-14 Blue	1	4	.170	A0962-ND	.27	.24	34157
	1	6	.170	A0963-ND[2]	.23	.20	34159
	1	6	.170	A09020-ND[1]	.21	.18	34158
16-14 Blue	1	8	.170	A0964-ND	.11	.06	34160
	1	10	.145	A09021-ND	.21	.18	32960
	1	10	.170	A0965-ND	.20	.18	34161
	1	1/4	.170	A0966-ND	.13	.06	34162
	1	5/16	.170	A0967-ND	.24	.21	34163
	1	3/8	.170	A0968-ND	.27	.24	34164
	4	6	.140	A0977-ND	.21	.18	322994
	4	8	.170	A0978-ND	.21	.18	34166
	4	10	.170	A0979-ND	.21	.18	34167
	5	6	.170	A0985-ND	.23	.20	324165
	5	8	.170	A09024-ND	.36	.32	53874-1
	6	6	.170	A0992-ND[1]	.23	.21	52955
	6	6	.170	A09030-ND[2]	.39	.34	52463
	6	8	.170	A0993-ND[1]	.28	.25	52956
	6	8	.170	A09031-ND[2]	.41	.36	52464
	6	10	.170	A0994-ND[1]	.24	.21	52957
	6	10	.170	A09032-ND[2]	.49	.43	52465
	8A	—	.170	A0998-ND	.14	.07	34071
	8A	—	.135" x .245"	A09034-ND	.84	.74	34204
12-10 Yellow	1	8	.250	A0969-ND	.27	.24	34853
	1	10	.250	A0970-ND[2]	.26	.23	34854
	1	10	.230	A09022-ND	.27	.24	34170
	1	1/4	.250	A0971-ND	.31	.28	34855
	1	1/2	.250	A09023-ND[1]	.55	.48	34837
	1	5/16	.250	A0972-ND	.21	.19	34856
	1	3/8	.230	A0973-ND	.31	.28	34173
	4	8	.250	A0980-ND	1.01	.89	35152
	4	10	.230	A0981-ND	.27	.24	34176
	5	6	.230	A0986-ND	.50	.44	324581
	5	8	.230	A0987-ND	.81	.72	324172
	5	10	.250	A09025-ND	.30	.27	52856
	8A	—	.230	A0999-ND	.22	.11	34072

[1] Short; [2] Long

Diamond Grip Terminal

This product line of terminals are designed for completely uniform reliability under the most critical conditions of vibrations, thermal shock, corrosion, tensions and current overload.

Material: Terminal Body and Metallic Sleeve: Copper per QQ-C-576 • Plating: Tin per MIL-T-10727
Wire: Stranded **Temperature Rating:** 170°C Max.

AWG	Fig.	Stud Size	Dim. – Inch W x L	Insulation Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
26-22	1	0	.140 x .464	.082	A28038-ND	.36	.32	31516
		2	.140 x .464	.082	A27397-ND	.36	.32	31518
		4	.203 x .585	.082	A28039-ND	.36	.32	31679
		6	.250 x .679	.082	A28040-ND	.36	.32	32861
22-16	1	4	.218 x .603	.125	A28041-ND	.37	.33	31094
		6	.218 x .603	.125	A27398-ND	.37	.33	31096
		6	.281 x .728	.125	A28042-ND	.36	.32	31269
		6	.281 x .728	.140	A28043-ND	.36	.32	31396
		8	.312 x .775	.125	A27399-ND	.36	.32	30996
		8	.312 x .775	.140	A28044-ND	.36	.32	31160
		8	.281 x .728	.125	A28045-ND	.36	.32	31270
		8	.281 x .728	.140	A28046-ND	.47	.42	31397
		10	.312 x .775	.125	A27400-ND	.37	.33	30997
		10	281 x .728	.140	A27401-ND	.36	.32	31398
16-14	1	6	.250 x .634	.170	A28047-ND	.51	.45	32190
		8	.343 x .790	.170	A28048-ND	.36	.32	30927
		10	.343 x .790	.150	A28049-ND	.37	.33	30993
		10	.343 x .790	.170	A28050-ND	.36	.32	30928
12-10	1	10	.375 x 1.007	.230	A27402-ND	.48	.42	31771
		1/4	.531 x 1.251	.230	A28051-ND	.54	.48	31772
		3/8	.593 x 1.345	.230	A28052-ND	.56	.49	31828

(Continued)

Terminyl Ring Tongue Terminals

These terminals have been designed to provide insulated terminals and splices for large wire sizes, many of which are used in airborne and ground support applications. **Temperature Rating:** 105°C Max. **Material:** Insulation: Nylon Terminal Body: ASTM B-152 • Plating: Tin per MIL-T-10727

AWG	Fig.	Stud Size	Dim. – Inch W x L	Insulation Dia. Inch	Digi-Key Part No.	Price Each		AMP Part No.
						10	100	
8 (red)	12	8	.478 x 1.425	.256	A27378-ND	1.31	1.15	53041
		10	.431 x 1.402	.256	A27379-ND	1.23	1.08	324043
		1/4	.478 x 1.425	.256	A27380-ND	1.40	1.23	324082
		5/16	.587 x 1.542	.256	A27381-ND	1.32	1.17	324044
		3/8	.587 x 1.542	.256	A27382-ND	1.30	1.14	324045
6 (blue)	12	10	.468 x 1.575	.314	A27383-ND	1.53	1.35	324046
		10	.398 x 1.700	.314	A27384-ND	1.79	1.58	53119-1
		1/4	.500 x 1.700	.314	A27385-ND	1.53	1.35	324047
		5/16	.625 x 1.762	.314	A27386-ND	1.53	1.35	324048
		3/8	.625 x 1.762	.314	A28015-ND	1.28	1.13	324049
4 (yellow)	12	8	.437 x 1.376	.382	A27387-ND	1.99	1.75	331456
		10	.546 x 1.812	.382	A27388-ND	2.03	1.79	324111
		10	.437 x 1.376	.382	A27554-ND	3.10	2.73	1-331456-0
		1/4	.546 x 1.812	.382	A27389-ND	1.85	1.63	324050
		5/16	.679 x 1.878	.382	A27390-ND	1.85	1.63	324051
		3/8	.679 x 1.878	.382	A27391-ND	2.11	1.85	324052
		1/2	.679 x 1.878	.382	A28016-ND	2.13	1.87	324114
2 (red)	12	10	.711 x 2.063	.468	A28017-ND	3.00	2.64	328655
		1/4	.679 x 2.045	.468	A27392-ND	2.41	2.12	324053
		5/16	.711 x 2.063	.468	A27393-ND	2.85	2.51	324112
		3/8	.711 x 2.063	.468	A27394-ND	2.41	2.12	324054
1/0 (blue)	12	1/4	.807 x 2.426	.580	A27395-ND	4.81	4.24	324056
		3/8	.807 x 2.426	.580	A27396-ND	3.28	2.89	324057

Solistrand™ Terminals and Splices

Temperature Rating: 170°C Max. **Material:** • Terminal Body: copper per ASTM B-152 • Plating: Tin per MIL-T-10727 **AMP Wire Range:** 22-16 Solid or Stranded, 16-14 Solid or Stranded, 14-12 Solid or Stranded, 12-10 Solid or Stranded, 8-600 MCM Solid or Stranded. UL Listed. CSA Certified. Military Approval.

Solistrand™ - Heavy Duty Ring Tongue

Fig.	Stud Size	Dimensions - Inch W x L	Digi-Key Part No.	Price Each		AMP Part No.
				10	100	
22-16 AWG						
13	4	.218 x .449	A0914-ND	.12	.11	34104
	6	.218 x .449	A0915-ND	.10	.05	34105
	8	.281 x .574	A0916-ND	.12	.11	34108
	10	.281 x .574	A0917-ND	.12	.11	34109
	1/4	.469 x .856	A0918-ND	.14	.12	34113
	5/16	.469 x .856	A0919-ND	.14	.13	34114
	3/8	.531 x .995	A0920-ND	.15	.13	34115
16-14 AWG						
13	6	.250 x .480	A0921-ND	.12	.11	34120
	8	.343 x .636	A0922-ND	.12	.11	34122
	10	.343 x .636	A0923-ND	.12	.11	34123
	1/4	.469 x .855	A0924-ND	.14	.12	34124
	5/16	.469 x .855	A0925-ND	.14	.13	34125
	3/8	.531 x .995	A0152-ND	.17	.15	34126
	8	.343 x .723	A27154-ND	.27	.24	35432
	10	.343 x .723	A27155-ND	.23	.20	34567
	1/4	.500 x .865	A27157-ND	.30	.26	35775
	5/16	.500 x .865	A27158-ND	.34	.30	35776
	3/8	.750 x 1.271	A27159-ND	.50	.44	327732
	1/2	.750 x 1.271	A27160-ND	1.57	1.39	321165
12-10 AWG						
13	6	.281 x .630	A0926-ND	.17	.15	35476
	8	.375 x .765	A0927-ND	.17	.15	32994
	10	.375 x .765	A0928-ND	.14	.07	33457
	1/4	.531 x 1.004	A0929-ND	.19	.17	33458
	5/16	.531 x 1.004	A0930-ND	.20	.18	33459
	3/8	.593 x 1.098	A0931-ND	.20	.18	33220

Solistrand™ - Spade Terminals

Fig.	Stud Size	Dimensions - Inch W x L	Digi-Key Part No.	Price Each		AMP Part No.
				10	100	
22-16 AWG						
14	2	.182 x .504	A0932-ND	.19	.17	53555-1
	4	.218 x .451	A09000-ND	.24	.21	321463
	6	.297 x .530	A09001-ND[1]	.12	.11	36195
	6	.250 x .623	A0933-ND[2]	.12	.10	323127
	8	.375 x .685	A0934-ND	.28	.25	34117
	10	.375 x .685	A0935-ND	.12	.11	34118
15	2	.182 x .504	A0939-ND	.46	.40	324605
	6	.296 x .514	A0940-ND[2]	.46	.40	320749
	6	.250 x .514	A09006-ND[1]	.46	.40	323136
	8	.296 x .514	A0941-ND[1]	.46	.40	52730
	8	.416 x .607	A09007-ND[2]	.14	.13	323124
16	4	.203 x .576	A0943-ND	.15	.14	53175-1
	6	.250 x .576	A0944-ND	.54	.47	53120-1
	8	.244 x .637	A09005-ND	.54	.47	53831-1
16-14 AWG						
14	6	.297 x .530	A09002-ND	.12	.11	322996
	6	.244 x .623	A27163-ND	.80	.71	330827
	8	.385 x .685	A09003-ND	.30	.26	34128
	10	.385 x .764	A27164-ND	.17	.15	33219
	10	.385 x .685	A09004-ND	.42	.37	34129
15	6	.294 x .514	A09008-ND	.46	.40	320855
	8	.294 x .514	A0942-ND	.14	.12	320856
	10	.294 x .514	A09009-ND	.25	.22	320857
16	6	.250 x .576	A0945-ND	.15	.14	53123-1
	8	.375 x .637	A0946-ND	.15	.14	53124-1
	10	.406 x .685	A0947-ND	.15	.14	53125-1
12-10 AWG						
14	6	.282 x .631	A0936-ND	.23	.21	322451
	8	.406 x .772	A0937-ND	.20	.17	32995
	10	.406 x .772	A27165-ND	.17	.15	33479
	10	.375 x .772	A0938-ND	.83	.73	35495
16	6	.250 x .636	A0948-ND	.21	.19	53126-1
	8	.375 x .729	A0949-ND	.69	.61	53127-1
	10	.406 x .777	A0950-ND	.22	.19	53128-1

[1] Short; [2] Long

Solistrand™ - Butt Splices

AWG	Fig.	Length Inch	Digi-Key Part No.	Price Each		AMP Part No.
				10	100	
26-22	17-C	.385	A09010-ND	.17	.15	321198
24-20	17-C	.490	A09011-ND	.18	.16	324001
22-16	17-A	.578	A0951-ND	.14	.07	31818
	17-B	.578	A09012-ND	.24	.21	33067
16-14	17-C	.591	A27207-ND	.24	.21	322459
	17-A	.567	A0952-ND	.17	.15	31819
	17-C	.591	A09013-ND	.28	.25	327025
	17-B	.567	A09014-ND	.27	.24	330368
14-12	17-B	.690	A27209-ND	.30	.26	321280
12-10	17-C	.765	A27210-ND	.32	.28	324893
	17-A	.565	A0953-ND	.20	.10	32151
	17-B	.567	A09015-ND	.80	.71	330369
8	17-A	.827	A27211-ND	.46	.40	34321
8	17-B	.827	A27212-ND	.55	.49	36906
6	17-A	1.015	A27213-ND	.80	.70	34322
6	17-B	1.015	A27214-ND	1.14	1.00	36886
4	17-A	1.140	A27215-ND	1.31	1.15	34323
2	17-A	1.265	A27216-ND	2.33	2.05	35189
2	17-B	1.265	A27217-ND	3.96	3.48	322246
1/0	17-D	1.412	A27218-ND	3.55	3.13	36957
2/0	17-D	1.437	A27219-ND	4.21	3.71	36958
3/0	17-D	1.480	A27220-ND	5.01	4.41	36959
4/0	17-D	1.484	A27221-ND	4.37	3.84	36960
250-300	17-D	2.093	A27222-ND	10.04	8.84	322279

ELECTRO-TAP Cable Connector/Splice

Housing Material: Nylon. **Contact Material:** Brass. **Contact Plating:** Tin

AWG	Fig.	Insul. Dia. Inch	Dimension – Inch			Color	Digi-Key Part No.	Price Each		AMP Part No.
			L	W	H			1	10	
22-18	18	.160	.687	.484	.444	Red	A1050-ND	.39	.31	53440-2
14-18		.160	.687	.484	.444	Blue	A1051-ND	.39	.31	53440-1

Closed End Splices

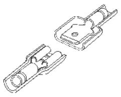
• For single and multiple wire applications • Nylon or vinyl or PVF^2 insulated • Temperature Ratings of 90°C, 105°C, 150°C • 300V, 600V or 1000V rated • Crescent crimp configuration • Covers wire ranges from 24 to 6 AWG (0.2 to =16 mm^2); 509 to 42, 700 CMA • Copper or steel splice material • Plated or unplated • Solid or stranded copper wire • UL and CSA approved.

AWG	Fig.	Insul. Color	Mat'l.	Open. Dia. Inch	Length Inch	Splice Mark*	Digi-Key Part No.	Price Each		AMP Part No.
								10	100	
Vinyl BOMB-TAIL Splices										
22-16	19	Blue	Copper	.173	.750	VS	A09052-ND	.24	.21	34306
		Trans.	Steel	.265	.825	ECV	A09053-ND	.11	.10	330021
		Purple	Copper	.235	.775	VS	A27475-ND	.12	.11	2-328375-3
		Trans.	Steel	.265	1.000	ECV	A27476-ND	.14	.12	328890
		Blue	Copper	.215	.800	VS	A27567-ND	.23	.21	34864
22-14	19	Red	Copper	.156	.729	VS	A09054-ND	.24	.21	34304
		Purple	Copper	.187	.740	VS	A09055-ND	.09	.04	36964
		Purple	Copper	.235	.900	ECV	A27568-ND	.15	.13	55843-1
22-12	19	Trans.	Copper	.360	1.500	ECV	A09056-ND	.14	.12	53234-1
		Trans.	Copper	.360	1.125	ECV	A27571-ND	.13	.11	329251
22-10	19	Purple	Copper	.312	1.010	VS	A09057-ND	.13	.12	36965
		Purple	Copper	.360	1.125	ECV	A09058-ND	.10	.05	321519
		Yellow	Copper	.235	.975	VS	A09059-ND	.27	.23	34308
		Yellow	Copper	.300	1.010	VS	A09060-ND[2]	.96	.85	34865
18-8	19	Green	Copper	.500	1.575	ECV	A09061-ND	.40	.35	320788
Nylon Molded Splices										
22-14	20	Trans.	Copper	.250	.680	ECN	A09062-ND	.13	.06	35115
22-10	20	Trans.	Copper	.375	.775	ECN	A09063-ND	.12	.06	35653
		Trans.	Copper	.375	.970	EC	A09064-ND	.16	.15	53915-1
		Trans.	Copper	.375	.720	EC	A27477-ND	.10	.09	328730

[2] Long

* **VS** = 300V, 90°C **ECV** = 600V max. Building Wiring, 1000V max. Fixtures and Signs, 105°C UL, 90°C CSA
ECN = 300V, 105°C **EC** = 600V max. Building Wiring, 1000V max. Fixtures and Signs, 105°C

A27223-ND	Crimp Tool for all Solistrand (except Flag Tongue Terminals)	**$187.50**
A9996-ND	PRO-CRIMPER II Hand Tool w/out Dies	**$75.00**
A9813-ND	Die Set for Uninsulated Terminals, use w/A9996	**$117.75**
A9991-ND	Die Set for Insulated Terminals, use w/A9996	**$45.00**
A9811-ND	Crimp Tool, Insulated Terminals w/Die Set	**$92.25**
A9812-ND	Crimp Tool, Uninsulated Terminals w/Die Set	**$168.00**
A09093-ND	Sealed Splice Connector Kit	**$111.18**
A9821-ND	PIDG and PLASTI-GRIP Connector Kit	**$112.50**
A28005-ND	Hand Tool for Fastons	**$330.00**
A28009-ND	Die Set for.187 and .250 Series (22-18 AWG), use w/A28005-ND	**$441.00**
A28010-ND	Die Set for.187 and .250 Series (16-14 AWG), use w/A28005-ND	**$441.00**
A27484-ND	Long Handle Tool for PIDG Spare Wire Caps (22-18 AWG)	**$261.11**
A27485-ND	Heavy Head Tool for PIDG Spare Wire Caps (12-10 AWG)	**$557.87**
A27486-ND	T-Head Tool for PIDG Spare Wire Caps (22-18 and 16-14 AWG)	**$848.21**

Fig. 1

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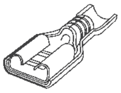
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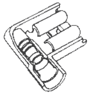
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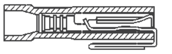
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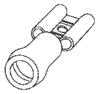
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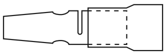
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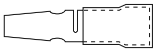
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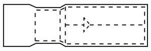
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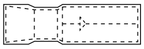
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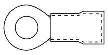
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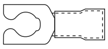
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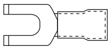
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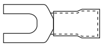
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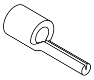
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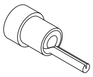
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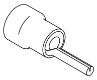
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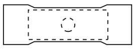
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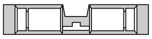
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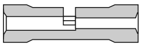
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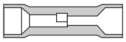
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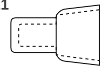
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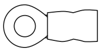
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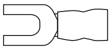
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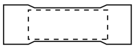
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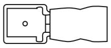
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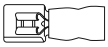


Fully-Insulated Quick Disconnects

Fig.	AWG	Crimp Tool #	Tab Size in. (mm)	Max. Wire Insul. Dia. in. (mm)	Digi-Key Part No.	Price Each			Molex Part No.
						10	100	500	
Avikrimp® - Male									
1	22-18 Red	15	.250 (6.35)	.140 (3.56)	WM18225-ND	.52	.43	.35	19001-0001
		16	.187 (4.75)	.140 (3.56)	WM18226-ND	.50	.42	.33	19001-0003
	16-14 Blue	15	.250 (6.35)	.170 (4.32)	WM18227-ND	.52	.43	.35	19001-0006
		16	.187 (4.75)	.170 (4.32)	WM18228-ND	.44	.37	.30	19001-0008
	12-10 Yellow	4	.250 (6.35)	.230 (5.84)	WM18229-ND	.50	.41	.33	19001-0010
Avikrimp® - Female									
1	22-18 Red	16	.250 (6.35)	.125 (3.18)	WM18230-ND	.24	.20	.16	19002-0001
		16	.187 (4.75)	.125 (3.18)	WM18231-ND	.44	.37	.29	19002-0005
	16-14 Blue	16	.250 (6.35)	.155 (3.94)	WM18232-ND	.44	.37	.30	19002-0024
		16	.187 (4.75)	.155 (3.94)	WM18233-ND	.30	.25	.20	19002-0028
	12-10 Yellow	16	.250 (6.35)	.245 (6.22)	WM18234-ND	.49	.41	.33	19002-0044
Insulkrimp® - Female (Standard Flare)									
2	26-24 Yellow	5	.250 (6.35)	.075 (1.91)	WM18235-ND	.18	.15	.12	19003-0071
		5	.187 (4.75)	.075 (1.91)	WM18236-ND	.18	.15	.12	19003-0064
	22-18 Red	16	.250 (6.35)	.135 (3.43)	WM18237-ND	.23	.19	.15	19003-0001
		16	.187 (4.75)	.135 (3.43)	WM18238-ND	.23	.19	.15	19003-0011
	16-14 Blue	16	.250 (6.35)	.145 (3.68)	WM18239-ND	.23	.19	.15	19003-0040
		16	.187 (4.75)	.160 (4.06)	WM18240-ND	.16	.13	.11	19003-0050
Insulkrimp® - Female (Expanded Flare)									
2	12-10 Yellow	16	.250 (6.35)	.275 (6.98)	WM18241-ND	.30	.25	.20	19005-0010

Avikrimp® Fully Pre-Insulated Quick Disconnect Flags

Fig.	AWG	Crimp Tool #	Tab Size in. (mm)	Max. Wire Insul. Dia. in. (mm)	Digi-Key Part No.	Price Each			Molex Part No.
						10	100	500	
3	22-18 Red	12	.250 (6.35)	.150 (3.81)	WM18242-ND	.51	.42	.34	19006-0001
		12	.187 (4.75)	.150 (3.81)	WM18245-ND	.51	.42	.34	19006-0005
	16-14 Blue	12	.250 (6.35)	.170 (4.32)	WM18243-ND	.51	.42	.34	19006-0011
		12	.187 (4.75)	.170 (4.32)	WM18246-ND	.51	.43	.34	19006-0015
	12-10 Yellow	13	.250 (6.35)	.248 (6.30)	WM18244-ND	1.69	1.41	1.13	19006-0019

Insulkrimp® Fully-Insulated Flag Quick Disconnects

Fig.	AWG	Crimp Tool #	Tab Size in. (mm)	Max. Wire Insul. Dia. in. (mm)	Digi-Key Part No.	Price Each			Molex Part No.
						10	100	500	
3	22-18 Red	14	.250 (6.35)	.175 (4.44)	WM18247-ND	.23	.19	.15	19007-0001
		14	.187 (4.75)	.175 (4.44)	WM18250-ND	.22	.19	.15	19007-0009
	16-14 Blue	14	.250 (6.35)	.200 (5.08)	WM18248-ND	.22	.19	.15	19007-0021
		14	.187 (4.75)	.200 (5.08)	WM18251-ND	.23	.19	.16	19007-0029
	12-10 Yellow	13	.250 (6.35)	.262 (6.65)	WM18249-ND	1.33	1.11	.89	19007-0040

Piggyback QD's Fully-Insulated Quick Disconnects

Fig.	AWG	Crimp Tool #	Tab Size in. (mm)	Max. Wire Insul. Dia. in. (mm)	Digi-Key Part No.	Price Each			Molex Part No.
						10	100	500	
4	22-18	11	.250 (6.35)	.060 (1.52)	WM18252-ND	.81	.68	.54	19013-0001
	16-14	11	.250 (6.35)	.145 (3.68)	WM18253-ND	.85	.71	.57	19013-0005
	12-10	11	.250 (6.35)	.150 (3.81)	WM18254-ND	.93	.78	.62	19013-0018

Avikrimp® Nylon Insulated w/ Vibration Support Quick Disconnects

Fig.	AWG	Crimp Tool #	Tab Size in. (mm)	Max. Wire Insul. Dia. in. (mm)	Digi-Key Part No.	Price Each			Molex Part No.
						10	100	500	
Female									
5	22-18	16	.250 x.032 (6.3 x 0.8)	.115 (2.9)	WM18255-ND	.19	.16	.13	19019-0012
		16	.187 x .020 (4.7 x 0.5)	.115 (2.9)	WM18257-ND	.19	.16	.13	19019-0006
		16	.110 x .032 (2.8 x 0.8)	.115 (2.9)	WM18259-ND	.19	.16	.13	19019-0004
		16	.110 x .020 (2.8 x 0.5)	.115 (2.9)	WM18260-ND	.19	.16	.13	19019-0001
	16-14	16	.250 x .032 (6.3 x 0.8)	.138 (3.5)	WM18262-ND	.19	.16	.13	19019-0031
		16	.187 x .020 (4.7 x 0.5)	.138 (3.5)	WM18258-ND	.19	.16	.13	19019-0027
		16	.110 x .020 (2.8 x 0.5)	.138 (3.5)	WM18261-ND	.19	.16	.13	19019-0022
	12-10	16	.250 x .032 (6.3 x 0.8)	.225 (5.7)	WM18256-ND	.30	.25	.20	19019-0037

Snap Plugs

Fig.	AWG	Crimp Tool #	Dia. in. (mm)	Max. Wire Insul. Dia. in. (mm)	Digi-Key Part No.	Price Each			Molex Part No.
						10	100	500	
Insulkrimp® (PVC insulation)									
6	22-18	18	.156 (3.96)	.140 (3.6)	WM18263-ND	.15	.12	.10	19034-0005
	16-14	19	.156 (3.96)	.175 (4.4)	WM18264-ND	.19	.16	.13	19034-0009
Avikrimp® (nylon insulation)									
7	22-18	18	.156 (3.96)	.140 (3.6)	WM18267-ND	.24	.20	.16	19036-0003
	16-14	9	.156 (3.96)	.170 (4.3)	WM18268-ND	.35	.29	.23	19036-0008

Snap Plug Receptacles

Fig.	AWG	Crimp Tool #	Snap Plug Dia. in. (mm)	Max. Wire Insul. Dia. in. (mm)	Digi-Key Part No.	Price Each			Molex Part No.
						10	100	500	
Insulkrimp® (PVC Insulation)									
8	22-18	20	.156 (3.9)	.140 (3.5)	WM18265-ND	.22	.18	.15	19038-0001
	16-14	21	.156 (3.9)	.170 (4.3)	WM18266-ND	.22	.18	.15	19038-0007
Avikrimp® (Nylon Insulation)									
9	22-18	20	.156 (3.9)	.125 (3.2)	WM18269-ND	.30	.25	.20	19039-0001
	16-14	21	.156 (3.9)	.150 (3.8)	WM18270-ND	.30	.25	.20	19039-0006

Standard Ring Tongue

Fig.	AWG	Crimp Tool #	Stud Size	Max. Width in. (mm)	Digi-Key Part No.	Price Each			Molex Part No.
						10	100	500	
Insulkrimp® (PVC Insulation)									
10	22-18	17	1-2	.235 (6.0)	WM18271-ND	.13	.11	.09	19070-0005
		17	3-4	.235 (6.0)	WM18272-ND	.13	.11	.09	19070-0007
		17	5-6	.264 (6.7)	WM18273-ND	.13	.11	.09	19070-0040
		17	8	.322 (8.2)	WM18274-ND	.13	.11	.09	19070-0013
		17	10	.322 (8.2)	WM18275-ND	.13	.11	.09	19070-0015
		17	1/4	.477 (12.1)	WM18276-ND	.18	.15	.12	19070-0023
		17	5/16	.477 (12.1)	WM18277-ND	.18	.15	.12	19070-0026
		17	3/8	.544 (13.8)	WM18278-ND	.18	.15	.12	19070-0033
	16-14	15	3-4	.260 (6.6)	WM18279-ND	.13	.11	.09	19070-0067
		15	5-6	.260 (6.6)	WM18280-ND	.13	.11	.09	19070-0069
		15	8	.322 (8.2)	WM18281-ND	.13	.11	.09	19070-0086
		15	10	.322 (8.2)	WM18282-ND	.13	.11	.09	19070-0090
		15	1/4	.477 (12.1)	WM18283-ND	.21	.18	.14	19070-0075
		15	5/16	.477 (12.1)	WM18284-ND	.21	.18	.14	19070-0078
		15	3/8	.544 (13.8)	WM18285-ND	.21	.18	.14	19070-0059
	12-10	15	5-6	.292 (7.4)	WM18286-ND	.17	.14	.11	19070-0143
		15	8	.292 (7.4)	WM18287-ND	.17	.14	.11	19070-0145
		15	10	.385 (9.8)	WM18288-ND	.17	.14	.11	19070-0123
		15	1/4	.540 (13.7)	WM18289-ND	.19	.16	.13	19070-0132
		15	5/16	.540 (13.7)	WM18290-ND	.19	.16	.13	19070-0136
		15	3/8	.598 (15.2)	WM18291-ND	.20	.17	.13	19070-0153
		10	1/2	.760 (19.3)	WM18292-ND	.35	.29	.23	19070-0109
Avikrimp® (Nylon Insulation)									
10	22-18	17	1-2	.235 (6.0)	WM18293-ND	.20	.16	.13	19073-0005
		17	3-4	.235 (6.0)	WM18294-ND	.20	.16	.13	19073-0007
		17	5-6	.264 (6.7)	WM18295-ND	.20	.16	.13	19073-0038
		17	8	.322 (8.2)	WM18296-ND	.20	.16	.13	19073-0013
		17	10	.322 (8.2)	WM18297-ND	.20	.16	.13	19073-0017
		17	1/4	.477 (12.1)	WM18298-ND	.25	.21	.17	19073-0024
		17	5/16	.477 (12.1)	WM18299-ND	.25	.21	.17	19073-0027
		17	3/8	.544 (13.8)	WM18300-ND	.25	.21	.17	19073-0032
	16-14	15	3-4	.260 (6.6)	WM18301-ND	.20	.16	.13	19073-0065
		15	5-6	.260 (6.6)	WM18302-ND	.20	.16	.13	19073-0067
		15	8	.322 (8.2)	WM18303-ND	.20	.16	.13	19073-0085
		15	10	.322 (8.2)	WM18304-ND	.20	.16	.13	19073-0087
		15	1/4	.477 (12.1)	WM18305-ND	.25	.21	.17	19073-0076
		15	5/16	.477 (12.1)	WM18306-ND	.25	.21	.17	19073-0079
		15	3/8	.544 (13.8)	WM18307-ND	.25	.21	.17	19073-0059
	12-10	15	5-6	.292 (7.4)	WM18308-ND	.25	.21	.17	19073-0216
		15	8	.292 (7.4)	WM18309-ND	.25	.21	.17	19073-0222
		15	10	.385 (9.8)	WM18310-ND	.26	.21	.17	19073-0170
		15	1/4	.540 (13.7)	WM18311-ND	.27	.22	.18	19073-0188
		15	5/16	.540 (13.7)	WM18312-ND	.27	.22	.18	19073-0200
		15	3/8	.598 (15.2)	WM18313-ND	.28	.23	.19	19073-0236
		15	1/2	.760 (19.3)	WM18314-ND	.33	.28	.22	19073-0145

(Continued)

Snap Spade Terminals

Fig.	AWG	Crimp Tool #	Stud Size	Max Wire Insul. Dia. in. (mm)	Max. Width in (mm)	Digi-Key Part No.	Price Each			Molex Part No.
							10	100	500	
Insulkrimp® (PVC Insulation)										
11	22-18 Red	17	5-6	.145 (3.7)	.260 (6.6)	WM18315-ND	.15	.12	.10	19099-0009
		15	8	.145 (3.7)	.300 (7.6)	WM18316-ND	.15	.12	.10	19099-0003
		17	10	.145 (3.7)	.340 (8.6)	WM18317-ND	.15	.12	.10	19099-0015
	16-14 Blue	15	5-6	.175 (4.4)	.260 (6.6)	WM18318-ND	.15	.12	.10	19099-0027
		15	8	.175 (4.4)	.320 (8.1)	WM18319-ND	.15	.12	.10	19099-0032
		15	10	.175 (4.4)	.340 (8.6)	WM18320-ND	.15	.12	.10	19099-0034
	12-10 Yellow	15	5-6	.250 (6.4)	.260 (6.6)	WM18321-ND	.19	.16	.13	19099-0044
		15	8	.250 (6.4)	.330 (8.4)	WM18322-ND	.19	.16	.13	19099-0038
		15	10	.250 (6.4)	.340 (8.6)	WM18323-ND	.19	.16	.13	19099-0050
Avikrimp® (nylon Insulation)										
11	22-18 Red	17	5-6	.140 (3.6)	.260 (6.6)	WM18324-ND	.20	.17	.14	19115-0009
		17	5-6	.140 (3.6)	.270 (6.8)	WM18325-ND	.20	.17	.14	19115-0001
		17	8	.140 (3.6)	.300 (7.6)	WM18326-ND	.20	.17	.14	19115-0003
		17	8	.140 (3.6)	.320 (8.1)	WM18327-ND	.20	.17	.14	19115-0012
		17	10	.140 (3.6)	.340 (8.6)	WM18328-ND	.20	.17	.14	19115-0014
	16-14 Blue	15	5-6	.170 (4.3)	.260 (6.6)	WM18329-ND	.20	.17	.14	19115-0024
		15	5-6	.170 (4.3)	.270 (6.8)	WM18330-ND	.20	.17	.14	19115-0016
		15	8	.170 (4.3)	.320 (8.1)	WM18331-ND	.20	.17	.14	19115-0079
		15	10	.170 (4.3)	.340 (8.6)	WM18332-ND	.20	.17	.14	19115-0031
	12-10 Yellow	15	5-6	.225 (5.7)	.260 (6.6)	WM18333-ND	.27	.23	.18	19115-0042
		15	8	.225 (5.7)	.330 (8.4)	WM18334-ND	.26	.21	.17	19115-0035
		15	10	.225 (5.7)	.340 (8.6)	WM18335-ND	.27	.23	.18	19115-0048

Flanged Spade Terminals

Fig.	AWG	Crimp Tool #	Stud Size	Max Wire Insul. Dia. in. (mm)	Max. Width in (mm)	Digi-Key Part No.	Price Each			Molex Part No.
							10	100	500	
Insulkrimp® (PVC Insulation)										
12	22-18 Red	15	5-6	.145 (3.7)	.301 (7.6)	WM18336-ND	.12	.10	.08	19121-0005
		15	8	.145 (3.7)	.301 (7.6)	WM18337-ND	.12	.10	.08	19121-0007
		15	10	.145 (3.7)	.301 (7.6)	WM18338-ND	.13	.11	.09	19121-0009
	16-14 Blue	15	5-6	.175 (4.4)	.301 (7.6)	WM18339-ND	.13	.11	.09	19121-0026
		15	8	.175 (4.4)	.301 (7.6)	WM18340-ND	.13	.11	.09	19121-0028
		15	10	.175 (4.4)	.301 (7.6)	WM18341-ND	.13	.11	.09	19121-0030
	12-10 Yellow	15	8	.250 (6.4)	.385 (9.8)	WM18342-ND	.15	.12	.10	19121-0053
		15	10	.250 (6.4)	.385 (9.8)	WM18343-ND	.15	.12	.10	19121-0056
Avikrimp® (Nylon Insulation)										
12	22-18	17	5-6	.140 (3.6)	.301 (7.6)	WM18344-ND	.20	.16	.13	19127-0007
		17	10	.140 (3.6)	.301 (7.6)	WM18346-ND	.20	.16	.13	19127-0012
	16-14 Blue	15	5-6	.170 (4.3)	.301 (7.6)	WM18347-ND	.20	.16	.13	19127-0039
		15	8	.170 (4.3)	.301 (7.6)	WM18348-ND	.20	.16	.13	19127-0042
		15	10	.170 (4.3)	.301 (7.6)	WM18349-ND	.20	.16	.13	19127-0099
	12-10 Yellow	15	8	.225 (5.7)	.385 (9.8)	WM18350-ND	.27	.22	.18	19127-0086
		15	10	.225 (5.7)	.385 (9.8)	WM18351-ND	.27	.22	.18	19127-0089

Spade Tongue Terminals

Fig.	AWG	Crimp Tool #	Stud Size	Max Wire Insul. Dia. in. (mm)	Max. Width in (mm)	Digi-Key Part No.	Price Each			Molex Part No.
							10	100	500	
Insulkrimp® (PVC Insulation)										
13	22-18 Red	17	5-6	.145 (3.7)	.326 (8.3)	WM18352-ND	.12	.10	.08	19144-0001
		17	8	.145 (3.7)	.326 (8.3)	WM18353-ND	.13	.11	.09	19144-0003
		17	10	.145 (3.7)	.326 (8.3)	WM18354-ND	.13	.11	.09	19144-0005
	16-14 Blue	15	5-6	.175 (4.4)	.305 (7.7)	WM18355-ND	.14	.12	.09	19144-0018
		15	8	.175 (4.4)	.305 (7.7)	WM18356-ND	.14	.12	.09	19144-0020
		15	8	.175 (4.4)	.372 (9.4)	WM18357-ND	.13	.11	.09	19144-0024
		15	10	.175 (4.4)	.372 (9.4)	WM18358-ND	.13	.11	.09	19144-0026
	12-10 Yellow	15	5-6	.250 (6.4)	.385 (9.8)	WM18359-ND	.15	.12	.10	19144-0037
		15	8	.250 (6.4)	.385 (9.8)	WM18360-ND	.15	.12	.10	19144-0039
		15	10	.250 (6.4)	.385 (9.8)	WM18361-ND	.15	.12	.10	19144-0042
		15	1/4	.250 (6.4)	.543 (13.8)	WM18362-ND	.15	.13	.10	19144-0046
Avikrimp® (Nylon Insulation)										
13	22-18 Red	17	5-6	.140 (3.6)	.326 (8.3)	WM18363-ND	.20	.16	.13	19198-0070
		17	8	.140 (3.6)	.326 (8.3)	WM18364-ND	.20	.16	.13	19198-0004
		17	10	.140 (3.6)	.326 (8.3)	WM18365-ND	.20	.16	.13	19198-0006
	16-14 Blue	15	5-6	.170 (4.3)	.305 (7.7)	WM18366-ND	.22	.18	.15	19198-0016
		15	8	.170 (4.3)	.305 (7.7)	WM18367-ND	.22	.18	.15	19198-0019
		15	10	.170 (4.3)	.372 (9.4)	WM18369-ND	.20	.16	.13	19198-0025
	12-10 Yellow	15	5-6	.225 (5.7)	.385 (9.8)	WM18370-ND	.31	.26	.21	19198-0044
		15	8	.225 (5.7)	.385 (9.8)	WM18371-ND	.25	.21	.17	19198-0047
		15	10	.225 (5.7)	.385 (9.8)	WM18372-ND	.25	.21	.17	19198-0050
		15	1/4	.225 (5.7)	.543 (13.8)	WM18373-ND	.28	.24	.19	19198-0056

Wire Pin Terminals

Fig.	AWG	Crimp Tool #	Pin Dia. in. (mm)	Max Wire Insul. Dia. in. (mm)	Digi-Key Part No.	Price Each			Molex Part No.
						10	100	500	
Krimptite® (Non-insulated)									
14	22-18	22	.08 (2.03)	—	WM18374-ND	.09	.08	.06	19211-0003
	16-14	22	.08 (2.03)	—	WM18375-ND	.12	.10	.08	19211-0005
	12-10	22	.12 (3.05)	—	WM18376-ND	.17	.14	.11	19211-0001
Insulkrimp® (PVC Insulation)									
15	22-18 Red	15	.08 (2.03)	.145 (3.68)	WM18377-ND	.14	.11	.09	19212-0003
	16-14 Blue	15	.08 (2.03)	.175 (4.44)	WM18378-ND	.16	.13	.11	19212-0005
	12-10 Yellow	15	.12 (3.05)	.25 (6.35)	WM18379-ND	.21	.18	.14	19212-0001
Avikrimp® (Nylon Insulation)									
16	22-18 Red	15	.08 (2.03)	.14 (3.56)	WM18380-ND	.22	.18	.15	19213-0009
	16-14 Blue	15	.08 (2.03)	.17 (4.32)	WM18381-ND	.23	.19	.16	19213-0011
	12-10 Yellow	15	.12 (3.05)	.225 (5.71)	WM18382-ND	.31	.26	.21	19213-0007

Butt Splices

Fig.	AWG	Crimp Tool #	O.D. in. (mm)	Digi-Key Part No.	Price Each			Molex Part No.
					10	100	500	
Insulkrimp® (PVC Insulation)								
17	22-18	18	.135 (3.4)	WM18383-ND	.12	.10	.08	19154-0004
	16-14	9	.160 (4.1)	WM18384-ND	.12	.10	.08	19154-0015
	12-10	15	.220 (5.6)	WM18385-ND	.17	.14	.11	19154-0028

Window Butt Splices

Fig.	AWG	Crimp Tool #	Max Wire Insul. Dia. in. (mm)	Digi-Key Part No.	Price Each			Molex Part No.
					10	100	500	
18	22-18 Red	15	.140 (3.56)	WM18386-ND	.36	.30	.24	19199-0007
	16-14 Blue	15	.170 (4.32)	WM18387-ND	.38	.31	.25	19199-0009
	12-10 Yellow	15	.228 (5.79)	WM18388-ND	.53	.44	.35	19199-0011

Step Down Butt Connectors

Fig.	AWG	Crimp Tool #	Insulation Color	Digi-Key Part No.	Price Each			Molex Part No.
					10	100	500	
19	16/14 to 22/18	17	Non-Insulated	WM18389-ND	.81	.68	.54	19215-0013
	12/10 to 16/14	17	Non-Insulated	WM18390-ND	.90	.75	.60	19215-0023
20	16/14 to 22/18	9	Blue w/Red Stripe	WM18391-ND	.78	.65	.52	19154-0022
	12/10 to 16/14	10	Yellow w/Blue Stripe	WM18392-ND	.94	.78	.63	19154-0035

Nylon-Insulated, Closed-End Connectors

Fig.	AWG	Crimp Tool #	Outside Diameter in. (mm)	Digi-Key Part No.	Price Each			Molex Part No.
					10	100	500	
21	22-14	6	.31 (7.8)	WM18393-ND	.10	.08	.07	19160-0012
	22-12	7	.35 (8.9)	WM18394-ND	.11	.09	.07	19160-0009
	16-10	6	.44 (11.2)	WM18395-ND	.15	.12	.10	19160-0002
	8	8	.56 (14.2)	WM18396-ND	.29	.24	.20	19160-0024

Perma-Seal - All Weather, Heat-Sealable Nylon Terminals and Splices

Fig.	AWG	Crimp Tool #	Stud Size	Digi-Key Part No.	Price Each			Molex Part No.
					10	100	500	
Ring								
22	22/18	1	6	WM18397-ND	.68	.57	.46	19164-0085
		1	8	WM18398-ND	.68	.57	.46	19164-0086
		1	10	WM18399-ND	.68	.57	.46	19164-0003
		1	1/4	WM18400-ND	.68	.57	.46	19164-0004
		1	3/8	WM18401-ND	.72	.60	.48	19164-0005
	16/14	1	6	WM18402-ND	.70	.59	.47	19164-0032
		1	8	WM18403-ND	.70	.59	.47	19164-0033
		1	10	WM18404-ND	.70	.59	.47	19164-0034
		1	1/4	WM18405-ND	.72	.60	.48	19164-0026
		1	5/16	WM18406-ND	.72	.60	.48	19164-0027
		1	3/8	WM18407-ND	.74	.62	.50	19164-0020
	12/10	1	6	WM18408-ND	.77	.64	.52	19164-0061
		1	8	WM18409-ND	.77	.64	.52	19164-0062
		1	10	WM18410-ND	.78	.65	.52	19164-0065
		1	1/4	WM18411-ND	.78	.65	.52	19164-0066
		1	5/16	WM18412-ND	.78	.65	.52	19164-0067
		1	3/8	WM18413-ND	.79	.66	.53	19164-0068
		1	1/2	WM18414-ND	.80	.67	.53	19164-0058
Spade								
23	22/18	1	6	WM18415-ND	.68	.57	.46	19164-0006
		1	8	WM18416-ND	.68	.57	.46	19164-0007
		1	10	WM18417-ND	.68	.57	.46	19164-0008
	16/14	1	6	WM18418-ND	.71	.59	.48	19164-0028
		1	8	WM18419-ND	.71	.59	.48	19164-0029
		1	10	WM18420-ND	.71	.59	.48	19164-0030
	12/10	1	6	WM18421-ND	.77	.64	.51	19164-0069
		1	8	WM18422-ND	.77	.64	.51	19164-0070
		1	10	WM18423-ND	.80	.67	.53	19164-0072
		1	1/4	WM18424-ND	.80	.67	.53	19164-0073
Butt Splices								
24	22-18	1	—	WM18425-ND	1.05	.87	.70	19164-0013
	16-14	1	—	WM18426-ND	1.05	.87	.70	19164-0044
	12-10	1	—	WM18427-ND	1.18	.98	.79	19164-0056
Fig.	**AWG**	**Crimp Tool #**	**Tab Size in. (mm)**	**Digi-Key Part No.**	**Price Each 10**	**100**	**500**	**Molex Part No.**
Quick Disconnect Couplers - Male								
25	22/18	3	.250 (6.35)	WM18428-ND	.99	.82	.66	19164-0015
	16/14	3	.250 (6.35)	WM18430-ND	1.27	1.06	.85	19164-0048
	12/10	2	.250 (6.35)	WM18432-ND	1.14	.95	.76	19164-0075
Quick Disconnect Couplers - Female								
26	22/18	3	.250 (6.35)	WM18429-ND	.97	.81	.65	19164-0017
	16/14	3	.250 (6.35)	WM18431-ND	1.27	1.06	.85	19164-0050
	12/10	2	.250 (6.35)	WM18433-ND	1.13	.94	.75	19164-0076

Crimp Tools

WM9938-ND	**#1**	Sealed Ring, Spade & Butt	$108.85
WM9939-ND	**#2**	Sealed, 10-12 AWG .250” (6.35mm)	$479.98
WM9940-ND	**#3**	Sealed, 14-22 AWG .250” (6.35mm)	$82.34
WM9941-ND	**#4**	10-12 AWG .250” (6.35mm)	$348.06
WM9942-ND	**#5**	24-26 AWG .187” (4.75mm) and .250” (6.35mm)	$302.51
WM9943-ND	**#6**	Splice 14-22 and 10-16 AWG	$293.32
WM9944-ND	**#7**	Splice 12-22 AWG	$238.55
WM9945-ND	**#8**	Splice 8 AWG	$343.90
WM9946-ND	**#9**	Butt Splice 14-16 AWG	$302.51
WM9947-ND	**#10**	Butt Splice 10-12 AWG	$302.51
WM9948-ND	**#11**	Piggyback .250” QD	$306.92
WM9949-ND	**#12**	Flag QD’s .187” (4.75mm) and .250” (6.35mm)	$368.30
WM9950-ND	**#13**	Flag QD’s .250” (6.35mm)10-12 AWG	$507.53
WM9951-ND	**#14**	Flag QD’s .187” (4.75mm)	$259.66
WM9952-ND	**#15**	Terminals/Splices 10-22 AWG	$302.51
WM9953-ND	**#16**	Quick Connects 10-22 AWG	$302.51
WM9954-ND	**#17**	Terminals/Splices 10-22 AWG	$302.51
WM9955-ND	**#18**	Snap Plug 18-22 AWG	$302.51
WM9956-ND	**#19**	Snap Plug 14-16 AWG	$302.51
WM9957-ND	**#20**	Snap Plug 18-22 AWG	$302.51
WM9958-ND	**#21**	Snap Plug14-16 AWG	$246.32
WM9959-ND	**#22**	Wire Pins 10-22 AWG	$222.50

Amphenol

Circular PT Bayonet Lock Connectors
with Solder Contacts (MIL-C-26482 Series 1 Type)

Aluminum shell components. Standard olive drab, electrically conductive cadmium plated. Dependable 5 key/keyway polarization with bayonet lock coupling assures positive mating. Spring tension provided by a wave washer in the coupling nut ensures maintenance of interfacial seal between mating halves. Insert and main joint gasket molded from resilient neoprene. **Solder contacts** are installed. Pins and sockets are copper alloy/gold plated. **Strain relief** is included on plug.

PT solder series is UL recognized under file #E115497, Section 5

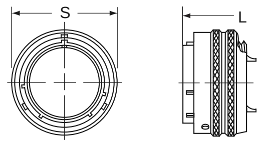


Fig. 1A

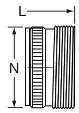


Fig. 1B

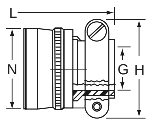


Fig. 1C *NEW!*

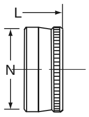
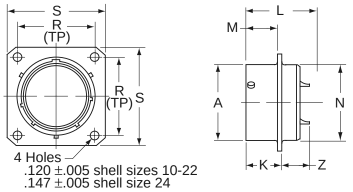


Fig. 2



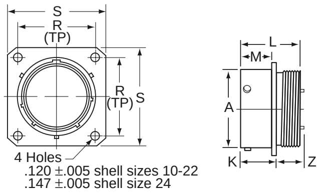


Fig. 3A *NEW!*

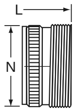


Fig. 3B *NEW!*

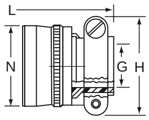


Fig. 3C *NEW!*

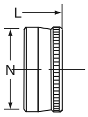
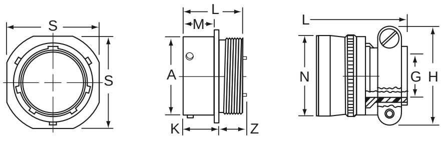
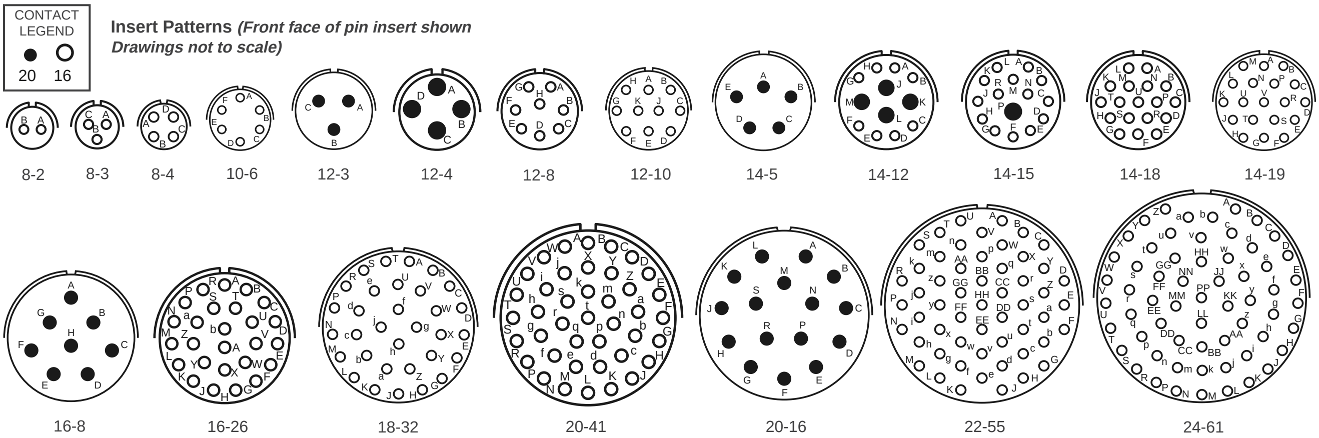


Fig. 4 *NEW!*



Insert Patterns *(Front face of pin insert shown*
Drawings not to scale)



8-2, 8-3, 8-4, 10-6, 12-3, 12-4, 12-8, 12-10, 14-5, 14-12, 14-15, 14-18, 14-19

16-8, 16-26, 18-32, 20-41, 20-16, 22-55, 24-61

Fig.	Shell Size/ Insert Arrange-ment No.	No. of Contacts/ Size	Description	Digi-Key Part No.	Price Each 1	10	50	Dimensions in Inches A Dia. +.001 –.005	G ±.010	H Max.	K +.020 –.010	L Max.	M +.010 –.000	N Dia. Max.	R (TP)	S Dia. Max.	Z Max.	Amphenol Part No.
1B	8-4	4/20	Plug w/pins	PT06E8-4P(SR)-ND*	26.59	17.03	15.08	—	.125	.812	—	1.906	—	—	—	.750	—	PT06E8-4P(SR)
1B			Plug w/sockets	PT06E8-4S(SR)-ND*	26.63	17.05	15.10	—	.125	.812	—	1.906	—	—	—	.750	—	PT06E8-4S(SR)
2			Recept. w/pins	PT02A8-4P-ND	10.85	6.51	5.07	.473	—	—	.493	.825	.431	.449	.594	.812	.465	PT02A8-4P
2			Recept. w/sockets	PT02A8-4S-ND	10.06	7.05	5.24	.473	—	—	.493	.825	.431	.449	.594	.812	.465	PT02A8-4S
1B	10-6	6/20	Plug w/pins	PT06E10-6P(SR)-ND*	28.58	18.30	16.20	—	.188	.875	—	1.906	—	—	—	.869	—	PT06E10-6P(SR)
1B			Plug w/sockets	PT06E10-6S(SR)-ND*	29.97	19.18	16.99	—	.188	.875	—	1.906	—	—	—	.869	—	PT06E10-6S(SR)
2			Recept. w/pins	PT02A10-6P-ND	11.68	7.01	5.45	.590	—	—	.493	.825	.431	.573	.719	.938	.465	PT02A10-6P
2			Recept. w/sockets	PT02A10-6S-ND	11.69	8.18	6.08	.590	—	—	.493	.825	.431	.573	.719	.938	.465	PT02A10-6S
1B	12-3	3/16	Plug w/pins	PT06E12-3P(SR)-ND*	27.75	17.76	15.73	—	.312	1.000	—	1.906	—	—	—	1.013	—	PT06E12-3P(SR)
1B			Plug w/sockets	PT06E12-3S(SR)-ND*	29.67	18.99	16.82	—	.312	1.000	—	1.906	—	—	—	1.013	—	PT06E12-3S(SR)
2			Recept. w/pins	PT02A12-3P-ND	17.50	11.43	9.59	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	PT02A12-3P
2			Recept. w/sockets	PT02A12-3S-ND	19.53	12.75	10.70	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	PT02A12-3S
1B	12-10	10/20	Plug w/pins	PT06E12-10P(SR)-ND*	27.16	17.39	15.40	—	.312	1.000	—	1.906	—	—	—	.1.013	—	PT06E12-10P(SR)
1B			Plug w/sockets	PT06E12-10S(SR)-ND*	29.57	18.93	16.76	—	.312	1.000	—	1.906	—	—	—	1.013	—	PT06E12-10S(SR)
2			Recept. w/pins	PT02A12-10P-ND	16.65	10.87	9.12	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	PT02A12-10P
2			Recept. w/sockets	PT02A12-10S-ND	19.19	12.53	10.51	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	PT02A12-10S
1B	14-5	5/16	Plug w/pins	PT06E14-5P(SR)-ND*	32.05	20.51	18.16	—	.375	1.125	—	1.906	—	—	—	1.156	—	PT06E14-5P(SR)
1B			Plug w/sockets	PT06E14-5S(SR)-ND*	31.21	21.85	19.51	—	.375	1.125	—	1.906	—	—	—	1.156	—	PT06E14-5S(SR)
2			Recept. w/pins	PT02A14-5P-ND	15.15	10.61	7.88	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02A14-5P
2			Recept. w/sockets	PT02A14-5S-ND	17.63	11.51	9.66	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02A14-5S
1B	14-19	19/20	Plug w/pins	PT06E14-19P(SR)-ND*	31.36	21.95	19.60	—	.375	1.125	—	1.906	—	—	—	1.156	—	PT06E14-19P(SR)
1B			Plug w/sockets	PT06E14-19S(SR)-ND*	31.46	22.02	19.66	—	.375	1.125	—	1.906	—	—	—	1.156	—	PT06E14-19S(SR)
2			Recept. w/pins	PT02A14-19P-ND	14.11	9.88	7.34	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02A14-19P
2			Recept. w/sockets	PT02A14-19S-ND	14.12	9.89	7.35	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02A14-19S
1B	16-8	8/16	Plug w/pins	PT06E16-8P(SR)-ND*	35.10	24.57	21.94	—	.500	1.188	—	2.047	—	—	—	1.281	—	PT06E16-8P(SR)
1B			Plug w/sockets	PT06E16-8S(SR)-ND*	39.58	27.71	24.74	—	.500	1.188	—	2.047	—	—	—	1.281	—	PT06E16-8S(SR)
2			Recept. w/pins	PT02A16-8P-ND	18.08	11.80	9.90	1.00	—	—	.493	.825	.431	.949	.969	1.219	.465	PT02A16-8P
2			Recept. w/sockets	PT02A16-8S-ND	23.39	15.27	12.81	1.00	—	—	.493	.825	.431	.949	.969	1.219	.465	PT02A16-8S
1B	20-16	16/16	Plug w/pins	PT06E20-16P(SR)-ND*	46.70	32.69	29.19	—	.625	1.438	—	2.250	—	—	—	1.531	—	PT06E20-16P(SR)
1B			Plug w/sockets	PT06E20-16S(SR)-ND*	56.73	39.71	35.46	—	.625	1.438	—	2.250	—	—	—	1.531	—	PT06E20-16S(SR)
2			Recept. w/pins	PT02A20-16P-ND	24.41	15.63	13.84	1.250	—	—	.650	1.076	.556	1.199	1.156	1.438	.526	PT02A20-16P
2			Recept. w/sockets	PT02A20-16S-ND	31.73	22.22	19.84	1.250	—	—	.650	1.076	.556	1.199	1.156	1.438	.526	PT02A20-16S
1B	22-55	55/20	Plug w/pins	PT06E22-55P(SR)-ND*	56.73	39.72	35.46	—	.750	1.625	—	2.250	—	—	—	1.656	—	PT06E22-55P(SR)
1B			Plug w/sockets	PT06E22-55S(SR)-ND*	60.83	42.59	38.03	—	.750	1.625	—	2.250	—	—	—	1.656	—	PT06E22-55S(SR)
2			Recept. w/pins	PT02A22-55P-ND	30.31	21.22	18.95	1.375	—	—	.650	1.076	.556	1.323	1.250	1.562	.526	PT02A22-55P
2			Recept. w/sockets	PT02A22-55S-ND	34.41	24.09	21.51	1.375	—	—	.650	1.076	.556	1.323	1.250	1.562	.526	PT02A22-55S

*(SR) at end of part number designates that a strain relief is included

(Continued)

Circular PT Bayonet Lock Connectors

with Solder Contacts (MIL-C-26482 Series 1 Type) *(Cont.)*

Fig.	Shell Size/ Insert Arrange-ment No.	No. of Contacts/ Size	Description	Digi-Key Part No.	Price Each			Dimensions in Inches										Amphenol Part No.*
					1	10	50	A Dia. +.001 –.005	G ±.010	H Max.	K +.020 –.010	L Max.	M +.010 –.000	N Dia. Max.	R (TP)	S Dia. Max.	Z Max.	
1B	8-2	2/20	Plug w/sockets	PT06A-8-2S(SR)-ND* *NEW!*	21.07	13.75	11.54	—	.125	.812	—	1.906	—	.550	—	.750	—	PT06A-8-2S(SR)
2			Recept. w/pins	PT02A-8-2P-ND *NEW!*	10.55	7.39	5.49	.473	—	—	.493	.825	.431	.449	.594	.812	.465	PT02A-8-2P
1B	8-3	3/20	Plug w/sockets	PT06A-8-3S(SR)-ND* *NEW!*	22.09	14.42	12.09	—	.125	.812	—	1.906	—	.550	—	.750	—	PT06A-8-3S(SR)
1B			Plug w/sockets	PT06E-8-3S(SR)-ND* *NEW!*	22.73	14.55	12.88	—	.125	.812	—	1.906	—	.550	—	.750	—	PT06E-8-3S(SR)
2			Recept. w/pins	PT02A-8-3P-ND *NEW!*	11.83	8.28	6.15	.473	—	—	.493	.825	.431	.449	.594	.812	.465	PT02A-8-3P
2			Recept. w/pins	PT02E-8-3P-ND *NEW!*	10.05	6.03	4.69	.473	—	—	.493	.825	.431	.449	.594	.812	.465	PT02E-8-3P
1B	8-4	4/20	Plug w/pins	PT06A-8-4P(SR)-ND* *NEW!*	19.76	12.90	10.82	—	.125	.812	—	1.906	—	.550	—	.750	—	PT06A-8-4P(SR)
1B			Plug w/sockets	PT06A-8-4S(SR)-ND* *NEW!*	20.19	13.18	11.05	—	.125	.812	—	1.906	—	.550	—	.750	—	PT06A-8-4S(SR)
1A			Plug w/sockets	PT06A-8-4S-ND *NEW!*	15.83	11.08	8.23	—	—	—	—	1.609	—	.590	—	.750	—	PT06A-8-4S
1C			Plug w/sockets	PT06E-8-4S-ND *NEW!*	16.74	10.93	9.17	—	—	—	—	1.266	—	.560	—	.750	—	PT06E-8-4S
2			Recept. w/pins	PT02E-8-4P-ND *NEW!*	11.85	7.11	5.53	.473	—	—	.493	.825	.431	.449	.594	.812	.465	PT02E-8-4P
2			Recept. w/sockets	PT02E-8-4S-ND *NEW!*	10.86	6.52	5.07	.473	—	—	.493	.825	.431	.449	.594	.812	.465	PT02E-8-4S
1B	10-6	6/20	Plug w/pins	PT06A-10-6P(SR)-ND* *NEW!*	19.97	13.04	10.94	—	.188	.875	—	1.906	—	.675	—	.859	—	PT06A-10-6P(SR)
1B			Plug w/sockets	PT06A-10-6S(SR)-ND* *NEW!*	23.27	14.89	13.19	—	.188	.875	—	1.906	—	.675	—	.859	—	PT06A-10-6S(SR)
3A			Recept. w/pins	PT00A-10-6P-ND *NEW!*	11.58	8.11	6.02	.590	—	—	.493	1.553	.431	.717	.719	.938	.468	PT00A-10-6P
3C			Recept. w/pins	PT00E-10-6P-ND *NEW!*	17.72	11.57	9.70	.590	—	—	.493	1.266	.431	.685	.719	.938	.468	PT00E-10-6P
4			Recept. w/pins	PT01A-10-6P(SR)-ND* *NEW!*	19.19	12.53	10.51	.590	.188	.875	.494	1.922	.400	.675	—	.938	.948	PT01A-10-6P(SR)
2			Recept. w/pins	PT02E-10-6P-ND *NEW!*	11.38	7.97	5.92	.590	—	—	.493	.825	.431	.573	.719	.938	.465	PT02E-10-6P
2			Recept. w/sockets	PT02E-10-6S-ND *NEW!*	14.45	10.12	7.52	.590	—	—	.493	.825	.431	.573	.719	.938	.465	PT02E-10-6S
1B	12-3	3/16	Plug w/pins	PT06A-12-3P(SR)-ND* *NEW!*	20.47	13.37	11.21	—	.312	1.000	—	1.906	—	.803	—	1.013	—	PT06A-12-3P(SR)
1A			Plug w/sockets	PT06A-12-3S-ND *NEW!*	14.83	10.38	7.71	—	—	—	—	1.609	—	.834	—	1.013	—	PT06A-12-3S
1B			Plug w/sockets	PT06A-12-3S(SR)-ND* *NEW!*	21.07	13.75	11.54	—	.312	1.000	—	1.906	—	.803	—	1.013	—	PT06A-12-3S(SR)
2			Recept. w/pins	PT02E-12-3P-ND *NEW!*	9.54	5.73	4.46	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	PT02E-12-3P
1B	12-4	4/16	Plug w/pins	PT06A-12-4P(SR)-ND* *NEW!*	22.82	14.61	12.93	—	.312	1.000	—	1.906	—	.803	—	1.013	—	PT06A-12-4P(SR)
2			Recept. w/sockets	PT02E-12-4S-ND *NEW!*	15.80	11.06	8.22	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	PT02E-12-4S
1A	12-8	8/20	Plug w/pins	PT06A-12-8P-ND *NEW!*	19.90	12.99	10.90	—	—	—	—	1.609	—	.834	—	1.013	—	PT06A-12-8P
1A			Plug w/sockets	PT06A-12-8S-ND *NEW!*	18.29	11.94	10.01	—	—	—	—	1.609	—	.834	—	1.013	—	PT06A-12-8S
1B			Plug w/pins	PT06E-12-8P(SR)-ND* *NEW!*	22.63	14.78	12.39	—	.312	1.000	—	1.906	—	.803	—	1.013	—	PT06E-12-8P(SR)
1B			Plug w/sockets	PT06E-12-8S(SR)-ND* *NEW!*	26.39	16.90	14.96	—	.312	1.000	—	1.906	—	.803	—	1.013	—	PT06E-12-8S(SR)
2			Recept. w/pins	PT02E-12-8P-ND *NEW!*	10.90	7.63	5.67	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	PT02E-12-8P
1B	12-10	10/20	Plug w/pins	PT06A-12-10P(SR)-ND* *NEW!*	17.45	12.22	9.08	—	.312	1.000	—	1.906	—	.803	—	1.013	—	PT06A-12-10P(SR)
1B			Plug w/sockets	PT06A-12-10S(SR)-ND* *NEW!*	16.23	11.36	8.44	—	.312	1.000	—	1.906	—	.803	—	1.013	—	PT06A-12-10S(SR)
2			Recept. w/pins	PT02E-12-10P-ND *NEW!*	11.33	7.93	5.89	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	PT02E-12-10P
2			Recept. w/sockets	PT02E-12-10S-ND *NEW!*	12.35	8.65	6.43	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	PT02E-12-10S
1B	14-5	5/16	Plug w/sockets	PT06A-14-5S(SR)-ND* *NEW!*	24.68	15.80	13.99	—	.375	1.125	—	1.906	—	.920	—	1.156	—	PT06A-14-5S(SR)
2			Recept. w/pins	PT02E-14-5P-ND *NEW!*	11.25	7.88	5.85	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02E-14-5P
1B	14-12	8/#20 4/#16	Plug w/pins	PT06A-14-12P(SR)-ND* *NEW!*	22.86	14.63	12.96	—	.375	1.125	—	1.906	—	.920	—	1.156	—	PT06A-14-12P(SR)
1B			Plug w/sockets	PT06E-14-12S(SR)-ND* *NEW!*	22.71	14.82	12.43	—	.375	1.125	—	1.906	—	.920	—	1.156	—	PT06E-14-12S(SR)
2			Recept. w/pins	PT02E-14-12P-ND *NEW!*	11.53	8.07	6.00	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02E-14-12P
2			Recept. w/sockets	PT02E-14-12S-ND *NEW!*	18.83	12.30	10.31	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02E-14-12S
2			Recept. w/sockets	PT02A-14-12S-ND *NEW!*	17.08	11.15	9.35	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02A-14-12S
2	14-15	14/#20 1/#16	Recept. w/pins	PT02A-14-15P-ND *NEW!*	11.35	7.95	5.91	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02A-14-15P
1A	14-18	18/20	Plug w/pins	PT06A-14-18P-ND *NEW!*	16.68	11.68	8.68	—	—	—	—	1.609	—	.970	—	1.156	—	PT06A-14-18P
1B			Plug w/sockets	PT06E-14-18S(SR)-ND* *NEW!*	27.02	17.30	15.32	—	.375	1.125	—	1.906	—	.920	—	1.156	—	PT06E-14-18S(SR)
2			Recept. w/pins	PT02A-14-18P-ND *NEW!*	15.05	10.54	7.83	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02A-14-18P
2			Recept. w/sockets	PT02E-14-18S-ND *NEW!*	16.79	10.96	9.20	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02E-14-18S
1B	14-19	19/20	Plug w/pins	PT06A-14-19P(SR)-ND* *NEW!*	24.53	15.70	13.90	—	.375	1.125	—	1.906	—	.920	—	1.156	—	PT06A-14-19P(SR)
2	16-26	26/20	Recept. w/pins	PT02A-16-26P-ND *NEW!*	19.81	12.93	10.85	1.000	—	—	.493	.825	.431	.949	.969	1.219	.465	PT02A-16-26P
1A	24-61	61/20	Plug w/pins	PT06A-24-61P-ND *NEW!*	29.66	18.98	16.81	—	—	—	—	1.750	—	1.587	—	1.776	—	PT06A-24-61P
1A			Plug w/sockets	PT06A-24-61S-ND *NEW!*	30.20	19.33	17.12	—	—	—	—	1.750	—	1.587	—	1.776	—	PT06A-24-61S

*(SR) at end of part number designates that a strain relief is included

NEW! Circular MS Bayonet Lock Connectors

with Solder Contacts (MIL-C-26482 Series 1 Type)

Fig.	Shell Size/ Insert Arrange-ment No.	No. of Contacts/ Size	Description	Digi-Key Part No.	Price Each			Dimensions in Inches										Amphenol Part No.
					1	10	50	A Dia. +.001 –.005	G ±.010	H Max.	K +.020 –.010	L Max.	M +.010 –.000	N Dia. Max.	R (TP)	S Dia. Max.	Z Max.	
1B	8-2	2/20	Plug w/sockets	MS3116F-8-2S-ND†	18.17	11.86	9.95	—	.125	.812	—	1.906	—	.550	—	.750	—	MS3116F-8-2S
1C			Plug w/sockets	MS3116E-8-2S-ND*	14.18	9.93	7.38	—	—	—	—	1.266	—	.560	—	.750	—	MS3116E-8-2S
2			Recept. w/pins	MS3112E-8-2P-ND*	5.36	3.04	2.24	.473	—	—	.493	.825	.431	.449	.594	.812	.465	MS3112E-8-2P
1C	8-3	3/20	Plug w/pins	MS3116E-8-3P-ND*	14.13	9.89	7.35	—	—	—	—	1.266	—	.560	—	.750	—	MS3116E-8-3P
1C			Plug w/sockets	MS3116E-8-3S-ND*	14.95	10.47	7.78	—	—	—	—	1.266	—	.560	—	.750	—	MS3116E-8-3S
1B			Plug w/sockets	MS3116F-8-3S-ND†	19.21	12.54	10.52	—	.125	.812	—	1.906	—	.550	—	.750	—	MS3116F-8-3S
2			Recept. w/pins	MS3112E-8-3P-ND*	10.50	6.30	4.90	.473	—	—	.493	.825	.431	.449	.594	.812	.465	MS3112E-8-3P
2			Recept. w/sockets	MS3112E-8-3S-ND	8.88	5.33	4.15	.473	—	—	.493	.825	.431	.449	.594	.812	.465	MS3112E-8-3S
1B	8-4	4/20	Plug w/pins	MS3116F-8-4P-ND†	18.03	11.77	9.87	—	.125	.812	—	1.906	—	.550	—	.750	—	MS3116F-8-4P
1C			Plug w/sockets	MS3116E-8-4S-ND*	15.78	11.05	8.21	—	—	—	—	1.266	—	.560	—	.750	—	MS3116E-8-4S
1B			Plug w/sockets	MS3116F-8-4S-ND†	20.24	13.21	11.08	—	.125	.812	—	1.906	—	.550	—	.750	—	MS3116F-8-4S
2			Recept. w/pins	MS3112E-8-4P-ND*	9.87	5.93	4.61	.473	—	—	.493	.825	.431	.449	.594	.812	.465	MS3112E-8-4P
2			Recept. w/sockets	MS3112E-8-4S-ND*	11.90	8.33	6.19	.473	—	—	.493	.825	.431	.449	.594	.812	.465	MS3112E-8-4S
1B	10-6	6/20	Plug w/pins	MS3116F-10-6P-ND†	17.20	11.23	9.42	—	.188	.875	—	1.906	—	.675	—	.859	—	MS3116F-10-6P
1B			Plug w/sockets	MS3116F-10-6S-ND†	18.45	12.05	10.11	—	.188	.875	—	1.906	—	.675	—	.859	—	MS3116F-10-6S
3B			Recept. w/pins	MS3110F-10-6P-ND†	19.29	12.59	10.56	.590	.188	.875	.493	1.922	.431	.675	.719	.938	.468	MS3110F-10-6P
3B			Recept. w/sockets	MS3110F-10-6S-ND†	18.57	12.13	10.17	.590	.188	.875	.493	1.922	.431	.675	.719	.938	.468	MS3110F-10-6S
2			Recept. w/pins	MS3112E-10-6P-ND*	10.89	6.54	5.09	.590	—	—	.493	.825	.431	.573	.719	.938	.465	MS3112E-10-6P
2			Recept. w/sockets	MS3112E-10-6S-ND*	10.40	7.28	5.41	.590	—	—	.493	.825	.431	.573	.719	.938	.465	MS3112E-10-6S
1C			Plug w/sockets	MS3116E-10-6S-ND*	17.05	11.94	8.87	—	—	—	—	1.266	—	.685	—	.859	—	MS3116E-10-6S
1B	12-3	3/16	Plug w/pins	MS3116F-12-3P-ND†	16.65	11.66	8.66	—	.312	1.000	—	1.906	—	.803	—	1.013	—	MS3116F-12-3P
1B			Plug w/sockets	MS3116F-12-3S-ND†	20.38	13.30	11.16	—	.312	1.000	—	1.906	—	.803	—	1.013	—	MS3116F-12-3S
2			Recept. w/pins	MS3112E-12-3P-ND*	11.19	6.72	5.23	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	MS3112E-12-3P
2			Recept. w/sockets	MS3112E-12-3S-ND*	10.89	6.54	5.09	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	MS3112E-12-3S
1B	12-10	10/20	Plug w/pins	MS3116F-12-10P-ND†	21.02	13.72	11.51	—	.312	1.000	—	1.906	—	.803	—	1.013	—	MS3116F-12-10P
1B			Plug w/sockets	MS3116F-12-10S-ND†	19.05	12.44	10.43	—	.312	1.000	—	1.906	—	.803	—	1.013	—	MS3116F-12-10S
2			Recept. w/pins	MS3112E-12-10P-ND*	10.05	7.04	5.23	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	MS3112E-12-10P
2			Recept. w/sockets	MS3112E-12-10S-ND*	17.86	11.66	9.78	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	MS3112E-12-10S
1B	14-12	8/#20 4/#16	Plug w/sockets	MS3116F-14-12S-ND†	25.54	16.35	14.48	—	.375	1.125	—	1.906	—	.920	—	1.156	—	MS3116F-14-12S
2			Recept. w/pins	MS3112E-14-12P-ND*	16.40	11.48	8.53	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	MS3112E-14-12P
1B	14-18	18/20	Plug w/sockets	MS3116F-14-18S-ND†	32.47	20.78	18.40	—	.375	1.125	—	1.906	—	.920	—	1.156	—	MS3116F-14-18S
2			Recept. w/pins	MS3112E-14-18P-ND*	17.72	11.57	9.70	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	MS3112E-14-18P
1B	14-19	19/20	Plug w/sockets	MS3116F-14-19S-ND†	32.04	20.51	18.16	—	.375	1.125	—	1.906	—	.920	—	1.156	—	MS3116F-14-19S
2			Recept. w/pins	MS3112E-14-19P-ND*	16.65	11.66	8.66	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	MS3112E-14-19P
1B	16-26	26/20	Plug w/sockets	MS3116F-16-26S-ND†	31.44	22.01	19.65	—	.500	1.188	—	2.047	—	1.047	—	1.281	—	MS3116F-16-26S
2			Recept. w/pins	MS3112E-16-26P-ND*	15.15	10.61	7.88	1.000	—	—	.493	.825	.431	.949	.969	1.219	.465	MS3112E-16-26P
1B	18-32	32/20	Plug w/pins	MS3116F-18-32P-ND†	35.90	25.13	22.44	—	.625	1.438	—	2.078	—	1.165	—	1.319	—	MS3116F-18-32P
1B	20-41	41/20	Plug w/pins	MS3116F-20-41S-ND†	36.98	25.89	23.12	—	.625	1.438	—	2.250	—	1.290	—	1.531	—	MS3116F-20-41S
1B	22-55	55/20	Plug w/pins	MS3116F22-55P-ND†	25.61	16.39	14.51	—	.750	1.625	—	2.250	—	1.418	—	1.656	—	MS3116F22-55P
2			Recept. w/pins	MS3112E-22-55P-ND*	24.98	15.99	14.16	1.375	—	—	.650	1.076	.556	1.323	1.250	1.562	.526	MS3112E-22-55P

* Environmental resistant supplied with a multi-holed grommet and clamping nut for moisture-proofing individual open wires † Grommet seal with strain relief clamp

Circular PT-SE Bayonet Lock Connectors

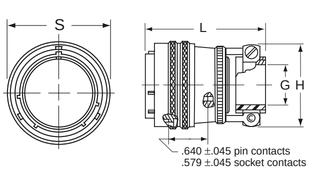
with Crimp Contacts (MIL-C-26482 Series 1 Type)

Aluminum shell components. Standard olive drab, electrically conductive cadmium plated. Dependable 5 key/keyway polarization with bayonet lock coupling assures positive mating. Spring tension provided by a wave washer in the coupling nut ensures maintenance of interfacial seal between mating halves. Insert and main joint gasket molded from resilient neoprene.

Crimp contacts are included, but not installed. (See contact hand crimping tools and contact installation/removal tools recommended below). Pins and sockets are copper alloy/gold plated.

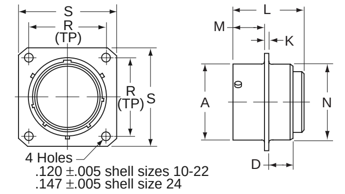
Strain relief is included on plug.

Fig. 1



.640 ±.045 pin contacts
.579 ±.045 socket contacts

Fig. 2



4 Holes
.120 ±.005 shell sizes 10-22
.147 ±.005 shell size 24

Fig. 4 *NEW!*

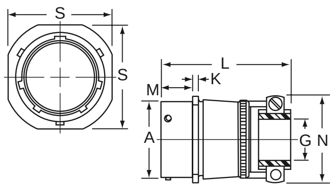
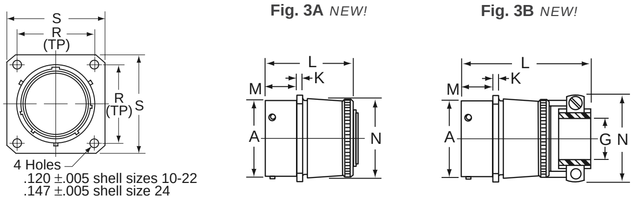
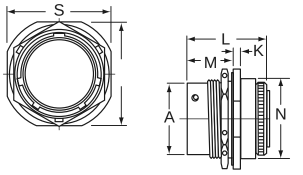


Fig. 3A *NEW!* **Fig. 3B** *NEW!*



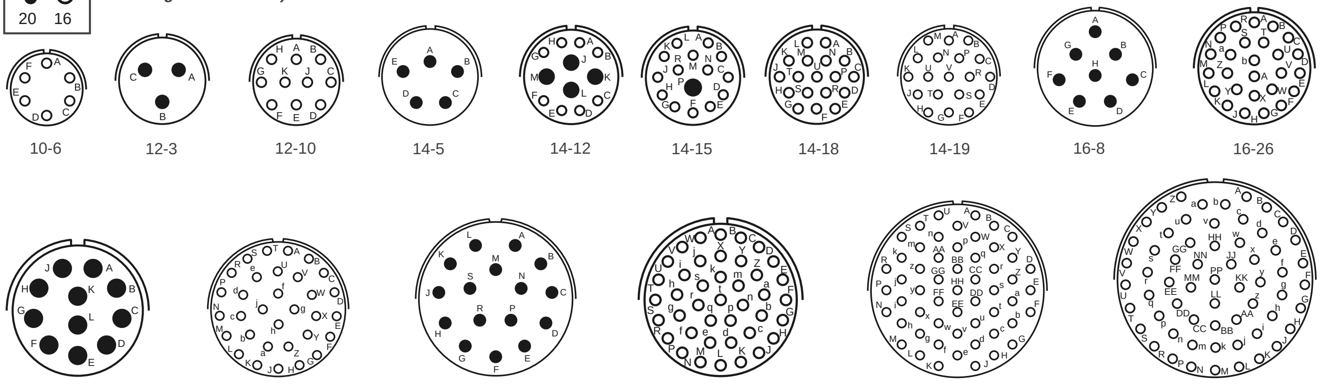
4 Holes
.120 ±.005 shell sizes 10-22
.147 ±.005 shell size 24

Fig. 5 *NEW!*



CONTACT LEGEND
● 20 ○ 16

Insert Patterns *(Front face of pin insert shown, Drawings not to scale.)*



10-6 12-3 12-10 14-5 14-12 14-15 14-18 14-19 16-8 16-26

18-11 18-32 20-16 20-41 22-55 24-61

Fig.	Shell Size/ Insert Arrange-ment No.	No. of Contacts/ Size	Description	Digi-Key Part No.	Price Each 1	10	50	+.001 –.005	A Dia. D Max.	G Max.	H Max.	K ±.016	L Max.	M +.010 -.000	N Dia. +.010. -.000	R (TP)	S Max.	Amphenol Part No.*
1	10-6	6/20	Plug w/pins	PT06SE10-6P(SR)-ND*	31.23	19.99	17.70	—	—	.188	.891	—	2.413	—	—	—	.859	PT06SE10-6P(SR)
1			Plug w/sockets	PT06SE10-6S(SR)-ND*	30.06	21.05	18.80	—	—	.188	.891	—	2.413	—	—	—	.859	PT06SE10-6S(SR)
2			Recept. w/pins	PT02SE10-6P-ND	28.85	18.47	16.35	.590	.312	—	—	.062	1.296	.431	.562	.719	.954	PT02SE10-6P
2			Recept. w/sockets	PT02SE10-6S-ND	31.21	19.98	17.69	.590	.312	—	—	.062	1.296	.431	.562	.719	.954	PT02SE10-6S
1	12-10	10/20	Plug w/pins	PT06SE12-10P(SR)-ND*	31.64	22.15	19.78	—	—	.312	1.016	—	2.413	—	—	—	1.031	PT06SE12-10P(SR)
1			Plug w/sockets	PT06SE12-10S(SR)-ND*	34.73	24.31	21.71	—	—	.312	1.016	—	2.413	—	—		1.031	PT06SE12-10S(SR)
2			Recept. w/pins	PT02SE12-10P-ND	30.27	19.38	17.16	.750	.312	—	—	.062	1.296	.431	.688	.812	1.047	PT02SE12-10P
2			Recept. w/sockets	PT02SE12-10S-ND	33.74	21.60	19.12	.750	.312	—	—	.062	1.296	.431	.688	.812	1.047	PT02SE12-10S
1	16-8	8/16	Plug w/pins	PT06SE16-8P(SR)-ND*	45.88	32.12	28.68	—	—	.500	1.203	—	2.528	—	—	—	1.281	PT06SE16-8P(SR)
1			Plug w/sockets	PT06SE16-8S(SR)-ND*	51.32	35.93	32.08	—	—	.500	1.203	—	2.528	—	—	—	1.281	PT06SE16-8S(SR)
2			Recept. w/pins	PT02SE16-8P-ND	40.70	28.49	25.44	1.000	.312	—	—	.062	1.296	.431	.938	.969	1.234	PT02SE16-8P
2			Recept. w/sockets	PT02SE16-8S-ND	46.13	32.29	28.83	1.000	.312	—	—	.062	1.296	.431	.938	.969	1.234	PT02SE16-8S
1	18-32	32/20	Plug w/pins	PT06SE18-32P(SR)-ND*	53.92	37.75	33.70	—	—	.625	1.469	—	2.528	—	—	—	1.391	PT06SE18-32P(SR)
1			Plug w/sockets	PT06SE18-32S(SR)-ND*	63.94	44.76	39.97	—	—	.625	1.469	—	2.528	—	—	—	1.391	PT06SE18-32S(SR)
2			Recept. w/pins	PT02SE18-32P-ND	49.18	34.43	30.74	1.125	.312	—	—	.062	1.296	.431	1.062	1.062	1.328	PT02SE18-32P
2			Recept. w/sockets	PT02SE18-32S-ND	59.19	41.43	37.00	1.125	.312	—	—	.062	1.296	.431	1.062	1.062	1.328	PT02SE18-32S
1	20-16	16/16	Plug w/pins	PT06SE20-16P(SR)-ND*	55.75	39.03	34.85	—	—	.625	1.469	—	2.753	—	—	—	1.531	PT06SE20-16P(SR)
1			Plug w/sockets	PT06SE20-16S(SR)-ND*	66.19	46.34	41.37	—	—	.625	1.469	—	2.753	—	—	—	1.531	PT06SE20-16S(SR)
2			Recept. w/pins	PT02SE20-16P-ND	48.93	34.25	30.58	1.250	.406	—	—	.094	1.358	.556	1.188	1.156	1.453	PT02SE20-16P
2			Recept. w/sockets	PT02SE20-16S-ND	59.35	41.55	37.10	1.250	.406	—	—	.094	1.358	.556	1.188	1.156	1.453	PT02SE20-16S

Dimensions in Inches

* (SR) at end of part number designates that a strain relief is included.

(Continued)

Circular PT-SE Bayonet Lock Connectors

with Crimp Contacts (MIL-C-26482 Series 1 Type) *(Cont.)*

Fig.	Shell Size/ Insert Arrange-ment No.	No. of Contacts/ Size	Description	Digi-Key Part No.	Price Each 1	10	50	Dimensions in Inches +.001 –.005	A Dia. D Max.	G Max.	H Max.	K ±.016	L Max.	M +.010 -.000	N Dia. +.010. -.000	R (TP)	S Max.	Amphenol Part No.*
1	22-55	55/20	Plug w/pins	PT06SE22-55P(SR)-ND*	74.37	52.07	46.49	—	—	.750	1.656	—	2.753	—	—	—	1.656	PT06SE22-55P(SR)
1			Plug w/sockets	PT06SE22-55S(SR)-ND*	91.77	64.24	57.36		—	.750	1.656	—	2.753	—	—	—	1.656	PT06SE22-55S(SR)
2			Recept. w/pins	PT02SE22-55P-ND	66.05	46.24	41.28	1.375	.406	—	—	.094	1.358	.556	1.312	1.250	1.578	PT02SE22-55P
2			Recept. w/sockets	PT02SE22-55S-ND	83.42	58.40	52.14	1.375	.406	—	—	.094	1.358	.556	1.312	1.250	1.578	PT02SE22-55S
1	24-61	61/20	Plug w/pins	PT06SE24-61P(SR)-ND*	83.15	58.21	51.98	—	—	.800	1.750	—	2.830	—	—	—	1.777	PT06SE24-61P(SR)
1			Plug w/sockets	PT06SE24-61S(SR)-ND*	101.99	71.39	63.75	—	—	.800	1.750	—	2.830	—	—	—	1.777	PT06SE24-61S(SR)
2			Recept. w/pins	PT02SE24-61P-ND	75.19	52.64	47.00	1.500	.406	—	—	.094	1.358	.589	1.438	1.375	1.703	PT02SE24-61P
2			Recept. w/sockets	PT02SE24-61S-ND	94.00	65.80	58.75	1.500	.406	—	—	.094	1.358	.589	1.438	1.375	1.703	PT02SE24-61S

* (SR) at end of part number designates that a strain relief is included.

NEW! Circular MS Bayonet Lock Connectors

with Crimp Contacts (MIL-C-26482 Series 1 Type)

Fig.	Shell Size/ Insert Arrange-ment No.	No. of Contacts/ Size	Description	Digi-Key Part No.	Price Each 1	10	50	Dimensions in Inches A Dia.	D Max.	G Max.	H Max.	K	L Max.	M	N Max.	R (TP)	S Max.	Amphenol Part No.
1	10-6	6/20	Plug w/pins	MS3126F-10-6P-ND	17.00	11.90	8.84	—	—	.188	.891	—	2.413	—	—	—	—	MS3126F-10-6P
1			Plug w/sockets	MS3126F-10-6S-ND	18.83	12.30	10.31	—	—	.188	.891	—	2.413	—	—	—	—	MS3126F-10-6S
3B			Recept. w/pins	MS3120F-10-6P-ND	14.28	10.00	7.43	.590	—	.188	—	.062	2.422	.431	.844	.719	.954	MS3120F-10-6P
3B			Recept. w/sockets	MS3120F-10-6S-ND	15.43	10.80	8.03	.590	—	.188	—	.062	2.422	.431	.844	.719	.954	MS3120F-10-6S
2			Recept. w/pins	MS3122E-10-6P-ND	21.35	13.94	11.69	.590	.312	—	—	.062	1.296	.431	.562	.719	.954	MS3122E-10-6P
4			Recept. w/sockets	MS3121F-10-6S-ND	17.17	11.21	9.40	.590	—	.188	—	.094	2.422	.431	.891	—	.955	MS3121F-10-6S
1	12-3	3/16	Plug w/sockets	MS3126F-12-3S-ND	22.09	14.42	12.09	—	—	.312	1.016	—	2.413	—	—	—	1.031	MS3126F-12-3S
3B			Recept. w/pins	MS3120F-12-3P-ND	15.08	10.56	7.84	.750	—	.312	—	.062	2.422	.431	.969	.812	1.047	MS3120F-12-3P
2			Recept. w/pins	MS3122E-12-3P-ND	24.14	15.46	13.69	.750	.312	—	—	.062	1.296	.431	.688	.812	1.047	MS3122E-12-3P
1	12-10	10/20	Plug w/pins	MS3126F-12-10P-ND	23.06	15.06	12.63	—	—	.312	1.016	—	2.413	—	—	—	1.031	MS3126F-12-10P
1			Plug w/sockets	MS3126F-12-10S-ND	20.83	13.60	11.41	—	—	.312	1.016	—	2.413	—	—	—	1.031	MS3126F-12-10S
3A			Recept. w/pins	MS3120E-12-10P-ND	22.14	14.45	12.12	.750	—	.312	—	.062	1.328	.431	.969	.812	1.047	MS3120E-12-10P
2			Recept. w/pins	MS3122E-12-10P-ND	19.97	13.04	10.94	.750	.312	—	—	.062	1.296	.431	.688	.812	1.047	MS3122E-12-10P
2			Recept. w/sockets	MS3122E-12-10S-ND	24.66	15.79	13.98	.750	.312	—	—	.062	1.296	.431	.688	.812	1.047	MS3122E-12-10S
1	14-5	5/16	Plug w/sockets	MS3126F-14-5S-ND	25.90	16.58	14.68	—	—	.375	1.141	—	2.413	—	—	—	1.156	MS3126F-14-5S
2			Recept. w/pins	MS3122E-14-5P-ND	19.10	12.47	10.46	.875	.312	—	—	.062	1.296	.431	.812	.906	1.141	MS3122E-14-5P
1	14-12	8/#20 4/#16	Plug w/sockets	MS3126F-14-12S-ND	33.94	23.76	21.22	—	—	.375	1.141	—	2.413	—	—	—	1.156	MS3126F-14-12S
2			Recept. w/pins	MS3122E-14-12P-ND	27.54	17.63	15.61	.875	.312	—	—	.062	1.296	.431	.812	.906	1.141	MS3122E-14-12P
1	14-15	14/#20 1/#16	Plug w/sockets	MS3126F-14-15S-ND	26.21	16.78	14.86	—	—	.375	1.141	—	2.413	—	—	—	1.156	MS3126F-14-15S
1	14-18	18/20	Plug w/sockets	MS3126F-14-18S-ND	31.62	22.14	19.77	—	—	.375	1.141	—	2.413	—	—	—	1.156	MS3126F-14-18S
2			Recept. w/pins	MS3122E-14-18P-ND	32.04	22.43	20.03	.875	.312	—	—	.062	1.296	.431	.812	.906	1.141	MS3122E-14-18P
1	14-19	19/20	Plug w/pins	MS3126F-14-19P-ND	22.93	14.68	13.00	—	—	.375	1.141	—	2.413	—	—	—	1.156	MS3126F-14-19P
1			Plug w/sockets	MS3126F-14-19S-ND	30.33	19.42	17.19	—	—	.375	1.141	—	2.413	—	—	—	1.156	MS3126F-14-19S
2			Recept. w/pins	MS3122E-14-19P-ND	25.25	16.16	14.31	.875	.312	—	—	.062	1.296	.431	.812	.906	1.141	MS3122E-14-19P
3B			Recept. w/sockets	MS3120F-14-19S-ND	16.38	11.47	8.52	.875	—	.375	—	.062	2.422	.431	1.094	.906	1.141	MS3120F-14-19S
5			Recept. w/sockets	MS3124E-14-19S-ND	25.83	16.54	14.64	.942	—	—	—	.125	1.438	.696	1.124	—	1.391	MS3124E-14-19S
1	16-8	8/16	Plug w/pins	MS3126F-16-8P-ND	21.21	13.85	11.61	—	—	.500	1.203	—	2.528	—	—	—	1.281	MS3126F-16-8P
1	16-26	26/20	Plug w/pins	MS3126F-16-26P-ND	31.92	22.35	19.95	—	—	.500	1.203	—	2.528	—	—	—	1.281	MS3126F-16-26P
1			Plug w/sockets	MS3126F-16-26S-ND	31.86	20.39	18.06	—	—	.500	1.203	—	2.528	—	—	—	1.281	MS3126F-16-26S
2			Recept. w/pins	MS3122E-16-26P-ND	29.00	18.57	16.44	1.000	.312	—	—	.062	1.296	.431	.938	.969	1.234	MS3122E-16-26P
1	18-11	11/16	Plug w/sockets	MS3126F-18-11S-ND	25.07	16.05	14.21	—	—	.625	1.469	—	2.528	—	—	—	1.391	MS3126F-18-11S
1	20-16	16/16	Plug w/sockets	MS3126F-20-16S-ND	22.02	14.37	12.06	—	—	.625	1.469	—	2.753	—	—	—	1.531	MS3126F-20-16S
1	20-41	41/20	Plug w/sockets	MS3126F-20-41S-ND	34.10	23.87	21.32	—	—	.625	1.469	—	2.753	—	—	—	1.531	MS3126F-20-41S
3B			Recept. w/sockets	MS3120F-20-41S-ND	27.20	17.41	15.42	1.250	—	.625	—	.094	2.824	.556	1.406	1.156	1.453	MS3120F-20-41S
2			Recept. w/pins	MS3122E-20-41P-ND	36.64	25.65	22.90	1.250	.406	—	—	.094	1.358	.556	1.188	1.156	1.453	MS3122E-20-41P
1	22-55	55/20	Plug w/sockets	MS3126F-22-55S-ND	48.50	33.95	30.32	—	—	.750	1.656	—	2.753	—	—	—	1.656	MS3126F-22-55S
2			Recept. w/pins	MS3122E-22-55P-ND	32.20	22.54	20.13	1.375	.406	—	—	.094	1.358	.556	1.312	1.250	1.578	MS3122E-22-55P
2			Recept. w/sockets	MS3122E-22-55S-ND	17.08	11.15	9.35	1.375	.406	—	—	.094	1.358	.556	1.312	1.250	1.578	MS3122E-22-55S
1	24-61	61/20	Plug w/sockets	MS3126F-24-61S-ND	46.22	32.36	28.89	—	—	.800	1.750	—	2.830	—	—	—	1.777	MS3126F-24-61S

ASTRO TOOL CORP.
CONNECTOR ASSEMBLY TOOLING

Contact Size	Hand Crimping Tool MS Tool Part No. Tool Frame	Price Each	Turret Head	Price Each	Insertion Tool Production Metal Pliers	Price Each	Prototype Plastic	Price Each	MS Part No.	Price Each	Removal Tool Prototype	Price Each	MS Part No.	Price Each
20	M22520/1-01	202.63	M22520/1-02	77.54	11-8107-20	146.83	11-7401-20	20.08	M81969/17-03	22.61	11-7880-20	29.73	M81969/19B-06	29.73
16	M22520/1-01	202.63	M22520/1-02	77.54	11-8107-16	146.83	11-7401-16	29.73	M81969/17-04	22.61	11-7880-16	29.73	M81969/19B-01	45.22

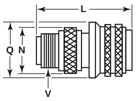
Amphenol®

Circular 97 Series Threaded Connectors
with Solder Contacts (MIL-C-5015 Type)

Underwriters Laboratories approved recognition
File E115497. Canadian Standard Association
Certification File LR69183

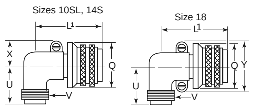
Low cost, general duty, non-environmental MIL-C-5015 type connectors. Available in either A solid or B split shell styles. Used extensively in the machine tool industry, welding industry and numerous other commercial applications. • Single key/keyway polarization • Threaded coupling • Hard dielectric inserts made of diallyl-phthalate • Aluminum alloy components with a conductive cadmium plate finish and olive chromate after-treatment • Contacts are solder type, silver plated with pre-tinned solder cups • Cable clamps are zinc alloy with olive drab/green chromate finish

MS3106A Straight Plug



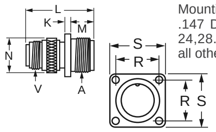
Coupling ring machined from solid aluminum bar stock for high tensile strength. Mates with all types of 97 series receptacles. Front shell includes polarization keyway. Solid shell. Threaded backshell.

MS3108B Angle Plug



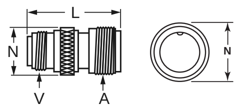
Shell is split longitudinally for convenient solder or inspection. Front shell is keyed to allow the 90 degree angle housing to be rotated and locked at any 45 degree increment.

MS3100A Wall Mount Receptacle



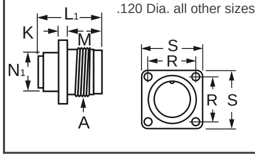
Mounting Holes .147 Dia. sizes 24,28.120 Dia. all other sizes

MS3101A Cable Receptacle

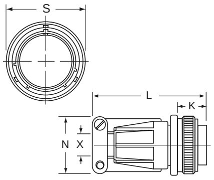


MS3102A Box Mount Receptacle

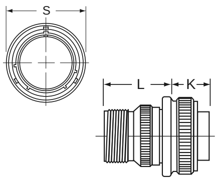
Mounting Holes
.147 Dia. sizes 24,28
.120 Dia. all other sizes



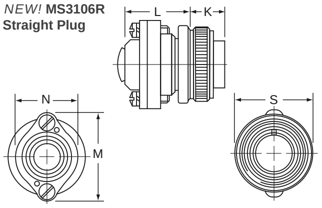
NEW! **MS3106E/F Straight Plug**



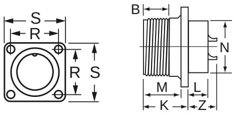
NEW! **MS3106A Straight Plug**



NEW! **MS3106R Straight Plug**



NEW! **MS3102E/R Straight Plug**



Insert Patterns
(Front face of pin insert shown. Drawings not to scale.)

CONTACT LEGEND

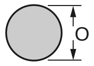
●	⊕	◉
16	12	8

SERVICE RATING:

		INST	A	D	E	B	C
Limited Operating	DC	250	700	1250	1750	2450	4200
Voltages at Sea Level	AC(rms)	200	500	900	1250	1750	3000

TEST CURRENT: Contact Size 16 = 13 amperes, Contact Size 12 = 23 amperes
NOTE: Transients were not considered in calculating these values.
NOTE: Limiting operating voltage at 50,000 feet altitude are approx. 25% of the sea level values.

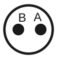
Panel Opening

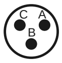


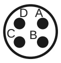
Insert Arrangement
Service Rating

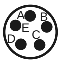
10SL-3
A

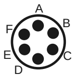
10SL-4
A

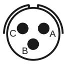

12S-3
A

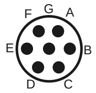

14S-1
A

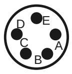

14S-2
INST.

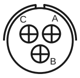

14S-5
INST.

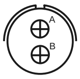

14S-6
INST.

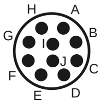

14S-7

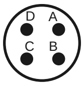

16S-1
A

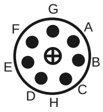

16S-8
A

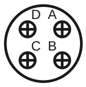

16-10

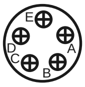

16-11

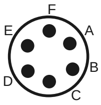

18-1
B,C,F,G = A
all others = INST.

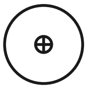

18-4
D

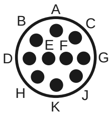

18-8
A

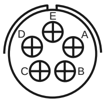

18-10
A

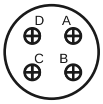

18-11
A

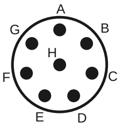

18-12
A

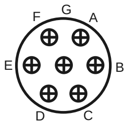

18-16
C

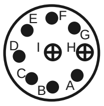

18-19
A

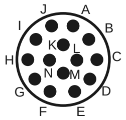

18-11

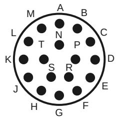

20-4
D

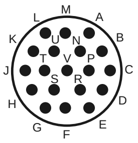

20-7
A,B,H,G = D
C,D,E,F = A

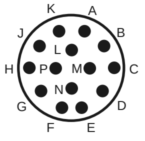

20-15
A

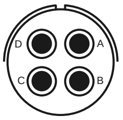

20-16
A

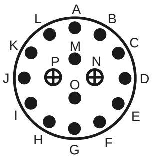

20-27
A

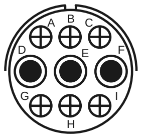

20-29
A

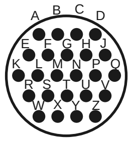

22-14
A

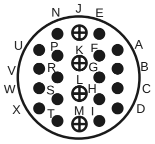

22-19
A

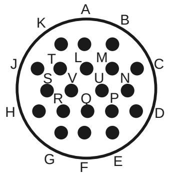

22-22

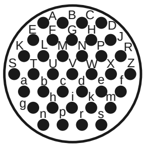

24-7
A


24-11


24-28
INST.


28-11
A


28-16
A


28-21
A

97 Series Plugs

Shell Size/ Insert Arrange-ment No.	No. of Contacts/ Size	Description	Digi-Key Part No.	Price Each 1	10	50	Dimensions in Inches L Max.	L1 Max.	N Ref.	Q Max.	U Ref.	V Fitting Thread	X Ref.	Y Ref.	Amphenol Part No.
Straight Plugs With Solid Shells															
10SL-3	3/16	Straight Plug w/socket	97-3106A-10SL-3S-ND	12.00	8.40	6.24	1-3/8	—	3/4	7/8	—	5/8-24	—	—	97-3106A-10SL-3S
10SL-4	2/16	Straight Plug w/socket	97-3106A-10SL-4S-ND	11.35	7.95	5.91									97-3106A-10SL-4S
12S-3	2/16	Straight Plug w/pins	97-3106A-12S-3P-ND	10.40	7.28	5.41	1-7/16	—	25/32	1	—	5/8-24	—	—	97-3106A-12S-3P
		Straight Plug w/socket	97-3106A-12S-3S-ND	11.13	7.79	5.79									97-3106A-12S-3S
14S-1	3/16	Straight Plug w/pins	97-3106A-14S-1P-ND	10.43	7.30	5.43	1-15/32	—	7/8	1-1/8	—	3/4-20	—	—	97-3106A-14S-1P
		Straight Plug w/socket	97-3106A-14S-1S-ND	12.30	8.61	6.40									97-3106A-14S-1S
14S-2	4/16	Straight Plug w/pins	97-3106A-14S-2P-ND	10.38	7.27	5.40									97-3106A-14S-2P
		Straight Plug w/socket	97-3106A-14S-2S-ND	12.88	9.02	6.70									97-3106A-14S-2S

(Continued)

Circular 97 Series Threaded Connectors with Solder Contacts (MIL-C-5015 Type) *(Cont.)*

Shell Size/ Insert Arrangement No.	No. of Contacts/ Size	Description	Digi-Key Part No.	Price Each			Dimensions in Inches								Amphenol Part No.
				1	10	50	L Max.	L1 Max.	N Ref.	Q Max.	U Ref.	V Fitting Thread	X Ref.	Y Ref.	
14S-5	5/16	Straight Plug w/pins	97-3106A-14S-5P-ND	11.60	8.12	6.04	1-15/32	—	7/8	1-1/8	—	3/4-20	—	—	97-3106A-14S-5P
		Straight Plug w/socket	97-3106A-14S-5S-ND	13.83	9.68	7.19									97-3106A-14S-5S
14S-6	6/16	Straight Plug w/pins	97-3106A-14S-6P-ND	12.03	8.42	6.26									97-3106A-14S-6P
		Straight Plug w/socket	97-3106A-14S-6S-ND	13.95	9.77	7.26									97-3106A-14S-6S
16S-1	7/16	Straight Plug w/pins	97-3106A-16S-1P-ND	12.03	8.42	6.26	1-15/32	—	1	1-1/4	—	7/8-20	—	—	97-3106A-16S-1P
		Straight Plug w/socket	97-3106A-16S-1S-ND	15.40	10.78	8.01									97-3106A-16S-1S
16S-8	5/16	Straight Plug w/pins	97-3106A-16S-8P-ND	13.43	9.40	6.99									97-3106A-16S-8P
		Straight Plug w/socket	97-3106A-16S-8S-ND	13.93	9.75	7.25									97-3106A-16S-8S
18-1	10/16	Straight Plug w/pins	97-3106A-18-1P-ND	15.78	11.05	8.21	1-31/32	—	1-1/8	1-11/32	—	1-20	—	—	97-3106A-18-1P
		Straight Plug w/socket	97-3106A-18-1S-ND	17.45	12.22	9.08									97-3106A-18-1S
18-4	4/16	Straight Plug w/pins	97-3106A-18-4P-ND	14.60	10.22	7.60									97-3106A-18-4P
		Straight Plug w/socket	97-3106A-18-4S-ND	15.75	11.03	8.19									97-3106A-18-4S
18-8	4/1#12, 4/7#16	Straight Plug w/pins	97-3106A-18-8P-ND	17.24	11.26	9.44									97-3106A-18-8P
		Straight Plug w/socket	97-3106A-18-8S-ND	18.62	12.16	10.20									97-3106A-18-8S
18-10	4/12	Straight Plug w/pins	97-3106A-18-10P-ND	17.48	12.24	9.09									97-3106A-18-10P
		Straight Plug w/socket	97-3106A-18-10S-ND	18.62	12.16	10.20									97-3106A-18-10S
18-11	5/12	Straight Plug w/pins	97-3106A-18-11P-ND	17.48	12.24	9.09									97-3106A-18-11P
		Straight Plug w/socket	97-3106A-18-11S-ND	17.24	11.26	9.44									97-3106A-18-11S
18-12	6/16	Straight Plug w/pins	97-3106A-18-12P-ND	14.33	10.03	7.45									97-3106A-18-12P
		Straight Plug w/socket	97-3106A-18-12S-ND	17.48	12.24	9.09									97-3106A-18-12S
18-16	1/12	Straight Plug w/pins	97-3106A-18-16P-ND	17.48	12.24	9.09									97-3106A-18-16P
		Straight Plug w/socket	97-3106A-18-16S-ND	19.64	12.82	10.76									97-3106A-18-16S
18-19	10/16	Straight Plug w/pins	97-3106A-18-19P-ND	22.52	14.42	12.77									97-3106A-18-19P
		Straight Plug w/socket	97-3106A-18-19S-ND	19.21	12.54	10.52									97-3106A-18-19S
20-4	4/12	Straight Plug w/pins	97-3106A-20-4P-ND	20.16	13.16	11.04	1-7/8	—	1-1/4	1-15/32	—	1-3/16-18	—	—	97-3106A-20-4P
		Straight Plug w/socket	97-3106A-20-4S-ND	26.35	16.87	14.94									97-3106A-20-4S
20-7	8/16	Straight Plug w/pins	97-3106A-20-7P-ND	20.16	13.16	11.04									97-3106A-20-7P
		Straight Plug w/socket	97-3106A-20-7S-ND	21.66	14.14	11.86									97-3106A-20-7S
20-15	7/12	Straight Plug w/pins	97-3106A-20-15P-ND	22.09	14.42	12.09									97-3106A-20-15P
		Straight Plug w/socket	97-3106A-20-15S-ND	27.70	17.73	15.70									97-3106A-20-15S
20-16	9/2#12, 9/7#16	Straight Plug w/pins	97-3106A-20-16P-ND	22.11	14.44	12.11									97-3106A-20-16P
		Straight Plug w/socket	97-3106A-20-16S-ND	22.50	14.40	12.75									97-3106A-20-16S
20-27	14/16	Straight Plug w/pins	97-3106A-20-27P-ND	19.78	12.92	10.83									97-3106A-20-27P
		Straight Plug w/socket	97-3106A-20-27S-ND	23.18	14.84	13.14									97-3106A-20-27S
20-29	17/16	Straight Plug w/pins	97-3106A-20-29P-ND	21.07	13.75	11.54									97-3106A-20-29P
		Straight Plug w/socket	97-3106A-20-29S-ND	25.45	16.29	14.43									97-3106A-20-29S
22-14	19/16	Straight Plug w/pins	97-3106A-22-14P-ND	24.05	15.40	13.63	1-31/32	—	1-3/8	1-19/32	—	1-3/16-18	—	—	97-3106A-22-14P
		Straight Plug w/socket	97-3106A-22-14S-ND	27.32	17.49	15.48									97-3106A-22-14S
22-19	14/16	Straight Plug w/pins	97-3106A-22-19P-ND	23.58	15.10	13.37									97-3106A-22-19P
		Straight Plug w/socket	97-3106A-22-19S-ND	24.05	15.40	13.63									97-3106A-22-19S
24-7	16/2 #12, 16/14 #16	Straight Plug w/pins	97-3106A-24-7P-ND	28.46	18.22	16.13	2-1/4	—	1-1/2	1-23/32	—	1-7/16-18	—	—	97-3106A-24-7P
		Straight Plug w/socket	97-3106A-24-7S-ND	30.83	19.73	17.47									97-3106A-24-7S
24-28	24/16	Straight Plug w/pins	97-3106A-24-28P-ND	29.77	19.06	16.87									97-3106A-24-28P
		Straight Plug w/socket	97-3106A-24-28S-ND	33.71	21.58	19.10									97-3106A-24-28S
28-11	22/4#12, 22/18#16	Straight Plug w/pins	97-3106A-28-11P-ND	32.27	20.65	18.29	2-1/4	—	1-3/4	1-31/32	—	1-7/16-18	—	—	97-3106A-28-11P
		Straight Plug w/socket	97-3106A-28-11S-ND	34.66	24.27	21.67									97-3106A-28-11S
28-16	20/16	Straight Plug w/pins	97-3106A-28-16P-ND	33.23	21.27	18.84									97-3106A-28-16P
		Straight Plug w/socket	97-3106A-28-16S-ND	33.66	21.55	19.08									97-3106A-28-16S
28-21	37/16	Straight Plug w/pins	97-3106A-28-21P-ND	34.54	24.18	21.59									97-3106A-28-21P
		Straight Plug w/socket	97-3106A-28-21S-ND	38.94	27.26	24.34									97-3106A-28-21S
Angle Plugs With Split Shell															
10SL-3	3/16	Angle Plug w/socket	97-3108B-10SL-3S-ND	16.03	11.22	8.34	—	1-1/2	—	7/8	1	5/8-24	—	—	97-3108B-10SL-3S
10SL-4	2/16	Angle Plug w/socket	97-3108B-10SL-4S-ND	15.30	10.71	7.96									97-3108B-10SL-4S
14S-1	3/16	Angle Plug w/pins	97-3108B-14S-1P-ND	13.93	9.75	7.25	—	1-23/32	—	1-1/8	1-1/16	3/4-20	21/32	—	97-3108B-14S-1P
		Angle Plug w/socket	97-3108B-14S-1S-ND	14.28	10.00	7.43									97-3108B-14S-1S
14S-2	4/16	Angle Plug w/pins	97-3108B-14S-2P-ND	13.80	9.66	7.18									97-3108B-14S-2P
		Angle Plug w/socket	97-3108B-14S-2S-ND	14.90	10.43	7.75									97-3108B-14S-2S
14S-5	5/16	Angle Plug w/pins	97-3108B-14S-5P-ND	15.13	10.59	7.87									97-3108B-14S-5P
		Angle Plug w/socket	97-3108B-14S-5S-ND	15.55	10.89	8.09									97-3108B-14S-5S
14S-6	6/16	Angle Plug w/pins	97-3108B-14S-6P-ND	15.55	10.89	8.09									97-3108B-14S-6P
		Angle Plug w/socket	97-3108B-14S-6S-ND	15.98	11.19	8.31									97-3108B-14S-6S
18-1	10/16	Angle Plug w/pins	97-3108B-18-1P-ND	22.02	14.37	12.06	—	2-5/32	—	1-11/32	1-3/16	1-20	1-41/64	1-41/64	97-3108B-18-1P
		Angle Plug w/socket	97-3108B-18-1S-ND	21.38	13.95	11.70									97-3108B-18-1S
18-4	4/16	Angle Plug w/pins	97-3108B-18-4P-ND	18.50	12.08	10.13									97-3108B-18-4P
		Angle Plug w/socket	97-3108B-18-4S-ND	19.74	12.89	10.81									97-3108B-18-4S

(Continued)

Amphenol Circular 97 Series Threaded Connectors with Solder Contacts (MIL-C-5015 Type) *(Cont.)*

Shell Size/ Insert Arrange- ment No.	No. of Contacts/ Size	Description	Digi-Key Part No.	Price Each 1	10	50	Dimensions in Inches L Max.	L1 Max.	N Ref.	Q Max.	U Ref.	V Fitting Thread	X Ref.	Y Ref.	Amphenol Part No.
18-8	4/1#12, 4/7#16	Angle Plug w/pins	97-3108B-18-8P-ND	22.02	14.37	12.06	—	2-5/32	—	1-11/32	1-3/16	1-20	1-41/64	1-41/64	97-3108B-18-8P
		Angle Plug w/socket	97-3108B-18-8S-ND	23.39	15.27	12.81									97-3108B-18-8S
18-10	4/12	Angle Plug w/pins	97-3108B-18-10P-ND	21.38	13.95	11.70									97-3108B-18-10P
		Angle Plug w/socket	97-3108B-18-10S-ND	23.39	15.27	12.81									97-3108B-18-10S
18-11	5/12	Angle Plug w/pins	97-3108B-18-11P-ND	21.38	13.95	11.70									97-3108B-18-11P
		Angle Plug w/socket	97-3108B-18-11S-ND	22.02	14.37	12.06									97-3108B-18-11S
18-12	6/16	Angle Plug w/pins	97-3108B-18-12P-ND	20.26	13.23	11.09									97-3108B-18-12P
		Angle Plug w/socket	97-3108B-18-12S-ND	21.38	13.95	11.70									97-3108B-18-12S
18-16	1/12	Angle Plug w/pins	97-3108B-18-16P-ND	22.04	14.39	12.07									97-3108B-18-16P
		Angle Plug w/socket	97-3108B-18-16S-ND	24.10	15.43	13.66									97-3108B-18-16S
18-19	10/16	Angle Plug w/pins	97-3108B-18-19P-ND	27.14	17.37	15.38									97-3108B-18-19P
		Angle Plug w/socket	97-3108B-18-19S-ND	22.70	14.53	12.87									97-3108B-18-19S

Amphenol *NEW!* MS/Standard Cylindrical with Solder Contacts (MIL-C-5015 Series 1 Type)

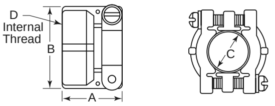
Shell Size/ Insert Arrange- ment No.	No. of Contacts/ Size	Description	Digi-Key Part No.	Price each 1	10	50	Dimensions in Inches B Min Full Thread	K	L	M	N Dia.	R	S	X Min Cable Dim.	Z	Amphenol Part No.
10SL-3	3/16	Plug w/socket	MS3106E-10SL-3S-ND*	14.70	10.29	7.65	—	.531	2.129	—	.896	—	.946	.281	—	MS3106E-10SL-30S
	3/16	Plug w/socket	MS3106F-10SL-3S-ND†	16.70	11.69	8.69	—	.531	2.129	—	.896	—	.946	.281	—	MS3106F-10SL-3S
	3/16	Plug w/socket	MS3106R-10SL-3S-ND‡	15.25	10.68	7.93	—	.531	1.057	1.120	.807	—	.946	—	—	MS3106R-10SL-3S
	3/16	Recept. w/pins	MS3102E-10SL-3P-ND*	7.24	4.11	3.03	.391	.672	.297	.562	.625	.719	1.000	—	.422	MS3102E-10SL-3P
	3/16	Recept. w/pins	MS3102R-10SL-3P-ND‡	6.47	3.67	2.71	.391	.672	.297	.562	.625	.719	1.000	—	.422	MS3102R-10SL-3P
10SL-4	2/16	Plug w/socket	MS3106A-10SL-4S-ND	15.08	10.56	7.84	—	.531	.937	—	—	—	.946	—	—	MS3106A-10SL-4S
	2/16	Plug w/socket	MS3106E-10SL-4S-ND*	16.78	11.75	8.73	—	.531	2.129	—	.896	—	.946	.281	—	MS3106E-10SL-4S
	2/16	Plug w/socket	MS3106F-10SL-4S-ND†	14.88	10.42	7.74	—	.531	2.129	—	.896	—	.946	.281	—	MS3106F-10SL-4S
	2/16	Recept. w/pins	MS3102E-10SL-4P-ND*	6.60	3.75	2.76	.391	.672	.297	.562	.625	.719	1.000	—	.422	MS3102E-10SL-4P
	2/16	Recept. w/pins	MS3102R-10SL-4P-ND‡	5.86	3.33	2.45	.391	.672	.297	.562	.625	.719	1.000	—	.422	MS3102R-10SL-4P
14S-2	4/16	Plug w/pins	MS3106F-14S-2P-ND†	12.80	8.96	6.66	—	.531	2.201	—	1.021	—	1.123	.406	—	MS3106F-14S-2P
	4/16	Plug w/socket	MS3106A-14S-2S-ND	11.70	8.19	6.09	—	.531	.937	—	—	—	1.123	—	—	MS3106A-14S-2S
	4/16	Plug w/socket	MS3106F-14S-2S-ND†	16.91	11.04	9.26	—	.531	2.201	—	1.021	—	1.123	.406	—	MS3106F-14S-2S
	4/16	Recept. w/pins	MS3102E-14S-2P-ND*	8.82	5.30	4.12	.450	.672	.297	.562	.750	.906	1.188	—	.422	MS3102E-14S-2P
	4/16	Recept. w/socket	MS3102E-14S-2S-ND*	8.74	4.96	3.66	.450	.672	.297	.562	.750	.906	1.188	—	.422	MS3102E-14S-2S
	4/16	Recept. w/pins	MS3102R-14S-2P-ND‡	5.93	3.37	2.48	.450	.672	.297	.562	.750	.906	1.188	—	.422	MS3102R-14S-2P
	4/16	Recept. w/socket	MS3102R-14S-2S-ND‡	8.84	5.02	3.70	.450	.672	.297	.562	.750	.906	1.188	—	.422	MS3102R-14S-2S
14S-5	5/16	Plug w/pins	MS3106A-14S-5P-ND	11.58	8.11	6.02	—	.531	.937	—	—	—	1.123	—	—	MS3106A-14S-5P
	5/16	Plug w/socket	MS3106A-14S-5S-ND	13.00	9.10	6.76	—	.531	.937	—	—	—	1.123	—	—	MS3106A-14S-5S
	5/16	Recept. w/pins	MS3102E-14S-5P-ND*	7.67	4.36	3.21	.450	.672	.297	.562	.750	.906	1.188	—	.422	MS3102E-14S-5P
	5/16	Recept. w/pins	MS3102R-14S-5P-ND‡	9.08	5.15	3.80	.450	.672	.297	.562	.750	.906	1.188	—	.422	MS3102R-14S-5P
14S-6	6/16	Plug w/socket	MS3106A-14S-6S-ND	12.90	9.03	6.71	—	.531	.937	—	—	—	1.123	—	—	MS3106A-14S-6S
	6/16	Plug w/socket	MS3106F-14S-6S-ND†	16.80	11.76	8.74	—	.531	2.201	—	1.021	—	1.123	.406	—	MS3106F-14S-6S
	6/16	Recept. w/pins	MS3102E-14S-6P-ND*	7.84	4.45	3.28	.450	.672	.297	.562	.750	.906	1.188	—	.422	MS3102E-14S-6P
	6/16	Recept. w/socket	MS3102E-14S-6S-ND*	9.84	5.91	4.60	.450	.672	.297	.562	.750	.906	1.188	—	.422	MS3102E-14S-6S
	6/16	Recept. w/pins	MS3102R-14S-6P-ND‡	5.49	3.12	2.30	.450	.672	.297	.562	.750	.906	1.188	—	.422	MS3102R-14S-6P
	6/16	Recept. w/socket	MS3102R-14S-6S-ND‡	9.01	5.12	3.77	.450	.672	.297	.562	.750	.906	1.188	—	.422	MS3102R-14S-6S
14S-7	3/16	Plug w/socket	MS3106F-14S-7S-ND†	17.05	11.13	9.34	—	.531	2.201	—	1.021	—	1.123	.406	—	MS3106F-14S-7S
16S-1	7/16	Plug w/socket	MS3106A-16S-1S-ND	15.48	10.84	8.05	—	.531	.937	—	—	—	1.250	—	—	MS3106A-16S-1S
	7/16	Plug w/socket	MS3106F-16S-1S-ND†	23.18	15.13	12.69	—	.531	2.201	—	1.151	—	1.250	.500	—	MS3106F-16S-1S
	7/16	Recept. w/pins	MS3102E-16S-1P-ND*	8.49	5.10	3.97	.450	.672	.297	.562	.875	.969	1.281	—	.422	MS3102E-16S-1P
	7/16	Recept. w/pins	MS3102R-16S-1P-ND‡	6.80	3.86	2.85	.450	.672	.297	.562	.875	.969	1.281	—	.422	MS3102R-16S-1P
16-10	3/12	Plug w/socket	MS3106A-16-10S-ND	16.53	11.57	8.60	—	.719	1.124	—	—	—	1.250	—	—	MS3106A-16-10S
	3/12	Plug w/socket	MS3106F-16-10S-ND†	23.00	14.72	13.04	—	.719	2.524	—	1.151	—	1.250	.500	—	MS3106F-16-10S
16-11	2/12	Recept. w/pins	MS3102R-16-11P-ND‡	6.83	3.88	2.86	.625	.860	.484	.750	.875	.969	1.281	—	.672	MS3102R-16-11P
18-1	10/16	Recept. w/pins	MS3102E-18-1P-ND*	10.20	6.12	4.76	.625	.891	.453	.750	1.000	1.062	1.375	—	.641§	MS3102E-18-1P
	10/16	Recept. w/pins	MS3102R-18-1P-ND‡	10.14	6.09	4.74	.625	.891	.453	.750	1.000	1.062	1.375	—	.641§	MS3102R-18-1P
	10/16	Plug w/socket	MS3106A-18-1S-ND	18.12	11.83	9.92	—	.719	1.219	—	—	—	1.333	—	—	MS3106A-18-1S
18-11	5/12	Recept. w/pins	MS3102E-18-11P-ND*	8.68	4.93	3.63	.625	.891	.453	.750	1.000	1.062	1.375	—	.641§	MS3102E-18-11P
20-27	14/16	Recept. w/pins	MS3102R-20-27P-ND‡	10.80	6.48	5.04	.625	.891	.453	.750	1.125	1.156	1.500	—	.641§	MS3102R-20-27P
22-14	19/16	Recept. w/pins	MS3102E-22-14P-ND*	11.43	6.86	5.34	.625	.891	.453	.750	1.250	1.250	1.625	—	.641§	MS3102E-22-14P
22-19	14/16	Recept. w/socket	MS3102E-22-19S-ND*	12.00	8.40	6.24	.625	.891	.453	.750	1.250	1.250	1.625	—	.641§	MS3102E-22-19S
22-22	4/8	Recept. w/pins	MS3102E-22-22P-ND*	14.90	10.43	7.75	.625	.891	.453	.750	1.250	1.250	1.625	—	.641§	MS3102E-22-22P
24-11	3/#8 6/#12	Recept. w/pins	MS3102R-24-11P-ND‡	11.65	8.16	6.06	.625	.953	.453	.812	1.375	1.375	1.750	—	.578§	MS3102R-24-11P
	3/#8 6/#12	Plug w/socket	MS3106R-24-11S-ND‡	23.83	15.25	13.51	—	.719	1.291	1.994	1.557	—	1.715	—	—	MS3106R-24-11S

* Environmental resisting
† Environmental resisting with strain relief (MS part number only)
‡ Lightweight environmental resisting
§ Increase Z dimension by .312 for size "0" contact only.

Accessories For 97 Series Connectors

Cable Clamp

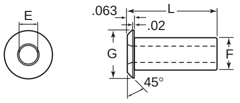
MS3075A Type



For jacketed cable or wires protected by tubing. Both clamping halves float for maximum strain relief. For unjacketed cable or wires, use corresponding MS3420 bushing. Clamp and bushing can be ordered together. Two telescoping bushings are furnished with shell sizes 24 and larger.

Bushing

MS3420 Type



Rubber bushing specifically designed for MS3057A type cable clamp. Can also be used as a reducing bushing. Order separately or with cable clamp.

Shell Size	Max. O.D. Cable	Description	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 50	Dimensions in Inches A	B	C Dia.	D. Internal Thread	E	F	G	L	Amphenol Part No.
10SL, 12S	5/16	Cable Clamp	97-3057-1004-ND	5.76	3.27	2.41	.795	.842	5/16	5/8-24	—	—	—	—	97-3057-1004
		Bushing	97-79-513-3-ND	1.04	.63	.41	—	—	—	—	.130	.210	.374	2.875	9779-513-3
		Bushing	97-79-513-4-ND	1.23	.74	.48	—	—	—	—	.220	.302	.500	2.750	9779-513-4
		Cable Clamp w/Bushing	97-3057-1004-1-ND*	7.00	3.98	2.93	.795	.842	5/16	5/8-24	.220	.302	.500	2.750	97-3057-1004-1*
12SL, 14S	7/16	Cable Clamp	97-3057-1007-ND	5.58	3.34	2.18	.850	.995	7/16	3/4-20	—	—	—	—	97-3057-1007
		Bushing	97-79-513-6-ND	1.27	.76	.50	—	—	—	—	.312	.427	.614	2.625	9779-513-6
		Cable Clamp w/Bushing	97-3057-1007-1-ND	7.07	4.01	2.96	.850	.995	7/16	3/4-20	.312	.427	.614	2.625	97-3057-1007-1
16,16S	9/16	Cable Clamp	97-3057-1008-ND	6.40	3.63	2.68	.920	1.120	9/16	7/8-20	—	—	—	—	97-3057-1008-1
		Bushing	97-79-513-8-ND	1.04	.63	.41	—	—	—	—	.437	.552	.739	2.500	9779-513-8
		Cable Clamp w/Bushing	97-3057-1008-1-ND	7.47	4.24	3.13	.920	1.120	9/16	7/8-20	.437	.552	.739	2.500	97-3057-1008-1
18	5/8	Cable Clamp	97-3057-1010-ND	5.43	3.08	2.27	.920	1.216	5/8	1-20	—	—	—	—	97-3057-1010
		Bushing	97-79-513-10-ND	1.04	.63	.41	—	—	—	—	.562	.615	.889	2.375	9779-513-10
		Cable Clamp w/Bushing	97-3057-1010-1-ND	6.37	3.61	2.66	.920	1.216	5/8	1-20	.562	.615	.889	2.375	97-3057-1010-1
20,22	3/4	Cable Clamp	97-3057-1012-ND	5.43	3.08	2.27	.927	1.403	3/4	1-3/16-18	—	—	—	—	97-3057-1012
		Bushing	97-79-513-12-ND	1.23	.74	.48	—	—	—	—	.625	.740	1.084	2.250	9779-513-12
		Cable Clamp w/Bushing	97-3057-1012-1-ND	6.50	3.69	2.72	.927	1.403	3/4	1-3/16-18	.625	.740	1.084	2.250	97-3057-1012-1
24,28	15/16	Cable Clamp	97-3057-1016-ND**	5.90	3.35	2.47	1.015	1.683	15/16	1-7/16-18	—	—	—	—	97-3057-1016**
		Bushing	97-79-513-12-ND	1.23	.74	.48	—	—	—	—	.625	.740	1.084	2.250	9779-513-12
		Bushing	97-79-513-16-ND	1.54	.92	.60	—	—	—	—	.750	.927	1.309	2.125	9779-513-16
		Cable Clamp w/Bushing	97-3057-1016-1-ND**	8.38	4.75	3.50	1.015	1.683	15/16	1-7/16-18	—	—	—	—	97-3057-1016-1**

* When Clamp and bushing are ordered together for shell sizes 10SL and 12S, bushing 97-79-513-4 will be furnished.
**Two telescoping bushings (97-79-513-12 and 97-79-513-16) are furnished with each cable clamp for shell sizes 24 and 28.

97 Series Receptacles

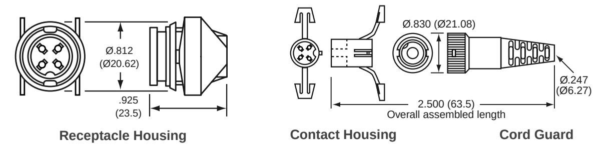
Shell Size Insert Arrange-ment No.	No. of Con-tacts/ Size	Description	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 50	Dimensions in Inches A Coupling Thread	K Ref.	L Max.	L1 Max.	M Ref.	N Ref.	N1 Ref.	O Ref.	R Ref.	S Ref.	V Fitting Thread	Ampenol Part No.
		Receptacles With Solid Shells																
10SL-3	3/16	Cable recept. w/pins	97-3101A-10SL-3P-ND	14.08	9.86	7.32	5/8-24	5/64	1-9/32	61.64	9/16	3/4	11/16	.812	23/32	1	5/8-24	97-3101A-10SL-3P
		Box mount recept. w/pins	97-3102A-10SL-3P-ND	9.69	5.82	4.53												97-3102A-10SL-3P
10SL-4	2/16	Cable recept. w/pins	97-3101A-10SL-4P-ND	13.43	9.40	6.99												97-3101A-10SL-4P
		Box mount recept. w/pins	97-3102A-10SL-4P-ND	8.91	5.35	4.16												97-3102A-10SL-4P
12S-3	2/16	Box mount recept. w/pins	97-3102A-12S-3P-ND	8.27	4.70	3.46	3/4-20	5/64	1-15/32	31/32	9/16	25/32	11/16	.812	13/16	1-3/32	5/8-24	97-3102A-12S-3P
		Box mount recept. w/socket	97-3102A-12S-3S-ND	8.88	5.04	3.71												97-3102A-12S-3S
14S-1	3/16	Wall mount recept. w/pins	97-3100A-14S-1P-ND	12.00	8.40	6.24	7/8-20	5/64	1-15/32	61/64	9/16	7/8	3/4	.938	29/32	1-3/16	3/4-20	97-3100A-14S-1P
		Wall mount recept. w/socket	97-3100A-14S-1S-ND	12.30	8.61	6.40												97-3100A-14S-1S
		Cable recept. w/pins	97-3101A-14S-1P-ND	14.78	10.35	7.69												97-3101A-14S-1P
		Cable recept. w/socket	97-3101A-14S-1S-ND	15.00	10.50	7.80												97-3101A-14S-1S
14S-2	4/16	Wall mount recept. w/pins	97-3100A-14S-2P-ND	13.35	9.35	6.95												97-3100A-14S-2P
		Wall mount recept. w/socket	97-3100A-14S-2S-ND	12.58	8.81	6.54												97-3100A-14S-2S
		Cable recept. w/pins	97-3101A-14S-2P-ND	14.70	10.29	7.65												97-3101A-14S-2P
		Cable recept. w/socket	97-3101A-14S-2S-ND	15.55	10.89	8.09												97-3101A-14S-2S
14S-5	5/16	Wall mount recept. w/pins	97-3100A-14S-5P-ND	13.35	9.35	6.95												97-3100A-14S-5P
		Wall mount recept. w/socket	97-3100A-14S-5S-ND	12.03	8.42	6.26												97-3100A-14S-5S
		Cable recept. w/pins	97-3101A-14S-5P-ND	15.85	11.10	8.25												97-3101A-14S-5P
		Cable recept. w/socket	97-3101A-14S-5S-ND	16.55	11.59	8.61												97-3101A-14S-5S
14S-6	6/16	Wall mount recept. w/pins	97-3100A-14S-6P-ND	12.03	8.42	6.26												97-3100A-14S-6P
		Wall mount recept. w/socket	97-3100A-14S-6S-ND	13.83	9.68	7.19												97-3100A-14S-6S
		Cable recept. w/pins	97-3101A-14S-6P-ND	16.55	11.59	8.61												97-3101A-14S-6P
		Cable recept. w/socket	97-3101A-14S-6S-ND	16.93	11.85	8.81												97-3101A-14S-6S
16S-1	7/16	Box mount recept. w/pins	97-3102A-16S-1P-ND	11.67	7.01	5.45	1-20	5/64	1-15/32	61/64	9/16	1	7/8	1.062	31/32	1-9/32	7/8-20	97-3102A-16S-1P
		Box mount recept. w/socket	97-3102A-16S-1S-ND	11.88	7.13	5.55												97-3102A-16S-1S
16S-8	5/16	Box mount recept. w/pins	97-3102A-16S-8P-ND	11.52	6.92	5.38												97-3102A-16S-8P
		Box mount recept. w/socket	97-3102A-16S-8S-ND	11.97	7.19	5.59												97-3102A-16S-8S
18-1	10/16	Box mount recept. w/pins	97-3102A-18-1P-ND	13.25	9.28	6.89	1-1/8-18	1/8	1-63/64	1-3/8	3/4	1-1/8	1	1.188	1-1/16	1-3/8	1-20	97-3102A-18-1P
		Box mount recept. w/socket	97-3102A-18-1S-ND	12.78	8.95	6.65												97-3102A-18-1S
18-4	4/16	Box mount recept. w/pins	97-3102A-18-4P-ND	11.52	6.92	5.38												97-3102A-18-4P
		Box mount recept. w/socket	97-3102A-18-4S-ND	10.40	7.28	5.41												97-3102A-18-4S
18-8	4/1#12, 4/7#16	Box mount recept. w/pins	97-3102A-18-8P-ND	13.25	9.28	6.89												97-3102A-18-8P
		Box mount recept. w/socket	97-3102A-18-8S-ND	14.48	10.14	7.53												97-3102A-18-8S
18-10	4/12	Box mount recept. w/pins	97-3102A-18-10P-ND	12.30	8.61	6.40												97-3102A-18-10P
		Box mount recept. w/socket	97-3102A-18-10S-ND	14.48	10.14	7.53												97-3102A-18-10S
18-11	5/12	Box mount recept. w/pins	97-3102A-18-11P-ND	12.30	8.61	6.40												97-3102A-18-11P
		Box mount recept. w/socket	97-3102A-18-11S-ND	11.53	8.07	6.00												97-3102A-18-11S
18-12	6/16	Box mount recept. w/pins	97-3102A-18-12P-ND	11.20	7.84	5.83												97-3102A-18-12P
		Box mount recept. w/socket	97-3102A-18-12S-ND	10.70	7.49	5.57												97-3102A-18-12S
18-16	1/12	Box mount recept. w/pins	97-3102A-18-16P-ND	11.73	8.21	6.10												97-3102A-18-16P
		Box mount recept. w/socket	97-3102A-18-16S-ND	15.00	10.50	7.80												97-3102A-18-16S
18-19	10/16	Box mount recept. w/pins	97-3102A-18-19P-ND	19.07	12.45	10.44												97-3102A-18-19P
		Box mount recept. w/socket	97-3102A-18-19S-ND	13.05	9.14	6.79												97-3102A-18-19S
20-4	4/12	Box mount recept. w/pins	97-3102A-20-4P-ND	12.00	8.40	6.24	1-1/4-18	1/8	1-57/64	1-3/8	3/4	1-1/4	1-1/8	1.312	1-5/32	1-1/2	1-3/16-18	97-3102A-20-4P
		Box mount recept. w/socket	97-3102A-20-4S-ND	14.78	10.35	7.69												97-3102A-20-4S
20-7	8/16	Box mount recept. w/pins	97-3102A-20-7P-ND	12.00	8.40	6.24												97-3102A-20-7P
		Box mount recept. w/socket	97-3102A-20-7S-ND	13.83	9.68	7.19												97-3102A-20-7S
20-15	7/12	Box mount recept. w/pins	97-3102A-20-15P-ND	16.05	11.24	8.35												97-3102A-20-15P
		Box mount recept. w/socket	97-3102A-20-15S-ND	20.66	13.49	11.31												97-3102A-20-15S
20-16	9/2#12, 9/7#16	Box mount recept. w/pins	97-3102A-20-16P-ND	14.48	10.14	7.53												97-3102A-20-16P
		Box mount recept. w/socket	97-3102A-20-16S-ND	15.75	11.03	8.19												97-3102A-20-16S
20-27	14/16	Box mount recept. w/pins	97-3102A-20-27P-ND	14.78	10.35	7.69												97-3102A-20-27P
		Box mount recept. w/socket	97-3102A-20-27S-ND	14.75	10.33	7.67												97-3102A-20-27S
20-29	17/16	Box mount recept. w/pins	97-3102A-20-29P-ND	16.60	11.62	8.64												97-3102A-20-29P
		Box mount recept. w/socket	97-3102A-20-29S-ND	18.05	11.78	9.88												97-3102A-20-29S
22-14	19/16	Box mount recept. w/pins	97-3102A-22-14P-ND	17.24	11.26	9.44	1-3/8-18	1/8	1-63/64	1-3/8	3/4	1-3/8	1-1/4	1.438	1-1/4	1-5/8	1-3/16-18	97-3102A-22-14P
		Box mount recept. w/socket	97-3102A-22-14S-ND	21.00	13.71	11.50												97-3102A-22-14S
22-19	14/16	Box mount recept. w/pins	97-3102A-22-19P-ND	16.91	11.04	9.26												97-3102A-22-19P
		Box mount recept. w/socket	97-3102A-22-19S-ND	17.24	11.26	9.44												97-3102A-22-19S
24-7	16/2#12, 16/14#16	Box mount recept. w/pins	97-3102A-24-7P-ND	20.28	13.24	11.11	1-1/2-18	1/8	2-1/4	1-3/8	13/16	1-1/2	1-3/8	1.562	1-3/8	1-3/4	1-7/16-18	97-3102A-24-7P
		Box mount recept. w/socket	97-3102A-24-7S-ND	22.75	14.85	12.46												97-3102A-24-7S
24-28	24/16	Box mount recept. w/pins	97-3102A-24-28P-ND	22.06	14.40	12.08												97-3102A-24-28P
		Box mount recept. w/socket	97-3102A-24-28S-ND	24.50	15.69	13.89												97-3102A-24-28S
28-11	22/4#12, 22/18#16	Box mount recept. w/pins	97-3102A-28-11P-ND	22.93	14.68	13.00	1-3/4-18	1/8	2-1/4	1-3/8	13/16	1-3/4	1-5/8	1.812	1-9/16	2	1-7/16-18	97-3102A-28-11P
		Box mount recept. w/socket	97-3102A-28-11S-ND	29.48	18.87	16.71												97-3102A-28-11S
28-16	20/16	Box mount recept. w/pins	97-3102A-28-16P-ND	24.05	15.40	13.63												97-3102A-28-16P
		Box mount recept. w/socket	97-3102A-28-16S-ND	24.23	15.51	13.74												97-3102A-28-16S
28-21	37/16	Box mount recept. w/pins	97-3102A-28-21P-ND	29.27	18.74	16.59												97-3102A-28-21P
		Box mount recept. w/socket	97-3102A-28-21S-ND	30.68	21.48	19.18												97-3102A-28-21S

tyco Electronics AMP

Audio / Instrument Connectors (DIN Type)

Audio/Instrument connectors are economical, quick connect/disconnect attachments for audio and instrument cable having small, flexible, stranded wire conductors. These versatile connectors are ideally suited for application in citizens' band (CB) radios, test equipment, computer input terminals and industrial control equipment.

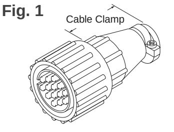
Material & Finish: Plug/Receptacle: Thermoplastic, black Contacts: Brass, plated. Tin over nickel.



No. of Pos.	Description	Digi-Key Part No.	Price Each 1	25	50	AMP Part No.
Plug Assemblies						
4	Contact Housing	A25074-ND	1.49	1.39	1.21	207313-1
5	Contact Housing	A25075-ND	1.03	.96	.84	207488-1
6	Contact Housing	A25076-ND	1.96	1.82	1.59	207332-1
—	Cord Guard	A25077-ND	1.19	1.11	.97	207314-1
Receptacle						
4	Receptacle Housing	A25078-ND	2.14	1.99	1.74	207316-1
5	Receptacle Housing	A25079-ND	2.29	2.13	1.86	207487-1
6	Receptacle Housing	A25080-ND	2.14	1.99	1.74	207333-1
Crimp Contacts — 22-28 AWG						
—	Pin, Diameter .058" (1.47mm), Loose	A25082-ND	.27	.25	.22	207438-3
—	Socket, Loose	A25083-ND	.29	.27	.24	207437-3
Tool						
—	Contact Extraction Tool	A25081-ND	29.04	—	—	91136-1

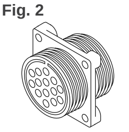
MIL-C-5015 Style Circular Plastic Connectors - Shell Size 20-14

Fig. 1



Reverse Sex

Fig. 2



Reverse Sex

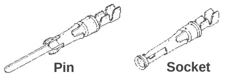
UL File No. E28476 CSA File No. LR7189

Standard Sex: Pin contacts in receptacle housings; socket contacts in plug housings.
Reverse Sex: Socket contacts in receptacle housings; pin contacts in plug housings.

Fig.	Description	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Plug Kit, Unassembled					
1	Reverse Sex w/o Cable Clamp Standard Sex w/o Cable Clamp	A25015-ND A25016-ND	11.51 11.63	10.91 11.02	213571-2 213652-1
Cable Clamps - Shell Size 17					
1	O.D. .453" (11.51mm), for use with 213652-1 O.D. .703" (17.86mm), for use with 213571-2	A1332-ND A1689-ND	2.32 2.58	2.20 2.45	206070-1 206322-1
Receptacle, Square Flange					
2	Reverse Sex Standard Sex	A25017-ND A25018-ND	6.69 6.56	6.34 6.21	213570-1 213651-1

MIL-C-5015 Style Contacts

Crimp Style, Type III+

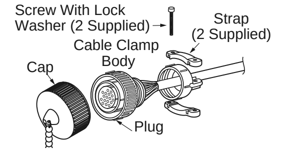


Contact Finish: **A:** 30µ gold on the electrical engagement area over 50µ nickel **B:** Tin **C:** 30µ selective gold over 30µ nickel

Desc.	AWG mm	Ins. Dia. Range Inch	Con. Fin.	Digi-Key Part No.	Loose Pc. Price Each 10	100	AMP Part No.	Digi-Key Part No.	Strip Form Pricing 1,000	AMP Part No.
Pin	24-20	.060-.135 (1.52-3.43)	B	—	—	—	—	A25009-ND	186.29	213605-1
Socket	24-20		B	—	—	—	—	A25002-ND	166.13	66563-6
Socket	24-20		B	A25007-ND	.53	.38	66565-2	—	—	—
Socket	24-20		A	—	—	—	—	A25006-ND	221.89	66563-8
Socket	24-20		A	A25008-ND	.60	.42	66565-4	—	—	—
Pin	18-14	110-.150. (2.79-3.81)	B	—	—	—	—	A25011-ND	186.29	213603-1
Socket	18-14		B	—	—	—	—	A25503-ND	134.54	66598-1
Pin	18-14		A	A25031-ND	5.19	.3.63	66602-2	—	—	—
Socket	18-14		A	A25012-ND	.58	.41	66601-1	—	—	—

CPC Connector Accessories, Metal-Shell

Cable clamps are used to prevent excessive strain on cable or wire from being transmitted to the contacts inside the connector housings.
Material: Zinc alloy, nickel plated



Shell Size	Cable Diameter Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Cable Clamps					
14	.225 - .562 (5.71 - 14.27)	A1626-ND	7.87	7.46	208945-5
22	.325 - .750 (8.26 - 19.05)	A1627-ND	12.05	11.42	208945-7
28	.450 - .938 (11.43 - 23.83)	A1628-ND	15.94	15.11	208945-8
Protective Caps					
14	—	A25047-ND	11.76	11.15	213823-2
22	—	A1633-ND	22.82	21.62	211903-1
28	—	A1634-ND	24.47	23.19	211904-1

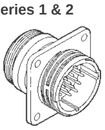
Circular Metal Shell Connectors

Note: Shell Only. Material and Finish: Receptacle: Insert: Black thermoplastic; **Outer Shell:** Aluminum alloy, zinc plated or unplated. **Plug: Insert:** Black thermoplastic; **Outer Shell and Coupling Ring:** Aluminum alloy, zinc plated; **Retainer Ring:** Stainless steel.

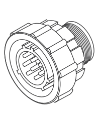
Note: Contacts (pins and sockets) must be ordered separately.

Component Diameter	
Arrangement/ Shell Size	Overall Dia. Inch (mm)
14	1.225 (31.12)
22	1.750 (44.45)
28	2.170 (55.12)

Series 1 & 2

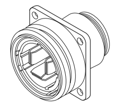


*** Standard Sex (Plug/Socket)**

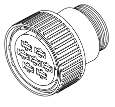


† Reverse Sex (Plug/Pins)

Series 3

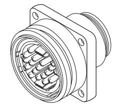


*** Standard Sex Square Flange Receptacle**

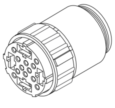


*** Standard Sex Plug**

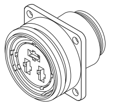
Series 4



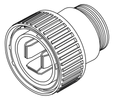
*** Standard Sex Square Flange Receptacle**



*** Standard Sex Plug**



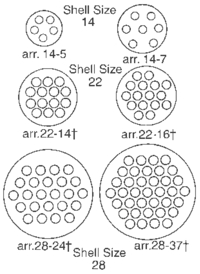
† Reverse Sex Square Flange Receptacle



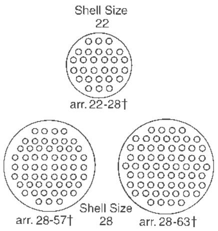
† Reverse Sex Plug

* Standard Sex: Pin contacts in receptacle housings; socket contacts in plug housings.
† Reverse Sex: Socket contacts in receptacle housings; pin contacts in plug housings.

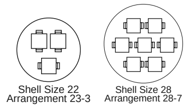
Series 1



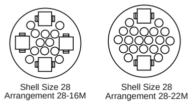
Series 2



Series 3



Series 4



Arrange-ment No.	Sex	Description (Shell Only)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Series 1						
14-5	Standard	Receptacle-Sq. Flanged Plug	A1600-ND A1601-ND	17.63 42.29	16.34 39.20	208719-1 208718-1
	Reverse	Receptacle-Sq. Flanged Plug	A1602-ND A1603-ND	20.07 31.39	18.61 29.09	208721-1 208720-1
14-7	Standard	Receptacle-Sq. Flanged Plug	A1604-ND A1605-ND	18.39 29.36	17.05 27.21	208715-1 208714-1
	Reverse	Receptacle-Sq. Flanged Plug	A1606-ND A1607-ND	18.39 28.70	17.05 26.60	208717-1 208716-1
22-14	Reverse	Receptacle-Sq. Flanged Plug Plug with Tetraseals	A1608-ND A1609-ND A25051-ND‡	21.65 28.43 34.32	20.07 26.36 31.81	208487-1 208486-1 208486-3
22-16	Standard	Receptacle-Sq. Flanged Plug	A1610-ND A1611-ND	24.17 27.37	22.41 25.37	208489-1 208488-1
28-24	Standard	Receptacle-Sq. Flanged Plug	A1612-ND A1613-ND	27.68 34.95	25.65 32.40	208459-1 208457-1
28-37	Standard	Receptacle-Sq. Flanged Plug	A1614-ND A1615-ND	27.65 34.95	25.64 32.40	208471-1 208470-1
	Reverse	Receptacle-Sq. Flanged Plug	A1616-ND A1617-ND	27.65 33.50	25.64 31.05	208473-1 208472-1
Series 2						
22-28	Standard	Receptacle-Sq. Flanged Plug	A1618-ND# A1619-ND	20.07 66.97	18.61 62.08	208491-1 208490-1
	Reverse	Receptacle-Sq. Flanged Plug	A1620-ND# A1621-ND	19.31 85.03	17.90 78.82	208493-1 208492-1
28-57	Reverse	Receptacle-Sq. Flanged Plug	A1622-ND# A1623-ND	29.52 99.34	27.36 92.08	208475-1 208474-1
28-63	Standard	Receptacle-Sq. Flanged Plug	A1624-ND# A1625-ND	29.52 93.28	27.36 86.45	208477-1 208476-1
Series 3						
22-3	Standard	Receptacle-Sq. Flanged Plug	A16070-ND A16071-ND	24.05 33.17	22.29 30.75	208495-1 208494-1
	Reverse	Plug	A25052-ND	30.42	28.20	208496-1
28-7	Standard	Receptacle-Sq. Flanged Plug	A16072-ND A16073-ND	26.26 38.87	24.34 36.03	208483-1 208482-1
28-7	Reverse	Receptacle-Sq. Flanged Plug	A16074-ND A16075-ND	26.24 34.07	24.32 31.58	208485-1 208484-1
Series 4						
28-16	Standard	Receptacle-Sq. Flanged Plug	A16076-ND A16077-ND	26.92 38.89	24.95 36.05	208479-1 208478-1
28-22	Standard	Receptacle-Sq. Flanged Plug	A16078-ND A16079-ND	26.92 37.17	24.95 34.45	208481-1 208480-1

# Aluminum alloy, unplated. ‡ Tetraseal provides splash-proof sealing between mating metal shells.

tyco | Electronics AMP

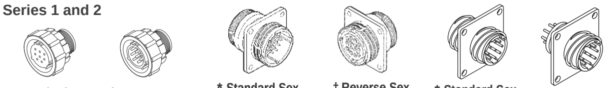
Circular Plastic Connectors

- Lightweight, all-plastic connectors • CPC connectors made of UL recognized, high-grade black thermoplastic material • 94V-1 rated, heat-stabilized, fire-resistant, self-extinguishing • Two connector series for different connection needs: **Series 1** — Standard density applications with Multimate contacts. **Series 2** — High-density applications with size 20 DM and 20 DF contacts, .040" (1.02 mm) dia. • Available in panel-mount, chassis-mount and free hanging versions • Quick-connect/disconnect capability with thread assist, positive detent coupling • Built-in pin and socket protection. Plug or socket half can be "hot", depending on connector sex • 5-key polarization for proper mating of connector halves • Full complement of optional accessories

Component Diameter	
Arrangement/ Shell Size	**Overall Dia. Inch (mm)**
11	.942 (23.93)
13	1.070 (27.18)
17	1.315 (33.40)
23	1.743 (44.2)

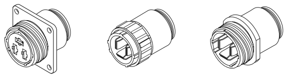
Note: Contacts (pins and sockets) must be ordered separately, unless otherwise noted.

Series 1 and 2



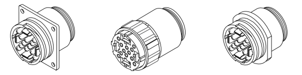
* Standard Sex (Plug/Socket) · † Reverse Sex (Plug/Pins) · * Standard Sex Square-Flange Receptacle · † Reverse Sex Square-Flange Receptacle · * Standard Sex Feed-Thru Receptacle · * Standard Sex PC Mount

Series 3



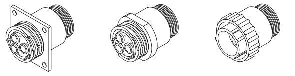
† Reverse Sex Square Flange Receptacle · † Reverse Sex Plug · * Standard Sex Free-Hanging Receptacle

Series 4



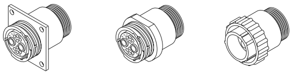
* Standard Sex Square Flange Receptacle · * Standard Sex Plug · * Standard Sex Free-Hanging Receptacle

Series 5



† Rev Sex Square Flange Receptacle · † Rev Sex Free-Hanging Receptacle · † Reverse Sex Plug

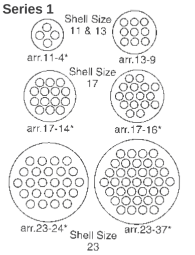
Series 6



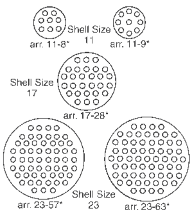
† Rev Sex Square Flange Receptacle · † Rev Sex Free-Hanging Receptacle · † Reverse Sex Plug

*** Standard Sex:** Pin contacts in receptacle housings; socket contacts in plug housings.
† Reverse Sex: Socket contacts in receptacle housings; pin contacts in plug housings.

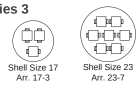
Series 1



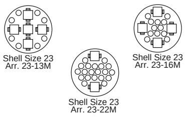
Series 2



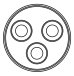
Series 3



Series 4

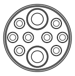


Series 5



Arr 17-3
Shell Size 17

Series 6



Arr 17-10
Shell Size 17

Series 1 (Shell Only)

Shell Size	No. of Cont.	Sex	Description	Digi-Key Part No.	Price Each		AMP Part No.
					1	25	
11	4	Rev.	Receptacle-Square Flanged	A1360-ND	1.44	1.33	206430-1
			Receptacle-Free Hanging	A1361-ND	1.44	1.33	206430-2
			Recep.-Square Flanged w/Inserts	A25053-ND	3.24	3.01	211102-1
			Plug	A1357-ND	1.74	1.62	206429-1
		Std.	Receptacle-Square Flanged	A1301-ND	1.37	1.28	206061-1
			Receptacle-Free Hanging	A1351-ND	1.44	1.33	206153-1
			Plug	A1300-ND	1.72	1.60	206060-1
13	9	Std.	Receptacle-Square Flanged	A1303-ND	1.50	1.39	206705-1
			Receptacle-Free Hanging	A1352-ND	1.54	1.43	206705-2
			Plug	A1302-ND	1.91	1.77	206708-1
17	14	Rev.	Receptacle-Square Flanged	A1362-ND	1.58	1.47	206043-1
			Receptacle-Free Hanging	A1363-ND	2.01	1.87	206043-3
			Plug	A1358-ND	1.97	1.83	206044-1
	16	Std.	Receptacle-Square Flanged	A1305-ND	1.58	1.47	206036-1
			Receptacle-Free Hanging	A1353-ND	1.58	1.47	206036-3
			Receptacle-Feed-Thru	A25058-ND	29.85	27.67	206552-1
			Plug-Reverse Numbering	A25057-ND	3.40	3.16	206554-1
			Plug	A1304-ND	1.97	1.83	206037-1
23	24	Std.	Receptacle-Square Flanged	A1354-ND	1.97	1.83	206838-1
			Receptacle-Free Hanging	A1355-ND	2.67	2.47	206838-2
			Plug	A1350-ND	2.54	2.36	206837-1
	37	Rev.	Receptacle-Square Flanged	A1364-ND	1.80	1.68	206306-1
			Receptacle-Free Hanging	A1365-ND	2.50	2.32	206306-2
			Plug	A1359-ND	2.28	2.11	206305-1
		Std.	Receptacle-Square Flanged	A1307-ND	1.80	1.68	206151-1
			Receptacle-Free Hanging	A1356-ND	1.99	1.85	206151-2
			Plug	A1306-ND	2.28	2.11	206150-1

Series 1 (Shell & Contacts) - PC Mount w/.025" (.64mm) Sq. Sol. Tails

Contact Finish: Duplex plated gold flash on entire contact with 30μ min. gold on contact engagement area, tin-lead on the termination area, all over .50μ min. nickel under plating.

Shell Size	No. of Cont.	Sex	Description	Digi-Key Part No.	Price Each		AMP Part No.
					1	25	
11	4	Rev.	Receptacle	A25054-ND	6.15	5.70	208283-1
13	9	Std.	Receptacle	A25055-ND	4.74	4.39	208223-1
17	16	Std.	Receptacle	A25056-ND	8.79	8.16	207303-3

Series 1 (Shell Only) - VDE Tested Connectors

Designed to meet requirements of VDE as shown in DIN Specification 57627. Recognized under the Component Program of UL for 600VAC & 600VDC service, File No. E28476. Certified by CSA, File No. LR7189.

Shell Size	No. of Contacts	Sex	Description	Digi-Key Part No.	Price Each		AMP Part No.
					1	25	
13	7	Std.	Receptacle-Square Flanged	A1635-ND	2.56	2.38	211401-1
			Plug	A1638-ND	2.30	2.13	211399-1
		Rev.	Receptacle-Square Flanged	A1641-ND	2.23	2.08	211398-1
			Plug	A1644-ND	2.67	2.47	211400-1
17	9	Std.	Receptacle-Square Flanged	A1636-ND	2.34	2.17	211767-1
			Plug	A1639-ND	3.08	2.85	211766-1
		Rev.	Receptacle-Square Flanged	A1642-ND	3.16	2.93	211769-1
			Plug	A1645-ND	2.75	2.55	211768-1
23	19	Std.	Receptacle-Square Flanged	A1637-ND	3.03	2.82	211771-1
			Plug	A1640-ND	3.71	3.44	211770-2
		Rev.	Receptacle-Square Flanged	A1643-ND	2.58	2.40	211773-1
			Plug	A1646-ND	3.12	2.89	211772-1

Series 1 (Shell Only) - Sealed Connectors

Sealed CPC connectors are designed to meet the requirements of UL, CSA, and VDE for environmentally sealed connectors used in industrial applications. **Operating Temperature Range:** -50°C - 125°C. **Voltage Rating:** 600 V (AC or DC), **Contacts:** 13 amps., single contact rating at 30°C T-Rise. **Flammability Rating:** UL 94V-0 rated. **Sealing Capability:** Per IP66 and IP67. **Housing Material:** Black, high strength, impact resistant thermoplastic. **Seal:** Gray Elastomer. **Fluid Resistance:** Diesel fuel, gear and engine fuel, gasoline, anti-freeze, hydraulic fluid, water.

Shell Size	No. of Contacts	Sex	Description	Digi-Key Part No.	Price Each		AMP Part No.
					1	25	
11	4	Rev.	Square Flange	A1675-ND	2.58	2.40	206430-3
			Free-Hanging	A1676-ND	5.68	5.27	206430-4
		Std.	Square Flange	A25038-ND	5.56	5.15	206061-2
13	9	Std.	Square Flange	A1669-ND	2.58	2.40	206705-3
			Free-Hanging	A1670-ND	2.64	2.46	206705-4
17	14	Rev.	Square Flange	A1677-ND	2.64	2.46	206043-4
			Free-Hanging	A1678-ND	4.28	3.98	206043-5
	16	Std.	Square Flange	A1671-ND	3.14	2.91	206036-4
			Free-Hanging	A1672-ND	2.73	2.53	206036-5
23	24	Std.	Square Flange	A1673-ND	3.20	2.97	206838-3
			Free-Hanging	A1674-ND	4.31	3.99	206838-4
	37		Square Flange	A25049-ND	6.74	6.26	206151-3

Series 2 (Shell Only) - Sealed Connectors

Shell Size	No. of Cont.	Sex	Description	Digi-Key Part No.	Price Each		AMP Part No.
					1	25	
11	8	Std.	Receptacle-Square Flanged	A1366-ND	2.60	2.42	205841-1
			Receptacle-Free Hanging	A1367-ND	2.58	2.40	205841-2
			Plug	A1368-ND	3.14	2.91	205838-1
			Receptacle-Feed-Thru	A25048-ND	24.44	22.65	206458-1
		Rev.	Receptacle-Square Flanged	A1369-ND	2.64	2.46	206433-1
			Receptacle-Free Hanging	A1370-ND	2.64	2.46	206433-2
			Plug	A1371-ND	3.14	2.91	206434-1
	9	Std.	Receptacle-Square Flanged	A1372-ND	2.56	2.38	206486-1
			Receptacle-Free Hanging	A1373-ND	2.64	2.46	206486-2
			Plug	A1374-ND	3.08	2.85	206485-1
17	28	Std.	Receptacle-Square Flanged	A1375-ND	2.83	2.63	205840-3
			Receptacle-Free Hanging	A1376-ND	3.32	3.08	206152-1
			Receptacle-Feed-Thru	A25046-ND	32.60	30.21	206127-1
			Plug - Dia. 1.349 (34.26) max.	A1377-ND	3.32	3.08	205839-3
			Plug - Dia. 1.315 (33.40) max.	A25044-ND	5.99	5.55	206125-1
		Rev.	Receptacle-Square Flanged	A1378-ND	2.75	2.55	206038-1
			Receptacle-Free Hanging	A1379-ND	3.36	3.12	206038-2
			Plug	A1380-ND	3.26	3.03	206039-1
			Plug-Reverse Numbering	A25045-ND	5.99	5.55	206126-1
23	57	Rev.	Receptacle-Square Flanged	A1381-ND	4.35	4.03	206438-1
			Receptacle-Free Hanging	A1382-ND	6.95	6.45	206438-2
			Plug	A1383-ND	4.47	4.15	206437-1
	63	Std.	Receptacle-Square Flanged	A1384-ND	4.16	3.86	205843-1
			Receptacle-Free Hanging	A1385-ND	4.41	4.09	205843-2
			Plug	A1386-ND	4.43	4.11	205842-1

Series 2 (Shell & Contacts) - PC Mount w/.025" (.64mm) Sq. Sol. Tails

Shell Size	No. of Cont.	Sex	Cont. Finish	Description	Digi-Key Part No.	Price Each		AMP Part No.
						1	25	
11	8	Rev.	A	Receptacle-Square Flanged	A25040-ND	6.07	5.63	208657-1
11	9	Std.	A	Receptacle-Square Flanged	A25041-ND	6.23	5.78	206852-2
17	28	Rev.	B	Receptacle-Square Flanged	A25042-ND	10.58	9.81	207216-2
23	63	Std.	A	Receptacle-Square Flanged	A25043-ND	20.99	19.46	206455-2

A - Duplex plated gold flash on entire contact with 30μ min. gold on contact engagement area, tin-lead on the termination area, all over 50μ min. nickel under plating. **B** - Plated gold flash on the entire contact, tin-lead on the termination area.

Series 3 and 4 (Shell Only)

Shell Size	No. of Contacts	Sex	Description	Digi-Key Part No.	Price Each		AMP Part No.
					1	25	
			Series 3				
17	3	Std.	Receptacle-Square Flanged	A1681-ND	2.17	2.02	206036-2
			Receptacle-Free Hanging	A1683-ND	2.17	2.02	206207-1
			Plug	A1685-ND	2.81	2.61	206037-2
		Rev.	Receptacle-Square Flanged	A16015-ND	2.17	2.02	206425-1
			Receptacle-Free Hanging	A16017-ND	2.93	2.72	206425-2
			Plug	A16019-ND	3.87	3.60	206426-1
23	7	Std.	Receptacle-Square Flanged	A1682-ND	3.34	3.10	206137-1
			Receptacle-Free Hanging	A1684-ND	3.42	3.18	206137-2
			Plug	A1686-ND	3.08	2.85	206136-1
		Rev.	Receptacle-Square Flanged	A16016-ND	2.69	2.49	206227-1
			Receptacle-Free Hanging	A16018-ND	3.71	3.44	206227-2
			Plug	A16020-ND	3.14	2.91	206226-1
			Series 4				
23	13	Std.	Receptacle-Square Flanged	A16029-ND	3.98	3.69	211825-1
			Receptacle-Free Hanging	A16032-ND	3.32	3.08	211825-2
			Plug	A16035-ND	6.89	6.39	211824-1
	16	Std.	Receptacle-Square Flanged	A16030-ND	2.58	2.40	207486-1
			Receptacle-Free Hanging	A16033-ND	3.71	3.44	207486-2
			Plug	A16036-ND	3.01	2.80	207485-1
	22	Std.	Receptacle-Square Flanged	A16031-ND	2.52	2.34	206613-1
			Receptacle-Free Hanging	A16034-ND	3.44	3.20	206613-3
			Plug	A16037-ND	3.59	3.33	206612-1

(Continued)

Series 5 and 6 Sealed Circular Plastic Connector *(Cont.)*

Sealed CPC connectors are the latest additions to the growing family of Circular Plastic Connectors. Sealed CPC connectors were developed as part of the Series 5 and 6 product line. Sealed CPC connectors are designed to meet the requirements of UL, CSA, and VDE. Sealed CPC connectors incorporated the latest technology in thermoplastic design and use the POWERBAND precision formed high current contact.

Shell Size	No. of Cont.	Sex	Description	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Series 5							
17	3	Rev	Square Flange, Recept.	A25781-ND	3.79	3.52	213889-2
17	3	Rev	Free-Hanging, Recpt.	A25782-ND	4.63	4.30	213890-2
17	3	Rev	Plug Assembly	A25783-ND	6.70	6.22	213905-1
Series 6							
17	10	Rev	Square Flange, Recept.	A25785-ND	3.61	3.35	213893-2
17	10	Rev	Free-Hanging, Recpt.	A25786-ND	5.39	5.00	213894-2
17	10	Rev	Plug Assembly	A25787-ND	8.26	7.66	213906-1

Accessories

Fig. 1

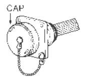


Fig. 2

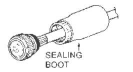


Fig. 3

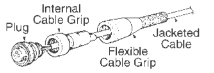


Fig. 4

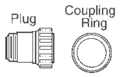


Fig. 5

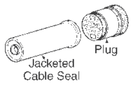


Fig. 6

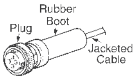


Fig. 7

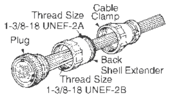


Fig. 8

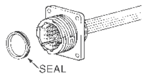


Fig. 9

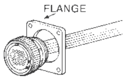
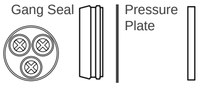


Fig.	Description	Shell Size	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
1	Sealing Cap for Receptacles, Plastic Strap	11	A16038-ND	2.58	2.40	206903-1
		13	A16039-ND	2.36	2.19	211870-1
		17	A16040-ND	2.79	2.59	207445-1
		23	A16041-ND	3.22	2.99	207446-1
1	Sealing Cap for Receptacles, Metal Bead Chain	11	A16042-ND	4.33	4.01	208800-1
		13	A16043-ND	5.13	4.75	213485-1
		17	A16044-ND	4.16	3.86	208652-1
		23	A16045-ND	5.00	4.64	208680-1
		23	A20537-ND†	6.44	5.97	208680-2
2	Cable Entry Seal, Heat Shrinkable Sealing Boots	11	A16046-ND	5.90	5.48	54010-1
		13	A16047-ND	6.52	6.05	54123-1
		17	A16048-ND	6.42	5.95	54011-1
		23	A16049-ND	7.20	6.67	54012-1
3	Flexible Cable Boot, Black Thermoplastic	11	A16050-ND	1.70	1.58	207489-1
		17	A16052-ND	3.08	2.85	207241-1
3	Internal Cable Grip, Black Thermoplastic	11	A16051-ND	1.85	1.71	207490-1
	Internal Cable Grip, Blk. Thermoplastic 8.25mm	17	A16053-ND	2.56	2.38	207387-1
	Internal Cable Grip, Blk. Thermoplastic 9.78mm	17	A16054-ND	2.48	2.30	207387-2
4	Replacement Coupling Ring	11	A16055-ND	.72	.68	213811-1
		13	A16056-ND	1.02	.95	213813-1
		17	A16057-ND	.81	.76	213810-1
		23	A16058-ND	1.30	1.21	213812-1
5	Jacketed Cable Seals, Cable Dia. 7.62mm	23	A16063-ND	11.85	10.99	207052-1
	Jacketed Cable Seals, Cable Dia. 11.43mm	23	A16064-ND	16.83	15.60	207052-2
	Jacketed Cable Seals, Cable Dia. 15.24mm	23	A16065-ND	9.39	8.71	207052-3
6	Rubber Boots	11	A16059-ND*	3.30	3.06	206304-1
7	Back Shell Extenders	23	A16062-ND	3.08	2.85	207055-1
8	Peripheral Seals for Receptacles Only	11	A1335-ND	.56	.45	206403-1
		13	A1336-ND	.82	.66	206403-4
		17	A1337-ND	.63	.51	206403-2
		23	A1338-ND	1.15	.93	206403-3
9	Panel Mount Flanges for Plugs Only	11	A25003-ND	3.06	2.90	207299-1
		13	A25004-ND	2.77	2.63	207299-2
		17	A25019-ND	2.93	2.78	207299-3
		23	A25020-ND	1.90	1.80	207299-4
	Flange Gasket	17	A25784-ND	1.00	.93	81665-2
	Keying Plug, Series 1 & 4		A16066-ND	.14	.14	200821-1
	Keying Plug, Series 2		A16067-ND	.35	.33	206509-1
	Keying Plug, Series 3 & 4 (Socket Cavities)		A16068-ND	.52	.49	206508-1
	Keying Plug, Series 3 & 4 (Pin Cavities)		A16069-ND	1.44	1.34	207597-1

* Rubber boots are used with jacketed cable to provide splashproof connections for Series 1 & 3 connectors. Black neoprene.
† For use with series 2 only.

Wire Entry Seal Kits

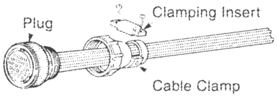
Includes one Gang Seal and one pressure plate marked for cavity identification. **Material and Finish:** Seal - Elastomer, red iron oxide. Pressure Plate - Nylon, black



Shell Size	Insulation Dia. Inch (mm)	Seal Dia. Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 50	AMP Part No.
Kit for Pins							
13-9	.075 - .125 (1.91 - 3.18)	.681 (17.30)	A25059-ND	4.20	3.90	3.41	213926-1
17-3	.178 - .265 (4.52 - 6.73)	.790 (20.07)	A25060-ND	5.33	4.94	4.32	213899-1
17-10	.150 - .265 (3.81 - 6.73)	.790 (20.07)	A25788-ND	4.08	3.79	3.31	213900-1
17-14	.075 - .125 (1.91 - 3.18)	.790 (20.07)	A25061-ND	4.26	3.96	3.46	213919-2
17-16	.075 - .125 (1.91 - 3.18)	.790 (20.07)	A25062-ND	4.26	3.96	3.46	213920-2
Kit for Sockets							
13-9	.075 - .125 (1.91 - 3.18)	.681 (17.30)	A25063-ND	4.20	3.90	3.41	213925-1
17-3	.178 - .265 (4.52 - 6.73)	.790 (20.07)	A25060-ND	5.33	4.94	4.32	213899-1
17-10	.150 - .265 (3.81 - 6.73)	.790 (20.07)	A25788-ND	4.08	3.79	3.31	213900-1
17-14	.075 - .125 (1.91 - 3.18)	.790 (20.07)	A25064-ND	4.08	3.79	3.31	213919-1
17-16	.075 - .125 (1.91 - 3.18)	.790 (20.07)	A25065-ND	8.73	8.10	7.08	213920-1

Cable Clamps – Plastic Shell

Cable clamps are used to prevent excessive strain on cable or wire from being transmitted to the contacts inside the connector housings. These may be used on all receptacles and plugs. Two screws included.

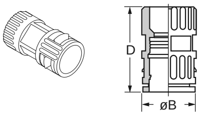


Shell Size	Cable Outer Dia. Inch (mm)	Screw Length Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
11	.329 (8.36)	.375 (9.53)	A1330-ND	2.30	2.18	206062-1
11	.329 (8.36)	.500 (12.7)	A25021-ND	2.30	2.18	206062-3
13	.453 (11.51)	.500 (12.7)	A1331-ND	2.32	2.20	206966-1
17	.453 (11.51)	.500 (12.7)	A1332-ND	2.32	2.20	206070-1
23	.703 (17.86)	.625 (15.88)	A1334-ND	2.39	2.27	206138-1
11	.453 (11.51)	.500 (12.7)	A1687-ND	2.30	2.18	206358-1
13	.703 (17.86)	.625 (15.88)	A1688-ND	2.43	2.31	207008-1
17	.703 (17.86)	.625 (15.88)	A1689-ND	2.58	2.45	206322-1
23	1.125 (28.58)	.625 (15.88)	A1690-ND	3.04	2.88	206512-1
23	1.125 (28.58)	1.00 (25.4)	A16061-ND*	3.81	3.54	207774-1

* Self-Centering

Flexible Tubing Connectors

To be used with all circular plastic connectors



Characteristics: • One-piece plastic quick screw connection with UNEF-inner thread • **Material:** High-quality, impact resistant plastic material (PA); Sealing: Santoprene® • **Properties:** Easy to assemble due to one-piece screw connection with push-in lock. Simple disconnect by displacing the snap-in sleeve. Smallest outer dimensions to be used under confined conditions • **Temperature Range:** From approx. -30°C up to +100°C • **Color:** Black

Shell Size	Trade Size Tubing Outer – Dia.	Inner Thread UNEF	Dimensions (mm) Largest Outer øB	Dimensions (mm) Total Length D	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
11	0.51” (13.0mm)	5/8” - 24	20.6	36.6	A16102-ND	2.08	2.01	1-969807-2
13	0.62” (15.8mm)	3/4” - 20	23.6	41.7	A16103-ND	2.19	2.12	1-969809-3
17	0.83” (21.2mm)	15/16” - 20	30.1	50.3	A16104-ND	2.42	2.33	1-969811-4
23	1.12” (28.5mm)	1” - 20	37.0	54.0	A16105-ND	3.92	3.77	2-969813-5

NOTE: Must also be used with Flexible Corrugated Tubing (Mfg. #s 969789-2, 969789-3, 969789-4 & 969789-5).

Flexible Corrugated Tubing and Connectors

Fig. 1 - All-plastic Tubing

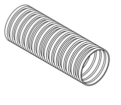


Fig. 2 - Straight Tubing Connections

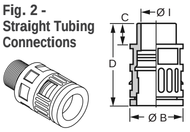
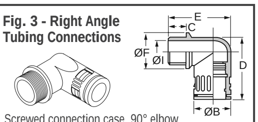


Fig. 3 - Right Angle Tubing Connections



Screwed connection case, 90° elbow type and fixed PG connecting thread DIN 40430

PLASTIC TUBING: • **Properties:** Air- and liquid-tight, oil resistant up to +80°C, benzine resistant, highly resistant to acids and solvents, ozone resistant, free of silicon, cadmium and halogen, self-extinguishing and flame retarding • **Temperature Range:** Approximately -40°C to +115°C, temporarily withstands temperatures up to approx. +150°C • **Color:** Black • UL File No. E86359, GGVS certified

CONNECTIONS: • One-piece plastic quick screw connection with PG-thread acc. to DIN 40430 for corrugated tubings • **Material:** High-quality, impact resistant plastic material (PA); Sealing: Santoprene® • **Properties:** Easy to assemble due to one-piece screw connection with push-in lock. Simple disconnect by displacing the snap-in sleeve. Smallest outer dimensions to be used under confined conditions • **Temperature Range:** From approximately -30°C up to +100°C • **Color:** Black • GGVS certified

Trade Size Tubing Outer Dia. - In. (mm)	Bending Radius (mm) ±10%	Digi-Key Part No.	Note: X in Part No. = Meters Per Roll Price Per Roll 5 meter	10 meter	25 meter	50 meter	AMP Part No.
Fig. 1 — All-Plastic Tubing							
0.51 (13.0)	20	A16090-X-ND	12.45	22.83	51.88	83.00	969789-2
0.62 (15.8)	35	A16091-X-ND	15.75	28.88	65.63	105.00	969789-3
0.83 (21.2)	45	A16092-X-ND	25.65	47.03	106.88	171.00	969789-4
1.12 (28.5)	55	A16093-X-ND	40.35	73.98	168.13	269.00	969789-5

Trade Size Tubing Outer – Dia. Inch (mm)	Thread DIN 40430 PG	Smallest Inner øI	Dimensions (mm) Largest Inner øB	Thread Length C	Total Length D	Total Height E	Connection øF	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Fig. 2 — Panel Mount Straight Tubing Connections											
0.51 (13.0)	9	10.0	20.0	10	35.0	—	—	A16094-ND	1.78	1.71	969803-2
0.62 (15.8)	11	12.5	23.0	10	37.0	—	—	A16095-ND	1.82	1.75	969803-3
0.83 (21.2)	16	17.0	29.5	12	43.5	—	—	A16096-ND	1.90	1.83	969803-4
1.12 (28.5)	21	23.5	37.0	12	46.0	—	—	A16097-ND	3.33	3.20	969803-5
Fig. 3 — Panel Mount Right Angle Tubing Connections											
0.51 (13.0)	9	12.0	20.0	10	36.0	34.0	20.0	A16098-ND	3.25	3.13	969817-2
0.62 (15.8)	11	15.5	23.0	10	42.0	37.5	23.0	A16099-ND	3.38	3.26	969817-3
0.83 (21.2)	16	18.0	29.5	12	50.0	47.0	27.0	A16100-ND	3.46	3.34	969817-4
1.12 (28.5)	21	24.0	37.0	12	57.0	55.0	34.0	A16101-ND	5.78	5.56	969817-5

Note: Must order counternuts and seals separately.

Thread	Dimensions (mm) Thickness	Hex Width	Height	Outer Dia.	Inner Dia.	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Counternuts									
9	5.0	22	—	—	—	A16106-ND	.23	.21	796260-2
11	5.0	24	—	—	—	A16107-ND	.24	.22	796260-3
16	6.0	30	—	—	—	A16108-ND	.26	.25	796260-5
21	7.0	36	—	—	—	A16109-ND	.41	.39	796260-6
Flat O-Ring Seal									
9	—	—	1.6	19	15	A16110-ND	.42	.40	796257-2
11	—	—	1.8	23	18	A16111-ND	.46	.44	796255-2
16	—	—	1.8	27	21.5	A16112-ND	.49	.47	796255-3
21	—	—	2.2	43	34	A16113-ND	.82	.77	796258-6

tyco Electronics AMP

Contacts (Pins and Sockets)

Fig. 1 – Crimp

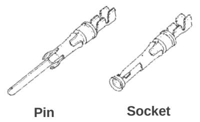


Fig. 2 – Solder Type

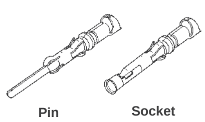


Fig. 3 – Solder Tab

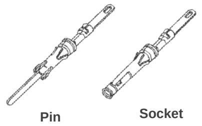


Fig. 4 – Crimp With Insulation Support

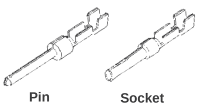


Fig. 5 – Solder Cup

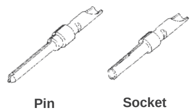
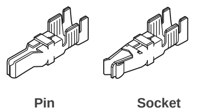


Fig. 6 – Power Contacts



CONTACT FINISH:

A Selective gold, gold flash with 30µ gold on electrical engagement area over 50µ nickel on entire contact.
B Duplex plated 30µ gold in mating area over 50µ nickel on contact body; bright tin-lead on solder tab.
C 15µ gold in the mating area over 50µ nickel.
D Selective gold, 30µ gold over 30µ nickel.
E .000100 (0.00254) silver plated contacts with lubricant added.
F Bright tin-lead on entire contact.

Series 1 Signal, Type III+, Precision Formed

Pin Diameter: .062 (1.57mm) **Crimp Contacts:** Brass **Test Current:** 13 Ampere **Solder Contacts & Grounding Pin:** Copper alloy, plated tin or gold **Spring:** Stainless Steel

Desc.	Wire Size AWG	Ins. Dia. Inch	Cont. Fin.	Digi-Key Part No.	Loose Pc. Price Each 10	Loose Pc. Price Each 100	AMP Part No.	Digi-Key Part No.	Strip Form Pricing 1,000	AMP Part No.
Crimp, Fig. 1										
Pin	30-26	.040-.060	F	—	—	—	—	A25084-ND	131.17	66425-6
Socket			F	—	—	—	—	A25085-ND	169.26	66424-6
Pin			C	—	—	—	—	A25086-ND	169.44	66425-7
Socket			C	—	—	—	—	A25087-ND	210.51	66424-7
Pin			C	A25088-ND	.90	.63	66429-3	—	—	—
Socket			C	A25089-ND	1.25	.88	66428-3	—	—	—
Pin			A	—	—	—	—	A25090-ND	178.35	66425-8
Socket			A	—	—	—	—	A25091-ND	221.60	66424-8
Pin			A	A25092-ND	.95	.66	66429-4	—	—	—
Socket			A	A25093-ND	1.49	1.04	66428-4	—	—	—
Pin	30-26	.014-.030	C	—	—	—	—	A25094-ND	169.26	66393-7
Pin			A	—	—	—	—	A25095-ND	178.18	66393-8
Socket			A	—	—	—	—	A25096-ND	221.42	66394-8
Pin			A	A25097-ND	.79	.55	66406-4	—	—	—
Socket			A	A25098-ND	.97	.68	66405-4	—	—	—
Pin	26-24	.035-.055	F	—	—	—	—	A25099-ND	105.20	66106-6
Socket			F	—	—	—	—	A25100-ND	166.11	66108-6
Pin			F	A1324-ND	.35	.24	66107-2	—	—	—
Socket			F	A1654-ND	.62	.43	66109-2	—	—	—
Pin			C	—	—	—	—	A25101-ND	169.26	66106-7
Socket			C	—	—	—	—	A25102-ND	210.37	66108-7
Pin			C	A25103-ND	.49	.34	66107-3	—	—	—
Socket			C	A25104-ND	.58	.41	66109-3	—	—	—
Pin			A	—	—	—	—	A25105-ND	178.18	66106-8
Socket			A	—	—	—	—	A25106-ND	221.42	66108-8
Pin			A	A1344-ND	.51	.36	66107-4	—	—	—
Socket			A	A1345-ND	.61	.43	66109-4	—	—	—
Pin	24-20	.040-.080	F	—	—	—	—	A25022-ND	107.52	66102-7
Socket			F	—	—	—	—	A25023-ND	134.54	66104-7
Pin			F	A1322-ND	.34	.24	66103-2	—	—	—
Socket			F	A1323-ND	.40	.28	66105-2	—	—	—
Pin			C	—	—	—	—	A25024-ND	169.44	66102-8
Socket			C	—	—	—	—	A25025-ND	210.51	66104-8
Pin			C	A25107-ND	.49	.34	66103-3	—	—	—
Socket			C	A25108-ND	.58	.41	66105-3	—	—	—
Pin			A	—	—	—	—	A25026-ND	178.35	66102-9
Socket			A	—	—	—	—	A25027-ND	221.60	66104-9
Pin			A	A1342-ND	.51	.36	66103-4	—	—	—
Socket			A	A1343-ND	.61	.43	66105-4	—	—	—
Pin	24-20	.060-.120	F	—	—	—	—	A25109-ND	131.17	66564-6
Socket			F	—	—	—	—	A25002-ND	166.13	66563-6
Pin			F	A25111-ND	.34	.24	66566-2	—	—	—
Socket			F	A25007-ND	.53	.38	66565-2	—	—	—
Pin			A	—	—	—	—	A25113-ND	180.40	66564-8
Socket			A	—	—	—	—	A25006-ND	221.89	66563-8
Pin			A	A25115-ND	.53	.37	66566-4	—	—	—
Socket			A	A25008-ND	.60	.42	66565-4	—	—	—
Pin	24-20	.080-.100	F	—	—	—	—	A25117-ND	124.69	66332-5
Socket			F	—	—	—	—	A25118-ND	134.54	66331-5
Pin			F	A1647-ND	.34	.24	66400-1	—	—	—
Socket			F	A1656-ND	.40	.28	66399-1	—	—	—
Pin			C	—	—	—	—	A25119-ND	169.73	66332-7
Socket			C	—	—	—	—	A25120-ND	210.51	66331-7
Pin			C	A25121-ND	.49	.34	66400-3	—	—	—
Socket			C	A25122-ND	.58	.41	66399-3	—	—	—
Pin			A	—	—	—	—	A25028-ND	178.67	66332-8
Socket			A	—	—	—	—	A25029-ND	221.60	66331-8
Pin			A	A1648-ND	.51	.36	66400-4	—	—	—
Socket			A	A1661-ND	.61	.43	66399-4	—	—	—
Crimp, Fig. 1 (Cont.)										
Pin	18-16	.080-.100	F	—	—	—	—	A25030-ND	107.52	66098-7
Socket			F	—	—	—	—	A25493-ND	124.29	66100-7
Pin			F	A1649-ND	.34	.24	66099-2	—	—	—
Socket			F	A1665-ND	.40	.28	66101-2	—	—	—
Pin			C	—	—	—	—	A25494-ND	169.73	66098-8
Socket			C	—	—	—	—	A25495-ND	210.78	66100-8
Pin			C	A25123-ND	.58	.40	66099-3	—	—	—
Socket			C	A25124-ND	.58	.41	66101-3	—	—	—
Pin			A	—	—	—	—	A25496-ND	178.67	66098-9
Socket			A	—	—	—	—	A25497-ND	221.89	66100-9
Pin			A	A1340-ND	.51	.36	66099-4	—	—	—
Socket			A	A16080-ND	.61	.43	66101-4	—	—	—
Pin	18-14	.080-.100	F	—	—	—	—	A25498-ND	107.52	66359-6
Socket			F	—	—	—	—	A25499-ND	134.54	66358-6
Pin			F	A1320-ND	.34	.24	66361-2	—	—	—
Socket			F	A1321-ND	.40	.28	66360-2	—	—	—
Pin			C	—	—	—	—	A25125-ND	161.82	66359-9
Socket			C	—	—	—	—	A25126-ND	210.61	66358-9
Pin			C	A25127-ND	.49	.35	66361-3	—	—	—
Socket			C	A25128-ND	.73	.51	66360-3	—	—	—
Pin			A	—	—	—	—	A25500-ND	170.37	1-66359-0
Socket			A	—	—	—	—	A25501-ND	221.70	1-66358-0
Pin			A	A1650-ND	.52	.36	66361-4	—	—	—
Socket			A	A1341-ND	.77	.54	66360-4	—	—	—
Pin	18-14	.110-.150	F	—	—	—	—	A25502-ND	107.52	66597-1
Socket			F	—	—	—	—	A25503-ND	134.54	66598-1
Pin			F	A25129-ND	.34	.24	66602-1	—	—	—
Socket			F	A25130-ND	.40	.28	66601-1	—	—	—
Pin			A	—	—	—	—	A25504-ND	178.94	66597-2
Socket			A	—	—	—	—	A25505-ND	219.34	66598-2
Pin			A	A25131-ND	.52	.36	66602-2	—	—	—
Socket			A	A25012-ND	.58	.41	66601-2	—	—	—
Grounding Pin (make first - break last)										
Pin	24-20	.045-.070	A	A25133-ND	1.81	1.26	164163-2	—	—	—
Pin	18-16	.078-.098	A	—	—	—	—	A25134-ND	568.85	164161-4
Pin			A	A25600-ND	1.34	.94	164164-2	—	—	—
Solder Type, Fig. 2										
Pin	26-20	.005-.024	A	A25136-ND	.82	.57	66182-1	—	—	—
Socket			D	A25137-ND	1.03	.72	66183-1	—	—	—
Pin	18-16	.03-.055	A	A25138-ND	.82	.57	66180-1	—	—	—
Socket			D	A25139-ND	1.03	.72	66181-1	—	—	—
Solder Tab, Fig. 3										
Pin	—	—	B	A16081-ND	1.36	.95	202236-1	—	—	—
Socket	—	—	B	A1668-ND	1.52	1.06	202237-1	—	—	—
Pin	—	—	F	A1629-ND	.77	.54	202236-2	—	—	—
Socket	—	—	F	A1631-ND	.85	.59	202237-2	—	—	—

Series 2

Pin Diameter: .040 (1.02mm) **Test Current:** 7.5 Ampere **Material: Pin Body** - Brass, **Socket** - Phospher bronze

Desc.	Wire Size AWG	Ins. Dia. Inch	Contact Finish	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
Crimp, Fig. 4							
Pin	28-24	.040 max.	A	A1630-ND	.30	.21	66507-9
Socket			A	A1632-ND	.34	.24	66505-9
Pin			D	A25000-ND	.25	.15	5-66507-9
Socket			D	A25001-ND	.27	.17	5-66505-9
Pin	24-20	.050 max.	A	A1679-ND	.18	.17	66506-9
Socket			A	A1680-ND	.19	.17	66504-9
Pin			D	A1008-ND	.18	.17	1-66506-0
Socket			A	A1009-ND	.19	.17	1-66504-0
Socket			D	A25005-ND	.18	.12	5-66504-7
Solder, Fig. 5							
Pin	24-20	.040 max.	D	A1028-ND	.25	.15	66570-3
Socket			D	A1029-ND	.29	.27	66569-3

Series 3

Desc.	Wire Size AWG	Ins. Dia. Inch	Contact Finish	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
Crimp, Fig. 6							
Pin	16-12	.135-.160	F	A16021-ND	1.83	1.28	66261-1
Socket			F	A16025-ND	3.32	2.32	66740-8
Pin			D	A16022-ND	4.58	3.20	66261-2
Socket			D	A16026-ND	5.66	3.95	66740-6
Pin			D	A25031-ND§	5.19	3.63	66262-2
Pin			E	A25032-ND#	2.30	1.61	66261-4
Socket			E	A25033-ND#	3.87	2.71	66740-2
Pin			E	A25034-ND§#	4.77	3.34	66262-4
Pin	10	.190-.220	F	A16023-ND	1.83	1.28	66259-1
Socket			F	A16027-ND	4.31	3.02	66741-8
Pin			D	A16024-ND	4.70	3.29	66259-2
Socket			D	A16028-ND	6.26	4.38	66741-6
Pin			E	A25035-ND#	2.30	1.61	66259-4
Socket			E	A25036-ND#	5.23	3.65	66741-2

# Recommended for high current/vibration applications where corrosion is a problem.
§ Ground contacts

(Continued)

tyco Electronics AMP Contacts (Pins and Sockets) *(Cont.)*

Series 4 – Crimp (Series 4 requires a combination of Fig. 1 & 6.)

Descrip.	Wire Size AWG	Insul. Dia. Inch	Contact Finish	Digi-Key Part No.	Price Each 10	100	AMP Part No.
Crimp, Requires a Combination of Fig. 1 & Fig. 6							
Pin	18-14	.080-.100	F	A1320-ND	.34	.24	66361-2
Socket			F	A1321-ND	.40	.28	66360-2
Socket			A	A1341-ND	.77	.54	66360-4
Pin			A	A1650-ND	.52	.36	66361-4
Pin	18-16	.080-.100	A	A1340-ND	.51	.36	66099-4
Socket			A	A16080-ND	.61	.43	66101-4
Pin			F	A1649-ND	.34	.24	66099-2
Socket			F	A1665-ND	.40	.28	66101-2
Pin	24-20	.080-.100	A	A1648-ND	.51	.36	66400-4
Socket			A	A1661-ND	.61	.43	66399-4
Pin			F	A1647-ND	.34	.24	66400-1
Socket			F	A1656-ND	.40	.28	66399-1
Socket	26-24	.035-.055	F	A1654-ND	.62	.43	66109-2
Pin	24-20	.040-.080	F	A1322-ND	.34	.24	66103-2
Pin			A	A1342-ND	.51	.36	66103-4
Socket			F	A1323-ND	.40	.28	66105-2
Socket			A	A1343-ND	.61	.43	66105-4
Pin	28-24	.035-.055	F	A1324-ND	.35	.24	66107-2
Pin			A	A1344-ND	.51	.36	66107-4
Socket			A	A1345-ND	.61	.43	66109-4

tyco Electronics AMP

Series 1 Coaxial, Subminiature, Precision Formed, Crimp

Outer Shell: Brass per MIL-C-50

Center Conductor: Beryllium copper per QQ-C-553 (Pin); Brass per QQ-B-626 (Socket)

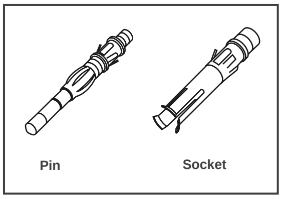
Inner Dielectric: Polypropylene

Retention Spring: Stainless steel per QQ-S-766

Ferrule: Tin-lead per MIL-T-10727 over Copper per QQ-C-576

Contact Finish: Gold/Nickel; Gold/Copper (30µ gold over 50µ nickel–outer shell and socket center conductor; 30µ gold over 100µ copper–pin center conductor)

NOTE: **A ferrule is required for each pin and socket.**



Coaxial Cable

Description	Cable Size RG/U	Digi-Key Part No.	Price Each 10	100	AMP Part No.
Contacts					
Pin	178, 196 196 (Double Braid)	A25144-ND	8.00	5.59	226537-2
Socket	178, 196 196 (Double Braid)	A25147-ND	6.11	4.27	51565-2
Pin	174, 188, 316 174 (Double Braid) 179, 187 187 (Double Braid), 161	A25145-ND	7.22	5.04	226537-1
Socket	174, 188, 316 174 (Double Braid) 179, 187 187 (Double Braid), 161	A25148-ND	6.11	4.27	51565-1
Ferrules					
178, 196 RG/U		A25150-ND	.36	.25	1-332057-0
174, 188, 316, 179, 187, 161 RG/U		A25151-ND	.58	.41	1-332056-0

Twisted Pair and Shielded Wire

Description	Cable Size RG/U	Digi-Key Part No.	Price Each 10	100	AMP Part No.
Contacts					
Pin	30, 28 (Twisted Pair, Solid) 28 (Twisted Pair, Stranded .005 Dia.) 26 (Twisted Pair, Solid or Stranded .063 Dia.)	A25146-ND	12.00	8.38	226537-3
Socket	30, 28 (Twisted Pair, Solid) 28 (Twisted Pair, Stranded .005 Dia.) 26 (Twisted Pair, Solid or Stranded .063 Dia.)	A25149-ND	7.12	4.98	51565-3
Pin	26 (Shielded, .075 Max. O.D.)	A25145-ND	7.22	5.04	226537-1
Socket	26 (Shielded, .075 Max. O.D.)	A25148-ND	6.11	4.27	51565-1
Ferrule					
Use for Twisted Pair and Shielded Wire		A25150-ND	.36	.25	1-332057-0

Series 1 Signal, Type II, Screw Machined, Crimp

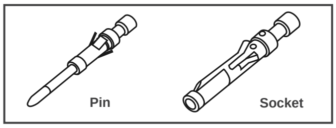
Pin Diameter: 1.57

Test Current: 13 Ampere

Contact Body: Brass

Retention Spring: Stainless steel

Contact Finish: 30µ gold over 50µ nickel. Gold thickness controlled on socket O.D.



Descrip.	Wire Size AWG	Insulation Dia. Inch	Digi-Key Part No.	Price Each 10	100	AMP Part No.
Crimp						
Pin Socket	28-24	.035-.055	A25110-ND A25112-ND	2.54 2.04	1.78 1.42	201611-1 201613-1
Pin Socket	24-20	.040-.062	A25114-ND A25116-ND	1.43 1.84	1.00 1.29	201578-1 201580-1
Pin Socket		.055-.088	A25132-ND A25541-ND	1.51 1.93	1.06 1.35	201330-1 201328-1
Pin Socket	18 (Two)	No Ins. Support	A25544-ND A25135-ND	5.37 12.06	3.75 8.43	202725-1 202726-1
Pin Socket	18-16	.080-.105	A25542-ND A25543-ND	1.61 2.41	1.13 1.68	202507-1 202508-1
Pin Socket		No Ins. Support	A25540-ND A25539-ND	1.76 1.95	1.23 1.36	200336-1 200333-1
Pin		No Ins. Support	A25140-ND†	2.09	1.46	204219-1
Pin Socket	14	No Ins. Support	A25141-ND A25142-ND	1.61 1.84	1.12 1.29	201570-1 201568-1
Pin		No Ins. Support	A25143-ND*†	3.87	2.71	212618-1

* Grounding pin is used to provide a make-first/break-last condition when mating and unmating connector halves.

† Pin length is .630 on these two pins.

.125 POWERBAND Contacts for Sealed Connectors

Test Current: 45 amps

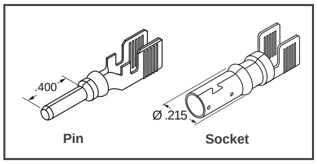
Pin Diameter: .125

Contact Body: Copper with beryllium copper spring

Contact Finish:

A: Post plated 30µ in mating area with 5µ min. gold on remainder of contact, all over 100µ min. nickel;

B: Post plated 200µ silver in mating area with 5µ min. gold on remainder of contact, all over 100µ min. nickel



Descrip.	Wire Size AWG	Contact Finish	Digi-Key Part No.	Price Each 1	10	AMP Part No.
Pin Socket	12-14	A	A25066-ND A25067-ND	2.48 3.85	2.30 3.58	213845-4 213847-4
Pin Socket		B	A25068-ND A25069-ND	2.01 3.08	1.87 2.85	213845-3 213847-3
Pin Socket	8-10	A	A25070-ND A25071-ND	2.48 3.85	2.30 3.58	213841-4 213843-4
Pin Socket		B	A25072-ND A25073-ND	2.01 3.08	1.87 2.85	213841-3 213843-3

Tools

Description	Digi-Key Part No.	Price Each	AMP Part No.
Series 1 Contacts			
Hand Tool, Procrimper, Handle Only, w/o Dies	A9996-ND	75.00	354940-1
Die Set CPC Conn)	A9919-ND	101.25	58495-2
Contact Extraction Tool	A1329-ND	16.80	305183
Crimp Tool, Procrimper II w/Dies	A9920-ND	136.99	58495-1
Crimp Tool, 18-14 AWG Certified – Crimp	A9913-ND	465.09	90310-3
Crimp Tool, 18-16 AWG Certified – Crimp	A25050-ND	461.96	90067-4
Crimp Tool, 24-20 AWG Certified – Crimp	A9917-ND	409.60	90067-5
Crimp Tool, 30-26 AWG Certified – Crimp	A9918-ND	382.20	90066-7
Series 1 & MIL-C-5015 Contacts			
Crimp Tool, 24-20 AWG	A25013-ND	455.78	90331-1
Crimp Tool, 18-14 AWG	A25014-ND	524.54	90310-2
Series 2 Contacts			
Contact Insertion / Extraction Tool	A1010-ND	5.44	91067-2
Crimp Tool, 26-22	A25039-ND	655.86	90406-1
Crimp Tool for CPC Contacts with Die	A9990-ND	154.50	58448-2
Die Set for CPC Contacts, use with A9996	A9814-ND	117.00	58448-3
Pro-Crimper II Hand Tool without Die	A9996-ND	75.00	354940-1
Series 3 Contacts			
Contact Extraction Tool	A9912-ND	64.39	91019-3
Crimp Tool, 10 AWG	A9910-ND	627.39	90384-1
Crimp Tool, 12-16 AWG	A9911-ND	627.39	90382-2
Coaxial			
Cable Size - RU/U 178 and 196	A25152-ND	1267.88	69656-2
Cable Size - RU/U 174, 188 and 316	A25153-ND	1623.83	69656-3
Cable Size - RU/U 179 and 187	A25154-ND	694.50	69656-1

CUI STACK

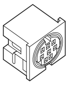
Miniature DIN Connector

APPLICATIONS: Because of their compact size and durable design, mini-DIN connectors are ideal for signal applications where space is at a premium. A variety of configurations including vertical, horizontal and in-line models allows for most requirements. Their concentric, cylindrical ground shell make these connectors an excellent choice where EMI/RFI is a concern. Typical applications include computers, peripheral devices, office, audio and video equipment.

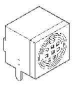
GENERAL SPECIFICATIONS:

- **Rating:** 100V AC 1A MAX, 12V DC 2A MAX
- **Insulation Resistance:** MIN 50 MEGΩ @ 250V DC
- **Voltage Withstand:** 250V AC, 1 minute
- **Contact Resistance:** Pins - 30 mΩ MAX, Shell - 50 mΩ MAX (All accessories included)

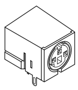
RT Angle Recpt.



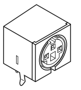
Shielded Right Angle Recpt.



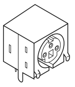
Shielded w/Switch



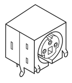
Shielded w/Kinked Pins



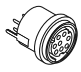
Shielded w/GND Tabs



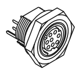
Shielded w/GND and Kinked Pins

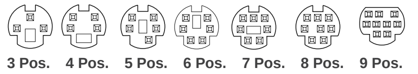


Vert., PCB

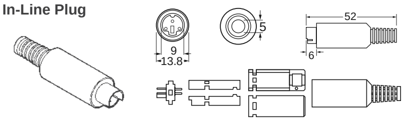


Vert., PCB Threaded w/Hex Nut

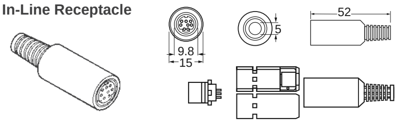


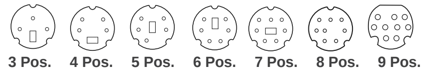


In-Line Plug



In-Line Receptacle



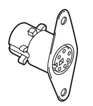


No. of Pos.	Digi-Key Part No.	Price Each			CUI Stack Part No.
		1	10	100	
Shielded Right Angle Receptacles					
3	CP-2230-ND	.99	.86	.66	MD-30SM
4	CP-2240-ND	1.02	.89	.68	MD-40SM
5	CP-2250-ND	1.05	.91	.70	MD-50SM
6	CP-2260-ND	1.11	.97	.74	MD-60SM
7	CP-2270-ND	1.23	1.07	.82	MD-70SM
8	CP-2280-ND	1.32	1.15	.88	MD-80SM
9	CP-2290-ND	1.65	1.43	1.10	MD-90SM
Right Angle PCB Mount Receptacles					
3	CP-2430-ND	.78	.68	.52	MD-30S
4	CP-2440-ND	.81	.71	.54	MD-40S
5	CP-2450-ND	.86	.75	.57	MD-50S
6	CP-2460-ND	.90	.78	.60	MD-60S
7	CP-2470-ND	1.02	.89	.68	MD-70S
8	CP-2480-ND	1.11	.97	.74	MD-80S
9	CP-2490-ND	1.53	1.33	1.02	MD-90S
Shielded Female with Switch					
3	CP-3030-ND	2.01	1.75	1.34	MD-30SMW
4	CP-3040-ND	2.10	1.82	1.40	MD-40SMW
5	CP-3050-ND	2.19	1.90	1.46	MD-50SMW
6	CP-3060-ND	2.31	2.01	1.54	MD-60SMW
7	CP-3070-ND	2.40	2.08	1.60	MD-70SMW
8	CP-3080-ND	2.46	2.14	1.64	MD-80SMW
Shielded Female with Kinked Pins					
3	CP-4030-ND	.99	.86	.66	MD-30SMK
4	CP-4040-ND	1.02	.89	.68	MD-40SMK
5	CP-4050-ND	1.05	.91	.70	MD-50SMK
6	CP-4060-ND	1.11	.97	.74	MD-60SMK
7	CP-4070-ND	1.23	1.07	.82	MD-70SMK
8	CP-4080-ND	1.32	1.15	.88	MD-80SMK
Shielded with GND Tabs					
3	CP-5030-ND	1.17	1.02	.78	MD-30SG
4	CP-5040-ND	1.20	1.04	.80	MD-40SG
5	CP-5050-ND	1.23	1.07	.82	MD-50SG
6	CP-5060-ND	1.29	1.12	.86	MD-60SG
8	CP-5080-ND	1.50	1.30	1.00	MD-80SG

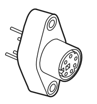
No. of Pos.	Digi-Key Part No.	Price Each			CUI Stack Part No.
		1	10	100	
Shielded with GND Tabs and Kinked Pins					
3	CP-6030-ND	1.17	1.02	.78	MD-30SGK
4	CP-6040-ND	1.20	1.04	.80	MD-40SGK
5	CP-6050-ND	1.23	1.07	.82	MD-50SGK
6	CP-6060-ND	1.29	1.12	.86	MD-60SGK
8	CP-6080-ND	1.50	1.30	1.00	MD-80SGK
Vertical, PCB Mount					
3	CP-2730-ND	1.02	.89	.68	MD-30SV
4	CP-2740-ND	1.08	.94	.72	MD-40SV
5	CP-2750-ND	1.14	.99	.76	MD-50SV
6	CP-2760-ND	1.17	1.02	.78	MD-60SV
8	CP-2780-ND	1.29	1.12	.86	MD-80SV
Vert. PCB Mount Threaded w/Hex Nut					
3	CP-2830-ND	1.41	1.23	.94	MD-30CV
4	CP-2840-ND	1.47	1.28	.98	MD-40CV
5	CP-2850-ND	1.50	1.30	1.00	MD-50CV
6	CP-2860-ND	1.56	1.36	1.04	MD-60CV
8	CP-2880-ND	1.65	1.43	1.10	MD-80CV
In-Line Plug					
3	CP-2030-ND	.87	.76	.58	MD-30
4	CP-2040-ND	.93	.81	.62	MD-40
5	CP-2050-ND	.99	.86	.66	MD-50
6	CP-2060-ND	1.05	.91	.70	MD-60
7	CP-2070-ND	1.11	.97	.74	MD-70
8	CP-2080-ND	1.17	1.02	.78	MD-80
9	CP-2090-ND	1.56	1.36	1.04	MD-90
In-Line Receptacle					
3	CP-2130-ND	1.08	.94	.72	MD-30J
4	CP-2140-ND	1.14	.99	.76	MD-40J
5	CP-2150-ND	1.20	1.04	.80	MD-50J
6	CP-2160-ND	1.26	1.10	.84	MD-60J
7	CP-2170-ND	1.32	1.15	.88	MD-70J
8	CP-2180-ND	1.38	1.20	.92	MD-80J
9	CP-2190-ND	1.83	1.59	1.22	MD-90J
Crimp Pin	CP-9999-ND	—	.09	.05	T-0006

Mini-DIN Panel Mount Connectors

Panel Mount Receptacle, Metal



Panel Mount Receptacle, Plastic



Description	Digi-Key Part No.	Price Each			CUI Stack Part No.
		1	10	100	
Panel Mount Mini-DIN Connectors — Metal					
3 Position	CP-2530-ND	1.02	.89	.68	MD-30SN
4 Position	CP-2540-ND	1.08	.94	.72	MD-40SN
5 Position	CP-2550-ND	1.17	1.02	.78	MD-50SN
6 Position	CP-2560-ND	1.29	1.12	.86	MD-60SN
7 Position	CP-2570-ND	1.35	1.17	.90	MD-70SN
8 Position	CP-2580-ND	1.38	1.20	.92	MD-80SN
9 Position	CP-2590-ND	1.47	1.28	.98	MD-90SN
Panel Mount Mini-DIN Connectors — Plastic					
3 Position	CP-2630-ND	1.08	.94	.72	MD-30SP
4 Position	CP-2640-ND	1.17	1.04	.78	MD-40SP
5 Position	CP-2650-ND	1.23	1.07	.82	MD-50SP
6 Position	CP-2660-ND	1.38	1.20	.92	MD-60SP
7 Position	CP-2670-ND	1.44	1.28	.96	MD-70SP
8 Position	CP-2680-ND	1.53	1.33	1.02	MD-80SP

13-Position DIN Connectors

Fig.	Digi-Key Part No.	Price Each			CUI Stack Part No.
		1	10	100	
1	CP-1013-ND	1.65	1.43	1.10	SD-130
2	CP-1113-ND	3.75	3.25	2.50	SD130J
3	CP-2313-ND	2.85	2.47	1.90	SDD-130J
4	CP-3313-ND	2.97	2.58	1.98	SDF-130J

Fig. 1 13-Pos. Male In-Line Plug

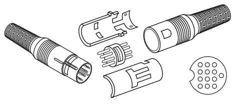


Fig. 2 13-Pos. Female In-Line Plug

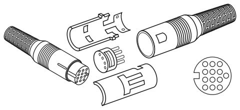


Fig. 3 Female PCB Right Angle Receptacle

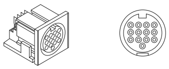
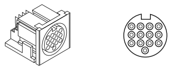


Fig. 4 Female PCB Shielded In-Line Jack



Circular DIN Connectors

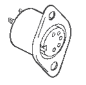
APPLICATIONS:

Circular DIN connectors combine low contact resistance with relatively high ampacity which make them an excellent choice for signal or power applications. Ideal for use with computers, peripheral devices, office equipment, power supplies, etc., their low cost and compact, durable design have made them a proven value.

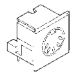
GENERAL SPECIFICATIONS:

- **Ratings:** 100V AC 2A MAX
- **Insulation Resistance:** MIN 100 MEGΩ @ 500V DC
- **Voltage WIthstand:** 1000V AC, 1 minute
- **Contact Resistance:** Pins - 10 mΩ @ MAX, Shell - 50 mΩ MAX (All accessories included)

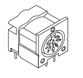
Panel Mount Receptacle

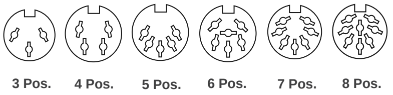


Right Angle Receptacle

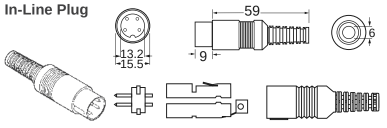


Front Shielded Right Angle Receptacle

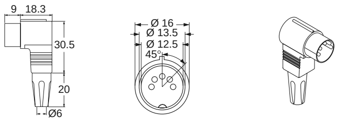




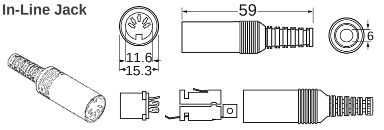
In-Line Plug



In-Line Plug RT Angle



In-Line Jack



No. of Pos.	Digi-Key Part No.	Price Each			CUI Stack Part No.
		1	10	100	
Panel Mount Receptacles					
3	CP-1230-ND	.62	.54	.41	SD-30SN
4	CP-1240-ND	.65	.56	.43	SD-40SN
5	CP-1250-ND	.70	.61	.47	SD-50SN
6	CP-1260-ND	.74	.64	.49	SD-60SN
7	CP-1270-ND	.80	.70	.54	SD-70SN
8	CP-1280-ND	.86	.75	.58	SD-80SN
Right Angle Receptacles					
3	CP-2330-ND	.69	.60	.46	SDS-30J
4	CP-2340-ND	.72	.63	.48	SDS-40J
5	CP-2350-ND	.72	.63	.48	SDS-50J
6	CP-2360-ND	1.08	.94	.72	SDS-60J
7	CP-2370-ND	1.20	1.04	.80	SDS-70J
8	CP-2380-ND	1.32	1.15	.88	SDS-80J
Right Angle Front Shielded Receptacles					
3	CP-7030-ND	.75	.65	.50	SDF-30J
4	CP-7040-ND	.90	.78	.60	SDF-40J
5	CP-7050-ND	.90	.78	.60	SDF-50J
6	CP-7060-ND	1.23	1.07	.82	SDF-60J
7	CP-7070-ND	1.32	1.15	.88	SDF-70J
8	CP-7080-ND	1.50	1.30	1.00	SDF-80J
In-Line Plug					
3	CP-1030-ND	.53	.46	.35	SD-30
4	CP-1040-ND	.54	.47	.36	SD-40
5	CP-1050-ND	.61	.53	.41	SD-50
6	CP-1060-ND	.64	.56	.43	SD-60
7	CP-1070-ND	.72	.63	.49	SD-70
8	CP-1080-ND	.76	.66	.51	SD-80
In-Line Plug Right Angle					
3	CP-1330-ND	2.28	1.98	1.52	SDR-30
5	CP-1350-ND	2.49	2.16	1.66	SDR-50
6	CP-1360-ND	2.55	2.21	1.70	SDR-60
7	CP-1370-ND	2.73	2.37	1.82	SDR-70
8	CP-1380-ND	2.82	2.45	1.88	SDR-80
In-Line Jack					
3	CP-1130-ND	.65	.56	.43	SD-30J
4	CP-1140-ND	.71	.62	.47	SD-40J
5	CP-1150-ND	.73	.63	.49	SD-50J
6	CP-1160-ND	.77	.67	.51	SD-60J
7	CP-1170-ND	.83	.72	.56	SD-70J
8	CP-1180-ND	.89	.78	.60	SD-80J

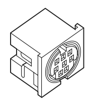
SINGATRON

Mini DIN Connectors

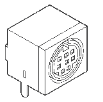
APPLICATIONS: Because of their compact size and durable design, mini-DIN connectors are ideal for signal applications where space is at a premium. A variety of configurations including vertical, horizontal and in-line models allows for most requirements. Their concentric, cylindrical ground shell make these connectors an excellent choice where EMI/RFI is a concern. Typical applications include computers, peripheral devices, office, audio and video equipment.

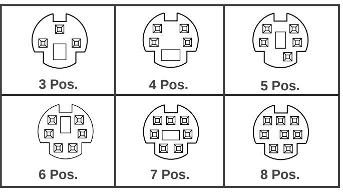
GENERAL SPECIFICATIONS: • **Rating:** 100V AC 1A MAX, 12V DC 2A MAX. • **Insulation Resistance:** MIN 50 MEGΩ @ 250V DC • **Voltage Withstand:** 250V AC, 1 minute • **Contact Resistance:** Pins - 30 mΩ MAX, Shell - 50 mΩ MAX (All accessories included)

Right Angle Receptacle

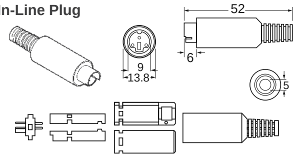


Shielded Right Angle Receptacle

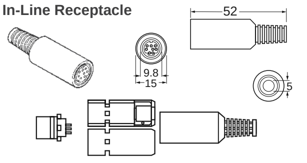


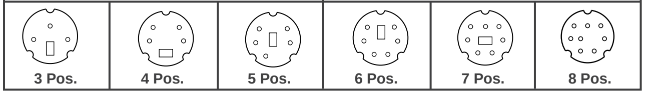


In-Line Plug



In-Line Receptacle

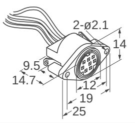




Description	Digi-Key Part No.	Pricing			Singatron Part No.
		1	10	100	
Right Angle PCB Mount Receptacles					
3-Pos. Right Angle Receptacle	275-1040-ND	.81	7.02	54.60	MDJ-001-3P
4-Pos. Right Angle Receptacle	275-1041-ND	.84	7.29	56.70	MDJ-002-4P
5-Pos. Right Angle Receptacle	275-1042-ND	.88	7.70	59.85	MDJ-003-5P
6-Pos. Right Angle Receptacle	275-1043-ND	.93	8.10	63.00	MDJ-004-6P
7-Pos. Right Angle Receptacle	275-1044-ND	1.05	9.18	71.40	MDJ-005-7P
8-Pos. Right Angle Receptacle	275-1045-ND	1.15	9.99	77.70	MDJ-006-8P
Shielded Right Angle Receptacles					
3-Pos. Right Angle Receptacle	275-1046-ND	1.02	8.91	69.30	MDJ-101-3PS
4-Pos. Right Angle Receptacle	275-1047-ND	1.05	9.18	71.40	MDJ-102-4PS
5-Pos. Right Angle Receptacle	275-1048-ND	1.09	9.45	73.50	MDJ-103-5PS
6-Pos. Right Angle Receptacle	275-1049-ND	1.15	9.99	77.70	MDJ-104-6PS
7-Pos. Right Angle Receptacle	275-1050-ND	1.27	11.07	86.10	MDJ-105-7PS
8-Pos. Right Angle Receptacle	275-1051-ND	1.36	11.88	92.40	MDJ-106-8PS
In-Line Plug					
3-Pos. In-Line Plug	275-1028-ND	.93	8.10	63.00	62000-3P
4-Pos. In-Line Plug	275-1029-ND	.99	8.64	67.20	62000-4P
5-Pos. In-Line Plug	275-1030-ND	1.05	9.18	71.40	62000-5P
6-Pos. In-Line Plug	275-1031-ND	1.12	9.72	75.60	62000-6P
7-Pos. In-Line Plug	275-1032-ND	1.18	10.26	79.80	62000-7P
8-Pos. In-Line Plug	275-1033-ND	1.24	10.80	84.00	62000-8P
In-Line Receptacle					
3-Pos. In-Line Jack	275-1034-ND	1.15	9.99	77.70	63000-3P
4-Pos. In-Line Jack	275-1035-ND	1.21	10.53	81.90	63000-4P
5-Pos. In-Line Jack	275-1036-ND	1.27	11.07	86.10	63000-5P
6-Pos. In-Line Jack	275-1037-ND	1.33	11.61	90.30	63000-6P
7-Pos. In-Line Jack	275-1038-ND	1.40	12.15	94.50	63000-7P
8-Pos. In-Line Jack	275-1039-ND	1.46	12.69	98.70	63000-8P

Description	Digi-Key Part No.	Pricing			Singatron Part No.
		1	10	100	
Panel Mount Mini-DIN Connectors With 6" (15.24cm) Lead WIre (26AWG)					
3-Pos. Recept.	275-1100-ND	1.71	14.85	115.50	MDJ-1201-3P-0160-00
4-Pos. Recept.	275-1101-ND	1.95	17.01	132.30	MDJ-1202-4P-0160-00
5-Pos. Recept.	275-1102-ND	2.14	18.63	144.90	MDJ-1203-5P-0160-00
6-Pos. Recept.	275-1103-ND	2.33	20.25	157.50	MDJ-1204-6P-0160-00
7-Pos. Recept.	275-1104-ND	2.42	21.06	163.80	MDJ-1205-7P-0160-00
8-Pos. Recept.	275-1105-ND	2.42	21.06	163.80	MDJ-1206-8P-0160-00

Panel Mount Recept., Plastic



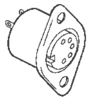
SINGATRON

Circular DIN Connectors

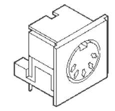
APPLICATIONS: Circular DIN connectors combine low contact resistance with relatively high ampacity which make them an excellent choice for signal or power applications. Ideal for use with computers, peripheral devices, office equipment, power supplies, etc., their low cost and compact, durable design have made them a proven value.

GENERAL SPECIFICATIONS: • **Ratings:** 100V AC 2A MAX • **Insulation Resistance:** MIN 100 MEGΩ @ 500V DC • **Voltage WIthstand:** 1000V AC, 1 minute • **Contact Resistance:** Pins - 10 mΩ @ MAX, Shell - 50 mΩ MAX (All accessories included)

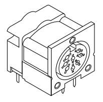
Panel Mount Receptacle

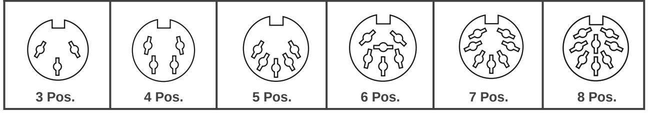


Right Angle Receptacle

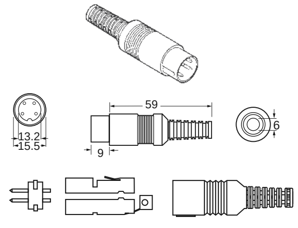


Front Shielded Right Angle Receptacle

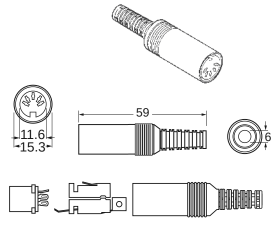




In-Line Plug



In-Line Jack



Description	Digi-Key Part No.	Pricing			Singatron Part No.
		1	10	100	
Panel Mount Receptacles					
3-Pos. Panel Mount Receptacle	275-1012-ND	.64	5.54	43.05	YE-1363
4-Pos. Panel Mount Receptacle	275-1013-ND	.67	5.81	45.15	YE-1364
5-Pos. Panel Mount Receptacle	275-1014-ND	.72	6.26	48.72	YE-1365A
6-Pos. Panel Mount Receptacle	275-1015-ND	.76	6.62	51.45	YE-1366
7-Pos. Panel Mount Receptacle	275-1016-ND	.82	7.16	55.65	YE-1367
8-Pos. Panel Mount Receptacle	275-1017-ND	.88	7.70	59.85	YE-1368A
Right Angle Receptacles					
5-Pos. Right Angle Receptacle	275-1019-ND	.78	6.75	52.50	DJ-006-5P
6-Pos. Right Angle Receptacle	275-1020-ND	1.24	10.80	84.00	DJ-019-6P(A)
7-Pos. Right Angle Receptacle	275-1021-ND	1.33	11.61	90.30	DJ-007-7P(A)
8-Pos. Right Angle Receptacle	275-1022-ND	1.43	12.42	96.60	DJ-010-8P(A)
Right Angle Front Shielded Receptacles					
4-Pos. Right Angle Front Shielded	275-1023-ND	1.24	10.80	84.00	DJ-037-4PS(A)
5-Pos. Right Angle Front Shielded	275-1024-ND	1.09	9.45	73.50	DJ-006-5PS(A)
6-Pos. Right Angle Front Shielded	275-1025-ND	1.43	12.42	96.60	DJ-019-6PS(A)
7-Pos. Right Angle Front Shielded	275-1026-ND	1.52	13.23	102.90	DJ-007-7PS(A)
8-Pos. Right Angle Front Shielded	275-1027-ND	1.71	14.85	115.50	DJ-010-8PS(A)
In-Line Plug					
3-Pos. In-Line Plug	275-1000-ND	.53	4.59	35.70	YE-1153
4-Pos. In-Line Plug	275-1001-ND	.56	4.86	37.80	YE-1154
5-Pos. In-Line Plug	275-1002-ND	.59	5.13	39.90	YE-1155A
6-Pos. In-Line Plug	275-1003-ND	.62	5.40	42.00	YE-1156
7-Pos. In-Line Plug	275-1004-ND	.68	5.94	46.20	YE-1157
8-Pos. In-Line Plug	275-1005-ND	.74	6.48	50.40	YE-1158A
In-Line Jack					
3-Pos. In-Line Jack	275-1006-ND	.67	5.81	45.15	YE-1333
4-Pos. In-Line Jack	275-1007-ND	.73	6.35	49.35	YE-1334
5-Pos. In-Line Jack	275-1008-ND	.74	6.48	50.40	YE-1335A
6-Pos. In-Line Jack	275-1009-ND	.79	6.89	53.55	YE-1336
7-Pos. In-Line Jack	275-1010-ND	.85	7.43	57.75	YE-1337
8-Pos. In-Line Jack	275-1011-ND	.91	7.97	61.95	YE-1338A

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tyco Electronics AMP

Shielded DIN Connectors

Features:

Crimp, snap-in contacts; Designed for ease of post molding; Pre-molded cord guard; Tin plated brass contacts; Ferrule crimps onto shield for reliable termination; Meets or exceeds DIN specification 41524 for 4-and-8-position plugs: 45322; UL recognized under the Component Program. File No E28476; CSA certified, File No. LR-35510.

Housings:

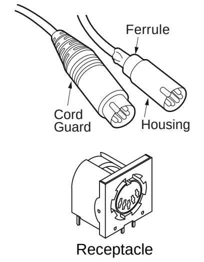
Black nylon 94V-O.

Ferrule and Shield: Brass, tin plated.

Cord Guard: Thermoplastic polymer, black.

Contacts: Brass, tin plated.

Pin Contacts: Copper alloy;
.00050" tin over .000100" nickel plating.



Description	Digi-Key Part No.	Pricing		AMP Part No.
		1	25	
4-Pos. Housing	A1651-ND	2.92	69.13	212437-2
5-Pos. Housing	A1652-ND	1.59	37.63	212437-3
6-Pos. Housing	A1653-ND	1.59	37.63	212437-4
8-Pos. Housing	A1655-ND	1.74	41.13	212437-6
Ferrule, 5.08mm-6.35mm Cable Dia.	A1657-ND	1.13	22.50	212435-8
Cord Guard, 4.19mm-6.35mm Cable Dia.	A1659-ND	1.75	35.00	212800-1
5-Pos. Receptacle	A1663-ND	2.37	52.80	212044-1
6-Pos. Receptacle	A1664-ND	2.96	66.40	212045-1
8-Pos. Receptacle	A1666-ND	3.18	71.38	212047-1
Pin Contact, 28-22 AWG	A1667-ND	4.80/10	33.56/100	66728-5
Contact Insertion Tool	A9998-ND	15.82	—	91002-1
Contact Extraction Tool	A9997-ND	171.93	—	91144-1

HIROSE ELECTRIC CO.,LTD.

Circular Connectors

HR10 Series

7mm Push-Pull Connectors

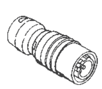
GOLD PLATED CONTACTS

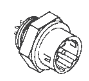
Features:

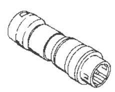
The most compact HR10 series with well-balanced, simplified layout in limited space; Easy "Push-Pull" Operation; Polarization – Five-key system permits only one way of coupling.

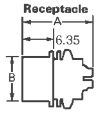
Electrical Specifications:

• Current Rating: 2A • Insulation Resistance: 1000MΩ or more at DC100V • Contact Resistance: 10mΩ or less at DC1A.

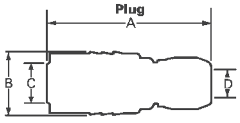

Plug

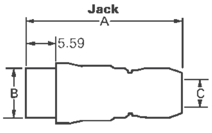

Receptacle


Jack



No. of Pins	Digi-Key Part No.	Dim. (mm) A	B
4	HR200, HR203	14.00	8.89
6	HR201, HR204	14.00	8.89
12	HR202, HR205	16.00	11.91





No. of Pins	Digi-Key Part No.	Dimensions (mm) A	B	C	D
4	HR100, HR103	28.50	11.00	7.01	5.21
6	HR101, HR104	28.50	11.00	7.01	5.21
12	HR102, HR105	32.51	14.00	9.50	7.19

No. of Pins	Digi-Key Part No.	Dimensions (mm) A	B	C
4	HR300, HR303	28.50	8.89	5.21
6	HR301, HR304	28.50	8.89	5.21
12	HR302, HR305	32.51	11.91	7.19

Con-tacts	Description	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
	HR10 Series					
4	Plug with pin insert	HR100-ND	12.41	10.94	9.17	HR10-7P-4P
6	Plug with pin insert	HR101-ND	14.07	12.40	10.39	HR10-7P-6P
12	Plug with pin insert	HR102-ND	14.06	13.24	11.58	HR10-10P-12P
4	Plug with socket insert	HR103-ND	14.07	12.40	10.39	HR10-7P-4S
6	Plug with socket insert	HR104-ND	15.16	13.36	11.20	HR10-7P-6S
12	Plug with socket insert	HR105-ND	16.85	15.86	13.88	HR10-10P-12S
4	Receptacle with pin insert	HR200-ND	7.23	6.36	4.77	HR10-7R-4P
6	Receptacle with pin insert	HR201-ND	7.88	6.93	5.20	HR10-7R-6P
12	Receptacle with pin insert	HR202-ND	10.08	8.82	6.72	HR10-10R-12P
4	Receptacle with socket insert	HR203-ND	8.83	7.73	5.89	HR10-7R-4S
6	Receptacle with socket insert	HR204-ND	11.35	9.94	7.57	HR10-7R-6S
12	Receptacle with socket insert	HR205-ND	14.07	12.40	10.39	HR10-10R-12S
4	Jack with pin insert	HR300-ND	11.66	10.21	7.78	HR10-7J-4P
6	Jack with pin insert	HR301-ND	11.03	9.72	8.14	HR10-7J-6P
12	Jack with pin insert	HR302-ND	13.23	11.66	9.77	HR10-10J-12P
4	Jack with socket insert	HR303-ND	12.14	10.70	8.96	HR10-7J-4S
6	Jack with socket insert	HR304-ND	13.80	12.16	10.19	HR10-7J-6S
12	Jack with socket insert	HR305-ND	15.52	14.61	12.79	HR10-10J-12S

HR10A Series

"Snap-In" Connectors

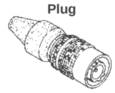
SILVER PLATED CONTACTS

Features:

• Compatible with current HR10 series: Cable crimping tool maintains consistent cable clamp force • To prevent from slipping, HR10A series are accompanied with ruled-off-squares roulette.

Electrical Specifications:

• Current Rating: 2A • Insulation Resistance: min. 1,000MΩ • Contact Resistance: max. 10mΩ.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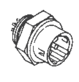
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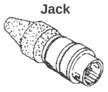
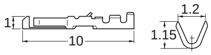
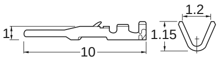
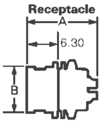

Jack



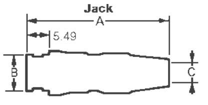
FEMALE SOCKET

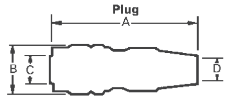


MALE PIN



No. of Pins	Digi-Key Part No.	Dim. (mm) A	B
4	HR210, HR213 HR232 HR237	14.00 12.19 11.99	8.89 8.89 8.89
5	HR218, HR219	14.00	8.89
6	HR211, HR214 HR233 HR238	14.00 12.19 11.99	8.89 8.89 8.89
10	HR216, HR217 HR234 HR239	16.00 12.19 11.99	14.00 11.91 11.91
12	HR212, HR215 HR235 HR240	16.00 12.19 11.99	11.89 11.91 11.91
20	HR236, HR241	14.99	15.39





No. of Pins	Digi-Key Part No.	Dimensions (mm) A	B	C
4	HR310, HR313 HR332, HR337	34.98	8.89	4.98
6	HR311, HR314 HR333, HR338	34.98	8.89	4.98
10	HR316, HR317 HR334, HR339	43.00	11.91	7.01
12	HR312, HR315 HR335, HR340	42.98	11.91	7.01
20	HR336, HR341	58.50	15.39	7.01

No. of Pins	Digi-Key Part No.	Dimensions (mm) A	B	C	D
4	HR110, HR113 HR160, HR165	34.98	11.48	6.99	4.99
5	HR118, HR119	34.98	11.48	6.99	4.99
6	HR111, HR114 HR161, HR166	34.98	11.48	6.99	4.99
10	HR116, HR117 HR162, HR167	43.00	14.71	9.50	7.01
12	HR112, HR115 HR163, HR168	42.98	14.71	9.50	7.01
20	HR164, HR169	58.78	19.00	13.00	7.01

Con-tacts	Description	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
	HR10A Series, Solder Cup					
4	Plug with pin insert	HR110-ND	10.88	9.59	8.03	HR10A-7P-4P
5	Plug with pin insert	HR118-ND	11.74	10.35	8.67	HR10A-7P-5P
6	Plug with pin insert	HR111-ND	11.09	9.77	8.19	HR10A-7P-6P
10	Plug with pin insert	HR116-ND	14.68	12.94	10.84	HR10A-10P-10P
12	Plug with pin insert	HR112-ND	15.35	13.53	11.34	HR10A-10P-12P
4	Plug with socket insert	HR113-ND	11.64	10.19	7.76	HR10A-7P-4S
5	Plug with socket insert	HR119-ND	10.65	9.38	7.86	HR10A-7P-5S
6	Plug with socket insert	HR114-ND	10.88	9.59	8.03	HR10A-7P-6S
10	Plug with socket insert	HR117-ND	14.05	12.38	10.37	HR10A-10P-10S
12	Plug with socket insert	HR115-ND	14.26	12.57	10.53	HR10A-10P-12S
4	Receptacle with pin insert	HR210-ND	6.73	5.92	4.44	HR10A-7R-4P
5	Receptacle with pin insert	HR218-ND	8.45	7.44	5.58	HR10A-7R-5P
6	Receptacle with pin insert	HR211-ND	7.28	6.41	4.81	HR10A-7R-6P
10	Receptacle with pin insert	HR217-ND	10.37	9.08	6.92	HR10A-10R-10P
12	Receptacle with pin insert	HR212-ND	11.02	9.64	7.35	HR10A-10R-12P
4	Receptacle with socket insert	HR213-ND	6.65	5.86	4.39	HR10A-7R-4S
5	Receptacle with socket insert	HR219-ND	6.85	6.03	4.53	HR10A-7R-5S
6	Receptacle with socket insert	HR214-ND	7.68	6.76	5.07	HR10A-7R-6S
10	Receptacle with socket insert	HR216-ND	10.20	8.93	6.80	HR10A-10R-10S
12	Receptacle with socket insert	HR215-ND	10.66	9.33	7.11	HR10A-10R-12S
4	Jack with pin insert	HR310-ND	9.62	8.43	6.42	HR10A-7J-4P
6	Jack with pin insert	HR311-ND	10.18	8.91	6.79	HR10A-7J-6P
10	Jack with pin insert	HR317-ND	12.68	11.18	9.37	HR10A-10J-10P
12	Jack with pin insert	HR312-ND	13.65	12.03	10.08	HR10A-10J-12P
4	Jack with socket insert	HR313-ND	9.60	8.40	6.40	HR10A-7J-4S
6	Jack with socket insert	HR314-ND	10.15	8.89	6.77	HR10A-7J-6S
10	Jack with socket insert	HR316-ND	12.08	10.64	8.92	HR10A-10J-10S
12	Jack with socket insert	HR315-ND	12.33	10.86	9.10	HR10A-10J-12S
	HR10A Series, Crimp Type (contacts sold separately)					
4	Plug for pin insert, Crimp Type	HR160-ND	11.86	10.38	7.91	HR10A-7P-4PC
6	Plug for pin insert, Crimp Type	HR161-ND	11.86	10.38	7.91	HR10A-7P-6PC
10	Plug for pin insert, Crimp Type	HR162-ND	13.38	11.79	9.88	HR10A-10P-10PC
12	Plug for pin insert, Crimp Type	HR163-ND	13.38	11.79	9.88	HR10A-10P-12PC
20	Plug for pin insert, Crimp Type	HR164-ND	23.52	22.74	20.39	HR10A-13P-20PC
4	Plug for socket insert, Crimp Type	HR165-ND	10.54	9.29	7.79	HR10A-7P-4SC
6	Plug for socket insert, Crimp Type	HR166-ND	10.54	9.29	7.79	HR10A-7P-6SC
10	Plug for socket insert, Crimp Type	HR167-ND	13.65	12.03	10.08	HR10A-10P-10SC
12	Plug for socket insert, Crimp Type	HR168-ND	13.65	12.03	10.08	HR10A-10P-12SC
20	Plug for socket insert, Crimp Type	HR169-ND	23.52	22.74	20.39	HR10A-13P-20SC
4	Recept. for pin insert, Crimp Type	HR232-ND	6.35	5.55	3.93	HR10A-7R-4PC
6	Recept. for pin insert, Crimp Type	HR233-ND	6.35	5.55	3.93	HR10A-7R-6PC
10	Recept. for pin insert, Crimp Type	HR234-ND	7.98	7.02	5.27	HR10A-10R-10PC
12	Recept. for pin insert, Crimp Type	HR235-ND	7.98	7.02	5.27	HR10A-10R-12PC
20	Recept. for pin insert, Crimp Type	HR236-ND	14.38	13.54	11.85	HR10A-13R-20PC
4	Recept. for socket insert, Crimp Type	HR237-ND	6.52	5.69	4.03	HR10A-7R-4SC
6	Recept. for socket insert, Crimp Type	HR238-ND	6.52	5.69	4.03	HR10A-7R-6SC
10	Recept. for socket insert, Crimp Type	HR239-ND	8.30	7.31	5.48	HR10A-10R-10SC
12	Recept. for socket insert, Crimp Type	HR240-ND	8.30	7.31	5.48	HR10A-10R-12SC
20	Recept. for socket insert, Crimp Type	HR241-ND	14.38	13.54	11.85	HR10A-13R-20SC
4	Jack for pin insert, Crimp Type	HR332-ND	11.02	9.64	7.35	HR10A-7J-4PC
6	Jack for pin insert, Crimp Type	HR333-ND	11.02	9.64	7.35	HR10A-7J-6PC
10	Jack for pin insert, Crimp Type	HR334-ND	13.57	11.96	10.02	HR10A-10J-10PC
12	Jack for pin insert, Crimp Type	HR335-ND	13.57	11.96	10.02	HR10A-10J-12PC
20	Jack for pin insert, Crimp Type	HR336-ND	23.84	23.05	20.66	HR10A-13J-20PC
4	Jack for socket insert, Crimp Type	HR337-ND	11.16	9.77	7.44	HR10A-7J-4SC
6	Jack for socket insert, Crimp Type	HR338-ND	11.16	9.77	7.44	HR10A-7J-6SC
10	Jack for socket insert, Crimp Type	HR339-ND	13.84	12.20	10.22	HR10A-10J-10SC
12	Jack for socket insert, Crimp Type	HR340-ND	13.84	12.20	10.22	HR10A-10J-12SC
20	Jack for socket insert, Crimp Type	HR341-ND	23.84	23.05	20.66	HR10A-13J-20SC
—	Male pin, Crimped, Gold	HR450-ND	—	.29	.17	HR10-PC-111
—	Female socket, Crimped, Gold	HR452-ND	—	.29	.17	HR12-SC-111
—	Male pin, Crimped, Silver	HR451-ND	—	.23	.14	HR10-PC-112
—	Female socket, Crimped, Silver	HR453-ND	—	.23	.14	HR12-SC-112
—	Hand crimp tool for HR10A Series	HR497-ND	508.30	—	—	HR12-SC-TC
—	Extraction tool for female sockets	HR498-ND	12.64	—	—	HR12-SC-TP
—	Extraction tool for male pins	HR499-ND	8.47	—	—	RP6-SC-TP

KMC Series

9mm Bayonet Lock Connectors

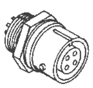
WATER RESISTANT

Features:

Five-key mechanism between two metal shells assures error-free polarization in coupling • Bayonet lock offers easier coupling with higher reliability than thread lock.

Electrical Specifications:

• Current Rating: 2A • Insulation Resistance: min. 2000MΩ at DC100V • Contact Resistance: max. 10mΩ at DC1A.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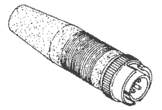
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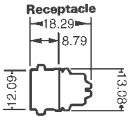
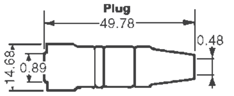




Con-tacts	Description	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
	KMC Series					
4	Plug with pin insert	HR400-ND	15.71	13.84	11.60	KMC-9BPD-4P
6	Plug with pin insert	HR401-ND	15.45	14.55	12.73	KMC-9BPD-6P
4	Receptacle with socket insert	HR402-ND	9.91	8.68	6.61	KMC-9BRD-4S
6	Receptacle with socket insert	HR403-ND	13.00	11.46	9.60	KMC-9BRD-6S

(Continued)

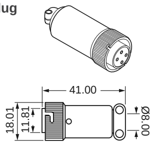
RM Series 12mm Video Connectors

Does not have rubber boot.

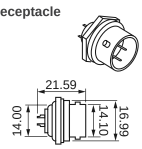
Features: • Pipe shaped socket contact for long life reliable operation • UL94V-0 diallyl phthalate molding material for excellent electrical & mechanical characteristics • Sleek design with grainy matte finish • Bayonet type coupling for easy operation • Reversible pin & socket insert • 2,3,4,5,6, & 7 pin available in the common diecasting body • Jack available for cable extension program

Specifications: • Operating Voltage: AC600V (2 pin) AC500V (3 & 4 pin) AC350V (5,6 & 7 pin) • Current rating: 5 amps • Insulation resistance: min. 1,000MΩ at DC500V • Contact resistance: max. 4mΩ • Solder cup diameter: 1.1mm (.043") • Temp. cycling: -55°C to +85°C • Contact durability: 2000 times at max. 8mΩ

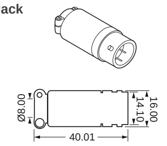
Plug



Receptacle



Jack

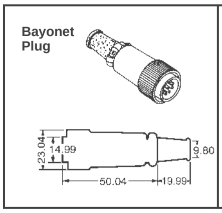


Con-tacts	Description	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
2	Plug with pin insert	HR120-ND	8.28	7.29	5.47	RM12BPG-2PH
3	Plug with pin insert	HR122-ND	8.45	7.44	5.58	RM12BPG-3PH
4	Plug with pin insert	HR124-ND	8.63	7.59	5.70	RM12BPG-4PH
5	Plug with pin insert	HR126-ND	8.52	7.46	5.68	RM12BPG-5PH
6	Plug with pin insert	HR128-ND	8.83	7.73	5.89	RM12BPG-6PH
7	Plug with pin insert	HR130-ND	9.12	7.98	6.08	RM12BPG-7PH
2	Plug with socket insert	HR121-ND	8.76	7.67	5.84	RM12BPG-2S(07)
3	Plug with socket insert	HR123-ND	8.98	7.86	5.99	RM12BPG-3S(07)
4	Plug with socket insert	HR125-ND	9.22	8.07	6.15	RM12BPG-4S(07)
5	Plug with socket insert	HR127-ND	9.77	8.55	6.52	RM12BPG-5S(07)
6	Plug with socket insert	HR129-ND	10.01	8.76	6.68	RM12BPG-6S(07)
7	Plug with socket insert	HR131-ND	10.44	9.14	6.96	RM12BPG-7S(07)
2	Receptacle with pin insert	HR221-ND	4.21	3.68	2.61	RM12BRD-2PH
3	Receptacle with pin insert	HR223-ND	4.29	3.75	2.66	RM12BRD-3PH
4	Receptacle with pin insert	HR225-ND	4.46	3.89	2.76	RM12BRD-4PH
5	Receptacle with pin insert	HR227-ND	4.70	4.11	2.91	RM12BRD-5PH
6	Receptacle with pin insert	HR229-ND	4.95	4.32	3.06	RM12BRD-6PH
7	Receptacle with pin insert	HR231-ND	5.31	4.64	3.29	RM12BRD-7PH
2	Receptacle with socket insert	HR220-ND	5.06	4.42	3.13	RM12BRD-2S
3	Receptacle with socket insert	HR222-ND	5.28	4.61	3.27	RM12BRD-3S
4	Receptacle with socket insert	HR224-ND	5.53	4.83	3.42	RM12BRD-4S
5	Receptacle with socket insert	HR226-ND	6.13	5.36	3.80	RM12BRD-5S
6	Receptacle with socket insert	HR228-ND	6.33	5.52	3.91	RM12BRD-6S
7	Receptacle with socket insert	HR230-ND	6.85	5.98	4.24	RM12BRD-7S
2	Jack with pin insert	HR321-ND	6.63	5.79	4.10	RM12BJB-2PH
3	Jack with pin insert	HR323-ND	6.25	5.50	4.13	RM12BJB-3PH
4	Jack with pin insert	HR325-ND	6.33	5.57	4.18	RM12BJB-4PH
5	Jack with pin insert	HR327-ND	6.43	5.66	4.25	RM12BJB-5PH
6	Jack with pin insert	HR329-ND	6.58	5.79	4.34	RM12BJB-6PH
7	Jack with pin insert	HR331-ND	6.83	6.01	4.51	RM12BJB-7PH
2	Jack with socket insert	HR320-ND	8.62	7.54	5.75	RM12BJB-2S(07)
3	Jack with socket insert	HR322-ND	8.93	7.82	5.96	RM12BJB-3S(07)
4	Jack with socket insert	HR324-ND	9.29	8.13	6.20	RM12BJB-4S(07)
5	Jack with socket insert	HR326-ND	9.62	8.43	6.42	RM12BJB-5S(07)
6	Jack with socket insert	HR328-ND	10.01	8.76	6.68	RM12BJB-6S(07)
7	Jack with socket insert	HR330-ND	10.30	9.01	6.87	RM12BJB-7S(07)

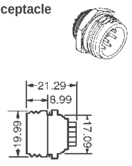
RM Series 15mm Video Connectors

Specifications: • Operating Voltage: AC350V, DC490V • Current Rating: 5A • Insulation Resistance: 1000MΩ min. at DC500V • Contact Resistance: 14mΩ max. at DC1A • Temp. Cycling: -55°C to +85°C • Applicable Cable Dia.: 8m/m max. • Plugs and jacks include rubber boot.

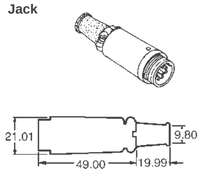
Bayonet Plug



Receptacle



Jack



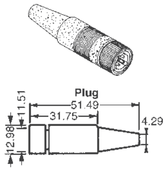
Con-tacts	Description	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
10	Plug with pin insert	HR106-ND	10.13	8.87	6.76	RM15TPD-10P
12	Plug with pin insert	HR107-ND	10.68	9.35	7.12	RM15TPD-12P
10	Plug with socket insert	HR108-ND	11.47	10.04	7.65	RM15TPD-10S
12	Plug with socket insert	HR109-ND	10.54	9.29	7.79	RM15TPD-12S
10	Receptacle with pin insert	HR206-ND	6.93	6.10	4.58	RM15TRD-10P
12	Receptacle with pin insert	HR207-ND	7.40	6.52	4.89	RM15TRD-12P
10	Receptacle with socket insert	HR208-ND	6.38	5.61	4.21	RM15TRD-10S
12	Receptacle with socket insert	HR209-ND	6.70	5.90	4.43	RM15TRD-12S
10	Jack Extension with pin insert	HR306-ND	9.53	8.34	6.36	RM15TJD-10P
12	Jack Extension with pin insert	HR307-ND	10.03	8.78	6.69	RM15TJD-12P
10	Jack Extension with socket insert	HR308-ND	9.14	8.01	6.10	RM15TJD-10S
12	Jack Extension with socket insert	HR309-ND	9.36	8.19	6.24	RM15TJD-12S

SR30 Series

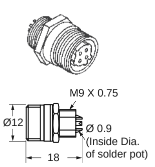
10mm Min. Microphone Connectors

Features: Standard applicable cable size is the outer diameter 4.2. Male pin: brass + gold plated or silver plated; Female pin: copper alloy + gold plated or silver plated.

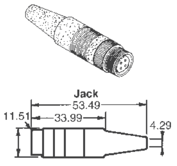
Specifications: • Rated Voltage: AC100V, DC140V • Current Rating: 1A • Insulation Resistance: 200MΩ min. at DC100V • Contact Resistance: 10mΩ max. at DC1A.



Plug



Receptacle



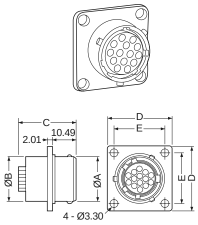
Jack

Con-tacts	Description	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
4	Plug with pin insert	HR500-ND	8.08	7.11	5.33	SR30-10PE-4P
6	Plug with pin insert	HR501-ND	8.05	7.09	5.32	SR30-10PE-6P
7	Plug with pin insert	HR510-ND	8.70	7.66	5.75	SR30-10PF-7P
4	Receptacle with socket insert	HR503-ND	6.58	5.79	4.34	SR30-10R-4S
6	Receptacle with socket insert	HR504-ND	6.80	5.99	4.49	SR30-10R-6S
7	Receptacle with socket insert	HR505-ND	5.69	4.97	3.52	SR30-10R-7S
4	Jack with socket insert	HR506-ND	10.99	9.62	7.33	SR30-10JE-4S
6	Jack with socket insert	HR507-ND	10.99	9.62	7.33	SR30-10JE-6S
7	Jack with socket insert	HR508-ND	10.39	9.10	6.93	SR30-10JF-7S
—	Cable Clamp for SR30 Series	HR509-ND	.45	.32	.22	SR30-P

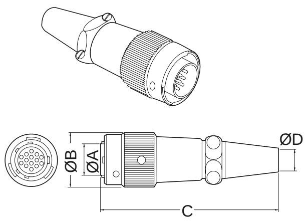
JR Series Video Connectors Aluminum

Features: JR series connectors offer you excellent performances both electrically and mechanically, having five keys in the fitting section to assure quite smooth coupling.

Specifications: • Withstand Voltage: AC1000V a minute • Insulation Resistance: 1000MΩ min. • Contact Resistance: 5mΩ max.



Receptacle



Plug

No. of Pins	Digi-Key Part No.	Dimensions (mm) A	B	C	D
7	HR138-ND, HR139-ND	16.31	26.97	78.49	11.00
10	HR140-ND, HR141-ND	16.31	26.97	78.49	11.00
14	HR142-ND, HR143-ND	16.31	26.97	78.49	11.00
26	HR144-ND, HR145-ND	20.50	30.99	97.99	12.19

No. of Pins	Digi-Key Part No.	Dimensions (mm) A	B	C	D	E
7	HR146-ND	22.00	19.99	26.49	29.01	23.01
7	HR147-ND	22.00	19.99	27.69	29.01	23.01
10	HR148-ND, HR149-ND	22.00	19.99	26.49	29.01	23.01
14	HR150-ND	22.00	19.99	26.59	29.01	23.01
14	HR151-ND	22.00	19.99	25.78	29.01	23.01
26	HR152-ND	25.81	23.90	26.80	31.98	26.01
26	HR153-ND	25.81	23.90	27.99	31.98	26.01

Con-tacts	Description	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
7	Plug with pin insert	HR138-ND	16.32	15.36	13.44	JRC16BP-7P
10	Plug with pin insert	HR140-ND	16.47	15.51	13.57	JRC16BP-10P
14	Plug with pin insert	HR142-ND	15.33	14.44	12.63	JRC16BP-14P
26	Plug with pin insert	HR144-ND	24.23	23.42	21.00	JRC21BPA-26P
7	Plug with socket insert	HR139-ND	16.00	15.06	13.18	JRC16BP-7S
10	Plug with socket insert	HR141-ND	16.26	15.72	14.10	JRC16BP-10S
14	Plug with socket insert	HR143-ND	14.96	14.08	12.32	JRC16BP-14S
26	Plug with socket insert	HR145-ND	21.56	20.84	18.69	JRC21BP-26S
7	Receptacle with pin insert	HR146-ND	10.58	9.27	7.06	JRC16BR-7P
10	Receptacle with pin insert	HR148-ND	10.87	9.52	7.25	JRC16BR-10P
14	Receptacle with pin insert	HR150-ND	10.94	9.58	7.30	JRC16BR-14P
26	Receptacle with pin insert	HR152-ND	13.90	12.25	10.27	JRC21BR-26P
7	Receptacle with socket insert	HR147-ND	10.39	9.10	6.93	JRC16BR-7S
10	Receptacle with socket insert	HR149-ND	12.26	10.81	9.06	JRC16BR-10S
14	Receptacle with socket insert	HR151-ND	10.56	9.24	7.04	JRC16BR-14S
26	Receptacle with socket insert	HR153-ND	12.68	11.18	9.37	JRC21BRA-26S

(Continued)

HR25 Series

World's Smallest Round Type Multiple Contact Connectors

The HR25 is the world's smallest high-density round type connector. It was developed using Hirose Electric's long experience with miniaturization technology in answer to the continuing need for the ever greater miniaturization and high-density construction of a wide variety of electronic equipment. The voltage used should be less than 30V AC or 42V DC. Wire AWG #30.

Applications: • CCD cameras, measuring instruments, wide variety of sensors, mobile radio, medical equipment.

Material: • Insulation: PPS resin, black • Contacts: Phosphor bronze, Gold and partial gold plating • Shell: Brass and zinc allow, Nickel plating

Ratings: • Current capacity 1A • Insulation resistance 1000 MΩ or greater • Contact resistance 30 mΩ • Solder pot inside diameter 0.5 mm

Fig. 1

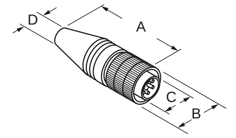


Fig. 2

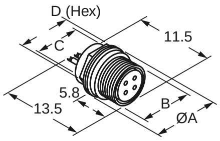


Fig. 3

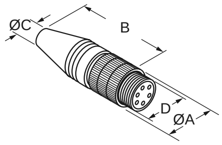


Fig. 4

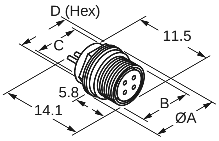


Fig. 5

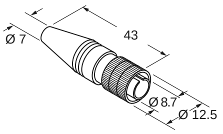


Fig. 6

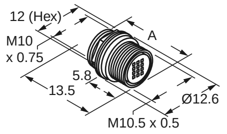


Fig. 7

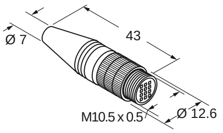


Fig. 8

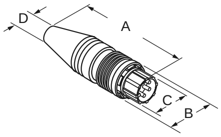


Fig. 9

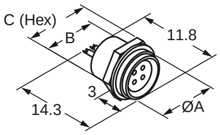


Fig. 10

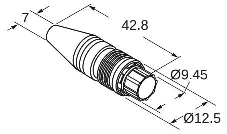


Fig. 11

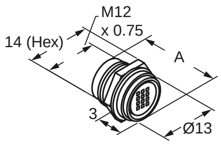
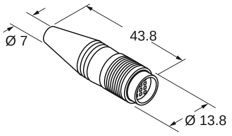


Fig. 12



# of Cont.	Shell Size	Dimensions (mm)				Digi-Key Part No.	Price Each				Hirose Part No.
		A	B	C	D		1	10	50	100	
Fig. 1 Plugs Screw Lock - Male Solder Type											
4	7	35	10.5	6.7	5	HR700-ND	16.18	15.24	13.81	13.33	HR25-7TP-4P
6	7	35	10.5	6.7	5	HR701-ND	15.77	15.24	14.19	13.67	HR25-7TP-6P
8	7	35	10.5	6.7	5	HR702-ND	16.80	16.24	15.12	14.56	HR25-7TP-8P
12	9	43	12.5	8.7	7	HR703-ND	28.07	27.13	25.26	24.33	HR25-9TP-12P
16	9	43	12.5	8.7	7	HR704-ND	30.11	29.11	27.10	26.10	HR25-9TP-16P
20	9	43	12.5	8.7	7	HR705-ND	32.25	31.18	29.03	27.95	HR25-9TP-20P
Fig. 1 Plugs Screw Lock - Female Solder Type											
4	7	35	10.5	6.7	5	HR706-ND	16.47	15.51	14.06	13.57	HR25-7TP-4S
6	7	35	10.5	6.7	5	HR707-ND	15.06	14.56	13.56	13.06	HR25-7TP-6S
8	7	35	10.5	6.7	5	HR708-ND	17.61	17.03	15.85	15.27	HR25-7TP-8S
12	9	43	12.5	8.7	7	HR709-ND	22.13	21.39	19.92	19.18	HR25-9TP-12S
16	9	43	12.5	8.7	7	HR710-ND	23.04	22.28	20.74	19.97	HR25-9TP-16S
20	9	43	12.5	8.7	7	HR711-ND	23.87	23.07	21.48	20.69	HR25-9TP-20S
Fig. 2 Receptacles Screw Lock - Male Solder Cup Type											
4	7	10.6	M8.5x0.5	M8x0.5	10	HR712-ND	14.91	13.14	11.79	11.01	HR25-7TR-4P
6	7	10.6	M8.5x0.5	M8x0.5	10	HR713-ND	13.11	12.34	11.18	10.80	HR25-7TR-6P
8	7	10.6	M8.5x0.5	M8x0.5	10	HR714-ND	14.28	13.44	12.18	11.76	HR25-7TR-8P
16	9	12.6	M10.5x0.5	M10x0.75	12	HR716-ND	19.56	18.91	17.61	16.96	HR25-9TR-16P
20	9	12.6	M10.5x0.5	M10x0.75	12	HR717-ND	20.88	20.19	18.80	18.10	HR25-9TR-20P
Fig. 2 Receptacles Screw Lock - Female Solder Cup Type											
4	7	10.6	M8.5x0.5	M8x0.5	10	HR718-ND	14.47	12.75	11.44	10.68	HR25-7TR-4S
6	7	10.6	M8.5x0.5	M8x0.5	10	HR719-ND	15.20	13.40	12.02	11.23	HR25-7TR-6S
8	7	10.6	M8.5x0.5	M8x0.5	10	HR720-ND	12.89	12.13	11.00	10.62	HR25-7TR-8S
12	7	12.6	M10.5x0.5	M10x0.75	12	HR721-ND	12.61	11.88	10.76	10.39	HR25-9TR-12S
16	7	12.6	M10.5x0.5	M10x0.75	12	HR722-ND	13.62	12.82	11.62	11.22	HR25-9TR-16S
20	9	12.6	M10.5x0.5	M10x0.75	12	HR723-ND	15.08	14.20	12.87	12.42	HR25-9TR-20S
Fig. 3 Jacks Screw Lock - Male Solder Type											
4	7	10.6	35	5	M8.5x0.5	HR724-ND	16.83	15.84	14.36	13.86	HR25-7TJ-4P
6	7	10.6	35	5	M8.5x0.5	HR725-ND	15.77	15.24	14.19	13.67	HR25-7TJ-6P
8	7	10.6	35	5	M8.5x0.5	HR726-ND	16.80	16.24	15.12	14.56	HR25-7TJ-8P
12	9	12.6	43	7	M10.5x0.5	HR727-ND	28.07	27.13	25.26	24.33	HR25-9TJ-12P
16	9	12.6	43	7	M10.5x0.5	HR728-ND	30.11	29.11	27.10	26.10	HR25-9TJ-16P
20	9	12.6	43	7	M10.5x0.5	HR729-ND	32.25	31.18	29.03	27.95	HR25-9TJ-20P
Fig. 3 Jacks Screw Lock - Female Solder Type											
4	7	10.6	35	5	M8.5x0.5	HR730-ND	15.05	14.16	12.84	12.39	HR25-7TJ-4S
6	7	10.6	35	5	M8.5x0.5	HR731-ND	15.06	14.56	13.56	13.06	HR25-7TJ-6S
8	7	10.6	35	5	M8.5x0.5	HR732-ND	15.57	15.06	14.02	13.50	HR25-7TJ-8S
12	9	12.6	43	7	M10.5x0.5	HR733-ND	22.13	21.39	19.92	19.18	HR25-9TJ-12S
16	9	12.6	43	7	M10.5x0.5	HR734-ND	23.04	22.28	20.74	19.97	HR25-9TJ-16S
20	9	12.6	43	7	M10.5x0.5	HR735-ND	23.87	23.07	21.48	20.69	HR25-9TJ-20S
Fig. 4 Receptacles Screw Lock - Male PCB Type											
4	7	10.6	M8.5x0.5	M8x0.5	10	HR736-ND	14.91	13.14	11.79	11.01	HR25-7TR-4PA
6	7	10.6	M8.5x0.5	M8x0.5	10	HR737-ND	13.11	12.34	11.18	10.80	HR25-7TR-6PA
8	7	10.6	M8.5x0.5	M8x0.5	10	HR738-ND	14.28	13.44	12.18	11.76	HR25-7TR-8PA
12	9	12.6	M10.5x0.5	M10x0.75	12	HR739-ND	17.51	16.93	15.76	15.18	HR25-9TR-12PA
16	9	12.6	M10.5x0.5	M10x0.75	12	HR740-ND	19.56	18.91	17.61	16.96	HR25-9TR-16PA
20	9	12.6	M10.5x0.5	M10x0.75	12	HR741-ND	21.71	20.99	19.54	18.82	HR25-9TR-20PA
Fig. 4 Receptacles Screw Lock - Female PCB Type											
4	7	10.6	M8.5x0.5	M8x0.5	10	HR742-ND	14.47	12.75	11.44	10.68	HR25-7TR-4SA
6	7	10.6	M8.5x0.5	M8x0.5	10	HR743-ND	15.20	13.40	12.02	11.23	HR25-7TR-6SA
8	7	10.6	M8.5x0.5	M8x0.5	10	HR744-ND	12.89	12.13	11.00	10.62	HR25-7TR-8SA
12	9	12.6	M10.5x0.5	M10x0.75	12	HR745-ND	13.11	12.34	11.18	10.80	HR25-9TR-12SA
16	9	12.6	M10.5x0.5	M10x0.75	12	HR746-ND	14.16	13.33	12.08	11.67	HR25-9TR-16SA
20	9	12.6	M10.5x0.5	M10x0.75	12	HR747-ND	15.08	14.20	12.87	12.42	HR25-9TR-20SA
Fig. 5 Plugs Screw Lock - Male Crimp Type (Contacts sold seperately)											
12	9	—	—	—	—	HR748-ND	20.58	19.90	18.53	17.84	HR25-9TP-12PC
16	9	—	—	—	—	HR749-ND	20.90	20.20	18.81	18.11	HR25-9TP-16PC
20	9	—	—	—	—	HR750-ND	21.20	20.49	19.08	18.37	HR25-9TP-20PC
Fig. 5 Plugs Screw Lock - Female Crimp Type (Contacts sold seperately)											
12	9	—	—	—	—	HR751-ND	20.58	19.90	18.53	17.84	HR25-9TP-12SC
16	9	—	—	—	—	HR752-ND	20.90	20.20	18.81	18.11	HR25-9TP-16SC
20	9	—	—	—	—	HR753-ND	21.20	20.49	19.08	18.37	HR25-9TP-20SC
Fig. 6 Receptacles Screw Lock - Male Crimp Type (Contacts sold seperately)											
12	9	13	—	—	—	HR754-ND	14.05	12.38	11.11	10.37	HR25-9TR-12PC
16	9	13	—	—	—	HR755-ND	14.47	12.75	11.44	10.68	HR25-9TR-16PC
20	9	13	—	—	—	HR756-ND	14.91	13.14	11.79	11.01	HR25-9TR-20PC
Fig. 6 Receptacles Screw Lock - Female Crimp Type (Contacts sold seperately)											
12	9	11.5	—	—	—	HR757-ND	14.05	12.38	11.11	10.37	HR25-9TR-12SC
16	9	11.5	—	—	—	HR758-ND	14.47	12.75	11.44	10.68	HR25-9TR-16SC
20	9	11.5	—	—	—	HR759-ND	14.91	13.14	11.79	11.01	HR25-9TR-20SC
Fig. 7 Jacks Screw Lock - Male Crimp Type (Contacts sold seperately)											
12	9	—	—	—	—	HR760-ND	20.58	19.90	18.53	17.84	HR25-9TJ-12PC
16	9	—	—	—	—	HR761-ND	20.90	20.20	18.81	18.11	HR25-9TJ-16PC
20	9	—	—	—	—	HR762-ND	21.20	20.49	19.08	18.37	HR25-9TJ-20PC
Fig. 7 Jacks Screw Lock - Female Crimp Type (Contacts sold seperately)											
12	9	—	—	—	—	HR763-ND	20.58	19.90	18.53	17.84	HR25-9TJ-12SC
16	9	—	—	—	—	HR764-ND	20.90	20.20	18.81	18.11	HR25-9TJ-16SC
20	9	—	—	—	—	HR765-ND	21.20	20.49	19.08	18.37	HR25-9TJ-20SC
Fig. 8 Plugs Push Pull Lock- Male Solder Type											
4	7	34.8	10.5	7.45	5	HR766-ND	19.16	18.52	17.24	16.61	HR25-7P-4P
6	7	34.8	10.5	7.45	5	HR767-ND	20.07	19.41	18.07	17.40	HR25-7P-6P
8	7	34.8	10.5	7.45	5	HR768-ND	21.09	20.39	18.99	18.28	HR25-7P-8P
12	9	42.8	12.5	9.45	7	HR769-ND	30.42	29.41	27.38	26.37	HR25-9P-12P
16	9	42.8	12.5	9.45	7	HR770-ND	32.46	31.38	29.22	28.14	HR25-9P-16P
20	9	42.8	12.5	9.45	7	HR771-ND	34.61	33.46	31.15	30.00	HR25-9P-20P
Fig. 8 Plugs Push Pull Lock - Female Solder Type											
4	7	34.8	10.5	7.45	5	HR772-ND	18.03	17.43	16.23	15.63	HR25-7P-4S
6	7	34.8	10.5	7.45	5	HR773-ND	19.25	18.61	17.33	16.68	HR25-7P-6S
8	7	34.8	10.5	7.45	5	HR774-ND	19.77	19.12	17.80	17.14	HR25-7P-8S
12	9	42.8	12.5	9.45	7	HR775-ND	24.48	23.67	22.04	21.22	HR25-9P-12S
16	9	42.8	12.5	9.45	7	HR776-ND	25.40	24.55	22.86	22.01	HR25-9P-16S
20	9	42.8	12.5	9.45	7	HR777-ND	26.22	25.35	23.60	22.73	HR25-9P-20S
Fig. 9 Receptacles Push Pull Lock- Male Solder Cup Type											
4	7	11	M10x0.75	12	—	HR778-ND	12.89	12.13	11.00	10.62	HR25-7R-4P
6	7	11	M10x0.75	12	—	HR779-ND	13.92	13.11	11.88	11.47	HR25-7R-6P
8	7	11	M10x0.75	12	—	HR780-ND	15.08	14.20	12.87	12.42	HR25-7R-8P
12	9	13	M13x0.75	14	—	HR781-ND	20.07	19.41	18.07	17.40	HR25-9R-12P
16	9	13	M13x0.75	14	—	HR782-ND	22.13	21.39	19.92	19.18	HR25-9R-16P
20	9	13	M13x0.75	14	—	HR783-ND	24.27	23.47	21.85	21.04	HR25-9R-20P
Fig. 9 Receptacles Push Pull Lock - Female Solder Cup Type											
4	7	11	M10x0.75	12	—	HR784-ND	15.33	13.51	12.12	11.32	HR25-7R-4S
6	7	11	M10x0.75	12	—	HR785-ND	13.01	12.24	11.10	10.71	HR25-7R-6S
8	7	11	M10x0.75	12	—	HR786-ND	13.58	12.79	11.59	11.19	HR25-7R-8S
12	9	13	M13x0.75	14	—	HR787-ND	16.01	15.08	13.66	13.19	HR25-9R-12S
16	9	13	M13x0.75	14	—	HR788-ND	15.06	14.56	13.56	13.06	HR25-9R-16S
20	9	13	M13x0.75	14	—	HR789-ND	15.87	15.35	14.29	13.76	HR25-9R-20S
Fig. 10 Plugs Push Pull Lock - Male Crimp Type (Contacts sold seperately)											
12	9	—	—	—	—	HR790-ND	22.94	22.18	20.65	19.88	HR25-9P-12PC
16	9	—	—	—	—	HR791-ND	23.25	22.48	20.93	20.15	HR25-9P-16PC
20	9	—	—	—	—	HR792-ND	23.55	22.77	21.20	20.41	HR25-9P-20PC

(Continued)

Circular Connectors HR25 Series *(Cont.)*

# of Cont.	Shell Size	Dimensions (mm) A	B	C	D	Digi-Key Part No.	Price Each 1	10	50	100	Hirose Part No.
Fig. 10 Plugs Push Pull Lock - Female Crimp Type (Contacts sold seperately)											
12	9	—	—	—	—	HR793-ND	22.94	22.18	20.65	19.88	HR25-9P-12SC
16	9	—	—	—	—	HR794-ND	23.25	22.48	20.93	20.15	HR25-9P-16SC
20	9	—	—	—	—	HR795-ND	23.55	22.77	21.20	20.41	HR25-9P-20SC
Fig. 11 Receptacles Push Pull Lock - Male Crimp Type (Contacts sold seperately)											
12	9	13.8	—	—	—	HR520-ND	14.28	13.44	12.18	11.76	HR25-9R-12PC
16	9	13.8	—	—	—	HR521-ND	14.62	13.76	12.47	12.04	HR25-9R-16PC
20	9	13.8	—	—	—	HR522-ND	14.98	14.10	12.78	12.34	HR25-9R-20PC
Fig. 11 Receptacles Push Pull Lock - Female Crimp Type (Contacts sold seperately)											
12	9	11.8	—	—	—	HR523-ND	14.28	13.44	12.18	11.76	HR25-9R-12SC
16	9	11.8	—	—	—	HR524-ND	14.62	13.76	12.47	12.04	HR25-9R-16SC
20	9	11.8	—	—	—	HR525-ND	14.98	14.10	12.78	12.34	HR25-9R-20SC
Fig. 12 Jacks Push Pull Lock - Male Crimp Type (Contacts sold seperately)											
12	9	—	—	—	—	HR526-ND	22.94	22.18	20.65	19.88	HR25-9J-12PC
16	9	—	—	—	—	HR527-ND	23.25	22.48	20.93	20.15	HR25-9J-16PC
20	9	—	—	—	—	HR528-ND	23.55	22.77	21.20	20.41	HR25-9J-20PC
Fig. 12 Jacks Push Pull Lock - Female Crimp Type (Contacts sold seperately)											
12	9	—	—	—	—	HR529-ND	22.94	22.18	20.65	19.88	HR25-9J-12SC
16	9	—	—	—	—	HR530-ND	23.25	22.48	20.93	20.15	HR25-9J-16SC
20	9	—	—	—	—	HR531-ND	23.55	22.77	21.20	20.41	HR25-9J-20SC

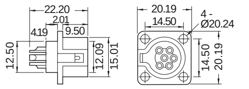
Descrip-tion	Digi-Key Part No.	*Loose Piece* Price Each 100	Hirose Part No.	*Cut Tape** Price Each 1	10	50	*Tape & Reel †* Pricing 10,000	Hirose Part No.
Crimp -Style Contacts - Male								
30-32	HR532-ND	.19	HR25-PC-111	.58	.36	.24	80.22	HR25-PC-211
Crimp -Style Contacts - Female								
30-32	HR536-ND	.19	HR25-5C-111	.58	.36	.24	80.22	HR25-5C-211
Tool for HR25 Series								
Manual Crimp Tool			H9975-ND	1472.11 each				HR25-TA3032HC

* For Cut Tape, add "CT" to the Digi-Key Part No. (HR532CT-ND)
† For Tape & Reel, add "TR" to the Digi-Key Part No. (HR532TR-ND)

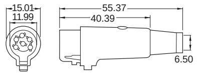
RP Series Plastic Connectors 12mm Connectors Panel Mount

Specifications: • Operating Voltage: AC150V (6, 7 pin), AC250V (3 pin) • Current Rating: 5A • Contact Resistance: 5mΩ max. at DC1A **Materials:** • Male Pin: Brass and silver plating • Female Pin: Phosphor bronze and silver plating

RP1

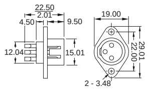


HR133-ND

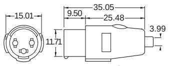


HR132-ND

RP2



Plug



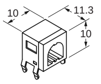
Receptacle

Con-tacts	Description	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
RP1 Series, 12mm						
6	Plug with pin insert	HR133-ND	2.31	1.92	1.42	RPC1-12RB-6P
6	Receptacle with socket insert	HR132-ND	4.87	4.25	3.01	RPC1-12P-6S(03)
RP2 Series, 12mm						
3	Plug with pin insert	HR135-ND	1.86	1.45	1.11	RPC2-12RB-3P(01)
7	Plug with pin insert	HR137-ND	2.83	2.35	1.74	RPC2-12RB-7P(01)
3	Receptacle with socket insert	HR134-ND	2.83	2.35	1.74	RPC2-12P-3S
7	Receptacle with socket insert	HR136-ND	3.63	3.17	2.25	RPC2-12P-7S

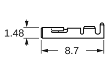
RP34 Series Compact Plastic Connector for AC Adapter

A compact, lightweight, 3-pole plastic connector specially designed for the AC adapter interface for notebook type personal computers. Plug is available in either straight type or right-angle type. Receptacle is very compact with a 10mm sq. mating surface and 11.3mm depth. • Snap-lock locking and D-shaped mating section for easy insertion and disconnection • One of the three poles is designed for grounding terminal • Snap-fit assembling method for plug eliminates use of screws • External appearance is simplified cubical shape and fits well to any equipment.

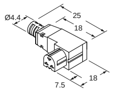
Materials: • Main Frame and Insulator: Polycarbonate resin containing glass, and PBT resin UL94V-0, black • Male Terminal: Brass with silver plating • Female Terminal: Phosphor bronze with silver plating



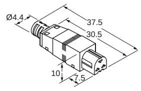
Receptacle



Contact (Female Terminal)



Rt. Angle Plug



Straight Plug

Con-tacts	Description	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
3	Plug with socket, straight	HR170-ND†	2.89	2.41	1.78	RP34-8SP-3SC
4	Plug with socket, straight	HR171-ND†	2.54	2.11	1.56	RP34-8SP-4SC
3	Plug with socket, right angle.	HR172-ND†	2.41	2.00	1.48	RP34-8P-3SC
3	Receptacle with pin, PC mount	HR173-ND	3.19	2.79	1.98	RP34-8R-3PDL
4	Receptacle with pin, PC mount.	HR174-ND	2.15	1.79	1.32	RP34-8R-4PDL
—	Contact, Female terminal, crimped, tin . . .	HR175-ND	.69	.57	.41	RP34-SC-112

† Contact not included and must be ordered separately (Digi-Key Part No. HR175-ND).

RP34L Series

Connectors for Low Profile Power Supply

Features: Low profile: These receptacles are designed with their installation heights to be shorter than those of conventional RP34 series, such as 6.1mm (for 2-core type) and 5mm (for 3-core type).

Applications: Notebook PCs, portable remote terminals, AV equipment.

Fig. 1

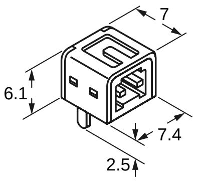


Fig. 2

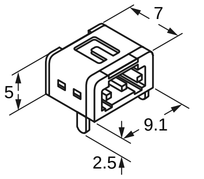


Fig. 3

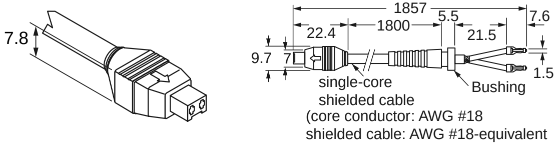


Fig. 4

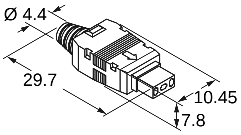


Fig. 5

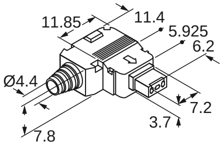


Fig.	No of Pos.	Description	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
1	2	Receptacle, Dip-Solder Male Terminal	H2348-ND	3.11	2.49	1.93	RP34L-5R-2PD
2	3	Receptacle, Dip-Solder Male Terminal	H2349-ND	3.19	2.56	1.98	RP34L-5R-3PD
3	2	Cable-Integrated Forming Straight Plug, Crimp-StyleFemale Terminal	H2350-ND	14.86	13.60	12.24	RP34L-5PA-2SC(1857)
4	3	Assembled Straight Plug, Crimp-Style Female Terminal	H2351-ND	3.05	2.45	1.89	RP34K-5P-3SC
5	3	Assembled Right Angle Plug, Crimp-Style Female Terminal	H2352-ND	3.80	3.04	2.35	RP34L-5LP-3SC
—	—	Crimp Terminal - #18-22 AWG	H2353-ND	2.00	1.54	1.23	RP34L-SC1-212(01)

MQ172 Series SMT

Micro-Miniature Interface Connectors for Power Supply/Signaling

Features: Ultra Miniature/Low Profile SMT Design. **Dimensions:** 3.9mm (H) x 6.4mm (W) x 6mm (D) for the 3 contact type, this series is ideal for today's miniature, lightweight electronic products.

Applications: Portable remote terminals, portable telephones, PHS (personal handy phone system), Notebook PCs, Electronic measuring instruments. **Ratings:** Rated Current: 3A (4-contact type, rated current is 2A, or 3A for optional 2 terminals and 0.5A for other 2 terminals.) Temp. Range: -30°C to +75°C. Rated Volt: DC 30V or less AC 40V or less.

Fig. 1

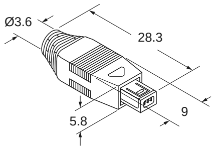


Fig. 2

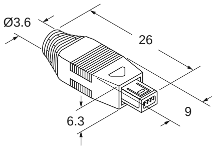


Fig. 3

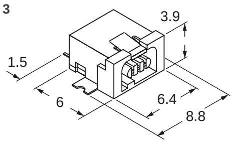


Fig. 4

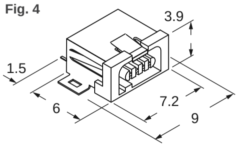


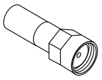
Fig.	No. of Contacts	Description	Digi-Key Part No.	Price Each 1	10	50	100	Hirose Part No.
1	3	Plug, Unshielded	H2790-ND	2.83	2.35	2.01	1.74	MQ172-3SA-CV
2	4	Plug, Shielded	H2791-ND	2.81	2.45	2.04	1.74	MQ172X-4SA-CV
3	3	Receptacle, Unshielded, Loose	H2792-ND	1.95	1.62	1.38	1.20	MQ172-3PA

Fig.	No. of Contacts	Digi-Key Part No.	*Loose Piece* Price Each 100	Hirose Part No.	*Cut Tape** Price Each 10	25	100	*Tape & Reel †* Pricing 1,000	Hirose Part No.
Shielded — Receptacle									
4	4	H2794-ND	1.52	MQ172X-4PA	2.23	2.07	1.65	877.80	MQ172X-4PA(11)

* For Cut Tape, add "CT" to the Digi-Key Part No. (HR2794CT-ND)
† For Tape & Reel, add "TR" to the Digi-Key Part No. (HR2794TR-ND)

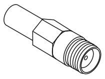
SMA Connectors

Fig. 1



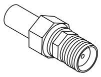
SMA Plug

Fig. 2



SMA Jack

Fig. 3



SMA Bulkhead Jack

Fig. 4

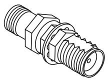


Fig. 5

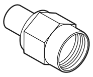


Fig. 6

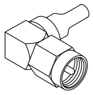


Fig. 7

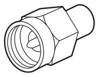


Fig. 8

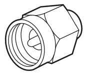
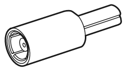
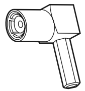


Fig. 9



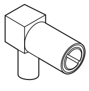
MIL-Type

Fig. 10



MIL-Type

Fig. 11



Zinc Die Cast

Fig. 12

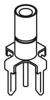


Fig. 13

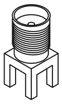


Fig. 14

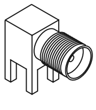


Fig. 15

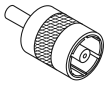


Fig. 16

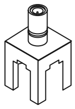


Fig. 17

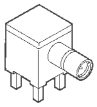


Fig. 18

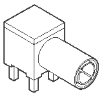
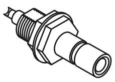


Fig. 19



Front mount shown

Fig. 20

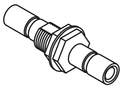


Fig. 21

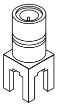
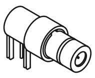


Fig. 22



A9966-ND Hand Crimp Tool, w/o Dies..........**$702.45**

Crimp Connectors

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.	Die Set	Price Each	Locator Plug*	Price Each
1	Plug, Hex Crimp, Brass, Ni Plated	142, 142A, 142B	A4010-ND	3.90	3.36	447647-2	—	—	—	—
	Plug, Hex Crimp, Brass, Ni Plated	174, 174A, 188, 188A, 316	A4011-ND	4.10	3.53	447647-3	—	—	—	—
	Plug, Hex Crimp, Brass, Ni Plated	Belden YR20621	A24676-ND	3.60	3.10	1-447647-1	—	—	—	—
2	Jack, Hex Crimp	142	A4006-ND	13.18	11.34	447648-2	—	—	—	—
	Jack, Hex Crimp	174, 188, 316	A4007-ND	6.10	5.25	447648-3	—	—	—	—
3	Bulkhead Jack, Crimp	142	A4008-ND	17.78	15.29	447650-2	—	—	—	—
	Bulkhead Jack, Crimp	174, 188, 316	A4009-ND	12.98	11.16	447650-3	—	—	—	—
	Bulkhead Jack, Comp. Crimp	402 Semi-Rigid	A24682-ND	21.90	18.84	228638-1	A9965-ND	214.76	A24748-ND	111.93
5	Plug, w/ Center Contact	405 Semi-Rigid	A4012-ND	8.48	5.60	227868-1	A9964-ND	214.76	A9961-ND	60.03
	Plug, w/ Center Contact	405 Semi-Rigid	A4013-ND	10.80	9.29	228639-1	A9964-ND	214.76	A9961-ND	60.03
	Short Plug, w/ Center Contact	405 Semi-Rigid	A24680-ND	9.88	8.50	221447-1	—	—	—	—
6	Right Angle Plug, w/ Center Contact	405 Semi-Rigid	A24681-ND	36.88	31.71	228583-1	A9964-ND	214.76	A9961-ND	60.03
7	Solderless Plug, w/ Center Contact	402 (.141)	A4014-ND	11.33	9.74	227743-1	A9965-ND	214.76	A9961-ND	60.03
	Solderless Plug, w/ Center Contact	402 (.141)	A4015-ND	8.63	7.42	228634-1	A9965-ND	214.76	A9961-ND	60.03
	Solderless Plug, w/o Center Contact	402 (.141)	A4017-ND	3.05	2.63	228635-1	A9965-ND	214.76	A9962-ND	85.98
8	Plug, Retractable Collar	402 (.141)	A4018-ND	3.73	3.21	227531-5	A9963-ND	759.00	A9962-ND	85.98

* Must use a locator with die set.

Crimp Connectors for Flexible Cables

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.	Hand-Tool	Price Each
1	Plug, Stainless Steel, Passivated, Length: .950"	174, 188, 188A, 316	A24683-ND‡	13.75	11.83	225532-4	A24785-ND	621.23
	Plug, Brass, Nickel, Length: 1.188"	17,16	A24684-ND‡	12.55	10.80	221117-2	A24785-ND	621.23
	Plug, Stainless Steel, Passivated	179, 179A, 179B, 161, 187, 187B, Belden 9221	A24685-ND‡	14.50	12.47	225532-8	A24785-ND	621.23
	Plug, Stainless Steel, Passivated	58, 58A, 58B, 58C	A24686-ND‡	15.13	13.01	225532-1	A24785-ND	621.23
	Plug, Stainless Steel, Passivated	223, 55, 55A, 55B	A24687-ND‡	14.35	12.35	1-225532-0	A24785-ND	621.23
	Plug, Stainless Steel, Passivated	142, 142A, 142B, 400, Belden 84142	A24688-ND‡	14.35	12.35	225532-3	A24785-ND	621.23
3	Bulkhead Jack, Stainless Steel, Passivated	174, 188, 188A, 316	A24689-ND	34.88	30.00	225608-4	A24785-ND	621.23
4	Bulkhead Jack Adapter (Jack-Jack)	—	A24690-ND	20.80	17.89	221643-1	—	—

‡ Mil Type

PC Board Connectors

Fig.	Description	Body Finish and Plating	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
13	Vertical Jack	Brass and Gold	A24691-ND	7.50	6.45	221789-1
14	Right Angle Jack	Stainless Steel and Gold	A24692-ND	23.95	20.60	221790-1

SMB Connectors

Center Contact: Gold †† Uses A9996-ND PRO-CRIMPER and A9968-ND Die † Uses A9996-ND PRO-CRIMPER and A9809-ND Die

Fig.	Description	Style	Cable Group RG/U	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
			50 Ohm				
9	Plug, Gold	Mil Type	178, 178A, 178B, 196, 196A	A4020-ND††	8.98	7.72	413985-5
	Plug, Nickel			A4021-ND††	5.23	4.50	413985-6
	Plug, Gold	Mil Type	174, 316, 188, 188A	A4026-ND††	6.23	5.36	413985-1
	Plug, Nickel			A4027-ND††	5.05	4.35	413985-3
	Plug, Gold	Mil Type	179, 179A, 179B, 161, 187, 187A, Belden 9221	A4031-ND††	7.55	6.50	1-413985-0
	Plug, Nickel			A4032-ND††	4.98	4.28	1-413985-1
	Plug, Gold	Mil Type	RD 316. 188 Double Braid	A4034-ND††	7.68	6.61	413985-2
	Plug, Nickel			A4035-ND††	4.98	4.28	413985-4
10	Plug, Right Angle, Nickel	Mil Type	178, 178A, 178B, 196, 196A	A4023-ND††	6.63	5.70	414002-8
11	Plug, Right Angle, Gold	Zinc		A4024-ND††	4.43	3.81	414363-8
	Plug, Right Angle, Nickel			A4025-ND††	4.30	3.70	414363-9
10	Plug, Right Angle, Gold	Mil Type	174, 316, 188, 188A, 179, 179A, 179B, 161, 187, 187A, Belden 9221	A4028-ND††	7.41	6.62	414002-1
	Plug, Right Angle, Nickel			A4029-ND††	6.40	5.51	414002-3
11	Plug, Right Angle, Gold	Zinc		A4030-ND††	4.23	3.64	414363-3
	Plug, Right Angle, Nickel			A4033-ND††	4.10	3.53	414363-5
10	Plug, Right Angle, Gold	Mil Type	RD 316, 188 Double Braid	A4036-ND††	7.90	6.80	414002-2
	Plug, Right Angle, Nickel			A4037-ND††	6.33	5.44	414002-4
11	Plug, Right Angle, Gold	Zinc	RD 316, 188 Double Braid	A4038-ND††	3.02	2.70	414363-4
	Plug, Right Angle, Nickel			A4039-ND††	4.10	3.53	414363-6
12	Jack, Vertical, Nickel	Comm.	—	A24693-ND	2.01	1.73	221111-1
16	Jack, Vertical, Gold	Mil Type	—	A4041-ND	4.00	3.44	413990-1
	Jack, Vertical, Nickel			A4042-ND	3.20	2.76	413990-2
17	Jack, Right Angle, Low Profile, Gold	Mil Type	—	A4043-ND	8.48	7.29	413996-2
	Jack, Right-Angle w/Standoff Pads, Gold			A24694-ND	6.13	5.27	414026-2
	Jack, Right Angle w/Standoff Pads, Nickel			A4044-ND	5.80	4.99	414026-3
	Jack, Right Angle, Nickel/Tin-Lead/Zinc Die Cast	Zinc		A4045-ND	4.23	3.64	414337-1
18	Plug, Right Angle, Gold, Nickel/Tin-Lead, Zinc Die Cast	Zinc	—	A4046-ND	5.53	4.76	414338-1
19	Receptacle, Solder Pot, Front Mount, Nickel	Mil Type		A24695-ND	5.25	4.52	228216-1
	Receptacle, Solder Pot, Rear Mount, Nickel			A24696-ND	5.25	4.52	228215-1
20	Bulkhead Jack Adapter (Jack-Jack), Nickel	Mil Type	—	A24697-ND	6.53	5.62	228553-1
			75 Ohm				
10	Plug, Right Angle, Gold	Comm.	179, 179A, 179B, 161, 187, 187A, Belden 9221	A24704-ND†	17.38	14.95	414048-6
15	Plug, Nickel	Comm.	179, 179A, 179B, 161, 187, 187A, Belden 9221	A4040-ND†	9.15	7.87	414618-2
21	PC Board Jack, Vertical, Gold	Mil Type	—	A4047-ND	5.93	5.10	414244-1
	PC Board Jack, Vertical, Tin-Lead			A4050-ND	4.75	4.09	414244-4
22	Jack, Right Angle, Front: Nickel, Rear: Tin-Lead	Comm.	—	A24698-ND	4.60	3.96	221014-1
			Tools				
	Crimp Tool, 50 Ohm, Hex/Comm. w/Die Set		174, 316, 188, 179, 161, 187, RD 316, 188 Double Braid	A9808-ND	134.25	—	58500-1
	Crimp Tool, 50 Ohm, Hex/Comm. w/Die Set		178, 196, 174, 316, 179, 161, 187,188	A9810-ND	337.50	—	58046-1
	Pro Crimper II Hand Tool w/o Die, Use w/A9968 and A9809		—	A9996-ND	75.00	—	354940-1
	Die Set, Hex/Comm, use w/A9996		174, 179, 187	A9809-ND	73.50	—	58489-1
	Die Set, Mil Type Crimp, use w/A9996		—	A9968-ND	60.75	—	58483-1

Fig. 1

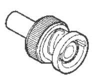


Fig. 2

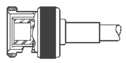


Fig. 3

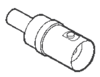
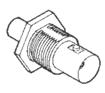


Fig. 4



BNC Coaxial Connectors Dual Crimp

MIL-C-39012 Class II - Cat. B

Fig.	Descrip-tion	Center Contact	Body Plating	Dielectric	Cable Group RG/U	Digi-Key Part No.	Price Each		AMP Part No.	CERTI-CRIMP Hand Tool	Die for Pro-Crimper
							1	25			
1	Plug	Gold	Nickel	TEFLON	174, 188, 188A, 316	A24422-ND	2.82	2.43	225395-7	A24569-ND	—
		Gold	Nickel	Polyethylene	174, 188, 188A, 316	A24423-ND	1.62	1.40	1-227079-6	A24774-ND	A24780-ND
		Tin Lead	Nickel	Polyethylene	174, 188, 188A, 316	A24424-ND	1.46	1.26	1-227079-4	A24774-ND	A24780-ND
		Gold	Silver	TEFLON	174, 188, 188A, 316	A24425-ND	4.18	3.60	2-331350-4	A24569-ND	—
		Gold	Nickel	TEFLON	179, 179A, 179B, 161, 187, 187A, Belden 9221	A24426-ND	2.78	2.40	225395-8	A24774-ND	—
		Tin Lead	Nickel	Polyethylene	179, 179A, 179B, 161, 187, 187A, Belden 9221	A24427-ND	1.62	1.40	2-227079-0	A24774-ND	A24780-ND
		Gold	Nickel	Polyethylene	179, 179A, 179B, 161, 187, 187A, Belden 9221	A24428-ND	1.62	1.40	2-227079-2	A24774-ND	A24780-ND
		Gold	Silver	TEFLON	179, 179A, 179B, 161, 187, 187A, Belden 9221	A24429-ND	7.95	6.84	2-331350-5	—	—
		Gold	Nickel	Polyethylene	RD 316, 188, Double Braid	A24430-ND	1.62	1.40	8-227079-2	A24782-ND	A24779-ND
		Gold	Nickel	TEFLON	Belden 9252, 122	A24431-ND	3.58	3.08	5-225395-7	—	—
		Gold	Nickel	TEFLON	180, 180A, 180B, 195, 195A	A24432-ND	2.82	2.43	225395-9	—	—
		Tin Lead	Nickel	Polyethylene	180, 180A, 180B, 195, 195A	A24433-ND	1.62	1.40	3-227079-7	A24782-ND	A24779-ND
		Gold	Silver	TEFLON	180, 180A, 180B, 195, 195A	A24434-ND	8.18	7.04	2-331350-6	—	—
		Gold	Nickel	Polyethylene	Belden 9907, RG-141	A24435-ND	1.62	1.40	6-227079-7	A24572-ND	A24570-ND
		Gold	Nickel	Polyethylene	Belden 89907	A24436-ND	1.62	1.40	6-227079-8	A24572-ND	A24781-ND
		Gold	Nickel	TEFLON	Belden 8218	A24437-ND	2.82	2.43	1-225395-0	—	—
		Gold	Nickel	Polyethylene	Belden 8218	A24438-ND	1.62	1.40	1-227079-9	A24782-ND	A24779-ND
		Tin Lead	Nickel	Polyethylene	Belden 8218	A24439-ND	1.62	1.40	1-227079-7	A24782-ND	A24779-ND
		Gold	Nickel	TEFLON	58, 58A, 58B, 58C	A1100-ND	3.66	3.28	225395-1	A24571-ND	A24777-ND
		Gold	Nickel	TEFLON	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1101-ND	3.62	3.24	225395-2	A24573-ND	A24776-ND
2	Plug	Tin Lead	Nickel	Polyethylene	58, 58A, 58B, 58C	A1117-ND	2.11	1.89	227079-1	A24572-ND	A24778-ND
		Gold	Nickel	Polyethylene	58, 58A, 58B, 58C	A1119-ND	2.10	1.89	227079-5	A24572-ND	A24770-ND
		Silver	Nickel	Polyethylene	58, 58A, 58B, 58C	A1118-ND	1.90	1.71	227079-9	A24572-ND	A24770-ND
		Gold	Silver	TEFLON	58, 58A, 58B, 58C	A24440-ND	4.18	3.60	2-331350-1	A24571-ND	A24777-ND
		Gold	Nickel	TEFLON	141, 141A, 303	A24441-ND	2.82	2.43	225395-5	A24571-ND	A24777-ND
		Gold	Nickel	Polyethylene	Belden 88240, Berk-Tek BTDC-58, Comm/Scope 2135	A24442-ND	1.62	1.40	4-227079-3	A24572-ND	A24570-ND
		Gold	Nickel	TEFLON	Belden 88240, Berk-Tek BTDC-58, Comm/Scope 2135	A24443-ND	3.58	3.08	4-225395-2	A24571-ND	A24777-ND
		Gold	Nickel	TEFLON	223, 55, 55A, 55B	A24444-ND	2.82	2.43	225395-3	A24571-ND	A24777-ND
		Gold	Nickel	Polyethylene	223, 55, 55A, 55B	A24445-ND	1.46	1.26	227079-6	A24572-ND	A24570-ND
		Gold	Nickel	TEFLON	142, 142A, 142B, 400	A24446-ND	2.82	2.43	225395-6	A24571-ND	A24777-ND
		Gold	Nickel	Polyethylene	142, 142A, 142B, 400	A24447-ND	2.35	2.03	6-227079-1	A24572-ND	A24570-ND
		Gold	Silver	TEFLON	142, 142A, 142B, 400	A24448-ND	4.75	4.09	2-331350-9	A24571-ND	A24777-ND
		Tin Lead	Nickel	Polyethylene	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1120-ND	2.10	1.89	227079-3	—	A24775-ND
		Gold	Nickel	Polyethylene	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1122-ND	2.10	1.89	227079-7	—	A24570-ND
		Silver	Nickel	Polyethylene	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1121-ND	2.10	1.89	1-227079-1	—	A24570-ND
		Gold	Silver	TEFLON	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24449-ND	4.80	4.13	331350	A24573-ND	—
		Gold	Nickel	TEFLON	302, Belden 88241, 89269, Hi-Temp 62A Times PL62, Berk-Tek, BTDC-59, BTDC-62	A24450-ND	3.58	3.08	4-225395-1	A24573-ND	A24776-ND
		Gold	Nickel	Polyethylene	302, Belden 88241, 89269, Hi-Temp 62A Times PL62, Berk-Tek, BTDC-59, BTDC-62	A24451-ND	1.62	1.40	4-227079-9	A24573-ND	A24570-ND
		Gold	Nickel	Polyethylene	Hi-Temp 59, Times PL59, PLF59, (20 AWG C.C.)	A24452-ND	1.62	1.40	5-227079-3	—	A24776-ND
		Gold	Nickel	TEFLON	Belden 9104, 9240, 9112, 9167, 9259, 9266, Times FM-59	A24453-ND	2.81	2.42	2-225395-0	A24573-ND	A24776-ND
		Gold	Nickel	Polyethylene	Belden 9104, 9240, 9112, 9167, 9259, 9266, Times FM-59	A24454-ND	1.46	1.26	1-227079-3	—	A24776-ND
		Gold	Nickel	Polyethylene	Belden 9248, 9114	A24455-ND	1.62	1.40	3-227079-0	—	A24776-ND
		Gold	Nickel	Polyethylene	Belden 8281, 9141, 9231, Western Electric 724, 728, 3049	A24456-ND	1.62	1.40	5-227079-8	—	A24631-ND
		Gold	Silver	TEFLON	Belden 8281, 9141, 9231, Western Electric 724, 728, 3049	A24457-ND	4.93	4.24	4-331350-0	—	A24631-ND
		Gold	Nickel	TEFLON	8, 8A, 213	A24458-ND	12.78	10.99	2-225395-1	A24574-ND	—
3	Cable Jack	Gold	Nickel	TEFLON	58, 58A, 58B, 58C	A1102-ND	5.28	4.54	225396-1	A24571-ND	—
	Jack	Gold	Nickel	TEFLON	174, 188, 188A, 316	A24459-ND	5.35	4.61	225396-7	A24569-ND	—
		Gold	Nickel	Polypropylene	174, 188, 188A, 316	A24460-ND	2.88	2.48	228979-7	A24774-ND	—
		Gold	Nickel	TEFLON	179, 179A, 179B, 161, 187, 187A, Belden 9221	A24461-ND	5.35	4.61	225396-8	A24569-ND	—
		Gold	Silver	TEFLON	58, 58A, 58B, 58C	A24462-ND	6.63	5.70	2-331351-1	A24571-ND	—
		Gold	Nickel	Polypropylene	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24463-ND	2.88	2.48	228979-6	—	A24570-ND
		Gold	Nickel	TEFLON	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1103-ND	5.28	4.54	225396-2	A24573-ND	A24776-ND
		Gold	Silver	TEFLON	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24464-ND	6.63	5.70	331351	A24573-ND	—
4	Bulkhead Jack	Gold	Nickel	TEFLON	174, 188, 188A, 316	A24465-ND	3.83	3.29	225398-7	A24569-ND	—
		Gold	Nickel	Polypropylene	174, 188, 188A, 316	A24466-ND	3.63	3.12	228980-7	A24774-ND	—
		Gold	Silver	TEFLON	174, 188, 188A, 316	A24467-ND	7.30	6.28	1-331693-2	A24569-ND	—
		Gold	Nickel	TEFLON	179, 179A, 179B, 161, 187, 187A, Belden 9221	A24468-ND	3.83	3.29	225398-8	A24569-ND	—
		Gold	Nickel	TEFLON	Times RD316	A24469-ND	3.83	3.29	1-225398-5	—	—
		Gold	Nickel	TEFLON	58, 58A, 58B, 58C	A1111-ND	4.97	4.47	225398-1	A24571-ND	—
		Gold	Nickel	Polypropylene	58, 58A, 58B, 58C	A24470-ND	3.65	3.14	228980-5	A24572-ND	A24570-ND
		Gold	Silver	TEFLON	58, 58A, 58B, 58C	A24471-ND	7.60	6.54	1-331693-1	A24571-ND	—
		Gold	Nickel	TEFLON	223, 55, 55A, 55B	A24472-ND	3.83	3.29	225398-3	A24571-ND	A24777-ND
		Gold	Nickel	TEFLON	142, 142A, 142B, 400	A24473-ND	3.83	3.29	225398-6	A24571-ND	A24777-ND
		Gold	Nickel	TEFLON	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1112-ND	4.97	4.47	225398-2	A24573-ND	A24776-ND
	Right Angle Plug	Gold	Silver	TEFLON	58, 58A, 58B, 58C	A24474-ND	20.13	17.31	225973-1	A24571-ND	—
		Gold	Nickel	TEFLON	58, 58A, 58B, 58C	A24475-ND	20.85	17.94	225974-1	A24571-ND	—
		Gold	Nickel	TEFLON	55, 55A, 55B, 223	A24476-ND	20.85	17.94	225974-2	A24571-ND	—
		Gold	Silver	TEFLON	142, 142A, 142B, 400	A24477-ND	20.13	17.31	225973-4	A24571-ND	—
		Gold	Nickel	TEFLON	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24478-ND	20.85	17.94	225974-5	A24573-ND	—
Panel Insulation Bushings for Bulkhead Jacks (2 required)						A24479-ND	.48	.41	330620	—	—
BNC Premises Wire Kit						A9822-ND	154.50	—	58477-1	—	—

RF Connectors

BNC Hex Crimp Connectors 50 Ohm

Fig. 1

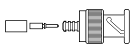


Fig. 2

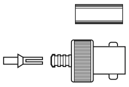


Fig. 3

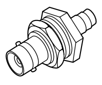


Fig. 4

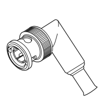
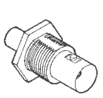


Fig. 5



Collar and outer contacts - nickel plated. Center Contact: Gold (except A24400: Silver) MIL-G-45204

Fig.	Description	Body Plating	Dielectric	Cable Group RG/U	Digi-Key Part No.	Price Each 1	25	AMP Part No.	Die for Pro-Crimper	Price Each
1	Plug	Nickel	Polymethylpentene	174, 188, 188A, 316	A1166-ND	2.53	2.27	2-221128-1	A9995-ND	45.00
		Nickel	Polymethylpentene	179, 179A, 179B, 161, 187, Belden 9221	A1167-ND	2.54	2.28	2-221128-3	A9995-ND	45.00
		Nickel	Polymethylpentene	180, 180A, 180B, 195, 195A	A1168-ND	2.54	2.28	2-221128-5	A9995-ND	45.00
		Nickel	Polymethylpentene	Belden 9907, 89907, Comm/Scope 2104	A1169-ND	2.54	2.28	2-221128-7	A9994-ND	45.00
		Nickel	Polymethylpentene	58, 58A, 58B, 58C, Belden 88240, Berk-Tek, BTDC-58, Comm/Scope 2135	A1164-ND	2.54	2.28	1-221128-0	A9994-ND	45.00
		Nickel	Polymethylpentene	140, 210, 62, 62A, 62B, 59, 59A, 59B, 302, Belden 9291, 9209, 9269, 89269, 88241, Hi-Temp, 62A,Times PL-62, Berk-Tek BTDC-59, BTDC-62, 124	A1165-ND	2.54	2.28	1-221128-1	A9994-ND	45.00
		Nickel	Polypropylene	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Beldon 9291, 9209, 9269,	A24400-ND	1.95	1.69	1-221128-4	A9994-ND	45.00
		Nickel	Polyethynene	188, 316 Double Braid	A1172-ND	2.28	2.05	2-221128-9	A9995-ND	45.00
		Nickel	Polypropylene	Belden 9104, 9240, 9112, 9167, 9259, 9266, Times FM-59	A1171-ND	2.54	2.28	1-221128-7	A9994-ND	45.00
		Nickel	Polypropylene	Belden 8281, 9141, 9231, Western Electric 724, 728, 3049	A1170-ND	2.54	2.28	1-221128-2	A9960-ND	45.00
2	Cable Jack	Nickel	Polymethylpentene	174, 188, 188A, 316	A1803-ND	3.15	2.71	413779-3	A9995-ND	45.00
		Nickel	Polymethylpentene	179, 179A, 197B, 161, 187, 187A, Belden 9221	A1804-ND	4.30	3.70	413779-4	A9995-ND	45.00
		Nickel	Polymethylpentene	180, 180A, 180B, 195, 195A	A1805-ND	3.13	2.69	413779-5	A9995-ND	45.00
		Nickel	Polymethylpentene	Belden 89907, 9907, Comm/Scope 3104, 2104	A1806-ND	3.13	2.69	413779-6	A9994-ND	45.00
		Nickel	Polymethylpentene	58, 58A, 58B, 58C, Belden 88240, Berk-Tek BTDC-58, Comm/Scope 2135	A1801-ND	4.93	4.24	413779-1	A9994-ND	45.00
		Nickel	Polymethylpentene	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1802-ND	3.13	2.69	413779-2	A9994-ND	45.00
3	Bulkhead Jack	Nickel	Polymethylpentene	174, 188, 188A, 316	A1813-ND	4.00	3.44	413771-3	A9995-ND	45.00
		Nickel	Polymethylpentene	179, 179A, 179B, 161, 187, 187A, Belden 9221	A1814-ND	5.35	4.61	413771-4	A9995-ND	45.00
		Nickel	Polymethylpentene	180, 180A, 180B, 195, 195A	A1815-ND	3.95	3.40	413771-5	A9995-ND	45.00
		Nickel	Polymethylpentene	Belden 89907, 9907, Comm/Scope 3104, 2104	A1816-ND	3.95	3.40	413771-6	A9995-ND	45.00
		Nickel	Polymethylpentene	58, 58A, 58B, 58C, Belden 88240, BerkTek BTDC-58, Comm/Scope 2135	A1811-ND	4.80	4.13	413771-1	A9994-ND	45.00
		Nickel	Polymethylpentene	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1812-ND	3.95	3.40	413771-2	A9994-ND	45.00
4	Plug, Right Angle	Nickel	Polymethylpentene	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1182-ND	10.65	9.16	413959-2	A9994-ND	45.00
		Nickel	Polymethylpentene	174, 188, 188A, 316	A1183-ND	10.65	9.16	413959-3	A9995-ND	45.00
		Nickel	Polymethylpentene	179, 179A, 179B, 161, 187, 187A, Belden 9221	A1184-ND	10.65	9.16	413959-4	A9995-ND	45.00
		Nickel	Polymethylpentene	180, 180A, 180B, 195, 195A	A1185-ND	10.65	9.16	413959-5	A9995-ND	45.00
		Nickel	Polymethylpentene	Belden 89907, 9907, Comm/Scope 3104, 2104	A1186-ND	10.65	9.16	413959-6	A9994-ND	45.00
		Nickel	Polymethylpentene	188, 174, 316 Double Braid	A1187-ND	10.48	9.01	413959-7	A9995-ND	45.00
		Nickel	Polymethylpentene	58, 58A, 58B, 58C	A1181-ND	9.50	6.31	413959-1	A9994-ND	45.00

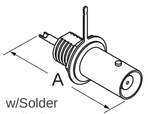
BNC Single Crimp Connectors 50 Ohm

Center Contact: Gold, MIL Type

Fig.	Description	Body Plating	Dielectric	Cable Group RG/U	Digi-Key Part No.	Price Each 1	25	AMP Part No.	CERTI-CRIMP Hand Tool	Price Each
1	Plug	Silver	TEFLON	178, 178A, 178B, 196, 196A	A24401-ND	10.65	9.16	330876	—	—
		Nickel	Polypropylene	174, 188, 188A, 316	A24402-ND	9.63	8.28	225527-9	A24769-ND	663.00
		Silver	Polypropylene	174, 188, 188A, 316	A24403-ND	15.40	13.25	2-330058-1	A24769-ND	663.00
		Silver	TEFLON	174, 188, 188A, 316	A24404-ND	10.63	9.14	2-330061-1	A24769-ND	663.00
		Silver	TEFLON	179, 179A, 179B, 161, 187, 187A, Belden 9221	A24405-ND	10.60	9.12	2-329446-1	A24769-ND	663.00
		Silver	Polypropylene	58, 58A, 58B, 58C	A24406-ND	8.20	7.06	2-329082-1	A24770-ND	687.00
		Silver	TEFLON	58, 58A, 58B, 58C	A24407-ND	9.65	8.30	2-329444-1	A24770-ND	687.00
		Silver	TEFLON	58, 58A, 58B, 58C	A24408-ND	14.98	12.88	330884	—	—
		Silver	TEFLON	223, 55, 55A, 55B	A24409-ND	9.65	8.30	2-329444-2	A24771-ND	780.00
		Silver	TEFLON	142, 142A, 142B, 400	A24410-ND	9.65	8.30	2-330358-2	A24772-ND	1222.13
		Silver	Polypropylene	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24411-ND	8.20	7.06	2-329083-1	A24773-ND	687.00
		Silver	TEFLON	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24412-ND	9.65	8.30	2-329445-1	A24773-ND	687.00
2	Jack	Nickel	TEFLON	174, 188, 188A, 316	A24413-ND	14.68	12.63	2-330062-1	A24769-ND	663.00
		Nickel	TEFLON	58, 58A, 58B, 58C	A24414-ND	12.38	10.65	2-329545-1	A24770-ND	687.00
		Silver	TEFLON	223, 55, 55A, 55B	A24415-ND	15.60	13.42	2-329452-2	A24771-ND	780.00
4	Plug, Right Angle	Silver	TEFLON	174, 188, 188A, 316	A24419-ND	24.13	20.75	331178	A24769-ND	663.00
		Silver	TEFLON	58, 58A, 58B, 58C	A24420-ND	26.03	22.39	331175	A24770-ND	687.00
		Silver	TEFLON	55, 55A, 55B, 223, 142, 142A, 142B	A24421-ND	26.03	22.39	331182	A24771-ND	780.00
5	Bulkhead Jack	Silver	Polypropylene	174, 188, 188A, 316	A24416-ND	11.33	9.74	2-330060-1	A24769-ND	663.00
		Silver	TEFLON	179, 179A, 179B, 161, 187, 187A, Belden 9221	A24417-ND	18.78	16.15	2-329458-1	A24769-ND	663.00
		Silver	TEFLON	58, 58A, 58B, 58C	A24418-ND	16.35	14.07	2-329456-1	A24770-ND	687.00

Bulkhead Solder Jacks Connectors 50 Ohm

Fig. 1



w/Solder Tail Shown

Fig. 2

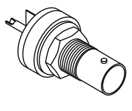


Fig. 3

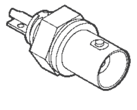
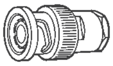


Fig.	Description	Dielectric	Dimension A	Contact Material	Body Plating	Digi-Key Part No.	Price Each 1	25	AMP Part No.
1	w/o Solder Terminal*	VALOX	1.060 (26.93)	Silver	Nickel	A24520-ND	2.23	1.92	227754-3
	with Solder Terminal**	VALOX	1.060 (26.93)	Silver	Nickel	A24521-ND	2.18	1.88	227755-3
	with Solder Terminal**	VALOX	1.312 (33.33)	Gold	Nickel	A24522-ND	1.80	1.55	227169-7
	w/o Solder Terminal*	VALOX	1.060 (26.93)	Gold	Nickel	A24523-ND	1.55	1.34	227754-2
	with Solder Terminal**	VALOX	1.060 (26.93)	Gold	Nickel	A24524-ND	1.60	1.38	227755-2
	with Solder Terminal**	TEFLON	1.312 (33.33)	Gold	Nickel	A24525-ND	2.50	2.15	227169-8
	w/o Solder Terminal*	TEFLON	1.060 (26.93)	Gold	Nickel	A24526-ND	2.45	2.11	227715-3
	with Solder Terminal**	TEFLON	1.060 (26.93)	Gold	Nickel	A24527-ND	2.75	2.37	227716-3
2	Sealed	Polymethyl-pentene	—	Gold	Nickel	A24528-ND	6.45	5.55	227426-1
3	Isolated	VALOX, White	—	Tin	Nickel	A24529-ND	2.50	2.15	227726-1
	Isolated	VALOX, White	—	Silver	Nickel	A24530-ND	2.50	2.15	227726-2
	Isolated	VALOX, White	—	Gold	Nickel	A24531-ND	2.21	1.91	227726-3

* Includes lockwasher and jam nut. ** Includes solder terminal and jam nut.

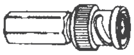
BNC Field Serviceable Plug Connectors 50 Ohm



Center Contact: Gold

Body Plating	Cable Group RG/U	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Silver	58, 58A, 58B, 58C, 141, 141A, 303, 222, 55, 55A, 55B, 142, 142A, 142B, 400	A24480-ND	15.93	13.70	221265-1
Nickel	58, 58A, 58B, 58C, 141, 141A, 303, 222, 55, 55A, 55B, 142, 142A, 142B, 400	A24481-ND	8.40	7.23	1-221265-0
	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269, 89269, 88241 Hi-Temp 62A, Times PL-62, Berk-Tek, BTDC-59, BTDC-62, 302, 71, 71A, 71B	A24482-ND	7.98	6.86	1-221265-1

BNC Twist-On Connectors 50 Ohm

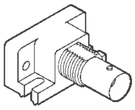


Center Contact: Gold. Body Plating: Nickel

Descrip-tion	Dielectric	Cable Group RG/U	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Plug	Polymethylpentene	59, 59A, 59B	A24483-ND	3.33	2.86	414265-3
Jack	Acetal	59, 59A, 59B	A24484-ND	5.48	4.71	222428-1

RF Connectors

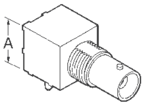
PC Board/Panel Mount Jack Connectors w/Mounting Flanges 50 Ohm


Right Angle

Description	Center Contact	Mount. Height In. (mm)	Body Material	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Right Angle	Tin	.625 (15.88)	VALOX, White	A1123-ND	4.90	4.22	226978-1
Right Angle	Gold	.625 (15.88)	VALOX, White	A24511-ND	4.90	4.22	226978-3
Vertical	Gold	1.375 (34.93)	VALOX, White	A24540-ND	5.53	4.76	226987-7

PC Board/Panel Mount Right Angle Jack Connectors

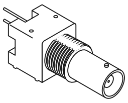
50 Ohm



Description	Center Contact	Mount. Height A- in. (mm)	Body Material	Digi-Key Part No.	Price Each 1	25	AMP Part No.
W/O Mounting Posts	Tin-Lead	.625 (15.88)	VALOX, White	A24485-ND	2.49	2.15	226990-1
W/Mounting Posts	Tin-Lead	.625 (15.88)	VALOX, White	A24486-ND	1.83	1.58	227161-1
W/O Mounting Posts	Gold	.625 (15.88)	VALOX, White	A24487-ND	2.13	1.84	226990-3
W/Mounting Posts	Gold	.625 (15.88)	VALOX, White	A24488-ND	1.83	1.58	227161-3
W/ Mounting Posts	Gold	.519 (13.18)	VALOX, White	A24489-ND	1.83	1.58	227161-7
W/O Mounting Posts	Tin-Lead	.519 (13.18)	VALOX, White	A24490-ND	2.14	1.84	226990-7
W/O Mounting Posts	Tin-Lead	.625 (15.88)	VALOX, Black	A24491-ND	2.14	1.84	226990-2
W/Mounting Posts	Tin-Lead	.625 (15.88)	VALOX, Black	A24492-ND	1.83	1.58	227161-2
W/O Mounting Posts	Gold	.625 (15.88)	VALOX, Black	A24493-ND	2.13	1.84	226990-6
W/Mounting Posts	Gold	.625 (15.88)	VALOX, Black	A24494-ND	1.83	1.58	227161-6
W/Mounting Posts	Gold	.519 (13.18)	VALOX, Black	A24495-ND	1.83	1.58	227161-9
W/O Mounting Posts	Tin-Lead	.625 (15.88)	Metal	A24496-ND	4.90	4.22	227433-1
W/Mounting Posts	Tin-Lead	.625 (15.88)	Metal	A24497-ND	2.48	2.14	227661-1
W/O Mounting Posts	Gold	.625 (15.88)	Metal	A24498-ND	2.54	2.19	227676-1
W/Mounting Posts	Gold	.625 (15.88)	Metal	A24499-ND	2.48	2.14	227677-1
W/Mounting Posts	Gold	.500 (12.70)	Metal	A24500-ND	4.40	3.79	413879-1

PC Board/Panel Mount Vertical Jack Connectors

50 Ohm



Description	Center Contact	Body Material	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Without Mounting Posts	Tin-Lead	VALOX, White	A24501-ND	4.78	4.11	226993-1
With Mounting Posts	Tin-Lead	VALOX, White	A24502-ND	1.83	1.58	227222-1
Without Mounting Posts	Gold	VALOX, White	A24503-ND	4.90	4.22	226993-3
With Mounting Posts	Gold	VALOX, White	A24504-ND	1.83	1.58	227222-3
Without Mounting Posts	Tin-Lead	VALOX, Black	A24505-ND	4.90	4.22	226993-2
With Mounting Posts	Tin-Lead	VALOX, Black	A24506-ND	2.40	2.07	227222-2
Without Mounting Posts	Gold	VALOX, Black	A24507-ND	4.90	4.22	226993-6
With Mounting Posts	Gold	VALOX, Black	A24508-ND	2.40	2.07	227222-6
With Mounting Posts	Tin-Lead	Metal	A24509-ND	2.35	2.03	227671-1
With Mounting Posts	Gold	Metal	A24510-ND	2.11	1.82	227673-1

Jack Accessories 50 and 75 Ohm

Description	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Insulating Bushing for Mounting Jacks, Nylon	A24532-ND	.50	.43	222163-1
Insulating Bushing for Bulkhead Solder Jacks	A24533-ND	.20	.18	227223-1
Screw for panel thickness of 3/32 (2.38) or greater	A24534-ND	.28	.24	221108-2
Screw for panel thickness of less than 3/32 (2.38)	A24535-ND	.28	.24	221108-4
Lockwasher	A1129-ND	.21	.19	1-329632-2
Hex Nut	A1128-ND	.22	.20	1-329631-2

Vertical Metalized PC Board Mount Jack Connectors 50 Ohm

Fig. 1

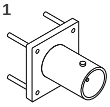


Fig. 2

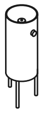


Fig. 3

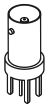
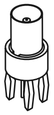


Fig.	Body Plating	Center Contact	Body Material	Digi-Key Part No.	Price Each 1	25	AMP Part No.
1	Nickel	Silver	VALOX	A24512-ND	2.97	2.56	227699-1
1	Nickel	Gold	VALOX	A24513-ND	2.97	2.56	227699-2
1	Nickel	Tin	VALOX	A24514-ND	2.97	2.56	227699-3
2	Nickel	Gold	VALOX	A24515-ND	3.33	2.86	221123-2
3	Nickel	Silver	VALOX	A24516-ND	4.50	3.87	222420-1
3	Tin-Lead, Leg Length: .125 (3.18)	Silver	VALOX	A24517-ND	3.58	3.08	414305-1
3	Tin-Lead, Leg Length: .175 (4.45)	Silver	VALOX	A24518-ND	4.58	3.94	414305-2

Press-Fit Terminal Jack Connectors 50 Ohm



Body Plating	Center Contact	Body Material	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Nickel	Gold	TEFLON	A24519-ND	3.78	3.25	222006-1

Right-Angle PC Board Mount Jack Connectors

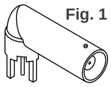


Fig. 1

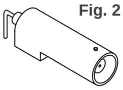
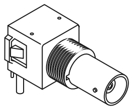


Fig. 2

Fig.	Body Plating	Center Contact Length - In (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
1	Nickel	.171 (4.34)	A24536-ND	4.98	4.28	413631-1
1	Tin-Lead	.171 (4.34)	A24537-ND	5.00	4.30	413631-2
1	Nickel	.131 (3.33)	A24538-ND	5.55	4.78	413631-3
2	Nickel	—	A24539-ND	2.02	1.74	414373-1

BNC Self-Terminating Jack Connectors 50 Ohm



Built-in chip resistor terminates the signal line to the proper characteristic impedance when in the unmated state.
Body: Polyester, PBT, Black; **Dielectric:** Polyester, PBT, Natural

Description	Center Contact	Digi-Key Part No.	Price Each 1	25	AMP Part No.
PCB, Right Angle, Tin Lead	Gold on mating end and Tin Lead on solder tails	A24634-ND	13.45	11.57	414367-1

BNC Adapters 50 Ohm

Fig.	Description	Body Material and Plating	Center Contact Material and Plating	Digi-Key Part No.	Price Each 1	25	AMP Part No.
1	Tee, Jack-Plug-Jack	Brass, Nickel	BE CU, Gold (30µ)	A24549-ND	12.85	11.06	221543-2
1	Tee, Jack-Plug-Jack	Zinc, Nickel	PH BR, Gold (15µ)	A24550-ND	5.70	4.91	413592-2
1	Tee, Jack-Plug-Jack	Zinc, Nickel	BE CU, Gold (30µ)	A24551-ND	5.53	4.76	413592-6
1	Tee, Jack-Plug-Jack	Brass, Nickel	BE CU, Silver (200µ)	A24552-ND	19.58	16.84	329518
2	Tee, Jack-Jack-Jack	Brass, Nickel	BE CU, Silver (200µ)	A24553-ND	15.50	13.33	221988-1
3	Right Angle, Jack-Plug	Nickel	Silver	A24554-ND	16.18	13.92	329517
3	Right Angle, Jack-Plug	Nickel	Gold	A24555-ND	20.70	17.81	222165-2
4	Bulkhead Jack, Jack-Jack	Nickel	Silver	A24556-ND	14.98	12.88	330024
4	Bulkhead Jack, Jack-Jack	Nickel	Gold (50µ)	A24557-ND	5.48	4.71	228226-1
4	Bulkhead Jack, Jack-Jack	Nickel	Gold (15µ)	A24558-ND	3.80	3.27	228226-3
5	Jack Covers	Silver	—	A24559-ND	6.08	5.23	330022
6	Feed-Thru, Jack-Jack	Nickel	Silver	A24560-ND	7.33	6.30	221551-1
6	Feed-Thru, Jack-Jack	Nickel	Gold	A24561-ND	6.73	5.79	221551-3
6	Feed-Thru, Jack-Jack	Nickel	Gold	A24562-ND	3.10	2.67	414414-1

Fig. 1

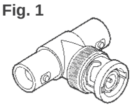


Fig. 2

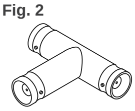


Fig. 3

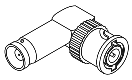


Fig. 4

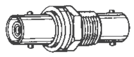


Fig. 5

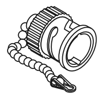


Fig. 6

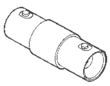


Fig. 1

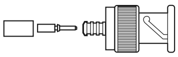


Fig. 2

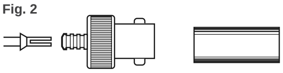


Fig. 3

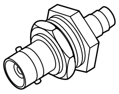
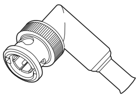


Fig. 4



BNC Dual Crimp Connectors 75 Ohm

Body Plating: Nickel Center contacts: Gold

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each 1	25	AMP Part No.	Dies for Pro-Crimper	Price Each
1	Plug	179, 179A, 179B, 187, 187A, 161, Belden 9221	A24575-ND	2.08	1.79	221185-8	A24630-ND	201.75
	Plug	AT&T 735A	A24576-ND	2.09	1.80	1-221185-8	A24632-ND	168.00
	Plug	Belden 8218	A24577-ND	2.09	1.80	221185-3	A24632-ND	168.00
	Plug	140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24587-ND	2.08	1.79	221185-2	A24597-ND	168.00
1	Plug	Belden 8212, 9104, 9112, 9240, 9167, 9259, 9266, Times FM-59, (RG-59 Type with 20 AWG C.C.)	A24588-ND	2.09	1.80	221185-9	A24597-ND	168.00
	Plug	Belden 9145, AT&T 734A	A24589-ND	2.09	1.80	1-221185-0	A24597-ND	168.00
	Plug	Belden 9248, 9114	A24590-ND	2.08	1.79	221185-1	A24633-ND	201.75
	Plug	6, 6A	A24591-ND	2.08	1.79	221185-7	A24631-ND	160.50
	Plug	Belden 8281, 9141, 9231, Western Electric 724, 728, 3049	A24592-ND	2.09	1.80	221185-5	A24631-ND	160.50
4	Right Angle Plug	140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24593-ND	10.95	9.42	221402-2	A24597-ND	168.00
2	Jack	179, 179A, 179B, 187, 187A, 161, Belden 9221	A24594-ND	4.68	4.03	221199-5	A24630-ND	201.75
3	Bulkhead Jack	179, 179A, 179B, 187, 187A, 161, Belden 9221	A24595-ND	4.95	4.26	221221-5	A24630-ND	201.75
	Bulkhead Jack	140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24596-ND	4.70	4.05	221221-2	A24597-ND	168.00

BNC Hex Crimp Connectors 75 Ohm

Collar and outer contacts - nickel plated Center contacts - gold MIL-G-45204

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each 1	25	AMP Part No.	Dies for Pro-Crimper	Price Each
1	Plug	179, 179A, 179B, 187, 187A, 161, Belden 9221	A1828-ND	3.50	3.01	413589-8	A9993-ND	38.25
	Plug	AT&T 735A	A1820-ND	3.50	3.01	1-413589-0	A9992-ND	38.25
	Plug	AT&T KS 19224 L2	A1824-ND	3.50	3.01	413589-4	A9971-ND	33.00
	Plug	Belden 8218	A1823-ND	3.50	3.01	413589-3	A9971-ND	33.00
	Plug	140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1822-ND	3.50	3.01	413589-2	A9992-ND	38.25
1	Plug	302, Belden 89269, 88241, Hi-Temp 62A, Times PL-62, Berk Tek BTDC-59, BTDC-62	A1821-ND	3.50	3.01	413589-1	A9992-ND	38.25
	Plug	59 Double Braid	A1826-ND	4.83	4.15	413589-6	A9993-ND	38.25
	Plug	Belden 8212, 9104, 9112, 9167, 9240, 9259, 9266, Times FM-59, (RG-59 Type with 20 AWG C.C.)	A1829-ND	3.50	3.01	413589-9	A9992-ND	38.25
	Plug	Belden 9145, AT&T 734A	A1827-ND	3.50	3.01	413589-7	A9992-ND	38.25
	Plug	Belden 8281, 9141, 9231, Western Electric 724, 728, 3049	A1825-ND	3.50	3.01	413589-5	—	—
4	Plug, Right Angle	179, 179A, 179B, 187, 187A, 161, Belden 9221	A1873-ND	13.78	11.85	413588-8	A9993-ND	38.25
	Plug, Right Angle	AT&T 735A	A1881-ND	13.78	11.85	1-413588-0	—	—
	Plug, Right Angle	AT&T KS 19224 L2	A1876-ND	13.78	11.85	413588-4	A9993-ND	38.25
	Plug, Right Angle	Belden 8218	A1875-ND	14.53	12.50	413588-3	A9992-ND	38.25
	Plug, Right Angle	140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1872-ND	13.78	11.85	413588-2	—	—
4	Plug, Right Angle	302, Belden 89269, 88241, Hi-Temp 62A, Times PL-62, Berk Tek BTDC-59, BTDC-62	A1874-ND	13.78	11.85	413588-1	A9992-ND	38.25
	Plug, Right Angle	Double Braid 59	A1878-ND	13.78	11.85	413588-6	—	—
	Plug, Right Angle	Belden 8212, 9104, 9112, 9240, 9167, 9259, 9266, Times FM-59, (RG-59 Type with 20 AWG C.C.)	A1880-ND	13.78	11.85	413588-9	A9992-ND	38.25
	Plug, Right Angle	Belden 9145, AT&T 734A	A1879-ND	13.78	11.85	413588-7	A9992-ND	38.25
	Plug, Right Angle	Belden 8281, 9141, 9231, Western Electric 724, 728, 3049	A1877-ND	13.78	11.85	413588-5	—	—
2	Jack	179, 179A, 179B, 187, 187A, 161, Belden 9221	A1838-ND	4.53	3.01	413760-8	A9993-ND	38.25
	Jack	AT&T KS 19224 L2	A1834-ND	4.53	3.01	413760-4	A9993-ND	38.25
	Jack	Belden 8218	A1833-ND	4.53	3.01	413760-3	A9992-ND	38.25
	Jack	140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1832-ND	2.58	1.71	413760-2	A9992-ND	38.25
	Jack	302, Belden 89269, 88241, Hi-Temp 62A, Times PL-62, Berk Tek BTDC-59, BTDC-62	A1831-ND	4.53	3.01	413760-1	A9992-ND	38.25
2	Jack	Double Shielded RG-59	A1836-ND	4.43	2.94	413760-6	—	—
	Jack	Belden 8212, 9104, 9112, 9240, 9167, 9259, 9266, Times FM-59, (RG-59 Type with 20 AWG C.C.)	A1839-ND	4.53	3.01	413760-9	A9992-ND	38.25
	Jack	Belden 8281, 9141, 9231, Western Electric 724, 728, 3049	A1835-ND	4.53	3.01	413760-5	—	—
3	Bulkhead Jack	179, 179A, 179B, 187, 187A, 161, Belden 9221	A1848-ND	5.33	4.58	413590-8	A9993-ND	38.25
	Bulkhead Jack	AT&T KS 19224 L2	A1844-ND	5.05	4.35	413590-4	A9993-ND	38.25
	Bulkhead Jack	Belden 8218	A1843-ND	6.13	5.27	413590-3	A9992-ND	38.25
	Bulkhead Jack	140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1842-ND	5.05	4.35	413590-2	A9992-ND	38.25
	Bulkhead Jack	302, Belden 89269, 88241, Hi-Temp 62A, Times PL-62, Berk Tek BTDC-59, BTDC-62	A1841-ND	5.05	4.35	413590-1	A9992-ND	38.25
3	Bulkhead Jack	Double Shielded RG-59	A1846-ND	5.05	4.35	413590-6	—	—
	Bulkhead Jack	Belden 8212, 9104, 9112, 9240, 9167, 9259, 9266, Times FM-59, (RG-59 Type with 20 AWG C.C.)	A1849-ND	5.05	4.35	413590-9	A9992-ND	38.25
	Bulkhead Jack	AT&T 734A, Belden 9145	A1847-ND	4.03	3.47	413590-7	A9992-ND	38.25
	Bulkhead Jack	Belden 8281, 9141, 9231, Western Electric 724, 728, 3049	A1845-ND	4.03	3.47	413590-5	—	—

BNC Bulkhead Jack Connectors 75 Ohm

Center Contact: Gold

Fig. 1

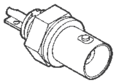


Fig. 2

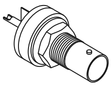


Fig.	Description	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
1	Jack, Solder, Nickel	A24598-ND	3.10	2.67	221244-1
2	Jack, Sealed Solder, Nickel	A24599-ND	6.23	5.36	414217-1

BNC PC Board/Panel Mount Jack Connectors

75 Ohm

Fig. 1

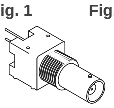


Fig. 2

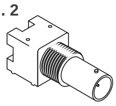


Fig.	Description	Contact Finish	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
1	Vertical, Metal	Gold 30µ	A24604-ND	6.33	5.44	222132-1
2	Right Angle, VALOX, White	Gold 30µ	A24600-ND	5.43	4.67	413194-1
	Right Angle, VALOX, Black	Gold 30µ	A24601-ND	5.43	4.67	413194-2
	Right Angle, VALOX, White	Gold 50µ	A24602-ND	6.40	5.51	414459-1
	Right Angle, VALOX, Metal	Gold 30µ	A24603-ND	4.48	3.85	222092-1

BNC PC Board Mount Jack Connectors

75 Ohm

Center Contact: Gold (except A24607-ND: Silver)

Fig. 1

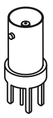


Fig. 2

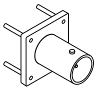


Fig. 3

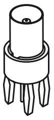


Fig. 4

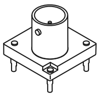


Fig. 5

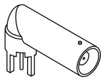


Fig. 6

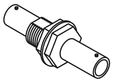
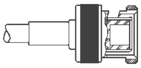


Fig.	Description	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
1	Vertical Metalized, Tin-Lead	A24606-ND	3.95	3.40	414394-1
2	Vertical Metalized, Nickel	A24607-ND	4.85	4.18	413986-1
3	Press Fit, Nickel, L (excl. pins): .810	A24608-ND	3.93	3.38	222462-1
	Press Fit, Nickel, L (excl. pins): .640	A24609-ND	5.23	4.50	414088-1
4	Vertical Metalized (PCB: .125 min.)	A24610-ND	7.60	6.54	221336-3
5	Right Angle, Nickel	A24611-ND	5.13	4.41	413558-1
	Right Angle, Tin-Lead	A24612-ND	4.90	4.22	413558-2
6	Bulkhead Jack Adapter, Nickel	A24613-ND	7.70	6.63	222117-1

BNC JIS Hex Crimp Cable Plug Connectors 50 Ohm and 75 Ohm



Body Plating: Nickel   Center Contact: Gold

Impedance Ohm	JIS Cable	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.	CERTI-CRIMP Hand Tool
75	5C-2V	A24541-ND	3.33	2.86	1-413589-2	—
	3C-2V	A24542-ND	3.33	2.86	1-413589-1	A9992-ND
	3C-2W	A24543-ND	3.33	2.86	1-413589-4	A9992-ND
	2.5C-2V	A24544-ND	3.33	2.86	1-413589-6	A9971-ND
	2.5C-2W	A24545-ND	3.33	2.86	1-413589-5	A9992-ND
	1.5C-2V	A24546-ND	3.33	2.86	1-413589-3	A9971-ND
50	3D-2V	A24547-ND	2.02	1.74	3-221128-1	A9972-ND
	1.5D-2V	A24548-ND	2.02	1.74	3-221128-2	—

BNC RF PC Board / Panel Mount Decoupled Jack Connectors

50 Ohm and 75 Ohm

Body Plating: VALOX, Black
Center Contact: Gold

Fig. 1

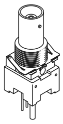


Fig. 2

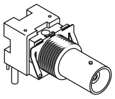
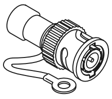


Fig.	Impedance Ohm	Mounting Post Length	Capacity/Voltage	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
			Vertical				
1	50	.137	9400pF / 1500V	A24615-ND	5.75	4.95	413476-2
			Low Profile, Right Angle				
2	50	.158	9400pF / 1500V	A24618-ND	3.15	2.71	413515-2
	50	.158	20000pF / 500V	A24619-ND	3.15	2.71	413515-3
	50	.110	7900pF / 1600V	A24620-ND	3.15	2.71	413515-7
	50	.185	9400pF / 1500V	A24621-ND	3.15	2.71	413515-8
	50	.110	9400pF / 1500V	A24622-ND	3.15	2.71	413515-9
			Standard, Right Angle				
2	50	.158	9400pF / 1500V	A24624-ND	3.70	3.19	413524-2
	50	.110	9400pF / 1500V	A24625-ND	3.70	3.19	413524-5

Terminator Plugs

50, 75, 93 Ohm



Body Plating: Nickel   Center Contact: Gold

Description	Resistor Specification	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
With Tether	1 Watt, 50 Ohm	A24563-ND	7.13	6.13	221629-1
Without Tether	1 Watt, 50 Ohm	A24564-ND	3.95	3.40	221629-4
With Tether	1 Watt, 75 Ohm	A24565-ND	9.48	8.15	221629-2
Without Tether	1 Watt, 75 Ohm	A24566-ND	8.25	7.10	221629-5
Without Tether	1 Watt, 93 Ohm	A24567-ND	6.33	5.44	221629-6
With Tether	1 Watt, 50 Ohm*	A24568-ND	6.45	5.55	1-221629-6

* Tether is conductive with #4 stud size.

BNC Action Pin / Bulkhead Decoupled Jack Connectors

Body Plating: Nickel

Center Contact: Gold

Fig. 1

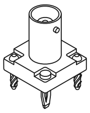


Fig. 2

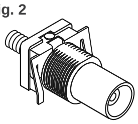


Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
1	Jack, PC Board Action Pin, 50 Ohm	—	A24627-ND	11.93	10.26	414553-1
2	Bulkhead Jack, Hex Crimp	58, 58A, 58B, 58C	A24628-ND	10.25	8.82	414758-1
	Bulkhead Jack, Hex Crimp	174, 174A, 316, 188, 188A	A24629-ND	10.25	8.82	414758-2

Twin BNC and Twin-Ax Jack Connectors

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
1	Plug, Silver* Plug, Nickel*	108, 108A, Belden 9272, 89272 108, 108A, Belden 9272, 89272	A24705-ND A24706-ND	18.18 16.53	15.64 14.22	332225 332225-5
2	Bulkhead Jack, Silver*	108, 108A, Belden 9272, 89272	A24707-ND	24.55	21.12	332342
3	Right-Angle Jack w/Mounting Posts, VALOX, White	—	A24708-ND	7.45	6.41	228686-1
4	Vertical Jack w/Mounting Posts, VALOX, White	—	A24709-ND	12.33	10.60	221198-1
5	Bulkhead Jack Adapter, Nickel (Center Contact: Silver)	—	A24710-ND	22.73	19.55	332215
6	Twin-Ax Bulkhead Solder, Front Mount, Nickel over Zinc	—	A24711-ND	11.70	10.07	228284-1
7	Twin Threaded PC Board Adapter	—	A24712-ND	25.43	21.87	330873

* Center contact: silver

Fig. 1

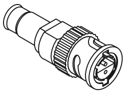


Fig. 2

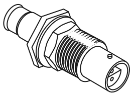


Fig. 3

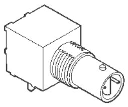


Fig. 4

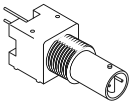


Fig. 5

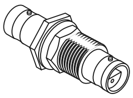


Fig. 6

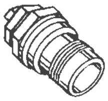


Fig. 7

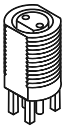


Fig. 1 MIL Type

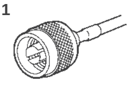


Fig. 2 Commercial Type

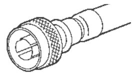


Fig. 3 MIL Type

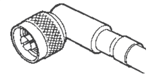


Fig. 4 MIL Type

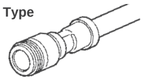


Fig. 5 MIL Type

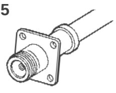


Fig. 6 MIL Type

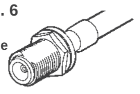


Fig. 7

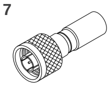


Fig. 8

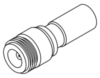


Fig. 9

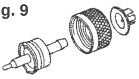


Fig. 10

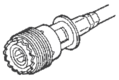


Fig. 11

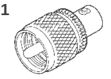


Fig. 12

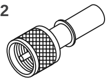


Fig. 13

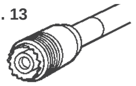


Fig. 14

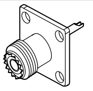


Fig. 15

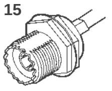


Fig. 16

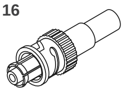


Fig. 17

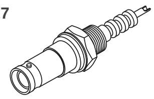


Fig. 18

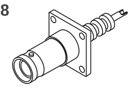


Fig. 19

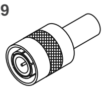


Fig. 20

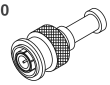


Fig. 21

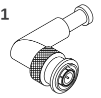


Fig. 22

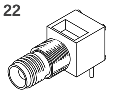


Fig. 23

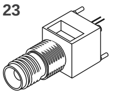


Fig. 24

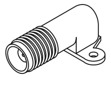


Fig. 25

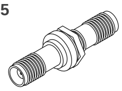


Fig. 26

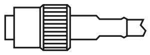


Fig. 27

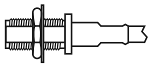
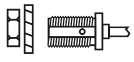


Fig. 28



N Dual Crimp Connectors 50 Ohm

Center contact plating: gold *Uses CERTI-CRIMP: A24574-ND **Uses CERTI-CRIMP: A9975-ND

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Dual Crimp						
1	Plug, Nickel	58, 58A, 58B, 58C	A1147-ND	12.05	10.37	1-225661-2
	Plug, Silver	58, 58A, 58B, 58C	A1148-ND	17.80	15.31	225361-1
1	Plug, Nickel	223, 55, 55A, 55B	A1149-ND	12.05	10.37	1-225661-3
1	Plug, Silver	142, 142A, 142B, 400	A1151-ND	17.85	15.36	225361-4
1	Plug, Nickel	8, 8A, 213	A1152-ND*	12.05	10.37	225661-2
	Plug, Silver	8, 8A, 213	A1153-ND*	16.28	14.00	51692-2
	Plug, Nickel, Weatherproof	8, 8A, 213	A1154-ND*	13.53	11.64	225662-2
	Plug, Silver, Weatherproof	8, 8A, 213	A1155-ND*	18.85	16.22	225092-2
1	Plug, Nickel	393	A1156-ND*	13.53	11.64	1-225662-1
	Plug, Silver	393	A1157-ND*	18.85	16.22	1-225092-1
1	Plug, Nickel	9, 9A, 9B, 214	A1158-ND*	12.05	10.37	225661-1
	Plug, Silver	9, 9A, 9B, 214	A1159-ND*	25.03	21.53	51692-1
	Plug, Nickel, Weatherproof	9, 9A, 9B, 214	A1160-ND*	13.53	11.64	225662-1
	Plug, Silver, Weatherproof	9, 9A, 9B, 214	A1161-ND*	18.85	16.22	225092-1
1	Plug, Nickel, Weatherproof	142, 142A, 142B, 400	A24652-ND	16.83	14.47	225699-1
2	Plug, Nickel	8, 8A, 213	A1162-ND*	8.45	7.27	1-227086-0
3	Right Angle Plug, Silver, Weatherproof	142, 142A, 142B, 400, Belden 9246	A24653-ND	55.98	48.14	225394-2
3	Right Angle Plug, Nickel	8, 8A, 213	A24654-ND*	32.88	28.28	225699-2
	Right Angle Plug, Silver	8, 8A, 213	A1137-ND*	43.65	37.54	225014-2
	Right Angle Plug, Silver, Weatherproof	8, 8A, 213	A1138-ND*	43.65	37.54	225389-2
3	Right Angle Plug, Nickel	9, 9A, 9B, 214	A1139-ND*	32.88	28.28	225669-1
	Right Angle Plug, Silver	9, 9A, 9B, 214	A1140-ND*	43.65	37.54	225014-3
4	Jack, Nickel, Weatherproof	58, 58A, 58B, 58C	A24655-ND	22.28	19.16	1-225664-2
	Jack, Nickel, Weatherproof	8, 8A, 213	A24656-ND*	22.28	19.16	225664-2
	Jack, Silver	8, 8A, 213	A1142-ND*	29.80	25.63	225093-2
5	Panel Jack, Silver, Weatherproof	213	A1143-ND*	31.90	27.44	225089-2
	Panel Jack, Silver, Weatherproof	214	A1144-ND*	31.90	27.44	225089-1
6	Bulkhead Jack, Silver	58, 58A, 58B, 58C	A24657-ND	30.28	26.04	225363-1
	Bulkhead Jack, Silver, Weatherproof	223, 55, 55A, 55B	A1145-ND	38.20	32.86	225393-1
	Bulkhead Jack, Silver, Weatherproof	8, 8A, 213	A24658-ND*	31.45	27.05	225094-2
	Bulkhead Jack, Silver, Weatherproof	9, 9A, 9B, 214	A1146-ND*	31.63	27.20	225094-1
Hex Crimp						
2	Plug, Nickel	115A, Belden 89880, 9880	A24659-ND**	14.10	12.13	414160-3
Semi-Rigid Cable Crimp						
1	Plug, Nickel	402, 141	A24660-ND	38.48	33.09	228440-1
6	Bulkhead Jack, Nickel, Rear Mount	402, 141	A24661-ND	41.20	35.44	228658-1
Terminators						
7	Plug, Nickel	—	A24662-ND	18.48	15.89	227953-1
8	Jack, Nickel	—	A24663-ND	17.60	15.14	227997-1

UHF Connectors

Center contact plating: Tin (except A24672-ND: Gold)

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Standard UHF Connectors						
9	Plug, Single Crimp, Tin Plated	58, 58A, 58B, 58C	A1107-ND	5.53	4.76	226279-1
	Plug, Single Crimp, Tin Plated	59, 59A, 59B	A1106-ND	3.40	2.93	226279-3
10	Jack, Single Crimp, Tin Plated	58, 58A, 58B, 58C	A1132-ND	6.78	5.83	226694-1
11	Adapter, UHF Plug to BNC Jack	—	A1135-ND	31.23	26.86	222320-1
Miniature UHF Connectors						
12	Plug, Dual Crimp, Nickel	58, 58A, 58B, 58C	A24671-ND	.76	.66	226600-1
13	Jack, Dual Crimp, Nickel	316	A24672-ND	1.52	1.32	414477-1
	Jack, Crimp. Nickel	58, 58A, 58B, 58C	A1104-ND	3.88	3.48	226602-1
14	Panel Solder Jack, Nickel	—	A1131-ND	3.75	3.23	226601-1
	Panel Solder Jack, Nickel	—	A24673-ND	2.68	2.31	226601-3
15	Bulkhead Jack, Crimp, Nickel	174, 316, 188, 188A	A24674-ND	4.40	3.79	228665-2
	Bulkhead Jack, Crimp, Nickel	58, 58A, 58B, 58C	A1105-ND	2.70	2.33	414045-1

SHV Dual Crimp Connectors

Center contact plating: Gold

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
16	Plug, Nickel	58, 58A, 58B, 58C	A24664-ND	20.03	17.23	51426-4
	Plug, Silver	58, 58A, 58B, 58C	A24665-ND	21.48	18.47	51426-1
16	Plug, Nickel	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24666-ND	20.03	17.23	51426-5
16	Plug, Silver	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24667-ND	21.48	18.47	51426-2
17	Bulkhead Solder Jack, Silver	—	A24668-ND	13.90	11.96	51494-1
	Bulkhead Solder Jack, Nickel	—	A24669-ND	10.70	9.21	51494-2
18	Panel Solder Jack, Nickel	—	A24670-ND	23.30	20.04	51421-2

TNC Hex and Dual Crimp Connectors

50 Ohm

Center Contacts: Gold

Dies for Pro-Crimper: **A:** A9994-ND **B:** A24570-ND **C:** A24574-ND

Certi-Crimp Tool: **D:** A24572-ND

Fig.	Description	Die/ Tool	Cable Group RG/U	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Hex Crimp							
19	Plug	—	174, 188, 188A, 316	A24635-ND	4.53	3.90	222506-5
19	Plug	A	58, 58A, 58B, 58C	A24636-ND	3.25	2.80	222506-1
Dual Crimp							
20	Plug	B/D	58, 58A, 58B, 58C, 141, 141A, 303	A24637-ND	2.45	2.11	227000-5
20	Plug, Weatherproof	—	223, 55, 55A, 55B	A24638-ND♦	24.40	20.99	225550-1
20	Plug, Weatherproof	—	142, 142A, 142B, 400	A24639-ND♦	15.55	13.38	225555-6
20	Plug	B	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24640-ND♦	3.65	3.14	227000-7
20	Plug, Weatherproof	C	8, 8A, 213	A24641-ND♦	35.23	30.30	225555-7
20	Plug, Weatherproof	C	Alpha 9847, Belden 8213, 9292	A24642-ND♦	20.33	17.48	1-225550-3
20	Plug, Weatherproof	C	225, 393	A24643-ND♦	27.60	23.74	1-225550-2
20	Plug, Weatherproof	C	9, 9A, 9B, 214	A24644-ND	20.33	17.48	225550-8
21	Right Angle Plug, Weatherproof	—	58, 58A, 58B, 58c	A24645-ND	34.05	29.29	225559-2
21	Right Angle Plug, Weatherproof	—	142, 142A, 142B, 400	A24646-ND	32.38	27.85	225554-6
21	Right Angle Plug, Weatherproof	C	393, 225	A24647-ND	35.95	30.92	1-225554-1

♦ Mil Type

TNC PC Board / Panel Mount Connectors

50 Ohm

Center Contacts: Gold

Fig.	Description	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
22	Right Angle Jack, Metal With Mounting Posts	A24648-ND	6.08	5.23	227839-1
23	Vertical Jack, Metal With Mounting Posts	A24649-ND	7.03	6.05	227835-1
24	Right Angle Jack, Nickel	A24650-ND	8.45	7.27	413933-1
25	Bulkhead Jack Adapter, Nickel	A24651-ND	10.03	8.63	221500-1

Miniature Threaded Connectors 50 Ohm

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.	Tool	Price Each
26	Plug, TEFLON	178, 178A, 178B, 196, 196A	A24699-ND	11.55	9.94	2-330311-2	A28795-ND	1725.00
	Plug, TEFLON	174, 316, 188, 188A	A24700-ND	11.48	9.87	2-330311-1	A28796-ND	1953.00
	Plug, TEFLON	180, 180A, 180B, 195, 195A	A24701-ND	10.73	9.23	1-330723-0	A28797-ND	1317.00
27	Jack, TEFLON	180, 180A, 180B, 195, 195A	A24702-ND	13.65	11.74	1-330599-0	A28797-ND	1317.00
28	Solder Jack Adapter	—	A24703-ND	16.28	14.00	329852	—	—

Hand Tools and Die Sets

Term.Type (Crimp)	Description	Digi-Key Part No.	Price Each	AMP Part No.
	50 Ohm			
Dual	PRO CRIMPER II (BNC)	A24786-ND	92.25	58433-1
—	PRO CRIMPER Hand Tool	A9996-ND	75.00	354940-1
—	Crimp Tool, BNC w/Die Set	A9802-ND	92.25	58433-2
Hex	PRO CRIMPER Die Set	A9995-ND	45.00	58436-3
Hex	PRO CRIMPER Die Set	A9994-ND	45.00	58436-1
Hex	PRO CRIMPER Die Set	A9960-ND	45.00	58436-2
Dual	CERTI-CRIMP w/Die Set	A24569-ND	349.50	220009-1
Dual	CERTI-CRIMP w/Die Set	A24572-ND	288.00	220187-1
Dual	CERTI-CRIMP w/Die Set	A24571-ND	315.00	69478-1
Dual	CERTI-CRIMP w/Die Set	A24573-ND	315.00	69477-1
Dual	CERTI-CRIMP w/Die Set	A24574-ND	849.41	220015-1
Dual	PRO CRIMPER Die Set	A24570-ND	45.00	58435-1
Dual	CERTI-CRIMP w/Die Set	A24774-ND	534.00	220009-5
Dual	PRO CRIMPER Die Set	A24780-ND	180.00	318450-2
Dual	PRO CRIMPER Die Set	A24779-ND	201.75	58330-1
Dual	CERTI-CRIMP w/Die Set	A24782-ND	635.00	69477-4
Dual	PRO CRIMPER Die Set	A24781-ND	219.00	318452-2
Dual	PRO CRIMPER Die Set	A24777-ND	168.00	220189-3
Dual	PRO CRIMPER Die Set	A24778-ND	65.25	220189-1
Dual	PRO CRIMPER Die Set	A24776-ND	124.50	58537-1
Dual	PRO CRIMPER Die Set	A24775-ND	65.25	220189-2
Dual	CERTI-CRIMP w/Die Set	A24769-ND	663.00	69245-1
Dual	CERTI-CRIMP w/Die Set	A24770-ND	687.00	69140-1
Dual	CERTI-CRIMP w/Die Set	A24771-ND	780.00	69140-2
Dual	CERTI-CRIMP w/Die Set	A24772-ND	1222.13	69331-1
Dual	CERTI-CRIMP w/Die Set	A24773-ND	687.00	69141-1
—	Jack Die Set	A9972-ND	35.25	58465-1
	BNC Pro-Crimper Dies, 75 Ohm			
Hex	BNC Die Set	A9993-ND	38.25	58425-2
Hex	BNC Die Set	A9992-ND	38.25	58425-1
Hex	Conn. Die Set	A9971-ND	33.00	852922-2
—	Crimp Tool w/Die Set	A9803-ND	105.00	58531-2
—	Crimp Tool w/Die Set	A9804-ND	105.00	58531-1
—	Crimp Tool w/Die Set	A9805-ND	105.00	58531-3
Dual	Die Set	A24597-ND	168.00	58085-1
Dual	Die Set	A24630-ND	201.75	318451-2
Dual	Die Set	A24631-ND	160.50	58538-1
Dual	Die Set	A24632-ND	168.00	58174-1
Dual	Die Set	A24633-ND	201.75	58086-1
	N-Type			
—	Crimp Tool w/Die Set	A9807-ND	126.00	58501-1
Hex	Die Set, use w/A9996-ND	A9975-ND	56.25	58485-1
	Cable Stripper			
—	Cable Stripping Tool	A1110-ND	131.14	603995-1

Braid-Pic Contacts and Terminals

Fig. 1

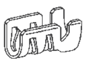
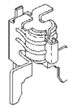


Fig. 2



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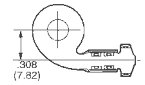
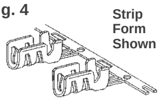


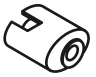
Fig. 4



Strip Form Shown

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each 1	25	AMP Part No.
1	Cable Contact, Loose, 50 or 75 Ohm	—	A24719-ND	1.06	.85	226286-3
2	Vertical Receptacle, Loose, 50 or 75 Ohm	—	A24720-ND	1.01	.81	226287-2
3	Grounding Terminals	58, 58A, 58B, 58C	A24721-ND	1.07	.86	226619-3
4	Braid Termination Only, Strip Form	174, 316, 188, 188A, 179, 179A, 179B, 187, 187A	A24722-ND	.73	.59	226176-2
4	Braid Termination Only, Loose Form	174, 316, 188, 188A, 179, 179A, 179B, 187, 187A	A24723-ND	.88	.71	226176-4

Shielded Wire Ferrules (Thermashield)



Description	Primary Ins. Dia. Range – In. (mm)	Cable Size	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Tin Plated, Violet	.033-.059 (0.84-1.5)	RG-196A/U	A24713-ND	.70	.56	2-323930-2
Zinc Plated, Tin	.059-.085 (1.5-2.16)	RG-174/U	A24714-ND	1.26	1.01	323931
Zinc Plated, Brown	.085-.095 (2.16-2.41)	—	A24715-ND	1.17	.94	323932
Zinc Plated, Green	.115-.130 (2.92-3.30)	RG58C/U, RG-141A/U, RG-223/U	A24716-ND	1.40	1.12	323934
Tin Plated, Green	.115-.130 (2.92-3.30)	RG58C/U, RG-141A/U, RG-223/U	A24717-ND	.70	.56	2-323934-2
Zinc Plated, Violet	.130-.145 (3.3-3.68)	—	A24718-ND	1.47	1.18	327137

F Connectors

Fig. 1

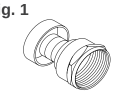


Fig. 2

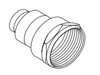


Fig. 3

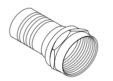


Fig. 4

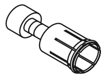


Fig. 5

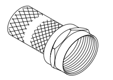


Fig. 6

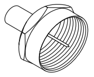


Fig. 7

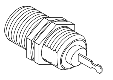


Fig. 8

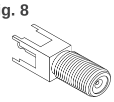


Fig. 9

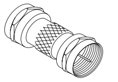


Fig. 10

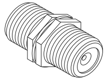


Fig. 11

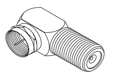


Fig. 12

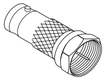
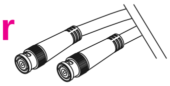


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	1,000
1	Separated Crimp Ring, for RG-59 Cable	CP-0010-ND	.33	.29	.22	.17
	Separated Crimp Ring, for RG-58 Cable	CP-0030-ND	.36	.32	.24	.18
	Separated Crimp Ring, for RG-6 Cable	CP-0060-ND	.37	.32	.25	.19
2	Built-On Crimp Ring, for RG-59 Cable	CP-0110-ND	.51	.44	.34	.26
	Built-On Crimp Ring, for RG-6 Cable	CP-0160-ND	.51	.44	.34	.26
3	Long Type Built-On Crimp Ring, for RG-59 Cable	CP-0210-ND	.48	.42	.33	.25
	Long Type Built-On Crimp Ring, for RG-6 Cable	CP-0260-ND	.48	.42	.33	.25
4	Push-On, Crimp Type, for RG-59 Cable	CP-0310-ND	.71	.62	.47	.36
	Push-On, Crimp Type, for RG-58 Cable	CP-0330-ND	.71	.62	.47	.36
5	Twist-On Type, for RG-59 Cable	CP-0410-ND	.44	.38	.30	.22
6	Male Terminator, w/ Built-In 75 Ohm Resistor	CP-0610-ND	.41	.36	.28	.21
7	Female Bulkhead Receptacle, w/ Washer and Nut	CP-1010-ND	.53	.46	.35	.27
8	PCB Type, Full length 26mm	CP-1210-ND	.77	.67	.52	.39
9	Adapter, Universal Male F to F Coupler	CP-2010-ND	1.24	1.08	.83	.62
10	Adapter, Female F to F Coupler, w/ Washer and Nut	CP-2110-ND	.48	.42	.33	.25
11	Adapter, Right Angle F Male to F Female	CP-2510-ND	1.62	1.41	1.08	.81
12	Adapter, F Male to BNC Female	CP-0130-ND	2.19	1.90	1.46	1.10

BNC and F Connector Cables, Male to Male



Item	Description	Cable Type RG58	RG59	RG6
Conductor	Material	BC	CCS	BC
	No. / in. (mm)	1 / .32 (0.813)	1 / .253 (0.643)	1 / .253 (0.643)
Insulation	Material	LDPE	LDPE	LDPE
	Color	Natural	Natural	Natural
	Diameter: in. (mm)	.116 (2.95)	.146 (3.71)	.146 (3.71)
Braided Shielding	Material	BC	BC	BC
	No. / in. (mm)	16/7 / .051 (0.12)	16/7 / .051 (0.12)	16/7 / .051 (0.12)
Jacket	Material	PVC	PVC	PVC
	Thickness: in. (mm)	.283 (0.72)	.354 (0.9)	.354 (0.9)
	Color	Black	Black	See Below
	Outer Diameter: in. (mm)	.195 ± .006 (4.95 ± 0.15)	.236 ± .006 (6.0 ± 0.15)	.236 ± .006 (6.0 ± 0.15)
General	Tensile Strength	1,500 psi	1,500 psi	1,500 psi
	Nominal Impedance (ohm)	53.5	73	75
	Nominal Capacitance (pF/m)	93.5	68.9	44.3
	Attenuation 100MHz (db/km)	138	125	102
	Voltage Rating	5.0kv	7.0kv	3.0kv
	UL Standard	1354	1354	1354

BC = Bare Copper CCS = Copper Clad Steel LDPE = Low Density PE

Length Feet (Meter)	Digi-Key Part No.	Price Each	TPI Part No.
BNC Connector Cables			
RG58/U Molded Strain Relief Cables 50Ω			
1 (.30)	290-1009-ND	7.95	58-012-1M
2 (.61)	290-1010-ND	8.49	58-024-1M
3 (.91)	290-1011-ND	8.95	58-036-1M
4 (1.22)	290-1012-ND	9.44	58-048-1M
5 (1.52)	290-1013-ND	9.98	58-060-1M
6 (1.83)	290-1014-ND	10.49	58-072-1M
10 (3.05)	290-1015-ND	12.54	58-120-1M
15 (4.57)	290-1016-ND	15.18	58-180-1M
25 (7.62)	290-1017-ND	20.79	58-300-1M
RG59/U Molded Strain Relief Cables 75Ω			
1 (.30)	290-1021-ND	7.95	59-012-1M
2 (.61)	290-1022-ND	8.49	59-024-1M
3 (.91)	290-1023-ND	8.95	59-036-1M
4 (1.22)	290-1024-ND	9.44	59-048-1M
5 (1.52)	290-1025-ND	9.98	59-060-1M
6 (1.83)	290-1026-ND	10.49	59-072-1M
10 (3.05)	290-1027-ND	12.54	59-120-1M
15 (4.57)	290-1028-ND	15.18	59-180-1M
25 (7.62)	290-1029-ND	20.79	59-300-1M
F Connector Cables			
RG6/U Molded End Cables - Black			
3 (.91)	290-1081-ND	7.08	F6-3B
6 (1.83)	290-1082-ND	9.15	F6-6B
10 (3.05)	290-1083-ND	10.68	F6-10B
12 (3.66)	290-1084-ND	11.73	F6-12B
15 (4.57)	290-1085-ND	14.28	F6-15B
25 (7.62)	290-1086-ND	17.88	F6-25B
RG6/U Molded End Cables - White			
3 (.91)	290-1090-ND	7.41	F6-3W
6 (1.83)	290-1091-ND	9.60	F6-6W
10 (3.05)	290-1092-ND	11.01	F6-10W
12 (3.66)	290-1093-ND	12.21	F6-12W
15 (4.57)	290-1094-ND	14.61	F6-15W
25 (7.62)	290-1095-ND	18.21	F6-25W

Coax Adapter Connector Kit

Kit includes male and female connectors of all eight types. Any adapter can be created on the spot in just seconds. Simply screw any combination of 24 connectors to one of the six universal interfaces.

- Gold plated contacts
- Silver plated machined brass connector bodies with teflon insulation

290-1045-ND TPI Part No. TPI-3000A....................................**$150.00**

Fig. 1

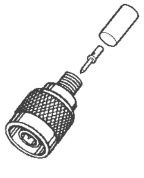


Fig. 2

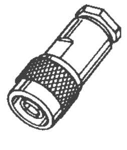


Fig. 3

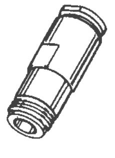
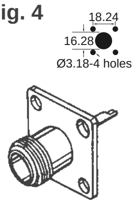


Fig. 4



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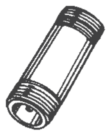


Fig. 6

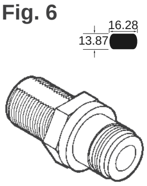


Fig. 7

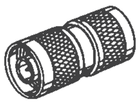


Fig. 8

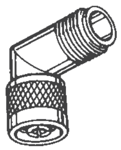


Fig. 9

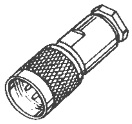


Fig. 10

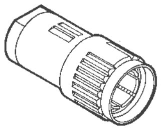


Fig. 11

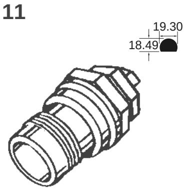
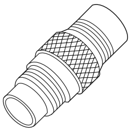


Fig. 12



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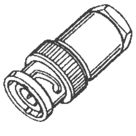


Fig. 14

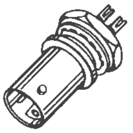


Fig. 15

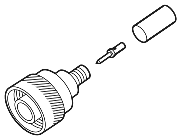


Fig. 16

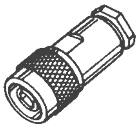
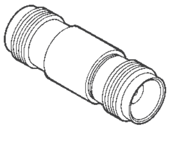


Fig. 17



Type N Coaxial Connectors

Fig.	Description	Cable Group RG/U	Military Part No.	Digi-Key Part No.	Pricing 1	25	100	Amphenol Part No.
1	Plug (Crimp)‡	8, 213	M39012/10B-0007	ARF1013-ND	10.56	135.44	471.74	82-340
1	Plug (Crimp)	9, 214	—	ARF1163-ND	11.31	145.27	505.73	82-332
1	Plug (Crimp)	55, 142, 223	—	ARF1164-ND	8.12	103.75	362.00	82-5370
1	Plug (Crimp)‡	214, 225, 393	M39012/01-0501	ARF1018-ND	12.02	154.25	536.00	82-4425
1	Plug (Crimp)‡	Ethernet	—	ARF1019-ND	16.77	223.75	845.00	82-4426-1001
2	Plug (Clamp)	8, 9, 144, 165, 213, 214. 216. 225	UG-21D/U	ARF1014-ND	7.55	95.25	359.00	82-202
2	Plug (Clamp)	8, 9, 144, 165, 213, 214, 216, 225	UG-1185	ARF1161-ND	7.80	100.25	393.00	82-312
2	Plug (Clamp)	58, 141, 142	UG-536B/U	ARF1016-ND	8.57	109.95	382.13	34025
2	Plug (Clamp)	58, 141, 142	UG-536B	ARFX1016-ND*	5.77	74.00	263.00	34025-RFX
2	Plug (Clamp)	Belden 9913	—	ARF1020-ND	8.92	104.75	395.00	82-202-1006
2	Plug (Clamp)	8, 9, 144, 165, 213, 214, 216, 225	UG-21D	ARFX1183-ND*	6.09	70.75	267.00	82-202-RFX
3	Jack (Clamp)	8, 9, 87A, 144, 165,	UG-23B/U	ARF1021-ND	11.26	144.46	502.64	82-63
4	Panel Receptacle	—	UG-58A/U	ARF1023-ND	6.27	105.50	413.00	82-97
4	Panel Receptacle	—	UG-58A	ARFX1023-ND*	4.62	58.50	225.00	82-97-RFX
4	Panel Receptacle	—	UG-58	ARF1160-ND	6.14	111.25	408.00	82-24
5	Straight/Jack-Jack	—	UG-29B/U	ARF1025-ND	10.19	145.50	549.00	82-101
5	Straight/Jack-Jack	—	UG-29B	ARFX1025-ND*	4.78	61.25	231.00	82-101-RFX
6	Bulkhead/Jack-Jack	—	UG-30/U	ARF1026-ND	25.03	321.36	1118.58	82-66
7	Straight/Plug-Plug	—	UG-57B/U	ARF1027-ND	11.54	143.25	541.00	82-100
7	Straight/Plug-Plug	—	UG-57B	ARFX1027-ND*	7.81	101.00	351.00	82-100-RFX
8	Angle/Jack-Plug	—	UG-27A	ARF1028-ND	27.14	348.14	1212.31	82-64

* RFX connectors.
‡ Crimp tools are listed within the RF & RFX Connectors section.

Twinaxial Connectors

Fig.	Description	Cable Group RG/U	Military Part No.	Digi-Key Part No.	Pricing 1	25	100	Amphenol Part No.
9	Plug (Clamp)	Times AA-6026,	—	ARF1031-ND	12.52	170.38	593.12	82-5589
9	Plug (Clamp)	AA-6076, AA-6079	—	ARFX1031-ND*	6.62	121.75	423.00	82-5589-RFX1
10	Plug (Clamp) Plastic Body	Belden 8227, 9207, IBM 7362211	—	ARF1033-ND	13.80	196.54	714.70	82-GB635-CR
11	Receptacle	—	—	ARFX1035-ND*	8.36	113.68	395.75	82-5590-RFX
12	Adapter/Jack-Jack	IBM 7362230	—	ARF1036-ND	26.50	354.23	1232.13	82-5588
12	Adapter/Jack-Jack			ARFX1036-ND*	6.19	84.41	298.28	82-5588-RFX
13	BNC Plug/Twinax - Noryl	108A	—	ARF1037-ND	10.52	139.94	486.75	31-224
13	BNC Plug/Twinax - TFE	108A	—	ARF1133-ND	14.37	184.37	641.69	31-2226
14	BNC Bulkhead/Twinax - Noryl	—	—	ARF1038-ND	19.95	265.35	922.97	31-223
14	BNC Bulkhead/Twinax - TFE	—	—	ARF1132-ND	18.48	237.16	825.03	31-2225

* RFX connectors

TNC Coaxial Connectors

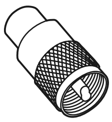
Fig.	Description	Cable Group RG/U	Military Part No.	Digi-Key Part No.	Pricing 1	25	100	Amphenol Part No.
15	Plug (Quick Crimp)‡	—	—	ARF1081-ND	5.88	75.45	262.65	36825
15	Plug (MIL-Crimp)	142, 223	—	ARF1135-ND	5.71	73.38	255.44	31-2373
15	Plug (Crimp)‡	59, 62	M23329/4-05	ARF1084-ND	5.53	71.01	247.20	31-2368
16	Plug (Clamp)	58, 141	—	ARF1082-ND	8.46	163.25	604.00	79875
16	Plug (Clamp)	58, 141, 142A	—	ARFX1082-ND*	2.59	33.25	116.00	79875-RFX
17	Straight/Jack-Jack	—	—	ARF1090-ND	13.71	176.04	612.85	31-4791

‡ Crimp tools are listed within the RF & RFX Connectors section.

*RFX™, is specifically designed for applications that do not require performance above 1 to 3 GHz. RFX™ connectors are not for use in military system applications. RFX™ connectors are generally less expensive than MIL-Spec and industry standard connectors.

RF & RFX Connectors

Fig. 1



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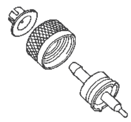

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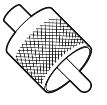

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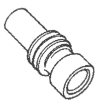

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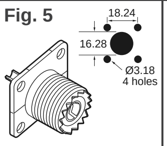

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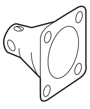

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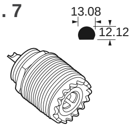

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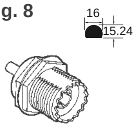

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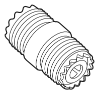

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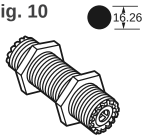

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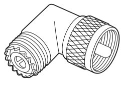

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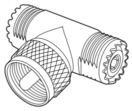

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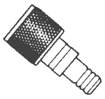

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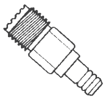

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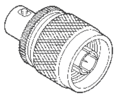

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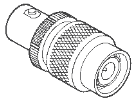

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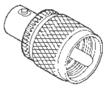

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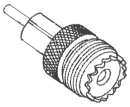

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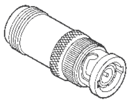

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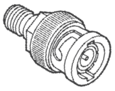

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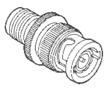

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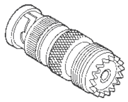

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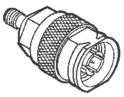

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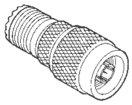

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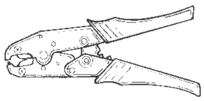

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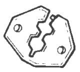


UHF Coaxial Connectors

Fig.	Description	Cable Group RG/U	Military Part No.	Digi-Key Part No.	Pricing 1	25	100	Amphenol Part No.
1	Plug	8, 9, 11, 13,	PL-259/U	ARF1000-ND	2.43	33.77	117.52	83-1SP-1050
1	Plug (TFE Insul.)	213, 214,	PL-259	ARF1001-ND	4.20	53.82	187.22	83-822
1	Plug (UG Standard)	59, 62, 140, 210	—	ARF1166-ND	4.79	62.41	215.27	83-750
2	Plug	58, 141	—	ARF1002-ND	3.75	60.24	219.07	83-58FCP
2	Plug (Crimp)	58, 141, 142	—	ARFX1002-ND*	2.69	37.27	129.62	83-58FCP-RFX
3	Plug (Crimp)	58, 141	—	ARF1165-ND	5.74	79.41	276.21	83-58SP
4	Reducing Adapter	55, 58, 141, 142	UG-175/U	ARF1003-ND	.80	10.61	37.88	83-185
4	Reducing Adapter	58, 141, 142	UG-175	ARFX1003-ND*	.45	7.07	23.38	83-185-RFX
4	Reducing Adapter	59, 62, 71, 140, 210	UG-176/U	ARF1004-ND	.82	13.70	48.95	83-168
4	Reducing Adapter	59, 62, 71, 140, 210	UG-176	ARFX1004-ND*	.45	6.29	23.31	83-168-RFX
5	Panel Receptacle	—	SO-239/U	ARF1005-ND	3.29	47.18	160.18	83-1R
5	Panel Receptacle	—	SO-239	ARFX1005-ND*	2.68	34.25	121.00	83-1R-RFX
5	Panel Mount (TFE Insul.)	—	SO-239/A	ARF1168-ND	5.51	72.67	252.85	83-798
6	Panel Mount Hood	58, 141	UG-177	ARF1167-ND	2.69	35.25	121.58	83-765
7	Bulkhead Receptacle	—	—	ARF1006-ND	9.71	143.67	522.74	83-875-1002
8	Bulkhead Receptacle	—	—	ARF1007-ND	3.55	46.48	162.77	83-878
8	Bulkhead Receptacle	—	—	ARFX1007-ND*	3.47	45.49	159.33	83-878-RFX
9	Straight/Jack-Jack	—	PL-258/U	ARF1008-ND	4.33	73.13	237.93	83-1J
10	Bulkhead/Jack-Jack	—	UG-363/U	ARF1009-ND	14.24	188.39	731.59	83-1F
11	Angle/Jack-Plug	—	UG-646/U	ARF1010-ND	7.49	136.47	426.23	83-1AP
12	Tee/Jack-Plug-Jack	—	M-358	ARF1011-ND	11.83	170.45	648.09	83-1T

* RFX connectors. RFX™, is specifically designed for applications that do not require performance above 1 to 3 GHz. RFX ™ connectors are not for use in military system applications. RFX™ connectors are generally less expensive than MIL-Spec and industry standard connectors.

Mini UHF Connectors

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Pricing 1	25	100	Amphenol Part No.
13	Plug (Crimp)•	58	ARF1092-ND	2.38	32.29	112.32	81-115N-1000
14	Jack (Crimp)•	58	ARF1093-ND	2.43	37.61	141.94	81-116

• Crimp tools are listed below.

Between Series Adapters

Fig.	Description	Military Part No.	Digi-Key Part No.	Pricing 1	25	100	Amphenol Part No.
15	BNC Jack to N Plug	UG-201A/U	ARF1096-ND	12.29	166.64	579.61	31-216
15	BNC Jack to N Plug	UG-201A/U	ARFX1096-ND*	10.29	132.25	460.00	31-216-RFX
16	BNC Jack to TNC Plug	—	ARF1098-ND	21.58	369.13	1419.74	79675
17	BNC Jack to UHF Plug	UG-273/U	ARF1099-ND	19.21	274.64	910.69	31-28
17	BNC Jack to UHF Plug	UG-273/U	ARFX1099-ND*	18.09	258.61	857.55	31-28-RFX
18	UHF Jack to RCA Plug	—	ARF1101-ND	8.95	192.43	608.60	83-10
19	BNC Plug to N Jack	UG-349A/U	ARF1102-ND	13.86	199.79	753.92	31-217
19	BNC Plug to N Jack	UG-349A/U	ARFX1102-ND*	13.75	199.61	749.72	31-217-RFX
20	BNC Plug to SMA Jack	—	ARF1103-ND	45.06	786.34	2735.08	901-165
21	BNC Plug to TNC Jack	—	ARF1104-ND	30.77	512.83	1681.42	79025
22	BNC Plug to UHF Jack	UG-255/U	ARF1105-ND	14.69	190.18	633.94	2900
23	N Plug to SMA Jack	—	ARF1106-ND	60.92	1063.26	3698.29	901-294
24	N Plug to UHF Jack	UG-146/U	ARF1107-ND	18.84	246.52	896.45	4400

* RFX adapters.

ECONOHEX™ Crimp Tools and Dies

Fig.	Description	Digi-Key Part No.	Price Each	Amphenol Part No.
	CTL Series Crimp Tools			
25	Crimp Tool – RG 58, 59, 62, Plenum 59, 62	ARF1116-ND†	47.27	CTL-1
25	Crimp Tool – RG 174, Belden 8281	ARF1117-ND†	48.60	CTL-2
25	Crimp Tool – RG 58, 8, 213	ARF1118-ND†	47.27	CTL-3
25	Crimp Tool – Belden 8227, IBM 7362211	ARF1119-ND†	48.60	CTL-4
25	Crimp Tool – RG 55, 58, 59, 62, 140, 141, 142, 210, 223, 303, 400, Plenum 59, 62	ARF1183-ND†	48.60	CTL-5
	Crimp Tool and Dies			
25	Tool Handle without Dies	ARF1108-ND	92.51	227-987
26	Crimp Die Set – Twin AX	ARF1110-ND	74.33	227-1417
26	Crimp Die Set – BNC, TNC	ARF1111-ND	58.51	227-1418
26	Crimp Die Set – RG 58, 59	ARF1112-ND	58.51	227-1419
26	Crimp Die Set – “N” Type	ARF1113-ND	58.51	227-1420

† CTL Series crimp tools are sold complete as a tool handle with die set included.

SMA & SMB Connectors

Fig. 1

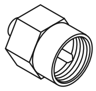
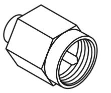


Fig. 2



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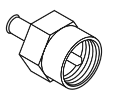

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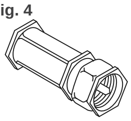

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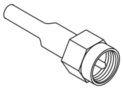

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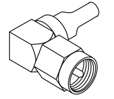
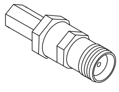


Fig. 7



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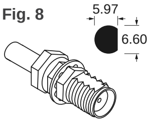

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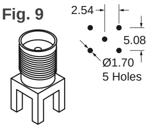

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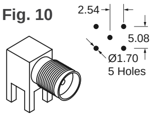

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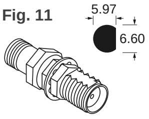

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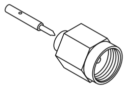

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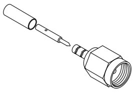

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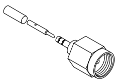

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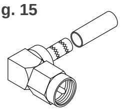

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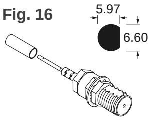

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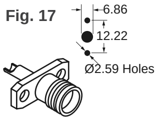

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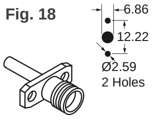

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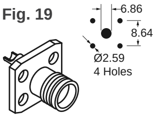

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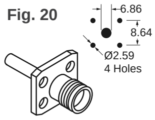

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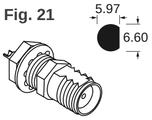

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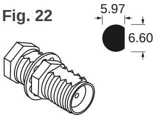
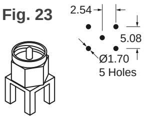


Fig. 23



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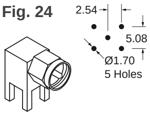

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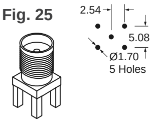

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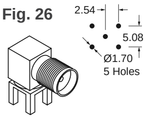


Fig. 27

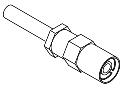


Fig. 28

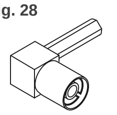


Fig. 29

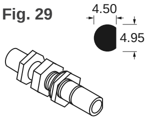


Fig. 30

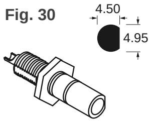


Fig. 31

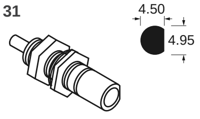


Fig. 32

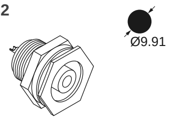


Fig. 33

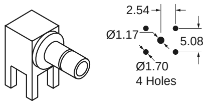
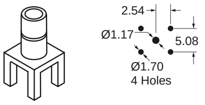


Fig. 34



SMA Coaxial Connectors

Fig.	Description	Cable Group RG/U	Plating	Cable Attachment Outer	Cable Attachment Inner	Digi-Key Part No.	Pricing 1	Pricing 25	Pricing 100	Amphenol Part No.
1	Plug, Straight	.085" (2.2mm) RG-405 (M17/133)	Passivated Nut	Solder	Plugable	ARF1184-ND	4.91	85.42	297.10	901-9723
2	Plug, Straight	.141" (3.6mm) RG-402 (M17/130)	Gold Nut	Solder	Plugable	ARF1185-ND	5.17	89.97	312.95	901-9808
3	Plug, Straight	.085" (2.2mm) RG-405 (M17/133)	Passivated Nut	Solder	Plugable	ARF1186-ND	5.35	93.01	323.51	901-9805-HP
4	Plug, Straight	55, 58, 141, 142, 223	—	Clamp	Solder	ARF1187-ND*	46.91	815.82	2837.66	901-103
4	Plug, Straight	174, 316	—	Clamp	Solder	ARF1188-ND*	32.13	558.82	1943.71	901-128-11
5	Plug, Straight	55B, 142B, 223, 400	Gold	Crimp	Solder	ARF1189-ND	7.47	129.83	451.60	901-9511-1
5	Plug, Straight	55B, 142B, 223, 400	Passivated	Crimp	Solder	ARF1190-ND	5.94	103.26	359.16	901-9511-1SF
5	Plug, Straight	174, 178, 187, 188, 316	Gold	Crimp	Solder	ARF1191-ND	6.79	118.06	410.66	901-9511-3
5	Plug, Straight	174, 178, 187, 188, 316	Passivated	Crimp	Solder	ARF1192-ND	5.59	97.19	338.04	901-9511-3SF
5	Plug, Straight	Dbl. Braid RG-188, 316	Passivated	Crimp	Solder	ARF1193-ND	6.16	107.06	372.37	901-9511-12SF
6	Plug, Right Angle	55, 141, 142, 223	Gold	Crimp	Solder	ARF1194-ND	10.43	181.46	631.18	901-9531-1
6	Plug, Right Angle	SF 142B, Times AA-2423	Passivated	Crimp	Solder	ARF1195-ND	7.03	122.24	425.19	901-9531-1SF
6	Plug, Right Angle	174, 179, 187, 188, 316	Gold	Crimp	Solder	ARF1196-ND	10.87	189.06	657.59	901-9531-3
6	Plug, Right Angle	174, 179, 187, 188, 316	Passivated	Crimp	Solder	ARF1197-ND	7.03	122.24	425.19	901-9531-3SF
6	Plug, Right Angle	Double Braid RG-316	Gold	Crimp	Solder	ARF1198-ND	11.29	196.27	682.68	901-9531-12
6	Plug, Right Angle	Double Braid RG-316	Passivated	Crimp	Solder	ARF1199-ND	7.27	126.42	439.71	901-9531-12SF
7	Jacks	174, 179, 187, 188, 316	Gold	Crimp	Solder	ARF1200-ND	32.20	559.95	1947.68	901-9602-3
7	Jacks	174, 179, 187, 188, 316	Passivated	Crimp	Solder	ARF1201-ND	33.51	582.73	2026.90	901-9602-3SF
8	Jacks, Bulkhead	55, 142, 223, 400	Passivated	Crimp	Solder	ARF1202-ND	20.48	356.09	1238.59	901-9610-1SF
8	Jacks, Bulkhead	174, 179, 187, 188, 316	Gold	Crimp	Solder	ARF1203-ND	16.04	279.03	970.54	901-9610-3
8	Jacks, Bulkhead	174, 179, 187, 188, 316	Passivated	Crimp	Solder	ARF1204-ND	13.14	228.54	794.92	901-9610-3SF
9	Jacks, Printed Circuit Board, Panel	—	Gold	—	—	ARF1205-ND	8.10	140.84	489.89	901-144
10	Jacks, Printed Circuit Board, Angle	—	Gold	—	—	ARF1206-ND	10.11	175.77	611.37	901-143
11	Adapters, Bulkhead Jack-Jack, Front or Rear Mt.	—	Gold	—	—	ARF1207-ND	13.01	226.26	786.99	901-9209-A
11	Adapters, Bulkhead Jack-Jack, Front or Rear Mt.	—	Passivated	—	—	ARF1208-ND	11.37	197.79	687.96	901-9209-ASF

* Safety wire holes.

SMA Brass Coaxial Connectors

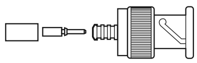
Fig.	Description	Cable Group RG/U	Plating	Cable Attachment Outer	Cable Attachment Inner	Digi-Key Part No.	Pricing 1	Pricing 25	Pricing 100	Amphenol Part No.
12	Plug, Straight	.141" (3.6mm) S/R	Gold	Solder	Solder	ARFX1209-ND	3.10	53.91	187.51	901-9868-RFX
12	Plug, Straight	.085" (2.16mm) S/R	Gold	Solder	Solder	ARF1210-ND	3.10	54.00	188.00	901-9867-RFX
13	Plug, Straight	58	Gold	Crimp	Solder	ARF1211-ND	4.65	80.86	281.26	901-9870
13	Plug, Straight	141, 223	Gold	Crimp	Solder	ARF1212-ND	4.87	84.66	294.46	901-9871
13	Plug, Straight	58	NIckel	Crimp	Solder	ARFX1213-ND	2.64	45.94	159.78	901-9876-RFX
14	Plug, Straight	174, 188, 316	Nickel	Crimp	Solder	ARFX1214-ND	2.64	45.94	159.78	901-9877-RFX
14	Plug, Straight	174, 188, 316	Gold	Crimp	Solder	ARF1215-ND	4.63	80.48	279.94	901-9916
15	Plug, Right Angle	174, 188, 316	Gold	Crimp	Solder	ARF1216-ND	7.84	136.29	474.04	901-9872
15	Plug, Right Angle	58	Gold	Crimp	Solder	ARF1217-ND	8.51	148.06	514.98	901-9873
15	Plug, Right Angle	141, 223	Gold	Crimp	Solder	ARF1218-ND	7.84	136.29	474.04	901-9874
15	Plug, Right Angle	58	Nickel	Crimp	Solder	ARFX1219-ND	4.43	77.06	268.05	901-9880-RFX
15	Plug, Right Angle	174, 188, 316	Nickel	Crimp	Solder	ARFX1220-ND	3.32	75.25	273.00	901-9881-RFX
16	Bulkhead Jack	174, 188, 316	Gold	Crimp	Solder	ARF1221-ND	7.57	131.73	458.20	901-9875
16	Bulkhead Jack	174, 188, 316	Nickel	Crimp	Solder	ARFX1222-ND	5.89	102.50	357.00	901-9879-RFX
17	Panel Receptacle, Jack	—	Nickel	—	—	ARFX1223-ND	4.34	75.55	262.77	901-9893-RFX
18	Panel Receptacle, Jack	—	Nickel	—	—	ARFX1224-ND	6.09	106.00	368.00	901-9891-RFX
19	Panel Receptacle, Jack	—	Nickel	—	—	ARFX1225-ND	4.50	78.20	272.01	901-9892-RFX
20	Panel Receptacle, Jack	—	Nickel	—	—	ARFX1226-ND	6.50	113.25	393.00	901-9887-RFX
21	Bulkhead Recep. Front Mt.	—	Nickel	—	—	ARFX1227-ND	3.73	64.92	225.80	901-9889-RFX
22	Bulkhead Recep. Rear Mt.	—	Nickel	—	—	ARFX1228-ND	3.73	64.92	225.80	901-9890-RFX
23	Plug Straight PCB Recep.	—	Gold	—	—	ARFX1229-ND	3.47	60.36	209.95	901-9895-RFX
24	Plug Rt. Angle PCB Recep.	—	Gold	—	—	ARFX1230-ND	6.46	112.25	391.00	901-9894-RFX
25	Receptacle,Straight PCB	—	Gold	—	—	ARFX1231-ND	3.01	52.39	182.22	901-144-8-RFX
26	Recep., Right Angle PCB	—	Gold	—	—	ARFX1232-ND	5.13	89.21	310.31	901-143-6-RFX

SMB Coaxial Connectors

Fig.	Description	Cable Group RG/U	Plating	Cable Attachment Outer	Cable Attachment Inner	Digi-Key Part No.	Pricing 1	Pricing 25	Pricing 100	Amphenol Part No.
27	Plug, Straight	RG-174, 179, 187,188, 316	Nickel	Crimp	Solder	ARF1233-ND	5.57	96.81	336.72	903-370P-51S
28	Plug, Right Angle	RG-174, 179, 187,188, 316	Gold	Crimp	Solder	ARF1234-ND	3.93	68.33	237.68	903-289P-51A2
28	Plug, Right Angle	RG-174, 179, 187,188, 316	Nickel	Crimp	Solder	ARF1235-ND	3.43	59.60	207.31	903-367P-51A2
28	Plug, Right Angle	RG-178, 196	Gold	Crimp	Solder	ARF1236-ND	4.91	85.42	297.10	903-291P-51A1
28	Plug, Right Angle	RG-178, 196	Nickel	Crimp	Solder	ARF1237-ND	3.82	66.44	231.08	903-368P-51A1
29	Bulkhead Jack	RG-174, 179, 187, 188, 316	Nickel	Crimp	Solder	ARF1238-ND	6.05	105.16	365.77	903-505J-51S
29	Bulkhead Jack	Dbl. Shield 316	Nickel	Crimp	Solder	ARF1239-ND	5.83	101.36	352.56	903-505J-51S1

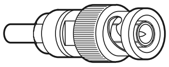
Fig.	Description	Plating	Digi-Key Part No.	Pricing 1	Pricing 25	Pricing 100	Amphenol Part No.
30	Bulkhead, Recept. Front Mount Solder Cup Terminal	Gold	ARF1240-ND	5.20	90.35	314.27	903-406J-51R
31	Bulkhead, Recept. Front Mount Blunt Post Terminal	Gold	ARF1241-ND	4.28	74.41	258.81	903-402J-51R
32	Bulkhead Jack, Recept. Recessed, Solder Cup Term.	Gold	ARF1242-ND	11.90	206.90	719.65	903-407J-51R
33	Jack Right Angle	Tin Lead (Body & Legs) Gold (Interface & Term.)	ARF1243-ND	5.85	101.74	353.88	903-373J-51A
34	Jack Straight	Gold	ARF1244-ND	3.56	61.88	215.23	903-499J-51P2

Fig. 1



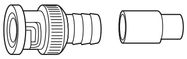
MIL-Crimp 3 Piece

Fig. 2



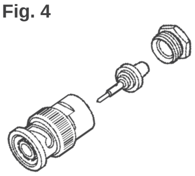
Original Crimp

Fig. 3



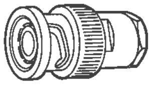
Single Crimp 2 Piece

Fig. 4



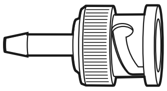
Quick Trim

Fig. 5



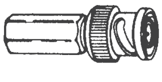
MIL-Clamp

Fig. 6



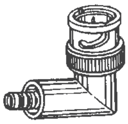
FCP

Fig. 7



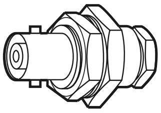
Suretwist®

Fig. 8



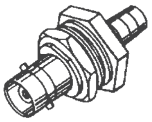
Angle Plug

Fig. 9



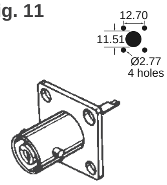
MIL-Clamp Jack

Fig. 10



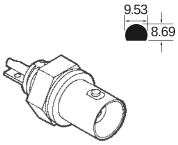
MIL-Crimp Bulkhead Jack

Fig. 11



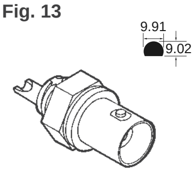
Panel Receptacle

Fig. 12



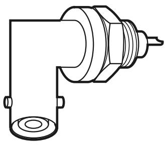
Bulkhead Jack Isolated

Fig. 13



Bulkhead Receptacle

Fig. 14



BNC Coaxial Connectors

Fig.	Description	Cable Group RG/U	Crimp Tool Part No.	Digi-Key Part No.	Pricing			Amphenol Part No.
					1	25	100	
1	Plug (MIL-Crimp)	58, 141, 142	CTL-1	ARF1039-ND	5.67	72.87	253.38	31-320
	Plug (MIL-Crimp)	58, 141, 142	CTL-1	ARFX1039-ND*	1.76	25.25	82.00	31-320-RFX
	Plug (Quick-Crimp)	Plenum 58	CTL-1	ARFX1041-ND*	1.64	21.00	74.00	36650-3RFX
	Plug (MIL-Crimp)	59, 62	CTL-1	ARF1042-ND	5.81	74.42	259.56	31-321
	Plug (MIL-Crimp)	59, 62	CTL-1	ARFX1042-ND*	1.76	25.25	82.00	31-321-RFX
	Plug (MIL-Crimp)	59, 62, 71, 140, 210, 302	CTL-1	ARF1156-ND	5.28	67.72	235.87	68175
	Plug (MIL-Crimp)	Belden 9259	CTL-1	ARF1052-ND	5.38	69.01	239.99	68175-1003
	Plug (MIL-Crimp)	59 (20AWG Ctr. Cond.)	CTL-1	ARF1046-ND	5.85	74.93	260.59	68175-1005
	Plug (MIL-Crimp)	59 (20AWG Ctr. Cond.)	CTL-1	ARFX1046-ND*	1.76	25.25	82.00	68175-5RFX
	Plug (MIL-Crimp)	Plenum 59, 62	CTL-1	ARFX1047-ND*	1.76	25.25	91.00	68175-11RFX
	Plug (MIL-Crimp)	174, 188, 316	CTL-2	ARF1049-ND	6.29	80.86	281.19	31-315
	Plug (MIL-Crimp)	174, 188, 316	CTL-2	ARFX1049-ND*	2.27	29.00	101.00	31-315-RFX
	Plug (MIL-Crimp)	179, 187	CTL-2	ARF1050-ND	7.74	99.39	346.08	31-242
	Plug (MIL-Crimp)	Belden 8281	CTL-2	ARF1051-ND	6.62	84.97	295.61	31-321-1000
	Plug (MIL-Crimp)	Belden 8281	CTL-2	ARFX1051-ND*	2.38	29.50	101.00	31-321-10RFX
	Plug (MIL-Crimp)	Belden 9907, 89907	CTL-1	ARF1054-ND	5.38	69.01	239.99	31-320-1006
	Plug (MIL-Crimp)	59, 62	CTL-1	ARFX1123-ND*	1.76	25.25	82.00	31-71008-RFX
	Plug (MIL-Crimp), 75Ω	59, 62	CTL-1	ARF1175-ND	4.17	53.75	186.00	31-71008
	Plug (MIL-Crimp), 75Ω	59, 62 (20 GACC)	CTL-1	ARF1176-ND	4.38	56.25	195.00	31-71008-1000
	Plug (MIL-Crimp), 75Ω	179, 187	CTL-2	ARF1174-ND	5.03	64.50	225.00	31-71013
	Plug (MIL-Crimp), 75Ω	Belden 8218	CTL-2	ARF1173-ND	4.17	53.75	186.00	31-71033
	Plug (MIL-Crimp), 75Ω	Belden 8281, 88281	CTL-2	ARF1172-ND	4.38	56.25	195.00	31-71032
	Plug (Thinnet/Ethernet)	58	CTL-1	ARF1181-ND	2.26	29.10	100.94	31-5800
	Plug (IBM/Arcnet)	59, 62	CTL-1	ARF1182-ND	2.30	29.36	103.00	31-5900
2	Plug (Original Crimp)	174, 179, 187, 188, 316	—	ARF1143-ND	15.72	201.62	702.46	31-371
3	Plug (Single Crimp)	59, 62	CTL-2	ARFX1124-ND*	2.48	32.00	111.00	31-5556-RFX
4	Plug (Quicktrim®)	59, 62	CTL-1	ARF1045-ND	7.19	142.25	519.00	31-4541
	Plug (Quicktrim®)	59, 62	CTL-1	ARFX1045-ND*	4.84	62.25	216.00	31-4541-RFX
	Plug (Quicktrim®)	Belden 9268	CTL-1	ARF1053-ND	8.55	109.75	382.00	31-4542
5	Plug (MIL-Clamp)	58	—	ARF1040-ND	4.34	55.62	193.64	31-202
	Plug (MIL-Clamp)	59, 62	—	ARF1043-ND	4.46	57.16	199.82	31-212
	Plug (MIL-Clamp)	59, 62	—	ARFX1043-ND*	2.37	30.50	106.00	31-212-RFX
	Plug (Standard Clamp)	8, 9, 11, 213, 214	—	ARF1155-ND	13.28	170.47	593.28	6775
	Plug (Standard Clamp)	55, 58, 141, 142, 223, 400	—	ARF1126-ND	4.60	58.97	204.97	31-2
	Plug (Standard Clamp)	55, 58, 141, 142, 223, 400	—	ARFX1119-ND*	2.26	29.00	106.00	31-2-RFX
	Plug (Standard Clamp)	59, 62, 71, 140, 210, 302	—	ARF1123-ND	5.53	115.50	438.00	31-12
	Plug (MIL-Clamp)	174, 179, 187, 188, 316	—	ARF1157-ND	8.66	111.24	387.28	69475
	Plug (Standard Clamp)	178, 196	—	ARF1120-ND	8.33	106.86	371.83	15875
6	Plug (FCP)	58, 141	—	ARF1145-ND	6.57	84.20	293.55	31-4700
	Plug (FCP)	59	—	ARF1146-ND	6.10	78.28	272.95	31-4702
7	Plug (Suretwist®)	59, 62	—	ARF1044-ND	5.15	66.18	229.69	31-5136
	Plug (Suretwist®)	59, 62	—	ARFX1044-ND*	2.37	30.50	106.00	31-5136-RFX
	Plug (Suretwist®)	58, 141, 142	—	ARF1147-ND	7.25	92.96	323.42	31-5137
	Plug (Suretwist®)	58, 141, 142	—	ARFX1147-ND*	2.37	30.50	106.00	31-5137-RFX
	Plug (Suretwist®)	Plenum 59, 62	—	ARF1048-ND	7.97	102.37	356.38	31-5369
8	Angle Plug (MIL-Crimp)	58, 141, 142A	CTL-1	ARF1055-ND	26.51	340.16	1184.50	31-335
	Angle Plug (MIL-Crimp)	58, 141, 142A	CTL-1	ARFX1055-ND*	5.01	64.25	224.00	31-335-RFX
	Angle Plug (MIL-Crimp)	59, 62	CTL-1	ARF1056-ND	21.50	275.78	959.96	31-336
9	Bulkhead Jack (Clamp)	55, 58, 141, 142, 223, 400	—	ARF1127-ND	8.73	112.01	390.37	31-206
10	Bulkhead Jack (MIL-Crimp)	55, 58, 141, 142, 223, 400	CTL-1	ARF1060-ND	8.04	103.26	359.47	31-342
	Bulkhead Jack (MIL-Crimp)	55, 58, 141, 142, 223, 400	CTL-1	ARFX1060-ND*	3.41	43.75	153.00	31-342-RFX
	Bulkhead Jack (MIL-Crimp)	59, 62, 140, 210	CTL-1	ARFX1061-ND*	3.41	43.75	153.00	31-343-RFX
	Bulkhead Jack (MIL-Crimp)	174, 188, 316	CTL-2	ARF1139-ND	11.54	148.32	516.03	31-318
	Bulkhead Jack (MIL-Crimp)	174, 188, 316	CTL-2	ARFX1139-ND*	4.69	60.25	183.00	31-318-RFX

* RFX connectors. RFX™ is specifically designed for applications that do not require performance above 1 to 3 GHz. RFX™ connectors are not for use in military system applications. RFX™ connectors are generally less expensive than MIL-Spec and industry standard connectors.

Fig. 15

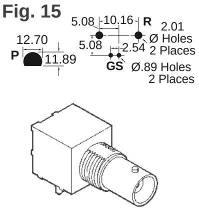
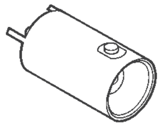


Fig. 16



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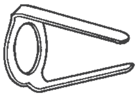

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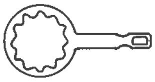

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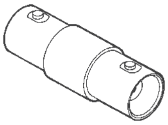

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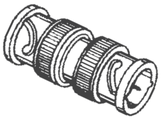

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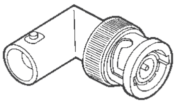

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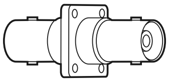

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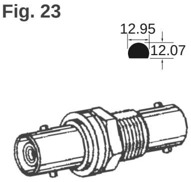

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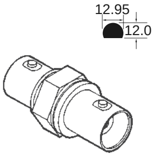

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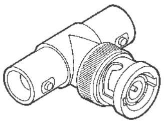

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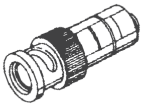

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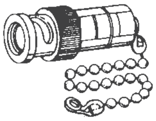


BNC Coaxial Connectors

		Cable Group	Crimp Tool	Digi-Key	Pricing			Amphenol
Fig.	Description	RG/U	Part No.	Part No.	1	25	100	Part No.
11	Panel Receptacle (Solder)	—	UG-290A	ARF1062-ND	7.38	94.76	329.60	31-203
	Panel Receptacle (Solder)	—	—	ARFX1062-ND*	3.82	49.00	171.00	31-203-RFX
12	Bulkhead Recept. Isolated (Solder)	—	IBM 925390	ARF1063-ND	5.81	74.50	260.00	31-10
	Bulkhead Recept. Isolated (Solder)	—		ARFX1063-ND*	2.45	31.50	110.00	31-10-RFX
	Bulkhead Isolated Recept.	—	—	ARF1121-ND	6.13	78.79	299.00	31-10-75
13	Bulkhead Recept. Pressurized	—	UG-625B	ARF1134-ND	2.99	38.37	132.87	31-236
	Bulkhead Recept.	—	UG-1094/U	ARF1064-ND	2.69	34.51	120.51	31-221
	Bulkhead Recept. (Solder)	—	—	ARFX1064-ND*	1.62	21.00	75.00	31-221-RFX
	Bulkhead Recept.	—	UG-1094A	ARF1131-ND	3.18	40.94	142.14	31-2221
	Bulkhead Recept.	—	—	ARF1149-ND	7.61	97.59	339.90	31-70018
	Bulkhead Recept. Pressurized	—	UG-657	ARF1122-ND	6.44	78.28	272.95	31-102
	Bulkhead Recept. Pressurized	—	UG-912	ARF1136-ND	14.89	307.75	1119.00	31-238
14	Angle Bulkhead Recept.	—	UG-1098	ARF1130-ND	38.06	604.75	2102.00	31-222
15	Rt. Angle Bulkhead Recept.	—	—	ARF1065-ND	5.94	76.22	265.74	31-5431
	Rt. Ang. Bulkhead Recept. With Hardware	—	—	ARF1065NW-ND	7.58	96.75	336.00	31-5431-2010
	Rt. Angle Bulkhead Recept.	75Ω	—	ARF1177-ND	5.94	76.22	265.74	31-71047-1010
	Rt. Angle Bulkhead Recept.	50Ω	—	ARF1178-ND	6.20	79.59	277.07	31-5640-1010
	Rt. Angle Bulkhead Recept. Metal	75Ω	—	ARF1179-ND	6.20	79.57	277.07	31-71043-1010
	Rt. Angle Bulkhead Recept. Low Profile	50Ω	—	ARF1180-ND	5.94	76.33	265.74	31-5486-1010
16	Receptacle Vertical PC	—	—	ARF1066-ND	6.73	86.26	300.76	31-5329
17	Shield Grounding Lug	—	—	ARF1067-ND	.62	7.99	27.81	31-759
18	Grounding Lug	—	—	ARF1068-ND	.59	7.75	26.00	31-10152
19	Straight/Jack-Jack	—	UG-914/U	ARF1069-ND	5.64	72.36	252.35	31-219
	Straight/Jack-Jack	—	—	ARFX1069-ND*	2.58	37.25	142.00	31-219-RFX
	Straight/Jack-Jack	75Ω	—	ARF1150-ND	6.27	80.34	280.16	31-70019
20	Straight/Plug-Plug	—	UG-491A/U	ARF1070-ND	9.75	125.14	435.69	31-218
	Straight/Plug-Plug	—	—	ARFX1070-ND*	3.18	40.79	142.00	31-218-RFX
21	Angle/Jack-Plug	—	UG-306/U	ARF1071-ND	13.98	179.48	624.18	31-9
	Angle/Jack-Plug	—	—	ARFX1071-ND*	4.50	66.50	215.00	31-9-RFX
	Angle/Jack-Plug	—	UG-306A	ARF1128-ND	15.25	195.70	681.86	31-209
22	Panel/Jack-Jack	—	UG-414	ARF1154-ND	17.37	355.50	1248.00	47000
23	Bulkhead/Jack-Jack, Gasketed	50Ω	—	ARFX1130-ND*	4.08	52.25	193.00	31-220G-RFX
	Bulkhead/Jack-Jack (Sealed)	50Ω	UG-492A	ARF1129-ND	9.61	123.34	429.51	31-220H
	Bulkhead/Jack-Jack, Non-Gasketed	50Ω	—	ARF1072-ND	8.33	106.86	371.83	31-220N
	Bulkhead/Jack-Jack	—	—	ARFX1072-ND*	3.74	48.50	178.00	31-220N-RFX
	Bulkhead/Jack-Jack (Sealed)	—	UG-492D	ARF1140-ND	12.26	157.33	547.96	31-3220
	Bulkhead/Jack-Jack, Gasketed	75Ω	—	ARF1151-ND	17.55	249.50	934.00	31-70020
24	Bulkhead/Jack-Jack (Ins.)	—	—	ARF1073-ND	13.51	173.55	603.58	31-4803
25	Tee/Jack-Plug-Jack	—	UG-274	ARF1152-ND	13.26	170.21	592.25	31-8
	Tee/Jack-Plug-Jack	50Ω	UG-274A/U	ARF1074-ND	11.03	141.37	492.34	31-208
	Tee/Jack-Plug-Jack	50Ω	—	ARFX1074-ND*	4.69	60.00	209.00	31-208-RFX
26	Res. Cap, 50 Ohm	—	—	ARF1075-ND	16.18	207.55	723.06	46650-51
	Res. Cap, 50 Ohm	—	—	ARFX1075-ND*	2.59	33.25	116.00	46650-51-RFX
	Res. Cap, 75 Ohm	—	—	ARFX1076-ND*	2.59	33.25	116.00	46650-75-RFX
	Res. Cap, 93 Ohm	—	—	ARFX1077-ND*	2.59	33.25	116.00	46650-93-RFX
27	Res. Cap & Chain, 50 Ohm	—	—	ARF1078-ND	16.70	214.24	745.72	35650-50
	Res. Cap & Chain, 75 Ohm	—	—	ARF1079-ND	16.70	214.24	745.72	35650-75

* RFX connectors. RFX™ is specifically designed for applications that do not require performance above 1 to 3 GHz. RFX™ connectors are not for use in military system applications. RFX™ connectors are generally less expensive than MIL-Spec and industry standard connectors.

Between Series Adapters

Gold plated.

Fig. 1

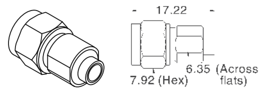


Fig. 2

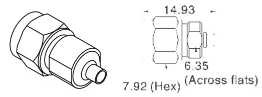
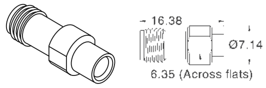


Fig. 3



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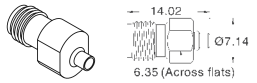

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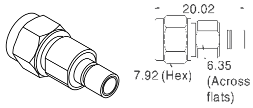

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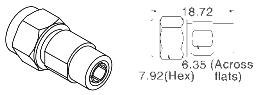

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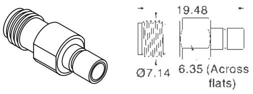

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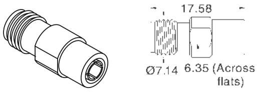

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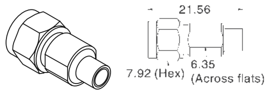

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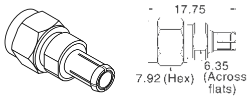

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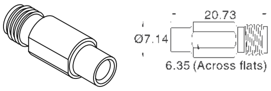

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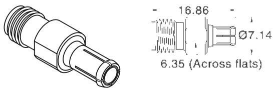
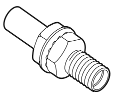


Fig.	Description	VSWR (GHz)	Freq. Range (GHz)	Digi-Key Part No.	Pricing 1	10	Johnson Part No.
1	SMA Plug to MMCX Jack	1.05+.05f	0-6	J617-ND	32.40	268.92	134-1019-151
2	SMA Plug to MMCX Plug	1.05+.05f	0-6	J618-ND	35.10	291.33	134-1019-161
3	SMA Jack to MMCX Jack	1.05+.05f	0-6	J619-ND	29.70	246.51	134-1019-171
4	SMA Jack to MMCX Plug	1.05+.05f	0-6	J620-ND	32.40	268.92	134-1019-181
5	SMA Plug to SMB Jack	1.05+.01f	0-4	J621-ND	29.70	246.51	134-1012-011
6	SMA Plug to SMB Plug	1.05+.01f	0-4	J622-ND	32.40	268.92	134-1012-021
7	SMA Jack to SMB Jack	1.05+.01f	0-4	J623-ND	27.18	225.56	134-1012-031
8	SMA Jack to SMB Plug	1.05+.01f	0-4	J624-ND	27.18	225.56	134-1012-041
9	SMA Plug to MCX Jack	1.03+.03f	0-6	J625-ND	27.18	225.56	134-1018-001
10	SMA Plug to MCX Plug	1.03+.03f	0-6	J626-ND	29.65	246.06	134-1018-011
11	SMA Jack to MCX Jack	1.03+.03f	0-6	J627-ND	27.18	225.56	134-1018-021
12	SMA Jack to MCX Plug	1.03+.03f	0-6	J628-ND	27.18	225.56	134-1018-031

RF Connectors

SMA/SMB Type

Fig. 1



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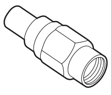


Fig. 3

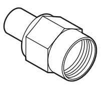


Fig. 4

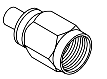
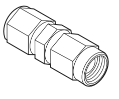


Fig. 5



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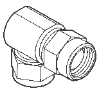

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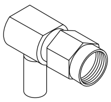
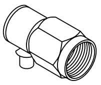


Fig. 8



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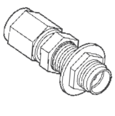

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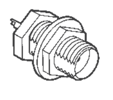

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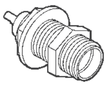

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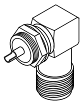

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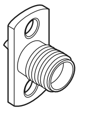

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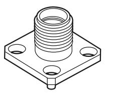


Fig. 15

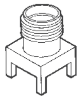
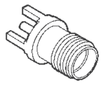


Fig. 16



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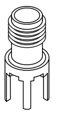

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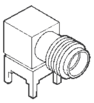

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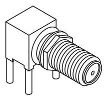

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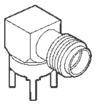


Fig. 21

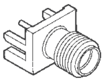


Fig. 22

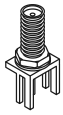


Fig. 23

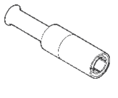


Fig. 24

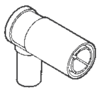


Fig. 25

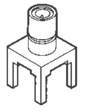


Fig. 26

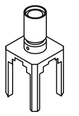


Fig. 27

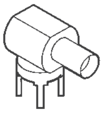


Fig. 28

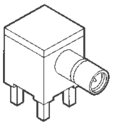


Fig. 29

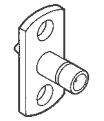


Fig. 30

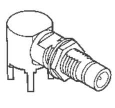


Fig.	Type (Desc.)	Cable Group	Plating	Digi-Key Part No.	Pricing 1	10	50	Johnson Part No.
SMA Type								
1	Crimp	2*	Gold	J523-ND	7.67	67.29	289.22	142-0303-411
	Crimp	2*	Nickel	J524-ND	7.38	64.72	278.20	142-0303-416
2	Crimp	2*	Gold	J525-ND	5.47	47.94	206.05	142-0403-011
	Crimp	2*	Nickel	J526-ND	5.09	44.63	191.84	142-0403-016
3	Solder	RG-402	Gold	J485-ND	1.26	11.09	47.65	142-0694-011
	Solder	RG-402	Nickel	J486-ND	.88	7.70	33.08	142-0694-016
	Solder	RG-405	Gold	J487-ND	3.79	33.23	142.84	142-0693-001
	Solder	RG-405	Nickel	J488-ND	3.40	29.84	128.26	142-0693-006
4	Crimp	RG-178/U, 196	Gold	J605-ND	5.94	52.07	223.81	142-0402-011
5	Clamp	2*	Gold	J474-ND	9.80	85.96	369.46	142-0203-011
	Clamp	2*	Nickel	J475-ND	8.95	78.52	337.49	142-0203-016
	Clamp	3**	Gold	J480-ND	16.78	147.12	632.35	142-0207-011
	Clamp	3**	Nickel	J481-ND	15.83	138.85	596.82	142-0207-016
6	Clamp	2*	Nickel	J477-ND	7.63	66.95	287.75	142-0203-106
	Clamp	3**	Nickel	J484-ND	8.74	76.61	329.28	142-0207-106
7	Crimp	2*	Gold	J510-ND	7.57	66.38	285.30	142-0403-101
8	Solder	.086 Semi-Rigid	Gold	J606-ND	8.39	73.56	316.17	142-0693-101
	Solder	.141 Semi-Rigid	Gold	J607-ND	8.39	73.56	316.17	142-0694-101
9	Clamp	2*	Gold	J478-ND	11.31	99.18	426.30	142-0103-401
10	Panel Mt.	—	Gold	J490-ND	5.28	46.28	198.94	142-0701-401
11	Panel Mt.	—	Gold	J489-ND	6.33	55.49	238.51	142-0701-411
12	Solder	—	Gold	J609-ND	12.06	105.79	454.72	142-0701-531
13	Flange Mt.	—	Gold	J492-ND	5.27	46.17	198.45	142-0701-621
14	Flange Mt.	—	Gold	J493-ND	5.27	46.17	198.45	142-0701-631
15	PC Mt.	—	Gold	J494-ND	6.62	58.03	249.41	142-0701-211
	PC Mt.	—	Nickel	J495-ND	6.22	54.55	234.47	142-0701-216
16	PC Mt.	—	Gold	J500-ND	5.14	45.06	193.67	142-0701-201
17	PC Mt.	—	Gold	J608-ND	5.14	45.06	193.67	142-0701-231
18	PC Mt.	—	Gold	J496-ND	11.07	97.04	417.11	142-0701-321
	PC Mt.	—	Nickel	J497-ND	10.39	91.09	391.51	142-0701-326
19	PC Mt.	—	Gold	J569-ND	10.77	94.48	406.09	142-0701-501
20	PC Mt.	—	Gold	J501-ND	7.31	64.07	275.38	142-0701-301
21	PC Mt.	—	Gold	J502-ND	5.48	48.08	206.66	142-0701-801
22	PC Mt.	—	Gold	J610-ND	6.88	60.31	259.21	142-0701-871
SMB Type								
23	Crimp	2*	Nickel	J464-ND	4.84	42.41	182.28	131-1403-016
24	Crimp	2*	Gold	J465-ND	4.79	42.01	180.57	131-1403-101
	Crimp	2*	Nickel	J466-ND	4.03	35.31	151.78	131-1403-116
25	PC Mt.	—	Gold	J467-ND	2.60	22.80	98.00	131-1701-201
	PC Mt.	—	Nickel	J468-ND	2.45	21.49	92.37	131-1701-206
	PC Mt.	—	Nickel	J469-ND	2.45	21.49	92.37	131-1701-216
26	PC Mt.	—	Gold	J613-ND†	2.05	17.96	77.18	131-3701-261
	PC Mt.	—	Nickel	J614-ND†	1.96	17.16	73.75	131-3701-266
	PC Mt.	—	Gold	J615-ND†	2.05	17.96	77.18	131-3701-271
	PC Mt.	—	Nickel	J616-ND†	1.96	17.16	73.75	131-3701-276
27	PC Mt.	—	Gold	J472-ND	4.95	43.41	186.57	131-3701-301
28	PC Mt.	—	Gold	J470-ND	4.56	40.01	171.99	131-1701-371
	PC Mt.	—	Nickel	J471-ND	4.39	38.48	165.38	131-1701-376
29	Panel Mt.	—	Gold	J520-ND	6.86	60.16	258.60	131-3701-621
30	Panel Mt.	—	Gold	J522-ND	6.60	57.86	248.68	131-3701-341
Crimp Tool Frame				J572-ND	80.93	—	—	140-0000-952
Die Set for SMA, SMB Type (RG178, 316, 316DS, 58)...............				J573-ND	76.94	—	—	140-0000-951

***Group 2 Cables:** RG-161/U, RG-174/U, RG-179/U, RG-187/U, RG-188/U, RG-316/U

****Group 3 Cables:** RG-58/U, RG-141/U, RG-303/U

† J613 and J614 Leg Length: 3.94mm; J615 and J616 Leg Length: 2.41mm

JOHNSON Components RF Connectors MCX Type

FEATURES: • 30% Smaller than SMB. • Rugged snap-on mating design. • Captivated contact. **ELECTRICAL:** • **Impedance:** 50 Ohms • **Frequency Range:** 0-6 GHz • **Working Voltage at sea level:** 335 VRMS; 250 VRMS (J531-ND and J532-ND). **MECHANICAL:** • **Engage/Disengage Force:** 3.4 lbs. max engagement/5 lbs. typical disengagement • **Contact Retention Force:** 4 lbs. min. axial force • **Durability:** 500 cycles min.

Fig. 1 – Right Angle Cable Plug

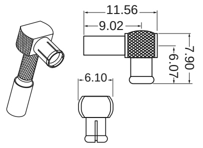


Fig. 2 – Straight Cable Plug

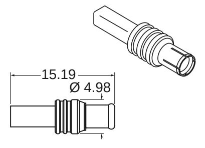


Fig. 3 – Straight Plug Receptacle

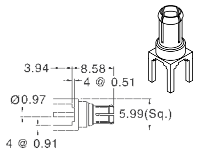


Fig. 4 – Straight PC Mount Jack

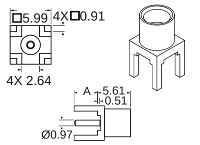


Fig. 5 – Right Angle PC Mnt. Jack

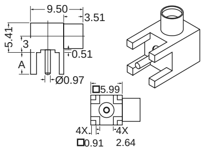


Fig. 6 – Front Mount Bulkhead Jack Receptacle

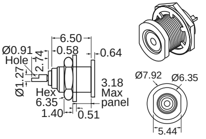


Fig. 7 – End Launch Jack

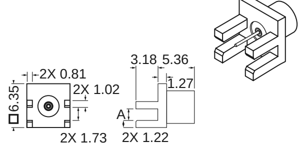


Fig. 8 – SMT Straight Jack

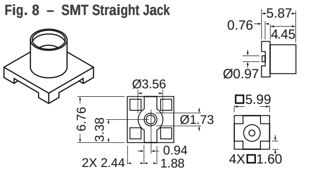


Fig. 9 – SMT Right Angle Jack

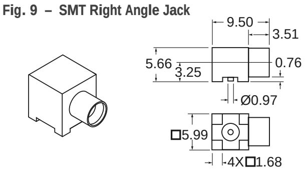


Fig. 10 – Straight Jack Receptacle - 2.54mm

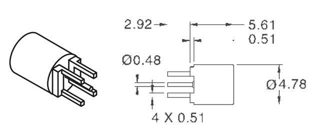


Fig.	Cable Type	Plating	Dim. A (mm)	Digi-Key Part No.	Price Each 1	10	50	100	Johnson Part No.
1	RG 178	Gold	—	J531-ND	5.18	4.55	3.91	3.35	133-3402-101
1	RG 316	Gold	—	J535-ND	5.18	4.55	3.91	3.35	133-3403-101
1	RG 178	Nickel	—	J532-ND	4.92	4.32	3.71	3.18	133-3402-106
1	RG 316	Nickel	—	J536-ND	4.92	4.32	3.71	3.18	133-3403-106
2	RG 316	Gold	—	J533-ND	4.39	3.86	3.32	2.84	133-3403-001
2	RG 316	Nickel	—	J534-ND	4.04	3.55	3.05	2.62	133-3403-006
3	—	Gold	—	J612-ND	6.18	5.42	4.66	3.99	133-3801-201
4	—	Gold	3.94	J537-ND	3.55	3.12	2.68	2.30	133-3701-201
4	—	Nickel	3.94	J538-ND	3.38	2.97	2.55	2.19	133-3701-206
4	—	Gold	2.79	J539-ND	3.55	3.12	2.68	2.30	133-3701-211
4	—	Nickel	2.79	J540-ND	3.38	2.97	2.55	2.19	133-3701-216
5	—	Gold	3.94	J541-ND	7.79	6.84	5.88	5.04	133-3701-301
5	—	Nickel	3.94	J542-ND	7.62	6.68	5.75	4.93	133-3701-306
5	—	Gold	2.79	J543-ND	7.98	7.00	6.02	5.16	133-3701-311
5	—	Nickel	2.79	J544-ND	7.79	6.84	5.88	5.04	133-3701-316
6	—	Gold	—	J545-ND	5.87	5.15	4.43	3.80	133-3701-401
6	—	Nickel	—	J546-ND	5.67	4.98	4.28	3.67	133-3701-406
7	—	Gold	1.73	J547-ND	4.48	3.93	3.38	2.90	133-3701-801
8	—	Gold	—	J548-ND	5.10	4.47	3.85	3.30	133-3711-201
9	—	Gold	—	J549-ND	8.33	7.31	6.29	5.39	133-3711-301
10	—	Gold	—	J611-ND	4.05	3.56	3.06	2.62	133-3701-231
Prototype Crimp Tool				J574-ND	287.01 each				141-0000-908
Hand Crimp Tool (frame only)				J572-ND	80.93 each				140-0000-952
Die Set (RG178, 316)				J573-ND	76.94 each				140-0000-951

JOHNSON Components RF Connectors MMCX Type

ELECTRICAL RATINGS: • **Impedance:** 50 Ohms • **Frequency Range:** 0-6 GHz • **Working Voltage:** 170 Vrms at sea level • **Insulation Resistance:** 1000 megaohms min. **MECHANICAL RATINGS:** • **Engagement/Disengagement Force:** 8.0 lbs. max. engagement; 1.4 lbs. min. disengagement • **Contact Retention Force:** 2.0 lbs. min. axial force • **Cable Retention:** 30 lbs. • **Durability:** 500 cycles min. **ENVIROMENTAL RATINGS** • **Operating Temperature:** –55°C to 155°C

Fig. 1 – Straight Cabled Plug

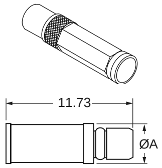


Fig. 2 – Right Angle Flexible Cabled Plug

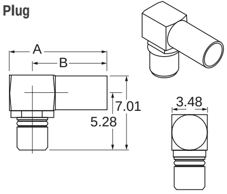


Fig. 3 – Straight Plug

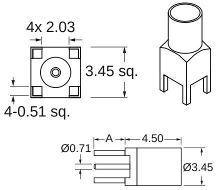


Fig. 4 – Right Angle Semi-Rigid Plug

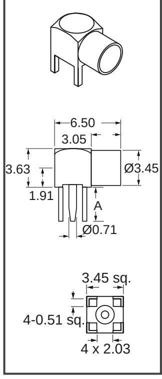


Fig. 5 – Straight Jack

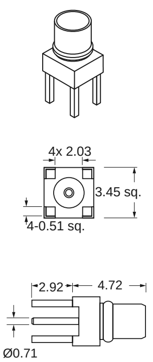


Fig. 6 – Right Angle Jack

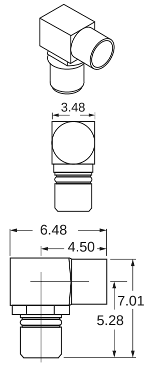


Fig. 7 – End Launch Jack

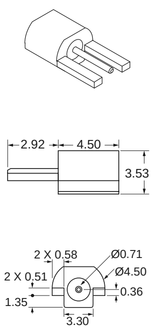


Fig.	Cable Type	Dim. (mm) A	B	Digi-Key Part No.	Price Each 1	10	50	Johnson Part No.
Straight Cabled Plug — Gold Crimp								
1	RG 178/U, 196 RG 316/U, 188, 161, 174 RG 316 DS, 188 DS, 187 DS	3.48 4.39 4.39	— — —	J589-ND J590-ND J591-ND	4.88 7.39 7.56	4.28 6.49 6.63	3.68 5.58 5.70	135-3402-001 135-3403-001 135-3404-001
	.047” Dia. Flexible, Huber K01152-07, Axon P512479A	3.48	—	J592-ND	4.88	4.28	3.68	135-3436-001
Right Angle Flexible Cabled Plug — Gold Crimp								
2	RG 178/U, 196 RG 316/U, 188, 187, 179, 161, 174 RG 316 DS, RG 188 DS	8.99 10.46 10.46	7.01 8.48 8.48	J593-ND J594-ND J595-ND	7.72 7.72 7.88	6.77 6.77 6.92	5.82 5.82 5.95	135-3402-101 135-3403-101 135-3404-101
	.047” Dia. Flexible, Huber K01152-07, Axon P512479A	8.99	7.01	J596-ND	7.72	6.77	5.82	135-3436-101
Straight Plug — Gold PCB								
3	—	—	—	J601-ND	7.02	6.16	5.30	135-3801-201
Right Angle Semi-Rigid Plug — Gold RG405								
4	—	—	—	J602-ND	7.96	6.99	6.01	135-3693-101
Jacks								
5	Straight - Gold PCB Straight - Gold PCB	2.92 1.73	— —	J597-ND J598-ND	4.47 4.39	3.92 3.85	3.37 3.31	135-3701-201 135-3701-211
6	Right Angle - Gold PCB Right Angle - Gold PCB	2.92 1.73	— —	J599-ND J600-ND	8.61 8.45	7.56 7.41	6.50 6.37	135-3701-301 135-3701-311
7	End Launch - PCB	—	—	J603-ND	6.09	5.35	4.60	135-3711-801
Hand Crimp Tool (frame only)				J572-ND	80.93 each			140-0000-952
Crimp Tool Die Set.................................				J604-ND	173.12 each			140-0000-953

HIROSE ELECTRIC CO., LTD. MXR Series - Circular Connectors Miniature Push-Pull Connectors w/ Ground Function

MXR type connectors are miniature, lightweight, push-pull lock connectors with a ground function which has been developed for use with VTR camera and system camera interfaces.

FEATURES: • The single action push-pull lock function allows quick connections and disconnections as well as high density mounting • Verification of a secure engagement is afforded by a click sound which exemplifies the fine feel of this lock system • Use of aluminum alloy for the shell has contributed to the lightweight design • One of the three conductors makes contact before the others in this sequenced design. **SPECIFICATIONS** • **Withstand Voltage:** 300V AC for 1 minute • **Current Capacity:** 2A • **Insulation Resistance:** 1000 MΩ or greater at 100V DC • **Contact Resistance:** 20 mΩ or less at 1A AC • **Solder Pot Diameter:** 0.9 mm dia. **APPLICATIONS:** VTR cameras, system cameras, audio equipment, etc. **MATERIALS:** • **Shell:** Aluminum alloy, nickel plating • **Insulation:** PBT resin, black, UL94V-0 • **Male Pins:** Brass, gold plating • **Female Pins:** Phosphor bronze, partial gold plating

Fig. 1 – Plug

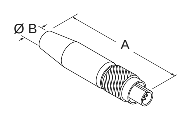


Fig. 2 – Solder Cup

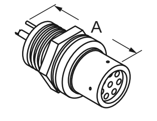


Fig. 3 – Solder Pin

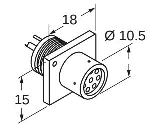
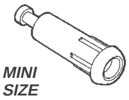


Fig.	No. of Contacts	Description	Dim. (mm) A	B	Digi-Key Part No.	Price Each 1	10	50	100	Hirose Part No.
Plug										
1	3 4 6 8 8	Bushing, black Bushing, black Bushing, black Bushing, black Bushing, white	47 47 47 50 50	5 5 5 8 8	HR603-ND HR604-ND HR606-ND HR608-ND HR610-ND	14.86 15.10 15.56 16.01 16.25	13.99 14.21 14.64 15.08 15.30	12.68 12.88 13.27 13.66 13.87	12.24 12.44 12.81 13.19 13.39	MXR-8PA-3PB MXR-8PA-4PB MXR-8PA-6PB MXR-8P-8P MXR-8P-8P(01)
Receptacles										
2	3 4 6 8	Solder Cup	19.3 19.3 19.3 20.4	— — — —	HR613-ND HR614-ND HR616-ND HR618-ND	8.52 8.86 9.34 9.84	7.46 7.75 8.17 8.61	6.75 7.02 7.40 7.79	5.68 5.91 6.23 6.56	MXR-8RA-3S MXR-8RA-4S MXR-8RA-6S MXR-8RA-8S
3	3 4 6 8	Solder Pin	— — — —	— — — —	HR623-ND HR624-ND HR626-ND HR628-ND	8.52 8.86 9.34 9.84	7.46 7.75 8.17 8.61	6.75 7.02 7.40 7.79	5.68 5.91 6.23 6.56	MXR-8R-3SA MXR-8R-4SA MXR-8R-6SA MXR-8R-8SA
Tools										
Tool, Tightening Jig - MXR Series					H9988-ND	272.38 each				MXR-8P-T01
Tool, Cable Crimper - MXR Series					H9989-ND	328.16 each				HR10A-TC-04

JOHNSON Components™

Plugs and Jacks

Fig. 1



MINI SIZE

Fig. 2

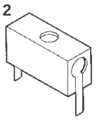


Fig. 3

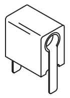


Fig. 4

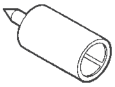
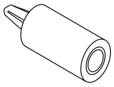


Fig. 5



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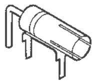

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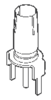


Fig. 8

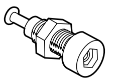
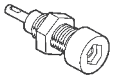


Fig. 9



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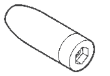
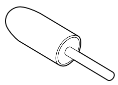


Fig. 11



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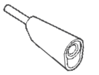

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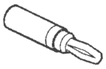

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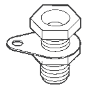

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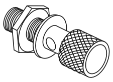


Fig. 16

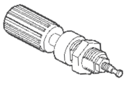


Fig. 17

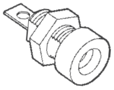


Fig. 18

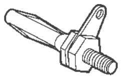


Fig. 19

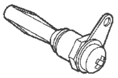


Fig. 20

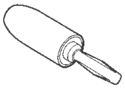


Fig. 21

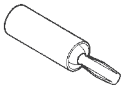


Fig. 22

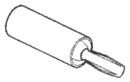


Fig. 23

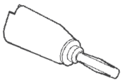


Fig.	Color	Digi-Key Part No.	Pricing						Johnson Part No.
			1	10	100	250	500	1,000	
Tip Jacks – for Standard Tip Plug: 2.03mm									
1	White	J330-ND	.90	7.99	63.27	133.20	249.75	466.20	105-1041-001
	Red	J124-ND	.90	7.99	63.27	133.20	249.75	466.20	105-1042-001
	Black	J125-ND	.90	7.99	63.27	133.20	249.75	466.20	105-1043-001
	Green	J331-ND	.90	7.99	63.27	133.20	249.75	466.20	105-1044-001
	Yellow	J333-ND	.90	7.99	63.27	133.20	249.75	466.20	105-1047-001
	Blue	J126-ND	.90	7.99	63.27	133.20	249.75	466.20	105-1050-001
Horizontal Test Jacks – for Standard Tip Plug: 2.03mm									
2	White	J108-ND	.32	2.86	22.61	47.60	89.25	166.60	105-0751-001
	Red	J109-ND*	.32	2.86	22.61	47.60	89.25	166.60	105-0752-001
	Black	J110-ND*	.32	2.86	22.61	47.60	89.25	166.60	105-0753-001
	Green	J111-ND	.32	2.86	22.61	47.60	89.25	166.60	105-0754-001
	Orange	J112-ND	.32	2.86	22.61	47.60	89.25	166.60	105-0756-001
	Yellow	J113-ND	.32	2.86	22.61	47.60	89.25	166.60	105-0757-001
	Brown	J114-ND	.32	2.86	22.61	47.60	89.25	166.60	105-0758-001
	Blue	J115-ND	.32	2.86	22.61	47.60	89.25	166.60	105-0760-001
	Violet	J116-ND	.32	2.86	22.61	47.60	89.25	166.60	105-0762-001
Horizontal Insulated Miniature Test Jacks – for Standard Tip Plug: 2.03mm									
3	White	J575-ND	.32	2.81	22.23	46.80	87.75	163.80	105-1101-001
	Red	J576-ND	.32	2.81	22.23	46.80	87.75	163.80	105-1102-001
	Black	J577-ND	.32	2.81	22.23	46.80	87.75	163.80	105-1103-001
	Green	J578-ND	.32	2.81	22.23	46.80	87.75	163.80	105-1104-001
	Yellow	J579-ND	.32	2.81	22.23	46.80	87.75	163.80	105-1107-001
	Blue	J580-ND	.32	2.81	22.23	46.80	87.75	163.80	105-1110-001
Vertical Test Jacks – for Standard Tip Plug: 2.03mm									
4	White	J119-ND	.48	4.30	34.01	71.60	134.25	250.60	105-0851-001
	Red	J120-ND	.48	4.30	34.01	71.60	134.25	250.60	105-0852-001
	Black	J121-ND	.48	4.30	34.01	71.60	134.25	250.60	105-0853-001
	Green	J122-ND	.48	4.30	34.01	71.60	134.25	250.60	105-0854-001
	Yellow	J123-ND	.48	4.30	34.01	71.60	134.25	250.60	105-0857-001
	Blue	J312-ND	.48	4.30	34.01	71.60	134.25	250.60	105-0860-001
Vertical Insulated Formed Contact Test Jacks – for Standard Tip Plug: 2.03mm									
5	White	J581-ND	.43	3.86	30.59	64.40	120.75	225.40	105-2201-201
	Red	J582-ND	.43	3.86	30.59	64.40	120.75	225.40	105-2202-201
	Black	J583-ND	.43	3.86	30.59	64.40	120.75	225.40	105-2203-201
	Green	J584-ND	.43	3.86	30.59	64.40	120.75	225.40	105-2204-201
	Yellow	J585-ND	.43	3.86	30.59	64.40	120.75	225.40	105-2207-201
	Blue	J586-ND	.43	3.86	30.59	64.40	120.75	225.40	105-2210-201
Shielded Test Jack – Horizontal									
6	Tin	J463-ND	3.69	32.76	259.35	546.00	1023.75	1911.00	129-0701-301
	Gold	J571-ND	4.55	39.90	294.00	630.00	1050.00	—	129-0701-302
Shielded Test Jack – Vertical									
7	Tin	J462-ND	3.69	32.76	259.35	546.00	1023.75	1911.00	129-0701-201
	Gold	J570-ND	4.55	39.90	294.00	630.00	1050.00	—	129-0701-202
Tip Jacks – Insulated Deluxe									
8	White	J105-ND	.95	8.40	66.50	140.00	262.50	490.00	105-0601-001
	Red	J106-ND	.95	8.40	66.50	140.00	262.50	490.00	105-0602-001
	Black	J107-ND	.95	8.40	66.50	140.00	262.50	490.00	105-0603-001
	Green	J337-ND	.95	8.40	66.50	140.00	262.50	490.00	105-0604-001
	Yellow	J338-ND	.95	8.40	66.50	140.00	262.50	490.00	105-0607-001
	Blue	J339-ND	.95	8.40	66.50	140.00	262.50	490.00	105-0610-001
Tip Jacks – Insulated Standard Type 6.35mm									
9	White	J320-ND	.54	4.82	38.19	80.40	150.75	281.40	105-0801-001
	Red	J117-ND*	.54	4.82	38.19	80.40	150.75	281.40	105-0802-001
	Black	J118-ND*	.54	4.82	38.19	80.40	150.75	281.40	105-0803-001
	Green	J321-ND	.54	4.82	38.19	80.40	150.75	281.40	105-0804-001
	Yellow	J323-ND	.54	4.82	38.19	80.40	150.75	281.40	105-0807-001
	Blue	J325-ND	.54	4.82	38.19	80.40	150.75	281.40	105-0810-001
Tip Jacks with Sleeve Assembly									
10	White	J450-ND	1.12	9.96	78.85	166.00	311.25	581.00	105-0701-001
	Red	J451-ND	1.12	9.96	78.85	166.00	311.25	581.00	105-0702-001
	Black	J452-ND	1.12	9.96	78.85	166.00	311.25	581.00	105-0703-001
Tip Plugs – Insulated Solderless Type									
11	White	J300-ND	.65	5.78	45.79	96.40	180.75	337.40	105-0301-001
	Red	J103-ND*	.65	5.78	45.79	96.40	180.75	337.40	105-0302-001
	Black	J104-ND*	.65	5.78	45.79	96.40	180.75	337.40	105-0303-001
	Green	J301-ND	.65	5.78	45.79	96.40	180.75	337.40	105-0304-001
	Yellow	J303-ND	.65	5.78	45.79	96.40	180.75	337.40	105-0307-001
	Blue	J305-ND	.65	5.78	45.79	96.40	180.75	337.40	105-0310-001
Tip Plugs – Insulated Stacking Single Type									
12	Red	J454-ND	2.43	21.60	171.00	360.00	675.00	1260.00	105-1202-001
	Black	J455-ND	2.43	21.60	171.00	360.00	675.00	1260.00	105-1203-001
Miniature Banana Plugs – Insulated Solder Type									
13	Red	J457-ND	1.30	11.59	91.77	193.20	362.25	676.20	108-1002-001
	Black	J458-ND	1.30	11.59	91.77	193.20	362.25	676.20	108-1003-001
For Standard Banana Plug 4.44mm Across Flats									
14	—	J147-ND*	1.04	9.22	72.96	153.60	288.00	537.60	108-0740-001
Uninsulated w/Knurled Thumb Nut For Standard Banana Plug 4.44mm Across Flats									
15	—	J587-ND	1.92	17.04	134.90	284.00	532.50	994.00	111-2223-001
Binding Posts – Insulated Standard									
16	White	J370-ND	1.54	13.70	108.49	228.40	428.25	799.40	111-0101-001
	Red	J164-ND*	1.54	13.70	108.49	228.40	428.25	799.40	111-0102-001
	Black	J165-ND*	1.54	13.70	108.49	228.40	428.25	799.40	111-0103-001
	Green	J371-ND	1.70	15.10	119.51	251.60	471.75	880.60	111-0104-001
	Yellow	J372-ND	1.54	13.70	108.49	228.40	428.25	799.40	111-0107-001
Banana Jacks – Insulated Solder Terminal									
17	White	J150-ND*	.42	3.72	29.45	62.00	116.25	217.00	108-0901-001
	Red	J151-ND*	.42	3.72	29.45	62.00	116.25	217.00	108-0902-001
	Black	J152-ND*	.42	3.72	29.45	62.00	116.25	217.00	108-0903-001
	Green	J153-ND	.42	3.72	29.45	62.00	116.25	217.00	108-0904-001
	Orange	J356-ND	.42	3.72	29.45	62.00	116.25	217.00	108-0906-001
	Yellow	J154-ND	.42	3.72	29.45	62.00	116.25	217.00	108-0907-001
	Brown	J357-ND	.42	3.72	29.45	62.00	116.25	217.00	108-0908-001
	Blue	J155-ND	.42	3.72	29.45	62.00	116.25	217.00	108-0910-001
	Violet	J358-ND	.42	3.72	29.45	62.00	116.25	217.00	108-0912-001
Banana Plug – Uninsulated Panel Mount Threaded Stud									
18	—	J148-ND	1.10	9.82	77.71	163.60	306.75	572.60	108-0750-001
Banana Plug – Uninsulated Panel Mount Screw Type									
19	—	J149-ND	.96	8.50	67.26	141.60	265.50	495.60	108-0753-001
Banana Plugs – Insulated Solderless Tapered Handle									
20	White	J144-ND*	.88	7.82	61.94	130.40	244.50	456.40	108-0301-001
	Red	J145-ND*	.88	7.82	61.94	130.40	244.50	456.40	108-0302-001
	Black	J146-ND*	.88	7.82	61.94	130.40	244.50	456.40	108-0303-001
	Green	J340-ND	.88	7.82	61.94	130.40	244.50	456.40	108-0304-001
	Orange	J341-ND	.88	7.82	61.94	130.40	244.50	456.40	108-0306-001
	Yellow	J342-ND	.88	7.82	61.94	130.40	244.50	456.40	108-0307-001
	Brown	J343-ND	.88	7.82	61.94	130.40	244.50	456.40	108-0308-001
	Blue	J344-ND	.88	7.82	61.94	130.40	244.50	456.40	108-0310-001
	Violet	J345-ND	.88	7.82	61.94	130.40	244.50	456.40	108-0312-001
Banana Plugs – Insulated Round Body Solder Stud									
21	Red	J156-ND	1.77	15.72	124.45	262.00	491.25	917.00	108-1722-101
	Black	J157-ND	1.77	15.72	124.45	262.00	491.25	917.00	108-1723-101
Banana Plugs – Insulated Round Body Solderless									
22	Red	J158-ND	1.35	12.02	95.19	200.40	375.75	701.40	108-1722-103
	Black	J159-ND	1.35	12.02	95.19	200.40	375.75	701.40	108-1723-103
Banana Plugs – Insulated Stacking Single Type									
23	White	J459-ND	1.47	13.06	103.36	217.60	408.00	761.60	108-1081-001
	Red	J460-ND	1.47	13.06	103.36	217.60	408.00	761.60	108-1082-001
	Black	J461-ND	1.47	13.06	103.36	217.60	408.00	761.60	108-1083-001

J100-KIT-ND ***Digi-Key® Plug & Jack Kit*** Contains 10 each of the plugs or jacks as denoted (*) on chart. Price includes compartment divided plastic box for easy storage and quick access **$76.95**

KEYSTONE ELECTRONICS CORP.

Standardized Phono-plugs

Fig. 1

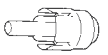


Fig. 2

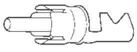


Fig. 3

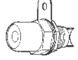


Fig. 4

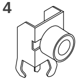


Fig.	Description	Digi-Key Part No.	Pricing 1	10	100
1	Conventional Type	561K-ND	.53	4.42	39.90
2	Strain Relief Lug Crimps to Wire Insulation	565K-ND	.72	5.94	50.90
3	Panel Mount Jack Hex Base Type	576K-ND	1.77	14.63	130.30
4	Snap-Fit 90° PC Phono Jack	901K-ND	1.12	9.22	83.10

HIROSE ELECTRIC CO.,LTD.

Miniature RF Connectors

FL (Finger-Lock) Series Coaxial Connectors:

Low-profile microminiature high-frequency connectors. The FL series connectors are low-profile microminiature coaxial connectors intended for high-density packaging of components on printed circuit boards. The FL series is ideal for high-density circuit board wiring in signal transmission applications at high frequencies up to 1 GHz.

Features: High-level matching: Maximum V.S.W.R is only 1.2 at frequencies up to 1 GHz. **Applications:** Typical applications include cellular telephones, radio communications equipment, electronic measuring instruments, CATV, control units, etc. **Material and Finish:** • Shell: Brass or phosphor bronze, silver plating • Center contact (male): Brass, gold plating • Center contact (female): Phosphor bronze, gold plating • Insulation: Polybutylene terephthalate (PBT), black. **Performance Characteristics:** • Characteristic impedance: 50Ω • Insulation resistance: 1000 MΩ or more (at 250 VDC) • Contact resistance: 10 mΩ or less for both center and outer conductors (at 1 ADC) • Withstanding voltage: 250 VAC (rms) for one minute • Coupling/removal force: 300 gf of more • Life of contacts: 50 times of use

S.FL2 Series Coaxial Connectors:

S.FL2 (Super FL Type 2 Coaxial Connector) Series is a surface mount, low profile, miniature coaxial connector intended for high density packaging. Compared to Hirose's FL series connectors, the S.FL2 Series offers a 50% reduced profile when assembled, achieving increased density of internal wiring for high frequency transmission applications.

Features: Highly flexible, offers high frequency performance below V.S.W.R 1.2 over 0-2000MHz range.

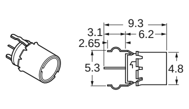
H.FL Series Coaxial Connectors:

The world's smallest low-profile coaxial connectors. The H.FL series of coaxial connectors consists of the world's smallest surface-mount low profile coaxial connectors. The H.FL connectors have a lower profile, with a mounted height of approximately 30% that of our S.FL2 connectors. They occupy 20% less board space, allowing higher density internal wiring.

Features: • High frequency response of V.S.W.R 1.3 or less from D.C. to 3000 MHz. **Material and Treatment:** • Shell: Phosphor bronze, silver plating • Insulator: PBT plastic (plug side), black; Liquid crystal polymer (receptacle side), black • Male center contact: Bronze, gold plating • Female center contact: Phosphor bronze, gold plating. **Performance Characteristics:** • Characteristic impedance: 50Ω • Insulation resistance: 500 MΩ or greater at DC 250V • Contact resistance: 20mΩ (center), 10mΩ (exterior) at DC 10mA • Dielectric strength: AC 300V (r.m.s), 1 minute • Contact service life: 50 times • Voltage standing wave ratio: 1.3 or less, DC to 3000MHz (target value)

Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
	FL Series					
1	Receptacle PC MT	H9142-ND	2.67	2.33	1.65	FL-R-PC(1)
2	Receptacle with Washer	H9143-ND	3.77	3.29	2.33	FL-R-PC(3)
3	Adapter Plug/SMA Plug	H9144-ND	42.95	40.81	38.35	HRMJ-FLJ
4	Adapter Recept/SMA Plug	H9145-ND	37.46	36.21	32.47	HRMJ-FLP-1
13	Removal Tool (FL Series)	H9146-ND	24.62	—	—	FL-LP-N
14	6" (15.24cm) FL/FL Series Cable Assembly	10212-ND	12.03	11.28	10.34	4189-06
14	12" (30.48cm) FL/FL Series Cable Assembly	10213-ND	12.54	11.76	10.78	4189-12
14	12" (30.48cm) FL/SMA Series Cable Assembly	10214-ND	23.36	21.90	20.08	4192-12
15	6" (15.24cm) FL Single End Cable Assembly	10215-ND	8.80	8.25	7.57	4191-06
	S.FL2 Series					
5	Receptacle Coaxial SMT	H9152-ND	2.85	2.38	1.76	S.FL2-R-SMT(01)
6	Receptacle Coaxial with Cap SMT	H9153-ND	2.83	2.35	1.74	S.FL2-R-SMT(C)(10)
7	Adapter Jack/SMA Plug	H9155-ND	31.35	30.31	27.17	HRMJ-S.FLP
8	Adapter Plug/SMA Jack	H9154-ND	25.26	24.42	21.90	HRMP-S.FLJ
13	Removal Tool (S.FL2 Series)	H9156-ND	37.46	—	—	S.FL-LP-N
14	6" (15.24cm) S.FL2/S.FL2 Cable Assembly	10220-ND	11.36	10.65	9.77	2189-06
14	12" (30.48cm) S.FL2/S.FL2 Cable Assembly	10221-ND	12.70	11.91	10.92	2189-12
14	12" (30.48cm) S.FL2/SMA Cable Assembly	10222-ND	32.32	30.30	27.78	2192-12
15	6" (15.24cm) S.FL2 Single End Cable Assembly	10223-ND	8.48	7.95	7.29	2191-6
	H.FL Series					
9	Receptacle Coaxial SMT	H9147-ND	1.98	1.65	1.22	H.FL-R-SMT(01)
10	Receptacle Coaxial w/ Cap SMT	H9148-ND	1.98	1.65	1.22	H.FL-R-SMT(C)(10)
11	Adapter Jack/SMA Plug	H9150-ND	20.90	20.20	18.11	HRMP-H.FLJ
12	Adapter Plug/SMA Jack	H9149-ND	28.47	27.53	24.68	HRMJ-H.FLP-3
13	Removal Tool (H.FL Series)	H9151-ND	39.55	—	—	H.FL-LP-N
14	6" (15.24cm) H.FL/H.FL Series Cable Assembly	10216-ND	10.62	9.96	9.13	1189-06
14	12" (30.48cm) H.FL/H.FL Series Cable Assembly	10217-ND	11.97	11.22	10.29	1189-12
14	12" (30.48cm) H.FL/SMA Cable Assembly	10218-ND	31.01	29.07	26.65	1192-12
15	6" (15.24cm) H.FL Single End Cable Assembly	10219-ND	7.87	7.38	6.77	1191-06

Fig. 1



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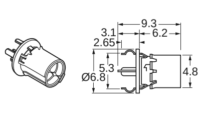


Fig. 3

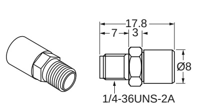
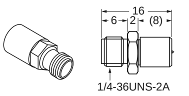


Fig. 4



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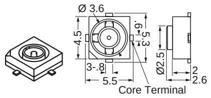

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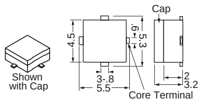
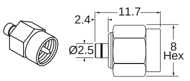


Fig. 7



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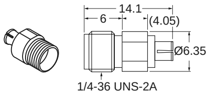
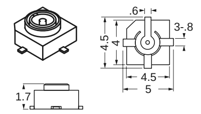


Fig. 9



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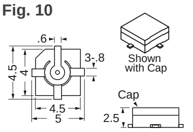

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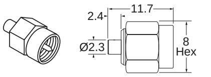

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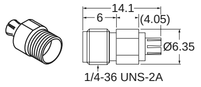

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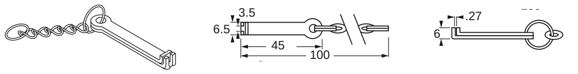


Fig. 14

Double End

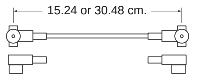
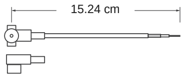


Fig. 15

Single End



Coaxial Switching Connector

MS-145 Series

Designed as interface coaxial switches, and other applications requiring redirecting of signals when mating with corresponding plugs. The mating action redirects the signals from the receptacle side to the plug side.

Features:

- **Frequency Range:** From DC to 2.5GHz and with GSM, PCS, cdma-One, W-CDMA, etc.
- **Low Profile:** Low protrusion of only 6mm above the mounting surface (receptacle).
- **Durability:** High durability (mating/unmating) of 10,000 cycles. Self alignment of mating parts. Inducement to floating is +/-0.5mm.
- Engages by pushing up to the 5.06mm diameter shoulder (P surface) of the MS-145 (MS-145-C(LP)-1 engages up to a position (Q point) of 1.3mm from the 5.06mm diameter shoulder of the MS-145).

Applications:

- Mobile phone antenna switching • Checks of microwave boards, etc.

Fig.	Description	Effect. Engage. Length mm	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
1	Interface Coaxial Switch Receptacle	—	H2803CT-ND	1.98	1.53	1.22	MS-145(06)
1	Interface Coaxial Switch Receptacle	—	H2803TR-ND	.82/1,000			MS-145(06)
2	Plug	0.82	H2804-ND*	15.87	14.82	13.76	MS-145-C(LP)-1
3	Plug	1.32	H2805-ND*	22.94	21.41	19.88	MS-145-C(LP)-A
4	Plug	1.32	H2806-ND*	15.66	14.62	13.58	MS-145-C(LP)-MI
5	SMA Adaptor to Male	1.32	H2807-ND	19.86	18.54	17.22	MS-145-HRMP-A
6	SMA Adaptor to Female, Panel mount	0.82	H2808-ND	27.65	25.81	23.96	MS-145-HRMJ
7	SMA Adaptor to Female, Straight	1.32	H2809-ND	19.86	18.54	17.22	MS-145-HRMJ-A-D

* Applicable cable for plugs: 1.5D-HQEW or 1.5D-QEW (manufactured by Fujikura Ltd.).

Fig. 1

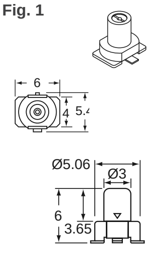


Fig. 2

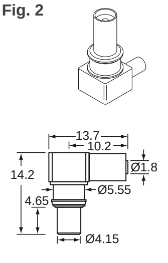


Fig. 3

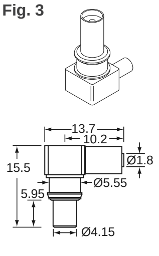


Fig. 4

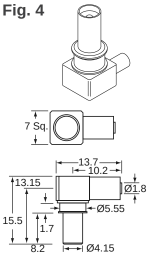


Fig. 5

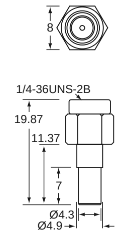


Fig. 6

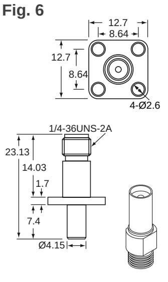
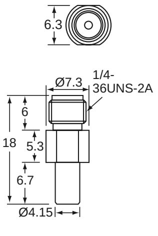
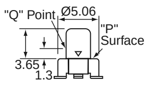


Fig. 7

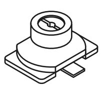


Plug Applications



Coaxial Switching Connector

MS-147 Series



The switching function is accomplished by mating with the corresponding plug. The transmission is redirected from normal direction to the plug assembly. The surface mounted receptacle protrudes above the board 3.9mm. The MS147 has an insertion loss of 0.15dB. **Characteristics:** Impedance of 50 Ohm, isolation of 25dB min (DC-2.0 GHz) and 20dB (2.0GHz to 2.5GHz). Self-aligning within 0.5mm and with a guaranteed durability of 12,000 mating/unmating cycles. **Applications:** Most mobile phones and circuit testing applications.

Description	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
Interface Coaxial Switching Recept.	H2800CT-ND	1.95	1.50	1.20	MS-147(06)
Interface Coaxial Switching Recept.	H2800TR-ND	1197.00/1,500			MS-147(06)
Mating Adapter	H2801-ND	20.18	18.83	17.49	MS-147-HRMJ-1
Mating Cable Assembly	H2802-ND	19.67	18.36	17.05	MS-147-C(LP)-1

Switchcraft® EN3 Weathertight Connectors

Fig. 1

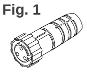
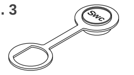
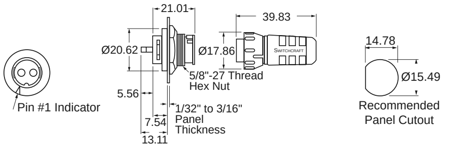


Fig. 2

Fig. 3



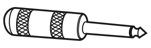


FEATURES AND BENEFITS: • Housing rated UL 94V-O against flammability • Contact terminal: Solder Cup Contacts • Panel Connector Shell features a positioning keyway to prevent misalignments • No Grommets. Cable clamp assembly features living hinges, which snap easily onto and holds the cable • Choose cord plug or panel mount • 2-8 pins • Exceeds Coast Guard specifications for water tightness (CFR 46 Part 110.20) • Optional cap covers the panel housing assembly when not in use **APPLICATIONS:** • Process control • Marine electronics • Medical instrumentation • Geothermal instrumentation • Communication • Transportation • General industrial electronics **SPECIFICATIONS:** • Mechanical: Shock: Mil-Std. 202 method 213B, condition K • Vibration: Mil-Std 202 Method 201 • Life 600 insertion/withdrawal cycles (min.) **Electrical:** Voltage Rating (sea level): • Tested at 600 VRMS • Insulation Resistance: 100 Megohms (min.) at 77°F (25°C) • Contact Resistance: 3.0 Millohms (max.) • Current Rating: 7.5 Amps (#20 contact) **Environmental:** • Temperature Limits: -40°C to +65°C (non-operating) • Moisture Resistance: Mil-Std 202 Method 106F • Insulation Resistance: Mil-Std 202 Method 302, condition B • Thermal Shock: Mil-Std 202 Method 107G • Salt Spray: Mil-Std 202 Method 101D, condition B • Water Tightness Test: U.S. Coast Guard CFR 46 Part 110.20

Fig.	No. of Postitions	Description	Digi-Key Part No.	Price Each 1	10	25	Switchcraft Part No.
Plugs							
1	3	Female Male	SC1156-ND SC1157-ND	4.88 3.52	3.66 2.64	3.36 2.42	EN3C3F EN3C3M
	4	Female Male	SC1158-ND SC1159-ND	5.84 4.04	4.38 3.03	4.02 2.78	EN3C4F EN3C4M
	5	Female Male	SC1160-ND SC1161-ND	6.80 4.64	5.10 3.48	4.68 3.19	EN3C5F EN3C5M
	6	Female Male	SC1162-ND SC1163-ND	7.76 5.16	5.82 3.87	5.34 3.55	EN3C6F EN3C6M
	8	Female	SC1164-ND	9.72	7.29	6.68	EN3C8F
Receptacles							
2	3	Female Male	SC1165-ND SC1166-ND	4.32 3.12	3.24 2.34	2.97 2.15	EN3P3F EN3P3M
	4	Female Male	SC1167-ND SC1168-ND	5.24 3.64	3.93 2.73	3.60 2.50	EN3P4F EN3P4M
	5	Female Male	SC1169-ND SC1170-ND	6.16 4.20	4.62 3.15	4.24 2.89	EN3P5F EN3P5M
	6	Female Male	SC1171-ND SC1172-ND	7.12 4.76	5.34 3.57	4.90 3.27	EN3P6F EN3P6M
	8	Male	SC1173-ND	5.84	4.38	4.02	EN3P8M
3	—	Dust Cap	SC1174-ND	.92	.69	.63	EN3CAP

Switchcraft® 1/4” (6.35mm) Plugs, Jacks and Audio Adapters

Fig. 1



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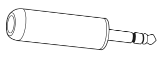

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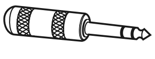
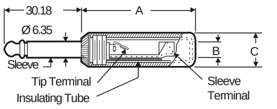


Dimensions for Figures 1-3



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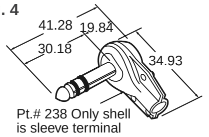


Fig. 5

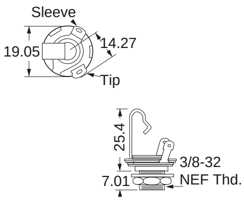
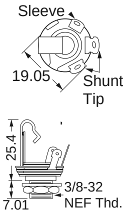


Fig. 6



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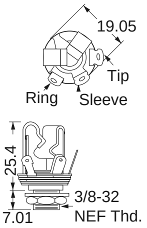

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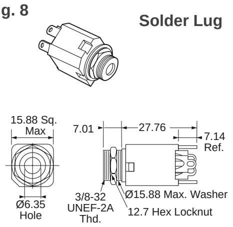


Fig. 9

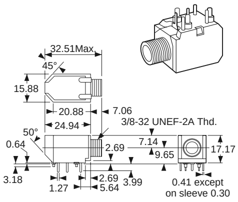


Fig. 10

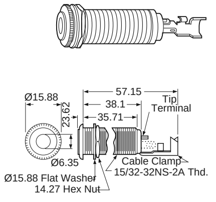


Fig. 11

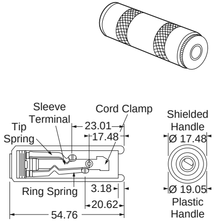
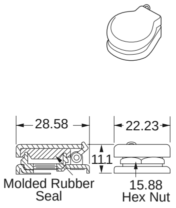


Fig. 12



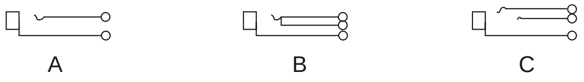


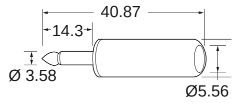
Fig.	Description	Mates With	Dimensions (mm) A	B	C	Digi-Key Part No.	Pricing 1	10	25	Switchcraft Part No.
1/4” (6.35mm) “Littel Plugs” Two Conductor Phone Plugs										
1	Shielded w/ Solder Lug & Cable Clamp	11	42.88	7.54	12.70	SC1075-ND	3.96	29.70	68.00	280
1/4” (6.35mm) “Littel Plugs” Three Conductor Phone Plugs										
2	Black w/ Solder Lug & Cable Clamp	12B	42.88	7.54	12.70	SC1081-ND	4.52	33.90	77.75	267
3	Shielded w/ Solder Lug & Cable Clamp	12B	42.88	7.54	12.70	SC1084-ND	5.36	40.20	92.25	297
1/4” (6.35mm) Right Angle Flat, Two Conductor Type Phone Plugs										
4	Shielded w/ Solder Lugs	11	—	—	—	SC1068-ND	4.40	33.00	75.75	228
1/4” (6.35mm) Right Angle Flat, Three Conductor Type Phone Plugs										
4	Shielded w/ Solder Lugs	12B	—	—	—	SC1069-ND	5.68	42.60	97.75	238

Fig.	Sche-matic	Description	Digi-Key Part No.	Pricing 1	10	25	Switchcraft Part No.
1/4” (6.35mm) “Littel Jax,” Two Conductor Phone Jacks							
5	A	Phone Jack 1/4” (6.35mm), Open Circuit	SC1085-ND	2.00	15.00	34.50	11
6	B	Phone Jack 1/4” (6.35mm) Tip Shunt	SC1089-ND	2.00	15.00	34.50	12A
1/4” (6.35mm) “Littel Jax,” Three Conductor Phone Jacks							
7	C	Phone Jack Double Open Circuit	SC1094-ND	2.08	15.60	35.75	12B
1/4” (6.35mm) Two Conductor Jacks with Solder Lug Terminals							
8	A	Phone Jack Enclosed Insulated Bushing	SC1103-ND	2.24	16.80	38.50	N111
8	B	Phone Jack Enclosed Single Closed Circuit	SC1104-ND	1.92	14.40	33.00	112A
1/4” (6.35mm) Two Conductor Jacks with PC Terminals							
9	A	Phone Jack Rt. Angle Single Open Circuit	SC1121-ND	1.76	13.20	30.25	RN111PC
9	B	Phone Jack Rt. Angle Single Closed Circuit	SC1122-ND	2.00	15.00	34.50	RN112APC
1/4” (6.35mm) Three Conductor Jacks with Solder Lug Terminals							
8	C	Phone Jack Enclosed Double Open Circuit	SC1107-ND	1.96	14.70	33.75	112B
1/4” (6.35mm) Three Conductor Jacks with PC Terminals							
9	C	Phone Jack Rt. Angle Double Open Circuit	SC1123-ND	2.16	16.20	37.25	RN112BPC
1/4” (6.35mm) “TP-Jax” Thick-panel Phone Jacks							
10	A	2 Cond, Open Circuit	SC1034-ND	6.32	47.40	108.75	151
10	C	3 Cond, Open Circuit	SC1035-ND	6.96	52.20	119.50	152B
“Extension-Jax” 1/4” (6.35mm) Cable Extension Jacks							
11	—	In Line 3 Cond Shielded Handle Screw Terminals	SC1042-ND	8.44	63.30	145.00	1230
Jack Cover							
12	—	Jack Cover Black w/ Hardware	SC1101-ND	7.44	55.80	128.00	515

Switchcraft®

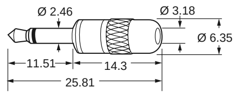
Phone, Power & Phono Plugs and Jacks

Fig. 1



3.5mm Plug

Fig. 2



2.5mm Plug

Fig. 3

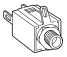
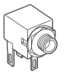


Fig. 4



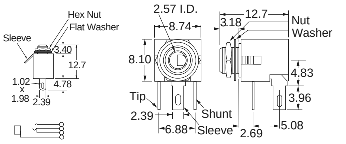


Fig. 5

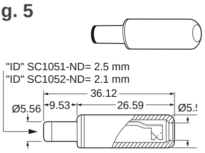


Fig. 6

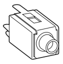
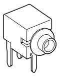
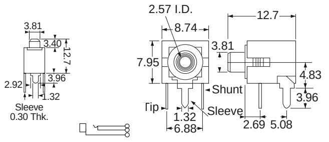


Fig. 7





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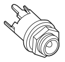
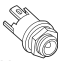


PCB Term.

Fig. 9



Solder Lug Term.

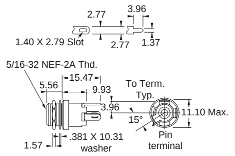


Fig. 10

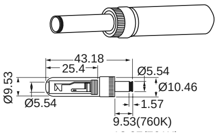


Fig. 11

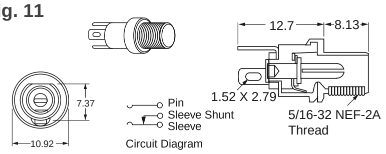


Fig. 12

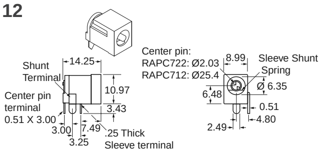


Fig. 13

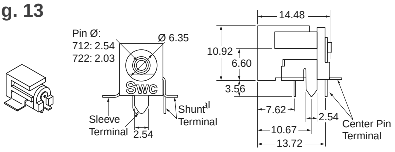


Fig. 14

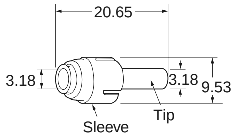


Fig. 15

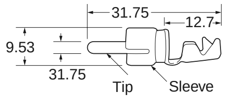


Fig. 16

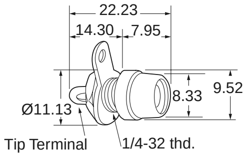


Fig. 17

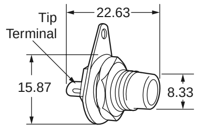


Fig. 18

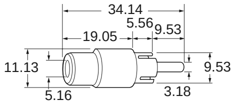


Fig. 19

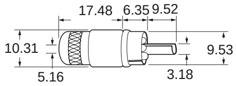


Fig. 20

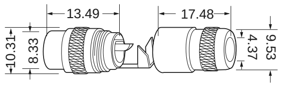


Fig.	Mates With	Description	Digi-Key Part No.	Price Each 1	10	25	Switchcraft Part No.
		"Tini Plug" Miniature Phone Plugs					
1	41	.141" (3.58mm) Black w/ Screw Terminals	SC1053-ND	3.12	2.34	2.15	740
1	41	.141" (3.58mm) Black w/ Solder Lug & Cable Clamp	SC1055-ND	3.04	2.28	2.09	750
1	41	.141" (3.58mm) Red w/ Solder Lug & Cable Clamp	SC1056-ND	3.04	2.28	2.09	755
1	41	.141" (3.58mm) Shielded w/ Solder Lug & Cable Clamp	SC1057-ND	4.12	3.09	2.83	780
		"Micro-plug" Subminiature Phone Plugs					
2	Fig. 3,4,6,7	.097" (2.46mm) 2 Cond Black w/ Solder Lugs	SC1058-ND	3.08	2.31	2.12	850
2	Fig. 3,4,6,7	.097" (2.46mm) 2 Cond Red w/ Solder Lugs	SC1059-ND	3.08	2.31	2.12	855
2	Fig. 3,4,6,7	.097" (2.46mm) 2 Cond Natural w/ Solder Lugs	SC1060-ND	3.08	2.31	2.12	880
		"Micro-d Jax" Subminiature Enclosed Phone Jack					
3	850	Subminiature 2 Cond Closed Circuit Solder Lug	SC1043-ND	2.04	1.53	1.40	MDSL2A
6	850	Subminiature 2 Cond Closed Circuit PCB	SC1044-ND	2.04	1.53	1.40	MDPC2A
4	850	Subminiature Rt. Angle 2 Cond Solder Lug	SC1045-ND	2.28	1.71	1.57	MDSL2ARA
7	850	Subminiature Rt. Angle PCB	SC1046-ND	2.28	1.71	1.57	MDPC2ARA
		Power Plugs					
5	712A	Power Plug .1" Black Handle (2.5 mm Dia.)	SC1051-ND	2.92	2.19	2.01	760
5	722A	Power Plug .08" Black Handle (2.1 mm Dia.)	SC1052-ND	2.92	2.19	2.01	S760
10	L712A	Conn Power Plug Locking 2.5 mm Blk	SC1148-ND	4.24	3.18	2.92	761K
10	712A	Conn Power Plug Locking 2.5 mm Blk	SC1149-ND	4.24	3.18	2.92	760K
		Power Jacks					
8	760K	Panel Mount Jack .1" Dia. PC Terminals (2.5 mm Dia.)	SC1050-ND	2.92	2.19	2.01	PC712A
8	S760K	Panel Mount Jack .08" Dia. (2.1mm Dia.)	SC1047-ND	2.92	2.19	2.01	PC722A
9	760	Panel Mount Jack .1" Dia., Solder Lug (2.5 mm Dia.)	SC1048-ND	2.92	2.19	2.01	712A
9	S760	Panel Mount Jack .08" Dia., Solder Lug (2.1 mm Dia.)	SC1049-ND	2.92	2.19	2.01	722A
11	761K	Conn Power Jack 2.5 mm Panel Mount Long	SC1150-ND	4.00	3.00	2.75	L712A
11	S761K	Conn Power Jack 2.1 mm Panel Mount Long	SC1151-ND	4.00	3.00	2.75	L722A
12	760	Conn Power Jack Right Angle PCB 2.5 mm	SC1152-ND	1.08	.81	.74	RAPC712
12	S760	Conn Power Jack Right Angle PCB 2.1 mm	SC1153-ND	1.08	.81	.74	RAPC722
13	760	Conn Power Jack Hybrid SMT 2.5 mm	SC1154-ND	1.20	.90	.83	RASH712
13	S760	Conn Power Jack Hybrid SMT 2.1 mm	SC1155-ND	1.20	.90	.83	RASH722

Fig.	Description	Digi-Key Part No.	Price Each 1	10	25	100	Switchcraft Part No.
	Phono Jacks and Plugs						
14	Phono Plug 2 Cond	SC1131-ND	.52	.39	.36	.33	3501M
15	Phono Plug 2 Cond. w/ Cable Clamp	SC1132-ND	1.00	.75	.69	.63	3501MC
16	Phono Jack 2 Cond. Panel Mount	SC1133-ND	1.40	1.05	.96	.88	3501FP
—	Insulated Washer Flat For SC1133-ND	SC1144-ND	.34	.25	.23	.21	S-2207
—	Insulated Washer Extruded For SC1133-ND	SC1145-ND	.38	.28	.26	.24	S-1564
17	Phono Jack 2 Cond. Panel Mount w/ Hardware	SC1134-ND	1.76	1.32	1.21	1.10	3501FR
—	Insulated Washer Flat For SC1134-ND	SC1146-ND	.17	.13	.12	.11	S-1028
—	Insulated Washer Extruded For SC1134-ND	SC1147-ND	.38	.28	.26	.24	S-1029
18	Phono Plug 2 Cond, Red Cable Clamp	SC1135-ND	1.48	1.11	1.02	.93	3558-1
18	Phono Plug 2 Cond, Black Cable Clamp	SC1136-ND	1.48	1.11	1.02	.93	3558-2
19	Phono Plug 2 Cond, Shielded w/ Cable Clamp	SC1138-ND	1.96	1.47	1.35	1.23	3502
20	Phono Extension Jack 2 Cond, Shielded w/ Heavy Duty Clamp	SC1139-ND	2.76	2.07	1.90	1.73	3503

Audio Connectors and Couplers

Fig. 1

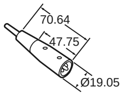


Fig. 2

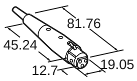


Fig. 3

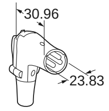


Fig. 4

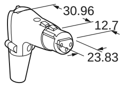


Fig. 5

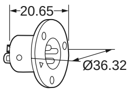


Fig. 6

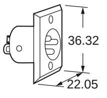


Fig. 7

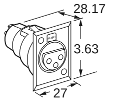


Fig.	Description	Digi-Key Part No.	Price Each 1	10	25	Mfg. Part No.
1	Plug Male Straight 3 pos Satin Nickel Finish	SC1003-ND	4.96	3.72	3.41	A3M
1	Plug Male Straight 3 pos Black w/Silver Contacts	SC1004-ND†	4.96	3.72	3.41	A3MB
1	Plug Male Straight 4 pos Satin Nickel Finish	SC1014-ND	5.72	4.29	3.93	A4M
1	Plug Male Straight 5 pos Satin Nickel Finish	SC1022-ND	10.08	7.56	6.93	A5M
2	Plug Female Straight 3 pos Satin Nickel Finish	SC1001-ND	5.60	4.20	3.85	A3F
2	Plug Female Straight 3 pos Black w/Silver Contacts	SC1002-ND†	5.60	4.20	3.85	A3FB
2	Plug Female Straight 4 pos Satin Nickel Finish	SC1013-ND	7.80	5.85	5.36	A4F
2	Plug Female Straight 5 pos Satin Nickel Finish	SC1021-ND	12.72	9.54	8.75	A5F
3	Plug Male Rt. Angle 3 pos Satin Nickel Finish	SC1012-ND	14.68	11.01	10.09	R3M
4	Plug Female Rt. Angle 3 pos Satin Nickel Finish	SC1011-ND	15.92	11.94	10.95	R3F
5	Receptacle Male Panel Mount 3 pos Satin Nickel Finish	SC1008-ND	6.00	4.50	4.13	C3M
6	Receptacle Male Narrow Panel Mount 3 pos Satin Nickel Finish	SC1010-ND	4.68	3.51	3.22	D3M
6	Receptacle Male Narrow Panel Mount 4 pos Satin Nickel Finish	SC1020-ND	5.56	4.17	3.82	D4M
6	Receptacle Male Narrow Panel Mount 5 pos Satin Nickel Finish	SC1028-ND	9.84	7.38	6.77	D5M
7	Receptacle Female Narrow Panel Mount 3 pos Satin Nickel Finish	SC1009-ND	6.32	4.74	4.35	D3F
7	Receptacle Female Narrow Panel Mount 4 pos Satin Nickel Finish	SC1019-ND	8.96	6.72	6.16	D4F
7	Receptacle Female Narrow Panel Mount 5 pos Satin Nickel Finish	SC1027-ND	14.48	10.86	9.96	D5F

† "Black Velvet" (Electrically Conductive Chrome Plate)

CUI STACK

Audio and Power Connectors

General Specifications:
• **Contact Resistance:** 10 - 20 mΩ • **Insulation Resistance:** 50 MΩ min.: 500 VDC • **Voltage Withstand:** 250 VAC, 1 minute • **Life:** 5,000 cycles, most models • **Insertion/Extraction Force:** 0.8 - 2.0 Kgs

Fig. 1 – Female Plug, 3.5 mm outside

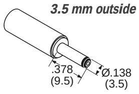


Fig. 2 – Female Plug, 5.5 mm outside

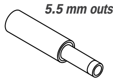


Fig. 3 – Male Power Plug

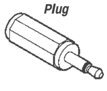


Fig. 4 – Male Stereo Plug

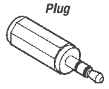


Fig. 5 – Right Angle Power Jack

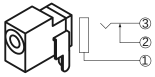


Fig. 6 – DC Power Jack

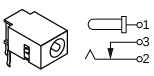


Fig. 7– Male Power Jack, Closed

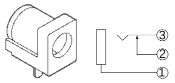


Fig. 8 – Male Power Jack, PCB (with kinked PCB pins)

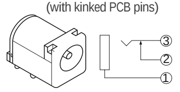


Fig. 9– DC Power Jack (with 1 mm PCB pins)

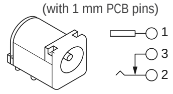


Fig. 10 – SMT Power Jack

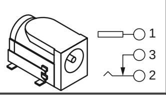


Fig. 11 – Male Power Jack, Open

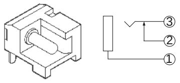


Fig. 12 – Panel Mount Jack

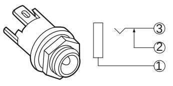


Fig. 13 – SMT Power Jack

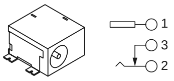


Fig. 14 – Right Angle Panel Mount Jack, Mono

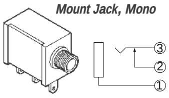


Fig. 15 – Straight Panel Mount Jack, Mono

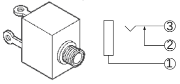


Fig. 16 – PCB Panel Mount Jack, Mono

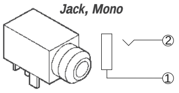


Fig. 17 – Right Angle Panel Mount Jack, Mono

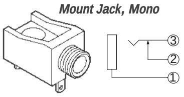


Fig. 18 – Audio Jack, Mono

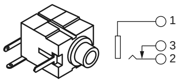


Fig. 19 – Audio Jack, Mono

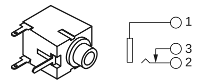


Fig. 20 – Audio Jack, Mono

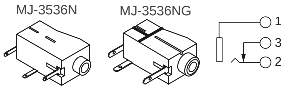


Fig. 21 – Audio Jack, Mono

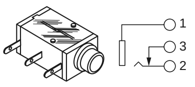


Fig. 22 – Audio Jack, Stereo

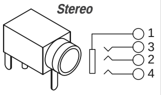


Fig. 23 – Rt Angle PCB Mount Jack, Stereo (CP-3504-ND); ***Rt Angle PCB Stereo Jack, Stereo*** (CP-3505-ND)

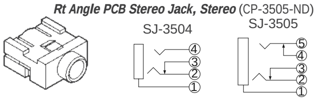


Fig. 24 – Audio Jack, Stereo

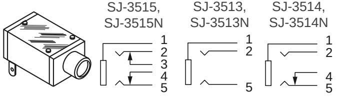


Fig. 25 – Audio Jack, Stereo

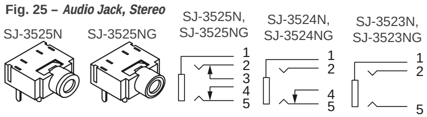


Fig. 26 – Audio Jack, Stereo

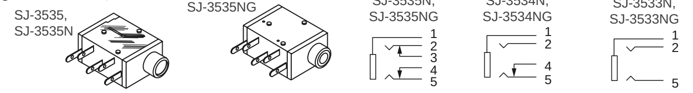


Fig. 27 – Audio Jack, Stereo

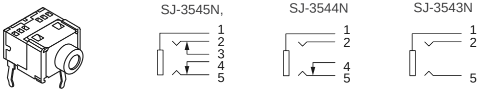


Fig. 28 – Audio Jack, Stereo

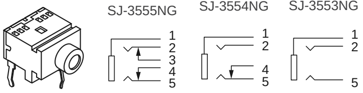


Fig. 29 – SMT Audio Jack, Mono

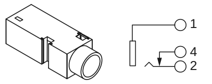


Fig. 30 – SMT Audio Jack, Stereo

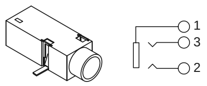


Fig. 31 – SMT Audio Jack, Stereo

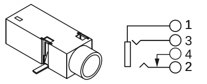


Fig. 32 – SMTt Audio Jack, Mono

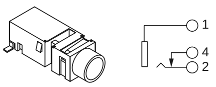


Fig. 33 – SMT Audio Jack, Stereo

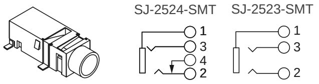


Fig. 34 – SMT Audio Jack, Mono

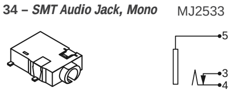


Fig. 35 – SMT Audio Jack, Stereo

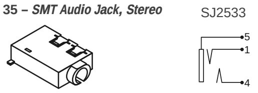


Fig. 36– SMT Audio Jack,Stereo

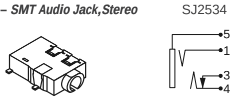


Fig. 37 – SMT Audio Jack, Stereo

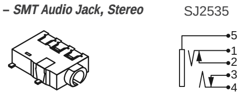


Fig. 38 – SMT Mono Audio Jack

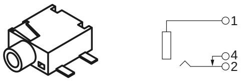


Fig. 39– SMT Stereo Jack

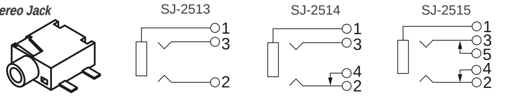


Fig.	Pin Dia.	Digi-Key Part No.	Price Each 1	10	100	CUI Stack Part No.
1	1.3 mm	CP-002D-ND	.78	.68	.53	PP-002D
2	2.1 mm	CP-004A-ND	.65	.56	.43	PP-002A
	2.5 mm	CP-004B-ND	.65	.56	.43	PP-002B
3	3.5 mm	CP-3501-ND	.76	.66	.51	MP-3501
	2.5 mm	CP-2501-ND	.76	.66	.51	MP-2501
4	3.5 mm	CP-3502-ND	.87	.76	.59	SP-3501
5	1.3 mm	CP-2519-ND	.45	.39	.30	PJ-007
6	1.65 mm	CP-016-ND	.54	.47	.36	PJ-016
7	2.0 mm	CP-002A-ND	.38	.33	.26	PJ-002A
	2.4 mm	CP-002B-ND	.38	.33	.26	PJ-002B
8	2.0 mm	CP-202A-ND	.38	.33	.26	PJ-202A
	2.5 mm	CP-202B-ND	.38	.33	.26	PJ-202B
9	2.0 mm	CP-102A-ND	.38	.33	.26	PJ-102A
	2.5 mm	CP-102B-ND	.38	.33	.26	PJ-102B
10	2.0 mm	CP-002APJ-ND	.73	.64	.49	PJ-002A-SMT-1
	2.5 mm	CP-002BPJ-ND	.73	.64	.49	PJ-002B-SMT-1
11	2.0 mm	CP-003A-ND	.34	.30	.23	PJ-003A
	2.4 mm	CP-003B-ND	.34	.30	.23	PJ-003B
12	2.1 mm	CP-5-ND*	1.83	1.59	1.22	PJ-005A
	2.5 mm	CP-6-ND*	1.83	1.59	1.22	PJ-005B
13	1.0 mm	CP-014CPJ-ND	.72	.63	.48	PJ-014C-SMT-1
	1.3 mm	CP-014DPJ-ND	.72	.63	.48	PJ-014D-SMT-1
14	2.5 mm	CP-2502-ND*	.99	.86	.66	MJ-2502
15	2.5 mm	CP-2505-ND*	.93	.81	.62	MJ-2505
16	2.5 mm	CP-2503-ND†	.51	.44	.34	MJ-2503A
17	3.5 mm	CP-3536-ND*	.39	.35	.27	MJ-3536
18	2.5 mm	CP-2508-ND*	.26	.23	.18	MJ-2508
	2.5 mm	CP-2508N-ND†	.26	.23	.18	MJ-2508N
19	2.5 mm	CP-2506-ND*	.37	.33	.25	MJ-2506
	2.5 mm	CP-2506N-ND†	.37	.33	.25	MJ-2506N
20	3.5 mm	CP-3536N-ND†	.39	.35	.27	MJ-3536N
	3.5 mm	CP-3536NG-ND‡	.39	.35	.27	MJ-3536NG
21	3.5 mm	CP-3502MJ-ND*	.66	.58	.45	MJ-3502
	3.5 mm	CP-3502N-ND†	.62	.54	.41	MJ-3502N
22	2.5 mm	CP-2503A-ND†	.65	.56	.43	SJ-2503A
23	3.5 mm	CP-3504-ND†	2.06	1.79	1.38	SJ-3504
	3.5 mm	CP-3505-ND†	2.10	1.83	1.41	SJ-3505
24	3.5 mm	CP-3515-ND*	.84	.74	.57	SJ-3515
	3.5 mm	CP-3514-ND*	.84	.74	.57	SJ-3514
	3.5 mm	CP-3513-ND*	.80	.70	.54	SJ-3513
	3.5 mm	CP-3515N-ND†	.82	.71	.55	SJ-3515N
	3.5 mm	CP-3514N-ND†	.82	.71	.55	SJ-3514N
	3.5 mm	CP-3513N-ND†	.77	.67	.52	SJ-3513N
25	3.5 mm	CP-3525N-ND†	.74	.64	.50	SJ-3525N
	3.5 mm	CP-3524N-ND†	.71	.62	.47	SJ-3524N
	3.5 mm	CP-3523N-ND†	.62	.54	.41	SJ-3523N
	3.5 mm	CP-3525NG-ND‡	.80	.70	.54	SJ-3525NG
	3.5 mm	CP-3524NG-ND‡	.78	.68	.53	SJ-3524NG
	3.5 mm	CP-3523NG-ND‡	.74	.64	.50	SJ-3523NG
26	3.5 mm	CP-3535-ND*	1.04	.91	.70	SJ-3535
	3.5 mm	CP-3534-ND*	1.01	.88	.68	SJ-3534
	3.5 mm	CP-3533-ND*	.98	.85	.66	SJ-3533
	3.5 mm	CP-3535N-ND†	1.01	.88	.68	SJ-3535N
	3.5 mm	CP-3534N-ND†	.98	.85	.66	SJ-3534N
	3.5 mm	CP-3533N-ND†	.95	.83	.64	SJ-3533N
	3.5 mm	CP-3535NG-ND‡	1.01	.88	.68	SJ-3535NG
	3.5 mm	CP-3534NG-ND‡	.98	.85	.66	SJ-3534NG
	3.5 mm	CP-3533NG-ND‡	.95	.83	.64	SJ-3533NG
27	3.5 mm	CP-3545-ND*	1.03	.90	.69	SJ-3545
	3.5 mm	CP-3544-ND*	1.00	.87	.67	SJ-3544
	3.5 mm	CP-3543-ND*	.95	.83	.64	SJ-3543
	3.5 mm	CP-3545N-ND†	1.00	.87	.67	SJ-3545N
	3.5 mm	CP-3544N-ND†	.97	.84	.65	SJ-3544N
	3.5 mm	CP-3543N-ND†	.97	.84	.65	SJ-3543N
28	3.5 mm	CP-3555NG-ND‡	.97	.84	.65	SJ-3555NG
	3.5 mm	CP-3554NG-ND‡	.94	.82	.63	SJ-3554NG
	3.5 mm	CP-3553NG-ND‡	.89	.78	.60	SJ-3553NG
29	3.5 mm	CP-3523MJ-ND	.76	.66	.51	MJ-3523-SMT-1
30	3.5 mm	CP-3523SJ-ND	.76	.66	.51	SJ-3523-SMT-1
31	3.5 mm	CP-3524SJ-ND	.79	.69	.53	SJ-3524-SMT-1
32	2.5 mm	CP-2523MJ-ND	.75	.65	.50	MJ-2523-SMT-1
33	2.5 mm	CP-2523SJ-ND	.75	.65	.50	SJ-2523-SMT-1
	2.5 mm	CP-2524SJ-ND	.79	.69	.53	SJ-2524-SMT-1
34	2.5 mm	CP-2533MJ-ND	.99	.86	.66	MJ-2533-SMT-1
35	2.5 mm	CP-2533SJ-ND	.99	.86	.66	SJ-2533-SMT-1
36	2.5 mm	CP-2534SJ-ND	1.05	.91	.70	SJ-2534-SMT-1
37	2.5 mm	CP-2535SJ-ND	1.08	.94	.72	SJ-2535-SMT-1
38	2.5 mm	CP-2512-ND	2.07	1.80	1.38	MJ-2510-SMT-TR
39	2.5 mm	CP-2514-ND	2.10	1.82	1.40	SJ-2513-SMT-TR
	2.5 mm	CP-2516-ND	2.16	1.88	1.44	SJ-2514-SMT-TR
	2.5 mm	CP-2518-ND	2.19	1.90	1.46	SJ-2515-SMT-TR

* Threaded with nut † Non-threaded ‡ Non-threaded and Isolated Ground

Fig.	Pin Dia.	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing	CUI Stack Part No.
10	2.0 mm	CP-002APJTR-ND	250	100.88	PJ-002A-SMT
	2.5 mm	CP-002BPJTR-ND	250	100.88	PJ-002B-SMT
13	1.0 mm	CP-014CPJTR-ND	800	332.40	PJ-014C-SMT
	1.3 mm	CP-014DPJTR-ND	800	332.40	PJ-014D-SMT
29	3.5 mm	CP-3523MJTR-ND	1,000	433.50	MJ-3523-SMT
30	3.5 mm	CP-3523SJTR-ND	1,000	433.50	SJ-3523-SMT
31	3.5 mm	CP-3524SJTR-ND	1,000	448.50	SJ-3524-SMT
32	2.5 mm	CP-2523MJTR-ND	1,000	429.00	MJ-2523-SMT
33	2.5 mm	CP-2523SJTR-ND	1,000	429.00	SJ-2523-SMT
	2.5 mm	CP-2524SJTR-ND	1,000	448.50	SJ-2524-SMT
34	2.5 mm	CP-2533MJTR-ND	1,000	495.00	MJ-2533-SMT
35	2.5 mm	CP-2533SJTR-ND	1,000	495.00	SJ-2533-SMT
36	2.5 mm	CP-2534SJTR-ND	1,000	525.00	SJ-2534-SMT
37	2.5 mm	CP-2535SJTR-ND	1,000	540.00	SJ-2535-SMT
38	2.5 mm	CP-2512TR-ND	800	828.00	MJ-2510-SMT
39	2.5 mm	CP-2514TR-ND	1,000	1050.00	SJ-2513-SMT
	2.5 mm	CP-2516TR-ND	800	864.00	SJ-2514-SMT
	2.5 mm	CP-2518TR-ND	1,000	1095.00	SJ-2515-SMT

EDAC INC

Waterproof Connector Assemblies

Colored wires to be installed in the following order:

1. Black
2. White
3. Red
4. Green
5. Brown
6. Blue
7. Orange
8. Yellow
9. Violet

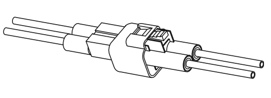


Fig. 1

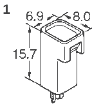


Fig. 2

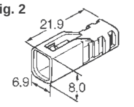


Fig. 3

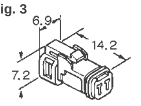


Fig. 4

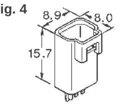


Fig. 5

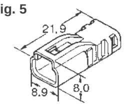


Fig. 6

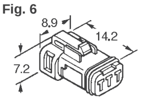


Fig. 7

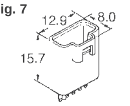


Fig. 8

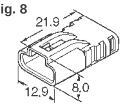


Fig. 9

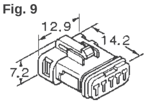


Fig. 10

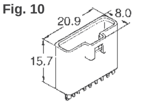


Fig. 11

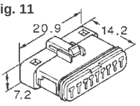


Fig. 12

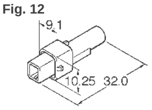


Fig. 13

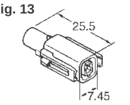


Fig. 14

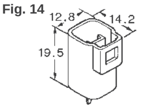


Fig. 15

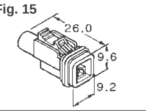


Fig. 16

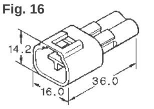


Fig. 17

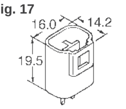


Fig. 18

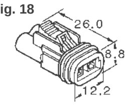


Fig. 19

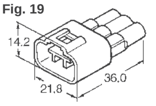


Fig. 20

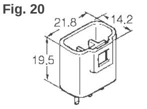
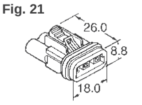


Fig. 21



Features: Major applications include baths, toilets, hot-water suppliers, washing machines, water purifiers, outdoor motors, frozen food showcases, and construction devices.

566 (WP20/22) Series, 22 AWG : FEATURES: As being a fully waterproof small-sized connector of 2 mm pitch. **SPECIFICATIONS: Pitch:** 2.0 mm. **Rated Voltage:** 250V. **Rated Current:** Max 2A. **Withstand Voltage:** AC1000V, 1 Minute. **Contact Resistance:** 10mΩ max. **Insulation Resistance:** 1000MΩ min./DC500V. **Temperature Range:** -40°C~+105°C. **Water proof grade:** JIS C0920 (grade 8) Water proof type by JIS C0920. **Applicable Board Thickness:** 1.6 mm. **Housing - Pin Block:** PBT (UL94V-0). **Terminal:** PB/Tin plating. **Wire - Housing Seal:** Silicone Rubber.

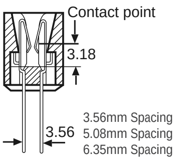
568 (CL07C) Series, 20 AWG FEATURES: • As a waterproof connector of single-pole specification, housing lock can assure tight closing without being easily disengaged. The lock is small in size and compact. • Outstanding in mechanical/electrical characteristics, etc. because of the highly stable contact part. • Conforming to Electric Apparatus Control Regulations. **SPECIFICATIONS: Rated Voltage:** 300V. **Rated Current:** Max 5A. **Withstand Voltage:** AC1700V, 1 Minute. **Contact Resistance:** 10mΩ max. **Insulation Resistance:** 1000MΩ min./DC500V. **Temperature Range:** -40°C~+105°C. **Water proof grade:** JIS C0920 (grade 4) Water proof type by JIS C0920. **Housing - Pin Block:** PBT (UL94V-0). **Terminal:** Brass/Tin plating. **Wire - Housing Seal:** Silicone Rubber.

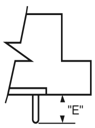
570 (CL07D/E) Series, 16 AWG FEATURES: • Fully waterproof connector of 5.8 mm pitch, being applicable to large current (max. 10A). • Conforming to Electric Apparatus Control Regulations. **SPECIFICATIONS: Rated Voltage:** 300V. **Rated Current:** Max 10A. **Withstand Voltage:** AC1700V, 1 Minute. **Contact Resistance:** 10mΩ max. **Insulation Resistance:** 1000MΩ min./DC500V. **Temperature Range:** -40°C~+105°C. **Water proof grade:** JIS C0920 (grade 4) Water proof type by JIS C0920. **Applicable Board Thickness:** 1.6 mm. **Housing - Pin Block:** PBT (UL94V-0). **Terminal:** Brass/Tin plating. **Wire - Housing Seal:** Silicone Rubber.

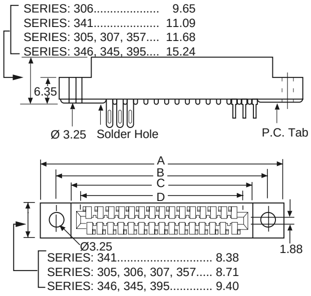
Fig.	Description	Length Ft. (M)	Digi-Key Part No.	Pricing 1	10	100	EDAC Part No.
WP20/22 Series — 22 AWG							
1	Connector Plug, 2 Position, PCB Mount	—	151-1001-ND	.87	7.70	61.60	566-002-420-101
2	Cable Assembly Plug, 2 Position	3 (.91)	151-1002-ND	5.25	48.30	420.00	566-002-714-120
3	Assembly Receptacle, 2 Position	3 (.91)	151-1003-ND	5.68	52.21	454.00	566-002-724-220
4	Connector Plug, 3 Position, PCB Mount	—	151-1004-ND	1.33	11.83	94.60	566-003-420-101
5	Cable Assembly Plug, 3 Position	3 (.91)	151-1005-ND	7.78	71.53	622.00	566-003-714-120
6	Assembly Receptacle, 3 Position	3 (.91)	151-1006-ND	8.18	75.21	654.00	566-003-724-220
7	Connector Plug, 5 Position, PCB Mount	—	151-1007-ND	1.98	17.60	140.80	566-005-420-101
8	Cable Assembly Plug, 5 Position	3 (.91)	151-1008-ND	12.78	117.53	1022.00	566-005-714-120
9	Assembly Receptacle, 5 Position	3 (.91)	151-1009-ND	13.05	120.06	1044.00	566-005-724-220
10	Connector Plug, 9 Position, PCB Mount	—	151-1010-ND	2.91	25.85	206.80	566-009-420-101
11	Assembly Receptacle, 9 Position	3 (.91)	151-1011-ND	22.98	211.37	1838.00	566-009-724-220
CL07C Series — 18 AWG							
12	Cable Assembly Plug, 1 Position	3 (.91)	151-1014-ND	3.40	31.28	272.00	568-001-734-100
13	Assembly Receptacle, 1 Position	3 (.91)	151-1015-ND	3.05	28.06	244.00	568-001-744-200
CL07D/E Series — 18 AWG							
14	Connector Plug, 1 Position, PCB Mount	—	151-1016-ND	1.15	10.18	81.40	570-001-420-101
15	Cable Assembly Receptacle, 1 Position	3 (.91)	151-1017-ND	3.95	36.34	316.00	570-001-744-200
16	Assembly Plug, 2 Position	3 (.91)	151-1018-ND	6.53	60.03	522.00	570-002-734-100
17	Connector Plug, 2 Position, PCB Mount	—	151-1019-ND	1.40	12.38	99.00	570-002-420-101
18	Cable Assembly Receptacle, 2 Position	3 (.91)	151-1020-ND	6.93	63.71	554.00	570-002-744-200
19	Cable Assembly Plug, 3 Position	3 (.91)	151-1021-ND	10.28	94.53	822.00	570-003-734-100
20	Connector Plug, 3 Position, PCB Mount	—	151-1022-ND	2.42	21.45	171.60	570-003-420-101
21	Assembly Receptacle, 3 Position	3 (.91)	151-1023-ND	10.63	97.75	850.00	570-003-744-200
—	Extraction Tool, 566 Series		151-1012-ND	205.35	—	—	566-280-300
—	Extraction Tool, 570 Series		151-1013-ND	147.08	—	—	570-280-300

Edgeboard Connectors

MATERIALS: Insulator: Thermoplastic Polyester,UL 94V-0. **Contacts:** Copper, Nickel, Tin Alloy CA-725 or Phosphor Bronze. **Contact Plating:** Gold on Mating Area, Tin-Lead on the Contact Tails, Nickel Underplate. **Colors**:Series 305, 306, 307, 341, 345 and 346 are green. Series 357 and 395 are black. **MECHANICAL: P.C. Card Slot:** Accepts boards .054" (1.37mm) to .070" (1.78mm) thick. **ELECTRICAL: Insulation Resistance:** 5000 megohms at 500 VDC. **Dielectric Withstanding Voltage:** 1500 V.A.C. RMS at sea level. **Current Rating:** 3 Amperes. **Contact Resistance:** 6 Milliohms, maximum. **ENVIRONMENTAL: Operating Temperature:** -65° to +125°C.






SERIES: 306.................... 9.65
SERIES: 341.................... 11.09
SERIES: 305, 307, 357.... 11.68
SERIES: 346, 345, 395.... 15.24
6.35
Ø 3.25
Solder Hole
P.C. Tab
A
B
C
D
Ø3.25
1.88
SERIES: 341............................ 8.38
SERIES: 305, 306, 307, 357..... 8.71
SERIES: 346, 345, 395............ 9.40

NOTE:

SERIES 341: 10.16mm for 28/56 pin & up.

SERIES 306: 12.70mm for 28 pin & up.

SERIES 305, 307, 357: 12.70mm for 28/56 pin & up

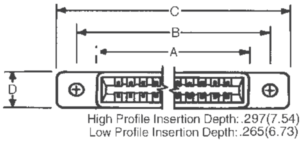
Pos./ Char.	Dimensions (mm) A ±.38	B ±.20	C ±.38	D ±.15	E ±.51	Digi-Key Part No.	Pricing 1	10	100	500	EDAC Part No.
Solder Tail — 3.56mm Spacing											
2.54mm Contact Centers											
12	37.47	29.85	22.23	17.78	3.18	EDC341122-ND	2.39	21.18	169.40	654.50	341-012-520-202
20	47.63	40.01	32.39	27.94	3.18	EDC341202-ND	2.60	23.10	184.80	714.00	341-020-520-202
30	60.33	52.71	45.09	40.64	3.18	EDC341302-ND	2.88	25.58	204.60	790.50	341-030-520-202
40	73.03	65.41	57.79	53.34	3.18	EDC341402-ND	3.16	28.05	224.40	867.00	341-040-520-202
50	85.73	78.11	70.49	66.04	3.18	EDC341502-ND	3.50	31.08	248.60	960.50	341-050-520-202
3.96mm Contact Centers											
12	46.79	38.91	31.65	27.94	5.41	EDC305122-ND	1.43	12.65	101.20	391.00	305-012-520-202
20	62.64	54.76	47.50	43.79	5.41	EDC305202-ND	1.86	16.50	132.00	510.00	305-020-520-202
24	70.56	62.69	55.42	51.71	5.41	EDC305242-ND	2.14	18.98	151.80	586.50	305-024-520-202
30	82.45	74.57	67.31	63.60	5.41	EDC305302-ND	2.42	21.45	171.60	663.00	305-030-520-202
36	94.34	86.46	79.20	75.49	5.41	EDC305362-ND	2.76	24.48	195.80	756.50	305-036-520-202
44	110.19	102.31	95.05	91.34	5.41	EDC305442-ND	3.19	28.33	226.60	875.50	305-044-520-202
Solder Tail — 5.08mm Spacing											
2.54mm Contact Centers											
20	46.61	40.01	32.00	27.94	4.44	EDC395202-ND	2.17	19.25	154.00	595.00	395-020-520-202
26	54.23	47.63	39.62	35.56	4.44	EDC395262-ND	2.36	20.90	167.20	646.00	395-026-520-202
30	59.31	52.71	44.70	40.64	4.44	EDC395302-ND	2.48	22.00	176.00	680.00	395-030-520-202
34	64.39	57.79	49.78	45.72	4.44	EDC395342-ND	2.54	22.55	180.40	697.00	395-034-520-202
36	66.93	60.33	52.32	48.26	4.44	EDC395362-ND	2.60	23.10	184.80	714.00	395-036-520-202
40	72.01	65.41	57.40	53.34	4.44	EDC395402-ND	2.79	24.75	198.00	765.00	395-040-520-202
44	77.09	70.49	62.48	58.42	4.44	EDC395442-ND	2.95	26.13	209.00	807.50	395-044-520-202
50	84.71	78.11	70.10	66.04	4.44	EDC395502-ND	3.13	27.78	222.20	858.50	395-050-520-202
56	92.33	85.73	77.72	73.66	4.44	EDC395562-ND	3.32	29.43	235.40	909.50	395-056-520-202
60	97.41	90.81	82.80	78.74	4.44	EDC395602-ND	3.44	30.53	244.20	943.50	395-060-520-202
62	99.95	93.35	85.34	81.28	4.44	EDC395622-ND	3.53	31.35	250.80	969.00	395-062-520-202
3.96mm Contact Centers											
20	62.64	54.76	47.50	43.79	5.41	EDC357202-ND	1.98	17.60	140.80	544.00	357-020-520-202
24	70.56	62.69	55.42	51.71	5.41	EDC357242-ND	2.08	18.43	147.40	569.50	357-024-520-202
30	82.45	74.57	67.31	63.60	5.41	EDC357302-ND	2.39	21.18	169.40	654.50	357-030-520-202
36	94.34	86.46	79.20	75.49	5.41	EDC357362-ND	2.73	24.20	193.60	748.00	357-036-520-202
44	110.19	102.31	95.05	91.34	5.41	EDC357442-ND	3.10	27.50	220.00	850.00	357-044-520-202
Solder Tail — 6.35mm Spacing											
3.18mm Contact Centers											
44	90.42	83.69	77.09	73.03	4.44	EDC346442-ND	3.22	28.60	228.80	884.00	346-044-520-202
56	109.47	102.74	96.14	92.08	4.44	EDC346562-ND	3.60	31.90	255.20	986.00	346-056-520-202
72	134.87	128.14	121.54	117.48	4.44	EDC346722-ND	4.34	38.50	308.00	1190.00	346-072-520-202
100	179.32	172.59	165.99	161.93	4.44	EDC346102-ND	5.46	48.40	387.20	1496.00	346-100-520-202
Solder Tail — Center Spacing (Single Row)											
3.96mm Contact Centers											
10	62.64	54.76	47.50	43.79	5.41	EDC306102-ND	1.77	15.68	125.40	484.50	306-010-520-102
15	82.45	74.57	67.31	63.60	5.41	EDC306152-ND	2.39	21.18	169.40	654.50	306-015-520-102
18	94.34	86.46	79.20	75.49	5.41	EDC306182-ND	2.76	24.48	195.80	756.50	306-018-520-102
22	110.19	102.31	95.05	91.34	5.41	EDC306222-ND	3.22	28.60	228.80	884.00	306-022-520-102
Solder Eyelets — 3.56mm Spacing											
3.96mm Contact Centers											
12	46.79	38.91	31.65	27.94	7.16	EDC305120-ND	1.43	12.65	101.20	391.00	305-012-500-202
20	62.64	54.76	47.50	43.79	7.16	EDC305200-ND	1.86	16.50	132.00	510.00	305-020-500-202
24	70.56	62.69	55.42	51.71	7.16	EDC305240-ND	2.14	18.98	151.80	586.50	305-024-500-202
30	82.45	74.57	67.31	63.60	7.16	EDC305300-ND	2.42	21.45	171.60	663.00	305-030-500-202
36	94.34	86.46	79.20	75.49	7.16	EDC305360-ND	2.76	24.48	195.80	756.50	305-036-500-202
44	110.19	102.31	95.05	91.34	7.16	EDC305440-ND	3.41	30.25	242.00	935.00	305-044-500-202
Solder Eyelets — 5.08mm Spacing											
3.96mm Contact Centers											
12	46.79	38.91	31.65	27.94	7.16	EDC307120-ND	1.52	13.48	107.80	416.50	307-012-500-202
20	62.64	54.76	47.50	43.79	7.16	EDC307200-ND	1.98	17.60	140.80	544.00	307-020-500-202
24	70.56	62.69	55.42	51.71	7.16	EDC307240-ND	2.08	18.43	147.40	569.50	307-024-500-202
30	82.45	74.57	67.31	63.60	7.16	EDC307300-ND	2.39	21.18	169.40	654.50	307-030-500-202
36	94.34	86.46	79.20	75.49	7.16	EDC307360-ND	2.73	24.20	193.60	748.00	307-036-500-202
44	110.19	102.31	95.05	91.34	7.16	EDC307440-ND	3.19	28.33	226.60	875.50	307-044-500-202
Solder Eyelets — Center Spacing (Single Row)											
3.96mm Contact Centers											
10	62.64	54.76	47.50	43.79	7.16	EDC306100-ND	1.77	15.68	125.40	484.50	306-010-500-102
15	82.45	74.57	67.31	63.60	7.16	EDC306150-ND	2.39	21.18	169.40	654.50	306-015-500-102
18	94.34	86.46	79.20	75.49	7.16	EDC306180-ND	2.76	24.48	195.80	756.50	306-018-500-102
22	110.19	102.31	95.05	91.34	7.16	EDC306220-ND	3.22	28.60	228.80	884.00	306-022-500-102

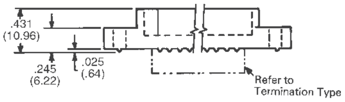
Pos./ Char.	Contact Spacing (mm)	Dim. (mm) C ±.38	D ±.15	Bus Style	Digi-Key Part No.	Pricing 1	10	100	500	EDAC Part No.
Industry Standard Bus Systems										
60	2.54	82.80	78.74	MULTIBUS 1	EDC345602-ND	4.19	37.13	297.00	1147.50	345-060-524-201
120	2.54	159.00	154.94	VERSABUS	EDC345202-ND	6.98	61.88	495.00	1912.50	345-120-520-201
56	3.18	96.14	92.08	STANDARD BUS	EDC346052-ND	4.09	36.30	290.40	1122.00	346-056-520-802
62	2.54	85.34	81.28	IBM PC-XT	EDC395062-ND	1.09	9.63	77.00	297.50	395-062-520-350
98	2.54	131.06	127.00	IMB PC-AT ISA	EDC395982-ND	1.40	12.38	99.00	382.50	395-098-520-350

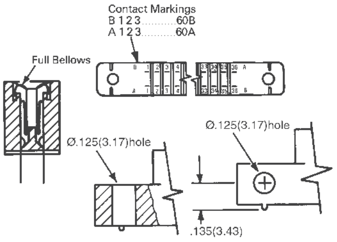
Sullins

Edgeboard Connectors

High and Low Profile


C
B
A
D
High Profile Insertion Depth: .297(7.54)
Low Profile Insertion Depth: .265(6.73)





MATERIALS

Insulator: Glass filled thermoplastic polyester Valox (Standard) UL 94V-0 Approved.

Contacts: Phosphor Bronze (Standard).

Contact Plating: Gold over .000050 Nickel Under Plate.

UL File Number: E64287.

Termination Plating: Tin.

MECHANICAL

Board Insertion Force: 16 ozs. maximum per contact pair using .062 steel test blade.

Board Withdrawal Force: 1 oz. minimum per contact pair using .062 steel test blade.

ELECTRICAL

Insulation Resistance: 5,000 megohms.

Dielectric Withstanding Voltage: Contact. Centers — .100, .125, .156. Voltage — 600 VDC, 800 VDC, 1800 VDC.

Current Rating: 3 amperes.

Voltage Drop: 30 MV at rated current.

Contact Resistance: 10 milliohms max. at rated current.

ENVIRONMENTAL

Solvent Resistance: Perchloroethylene, Freon 113, Freon 11, Trichloroethylene.

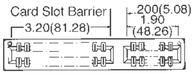
Operating Temperature: Valox -65°C to +135°C. Phosphor Bronze -65°C to +125°C.

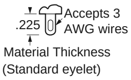
High Profile

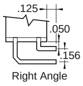
Positions/	Dimensions (Inches)				Digi-Key	Pricing				Sullins
Contacts	A	B	C	D	Part No.	1	10	100	500	Part No.
Peripheral Component Interconnect (PCI) .050" Contact Centers										
10/20	0.740	1.026	1.340	.370	S01019-ND	10.58	84.00	588.00	2352.00	RZB10DCHN
15/30	0.990	1.276	1.590	.370	S01519-ND	10.96	87.00	609.00	2436.00	RZB15DCHN
20/40	1.240	1.526	1.840	.370	S02019-ND	11.15	88.50	619.50	2478.00	RZB20DCHN
25/50	1.490	1.776	2.090	.370	S02519-ND	10.90	86.50	605.50	2422.00	RZB25DCHN
25/50	1.490	1.776	2.090	.370	S02520-ND*	10.49	83.25	582.75	2331.00	RZB25DCRN
30/60	1.740	2.026	2.340	.370	S03019-ND	11.25	89.25	624.75	2499.00	RZB30DCHN
11/45	3.140	3.426	3.740	.370	S05619-578-ND	13.89	110.25	771.75	3087.00	RZB56DCHN-S578
60/120	3.240	3.526	3.840	.370	S06019-ND	14.18	112.50	787.50	3150.00	RZB60DCHN
11/49	3.340	3.626	—	.370	S06019-578-ND	14.18	112.50	787.50	3150.00	RZB60DCHN-S578
11/45/10	3.740	4.026	4.340	.370	S06619-578-ND	14.58	115.75	810.25	3241.00	RZB66DCHN-S578
80/160	4.240	4.526	4.840	.370	S08019-ND	15.62	124.00	868.00	3472.00	RZB80DCHN
42/49	4.890	5.176	5.490	.370	S09119-578-ND	16.38	130.00	910.00	3640.00	RZB91DCHN-S578
100/200	5.240	5.526	5.840	.370	S010019-ND	17.04	135.25	946.75	3787.00	RZB100DCHN
11/45/50	5.740	6.026	6.340	.370	S010619-578-ND	17.48	138.75	971.25	3885.00	RZB106DCHN-S578
Solder Tail .100" Contact Centers										
6/12	0.860	1.175	1.435	.370	S1066-ND	1.73	13.75	96.25	385.00	EZC06DCWN
8/16	1.060	1.375	1.635	.370	S1087-ND	2.27	18.00	126.00	504.00	EZC08DCTN
10/20	1.260	1.575	1.835	.370	S1106-ND	2.33	18.50	129.50	518.00	EZC10DCWN
12/24	1.460	1.775	2.035	.370	S1126-ND	2.17	17.25	120.75	483.00	EZC12DCWN
15/30	1.760	2.075	2.335	.370	S1156-ND	2.68	21.25	148.75	595.00	EZC15DCWN
25/50	2.760	3.075	3.335	.370	S1256-ND	3.02	24.00	168.00	672.00	EZC25DCWN
25/50	2.760	3.075	3.335	.370	S1250-ND	3.02	24.00	168.00	672.00	EZC25DCWH
30/60	3.260	3.575	3.835	.370	S1306-ND	3.34	26.50	185.50	742.00	EZC30DCWN
44/88	4.660	4.975	5.235	.370	S1447-ND	4.82	38.25	267.75	1071.00	EZC44DCTN
49/98	5.460	—	—	.370	S14916-605-ND	12.19	96.75	677.25	2709.00	EZC49DCAN-S605
60/120	6.260	6.575	6.835	.370	S1608-ND	6.39	50.75	355.25	1421.00	EZC60DCTI
61/122	6.360	6.675	6.935	.370	S1618-ND	6.46	51.25	358.75	1435.00	EZC61DCTI
70/140	7.260	7.575	7.835	.370	S1706-ND	5.95	47.25	330.75	1323.00	EZC70DCWN
18/36	2.060	2.375	2.635	.370	S1186-371-ND	2.14	17.00	119.00	476.00	EZC18DCWN-S371
31/62	3.360	3.675	3.935	.370	S1316-371-ND	2.84	22.50	157.50	630.00	EZC31DCWN-S371
49/98	5.460	—	—	.370	S1499-967-ND	15.47	122.75	859.25	3437.00	RXC49DSCN-S967
Solder Tail Right Angle .100" Contact Centers										
10/20	1.460	1.775	2.035	.370	S11022-ND	3.56	28.25	197.75	791.00	EZC10DCAH
15/30	1.760	2.075	2.335	.370	S11515-ND	5.95	47.25	330.75	1323.00	EZC15DCAS
18/36	2.060	2.375	2.635	.370	S11816-ND	4.57	36.25	253.75	1015.00	EZC18DCAN
25/50	2.760	3.075	3.335	.370	S12517-ND	6.43	51.00	357.00	1428.00	EZC25DTAS
25/50	2.760	3.080	3.340	.370	S12515-189-ND	6.65	52.75	369.25	1477.00	EZC25DCAS-S189
Wire Wrap .100" Contact Centers										
10/20	1.260	1.575	1.835	.370	S11013-ND	2.84	22.50	157.50	630.00	EZC10DCMH
30/60	3.260	3.575	3.835	.370	S13014-ND	5.17	41.00	287.00	1148.00	EZC30DCMN
Solder Tail .125" Contact Centers										
28/56	3.785	4.045	4.305	.370	S22821-ND††	6.14	48.75	341.25	1365.00	EZA28DRJH
28/56	3.785	4.045	4.305	.370	S22811-ND	5.04	40.00	280.00	1120.00	EZA28DCSD
28/56	3.785	—	—	.370	S22812-ND	5.04	40.00	280.00	1120.00	EZA28DCSN
36/72	4.785	5.045	5.305	.370	S23612-ND	6.11	48.50	339.50	1358.00	EZA36DCSN
50/100	6.535	6.795	7.055	.370	S25011-ND	8.60	68.25	477.75	1911.00	EZA50DCSD
Solder Tail Right Angle .125" Contact Centers										
36/72	4.785	5.045	5.305	.370	S23623-ND	8.51	67.50	472.50	1890.00	EZA36DCCH
Solder Tail .156" Contact Centers										
6/12	1.221	1.534	1.784	.370	S5066-ND	2.68	21.25	148.75	595.00	EZM06DCWN
22/44	3.717	4.030	4.280	.370	S5220-ND	3.94	31.25	218.75	875.00	EZM22DCWH
22/44	3.717	4.030	4.280	.370	S52210-ND†	4.03	32.00	224.00	896.00	EZM22DCTH
36/72	5.901	6.214	6.464	.370	S5366-ND	4.66	37.00	259.00	1036.00	EZM36DCWN
43/86	6.993	7.306	7.556	.370	S5437-ND	5.32	42.25	295.75	1183.00	EZM43DCTN
Wire Wrap .156" Contact Centers										
22/44	3.717	4.030	4.280	.370	S52213-ND	5.26	41.75	292.25	1169.00	EZM22DCMH

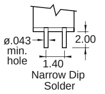
* Card Extender † .170" Post Length †† .165" Post Length

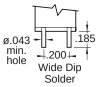
Low Profile











Positions/	Dimensions (Inches)				Digi-Key	Pricing				Sullins
Contacts	A	B	C	D	Part No.	1	10	100	500	Part No.
At Expansion Board Connector										
49/98	PCB Expansion Port Edge Card				S1020-ND	3.12	24.75	173.25	693.00	EZC49DCWN-S420
Right Angle — Solder Tail — .156" Spacing										
.100" Contact Centers										
5/10	0.775	1.075	1.375	.330	S1051-ND	6.33	50.25	351.75	1407.00	EZC05DRAS
6/12	0.875	1.175	1.475	.330	S1061-ND	5.70	45.25	316.75	1267.00	EZC06DRAS
10/20	1.275	1.575	1.875	.330	S1101-ND	4.97	40.48	294.40	1288.00	EZC10DRAS
15/30	1.775	2.075	2.375	.330	S1151-ND	5.99	47.50	332.50	1330.00	EZC15DRAS
18/36	2.075	2.375	2.675	.330	S1181-ND	6.52	51.75	362.25	1449.00	EZC18DRAS
20/40	2.275	2.575	2.875	.330	S1201-ND	7.34	58.25	407.75	1631.00	EZC20DRAS
22/44	2.475	2.775	3.075	.330	S1221-ND	7.62	60.50	423.50	1694.00	EZC22DRAS
25/50	2.775	3.075	3.375	.330	S1251-ND	9.86	78.25	547.75	2191.00	EZC25DRAS
31/62	3.375	3.675	3.975	.330	S1311-ND	9.17	72.75	509.25	2037.00	EZC31DRAS
.156" Contact Centers										
10/20	1.844	2.157	2.499	.325	S5101-ND	7.50	59.50	416.50	1666.00	EZM10DRAS
12/24	2.156	2.469	2.811	.325	S5121-ND	7.94	63.00	441.00	1764.00	EZM12DRAS
22/44	3.716	4.029	4.371	.325	S5221-ND	8.57	68.00	476.00	1904.00	EZM22DRAS
28/56	4.652	4.964	5.303	.438	S5281-ND	13.92	110.50	773.50	3094.00	EZM28DRAS
Eyelet (Standard) — .014" Thick, .140" Spacings										
.100" Contact Centers										
5/10	0.775	1.075	1.375	.330	S1052-ND	2.71	21.50	150.50	602.00	EZC05DREH
6/12	0.875	1.175	1.475	.330	S1062-ND	2.84	22.50	157.50	630.00	EZC06DREH
10/20	1.275	1.575	1.875	.330	S1102-ND	3.24	25.75	180.25	721.00	EZC10DREH
15/30	1.775	2.075	2.375	.330	S1152-ND	4.13	32.75	229.25	917.00	EZC15DREH
18/36	2.075	2.375	2.675	.330	S1182-ND	4.57	36.25	253.75	1015.00	EZC18DREH
22/44	2.475	2.775	3.075	.330	S1222-ND	6.24	49.50	346.50	1386.00	EZC22DREH
25/50	2.775	3.075	3.375	.330	S1252-ND	5.48	43.50	304.50	1218.00	EZC25DREH
31/62	3.375	3.675	3.975	.330	S1312-ND	5.20	41.25	288.75	1155.00	EZC31DREH
35/70	3.775	4.075	4.375	.400	S1352-ND	6.74	53.50	374.50	1498.00	EZC35DREH
36/72	3.875	4.175	4.475	.400	S1362-ND	8.69	69.00	483.00	1932.00	EZC36DREH
—	Polarizing Key				PLA-K1-ND	—	1.00	7.00	28.00	PLA-K1
.156" Contact Centers										
6/12	1.220	1.533	1.875	.325	S5062-ND	3.31	26.25	183.75	735.00	EZM06DREH
10/20	1.844	2.157	2.499	.325	S5102-ND	4.19	33.25	232.75	931.00	EZM10DREH
15/30	2.624	2.937	3.279	.325	S5152-ND	4.88	38.75	271.25	1085.00	EZM15DREH
18/36	3.092	3.405	3.747	.325	S5182-ND	5.80	46.00	322.00	1288.00	EZM18DREH
22/44	3.716	4.029	4.371	.325	S5222-ND	5.07	40.25	281.75	1127.00	EZM22DREH
28/56	4.652	4.964	5.303	.438	S5282-ND	7.72	61.25	428.75	1715.00	EZM28DREH
36/72	5.906	6.219	6.566	.438	S5362-ND	11.43	90.75	635.25	2541.00	EZM36DREH
Solder Tail — .140" Spacing										
.100" Contact Centers										
5/10	0.775	1.075	1.375	.330	S1053-ND	2.61	20.75	145.25	581.00	EZC05DRTH
6/12	0.875	1.175	1.475	.330	S1063-ND	2.71	21.50	150.50	602.00	EZC06DRTH
10/20	1.275	1.575	1.875	.330	S1103-ND	3.06	24.25	169.75	679.00	EZC10DRTH
15/30	1.775	2.075	2.375	.330	S1153-ND	3.47	27.50	192.50	770.00	EZC15DRTH
20/40	2.275	2.575	2.875	.330	S1203-ND	5.51	43.75	306.25	1225.00	EZC20DRTH
22/44	2.475	2.775	3.075	.330	S1223-ND	5.73	45.50	318.50	1274.00	EZC22DRTH
31/62	3.375	3.675	3.975	.330	S1313-ND	5.89	46.75	327.25	1309.00	EZC31DRTH
36/72	3.875	4.175	4.475	.400	S1363-ND	6.43	51.00	357.00	1428.00	EZC36DRTH
.125" Contact Centers										
28/56	3.785	4.045	4.325	.330	S2283-ND	5.10	40.50	283.50	1134.00	EZA28DRTH
36/72	4.785	5.045	5.325	.330	S2363-ND	7.21	57.25	400.75	1603.00	EZA36DRTH
.156" Contact Centers										
6/12	1.220	1.533	1.875	.325	S5063-ND	4.54	36.00	252.00	1008.00	EZM06DRTH
10/20	1.844	2.157	2.499	.325	S5103-ND	4.35	34.50	241.50	966.00	EZM10DRTH
22/44	3.716	4.029	4.371	.325	S5223-ND	5.54	44.00	308.00	1232.00	EZM22DRTH
25/50	4.184	4.497	4.839	.325	S5253-ND	6.52	51.75	362.25	1449.00	EZM25DRTH
28/56	4.652	4.965	5.303	.438	S5283-ND	8.06	64.00	448.00	1792.00	EZM28DRTH
Solder Tail — .200" Spacing										
.100" Contact Centers										
5/10	0.775	1.075	1.375	.330	S1054-ND	2.27	18.00	126.00	504.00	EZC05DRXH
6/12	0.875	1.175	1.475	.330	S1064-ND	2.36	18.75	131.25	525.00	EZC06DRXH
10/20	1.275	1.575	1.875	.330	S1104-ND	2.68	21.25	148.75	595.00	EZC10DRXH
15/30	1.775	2.075	2.375	.330	S1154-ND	3.09	24.50	171.50	686.00	EZC15DRXH
18/36	2.075	2.375	2.675	.330	S1184-ND	3.09	24.50	171.50	686.00	EZC18DRXH
20/40	2.275	2.575	2.875	.330	S1204-ND	3.94	31.25	218.75	875.00	EZC20DRXH
22/44	2.475	2.775	3.075	.330	S1224-ND	4.47	35.50	248.50	994.00	EZC22DRXH
25/50	2.775	3.075	3.375	.330	S1254-ND	4.47	35.50	248.50	994.00	EZC25DRXH
30/60	3.275	3.575	3.875	.330	S1304-ND	6.74	53.50	374.50	1498.00	EZC30DRXH
36/72	3.875	4.175	4.475	.330	S1364-ND	5.61	44.50	311.50	1246.00	EZC36DRXH
40/80	4.275	4.575	4.875	.330	S1404-ND	6.90	54.75	383.25	1533.00	EZC40DRXH
50/100	5.275	5.575	5.875	.400	S1504-ND	9.67	76.75	537.25	2149.00	EZC50DRXH
60/120	6.275	6.575	6.875	.400	S1604-ND	9.17	72.75	509.25	2037.00	EZC50DRXH
—	Polarizing Key				PLC-K1-ND	—	1.00	7.00	28.00	PLC-K1
.125" Contact Centers										
28/56	3.785	4.045	4.325	.330	S2284-ND	6.65	52.75	369.25	1477.00	EZA28DRXH
.156" Contact Centers										
6/12	1.220	1.533	1.875	.325	S5064-ND	3.02	24.00	168.00	672.00	EZM06DRXH
10/20	1.844	2.157	2.499	.325	S5104-ND	3.02	24.00	168.00	672.00	EZM10DRXH
12/24	2.156	2.469	2.811	.325	S5124-ND	3.59	28.50	199.50	798.00	EZM12DRXH
15/30	2.624	2.937	3.279	.325	S5154-ND	3.47	27.50	192.50	770.00	EZM15DRXH
18/36	3.092	3.405	3.747	.325	S5184-ND	4.16	33.00	231.00	924.00	EZM18DRXH
22/44	3.716	4.029	4.371	.325	S5224-ND	4.16	33.00	231.00	924.00	EZM22DRXH
25/50	4.184	4.497	4.839	.325	S5254-ND	5.32	42.25	295.75	1183.00	EZM25DRXH
28/56	4.652	4.964	5.303	.438	S5284-ND	6.08	48.25	337.75	1351.00	EZM28DRXH
36/72	5.906	6.219	6.566	.438	S5364-ND	7.91	62.75	439.25	1757.00	EZM36DRXH
43/86	7.000	7.302	7.643	.500	S5434-ND	8.73	69.25	484.75	1939.00	EZM43DRXH
Eyelet — .007" Thick, .140" Spacing										
.156" Contact Centers										
6/12	1.220	1.533	1.875	.325	S5065-ND	4.50	35.75	250.25	1001.00	EZM06DSEH
10/20	1.844	2.157	2.499	.325	S5105-ND	4.28	34.00	238.00	952.00	EZM10DSEH
12/24	2.156	2.469	2.811	.325	S5125-ND	3.12	24.75	173.25	693.00	EZM12DSEH
15/30	2.624	2.937	3.279	.325	S5155-ND	4.57	36.25	253.75	1015.00	EZM15DSEH
18/36	3.092	3.405	3.747	.325	S5185-ND	5.36	42.50	297.50	1190.00	EZM18DSEH
22/44	3.716	4.029	4.371	.325	S5225-ND	5.45	43.25	302.75	1211.00	EZM22DSEH
43/86	7.000	7.302	7.643	.500	S5435-ND	9.67	76.75	537.25	2149.00	EZM43DSEH

HRS HIROSE ELECTRIC CO.,LTD.

DIN Connectors

Fig. 1

2-Row, Plug, Right-Angle Type

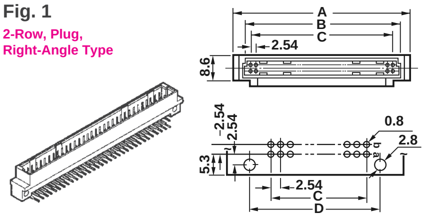


Fig. 2

2-Row, Plug, Straight Type

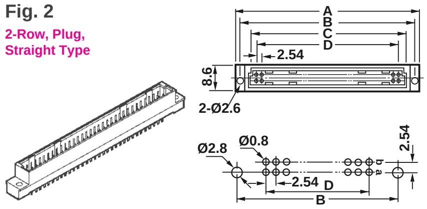


Fig. 3

2-Row, Socket, Right-Angle Type

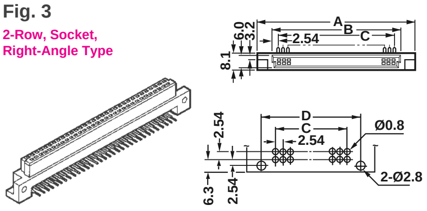
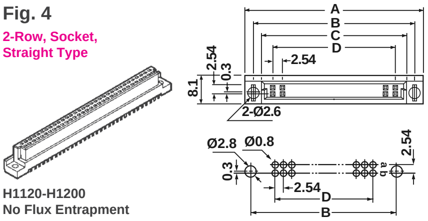


Fig. 4

2-Row, Socket, Straight Type



H1120-H1200
No Flux Entrampent

Fig. 5

3-Row, Socket, Right-Angle Type

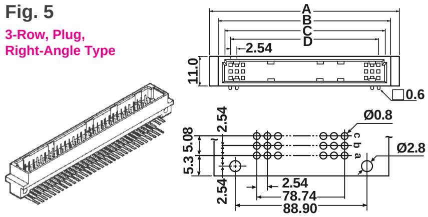


Fig. 6

3-Row, Plug, Straight Type

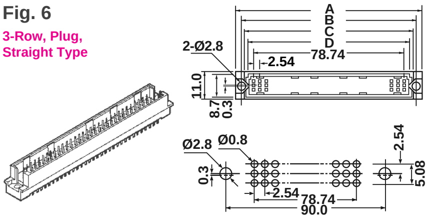


Fig. 7

3-Row, Socket, Right-Angle Type

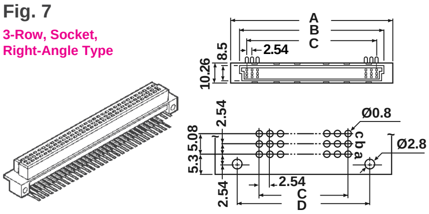


Fig. 8

3-Row, Socket, Straight Type

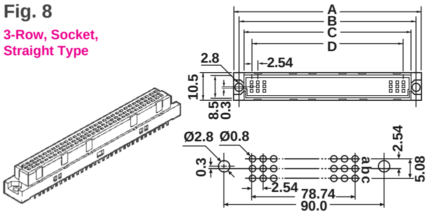


Fig.	No. of Rows	No. of Pins	Type	Dimensions (mm) A	B	C	D	Digi-Key Part No	Pricing 1	10	100	500	1,000	Hirose Part No.
1	2	20	Plug-Right Angle	38.12	29.47	22.86	33.02	H1020-ND	2.67	22.14	164.00	615.00	1090.60	PCN10-20P-2.54DS
		32	Plug-Right Angle	53.26	44.71	38.10	48.26	H1032-ND	3.22	26.73	198.00	742.50	1316.70	PCN10-32P-2.54DS
		44	Plug-Right Angle	68.60	59.95	53.34	63.50	H1044-ND	2.94	25.68	181.90	722.25	1391.00	PCN10-44P-2.54DS
		50	Plug-Right Angle	76.22	67.57	60.96	71.12	H1050-ND	3.19	27.84	197.20	783.00	1508.00	PCN10-50P-2.54DS
		64	Plug-Right Angle	94.00	85.35	78.74	88.90	H1064-ND	3.58	31.20	221.00	877.50	1690.00	PCN10-64P-2.54DS
		90	Plug-Right Angle	127.02	118.37	111.76	121.92	H1090-ND	4.43	38.64	273.70	1086.75	2093.00	PCN10-90P-2.54DS
		100	Plug-Right Angle	139.72	131.07	124.46	134.62	H1100-ND	5.12	44.64	316.20	1255.50	2418.00	PCN10-100P-2.54DS
2	2	20	Plug-Straight	43.3	38.1	29.47	22.86	H2020-ND	2.05	17.01	126.00	472.50	837.90	PCN10-20P-2.54DSA
		32	Plug-Straight	58.34	53.34	44.71	38.10	H2032-ND	2.70	22.41	166.00	622.50	1103.90	PCN10-32P-2.54DSA
		44	Plug-Straight	73.58	68.10	59.95	53.34	H2044-ND	2.54	21.06	156.00	585.00	1037.40	PCN10-44P-2.54DSA
		50	Plug-Straight	81.40	76.20	67.57	60.96	H2050-ND	3.22	28.08	198.90	789.75	1521.00	PCN10-50P-2.54DSA
		64	Plug-Straight	99.18	93.98	85.34	78.74	H2064-ND	3.66	31.92	226.10	897.75	1729.00	PCN10-64P-2.54DSA
		90	Plug-Straight	132.20	127.00	118.37	111.76	H2090-ND	5.03	43.92	311.10	1235.25	2379.00	PCN10-90P-2.54DSA
		100	Plug-Straight	144.90	139.70	131.07	124.46	H2100-ND	5.23	45.60	323.00	1282.50	2470.00	PCN10-100P-2.54DSA
3	2	20	Socket-Right Angle	43.10	29.12	22.86	38.10	H2120-ND	2.81	24.48	173.40	688.50	1326.00	PCN10C-20S-2.54DS
		32	Socket-Right Angle	58.34	44.36	38.10	53.34	H2132-ND	3.77	32.88	232.90	924.75	1781.00	PCN10C-32S-2.54DS
		44	Socket-Right Angle	73.58	59.60	53.34	68.58	H2144-ND	4.84	42.24	299.20	1188.00	2288.00	PCN10C-44S-2.54DS
		50	Socket-Right Angle	81.20	67.22	60.96	76.20	H2150-ND	5.12	44.64	316.20	1255.50	2418.00	PCN10C-50S-2.54DS
		64	Socket-Right Angle	98.98	85.00	78.74	93.98	H2164-ND	6.60	57.60	408.00	1620.00	3120.00	PCN10C-64S-2.54DS
		90	Socket-Right Angle	132.00	118.02	111.76	127.00	H2190-ND	7.48	65.78	493.35	1988.35	3812.25	PCN10C-90S-2.54DS
		100	Socket-Right Angle	144.70	130.72	124.46	139.70	H2200-ND	8.52	74.55	568.00	2263.13	4348.75	PCN10C-100S-2.54DS
3	2	20	Socket-Right Angle	43.10	29.12	22.86	38.10	H3020-ND	2.34	19.44	144.00	540.00	957.60	PCN13-20S-2.54DS
		32	Socket-Right Angle	58.34	44.36	38.10	53.43	H3032-ND	2.86	23.76	176.00	660.00	1170.40	PCN13-32S-2.54DS
		44	Socket-Right Angle	73.58	59.60	53.34	68.58	H3044-ND	2.86	24.96	176.80	702.00	1352.00	PCN13-44S-2.54DS
		50	Socket-Right Angle	81.20	67.22	60.96	76.20	H3050-ND	3.52	30.72	217.60	864.00	1664.00	PCN13-50S-2.54DS
		64	Socket-Right Angle	98.98	85.00	78.74	93.98	H3064-ND	3.58	31.20	221.00	877.50	1690.00	PCN13-64S-2.54DS
		90	Socket-Right Angle	132.00	118.02	111.76	127.00	H3090-ND	4.57	39.84	282.20	1120.50	2158.00	PCN13-90S-2.54DS
		100	Socket-Right Angle	144.70	130.72	124.46	139.70	H3100-ND	4.95	43.20	306.00	1215.00	2340.00	PCN13-100S-2.54DS
4	2	20	Socket-Straight	39.12	34.12	29.12	22.86	H1120-ND	2.94	25.68	181.90	722.25	1391.00	PCN10C-20S-2.54DSA
		32	Socket-Straight	54.36	49.36	44.36	38.10	H1132-ND	3.52	30.72	217.60	864.00	1664.00	PCN10C-32S-2.54DSA
		44	Socket-Straight	69.60	64.60	59.60	53.34	H1144-ND	4.90	42.72	302.60	1201.50	2314.00	PCN10C-44S-2.54DSA
		50	Socket-Straight	77.22	72.22	67.22	60.96	H1150-ND	5.03	43.92	311.10	1235.25	2379.00	PCN10C-50S-2.54DSA
		64	Socket-Straight	95.00	90.00	85.00	78.74	H1164-ND	6.13	53.52	379.10	1505.25	2899.00	PCN10C-64S-2.54DSA
		90	Socket-Straight	128.02	123.02	118.02	111.76	H1190-ND	7.15	62.92	471.90	1901.90	3646.50	PCN10C-90S-2.54DSA
		100	Socket-Straight	140.72	135.72	130.72	124.46	H1200-ND	8.08	71.06	532.95	2147.95	4118.25	PCN10C-100S-2.54DSA
4	2	32	Socket-Straight-W/W	54.36	49.36	43.36	38.10	H4232-ND	6.68	58.32	413.10	1640.25	3159.00	PCN10-32S-2.54WB
		50	Socket-Straight-W/W	77.22	72.22	67.22	60.96	H4250-ND	8.47	74.13	564.80	2250.38	4324.25	PCN10-50S-2.54WB
		64	Socket-Straight-W/W	95.00	99.00	85.00	78.74	H4264-ND	10.15	88.83	676.80	2696.63	5181.75	PCN10-64S-2.54WB
		90	Socket-Straight-W/W	128.02	123.00	118.00	111.76	H4290-ND	12.35	108.78	911.40	3748.50	7203.00	PCN10-90S-2.54WB
		20	Socket-Straight	39.12	34.12	29.12	22.86	H4020-ND	1.72	14.31	106.00	397.50	704.90	PCN13-20S-2.54DSA
		32	Socket-Straight	54.36	49.36	44.36	38.10	H4032-ND	2.05	17.01	126.00	472.50	837.90	PCN13-32S-2.54DSA
		44	Socket-Straight	69.60	64.60	59.60	53.34	H4044-ND	2.37	19.71	146.00	547.50	970.90	PCN13-44S-2.54DSA
		50	Socket-Straight	77.22	72.22	67.22	60.96	H4050-ND	2.63	21.87	162.00	607.50	1077.30	PCN13-50S-2.54DSA
		64	Socket-Straight	95.00	90.00	85.00	78.74	H4064-ND	3.02	25.11	186.00	697.50	1236.90	PCN13-64S-2.54DSA
		90	Socket-Straight	128.02	123.02	118.02	111.76	H4090-ND	3.27	28.56	202.30	803.25	1547.00	PCN13-90S-2.54DSA
		100	Socket-Straight	140.72	135.72	130.72	124.46	H4100-ND	3.55	30.96	219.30	870.75	1677.00	PCN13-100S-2.54DSA
4	2	64	Socket-Straight	95.00	90.00	85.00	78.74	H8164-ND	6.00	52.32	370.60	1471.50	2834.00	PCN10MC-64S-2.54DSA
		100	Socket-Straight	140.72	135.72	130.72	124.46	H8200-ND	8.90	77.91	593.60	2365.13	4544.75	PCN10MC-100S-2.54DSA
1	2	64	Plug-Right Angle	94.00	85.35	78.74	88.90	H5164-ND	5.69	49.68	351.90	1397.25	2691.00	PCN10MC-64P-2.54DS
		100	Plug-Right Angle	139.72	131.07	124.46	134.62	H5200-ND	6.35	55.44	392.70	1559.25	3003.00	PCN10MC-100P-2.54DS
5	3	64*	Plug-Right Angle	94.00	88.00	85.25	78.74	H5064-ND	4.15	36.24	256.70	1019.25	1963.00	PCN10-64ACP-2.54DS
		96	Plug-Right Angle	94.00	88.00	85.25	78.74	H5096-ND	5.03	43.92	311.10	1235.25	2379.00	PCN10-96P-2.54DS
		96	Plug-Right Angle	94.00	88.00	85.25	78.74	H5196-ND	7.35	64.68	485.10	1955.10	3748.50	PCN10MC-96P-2.54DS
6	3	64*	Plug-Straight	95.00	90.00	88.00	85.25	H6064-ND	4.07	35.52	251.60	999.00	1924.00	PCN10-64ACP-2.54DSA
		96	Plug-Straight	95.00	90.00	88.00	85.25	H6096-ND	6.05	52.80	374.00	1485.00	2860.00	PCN10-96P-2.54DSA
7	3	64*	Socket-Right Angle	94.00	85.00	78.74	88.90	H7064-ND	4.26	37.20	263.50	1046.25	2015.00	PCN13-64ACS-2.54DS
		96	Socket-Right Angle	94.00	85.00	78.74	88.90	H7096-ND	5.20	45.36	321.30	1275.75	2457.00	PCN13-96S-2.54DS
8	3	96	Socket-Straight	95.00	90.00	85.00	78.74	H8196-ND	6.27	54.72	387.60	1539.00	2964.00	PCN10MC-96S-2.54DSA
		64*	Socket-Straight	95.00	90.00	85.00	78.74	H8064-ND	5.75	50.16	355.30	1410.75	2717.00	PCN10-64ACS-2.54DSA
		96	Socket-Straight	95.00	90.00	85.00	78.74	H8096-ND	3.66	31.92	226.10	897.75	1729.00	PCN13-96S-2.54DSA
		96	Socket-Straight-W/W	95.00	90.00	85.00	78.74	H8296-ND	12.77	112.48	942.40	3876.00	7448.00	PCN10-96S-2.54WB

* 64 pins; in 3-row format with pins on outside rows and middle row open.

Fig. 1

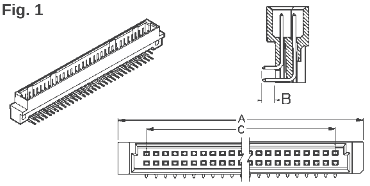


Fig. 2

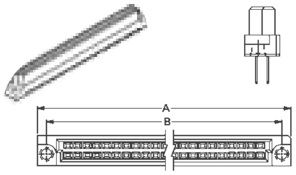


Fig. 3

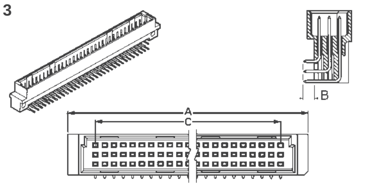


Fig. 4

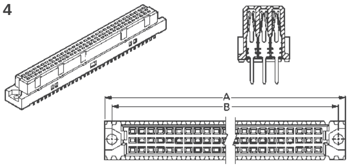


Fig. 5

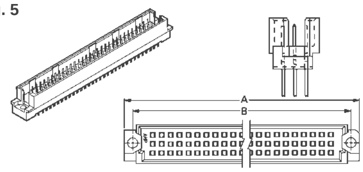


Fig. 6

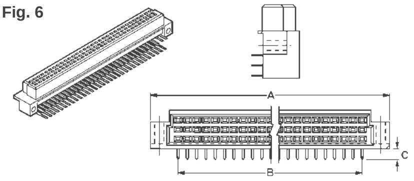


Fig. 7

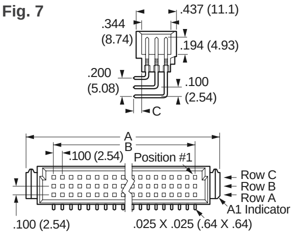


Fig. 8

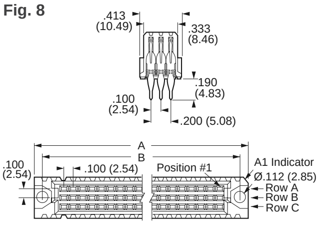


Fig. 9

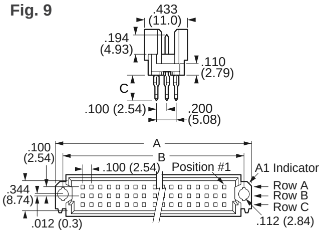


Fig. 10

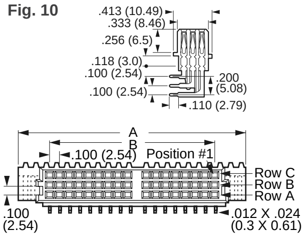


Fig.	No. of Rows	No. of Pins	Type	Dimensions – Inch (mm)			Digi-Key Part No.	Pricing		AMP Part No.
				A	B	C		1	25	
1	2	64	Plug, Right Angle	3.700 (93.98)	0.104 (2.64)	3.100 (78.74)	A1250-ND	3.15	70.57	533248-1
2	2	64	Socket, Straight	3.735 (94.87)	3.543 (89.99)	—	A1252-ND	3.38	75.63	650861-5
	2	32	Socket, Straight	2.160 (54.86)	1.969 (50.01)	—	A1253-ND	2.93	68.10	650858-5
3	3	96	Plug, Right Angle	3.700 (93.98)	0.104 (2.64)	3.100 (78.74)	A1254-ND	3.37	75.38	650473-5
	3	64*	Plug, Right Angle	3.700 (93.98)	0.104 (2.64)	3.100 (78.74)	A1255-ND	2.82	63.13	650945-5
4	3	96	Socket, Straight	3.700 (93.98)	3.543 (89.99)	—	A1258-ND	4.05	90.75	535043-5
	3	64*	Socket, Straight	3.700 (93.98)	3.543 (89.99)	—	A1259-ND	3.38	75.63	650408-5
5	3	96	Plug, Straight	3.740 (95.00)	3.543 (89.99)	—	A1260-ND	3.28	73.50	650470-5
	3	64*	Plug, Straight	3.740 (95.00)	3.543 (89.99)	—	A1261-ND	2.70	60.50	650934-5
6	3	96	Socket, Right Angle	3.692 (93.78)	3.100 (78.74)	0.110 (2.79)	A1262-ND	4.39	98.21	650461-5
	3	64*	Socket, Right Angle	3.692 (93.78)	3.100 (78.74)	0.110 (2.79)	A1263-ND	3.59	80.35	650870-4
	3	96	Socket, Right Angle	3.692 (93.78)	3.100 (78.74)	0.167 (4.24)	A1264-ND	4.39	98.21	650462-5
7	3	48	Pin, Right Angle	2.100 (53.34)	1.500 (38.10)	0.104 (2.64)	A1275-ND	2.36	52.77	650478-5
	2	32	Pin, Right Angle	2.100 (53.34)	1.500 (38.10)	0.104 (2.64)	A1276-ND	2.12	49.13	650946-5
	3	120	Pin, Right Angle	4.500 (114.30)	3.900 (99.06)	0.104 (2.64)	A1277-ND	5.07	113.49	650906-5
	3	150	Pin, Right Angle	5.500 (139.70)	4.900 (124.46)	0.104 (2.64)	A1278-ND	5.32	123.50	650907-5
	3	96	Pin, Right Angle	3.700 (93.98)	3.100 (78.74)	—	A1279-ND	3.38	75.63	650947-5
	2	64	Pin, Right Angle	3.700 (93.98)	3.100 (78.74)	—	A1280-ND	2.83	63.34	650951-5
	3	48	Pin, Right Angle	2.100 (53.34)	1.500 (38.10)	.130 (3.30)	A1281-ND	2.36	52.94	650948-5
	3	120	Pin, Right Angle	4.500 (114.30)	3.900 (99.06)	.130 (3.30)	A1283-ND	5.07	113.49	650949-5
8	3	96	Vertical Receptacle	3.700 (93.98)	3.543 (89.99)	—	A1285-ND	4.05	90.75	535090-5
	2	64	Vertical Receptacle	3.700 (93.98)	3.543 (89.99)	—	A1286-ND	3.38	75.63	650956-5
	3	48	Vertical Receptacle	2.100 (53.34)	1.500 (38.10)	—	A1287-ND	3.38	75.63	535070-5
	3	120	Vertical Receptacle	4.500 (114.30)	4.343 (110.31)	—	A1289-ND	5.56	124.40	535098-5
	3	150	Vertical Receptacle	5.500 (139.70)	5.343 (135.71)	—	A1290-ND	7.38	164.58	650405-5
	3	96	Vertical Receptacle with Action Pin	3.700 (93.98)	3.543 (89.99)	—	A1291-ND	4.05	90.75	535032-4
	2	64	Vertical Receptacle with Action Pin	3.700 (93.98)	3.543 (89.99)	—	A1292-ND	3.59	80.35	535059-5
	3	48	Vertical Receptacle with Action Pin	2.100 (53.34)	1.944 (49.38)	—	A1293-ND	2.80	65.08	535034-5
	2	32	Vertical Receptacle with Action Pin	2.100 (53.34)	1.944 (49.38)	—	A1294-ND	2.64	61.20	535068-5
	3	120	Vertical Receptacle with Action Pin	4.500 (114.30)	4.343 (110.31)	—	A1295-ND	5.01	116.35	535079-5
	3	150	Vertical Receptacle with Action Pin	5.500 (139.70)	5.343 (135.71)	—	A1296-ND	6.66	154.70	535080-5
9	3	48	Vertical Pin with Solder Posts	2.140 (54.36)	1.943 (49.35)	—	A1237-ND	2.28	51.05	650477-5
	2	32	Vertical Pin with Solder Posts	2.140 (54.36)	1.943 (49.35)	—	A1238-ND	1.97	45.68	650936-5
	3	120	Vertical Pin with Solder Posts	4.535 (115.19)	4.343 (110.31)	—	A1239-ND	3.98	92.30	650910-5
	3	150	Vertical Pin with Solder Posts	5.535 (140.59)	5.343 (135.71)	—	A1297-ND	4.76	110.50	650911-5
	3	96	Vertical Pin with Action Pin Posts	3.740 (95.00)	3.543 (89.99)	—	A1241-ND	3.29	73.73	650889-5
	2	64	Vertical Pin with Action Pin Posts	3.740 (95.00)	3.543 (89.99)	0.250 (6.35)	A1242-ND	3.29	73.73	650912-5
	3	48	Vertical Pin with Action Pin Posts	2.140 (54.36)	1.943 (49.35)	0.250 (6.35)	A1243-ND	2.44	56.58	650918-5
	2	32	Vertical Pin with Action Pin Posts	2.140 (54.36)	1.943 (49.35)	0.250 (6.35)	A1244-ND	2.19	50.86	650931-5
	3	120	Vertical Pin with Action Pin Posts	4.535 (115.19)	4.343 (110.31)	0.250 (6.35)	A1245-ND	4.20	97.50	650921-5
	3	150	Vertical Pin with Action Pin Posts	5.535 (140.59)	5.343 (135.71)	0.250 (6.35)	A1246-ND	4.98	115.70	650924-5
	3	96	Vertical Pin with Action Pin Posts	3.740 (95.00)	3.543 (89.99)	0.521 (13.23)	A1265-ND	4.23	94.58	650909-5
	2	64	Vertical Pin with Action Pin Posts	3.740 (95.00)	3.543 (89.99)	0.521 (13.23)	A1266-ND	3.42	76.57	650930-5
	2	32	Vertical Pin with Action Pin Posts	2.140 (54.36)	1.943 (49.35)	0.521 (13.23)	A1268-ND	2.30	53.44	650932-5
	3	150	Vertical Pin with Action Pin Posts	5.535 (140.59)	5.343 (135.71)	0.521 (13.23)	A1270-ND	5.94	137.80	650923-5
10	3	48	Right Angle Receptacle	2.096 (53.24)	1.900 (48.26)	—	A1271-ND	3.37	75.38	650868-5
	3	120	Right Angle Receptacle	4.496 (114.20)	4.300 (109.22)	—	A1273-ND	5.92	132.41	650874-5
	3	150	Right Angle Receptacle	5.496 (139.60)	5.300 (134.62)	—	A1274-ND	6.92	160.55	650875-5

* 64 pins; in 3-row format with pins on outside rows and middle row open.

tyco Electronics AMP

Z-Pack 2mm FB (Futurebus+) Connectors

Fig. 1

Signal Module, Vertical Pin

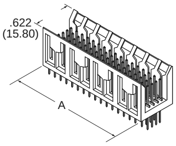


Fig. 2

Signal Module, Right-Angle Receptacle

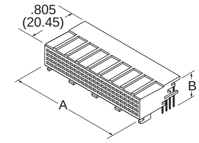


Fig. 3

Power Module, Vertical Pin

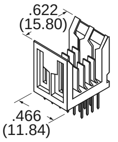
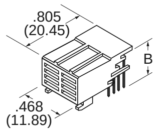


Fig. 4

Power Module, Right Angle Receptacle



The Z-PACK 2mm FB two-piece connector system uses a modular concept and a 2mm contact pitch to provide high-density, high-speed signal and power connections for Futurebus+ and Futurebus+ "like" applications.

Product Facts:

- High-density connections; four-row, 2mm x 2mm circuit grid
- Modular design for signal and power connections
- Designed to meet International Specifications IEC 1076-4-0X (48B) and EIA IS 64
- Module assemblies are end-to-end stackable
- Choice of solder leads or compliant press-fit leads
- Flat rock receptacle tooling
- Unique "cold hold" receptacle retention feature requires no tooling for lower applied cost
- Integral receptacle lead organizer

Pin and Receptacle Contacts: Duplex plated gold flash over 0.0008 (.000030) min. palladium-nickel on mating surface, 0.0038 (.000150) min. tin-lead on solder lead, with entire contact underplated 0.0013 (.000050) nickel

Pin Contacts: Phosphor bronze

Receptacle Contacts: Copper alloy 18C

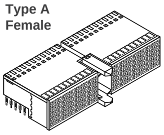
Housing: Liquid crystal polymer

No.of Pos.	Dim. – Inch (mm) A	B	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Fig. 1 With Solder Leads						
24	.468 (11.89)	—	A3262-ND	2.41	2.19	536501-1
48	.940 (23.88)	—	A3263-ND	4.05	3.68	536501-2
96	1.885 (47.88)	—	A3264-ND	9.07	8.12	536501-3
192	3.775 (95.89)	—	A3265-ND	12.88	11.67	536501-4
Fig. 1 With Compliant Press-Fit Leads						
24	.468 (11.89)	—	A3266-ND	2.44	2.21	536504-1
48	.940 (23.88)	—	A3267-ND	4.05	3.68	536504-2
96	1.885 (47.88)	—	A3268-ND	9.07	8.12	536504-3
192	3.775 (95.89)	—	A3269-ND	15.80	14.10	536504-4
Fig. 2 With Solder Leads						
24	.468 (11.89)	.107 (2.72)	A3270-ND	2.65	2.40	536507-1
48	.940 (23.88)	.107 (2.72)	A3271-ND	5.49	4.94	536507-2
96	1.885 (47.88)	.107 (2.72)	A3272-ND	9.88	8.85	536507-3
192	3.775 (95.89)	.107 (2.72)	A3273-ND	17.36	15.54	536507-4
24	.468 (11.89)	.139 (3.53)	A3274-ND	3.25	2.91	536510-1
48	.940 (23.88)	.139 (3.53)	A3275-ND	5.49	4.94	536510-2
96	1.885 (47.88)	.139 (3.53)	A3276-ND	9.88	8.85	536510-3
192	3.775 (95.89)	.139 (3.53)	A3277-ND	17.36	15.54	536510-4
Fig. 2 With Compliant Press-Fit Leads						
24	.468 (11.89)	—	A3278-ND	2.00	1.80	536511-1
48	.940 (23.88)	—	A3279-ND	5.49	4.94	536511-2
96	1.885 (47.88)	—	A3280-ND	9.88	8.85	536511-3
192	3.775 (95.89)	—	A3281-ND	17.36	15.54	536511-4
Fig. 3 With Solder Leads						
8	—	—	A3282-ND	2.68	2.43	536600-1
Fig. 3 With Compliant Press-Fit Leads						
8	—	—	A3283-ND	2.68	2.43	536603-1
Fig. 4 With Solder Leads						
8	—	.107 (2.72)	A3284-ND	2.83	2.54	536607-1
8	—	.139 (3.53)	A3285-ND	5.04	4.56	536613-1
Fig. 4 With Compliant Press-Fit Leads						
8	—	—	A3286-ND	5.06	4.59	536614-1

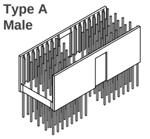
Sullins ELECTRONICS CORPORATION

NEW! Hard Metric Compact PCI Connectors

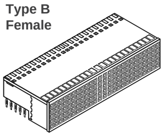
Type A Female



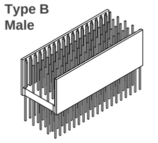
Type A Male



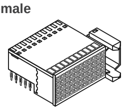
Type B Female



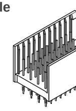
Type B Male



Type C Female



Type C Male



Designed for the Telecommunications industry to replace the DIN 41612 Series of 2 piece connectors. It is much higher density than the older 4162 and the IEC Specification allows for greater standardization.

Specifications:

• Insulator Material: Liquid Crystal Polymer (LCP) UL94V-O • Contact Material: Phospher Bronze • Current Rating: 1 Amp • Dielectric Withstanding Voltage: AC 1000V for 1 Minute • Insulator Resistance: 1000 megohm Minimum at DC 500V • Contact Resistance: 30 milli-ohm Maximum at DC 100mA • Operating Temperature: -65°C to + 125°C

No. of Pos.	Description	Digi-Key Part No.	Price Each 1	25	Sullins Part No.
110	Type A Female HM Unshielded	S3100-ND	6.31	5.72	2AF1105F001-0-H
110	Type A Female HM Shielded	S3101-ND	7.50	6.80	2AF1105F001-1-H
154	Type A Male cPCI HM	S3102-ND	6.31	5.72	2AM154P1011-1-H
154	Type A Male HM cPCI Hot Swap	S3103-ND	7.50	6.80	2AM154P1012-1-H
100	Type A Male HM cPCI Telephony	S3104-ND	4.64	4.20	2AM100P1013-1-H
95	Type B19 Female HM Unshielded	S3105-ND	6.07	5.50	2B19F955F001-0-H
95	Type B19 Female HM Shielded	S3106-ND	6.65	6.03	2B19F955F001-1-H
133	Type B19 Male HM	S3107-ND	5.46	4.95	2B19M133P1001-1-H
110	Type B22 Female HM Unshielded	S3108-ND	7.10	6.44	2B22F1105F001-0-H
110	Type B22 Female HM Shielded	S3109-ND	7.50	6.80	2B22F1105F001-1-H
154	Type B22 Male HM	S3110-ND	6.17	5.60	2B22M154P1001-1-H
154	Type B22 Male HM CPCI Telephony	S3111-ND	6.89	6.24	2B22M154P1013-1-H
125	Type B25 Female HM Shielded	S3112-ND	9.41	8.52	2B25F1255F001-1-H
125	Type B25 Female HM Unshielded	S3113-ND	7.16	6.48	2B25F1255F001-0-H
175	Type B25 Male HM	S3114-ND	7.02	6.36	2B25M175P1001-1-H
55	Type C Female HM Unshielded	S3115-ND	4.40	3.99	2CF555F001-0-H
55	Type C Female HM Shielded	S3116-ND	5.70	5.16	2CF555F001-1-H
77	Type C Male HM	S3117-ND	3.31	3.00	2CM77P1001-1-H

HRS HIROSE ELECTRIC CO.,LTD.

DIMM Sockets — SX1 Series

Features: The SX1 Series of horizontal SMT type sockets with 0.635mm pitch comply with the "Small Outline DIMM" specification standardized by JEDEC. Compared with the 72-pin DRAM SIMM socket, these SX1 sockets are about half the size. These sockets can be used in applications requiring double density (i.e., both sides) and permit module boards to be designed with higher level functions and higher density. **Applications:** Personal computers, office automation equipment, measuring instruments, communications equipment, medical equipment, factory automation, game machines, EWS, general-use computers, etc. **Ratings:** Temp. Range -55°C to +85°C Volt: 25V AC Current: 0.5A

Fig. 1

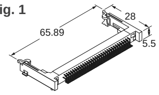


Fig. 2

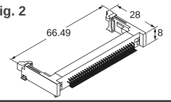


Fig. 3

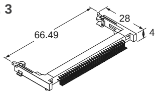
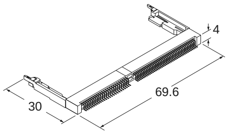


Fig.	No. of Pos.	Description	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
Standard							
1	72	Height 5.5mm, DIMM key 3.3V	H2342-ND	5.17	4.14	3.20	SX1B-72S-0.635SH
	72	Height 5.5mm, DIMM key 5V	H2343-ND	5.17	4.14	3.20	SX1BA-72S-0.635SH
High Profile							
2	72	Height 8.0mm, DIMM key 3.3V	H2344-ND	7.78	6.54	5.14	SX1C-72S-0.635SH
	72	Height 8.0mm, DIMM key 5V	H2345-ND	7.78	6.54	5.14	SX1CA-72S-0.635SH
Low Profile							
3	72	Height 4.0mm, DIMM key 3.3V	H2346-ND	6.08	4.87	3.76	SX1E-72S-0.635SH
	72	Height 4.0mm, DIMM key 5V	H2347-ND	6.08	4.87	3.76	SX1EA-72S-0.635SH

DIMM Sockets — SX6E Series



Features: The SX6E Series are 0.8mm pitch horizontal SMT type sockets conforming to the 144-pin, 8-byte Small Outline DIMM specification which has been standardized by JEDEC. These miniature, lightweight sockets succeed in establishing a mounting height of only 4mm. **Applications:** Personal computers, office automation equipment, measuring instruments, communications equipment, medical equipment, factory automation, game machines, EWS, general-use computers, etc. **Ratings:** Temp. Range: -55°C to +85°C Volt: 25V AC Current: 0.3A

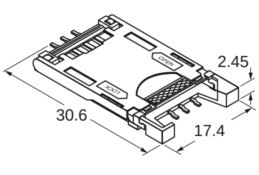
No. of Pos.	Description	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
144	Conn DIMM SMD	H2341-ND	11.61	9.68	8.58	SX6E-144S-O.8SH

SIM Card Sockets — ID1A Series

Features: Suited for Plug-in SIM Cards of the GSM Standard (11.11). SIM card Subscriber Identity Modules are used for subscriber identification with portable telephone terminals of the GSM system for which standards have been unified. The ID1A Series of sockets are suited for use with GSM standard (11.11) plug-in SIM cards. These sockets are miniature and thin with a height of 2.45mm, length of 30.6mm, and width of 17.4mm.

Applications: Portable terminals and equipment that uses GSM Standard (11.11) plug-in SIM cards.

Ratings: Current: 1A Temp. Range: -30°C to +80°C. Volt: 100V AC



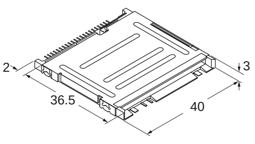
Digi-Key Part No.	Bulk Price Each 1	25	100	Hirose Part No.	Digi-Key Part No.	Tape & Reel Pricing 500	Hirose Part No.
H1016-ND	2.97	2.38	1.84	ID1A-6S-2.54SF	H1016TR-ND	702.00	ID1A-6S-2.54SF(21)

SmartMedia Connectors — MCR 102 Series

Features: The MCR102 Series of miniature, thin connectors conforms to the SSFDC Forum of "SmartMedia" miniature storage media. Available in three types: 3.3V card type, 5V card type, and a combined type for both 3.3V and 5V cards.

Applications: Digital cameras, PDA, voice recorders, and other equipment that uses SmartMedia.

Ratings: Current: 0.5A Temp Range: -20°C to +60°C Voltage: 125V AC



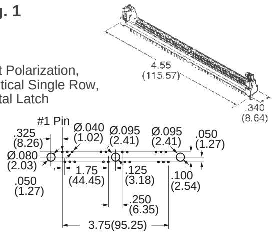
No. of Pos.	Description	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
22	Smart Card 3.3V/5V	H2338-ND	5.34	4.27	3.30	MCR102-22R-1.27SF
22	Smart Card 3.3V	H2339-ND	4.29	3.44	2.66	MCR102-22RL-1.27SF
22	Smart Card 5V	H2340-ND	5.34	4.27	3.30	MCR102-22RH-1.27SF

SIMM Sockets

Features and Benefits: • Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly • Guaranteed 2 points of contact per readout with standard JEDEC module • Anti-overstress latch feature provides extra protection during module removal • Polarization posts provide orientation for proper loading of socket into printed circuit board • Polarization rib properly orients module to socket • EIA standard dimensions.

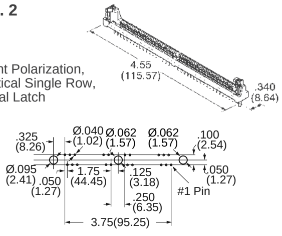
Electrical Specifications: • Voltage: 250V • Current: 1.0A • Contact Resistance: 30mΩ max. • Dielectric Withstanding Voltage: 1000V AC • Insulation Resistance: 5000MΩ min. • Capacitance: 2.5 pF max.
Mechanical Specifications: • Normal Force: 150g • Durability: 25 cycles.
Physical Specifications: • Housing: Black LCP, UL 94V-0 • Latch: Stainless Steel • Contact: Phosphor Bronze Alloy • Temperature: -40°C to +85°C

Fig. 1



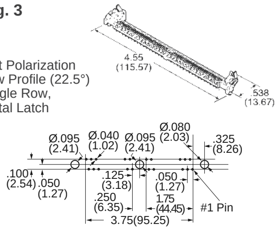
Left Polarization,
Vertical Single Row,
Metal Latch

Fig. 2



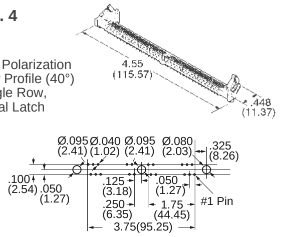
Right Polarization,
Vertical Single Row,
Metal Latch

Fig. 3



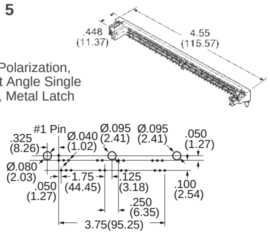
Left Polarization
Low Profile (22.5°)
Single Row,
Metal Latch

Fig. 4



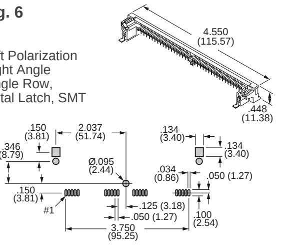
Left Polarization
Low Profile (40°)
Single Row,
Metal Latch

Fig. 5



Left Polarization,
Right Angle Single
Row, Metal Latch

Fig. 6



Left Polarization
Right Angle
Single Row,
Metal Latch, SMT

Fig.	Plate	Digi-Key Part No.	Price Each 1	25	50	100	Molex Part No.
1	Tin	WM1700-ND	3.69	3.45	3.12	2.79	15-82-0775
1	Gold	WM1702-ND	3.69	3.45	3.12	2.79	15-82-0762
2	Tin	WM1701-ND	3.69	3.45	3.12	2.79	15-82-0777
2	Gold	WM1703-ND	3.69	3.45	3.20	2.79	15-82-0788
3	Tin	WM1704-ND	3.69	3.45	3.12	2.79	15-82-0678
3	Gold	WM1705-ND	3.69	3.45	3.12	2.79	15-82-0675
4	Tin	WM1706-ND	6.21	5.80	5.25	4.70	15-82-0649
4	Gold	WM1707-ND	3.69	3.45	3.12	2.79	15-82-0627
5	Tin	WM1709-ND	12.13	11.32	10.25	9.17	15-82-1538
5	Gold	WM1708-ND	15.36	14.34	12.97	11.61	15-82-0312
6	Gold	WM18502-ND	16.61	15.50	14.03	12.55	15-82-0328

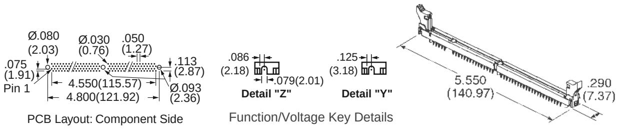
DIMM Sockets

Features and Benefits: • Accepts JEDEC M0-161 modules for 100% industry compatibility • Dual ejector latches for easy module removal • Palladium nickel with gold flash plating for improved reliability • Added contact wipe for improved reliability

Electrical Specifications: • Voltage: 100V • Current: 1.0A • Contact Resistance: 20mΩ max. • Dielectric Withstanding Voltage: 750V AC • Insulation Resistance: 100MΩ min.

Mechanical Specifications: • Mating Force: 5 oz. per pair • Durability: 25 cycles min.

Physical Specifications: • Housing and Latch: High temperature resistant thermoplastic, UL 94V-0 • Contact: Phosphor Bronze • Plating: Selective palladium nickel with gold flash with tin/lead on solder tails • Temperature: -40°C to +85°C



PCB Layout: Component Side

Function/Voltage Key Details

Description	Circuits	Function Key	Voltage Key	Digi-Key Part No.	Price Each 1	25	50	Molex Part No.
DRAM 3.3V	168	Detail Y	Detail Y	WM1710-ND	4.34	4.06	3.67	71251-0001
SDRAM 3.3V	168	Detail Z	Detail Y	WM1714-ND	4.34	4.06	3.67	71251-0016
Unbuffered 3.3V	168	Detail X	Detail Y	WM1712-ND	4.34	4.06	3.67	71251-0012
DRAM 3.3V, Forklock Version	168	Detail Y	Detail Y	WM18497-ND†	4.57	4.27	3.86	71736-0001

† White glass-filled LCP, UL94-0

S.O. DIMM Sockets

Features and Benefits: • Size 144 circuits • S.O. DIMM sockets accept JEDEC standard DRAM and SDRAM modules; SGRAM socket accepts JEDEC standard SGRAM modules • Plastic latch prevents scratching of module, while metal anti-overstress feature protects latch from bending too far in or out • Front solder tabs provide secure PCB hold-down • Polarization key assures proper module insertion

Electrical Specifications: • Power Supply: 3.3V • Voltage: 100V • Current: 0.3A • Dielectric Withstanding Voltage: 200V AC/1 min. • Insulation Resistance: 1000MΩ min.

Physical Specifications: • Temperature: -55°C to +85°C

Fig. 1 — S.O. DIMM, Right Angle, SMT

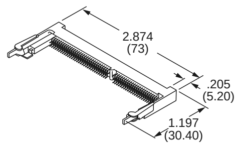


Fig. 2 — S.O. DIMM, Right Angle, SMT

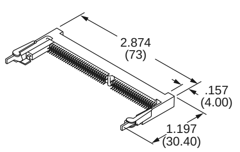
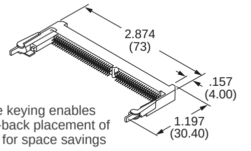


Fig. 3 — S.O. DIMM, Right Angle, SMT, Reverse Keying



Reverse keying enables back-to-back placement of sockets for space savings

Fig. 4 — SGRAM, Right Angle, SMT

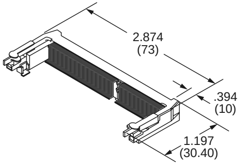


Fig.	Description	Max. Contact Resistance	Mounted Height	Digi-Key Part No.	Price Each 1	25	50	Molex Part No.
	S.O. DIMM Sockets							
1	SMT, Right Angle	60mΩ	5.2mm	WM18499-ND	6.66	6.22	5.63	54142-1440
2	SMT, Right Angle	50mΩ	4.0mm	WM18498-ND	6.89	6.43	5.82	54144-1440
3	SMT, Right Angle, Reverse Keying	60mΩ	4.0mm	WM18501-ND	6.66	6.22	5.63	54432-1440
	SGRAM Socket							
4	SMT, Right Angle	70mΩ	10.0mm	WM18500-ND	6.93	6.47	5.86	54189-1440

CF Card Connectors

Card Headers

Features and Benefits:
• Size 50 circuits • Dual-row 1..27mm (.050") pitch at card interface and 0.635mm (.025") pitch in-line SMT tails • High temperature housing suitable for reflow soldering • In-line SMT tails protect against damage during assembly.

Electrical Specifications:
• Voltage: 100V • Current: 0.5A • Contact Resistance: 40mΩ max. • Dielectric Withstanding Voltage: 500V AC/1 min. • Insulation Resistance: 1000MΩ min.

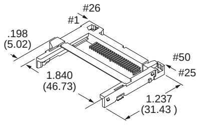
Physical Specifications:
• Housing: Glass-filled LCP, UL94V-0 (WM18503-ND: black; WM18505-ND and WM18506-ND: white) • Contact: Phosphor bronze • Plating: Gold over palladium nickel in contact area; tin/lead in solder tail area, nickel underplate overall • Solder Tab: Phosphor bronze, tin/lead over copper plating • Temperature: -20°C to +90°C • PC Board Thickness: 0.80mm • PC Card Thickness: 3.30mm ±0.1 • PC Card Width: 42.80mm ±0.1

Card Ejectors

Features and Benefits:
• Low-profile modular design snaps easily onto header • Can be used with both top and bottom mount headers • Lever design provides for smooth card extraction

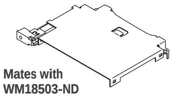
Physical Specifications:
• Metal Shell and Lever: Stainless steel • Top button: Glass-filled PBT, UL 94V-0 (WM18504-ND has a brass pin and black polycarbonate base button)

Fig. 1 – Right Angle, SMT Top Mount Header
For Type I and Type II Cards



Integral gold plated frame grounds and solder tabs

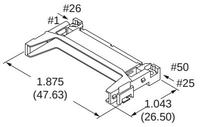
Fig. 2 – Left Side Flip Button Ejector
For Type I and Type II Headers



Mates with WM18503-ND

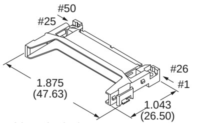
Flip-style button folds 90° Stainless steel rod

Fig. 3 – Right Angle, SMT Top Mount Header
For Type I Cards



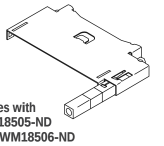
Solder tabs in front provide stability during mating

Fig. 4 – Right Angle, SMT Bottom Mount Header
For Type I Cards



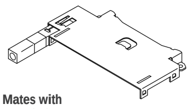
Solder tabs in front provide stability during mating

Fig. 5 – Right Side Button Ejector
For Type I Headers



Mates with WM18505-ND and WM18506-ND

Fig. 6 – Left Side Button Ejector
For Type I Headers



Mates with WM18505-ND and WM18506-ND

Fig.	Description	Digi-Key Part No.	Price Each 1	25	50	Molex Part No.
	For Type I and Type II Cards and Headers					
1	Header, Rt. Angle, SMT, 5.85mm Low Profile Height	WM18503-ND	17.82	16.64	15.05	55244-5021
2	Ejector, Left Side Flip Button	WM18504-ND	8.49	7.93	7.17	55246-0011
	For Type I Cards and Headers					
3	Top Mount Header, Rt. Angle, SMT, 1.64mm Standoff Height	WM18505-ND	11.57	10.81	9.78	53856-5010
4	Bottom Mount Header, Rt. Angle, SMT, 1.64mm Standoff Height	WM18506-ND	11.57	10.81	9.78	53927-5010
5	Ejector, Right Side Flip Button (for Top or Bottom Mt. Headers)	WM18507-ND	10.67	9.97	9.02	55021-0001
6	Ejector, Left Side Button (for Top or Bottom Mount Headers)	WM18508-ND	10.67	9.97	9.02	55022-0001

Amphenol NEW! Smart Card Connectors

PUSHMATIC® II With or Without Locking Arms

Fig.1

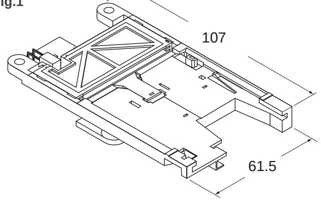


Fig. 2

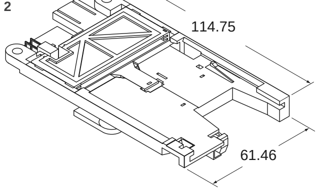


Fig. 3

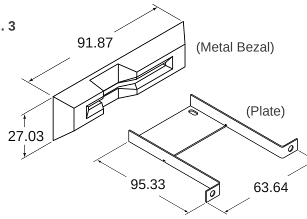
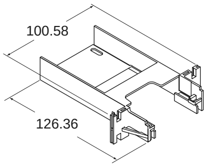


Fig. 4



Applications: • Payment and security systems **Design Features:** • Anti-vandal Smart Card Connector for unattended terminals • Miniaturized style, suitable for mobile interface devices • Card accessible during power failure • Card presence switch, also can be used for system wake up • Card end position switch also acts as card locking sensor • Additional sensor for card active position detects abnormal termination of the transaction • Self retracting and self cleaning data contacts provide protection against vandalism • SCC meets the requirements as specified in document EMV 96 (Europay Mastercard Visa/Integrated Circuit Card Specification for Payment Systems) • Housing bottom features a large debris slot allowing the egress of coins, paper, as well as cut in half cards • 16 way interface header allows for custom cabling **Assembly Instructions:** • PUSHMATIC® II can be used with mounting adapter and bezels according to customer design.

Standard Style Smart Card Connectors

Fig. 5

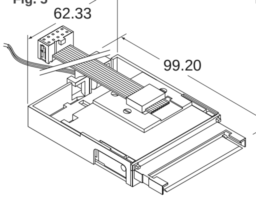


Fig. 6

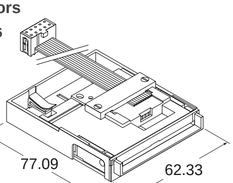
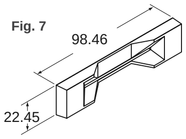


Fig. 7



Note: Use only with Fig. 6
C702 10M008 5142
C702 10M008 5222

Applications: • Unattended Point of Sale systems • Vending equipment • Access control **Design Features:** • High numbers of card insertion cycles, due to the principle of landing contacts • Designed for harsh applications and environments • Modular system with several operating methods from manual handling to automatic card ejection • Bezel Accessory **Assembly Instructions:** • Please make sure that interface cables are unrestricted and free to move after assembly.

Superflat Style Smart Card Connectors

Fig. 8

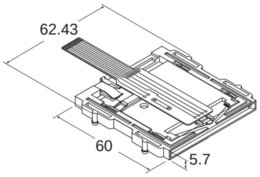
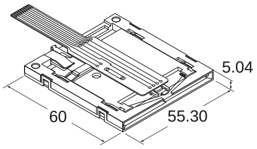


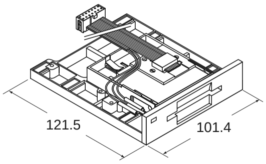
Fig. 9



Applications: • Point of Sale systems • Mobile devices • Access control • Keyboards **Design Features:** • Miniature size ideally suited for mobile devices **Assembly Instructions:** • Please make sure that flexprints remain free and unrestricted after assembly.

Disk Drive Slot Smart Card Connectors

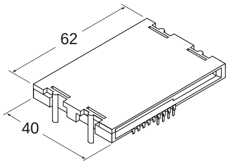
Fig. 10



Design Features: • A Smart Card Connector (C702-1) with Push Pull card handling • Mounted on a 3.5 high inch disk drive frame (tan color: RAL 7032) with a bicolor LED (red/green) • Mounting screws are included **Assembly Instructions:** • Please make sure that interface cables are unrestricted and free to move after assembly.

PCB Mount Wiping Contact Smart Card Connectors

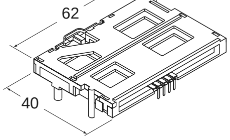
Fig. 11



Applications: • Set top boxes • Toll road transponders • Parking meters • Utility metering systems **Design Features:** • Termination: dip solder pins • Special shape of wiping contacts minimize card scratching and wear • Smart Card Connector meets the requirements as specified in document ISO 7816 **Soldering Conditions:** • Wave soldering: 260°C; 10s max.

PCB Mount Wiping Contact Smart Card Connectors

Fig. 12



C702 10M008 2724

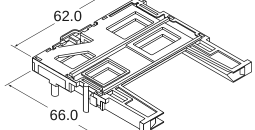
Applications: • Set top boxes • Toll road transponders • Parking meters • Utility metering systems **Design Features:** • Termination: dip solder pins • Special shape of wiping contacts minimize card scratching and wear • Smart Card Connector meets the requirements as specified in document EMV 96 (Europay Mastercard Visa/Integrated Circuit Card Specification for Payment Systems) Includes 3mm stand-offs **Soldering Conditions:** • Wave soldering: 260°C; 10s max.

C702 10M008 2554 with 3mm Standoffs

These acceptors are low cost and provide direct sliding contact between the acceptor and the chip card. These acceptors have NC closed card present switches which open when the card is fully inserted.

PCB Mounting Contact Smart Card Connectors with 3mm Standoffs

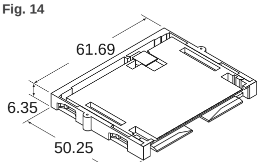
Fig. 13



Applications: • TV/Satellite decoders • Point of Sale systems • Computer networks and energy meters • Also suitable for applications with permanently inserted cards under changing temperatures **Design Features:** • Meets the EMV Integrated Circuit Card Specification for Payment Systems (Europay Mastercard Visa) • Has a switch which indicates whether a card is in the reading position

Landing Card PCB Mount Smart Card Connectors

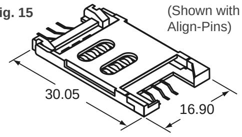
Fig. 14



Design Features: • High number of mating cycles due to minimized wiping distance on card contacts • Contact self-cleaning effect • Short card insertion depth **Soldering Conditions:** • Wave soldering: 260°C; 10s max.

SIMLOCK®

Fig. 15



(Shown with Align-Pins)

Applications: • Designed for mini SIM/SAM card **Design features:** • Size: same footprint as SIM card • Reliable function in locked state during mobile use • Polarization notch does not allow incorrect card positioning • Suitable for automatic assembly processes (Pick & Place, Tape & Reel, and Reflow) **Soldering Conditions:** • Infrared reflow: 245°C; 10s max.

SIMBLOCK®

Fig. 16

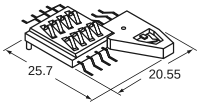
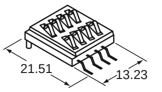


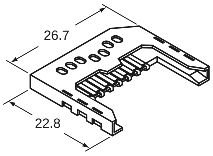
Fig. 17



Applications: • Handsets • E-Purses **Design Features:** • Contacts chip cards according to ISO 7816 and Plug in SIM-Cards • Low height (2mm standard) • High co-planarity accuracy • SMT-Version with 6 contacts especially designed for GSM 11.11 interfaces **Soldering Conditions:** • Infrared reflow: 245°C; 10s max., SIMBLOCK® with switch

MMC Connectors

Fig. 18



Applications: • Audio • Video • PC • Automotive • Telecom Designed according to latest MMCA specification. Cut out for mechanical and electrical contact tests. Underneath contact design.

Fig.	Description	Digi-Key Part No.	Price Each 1	25	100	T&R Pricing 800	Amphenol Part No.
1	Pushmatic® II, 12V	361-1005-ND	30.83	28.77	26.72	—	C702 10M008 9042
	Pushmatic® II, 5V	361-1007-ND	30.83	28.77	26.72	—	C702 10M008 9062
2	Pushmatic® II, 12V, with Locking Arms	361-1006-ND	34.71	32.40	30.09	—	C702 10M008 9052
	Pushmatic® II, 5V, with Locking Arms	361-1008-ND	35.49	33.13	30.76	—	C702 10M008 9072
3	Metal Bezel for Pushmatic® II	361-1009-ND	10.74	8.88	7.48	—	C702 G46 000 G2
	Metal Mounting Plate for Pushmatic® II	361-1010-ND	4.67	3.63	2.90	—	C702 G51 012 E2
4	Plastic Adapter for Deep Bezel	361-1011-ND	10.37	8.57	7.22	—	C702 N25 040 E2
5	Pushmatic®, 12V, ISO	361-1001-ND	19.68	18.37	17.06	—	C702 10M008 7002
	Pushmatic®, 5V, ISO	361-1002-ND	19.68	18.37	17.06	—	C702 10M008 7012
6	Push Pull, ISO	361-1003-ND	14.68	12.85	11.38	—	C702 10M008 5142
	Push Pull, Afnor	361-1004-ND	17.10	15.96	14.82	—	C702 10M008 5222
7	Plastic Bezel, Black, Standard Style	361-1012-ND	11.68	10.22	9.06	—	C702 N11 141 E2
8	Superflat Snap-In, EMV Compatible	361-1014-ND	8.76	7.08	5.57	—	C702 10M008 0664
9	Superflat	361-1015-ND	10.58	8.74	7.36	—	C702 10M008 0014

Fig.	Description	Digi-Key Part No.	Price Each 1	25	100	T&R Pricing 800	Amphenol Part No.
10	Disk Drive Slot, Desktop	361-1022-ND	35.01	32.68	30.35	—	C705 10M008 0195
11	ISO Wiping Contact, Snap-In	361-1016-ND	2.54	1.95	1.56	—	C702 10M008 2064
12	ISO Wiping Contact, EMV, Snap-In	361-1018-ND	2.11	1.63	1.30	—	C702 10M008 2724
	ISO Wiping Contact EMV, with Standoffs	361-1019-ND	2.21	1.70	1.36	—	C702 10M008 2554
13	ISO Wiping Contact w/Rails, w/Standoffs	361-1017-ND	2.37	1.83	1.46	—	C702 10M008 2834
14	ISO Landing PCB	361-1013-ND	6.70	5.20	4.16	—	C702 10M008 1214
15	SIMLOCK® without Align-Pins, Black	361-1020-1-ND*	2.11	1.63	1.30	—	C707 10M006 5002
	SIMLOCK® without Align-Pins, Black	361-1020-2-ND	—	—	—	728.00	C707 10M006 5002
	SIMLOCK® with Align-Pins, Black	361-1021-1-ND*	2.11	1.63	1.30	—	C707 10M006 0492
	SIMLOCK® with Align-Pins, Black	361-1021-2-ND	—	—	—	728.00	C707 10M006 0492
16	SIMBLOCK® with NC Switch	361-1023-ND	2.99	2.32	1.86	—	C707 10M006 0532
17	SIMBLOCK® without Switch	361-1024-ND	2.73	2.10	1.68	—	C707 10M006 0522
18	Multimedia Card Push Pull	361-1025-ND	2.89	2.23	1.78	—	C709 10A007 1001

* Denotes Cut Tape

I.C. Sockets

Performance Characteristics:

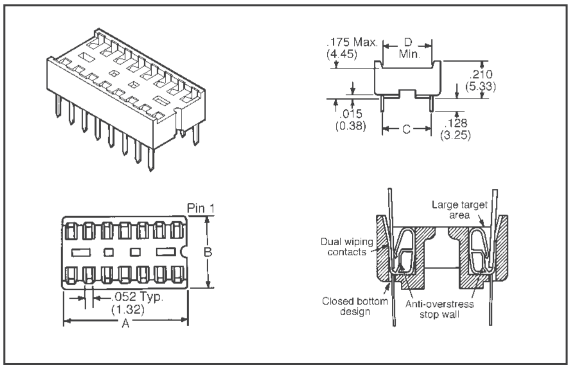
Physical: • Engaging force: 250 grams (.013 [0.33] pin) • Separating force: 50 grams (.008 [0.2] pin).

Electrical: • Rating: 250 VAC • Contact resistance: 20 milliohms max. initial, 30 milliohms max. after test • Dielectric withstanding voltage: 1000 VRMS min. • Insulation resistance: 5,000 megohms min. • Capacitance: 0.5 picofarad max.

Environmental: • Operating temperature: -55°C to + 105°C (tin); -55°C to + 125°C (gold) • Vibration: 10-2000-10 Hz in 20 minutes at .06 [1.52] or 15G's for 3 sweeps in each of 3 axis • Shock: 100 G's sawtooth; 6 shocks.

Material and Finish: • Housing: Glass-filled thermoplastic. 94V-0 rated. (black).

Notes: • Closed bottom design: inhibits flux contamination and solder wicking • Over-stress stop wall: prevents damage to socket contact from bent or twisted DIP leads and off-set insertion or extraction of DIP packages • Closed Frame Style (unless noted) • Large target area: makes it easy to insert DIP packages • Dual wiping contacts: make a gas-tight connection for high reliability • Low profile: .175 (4.45) max. seating plane above pc board • Dual wiping contacts • Stackable end-to-end and side-to-side • Designed to meet EiA RS-415, MIL-S-83734 and stringent computer specifications • Recognized under the Component Program of Underwriters Lab. Inc. File E28476 • Certified by Canadian Standards Association File No. LR 16455.

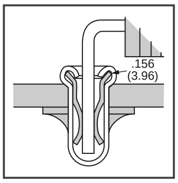


No. of Pins	Dimensions – In. (mm) A	B	C	D	Digi-Key Part No.	Price Each 1	10	AMP Part No.
Dual Leaf Low Profile Dip Sockets								
Phosphor Bronze with 15µ Gold Plating								
6	.295 (7.49)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A9406-ND	.66	.53	2-641296-4
8	.395 (10.03)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A9408-ND	.51	.41	2-640463-4
14	.695 (17.65)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A9414-ND	.60	.48	2-640357-4
16	.795 (20.19)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A9416-ND	.66	.53	2-640358-4
16	.795 (20.19)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A94116-ND*	.78	.63	2-641600-4
18	.895 (22.73)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A9418-ND	1.20	.96	2-640359-4
20	.995 (25.27)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A9420-ND	.87	.70	2-640464-4
20	.995 (25.27)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A94120-ND*	1.02	.82	2-641602-4
24	1.195 (30.35)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A9424-ND	1.62	1.30	2-640361-4
24	1.195 (30.35)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A94124-ND*	1.44	1.16	2-641932-4
28	1.395 (35.43)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A9428-ND	1.50	1.20	2-640362-4
28	1.395 (35.43)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A94128-ND*	1.50	1.20	2-641605-4
32	1.595 (40.51)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A94132-ND*	1.71	1.37	2-644018-4
40	1.995 (50.67)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A9440-ND	1.95	1.56	2-640379-4
40	1.995 (50.67)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A94140-ND*	1.95	1.56	2-641606-4
Beryllium Copper with 30µ Gold Plating								
6	.295 (7.49)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24793-ND	.60	.48	2-641296-2
8	.395 (10.03)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24794-ND	.42	.34	2-640463-2
14	.695 (17.65)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24795-ND*	.84	.68	2-641599-2
16	.795 (20.19)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24796-ND*	.87	.70	2-641600-2
24	1.195 (30.35)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24797-ND*	1.50	1.20	2-641932-2
24	1.195 (30.35)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A24798-ND*	1.92	1.54	2-641604-2
28	1.395 (35.43)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A24799-ND*	2.01	1.61	2-641605-2
32	1.595 (40.51)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A24800-ND*	2.28	1.83	2-644018-2
40	1.995 (50.67)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A24801-ND*	2.70	2.16	2-641606-2
Sockets with Retention Solder Tails								
Phosphor Bronze with 15µ Gold Plating								
8	.395 (10.03)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24802-ND	.60	.48	2-641260-4
28	1.395 (35.43)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A24803-ND*	1.50	1.20	2-641615-4
Phosphor Bronze with Tinned Plating								
28	1.395 (35.43)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A24804-ND*	.57	.46	2-641615-3
Beryllium Copper with 30µ Gold Plating								
28	1.395 (35.43)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A24805-ND*	2.01	1.61	2-641615-3
40	1.995 (50.67)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A24806-ND*	2.70	2.16	2-641616-2
Beryllium Copper with Tinned Plating								
8	.395 (10.03)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24807-ND	.24	.20	2-641260-1
14	.695 (17.65)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24808-ND*	.60	.48	2-641609-1
16	.795 (20.19)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24809-ND*	.57	.46	2-641610-1
20	.995 (25.27)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24810-ND*	.66	.53	2-641612-1
24	1.195 (30.35)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24811-ND*	.39	.32	2-641933-1
32	1.595 (40.51)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A24812-ND*	.99	.80	2-382189-1

* Open Frame Style.

Test Sockets

Reusable Receptacles for Component Testing: • Receptacles help prevent heat damage to pc boards and components during burn-in and bread-boarding evaluation • Receptacles eliminate need for soldering components directly to the board • Board components can be inserted and extracted at a minimum of 100 times.

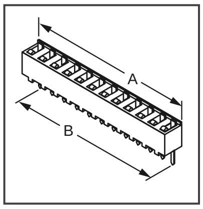


Description	Accepts Lead Size - Inch (mm)	Finish Cup	Spring	Digi-Key Part No.	Price Each 1	10	100	AMP Part No.
Closed Bottom	.018 - .040 (0.46 - 1.02)	30µ Gold Tin-Lead Tin-Lead	30µ Gold 30µ Gold Tin-Lead	A29070-ND A29071-ND A29072-ND	.77 .34 .27	.62 .27 .22	.49 .22 .18	380598-1 380598-2 380598-3
Closed Bottom	.036 - .051 (0.91 - 1.30)	Tin-Lead Tin-Lead	Tin-Lead 30µ Gold	A29073-ND A29074-ND	.27 .32	.22 .26	.18 .21	1-380758-0 1-380758-1
Open Bottom	.018 - .040 (0.46 - 1.02)	30µ Gold Tin-Lead Tin-Lead	30µ Gold 30µ Gold Tin-Lead	A29075-ND A29076-ND A29077-ND	.81 .50 .36	.65 .40 .29	.52 .32 .23	380635-1 380635-2 380635-5
Open Bottom	.036 - .051 (0.91 - 1.30)	Tin-Lead Tin-Lead	TIn-Lead 30µ Gold	A29078-ND A29079-ND	.27 .43	.22 .35	.18 .28	640206-1 640206-2
Stand-Off	.018 - .040 (0.46 - 1.02)	Tin-Lead Tin-Lead	30µ Gold TIn-Lead	A29080-ND A29081-ND	.96 .40	.77 .33	.61 .26	1-380737-0 640593-1

SIP Sockets

STRAIGHT SOLDER TAIL

The DIPLOMATE Dual Leaf SIP socket family provides high quality at low cost with superior handling characteristics. These stackable housings feature a "true closed bottom" design which prevents solder or flux wicking • Housing- Glass-filled thermoplastic, 94V-0 rated, black • Low Profile - .210 (5.33) max. • Dual wiping contacts • Accepts .008 - .014 (0.2 - 0.36) thick x .030 (0.76) max. wide rectangular leads



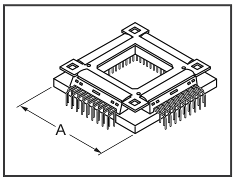
No. Of Positions	Dimensions - Inch (mm) A	B	Digi-Key Part No.	Price Each 1	10	100	AMP Part No.
3	.295 (7.49)	.200 (5.08)	A26245-ND	.78	.63	.50	382437-1
4	.395 (10.03)	.300 (7.62)	A24813-ND	.78	.63	.50	382438-1
7	.695 (17.65)	.600 (15.24)	A24814-ND	.78	.63	.50	382441-1
8	.795 (20.19)	.700 (17.78)	A24815-ND	.93	.75	.59	643640-1
10	.995 (25.27)	.900 (22.86)	A24816-ND	1.08	.87	.69	643642-1
12	1.195 (30.35)	1.100 (27.94)	A26246-ND	1.26	1.01	.80	643644-1
14	1.395 (35.43)	1.300 (33.02)	A24817-ND	2.01	1.61	1.28	643646-1
15	1.495 (37.97)	1.400 (35.56)	A24818-ND	2.13	1.71	1.35	643647-1
16	1.595 (40.51)	1.500 (38.1)	A26247-ND	1.35	1.08	.86	643648-1
17	1.695 (43.05)	1.600 (40.64)	A26248-ND	1.77	1.42	1.13	643649-1
18	1.795 (45.59)	1.700 (43.18)	A24819-ND	1.86	1.49	1.18	643650-1
20	1.995 (50.57)	1.900 (48.26)	A24820-ND	1.35	1.08	.86	643652-1
25	2.495 (63.37)	2.400 (60.96)	A24821-ND	4.20	3.36	2.66	643657-1
30	2.995 (76.07)	2.900 (73.66)	A26250-ND	5.91	4.73	3.75	643662-1

PQFP Sockets

Housing: High temperature thermoplastic, 94V-0 rated, black. **Cover:** Polyphenylene sulfide (PPS), 94V-0 rated, black. (MICRO-PITCH: Housing and Cover are high temperature thermoplastic, 94V-0 rated).

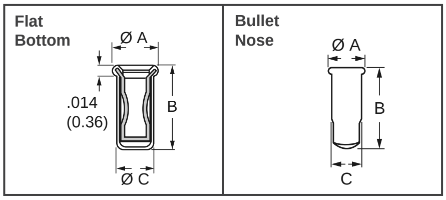
Performance Characteristics:

- Current Rating: 1amp Max.
- Operating Temp.: -55°C to +105°C
- Dielectric Withstanding Volt.: 750 VAC min.
- Capacitance (Adjacent Contacts): 1 picofarad max.
- Durability: 15 insertion/withdrawal cycles



No. Of Pos.	Description	Dimension A Inch (mm)	Digi-Key Part No.	Price Each 1	10	100	AMP Part No.
Conventional AMP Sockets							
100	Housing Sub-Assembly	1.140 (28.96)	A24822-ND	14.94	11.96	9.47	821949-4
100	Cover	1.140 (28.96)	A24823-ND	2.05	1.64	1.30	821939-1
132	Housing Sub-Assembly	1.340 (34.04)	A24824-ND	20.28	16.23	12.85	821949-5
132	Cover	1.340 (34.04)	A24825-ND	2.67	2.14	1.70	821942-1
MICRO-PITCH Sockets for JEDEC Metric Quad Flat Pack IC's							
144	Housing Sub-Assembly	38.2 (1.504)	A24826-ND	20.07	16.06	12.72	822114-3
144	Cover	38.2 (1.504)	A24827-ND	2.72	2.18	1.72	822115-3
160	Housing Sub-Assembly	38.2 (1.504)	A24828-ND	22.35	17.88	14.16	822114-4
160	Cover	38.2 (1.504)	A24838-ND	3.05	2.44	1.94	822115-4
Tools							
—	Extraction Tool	—	A24839-ND	46.65	—	—	822254-1
100	Insertion Hand Tool for Conventional	—	A24831-ND	588.45	—	—	822253-1
132	Insertion Hand Tool for Conventional	—	A24841-ND	288.29	—	—	822253-2
—	Insertion Hand Tool for MICRO-PITCH	—	A24842-ND	225.92	—	—	822253-4

Miniature Spring Sockets



The Miniature Spring Socket System is composed of a series of individual sockets, each utilizing a permanently secured helical spring design to accept round, square or rectangular leads.

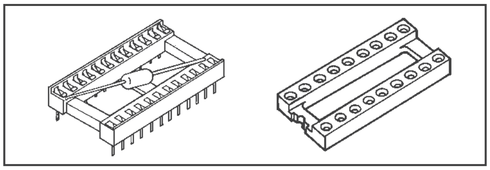
Features: • SMT and IRR processing compatibility • Five different hole size series .039 to .107” (0.99 to 2.72mm) available to accommodate a pin diameter range of .012 to .065” (0.30 to 1.65mm) and board thicknesses of .031 to .125” (0.79 to 3.18mm) • Low-Profile, above-board height of .022” (0.56mm) allows maximum board-to-board clearance • Small head diameter allow centerline spacing as close as .070” (1.78mm) • Sockets accept round, square or rectangular leads without socket orientation • Inner helical spring assures maximum reliability

Material: Spring: Beryllium Copper **Contact Sleeve:** Copper

Description	Pin Diameter Range Inch (mm)	Finish Spring	Finish Sleeve	Dimensions – Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	AMP Part No.
Flat Bottom										
Closed Bottom	.013 - .020 (0.33 - 0.51)	30µ Gold	Gold Flash	.059 (1.50)	.142 (3.61)	.038 (0.97)	A26251-ND	.32	.26	2-330808-8
	.013 - .020 (0.33 - 0.51)	30µ Gold	Tin	.059 (1.50)	.142 (3.61)	.038 (0.97)	A26253-ND	.29	.23	6-330808-5
	.013 - .020 (0.33 - 0.51)	30µ Gold	Tin	.059 (1.50)	.178 (4.52)	.039 (0.99)	A26255-ND	.30	.24	2-332095-4
	.013 - .020 (0.33 - 0.51)	30µ Gold	Gold Flash	.059 (1.50)	.178 (4.52)	.039 (0.99)	A26257-ND	.34	.28	2-332095-1
	.018 - .021 (0.46 - 0.53)	30µ Gold	Gold Flash	.070 (1.78)	.138 (3.51)	.050 (1.27)	A24846-ND	.32	.26	2-331272-2
	.018 - .021 (0.46 - 0.53)	30µ Gold	Tin	.070 (1.78)	.138 (3.51)	.050 (1.27)	A24848-ND	.54	.43	2-331272-3
	.014 - .026 (0.36 - 0.66)	30µ Gold	Gold Flash	.070 (1.78)	.260 (6.60)	.050 (1.27)	A24850-ND	.34	.27	50863-4
	.014 - .026 (0.36 - 0.66)	30µ Gold	Tin	.070 (1.78)	.260 (6.60)	.050 (1.27)	A24851-ND	.29	.24	50863-5
	.014 - .026 (0.36 - 0.66)	Tin	Tin	.070 (1.78)	.260 (6.60)	.050 (1.27)	A24854-ND	.24	.20	50863-8
	.022 - .025 (0.56 - 0.64)	30µ Gold	Gold Flash	.070 (1.78)	.138 (3.51)	.050 (1.27)	A24856-ND	.32	.26	2-331272-6
	.022 - .025 (0.56 - 0.64)	30µ Gold	Tin	.070 (1.78)	.138 (3.51)	.050 (1.27)	A24857-ND	.27	.22	2-331272-7
	.014 - .026 (0.36 - 0.66)	30µ Gold	Gold Flash	.070 (1.78)	.178 (4.52)	.050 (1.27)	A24862-ND	.33	.27	50462-6
	.014 - .026 (0.36 - 0.66)	30µ Gold	Tin	.070 (1.78)	.178 (4.52)	.050 (1.27)	A24863-ND	.29	.23	50462-8
	.026 - .029 (0.66 - 0.74)	30µ Gold	Gold Flash	.080 (2.03)	.138 (3.51)	.061 (1.55)	A24864-ND	.65	.52	1-331677-1
	.026 - .029 (0.66 - 0.74)	30µ Gold	Tin	.080 (2.03)	.138 (3.51)	.061 (1.55)	A24865-ND	.29	.24	3-331677-8
	.026 - .033 (0.66 - 0.84)	30µ Gold	Gold Flash	.080 (2.03)	.257 (6.53)	.061 (1.55)	A24866-ND	.34	.28	50864
	.026 - .033 (0.66 - 0.84)	30µ Gold	Tin	.080 (2.03)	.257 (6.53)	.061 (1.55)	A24867-ND	.30	.24	50864-1
	.026 - .033 (0.66 - 0.84)	Tin	Tin	.080 (2.03)	.257 (6.53)	.061 (1.55)	A24870-ND	.24	.20	50864-6
	.030 - .033 (0.76 - 0.84)	30µ Gold	Gold Flash	.080 (2.03)	.138 (3.51)	.061 (1.55)	A24873-ND	.33	.27	1-331677-4
	.030 - .033 (0.76 - 0.84)	30µ Gold	Tin	.080 (2.03)	.138 (3.51)	.061 (1.55)	A24877-ND	.29	.24	1-331677-8
	.034 - .041 (0.86 - 1.04)	30µ Gold	Gold Flash	.089 (2.26)	.260 (6.60)	.070 (1.78)	A24880-ND	.35	.29	50865
	.037 - .040 (0.94 - 1.02)	30µ Gold	Gold Flash	.089 (2.26)	.143 (3.63)	.070 (1.78)	A24886-ND	.33	.27	1-332070-1
	.037 - .040 (0.94 - 1.02)	30µ Gold	Tin	.089 (2.26)	.143 (3.63)	.070 (1.78)	A24890-ND	.29	.24	2-332070-3
	.037 - .040 (0.94 - 1.02)	Tin	Tin	.089 (2.26)	.143 (3.63)	.070 (1.78)	A24893-ND	.24	.20	2-332070-2
	.042 - .049 (1.07 - 1.24)	30µ Gold	Gold Flash	.118 (3.00)	.288 (7.31)	.101 (2.57)	A24897-ND	.75	.60	50871-4
	.042 - .049 (1.07 - 1.24)	30µ Gold	Tin	.118 (3.00)	.288 (7.31)	.101 (2.57)	A24898-ND	.33	.27	50871-5
	.042 - .049 (1.07 - 1.24)	Tin	Tin	.118 (3.00)	.288 (7.31)	.101 (2.57)	A29082-ND	.26	.21	50871-8
	.050 - .057 (1.27 - 1.45)	30µ Gold	Gold Flash	.118 (3.00)	.288 (7.31)	.101 (2.57)	A24900-ND	.75	.60	1-50871-3
	.050 - .057 (1.27 - 1.45)	30µ Gold	Tin	.118 (3.00)	.288 (7.31)	.101 (2.57)	A24901-ND	.65	.52	1-50871-4
	.056 - .065 (1.42 - 1.65)	30µ Gold	Tin	.118 (3.00)	.288 (7.31)	.101 (2.57)	A24906-ND	.33	.27	2-50871-3
	.056 - .065 (1.42 - 1.65)	Tin	Tin	.118 (3.00)	.288 (7.31)	.101 (2.57)	A26261-ND	.27	.22	2-50871-6
Open Bottom	.013 - .020 (0.33 - 0.51)	30µ Gold	Tin	.059 (1.50)	.142 (3.61)	.038 (0.97)	A26259-ND	.29	.23	5-330808-6
	.014 - .026 (0.36 - 0.66)	30µ Gold	Gold Flash	.070 (1.78)	.260 (6.60)	.050 (1.27)	A24849-ND	.35	.29	50863
	.014 - .026 (0.36 - 0.66)	Tin	Tin	.070 (1.78)	.260 (6.60)	.050 (1.27)	A24853-ND	.25	.21	50863-6
	.018 - .021 (0.46 - 0.53)	30µ Gold	Gold Flash	.070 (1.78)	.138 (3.51)	.050 (1.27)	A24859-ND	.33	.27	3-331272-8
	.018 - .021 (0.46 - 0.53)	30µ Gold	Tin	.070 (1.78)	.138 (3.51)	.050 (1.27)	A24860-ND	.29	.23	3-331272-9
	.014 - .026 (0.36 - 0.66)	30µ Gold	Tin	.070 (1.78)	.178 (4.52)	.050 (1.27)	A24861-ND	.30	.24	50462-2
	.026 - .033 (0.66 - 0.84)	Tin	Gold Flash	.080 (2.03)	.257 (6.53)	.061 (1.55)	A24869-ND	.31	.25	50864-5
	.026 - .033 (0.66 - 0.84)	Tin	Tin	.080 (2.03)	.257 (6.53)	.061 (1.55)	A24872-ND	.25	.21	50864-8
	.030 - .033 (0.76 - 0.84)	Tin	Gold Flash	.080 (2.03)	.138 (3.51)	.061 (1.55)	A24874-ND	.30	.25	2-331677-2
	.030 - .033 (0.76 - 0.84)	30µ Gold	Gold Flash	.080 (2.03)	.138 (3.51)	.061 (1.55)	A24875-ND	.35	.28	2-331677-6
	.034 - .041 (0.86 - 1.04)	30µ Gold	Tin	.089 (2.26)	.260 (6.60)	.070 (1.78)	A24883-ND	.34	.28	50865-3
	.034 - .041 (0.86 - 1.04)	Tin	Tin	.089 (2.26)	.260 (6.60)	.070 (1.78)	A24884-ND	.28	.23	50865-6
	.037 - .040 (0.94 - 1.02)	30µ Gold	Gold Flash	.089 (2.26)	.143 (3.63)	.070 (1.78)	A24888-ND	.35	.29	1-332070-4
	.030 - .033 (0.76 - 0.84)	Tin	Gold Flash	.089 (2.26)	.143 (3.63)	.070 (1.78)	A24889-ND	.31	.25	2-332070-5
	.037 - .040 (0.94 - 1.02)	Tin	Gold Flash	.089 (2.26)	.143 (3.63)	.070 (1.78)	A24891-ND	.31	.25	2-332070-9
	.042 - .049 (1.07 - 1.24)	30µ Gold	Tin	.118 (3.00)	.288 (7.31)	.101 (2.57)	A24899-ND	.35	.28	50871-1
	.042 - .049 (1.07 - 1.24)	Tin	Tin	.118 (3.00)	.288 (7.31)	.101 (2.57)	A29083-ND	.53	.43	50871-6
	.050 - .057 (1.27 - 1.45)	30µ Gold	Tin	.118 (3.00)	.288 (7.31)	.101 (2.57)	A24902-ND	.68	.55	1-50871-0
	.056 - .065 (1.42 - 1.65)	30µ Gold	Gold Flash	.118 (3.00)	.288 (7.31)	.101 (2.57)	A24905-ND	.40	.33	1-50871-8
	.056 - .065 (1.42 - 1.65)	30µ Gold	Tin	.118 (3.00)	.288 (7.31)	.101 (2.57)	A26260-ND	.35	.28	1-50871-9
	.056 - .065 (1.42 - 1.65)	Tin	Tin	.118 (3.00)	.288 (7.31)	.101 (2.57)	A26262-ND	.27	.22	2-50871-4
Knockout Bottom	.013 - .020 (0.33 - 0.51)	30µ Gold	Gold Flash	.059 (1.50)	.142 (3.61)	.038 (0.97)	A26252-ND	.33	.27	3-330808-8
	.013 - .020 (0.33 - 0.51)	30µ Gold	Tin	.059 (1.50)	.178 (4.52)	.039 (0.99)	A26256-ND	.61	.50	1-332095-9
	.013 - .020 (0.33 - 0.51)	30µ Gold	Gold Flash	.059 (1.50)	.178 (4.52)	.039 (0.99)	A26258-ND	.34	.28	2-332095-2
	.018 - .021 (0.46 - 0.53)	30µ Gold	Gold Flash	.070 (1.78)	.138 (3.51)	.050 (1.27)	A24847-ND	.33	.27	3-331272-0
	.014 - .026 (0.36 - 0.66)	30µ Gold	Tin	.070 (1.78)	.260 (6.60)	.050 (1.27)	A24852-ND	.60	.49	50863-3
	.014 - .026 (0.36 - 0.66)	Tin	Tin	.070 (1.78)	.260 (6.60)	.050 (1.27)	A24855-ND	.49	.40	50863-7
	.022 - .025 (0.56 - 0.64)	30µ Gold	Tin	.070 (1.78)	.138 (3.51)	.050 (1.27)	A24858-ND	.29	.23	3-331272-5
	.026 - .033 (0.66 - 0.84)	30µ Gold	Tin	.080 (2.03)	.257 (6.53)	.061 (1.55)	A24868-ND	.31	.25	50864-3
	.026 - .033 (0.66 - 0.84)	Tin	Tin	.080 (2.03)	.257 (6.53)	.061 (1.55)	A24871-ND	.50	.40	50864-7
	.030 - .033 (0.76 - 0.84)	30µ Gold	Gold Flash	.080 (2.03)	.138 (3.51)	.061 (1.55)	A24876-ND	.35	.28	2-331677-9
	.030 - .033 (0.76 - 0.84)	30µ Gold	Tin	.080 (2.03)	.138 (3.51)	.061 (1.55)	A24878-ND	.30	.25	3-331677-4
	.034 - .041 (0.86 - 1.04)	30µ Gold	Gold Flash	.089 (2.26)	.260 (6.60)	.070 (1.78)	A24881-ND	.72	.58	50865-2
	.034 - .041 (0.86 - 1.04)	30µ Gold	Tin	.089 (2.26)	.260 (6.60)	.070 (1.78)	A24882-ND	.32	.26	50865-1
	.034 - .041 (0.86 - 1.04)	Tin	Tin	.089 (2.26)	.260 (6.60)	.070 (1.78)	A24885-ND	.26	.21	50865-7
	.037 - .040 (0.94 - 1.02)	30µ Gold	Gold Flash	.089 (2.26)	.143 (3.63)	.070 (1.78)	A24887-ND	.35	.29	1-332070-7
	.037 - .040 (0.94 - 1.02)	30µ Gold	Tin	.089 (2.26)	.143 (3.63)	.070 (1.78)	A24892-ND	.31	.25	3-332070-5
	.037 - .040 (0.94 - 1.02)	Tin	Tin	.089 (2.26)	.143 (3.63)	.070 (1.78)	A24894-ND	.25	.21	3-332070-4
Bullet Nose Bottom										
Loose Piece	.012 - .021 (0.30 - 0.53)	30µ Gold	Tin	.066 (1.67)	.184 (4.64)	.042 (1.07)	A24843-ND	.16	.14	645946-2
	.015 - .021 (0.38 - 0.53)	30µ Gold	Tin	.066 (1.67)	.158 (4.01)	.042 (1.07)	A24844-ND	.30	.24	645945-2
	.015 - .021 (0.38 - 0.53)	Tin	Tin	.066 (1.67)	.158 (4.01)	.042 (1.07)	A24845-ND	.13	.10	645945-1
	.037 - .041 (0.94 - 1.04)	30µ Gold	Tin	.089 (2.26)	.260 (6.60)	.074 (1.88)	A24895-ND	.24	.19	645500-1
	.042 - .049 (1.07 - 1.24)	Gold Flash	Tin	.120 (3.05)	.308 (7.82)	.100 (2.54)	A29046-ND	.54	.44	645980-2
	.042 - .049 (1.07 - 1.24)	Tin	Tin	.120 (3.05)	.308 (7.82)	.100 (2.54)	A29068-ND	.23	.19	645980-1
Carrier Strip w/Sealant	.028 - .033 (0.71 - 0.84)	30µ Gold	Tin	.080 (2.03)	.290 (7.37)	.061 (1.55)	A24879-ND	—	.17	1-645986-2
	.028 - .033 (0.71 - 0.84)	Tin	Tin	.080 (2.03)	.290 (7.37)	.061 (1.55)	A28507-ND	—	.31	1-645986-1
Carrier Strip without Sealant	.037 - .041 (0.94 - 1.04)	30µ Gold	Tin	.089 (2.03)	.260 (7.37)	.074 (1.55)	A24896-ND	—	.21	1-645502-1
	.042 - .049 (1.07 - 1.24)	Gold Flash	Tin	.120 (3.05)	.308 (7.82)	.100 (2.54)	A29045-ND	—	.25	1-645979-2
	.042 - .049 (1.07 - 1.24)	Tin	Tin	.120 (3.05)	.308 (7.82)	.100 (2.54)	A29069-ND	—	.21	645979-1

ON-SHORE TECHNOLOGY, INC.

I.C. Sockets



Low Cost Version

Special Features/Application:

• Dual wipe contacts to maximize contact area and minimize resistance • Closed bottom design to help prevent wicking and flux contamination • Auto insertability • Low profile design • Wide entry area for easy IC insertion • Board stand-offs for easy clean ups • Side and end stackable • Pin 1 is polarized • Stamped pin

Plating:

• Pin tin plated, 80-120m" tin-lead. Includes internal glass encapsulated ceramic capacitor 0.1mF, 50Vdc

Surface Mount IC Sockets

Special Features/Applications:

• For surface mounted technology • Tin for solder must be in the pc board

Technical Data:

• Insulator body material: glass-filled polyethersulphone • Temperature range: 55°C to +200°C continuous • Solder temperature: 280°C, intermittent

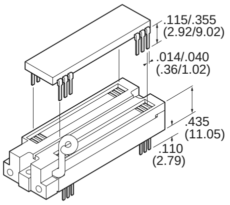
Plating:

• Pin tin plated min. 80m" nickel + min. 150m" tin-lead • High temperature insulator

No. of Pins	Contact Spacing In. (mm)	Digi-Key Part No.	Price Each 1	10	100	1,000
Low Cost Version with Cap - Tin Plated Solder Pins						
18	.300 (7.62)	ED2126-ND	.93	.77	.64	.54
Surface Mount - Screw Machined Pins w/out Solder Tail						
6	.300 (7.62)	ED2201-ND	.72	.60	.50	.41
8	.300 (7.62)	ED2202-ND	.95	.79	.66	.55
14	.300 (7.62)	ED2203-ND	1.67	1.39	1.16	.96
16	.300 (7.62)	ED2204-ND	1.72	1.43	1.19	.99
18	.300 (7.62)	ED2205-ND	1.93	1.60	1.34	1.11
20	.300 (7.62)	ED2206-ND	2.15	1.78	1.48	1.23
22	.400 (10.16)	ED2207-ND	2.36	1.96	1.63	1.36
24	.600 (15.24)	ED2208-ND	2.87	2.38	1.98	1.64
28	.600 (15.24)	ED2209-ND	3.34	2.76	2.30	1.91
36	.600 (15.24)	ED2210-ND	3.86	3.20	2.67	2.22
40	.600 (15.24)	ED2211-ND	4.29	3.56	2.96	2.46
48	.600 (15.24)	ED2212-ND	5.15	4.27	3.56	2.95
64	.600 (15.24)	ED2213-ND	6.87	5.69	4.74	3.94

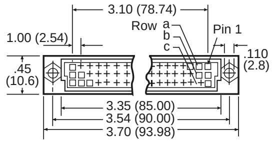
tyco Electronics AMP

ZIF Lock Sockets

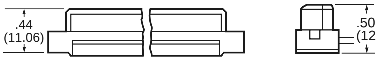


No. of Pos.	Plating	Digi-Key Part No.	Price Each 1	10	AMP Part No.
14	Tin-Lead	A92143-ND	22.88	19.33	55173-5
16	Tin-Lead	A92163-ND	15.28	12.91	55174-5
28	Tin-Lead	A92286-ND	36.20	30.58	54994-5
14	Gold	A91143-ND	27.72	23.41	55173-6
40	Gold	A91406-ND	47.23	39.89	54995-6

NorComp DIN Connectors



Contacts fitted in rows a and c only.

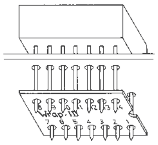


No. of Rows	No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
3	64	Socket-IDC Type	T8064-ND	13.60	11.73	7.98	689-096-290-001
—	64	Strain Relief	T0064-ND	1.07	.93	.63	TD064-SR

See **3M Ribbon Cable** in Index for Ribbon Cable (MC64M-ND and MC64G-ND).

ok
Division of OK International

Socket Wrap I.D.



- Press fit to socket pins
- Improves wiring speed
- Instant pin numbering
- Reduces wiring errors
- Large space for user information
- Simplifies troubleshooting

Now offering an exciting, low cost item used to identify pin numbers on wire-wrapping sockets. Consisting of a socket-sized plastic panel with numbered holes in the pin location, the Socket Wrap-ID is simply slipped onto the socket before wrapping.

You can also write on them for easy identification of location, IC part number, function, etc. These unique items greatly simplify both initial wire-wrapping and subsequent troubleshooting or repair.

A great help to hobbyists, technicians, and production facilities alike.

Spacing In. (mm)	Description	Digi-Key Part No.	Price Each 5	10
.3 (7.62)	8 Pin I.D.	K470-ND	—	.40
.3 (7.62)	14 Pin I.D.	K266-ND	—	.30
.3 (7.62)	16 Pin I.D.	K267-ND	—	.31
.3 (7.62)	20 Pin I.D.	K269-ND	.57	—
.6 (15.24)	28 Pin I.D.	K272-ND	.79	—

MILL-MAX

Universal Serial Bus Connectors

Features:

- USB receptacles for thru-hole and surface mount
- Plug retention tabs
- Kinked locating legs for secure PCB retention
- Fully compatible with USB 1.0 specification
- Passes 16MHz Signal Attentuation per ASTM-D-4566

Material Specifications:

- Shell and Contact: Copper alloy
- Shell Finish: Tin/lead over copper
- Contact Finish: 30µ selective gold, tin/lead tail
- Housing: Glass filed thermoplastic rated UL94V-0

Ratings:

- Voltage: 30VAC (rms)
- Current: 1A max. per contact for 30°C temperature rise. Thru-hole housings rated at 130°C for wave soldering. SMT housing rated at 240°C for reflow soldering

Electrical:

- Contact Resistance: 30mW max.
- Insulation Resistance: 1000mΩ min.
- Dielectric Withstanding Voltage: 750VAC at sea level
- Capacitance: 2pF max.

Fig. 1

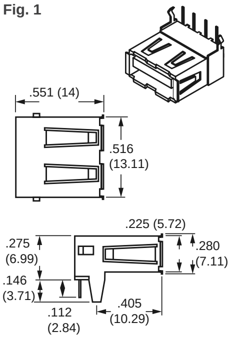


Fig. 2

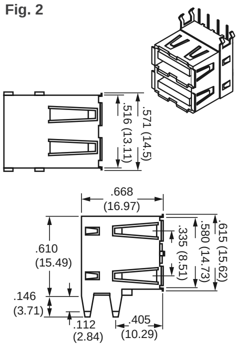


Fig. 3

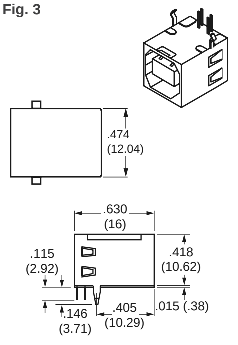


Fig. 4

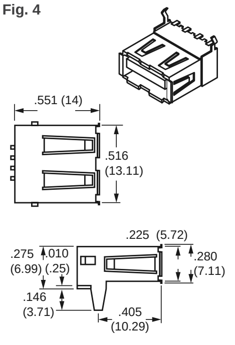
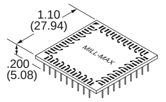


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	500	1,000	Mill-Max Part No.
1	Type A Receptacle, Single, Thru Hole	ED90001-ND	1.23	1.04	.86	.63	.53	896-30-004-90-000000
2	Type A Receptacle, Double, Thru Hole	ED90002-ND	1.93	1.64	1.34	.99	.84	896-30-008-90-000000
3	Type B Receptacle, Single, Thru Hole	ED90003-ND	1.23	1.04	.86	.63	.53	897-30-004-90-000000
4	Type A Receptacle, Single, Surface Mount	ED90004-ND	1.23	1.04	.86	.63	.53	896-30-004-00-000000

MILL-MAX

68-Position PLCC Adapter

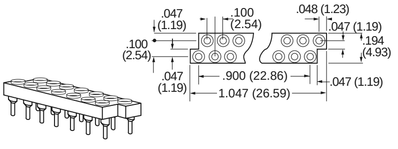


Pin Plating: Gold

Description	Digi-Key Part No.	Price Each 1	10	100	500	Mill-Max Part No.
68-Pos. PLCC Adapter	ED7700-ND	10.05	8.50	6.96	5.14	894-10-068-00-240000

MILL-MAX

Zig Zag Sockets

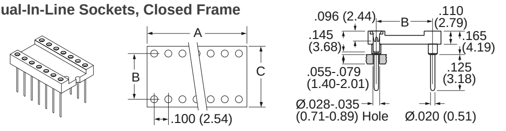


Double row staggered strips will accommodate Single-in-Line Zig-Zag memory packages on high density boards, left stackable. **Insertion Characteristics:** 4-finger low force **Plating:** Sleeve (Pin) – 200µ" Sn.; Contact (Clip) – 30µ" Au

No. of Pins	Insulator Body	Digi-Key Part No.	Price Each 1	10	100	500	1,000	Mill-Max Part No.
20	Left Stackable	ED2220-ND	1.37	.95	.77	.66	.55	410-93-220-10-001

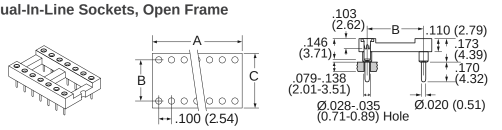
Dual-In-Line and PLCC Sockets

Dual-In-Line Sockets, Closed Frame



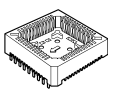
- Closed frame insulator withstands high mechanical impact. • Low profile • Plating; Sleeve (Pin) 200µ"Sn and Contact (Clip) 30µ" Au.

Dual-In-Line Sockets, Open Frame

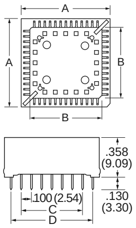


- DIP sockets with solder tail length of .170" ((4.32mm), allowing application on multilayer PCBs up to .139" (3.53mm). • Plating; Sleeve (Pin) 200µ"Sn and Contact (Clip) 30µ" Au.

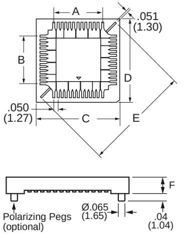
Compact PLCC Sockets



Solder Tail



Surface Mount with Polarizing Posts (optional)



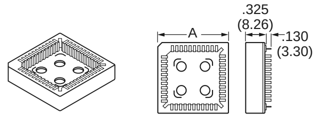
- Designed for JEDEC type devices. • Open frame design in solder area improves results of IR soldering and facilitates visual inspection of solder pads. • The brown PPS (Ryton R-4) insulator has optional polarizing pegs (PP).

No. of Pins	A	B	C	D	E	F	Digi-Key Part No.	Price Each 1	10	100	Mill-Max Part No.
Dual-In-Line Sockets, Solder Tail Closed Frame											
8	0.4	0.3	0.4	—	—	—	ED60000-ND	.42	.29	.24	210-93-308-41-001000
14	0.7	0.3	0.4	—	—	—	ED60001-ND	.73	.51	.41	210-93-314-41-001000
16	0.8	0.3	0.4	—	—	—	ED60002-ND	.83	.58	.47	210-93-316-41-001000
24	1.2	0.3	0.4	—	—	—	ED60003-ND	1.25	.87	.71	210-93-324-41-001000
24	1.2	0.6	0.7	—	—	—	ED60004-ND	1.25	.87	.71	210-93-624-41-001000
28	1.4	0.6	0.7	—	—	—	ED60005-ND	1.46	1.02	.82	210-93-628-41-001000
32	1.6	0.6	0.7	—	—	—	ED60006-ND	1.67	1.16	.94	210-93-632-41-001000
40	2.0	0.6	0.7	—	—	—	ED60007-ND	2.09	1.45	1.17	210-93-640-41-001000
Dual-In-Line Sockets, Long Solder Tail for Multilayer PC-Boards, Open Frame											
8	0.4	0.3	0.4	—	—	—	ED60008-ND	.59	.41	.33	111-93-308-41-001000
14	0.7	0.3	0.4	—	—	—	ED60009-ND	.98	.69	.56	111-93-314-41-001000
16	0.8	0.3	0.4	—	—	—	ED60010-ND	1.13	.78	.63	111-93-316-41-001000
20	1.0	0.3	0.4	—	—	—	ED60011-ND	1.36	.95	.77	111-93-320-41-001000
24	1.2	0.3	0.4	—	—	—	ED60012-ND	1.63	1.13	.92	111-93-324-41-001000
24	1.2	0.6	0.7	—	—	—	ED60013-ND	1.63	1.13	.92	111-93-624-41-001000
28	1.4	0.6	0.7	—	—	—	ED60014-ND	1.90	1.32	1.07	111-93-628-41-001000
32	1.6	0.6	0.7	—	—	—	ED60015-ND	2.17	1.51	1.22	111-93-632-41-001000
40	2.0	0.6	0.7	—	—	—	ED60016-ND	2.72	1.89	1.53	111-93-640-41-001000
Compact PLCC Sockets Solder Tail											
20	.590	.360	.200	.400	—	—	ED80000-ND	1.11	1.00	.89	540-99-020-24-000000
28	.690	.460	.300	.500	—	—	ED80001-ND	1.37	1.24	1.10	540-99-028-24-000000
32*	.783/.683	.564/.464	.400/.300	.600/.500	—	—	ED80002-ND	1.49	1.35	1.20	540-99-032-24-000000
44	.890	.660	.500	.700	—	—	ED80003-ND	1.48	1.33	1.19	540-99-044-24-000000
52	.990	.760	.600	.800	—	—	ED80004-ND	2.06	1.86	1.65	540-99-052-24-000000
68	1.190	.960	.800	1.000	—	—	ED80005-ND	1.87	1.68	1.50	540-99-068-24-000000
84	1.390	1.160	1.000	1.200	—	—	ED80006-ND	2.39	2.15	1.91	540-99-084-24-000000
Compact PLCC Sockets Surface Mount											
20	.200	.200	.585	.585	.657	.180	ED80007-ND	1.26	1.13	1.01	540-99-020-17-400000
28	.300	.300	.685	.685	.799	.180	ED80008-ND	1.29	1.16	1.03	540-99-028-17-400000
32*	.300	.400	.665	.766	.885	.168	ED80009-ND	1.37	1.24	1.10	540-99-032-17-400000
44	.500	.500	.885	.885	1.082	.180	ED80010-ND	1.67	1.51	1.34	540-99-044-17-400000
52	.600	.600	1.000	1.000	1.224	.180	ED80011-ND	1.78	1.60	1.42	540-99-052-17-400000
68	.800	.800	1.202	1.202	1.507	.180	ED80012-ND	1.98	1.78	1.59	540-99-068-17-400000
84	1.000	1.000	1.400	1.400	1.791	.180	ED80013-ND	2.21	1.99	1.77	540-99-084-17-400000
Compact PLCC Sockets Surface Mount with Polarizing Posts											
20	.200	.200	.585	.585	.657	.180	ED80014-ND	1.26	1.13	1.01	540-99-020-17-400200
28	.300	.300	.685	.685	.799	.180	ED80015-ND	1.29	1.16	1.03	540-99-028-17-400200
32*	.300	.400	.665	.766	.885	.168	ED80016-ND	1.37	1.24	1.10	540-99-032-17-400200
44	.500	.500	.885	.885	1.082	.180	ED80017-ND	1.67	1.51	1.34	540-99-044-17-400200
52	.600	.600	1.000	1.000	1.224	.180	ED80018-ND	1.78	1.60	1.42	540-99-052-17-400200
68	.800	.800	1.202	1.202	1.507	.180	ED80019-ND	1.98	1.78	1.59	540-99-068-17-400200
84	1.000	1.000	1.400	1.400	1.791	.180	ED80020-ND	2.21	1.99	1.77	540-99-084-17-400200

* Rectangular

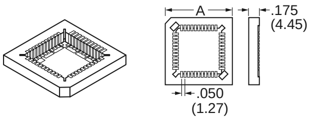
Low Cost PLCC Sockets

Thru-Hole Mount



- Accepts JEDEC PLCCs MO-052 AE • Holes for drainage • Standoffs provide clearance for heat dissipation and cleaning • Internal standoffs ensure proper positioning of chip carrier in socket • Easy access for probing installed chip carrier

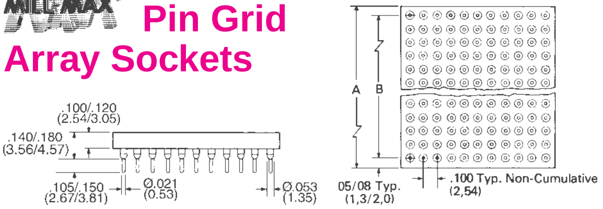
Surface Mount

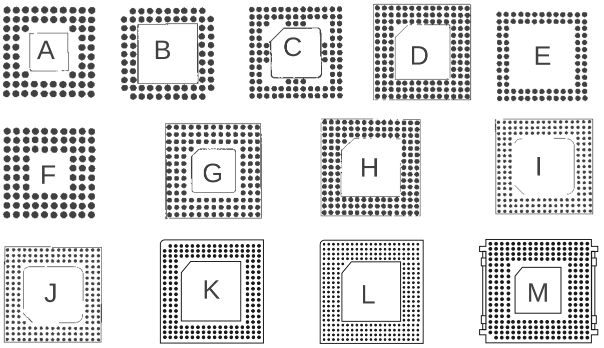


- Accepts JEDEC PLCCs MO-052 AE • Low profile for high density PC board stacking • Standoffs provide clearance for heat dissipation and cleaning

No. of Pins	Dimensions - Inch (mm) A	Digi-Key Part No.	Price Each 1	10	100	Mill-Max Part No.
Thru-Hole Mount						
20	0.613 (15.57)	ED80021-ND	.91	.77	.63	940-99-020-24-000000
28	0.720 (18.29)	ED80022-ND	.80	.68	.56	940-99-028-24-000000
32	0.820 (20.83) / .722 (18.34)	ED80023-ND	.82	.69	.57	940-99-032-24-000000
44	0.920 (23.37)	ED80024-ND	.83	.71	.58	940-99-044-24-000000
52	1.020 (25.91)	ED80025-ND	.89	.76	.62	940-99-052-24-000000
68	1.220 (30.99)	ED80026-ND	.91	.78	.64	940-99-068-24-000000
84	1.420 (36.07)	ED80027-ND	1.14	.97	.79	940-99-084-24-000000
Surface Mount						
20	0.613 (15.57)	ED80028-ND	.83	.71	.58	940-99-020-17-400000
28	0.720 (18.29)	ED80029-ND	.92	.79	.64	940-99-028-17-400000
32	0.820 (20.83) / .720 (18.29)	ED80030-ND	.73	.63	.51	940-99-032-17-400000
44	0.920 (23.37)	ED80031-ND	.87	.74	.61	940-99-044-17-400000
52	1.020 (25.91)	ED80032-ND	1.06	.90	.74	940-99-052-17-400000
68	1.220 (30.99)	ED80033-ND	1.04	.88	.72	940-99-068-17-400000
84	1.420 (36.07)	ED80034-ND	1.32	1.12	.92	940-99-084-17-400000

Pin Grid Array Sockets





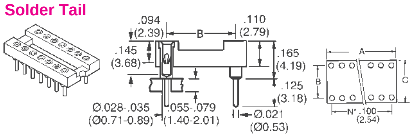
MATERIAL: • **Insulator body:** Standard material is glass filled thermoplastic polyester (PCT), self-extinguishing, rated UL94V-0. • **Color:** Black. • **Receptacle (sleeve):** Screw-machined brass (QQ-B-626), plated 200µ" tin-lead (SnPb 90/10) over 80-120µ" nickel. • **Pin:** Screw-machined brass (QQ-B-626), plated 200µ" tin-lead (SnPb 90/10) over 80-120µ" nickel. • **Contact (clip):** Stamped Beryllium-copper (QQ-C-533) heat treated, plated gold flash, 30µ" gold, over 80-120µ" nickel.

ELECTRICAL DATA: • **Rated Current:** 1A • **Rated Voltage:** 100 VRMS/150 VDC • **Contact Resistance:** 100 mΩ max. • **Insulation resistance:** 10,000 MΩ min. • **Dielectric Strength:** 1000 VRMS min. • **Capacity:** 0.3 pF max. • **Operating Temperature Range:** -55°C to +125°C

Pin Grid Array Size	No. of Pins	Footprint (See Diag.)	Insulator Size Inches (mm) A	B	Description (Type of Contacts)	Frame Style	Digi-Key Part No.	Price Each 1	10	100
10x10	68	A	1.0 (25.40)	.9 (22.86)	Solder-Tail	Open	ED2002-ND	3.37	2.92	2.36
11x11	68	B	1.1 (27.94)	1.0 (25.40)	Solder-Tail	Open	ED2004-ND	3.37	2.92	2.36
13x13	101	C	1.3 (33.02)	1.2 (30.48)	Solder-Tail	Open	ED2007-ND	4.68	4.06	3.28
14x14	132	D	1.4 (35.56)	1.3 (33.02)	Solder-Tail	Open	ED2008-ND	6.12	5.31	4.29
13x13	88	E	1.3 (33.02)	1.2 (30.48)	Solder-Tail	Open	ED2009-ND	4.36	3.78	3.06
13x13	121	G	1.3 (33.02)	1.2 (30.48)	Solder-Tail	Open	ED2027-ND	5.61	4.87	3.93
15x15	145	H	1.5 (38.10)	1.4 (35.56)	Solder-Tail	Open	ED2029-ND	6.72	5.83	4.71
17x17	168	I	1.7 (43.18)	1.6 (40.64)	Solder-Tail	Open	ED2030-ND	7.79	6.75	5.46
17x17	169	J	1.7 (43.18)	1.6 (40.64)	Solder-Tail	Open	ED2031-ND	7.84	6.80	5.49
10x10	68	A	1.0 (25.40)	.9 (22.86)	3 Level Wire Wrap	Open	ED2014-ND	9.50	8.23	6.65
11x11	68	B	1.1 (27.94)	1.0 (25.40)	3 Level Wire Wrap	Open	ED2016-ND	9.50	8.23	6.65
14x14	132	D	1.4 (35.56)	1.3 (33.02)	3 Level Wire Wrap	Open	ED2020-ND	17.24	14.94	12.07
13x13	88	E	1.3 (33.02)	1.2 (30.48)	3 Level Wire Wrap	Open	ED2021-ND	11.49	9.97	8.05
10x10	84	F	1.0 (25.40)	.9 (22.86)	3 Level Wire Wrap	Open	ED2023-ND	10.10	8.76	7.08
13x13	121	G	1.3 (33.02)	1.2 (30.48)	3 Level Wire Wrap	Open	ED2037-ND	15.80	13.70	11.07
15x15	145	H	1.5 (38.10)	1.4 (35.56)	3 Level Wire Wrap	Open	ED2039-ND	18.75	16.25	13.13
17x17	169	J	1.7 (43.18)	1.6 (40.64)	3 Level Wire Wrap	Open	ED2041-ND	21.85	18.94	15.30
18x18	179	K	1.8 (45.72)	1.7 (43.18)	Solder-Tail	Open	ED2042-ND	8.30	7.20	5.81
21x21	273	L	2.1 (53.34)	2.0 (50.80)	Solder-Tail	Open	ED2044-ND	12.53	10.86	8.78
18x18	223	M	1.8 (45.72)	1.7 (43.18)	Solder-Tail	Open	ED2046-ND	13.18	11.43	9.23

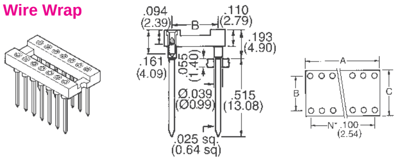
Dual-In-Line Sockets – Open Frame (Screw Machined)

Solder Tail



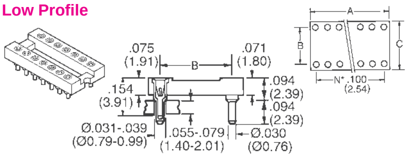
Most popular line of standard low profile IC-Sockets. Open frame design leaves space beneath IC for improved heat dissipation, easier PCB cleaning and inspection. **Insertion Characteristics:** 4-finger standard. **Plating: For ED3308-ED3964:** Sleeve (Pin) – 200µ" Sn. Contact (Clip) – 30µ" Au. **For ED3108-ED3764:** Sleeve (Pin) – 200µ" Sn. Contact (Clip) – 150µ" Sn. **For ED56083-ED56646:** Sleeve (Pin) – 10µ" Au. Contact (Clip) – 30µ" Au.

Wire Wrap



Solderless wire wrap terminals are firmly locked in the insulator body to withstand torque of wrapping tool. Length of terminal for three-level wrapping. **Insertion Characteristics:** 4-finger standard. **Plating: For ED4308-ED4964:** Sleeve (Pin) – 200µ" Sn. Contact (Clip) – 30µ" Au. **For ED57083-ED57406:** Sleeve (Pin) — 10µ" Au. Contact (Clip) — 30µ" Au

Low Profile



"Ultra low profile" Dual-in-line sockets are equipped with specially designed contacts allowing .095" (2.41mm) height above PCB. Special short contact requires .075" (1.91mm) insertion depth only. Solder tail diameter .030" (.76mm). **Insertion Characteristics:** 4-finger short contact. **Plating:** Sleeve (Pin) — 200µ" Sn. Contact (Clip) — 30µ" Au.

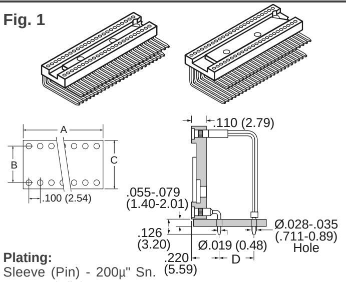
No. of Pins	Dimensions – Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	100	500	1,000	Mill-Max Part No.
Solder Tail (Gold)										
8	0.4 (10.16)	0.3 (7.62)	0.4 (10.16)	ED3308-ND	.42	.29	.24	.21	.17	110-93-308-41-001
14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED3314-ND	.73	.51	.41	.36	.30	110-93-314-41-001
16	0.8 (20.30)	0.3 (7.62)	0.4 (10.16)	ED3316-ND	.83	.58	.47	.41	.34	110-93-316-41-001
18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	ED3318-ND	.94	.66	.53	.46	.38	110-93-318-41-001
20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED3320-ND	1.04	.73	.59	.51	.42	110-93-320-41-001
24	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	ED3324-ND	1.25	.87	.71	.61	.51	110-93-324-41-001
28	1.4 (35.56)	0.3 (7.62)	0.4 (10.16)	ED3328-ND	1.46	1.02	.82	.71	.59	110-93-328-41-001
22	1.1 (27.94)	0.4 (10.16)	0.5 (12.70)	ED3422-ND	1.15	.80	.65	.56	.46	110-93-422-41-001
24	1.2 (30.48)	0.4 (10.16)	0.5 (12.70)	ED3424-ND	1.25	.87	.71	.61	.51	110-93-424-41-001
24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED3624-ND	1.25	.87	.71	.61	.51	110-93-624-41-001
28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	ED3628-ND	1.46	1.02	.82	.71	.59	110-93-628-41-001
32	1.6 (40.64)	0.6 (15.24)	0.7 (17.78)	ED3632-ND	1.67	1.16	.94	.81	.67	110-93-632-41-001
40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED3640-ND	2.09	1.45	1.17	1.01	.84	110-93-640-41-001
48	2.4 (60.96)	0.6 (15.24)	0.7 (17.78)	ED3648-ND	2.50	1.74	1.41	1.21	1.01	110-93-648-41-001
50	2.5 (63.50)	0.9 (22.86)	1.0 (25.40)	ED3950-ND	2.61	1.81	1.46	1.26	1.05	110-93-950-41-001
64	3.2 (81.28)	0.9 (22.86)	1.0 (25.40)	ED3964-ND	3.34	2.32	1.87	1.61	1.34	110-93-964-41-001
Solder Tail (Gold)										
8	0.4 (10.16)	0.3 (7.62)	0.4 (10.16)	ED56083-ND	.59	.42	.34	.29	.24	110-13-308-41-001
14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED56143-ND	1.04	.72	.58	.50	.42	110-13-314-41-001
16	0.8 (20.30)	0.3 (7.62)	0.4 (10.16)	ED56163-ND	1.18	.82	.67	.57	.48	110-13-316-41-001
18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	ED56183-ND	1.33	.93	.75	.64	.54	110-13-318-41-001
20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED56203-ND	1.48	1.03	.83	.71	.60	110-13-320-41-001
24	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	ED56243-ND	1.77	1.23	1.00	.86	.71	110-13-324-41-001
28	1.4 (35.56)	0.3 (7.62)	0.4 (10.16)	ED56283-ND	2.07	1.44	1.16	1.00	.83	110-13-328-41-001
24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED56246-ND	1.77	1.23	1.00	.86	.71	110-13-624-41-001
28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	ED56286-ND	2.07	1.44	1.16	1.00	.83	110-13-628-41-001
32	1.6 (40.64)	0.6 (15.24)	0.7 (17.78)	ED56326-ND	2.36	1.64	1.33	1.14	.95	110-13-632-41-001
40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED56406-ND	2.96	2.05	1.66	1.42	1.19	110-13-640-41-001
64	3.2 (81.28)	0.9 (22.86)	1.0 (25.40)	ED56646-ND	4.73	3.28	2.65	2.27	1.90	110-13-964-41-001
Solder Tail (Tin)										
8	0.4 (10.16)	0.3 (7.62)	0.4 (10.16)	ED3108-ND	.32	.23	.19	.16	.13	110-99-308-41-001
14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED3114-ND	.57	.40	.32	.28	.23	110-99-314-41-001
16	0.8 (20.30)	0.3 (7.62)	0.4 (10.16)	ED3116-ND	.65	.45	.37	.32	.26	110-99-316-41-001
18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	ED3118-ND	.73	.51	.41	.35	.30	110-99-318-41-001
20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED3120-ND	.81	.57	.46	.39	.33	110-99-320-41-001
24	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	ED3124-ND	.97	.68	.55	.47	.39	110-99-324-41-001
28	1.4 (35.56)	0.3 (7.62)	0.4 (10.16)	ED3128-ND	1.13	.79	.64	.55	.46	110-99-328-41-001
24	1.2 (30.48)	0.4 (10.16)	0.5 (12.70)	ED3524-ND	.97	.68	.55	.47	.39	110-99-424-41-001
24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED3724-ND	.97	.68	.55	.47	.39	110-99-624-41-001
28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	ED3728-ND	1.13	.79	.64	.55	.46	110-99-628-41-001
32	1.6 (40.64)	0.6 (15.24)	0.7 (17.78)	ED3732-ND	1.30	.90	.73	.63	.52	110-99-632-41-001
40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED3740-ND	1.62	1.13	.91	.78	.65	110-99-640-41-001
48	2.4 (60.96)	0.6 (15.24)	0.7 (17.78)	ED3748-ND	1.94	1.35	1.09	.94	.78	110-99-648-41-001
64	3.2 (81.28)	0.9 (22.86)	1.0 (25.40)	ED3764-ND	2.59	1.80	1.46	1.25	1.04	110-99-964-41-001

No. of Pins	Dimensions – Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	100	500	1,000	Mill-Max Part No.
Wire Wrap										
8	0.4 (10.16)	0.3 (7.62)	0.4 (10.16)	ED4308-ND	.92	.64	.52	.44	.37	123-93-308-41-001
14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED4314-ND	1.60	1.11	.90	.77	.65	123-93-314-41-001
16	0.8 (20.30)	0.3 (7.62)	0.4 (10.16)	ED4316-ND	1.83	1.27	1.03	.88	.74	123-93-316-41-001
18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	ED4318-ND	2.06	1.43	1.16	.99	.83	123-93-318-41-001
20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED4320-ND	2.29	1.59	1.29	1.10	.92	123-93-320-41-001
24	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	ED4324-ND	2.75	1.91	1.54	1.32	1.10	123-93-324-41-001
28	1.4 (35.56)	0.3 (7.62)	0.4 (10.16)	ED4328-ND	3.20	2.22	1.80	1.54	1.29	123-93-328-41-001
22	1.1 (27.94)	0.4 (10.16)	0.5 (12.70)	ED4422-ND	2.52	1.75	1.41	1.21	1.01	123-93-422-41-001
24	1.2 (30.48)	0.4 (10.16)	0.5 (12.70)	ED4424-ND	2.75	1.91	1.54	1.32	1.10	123-93-424-41-001
24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED4624-ND	2.75	1.91	1.54	1.32	1.10	123-93-624-41-001
28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	ED4628-ND	3.20	2.22	1.80	1.54	1.29	123-93-628-41-001
32	1.6 (40.64)	0.6 (15.24)	0.7 (17.78)	ED4632-ND	3.66	2.54	2.05	1.76	1.47	123-93-632-41-001
40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED4640-ND	4.58	3.18	2.57	2.20	1.83	123-93-640-41-001
48	2.4 (60.96)	0.6 (15.24)	0.7 (17.78)	ED4648-ND	5.49	3.81	3.08	2.64	2.20	123-93-648-41-001
50	2.5 (63.50)	0.9 (22.86)	1.0 (25.40)	ED4950-ND	5.72	3.97	3.21	2.75	2.29	123-93-950-41-001
64	3.2 (81.28)	0.9 (22.86)	1.0 (25.40)	ED4964-ND	7.32	5.08	4.10	3.52	2.93	123-93-964-41-001
Wire Wrap										
8	0.4 (10.16)	0.3 (7.62)	0.4 (10.16)	ED57083-ND	1.16	.81	.66	.56	.47	123-13-308-41-001
14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED57143-ND	2.04	1.42	1.15	.98	.82	123-13-314-41-001
16	0.8 (20.30)	0.3 (7.62)	0.4 (10.16)	ED57163-ND	2.33	1.62	1.31	1.12	.94	123-13-316-41-001
20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED57203-ND	2.91	2.02	1.63	1.40	1.17	123-13-320-41-001
24	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	ED57243-ND	3.49	2.43	1.96	1.68	1.40	123-13-324-41-001
24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED57246-ND	3.49	2.43	1.96	1.68	1.40	123-13-624-41-001
28	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED57286-ND	4.07	2.83	2.29	1.96	1.63	123-13-628-41-001
40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED57406-ND	5.82	4.04	3.26	2.80	2.33	123-13-640-41-001
Low Profile										
8	0.4 (10.16)	0.3 (7.62)	0.4 (10.16)	ED5308-ND	.70	.49	.40	.34	.29	115-93-308-41-003
14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED5314-ND	1.18	.82	.66	.57	.48	115-93-314-41-003
16	0.8 (20.30)	0.3 (7.62)	0.4 (10.16)	ED5316-ND	1.35	.94	.76	.65	.54	115-93-316-41-003
18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	ED5318-ND	1.52	1.05	.85	.73	.61	115-93-318-41-003
20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED5320-ND	1.62	1.13	.91	.78	.65	115-93-320-41-003
24	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	ED5324-ND	1.95	1.35	1.09	.94	.78	115-93-324-41-003
28	1.4 (35.56)	0.3 (7.62)	0.4 (10.16)	ED5328-ND	2.27	1.58	1.28	1.10	.91	115-93-328-41-003
22	1.1 (27.94)	0.4 (10.16)	0.5 (12.70)	ED5422-ND	1.79	1.24	1.00	.86	.72	115-93-422-41-003
24	1.2 (30.48)	0.4 (10.16)	0.5 (12.70)	ED5424-ND	1.95	1.35	1.09	.94	.78	115-93-424-41-003
24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED5624-ND	1.95	1.35	1.09	.94	.78	115-93-624-41-003
28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	ED5628-ND	2.27	1.58	1.28	1.10	.91	115-93-628-41-003
32	1.6 (40.64)	0.6 (15.24)	0.7 (17.78)	ED5632-ND	2.60	1.81	1.46	1.25	1.04	115-93-632-41-003
40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED5640-ND	3.25	2.26	1.82	1.56	1.30	115-93-640-41-003
48	2.4 (60.96)	0.6 (15.24)	0.7 (17.78)	ED5648-ND	3.90	2.71	2.19	1.88	1.56	115-93-648-41-003

Dual-In-Line Sockets – Right Angle Mount Closed Frame

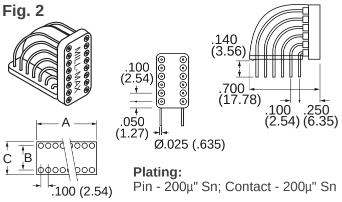
- For components to be mounted perpendicularly to the PCB, such as LED displays.
- Horizontal mount solder tails are available with either .300" (7.62mm) [standard] or .100" (2.54mm) row spacing.

Fig. 1



Plating:
Sleeve (Pin) - 200µ" Sn.
Contact (Clip) - 30µ" Au.

Fig. 2



Plating:
Pin - 200µ" Sn; Contact - 200µ" Sn

Fig.	No. of Pins	Dimensions – Inch (mm) A	B	C	D	Digi-Key Part No.	Price Each 1	10	100	500	1,000	Mill-Max Part No.
1	6	0.3 (7.62)	0.3 (7.62)	0.4 (10.16)	.300 (7.62)	ED58407-ND	2.46	1.71	1.38	1.19	.99	299-93-306-10-001
	8	0.4 (10.16)	0.3 (7.62)	0.4 (10.16)	.300 (7.62)	ED58408-ND	3.28	2.28	1.84	1.58	1.32	299-93-308-10-001
	10	0.5 (12.70)	0.3 (7.62)	0.4 (10.16)	.300 (7.62)	ED58409-ND	3.93	2.73	2.21	1.89	1.58	299-93-310-10-001
	12	0.6 (15.24)	0.3 (7.62)	0.4 (10.16)	.300 (7.62)	ED58410-ND	4.71	3.27	2.64	2.27	1.89	299-93-312-10-001
	14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	.300 (7.62)	ED58411-ND	5.50	3.82	3.08	2.64	2.20	299-93-314-10-001
	16	0.8 (20.30)	0.3 (7.62)	0.4 (10.16)	.300 (7.62)	ED58412-ND	6.29	4.36	3.53	3.02	2.52	299-93-316-10-001
	18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	.300 (7.62)	ED58413-ND	7.07	4.91	3.97	3.40	2.83	299-93-318-10-001
	20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	.300 (7.62)	ED58414-ND	7.58	5.26	4.25	3.64	3.04	299-93-320-10-001
	24	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	.300 (7.62)	ED58415-ND	9.10	6.31	5.10	4.37	3.64	299-93-324-10-001
1	8	0.4 (10.16)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58416-ND	3.80	2.64	2.13	1.83	1.52	299-93-608-10-002
	10	0.5 (12.70)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58417-ND	4.55	3.16	2.55	2.19	1.82	299-93-610-10-002
	12	0.6 (15.24)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58418-ND	5.46	3.79	3.06	2.63	2.19	299-93-612-10-002
	14	0.7 (17.78)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58419-ND	6.37	4.42	3.57	3.06	2.55	299-93-614-10-002
	16	0.8 (20.30)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58420-ND	7.28	5.05	4.08	3.50	2.92	299-93-616-10-002
	18	0.9 (22.86)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58421-ND	8.19	5.68	4.59	3.94	3.28	299-93-618-10-002
	20	1.0 (25.40)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58422-ND	8.78	6.09	4.92	4.22	3.52	299-93-620-10-002
	22	1.1 (27.94)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58423-ND	9.66	6.70	5.41	4.64	3.87	299-93-622-10-002
	24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58424-ND	10.54	7.31	5.91	5.06	4.22	299-93-624-10-002
	26	1.3 (33.02)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58425-ND	11.42	7.92	6.40	5.49	4.57	299-93-626-10-002
	28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58426-ND	12.30	8.53	6.89	5.91	4.92	299-93-628-10-002
	30	1.5 (38.10)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58427-ND	13.17	9.14	7.38	6.33	5.27	299-93-630-10-002
	32	1.6 (40.64)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58428-ND	14.05	9.75	7.87	6.75	5.63	299-93-632-10-002
	36	1.8 (45.72)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58429-ND	15.81	10.97	8.86	7.59	6.33	299-93-636-10-002
	40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58430-ND	17.57	12.18	9.84	8.44	7.03	299-93-640-10-002
1	6	.300 (7.62)	0.3 (7.62)	0.4 (10.16)	.100 (2.54)	ED58431-ND	2.40	1.67	1.35	1.16	.97	299-93-306-11-001
	8	0.4 (10.16)	0.3 (7.62)	0.4 (10.16)	.100 (2.54)	ED58432-ND	3.20	2.22	1.80	1.54	1.29	299-93-308-11-001
	10	0.5 (12.70)	0.3 (7.62)	0.4 (10.16)	.100 (2.54)	ED58433-ND	3.84	2.67	2.16	1.85	1.54	299-93-310-11-001
	12	0.6 (15.24)	0.3 (7.62)	0.4 (10.16)	.100 (2.54)	ED58434-ND	4.61	3.20	2.58	2.22	1.85	299-93-312-11-001
	14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	.100 (2.54)	ED58435-ND	5.37	3.73	3.01	2.58	2.15	299-93-314-11-001
	16	0.8 (20.30)	0.3 (7.62)	0.4 (10.16)	.100 (2.54)	ED58436-ND	6.14	4.26	3.44	2.95	2.46	299-93-316-11-001
	18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	.100 (2.54)	ED58437-ND	6.91	4.79	3.87	3.32	2.77	299-93-318-11-001
	20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	.100 (2.54)	ED58438-ND	7.41	5.14	4.15	3.56	2.97	299-93-320-11-001
	24	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	.100 (2.54)	ED58439-ND	8.89	6.17	4.98	4.27	3.56	299-93-324-11-001
2	10	0.5 (12.70)	0.2 (5.08)	0.3 (7.62)	—	ED7800-ND	8.41	5.84	4.72	4.04	3.37	299-99-210-12-001800

IC Sockets

With Integral Decoupling Capacitor Machine Screw Contact

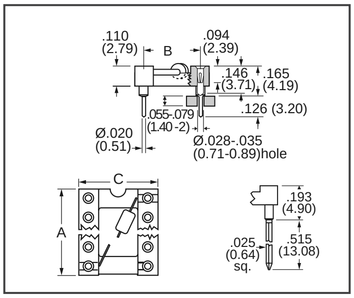
Special Features/Applications:

- To eliminate noise at the source before it can reach the chip
- Advantages for uses such as high speed logic and memory applications
- To eliminate long leads as potential sources of noise because capacitor leads are connected directly to the ground and voltage pin of the socket
- To save minimum of 12% on board space

Technical Data:

- Insulator body material: glass filled polyester UL94VO
- Pin: screw machined

Socket with integral glass encapsulated ceramic capacitor 0.1µF, 50 VDC



Type of Pins	No. of Pins	Dim. – Inch (mm) A	B	C	Digi-Key Part No.	Pricing 1	10	100	Mill-Max Part No.
Tin Plated, Solder Tab	14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED2101-ND	1.68	14.56	117.60	110-93-314-41-801000
	16	0.8 (20.32)	0.3 (7.62)	0.4 (10.16)	ED2102-ND	1.80	15.60	126.00	110-93-316-41-801000
	18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	ED2103-ND	1.92	16.67	134.61	110-93-318-41-801000
	20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED2104-ND	1.96	16.98	137.13	110-93-320-41-801000
	24#	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	ED2106-ND	2.24	19.37	156.45	110-93-324-41-801000
	24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED2105-ND	2.47	21.40	172.83	110-93-624-41-801000
	28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	ED2107-ND	2.67	23.11	186.69	110-93-628-41-801000
	40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED2108-ND	3.14	27.25	220.08	110-93-640-41-801000
Gold Plated, Solder Tab	14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED2109-ND	1.98	17.19	138.81	110-13-314-41-801000
	16	0.8 (20.32)	0.3 (7.62)	0.4 (10.16)	ED2110-ND	2.17	18.82	152.04	110-13-316-41-801000
	18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	ED2111-ND	2.32	20.12	162.54	110-13-318-41-801000
	20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED2112-ND	2.40	20.80	168.00	110-13-320-41-801000
	24#	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	ED2114-ND	2.77	24.00	193.83	110-13-324-41-801000
	24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED2113-ND	3.00	26.03	210.21	110-13-624-41-801000
	28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	ED2115-ND	3.27	28.31	228.69	110-13-628-41-801000
	40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED2116-ND	3.86	33.49	270.48	110-13-640-41-801000
3-Level Tin Plated Wire-Wrap	14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED2117-ND	2.72	23.53	190.05	123-93-314-41-801000
	16	0.8 (20.32)	0.3 (7.62)	0.4 (10.16)	ED2118-ND	3.00	26.00	210.00	123-93-316-41-801000
	18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	ED2119-ND	3.24	28.11	227.01	123-93-318-41-801000
	20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED2120-ND	3.38	29.30	236.67	123-93-320-41-801000
	24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED2121-ND	4.16	36.09	291.48	123-93-624-41-801000
	28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	ED2122-ND	4.64	40.25	325.08	123-93-628-41-801000
	40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED2123-ND	5.85	50.73	409.71	123-93-640-41-801000

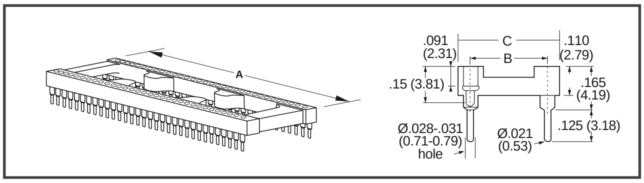
# With .300" (7.62mm) Contact Row Spacing.

Shrink Dip Sockets – Solder Tail – Open Frame

- High density Dual-in-Line Sockets for devices featuring .070" (1.78mm) lead spacing.
- Four-finger beryllium copper contacts meet high vibration and shock requirements.

Insertion Characteristics: 4-finger standard.

Plating:
Sleeve (Pin) – 200µ" Sn.
Contact (Clip) – 30µ" Au.



No.of Pins	Dim. – Inch (mm) A	B	C	Digi-Key Part No.	Pricing 1	10	100	500	1,000	Mill-Max Part No.
16	0.572 (14.53)	0.3 (7.62)	0.39 (9.91)	ED22163-ND	1.60	11.10	89.67	384.30	640.50	117-93-316-41-005
28	0.992 (25.20)	0.4 (10.16)	0.49 (12.45)	ED22284-ND	2.71	18.77	151.62	649.80	1083.00	117-93-428-41-005
30	1.062 (26.97)	0.4 (10.16)	0.49 (12.45)	ED22304-ND	2.90	20.10	162.33	695.70	1159.50	117-93-430-41-005
48	1.692 (42.98)	0.4 (10.16)	0.49 (12.45)	ED22484-ND	4.64	32.16	259.77	1113.30	1855.50	117-93-448-41-005
20	0.712 (18.08)	0.6 (15.24)	0.69 (17.53)	ED22206-ND	1.93	13.39	108.15	463.50	772.50	117-93-620-41-005
28	0.992 (25.20)	0.6 (15.24)	0.69 (17.53)	ED22286-ND	2.71	18.77	151.62	649.80	1083.00	117-93-628-41-005
40	1.412 (35.86)	0.6 (15.24)	0.69 (17.53)	ED22406-ND	3.86	26.78	216.30	927.00	1545.00	117-93-640-41-005
42	1.482 (37.64)	0.6 (15.24)	0.69 (17.53)	ED22426-ND	4.05	28.11	227.01	972.90	1621.50	117-93-642-41-005
48	1.692 (42.98)	0.6 (15.24)	0.69 (17.53)	ED22486-ND	4.64	32.16	259.77	1113.30	1855.50	117-93-648-41-005
52	1.832 (46.53)	0.6 (15.24)	0.69 (17.53)	ED22526-ND	4.88	33.85	273.42	1171.80	1953.00	117-93-652-41-005
56	1.972 (50.09)	0.6 (15.24)	0.69 (17.53)	ED22566-ND	5.26	36.48	294.63	1262.70	2104.50	117-93-656-41-005
64	2.252 (57.20)	0.6 (15.24)	0.69 (17.53)	ED22646-ND	6.02	41.70	336.84	1443.60	2406.00	117-93-664-41-005
64	2.252 (57.20)	0.75 (19.05)	0.84 (21.34)	ED22647-ND	6.02	41.70	336.84	1443.60	2406.00	117-93-764-41-005
68	2.392 (60.76)	0.6 (15.24)	0.69 (17.53)	ED22686-ND	6.39	44.30	357.84	1533.60	2556.00	117-93-668-41-005

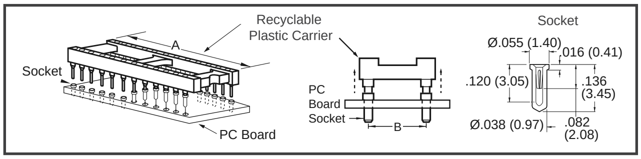
Dual-In-Line Socket Carriers Miniature

- Reusable carriers
- Pin Carrier Assemblies assure maximum ventilation and better visibility for inspection and repair.
- Easy mounting due to the ***RECYCLABLE PLASTIC CARRIER***. No solder wicking problems.

Requires .039" (.99mm) min. diameter holes in PCB.

Insertion Characteristics: 3-finger.

Plating: Sleeve (Pin) – 200µ" Sn. Contact (Clip) – 30µ" Au.

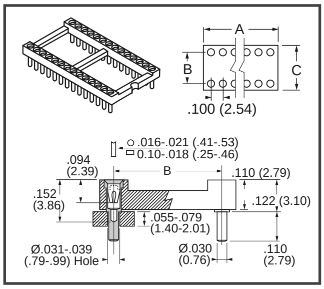


No. of Pins	Dim. – Inch (mm) A	B	Digi-Key Part No.	Pricing 1	10	100	500	1,000	Mill-Max Part No.
8	0.4 (10.16)	0.3 (7.62)	ED6008-ND	.93	6.45	52.08	223.20	372.00	614-93-308-31-012
14	0.7 (17.78)	0.3 (7.62)	ED6014-ND	1.63	11.28	91.14	390.60	651.00	614-93-314-31-012
16	0.8 (20.32)	0.3 (7.62)	ED6016-ND	1.86	12.90	104.16	446.40	744.00	614-93-316-31-012
18	0.9 (22.86)	0.3 (7.62)	ED6018-ND	2.09	14.51	117.18	502.20	837.00	614-93-318-31-012
20	1.0 (25.40)	0.3 (7.62)	ED6020-ND	2.33	16.12	130.20	558.00	930.00	614-93-320-31-012
24	1.2 (30.48)	0.3 (7.62)	ED6024-ND	2.79	19.34	156.24	669.60	1116.00	614-93-324-31-012
28	1.4 (35.56)	0.3 (7.62)	ED6028-ND	3.26	22.57	182.28	781.20	1302.00	614-93-328-31-012
24	1.2 (30.48)	0.6 (15.24)	ED6124-ND	2.79	19.34	156.24	669.60	1116.00	614-93-624-31-012
28	1.4 (35.56)	0.6 (15.24)	ED6128-ND	3.26	22.57	182.28	781.20	1302.00	614-93-628-31-012
32	1.6 (40.64)	0.6 (15.24)	ED6132-ND	3.72	25.79	208.32	892.80	1488.00	614-93-632-31-012
40	2.0 (50.80)	0.6 (15.24)	ED6140-ND	4.65	32.24	260.40	1116.00	1860.00	614-93-640-31-012

Dual-In-Line Socket – Low Profile Open Frame

- Dip Sockets with reduced height; only .122" (3.10mm) above PCB.
- Hi-Rel, 4-finger #30 clip.

Plating: Sleeve (Pin) – 200µ" Sn.
Contact (Clip) – 30µ" Au.

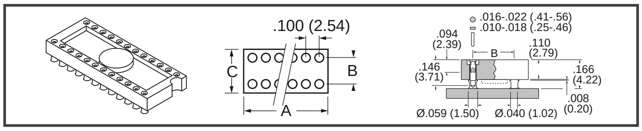


No.of Pins	Dim. – Inch (mm) A	B	C	Digi-Key Part No.	Pricing 1	10	100	500	1,000	Mill-Max Part No.
8	0.4 (10.16)	0.3 (7.62)	0.4 (10.16)	ED58083-ND	.62	5.28	43.20	159.36	268.80	115-93-308-41-001
14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED58143-ND	1.05	8.86	72.45	267.26	450.80	115-93-314-41-001
16	0.8 (20.32)	0.3 (7.62)	0.4 (10.16)	ED58163-ND	1.20	10.12	82.80	305.44	515.20	115-93-316-41-001
18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	ED58183-ND	1.35	11.39	93.15	343.62	579.60	115-93-318-41-001
20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED58203-ND	1.44	12.21	99.90	368.52	621.60	115-93-320-41-001
24	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	ED58243-ND	1.73	14.66	119.93	442.39	746.20	115-93-324-41-001
28	1.4 (35.56)	0.3 (7.62)	0.4 (10.16)	ED58283-ND	2.02	17.11	139.95	516.26	870.80	115-93-328-41-001
24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED58246-ND	1.73	14.66	119.93	442.39	746.20	115-93-624-41-001
28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	ED58286-ND	2.02	17.11	139.95	516.26	870.80	115-93-628-41-001
32	1.6 (40.64)	0.6 (15.24)	0.7 (17.78)	ED58326-ND	2.31	19.53	159.75	589.30	994.00	115-93-632-41-001
40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED58406-ND	2.89	24.42	199.80	737.04	1243.20	115-93-640-41-001

Dual-In-Line Sockets – Surface Mount, Stub Tail, Closed Frame

- Closed frame insulator is vision system compatible.
- High-temp Nylon 46, suitable for infra-red and vapor phase soldering.

Plating: Sleeve (Pin) – 200µ" Sn.
Contact (Clip) – 200µ" Sn.



No.of Pins	Dim.– Inch (mm) A	B	C	Digi-Key Part No.	Pricing 1	10	100	500	1,000	Mill-Max Part No.
Vacuum Pads Top Surface Only										
8	0.4 (10.16)	0.3 (7.62)	0.4 (10.16)	ED2128-ND	.57	4.94	39.90	171.00	285.00	214-99-308-01-670800
14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED2129-ND	.96	8.29	66.99	287.10	478.50	214-99-314-01-670800
16	0.8 (20.32)	0.3 (7.62)	0.4 (10.16)	ED2130-ND	1.10	9.49	76.65	328.50	547.50	214-99-316-01-670800
18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	ED2131-ND	1.23	10.63	85.89	368.10	613.50	214-99-318-01-670800
20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED2132-ND	1.32	11.44	92.40	396.00	660.00	214-99-320-01-670800
Vacuum Pads Top and Bottom										
24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED2133-ND	1.58	13.70	110.67	474.30	790.50	214-99-624-01-670800
28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	ED2134-ND	1.85	15.99	129.15	553.50	922.50	214-99-628-01-670800
32	1.6 (40.64)	0.6 (15.24)	0.7 (17.78)	ED2135-ND	2.11	18.30	147.84	633.60	1056.00	214-99-632-01-670800
40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED2136-ND	2.64	22.85	184.59	791.10	1318.50	214-99-640-01-670800

In-Line Sockets and Headers - Solder Tail and Solderless

Fig. 1

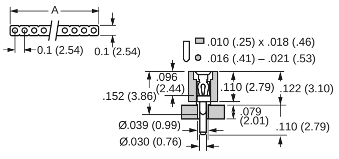


Fig. 2

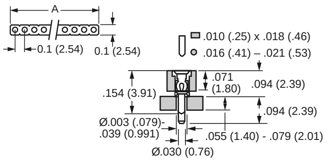


Fig. 3 *NEW!*

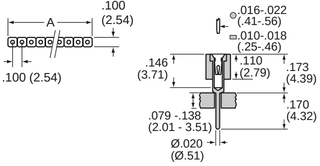


Fig. 4 *NEW!*

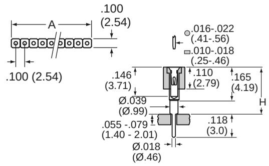


Fig. 5 *NEW!*

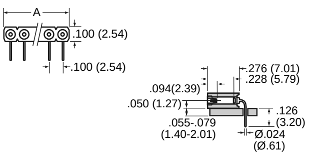


Fig. 6 *NEW!*

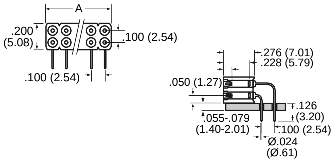


Fig. 7 *NEW!*

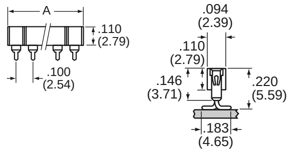


Fig. 8 *NEW!*

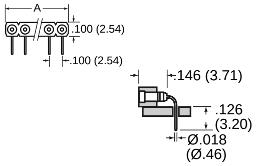


Fig. 9 *NEW!*

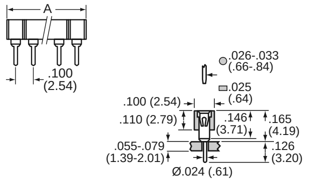
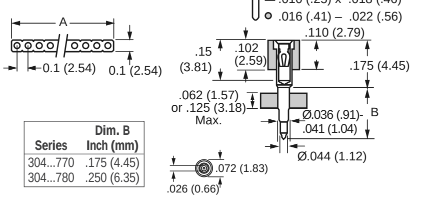


Fig. 10



Series	Dim. B Inch (mm)
304...770	.175 (4.45)
304...780	.250 (6.35)

Fig. 11 *NEW!*

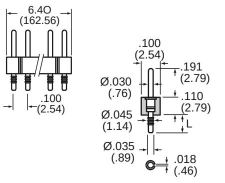


Fig. 12 *NEW!*

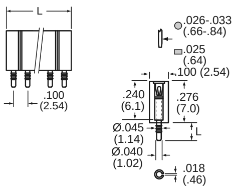


Fig. 13 *NEW!*

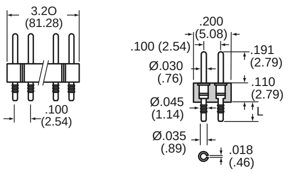


Fig. 14 *NEW!*

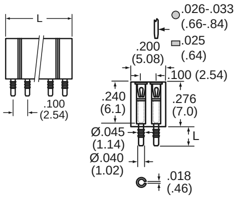


Fig. 15

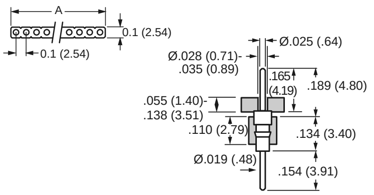


Fig. 16 *NEW!*

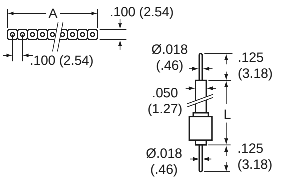


Fig. 17 *NEW!*

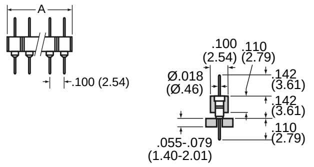


Fig. 18 *NEW!*

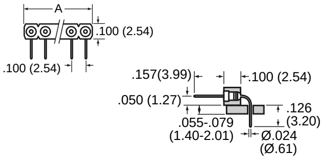


Fig. 19 *NEW!*

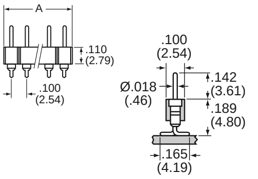


Fig. 20 *NEW!*

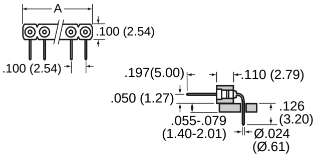


Fig.	Description	No. of Pins	Dim. A Inch (mm)	Plating Sleeve/Pin	Plating Contact/Clip	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Mill-Max Part No.
	Solder Tail Socket									
1	Very Low Profile, Series 315...01	64	6.4” (162.56)	200µ” Sn	30µ” Au	ED7864-ND	4.16	3.52	2.88	315-93-164-41-001000
2	Ultra Low Profile, Series 315...03	64	6.4” (162.56)	200µ” Au	30µ” Au	ED7964-ND	4.06	3.44	2.81	315-93-164-41-003000
3	Single Row, Long Solder Tail, Series 311…01	64	6.4" (162.56)	200µ” Sn	30µ” Au	ED1064-ND *NEW!*	3.16	2.74	2.22	311-93-164-41-001000
4	Single Row, Series 316…01 H=.594	64	6.4" (162.56)	200µ” Sn	30µ” Au	ED1164-ND *NEW!*	8.48	7.35	5.94	316-93-164-41-001000
4	Single Row, Series 316…03 H=.315	64	6.4" (162.56)	200µ” Sn	30µ” Au	ED1264-ND *NEW!*	7.33	6.36	5.14	316-93-164-41-003000
4	Single Row, Series 316…06 H=.236	64	6.4" (162.56)	200µ” Sn	30µ” Au	ED1364-ND *NEW!*	6.92	6.01	4.85	316-93-164-41-006000
4	Single Row, Series 316…07 H=.402	64	6.4" (162.56)	200µ” Sn	30µ” Au	ED1464-ND *NEW!*	7.66	6.64	5.37	316-93-164-41-007000
4	Single Row, Series 316…08 H=.472	64	6.4" (162.56)	200µ” Sn	30µ” Au	ED15064-ND *NEW!*	8.01	6.94	5.61	316-93-164-41-008000
5	Single Row, Right Angle .030" dia. Pins	50	5.0" (127.00)	200µ” Sn	30µ” Au	ED1450-ND *NEW!*	5.89	5.11	4.13	801-93-050-20-001000
6	Double Row, Right Angle .030" dia. Pins	2 x 50	5.0" (127.00)	200µ” Sn	30µ” Au	ED14100-ND *NEW!*	14.31	12.41	10.02	803-93-100-20-001000
7	Single Row, .220" Surface Mount	64	6.4" (162.56)	200µ” Sn	30µ” Au	ED23064-ND *NEW!*	5.84	5.06	4.09	310-93-164-41-105000
8	Single Row, Series 399…03 Right Angle	64	6.4" (162.56)	200µ” Sn	30µ” Au	ED22064-ND *NEW!*	5.63	4.88	3.94	399-93-164-10-003000
9	Single Row, Low Profile .030" dia. Pins	64	6.4" (162.56)	200µ” Sn	30µ” Au	ED2764-ND *NEW!*	6.20	5.38	4.35	801-93-064-10-002000
	Solderless Press-Fit Header/Socket									
10	Solderless Press-Fit Socket, Series 304...770	64	6.4” (162.56)	10µ” Au	30µ” Au	ED8064-ND	6.53	5.53	4.53	304-13-164-41-770000
10	Solderless Press-Fit Socket, Series 304...780	64	6.4” (162.56)	10µ” Au	30µ” Au	ED8164-ND	7.05	5.97	4.89	304-13-164-41-780000
11	Single Row Header Compliant Tail L=.104	64	6.4" (162.56)	10µ” Au	—	ED2864-ND *NEW!*	9.04	7.84	6.33	800-10-064-61-001000
11	Single Row Header Compliant Tail L=.143	64	6.4" (162.56)	10µ” Au	—	ED2964-ND *NEW!*	9.17	7.95	6.42	800-10-064-62-001000
12	Single Row Socket Compliant Tail L=.104	50	5.0" (127.00)	200µ” Sn	30µ” Au	ED15050-ND *NEW!*	8.76	7.59	6.13	801-93-050-61-001000
12	Single Row Socket Compliant Tail L=.143	50	5.0" (127.00)	200µ” Sn	30µ” Au	ED1650-ND *NEW!*	8.79	7.62	6.16	801-93-050-62-001000
13	Double Row Header Compliant Tail L=.104	2 x 32	3.2" (81.28)	10µ” Au	—	ED3064-ND *NEW!*	9.04	7.84	6.33	802-10-064-61-001000
13	Double Row Header Compliant Tail L=.143	2 x 32	3.2" (81.28)	10µ” Au	—	ED3164-ND *NEW!*	9.17	7.95	6.42	802-10-064-62-001000
14	Double Row Socket Compliant Tail L=.104	2 x 50	5.0" (127.00)	200µ” Sn	30µ” Au	ED15100-ND *NEW!*	17.34	15.03	12.14	803-93-100-61-001000
14	Double Row Socket Compliant Tail L=.143	2 x 50	5.0" (127.00)	200µ” Sn	30µ” Au	ED16100-ND *NEW!*	17.40	15.08	12.18	803-93-100-62-001000
	Solder Tail Header Strip									
15	Pin/Solder Tail Header Strip, Series 350	64	6.4” (162.56)	10µ” Au	—	ED7764-ND	6.12	5.18	4.24	350-10-164-00-001000
16	Single Row, .018/.018 Pin L=.210	64	6.4" (162.56)	10µ” Au	—	ED16064-ND *NEW!*	5.99	5.20	4.20	342-10-164-00-591000
16	Single Row, .018/.018 Pin L=.335	64	6.4" (162.56)	10µ” Au	—	ED17064-ND *NEW!*	6.42	5.57	4.50	342-10-164-00-592000
16	Single Row, .018/.018 Pin L=.585	64	6.4" (162.56)	10µ” Au	—	ED18064-ND *NEW!*	8.57	7.43	6.00	342-10-164-00-593000
16	Single Row, .018/.018 Pin L=.835	64	6.4" (162.56)	10µ” Au	—	ED19064-ND *NEW!*	11.23	9.74	7.87	342-10-164-00-594000
17	Single Row, Series 350…06 Straight	64	6.4" (162.56)	10µ” Au	—	ED2064-ND *NEW!*	5.76	5.00	4.04	350-10-164-00-006000

(Continued)

Fig. 21 *NEW!*

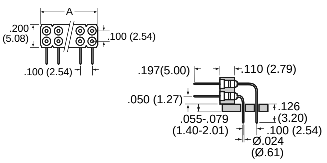


Fig. 22

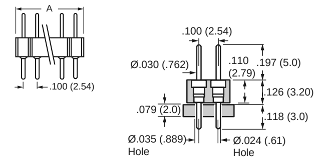


Fig. 23

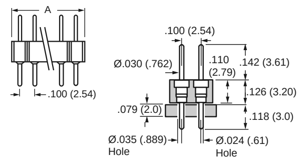


Fig. 24

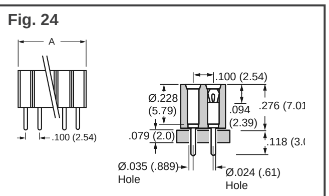


Fig. 25

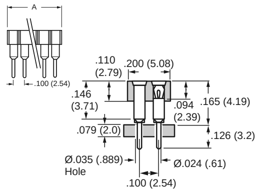


Fig. 26 *NEW!*

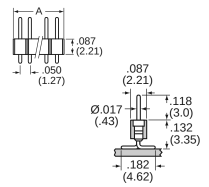


Fig. 27

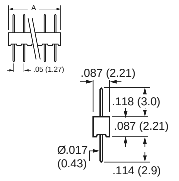


Fig. 28 *NEW!*

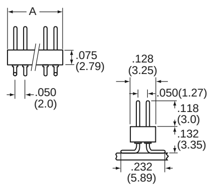


Fig. 29

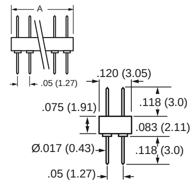


Fig. 30 *NEW!*

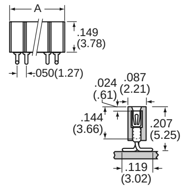


Fig. 31

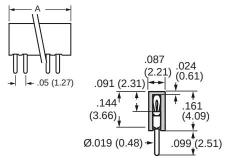


Fig. 32 *NEW!*

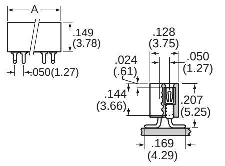


Fig. 33

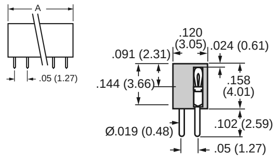


Fig. 34

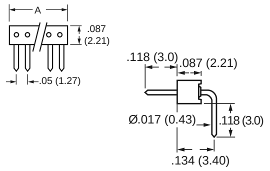


Fig. 35

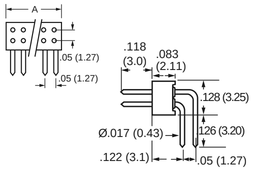


Fig. 36

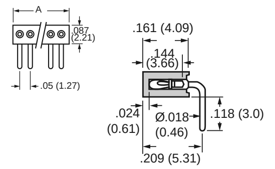


Fig. 37

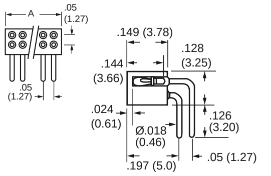


Fig. 38 *NEW!*

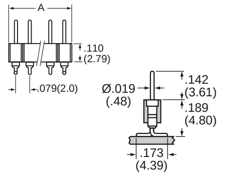


Fig. 39

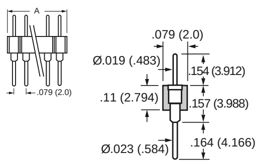


Fig. 40 *NEW!*

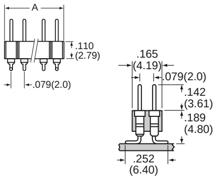


Fig. 41

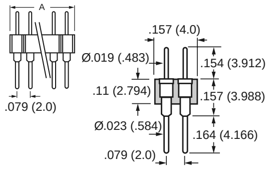


Fig. 42 *NEW!*

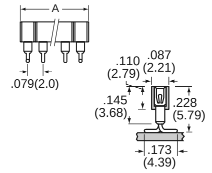


Fig. 43

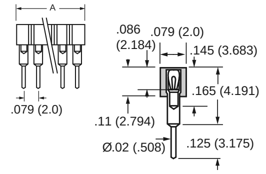


Fig. 44 *NEW!*

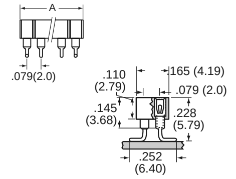


Fig. 45

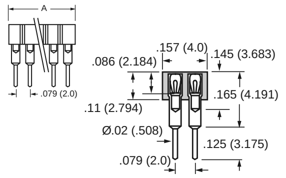


Fig.	Description	No. of Pins	Dim. A Inch (mm)	Plating Sleeve/Pin	Plating Contact/Clip	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Mill-Max Part No.
	Solder Tail Header Strip (Cont.)									
18	Single Row, Series 399...09 Right/Angle	64	6.4" (162.56)	10µ" Au	—	ED2164-ND *NEW!*	6.59	5.72	4.62	399-10-164-10-009000
19	Single Row, .189" Surface Mount Header	64	6.4" (162.56)	10µ" Au	—	ED24064-ND *NEW!*	8.38	7.27	5.87	350-10-164-00-106000
20	Single Row, Right Angle .030" Diameter Pins	64	6.4" (162.56)	10µ" Au	—	ED2564-ND *NEW!*	6.80	5.90	4.77	800-10-064-20-001000
21	Double Row, Right Angle .030" Diameter Pins	2 x 32	3.2" (81.28)	10µ" Au	—	ED2664-ND *NEW!*	7.22	6.26	5.06	802-10-064-20-001000
	Interconnects, .100" (2.54mm) Grid									
22	Double Row, Pin Header, Straight Solder Tail	2 x 32	3.2" (81.28)	10µ" Au	—	ED9464-ND	6.85	5.80	4.75	802-10-064-10-001000
23	Double Row, Low Profile Pin Header	2 x 32	3.2" (81.28)	10µ" Au	—	ED9564-ND	6.72	5.69	4.66	802-10-064-10-002000
24	Double Row, Socket, Straight Solder Tail	2 x 36	3.6" (91.44)	200µ" Sn	30µ" Au	ED9672-ND	8.62	7.29	5.97	803-93-072-10-001000
25	Double Row, Low Profile Socket	2 x 36	3.6" (91.44)	200µ" Sn	30µ" Au	ED9772-ND	8.09	6.85	5.60	803-93-072-10-002000
	Interconnects, .050" (1.27mm) Grid									
26	Single Row, .132" (3.35mm) SMT Header	50	2.5" (63.50)	10µ" Au	—	ED1050-ND *NEW!*	9.65	8.37	6.76	850-10-050-30-001000
27	Single Row, .087" (2.21mm) Profile Pin Header	50	2.5" (63.50)	10µ" Au	—	ED8250-ND	7.10	6.01	4.92	850-10-050-10-001000
28	Double Row, .132" (3.35mm) SMT Header	2 x 50	2.5" (63.50)	10µ" Au	—	ED10100-ND *NEW!*	17.61	15.27	12.33	852-10-100-30-001000
29	Double Row, .075" (1.91mm) Profile Pin Header	2 x 50	2.5" (63.50)	10µ" Au	—	ED83100-ND	14.20	12.02	9.84	852-10-100-10-001000
30	Single Row, .207" (5.26mm) SMT Socket	50	2.5" (63.50)	200µ" Sn	30µ" Au	ED1150-ND *NEW!*	13.12	11.37	9.19	851-93-050-30-001000
31	Single Row, .161" (4.09mm) Profile Socket	50	2.5" (63.50)	200µ" Sn	30µ" Au	ED8450-ND	10.82	9.16	7.50	851-93-050-10-001000
32	Double Row, .207" (5.26mm) SMT Socket	2 x 50	2.5" (63.50)	200µ" Sn	30µ" Au	ED11100-ND *NEW!*	24.48	21.22	17.14	853-93-100-30-001000
33	Double Row, .161" (4.09mm) Profile Socket	2 x 50	2.5" (63.50)	200µ" Sn	30µ" Au	ED85100-ND	21.65	18.32	14.99	853-93-100-10-001000
	Right Angle Interconnects, .050" (1.27mm) Grid									
34	Single Row, Pin Header, Rt. Angle Solder Tail	50	2.5" (63.50)	10µ" Au	—	ED8650-ND	9.64	8.16	6.68	850-10-050-20-001000
35	Double Row, Pin Header, Rt. Angle Solder Tail	2 x 50	2.5" (63.50)	10µ" Au	—	ED87100-ND	19.44	16.45	13.46	852-10-100-20-001000
36	Single Row, Socket, Rt. Angle Solder Tail	50	2.5" (63.50)	200µ" Sn	30µ" Au	ED8850-ND	13.47	11.40	9.33	851-93-050-20-001000
37	Double Row, Socket, Rt. Angle Solder Tail	2 x 50	2.5" (63.50)	200µ" Sn	30µ" Au	ED89100-ND	27.04	22.88	18.72	853-93-100-20-001000
	Interconnects, 2mm Grid									
38	Single Row, .189" (4.80mm) SMT Header	50	3.94" (100.08)	10µ" Au	—	ED1250-ND *NEW!*	8.79	7.62	6.16	830-10-050-30-001000
39	Single Row Pin Header	50	3.94" (100.08)	10µ" Au	—	ED9050-ND	6.31	5.34	4.37	830-10-050-10-001000
40	Double Row, .189" (4.80mm) SMT Header	2 x 50	3.94" (100.08)	10µ" Au	—	ED12100-ND *NEW!*	17.40	15.08	12.18	832-10-100-30-001000
41	Double Row Pin Header	2 x 50	3.94" (100.08)	10µ" Au	—	ED91100-ND	12.61	10.67	8.73	832-10-100-10-001000
42	Single Row, .228" (5.79mm) SMT Socket	50	3.94" (100.08)	200µ" Sn	30µ" Au	ED1350-ND *NEW!*	6.82	5.91	4.78	831-93-050-30-001000
43	Single Row Socket	50	3.94" (100.08)	200µ" Sn	30µ" Au	ED9250-ND	4.06	3.44	2.82	831-93-050-10-001000
44	Double Row, .228" (5.79mm) SMT Socket	2 x 50	3.94" (100.08)	200µ" Sn	30µ" Au	ED13100-ND *NEW!*	13.50	11.70	9.45	833-93-100-30-001000
45	Double Row Socket	2 x 50	3.94" (100.08)	200µ" Sn	30µ" Au	ED93100-ND	8.13	6.88	5.63	833-93-100-10-001000

MILL-MAX® Single In-Line Strip Sockets - Solder Tail and Solderless

MATERIALS:
- **Insulator Body:** Glass filled thermoplastic polyester, self-extinguishing rated UL 94V-O; color black; resistant against detergents, mineral acids, solvents, greases and oils (short time)
- **Receptacle (sleeve):** Screw machined brass, plated 200µ" tin-lead
- **Pin:** Screw machined brass with 10µ" gold plating
- **Contact:** Stamped beryllium-copper, plated 30µ" gold
- **Mechanical Life:** 100 cycles min.

ELECTRICAL DATA:
- **Rated Current:** 1A
- **Current Rating:** Clips have rating of 3A
- **Rated Voltage:** 100 VRMS/150 VDC
- **Contact Resistance:** 10mΩ max.
- **Insulation Resistance:** 10,000MΩ min.
- **Dielectric Strength:** 1000 VRMS min.
- **Capacitance:** 0.3 pF max.

ENVIRONMENTAL DATA:
- **Operating Temp. Range:** -55°C to +125°C
- **Vibration:** 10-2000 Hz, 15g.
- **Shock (no elect. discontinuity greater than 1µs):** 150g.
- **Solderability:** IEC 68-2-20 Ta.
- **Resistance to Soldering Heat:** IEC 68-2-20, 260°C, 5s
- **Resistance to Atmosphere Corrosion:** IEC 68-2-42 & 43.

Fig. 1 — Standard Solder Tail

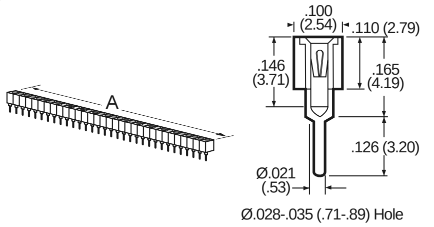


Fig. 2 — Low Profile Socket

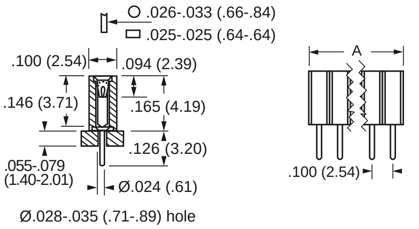


Fig. 3 — Socket Strip

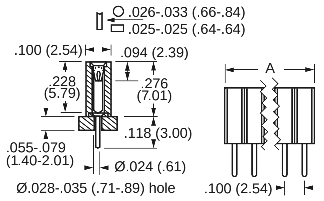


Fig. 4 — Low Profile Pin Header

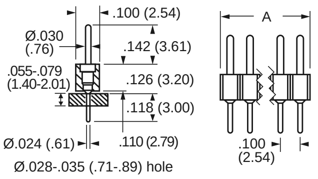


Fig. 5 — Pin Header Strip

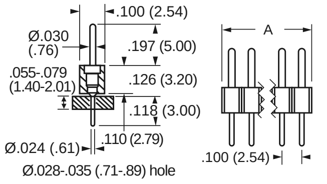


Fig.	No. of Pins	Dim. A Inch (mm)	Plating Sleeve/Pin	Clip	Digi-Key Part No.	Pricing 1	10	100	Mill-Max Part No.
Strip Sockets Solder Tail — 7000 Series									
1	64	6.4 (162.56)	200µ" Sn	30µ" Au	ED7064-ND	2.89	24.48	200.25	310-93-164-41-001
Single Row Socket, Straight Angle Solder Tail — Series 7400									
1	64	6.4 (162.56)	10µ" Au	30µ" Au	ED7464-ND	4.10	34.68	283.73	310-13-164-41-001000
Single Row, Low Profile Socket — Series 7600									
2	36	3.6 (91.44)	200µ" Sn	30µ" Au	ED7636-ND	4.14	35.04	286.65	801-93-036-10-012000
Single Row Pin Socket, Straight Solder Tail — 7100 Series									
3	50	5.0 (127.00)	200µ" Sn	30µ" Au	ED7150-ND	5.98	50.63	414.23	801-93-050-10-001
Single Row, Low Profile Pin Header — Series 7500									
4	64	6.4 (162.56)	10µ" Au	—	ED7564-ND	6.72	56.84	465.08	800-10-064-10-002000
Single Row Pin Header, Straight Solder Tail — 7200 Series									
5	64	6.4 (162.56)	10µ" Au	—	ED7264-ND	6.85	57.97	474.30	800-10-064-10-001

Digi-Key Part No.	Base Price	Pin Adder
7000 Series		
ED70XX-ND	.33	.04
7400 Series		
ED74XX-ND	.26	.06
7600 Series		
ED76XX-ND	.54	.10
7100 Series		
ED71XX-ND	.47	.11
7500 Series		
ED75XX-ND	.32	.10
7200 Series		
ED72XX-ND	.45	.10

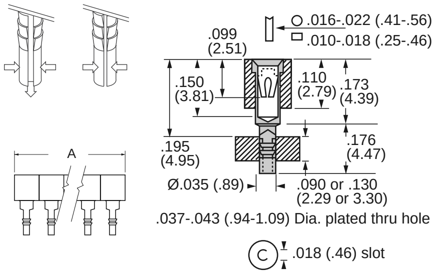
Single In-Line Strip Sockets — Solderless Press Fit, Compliant Tail

FEATURES:

Unique compliant tail pins conforms to .040" ±.003" (1.02mm ±08mm) finished hole diameter without stressing inner layers.

APPLICATION OF COMPLIANT TAIL PINS:

Mill-Max's patented (Patent No. 4,799,904) compliant tail features precision machined pins that are hollow and slotted to conform to a .040" ±.003" (1.02mm ±08mm) diameter PTH. As the pin is inserted, the slot compresses to fit the PTH, thus avoiding damage (see illustration). The pin's tail has fine serrations that form a perfect "gas tight" connection that doesn't require soldering. And since the pin doesn't damage the hole, compliant tail sockets and connectors can be easily replaced.



No. of Pins	Dim. A Inch (mm)	Plating Sleeve/Pin	Clip	Digi-Key Part No.	Pricing 1	10	100	Mill-Max Part No.
64	6.4" (162.56)	200µ" Sn	30µ" Au	ED7364-ND	7.35	62.15	508.50	346-93-164-41-013

Digi-Key Part No.	Base Price	Pin Adder
ED73XX-ND	.95	.10

HOW TO ORDER — 4 EASY STEPS

How do I order an ED7064 header with 64 pins? Call Digi-Key where you'll happily receive the price.

or Determine the cost yourself

ED ❏ ❏ ❏ ❏ - ND
Series — Number of Desired Pins

How to Order — In 4 Easy Steps	*Our Example*	*Your Digi-Key Part Number*
Step 1. Select needed "Digi-Key Part Number" and number of pins desired	ED7064-ND	ED __ __ __ __ - ND
Step 2. Begin with appropriate "Base Price" of your selected Part Number (refer to chart)...	.33	_______
Step 3. Multiply the number of pins you desire by "Pin Adder" of your selected Part Number (refer to chart)..	64 x .04 = 2.56	____ x ____ = _______
Step 4. Add Step 2 & Step 3 together for Final Cost!	Your Cost = $2.89	Your Cost = $______

NOTE: For quantities of 10 or more, call 1-800-DIGI-KEY.

Pin Receptacles and P.C. Pins

Fig. 1

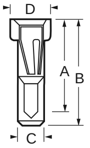


Fig. 2

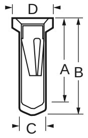


Fig. 3

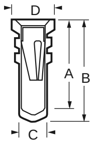


Fig. 4

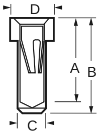


Fig. 5

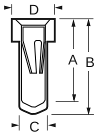


Fig. 6

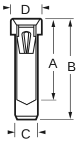


Fig. 7

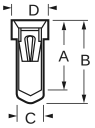


Fig. 8

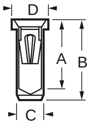


Fig. 9

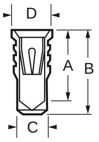


Fig. 10

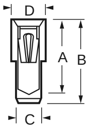


Fig. 11

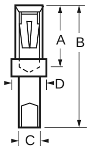


Fig. 12

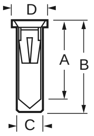


Fig. 13

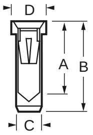


Fig. 14

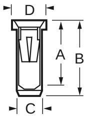


Fig. 15

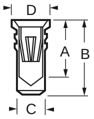


Fig. 16

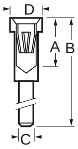


Fig. 17

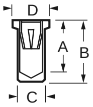


Fig. 18

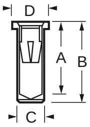


Fig. 19

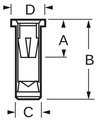


Fig. 20

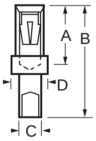


Fig. 21

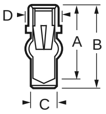


Fig. 22

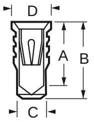


Fig. 23

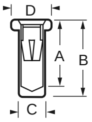


Fig. 24

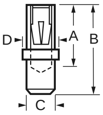


Fig. 25

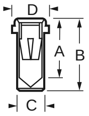


Fig. 26

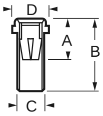


Fig. 27

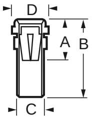


Fig. 28

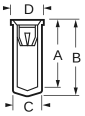


Fig. 29

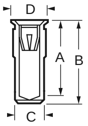


Fig. 30

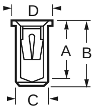


Fig. 31

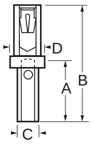


Fig. 32

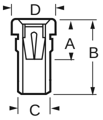


Fig. 33

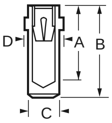


Fig. 34

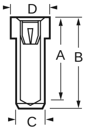


Fig. 35

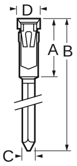


Fig. 36

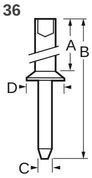


Fig. 37

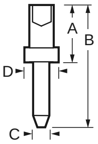


Fig. 38

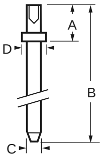


Fig. 39

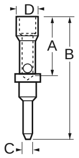


Fig. 40

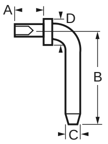


Fig.	Mounting Hole Diameter	Dimensions Inch (mm)				Digi-Key Part No.	Pricing		
		A	B	C	D		10	100	1,000
.015" – .021" (.38mm – .53mm) Pin Diameter									
1	.036 (.91)	.138 (3.51)	.155 (3.94)	.034 (.86)	.058 (1.47)	ED5036-ND	1.48	11.10	74.00
2	.040 (1.02)	.120 (3.05)	.136 (3.45)	.038 (.97)	.055 (1.40)	ED5037-ND	.80	6.00	40.00
2	.040 (1.02)	.150 (3.81)	.170 (4.32)	.038 (.97)	.055 (1.40)	ED5038-ND	.81	6.09	40.60
3	.041 (1.04)	.124 (3.15)	.140 (3.56)	.038 (.97)	.055 (1.40)	ED5039-ND	1.57	11.79	78.60
3	.041 (1.04)	.154 (3.91)	.170 (4.32)	.038 (.97)	.055 (1.40)	ED5040-ND	1.58	11.88	79.20
4	.040 (1.02)	.127 (3.23)	.146 (3.71)	.038 (.97)	.055 (1.40)	ED5046-ND	.93	6.96	46.40
5	.040 (1.02)	.140 (3.56)	.160 (4.06)	.038 (.97)	.056 (1.42)	ED5041-ND	1.77	13.26	88.40
.015" – .025" (.38mm – .64mm) Pin Diameter									
6	.051 (1.30)	.205 (5.21)	.248 (6.30)	.049 (1.24)	.063 (1.60)	ED5045-ND	2.08	15.57	103.80
7	.053 (1.35)	.135 (3.43)	.160 (4.06)	.051 (1.30)	.072 (1.83)	ED5042-ND	1.71	12.84	85.60
8	.057 (1.45)	.142 (3.61)	.161 (4.09)	.055 (1.40)	.072 (1.83)	ED5044-ND	.99	7.44	49.60
9	.057 (1.45)	.150 (3.81)	.170 (4.32)	.053 (1.35)	.072 (1.83)	ED5004-ND	1.75	13.11	87.40
10	.061 (1.55)	.150 (3.81)	.180 (4.57)	.058 (1.47)	.080 (2.03)	ED5043-ND	1.60	12.03	80.20
.022" – .032" (.56mm – .81mm) Pin Diameter									
11	.060 (1.52)	.170 (4.32)	.294 (7.47)	.040 (1.02)	.094 (2.39)	ED5015-ND	4.26	31.92	212.80
12	.063 (1.60)	.233 (5.92)	.259 (6.58)	.060 (1.52)	.077 (1.96)	ED5008-ND	1.89	14.16	94.40
13	.071 (1.80)	.210 (5.33)	.250 (6.35)	.068 (1.73)	.093 (2.36)	ED5006-ND	2.04	15.30	102.00
14	.076 (1.93)	.185 (4.70)	.206 (5.23)	.073 (1.85)	.090 (2.29)	ED5007-ND	2.00	15.03	100.20
.025" – .037" (.64mm – .94mm) Pin Diameter									
15	.061 (1.55)	.165 (4.19)	.200 (5.08)	.057 (1.45)	.078 (1.98)	ED5005-ND	2.85	21.36	142.40
16	.042 (1.07)	.180 (4.57)	.320 (8.13)	.040 (1.02)	.078 (1.98)	ED5009-ND	2.38	17.88	119.20
16	.042 (1.07)	.180 (4.57)	.397 (10.08)	.040 (1.02)	.078 (1.98)	ED5010-ND	2.82	21.12	140.80
.037" – .043" (.94mm – 1.09mm) Pin Diameter									
17	.071 (1.80)	.127 (3.23)	.150 (3.81)	.069 (1.75)	.090 (2.29)	ED5019-ND	2.24	16.80	112.00
.032" – .047" (.56mm – 1.19mm) Pin Diameter									
18	.075 (1.91)	.180 (4.57)	.206 (5.23)	.072 (1.83)	.090 (2.29)	ED5016-ND	2.04	15.30	102.00
19	.075 (1.91)	.125 (3.18)	.221 (5.61)	.072 (1.83)	.090 (2.29)	ED5018-ND	4.21	31.56	210.40
20	.067 (1.70)	.200 (5.08)	.324 (8.23)	.065 (1.65)	.125 (3.18)	ED5021-ND	4.58	34.38	229.20
21	.076 (1.93)	.195 (4.95)	.220 (5.59)	.074 (1.88)	.102 (2.59)	ED5020-ND	4.32	32.40	216.00
22	.076 (1.93)	.180 (4.57)	.206 (5.23)	.071 (1.80)	.090 (2.29)	ED5017-ND	2.42	18.12	120.80
23	.091 (2.31)	.220 (5.59)	.253 (6.43)	.088 (2.24)	.120 (3.05)	ED5013-ND	2.96	22.17	147.80
24	.089 (2.26)	.220 (5.59)	.317 (8.05)	.085 (2.16)	.125 (3.18)	ED5014-ND	3.66	27.48	183.20
25	.087 (2.21)	.195 (4.95)	.236 (5.99)	.085 (2.16)	.125 (3.18)	ED5012-ND	2.54	19.05	127.00

Fig.	Mounting Hole Diameter	Dimensions Inch (mm)				Digi-Key Part No.	Pricing		
		A	B	C	D		10	100	1,000
26	.087 (2.21)	.130 (3.30)	.236 (5.99)	.085 (2.16)	.125 (3.18)	ED5011-ND	2.54	19.08	127.20
27	.089 (2.26)	.131 (3.33)	.250 (6.35)	.080 (2.03)	.110 (2.79)	ED5028-ND	3.14	23.58	157.20
.040" – .050" (1.02mm – 1.27mm) Pin Diameter									
28	.102 (2.59)	.260 (6.60)	.290 (7.37)	.100 (2.54)	.118 (3.00)	ED5024-ND	2.52	18.87	125.80
29	.103 (2.62)	.260 (6.60)	.290 (7.37)	.088 (2.24)	.118 (3.00)	ED5023-ND	3.53	26.49	176.60
.048" – .064" (1.22mm – 1.63mm) Pin Diameter									
30	.102 (2.59)	.180 (4.57)	.213 (5.41)	.098 (2.49)	.120 (3.05)	ED5029-ND	3.28	24.57	163.80
31	—	.267 (6.78)	.530 (13.46)	.103 (2.62)	.141 (3.58)	ED5032-ND	7.31	54.81	365.40
32	.108 (2.74)	.134 (3.40)	.250 (6.35)	.102 (2.59)	.136 (3.45)	ED5031-ND	4.03	30.24	201.60
.065" – .082" (1.65mm – 2.08mm) Pin Diameter									
33	.144 (3.66)	.340 (8.64)	.412 (10.46)	.142 (3.61)	.188 (4.78)	ED5035-ND	5.52	41.40	276.00
.084" – .102" 2.13mm – 2.59mm) Pin Diameter									
34	.144 (3.66)	.415 (10.54)	.465 (11.81)	.142 (3.61)	.188 (4.78)	ED5034-ND	6.68	50.10	334.00
.015" – .025" (.38mm – .64mm) Pin Diameter									
35	.055 (1.40)	.200 (5.08)	.700 (17.78)	.025 (.64)	.072 (1.83)	ED5001-ND	1.41	10.59	70.60
35	.055 (1.40)	.200 (5.08)	.560 (14.22)	.025 (.64)	.072 (1.83)	ED5002-ND	1.26	9.42	62.80
35	.055 (1.40)	.200 (5.08)	.460 (11.68)	.025 (.64)	.072 (1.83)	ED5003-ND	1.62	12.12	80.80
.025" (.64mm) Pin Diameter									
36	.035 (.89)	.047 (1.19)	.260 (6.60)	.025 (.64)	.062 (1.57)	ED5055-ND	.84	6.30	42.00
36	.035 (.89)	.078 (1.98)	.291 (7.39)	.025 (.64)	.062 (1.57)	ED5056-ND	.66	4.98	33.20
37	.043 (1.09)	.076 (1.93)	.201 (5.11)	.025 (.64)	.062 (1.57)	ED5053-ND	.83	6.21	41.40
37	.043 (1.09)	.107 (2.72)	.232 (5.89)	.025 (.64)	.062 (1.57)	ED5054-ND	.67	5.04	33.60
.040" (1.02mm) Pin Diameter									
38	.043 (1.09)	.047 (1.19)	.221 (5.61)	.040 (1.02)	.070 (1.78)	ED5047-ND	.72	5.40	36.00
38	.043 (1.09)	.102 (2.59)	.252 (6.40)	.040 (1.02)	.070 (1.78)	ED5048-ND	.75	5.64	37.60
38	.043 (1.09)	.102 (2.59)	.290 (7.37)	.040 (1.02)	.070 (1.78)	ED5050-ND	.80	6.03	40.20
38	.043 (1.09)	.102 (2.59)	.402 (10.21)	.040 (1.02)	.070 (1.78)	ED5052-ND	.95	7.14	47.60
39	—	.282 (7.16)	.588 (14.94)	.040 (1.02)	.105 (2.67)	ED5061-ND	4.33	32.49	216.60
.040" (1.02mm) Pin Diameter									
40	.043 (1.09)	.082 (2.08)	.257 (6.53)	.040 (1.02)	.070 (1.78)	ED5058-ND	2.65	19.86	132.40

ARIES® ELECTRONICS, INC.

I.C. Sockets

Dual Leaf Tin Plated Wire Wrap

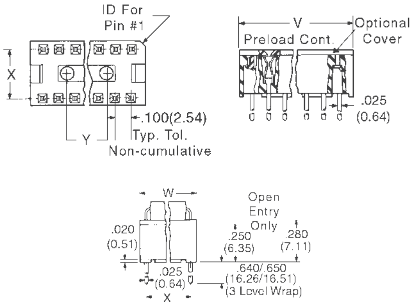
Contacts: Phosphor bronze CA510.
Contact Finish: Tin plating 200µ" minimum.

No. of Pins	Digi-Key Part No.	Pricing 1	25	100	500	1,000	2,500
8	C8108-ND	2.12	44.83	173.26	713.41	1324.90	1222.99/M
14	C8114-ND	3.02	63.80	246.60	1015.41	1885.75	1740.70/M
16	C8116-ND	3.31	70.02	270.62	1114.32	2069.45	1910.27/M
18	C8118-ND	3.44	72.77	281.25	1158.09	2150.73	1985.30/M
20	C8120-ND	4.24	89.71	346.73	1427.70	2651.44	2447.48/M
22	C8122-ND	4.77	100.93	390.09	1606.27	2983.07	2753.60/M
24	C8124-ND	5.35	113.14	437.29	1800.59	3343.96	3086.74/M
28	C8128-ND	6.10	129.09	498.94	2054.45	3815.40	3521.91/M
40	C8140-ND	8.74	184.86	714.50	2942.05	5463.81	5043.52/M

Dual Leaf Gold Inlay Wire Wrap

Contacts: Copper alloy CA725.
Contact Finish: Gold inlay 50µ" over 50µ" nickel interliner.

No. of Pins	Digi-Key Part No.	Pricing 1	25	100	500	1,000	2,500
8	C9108-ND	2.49	52.58	203.23	836.83	1554.12	1434.58/M
14	C9114-ND	4.11	86.96	336.10	1383.93	2570.15	2372.45/M
16	C9116-ND	4.71	99.66	385.20	1586.13	2945.68	2719.09/M
18	C9118-ND	5.19	109.89	424.74	1748.95	3248.05	2998.20/M
20	C9120-ND	5.77	122.10	471.94	1943.28	3608.94	3331.34/M
22	C9122-ND	6.26	132.33	511.48	2106.09	3911.31	3610.45/M
24	C9124-ND	6.91	146.25	565.26	2327.56	4322.60	3990.10/M
28	C9128-ND	8.10	171.44	662.63	2728.47	5067.15	4677.38/M
40	C9140-ND	11.21	237.22	916.88	3775.38	7011.43	6472.09/M



Pins	"V"±.25 Inch (mm)	"W"Max. Inch (mm)	"X"±.13 Inch (mm)	"Y"±.25 Inch (mm)
8	.465 (11.81)	.400 (10.16)	.300 (7.62)	n/a
14	.765 (19.43)	.400 (10.16)	.300 (7.62)	.300 (7.62)
16	.865 (21.97)	.400 (10.16)	.300 (7.62)	.400 (10.16)
18	.965 (24.51)	.400 (10.16)	.300 (7.62)	.400 (10.16)
20	1.065 (27.05)	.400 (10.16)	.300 (7.62)	.400 (10.16)
22	1.180 (29.97)	.500 (12.70)	.400 (10.16)	.500 (12.70)
24	1.280 (32.51)	.700 (17.78)	.600 (15.24)	.500 (12.70)
28	1.480 (37.59)	.700 (17.78)	.600 (15.24)	.500 (12.70)
40	2.080 (52.83)	.700 (17.78)	.600 (15.24)	.800 (20.32)

FEATURES:

- Universal mounting and packaging capabilities.
- Contacts accommodate .015" (.38mm) through .021" (.53mm) rectangular or round dual-in-line leads.
- Wire wrap posts held to true position of .015" (.38mm) providing a true position of .020" (.51mm) on boards for efficient automatic wire wrapping.

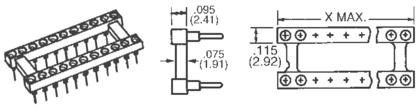
SPECIFICATIONS:

Material: Body, 94V-0 glass filled polyester.

Notes: Sockets meet requirements of Texas Instruments test specification TS-0003 and test report TR-0001. Contacts are replaceable and have redundant spring elements. Cover is removable. Contact is designed and oriented in the plastic body to generate maximum possible contact. Socket is designed to achieve maximum density on boards. Closed entry cover is provided to facilitate automatic insertion and protect IC leads against damage. Accommodates standard (C) leads up to .001" x .018" (.03mm x .46mm). Sockets are capable of being automatically or simultaneously wire wrapped.

Open Frame Machine Pin Collet Sockets

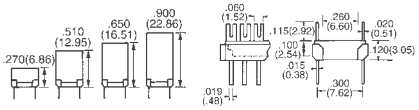
Specifications: Contacts: Collet – beryllium copper with 10µ" gold plating. Body – brass. Collet accepts: .014-.022 (.38-.56) dia. round leads. Platform: Glass filled thermoplastic UL94V-O. • Compatible with automatic insertion equipment. Collet is 10µ" gold plated.



Pin Centers	No. of Pins	Dim "X" Inch (mm)	Digi-Key Part No.	Pricing 1	25	100
.300 (7.62)	8	.400 (10.16)	A400-ND	.44	10.20	23.13
.300 (7.62)	14	.700 (17.78)	A401-ND	.75	17.33	39.29
.300 (7.62)	16	.800 (20.32)	A402AE-ND	.85	19.65	44.56
.300 (7.62)	18	.900 (22.86)	A403AE-ND	1.06	24.38	55.27
.300 (7.62)	20	1.000 (25.40)	A404-ND	.96	22.05	50.00
.300 (7.62)	24	1.200 (30.48)	A405-ND	1.19	27.53	62.41
.400 (10.16)	22	1.100 (27.97)	A406-ND	1.40	28.63	86.56
.400 (10.16)	24	1.200 (30.48)	A407-ND	1.59	32.51	98.30
.600 (15.24)	24	1.200 (30.48)	A408-ND	1.17	26.46	64.29
.600 (15.24)	28	1.400 (35.56)	A409-ND	1.40	31.57	76.70
.600 (15.24)	32	1.600 (40.64)	A410-ND	1.59	35.98	87.41
.600 (15.24)	40	2.000 (50.80)	A411-ND	1.85	41.86	101.70
.600 (15.24)	48	2.400 (60.96)	A412-ND	2.41	54.39	132.14
.900 (22.86)	50	2.500 (63.50)	A413-ND	3.18	65.08	196.77
.900 (22.86)	64	3.200 (81.28)	A414-ND	4.06	83.03	251.02

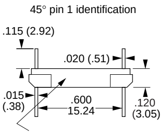
DIP Headers and Covers

Order Headers & Covers Separately



No. of Pins	DIP Header Number	Pricing 1	25	100	Cover Selection Guide – In. (mm) .27" (6.86) Cover	.51" (12.95) Cover	.65" (16.51) Cover	.90" (22.86) Cover
8	A101-ND	1.17	25.62	82.99	A105-ND	—	—	—
14	A102-ND	1.65	36.12	117.01	A106-ND	A107-ND	A108-ND	A109-ND
16	A103-ND	1.80	39.38	127.55	A110-ND	A111-ND	A112-ND	A113-ND
18	A133-ND	2.01	43.94	142.35	A137-ND	—	—	—
20	A104-ND	2.15	46.94	152.04	A114-ND	—	—	—
24*	A134-ND	2.64	57.70	186.90	A138-ND	A139-ND	—	—
28*	A135-ND	3.07	67.15	217.52	A140-ND	—	—	—
40*	A136-ND	4.07	88.99	288.27	A142-ND	—	—	—

Cover	Pricing 1	25	100
A105-ND, A106-ND	.52	10.59	31.26
A107-ND-A111-ND	.56	11.52	33.99
A112-ND, A113-ND	.61	12.49	36.86
A114-ND	.65	13.37	39.45
A137-ND	.65	13.37	39.45
A138-ND	.72	15.11	43.41
A139-ND	.85	17.96	51.60
A140-ND	.94	19.86	57.06
A142-ND	1.03	21.71	62.38

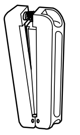


Depth of Bathtub: .100 (2.54)
Width of Bathtub: .500 (12.70)

* .600 Spacing

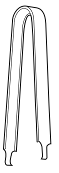
ARIES® ELECTRONICS, INC.

IC Pin Straightener



A998-ND
$32.50/1
$710.89/25

Dip Extractor



A999-ND
$5.08/1
$111.08/25

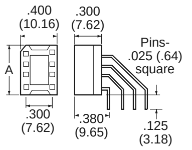
A998-ND
Anti-Static IC Pin Straightener:
Straightens IC legs with one squeeze. Put .300" (7.62mm) ICs in one side of tool, and .600" (15.24mm) in other side of tool. This brings leads into tolerance .320" (8.13mm) or .620" (15.75mm).

Note: This tool does not straighten IC legs that are bent to such an extent that the pin-to-pin spacing is not .100" (2.54mm).

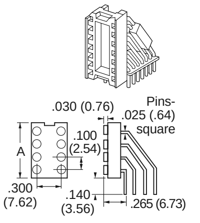
A999-ND Dip Extractor:
An extremely handy, low cost tool for removing ICs from dip sockets.

Vertisockets

Vertical Mount



A117-ND – A121-ND



A122-ND – A125-ND

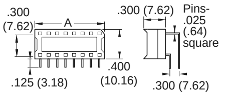
Features: • Restricted entry for contact protection • Maximum electrical contact • Accepts standard LEDs and Incandescent displays as well as .5" (12.70mm) and .6" (15.24mm) high large displays.

Specifications: • **Contacts:** Grade A spring tempered phosphor bronze • **Plating:** 10µ gold (per MIL-G-45204) over 50µ nickel (per QQN-290), 100µ tin plating (per MIL-T-10727) over 50µ nickel (per QQN-290) • **Socket:** Glass filled thermoplastic.

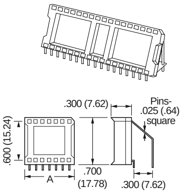
No. of Pins	Pin Centers Inch (mm)	Description	Dimension Inch (mm) A	Digi-Key Part No.	Pricing 1	25
8	.300 (7.62)	Gold Plated	.45 (11.43)	A117-ND	4.40	96.86
14	.300 (7.62)	Gold Plated	.75 (19.05)	A118-ND	5.21	114.68
16	.300 (7.62)	Gold Plated	.85 (21.59)	A119-ND	6.78	149.22
8	.600 (15.24)	Gold Plated	—	A466-ND	5.51	115.66
14	.300 (7.62)	Tin Plated	.75 (19.05)	A120-ND	3.89	85.53
16	.300 (7.62)	Tin Plated	.85 (21.59)	A121-ND	5.28	116.11
10	.300 (7.62)	Collet Contacts	.495 (12.57)	A122-ND	6.01	132.22
14	.300 (7.62)	Collet Contacts	.695 (17.65)	A124-ND	7.48	164.51
16	.300 (7.62)	Collet Contacts	.795 (20.19)	A125-ND	8.28	182.05
8	.600 (15.24)	Gold Plated	—	A464-ND	4.35	91.35
10	.200 (5.08)	Gold Plated	—	A465-ND	5.21	109.46

Vertisockets

Horizontal Mount



A126-ND—A129-ND



A130-ND—A132-ND

Features:

• Restricted entry for contact protection. • Maximum electrical contact. • Accepts standard LEDs and Incandescent displays as well as .5" (12.70mm) and .6" (5.24mm) high large displays.

Specifications:

• **Contacts:** Grade A spring tempered phosphor bronze. • **Plating:** 10µ gold (per MIL-G-45204) over 50µ nickel (per QQN-290), 100µ tin plating (per MIL-T-10727) over 50µ nickel (per QQN-290). • **Socket:** Glass filled thermoplastic.

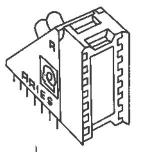
No. of Pins	Pin Centers Inch (mm)	Dimensions Inch (mm) A	Digi-Key Part No.	Pricing 1	25	100
8	.300 (7.62)	.45 (11.43)	A126-ND	3.62	79.59	246.09
14	.300 (7.62)	.75 (19.05)	A127-ND	4.43	97.41	301.19
16	.300 (7.62)	.85 (21.59)	A128-ND	4.81	105.88	327.38
20	.300 (7.62)	1.05 (26.67)	A129-ND	5.92	130.24	402.72
24	.600 (15.24)	1.25 (31.75)	A130-ND	9.11	200.48	619.90
28	.600 (15.24)	1.45 (36.83)	A131-ND	10.22	224.79	695.07
40	.600 (15.24)	2.05 (52.07)	A132-ND	13.30	292.49	904.42

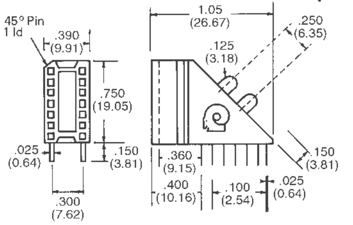
Vertical Socket

For Displays on .300" (7.62mm) Centers, 14 pin.

These low cost Vertisockets are recommended for high volume vertical display mounting applications.

Available in Tin Plated only.

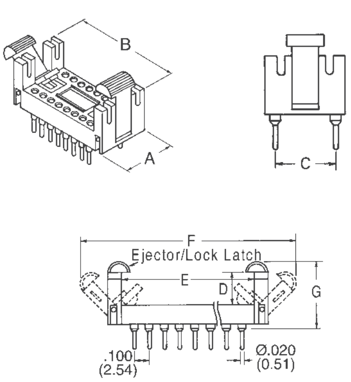




Digi-Key Part No.	Pricing 1	25	100	500	Aries Part No.
A116-ND	2.89	63.53	196.43	866.60	14-810-90R

ARIES® ELECTRONICS, INC.

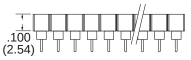
Lock / Eject DIP Sockets



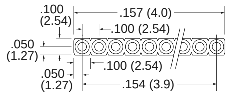
No. of Pins	Dimensions Inches (mm)						
	A	B	C	D	E	F	G
14	.400 (10.16)	.950 (24.16)	.300 (7.62)	.280 (7.11)	.770 (19.56)	1.300 (33.02)	.490 (12.45)
16	.400 (10.16)	1.050 (26.70)	.300 (7.62)	.280 (7.11)	.870 (22.10)	1.540 (39.12)	.490 (12.45)
24	.700 (17.78)	1.490 (37.85)	.600 (15.24)	.182 (4.62)	1.300 (33.02)	1.800 (45.72)	.460 (11.68)
28	.700 (17.78)	1.690 (42.90)	.600 (15.24)	.182 (4.62)	1.500 (38.10)	2.000 (50.80)	.460 (11.68)
32	.700 (17.78)	1.890 (48.00)	.600 (15.24)	.182 (4.62)	1.700 (43.18)	2.200 (55.88)	.460 (11.68)
40	.700 (17.78)	2.290 (58.20)	.600 (15.24)	.182 (4.62)	2.100 (53.34)	2.600 (66.04)	.460 (11.68)

No. of Pins	Fits Jumper Connectors, such as:	Digi-Key Part No.	Price Each 1	25	100	Aries Part No.
14	IC Packages	A514-ND	3.21	2.57	1.82	14-C280-10
16	IC Packages	A516-ND	3.49	2.79	1.98	16-C280-10
24	IC Packages	A524-ND	4.83	3.87	2.74	24-C182-10
28	IC Packages	A528-ND	5.14	4.12	2.92	28-C182-10
32	IC Packages	A532-ND	5.89	4.71	3.34	32-C182-10
40	IC Packages	A540-ND	7.48	5.99	4.24	40-C182-10

Series X518 Collet Sockets with Solder Tail Pins



Single Row



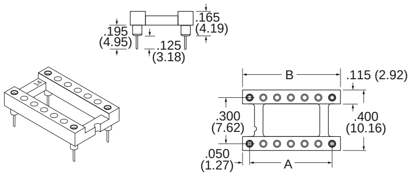
Features: • Cuttable to the number of pins desired to fit the application. • Side-to-side and end-to-end stackable.

Specifications:
• Body material is black UL 94V-0 Nylon 4/6 • Contact Current Rating: 3A • Operating Temperature: 221°F (105°C) Tin plating; 257°F (125°C) Gold plating • Accepts leads .015"-.025" (3.81mm-6.35mm) in diameter • Accepts lead lengths from .100" (2.54mm) min.

Mounting Considerations:
• Suggested PCB hole size: .030" ±.002" (.76mm ±.05mm) diameter

No. of Pins	Description	Digi-Key Part No.	Price Each 1	25	Aries Part No.
40	Tin Plated	A460-ND	2.33	1.96	40-0518-10
40	Gold Plated	A461-ND	3.43	2.88	40-0518-11

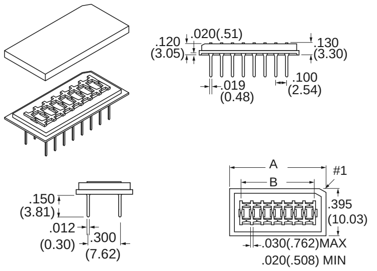
4-Pin Oscillator Sockets



Specifications:
• **Body Material:** Blue UL 94V-0 Glass-filled Polyester Thermoplastic (PBT) • **Pin Body Plating:** 200µ min. Tin per MIL-T-10727 over 100µ min. Nickel per QQ-N-290 • **Contact Plating:** 10µ min. Gold per MIL-G-45204 over 50µ min. Nickel per QQ-N-290 • **Contact Current Rating:** 3 Amps • **Operating Temp.:** 105°C • **Insertion Force:** 180 grams/pin; Withdrawal Force: 90 grams/pin; Normal Force: 140 grams/pin; based on a .018" (.46mm) diameter test lead • Accepts Leads .015"-.025" (.38mm-.64mm) in diameter, .100"-.146" (2.54mm-3.71mm) in length.

Size	Dim. – Inch (mm) A	B	Digi-Key Part No.	Price Each 1	25	100	Aries Part No.
Full	.600 (15.24)	.700 (17.78)	A462-ND	.60	.50	.41	1107741
Half	.300 (7.62)	.400 (10.16)	A463-ND	.60	.50	.41	1108800

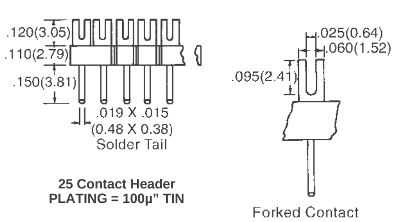
Series 680 Programmable Headers and Covers



Features:
• Complete versatility for programming within the unit itself, thus eliminating the need for DIP switches in many situations.
Specifications: • **Body and Cover:** Red UL 94-HB glass-filled nylon • **Current Rating:** 1 amp • **Operating Temp.:** 221°F (105°C) • **Mounting Considerations:** Suggested PCB hole size: .032" ±.002" (.81mm ±.05mm) diameter

No. of Pins	Dimensions Inch (mm) A	B	Digi-Key Part No.	Price Each 1	25	100	Aries Part No.
Covers							
4	—	—	A470-ND	.36	.30	.25	04-655-10
6	—	—	A471-ND	.57	.49	.39	06-655-10
8	—	—	A472-ND	.57	.49	.39	08-655-10
10	—	—	A473-ND	.63	.53	.43	10-655-10
12	—	—	A474-ND	.63	.53	.43	12-655-10
14	—	—	A475-ND	.65	.55	.45	14-655-10
16	—	—	A476-ND	.65	.55	.45	16-655-10
18	—	—	A477-ND	.71	.60	.49	18-655-10
20	—	—	A478-ND	.71	.60	.49	20-655-10
22	—	—	A479-ND	.76	.64	.52	22-655-10
24	—	—	A480-ND	.82	.69	.56	24-655-10
Headers							
4	.25 (6.35)	.10 (2.54)	A700-ND	.79	.67	.54	04-680-190T
6	.35 (8.89)	.20 (5.08)	A701-ND	.88	.74	.60	06-680-190T
8	.45 (11.43)	.30 (7.62)	A702-ND	.93	.78	.64	08-680-190T
10	.55 (13.97)	.40 (10.16)	A703-ND	.99	.83	.68	10-680-190T
12	.65 (16.51)	.50 (12.70)	A704-ND	1.01	.85	.69	12-680-190T
14	.75 (19.05)	.60 (15.24)	A705-ND	1.06	.89	.72	14-680-190T
16	.85 (21.59)	.70 (17.78)	A706-ND	1.12	.95	.77	16-680-190T
18	.95 (24.13)	.80 (20.32)	A707-ND	1.17	.99	.80	18-680-190T
20	1.05 (26.67)	.90 (22.86)	A708-ND	1.22	1.03	.83	20-680-190T
22	1.15 (29.21)	1.00 (25.40)	A709-ND	1.28	1.08	.87	22-680-190T
24	1.25 (31.75)	1.10 (27.94)	A710-ND	1.32	1.11	.90	24-680-190T
ARIES ELECTRONICS Tool							
A490-ND Header Programming Tool **$22.34**							

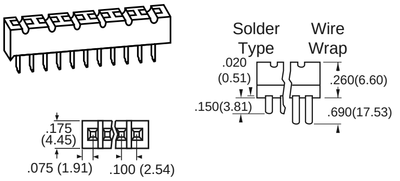
Strip Line SIP Headers



Coined Contacts
"Break" feature on Pin Line Headers assures Headers can be easily snapped off to any number of positions without loss or damage to any pins. No tool is required. The "break" feature minimizes stocking problems and gives immediate adaptability for any length Header requirement to any grid or matrix pattern.

Digi-Key Part No.	Pricing 1	25	100	Aries Part No.
A115-ND	2.56	56.07	181.63	25-0600-10

Strip Line SIP Socket



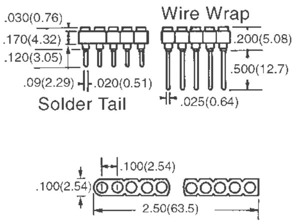
Contacts: Grade A spring temper phosphor bronze QQB-7500 **Plating:** 100µ tin plating per MIL-T-10727 **Socket:** Glass filled thermoplastic.

STRIP-LINE

Bifurcated Contacts

No. of Pins	Solder Tail Digi-Key Part No.	Price Each 1	25	100	Wire Wrap Digi-Key Part No.	Price Each 1	25	100
12	A200-ND	1.52	1.38	1.18	A204-ND	2.93	2.55	1.93
20	A201-ND	2.03	1.85	1.57	A205-ND	4.28	3.73	2.82
25	A202-ND	2.55	2.32	1.97	A206-ND	5.39	4.68	3.55
34	A203-ND	2.66	2.42	2.06	A207-ND	5.58	4.85	3.68

Pin Line Sockets with "Break" Feature



Tin-plated Pin Line sockets can be snapped apart into any required number of pins without damage or loss of pins. Pin Line sockets are low profile and used for mounting devices with .100" (2.54mm) spacing between pins. Rows of socket strips may be mounted on any centers or side-by-side for .100" (2.54mm) grid or matrix patterns. Strips also butt end-to-end and maintain .100" (2.54mm) spacing.

No. of Pins	Digi-Key Part No.	Price Each 1	25	100
Solder Tail Dip Socket with Screw Machined Pin				
25	A208-ND	2.47	2.18	1.69
Wire Wrap Socket with Screw Machined Pin				
25	A209-ND	7.85	6.82	5.17

ARIES®
ELECTRONICS, INC.

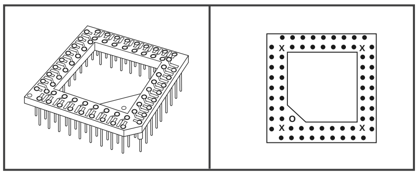
Quad Flat Pack (QFP) to PGA Adapter for Motorola 68340

SPECIFICATIONS:

• Adapter body is black FR-4, .094 (2.39) thick, with 1 ounce minimum Copper traces. • **Pins:** Brass Alloy 360, 1/2 hard per QQ-B-626. • **Pin Plating:** 200µ (5.08µm) min. Tin per MIL-T-10727 over 100µ (2.54µm) min. Nickel per QQ-N-290. • **Operating Temperature:** 221°F (125°C).

Pin Count	Digi-Key Part No.	Price Each 1	25	Aries Part No.
144	A723-ND	90.99	78.00	97-68340

Chip Carriers

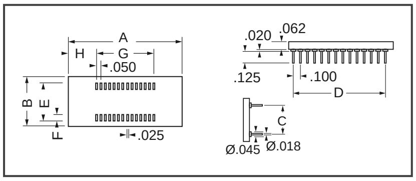


• Your present PLCC devices can be used in thru-hole applications by soldering to our adapters. • Your standard JEDEC footprints are converted to PGA footprints. • Your PGA Sockets (LIF) will save space. • Your p.c. board will have more space for conductor runs when converted to .100" (2.54mm) pin spacing. • Polarization option available. • Your standard test clip can be used for testing.

SPECIFICATIONS: Body: Copper Clad FR-4 Solder Plated. **Pins:** Brass, Tin/Lead Plated.

Pin Count	Digi-Key Part No.	Price Each 1	25	100	Aries Part No.
68	A171-ND	11.48	9.84	8.96	68-505-110

Surface Mount SOIC to DIP and SOJ to DIP Adapters



Materials: Board: .062" (1.57mm) thick double-sided FR-4 with 1 oz. copper traces. **Pins:** Brass alloy 360, 1/2 hard per QQ-B-626

Plating: 200µ" min. 93/7 tin/lead per MIL-T-10727 type 1 over 100µ" min. nickel per QQ-N-290.

Suggested P.C.B. mounting hole = .028" (.71mm) Diameter

No. of Pins	Digi-Key Part No.	Dimensions (Inch) A	B	C	D	E	F	G	H
8	A724-ND	.400	.460	.300	.300	.455	.155	.150	.121
14	A725-ND	.700	.450	.300	.600	.420	.138	.300	.180
16	A726-ND	.800	.450	.300	.700	.420	.138	.350	.180
20	A727-ND	1.000	.450	.300	.900	.420	.138	.450	.180
20	A325-ND	1.000	.420	.300	.900	.350	.090	.600	.060
24	A720-ND	1.200	.700	.600	1.100	.455	.150	.550	.180
24	A322-ND	1.200	.450	.300	1.100	.420	.138	.550	.180
28	A320-ND	1.400	.700	.600	1.300	.450	.075	.650	.375
28	A321-ND	1.400	.420	.300	1.300	.350	.090	.650	.375
32	A323-ND	1.600	.700	.600	1.500	.650	.200	.750	.425
32	A324-ND	1.600	.530	.400	1.500	.500	.090	.750	.425

No. of Pins	Type	Digi-Key Part No.	Price Each 1	25	100	Aries Part No.
8	SOIC	A724-ND	6.97	5.86	3.81	08-350000-10
14	SOIC	A725-ND	6.97	5.86	3.81	14-350000-10
16	SOIC	A726-ND	6.97	5.86	3.81	16-350000-10
20	SOIC	A727-ND	6.97	5.86	3.81	20-350000-10
20	SOJ	A325-ND	6.42	5.51	5.01	20-350001-10
24	SOIC	A720-ND	10.68	8.98	5.84	24-650000-10
24	SOIC	A322-ND	4.71	4.04	3.68	24-350000-10
28	SOIC	A320-ND	10.70	9.17	8.35	28-650000-10
28	SOIC	A321-ND	6.42	5.51	5.01	28-350002-10
32	SOJ	A323-ND	10.69	9.17	8.34	32-650000-10
32	SOJ	A324-ND	9.40	8.06	7.33	32-450001-10

Quad Flat Pack (QFP) to PGA Adapters

Fig. 1

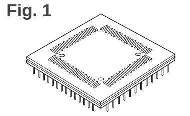
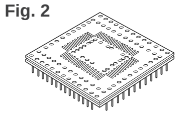


Fig. 2



Adapters convert surface mount type Quad Flat Pack (QFP) packages to standard pin grid array through-hole packages on .100" (2.54mm) pin spacing. This allows the surface mount QFP package to be used in standard PGA and PGA ZIF sockets, which is extremely useful for testing. Typically, surface mount QFP packages are less expensive than their through-hole PGA counterparts. The surface mount packages are often more readily available. Also, the user does not have to redesign a through-hole board in order to utilize the advantages of the surface mount QFP packages.

Fig. No.	Chip Type/ Mfg.	Pads No.	PGA No.	Pins/ Matrix	Digi-Key Part No.	Price Each 1	25	Aries Part No.
1	JEDEC	132	132	13x13	A174-ND	33.80	28.97	95-132I25
2	EIAJ	100	100	13x13	A175-ND	32.50	27.86	96-100M65
1	EIAJ	160	160	15x15	A176-ND	32.50	27.86	96-160M65
—	EIAJ	208	208	17x17	A722-ND	60.67	52.00	96-208M50

Surface Mount PLCC to DIP Adapters

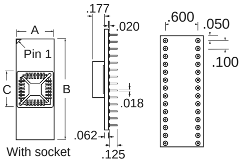
Materials:

• **Pins and Contacts:** Phosphor bronze adapter • **Body:** FR-4, .062" (1.57mm) thick • **Socket:** LCP, UL 94V-0 rated • **Pads & Traces:** 1 oz. min. copper.

Plating:

Pins: 200µ" tin per MIL-T-10727 over 100µ" nickel per QQ-N-290.

Contacts: 150µ" 90/10 tin/lead.



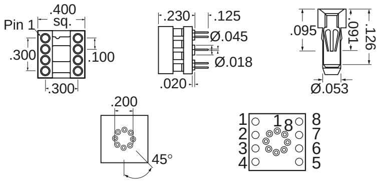
No.of Pins	Dim. (Inch) A	B	C	Digi-Key Part No.	Price Each 1	25	Aries Part No.
28	.77	1.40	.705	A326-ND	24.64	21.12	28-653000-10
32	.705	1.60	.805	A721-ND	40.93	34.38	32-653000-10
44	.97	2.20	.910	A327-ND	28.38	24.33	44-653000-10
68	1.28	3.40	1.220	A328-ND	32.84	28.15	68-653000-10
84	1.48	4.20	1.420	A329-ND	32.84	28.15	84-653000-10

TO to DIP Adapter/Socket

Features: 8-pin DIP IC socket on the top and a circular, 8-pin TO can male pin footprint on the bottom, can be readily mounted on boards having TO thru-hole footprints without having to redesign the board.

Specifications: • **Socket Body**: black UL 94V-0 glass-filled polyester thermoplastic. • **Female Pin Body Plating**: 200µ min. Tin over 100µ min. Nickel. • **Contact Plating:** 10µ min. Gold 50µ min. Nickel. • **Male Pin:** Brass Alloy 360. • **Male Pin Plating:** 200µ min. Tin. • **Current rating:** 3 Amps. • **Operating Temperature:** 221°F (105°C) Tin plating. • Accepts leads .015"-.025" (.38mm-.64mm) in diameter, .100"-.125" (2.54mm-3.18mm) long.

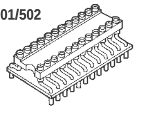
Mounting Considerations: Suggested PCB hole size: .028" (.71mm) diameter.



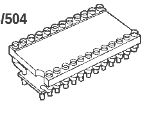
Digi-Key Part No.	Price Each 1	25	100	500	Aries Part No.
A330-ND	6.70	5.74	5.23	4.79	1109523

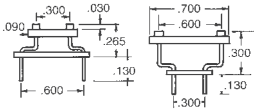
Adapter Sockets

A501/502



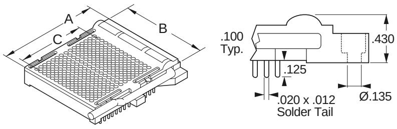
A503/504





No. of Pins	Description (Inch)	Digi-Key Part No.	Price Each 1	25	100	Aries Part No.
24	.300 to .600	A501-ND	10.24	7.79	5.13	1106396-24
28	.300 to .600	A502-ND	11.42	8.69	5.72	1106396-28
24	.600 to .300	A503-ND	10.24	7.79	5.13	1107254-24
28	.600 to .300	A504-ND	11.42	8.69	5.72	1107254-28

PGA Zero Insertion Force (ZIF) Sockets



Features: • The Aries ZIF PGA is an extremely rugged, yet smooth acting test socket. • A strong metal cam activates the contacts which are normally closed. This prevents dependency on the plastic for contact force. • Housing of glass filled PPS, UL-94V-O rated.

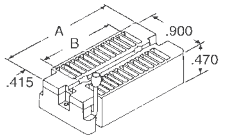
Specifications: • **Contacts:** Beryllium copper. • **Temperature Rating:** -65°C +125°C. • **Housing:** Glass filled PPS UL94VO rated. • **Handle:** Stainless steel.

Grid Size	No. of Pins	Dimensions (Inch) A	B	C	Digi-Key Part No.	Price Each
13 x 13	169	1.894	1.675	1.200	A314-ND	28.04
15 x 15	225	2.094	1.875	1.400	A315-ND	34.94
17 x 17	289	2.294	2.075	1.600	A316-ND	42.62
19 x 19	361	2.494	2.275	1.800	A317-ND	51.26
21 x 21	441	2.694	2.475	2.000	A318-ND	60.93

Universal Zero Insertion Force (ZIF) Test Sockets

The new Aries Universal Test Socket is a direct replacement for other test sockets currently on the market, with a number of significant advantages.

• .900 (22.86) overall height with contact level up • Available 24, 28, 32, 40, 48 pins in body of UL 94VO rated polyphenylene sulfide. • Contacts available tin plated (for up to 105°C) or gold plated (for up to 150°C). • Insulation Resistance – 1000 megohms min. Dielectric withstanding voltage – 1000 VAC min. • Contact rating – 1 amp. • All pin count sockets (24, 28, 32, 40, 48) go into p.c.b.'s with .600 (15.24) centers. • Sockets can be soldered into p.c. boards or plugged into any socket. • Contacts are normally closed to eliminate dependence on plastic to sustain contact.



No. of Pins	Dim. (Inch) A	B
24	1.74	1.10
28	1.94	1.30
32	2.14	1.50
40	2.54	1.90
48	2.94	2.30

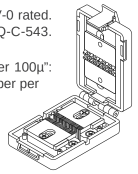
No. of Pins	Contact Plating	Digi-Key Part No.	Price Each 1	25	100	Aries Part No.
24	Tin	A300-ND	7.97	6.98	6.78	24-6554-10
24	Gold	A301AE-ND	11.52	10.09	9.80	24-6554-11
28	Tin	A302-ND	9.10	7.97	7.74	28-6554-10
28	Gold	A303-ND	12.49	10.93	10.62	28-6554-11
32	Tin	A304-ND	10.15	8.89	8.64	32-6554-10
32	Gold	A305-ND	13.84	12.11	11.77	32-6554-11
40	Tin	A306-ND	12.11	10.60	10.30	40-6554-10
40	Gold	A307-ND	16.51	14.45	14.05	40-6554-11
48	Tin	A308-ND	14.23	12.45	12.10	48-6554-10
48	Gold	A309-ND	19.32	16.91	16.43	48-6554-11

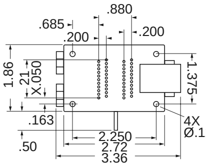
Surface Mount Universal SOIC Zero Insertion Force (ZIF) Test Sockets

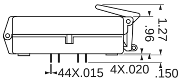
Socket Accepts: SOIC gull wing & J-lead devices up to 44 pin devices; .050" (1.27mm) lead pitch; body widths from .15" (3.81mm) to .60" (15.24mm).

Materials: • **Body:** Glass-filled PPS, UL 94V-0 rated. • **Contacts:** Beryllium copper alloy per QQ-C-543. • **Hardware:** Stainless Steel.

Plating: 20µ" min. gold per MIL-G-45204 over 100µ": min. nickel per QQ-N-290 over 20µ" min. copper per MIL-C-14550.







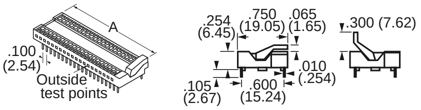
Digi-Key Part No.	Price Each	Aries Part No.
A339-ND	127.99	44-547-11

ARIES ELECTRONICS, INC.

Zero Insertion Force (ZIF) Lo-Profile Sockets

Features: A complete line of sizes, 24, 28 and 40 pin, low profile ZIF (zero insertion force) sockets provides a low cost solution for a test socket with a height of only .319" (8.10mm) [8, 10] and even with handle in open position, measures just .554" (14.07mm).

Specifications: • **Pin:** Spring temper beryllium copper, tin plated. • **Body:** Glass filled polyester UL94VO rated. • **Cam:** Cast metal.

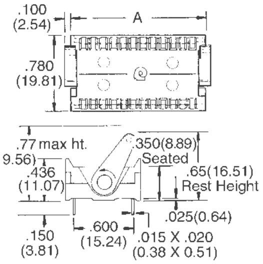


No. of Pins	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	25	100	Aries Part No.
24	1.450 (36.83)	A346-ND	6.03	5.48	4.66	24-526-10
28	1.650 (41.91)	A347-ND	6.50	5.91	5.03	28-526-10
40	2.250 (57.15)	A348-ND	7.82	7.11	6.05	40-526-10

Zero Insertion Force (ZIF) Sockets

Specifications:

• **Contacts:** Heat treated beryllium copper • **Plating:** 100µ tin plating per MIL-T-10727. • **Sockets:** Glass filled thermoplastic.



No. of Pins	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	25	100	Aries Part No.
24	1.30 (33.02)	A150-ND	8.90	8.01	7.57	24-516-10
28	1.62 (41.15)	A146-ND	9.58	8.62	8.15	28-516-10
40	2.10 (53.34)	A152-ND	12.63	11.37	10.75	40-516-10

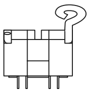
Quick-Release Universal ZIF Test Socket

Features:

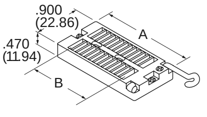
• Aries' Universal Test Socket accepts devices on .300" (7.62mm) to .600" (15.24mm) centers • Sockets go into PCB .600" (15.24mm) centers • Swing quick-release handle down to open contacts and insert device. Release and handle automatically returns as contacts close onto device leads.

Specifications:

• **Socket Body**: Black UL 94V-0 Glass-filled Polyphenylene Sulfide (PPS) • **Handle:** stainless steel • **Contact Current Rating:** 1 amp • **Insulation Resistance:** 1000 MOhms min. • **Life Cycle:** 25,000 to 50,000 cycles • **Operating Temperature:** 221°F (105°C) Tin plating; 302°F (150°C) Gold plating • **Retention Force (when closed):** 55 grams/pin based on a .020" (.51mm) diameter test lead • Accepts leads .015"-.035" (.38mm-.89mm) wide, .100"-.280" (2.79mm-7.11mm) long



Loop Handle

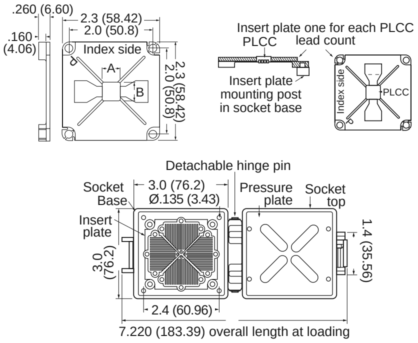


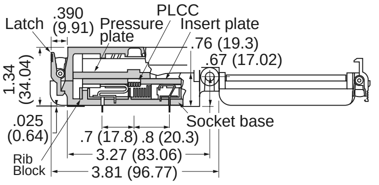
No. of Pins	Dim. – In. (mm) A	B
24	1.79 (45.47)	1.10 (27.94)
28	1.99 (50.55)	1.30 (33.02)
32	2.19 (55.63)	1.50 (38.10)
40	2.59 (65.79)	1.90 (48.26)
48	2.99 (75.95)	2.30 (58.42)

No. of Pins	Description	Digi-Key Part No.	Price Each 1	25	100	Aries Part No.
24	Tin Plated	A439-ND	10.36	8.71	7.05	24-6574-10
24	Gold Plated	A440-ND	14.98	12.59	10.20	24-6574-11
28	Tin Plated	A441-ND	11.83	9.94	8.05	28-6574-10
28	Gold Plated	A442-ND	16.23	13.64	11.05	28-6574-11
32	Tin Plated	A443-ND	13.33	11.20	9.07	32-6574-10
32	Gold Plated	A444-ND	18.16	15.26	12.36	32-6574-11
40	Tin Plated	A445-ND	15.74	13.23	10.71	40-6574-10
40	Gold Plated	A446-ND	21.48	18.05	14.62	40-6574-11
48	Tin Plated	A447-ND	18.50	15.54	12.59	48-6574-10
48	Gold Plated	A448-ND	25.11	21.10	17.09	48-6574-11

Surface Mount Universal PLCC ZIF Test Sockets

SPECIFICATIONS: • **Plastic Parts:** UL 94V-0 glass-filled thermoplastic • **Contact Pin:** Beryllium copper • **Fasteners, Spring, Hinge Pins:** Stainless steel • **Temperature Range:** -65°C to 125°C • **Life Cycle:** 10,000 insertions maximum.



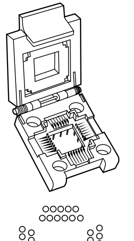


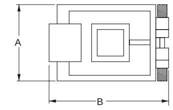
No. Of Pins	Dim. – Inch (mm) A	B	Digi-Key Part No.	Price Each	Aries Part No.
—	—	—	A331-ND	142.03	84-537-21
Adapter Plates					
20	.395/.397 (10.03/10.08)	.395/.397 (10.03/10.08)	A332-ND	8.83	20-537-20
28	.495/.497 (12.57/12.62)	.495/.497 (12.57/12.62)	A333-ND	8.83	28-537-20
32	.495/.497 (12.57/12.62)	.595/.597 (15.11/15.16)	A334-ND	8.83	32-537-20
44	.695/.697 (17.65/17.70)	.695/.697 (17.65/17.70)	A335-ND	8.83	44-537-20
52	.795/.797 (20.19/20.24)	.795/.797 (20.19/20.24)	A336-ND	8.83	52-537-20
68	.995/.997 (25.27/25.32)	.995/.997 (25.27/25.32)	A337-ND	8.83	68-537-20
84	1.195/1.197 (30.35/30.40)	1.195/1.197 (30.35/30.40)	A338-ND	8.83	84-537-20

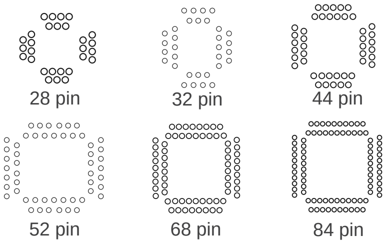
PLCC ZIF Test Sockets

Features: • Zero Insertion Force. • Corner posts provide positive package registration. • 12µ" Gold plating. • 10,000 insertions min.

Application: • Can be shimmed to accept many Ceramic, Leadless and J-Lead Packages.

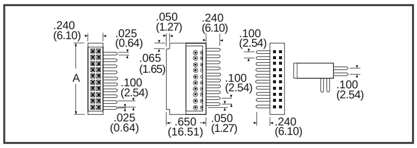


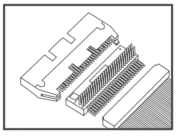




No. of Pins	Dim. Inch (mm) A	B	Digi-Key Part No.	Price Each 1	25	100
28	1.181 (30.00)	1.605 (40.77)	A310-ND	61.89	54.82	48.28
32	1.180 (29.97)	1.583 (40.21)	A449-ND	73.81	62.01	40.31
52	1.500 (38.10)	1.920 (48.77)	A450-ND	75.76	63.65	41.37
44	1.339 (34.01)	1.772 (45.01)	A311-ND	63.43	56.19	49.48
68	1.654 (42.01)	2.343 (59.51)	A312-ND	77.34	68.50	60.33
84	1.890 (48.01)	2.580 (65.53)	A313-ND	87.17	77.21	68.00

3M Intra-Connector™

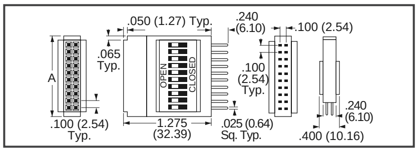


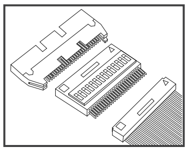


When you wanted to test for a problem that might lie on the circuit board or in the cable, you had a problem. Inaccessible? Not with a 3M ESP Intra-Connector™ system. The Intra-Connector mates in-line with standard double row socket connectors. It has one set of female contacts, but two sets of male contacts at right angles. So, it provides instant line-by-line "probe-ability." The pins can also be used to make daisy chaining possible from a single connector cable end. Modified configurations are quickly available for special connections. The Intra-Connector system provides both straight-in and right angle functions. It mates with a standard .10" x .10" (2.54mm x 2.54mm) dual row connector or PC board-mounted .025" (.64mm) square pins. Two Intra-Connector systems used with the Intra-Switch™ system form a complete test assembly for probing signals under no load and full-load conditions. Contacts are non-corrosive Alloy 770; body is glass-filled polyester thermo-plastic.

No. of Contacts	Dim. A In. (mm)	Digi-Key Part No.	Price Each
20	1.160 (29.46)	922576-20-ND	14.84
26	1.460 (37.08)	922576-26-ND	15.45
34	1.860 (47.24)	922576-34-ND	17.24
40	2.160 (54.86)	922576-40-ND	18.90
50	2.660 (67.56)	922576-50-ND	20.45
60	3.160 (80.26)	922576-60-ND	23.77

3M Intra-Switch™

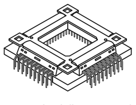




There are a lot of complicated, time consuming ways to interrupt a signal line on an assembly — some may even be damaging to your PC board. But there's one easy way; Intra-Switch™ from 3M ESP. Simply by inserting the Intra-Switch™ connector between mating system connectors you have instant line-by-line switching. The low profile design and recessed switch buttons give you room to work in confined areas. Using a pencil or probe tip, any or all switches may be actuated. Applications include switching command signals to or from test equipment and programming optional preset logic functions. Switch buttons are recessed to prevent accidental switching. "Open" and "closed" positions are clearly marked, molded-in the body. Contacts are non-corrosive Alloy 770; body is glass-filled polyester thermoplastic. Intra-Switch is compatible with most sockets and headers for flat cable, including 3M, T&B/Ansley, Berg, Amp, Symbex and many others.

No. of Contacts	Dim. A In. (mm)	Digi-Key Part No.	Price Each
26	1.460 (37.08)	922578-26-ND	36.06
34	1.860 (47.24)	922578-34-ND	38.16
40	2.160 (54.86)	922578-40-ND	46.39
50	2.660 (67.56)	922578-50-ND	41.36

3M OEM PQFP Sockets



Features: • Accepts JEDEC MO-069 packages, lead sizes 84 through 196 • .025" (.64mm) centerline contacts for high-density packaging • Lid design separates, maintains IC lead spacing • Lid acts as package carrier and transport protector • Lid is compatible with conventional package shipping tubes and trays • Slotted, "open" socket walls and corners permit airflow around captured package (aids in package heat dissipation) • Hinged socket latches audibly "snap" signals secure lid/package assembly to base, expedites package withdrawal • .075" (1.91mm) contact spacing and .100" (2.54mm) row spacing.

Physical Specifications: • **Insulation Socket and Lid:** • Material: Glass Filled Polyethersulfone (PES) • Flammability: UL94 V-0 • Color: Black • **Latching Aid:** • Material: Polycarbonate (PC) • Color: Black • **Contact:** • Material: Beryllium Copper (C172) Plating • Underplate: 50µ" (1.27µm) Sulfamate Nickel • Wiping Area: 200µ" (5.08µm) 60/40 Tin Lead • Soldertails: 200µ" (5.08µm) 60/40 Tin Lead • **Marking:** Raised Letters

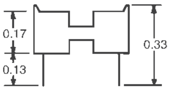
Electrical Specifications: • Current Rating: 1 Amp • Insulation Resistance: $>1x10^{12}\Omega$ • Withstanding Voltage: 1000 Vrms at Sea Level

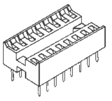
Environmental Specifications: • Temperature Rating Operating: -55°C to +105°C

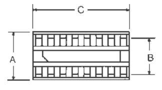
No. of Contacts	Digi-Key Part No.	Pricing 1	10	3M Part No.
PQFP Socket Tin				
84	3M8409-ND	35.38	308.20	284-7242-70-1807
100	3M1009-ND	37.62	327.70	2100-7243-00-1807
132	3M1329-ND	41.98	365.70	2132-7244-70-1807
164	3M1649-ND	28.45	203.42	2016407245-00001800
196	3M1969-ND	33.82	241.79	2019607246-00001800

ASSMANN

IC Sockets
Dual Wipe
Solder Tail







Contacts: Phosphor bronze. Protection against capillary version. **Mechanical and electrical data:** Transitional resistance ≤12mΩ. Capacity between adjacent contacts <0.9 pF. Capacity between opposite adjacent contacts <0.4 pF. Breakdown voltage 600 V_{eff}. Insertion force ≤1.5N · Extraction force ≥0.7N. **Insulators:** Polyester GV,VO,UL 94. Insulation resistance 10^{12} Ω. Operation temperature range -65°C to +150°C.

Dimensions (Inch) A	B	C	Digi-Key Part No.
0.39	0.30	0.30	AE8906-ND
0.39	0.30	0.30	AE9806-ND
0.39	0.30	0.39	AE8908-ND
0.39	0.30	0.39	AE9808-ND
0.39	0.30	0.70	AE8914-ND
0.39	0.30	0.70	AE9814-ND
0.39	0.30	0.80	AE8916-ND
0.39	0.30	0.80	AE9816-ND
0.39	0.30	0.90	AE8918-ND
0.39	0.30	1.90	AE9818-ND

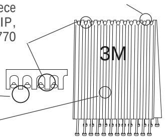
Dimensions (Inch) A	B	C	Digi-Key Part No.
0.39	0.30	1.00	AE8920-ND
0.30	0.30	1.00	AE9820-ND
0.50	0.40	1.10	AE8922-ND
0.50	0.40	1.10	AE9822-ND
0.70	0.60	1.20	AE8924-ND
0.70	0.60	1.20	AE9824-ND
0.70	0.60	1.40	AE8928-ND
0.70	0.60	1.40	AE9828-ND
0.70	0.60	2.00	AE8940-ND
0.70	0.60	2.00	AE9840-ND

No. of Cont.	Contact Plating	Digi-Key Part No.	Pricing 1	10	100	500	Assmann Part No.
6	Tin	AE8906-ND	.27	2.16	17.40	63.00	A06-LC-TT
6	Gold	AE9806-ND	.33	2.83	22.89	98.10	A06-LCG
8	Tin	AE8908-ND	.29	2.34	18.85	68.25	A08-LC-TT
8	Gold	AE9808-ND	.36	3.12	25.20	108.00	A08-LCG
14	Tin	AE8914-ND	.32	2.52	20.30	73.50	A14-LC-TT
14	Gold	AE9814-ND	.57	4.94	39.90	171.00	A14-LCG
16	Tin	AE8916-ND	.36	2.88	23.20	84.00	A16-LC-TT
16	Gold	AE9816-ND	.65	5.64	45.57	195.30	A16-LCG
18	Tin	AE8918-ND	.41	3.24	26.10	94.50	A18-LC-TT
18	Gold	AE9818-ND	.73	6.34	51.24	219.60	A18-LCG
20	Tin	AE8920-ND	.45	3.60	29.00	105.00	A20-LC-TT
20	Gold	AE9820-ND	.81	7.05	56.91	243.90	A20-LCG
22	Tin	AE8922-ND	.50	3.96	31.90	115.50	A22-LC-TT
22	Gold	AE9822-ND	.89	7.75	62.58	268.20	A22-LCG
24	Tin	AE8924-ND	.54	4.32	34.80	126.00	A24-LC-TT
24	Gold	AE9824-ND	.98	8.45	68.25	292.50	A24-LCG
28	Tin	AE8928-ND	.63	5.04	40.60	147.00	A28-LC-T
28	Gold	AE9828-ND	1.14	9.88	79.80	342.00	A28-LCG
40	Tin	AE8940-ND	.90	7.20	58.00	210.00	A40-LC-TT
40	Gold	AE9840-ND	1.63	14.12	114.03	488.70	A40-LCG

3M IC Test Clips

New "open-nose" design now permits probe tip access at DIP leads.

- Simplifies prototype and production testing, field service work, and Quality Control. • New one-piece body for each DIP size. TC-14 fits 14-pin DIP, etc. • High reliability Gold contacts. • Proven 770 Alloy contacts.



"Contact comb" fits between DIP leads – eliminating any possibilities of shorts.

New "duck-bill" contacts are flat-won't roll off new narrow DIP leads.

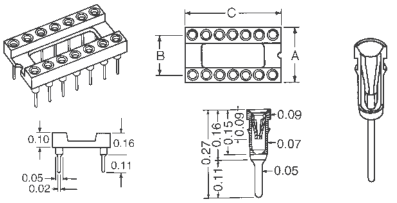
Rugged, engineering-grade thermoplastic body molded around contact pins

No. of Pins	Row to Row (Inch)	Nail-Head Leads Digi-Key Part No.	Price Each	Headless Leads Digi-Key Part No.	Price Each
Alloy 770					
8	.3	923695-ND	9.79	923690-08-ND	9.79
14	.3	923698-ND	9.85	923690-14-ND	10.04
16	.3	923700-ND	9.95	923690-16-ND	10.14
16	.5/.6	923702-ND	16.54	923690-16LSI-ND	16.54
18	.3	923703-ND	13.99	923690-18-ND	13.99
20	.3	923704-ND	14.64	923690-20-ND	14.64
22	.5/.6	923705-ND	18.15	923690-22-ND	18.15
24	.5/.6	923714-ND	19.05	923690-24-ND	19.05
24	.3	923715-ND	19.05	923689-24-ND	19.05
28	.5/.6	923718-ND	22.85	923690-28-ND	22.85
28	.3	923717-ND	22.85	923689-28-ND	22.85
36	.5/.6	923720-ND	25.37	923690-36-ND	25.37
40	.5/.6	923722-ND	26.62	923690-40-ND	26.62
48	.5/.6	923724-ND	35.51	923690-48-ND	35.51
64	.9	923726-ND	40.56	923690-64-ND	40.56
Gold Plated					
8	.3	923743-08-ND	11.87	923739-08-ND	11.87
14	.3	923743-14-ND	12.19	923739-14-ND	12.19
16	.3	923743-16-ND	12.50	923739-16-ND	12.50
16	.5/.6	923743-16-LSI-ND	16.45	923739-16-LSI-ND	16.45
18	.3	923743-18-ND	16.90	923739-18-ND	17.57
20	.3	923743-20-ND	17.65	923739-20-ND	18.32
22	.5/.6	923743-22-ND	18.50	923739-22-ND	22.10
24	.5/.6	923743-24-ND	23.22	923739-24-ND	23.89
24	.3	923742-24-ND	23.22	923738-24-ND	23.22
28	.5/.6	923743-28-ND	27.91	923739-28-ND	28.57
28	.3	923742-28-ND	27.91	923738-28-ND	27.91
36	.5/.6	923743-36-ND	27.11	923739-36-ND	31.12
40	.5/.6	923743-40-ND	32.72	923739-40-ND	32.72
48	.5/.6	923743-48-ND	39.17	923739-48-ND	43.81
64	.9	923743-64-ND	45.19	923739-64-ND	50.13

ASSMANN

IC Sockets Machine Pin

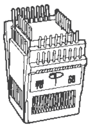
with gold plated precision spring contacts, open frame, solder pin terminals.



Contacts: Contact spring: copper alloy, slit 4 times. Surface gold over nickel. Absolute protection against capillary action. Connecting pins brass, solder version. **Mechanical and electrical data:** Depth of insertion 2.3 to 3.7 mm. Vibration 20 g after MIL-STD-202. Shock 150g to MIL-STD-202. Insertion frequency >1000. Transitional resistance after 100 insertion cycles ≤12mΩ. Capacity between adjacent contacts <0.9pF. Capacity between opposite adjacent contacts <0.4pF. Air and creepage space between adjacent contacts >0.4mm. Tensile strength 1000 V_{eff}. **Insulators:** Polyester GV, VO self-extinguishing UL 94. Insulation resistance 10^{12}Ω. Operating temperature range -65°C to + 150°C. Retains shape in solder bath. Resistant to detergent. **Cont. Plating:** Pin: Tin Clip: Gold.

No. of Cont.	Dimensions (Inch) A	B	C	Digi-Key Part No.	Pricing 1	10	100	Assmann Part No.
8	0.40	0.30	0.40	AE7208-ND	.35	3.07	24.78	AR08-HZL
14	0.40	0.30	0.70	AE7214-ND	.63	5.46	44.10	AR14-HZL
16	0.40	0.30	0.80	AE7216-ND	.72	6.24	50.40	AR16-HZL
18	0.40	0.30	0.90	AE7218-ND	.84	7.28	58.80	AR18-HZL
20	0.40	0.30	1.00	AE7220-ND	.93	8.06	65.10	AR20-HZL
22	0.50	0.40	1.10	AE7222-ND	1.02	8.84	71.40	AR22-HZL
24	0.70	0.60	1.20	AE7224-ND	1.14	9.88	79.80	AR24-HZL
28	0.70	0.60	1.40	AE7228-ND	1.32	11.44	92.40	AR28-HZL
40	0.70	0.60	2.00	AE7240-ND	1.95	16.90	136.50	AR40-HZL
48	0.70	0.60	2.40	AE7248-ND	2.37	20.54	165.90	AR48-HZL
64	1.00	0.90	3.20	AE7264-ND	3.15	27.30	220.50	AR64-HZL

3M Surface Mount Test Clips
by 3M Electronic Specialty Products



Features: • Allow safe, convenient, fast and easy testing of normally hard-to-access. Small Outline Integrated Circuits (SOICs) • Eight sizes available for .30" (7.62mm) and .15" (3.81mm) package sizes • Helical compression springs and insulating contact combs ensure contact integrity during testing • Permits devices stacked as close as .0505" (1.28mm) end-to-end to be tested simultaneously • Standard .025" (.64mm) square contacts on .10" (2.54mm) centers at the probe end of the clip easily accept test probes or single row female socket connectors • Steel hinge pin and glass filled polyester body provide long service life • Available with alloy 764 unplated and gold plated leads • Allows safe, convenient testing of Plastic Leaded Chip Carrier (PLCC) style ICs • All four sides of test clip open simultaneously for fast and easy attachment to PLCC being tested • Stays securely clamped to PLCC until removed • Helical compression springs and insulating contact combs ensure contact integrity during testing • Permits testing of ICs with as little as .200" (5.08mm) row to row spacing between devices • Staggered contact rows on .100" (2.54mm) centers • Industry standard .025" (.64mm) square contact pins on the .100" (2.54mm) centers • Available with alloy 764 leads and gold plated leads.

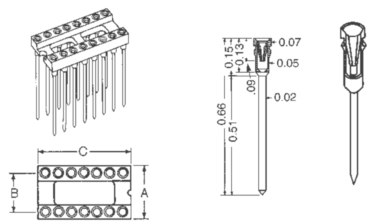
No. of Pin	Descrip.	Narrow Digi-Key Part No.	Price Each	Wide Digi-Key Part No.	Price Each
		.150" SOIC		*.300" SOIC*	
8	Alloy 764	923650-08-ND	10.90	—	—
14	Alloy 764	923650-14-ND	11.04	—	—
16	Alloy 764	923650-16-ND	11.35	923660-16-ND	11.49
18	Alloy 764	—	—	923660-18-ND	12.15
20	Alloy 764	—	—	923660-20-ND	12.27
24	Alloy 764	—	—	923660-24-ND	13.77
28	Alloy 764	—	—	923660-28-ND	14.75
8	Gold Plated	923655-08-ND	11.35	—	—
14	Gold Plated	923655-14-ND	12.57	—	—
16	Gold Plated	923655-16-ND	12.45	923665-16-ND	13.19
18	Gold Plated	—	—	923665-18-ND	13.29
20	Gold Plated	—	—	923665-20-ND	13.45
24	Gold Plated	—	—	923665-24-ND	15.17
28	Gold Plated	—	—	923665-28-ND	16.29

No. of Pin	Descrip.	PLCC Digi-Key Part No.	Price Each	LCC Digi-Key Part No.	Price Each
		PLCC		*LCC*	
20	Alloy 764	923670-20-ND	30.24	923680-20-ND	32.19
28	Alloy 764	923670-28-ND	32.07	923680-28-ND	43.14
44	Alloy 764	923670-44-ND	40.69	923680-44-ND	51.74
68	Alloy 764	923670-68-ND	46.83	923680-68-ND	57.01
20	Gold Plated	923675-20-ND	33.34	923685-20-ND	33.87
28	Gold Plated	923675-28-ND	39.46	923685-28-ND	45.56
44	Gold Plated	923675-44-ND	43.63	923685-44-ND	54.93
68	Gold Plated	923675-68-ND	51.39	923685-68-ND	68.96
84	Gold Plated	923675-84-I-ND	55.36	—	—

ASSMANN

IC Sockets
Wire-Wrap

with gold plated precision spring contacts.



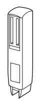
Contacts: Contact spring: copper alloy, slit 4 times. Surface gold over nickel. Absolute protection against capillary action. Connecting pins brass, solder version. **Mechanical and electrical data:** Depth of insertion 2.3mm to 3.7mm. Vibration 20g after MIL-STD-202. Shock 150g to MIL-STD-202. Insertion frequency >1000. Transitional resistance after 100 insertion cycles ≤12mΩ. Capacity between adjacent contacts <0.9pF. Capacity between opposite adjacent contacts <0.4pF. Air and creepage space between adjacent contacts >0.4mm. Tensile strength 1000V_{eff}. **Insulators:** Polyester GV, VO self-extinguishing UL 94. Insulation resistance 10^{12}Ω. Operating temperature range -65°C to +150°C. Retains shape in solder bath. Resistant to detergent. **Contact Plating:** Pin: Tin, Clip: Gold

No. of Cont.	Dimensions (Inch) A	B	C	Digi-Key Part No.	Pricing 1	10	100	Assmann Part No.
8	0.40	0.30	0.40	AE7108-ND	.96	8.32	67.20	AR08-HZW
14	0.40	0.30	0.70	AE7114-ND	1.65	14.30	115.50	AR14-HZW
16	0.40	0.30	0.80	AE7116-ND	1.89	16.38	132.30	AR16-HZW
18	0.40	0.30	0.90	AE7118-ND	2.13	18.46	149.10	AR18-HZW
20	0.40	0.30	1.00	AE7120-ND	2.37	20.54	165.90	AR20-HZW
22	0.50	0.40	1.10	AE7122-ND	2.61	22.62	182.70	AR22-HZW
24	0.70	0.60	1.20	AE7124-ND	2.85	24.70	199.50	AR24-HZW
28	0.70	0.60	1.40	AE7128-ND	3.30	28.60	231.00	AR28-HZW
40	0.70	0.60	2.00	AE7140-ND	4.74	41.08	331.80	AR40-HZW

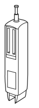
Division of OK International

IC Insertion/ Extraction Tools

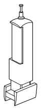
K153-ND



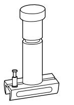
K154-ND



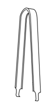
K155-ND



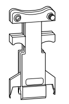
K156-ND



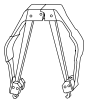
K157-ND



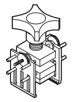
K158-ND



K293-ND



K375-ND



Description	Digi-Key Part No.	Price Each
14-16 Pin Dip/IC Inserter	K153-ND	9.75
14-16 Pin CMOS Safe Inserter	K154-ND	19.00
24-28 Pin CMOS Safe Inserter	K155-ND	19.00
36-40 Pin CMOS Safe Inserter	K156-ND	21.50
Extractor Tool, (8 to 24 pins)	K157-ND	2.95
Extractor Tool, (28 to 40 pins)	K158-ND	21.89
Insertion & Extraction Kit	K159-ND	69.95
Universal PLCC Extraction Tool	K293-ND	19.95
Low Cost Universal PLCC Extractor	K374-ND	7.95
Universal PGA Insert/Extract Kit*	K375-ND	225.00

The K159 Kit contains: K154, K155, K156, K157 and K158.
* K375-ND, Comes complete with Case and two sets of Jaws.

TEXTOOL/3M Zero Insertion Force (ZIF) I.C. Sockets

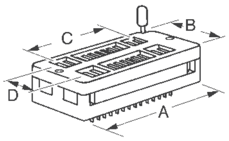
ZIP DIP II SOCKETS: For test and burn-in of all common dual-in-line packages on .100" lead spacing. The zero insertion pressure feature allows easy insertion and removal without lead distortion. Receptacles are ideal for high use situations such as PROM programming.

ECONO ZIF SOCKETS: Designed for OEM/end use applications where field replacement or programming of DIPs is required. The patented ZIF feature uses screwdriver rotation of a cam (instead of a lever) for security against vibration or accidental unloading. Leads are on .100" centers.

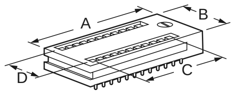
RECEPTACLES FOR ZIP DIP: **Features:** • Matching receptacle for every ZIP DIP Socket • Mounting flange standard option to hold receptacle to board • Pre-tapped holes in receptacle body mate with screw-hole in socket to hold socket firmly to receptacle (2 screws provided with each receptacle) • Available in solder-tail options. **Physical Specifications:** • Insulation Material: Glass Reinforced Polysulfone, Flammability Rating: UL 94V-0 • Color: Green • Marking: Part Number Identification • Contact Material: Beryllium Copper • Plating: 30µ" (.076µm) Gold — MIL-G-45204, Type II, Grade C over 50µ" (1.3µm) Sulfamate Nickel per QQ-N-290A, Class 2 or 75µ" (1.9µm) Nickel Boron. **Electrical Specifications:** • Current Rating: 1Amp • Insulation Resistance: >1x10^{12}Ω at 500 Vdc Withstanding Voltage: 1000Vrms at Sea Level. **Environmental Specifications:** • Temperature Rating Operating: -67°F (-55°C) to +302°F (+150°C)

ZIP DIP SOCKETS .100 CENTERS - DOUBLE DIP: **Features:** • For DIPs with .100" lead spacing • Extra wide contact zone allows insertion of DIPs with distance between rows from .300" through .600" • Lever actuated zero insertion force mechanism • Socket easily disassembles for repairability

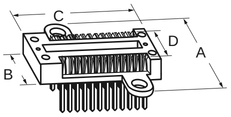
ZIP DIP II



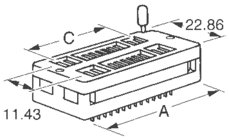
Econo ZIF



Receptacle for ZIP DIP Sockets



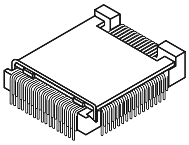
Double DIP ZIP

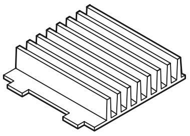


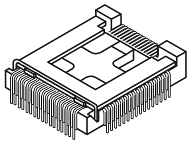
3M4099-ND Extraction Tool.......**$3.99**

No. of Pins	Contact Plating	Dimensions – Inch (mm)				Digi-Key Part No.	Pricing		3M Part No.
		A	B	C	D		1	10	
ZIP DIP Sockets									
14	Gold	1.30 (33.02)	.60 (15.24)	.60 (15.24)	.300 (7.62)	3M1402-ND	16.44	130.50	214-3339-00-0602J
16	Gold	1.39 (35.31)	.60 (15.24)	.70 (17.78)	.300 (7.62)	3M1602-ND	17.12	135.90	216-3340-00-0602J
18	Gold	1.49 (37.85)	.60 (15.24)	.80 (20.32)	.300 (7.62)	3M1802-ND	17.80	141.30	218-3341-00-0602J
20	Gold	1.59 (40.39)	.60 (15.24)	.90 (22.86)	.300 (7.62)	3M2002-ND	18.48	146.60	220-3342-00-0602J
22	Gold	1.69 (42.93)	.70 (17.78)	1.00 (25.40)	.400 (10.16)	3M2202-ND	19.15	152.00	222-3343-00-0602J
24	Gold	1.79 (45.47)	.90 (22.86)	1.10 (27.94)	.600 (15.24)	3M2402-ND	17.04	135.30	224-1275-00-0602J
28	Gold	1.99 (50.55)	.90 (22.86)	1.30 (33.02)	.600 (15.24)	3M2802-ND	18.93	150.20	228-1277-00-0602J
40	Gold	2.60 (66.04)	.90 (22.86)	1.90 (48.26)	.600 (15.24)	3M4002-ND	24.51	194.50	240-1280-00-0602J
64	Gold	3.95 (100.33)	1.30 (33.02)	3.10 (78.74)	.900 (22.86)	3M6402-ND	36.20	287.30	264-4493-00-0602J
Econo ZIF Sockets									
14	Gold	1.00 (25.40)	.50 (12.70)	.600 (15.24)	.300 (7.62)	3M1403-ND	10.71	93.30	214-4839-00-3303
16	Gold	1.10 (27.94)	.50 (12.70)	.700 (17.78)	.300 (7.62)	3M1603-ND	7.92	69.00	216-6278-00-3303
20	Gold	1.30 (33.02)	.50 (12.70)	.900 (22.86)	.300 (7.62)	3M2003-ND	11.73	102.20	220-4842-00-3303
24	Gold	1.50 (38.10)	.80 (20.32)	1.100 (27.94)	.600 (15.24)	3M2403-ND	12.40	108.00	224-4844-00-3303
28	Gold	1.70 (43.18)	.80 (20.32)	1.300 (33.02)	.600 (15.24)	3M2803-ND	11.73	102.20	228-1296-00-3303
40	Gold	2.30 (58.42)	.80 (20.32)	1.900 (48.26)	.600 (15.24)	3M4003-ND	15.18	132.30	240-4846-00-3303
48	Gold	2.74 (69.60)	.80 (20.32)	2.300 (58.42)	.600 (15.24)	3M4803-ND	16.57	144.40	248-5201-00-3303
64	Gold	3.54 (89.92)	1.10 (27.94)	3.100 (78.74)	.900 (22.86)	3M6403-ND	19.36	168.60	264-5200-00-3303
ZIP DIP Receptacle									
14	Gold	1.00 (25.40)	.60 (15.24)	1.28 (32.51)	.300 (7.62)	3M1401-ND	15.45	116.90	214-3339-09-0602J
16	Gold	.96 (24.38)	.56 (14.22)	1.37 (34.80)	.300 (7.62)	3M1601-ND	16.11	121.90	216-3340-09-0602J
18	Gold	.95 (24.13)	.55 (13.97)	1.49 (37.85)	.300 (7.62)	3M1801-ND	16.86	127.60	218-3341-09-0602J
20	Gold	1.00 (25.40)	.60 (15.24)	1.58 (40.13)	.300 (7.62)	3M2001-ND	17.52	132.50	220-3342-09-0602J
22	Gold	1.06 (26.92)	.65 (16.51)	1.69 (42.93)	.400 (10.16)	3M2201-ND	18.18	137.50	222-3343-09-0602J
24	Gold	1.26 (32.00)	.86 (21.84)	1.77 (44.96)	.603 (15.32)	3M2401-ND	16.20	122.60	224-1275-09-0602J
28	Gold	1.26 (32.00)	.86 (21.84)	1.98 (50.29)	.600 (15.24)	3M2801-ND	17.99	136.10	228-1277-09-0602J
40	Gold	1.27 (32.26)	.86 (21.84)	2.58 (65.53)	.606 (15.39)	3M4001-ND	22.42	169.60	240-1280-09-0602J
64	Gold	1.70 (43.18)	1.30 (33.02)	3.95 (100.33)	.900 (22.86)	3M6401-ND	35.89	271.50	264-4493-09-0602J
Double DIP Socket ZIP									
24	Gold	1.77 (44.96)	—	1.10 (27.94)	—	3M2406-ND	23.75	188.50	224-1286-00-0602J
28	Gold	1.99 (50.55)	—	1.30 (33.02)	—	3M2806-ND	26.85	213.10	228-1371-00-0602J
40	Gold	2.59 (65.79)	—	1.90 (48.26)	—	3M4006-ND	35.07	278.30	240-1288-00-0602J

3M OEM Type "A" LCC Sockets







Features:
• Accepts JEDEC leadless type "A" ceramic chip carriers • Variety of lid options available • "U" lid for I.C.E. adapter I/O cable egress • Head Sink(s) acceptable and available • Thruster spring helps register substrate three corner notches, maintain centering • Polarizing post on bottom of socket • Through hole contact tails • No tools required for package insertion/removal • Full contact probe-ability • High temperature PPS plastic and BeCu contacts for rugged performance

Physical Specifications:
• **Insulation:** • Material: Glass Filled Polyphenylene Sulfide (PPS) • Flammability: UL94 V-0 • Color: Black • **Lid Material:** Aluminum • **Latch Material:** Stainless Steel • **Thruster & Contact Material:** Beryllium Copper (C172) Plating; Underplate: 50µ" (1.27µm) Nickel; Wiping Area: 30µ" (0.76µm) Gold; Solder Tails: 30µ" (0.76µm) Gold • **Marking:** Raised Letters

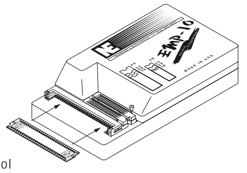
Electrical Specifications: • Current Rating: 1 Amp • Insulation Resistance: >1x10^{12}Ω • Withstanding Voltage: 1000 Vrms at Sea Level

Environmental Specifications: • Operating Temperature Rating: -55° to +105°C

Lid Type	No. of Contacts	Digi-Key Part No.	Pricing		3M Part No.
			1	10	
LCC Sockets					
Full	68	3M6809A-ND	16.15	140.70	268-5401-00-1102JH
No Lid	68	3M6809B-ND	16.15	140.70	268-5401-11-1102JH
U-Shaped	68	3M6809C-ND	16.27	141.70	268-5401-50-1102JH
Finned Heat Sink	68	3M6809D-ND	19.17	167.00	268-5401-52-1102JH
LCC Socket Lid					
Full	—	3MLLSF-ND	.91	7.90	268-5401-00-0000
U-Shaped	—	3MLLSU-ND	1.03	9.00	268-5401-50-0000
Finned Heat Sink	—	3MLLSH-ND	3.45	30.00	268-5401-52-0000

Needham's Electronics

EMP-10 Programmer



Programs: EPROMS, Gals, Microcontrollers, Flash, EEPROMS

The EMP-10 from Needham's is one of a kind. Versatile and compact with its speed and ease of programming make it untouchable by the competition.

• Very fast programming • Supports Intel Hex, Mots, Jedec Binary, ASCII Formats • Easy to read menus with mouse or cursor control • Contains full screen editor with search and fill entry in Hex, Binary or ASCII • Free software upgrades and 1 year warranty • Programming voltages and algorithms automatically loaded

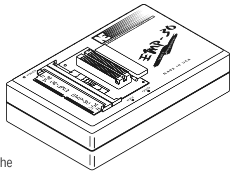
EMP-10 comes complete with 3 "Family Modules". Each module supports a group of devices. The "Family Modules" allow for rerouting VCC, VPP and ground, when changing to different device groups. The "Family Modules" are simple to snap in and each module supports two device groups. The concept of "Family Modules" provides support for a wide variety of devices. Needham's will be able to provide future support as new devices become available for a minimal cost to the customer.

System Requirements: PC with 512K memory, 1 standard parallel I/O port. MS DOS 2.11 or greater and a standard Centronix 36 pin parallel cable.
Software, power supply and literature included with the EMP-10. • Dimensions: 4.6" x 7.75" x 1.65" (116.84mm x 196.85mm x 41.91mm) • EPROMS: 2716 through 27C080, 27C210 through 27C240 • Flash: 28F256A through 28F020,29C256-040 • Gal: 22V10, 22V10B • Micros: C51, C51FX, 8751, 87C751, PIC16C5X EEPROMS, 89C5X

NE005-ND..**$219.95 each**

Needham's Electronics

EMP-30 Programmer



Programs: EPROMS, Gals, Microcontrollers, PLD, Flash, EEPROMS, Serial EEPROMS.

The EMP-30 is an advanced universal programmer that supports digital voltages from 1.8 Volts to 7 Volts and analog voltages (such as VCC) from 0 to 25 volts. The EMP-30 provides near-theoretical programming times for most devices currently available. The EMP-30 is the fastest, most reliable and most versatile programmer in the EMP line. It supports more device types with larger pin counts than the smaller units in the EMP line, and changing Family Modules is not required as often. The socket module on top of the EMP-30 is removable, allowing different modules to be plugged in to accommodate different device packages. This helps eliminate the confusion often caused by third party adapters. The EMP-30 comes standard with a 48-pin DIP Socket Module and thirteen Family Modules. The unit contains three microprocessors, and automatically performs self-test and calibration verification upon power-up.

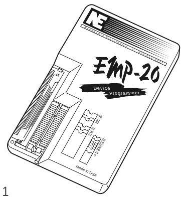
Contents: EMP-30 Programmer: 48-pin ZIF Socket Module: 110 VAC Power Transformer: 13 Family Modules: Parallel Port Cable: Printed Manual/User's Guide.

System Requirements: IBM-Compatible PC (386+)with 640Kb of RAM: Hard disk with at least 6Mb of free space: Standard parallel port.

No. of Pins	Description	Pkg. Type	Digi-Key Part No.	Price Each	Needham's Part No.
—	Universal Device Programmer	—	EMP-30-ND	995.00	EMP-30
20	Socket Module for EMP-30	PLCC	PLCC20-ND	105.00	PLCC20
32	Socket Module for EMP-30	PLCC	PLCC32-ND	105.00	PLCC32
44	Socket Module for EMP-30	PLCC	PLCC44-ND	105.00	PLCC44
48	Socket Module for EMP-30	TSOP	TSOP48-ND	125.00	TSOP48
56	Socket Module for EMP-30	TSOP	TSOP56-ND	125.00	TSOP56

Needham's Electronics

EMP-20 Programmer



Programs: EPROMS, Gals, Microcontrollers, PLD, Flash, EEPROMS, Serial EEPROMS.

The EMP-20 from Needham's is one of a kind. Versatile and compact with its speed and ease of programming make it untouchable by the competition.

• Very fast programming, for example: 27C10A in 23 seconds; 27C040 in only 90 seconds • Supports Intel Hex, Mots, Jedec Binary, ASC II formats • Easy-to-read menus with cursor control make programming enjoyable • Contains full screen editor with search and fill, entry in Hex, Binary or ASCII • Free software upgrades and 1 year warranty • All programming voltages and algorithms are automatically loaded in when you select a part number to work with

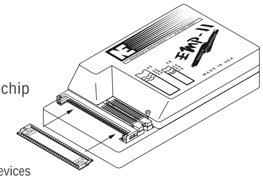
EMP-20 comes complete with 4 family modules. Each module supports a group of devices. The "Family Modules" allows for rerouting of VCC, VPP and ground pins, when changing to different device groups. The "Family Modules" are simple to snap in and each module supports two groups of devices. The concept of family modules provides support for a wide variety of devices. Needham's will be able to provide future support as new devices become available for a minimal cost to the customer.

System Requirements: PC with 512K memory, 1 Standard parallel I/O port, MS Dos 2.11 or greater and a standard centronix 36 pin parallel cable. • Software, power supply and literature included with the EMP-20. •Dimensions: 9.5" x 5.75" x 1.25" (241.30mm x 146.05mm x 31.75mm) • Eproms: 2716 through 27C080, 27C210 through 27C240, 27C400 through 27C800 • Flash: 28F256A through 28F020 • GAL, PLD, PALCE: 16V8, 20V8, 22V10 • Microcontrollers: 8741, 42, 48, 49, C51, C51FX, 8751, 87C751, 87C752, PIC16C5X, PIC16C71 • EEPROMS and Serial EEPROMS • Xilinx — XC1736A & D, XC1765 & D, XC17128

EMP20-ND..**$449.50 each**

Needham's Electronics

EMP-11 Programmer



Programs: EPROMS, FLASH, 8051-style micros, Microchip PICs, GALs

The EMP-11 is a low-cost, true low-voltage support, Windows™ based programmer that supports more than 1400 devices. The native 32-bit Windows™ software allows "drag and drop" file loading, window positioning/sizing, along with graphical display of splits and sets. Devices with special features such as block locking, encryption tables, and reset polarity are supported. The file formats supported include Binary, JEDEC, Intel Hex, Motorola S, TekHex, and POF. Modular device and file formats allow for easier updates along with specialized (proprietary) file formats. Configuration data for multiple projects with custom programming tasks can be stored in "session files" for quick retrieval. Full communications error detection and correction in conjunction with device ID checking ensures reliable programming.

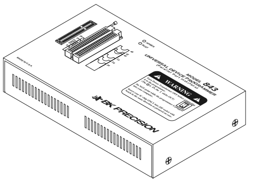
Contents: EMP-11 Programmer: 40-pin ZIF Socket Module: 110 VAC Power Transformer: Family Modules: Parallel Port Cable: Software CD-ROM

System Requirements: IBM-Compatible PC (486+): Windows™ 95, 98, 2000, or ME: 55-75 Mb Free Space: Parallel Port

Description	Digi-Key Part No.	Price Each	Needham's Part No.
Device Programmer	EMP-11-ND	334.95	EMP-11
44-PSOP Adapter (uses TI socket #CSP044-29)	E11-PSOPA-29-ND	90.00	E11-PSOPA-29
48-TSOP Adapter (uses Wells socket #648-0482211)	E11-TSOPA-48-ND	125.00	E11-TPSOPA-48
44-PSOP Adapter (uses TI socket #CSP044-52)	E11-PSOPA-52-ND	90.00	E11-PSOPA-52
44-PSOP Adapter (uses Wells socket #652-G44)	E11-PSOPA-W-ND	90.00	E11-PSOPA-W

BK PRECISION®
SETTING NEW STANDARDS IN PERFORMANCE & VALUE

EPROM and Universal Programmers



Software Features:

- **Device Functions**: Blank Check, Read Program, Verify, Checksum, Encrytion, Data Compare, Auto Program
- **Buffer Features**: Clear, Edit, Fill, File Load, File, File Save
- **Programming Alogrithms**: Normal, Intelligent, Quick Pulse, Flash Programming
- **Misc. Functions**: Manages 8, 16, 32 bit data split, Macros, Batch execution, DOS shell (844 and 845 in Windows™ environment), Auto Device search and Self test

Description	Digi-Key Part No.	Price Each
EPROM Programmer Serial (Model 840)	BK840-ND	205.00
EPROM Programmer Serial IC (Model 841)	BK841-ND	260.00
Universal Programmer w/Serial Interface	BK842-ND	695.00
Universal Programmer 48-Pin ZIF (Model 846)	BK846-ND	495.00
Universal Programmer 4 GANG ZIFs (Model 847)	BK847-ND	595.00
Universal Programmer for Windows™ and MS-DOS		
Universal Programmer & Logic IC Tester, 48-Pin ZIF (Model 845)	BK845-ND	1295.00
Universal Programmer, 40-Pin ZIF (Model 844)	BK844-ND	420.00
Optional Adapters for EPROM Programmers (not included)		
40-Pin ZIF Socket Adapter for 875X EPROM Program (Used with BK840/841)	BKRM875X-ND	121.50
40-Pin ZIF Socket Adapter for 16Bit Micros Program (Used with BK840/841)	BKRM16BIT-ND	121.50
Adapter for Microchip's PIC16C54/55/56/57 only (Used with BK840/841)	BKRMPIC16C54-ND	121.71
Module For PIC (Used with BK846/847)	BKMODULE03-0-8467-ND	35.00
Module For AMD (Used with BK846/847)	BKMODULE05-0-8467-ND	35.00
Module For PIC (Used with BK846/847)	BKMODULE11-1-8467-ND	35.00
Optional Adapters for Universal Programmers (not included)		
8-GANG Adapter (Used with BK845)	BKTM8G-ND	336.00
20-Pin PAL Adapter (Used with BK843)	BKPA20-20-ND	114.30
SOP Adapter (Used with BK843)	BKPA44-48A-ND	174.60

	Model 840	Model 841	Model 843	Model 846	Model 847	Model 845	Model 844
Devices Supported	Eproms, Page mode Eproms, EEproms, Flash Eproms		PALs, Proms, Eproms, EEproms, Serial (E) Prom EPLDs, GALs, PEELs & Microcontrollers	Serial (E) Prom EPLDs, GALs, PEELs & Microcontrollers		Eproms, EEproms, Flash Eproms, Serial E(E) Proms, Bipolar Proms, PALs, PALCEs, GALs, PEELs, EPLDs, SPLDs, CPLDs	Eproms, GALs, PALCEs, 87C51, PIC, 17Cxx (over 500 chips)
Host Computer Requirements	IBM PC/XT/AT/386/486					PC, XT, 386, 486, Pentium or compatibles, PS/2, Portable (notebook) personal computers	IBM PC XT, AT, 386, 486, Pentium, PS/2, Portable (notebook) or compatibles
Interface Requirements	8-bit ISDA bus adapter card		Standard parallel port			Standard parallel port (LPT1, LPT2, LPT3)	Either one of standard parallel ports (LPT, LPT2, or LPT3)
Programming Socket	(1) 32 pin ZIF	(4) 32 pin ZIF	(4) 32 pin ZIF	(1) 48 pin ZIF	(1) 48 pin; (3) 32 pin ZIF	Gold testool 48-pin ZIF Std.	Textool 40 pin ZIF
Pin Spacing	.300"-.600" (7.62-15.24mm)						
Module Dimensions	5.7" x 3.3" x 13" 14.8cm x 7.6cm x 3.3cm		9.5" x 6.5" x 1.5" 24.2cm x 16.5cm x 3.8cm	8.5" x 5" x 1.5" 21.6cm x 12.7cm x 3.8cm)		9.75" x 7.50" x 2.25" (24.8cm x 19.1cm x 5.7cm)	7.25" x 5.00" x 1.25" (18.4cm x 12.7cm x 3.2cm)
Interface Card Dimensions	5.8" x 4.3" (14.7cm x 10.8cm)		4.25" x 4.25" (10.8cm x 10.8cm)	—		—	—
Shipping Weight	2 lbs. (9.1kg)		4.5 lbs (2.1kg)	4.0lbs (1.82kg)	4.5lbs. (1.82kg)	3.25 lbs. (1.5kg)	—
Accessories	Instruction manual, software diskette, 40 pin ribbon		Instruction manual, software diskette, 40 pin printer cable	Instruction manual, software diskette, power transformer, 6ft. (1.83m) parallel printer cable		48-pin ZIF (DIP) socket, built-in internal universal (110-240 VAC) switching power supply. 6ft. (1.83m) printer cable, 6 ft. (1.83m) AC power cord. Installation disk and manual	120V power adapter, 6 ft. (1.83m) parallel printer cable (I.E.E. standard, 25-pins and wires), Installation diskette & manual
Optional Adapters	RM-16 bit 40 pin socket Eproms, RM-875x; microcontroller adapter, RM-pic 16C5X microcontroller adapter			50 different available adapters for special package devices		8-GANG adapter	4-GANG adapter

Programming and Prototyping Adapters

Description	Recommended For Use With	Digi-Key Part No.	Price Each	Logical Systems Part No.
Programming Adapters				
8 Pin SOIC .150" Wide Socket to 8 Pin .300" Wide DIP Plug 8 Pin SOIC .150" Wide Socket to 8 Pin .600" Wide DIP Plug	PIC12(L)C508A, 509A; PIC12(L)CE518, 519	309-1045-ND 309-1046-ND	60.00 60.00	PA8SO1-03-3 PA8SO1-03-6
8 Pin SOIC .210" Wide Socket to 8 Pin .300" Wide DIP Plug 8 Pin SOIC .210" Wide Socket to 8 Pin .600" Wide DIP Plug	PIC12(L)C508A, 509A; PIC12(L)CE518, 519; PIC12C671, 672	309-1047-ND 309-1048-ND	70.00 70.00	PA8SO1-2006-3 PA8SO1-2006-6
14 Pin SOIC .150" Wide Socket to 14 Pin .300" Wide DIP Plug 14 Pin SOIC .150" Wide Socket to 14 Pin .600" Wide DIP Plug	PIC16C505	309-1000-ND 309-1001-ND	60.00 60.00	PA14SO1-03-3 PA14SO1-03-6
18 Pin SOIC .300" Wide Socket to 18 Pin .300" Wide DIP Plug 18 Pin SOIC .300" Wide Socket to 18 Pin .600" Wide DIP Plug	PIC16C52-58, 61, 554, 558, 621-625, 71, 710-717, F83, 84; PIC16HV510; Z86C(E)(L)02, 03, 04, 06, 08, 16, 28; Z8E000, 001	309-1010-ND 309-1011-ND	70.00 70.00	PA18SO1-08H-3 PA18SO1-08H-6
20 Pin SOIC .300" Wide Socket to 20 Pin .300" Wide DIP Plug 20 Pin SOIC .300" Wide Socket to 20 Pin .600" Wide DIP Plug 20 Pin SSOP Socket to 20 Pin .300" Wide DIP Plug 20 Pin SSOP Socket to 20 Pin .600" Wide DIP Plug	PIC16C770, 771	309-1012-ND 309-1013-ND 309-1014-ND 309-1015-ND	70.00 70.00 80.00 80.00	PA20SO1-08H-3 PA20SO1-08H-6 PA20SS-OT-3 PA20SS-OT-6
20 Pin SSOP Socket to 18 Pin .600" Wide DIP Plug	PIC16C56(A), 58A(B), 554, 558, 620(A), 621, E623-E625, 710-717; PIC16HV540	309-1016-ND	80.00	PA20SS-P54
28 Pin PLCC Auto-eject Socket to 28 Pin .600" Wide DIP Plug 28 Pin PLCC Lidded ZIF Socket to 28 Pin .600" Wide DIP Plug	Z86C(E)(L)30, 31, 33, 34, 35, 36, 83, 84; Z86233, 733	309-1017-ND 309-1020-ND	70.00 90.00	PA28-28 PA28-28Z
28 Pin SOIC .300" Wide Socket to 28 Pin .300" Wide DIP Plug 28 Pin SOIC .300" Wide Socket to 28 Pin .600" Wide DIP Plug	PIC14000; PIC16C55, 57, 62, 63, 66, 72, 73, 76, 642, 773, F872, F873, F876; PIC18C242, 252; Z86C(E)(L)30, 31, 33, 34, 35, 36, 83, 84; Z86233, 733	309-1023-ND 309-1024-ND	70.00 70.00	PA28SO1-08H-3 PA28SO1-08H-6
28 Pin SSOP Socket to 28 Pin .600" Wide DIP Plug	PIC14000, PIC16C62A(B), 63A, 72(A), 73B, 773, F872	309-1025-ND	80.00	PA28SS-OT-6
28 Pin SSOP Socket to 28 Pin .600" Wide DIP Plug	PIC16C55(A), 57(C)	309-1026-ND	80.00	PA28SS-P55
44 Pin PQFP Socket to 40 Pin .600" Wide DIP Plug 44 Pin TQFP Socket to 40 Pin .600" Wide DIP Plug	PIC16C64A, 65A(B), 67, 662, 74A(B), 774, 77, F874, F877	309-1002-ND 309-1003-ND	165.00 165.00	PA16C64-QD-16 PA16C64-QD-03
44 Pin PLCC Auto-eject Socket to 40 Pin .600" Wide DIP Plug 44 Pin PLCC Lidded ZIF Socket to 40 Pin .600" Wide DIP Plug 44 Pin TQFP Socket to 40 Pin .600" Wide DIP Plug 44 Pin PQFP Socket to 40 Pin .600" Wide DIP Plug	PIC17C42(A), 43, 44	309-1006-ND 309-1007-ND 309-1008-ND 309-1009-ND	115.00 135.00 165.00 165.00	PA17C42-PD PA17C42-PDZ PA17C42-QD-03 PA17C42-QD-16
44 Pin PLCC Auto-eject Socket to 40 Pin .600" Wide DIP Plug 44 Pin PLCC Lidded ZIF Socket to 40 Pin .600" Wide DIP Plug	Z86C(E)21, 61	309-1035-ND 309-1036-ND	115.00 115.00	PA44-40-01-PD PA44-40-01-PDZ
44 Pin PLCC Auto-eject Socket to 40 Pin .600" Wide DIP Plug 44 Pin PLCC Lidded ZIF Socket to 40 Pin .600" Wide DIP Plug	Z86C(E)40, 43, 743, 44, 45, 46	309-1037-ND 309-1038-ND	115.00 135.00	PA44-40-33-PD PA44-40-33-PDZ
44 Pin PLCC Auto-eject Socket to 40 Pin .600" Wide DIP Plug 44 Pin PLCC Lidded ZIF Socket to 40 Pin .600" Wide DIP Plug	PIC16C64A, 65A(B), 67, 662, 74A (B), 774, 77, F874, F877	309-1039-ND 309-1040-ND	115.00 135.00	PA44-40-P64-PD PA44-40-P64-PDZ
DIP to PLCC Prototyping Adapters				
Emulator Adapter, 28 Pin DIP ZIF Socket to 28 Pin PLCC Plug. Wired 1:1 Emulator Adapter, 28 Pin DIP Socket to 28 Pin PLCC Plug. Wired 1:1	Z86C(E)(L)30, 31, 33, 34, 35, 36, 83, 84; Z86233, 733	309-1018-ND 309-1019-ND	104.00 90.00	PA28-28-DP PA28-28-DP-PP
Emulator Adapter, 40 Pin DIP ZIF Socket to 44 Pin PLCC Plug Emulator Adapter, 40 Pin DIP Socket to 44 Pin PLCC Plug	PIC17C42(A), 43, 44	309-1004-ND 309-1005-ND	145.00 125.00	PA17C42-DP PA17C42-DP-PP
Emulator Adapter, 40 Pin DIP ZIF Socket to 44 Pin PLCC Plug Emulator Adapter, 40 Pin DIP Socket to 44 Pin PLCC Plug	Z86C(E)21, 61	309-1027-ND 309-1028-ND	145.00 125.00	PA40-44-01-DP PA40-44-01-DP-PP
Emulator Adapter, 40 Pin DIP ZIF Socket to 44 Pin PLCC Plug Emulator Adapter, 40 Pin DIP Socket to 44 Pin PLCC Plug	Z86C(E)40, 43, 743, 44, 45, 46	309-1029-ND 309-1030-ND	145.00 125.00	PA40-44-33-DP PA40-44-33-DP-PP
Emulator Adapter, 40 Pin DIP ZIF Socket to 44 Pin PLCC Plug Emulator Adapter, 40 Pin DIP Socket to 44 Pin PLCC Plug	PIC16C64A, 65A(B), 67, 662, 74A(B), 774, 77, F874, F877	309-1031-ND 309-1032-ND	145.00 125.00	PA40-44-P64-DP PA40-44-P64-DP-PP
PLCC to PLCC Prototyping Adapter				
28 Pin PLCC Auto-eject Socket to 28 Pin PLCC Plug. 1:1 Pinout 28 Pin PLCC Lidded ZIF Socket to 28 Pin PLCC Plug. 1:1 Pinout	Z86C(E)(L)30, 31, 33, 34, 35, 36, 83, 84, Z86233, 733	309-1021-ND 309-1022-ND	110.00 140.00	PA28-PP PA28-PZP
44 Pin PLCC Auto-eject Socket to 44 Pin PLCC Plug. 1:1 Pinout 44 Pin PLCC Lidded ZIF Socket to 44 Pin PLCC Plug. 1:1 Pinout	Z86C(E)21, 40, 43, 743, 44, 45, 46, 61	309-1041-ND 309-1042-ND	145.00 165.00	PA44-PP PA44-PZP
DIP to QFP Prototyping Adapters				
40 Pin DIP Socket to 44 Pin QFP Solder Down Plug 40 Pin DIP ZIF Socket to 44 Pin QFP Solder Down Plug	Z86C(E)40, 43, 743, 44, 45, 46	309-1033-ND 309-1034-ND	270.00 290.00	PA40DP-44QF-34 PA40DZ-44QF-34
QFP to QFP Prototyping Adapters				
44 Pin TQFP Socket to 44 Pin Solder Down QFP Plug. 1:1 Pinout 44 Pin PQFP Socket to 44 Pin Solder Down QFP Plug. 1:1 Pinout	N/A	309-1043-ND 309-1044-ND	360.00 360.00	PA44QF03-44QF PA44QF16-44QF
DIP to SO-Plug Prototyping Adapter Kits				
8 Pin .300" DIP Board. Two 8 Pin .250" SOIC Plugs	PIC12(L)C508A, 509A, DE518, CE519	309-1050-ND	19.60	PADSO-0803-D250-08/2
8 Pin .300" DIP Board. Two 8 Pin .310" SOIC Plugs	PIC12(L)C508A, 509A, CE518, CE519, 671, 672	309-1051-ND	19.60	PADSO-0803-D310-08/2
16 Pin .300" DIP Board. Two 14 Pin .250" SOIC Plugs 16 Pin .300" DIP Board with ZIF Socket. Two 14 Pin .250" SOIC Plugs	PIC16C505	309-1053-ND 309-1055-ND	24.80 36.80	PADSO-1603-D250-14/2 PADSO1603Z-D250-14/2
18 Pin .300" DIP Board. Two 18 Pin .420" SOIC Plugs 18 Pin .300" DIP Board with ZIF Socket. Two 18 Pin .420" SOIC Plugs	PIC16C52,54(A)(C), 56(A), 58A(B), 61, 554, 558, 621, 620(A), CE623-CE625, 71, 710-717, F83, F84(A), HV540; Z86C(E)(L)02, 03, 04, 06, 08, 16, 28; Z8E000, 001	309-1057-ND 309-1059-ND	26.60 38.60	PADSO-1803-D420-18/2 PADSO1803Z-D420-18/2
20 Pin .300" DIP Board. Two 20 Pin .420" SOIC Plugs 20 Pin .300" DIP Board with ZIF Socket. Two 20 Pin .420" SOIC Plugs	PIC16C770, 771	309-1061-ND 309-1063-ND	28.00 40.00	PADSO-2003-D420-20/2 PADSO-2003Z-D420-20/2
28 Pin .300" DIP Board. Two 28 Pin .420" SOIC Plugs 28 Pin .300" DIP Board with ZIF Socket. Two 28 Pin .420" SOIC Plugs 28 Pin .600" DIP Board. Two 28 Pin .420" SOIC Plugs 28 Pin .600" DIP Board with ZIF Socket. Two 28 Pin .420" SOIC Plugs	PIC14000, PIC16C55(A), 57(C), 62A(B), 57(C), 62A(B), 63(A), 66, 72(A), 73A(B), 76, 642, 773, F872-F876; PIC18C242, 252; Z86C(E)(L)30, 31, 33, 34, 35, 36, 83, 84; Z86233, 733	309-1065-ND 309-1067-ND 309-1069-ND 309-1071-ND	33.60 47.60 33.60 47.60	PADSO-2803-D420-28/2 PADSO2803Z-D420-28/2 PADSO-2806-D420-28/2 PADSO2806Z-D420-28/2
SOIC to SOIC Prototyping Adapters				
8 Pin SOIC .210" Socket to 8 Pin SOIC Connector	PIC12(L)C508A, 509A, CE518, CE519, 671, 672	309-1072-ND*	70.00	PA-SOD-2006-08
14 Pin SOIC .300" Socket to 14 Pin SOIC Connector	PIC16C505	309-1074-ND*	70.00	PA-SOD-2808-14
18 Pin SOIC .300" Socket to 18 Pin SOIC Connector	PIC16C52, 54(A)(C), 56(A), 58A(B), 61, 554, 558, 621, 620(A), CE623-CE625, 71, 710-717, F83, F84(A), HV540; Z86C(E)(L)02, 03, 04, 06, 08, 16, 28; Z8E000, 001	309-1075-ND*	70.00	PA-SOD-2808-18
20 Pin SOIC .300" Socket to 20 Pin SOIC Connector	PIC16C770, 771	309-1076-ND*	70.00	PA-SOD-2808-20
28 Pin SOIC .300" Socket to 28 Pin SOIC Connector	PIC14000, PIC16C55(A), 57(C), 62A(B), 63(A), 66, 72(A), 73A(B), 76, 642, 773, F872-F876; PIC18C242, 252, Z86C(E)(L)30, 31, 33, 34, 35, 36, 83, 84; Z86233, 733	309-1073-ND*	70.00	PA-SOD-2808-28

* Require SO-Plugs which must be ordered separately.

Description	Digi-Key Part No.	Price Each	Logical Systems Part No.
Additional DIP Boards			
8 Pin .300" DIP Board	309-1049-ND	14.00	PA-DSO-0803
16 Pin .300" DIP Board 16 Pin .300" DIP Board With ZIF Socket	309-1052-ND 309-1054-ND	18.00 30.00	PA-DSO-1603 PA-DSO-1603Z
18 Pin .300" DIP Board 18 Pin .300" DIP Board With ZIF Socket	309-1056-ND 309-1058-ND	19.00 31.00	PA-DSO-1803 PA-DSO-1803Z
20 Pin .300" DIP Board 20 Pin .300" DIP Board With ZIF Socket	309-1060-ND 309-1062-ND	20.00 34.00	PA-DSO-2003 PA-DSO-2003Z
28 Pin .300" DIP Board 28 Pin .300" DIP Board With ZIF Socket 28 Pin .600" DIP Board 28 Pin .600" DIP Board With ZIF Socket	309-1064-ND 309-1066-ND 309-1068-ND 309-1070-ND	24.00 38.00 24.00 38.00	PA-DSO-2803 PA-DSO-2803Z PA-DSO-2806 PA-DSO-2806Z

Description	Digi-Key Part No.	Price Each	Logical Systems Part No.
Additional SO-Plugs			
8 Pin .250" Plugs (6 pieces) 8 Pin .310" Plugs (6 pieces)	309-1078-ND 309-1079-ND	16.80 16.80	PA-SOF-D250-08/6 PA-SOF-D310-08/6
14 Pin .250" Plugs (6 pieces)	309-1080-ND	20.40	PA-SOF-D250-14/6
18 Pin .420" Plugs (6 pieces)	309-1081-ND	22.80	PA-SOF-D420-18/6
20 Pin .420" Plugs (6 pieces)	309-1082-ND	24.00	PA-SOF-D420-20/6
28 Pin .420" Plugs (6 pieces)	309-1083-ND	28.80	PA-SOF-D420-28/6
Additional QFP Plug			
44 Pin Solder Down QFP Plug	309-1084-ND	90.00	PQF-44

XILINX

Programmable Gate Arrays

FPGA (Field Programmable Gate Arrays)

9282B-ND	Programmable Logic Data Book............ **$1.95**

A Technical Overview: Every Xilinx FPGA performs the function of a custom LSI circuit, like a gate array, but the Xilinx device is user-programmable and even reprogrammable in the system. Xilinx sells standard off-the-shelf devices in many different sizes, speeds, operating temperature ranges, and packages. The user selects the appropriate Xilinx device, and then converts the design idea or schematic into a configuration data file, using the Xilinx development system software and loads this file into the Xilinx FPGA.

XC3000/XC3100 • Replaces TTI, MSI, and other PLD logic • Toggle rates of 70 to 125 MHz, delays from 9 to 5.5. ns • Unlimited reprogrammability

XC3000A • Five device types (1300-7500 gates) • 4-input look-up tables • Flip-flop toggle rate over 110 MHz • No on-chip RAM, data storage limited to flip-flops • Use for medium speed, medium complexity applications

XC3100A • Functionally and bitstream identical with XC3000A series • Five device types (1300-7500 gates) • 4-input look-up tables • No on-chip RAM, data storage limited to flip-flops • Use for high performance design, system clock up to 100 MHz

XC4000/XC4000A • Benefits of custom CMOS VLSI • Gate ranges from 2,000 to 20,000 • Unlimited reprogrammability

XC4000E • Ten device types (2,000-25,000 gates) • Dedicated carry network • Function generator can be used as RAM • Use for general purpose logic and data-path logic

XC4000L • Low voltage version of XC4000E devices (3.0-3.6V)

XC4000EX • Larger version of the XC4000E family (28,000-125,000 gates) • Increased routing resources • Faster clocking options, more versatile output logic • Use for designs beyond 20,000 gate complexity

XC4000XL • Low voltage version of the XC4000EX devices (3.0-3.6V)

XC5200 • Low cost FPGA • Dedicated carry structure (no RAM) • Four-input function generators • Use for general purpose logic and data-path logic

Package	Gates	#CLB	I/O Pins	FIlp-Flops	Operating Voltage (V)	Digi-Key Part No.	Price Each			Xilinx Part No.
							1	25	100	
XC3000/XC3100 Series										
44-PLCC	3000	100	34	360	4.75V-5.25V	122-1011-ND	17.95	15.20	13.10	XC3030-100PC44C
68-PLCC	3000	100	58	360	4.75V-5.25V	122-1012-ND	18.50	15.65	13.50	XC3030-100PC68C
84-PLCC	3000	100	74	360	4.75V-5.25V	122-1013-ND	19.00	16.10	13.90	XC3030-100PC84C
100-PQFP	3000	100	80	360	4.75V-5.25V	122-1014-ND	21.00	17.75	15.35	XC3030-100PQ100C
84-PLCC	4200	144	74	480	4.75V-5.25V	122-1020-ND	22.15	18.75	16.20	XC3042-100PC84C
100-PQFP	4200	144	82	480	4.75V-5.25V	122-1021-ND	24.60	20.80	18.00	XC3042-100PQ100C
84-PLCC	2000	64	64	256	4.75V-5.25V	122-1036-ND	37.90	32.10	27.70	XC3120-3PC84C
XC3000A/XC3100A Series										
68-PLCC	2000	64	58	256	4.75V-5.25V	122-1009-ND	13.20	11.15	10.35	XC3020A-7PC68C
84-PLCC	2000	64	64	256	4.75V-5.25V	122-1010-ND	13.70	11.60	10.80	XC3020A-7PC84C
44-PLCC	3000	100	34	360	4.75V-5.25V	122-1017-ND	13.81	11.73	10.88	XC3030A-7PC44C
84-PLCC	3000	100	74	360	4.75V-5.25V	122-1018-ND	14.75	12.50	11.60	XC3030A-7PC84C
100-PQFP	3000	100	80	360	4.75V-5.25V	122-1019-ND	16.30	13.80	12.80	XC3030A-7PQ100C
84-PLCC	4200	144	74	480	4.75V-5.25V	122-1025-ND	19.20	16.25	15.10	XC3042A-7PC84C
100-PQFP	4200	144	82	480	4.75V-5.25V	122-1026-ND	21.10	17.85	16.60	XC3042A-7PQ100C
84-PLCC	6400	224	70	688	4.75V-5.25V	122-1029-ND	35.65	30.20	28.05	XC3064A-7PC84C
84-PLCC	9000	320	70	928	4.75V-5.25V	122-1034-ND	61.80	52.30	48.55	XC3090A-7PC84C
68-PLCC	2000	64	58	256	4.75V-5.25V	122-1037-ND	16.20	13.70	12.70	XC3120A-3PC68C
84-PLCC	2000	64	64	256	4.75V-5.25V	122-1038-ND	16.65	14.10	13.10	XC3120A-3PC84C
44-PLCC	3000	100	34	360	4.75V-5.25V	122-1039-ND	18.01	15.25	14.15	XC3130A-3PC44C
84-PLCC	3000	100	74	360	4.75V-5.25V	122-1040-ND	19.10	16.15	15.00	XC3130A-3PC84C
100-PQFP	3000	100	80	360	4.75V-5.25V	122-1041-ND	20.70	17.50	16.25	XC3130A-3PQ100C
84-PLCC	4200	144	74	480	4.75V-5.25V	122-1043-ND	23.45	19.85	18.40	XC3142A-3PC84C
100-PQFP	4200	144	82	480	4.75V-5.25V	122-1044-ND	25.80	21.80	20.26	XC3142A-3PQ100C
84-PLCC	6400	224	70	688	4.75V-5.25V	122-1045-ND	34.50	29.20	27.10	XC3164A-3PC84C
84-PLCC	9000	320	70	928	4.75V-5.25V	122-1046-ND	53.25	47.70	44.30	XC3190A-3PC84C
160-PQFP	9000	320	138	928	4.75V-5.25V	122-1047-ND	55.90	50.05	46.50	XC3190A-3PQ160C
100-PQFP	4200	144	82	480	4.75V-5.25V	122-1024-ND	29.30	24.80	21.40	XC3042-70PQ100C
144-TQFP	4500	224	120	688	4.75V-5.25V	122-1084-ND	37.60	31.85	29.55	XC3164A-3TQ144C
160-PQFP	7500	484	176	1320	4.75V-5.25V	122-1085-ND	76.25	68.26	63.41	XC3195A-3PQ160C
XC4000/XC4000A Series										
160-PQFP	5000	196	112	616	4.75V-5.25V	122-1050-ND	105.00	96.55	89.65	XC4005-5PQ160C
84-PLCC	3000	100	61	360	4.75V-5.25V	122-1066-ND	55.60	51.30	47.60	XC4003-6PC84C
84-PLCC	5000	196	61	616	4.75V-5.25V	122-1068-ND	96.05	88.55	82.25	XC4005-5PC84C
208-PQFP	8000	324	144	936	4.75V-5.25V	122-1070-ND	182.00	168.00	156.00	XC4008-5PQ208C
208-PQFP	10000	400	160	1120	4.75V-5.25V	122-1071-ND	236.00	218.00	202.00	XC4010-5PQ208C
160-PQFP	10000	400	—	1120	4.75V-5.25V	122-1072-ND	146.00	135.01	125.00	XC4010D-5PQ160C
XC4000E Series										
84-PLCC	3000	100	80	360	4.75V-5.25V	122-1086-ND	23.70	21.85	20.30	XC4003E-4PC84C
100-PQFP	3000	100	80	360	4.75V-5.25V	122-1087-ND	33.30	30.70	28.50	XC4003E-3PQ100C
100-PQFP	3000	100	80	360	4.75V-5.25V	122-1088-ND	25.60	23.60	21.95	XC4003E-4PQ100C
84-PLCC	5000	196	112	616	4.75V-5.25V	122-1180-ND	26.65	24.75	23.00	XC4005E-4PC84C
100-PQFP	5000	196	112	616	4.75V-5.25V	122-1089-ND	53.35	49.20	45.65	XC4005E-3PQ100C
160-PQFP	5000	196	112	616	4.75V-5.25V	122-1090-ND	55.60	51.25	47.60	XC4005E-3PQ160C
160-PQFP	5000	196	112	616	4.75V-5.25V	122-1091-ND	42.75	39.45	36.61	XC4005E-4PQ160C
160-PQFP	6000	256	128	768	4.75V-5.25V	122-1092-ND	79.73	73.55	68.26	XC4006E-3PQ160C
160-PQFP	6000	256	128	768	4.75V-5.25V	122-1093-ND	61.40	56.65	52.61	XC4006E-4PQ160C
208-PQFP	6000	256	128	768	4.75V-5.25V	122-1094-ND	82.65	76.20	70.80	XC4006E-3PQ208C
208-PQFP	6000	256	128	768	4.75V-5.25V	122-1095-ND	63.60	58.65	54.45	XC4006E-4PQ208C
144-TQFP	6000	256	128	768	4.75V-5.25V	122-1096-ND	67.45	62.20	57.80	XC4006E-4TQ144C
160-PQFP	8000	324	144	936	4.75V-5.25V	122-1097-ND	93.95	86.65	80.45	XC4008E-3PQ160C
160-PQFP	8000	324	144	936	4.75V-5.25V	122-1098-ND	72.25	66.65	61.90	XC4008E-4PQ160C
208-PQFP	8000	324	144	936	4.75V-5.25V	122-1099-ND	102.00	94.30	87.60	XC4008E-3PQ208C
208-PQFP	8000	324	144	936	4.75V-5.25V	122-1100-ND	78.70	72.55	67.36	XC4008E-4PQ208C
84-PLCC	10000	400	160	1120	4.75V-5.25V	122-1101-ND	81.10	75.30	70.00	XC4010E-3PC84C
84-PLCC	10000	400	160	1120	4.75V-5.25V	122-1102-ND	62.35	57.90	53.85	XC4010E-4PC84C
160-PQFP	10000	400	160	1120	4.75V-5.25V	122-1103-ND	109.00	101.00	93.36	XC4010E-3PQ160C
160-PQFP	10000	400	160	1120	4.75V-5.25V	122-1104-ND	83.85	77.35	71.81	XC4010E-4PQ160C
208-PQFP	10000	400	160	1120	4.75V-5.25V	122-1105-ND	176.00	162.01	150.00	XC4010E-2PQ208C
208-PQFP	10000	400	160	1120	4.75V-5.25V	122-1106-ND	130.00	120.01	111.00	XC4010E-3PQ208C
208-PQFP	10000	400	160	1120	4.75V-5.25V	122-1107-ND	100.00	92.31	85.70	XC4010E-4PQ208C
160-PQFP	13000	576	192	1536	4.75V-5.25V	122-1108-ND	132.00	123.01	114.00	XC4013E-3PQ160C
160-PQFP	13000	576	192	1536	4.75V-5.25V	122-1109-ND	102.00	94.40	87.80	XC4013E-4PQ160C
208-PQFP	13000	576	192	1536	4.75V-5.25V	122-1110-ND	312.00	290.00	270.01	XC4013E-1PQ208C
208-PQFP	13000	576	192	1536	4.75V-5.25V	122-1111-ND	223.00	207.01	193.00	XC4013E-2PQ208C
208-PQFP	13000	576	192	1536	4.75V-5.25V	122-1112-ND	165.00	153.01	143.01	XC4013E-3PQ208C
208-PQFP	13000	576	192	1536	4.75V-5.25V	122-1113-ND	127.00	118.00	110.00	XC4013E-4PQ208C
208-HQFP	20000	784	224	2016	4.75V-5.25V	122-1114-ND	286.00	266.01	247.01	XC4020E-2HQ208C
208-HQFP	20000	784	224	2016	4.75V-5.25V	122-1115-ND	212.00	197.01	183.01	XC4020E-3HQ208C
240-HQFP	20000	784	224	2016	4.75V-5.25V	122-1116-ND	444.00	410.00	380.00	XC4020E-2HQ240C
240-HQFP	20000	784	224	2016	4.75V-5.25V	122-1117-ND	329.00	303.00	282.00	XC4020E-3HQ240C
240-HQFP	25000	1024	256	2560	4.75V-5.25V	122-1118-ND	508.00	472.00	439.00	XC4025E-2HQ240C
240-HQFP	25000	1024	256	2560	4.75V-5.25V	122-1119-ND	376.00	349.01	325.01	XC4025E-2HQ240C
XC4000L Series										
84-PLCC	5000	196	112	616	3.0V-3.6V	122-1120-ND	29.50	27.40	25.45	XC4005L-5PC84C
100-PQFP	5000	196	112	616	3.0V-3.6V	122-1121-ND	45.75	42.15	39.15	XC4005L-5PQ100C
208-PQFP	5000	196	112	616	3.0V-3.6V	122-1122-ND	51.50	47.50	44.11	XC4005L-5PQ208C
84-PLCC	10000	400	160	1120	3.0V-3.6V	122-1123-ND	72.00	66.85	62.20	XC4010L-5PC84C
208-PQFP	13000	576	192	1536	3.0V-3.6V	122-1125-ND	169.00	157.00	146.00	XC4013L-5PQ208C

(Continued)

XILINX Programmable Gate Arrays *(Cont.)*

Package	Gates	#CLB	I/O Pins	Flip-Flops	Operating Voltage (V)	Digi-Key Part No.	Price Each 1	25	100	Xilinx Part No.
XC4000EX Series										
208-HQFP	28000	1024	256	2560	4.75V-5.25V	122-1126-ND	329.00	295.00	254.00	XC4028EX-2HQ208C
208-HQFP	28000	1024	256	2560	4.75V-5.25V	122-1127-ND	244.00	218.00	188.00	XC4028EX-3HQ208C
240-HQFP	36000	1296	288	3168	4.75V-5.25V	122-1128-ND	318.00	284.01	246.01	XC4036EX-3HQ240C
XC4000LX Series										
240-HQFP	36000	1296	288	3168	3.0V-3.6V	122-1129-ND	377.00	338.01	292.00	XC4036XL-1HQ240C
240-HQFP	36000	1296	288	3168	3.0V-3.6V	122-1130-ND	279.00	250.00	216.00	XC4036XL-2HQ240C
XC5200 Series										
84-PLCC	3000	64	84	256	4.75V-5.25V	122-1131-ND	10.15	8.60	7.40	XC5202-6PC84C
100-PQFP	3000	64	84	256	4.75V-5.25V	122-1132-ND	12.35	10.45	9.05	XC5202-6PQ100C
84-PLCC	6000	120	124	480	4.75V-5.25V	122-1133-ND	18.45	15.65	13.50	XC5204-6PC84C
100-PQFP	6000	120	124	480	4.75V-5.25V	122-1134-ND	20.39	17.35	15.00	XC5204-6PQ100C
160-PQFP	6000	120	124	480	4.75V-5.25V	122-1135-ND	24.20	20.50	17.70	XC5204-6PQ160C
144-TQFP	6000	120	124	480	4.75V-5.25V	122-1136-ND	25.30	21.40	18.51	XC5204-6TQ144C
100-VQFP	6000	120	124	480	4.75V-5.25V	122-1137-ND	21.45	18.15	15.65	XC5204-6VQ100C
84-PLCC	10000	196	148	784	4.75V-5.25V	122-1138-ND	37.90	32.05	27.70	XC5206-5PC84C
100-PQFP	10000	196	148	784	4.75V-5.25V	122-1139-ND	38.20	32.35	27.90	XC5206-6PQ100C
160-PQFP	10000	196	148	784	4.75V-5.25V	122-1140-ND	48.85	41.35	35.70	XC5206-5PQ160C
160-PQFP	10000	196	148	784	4.75V-5.25V	122-1141-ND	42.50	35.95	31.05	XC5206-6PQ160C
208-PQFP	10000	196	148	784	4.75V-5.25V	122-1142-ND	51.50	43.60	37.65	XC5206-5PQ208C
144-TQFP	10000	196	148	784	4.75V-5.25V	122-1143-ND	42.80	36.20	31.30	XC5206-5TQ144C
84-PLCC	16000	324	196	1296	4.75V-5.25V	122-1144-ND	54.40	46.05	39.75	XC5210-5PC84C
160-PQFP	16000	324	196	1296	4.75V-5.25V	122-1145-ND	92.75	78.45	67.76	XC5210-4PQ160C
160-PQFP	16000	324	196	1296	4.75V-5.25V	122-1146-ND	77.25	65.40	56.45	XC5210-5PQ160C
160-PQFP	16000	324	196	1296	4.75V-5.25V	122-1147-ND	67.20	56.85	49.10	XC5210-6PQ160C
208-PQFP	16000	324	196	1296	4.75V-5.25V	122-1148-ND	78.35	66.30	57.25	XC5210-5PQ208C
208-PQFP	16000	324	196	1296	4.75V-5.25V	122-1149-ND	68.15	57.55	49.80	XC5210-6PQ208C
240-PQFP	16000	324	196	1296	4.75V-5.25V	122-1150-ND	84.35	71.35	61.66	XC5210-5PQ240C
240-PQFP	16000	324	196	1296	4.75V-5.25V	122-1151-ND	73.35	62.05	53.60	XC5210-6PQ240C
144-TQFP	16000	324	196	1296	4.75V-5.25V	122-1152-ND	62.95	53.25	46.00	XC5210-6TQ144C

Serial Configuration Proms for Field Programmable Gate Arrays

Package	Memory Size	Description	Digi-Key Part No.	Price Each 1	25	100	Xilinx Part No.
8-Dip	36K	Serial Configuration Prom	122-1187-ND	3.45	2.95	2.55	XC1736EPD8C
8-SOIC	36K	Serial Configuration Prom	122-1189-ND	4.15	3.50	3.05	XC1736ESO8C
8-SOIC	36K	Serial Configuration Prom	122-1192-ND	4.15	3.50	3.05	XC1736EVO8C
8-Dip	65K	Serial Configuration Prom	122-1188-ND	4.00	3.40	2.95	XC1765EPD8C
8-SOIC	65K	Serial Configuration Prom	122-1190-ND	4.80	4.05	3.50	XC1765ESO8C
8-SOIC	65K	Serial Configuration Prom	122-1193-ND	4.80	4.05	3.50	XC1765EVO8C
8-SOIC	65K	3 V Serial Configuration Prom	122-1194-ND	5.45	4.60	4.00	XC1765ELVO8C
8-Dip	128K	Serial Configuration Prom	122-1191-ND	6.00	5.40	5.00	XC17128EPD8C
8-SOIC	128K	Serial Configuration Prom	122-1195-ND	6.90	6.20	5.75	XC17128EVO8C

Package	Memory Size	Description	Digi-Key Part No.	Price Each 1	25	100	Xilinx Part No.
8-SOIC	128K	3 V Serial Configuration Prom	122-1196-ND	6.15	5.50	5.10	XC17128ELVO8C
20-PLCC	128K	Serial Configuration Prom	122-1197-ND	6.90	6.20	5.75	XC17128EPC20C
8-Dip	128K	3 V Serial Configuration Prom	122-1198-ND	5.35	4.75	4.45	XC17128ELPD8C
8-Dip	256K	Serial Configuration Prom	122-1199-ND	11.45	10.25	9.50	XC17256EPD8C
8-SOIC	256K	Serial Configuration Prom	122-1200-ND	13.60	12.20	11.30	XC17256EVO8C
8-Dip	256K	3 V Serial Configuration Prom	122-1201-ND	7.95	7.35	6.85	XC17256ELPD8C
8-SOIC	256K	3 V Serial Configuration Prom	122-1202-ND	8.55	7.95	7.40	XC17256ELVO8C
20-PLCC	256K	Serial Configuration Prom	122-1203-ND	13.60	12.20	11.30	XC17256EPC20C

XILINX Foundation Software Series

Foundation Series provides a complete, front-to-back environment for the design of Xilinx programmable logic devices — incorporating design entry (schematic and Abel HDL), synthesis, simulation, and FPGA/CPLD implementation tools. An emphasis on intuitive, easy to learn and use tools simplifies the task of creating programmable logic designs for both new and experienced users. Foundation F1.3 Standard and Express systems feature Xilinx's new M1 design implementation technology which delivers industry-leading device performance and utilization. The Foundation Express System incorporates advanced synthesis technology from Synopsys into the Foundation Standard System providing push-button and constraint driven synthesis for VHDL and Verilog.

Description	Digi-Key Part No.	Price Each	Xilinx Part No.
Foundation Series Base System (Low Density <8K gates, (Schematic Entry)	122-1181-ND	1090.00	DS-FND-BAS-PC
Foundation Series Base w/VHDL Synthesis (Low Density <8K gates)	122-1185-ND	1490.00	DS-FND-BSX-PC

XILINX XC9500 In-System Programmable CPLDs (Complex Programmable Logic Devices)

The XC9500 CPLD family provides advanced in-system programming and test capabilities for high performance, general purpose logic integration. All devices are in-system programmable for a minimum of 10,000 program/erase cycles. Extensive IEEE 1149.1 (JTAG) boundary-scan support is also included on all family members.

The XC9500 family is fully pin-compatible allowing easy design migration across multiple density options in a given package footprint. Advanced system features include output slew rate control and user-programmable ground pins to help reduce system noise. I/Os may be configured for 3.3V or 5V operation. All outputs provide 24mA drive.

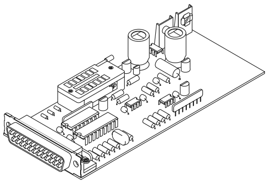
Pkg.	Macro-cells	Usable Gates	Registers	System Frequency MHz (min)	Digi-Key Part No.	Price Each 1	25	100	Xilinx Part No.
44-PLCC	36	800	36	100	122-1167-ND	3.30	3.05	2.85	XC9536-15PC44C
44-VQFP	36	800	36	100	122-1168-ND	3.30	3.05	2.85	XC9536-15VQ44C
44-PLCC	36	800	36	100	122-1169-ND	4.30	4.00	3.70	XC9536-7PC44C
44-VQFP	36	800	36	100	122-1170-ND	4.30	4.00	3.70	XC9536-7VQ44C
44-PLCC	72	1600	72	83	122-1171-ND	5.53	4.35	3.45	XC9572-15PC44C
84-PLCC	72	1600	72	83	122-1172-ND	6.10	5.15	4.45	XC9572-15PC84C
100-PQFP	72	1600	72	83	122-1173-ND	24.50	20.70	17.91	XC9572-7PQ100C
100-PQFP	72	1600	72	83	122-1174-ND	15.10	12.80	11.05	XC9572-10PQ100C
84-PLCC	108	2400	108	83	122-1175-ND	12.10	10.25	8.85	XC95108-15PC84C
84-PLCC	108	2400	108	83	122-1176-ND	28.65	24.25	20.95	XC95108-7PC84C
100-TQFP	108	2400	108	83	122-1177-ND	15.50	13.10	11.35	XC95108-15TQ100C
100-PQFP	108	2400	108	83	122-1178-ND	26.20	22.15	19.15	XC95108-10PQ100C

ROMAN-JONES, INC. Xilinx Serial PROM Programmer

The Xilinx Serial PROM Programmer provides a low cost alternative for programming any Xilinx XC17xx Family Serial PROM devices. The programmer product consists of an external programmer and associated interface software. The programmer and software have been tested and certified by Xilinx.

FEATURES:

• Parallel port interface which can be directly connected (if cable is desired - recommend M7PSG-2506J-ND) • Co-exists with printers using an A/B switchbox • No special interface cards required • Operates on 9 volt battery (not included, recommend P145-ND) • Supports ALL Xilinx Serial PROMs • Simple user interface. Easy to use software • Supported under DOS 2.2 greater, Windows 95/98, and Windows NT 4.0 • Supports both Intel Hex and Binary files generated by Xilinx compilers • **Software not included. Requires downloading from www.roman-jones.com • Free updates also available via FTP download**



Description	Digi-Key Part No.	Price Each
Programmers		
SPROM Programmer with 8-Dip Machine Pin Socket	SPROM-MPS-ND	119.95
SPROM Programmer with 8-Dip ZIF Socket	SPROM-TZS-ND	139.95
Adapters		
8-Pin Dip to 8-Pin SOIC/VOIC	SA1-ND	44.95
8-Pin Dip to 44-Pin VQFP	SA2-ND	95.95
8-Pin Dip to 20-Pin PLCC	SA3-ND	49.95
8-Pin Dip to 20-Pin SOIC	SA4-ND	54.95
8-Pin Dip to 44-Pin PLCC	SA5-ND	64.95

CPLDs (Complex Programmable Logic Devices)

Atmel offers a broad range of high-density, low-power, and cost-effective solutions enabling designers to create products that are "just what the market ordered." Based on a standard architecture, which uses industry standard development tools, Atmel's CPLDs offer the unique low-power or "L" feature while providing 100% connectivity. These devices are processed with Atmel's proprietary 0.65-micron processes.

The ATF750/C CPLDs are based on a 22V10-type architecture and provide market-leading capacity and flexibility in a 22V10 footprint with twice the registers and additional features for better logic utilization.

The ATV2500/B OTP CPLDs offer 24 I/O pins, 48 registers, 17 product terms per macro, and 100% connectivity.

The ATF1500 Series is targeted at wider logic density, with higher number of I/O's. This family has devices from 44 to 160 pins, and 32 to 96 I/O's. High connectivity, and flexible architecture make these parts highly suitable for system design. In system programmability in the larger devices allow for reconfiguration even after the device is in the system.

Standard Development Tools

Atmel's philosophy is that designers should be able to use known development tools. Third-party design tools such as Synario™, ABEL™, CUPL™, PPLDesigner-XL™, LOG/iC™, and PLDSyn™ support Atmel's EPLDs. Also Atmel-specific versions of the popular Synario, ABEL, and CUPL design tools are offered. In addition, workstation support is available on popular platforms with Viewlogic, MINC, Cadence, Mentor, and Synopsys.

Voltage	ISP	Tpd (ns)	Registers	Macro-cells	Usable Gates	Power Option	Memory Type	Package Type	Digi-Key Part No.	Price Each			Atmel Part No.
										1	25	100	
ATF750 Series													
5.0	No	15	20	10	750	Standard	Flash	28-PLCC	ATF750C-15JC-ND	3.31	2.30	2.01	ATF750C-15JC
5.0	No	15	20	10	750	Standard	Flash	24-DIP	ATF750C-15PC-ND	3.31	2.30	2.01	ATF750C-15PC
5.0	No	15	20	10	750	Standard	Flash	24-SOIC	ATF750C-15SC-ND	3.31	2.30	2.01	ATF750C-15SC
5.0	No	15	20	10	750	Low	Flash	28-PLCC	ATF750CL-15JC-ND	3.31	2.30	2.01	ATF750CL-15JC
5.0	No	15	20	10	750	Low	Flash	24-DIP	ATF750CL-15PC-ND	3.31	2.30	2.01	ATF750CL-15PC
5.0	No	15	20	10	750	Low	Flash	24-SOIC	ATF750CL-15SC-ND	3.31	2.30	2.01	ATF750CL-15SC
ATV2500 Series													
5.0	No	15	48	24	2500	Standard	OTP	44-PLCC	ATV2500B-15JC-ND	7.98	5.99	5.31	ATV2500B-15JC
5.0	No	20	48	24	2500	Low	OTP	44-PLCC	ATV2500BL-20JC-ND	7.52	5.64	5.01	ATV2500BL-20JC
5.0	No	20	48	24	2500	Quarter	OTP	44-PLCC	ATV2500BQ-20JC-ND	7.52	5.64	5.01	ATV2500BQ-20JC
5.0	No	25	48	24	2500	Quarter	OTP	40-DIP	ATV2500BQ-25PC-ND	6.34	4.76	4.22	ATV2500BQ-25PC
5.0	No	25	48	24	2500	Qtr & Low	OTP	44-PLCC	ATV2500BQL-25JC-ND	6.50	4.88	4.33	ATV2500BQL-25JC
ATF1500 Series													
5.0	No	10	32	32	1500	Standard	Flash	44-TQFP	ATF1500A-10AC-ND	2.81	1.94	1.70	ATF1500A-10AC
5.0	No	10	32	32	1500	Standard	Flash	44-PLCC	ATF1500A-10JC-ND	2.81	1.94	1.70	ATF1500A-10JC
2.7	No	15	32	32	1500	Standard	Flash	44-TQFP	ATF1500ABV-15AC-ND	2.81	1.94	1.70	ATF1500ABV-15AC
2.7	No	15	32	32	1500	Standard	Flash	44-PLCC	ATF1500ABV-15JC-ND	2.81	1.94	1.70	ATF1500ABV-15JC
5.0	Yes	10	32	32	1500	Standard	Flash	44-TQFP	ATF1502AS-10AC-ND	2.81	1.94	1.70	ATF1502AS-10AC44
5.0	Yes	10	32	32	1500	Standard	Flash	44-PLCC	ATF1502AS-10JC-ND	2.81	1.94	1.70	ATF1502AS-10JC44
5.0	Yes	10	64	64	3000	Standard	Flash	44-TQFP	ATF1504AS-10AC44-ND	3.53	2.21	2.14	ATF1504AS-10AC44
5.0	Yes	10	64	64	3000	Standard	Flash	44-PLCC	ATF1504AS-10JC44-ND	3.84	2.40	2.32	ATF1504AS-10JC44
5.0	Yes	10	64	64	3000	Standard	Flash	68-PLCC	ATF1504AS-10JC68-ND	4.52	3.39	3.28	ATF1504AS-10JC68
5.0	Yes	10	64	64	3000	Standard	Flash	84-PLCC	ATF1504AS-10JC84-ND	4.86	3.65	3.53	ATF1504AS-10JC84
5.0	Yes	10	64	64	3000	Standard	Flash	100-TQFP	ATF1504AS-10AC100-ND	4.56	3.42	3.31	ATF1504AS-10AC100
5.0	Yes	15	64	64	3000	Standard	Flash	100-TQFP	ATF1504AS-15AC100-ND	4.28	3.21	3.11	ATF1504AS-15AC100
5.0	Yes	10	64	64	3000	Standard	Flash	100-PQFP	ATF1504AS-10QC100-ND	6.20	4.50	4.13	ATF1504AS-10QC100
5.0	Yes	20	64	64	3000	Low	Flash	44-TQFP	ATF1504ASL-20AC44-ND	3.74	2.34	2.27	ATF1504ASL-20AC44
5.0	Yes	20	64	64	3000	Low	Flash	44-PLCC	ATF1504ASL-20JC44-ND	4.03	2.52	2.44	ATF1504ASL-20JC44
5.0	Yes	20	64	64	3000	Low	Flash	68-PLCC	ATF1504ASL-20JC68-ND	4.72	3.54	3.43	ATF1504ASL-20JC68
5.0	Yes	20	64	64	3000	Low	Flash	84-PLCC	ATF1504ASL-20JC84-ND	5.08	3.81	3.69	ATF1504ASL-20JC84
5.0	Yes	20	64	64	3000	Low	Flash	100-TQFP	ATF1504ASL20AC100-ND	4.78	3.59	3.47	ATF1504ASL-20AC100
5.0	Yes	20	64	64	3000	Low	Flash	100-PQFP	ATF1504ASL20QC100-ND	6.44	4.67	4.29	ATF1504ASL-20QC100
3.3	Yes	15	64	64	3000	Standard	Flash	44-TQFP	ATF1504ASV-15AC44-ND	3.74	2.34	2.27	ATF1504ASV-15AC44
3.3	Yes	15	64	64	3000	Standard	Flash	44-PLCC	ATF1504ASV-15JC44-ND	4.03	2.52	2.44	ATF1504ASV-15JC44
3.3	Yes	15	64	64	3000	Standard	Flash	68-PLCC	ATF1504ASV-15JC68-ND	4.72	3.54	3.43	ATF1504ASV-15JC68
3.3	Yes	15	64	64	3000	Standard	Flash	84-PLCC	ATF1504ASV-15JC84-ND	5.08	3.81	3.69	ATF1504ASV-15JC84
3.3	Yes	15	64	64	3000	Standard	Flash	100-TQFP	ATF1504ASV15AC100-ND	4.78	3.59	3.47	ATF1504ASV-15AC100
3.3	Yes	15	64	64	3000	Standard	Flash	100-PQFP	ATF1504ASV15QC100-ND	6.44	4.67	4.29	ATF1504ASV-15QC100
3.3	Yes	20	64	64	3000	Low	Flash	44-TQFP	ATF1504ASVL20AC44-ND	3.96	2.48	2.40	ATF1504ASVL-20AC44
3.3	Yes	20	64	64	3000	Low	Flash	44-PLCC	ATF1504ASVL20JC44-ND	3.52	2.64	2.56	ATF1504ASVL-20JC44
3.3	Yes	20	64	64	3000	Low	Flash	68-PLCC	ATF1504ASVL20JC68-ND	4.94	3.71	3.59	ATF1504ASVL-20JC68
3.3	Yes	20	64	64	3000	Low	Flash	84-PLCC	ATF1504ASVL20JC84-ND	5.30	3.98	3.85	ATF1504ASVL-20JC84
3.3	Yes	20	64	64	3000	Low	Flash	100-TQFP	ATF1504ASVL20AC10-ND	5.00	3.75	3.63	ATF1504ASVL-20AC100
5.0	Yes	10	128	128	6000	Standard	Flash	84-PLCC	ATF1508AS-10JC84-ND	10.85	8.75	8.02	ATF1508AS-10JC84
5.0	Yes	10	128	128	6000	Standard	Flash	100-TQFP	ATF1508AS-10AC100-ND	12.40	10.00	9.17	ATF1508AS-10AC100
5.0	Yes	10	128	128	6000	Standard	Flash	100-PQFP	ATF1508AS-10QC100-ND	12.33	10.78	9.48	ATF1508AS-10QC100
5.0	Yes	10	128	128	6000	Standard	Flash	160-PQFP	ATF1508AS-10QC160-ND	15.34	13.40	11.79	ATF1508AS-10QC160
5.0	Yes	20	128	128	6000	Low	Flash	84-PLCC	ATF1508ASL-20JC84-ND	6.38	4.63	4.25	ATF1508ASL-20JC84
5.0	Yes	20	128	128	6000	Low	Flash	100-TQFP	ATF1508ASL20AC100-ND	7.07	5.70	5.23	ATF1508ASL-20AC100
5.0	Yes	20	128	128	6000	Low	Flash	100-PQFP	ATF1508ASL20QC100-ND	7.85	6.33	5.80	ATF1508ASL-20QC100
5.0	Yes	20	128	128	6000	Low	Flash	160-PQFP	ATF1508ASL20QC160-ND	10.24	8.26	7.57	ATF1508ASL-20QC160
3.3	Yes	15	128	128	6000	Standard	Flash	84-PLCC	ATF1508ASV-15JC84-ND	7.24	5.83	5.35	ATF1508ASV-15JC84
3.3	Yes	15	128	128	6000	Standard	Flash	100-TQFP	ATF1508ASV15AC100-ND	8.55	6.89	6.32	ATF1508ASV-15AC100
3.3	Yes	15	128	128	6000	Standard	Flash	100-PQFP	ATF1508ASV15QC100-ND	9.31	7.50	6.88	ATF1508ASV-15QC100
3.3	Yes	15	128	128	6000	Standard	Flash	160-PQFP	ATF1508ASV15QC160-ND	11.68	9.42	8.64	ATF1508ASV-15QC160
3.3	Yes	20	128	128	6000	Low	Flash	100-TQFP	ATF1508ASVL20AC10-ND	8.55	6.89	6.32	ATF1508ASVL-20AC100

AT91 ARM Thumb Microcontrollers

The best combination of low-power consumption, 32-bit performance and 16-bit system cost.

The AT91 series provides the optimal combination of processing power, peripherals and memory blocks for demanding real-time applications that require high performance on a tight power budget. They utilize the ARM7DTMI 32-bit RISC processor core, an industry leader in MIPS/Watt. Its wide range of Real Time Operating Systems and sophisticated application development tools minimize the risk and time taken to bring new applications to the market.

Features:

- Optimal combination of large SRAM, ROM and Flash memories
- Wide choice of on-chip peripherals
- 3-stage instruction execution pipeline for high instruction throughout
- Single-cycle memory access through EBI
- Hardware multiplier-plus-barrel shifter gives DSP capability
- PDC channels (on-chip DMA) free the processor for the application
- Advanced power management provides idle mode and disables unused peripherals
- Low-latency Advanced Interrupt Controller
- Banked registers provide separate stacks and call/returns in interrupt modes
- Wide choice of Real Time Operating Systems for ease of development of real-time applications
- Extensive application development tools for rapid, low-risk software development
- Widely used in embedded GPS systems, hand-held communications devices, wireless networking, industrial automation

AT91 ARM Thumb Evaluation Kit

The EB40 and EB63 Evaluation Kits are complete low-cost evaluation platforms, which enable real-time code development and exploration of the AT91 ARM Thumb microcontrollers. The kit includes:

- Sample microcontroller (AT91M40800 for the EB40 or the AT91M63200 for the EB63)
- Evaluation Board with the Angel debug monitor
- AT91 Getting Started CD-ROM with data sheets and examples
- DB9 serial cable
- 2.1mm power jack (power supply not included)
- Evaluation copies of compilers and debuggers from Green Hills and ARM
- SRAM
- Flash
- 2 Serial ports
- Reset button & controller
- Push buttons
- LEDs
- 20-pin JTAG ICE interface connector
- Voltage regulation
- Clock generator
- Board self-test program
- Angel debug monitor
- Current consumption measurement capability
- Expansion slots for add-on cards with user specific memories and peripherals

AT91EB40-ND	Evaluation Kit for the AT91 40 series	**$216.05**
AT91EB63-ND	Evaluation Kit for the AT91 63 and 43 series	**$250.00**
AT91MEC01-ND	Memory Extension card for EB40 and EB63	**$300.00**

SRAM Bytes	Flash Bytes	Hardware Multiplier	I/O Pins	Multi-processor I/F	16-Bit Timers	SPI	USART	PDC Channels	Voltage Range (V)	Speed	Operating Temperature Range	Package	Digi-Key Part No.	Price Each		
														1	25	100
8K	—	1	81	—	3	—	2	4	1.8-3.6	33Mhz	-40°C to 85°C	100-TQFP	AT91M40800-33AI-ND	10.71	8.63	7.92
8K	2M	1	85	—	3	—	2	4	2.7-3.6	33Mhz	-40°C to 85°C	120-BGA	AT91F40816-33CI-ND	32.37	28.28	24.87
2K + 1K	—	1	144	1	6	1	3	8	2.7-3.6	25Mhz	-40°C to 85°C	176-TQFP	AT91M63200-25AI-ND	18.83	15.38	13.19
3K	—	1	115	—	6	1	3	8	2.7-3.6	25Mhz	-40°C to 85°C	144-BGA	AT91M43300-25CI-ND	18.83	15.38	13.19
136K	—	1	81	—	3	—	2	4	2.7-3.6	33Mhz	-40°C to 85°C	100-TQFP	AT91R40807-33AI-ND	30.32	24.75	21.24

FPGA's (Field Programmable Gate Arrays)

AT40K SERIES FPGAs

Atmel's AT40K Series coprocessor FPGAs range from 5K to 50K usable gates, and are designed for high density, compute-intensive DSP and other fast logic designs. The AT40K family solves the Logic vs. SRAM trade-off problem by providing fast, flexible, distributed 10ns FreeRAM™ without using valuable logic resources. Structured logic functions, including variable array multipliers can be implemented directly in core cells without using any bussing resources - providing dramatic improvements in speed, utilization, power and system cost.

The AT40K family has the ability to implement Cache Logic design, where part of the FPGA can be reprogrammed without loss of register data, while the remainder of the FPGA continues to operate without disruption. This is ideal for building adaptive filters, variable coefficient multipliers and other designs where the datapath can change to increase system performance.

All Atmel FPGAs can be designed using industry standard CAE tools for schematics, VHDL and Verilog on a PC, Sun, or HP workstation. Software tools are available on Atmel's website at: http://www.atmel.com/fpga_software.html

Features:

- Distributed, single/dual port 10ns SRAM, independent of logic cells
- Up to 384 PCI compliant I/Os
- Mixed 3V/5V capability
- Architecture optimized for efficient, ultrafast array multipliers
- Cache Logic® dynamic full/partial reconfigurability in-system
- Eight global clocks
- Efficient, industry-standard design tools, optimized for synthesis
- QuickChange™ tools for adaptive hardware designs
- Variety of surface mount packages
- All devices in family are pin-compatible

Package Options	Usable Gates	Cells	Ram (Bits)	I/O (Max)	Speed (ns)	Vcc	Digi-Key Part No.	Price Each 1	25	100
84-PLCC	5K-10K	256	2,048	62	2	5.0	AT40K05-2AJC-ND	24.90	21.75	19.13
144-TQFP	5K-10K	256	2,048	114	2	5.0	AT40K05-2BQC-ND	27.89	24.36	21.42
208-PQFP	5K-10K	256	2,048	128	2	5.0	AT40K05-2DQC-ND	28.64	25.02	22.00
84-PLCC	5K-10K	256	2,048	62	3	3.3	AT40K05LV-3AJC-ND	16.68	14.58	12.82
144-TQFP	5K-10K	256	2,048	114	3	3.3	AT40K05LV-3BQC-ND	18.59	16.24	14.28
208-PQFP	5K-10K	256	2,048	128	3	3.3	AT40K05LV-3DQC-ND	19.09	16.68	14.67
84-PLCC	10K-20K	576	4,608	62	2	5.0	AT40K10-2AJC-ND	46.07	40.24	35.39
144-TQFP	10K-20K	576	4,608	114	2	5.0	AT40K10-2BQC-ND	51.63	45.10	39.66
208-PQFP	10K-20K	576	4,608	161	2	5.0	AT40K10-2DQC-ND	52.95	46.26	40.68
84-PLCC	10K-20K	576	4,608	62	3	3.3	AT40K10LV-3AJC-ND	24.90	21.75	19.13
144-TQFP	10K-20K	576	4,608	114	3	3.3	AT40K10LV-3BQC-ND	27.89	24.36	21.42
208-PQFP	10K-20K	576	4,608	161	3	3.3	AT40K10LV-3DQC-ND	28.64	25.02	22.00
84-PLCC	20K-30K	1024	8,192	62	2	5.0	AT40K20-2AJC-ND	77.03	65.48	62.65
144-TQFP	20K-30K	1024	8,192	114	2	5.0	AT40K20-2BQC-ND	86.25	73.32	70.15
208-PQFP	20K-30K	1024	8,192	161	2	5.0	AT40K20-2DQC-ND	88.58	75.29	72.05
84-PLCC	20K-30K	1024	8,192	62	3	3.3	AT40K20LV-3AJC-ND	41.50	36.25	31.88
144-TQFP	20K-30K	1024	8,192	114	3	3.3	AT40K20LV-3BQC-ND	46.48	40.60	35.70
208-PQFP	20K-30K	1024	8,192	161	3	3.3	AT40K20LV-3DQC-ND	47.73	41.69	36.66
144-TQFP	40K-50K	2304	18,432	114	2	5.0	AT40K40-2BQC-ND	199.45	175.38	165.06
208-PQFP	40K-50K	2304	18,432	161	2	5.0	AT40K40-2DQC-ND	204.81	180.10	169.50
144-TQFP	40K-50K	2304	18,432	114	3	3.3	AT40K40LV-3BQC-ND	99.00	84.15	80.52
208-PQFP	40K-50K	2304	18,432	161	3	3.3	AT40K40LV-3DQC-ND	103.50	87.98	84.18

FPGA Configuration Memory

In-System Reprogrammable Serial EEPROMs

The AT17 Series FPGA Configuration EEPROMs (Configurators) provide an easy-to-use, cost-effective configuration memory for Field Programmable Gate Arrays. The AT17 Series family uses a simple serial-access procedure to configure one or more FPGA devices. The AT17 Series organization supplies enough memory to configure one or multiple smaller FPGAs. The AT17 Series Configurators can be programmed with industry-standard programmers or Atmel's ATDH2200E Programming System.

Features:

- EE Reprogrammable Serial Memories Designed to Store Configuration Programs for Field Programmable Gate Arrays (FPGAs)
- In-System Programmable via 2-wire Bus
- Simple Interface to SRAM FPGAs
- Compatible with Atmel AT6000, AT40K FPGAs, Altera FLEX® Devices, ORCA® FPGAs, Xilinx XC3000, XC4000, XC5200, Spartan® , Virtex® FPGAs
- Cascadable Read Back to Support Additional Configurations or Future Higher-density Arrays
- Low-power CMOS EEPROM Process
- Programmable Reset Polarity
- Available in PLCC Package (Pin Compatible Across Product Family)
- Emulation of Atmel's AT24CXXX Serial EEPROMs
- Available in 3.3V ± 10% LV and 5V ± 5% C Versions
- System-friendly READY Pin
- Low-power Standby Mode

Package Options	Memory Size	Fmax	Vcc	Digi-Key Part No.	Price Each 1	25	100
20-PLCC	64Kbit	12.5 MHz	5.0	AT17C65-10JC-ND	5.40	4.05	3.92
8-DIP	64Kbit	12.5 MHz	5.0	AT17C65-10PC-ND	4.50	3.38	3.27
8-SOIC	65Kbit	12.5MHz	5.0	AT17C65-10NC-ND *NEW!*	4.73	2.96	2.86
8-SOIC	65Kbit	12.5MHz	5.0	AT17C65-10NI-ND *NEW!*	5.23	3.27	3.17
20-PLCC	64Kbit	10 MHz	3.3	AT17LV65-10JC-ND	6.48	4.86	4.31
8-DIP	64Kbit	10 MHz	3.3	AT17LV65-10PC-ND	5.40	4.05	3.92
8-SOIC	64Kbit	10 MHz	3.3	AT17LV65-10NC-ND *NEW!*	4.74	3.56	3.44
8-SOIC	64Kbit	10 MHz	3.3	AT17LV65-10NI-ND *NEW!*	5.90	4.43	4.28
20-PLCC	128Kbit	12.5 MHz	5.0	AT17C128-10JC-ND	8.64	6.27	5.75
8-DIP	128Kbit	12.5 MHz	5.0	AT17C128-10PC-ND	7.20	5.22	4.79
8-SOIC	128Kbit	12.5 MHz	5.0	AT17C128-10NC-ND *NEW!*	6.26	4.70	4.17
8-SOIC	128Kbit	12.5 MHz	5.0	AT17C128-10NI-ND *NEW!*	6.98	5.24	4.65
20-PLCC	128Kbit	10 MHz	3.3	AT17LV128-10JC-ND	9.32	7.52	6.89
8-DIP	128Kbit	10 MHz	3.3	AT17LV128-10PC-ND	8.64	6.27	5.75
8-SOIC	128Kbit	10 MHz	3.3	AT17LV128-10NC-ND *NEW!*	7.52	5.46	5.01
8-SOIC	128Kbit	10 MHz	3.3	AT17LV128-10NI-ND *NEW!*	8.38	6.08	5.58
20-PLCC	256Kbit	12.5 MHz	5.0	AT17C256-10JC-ND	15.55	12.53	11.50
8-DIP	256Kbit	12.5 MHz	5.0	AT17C256-10PC-ND	12.96	10.44	9.58
8-SOIC	256Kbit	12.5 MHz	5.0	AT17C256-10NC-ND *NEW!*	22.58	15.33	14.49
8-SOIC	256Kbit	12.5 MHz	5.0	AT17C256-10NI-ND *NEW!*	12.56	10.13	9.29
20-PLCC	256Kbit	10 MHz	3.3	AT17LV256-10JC-ND	17.21	15.04	13.23
8-DIP	256Kbit	10 MHz	3.3	AT17LV256-10PC-ND	15.55	12.53	11.50
8-SOIC	256Kbit	10 MHz	3.3	AT17LV256-10NC-ND *NEW!*	13.54	10.91	10.01
8-SOIC	256Kbit	10 MHz	3.3	AT17LV256-10NI-ND *NEW!*	15.07	12.14	11.14
20-PLCC	512Kbit	15 MHz	5.0	AT17C512-10JC-ND	17.93	15.66	13.77
20-PLCC	512Kbit	15 MHz	3.3	AT17LV512-10JC-ND	20.92	18.27	16.07
20-PLCC	1-Mbit	15 MHz	5.0	AT17C010-10JC-ND	23.90	20.88	18.36
20-PLCC	1-Mbit	15 MHz	3.3	AT17LV010-10JC-ND	28.68	25.06	22.04
20-PLCC	2-Mbit	12.5 MHz	5.0	AT17C020-10JC-ND	34.36	30.02	26.40
20-PLCC	2-Mbit	12.5 MHz	3.3	AT17LV020-10JC-ND	41.23	36.02	31.68

FPGA Configurator Programming Kit (Enhanced) ATDH2200E

Atmel offers a low cost development kit for the designer who wishes to begin working with the AT17 Series of ISP FPGA configuration memories. The kit allows designers to read, write and in-system program any of Atmel's AT17 series family members directly from a PC. All standard file input formats produced by the various FPGA vendors are supported. The AT17 series devices can be programmed directly on the programming board or the board can be used to facilitate in-system programming of the AT17 series devices in the target application (cable provided). The ATDH2200E supports all Atmel AT17 series configuration memories.

FEATURES:

Hardware:

- Supports Programming of all AT17C/LV Series Devices
- Connection to Allow In-System Prog. (ISP)
- 5.0V or 3.0V Supply

Software:

- CPS - Configurator Programming System
- GUI-based Interface
- Supports Win95/Win98/WinNT
- Online Help
- Supports Programming Reset Polarity
- Verification Routines to Validate Programming
- Accepts HEX, MCS, POF, RBF and BST File Formats

System Contents:

- ATDH2200 Programming Board
- ATDH2222 20-pin PLCC Adapter
- CPS Software
- ATDH2200E Datasheet
- ATDH2200E Programming Kit User Guide
- Standard (PC Printer Port) Parallel Cable
- 10-pin Ribbon Cable for ISP
- 9V DC, 200 mA, 2.1 mm Center Positive Power Supply
- Sample AT17C/LV Devices

ATDH2200E-ND FPGA Configurator Program Kit **$384.25**

NEW! FPSLIC — Field Programmable System Level Integrated Circuit

FPSLIC — FPGA + AVR in one Package!

The AT94K Series (FPSLIC family) is a combination of the popular Atmel AT40K series SRAM FPGAs and the high-performance Atmel AVR 8-bit RISC microcontroller with standard peripherals. Extensive data and instruction SRAM as well as device control and management logic are included on this monolithic device, fabricated on Atmel's 0.35µ five-layer metal CMOS process.

5,000 to 40,000 Gates of Patented SRAM-based AT40K FPGA with FreeRAM™: • 2K to 18.4K Bits of Distributed Single/Dual Port FPGA User SRAM • High-performance DSP Optimized FPGA Core Cell • Dynamically Reconfigurable In-System – FPGA Configuration Access. Available On-chip from AVR Microcontroller Core to Support Cache Logic ® Designs • Very Low Static and Dynamic Power Consumption – Ideal for Portable and Handheld Applications

Patented AVR Enhanced RISC Architecture: • 120+ Powerful Instructions • Most Single Clock Cycle Execution • High-performance Hardware Multiplier for DSP-based Systems • Approaching 1 MIPS per MHz Performance • C Code Optimized Architecture with 32 x 8 General-purpose Internal Registers • Low-power Idle, Power-save, and Power-down Modes • 100 µA Standby and Typical 2-3 mA per MHz Active

Up to 36K Bytes of Dynamically Allocated Instruction and Data SRAM: • Up to 16K x 16 Internal 15ns Instructions SRAM • Up to 16K x 8 Internal 15ns Data SRAM

AVR Fixed Peripherals: • Industry-standard 2-wire Serial Interface • Two Programmable Serial UARTs • Two 8-bit Timer/Counters with Separate Prescaler and PWM • One 16-bit Timer/Counter with Separate Prescaler, Compare, Capture Modes and Dual 8-, 9- or 10-bit PWM

Support for FPGA Custom Peripherals: • AVR Peripheral Control – 16 Decoded AVR Address Lines Directly Accessible to FPGA • FPGA Macro Library of Custom Peripherals

16 FPGA Supplied Internal Interrupts to AVR

Up to Four External Interrupts to AVR

8 Global FPGA Clocks: • Two FPGA Clocks Driven from AVR Logic • FPGA Global Clock Access Available from FPGA Core

Multiple Oscillator Circuits: • Programmable Watchdog Timer with On-chip Oscillator • Oscillator to AVR Internal Clock Circuit • Software-selectable Clock Frequency • Oscillator to Timer/Counter for Real-time Clock

Vcc: 3.0V to 3.6V

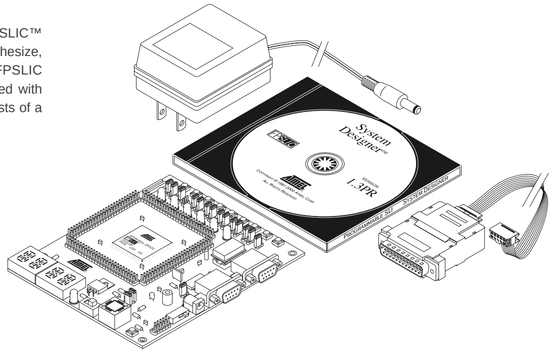
3.3V 33 MHz PCI Compliant FPGA I/O: • 20 mA Sink/Source High-performance I/O Structures • All FPGA I/O Individually Programmable

State-of-the-art Integrated PC-based Software Suite including Co-verification

FPGA Gates	FPGA Core Cells	FPGA SRAM Bits	FPGA Registers (Total)	Max. FPGA User I/O	AVR Programable I/O Lines	Program SRAM Bytes	Operating Temp.	Package	Digi-Key Part Number	Price Each 1	25	100
40K	2304	18432	2862	84	16	20K-32K	Commerical	144-PQFP	AT94K40AL-25BQC-ND	97.50	82.88	79.30
40K	2304	18432	2862	120	16	20K-32K	Commerical	208-PQFP	AT94K40AL-25DQC-ND	102.38	87.02	83.27

NEW! ATSTK94 *FPSLIC* Starter Kit

The ATSTK94 is a low-cost development kit for the designer who wishes to begin working with Atmel's award-winning FPSLIC™ (FIELD PROGRAMMABLE SYSTEM-LEVEL INTEGRATION) AT94K family of devices. The kit allows designers to design, synthesize, simulate and program Atmel's new FPSLIC products. A comprehensive tutorial takes designers through the complete FPSLIC development process. The starter kit, which runs on PC Windows based platforms, includes everything needed to get started with FPSLIC, including all software, tutorials, hands on examples, complete documentation, boards, parts and cables. The kit consists of a starter kit board that includes the following.



Features:

- ATK94K40 Device
- AT17LV010 Device
- ISP Port for Direct Download from PC
- Push-button Switches and LEDs
- 4 Alphanumerc LED Displays
- 2 RS232 Transmit/Receive Ports
- 18.432 MHz, 4 MHz and 32 kHz Clock Sources
- Power Mgmt. Circuitry (9V Power Supply included)
- Access to all FPSLIC Pins via Headers
- Push-button Reset
- Configurator Prog. Cable for AT17LV010 In-Syst. Prog.
- The System Designer™ Software (4-Month License)

Software:

- Full-featured Version of the FPSLIC Dev. Tool
- Co-verification for Complete Hardware (VHDL/Verilog) or Software (C/ASM) Interactive Simulation
- Comprehensive FPGA Tool Suite
- ModelTech MTI HDL Simulator
- Exemplar HDL Synthesis
- AVR Studio Complete Development and Debug Environment
- AVR Instruction Set Simulator (ISS)
- 1-Month AVR C Compiler Evaluation License

ATSTK94-ND FPSLIC Starter Kit **$537.95**

TinyAVR™ 8-Bit Microcontrollers

Features: • Low cost • Small package sizes • Streamlined feature sets • Tailored to meet the specific needs of a wide variety of applications • High-performance and low-power 8-bit RISC architecture • 90 powerful instructions - most single clock cycle execution • 32 x 8 general purpose working registers • Low-power Idle and Power-down Modes • Programming lock for Flash program and EEPROM data security • External and internal interrupt sources • Low-power, high-speed CMOS process technology • Fully static operation

ATtiny12L Series:

• In-system programmable via SPI Port • Enhanced Power-on Reset Circuit • Internal calibrated RC oscillator

ATtiny15L Series:

• In-System programmable via SPI Port • Enhanced Power-on Reset Circuit • Programmable Brown-out Detection Circuit • Internal, Calibrated 1.6MHz Tuneable Oscillator • Internal 25.6MHz clock Generator for Timer/Counter • External and Internal Interrupt Sources • Low-power Idle and Power-down Modes

ATtiny28L/ATiny 28V Series:

• Low-power, Idle and Power-down Modes • External and Internal Interrupt Sources • Power-on Reset Circuit with Programmable Start-up Time • Internal Calibrated RC Oscillator

Power Consumption at 4MHz, 3V, 25°C:

Series	ATtiny11 & ATtiny12L	ATtiny15L & ATtiny28L
Active:	2.2mA Max.	3.0mA Max.
Idle Mode:	0.5mA Max.	1.2mA Max.
Power Down Mode:	<1µA Typ.	<1µA Typ.

Memory Size (Bytes) Flash	EEPROM	ISP	I/O Pins	Timers	Analog Comp.	On Chip Osc.	Vcc (V)	Clock Speed (MHz)	Operating Temp. Range †	Pkg.	Digi-Key Part No.	Price Each 1	25	100
1K	—	No	6	1	Yes	Yes	4.0 - 5.5	0-6	Commercial	8-Dip	ATTINY11-6PC-ND	1.57	.93	.84
1K	—	No	6	1	Yes	Yes	4.0 - 5.5	0-6	Industrial	8-Dip	ATTINY11-6PI-ND	1.68	1.00	.90
1K	—	No	6	1	Yes	Yes	4.0 - 5.5	0-6	Commercial	8-SOIC	ATTINY11-6SC-ND	1.57	.93	.84
1K	—	No	6	1	Yes	Yes	4.0 - 5.5	0-6	Industrial	8-SOIC	ATTINY11-6SI-ND	1.68	1.00	.90
1K	64	Yes	6	1	Yes	Yes	2.7 - 5.5	0-4	Commercial	8-Dip	ATTINY12L-4PC-ND	1.88	1.12	1.01
1K	64	Yes	6	1	Yes	Yes	2.7 - 5.5	0-4	Industrial	8-Dip	ATTINY12L-4PI-ND	1.99	1.18	1.07
1K	64	Yes	6	1	Yes	Yes	2.7 - 5.5	0-4	Commercial	8-SOIC	ATTINY12L-4SC-ND	1.88	1.12	1.01
1K	64	Yes	6	1	Yes	Yes	2.7 - 5.5	0-4	Industrial	8-SOIC	ATTINY12L-4SI-ND	1.99	1.18	1.07
1K	64	Yes	6 (4-Ch. 10-Bit A/D)	2	Yes	Yes	2.7 - 5.5	1.6	Commercial	8-Dip	ATTINY15L-1PC-ND *NEW!*	2.74	1.63	1.47
1K	64	Yes	6 (4-Ch. 10-Bit A/D)	2	Yes	Yes	2.7 - 5.5	1.6	Industrial	8-Dip	ATTINY15L-1PI-ND *NEW!*	2.52	1.75	1.53
1K	64	Yes	6 (4-Ch. 10-Bit A/D)	2	Yes	Yes	2.7 - 5.5	1.6	Commercial	8-SOIC	ATTINY15L-1SC-ND *NEW!*	2.74	1.63	1.47
1K	64	Yes	6 (4-Ch. 10-Bit A/D)	2	Yes	Yes	2.7 - 5.5	1.6	Industrial	8-SOIC	ATTINY15L-1SI-ND *NEW!*	2.52	1.75	1.53
2K	—	No	20	1	Yes	Yes	2.7 - 5.5	0-4	Commercial	28-Dip	ATTINY28L-4PC-ND	1.88	1.12	1.01
2K	—	No	20	1	Yes	Yes	2.7 - 5.5	0-4	Industrial	28-Dip	ATTINY28L-4PI-ND	1.99	1.18	1.07
2K	—	No	20	1	Yes	Yes	2.7 - 5.5	0-4	Commerical	32-TQFP	ATTINY28L-4AC-ND *NEW!*	2.07	1.23	1.11
2K	—	No	20	1	Yes	Yes	2.7-5.5	0-4	Industrial	32-TQFP	ATTINY28L-4AI-ND *NEW!*	2.18	1.30	1.17
2K	—	No	20	1	Yes	Yes	1.8-5.5	0-1	Commerical	32-TQFP	ATTINY28V-1AC-ND *NEW!*	2.16	1.28	1.16
2K	—	No	20	1	Yes	Yes	1.8-5.5	0-1	Industrial	32-TQFP	ATTINY28V-1AI-ND *NEW!*	2.30	1.37	1.23
2K	—	No	20	1	Yes	Yes	1.8-5.5	0-1	Commercial	28-Dip	ATTINY28V-1PC-ND *NEW!*	1.96	1.17	1.05
2K	—	No	20	1	Yes	Yes	1.8-5.5	0-1	Industrial	28-Dip	ATTINY28V-1PI-ND *NEW!*	2.10	1.25	1.13

† Commercial Temperature Range: 0°C to +70°C (+32°F to +159°F); Industrial Temperature Range: -40°C to +85°C (-40°F to +185°F)

AVR 8-Bit RISC FLASH Microcontrollers

Atmel's new AVR microcontrollers have a RISC core running single cycle instructions and a well-defined I/O structure that limits the need for external components. Internal oscillators, timers, UART, SPI, pull-up resistors, pulse width modulation, ADC, analog comparator and watch dog timers are some of the features you will find in AVR devices. AVR instructions are tuned to decrease the size of the program whether the code is written in C or Assembly. With on-chip in-system programmable Flash and EEPROM, the AVR is a perfect choice in order to optimize cost and get product to the market quickly.

The AVR is a low-power CMOS 8-bit series of microcontrollers based on the AVR RISC architecture. By executing powerful instructions in a single clock cycle, they achieve throughputs approaching 1 MIPS per MHz allowing the system designer to optimize power consumption versus processing speed. The AVR core combines a rich instruction set with the 32 general purpose working registers. All 32 registers are directly connected to the Arithmetic Logic Unit (ALU), allowing two independent registers to be accessed in one single instruction executed in one clock cycle. The resulting architecture is more code efficient while achieving throughputs up to ten times faster than conventional CISC microcontrolllers.

General Features: • Utilizes the AVR high-performance and low-power RISC architecture • 118 powerful instructions – most single clock cycle execution (89 instructions in AT90S1200 Series) • 32 x 8 general purpose working registers • Programming Lock for Flash program and EEPROM data security • Low-power idle and power down modes • External and internal interrupt sources • Low-power, high speed CMOS process technology • Fully static operation

Additional Features:

AT90S1200 Series: • Selectable on-chip RC Oscillator for Zero External Components • 1200A comes with the RCEN fuse programmed

AT90S2323 and AT90S2343 Series:

• Power-on Reset Circuit • Selectable On-chip RC Oscillator on the 2343 Series

AT90S4433 Series:

• Brown-Out Reset Circuit • Enhanced Power-on Reset Circuit

AT90S4434 and AT90S8535 Series:

• Real Time Clock (RTC) with separate oscillator & counter mode • Three Sleep Modes: Idle, Power Save, and Power Down • Power-on Reset Circuit

Power Consumption at 4MHz, 3V, 25°C

Series	AT90S1200	AT90S2313	AT90S2323 & AT90S2343	AT90S4433	AT90S8515	AT90S8535
Active:	2.0mA Max.	2.8mA Max.	2.4mA Max.	3.4mA Max.	3.0mA Max.	6.4mA Max.
Idle Mode:	0.4mA Max.	0.8mA Max.	0.5mA Max.	1.4mA Max.	1.0mA Max.	1.9mA Max.
Power Down Mode:	<1µA Typ.	<1µA Typ.	<1µA Typ.	<1µA Typ.	<µA Typ.	<1µA Typ.

Memory Size (BYTES)				I/O			Analog	On Chip	Vcc	Clock	Operating Temp.		Digi-Key	Price Each		
Flash	EEPROM	RAM	ISP	Pins	UART	Timers	Comp.	Osc.	(V)	Speed (MHz)	Range †	Pkg.	Part No.	1	25	100
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Commercial	20-Dip	AT90S1200-12PC-ND	2.20	1.47	1.32
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Industrial	20-Dip	AT90S1200-12PI-ND	2.35	1.57	1.41
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Commercial	20-SOIC	AT90S1200-12SC-ND	2.20	1.47	1.32
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Industrial	20-SOIC	AT90S1200-12SI-ND	2.35	1.57	1.41
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Commercial	20-SSOP	AT90S1200-12YC-ND	2.55	1.70	1.48
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Industrial	20-SSOP	AT90S1200-12YI-ND	2.70	1.80	1.57
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Commercial	20-Dip	AT90S1200-4PC-ND	2.30	1.53	1.38
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Industrial	20-Dip	AT90S1200-4PI-ND	2.45	1.63	1.47
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Commercial	20-SOIC	AT90S1200-4SC-ND	2.30	1.53	1.38
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Industrial	20-SOIC	AT90S1200-4SI-ND	2.45	1.63	1.47
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Commercial	20-SSOP	AT90S1200-4YC-ND	2.65	1.76	1.54
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Industrial	20-SSOP	AT90S1200-4YI-ND	2.80	1.86	1.63
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Commercial	20-Dip	AT90S1200A-12PC-ND	2.38	1.58	1.43
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Industrial	20-Dip	AT90S1200A-12PI-ND	2.53	1.68	1.47
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Commercial	20-SOIC	AT90S1200A-12SC-ND	2.38	1.58	1.43
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Industrial	20-SOIC	AT90S1200A-12SI-ND	2.53	1.68	1.47
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Commercial	20-SSOP	AT90S1200A-12YC-ND	2.73	1.81	1.59
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Industrial	20-SSOP	AT90S1200A-12YI-ND	2.88	1.91	1.67
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Commercial	20-Dip	AT90S1200A-4PC-ND	2.48	1.65	1.49
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Industrial	20-Dip	AT90S1200A-4PI-ND	2.65	1.76	1.54
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Commercial	20-SOIC	AT90S1200A-4SC-ND	2.48	1.65	1.49
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Industrial	20-SOIC	AT90S1200A-4SI-ND	2.65	1.76	1.54
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Commercial	20-SSOP	AT90S1200A-4YC-ND	2.83	1.88	1.64
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Industrial	20-SSOP	AT90S1200A-4YI-ND	3.00	2.00	1.74
2K	128	128	Yes	15	1	2	Yes	No	4.0 - 6.0	0-10	Commercial	20-Dip	AT90S2313-10PC-ND	2.98	1.98	1.73
2K	128	128	Yes	15	1	2	Yes	No	4.0 - 6.0	0-10	Industrial	20-Dip	AT90S2313-10PI-ND	3.18	2.11	1.85
2K	128	128	Yes	15	1	2	Yes	No	4.0 - 6.0	0-10	Commercial	20-SOIC	AT90S2313-10SC-ND	2.98	1.98	1.73
2K	128	128	Yes	15	1	2	Yes	No	4.0 - 6.0	0-10	Industrial	20-SOIC	AT90S2313-10SI-ND	3.18	2.11	1.85
2K	128	128	Yes	15	1	2	Yes	No	2.7 - 6.0	0-4	Commercial	20-Dip	AT90S2313-4PC-ND	3.13	2.08	1.82
2K	128	128	Yes	15	1	2	Yes	No	2.7 - 6.0	0-4	Industrial	20-Dip	AT90S2313-4PI-ND	3.35	2.23	1.95
2K	128	128	Yes	15	1	2	Yes	No	2.7 - 6.0	0-4	Commercial	20-SOIC	AT90S2313-4SC-ND	3.13	2.08	1.82
2K	128	128	Yes	15	1	2	Yes	No	2.7 - 6.0	0-4	Industrial	20-SOIC	AT90S2313-4SI-ND	3.35	2.23	1.95
2K	128	128	Yes	3	—	1	No	No	4.0 - 6.0	0-10	Commercial	8-Dip	AT90S2323-10PC-ND	2.63	1.75	1.53
2K	128	128	Yes	3	—	1	No	No	4.0 - 6.0	0-10	Industrial	8-Dip	AT90S2323-10PI-ND	2.83	1.88	1.64
2K	128	128	Yes	3	—	1	No	No	4.0 - 6.0	0-10	Commercial	8-SOIC	AT90S2323-10SC-ND	2.63	1.75	1.53
2K	128	128	Yes	3	—	1	No	No	4.0 - 6.0	0-10	Industrial	8-SOIC	AT90S2323-10SI-ND	2.83	1.88	1.64
2K	128	128	Yes	3	—	1	No	No	2.7 - 6.0	0-4	Commercial	8-Dip	AT90LS2323-4PC-ND	2.66	1.85	1.61
2K	128	128	Yes	3	—	1	No	No	2.7 - 6.0	0-4	Industrial	8-Dip	AT90LS2323-4PI-ND	2.95	1.96	1.72
2K	128	128	Yes	3	—	1	No	No	2.7 - 6.0	0-4	Commercial	8-SOIC	AT90LS2323-4SC-ND	2.78	1.85	1.61
2K	128	128	Yes	3	—	1	No	No	2.7 - 6.0	0-4	Industrial	8-SOIC	AT90LS2323-4SI-ND	2.95	1.96	1.72
2K	128	128	Yes	5	—	1	No	Yes	4.0 - 6.0	0-10	Commercial	8-Dip	AT90S2343-10PC-ND	2.63	1.75	1.53
2K	128	128	Yes	5	—	1	No	Yes	4.0 - 6.0	0-10	Industrial	8-Dip	AT90S2343-10PI-ND	2.83	1.88	1.64
2K	128	128	Yes	5	—	1	No	Yes	4.0 - 6.0	0-10	Commercial	8-SOIC	AT90S2343-10SC-ND	2.63	1.75	1.53
2K	128	128	Yes	5	—	1	No	Yes	4.0 - 6.0	0-10	Industrial	8-SOIC	AT90S2343-10SI-ND	2.83	1.88	1.64
2K	128	128	Yes	5	—	1	No	Yes	2.7 - 6.0	0-4	Commercial	8-Dip	AT90LS2343-4PC-ND	2.78	1.85	1.61
2K	128	128	Yes	5	—	1	No	Yes	2.7 - 6.0	0-4	Industrial	8-Dip	AT90LS2343-4PI-ND	2.95	1.96	1.72
2K	128	128	Yes	5	—	1	No	Yes	2.7 - 6.0	0-4	Commercial	8-SOIC	AT90LS2343-4SC-ND	2.78	1.85	1.61
2K	128	128	Yes	5	—	1	No	Yes	2.7 - 6.0	0-4	Industrial	8-SOIC	AT90LS2343-4SI-ND	2.95	1.96	1.72
4K	256	128	Yes	20 (6-Ch. 10-Bit A/D)	1	2	Yes	No	4.0 - 6.0	0-8	Commercial	32-TQFP	AT90S4433-8AC-ND	5.43	3.26	3.15
4K	256	128	Yes	20 (6-Ch. 10-Bit A/D)	1	2	Yes	No	4.0 - 6.0	0-8	Industrial	32-TQFP	AT90S4433-8AI-ND	5.80	3.48	3.37
4K	256	128	Yes	20 (6-Ch. 10-Bit A/D)	1	2	Yes	No	4.0 - 6.0	0-8	Commercial	28-Dip	AT90S4433-8PC-ND	5.25	3.15	3.05
4K	256	128	Yes	20 (6-Ch. 10-Bit A/D)	1	2	Yes	No	4.0 - 6.0	0-8	Industrial	28-Dip	AT90S4433-8PI-ND	5.63	3.38	3.27
4K	256	128	Yes	20 (6-Ch. 10-Bit A/D)	1	2	Yes	No	2.7 - 6.0	0-4	Commercial	32-TQFP	AT90LS4433-4AC-ND	5.70	3.42	3.31
4K	256	128	Yes	20 (6-Ch. 10-Bit A/D)	1	2	Yes	No	2.7 - 6.0	0-4	Industrial	32-TQFP	AT90LS4433-4AI-ND	6.08	3.65	3.53
4K	256	128	Yes	20 (6-Ch. 10-Bit A/D)	1	2	Yes	No	2.7 - 6.0	0-4	Commercial	28-Dip	AT90LS4433-4PC-ND	5.53	3.32	3.21
4K	256	128	Yes	20 (6-Ch. 10-Bit A/D)	1	2	Yes	No	2.7 - 6.0	0-4	Industrial	28-Dip	AT90LS4433-4PI-ND	5.90	3.54	3.43
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Commercial	44-TQFP	AT90S8515-8AC-ND	7.00	4.20	4.06
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Industrial	44-TQFP	AT90S8515-8AI-ND	7.48	4.49	4.34
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Commercial	44-PLCC	AT90S8515-8JC-ND	6.83	4.10	3.96
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Industrial	44-PLCC	AT90S8515-8JI-ND	7.30	4.38	4.24
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Commercial	40-Dip	AT90S8515-8PC-ND	6.83	4.10	3.96
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Industrial	40-Dip	AT90S8515-8PI-ND	7.30	4.38	4.24
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Commercial	44-TQFP	AT90S8515-4AC-ND	7.35	4.41	4.27
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Industrial	44-TQFP	AT90S8515-4AI-ND	7.85	4.71	4.18
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Commercial	44-PLCC	AT90S8515-4JC-ND	7.18	4.31	4.17
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Industrial	44-PLCC	AT90S8515-4JI-ND	7.68	4.61	4.09
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Commercial	40-Dip	AT90S8515-4PC-ND	7.18	4.31	4.17
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Industrial	40-Dip	AT90S8515-4PI-ND	7.68	4.61	4.09
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Commercial	44-TQFP	AT90S8515A-8AC-ND	7.00	4.20	4.06
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Industrial	44-TQFP	AT90S8515A-8AI-ND	7.48	4.49	4.34
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Commercial	44-PLCC	AT90S8515A-8JC-ND	6.83	4.10	3.96
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Industrial	44-PLCC	AT90S8515A-8JI-ND	7.30	4.38	4.24
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Commercial	40-Dip	AT90S8515A-8PC-ND	6.83	4.10	3.96
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Industrial	40-Dip	AT90S8515A-8PI-ND	7.30	4.38	4.24
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Commercial	44-TQFP	AT90S8515A-4AC-ND	7.35	4.41	4.27
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Industrial	44-TQFP	AT90S8515A-4AI-ND	7.85	4.71	4.18
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Commercial	44-PLCC	AT90S8515A-4JC-ND	7.18	4.31	4.17
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Industrial	44-PLCC	AT90S8515A-4JI-ND	7.68	4.61	4.09
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Commercial	40-Dip	AT90S8515A-4PC-ND	7.18	4.31	4.17
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Industrial	40-Dip	AT90S8515A-4PI-ND	7.68	4.61	4.09
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	4.0 - 6.0	0-8	Commercial	44-TQFP	AT90S8535-8AC-ND	7.70	4.62	4.10
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	4.0 - 6.0	0-8	Industrial	44-TQFP	AT90S8535-8AI-ND	8.23	4.94	4.38
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	4.0 - 6.0	0-8	Commercial	44-PLCC	AT90S8535-8JC-ND	7.53	4.52	4.01
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	4.0 - 6.0	0-8	Industrial	44-PLCC	AT90S8535-8JI-ND	8.05	4.83	4.29
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	4.0 - 6.0	0-8	Commercial	40-Dip	AT90S8535-8PC-ND	7.53	4.52	4.01
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	4.0 - 6.0	0-8	Industrial	40-Dip	AT90S8535-8PI-ND	8.05	4.83	4.29
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	2.7 - 6.0	0-4	Commercial	44-TQFP	AT90LS8535-4AC-ND	8.05	4.83	4.29
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	2.7 - 6.0	0-4	Industrial	44-TQFP	AT90LS8535-4AI-ND	8.60	5.16	4.58
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	2.7 - 6.0	0-4	Commercial	44-PLCC	AT90LS8535-4JC-ND	7.88	4.73	4.19
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	2.7 - 6.0	0-4	Industrial	44-PLCC	AT90LS8535-4JI-ND	8.43	5.06	4.49
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	2.7 - 6.0	0-4	Commercial	40-Dip	AT90LS8535-4PC-ND	7.88	4.73	4.19
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	2.7 - 6.0	0-4	Industrial	40-Dip	AT90LS8535-4PI-ND	8.43	5.06	4.49

† Commercial Temperature Range: 0°C to +70°C (+32°F to +159°F); Industrial Temperature Range: -40°C to +85°C (-40°F to +185°F)

MegaAVR™ 8-Bit Microcontrollers

Power consumption at 4 MHz, 3.0V, 25°C

Series	AT163	AT163L
Active Idle Mode Power-down Mode	5.5 mA 1.9 mA < 1mA	5.0 mA 1.9 mA < 1mA

High-performance, Low-power AVR ® 8-bit Microcontroller • 32 x 8 General Purpose Working Registers
Data and Nonvolatile Program Memory • Fully Static Operation
Peripheral Features • 8-channel, 10-bit ADC • Analog Comparator • Programmable Watchdog Timer with Separate On-chip Oscillator • Programmable Serial UART • Master/Slave SPI Serial Interface for In-System Programming
Special Microcontroller Features • External and Internal Interrupt Sources • Up to 1 MIPS per MHz

ATmega103
- 121 Powerful Instructions – Most Single Clock Cycle Execution
- 128K Bytes of In-System Programmable Flash
- 4K Bytes Internal SRAM
- 4K Bytes of In-System Programmable EEPROM
- Programming Lock for Flash Program and EEPROM Data Security

Peripheral Features • Real-time Counter (RTC) with Separate Oscillator • Two 8-bit Timer/Counters with Separate Prescaler and PWM • Expanded 16-bit Timer/Counter System with Separate Prescaler, Compare Capture Modes and Dual 8-, 9- or 10-bit PWM
Special Microcontroller Features • Low-power Idle, Power Save and Power-down Modes • Software Selectable Clock Frequency

ATmega163/163L
- 130 Powerful Instructions - Most Single Clock Cycle Execution
- On-chip 2-cycle Multiplier
- Self-programming In-System Programmable Flash Memory
- 16K Bytes with Optional Boot Block (256 - 2K Bytes)

Endurance: 1,000 Write/Erase Cycles • Boot Section Allows Reprogramming of Program Code without External Programmer • Optional Boot Code Section with Independent Lock Bits • 512 Bytes EEPROM • 1024 Bytes Internal SRAM • Programming Lock for Software Security
Peripheral Features • Two 8-bit Timer/Counters with Separate Prescaler and Compare Mode • One 16-bit Timer/Counter with Separate Prescaler, Compare Mode, and Capture Mode • Real Time Clock with Separate Oscillator and Counter Mode • Three PWM Channels • Byte-oriented 2-wire Serial Interface
Special Microcontroller Features • Power-on Reset and Programmable Brown-out Detection • Internal Calibrated RC Oscillator • 4 Sleep Modes: Idle, ADC Noise Reduction, Power Save, and Power-Down

Memory Size (Bytes)			ISP	I/O Pins	Timers	Analog Comp.	Vcc (V)	Clock Speed (MHz)	Operating Temp. Range †	Pkg.	Digi-Key Part No.	Price Each		
Flash	EEPROM	RAM										1	25	100
128K	4K	4K	Yes	48 (8-Chan. 10-Bit A/D)	3	Yes	4.0 - 5.5	0-6	Commercial	64-TQFP	ATMEGA103-6AC-ND	13.86	11.17	10.25
128K	4K	4K	Yes	48 (8-Chan. 10-Bit A/D)	3	Yes	4.0 - 5.5	0-6	Industrial	64-TQFP	ATMEGA103-6AI-ND	14.81	11.94	10.95
128K	4K	4K	Yes	48 (8-Chan. 10-Bit A/D)	3	Yes	2.7 - 3.6	0-4	Commercial	64-TQFP	ATMEGA103L-4AC-ND	14.56	11.74	10.76
128K	4K	4K	Yes	48 (8-Chan. 10-Bit A/D)	3	Yes	2.7 - 3.6	0-4	Industrial	64-TQFP	ATMEGA103L-4AI-ND	15.57	12.55	11.51
16K	512	1K	Yes	32 (8-Chan. 10-Bit A/D)	3	Yes	4.0 - 5.5	0-8	Commercial	44-TQFP	ATMEGA163-8AC-ND *NEW!*	7.84	5.88	5.22
16K	512	1K	Yes	32 (8-Chan. 10-Bit A/D)	3	Yes	4.0 - 5.5	0-8	Industrial	44-TQFP	ATMEGA163-8AI-ND *NEW!*	8.38	6.08	5.58
16K	512	1K	Yes	32 (8-Chan. 10-Bit A/D)	3	Yes	4.0 - 5.5	0-8	Commercial	40-Dip	ATMEGA163-8PC-ND *NEW!*	7.70	5.78	5.13
16K	512	1K	Yes	32 (8-Chan. 10-Bit A/D)	3	Yes	4.0 - 5.5	0-8	Industrial	40-Dip	ATMEGA163-8PI-ND *NEW!*	8.24	5.98	5.48
16K	512	1K	Yes	32 (8-Chan. 10-Bit A/D)	3	Yes	2.7 - 5.5	0-4	Commercial	44-TQFP	ATMEGA163L-4AC-ND *NEW!*	8.24	5.98	5.48
16K	512	1K	Yes	32 (8-Chan. 10-Bit A/D)	3	Yes	2.7 - 5.5	0-4	Industiral	44-TQFP	ATMEGA163L-4AI-ND *NEW!*	8.80	6.38	5.86
16K	512	1K	Yes	32 (8-Chan. 10-Bit A/D)	3	Yes	2.7 - 5.5	0-4	Commercial	40-Dip	ATMEGA163L-4PC-ND *NEW!*	8.10	5.88	5.39
16K	512	1K	Yes	32 (8-Chan. 10-Bit A/D)	3	Yes	2.7 - 5.5	0-4	Industrial	40-Dip	ATMEGA163L-4PI-ND *NEW!*	8.66	6.28	5.76

† Commercial Temperature Range: 0°C to +70°C (+32°F to +159°F); Industrial Temperature Range: -40°C to +85°C (-40°F to +185°F)

NEW! AVR ATICE30 Emulator

The ICE30 emulator unit is an in-circuit emulator for all ATmega devices. The ICE30 is controlled by AVR Studio, version 3.0 and later. The ICE30 supports the following AVR devices: • **ATmega103** • **ATmega603** • **ATmega161** • **ATmega163** • **ATmega83** • **ATmega32**

Contents:

• ICE30 emulator unit • Pod Card ATmegaPOD • Pod card AT90AADCPOD • Pod Card ATmega163POD • Pod Cable • ATmega161/ATmega163/ATmega83/ATmega32 Probe (DIL40) with Cable • ATmega103/ATmega603 Probe with TQFP64 Adapter, Including Cables • RS-232 Cable • Power Supply Unit • Documentation

ATICE30-ND
MEGAAVR in Circuit Emulator +SPM $3570.00

NEW! AVR ATICE200 – Low Cost In-Circuit Emulator

The AVR® ICE 200 is a real-time In-Circuit Emulator based on a highly integrated AVR emulator chip. The ICE 200 speeds up the co-development of software and hardware for the AVR 8-bit RISC. The ICE 200 emulator interfaces with AVR Studio, Atmel's Integrated Development Environment (IDE) for code writing and debugging. The AVR® ICE 200 has all the advanced features that give the user complete control of the AVR microcontroller, combined with an intuitive user interface in AVR Studio. This makes the AVR ICE 200 the perfect tool to develop applications for AVR 8-bit RISC microcontrollers. The ICE 200 emulates all the powerful features of the AVR 8-bit RISC microcontroller. It gives read/write access to all AVR resources such as Flash memory, EEPROM, Register file, I/O locations, Program Counter, internal and external SRAM.
The AVR® ICE 200 In-Circuit Emulator supports the following Atmel AVR devices: • ATtiny11 • ATtiny12 • AT90S1200 • AT90S2313 • AT90S2333 • AT90LS2333 • AT90S4414 • AT90S4433 • AT90LS4433 • AT90S4434 • AT90LS4434 • AT90S8515 • AT90S8535 • AT90LS8535

Features:
• Emulates All On-Chip Functions • Real-time Operation • Symbolic Debugging Support • Unlimited Number of Breakpoints • Includes Personality Adapters for 8-pin, 20-pin, 28-pin and 40-pin AVR devices • Non-intrusive Operation • Electrical Characteristic Identical with Real Device • Supports Assembler and C Source Level Debugging • Automatic Configuration System • 2.7V to 5.5V Operating Voltage • Low Noise Due to Special Emulator Chip Close to Target Application • Software Upgradable from AVR Studio

ATICE200-ND AVR 8-bit RISC In-Circuit Emulator.. $232.00

AVR Flash Microcontroller Starter Kits

Atmel Starter Kits are complete evaluation platforms for taking your AVR design from conception to realization. They are the ideal method to get acquainted with the AVR microcontroller family, including the new analog devices.

STK300 megaAVR™ Starter Kit

The STK300 megaAVR Starter Kit is the ideal method to get acquainted with these high-performance, low-power RISC microcontrollers.

The development board comes complete with pushbutton switches, LEDs, and RS-232 Port. All ports of the megaAVR controller is accessible through header connectors on the edge of the board. There is also a 14-pin header for connection to an off-board liquid crystal display (LCD), with built-in contrast adjustment.

The board has support for external data memory with sockets for SRAM and address latch devices, plus a header connector for external memory mapped devices.

The internal 10 bits A/D converter on the megaAVR microcontroller is accessible through a separate header connector on the board. The analog reference voltage can be adjusted with an on-board potentiometer or optionally with an external reference voltage.

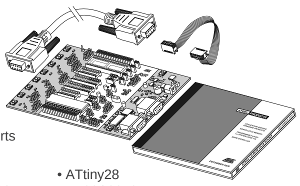
3.3V or 5V operation can be selected by a jumper setting on the board. The Starter Kit includes on-board brown-out detection. The The STK300 supports the Atmel ATmega103/L.

Included with the STK300 Starter Kit is an In-System Programming (ISP) cable that can be used to program any Atmel AVR microcontroller in the application.

Features:
• Supports all megaAVR devices • Includes In-System Programming cable for any AVR microcontrollers • A/D Converter support with adjustable analog reference • LCD interface with contrast adjustment • RS232 serial port for PC interface • Real-time clock crystal • Low-current dual rail supplies for external op amps • User selectable voltage operation (3.3V or 5V) • Dual-voltage brown-out detection • 8 push-button switches and 8 LEDs • External SRAM interface with latch socket • ATmega103 microcontroller included • megaAVR Application Builder Software includes – actually writes code for peripheral setup • Includes Atmel AVR ISP software

ATSTK300-ND megaAVR Programmer Starter Kit.. **$118.50**

STK500 Starter Kit



The ATSTK500 is a complete starter kit, programming tool and development system for Atmel's AVR Flash microcontrollers. The ATSTK500 gives AVR users freedom to develop and test complete AVR designs and prototypes. The ATSTK500 interfaces with AVR Studio®, Atmel's Integrated Development Environment (IDE) for code writing and debugging. The STK500 supports the following Atmel AVR devices.

- ATtiny11
- AT90S2313
- AT90S4433
- ATmega163
- ATtiny12
- AT90S2323
- AT90S4434
- AT90S1200
- ATtiny15
- AT90S2333
- AT90S8515
- AT90S4414
- ATtiny28
- AT90S2343
- AT90S8535
- ATmega161

The ATSTK500 supports In-System Programming (ISP) of all AVR microcontrollers in the sockets as well as programming of external target systems. The AVR I/O ports are accessible on pin headers that can be used for connecting LEDs, push buttons, or external signals. The extra RS232 port can be connected to any of the I/O pins.

The ATSTK500 programming interface is integrated in AVR Studio. The Flash, EEPROM and all fuse options can be programmed individually or with the automatic programming option. The DOS programming software is included for efficient batch programming in a production environment. The ATSTK500 clock frequency and supply voltage is controlled from AVR Studio. The active simulator or emulator code in AVR Studio can easily be programmed into the ATSTK500 with a click of the mouse.

Features:
• AVR Studio ® Compatible • RS232 Interface to PC for Programming and Control • Sockets for 8-pin, 20-pin, 28-pin and 40-pin AVR Devices • Parallel and Serial High-voltage Programming of AVR Parts • Serial In-System Programming (ISP) of AVR Parts • In-System Programmer for Programming AVR Parts in External Target System • Reprogramming of AVR parts • 8 Push Buttons for General Use • 8 LEDs for General Use • All AVR I/O Ports Easily Accessible through Pin Header Connectors • Additional RS232 Port for General Use • Expansion Connectors for Plug-in Modules and Prototyping Area • On-board 2-Mbit DataFlash ® for Nonvolatile Data Storage • Regulated Power Supply

* Requires a 10V-15V DC 500mA (min.) power source such as the Digi-Key T506-ND wall transformer.

ATSTK500-ND AVR Programmer Starter Kit... **$94.80**

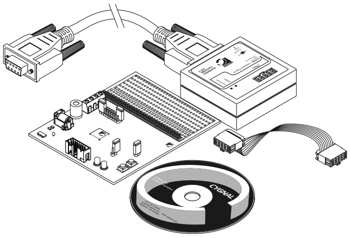
20MIPS 8051 FLASH Microcontrollers

with JTAG Debugging and Precision Analog Data Converters

Complete Development Kit for Cygnal MCUs: Cygnal development kits provide a comprehensive integrated development environment for unobtrusive real-time debug IN YOUR TARGET SYSTEM!

Unlike "development boards" sold by others, Cygnal Development Kits offer features and performance typically found only on development systems costing thousands of dollars. These kits include serial interface hardware and cables, Target/Prototyping board; wall-mount power supply and integrated development environment software (IDE). The IDE contains a full-featured, chroma-coded editor, two-pass macro-assembler with external C-compiler interface and source-level debugger with multiple breakpoints, single-step, and much more. System requirements: Windows™ 95/98/NT, 8MB of hard disk space and RS232 COM port. The pre-assembled Target/Prototyping has Cygnal C8051Fxxx chip installed and contains a local power supply regulator, pushbutton reset switch, power LED, port I/O pushbutton switch and LED and a user-prototyping area. This board can be powered by the included wall-mount power supply. The kit also includes an Emulation Cartridge (EC), that provides interface between the JTAG port of the C8051Fxxx chip and the RS-232 serial port of the user's PC.

Digi-Key Part Number	Target Board Chip	Price Each
336-1014-ND	F000/001/002	99.00
336-1017-ND	F005/006/007	99.00
336-1019-ND	F010/011/012	99.00
336-1024-ND	F220&221/226/230&231/236	99.00



C8051F000 Family: This family features a 20MIPS(max), 8051 code-compatible CPU, in-system programming/debugging, plus precision analog data converters and a rich complement of digital peripherals. All family members include 32K bytes of FLASH memory and 256 or 2304 bytes of SRAM. Built-in debug support circuitry enables low-cost, in-system debugging via JTAG interface (see Development Kit). On-board hardware digital peripherals include UART, SMBus™, SPI™ serial interfaces; four 16-bit timers, and a five-channel, Programmable Counter Array (PCA) useful for PWM and general purposing timing applications. A unique crossbar circuit allows digital peripherals to be individually assigned to package pins in any combination. The multiplexed 100ksps 10-bit or 12-bit SAR-type ADCs can be operated in either single-ended or differential input modes. All family members have two 12-bit DACs, programmable voltage comparator(s), temperature sensor and voltage reference. High integration, unmatched performance, flexibility and low cost of development make the C8051F000 family the ideal choice for analog-intensive embedded applications.

C8051F200 Family: The reduced pin-count C8051F200 family offers the same 20 MIPS 8051 CPU, in-system programmability, and debugging capabilities found in the C8051F000 family. All family members have 8K bytes of in-system programmable FLASH memory and 256 or 1280 bytes of SRAM. Built-in debug support circuitry enables low-cost, in-system debugging via JTAG interface (see Development Kit). On-board hardware digital peripherals include UART and SPI™ serial interfaces and three 16-bit timers. Analog peripherals consist of an 8-bit, 100ksps ADC and two comparators. Each I/O port pin can be configured as either digital I/O or as an ADC input. Ideal for a wide range of general purpose, embedded applications!

Flash Bytes	RAM Bytes	SMB/12C	SPI	UART	16-Bit Timers	5-Ch PCA	DIG I/O	ADC Bits	A/D Ch.	Temp Snsr	D/A	COMPR	Pkg	Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	T&R Pricing 500	Cygnal Part No.
32K	256	✓	✓	✓	4	✓	32	12	8	✓	2	2	64TQFP	336-1000-1-ND	27.48	20.06	15.08	336-1000-2-ND	7388.15	C8051F000
32K	256	✓	✓	✓	4	✓	16	12	8	✓	2	2	48TQFP	336-1001-1-ND	26.38	19.25	14.48	336-1001-2-ND	7095.55	C8051F001
32K	256	✓	✓	✓	4	✓	8	12	4	✓	2	1	32LQFP	336-1002-1-ND	25.64	18.72	14.07	336-1002-2-ND	6896.05	C8051F002
32K	2304	✓	✓	✓	4	✓	32	12	8	✓	2	2	64TQFP	336-1003-1-ND	31.51	23.00	17.29	336-1003-2-ND	8472.10	C8051F005
32K	2304	✓	✓	✓	4	✓	16	12	8	✓	2	2	48TQFP	336-1004-1-ND	30.41	22.20	16.69	336-1004-2-ND	8179.50	C8051F006
32K	256	✓	✓	✓	4	✓	32	10	8	✓	2	2	64TQFP	336-1005-1-ND	23.81	17.40	13.07	336-1005-2-ND	6403.95	C8051F010
32K	256	✓	✓	✓	4	✓	16	10	8	✓	2	2	48TQFP	336-1006-1-ND	22.71	16.58	12.47	336-1006-2-ND	6104.70	C8051F011
32K	256	✓	✓	✓	4	✓	8	10	4	✓	2	1	32LQFP	336-1007-1-ND	21.61	15.78	11.86	336-1007-2-ND	5812.10	C8051F012
8K	256	—	✓	✓	3	—	32	8	32	—	—	2	48TQFP	336-1008-1-ND	11.55	8.43	6.34	336-1008-2-ND	3105.55	C8051F220
8K	256	—	✓	✓	3	—	22	8	22	—	—	2	32LQFP	336-1009-1-ND	10.95	7.99	6.01	336-1009-2-ND	2945.95	C8051F221
8K	1280	—	✓	✓	3	—	32	8	32	—	—	2	48TQFP	336-1010-1-ND	13.74	10.03	7.54	336-1010-2-ND	3697.40	C8051F226
8K	256	—	✓	✓	3	—	32	—	—	—	—	2	48TQFP	336-1011-1-ND	9.72	7.10	5.33	336-1011-2-ND	2613.45	C8051F230
8K	256	—	✓	✓	3	—	22	—	—	—	—	2	32LQFP	336-1012-1-ND	9.35	6.82	5.13	336-1012-2-ND	2513.70	C8051F231
8K	1280	—	✓	✓	3	—	32	—	—	—	—	2	48TQFP	336-1013-1-ND	11.91	8.69	6.53	336-1013-2-ND	2513.70	C8051F236

Winbond Electronics Corporation America

Single-Chip Voice Record/Playback Devices

General Description: Winbond's patented ChipCorder® technology is a revolutionary multilevel technique to record and play back sound on a single chip. The advanced technology provides natural sound reproduction, in a cost-effective device that retains stored messages in the event of power loss or battery replacement.

The technology, based on a unique multilevel storage approach, stores multiple voltage levels into previously binary, two level EEPROM memory cells. Unlike traditional voice solutions whereby voice is digitized, the Winbond approach stores analog signals directly into single cells as one of over 250 levels.

All ChipCorder products integrate the oscillator, microphone pre-amplifier, automatic gain control, anti-aliasing filter, smoothing filter, and speaker amplifier on-chip to achieve a complete "system on a chip." Only a microphone, speaker, power source, and a few passive components are needed to implement a complete record/playback function.

ISD1100 Series **Description:** The ISD1100 has been designed for low-cost consumer applications where a bare die is mounted directly to the PC board. The inclusion of pull-up or pull-down resistors on the input pins minimizes the number of signals used and the number of external components or bonding wires required. **Features:** • Pushbutton interface • 5 volt operating range • Automatic power-down

ISD1200 Series **Description:** The ISD1200 offers a simple push-button interface coupled with the automatic power-down feature. It offers full addressability to handle multiple messages on a single chip. It is ideal for toy applications. **Features:** • 5 volt operating range • Automatic power-down • Fully addressable to handle multiple messages

ISD1400 Series **Description:** The ISD1400 expands on the simple push-button interface of the ISD1200, with longer storage durations of 16 and 20 seconds. It offers full addressability to handle multiple messages on a single chip and is widely used in communication and consumer applications. **Features:** • 5 volt operating range • Automatic power-down • Fully addressable to handle multiple messages

ISD2500 Series **Description:** The ISD2500 family offers improvement in speech length up to a maximum of 90 seconds. This extends the single-chip voice solution to industrial and high-end consumer applications. This family offers sound capability for new applications such as cellular phones, answering machines, voice-response faxes, copy machines and industrial applications where voice prompting provides product differentiation for equipment and manufacturers. **Features:** • 5 volt operating range • Fully addressable to handle multiple messages • Directly cascadable for longer durations • Automatic power-down (push-button mode)

ISD33000 Series **Description:** The ISD33000 ChipCorder Series provides high-quality, 3-volt, single-chip Record/Playback solutions for 1- to 4-minute messaging applications which are ideal for cellular phones and other portable products. The CMOS devices include an on-chip oscillator, anti-aliasing filter, smoothing filter, AutoMute™ feature, audio amplifier, and high density, multilevel storage array. The ISD33000 series is designed to be used in a microprocessor- or microcontroller-based system. Address and control are accomplished through a Serial Peripheral Interface (SPI) or Microwire Serial Interface to minimize pin count.

ISD4002 / ISD4003 Series **Description:** The ISD4000 series provides high-quality, 3-volt, single-chip record/playback solutions for 2 to 4 minute (ISD4002) and 4 to 8 minute (ISD4003) messaging applications. These CMOS-based devices include an on-chip oscillator, anti-aliasing filter, smoothing filter, AutoMute™ feature, audio amplifier, and high density, multilevel Flash storage array. **Features:** • Single +3 volt supply • Low-power consumption • AutoMute feature to provide background noise attenuation • Fully addressable to handle multiple messages • On-chip clock source • Microcontroller SPI or Microwire™ Serial Interface

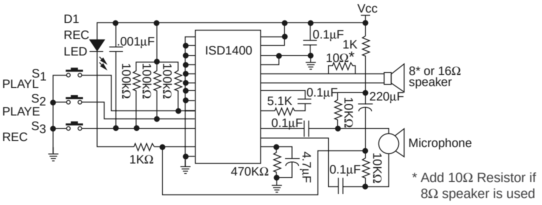
ISD-ES001 Evaluation System **Description:** The ISD-ES001 Evaluation System is a multi-purpose evaluation and development tool for use with Winbond's line of single-chip voice record/playback devices. As an evaluation tool, the ISD-ES001 enables designers to record and play back recordings using simple front-panel controls. The system's ease-of-use features facilitate comparisons of speech and sound quality relative to duration for each of these products. **Features:** • Combination evaluation system and emulation tool • Permits evaluation of speech/sound quality for different durations of Winbond devices • Documentation includes system schematic, Application Design Manual, step-by-step instructions for system use and explanation for use of three operation modes: Multiple message addressing; Looping on single message; Multiple message record/playback • Supports message-prompting applications and development • System includes: Telephone handset and jack; AC adapter jack; Audio in/out jacks; Cable for direct pin connections for microprocessor and microcontroller based applications

ISD-ES002 "Parrot"™ Demonstration Board **Description:** The ISD-ES002 Parrot Demonstration Board is a hand-held unit with a built-in socket allowing easy and immediate record and playback of Winbond devices. The ISD-ES002 system includes a speaker, a 9-volt battery with power supply regulation, and an ISD1416AP.

ISD-ES302 Demonstration Board for ISD33000 Series **Description:** The ISD-ES302 Demonstration Board is a portable unit designed to allow listeners to hear the high voice quality of ISD33000 Series products and to demonstrate the features available through the SPI control bus. The ISD-ES302 system includes: a demonstration board; a speaker (16 ohm); two AA batteries (1.5 volts each); an NSC COP820C microcontroller (on-board); an ISD1000A audio chip (on-board); an ISD33120P, an ISD33150P, an ISD33180P, and an ISD33240P device.

Voice quality better than "telephone quality" (telephones cut off below 300 Hz) is achieved with a sampling frequency of 8 KHz. The high frequency cut-off of the low pass filter is then chosen to be 3.4 KHz, satisfying the Nyquist criterion, but still with a wide enough frequency band to allow for good quality voice reproduction.

Application Example



* Add 10Ω Resistor if 8Ω speaker is used

Recommended Part List

Schematic Part	Digi-Key Part No.	Schematic Part	Digi-Key Part No.	Schematic Part	Digi-Key Part No.
1 KΩ (2)	1.0KQBK-ND	100 KΩ (3)	100KQBK-ND	LED	P300-ND
5.1 KΩ	5.1KQBK-ND	0.1 µF (4)	P4525-ND	S1	EG1301-ND
10 KΩ (2)	10KQBK-ND	0.001 µF	P4551-ND	S2	EG1305-ND
470 KΩ	470KQBK-ND	Microphone	P9931-ND	S3	EG1308-ND

Duration	Interface	Input Sample Rate	Filter Pass Band	Pkg.	Digi-Key Part No.	Price Each 1	10	25	Winbond Part No.
10 Sec.	Pushbutton	6.4KHz	2.6KHz	28 Dip	ISD1110P-ND	4.50	3.60	3.00	ISD1110P
10 Sec.	Pushbutton	6.4KHz	2.6KHz	28-SOIC	ISD1110S-ND	4.50	3.60	3.00	ISD1110S
12 Sec.	Pushbutton	5.3KHz	2.2KHz	28 Dip	ISD1212P-ND	4.50	3.60	3.00	ISD1212P
16 Sec.	Pushbutton	8.0KHz	3.3KHz	28 Dip	ISD1416P-ND	5.63	4.50	3.76	ISD1416P
16 Sec.	Pushbutton	8.0KHz	3.3KHz	28-SOIC	ISD1416S-ND	5.63	4.50	3.76	ISD1416S
20 Sec.	Pushbutton	6.4KHz	2.6KHz	SO-28	ISD1420S-ND	5.63	4.50	3.76	ISD1420S
20 Sec.	Pushbutton	6.4KHz	2.6KHz	28 Dip	ISD1420P-ND	5.63	4.50	3.76	ISD1420P
60 Sec.	Button/MCU	8.0KHz	3.4KHz	28-SOIC	ISD2560G-ND	9.13	7.30	6.09	ISD2560G
60 Sec.	Button/MCU	8.0KHz	3.4KHz	28 Dip	ISD2560P-ND	9.13	7.30	6.08	ISD2560P
75 Sec.	Button/MCU	6.4KHz	2.7KHz	28 Dip	ISD2575P-ND	9.13	7.30	6.08	ISD2575P
90 Sec.	Button/MCU	5.3KHz	2.3KHz	28 Dip	ISD2590P-ND	9.13	7.30	6.08	ISD2590P

Duration	Interface	Input Sample Rate	Filter Pass Band	Pkg.	Digi-Key Part No.	Price Each 1	10	25	Winbond Part No.
2 Min.	Button/MCU	4.0KHz	1.7KHz	28 Dip	ISD25120P-ND	9.13	7.30	6.08	ISD25120P
120 Sec.	SPI/Microwire	8.0KHz	3.4KHz	28-Dip	ISD4002-120P-ND	8.75	7.00	5.83	ISD4002-120P
120 Sec.	SPI/Microwire	8.0KHz	3.4KHz	28-SOIC	ISD4002-120S-ND	8.75	7.00	5.83	ISD4002-120S
240 Sec.	SPI/Microwire	4.0KHz	1.7KHz	28-Dip	ISD4002-240P-ND	9.13	7.30	6.08	ISD4002-240P
240 Sec.	SPI/Microwire	4.0KHz	1.7KHz	28-SOIC	ISD4002-240S-ND	9.13	7.30	6.08	ISD4002-240S
4 Min.	SPI/Microwire	8.0KHz	3.4KHz	28-Dip	ISD4003-04MP-ND	10.75	8.60	7.17	ISD4003-04MP
4 Min.	SPI/Microwire	8.0KHz	3.4KHz	28-SOIC	ISD4003-04MS-ND	10.75	8.60	7.17	ISD4003-04MS
8 Min.	SPI/Microwire	4.0KHz	1.7KHz	28-Dip	ISD4003-08MP-ND	11.13	8.90	7.42	ISD4003-08MP
8 Min.	SPI/Microwire	4.0KHz	1.7KHz	28-SOIC	ISD4003-08MS-ND	11.13	8.90	7.42	ISD4003-08MS
Evaluation System for ISD1110/1200/1400/2500					ISD-ES001-ND	399.00	—	—	ISD-ES001
Parrot Demonstration Board for ISD1110/1200/1400/2500					ISD-ES002-ND	140.00	—	—	ISD-ES002
Demonstration Board for ISD33000 Series					ISD-ES302-ND	285.00	—	—	ISD-ES302

Jackrabbit™ Low-Cost Single-Board Computer

This high-performance single-board computer from Z-World is stocked with I/O, memory, and communication ports. Measuring just 2.5" x 3.5", the Jackrabbit is perfect for embedded control. The Jackrabbit's remarkably low price point, fast execution speed, floating point capability, and interactive debugging make it ideal for OEM applications. The Jackrabbit also offers great flexibility for applications by providing extensive RAM, I/O and code space. Software for the Jackrabbit is developed using industry-proven Dynamic C® an integrated C-language development package that includes an interactive compiler, editor and debugger — making the Jackrabbit easy to program and develop.

Model BL1800: • **Board Size:** 2.50" x 3.50" x 0.94" (64 mm x 89 mm x 24 mm) • **Input Voltage:** 8-40VDC, switching regulator, 49 mA typ. at 24VDC • **General Purpose I/O:** 14 bi-directional, 6 inputs, 4 outputs (CMOS compatible) • **High Power Outputs:** 3 sinking (1 Amp) and 1 sourcing (500mA) • **1 Analog Input:** 9-bit resolution, 8-bit accuracy, 0.1-2.8V input range, 75ms typ. acquisition time • **2 Analog Outputs:** Filtered/buffered PWM outputs • **Processor:** Rabbit 2000, clock, 29.5MHz • **Memory:** SRAM 128K, flash 256K • **Timers:** Five 8-bit cascadable timers, one 10-bit timer with 2 match registers • **Serial Ports:** (2) RS-232 (or one with CTS/RTS) rated at 1KV ESD, (1) RS-485 rated at 15kV ESD, (1) 5V CMOS compatible (programming port), 2 serial ports can be clocked • **Serial Rate**: selectable baud rates up to 115,200 bps (RS-232), 230,400 bps (RS-485). 5 Volt CMOS compatible port up to 7.37Mbps • **Additional Features:** watchdog/supervisor, time/date clock, and backup battery

Model BL1810: Same as BL1800, except with 14.7MHz clock, 128K flash, linear regulator (8-25V), 3 sinking (200mA) and 1 sourcing (100mA) high-voltage outputs, and CMOS port baud rate of 3.69Mbps.

Model BL1820: Same as BL1810, except no RS-485, no backup battery or battery circuitry, and 3 additional I/O

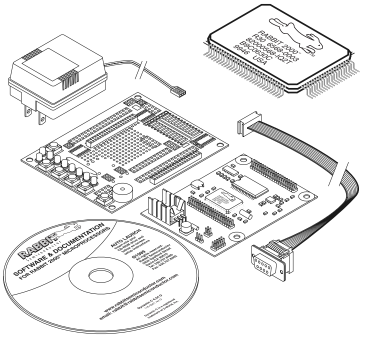
Description	Digi-Key Part No.	Price Each			Z-World Part No.
		1	5	25	
Model BL1800	316-1011-ND *NEW!*	99.10	—	—	101-0356
Model BL1810	316-1001-ND	69.07	65.00	61.00	101-0357
Model BL1820	316-1002-ND	49.05	46.00	43.00	101-0358

Jackrabbit™ Development Kit

Digi-Key Part No. 316-1000-ND Only **$139.00**

Includes Jackrabbit BL1810, manual, schematics, AC adapter, prototyping board, programming cable, documentation on CD ROM, additional parts, and complete Dynamic C SE software development system (not a trial version).

Rabbit 2000™ 8-Bit Microprocessor



The Rabbit 2000 is a high-performance, 8-bit microprocessor distinguished by its C-friendly instruction set, fast number crunching ability and numerous on-chip peripherals. Built-in features include 4 serial ports, a slave port, remote bootstrap capability, advanced clocking options, and glueless interface to both memory and I/O — making hardware design easy. With a maximum clock speed of 30 MHz, and optimized C-oriented instruction set, the Rabbit 2000 outperforms alternative 16 and 32-bit processors at a much lower system cost. Supported by industry-proven Dynamic C® from Z-World, the Rabbit 2000 can handle C-language applications of approximately 1 megabyte (50,000+ C statements). Dynamic C provides an interactive compiler, editor, and source-level debugger. Numerous application libraries are also included. This close integration of hardware and software shortens development time and makes programming much easier.

Rabbit 2000 Advantages

• Architecture for enhanced math performance • Glueless memory and I/O interface • Remote cold boot • Slave interface • 4 serial ports • 40-plus multifunctional I/O pins • Battery-backable real-time clock • Watchdog timer • Five 8-bit cascadable timers and 2 10-bit timers with match registers • 488 microsecond periodic interrupt • Clocking options for low power applications

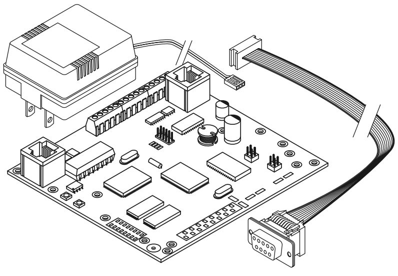
Description	Digi-Key Part No.	Price Each			Rabbit Part No.
		2	10	100	
Rabbit 2000	316-1004-ND	14.97	12.50	10.75	668-0003

Rabbit 2000™ Development Kit

Digi-Key Part No. 316-1003-ND Only **$139.00**

Kit includes Jackrabbit single board computer, manual, schematics, AC adapter, prototyping board, programming cable, documentation on CD ROM, additional parts, and complete Dynamic C SE software developement system (not a trial version).

Rabbit 2000™ 8-Bit Microprocessor with TCP/IP Support



The Rabbit 2000 is now available with full TCP/IP support! The Rabbit 2000 is a high-performance, 8-bit microprocessor distinguished by its C-friendly instruction set, fast number crunching ability and numerous on-chip peripherals.

Built-in features include 4 serial ports, a slave port, remote bootstrap capability, advanced clocking options, and glueless interfacing to both memory and I/O. Full TCP/IP source code for the Rabbit 2000 is provided with Dynamic C® software on CD-ROM. ICMP, HTTP, DCHP (includes facilities for SSI, CGI routines, cookies, and basic authentication), SMTP, FTP and TFTP (client and server) capabilities are provided. Ethernet drivers for the Realtek NE2000 compatible chipset are also included.

Supported by industry-proven Dynamic C, the Rabbit 2000 handles C-language applications of approximately 1 megabyte (50,000+ C statements). Software development is easier and fast using Dynamic C's interactive compiler, editor, and source-level debugger. Numerous application libraries are also included.

Rabbit 2000 TCP/IP Design Advantages

- Cost-effective – no run-time royalties!
- Develop robust 10baseT Ethernet applications
- Write directly to TCP or UDP sockets
- Development board includes RS-232 and RS-485 ports, 4 high-current outputs (200mA) 4 digital inputs, 512K flash, 128K SRAM, Five 8-bit cascadable timers and 2 10-bit timers with match registers, a real time battery-backable clock and 10baseT Ethernet interface

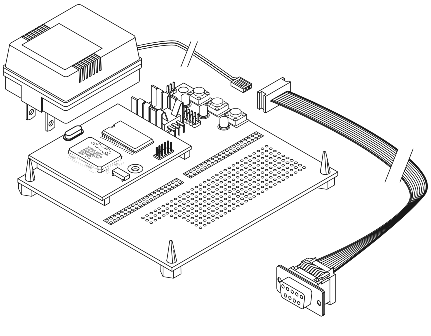
Description	Digi-Key Part No.	Price Each	Rabbit Part No.
Rabbit 2000 TCP/IP Toolkit	316-1006-ND	99.10	101-0403

Rabbit 2000™ TCP/IP Development Kit

Digi-Key Part No. 316-1005-ND Only **$199.00**

Kit includes Rabbit 2000™ TCP/IP development board (with Rabbit 2000 microprocessor, flash, SRAM, Ethernet hardware, 8 digital I/O), demonstration board, power supply, PC serial cable for real-time debugging, and complete Dynamic C SE software development system with TCP/IP on CD ROM (not a trial version).

RabbitCore 2000™ Microprocessor Core Module



A more powerful alternative to a microcontroller, the RabbitCore 2000 will jump-start your board design. Included are general-purpose I/O memory I/O interface, backup interface and master-slave control pins. Dual 40-pin male connectors on the RabbitCore 2000 mate with common dual-row 2mm sockets on your board. Flash and SRAM are on-board, providing a development-ready memory interface. Five parallel ports provide up to 40 parallel I/O lines that may be used to interface to nearly any digital device. Its 8-bit data bus lines, 13 address lines and necessary strobes are provided to easily interface communications peripherals, I/O registers or small memories as I/O devices, external memory. Programs are created using Z-World's Dynamic C®, a C language environment that includes an editor, compiler and debugger. The RabbitCore 2000 is ideal for reducing production costs, prototyping a new design, and time-to-market of your product.

RabbitCore 2000

• **Board Size:** 1.90" x 2.30" x 0.50" (48.3mm x 58.4mm x 12.7mm) • **Input Voltage:** 4.75-5.25V DC • **Current:** 98mA at 18.432 MHz, 5V DC (130mA at 25.8 MHz, 5V DC) • **Processor:** Rabbit 2000 • **General Purpose I/O:** 40 parallel I/O lines grouped in five 8-bit ports (shared with serial ports) • **Memory, I/O Interface:** 13 Address lines, 8 data lines, I/0 read/write, buffer enable, status, clock • **Additional Digital Inputs:** (2), start up mode (for master/slave), reset in • **Additional Digital Outputs:** Watchdog output, reset out • **Clock:** 18.432 MHz - 25.8 Mhz (see versions) • **SRAM:** 128K - 512K, (see versions) • **Flash:** 256K • **Timers:** Five 8-bit cascadable timers, one 10-bit timers with 2 match registers. • **Serial Ports:** 4 CMOS-compatible ports. Max asynchronous baud rate is 806,400bps, max synchronous is 6.45Mbps. Two ports are configurable as clocked ports • **Slave Interface:** Allows the RabbitCore 2000 to be used as an intelligent peripheral device slaved to a master processor • **Additional Features:** Watchdog supervisor, time/date clock, backup battery circuitry and connectors for user-supplied battery. Mates to your board via dual 40-pin male connectors.

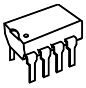
Description	Digi-Key Part No.	Price Each	Rabbit Part No.
RCM2000 (25.8 MHz clock and 512K SRAM)	316-1008-ND	69.07	101-0404
RCM2010 (25.8 MHz clock and 128K SRAM)	316-1009-ND	49.05	101-0405
RCM2020 (8.432 MHz clock and 128K SRAM)	316-1010-ND	39.04	101-0383

RabbitCore 2000™ Development Kit

Digi-Key Part No. 316-1007-ND Only **$169.00**

Kit includes a model RCM2020, manual with schematics and documentation on CD-ROM, getting started guide, AC adapter, prototyping board, programming cable, and complete Dynamic C SE software development system on CD-ROM (not a trial version).

MICROCHIP KeeLoq® Code-Hopping Algorithm Encoders and Decoders



The Microchip KeeLoq family of code-hopping encoders and decoders offer a low cost, high security solution for security products such as garage door openers, alarm systems, and remote keyless entry systems.

KeeLoq is based on a code-hopping algorithm which provides Rock Solid Security. They use a programmable 64-bit encryption key that is unique to each device to generate 32-bit code-hopping code. The key length and hopping code combination reduces the possibility of unwanted access, due to code grabbing and code scanning, to essentially zero.

The KeeLoq encoders work with any of the decoders. They feature on-chip, error corrected EEPROM for non-volatile operation and, therefore, reduce the required components normally external to the encoder. The only additional circuitry required are push buttons, battery, and RF circuitry.

The KeeLoq decoders are single-chip solutions that employ normal and secure learning mechanisms, and operate over a wide voltage range. Microchip decoders are also full-featured, with serial interface to PICmicro microcontrollers, allowing designers to integrate the decoder with system functionality.

The KeeLoq family of products can be programmed with the KeeLoq Evaluation Kit or with the Pro Mate II Universal Programmer.

Encoder Features:

The HCS200 offers 3 inputs for up to 7 functions and it has a 28-bit serial number. It uses PWM for its output modulation. The HCS201 adds a step-up voltage regulator.

The HCS300 and HCS301 each have 4 inputs for up to 15 functions and add an LED output. The HCS300 runs on 2.0-6.3V while the HCS301 works from 3.5-13.0V. The HCS320 shares the same basic features of the HCS301 but adds a shift key input.

The HCS360 and HCS361 offer an even higher level of security by using a 48-bit seed and selectable 28/32-bit serial number. They offer 4 inputs for up to 15 functions. In addition to PWM, the HCS360 can modulate using the Manchester format and the HCS361 can modulate using VPWM.

Decoder Features:

All three decoders feature secure learning, auto bit rate detection, PWM input decode, and serial interface for PICmicro communication.

The HCS512 is an 18-pin device that can learn 4 different transmitters and has 4 binary function output pins.

The HCS500 is an 8-pin device that can learn up to 7 different transmitters, has an internal oscillator, and has 1Kbits of user EEPROM.

The HCS515 is a 14-pin device with the same features as the HCS500 plus 2 binary function output pins.

Programmer and Evaluation Kit

The KeeLoq Evaluation Kit demonstrates the capabilities of Microchip's code-hopping technology. It includes everything you need to program and test the KeeLoq encoders and decoders. Kit includes: • Software and License disk • Programmer board for programming encoders and decoders • HCS512 and PIC16C56/93C46 EEPROM based decoder and RF based receiver module • PDIP transmitter: can be used for the HCS200, HCS300, HCS301, HCS320, HCS360, HCS361 in sample kit • HCS300 SOIC transmitter • Power supplies and cabling

DM303002-ND..**$299.00**

DS00161-ND CD-ROM Microchip Technical Library **$2.25**

Inputs	Functions	Voltage	Serial No. Bits	Key Bits	Baud Rates	LED Output	Time Out	Modulation	Operating Temperature	Package	Digi-Key Part No.	Price Each		
												1	25	100
							Encoders							
3	7	3.5 - 13.0	28	64	2	No	Yes	PWM	+32°F to +158°F (0°C to +70°C)	8-Dip	HCS200/P-ND	1.33	.96	.86
3	7	3.5 - 13.0	28	64	2	No	Yes	PWM	+32°F to +158°F (0°C to +70°C)	8-Soic	HCS200/SN-ND	1.33	.96	.86
3	7	3.5 - 13.0	28	64	2	No	Yes	PWM	-40°F to +185°F (-40°C to +85°C)	8-Dip	HCS200-I/P-ND	1.45	1.06	.95
3	7	3.5 - 13.0	28	64	2	No	Yes	PWM	-40°F to +185°F (-40°C to +85°C)	8-Soic	HCS200-I/SN-ND	1.45	1.06	.95
3	7	3.5 - 13.0	28	64	2	No	Yes	PWM	+32°F to +158°F (0°C to +70°C)	8-Dip	HCS201/P-ND	1.28	.92	.83
3	7	3.5 - 13.0	28	64	2	No	Yes	PWM	+32°F to +158°F (0°C to +70°C)	8-Soic	HCS201/SN-ND	1.28	.92	.83
3	7	3.5 - 13.0	28	64	2	No	Yes	PWM	-40°F to +185°F (-40°C to +85°C)	8-Dip	HCS201-I/P-ND	1.40	1.01	.91
3	7	3.5 - 13.0	28	64	2	No	Yes	PWM	-40°F to +185°F (-40°C to +85°C)	8-Soic	HCS201-I/SN-ND	1.40	1.01	.91
4	15	2.0 - 6.3	28	64	3	Yes	Selectable	PWM	+32°F to +158°F (0°C to +70°C)	8-Dip	HCS300/P-ND	1.48	1.08	.97
4	15	2.0 - 6.3	28	64	3	Yes	Selectable	PWM	+32°F to +158°F (0°C to +70°C)	8-Soic	HCS300/SN-ND	1.48	1.08	.97
4	15	2.0 - 6.3	28	64	3	Yes	Selectable	PWM	-40°F to +185°F (-40°C to +85°C)	8-Dip	HCS300-I/P-ND	1.63	1.18	1.06
4	15	2.0 - 6.3	28	64	3	Yes	Selectable	PWM	-40°F to +185°F (-40°C to +85°C)	8-Soic	HCS300-I/SN-ND	1.63	1.18	1.06
4	15	3.5 - 13.0	28	64	3	Yes	Selectable	PWM	+32°F to +158°F (0°C to +70°C)	8-Dip	HCS301/P-ND	1.48	1.08	.97
4	15	3.5 - 13.0	28	64	3	Yes	Selectable	PWM	+32°F to +158°F (0°C to +70°C)	8-Soic	HCS301/SN-ND	1.48	1.08	.97
4	15	3.5 - 13.0	28	64	3	Yes	Selectable	PWM	-40°F to +185°F (-40°C to +85°C)	8-Dip	HCS301-I/P-ND	1.63	1.18	1.06
4	15	3.5 - 13.0	28	64	3	Yes	Selectable	PWM	-40°F to +185°F (-40°C to +85°C)	8-Soic	HCS301-I/SN-ND	1.63	1.18	1.06
4	15	3.5 - 13.0	28	64	3	Yes	Selectable	PWM	+32°F to +158°F (0°C to +70°C)	8-Dip	HCS320/P-ND	1.73	1.26	1.13
4	15	3.5 - 13.0	28	64	3	Yes	Selectable	PWM	+32°F to +158°F (0°C to +70°C)	8-Soic	HCS320/SN-ND	1.73	1.26	1.13
4	15	3.5 - 13.0	28	64	3	Yes	Selectable	PWM	-40°F to +185°F (-40°C to +85°C)	8-Dip	HCS320-I/P-ND	1.90	1.39	1.25
4	15	3.5 - 13.0	28	64	3	Yes	Selectable	PWM	-40°F to +185°F (-40°C to +85°C)	8-Soic	HCS320-I/SN-ND	1.90	1.39	1.25
4	15	2.0 - 6.6	28/32	64	2	Yes	Selectable	PWM/Manchester	+32°F to +158°F (0°C to +70°C)	8-Dip	HCS360/P-ND	1.90	1.38	1.24
4	15	2.0 - 6.6	28/32	64	2	Yes	Selectable	PWM/Manchester	+32°F to +158°F (0°C to +70°C)	8-Soic	HCS360/SN-ND	1.90	1.38	1.24
4	15	2.0 - 6.6	28/32	64	2	Yes	Selectable	PWM/Manchester	-40°F to +185°F (-40°C to +85°C)	8-Dip	HCS360-I/P-ND	2.08	1.52	1.37
4	15	2.0 - 6.6	28/32	64	2	Yes	Selectable	PWM/Manchester	-40°F to +185°F (-40°C to +85°C)	8-Soic	HCS360-I/SN-ND	2.08	1.52	1.37
4	15	2.0 - 6.6	28/32	64	2	Yes	Selectable	PWM/VPWM	+32°F to +158°F (0°C to +70°C)	8-Dip	HCS361/P-ND	1.90	1.38	1.24
4	15	2.0 - 6.6	28/32	64	2	Yes	Selectable	PWM/VPWM	+32°F to +158°F (0°C to +70°C)	8-Soic	HCS361/SN-ND	1.90	1.38	1.24
4	15	2.0 - 6.6	28/32	64	2	Yes	Selectable	PWM/VPWM	-40°F to +185°F (-40°C to +85°C)	8-Dip	HCS361-I/P-ND	2.08	1.52	1.37
4	15	2.0 - 6.6	28/32	64	2	Yes	Selectable	PWM/VPWM	-40°F to +185°F (-40°C to +85°C)	8-Soic	HCS361-I/SN-ND	2.08	1.52	1.37

Function Outputs	Functions	Serial Interface	Voltage	Secure Learn	User Memory	Baud Rates	Vlow Output	Repeat	Modulation	Operating Temperature	Package	Digi-Key Part No.	Price Each		
													1	25	100
								Decoders							
1	15	Yes	3.0 - 5.5	Yes	1Kbit	Full	Yes	Yes	PWM	+32°F to +158°F (0°C to +70°C)	8-Soic	HCS500/SM-ND	2.35	1.88	1.57
1	15	Yes	3.0 - 5.5	Yes	1Kbit	Full	Yes	Yes	PWM	-40°F to +185°F (-40°C to +85°C)	8-Dip	HCS500-I/P-ND	2.48	1.98	1.65
1	15	Yes	3.0 - 5.5	Yes	1Kbit	Full	Yes	Yes	PWM	-40°F to +185°F (-40°C to +85°C)	8-Soic	HCS500-I/SM-ND	2.60	2.07	1.73
4	15	Yes	3.0 - 6.0	Yes	No	Full	Yes	Yes	PWM	+32°F to +158°F (0°C to +70°C)	18-Dip	HCS512/P-ND	5.55	4.44	3.70
4	15	Yes	3.0 - 6.0	Yes	No	Full	Yes	Yes	PWM	+32°F to +158°F (0°C to +70°C)	18-Soic	HCS512/SO-ND	5.58	4.46	3.72
4	15	Yes	3.0 - 6.0	Yes	No	Full	Yes	Yes	PWM	-40°F to +185°F (-40°C to +85°C)	18-Dip	HCS512-I/P-ND	6.10	4.88	4.07
4	15	Yes	3.0 - 6.0	Yes	No	Full	Yes	Yes	PWM	-40°F to +185°F (-40°C to +85°C)	18-Soic	HCS512-I/SO-ND	6.15	4.91	4.09
2	15	Yes	4.5 - 5.5	Yes	1Kbit	Full	Yes	Yes	PWM	+32°F to +158°F (0°C to +70°C)	14-Dip	HCS515/P-ND	3.00	2.07	1.96
2	15	Yes	4.5 - 5.5	Yes	1Kbit	Full	Yes	Yes	PWM	+32°F to +158°F (0°C to +70°C)	14-Soic	HCS515/SL-ND	3.05	2.11	2.00
2	15	Yes	4.5 - 5.5	Yes	1Kbit	Full	Yes	Yes	PWM	-40°F to +185°F (-40°C to +85°C)	14-Dip	HCS515-I/P-ND	3.30	2.28	2.16
2	15	Yes	4.5 - 5.5	Yes	1Kbit	Full	Yes	Yes	PWM	-40°F to +185°F (-40°C to +85°C)	14-Soic	HCS515-I/SL-ND	3.35	2.32	2.20

SENSORY

Voice Direct™ 364 Speech Recognition Kit

Bring life to consumer electronics, toys, motors, appliances, lights, and games through the power of VoiceActivation™!

Sensory's Voice Direct™ 364 Speech Recognition Kit delivers state-of-the-art technology in an affordable, easy to assemble module. This kit is an easy-to-use tool for adding voice recognition to a range of applications limited only by your imagination.

The Voice Direct™ 364 is a speaker-dependent speech recognition module, allowing training of up to 15 words (capable of being organized into 1 to 3 command sets). Using sophisticated speech recognition technology, Voice Direct™ 364 maps spoken commands to system control functions. Each time one of the words is recognized, output pins on the module are toggled high for 1 second. With proper use, greater than 99% recognition accuracy can be achieved.

New Continuous Listening Technology is "always on" — meaning no button press is required! Up to 3 "gateway" words can be programmed, each allowing access to 5 commands. In addition, the Voice Direct™ 364 technology builds on the original Voice Direct™ by offering even greater accuracy, faster response times, and improved noise immunity. Minimal programming and effort required.

Features: • Minimal external components • Recognizes up to 15 words or phrases • Over 99% recognition accuracy • Phrase recognition up to 2.5 seconds • User-friendly speech prompting • Quick setup time

Kit Contains: • Voice Direct™ 364 Module • Microphone element • Speaker (2.25", 8 ohm) • Microswitches (4 pieces) • Passive component selection to configure the module • Quick Setup Guide

Additional Required Tools and Components: • Power Source (4.5-5.25V @ 100mA, three 1.5 alkaline batteries recommended) • Soldering iron • Multimeter • 0.1" M/F headers • 3" x 3" proto or perf board • Hookup wire

VD364KIT-ND
Voice Direct™ 364 Speech Recognition Kit **$49.00**

18/28/40-Pin 8-Bit CMOS *FLASH* Microcontrollers

PIC16F84/84A: Peripheral Features: • 13 I/O pins with individual direction control • High current sink/source for direct LED drive: 25mA sink max. per pin; 20mA source max. per pin • TMR0: 8-bit timer/counter with 8-bit programmable prescaler (**LF84** • Wide operating voltage range: Commercial: 2.0V to 6.0V; Industrial: 2.0V to 6.0V • Low power consumption: <2mA typical @ 5V, 4 MHz; 15µA typical @ 2V, 32 kHz; <1µA typical standby current @ 2V • Max Freq.: 10 MHz.) (**LF84A** • Wide operating voltage range: Commercial: 2.0V to 5.5V; Industrial: 2.0V to 5.5V • Low power consumption: <2mA typical @ 5V, 4 MHz; 15µA typical @ 2V, 32 kHz; <0.5µA typical standby current @ 2V • Max Freq.: 20 MHz)

PIC16F87X: Core Features: • High-performance RISC CPU • Only 35 single word instructions to learn • All single cycle instructions except for program branches which are two cycle • Operating Speed: DC – 20MHz clock input; DC – 200ns instruction cycle • Up to 8K x 14 words of FLASH Program Memory; Up to 368 x 8 bytes of Data Memory (RAM); Up to 256 x 8 bytes of EEPROM data memory • Pinout compatible to the PIC16C72, 73, 74, 76, 77 • Interrupt capability (up to 14 internal/external interrupt sources) • Eight level deep hardware stack • Direct, indirect, and relative addressing modes • Power-on Reset (POR) • Power-up Timer (PWRT) and Oscillator Start-up Timer (OST) • Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation • Programmable code-protection • Power saving SLEEP mode • Selectable oscillator options • Low-power, high-speed CMOS FLASH/EEPROM technology • Fully static design • In-Circuit Serial Programming™ via two pins • Only single 5V source needed for programming • In-Circuit Debugging via two pins • Processor read/write access to program memory • Wide operating voltage range: 2.0V to 5.5V (PIC16LF87X) • High Sink/Source Current: 25mA • Commercial and Industrial temperature ranges • Low-power consumption: <2mA typical @ 5V, 4MHz; 20µA typical @ 3V, 32kHz; <1µA typical standby current

Peripheral Features: • Timer0: 8-bit timer/counter with 8-bit prescaler • Timer1: 16-bit timer/counter with prescaler, can be incremented during sleep via external crystal/clock • Timer2: 8-bit timer/counter with 8-bit period register, prescaler and postscaler • Two Capture, Compare, PWM modules • Capture is 16-bit, max. resolution is 12.5ns; Compare is 16-bit, max. resolution is 200ns; PWM max. resolution is 10-bit • 10-bit multi-channel Analog-to-Digital converter • Synchronous Serial Port (SSP) with SPI™ (Master Mode) and I^{2}C™ (Master/Slave) • Universal Synchronous Asynchronous Receiver Transmitter (USART/SCI) with 9-bit address detection • Parallel Slave Port (PSP) 8-bits wide, with external Read, Write and Chip Select controls (40/44-pin only) • Brown-out detection circuitry for Brown-out Reset (BOR)

DS00092D-ND	Embedded Control Handbook, Volume 1	**$9.95**
DS00711-ND	Embedded Control Handbook, Update 2000	**$5.00**
DS00161-ND	CD-ROM Microchip Technical Library	**$2.25**

Key Features	**PIC16F872**	**PIC16F873**	**PIC16F874**	**PIC16F876**	**PIC16F877**
Operating Frequency	DC - 20 MHZ				
Resets (and Delays)	POR, BOR (PWRT, OST)				
FLASH Program Memory (14-bit words)	2K	4K		8K	
Data Memory (bytes)	128	192		368	
EEPROM Data Memory	64	128		256	
Interrupts	10	13	14	13	14
I/O Ports	A,B,C	A,B,C	A,B,C,D,E	A,B,C	A,B,C,D,E
Timers	3				
Capture/Compare/ PWM Modules	1	2			
Serial Communications	MSSP	MSSP, USART			
Parallel Communications	—	—	PSP	—	PSP
10-Bit Analog-to-Digital Module	5-input Channels	5-input Channels	8-input Channels	5-input Channels	8-input Channels
Instruction Set	35 Instructions				

Memory Size		Config-uration	I/O Lines	Oscillator Type External	Frequency Range Min./Max.	Operating Temperature Range	Package	Digi-Key Part No.	Price Each		
PROGRAM	RAM/ EEPROM								1	25	100
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	18-Dip	PIC16F627-04I/P-ND *NEW!*	3.50	2.01	1.86
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	18-Soic	PIC16F627-04I/SO-ND *NEW!*	3.58	2.05	1.90
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	20-SSOP	PIC16F627-04I/SS-ND *NEW!*	3.85	2.21	2.05
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-20MHz	-40°–185°F (-40°–85°C)	18-Dip	PIC16F627-20I/P-ND *NEW!*	3.75	2.15	1.99
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-20MHz	-40°–185°F (-40°–85°C)	18-Soic	PIC16F627-20I/SO-ND *NEW!*	3.83	2.19	2.03
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-20MHz	-40°–185°F (-40°–85°C)	20-SSOP	PIC16F627-20I/SS-ND *NEW!*	4.13	2.36	2.19
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	18-Dip	PIC16F628-04I/P-ND *NEW!*	3.98	2.28	2.11
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	18-Soic	PIC16F628-04I/SO-ND *NEW!*	4.08	2.32	2.15
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	20-SSOP	PIC16F628-04I/SS-ND *NEW!*	4.38	2.50	2.32
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-20MHz	-40°–185°F (-40°–85°C)	18-Dip	PIC16F628-20I/P-ND *NEW!*	4.28	2.44	2.26
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-20MHz	-40°–185°F (-40°–85°C)	18-Soic	PIC16F628-20I/SO-ND *NEW!*	4.35	2.49	2.30
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-20MHz	-40°–185°F (-40°–85°C)	20-SSOP	PIC16F628-20I/SS-ND *NEW!*	4.70	2.68	2.48
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	18-Dip	PIC16LF627-04I/P-ND *NEW!*	3.68	2.11	1.95
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	18-Soic	PIC16LF627-04I/SO-ND *NEW!*	3.75	2.15	1.99
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	20-SSOP	PIC16LF627-04I/SS-ND *NEW!*	4.05	2.32	2.15
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	18-Dip	PIC16LF628-04I/P-ND *NEW!*	4.18	2.39	2.22
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	18-Soic	PIC16LF628-04I/SO-ND *NEW!*	4.28	2.44	2.26
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	20-SSOP	PIC16LF628-04I/SS-ND *NEW!*	4.60	2.63	2.44
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	18-Dip	PIC16F84-04/P-ND**H**	6.88	4.51	4.37
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	18-Soic	PIC16F84-04/SO-ND	7.00	4.59	4.45
1K x 14	68/64	FLASH	13	Xtal/RC	DC-10MHz	32°–158° F (0°–70°C)	18-Dip	PIC16F84-10/P-ND**H**	7.38	4.84	4.69
1K x 14	68/64	FLASH	13	Xtal/RC	DC-10MHz	32°–158° F (0°–70°C)	18-Soic	PIC16F84-10/SO-ND	7.50	4.93	4.78
1K x 14	68/64	FLASH	13	Xtal/RC	DC-200KHz	32°–158° F (0°–70°C)	18-Dip	PIC16LF84-04/P-ND**H**	7.20	4.73	4.58
1K x 14	68/64	FLASH	13	Xtal/RC	DC-200KHz	32°–158° F (0°–70°C)	18-Soic	PIC16LF84-04/SO-ND	7.33	4.81	4.67
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	18-Dip	PIC16F84-04I/P-ND**H**	7.58	4.98	4.82
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	18-Soic	PIC16F84-04I/SO-ND	7.73	5.07	4.91
1K x 14	68/64	FLASH	13	Xtal/RC	DC-10MHz	-40°–185°F (-40°–85°C)	18-Dip	PIC16F84-10I/P-ND**H**	8.13	5.33	5.17
1K x 14	68/64	FLASH	13	Xtal/RC	DC-10MHz	-40°–185°F (-40°–85°C)	18-Soic	PIC16F84-10I/SO-ND	8.28	5.43	5.26
1K x 14	68/64	FLASH	13	Xtal/RC	DC-200KHz	-40°–185°F (-40°–85°C)	18-Dip	PIC16LF84-04I/P-ND**H**	7.93	5.19	5.04
1K x 14	68/64	FLASH	13	Xtal/RC	DC-200KHz	-40°–185°F (-40°–85°C)	18-Soic	PIC16LF84-04I/SO-ND	8.05	5.29	5.13
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	18-Dip	PIC16F84A-04/P-ND	5.63	3.46	3.36
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	18-Soic	PIC16F84A-04/SO-ND	5.73	3.53	3.42
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	20-SSOP	PIC16F84A-04/SS-ND	6.10	3.76	3.65
1K x 14	68/64	FLASH	13	Xtal/RC	DC-20MHz	32°–158° F (0°–70°C)	18-Dip	PIC16F84A-20/P-ND	6.00	3.69	3.59
1K x 14	68/64	FLASH	13	Xtal/RC	DC-20MHz	32°–158° F (0°–70°C)	18-Soic	PIC16F84A-20/SO-ND	6.10	3.76	3.65
1K x 14	68/64	FLASH	13	Xtal/RC	DC-20MHz	32°–158° F (0°–70°C)	20-SSOP	PIC16F84A-20/SS-ND	6.50	4.00	3.89
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	18-Dip	PIC16LF84A-04/P-ND	5.90	3.63	3.53
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	18-Soic	PIC16LF84A-04/SO-ND	6.00	3.69	3.58
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	20-SSOP	PIC16LF84A-04/SS-ND	6.40	3.94	3.82
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	18-Dip	PIC16F84A-04I/P-ND	6.18	3.80	3.69
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	18-Soic	PIC16F84A-04I/SO-ND	6.28	3.87	3.75
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	20-SSOP	PIC16F84A-04I/SS-ND	6.68	4.10	3.99
1K x 14	68/64	FLASH	13	Xtal/RC	DC-20MHz	-40°–185°F (-40°–85°C)	18-Dip	PIC16F84A-20I/P-ND	6.60	4.06	3.94
1K x 14	68/64	FLASH	13	Xtal/RC	DC-20MHz	-40°–185°F (-40°–85°C)	18-Soic	PIC16F84A-20I/SO-ND	6.70	4.13	4.00
1K x 14	68/64	FLASH	13	Xtal/RC	DC-20MHz	-40°–185°F (-40°–85°C)	20-SSOP	PIC16F84A-20I/SS-ND	7.08	4.36	4.24
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	18-Dip	PIC16LF84A-04I/P-ND	6.45	3.97	3.86
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	18-Soic	PIC16LF84A-04I/SO-ND	6.58	4.05	3.93
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	20-SSOP	PIC16LF84A-04I/SS-ND	6.95	4.28	4.15
2K x 14	128/64	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40°–185°F (-40°–85°C)	28-Soic	PIC16F870-I/SO-ND *NEW!*	4.63	2.87	2.74
2K x 14	128/64	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40°–185°F (-40°–85°C)	28-Dip .3"	PIC16F870-I/SP-ND *NEW!*	4.63	2.87	2.74
2K x 14	128/64	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40°–185°F (-40°–85°C)	28-SSOP	PIC16F870-I/SS-ND *NEW!*	4.78	2.97	2.82
2K x 14	128/64	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40°–185°F (-40°–85°C)	40-Dip	PIC16F871-I/P-ND *NEW!*	5.48	3.40	3.12
2K x 14	128/64	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40°–185°F (-40°–85°C)	44-PLCC	PIC16F871-I/L-ND *NEW!*	6.13	3.80	3.49
2K x 14	128/64	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40°–185°F (-40°–85°C)	28-Dip .3"	PIC16F872-I/SP-ND	4.63	2.83	2.74
2K x 14	128/64	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40°–185°F (-40°–85°C)	28-Soic	PIC16F872-I/SO-ND	4.63	2.83	2.74
2K x 14	128/64	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40°–185°F (-40°–85°C)	28-SSOP	PIC16F872-I/SS-ND	4.78	2.92	2.82
2K x 14	128/64	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	28-Dip .3"	PIC16LF872-I/SP-ND	4.88	2.98	2.88
2K x 14	128/64	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	28-Soic	PIC16LF872-I/SO-ND	4.88	2.98	2.88
2K x 14	128/64	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	28-SSOP	PIC16LF872-I/SS-ND	5.00	3.06	2.96
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	28-Dip .3"	PIC16F873-04/SP-ND	7.13	4.35	4.21
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	28-Soic	PIC16F873-04/SO-ND	7.13	4.35	4.21
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	32°–158° F (0°–70°C)	28-Dip .3"	PIC16F873-20/SP-ND	7.63	4.66	4.51
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	32°–158° F (0°–70°C)	28-Soic	PIC16F873-20/SO-ND	7.63	4.66	4.51
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	28-Dip .3"	PIC16LF873-04/SP-ND	7.48	4.57	4.42
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	28-Soic	PIC16LF873-04/SO-ND	7.48	4.57	4.42
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	28-Dip .3"	PIC16F873-04I/SP-ND	8.28	5.06	4.89
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	28-Soic	PIC16F873-04I/SO-ND	8.28	5.06	4.89
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40°–185° F (-40°–85°C)	28-Dip .3"	PIC16LF873-04I/SP-ND	8.23	5.03	4.86
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	28-Soic	PIC16LF873-04I/SO-ND	8.23	5.03	4.86
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	40-Dip	PIC16F874-04/P-ND	7.78	4.75	4.60
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	44-PLCC	PIC16F874-04/L-ND	8.70	5.32	5.15
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	32°–158° F (0°–70°C)	40-Dip	PIC16F874-20/P-ND	8.33	5.08	4.92
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	32°–158° F (0°–70°C)	44-PLCC	PIC16F874-20/L-ND	9.30	5.69	5.51
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	40-Dip	PIC16LF874-04/P-ND	8.63	5.28	5.11
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	44-PLCC	PIC16LF874-04/L-ND	9.68	5.91	5.72
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	40-Dip	PIC16F874-04I/P-ND	9.05	5.53	5.35
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	44-PLCC	PIC16F874-04I/L-ND	9.58	5.85	5.66
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	40-Dip	PIC16LF874-04I/P-ND	9.50	5.81	5.62
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	44-PLCC	PIC16LF874-04I/L-ND	10.63	6.50	6.29
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	28-Dip .3"	PIC16F876-04/SP-ND	7.68	4.70	4.55
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	28-Soic	PIC16F876-04/SO-ND	7.68	4.70	4.55
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	32°–158° F (0°–70°C)	28-Dip .3"	PIC16F876-20/SP-ND	8.70	5.32	5.15

(Continued)

MICROCHIP 18/28/40-Pin 8-Bit CMOS FLASH Microcontrollers (Cont.)

Memory Size		Configuration	I/O Lines	Oscillator Type External	Frequency Range Min./Max.	Operating Temperature Range	Package	Digi-Key Part No.	Price Each		
PROGRAM	RAM/ EEPROM								1	25	100
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	32°–158° F (0°–70°C)	28-Soic	PIC16F876-20/SO-ND	8.70	5.32	5.15
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	28-Dip .3"	PIC16LF876-04/SP-ND	8.55	5.22	5.05
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	28-Soic	PIC16LF876-04/SO-ND	8.55	5.22	5.05
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	28-Dip .3"	PIC16F876-04I/SP-ND	8.95	5.47	5.29
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	28-Soic	PIC16F876-04I/SO-ND	8.95	5.47	5.29
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	28-Dip .3"	PIC16LF876-04I/SP-ND	9.40	5.75	5.56
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	28-Soic	PIC16LF876-04I/SO-ND	9.40	5.75	5.56
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	40-Dip	PIC16F877-04/P-ND	8.40	5.13	4.96
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	44-PLCC	PIC16F877-04/L-ND	9.40	5.75	5.56
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	32°–158° F (0°–70°C)	40-Dip	PIC16F877-20/P-ND	9.50	5.80	5.62
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	32°–158° F (0°–70°C)	44-PLCC	PIC16F877-20/L-ND	10.63	6.50	6.29
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	40-Dip	PIC16LF877-04/P-ND	9.33	5.70	5.51
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32°–158° F (0°–70°C)	44-PLCC	PIC16LF877-04/L-ND	9.88	6.03	5.84
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	40-Dip	PIC16F877-04I/P-ND	9.23	5.64	5.46
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	44-PLCC	PIC16F877-04I/L-ND	10.93	6.68	6.47
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	40-Dip	PIC16LF877-04I/P-ND	9.70	5.93	5.73
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40°–185°F (-40°–85°C)	44-PLCC	PIC16LF877-04I/L-ND	11.48	7.02	6.79

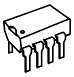
† Two Analog Comparators and One 10 Bit PWM

★ *Digi-Key now offers a programming service using customer supplied Master IC and software disk for Microchips PIC family. The following formats are supported by our programming center: BIN16 — 16-bit binary format (default for PGM16/TASM16), INHXM8 — Merged 8-bit Intel™ Hex (Parallax) format, INHXS8 — Split 8-bit Intel™ Hex format, INHX16 — 16-bit Intel™ Hex format. For further information and price quotes, please call 1-800-344-4539, and request the programming center.*

MICROCHIP

8-pin, 8-Bit Microcontrollers

PIC12C50X, PIC12CE5XX and PIC12C67X Series



High-Performance RISC CPU: • Only 33 single word instructions to learn • All instructions are single cycle (1µs) except for program branches which are two-cycle • Operating Speed: DC - 4 MHz clock input, DC - 1µs instruction cycle • 12-bit wide instructions • 8-bit wide data path • Seven special function hardware registers • Two-level deep hardware stack • Direct, indirect and relative addressing modes for data and instructions • Internal 4 MHz RC oscillator with programmable calibration • In-circuit serial programming

Peripheral Features: • 8-bit real time clock/counter (TMR0) with 8-bit programmable prescaler • Power-On Reset (POR) • Device Reset Timer (DRT) • Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation • Programmable code-protection • Power saving SLEEP mode • Wake-up from SLEEP on pin change • Internal pull-ups on I/O pins

Selectable Oscillator Options: • INTRC - Internal 4 MHz RC oscillator • EXTRC - External low-cost RC oscillator • XT - Standard crystal/resonator • LP - Power saving, low frequency crystal • Internal pull-up on MCLR pin

Applications: The PIC12C5XX series fits perfectly in applications ranging from personal care appliances and security systems to low-power remote transmitters/receivers (e.g., timer functions, replacement of "glue" logic and PLDs in larger systems, co-processor applications).

8 PIN MCU with A/D:

PIC12C67X microcontrollers typically achieve a 2:1 code compression and a 4:1 speed improvement over other 8-bit microcontrollers in their class.

The PIC12C67X devices have 128 bytes of RAM and 6 I/O pins. In addition a timer/counter is available. Also a 4-channel high-speed 8-bit A/D is provided. The 8-bit resolution is ideally suited for applications requiring low-cost analog interface, e.g., thermostat control, pressure sensing, etc.

DS00161-ND	CD-ROM Microchip Technical Library............	**$2.25**
DS00711-ND	Embedded Control Handbook Update 2000......................................	**$5.00**

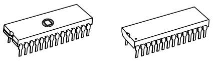
Memory Size		Configuration	I/O Lines	Oscillator Type External †	Frequency Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
512 x 12	25 x 8	EPROM	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-CDip	PIC12C508/JW-ND	9.65	—	—
512 x 12	25 x 8	OTP	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12C508-04/P-ND	2.05	1.72	1.40
512 x 12	25 x 8	OTP	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Soic*	PIC12C508-04/SM-ND	2.15	1.81	1.47
512 x 12	25 x 8	OTP	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12C508-04I/P-ND	2.25	1.90	1.54
512 x 12	25 x 8	OTP	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Soic*	PIC12C508-04I/SM-ND	2.38	1.99	1.61
512 x 12	25 x 8	EPROM	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-CDip	PIC12C508A/JW-ND	9.17	—	—
512 x 12	25 x 8	OTP	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12C508A-04/P-ND	1.58	.97	.94
512 x 12	25 x 8	OTP	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Soic*	PIC12C508A-04/SM-ND	1.58	.97	.94
512 x 12	25 x 8	OTP	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12C508A-04I/P-ND	1.73	1.07	1.03
512 x 12	25 x 8	OTP	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Soic*	PIC12C508A-04I/SM-ND	1.73	1.07	1.03
1K x 12	41 x 8	EPROM	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-CDip	PIC12C509/JW-ND	10.14	—	—
1K x 12	41 x 8	OTP	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12C509-04/P-ND	2.28	1.90	1.54
1K x 12	41 x 8	OTP	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Soic*	PIC12C509-04/SM-ND	2.38	2.00	1.62
1K x 12	41 x 8	OTP	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12C509-04I/P-ND	2.50	2.09	1.70
1K x 12	41 x 8	OTP	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Soic*	PIC12C509-04I/SM-ND	2.60	2.18	1.76
1K x 12	41 x 8	EPROM	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-CDip	PIC12C509A/JW-ND	9.65	—	—
1K x 12	41 x 8	OTP	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12C509A-04/P-ND	1.63	1.01	.97
1K x 12	41 x 8	OTP	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Soic*	PIC12C509A-04/SM-ND	1.63	1.01	.97
1K x 12	41 x 8	OTP	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12C509A-04I/P-ND	1.80	1.11	1.07
1K x 12	41 x 8	OTP	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Soic*	PIC12C509A-04I/SM-ND	1.80	1.11	1.07
512 x 12	25 x 8	EPROM‡	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-CDip	PIC12CE518/JW-ND	10.23	—	—
512 x 12	25 x 8	OTP‡	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12CE518-04/P-ND	1.93	1.19	1.15
512 x 12	25 x 8	OTP‡	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Soic*	PIC12CE518-04/SM-ND	2.03	1.25	1.21
512 x 12	25 x 8	OTP‡	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12CE518-04I/P-ND	2.13	1.31	1.27
512 x 12	25 x 8	OTP‡	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Soic*	PIC12CE518-04I/SM-ND	2.23	1.37	1.33
1K x 12	41 x 8	EPROM‡	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-CDip	PIC12CE519/JW-ND	10.81	—	—
1K x 12	41 x 8	OTP‡	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12CE519-04/P-ND	2.10	1.29	1.25
1K x 12	41 x 8	OTP‡	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Soic*	PIC12CE519-04/SM-ND	2.20	1.36	1.31
1K x 12	41 x 8	OTP‡	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12CE519-04I/P-ND	2.30	1.42	1.38
1K x 12	41 x 8	OTP‡	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Soic*	PIC12CE519-04I/SM-ND	2.40	1.48	1.43
1K x 14	128	EPROM	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	8-CDip	PIC12C671/JW-ND	8.62	—	—
1K x 14	128	OTP	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12C671-04/P-ND	2.88	1.77	1.71
1K x 14	128	OTP	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Soic*	PIC12C671-04/SM-ND	3.00	1.86	1.80
1K x 14	128	OTP	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12C671-10/P-ND	3.08	1.89	1.83
1K x 14	128	OTP	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	8-Soic*	PIC12C671-10/SM-ND	3.23	1.99	1.92
1K x 14	128	OTP	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12C671-04I/P-ND	3.15	1.94	1.88
1K x 14	128	OTP	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Soic*	PIC12C671-04I/SM-ND	3.30	2.04	1.98
1K x 14	128	OTP	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-10MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12C671-10I/P-ND	3.38	2.08	2.02
2K x 14	128	EPROM	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	8-CDip	PIC12C672/JW-ND	8.63	—	—
2K x 14	128	OTP	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12C672-04/P-ND	2.88	1.77	1.71
2K x 14	128	OTP	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Soic*	PIC12C672-04/SM-ND	3.00	1.86	1.80
2K x 14	128	OTP	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12C672-10/P-ND	3.08	1.89	1.83
2K x 14	128	OTP	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	8-Soic*	PIC12C672-10/SM-ND	3.23	1.99	1.92
2K x 14	128	OTP	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12C672-04I/P-ND	3.15	1.94	1.88
2K x 14	128	OTP	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Soic*	PIC12C672-04I/SM-ND	3.30	2.04	1.98
2K x 14	128	OTP	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-10MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12C672-10I/P-ND	3.38	2.08	2.01
2K x 14	128	OTP	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-10MHz	-40° – 185°F (-40° – 85°C)	8-Soic*	PIC12C672-10I/SM-ND	3.55	2.18	2.12
1K x 14	128 x 8	EPROM‡	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	8-CDip	PIC12CE673/JW-ND	9.49	—	—
1K x 14	128 x 8	OTP‡	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12CE673-04/P-ND	3.38	2.08	2.02
1K x 14	128 x 8	OTP‡	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12CE673-10/P-ND	3.63	2.23	2.16
2K x 14	128 x 8	EPROM‡	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	8-CDip	PIC12CE674/JW-ND	9.49	—	—
2K x 14	128 x 8	OTP‡	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12CE674-04/P-ND	3.38	2.08	2.02
2K x 14	128 x 8	OTP‡	6 (4-Ch 8-bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12CE674-10/P-ND	3.63	2.23	2.16

† Has internal RC Oscillator @ 4MHz (See data sheet for accuracy) ‡ 16-Byte EEPROM * Body width = .208 Inches (nominal)

MICROCHIP

8-Bit RISC Microcontrollers

PIC16C5X and PIC16HV540 Series



General Description: Microchip's long history of innovation has proven its commitment to develop and market leading edge products. With its PIC, Microchip has engineered *the most advanced low-to mid range 8-Bit Microcontroller family on the market today*. The flexibility of CMOS OTP EPROM Technology, the superior performance of RISC Architecture and the smallest packaging combined with affordable pricing are the prime reasons systems designers select PIC as their Microcontroller of Choice. With PIC, the 8-12 week lead time typical of ROM MCUs is reduced to just days. In addition, PIC's code compaction factor takes weeks off system design time. PIC's small die size combined with Microchip's advanced CMOS technology, support a *wide performance range* and low operating and standby currents. Low currents are ideal for long-life battery dependent applications. One of PIC's strongest suits is its I/O capability.

PIC16C5X (Use Programmer PICSTART Plus)

Features: Only 33 single word instructions to learn • All single cycle instructions (200 ns) except for program branches which are two-cycle • 12-bit wide instructions • 8-bit wide data path • 512 - 2K x 12 on-chip EPROM program memory • 25 to 73 x 8 general purpose registers (SRAM) • 7 special function hardware registers • 2 level deep hardware stack • Direct, indirect and relative addressing modes for data and instructions • 8 bit real time clock/counter (RTCC) with 8-bit programmable prescaler • Oscillator start-up timer • Watchdog timer (WDT) with its own on-chip RC oscillator.

PIC16C54C (Use Programmer PICSTART Plus)

Features: The PIC16C54C expands the baseline family with a low end device that offers lower power consumption and enhanced electrical characteristics. The PIC16C54C provides a cost reduction path for PIC16C57 and PIC16C58B users that require less program memory or data memory for a new application. Also some current PIC16C54, 54A, and 54B users may migrate to the PIC16C54C to enjoy the advantages of lower power consumption and enhanced electrical characteristics all at a lower cost. Software is supported from the PIC16C54 directly to the PIC16C54C with no software code changes. The PIC16C54C is equipped with special microcontroller-like features that reduce system cost and power requirements. There are four oscillator configurations to choose from, including power saving LP (Low Power) oscillator and cost saving RC oscillator.

PIC16HV540 (Enhanced PIC16C54 EPROM-Based 8-Bit CMOS Microcontroller with On-Chip Voltage Regulator)

General Description: The PIC16HV540 is a low-cost, high-performance, 8-bit, fully-static, EPROM-based CMOS microcontroller. It is pin and software compatible with the PIC16C5X family of devices. It employs an RISC architecture with only 33 single word/single cycle instructions. The PIC16HV540 is the first One-Time-Programmable (OTP) microcontroller with an on-chip 3 Volt and 5 Volt regulator. This eliminates the need for an external regulator in many applications powered from 9 Volt or 12 Volt batteries or unregulated 6 Volt, 9 Volt or 12 Volt mains adapters. The PIC16HV540 is ideally suited for applications that require very low standby current at high voltages. These typically require expensive low current regulators.

The PIC16HV540 is equipped with special features that reduce system cost and power requirements. The Power-On Reset (POR) and Device Reset Timer (DRT) eliminate the need for external reset circuitry. There are four oscillator configurations to choose from, including the power-saving LP (Low Power) oscillator, cost-saving RC oscillator, and XT and HS for crystal oscillators. Power saving SLEEP mode, Watchdog Timer and code protection features improve system cost, power and reliability.

Applications: The PIC16HV540 is very versatile even in areas where no microcontroller use has been considered before (e.g., timer functions, replacement of "glue" logic in larger systems, coprocessor applications). The PIC16HV540 fits perfectly in low-power battery applications such as CO and smoke detection, toys, games, security systems and automobile modules.

Features: • High-Performance RISC CPU • 18-pins • 12 I/O • 512 EPROM • 25 RAM • Only 33 single word instructions to learn • All instructions are single cycle (200 ns) except for program branches which are two-cycle • Operating Speed: DC - 20 MHz clock input; 200 - ns instruction cycle • 12-bit wide instructions • 8-bit wide data path • Seven special function hardware registers • ***Four-level deep hardware stack*** • Direct, indirect and relative addressing modes for data and instructions. **Peripheral Features:** • 8-bit real time clock/counter (TMR0) with 8-bit programmable prescaler • Power-On Reset (POR) • Brown-Out Protection • Device Reset Timer (DRT) with short RC-oscillator start up time • Programmable Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation • Sleep Timer • ***8 High Voltage I/O*** • ***4 Regulated I/O*** • Wake up from SLEEP on pin change • Programmable code-protection • Power saving SLEEP mode • Selectable oscillator options: RC – Low-cost RC oscillator; XT – Standard crystal/resonator; HS – High speed crystal/resonator; LP – Power saving, low frequency crystal • Glitch filtering on master clear and pin change inputs. **CMOS Technology:** • ***Selectable on-chip 3V/5V Regulator*** • Low-power, high-speed CMOS EPROM technology • Fully static design • ***Wide-operating voltage range: 3.5V to 15V*** • Temperature range: Commercial: 0°C to 70°C; Industrial: -40°C to 85°C • Low-power consumption: <2mA typical @ 5V, 4 MHz; 15µA typical @ 3A, 32kHz; <4.5µA typical standby current @ 15V (with WDT disabled), 0°C t0 70°C.

PIC16C58B (Use Programmer PICSTART Plus)

Features: The PIC16C58B expands the baseline family support with a larger memory, small pin count device. The PIC16C58B provides upward migration path to PIC16C54 and PIC16C56 customers that require more program or data memory. In addition, PIC16C57 customers that do not require as much I/O capability can migrate down to 18 pins to save cost and board space. The PIC16C58B positions in the high-end of the baseline family between the PIC16C56 and the PIC16C57 providing the same memory capability of the PIC16C57 in the smaller 18 pin package. Only small code changes are necessary to interface to the I/O pins will be required The PIC16C58B is equipped with special microcontroller-like features that reduce system cost and power requirements. There are four user selectable oscillator configurations to choose from, including power saving LP (Low Power) oscillator and cost saving RC oscillator.

Maximum output current sinked by any I/O pin = 25mA; sourced by any I/O pin = 20mA. Do not exceed more than 800 mw of total power dissipation. EPROM = Erasable PROM; OTP= One Time Programmable Only

PIC16C505 14-pin PIC.

See chart for specifications.

DS00092D-ND	Embedded Control Handbook, Volume 1	**$9.95**
DS00711-ND	Embedded Control Handbook, Updated 2000	**$5.00**
DS00161-ND	CD-ROM Microchip Technical Library	**$2.25**

Memory Size									Price Each		
EPROM	RAM	Config-uration	I/O Lines	Oscillator Type External	Frequency Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	1	25	100
1K x 12	72 x 8	EPROM	11	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	14-CDip	PIC16C505/JW-ND	6.25	—	—
1K x 12	72 x 8	OTP	11	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	14-Dip	PIC16C505-04/P-ND★	2.05	1.26	1.22
1K x 12	72 x 8	OTP	11	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	14-Soic	PIC16C505-04/SL-ND	2.05	1.26	1.22
1K x 12	72 x 8	OTP	11	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	14-Dip	PIC16C505-04I/P-ND★	2.05	1.26	1.22
1K x 12	72 x 8	OTP	11	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	14-Soic	PIC16C505-04I/SL-ND	2.05	1.26	1.22
1K x 12	72 x 8	OTP	11	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	14-Dip	PIC16C505-20/P-ND★	2.13	1.31	1.27
1K x 12	72 x 8	OTP	11	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	14-Soic	PIC16C505-20/SL-ND	2.13	1.31	1.27
1K x 12	72 x 8	OTP	11	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	14-Dip	PIC16C505-20I/P-ND★	2.13	1.31	1.27
1K x 12	72 x 8	OTP	11	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	14-Soic	PIC16C505-20I/SL-ND	2.13	1.31	1.27
512 x 12	25 x 8	OTP	12	RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C54-RC/P-ND★	3.70	2.72	2.53
512 x 12	25 x 8	OTP	12	RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C54-RC/SO-ND★	3.78	2.78	2.58
512 x 12	25 x 8	OTP	12	Xtal	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C54-XT/SO-ND★	3.78	2.78	2.58
512 x 12	25 x 8	OTP	12	Xtal	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C54-HS/P-ND★	3.95	2.91	2.71
512 x 12	25 x 8	OTP	12	Xtal	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C54-HS/SO-ND★	4.05	2.97	2.76
512 x 12	25 x 8	OTP	12	Xtal	DC-40KHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C54-LP/P-ND★	3.88	2.86	2.66
512 x 12	25 x 8	OTP	12	Xtal	DC-40KHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C54-LP/SO-ND★	3.98	2.92	2.71
512 x 12	25 x 8	OTP	12	RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C54-RCI/P-ND★	4.08	3.00	2.78
512 x 12	25 x 8	OTP	12	Xtal	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C54-XTI/P-ND★	4.08	3.00	2.78
512 x 12	25 x 8	OTP	12	Xtal	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C54-XTI/SO-ND	4.15	3.06	2.84
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C54A-04/P-ND★	3.70	2.72	2.53
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C54A-04/SO-ND★	3.78	2.78	2.58
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C54A-04/SS-ND	4.08	3.00	2.79
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC54A-04/SO-ND★	3.95	2.91	2.71
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C54A-10/P-ND★	3.95	2.91	2.71
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C54A-20/P-ND★	4.23	3.12	2.90
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C54A-20/SO-ND★	4.33	3.18	2.95
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C54A-20/SS-ND	4.68	3.44	3.19
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C54A-04I/SO-ND★	4.15	3.05	2.84
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-200KHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16LC54A-04I/SO-ND★	4.35	3.21	2.98
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-10MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C54A-10I/P-ND★	4.35	3.20	2.98
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C54A-20I/P-ND★	4.65	3.43	3.19
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C54A-20I/SO-ND★	4.75	3.50	3.25
512 x 12	25 x 8	EPROM	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C54C/JW-ND	6.59	—	—
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C54C-04/P-ND★	2.30	1.42	1.37
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C54C-04/SO-ND★	2.35	1.45	1.40
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C54C-04/SS-ND★	2.53	1.56	1.51
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C54C-20/P-ND★	2.48	1.52	1.47
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C54C-20/SO-ND★	2.53	1.55	1.50
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C54C-20/SS-ND★	2.73	1.67	1.62
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C54C-04I/P-ND★	2.30	1.42	1.37
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C54C-04I/SO-ND★	2.35	1.45	1.40
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	20-SSOP	PIC16C54C-04I/SS-ND★	2.53	1.56	1.51
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C54C-20I/P-ND★	2.48	1.52	1.47
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C54C-20I/SO-ND★	2.53	1.55	1.50
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	20-SSOP	PIC16C54C-20I/SS-ND★	2.73	1.67	1.62
512 x 12	25 x 8	EPROM	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16HV540/JW-ND	6.59	—	—
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16HV540-04/P-ND	2.30	1.42	1.37
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16HV540-04/SO-ND	2.35	1.45	1.40
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16HV540-20/P-ND	2.45	1.52	1.47
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16HV540-20/SO-ND	2.50	1.55	1.50
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16HV540-04I/P-ND	2.30	1.42	1.37
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16HV540-04I/SO-ND	2.35	1.45	1.40
512 x 12	24 x 8	OTP	20	RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C55-RC/P-ND★	4.55	3.34	3.10
512 x 12	24 x 8	OTP	20	RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C55-RC/SO-ND★	4.73	3.47	3.23
512 x 12	24 x 8	OTP	20	RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C55-RC/SP-ND★	4.55	3.34	3.10
512 x 12	24 x 8	OTP	20	Xtal	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C55-XT/P-ND★	4.85	3.57	3.32
512 x 12	24 x 8	OTP	20	Xtal	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C55-XT/SO-ND★	5.05	3.72	3.45
512 x 12	24 x 8	OTP	20	Xtal	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C55-XT/SP-ND★	4.85	3.57	3.32
512 x 12	24 x 8	OTP	20	Xtal	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C55-HS/P-ND★	5.55	4.09	3.80
512 x 12	24 x 8	OTP	20	Xtal	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C55-HS/SO-ND★	5.78	4.25	3.95
512 x 12	24 x 8	OTP	20	Xtal	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C55-HS/SP-ND★	5.55	4.09	3.80
512 x 12	24 x 8	OTP	20	Xtal	DC-40KHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C55-LP/P-ND★	4.78	3.51	3.26
512 x 12	24 x 8	OTP	20	Xtal	DC-40KHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C55-LP/SO-ND★	4.95	3.65	3.39
512 x 12	24 x 8	OTP	20	Xtal	DC-40KHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C55-LP/SP-ND★	4.78	3.51	3.26

(Continued)

MICROCHIP 8-Bit RISC Microcontrollers *(Cont.)*

Memory Size		Config-uration	Oscillator I/O Lines	Frequency Type External	Operating Range Min./Max.	Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
512 x 12	24 x 8	OTP	20	Xtal	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Dip	PIC16C55-HSI/P-ND★	6.13	4.50	4.18
512 x 12	24 x 8	OTP	20	Xtal	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C55-HSI/SO-ND★	6.35	4.68	4.35
512 x 12	24 x 8	OTP	20	RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip	PIC16C55-RCI/P-ND★	5.00	3.67	3.41
512 x 12	24 x 8	OTP	20	Xtal	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip	PIC16C55-XTI/P-ND★	5.35	3.93	3.65
512 x 12	24 x 8	OTP	20	Xtal	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C55-XTI/SO-ND★	5.55	4.09	3.80
512 x 12	25 x 8	EPROM	20	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-CDip	PIC16C55A/JW-ND	7.35	—	—
512 x 12	25 x 8	OTP	20	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C55A-04/P-ND★	2.83	1.73	1.68
512 x 12	25 x 8	OTP	20	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C55A-04/SO-ND★	2.93	1.80	1.75
512 x 12	25 x 8	OTP	20	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C55A-04/SP-ND★	2.83	1.73	1.68
512 x 12	25 x 8	OTP	20	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16LC55A-04/P-ND★	2.95	1.82	1.76
512 x 12	25 x 8	OTP	20	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16LC55A-04/SO-ND★	3.08	1.89	1.83
512 x 12	25 x 8	OTP	20	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C55A-20/P-ND★	3.15	1.95	1.89
512 x 12	25 x 8	OTP	20	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C55A-20/SO-ND★	3.28	2.02	1.96
512 x 12	25 x 8	OTP	20	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C55A-20/SP-ND★	3.15	1.95	1.89
512 x 12	25 x 8	OTP	20	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip	PIC16C55A-04I/P-ND★	3.10	1.91	1.85
512 x 12	25 x 8	OTP	20	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C55A-04I/SO-ND★	3.23	1.98	1.92
1K x 12	25 x 8	OTP	12	RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C56-RC/P-ND★	4.73	3.49	3.24
1K x 12	25 x 8	OTP	12	RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C56-RC/SO-ND★	4.85	3.57	3.32
1K x 12	25 x 8	OTP	12	Xtal	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C56-XT/P-ND★	5.08	3.73	3.47
1K x 12	25 x 8	OTP	12	Xtal	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C56-XT/SO-ND★	5.20	3.82	3.55
1K x 12	25 x 8	OTP	12	Xtal	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C56-HS/P-ND★	5.80	4.27	3.97
1K x 12	25 x 8	OTP	12	Xtal	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C56-HS/SO-ND★	5.95	4.38	4.07
1K x 12	25 x 8	OTP	12	Xtal	DC-40KHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C56-LP/P-ND★	4.98	3.66	3.40
1K x 12	25 x 8	OTP	12	RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C56-RCI/P-ND★	5.20	3.83	3.56
1K x 12	25 x 8	OTP	12	Xtal	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C56-XTI/P-ND★	5.58	4.10	3.81
1K x 12	25 x 8	OTP	12	Xtal	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C56-HSI/P-ND★	6.38	4.70	4.36
1K x 12	25 x 8	EPROM	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C56A/JW-ND	9.09	—	—
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C56A-04/P-ND	2.60	1.60	1.55
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C56A-04/SO-ND	2.65	1.63	1.58
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C56A-20/P-ND	2.78	1.71	1.66
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C56A-20/SO-ND	2.83	1.74	1.69
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC56A-04/P-ND	2.73	1.68	1.63
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC56A-04/SO-ND	2.78	1.71	1.66
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C56A-04I/P-ND	2.85	1.76	1.70
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C56A-04I/SO-ND	2.90	1.79	1.74
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C56A-20I/P-ND	3.05	1.88	1.82
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C56A-20I/SO-ND	3.13	1.92	1.86
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16LC56A-04I/P-ND	3.00	1.84	1.79
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16LC56A-04I/SO-ND	3.05	1.88	1.82
2K x 12	72 x 8	OTP	20	RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C57-RC/P-ND★	5.78	4.25	3.95
2K x 12	72 x 8	OTP	20	RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C57-RC/SO-ND★	6.00	4.42	4.11
2K x 12	72 x 8	OTP	20	Xtal	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C57-XT/P-ND★	6.18	4.55	4.22
2K x 12	72 x 8	OTP	20	Xtal	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C57-XT/SO-ND★	6.43	4.73	4.39
2K x 12	72 x 8	OTP	20	Xtal	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C57-XT/SP-ND★	6.18	4.55	4.22
2K x 12	72 x 8	OTP	20	Xtal	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C57-HS/P-ND★	7.08	5.20	4.84
2K x 12	72 x 8	OTP	20	Xtal	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C57-HS/SO-ND★	7.35	5.41	5.03
2K x 12	72 x 8	OTP	20	Xtal	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C57-HS/SP-ND★	7.08	5.20	4.84
2K x 12	72 x 8	OTP	20	Xtal	DC-40KHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C57-LP/P-ND★	6.05	4.46	4.15
2K x 12	72 x 8	OTP	20	Xtal	DC-40KHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C57-LP/SO-ND★	6.30	4.64	4.31
2K x 12	72 x 8	OTP	20	Xtal	DC-40KHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C57-LP/SP-ND★	6.05	4.46	4.15
2K x 12	72 x 8	OTP	20	Xtal	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Dip	PIC16C57-HSI/P-ND★	7.78	5.72	5.32
2K x 12	72 x 8	OTP	20	Xtal	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C57-HSI/SO-ND★	8.10	5.95	5.53
2K x 12	72 x 8	OTP	20	RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip	PIC16C57-RCI/P-ND★	6.35	4.67	4.34
2K x 12	72 x 8	OTP	20	Xtal	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip	PIC16C57-XTI/P-ND★	6.80	5.00	4.65
2K x 12	72 x 8	OTP	20	Xtal	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C57-XTI/SO-ND★	7.08	5.20	4.83
2K x 12	72 x 8	EPROM	20	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-CDip	PIC16C57C/JW-ND	10.48	—	—
2K x 12	72 x 8	OTP	20	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C57C-04/P-ND★	3.28	2.02	1.96
2K x 12	72 x 8	OTP	20	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C57C-04/SO-ND★	3.43	2.10	2.04
2K x 12	72 x 8	OTP	20	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C57C-04/SP-ND★	3.28	2.02	1.96
2K x 12	72 x 8	OTP	20	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16LC57C-04/P-ND★	3.45	2.12	2.06
2K x 12	72 x 8	OTP	20	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16LC57C-04/SO-ND★	3.58	2.21	2.14
2K x 12	72 x 8	OTP	20	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C57C-20/P-ND★	3.68	2.27	2.20
2K x 12	72 x 8	OTP	20	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C57C-20/SO-ND★	3.83	2.36	2.29
2K x 12	72 x 8	OTP	20	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C57C-20/SP-ND★	3.68	2.27	2.20
2K x 12	72 x 8	OTP	20	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip	PIC16C57C-04I/P-ND★	3.60	2.23	2.16
2K x 12	72 x 8	OTP	20	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C57C-04I/SO-ND★	3.75	2.31	2.24
2K x 12	73 x 8	EPROM	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C58B/JW-ND	10.29	—	—
2K x 12	73 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C58B-04/P-ND★	2.75	1.70	1.65
2K x 12	73 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C58B-04/SO-ND★	2.80	1.73	1.68
2K x 12	73 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C58B-04/SS-ND★	3.03	1.87	1.81
2K x 12	73 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C58B-20/P-ND★	2.95	1.82	1.76
2K x 12	73 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C58B-20/SO-ND★	3.00	1.85	1.80
2K x 12	73 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C58B-20/SS-ND★	3.25	2.00	1.94
2K x 12	73 x 8	OTP	12	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C58B-20I/P-ND★	3.25	2.00	1.94
2K x 12	73 x 8	OTP	12	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C58B-20I/SO-ND★	3.30	2.04	1.98
2K x 12	73 x 8	OTP	12	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	20-SSOP	PIC16C58B-20I/SS-ND★	3.55	2.19	2.12
2K X 12	73 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC58B-04/P-ND	2.90	1.78	1.73

★ *Digi-Key now offers a programming service using customer supplied Master IC and software disk for Microchips PIC family. The following formats are supported by our programming center: BIN16 — 16-bit binary format (default for PGM16/TASM16), INHXM8 — Merged 8-bit Intel™ Hex (Parallax) format, INHXS8 — Split 8-bit Intel™ Hex format, INHX16 — 16-bit Intel™ Hex format. For further information and price quotes, please call 1-800-344-4539, and request the programming center.*

MICROCHIP EPROM-Based 8-Bit CMOS Microcontrollers

PIC16C55X Series

High Performance RISC CPU: • Only 35 instructions to learn • All single-cycle instructions (200ns), except for program branches which are two-cycle • Operating Speed: DC - 20 MHz clock input, DC - 200 ns instruction cycle • Interrupt capability • 16 special function hardware registers • 8-level deep hardware stack • Direct, Indirect and Relative addressing modes

Peripheral Features: • 13 I/O pins with individual direction control • High current sink/source for direct LED drive • Timer0: 8-bit timer/counter with 8-bit programmable prescaler

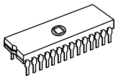
DS00161-ND CD-ROM Microchip Technical Library **$2.25**

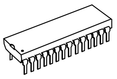
Memory Size		Config-uration	I/O Lines	Oscillator Type External	Frequency Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
512 x 14	80 x 8	OTP	13	Xtal/RC	DC - 4MHz	(0° – 70°C)	18-Dip	PIC16C554-04/P-ND★	3.73	2.70	2.25
512 x 14	80 x 8	OTP	13	Xtal/RC	DC - 4MHz		18-Soic	PIC16C554-04/SO-ND★	3.80	2.75	2.29
2K x 14	128 x 8	EPROM	13	Xtal/RC	DC - 20 MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C558/JW-ND	10.14	—	—
2K x 14	128 x 8	OTP	13	Xtal/RC	DC - 4MHz		18-Dip	PIC16C558-04/P-ND★	4.88	3.54	2.95
2K x 14	128 x 8	OTP	13	Xtal/RC	DC - 4MHz		18-Soic	PIC16C558-04/SO-ND★	4.98	3.61	3.01

★ *This part can be programmed by Digi-Key. For further information and price quotes, please call 1-800-344-4539, and request the programming center.*

8-Bit RISC Microcontrollers

PIC16C6X Series





General Description:

The PIC16C6X is a family of low-cost, high-performance, CMOS, full-static 8-bit microcontrollers.

"A" Version parts have an additional brown-out detect circuit.

(Use Programmer PICSTART Plus)

All PIC16/17 microcontrollers employ an advanced RISC-like architecture. The PIC16CXX has enhanced core features, eight-level deep stack, and multiple internal and external interrupt sources. The separate instruction and data buses of the Harvard architecture allow a 14-bit wide instruction word with the separate 8-bit wide data. The two stage instruction pipeline allows all instructions to execute in a single cycle, except for program branches (which require two cycles). A total of 35 instructions (reduced instruction set) are available. Additionally, a large register set gives some of the architectural innovations used to achieve a very high performance.

PIC16C6X Microcontroller Core Features:

- High-Performance RISC CPU
- Only 35 single word instructions to learn
- All single cycle instructions except for program branches which are two-cycle
- Operating speed: DC - 20MHz clock input, DC - 200ns instruction cycle
- Interrupt capability
- Eight level deep hardware stack
- Direct, indirect and relative addressing modes • Power-on Reset (POR)
- Power-up Timer (PWRT) and Oscillator Start-up Timer (OST)
- Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation
- Programmable code-protection
- Power saving SLEEP mode
- Selectable oscillator options
- Low-power, high-speed CMOS EPROM/ROM technology
- Fully static design • Wide operating voltage range: 2.5V to 6.0V
- Commercial, Industrial and Extended temperature ranges
- Lower power consumption: < 2mA @ 5V, 4MHz; 15µA typical @ 3V, 32kHz; <1µA typical standby current

PIC16C6X Peripheral Features:

- Timer0: 8-bit timer/counter with 8-bit prescaler
- Timer1: 16-bit timer/counter with prescaler, can be incremented during sleep via external crystal/clock
- Timer2: 8-bit timer/counter with 8-bit period register, prescaler and postscaler
- Capture/Compare/PWM (CCP) module(s)
- Capture is 16-bit, max resolution 12.5ns , Compare is 16-bit, max resolution is 200ns, PWM max resolution is 10-bit
- Synchronous Serial Port (SSP) with SPI™ and I²C™
- Universal Synchronous Asynchronous Receiver Transmitter (USART/SCI)
- Parallel Slave Port (PSP) 8-bits wide, with external RD, WR and CS controls
- Brown-out detection circuitry for Brown-out Reset (BOR)

DS00092D-ND	Embedded Control Handbook, Volume 1	**$9.95**
DS00711-ND	Embedded Control Handbook, Update 2000	**$5.00**
DS00161-ND	CD-ROM Microchip Technical Library	**$2.25**

Memory Size		Config-uration	I/O Lines	Oscillator Type External	Frequency Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-400KHz	32° - 158°F (0° - 70°C)	28-Dip .3"	PIC16LC62A-04/SP-ND★	7.43	4.58	4.43
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-400KHz	32° - 158°F (0° - 70°C)	28-SOIC	PIC16LC62A-04/SO-ND★	7.43	4.58	4.43
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-400KHz	-40° - 185°F (-40° - 85°C)	28-Dip .3"	PIC16LC62A-04I/SP-ND★	8.15	5.02	4.85
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-400KHz	-40° - 185°F (-40° - 85°C)	28-SOIC	PIC16LC62A-04I/SO-ND★	8.15	5.02	4.85
2K x 14	128 x 8	EPROM	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-CDip	PIC16C62B/JW-ND	9.57	—	—
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	28-Dip .3"	PIC16C62B-04/SP-ND★	4.40	2.71	2.63
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	28-SOIC	PIC16C62B-04/SO-ND★	4.40	2.71	2.63
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	28-SSOP	PIC16C62B-04/SS-ND	4.65	2.86	2.77
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-Dip .3"	PIC16C62B-20/SP-ND★	4.70	2.90	2.81
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-SOIC	PIC16C62B-20/SO-ND★	4.70	2.90	2.81
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-SSOP	PIC16C62B-20/SS-ND	4.95	3.05	2.96
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	28-Dip .3"	PIC16LC62B-04/SP-ND★	4.63	2.85	2.76
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	28-SOIC	PIC16LC62B-04/SO-ND★	4.63	2.85	2.76
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-4MHz	-40° - 185°F (-40° - 85°C)	28-Dip .3"	PIC16C62B-04I/SP-ND★	4.85	2.98	2.89
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-20MHz	-40° - 185°F (-40° - 85°C)	28-Dip .3"	PIC16C62B-20I/SP-ND★	5.18	3.19	3.09
4K x 14	192 x 8	EPROM	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-CDip .3"	PIC16C63/JW-ND	13.49	—	—
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	28-Dip .3"	PIC16C63-04/SP-ND★	8.50	5.23	5.06
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	28-SOIC	PIC16C63-04/SO-ND★	8.50	5.23	5.06
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-10MHz	32° - 158°F (0° - 70°C)	28-Dip .3"	PIC16C63-10/SP-ND★	9.10	5.60	5.42
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-10MHz	32° - 158°F (0° - 70°C)	28-SOIC	PIC16C63-10/SO-ND★	9.10	5.60	5.42
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-Dip .3"	PIC16C63-20/SP-ND★	9.10	5.60	5.42
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-SOIC	PIC16C63-20/SO-ND★	9.10	5.60	5.42
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-4MHz	-40° - 185°F (-40° - 85°C)	28-Dip .3"	PIC16C63-04I/SP-ND★	9.35	5.76	5.57
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-4MHz	-40° - 185°F (-40° - 85°C)	28-SOIC	PIC16C63-04I/SO-ND★	9.35	5.76	5.57
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-20MHz	-40° - 185°F (-40° - 85°C)	28-Dip .3"	PIC16C63-20I/SP-ND★	10.05	6.19	5.99
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-20MHz	-40° - 185°F (-40° - 85°C)	28-SOIC	PIC16C63-20I/SO-ND★	10.05	6.19	5.99
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-200KHz	-40° - 185°F (-40° - 85°C)	28-Dip .3"	PIC16LC63-04I/SP-ND★	9.78	6.03	5.83
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-200KHz	-40° - 185°F (-40° - 85°C)	28-SOIC	PIC16LC63-04I/SO-ND★	9.78	6.03	5.83
4K x 14	192 x 8	EPROM	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-CDip .3"	PIC16C63A/JW-ND	9.18	—	—
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	28-Dip .3"	PIC16C63A-04/SP-ND★	5.38	3.31	3.20
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	28-SOIC	PIC16C63A-04/SO-ND★	5.38	3.31	3.20
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	28-SSOP	PIC16C63A-04/SS-ND	5.63	3.47	3.36
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-4MHz	-40° - 185°F (-40° - 85°C)	28-Dip .3"	PIC16C63A-04I/SP-ND★	5.93	3.65	3.54
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-4MHz	-40° - 185°F (-40° - 85°C)	28-SOIC	PIC16C63A-04I/SO-ND★	5.93	3.65	3.54
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-4MHz	-40° - 185°F (-40° - 85°C)	28-SSOP	PIC16C63A-04I/SS-ND	6.20	3.82	3.70
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-Dip .3"	PIC16C63A-20/SP-ND★	5.78	3.56	3.45
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-SOIC	PIC16C63A-20/SO-ND★	5.78	3.56	3.45
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-SSOP	PIC16C63A-20/SS-ND	6.03	3.72	3.61
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-20MHz	-40° - 185°F (-40° - 85°C)	28-Dip .3"	PIC16C63A-20I/SP-ND★	6.35	3.91	3.79
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-20MHz	-40° - 185°F (-40° - 85°C)	28-SOIC	PIC16C63A-20I/SO-ND★	6.35	3.91	3.79
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-20MHz	-40° - 185°F (-40° - 85°C)	28-SSOP	PIC16C63A-20I/SS-ND★	6.63	4.08	3.95
2K x 14	128 x 8	EPROM	33	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	40-CDip	PIC16C64A/JW-ND	12.56	—	—
2K x 14	128 x 8	OTP	33	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	40-Dip	PIC16C64A-04/P-ND★	7.93	4.89	4.73
2K x 14	128 x 8	OTP	33	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	44-PLCC	PIC16C64A-04/L-ND★	8.58	5.28	5.11
2K x 14	128 x 8	OTP	33	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	40-Dip	PIC16C64A-20/P-ND★	8.50	5.23	5.06
2K x 14	128 x 8	OTP	33	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	44-PLCC	PIC16C64A-20/L-ND★	9.15	5.63	5.45
2K x 14	128 x 8	OTP	33	Xtal/RC	DC-200KHz	32° - 158°F (0° - 70°C)	40-Dip	PIC16LC64A-04/P-ND★	8.33	5.13	4.97
2K x 14	128 x 8	OTP	33	Xtal/RC	DC-200KHz	32° - 158°F (0° - 70°C)	44-PLCC	PIC16LC64A-04/L-ND★	8.98	5.53	5.35
2K x 14	128 x 8	OTP	33	Xtal/RC	DC-4MHz	-40° - 185°F (-40° - 85°C)	40-Dip	PIC16C64A-04I/P-ND★	8.73	5.38	5.20
2K x 14	128 x 8	OTP	33	Xtal/RC	DC-20MHz	-40° - 185°F (-40° - 85°C)	44-PLCC	PIC16C64A-20I/L-ND★	10.00	6.16	5.96
4K x 14	192 x 8	EPROM	33	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	40-CDip	PIC16C65A/JW-ND	14.02	—	—
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	40-Dip	PIC16C65A-04/P-ND★	10.60	6.53	6.32

(Continued)

8-Bit RISC Microcontrollers PIC16C6X Series *(Cont.)*

Memory Size		Config-uration	I/O Lines	Oscillator Type External	Frequency Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C65A-10/P-ND★	11.35	6.99	6.76
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C65A-10/L-ND★	13.05	8.04	7.78
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C65A-20/P-ND★	11.35	6.99	6.76
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C65A-20/L-ND★	13.05	8.04	7.78
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16LC65A-04/P-ND★	11.13	6.86	6.64
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16LC65A-04/L-ND★	12.85	7.91	7.65
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C65A-04I/P-ND★	11.68	7.18	6.95
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C65A-04I/L-ND★	13.40	8.25	7.98
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C65A-20I/P-ND★	12.48	7.69	7.44
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C65A-20I/L-ND★	14.20	8.74	8.46
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-200KHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16LC65A-04I/L-ND★	13.90	8.57	8.29
4K x 14	192 x 8	EPROM	33	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-CDip	PIC16C65B/JW-ND	10.09	—	—
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C65B-04/P-ND★	6.03	3.71	3.59
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C65B-04/L-ND★	7.00	4.31	4.18
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C65B-20/P-ND★	6.45	3.97	3.85
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C65B-20/L-ND★	7.43	4.57	4.43
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16LC65B-04/L-ND★	7.30	4.50	4.36
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C65B-04I/P-ND★	6.65	4.10	3.98
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C65B-20I/P-ND★	7.10	4.38	4.24
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C65B-20I/L-ND★	8.08	4.98	4.83
8K x 14	368	EPROM	22	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-CDip .3"	PIC16C66/JW-ND	13.89	—	—
8K x 14	368	OTP	22	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C66-04/SP-ND★	7.83	4.83	4.68
8K x 14	368	OTP	22	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C66-04/SO-ND★	7.83	4.83	4.68
8K x 14	368	OTP	22	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C66-10/SP-ND★	8.38	5.16	5.00
8K x 14	368	OTP	22	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C66-10/SO-ND★	8.38	5.16	5.00
8K x 14	368	OTP	22	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C66-20/SP-ND★	8.38	5.16	5.00
8K x 14	368	OTP	22	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C66-20/SO-ND★	8.38	5.16	5.00
8K x 14	368	OTP	22	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16LC66-04/SP-ND★	8.23	5.07	4.91
8K x 14	368	OTP	22	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16LC66-04/SO-ND★	8.23	5.07	4.91
8K x 14	368	OTP	22	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3"	PIC16C66-04I/SP-ND★	8.63	5.31	5.14
8K x 14	368	OTP	22	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3"	PIC16C66-20I/SP-ND★	9.23	5.68	5.50
8K x 14	368	OTP	22	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C66-20I/SO-ND★	9.23	5.68	5.50
8K x 14	368	EPROM	33	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-CDip	PIC16C67/JW-ND	13.80	—	—
8K x 14	368	OTP	33	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C67-04/P-ND★	8.55	5.26	5.10
8K x 14	368	OTP	33	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C67-10/P-ND★	9.15	5.63	5.46
8K x 14	368	OTP	33	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C67-10/L-ND★	9.68	5.97	5.79
8K x 14	368	OTP	33	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C67-20/P-ND★	9.15	5.63	5.46
8K x 14	368	OTP	33	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C67-20/L-ND★	9.68	5.97	5.79
8K x 14	368	OTP	33	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C67-04I/P-ND★	9.40	5.79	5.61
8K x 14	368	OTP	33	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C67-20I/P-ND★	10.05	6.20	6.00
8K x 14	368	OTP	33	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C67-20I/L-ND★	10.55	6.51	6.30

★ *Digi-Key now offers a programming service using customer supplied Master IC and software disk for Microchips PIC family. The following formats are supported by our programming center: BIN16 — 16-bit binary format (default for PGM16/TASM16), INHXM8 — Merged 8-bit Intel™ Hex (Parallax) format, INHXS8 — Split 8-bit Intel™ Hex format, INHX16 — 16-bit Intel™ Hex format. For further information and price quotes, please call 1-800-344-4539, and request the programming center.*

8-Bit CMOS Microcontroller with LCD Driver

PIC16C92X

(Use Programmer PICSTART Plus and AC164024-ND)

General Description:

The PIC16C9XX is a family of low-cost, high-performance, CMOS, fully-static, 8-bit microcontrollers with an integrated LCD Driver module, in the PIC16CXX mid-range family.

The **PIC16C923** devices have 176 bytes of RAM, 25 I/O pins, and 25-27 input only. In addition several peripheral features are available including: three timer/ counters, one Capture/Compare/ PWM module, one serial port and one LCD module. The Synchronous Serial Port can be configured as either a 3-wire Serial Peripheral Interface (SPI) or the two-wire Inter-Integrated Circuit (I^2C) bus. The LCD module features programmable multiplex mode (static, 1/2, 1/3 and 1/4) and drive bias (static and 1/3). It is capable of driving up to 32 segments and up to 4 commons. It can also drive the LCD panel while in SLEEP mode.

The **PIC16C924** devices have 176 bytes of RAM, 25 I/O pins, and 25-27 input only. In addition several peripheral features are available including: three timer/counters, one Capture/Compare/ PWM module, one serial port and one LCD module. The Synchronous Serial Port can be configured as either a 3-wire Serial Peripheral Interface (SPI) or the two-wire Inter-Integrated Circuit (I^2C) bus. The LCD module features programmable multiplex mode (static, 1/2, 1/3 and 1/4) and drive bias (static and 1/3). It is capable of driving up to 32 segments and up to 4 commons. It can also drive the LCD panel while in SLEEP mode. The PIC16C924 also has a 5-channel high-speed 8-bit A/D. The 8-bit resolution is ideally suited for applications requiring low-cost analog interface, e.g., thermostat control, pressure sensing, and meters.

Microcontroller Core Features:

• High performance RISC CPU • Only 35 single word instructions to learn • 4K x 14 on-chip EPROM program memory • 176 x 8 general purpose registers (SRAM) • 57 special function registers (60 for PIC16C924) • All single cycle instructions (500 ns) except for program branches which are two-cycle • Operating speed: DC - 8Mhz clock input; DC - 500ns instruction cycle • Interrupt capability • Eight level deep hardware stack • Direct, indirect and relative addressing modes

Peripheral Features:

• 25 I/O pins with individual direction control • 25-27 input only pins • Timer0: 8-bit timer/counter with 8-bit prescaler • Timer1: 16-bit timer/counter. Timer1 can be incremented during sleep via external crystal/clock • Timer2: 8-bit timer/counter with 8-bit period register, prescaler and postscaler

• One pin that can be configured a capture input, PWM output, or compare output:

• Capture is 16-bit, max. resolution 31.25ns • Compare is 16-bit, max. resolution 500ns • PWM resolution is 1- to 10-bits. Maximum PWM frequency @ 8-bit resolution = 32kHz, @ 10-bit resolution = 8kHz

• Programmable LCD timing module:

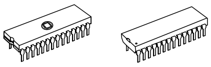
• Multiple LCD timing sources available • Can drive LCD panel while in Sleep mode • Static, 1/2, 1/3, 1/4 multiplex • Static drive and 1/3 bias capability • 16 bytes of dedicated LCD RAM • Up to 32 segments, up to 4 commons • Synchronous Serial Port (SSP) with SPI™ and I^2C™ • 8-bit multichannel Analog to Digital converter (PIC16C924 only)

DS00161-ND CD-ROM Microchip Technical Library **$2.25**

Memory Size		Config-uration	I/O Lines	Oscillator Type External	Frequency Range Min./Max.	Operating Temperature Range	Package	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
4K x 14	176 x 8	EPROM	50-52 (5-Ch. 8-bit A/D)	Xtal/RC	DC - 8MHz	32° – 158°F (0° – 70°C)	68PLCC	PIC16C924/CL-ND	25.97	—	—
4K x 14	176 x 8	OTP	50-52 (5-Ch. 8-bit A/D)	Xtal/RC	DC - 4MHz		68PLCC	PIC16C924-04/L-ND	7.08	4.35	4.21
4K x 14	176 x 8	OTP	50-52 (5-Ch. 8-bit A/D)	Xtal/RC	DC - 4MHz		68PLCC	PIC16LC924-04/L-ND	7.43	4.57	4.42
4K x 14	176 x 8	OTP	50-52	Xtal/RC	DC - 4MHz		68PLCC	PIC16C923-04/L-ND	6.30	3.88	3.75
4K x 14	176 x 8	OTP	50-52	Xtal/RC	DC - 4MHz		68PLCC	PIC16LC923-04/L-ND	6.63	4.07	3.94

8-Bit RISC Microcontrollers

PIC16C62X / 16CE62X (EEPROM – Memory)



PIC16C62X
(Use Programmer PICSTART Plus or MP-PROG-ND)

General Description: The PIC16C62X are 18-pin EPROM-based members of the versatile PIC16CXX family of low-cost, high-performance, CMOS, fully-static, 8-bit microcontrollers. The PIC16C620 and PIC16C621 have 80 bytes of RAM. The PIC16C622 has 128 bytes of RAM. Each device has 13 I/O pins and an 8-bit timer/counter with an 8-bit programmable prescaler. In addition, the PIC16C62X add two analog comparators with a programmable on-chip voltage reference module. The comparator module is ideally suited for applications requiring a low-cost analog interface, e.g., battery chargers, threshold detectors, white goods controllers etc.

Features: **High-Performance RISC-like CPU:** • Only 35 single word instructions to learn • All single cycle instructions (200ns), except for program branches which are two-cycle • Operating speed: DC - 20MHz clock input, DC - 200ns instruction cycle • Interrupt capability • 16 special function hardware registers • 8 level deep hardware stack • Direct, Indirect and relative addressing modes.

Peripheral Features: • 13 I/O pins with individual direction control • 25mA sink/source per I/O for direct LED drive • Analog comparator module with: 2 analog comparators, Programmable on-chip voltage reference (VREF) module, Programmable input multiplexing form device inputs and internal voltage reference, Comparator outputs can be output signals • TMR0: 8-bit timer/counter with 8-bit programmable prescaler

Special Microcontroller Features: • Power-on-reset (POR) • Power-up Timer (PWRT) and Oscillator start-up timer (OST) • Brown-out protection • Watchdog timer (WDT) with its own on-chip RC oscillator for reliable operation • Programmable code protection • Power saving SLEEP mode • Fuse selectable oscillator options • Serial in-system programming (via two pins) • 4 user programmable ID locations

CMOS Technology: • Low-power, high-speed CMOS EPROM technology • Fully static design • Wide operating voltage range - 3.0V to 6.0V • Commercial and industrial temperature range • Low power consumption - < 2mA @ 5v, 4Mhz; 15µA typical @ 3V, 32KHz; < 1µA typical standby current @ 3V

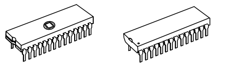
DS00092D-ND	Embedded Control Handbook, Volume 1	**$9.95**
DS00711-ND	Embedded Control Handbook, Update 2000	**$5.00**
DS00161-ND	CD-ROM Microchip Technical Library	**$2.25**

Memory Size		Config-uration	I/O Lines	Oscillator Type External	Frequency Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
Program	RAM								1	25	100
512 x 14	80 x 8	EPROM❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C620/JW-ND	8.51	—	—
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C620-04/P-ND★	4.35	3.65	2.95
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C620-04/SO-ND★	4.43	3.72	3.01
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C620-20/P-ND★	4.65	3.90	3.16
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C620-20/SO-ND★	4.73	3.98	3.22
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC620-04/P-ND★	4.55	3.83	3.10
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC620-04/SO-ND★	4.65	3.90	3.16
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C620-04I/P-ND★	4.78	4.01	3.25
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C620-04I/SO-ND★	4.88	4.09	3.31
1K x 14	80 x 8	EPROM❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C621/JW-ND	9.27	—	—
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C621-04/P-ND★	4.90	4.12	3.34
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C621-04/SO-ND★	5.00	4.21	3.41
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C621-20/P-ND★	5.25	4.41	3.57
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C621-20/SO-ND★	5.35	4.50	3.64
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC621-04/P-ND★	5.15	4.33	3.51
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC621-04/SO-ND★	5.25	4.42	3.58
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C621-04I/P-ND★	5.40	4.54	3.67
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C621-20I/SO-ND★	5.90	4.95	4.01
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-200KHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16LC621-04I/P-ND★	5.68	4.76	3.86
2K x 14	128 x 8	EPROM❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C622/JW-ND	10.14	—	—
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C622-04/P-ND★	5.63	4.72	3.82
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C622-04/SO-ND★	5.73	4.82	3.90
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C622-04/SS-ND	6.18	5.20	4.21
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C622-20/P-ND★	6.03	5.05	4.09
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C622-20/SO-ND★	6.13	5.16	4.17
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C622-20/SS-ND	6.63	5.56	4.50
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC622-04/P-ND★	5.90	4.96	4.02
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC622-04/SO-ND★	6.03	5.06	4.10
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16LC622-04/SS-ND	6.50	5.46	4.42
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C622-04I/P-ND★	6.18	5.20	4.21
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C622-04I/SO-ND★	6.30	5.30	4.29
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C622-20I/P-ND★	6.63	5.56	4.50
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C622-20I/SO-ND★	6.75	5.67	4.59
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-200KHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16LC622-04I/P-ND★	6.50	5.46	4.42
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-200KHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16LC622-04I/SO-ND★	6.63	5.57	4.51
512 X 14	80 x 8	EPROM❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C620A/JW-ND	8.11	—	—
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C620A-04/P-ND★	2.50	1.54	1.49
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C620A-04/SO-ND★	2.55	1.57	1.52
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C620A-20/P-ND★	2.68	1.65	1.60
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C620A-20/SO-ND★	2.73	1.68	1.63
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC620A-04/P-ND★	2.63	1.62	1.57
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C620A-04I/P-ND★	2.50	1.54	1.49
1K x14	80 x 8	EPROM❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C621A/JW-ND	9.27	—	—
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C621A-04/P-ND★	2.83	1.73	1.68
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C621A-04/SO-ND★	2.88	1.77	1.71
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C621A-20/P-ND★	3.00	1.86	1.80
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C621A-20/SO-ND★	3.08	1.89	1.83
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C621A-04I/P-ND★	3.10	1.91	1.85
2K x 14	128 x 8	EPROM❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C622A/JW-ND	10.14	—	—
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C622A-04/P-ND★	3.13	1.93	1.87
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C622A-04/SO-ND★	3.20	1.97	1.90
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C622A-20/P-ND★	3.35	2.06	2.00
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C622A-20/SO-ND★	3.40	2.10	2.04
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC622A-04/P-ND★	4.28	2.63	2.55
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC622A-04/SO-ND★	4.38	2.70	2.62
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C622A-04I/P-ND★	3.45	2.12	2.05
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C622A-20I/P-ND★	3.68	2.27	2.20
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C622A-20I/SO-ND★	3.75	2.31	2.24
512 x 14	96 x 8	EPROM‡❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16CE623/JW-ND	8.94	—	—
512 x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16CE623-04/P-ND	3.23	1.98	1.92
512 x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16CE623-04/SO-ND	3.28	2.02	1.96
512 x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16CE623-20/P-ND	3.45	2.12	2.06
512 x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16CE623-20/SO-ND	3.53	2.17	2.10
512 x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16CE623-04I/P-ND	3.55	2.18	2.11
512 x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16CE623-04I/SO-ND	3.60	2.23	2.16
1K x 14	96 x 8	EPROM‡❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16CE624/JW-ND	9.73	—	—
1K x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16CE624-04/P-ND	3.60	2.22	2.15
1K x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16CE624-04/SO-ND	3.68	2.27	2.20
1K x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16CE624-20/P-ND	3.85	2.38	2.30
1K x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16CE624-20/SO-ND	3.93	2.42	2.35
1K x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16CE624-04I/P-ND	3.98	2.44	2.37
1K x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16CE624-04I/SO-ND	4.05	2.49	2.42
2K x 14	128 x 8	EPROM‡❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16CE625/JW-ND	10.64	—	—
2K x 14	128 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16CE625-04/P-ND	4.10	2.52	2.44
2K x 14	128 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16CE625-04/SO-ND	4.18	2.57	2.49
2K x 14	128 x 8	OTP‡❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16CE625-20/P-ND	4.38	2.70	2.62
2K x 14	128 x 8	OTP‡❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16CE625-20/SO-ND	4.48	2.75	2.67
2K x 14	128 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16CE625-04I/P-ND	4.50	2.78	2.69
2K x 14	128 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16CE625-04I/SO-ND	4.60	2.83	2.74

❖ 2 Analog comparators, Programmable on Chip V Ref.
‡ 128 Byte EEPROM
★ *This part can be programmed by Digi-Key. For further information and price quotes, please call 1-800-344-4539, and request the programming center.*

8-Bit CMOS Microcontrollers with A/D Converter

PIC16C7X and PIC16C77X Series



PIC16C71X Microcontroller Core Features: • High-Performance RISC CPU • Only 35 single word instructions to learn • All single cycle instructions except for program branches which are two-cycle • Operating speed: DC - 20MHz clock input, DC - 200ns instruction cycle • Up to 2K x 14 words of Program Memory, up to 128 x 8 bytes of Data Memory (RAM) • Interrupt capability • Eight level deep hardware stack • Direct, indirect and relative addressing modes • Power-on Reset (POR) • Power-up Timer (PWRT) and Oscillator Start-up Timer (OST) • Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation • Programmable code-protection • Power saving SLEEP mode • Selectable oscillator options • Low-power, high-speed CMOS EPROM technology • Fully static design • High Sink/Source Current 25/25mA • Commercial, Industrial and Extended Temperature Ranges • Program Memory Parity Error Checking Circuitry with Parity Error Reset (PER) (PIC16C715) • Low-power consumption: <2mA @ 5V, 4MHz; 15µA typical @ 3V, 32kHz; <1µA typical standby current

Peripheral Features: • Timer0: 8-bit timer/counter with 8-bit prescaler • 8-bit multichannel analog-to-digital converter • Brown-out detection circuitry for Brown-out Reset (BOR) • 13 I/O Pins with Individual Direction Control

PIC16C7X Microcontroller Core Features: • High-Performance RISC CPU • Only 35 single word instructions to learn • All single cycle instructions except for program branches which are two-cycle • Operating speed: DC - 20MHz clock input, DC - 200ns instruction cycle • Up to 8K x 14 words of Program Memory, up to 368 x 8 bytes of Data Memory (RAM) • Interrupt capability • Eight level deep hardware stack • Direct, indirect and relative addressing modes • Power-on Reset (POR) • Power-up Timer (PWRT) and Oscillator Start-up Timer (OST) • Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation • Programmable code-protection • Power saving SLEEP mode • Selectable oscillator options • Low-power, high-speed CMOS EPROM technology • Fully static design • Wide operating voltage range: 2.5V to 6.0V • High Sink/Source Current 25/25mA • Commercial, industrial and extended temperature ranges • Program Memory Parity Error Checking Circuitry with Parity Error Reset (PER) (PIC16C715) • Low-power consumption: <2mA @ 5V, 4MHz; 15µA typical @ 3V, 32kHz; <1µA typical standby current

PIC16C7X Peripheral Features: • Timer0: 8-bit timer/counter with 8-bit prescaler • Timer1: 16-bit timer/counter with prescaler, can be incremented during sleep via external crystal/clock • Timer2: 8-bit timer/counter 8-bit period register, prescaler and postscaler • Capture, Compare, PWM module(s) • Capture is 16-bit, max resolution is 12.5 ns, Compare is 16-bit, max resolution is 200ns, PWM max. resolution is 10-bit • 8-bit multichannel analog-to-digital converter • Synchronous Serial Port (SSP) with SPI™ and I²C™ • Universal Synchronous Asynchronous Receiver Transmitter (USART/SCI) • Parallel, Slave Port (PSP) 8-bits wide, with external RD, WR and CS controls • Brown-out detection circuitry for Brown-out Reset (BOR)

PIC16C77X Microcontroller Core Features: • High-Performance RISC CPU • Only 35 single word instructions to learn • All single cycle instructions except for program branches which are two-cycle • Operating speed: DC - 20MHz clock input, DC - 200ns instruction cycle • 4K x 14 words of Program Memory, 256 x 8 bytes of Data Memory (RAM) • Interrupt capability (up to 14 internal/external interrupt sources) • Eight level deep hardware stack • Direct, indirect and relative addressing modes • Power-on Reset (POR) • Power-up Timer (PWRT) and Oscillator Start-up Timer (OST) • Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation • Programmable code-protection • Power saving SLEEP mode • Selectable oscillator options • Low-power, high-speed CMOS EPROM technology • Fully static design • In-Circuit Serial Programming™ (ISCP) • Wide operating voltage range: 2.5V to 5.5V • High Sink/Source Current 25/25mA • Commercial and industrial temperature ranges • Low-power consumption: <2mA @ 5V, 4MHz; 22µA typical @ 3V, 32kHz; <1µA typical standby current

PIC16C77X Peripheral Features: • Timer0: 8-bit timer/counter with 8-bit prescaler • Timer1: 16-bit timer/counter with prescaler, can be incremented during sleep via external crystal/clock • Timer2: 8-bit timer/counter 8-bit period register, prescaler and postscaler • Two Capture, Compare, PWM module • Capture is 16-bit, max. resolution is 12.5 ns; Compare is 16-bit, max. resolution is 200 ns; PWM max. resolution is 10-bit • 12-bit multi-channel Analog-to-Digital converter • On-chip absolute bandgap voltage reference generator • Synchronous Serial Port (SSP) with SPI™ (Master Mode) and I²C™ • Universal Synchronous Asynchronous Receiver Transmitter, supports high/low speeds and 9-bit address mode (USART/SCI) • Parallel, Slave Port (PSP) 8-bits wide, with external Read, Write and Chip Select controls • Programmable Brown-out detection circuitry for Brown-out Reset (BOR) • Programmable Low-voltage detection circuitry

Key Features		PIC16C710	PIC16C71	PIC16C711	PIC16C712	PIC16C715	PIC16C716	PIC16C72A	PIC16C73B
Clock	Maxium Frequency of Operation (MHz)	20	20	20	20	20	20	20	20
Memory	EPROM Program Memory (x14 words)	512	1K	1K	1K	2K	2K	2K	4K
	Data Memory (bytes)	36	36	68	128	128	128	128	192
Peripherals	Timer Modules(s)	TMRO	TMRO	TMRO	TMRO,1,2	TMRO	TMRO,1,2	TMRO,1,2	TMRO,1,2
	Capture/Compare/ PWM Module(s)	— —	— —	— —	1 —	— —	1 —	1 —	2 —
	Serial Port(s) SPI/I²C,USART)	— —	— —	— —	— —	— —	— —	SPI/I²C —	SPI/I²C USART
	A/D Converter (8-bit) Ch.	4	4	4	4	4	4	5	5
Features	Interrupt Sources	4	4	4	7	4	7	8	11
	I/O Pins	13	13	13	13	13	13	22	22
	Voltage Range (Volts)	2.5-6.0	3.0-6.0	2.5-6.0	2.5-5.5	2.5-5.5	2.5-5.5	2.5-5.5	2.5-5.5
	In-Circuit Serial Prog	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Brown-out Reset	Yes	—	Yes	Yes	Yes	Yes	Yes	Yes
	Packages	18-pin DIP, SOIC 20-pin SSOP	18-pin DIP SOIC	18-pin DIP, SOIC 20-pin SSOP	18-pin DIP, SOIC 20-pin SSOP	18-pin DIP, SOIC 20-pin SSOP	18-pin DIP, SOIC 20-pin SSOP	28-pin SDIP SOIC, SSOP	28-pin SDIP Soic

PIC16C77X Key Features	PIC16C773	PIC16C774
Operating Frequency	DC - 20MHz	
Resets (and Delays)	POR, BOR, MCLR, WDT (PWRT, OST)	
Program Memory (14-bit words)	4K	
Data Memory (bytes)	256	
Interrupts	13	14
I/O Ports	Ports A,B,C	Ports A,B,C,D,E
Timers	3	
Capture/Compare/ PWM Modules	2	
Serial Communications	MSSP, USART	
Parallel Communications	—	PSP
12-bit Analog-to-Digital Module	6 Input Channels	10 input Channels
Instruction Set	35 Instructions	

9267B-ND Microchip PIC16C7X Family Data Book includes: PIC16C72, PIC16C73A, PIC16C74A, PIC16C76, PIC16C77 . . . . . **$6.95**

Memory Size		Config-uration	I/O Lines	Oscillator Type Ext.	Freq. Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
512 x 14	36	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C710-04/P-ND★	3.85	2.20	2.04
512 x 14	36	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C710-04/SO-ND★	3.93	2.24	2.08
512 x 14	36	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C710-20/P-ND★	4.13	2.35	2.18
512 x 14	36	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C710-20/SO-ND★	4.20	2.40	2.23
512 x 14	36	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC710-04/P-ND★	4.05	2.31	2.14
512 x 14	36	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC710-04/SO-ND★	4.13	2.36	2.18
512 x 14	36	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16LC710-04/SS-ND	4.53	2.59	2.40
512 x 14	36	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C710-04I/SO-ND★	4.33	2.47	2.29
1K x 14	36 x 8	EPROM	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C71/JW-ND	9.30	—	—
1K x 14	36 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C71-04/P-ND★	6.10	3.91	3.66
1K x 14	36 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C71-20/P-ND★	6.53	4.18	3.92
1K x 14	36 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C71-20/SO-ND★	6.65	4.26	4.00
1K x 14	36 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC71-04/P-ND★	6.40	4.10	3.85
1K x 14	36 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC71-04/SO-ND★	6.53	4.18	3.92
1K x 14	36 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C71-04I/P-ND★	6.73	4.30	4.03
1K x 14	36 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C71-20I/P-ND★	7.18	4.60	4.31
1K x 14	36 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C71-20I/SO-ND★	7.33	4.69	4.40
1K x 14	68 x 8	EPROM	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C711/JW-ND	10.03	—	—
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C711-04/P-ND★	4.20	2.40	2.23
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C711-04/SO-ND★	4.28	2.45	2.27
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C711-04/SS-ND	4.70	2.69	2.50
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C711-20/P-ND★	4.50	2.57	2.38
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C711-20/SO-ND★	4.58	2.62	2.43
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C711-20/SS-ND	5.05	2.88	2.67
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC711-04/P-ND★	4.40	2.52	2.34
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC711-04/SO-ND★	4.50	2.57	2.38
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16LC711-04/SS-ND	4.95	2.83	2.62
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C711-04I/P-ND★	4.63	2.64	2.45
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C711-04I/SO-ND★	4.70	2.69	2.50
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C711-20I/P-ND★	4.95	2.82	2.62
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C711-20I/SO-ND★	5.05	2.88	2.67
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16LC711-04I/P-ND★	4.85	2.77	2.57
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16LC711-04I/SO-ND★	4.95	2.83	2.62
2K x 14	128	EPROM	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C715/JW-ND	11.91	—	—
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C715-04/P-ND★	4.73	2.70	2.50
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C715-04/SO-ND★	4.83	2.75	2.55
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C715-20/P-ND★	5.05	2.89	2.68
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C715-20/SO-ND★	5.15	2.95	2.73
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C715-20/SS-ND	5.65	3.23	3.00
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC715-04/P-ND★	4.95	2.83	2.62
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC715-04/SO-ND★	5.05	2.89	2.68

(*Continued*)

8-Bit CMOS Microcontrollers with A/D Converter, PIC16C7X and PIC16C77X *(Cont.)*

Memory Size		Config-uration	I/O Lines	Oscillator Type Ext.	Freq. Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16LC715-04/SS-ND	5.55	3.17	2.94
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C715-04I/P-ND★	5.30	3.02	2.80
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C715-20I/P-ND★	5.68	3.24	3.00
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16LC715-04I/P-ND★	5.55	3.18	2.94
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16LC715-04I/SO-ND★	5.68	3.24	3.00
2K x 14	128 x 8	EPROM	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C716/JW-ND	11.62	—	—
2K x 14	128 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C716-04/P-ND	4.90	2.80	2.60
2K x 14	128 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C716-04/SO-ND	4.53	2.58	2.39
2K x 14	128 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C716-20/P-ND	5.25	3.00	2.78
2K x 14	128 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C716-20/SO-ND	5.35	3.06	2.84
2K x 14	128 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC716-04/P-ND	5.13	2.93	2.72
2K x 14	128 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC716-04/SO-ND	4.75	2.71	2.51
2K x 14	128 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C716-04I/P-ND	4.88	2.78	2.58
2K x 14	128 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C716-04I/SO-ND	4.98	2.84	2.63
2K x 14	128 x 8	OTP	13 (4-Ch, 8 Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C716-20I/P-ND	5.78	3.30	3.06
2K x 14	128 x 8	OTP	13 (4-Ch, 8 Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C716-20I/SO-ND	5.88	3.35	3.11
2K x 14	128 x 8	EPROM	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-CDip .3”	PIC16C72/JW-ND	14.05	—	—
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C72-04/SO-ND★	7.68	4.72	4.57
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-SSOP	PIC16C72-04/SS-ND	8.25	5.08	4.91
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	28-Dip .3”	PIC16C72-10/SP-ND★	8.08	4.98	4.81
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C72-10/SO-ND★	8.20	5.05	4.89
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C72-20/SO-ND★	8.20	5.05	4.89
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-SSOP	PIC16C72-20/SS-ND	8.73	5.38	5.21
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	28-Dip .3”	PIC16LC72-04/SP-ND★	7.93	4.88	4.72
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16LC72-04/SO-ND★	8.05	4.97	4.81
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	28-SSOP	PIC16LC72-04/SS-ND	8.63	5.32	5.15
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3”	PIC16C72-04I/SP-ND★	8.30	5.12	4.95
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C72-04I/SO-ND★	8.43	5.19	5.02
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3”	PIC16C72-20I/SP-ND★	8.88	5.47	5.30
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C72-20I/SO-ND★	9.03	5.56	5.38
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	-40° – 185°F (-40° – 85°C)	28-Dip .3”	PIC16LC72-04I/SP-ND★	8.70	5.36	5.18
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16LC72-04I/SO-ND★	8.83	5.44	5.26
2K x 14	128 x 8	EPROM	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-CDip .3”	PIC16C72A/JW-ND	9.77	—	—
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C72A-04/SP-ND★	5.23	3.22	3.12
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C72A-04/SO-ND★	5.23	3.22	3.12
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C72A-20/SP-ND★	5.58	3.44	3.34
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C72A-20/SO-ND★	5.58	3.44	3.34
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16LC72A-04/SP-ND★	5.48	3.38	3.28
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-SSOP	PIC16LC72A-04/SS-ND	5.78	3.56	3.45
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3"	PIC16C72A-04I/SP-ND★	5.78	3.56	3.45
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C72A-04I/SO-ND★	5.78	3.56	3.45
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3"	PIC16C72A-20I/SP-ND★	6.15	3.79	3.67
4K x 14	192 x 8	EPROM	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-CDip .3”	PIC16C73A/JW-ND	13.88	—	—
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3”	PIC16C73A-04/SP-ND★	9.30	5.73	5.54
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C73A-04/SO-ND★	9.30	5.73	5.54
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	28-Dip .3”	PIC16C73A-10/SP-ND★	9.95	6.13	5.93
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C73A-10/SO-ND★	9.95	6.13	5.93
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3”	PIC16C73A-20/SP-ND★	9.95	6.13	5.93
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C73A-20/SO-ND★	9.95	6.13	5.93
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	28-Dip .3”	PIC16LC73A-04/SP-ND★	9.73	5.99	5.79
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16LC73A-04/SO-ND★	9.73	5.99	5.79
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3”	PIC16C73A-04I/SP-ND★	10.23	6.30	6.09
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C73A-04I/SO-ND★	10.23	6.30	6.09
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3”	PIC16C73A-10I/SP-ND★	10.95	6.74	6.52
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C73A-10I/SO-ND★	10.95	6.74	6.52
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3”	PIC16C73A-20I/SP-ND★	10.95	6.74	6.52
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C73A-20I/SO-ND★	10.95	6.74	6.52
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	-40° – 185°F (-40° – 85°C)	28-Dip .3”	PIC16LC73A-04I/SP-ND★	10.65	6.57	6.35
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16LC73A-04I/SO-ND★	10.65	6.57	6.35
4K x 14	192 x 8	EPROM	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-CDip .3”	PIC16C73B/JW-ND	9.87	—	—
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3”	PIC16C73B-04/SP-ND★	6.75	4.16	4.03
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C73B-04/SO-ND★	6.75	4.16	4.03
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-SSOP	PIC16C73B-04/SS-ND	7.00	4.31	4.18
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3”	PIC16C73B-20/SP-ND★	7.23	4.45	4.32
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C73B-20/SO-ND★	7.23	4.45	4.32
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-SSOP	PIC16C73B-20/SS-ND	7.50	4.62	4.47
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3”	PIC16C73B-04I/SP-ND★	7.43	4.58	4.44
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C73B-04I/SO-ND★	7.43	4.58	4.44
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-SSOP	PIC16C73B-04I/SS-ND	7.70	4.74	4.59
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3”	PIC16C73B-20I/SP-ND★	7.95	4.90	4.75
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C73B-20I/SO-ND★	7.95	4.90	4.75
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-SSOP	PIC16C73B-20I/SS-ND	8.20	5.05	4.89
4K x 14	192 x 8	EPROM	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-CDip	PIC16C74A/JW-ND	14.59	—	—
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C74A-04/P-ND★	11.25	6.93	6.71

(Continued)

8-Bit CMOS Microcontrollers with A/D Converter, PIC16C7X and PIC16C77X *(Cont.)*

Memory Size		Configuration	I/O Lines	Oscillator Type Ext.	Freq. Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C74A-04/L-ND★	11.93	7.34	7.10
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC -10MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C74A-10/P-ND★	12.05	7.42	7.18
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC -10MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C74A-10/L-ND★	12.73	7.84	7.58
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C74A-20/P-ND★	12.05	7.42	7.18
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C74A-20/L-ND★	12.73	7.84	7.58
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16LC74A-04/P-ND★	11.83	7.28	7.04
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16LC74A-04/L-ND★	12.50	7.69	7.44
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C74A-04I/P-ND★	12.38	7.63	7.38
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C74A-04I/L-ND★	13.03	8.03	7.77
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC -10MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C74A-10I/L-ND★	13.90	8.56	8.28
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C74A-20I/L-ND★	13.90	8.56	8.28
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16LC74A-04I/L-ND★	13.63	8.39	8.12
4K x 14	192 x 8	EPROM	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-CDip	PIC16C74B/JW-ND	11.20	—	—
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C74B-04/P-ND★	8.20	5.06	4.90
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C74B-04/L-ND★	9.18	5.65	5.48
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C74B-04I/P-ND★	9.03	5.56	5.39
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C74B-04I/L-ND★	10.00	6.16	5.97
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C74B-20/P-ND★	8.78	5.41	5.24
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C74B-20/L-ND★	9.75	6.01	5.82
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C74B-20I/P-ND★	9.63	5.93	5.75
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C74B-20I/L-ND★	10.60	6.53	6.33
8K x 14	368	EPROM	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-CDip .3”	PIC16C76/JW-ND	14.34	—	—
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3”	PIC16C76-04/SP-ND★	8.55	5.26	5.10
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C76-04/SO-ND★	8.55	5.26	5.10
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	28-Dip .3”	PIC16C76-10/SP-ND★	9.15	5.63	5.46
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3”	PIC16C76-20/SP-ND★	9.15	5.63	5.46
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C76-20/SO-ND★	9.15	5.63	5.46
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	28-Dip .3”	PIC16LC76-04/SP-ND★	8.98	5.53	5.36
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16LC76-04/SO-ND★	8.98	5.53	5.36
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3”	PIC16C76-04I/SP-ND★	9.40	5.79	5.61
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C76-04I/SO-ND★	9.40	5.79	5.61
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3”	PIC16C76-10I/SP-ND★	10.05	6.20	6.00
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C76-10I/SO-ND★	10.05	6.20	6.00
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3”	PIC16C76-20I/SP-ND★	10.05	6.20	6.00
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C76-20I/SO-ND★	10.05	6.20	6.00
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	-40° – 185°F (-40° – 85°C)	28-Dip .3”	PIC16LC76-04I/SP-ND★	9.83	6.05	5.86
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16LC76-04I/SO-ND★	9.83	6.05	5.86
8K x 14	368	EPROM	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-CDip	PIC16C77/JW-ND	14.23	—	—
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C77-04/P-ND★	9.18	5.66	5.48
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C77-04/L-ND★	9.65	5.94	5.76
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C77-10/P-ND★	9.83	6.06	5.87
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C77-10/L-ND★	10.33	6.36	6.16
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C77-20/P-ND★	9.83	6.06	5.87
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C77-20/L-ND★	10.33	6.36	6.16
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16LC77-04/L-ND★	10.13	6.24	6.05
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C77-04I/P-ND★	10.10	6.23	6.03
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C77-04I/L-ND★	10.60	6.54	6.33
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C77-10I/P-ND★	10.80	6.66	6.45
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C77-10I/L-ND★	11.35	6.99	6.78
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C77-20I/P-ND★	10.80	6.66	6.45
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C77-20I/L-ND★	11.35	6.99	6.78
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16LC77-04I/P-ND★	10.55	6.51	6.30
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-200KHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16LC77-04I/L-ND★	11.08	6.83	6.62
8K x 14	256	EPROM	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-CDip	PIC16C745/JW-ND *NEW!*	22.70	—	—
8K x 14	256	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3”	PIC16C745-I/SP-ND *NEW!*	8.60	5.34	4.47
8K x 14	256	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C745-I/SO-ND *NEW!*	8.60	5.34	4.47
8K x 14	256	EPROM	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	40-CDip	PIC16C765/JW-ND *NEW!*	23.35	—	—
8K x 14	256	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	40-PLCC	PIC16C765-I/L-ND *NEW!*	9.78	6.07	5.23
PIC16C77X With 12-Bit A/D Converter											
4K x 14	256 x 8	EPROM	22 (6-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-CDip	PIC16C773/JW-ND	13.13	—	—
4K x 14	256 x 8	OTP	22 (6-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C773/SP-ND	10.15	6.26	6.06
4K x 14	256 x 8	OTP	22 (6-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C773/SO-ND	10.15	6.26	6.06
4K x 14	256 x 8	OTP	22 (6-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16LC773/SP-ND	10.68	6.59	6.38
4K x 14	256 x 8	OTP	22 (6-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16LC773/SO-ND	10.68	6.59	6.38
4K x 14	256 x 8	OTP	22 (6-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3"	PIC16C773-I/SP-ND	11.15	6.88	6.66
4K x 14	256 x 8	OTP	22 (6-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C773-I/SO-ND	11.15	6.88	6.66
4K x 14	256 x 8	EPROM	33 (10-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-CDip	PIC16C774/JW-ND	14.85	—	—
4K x 14	256 x 8	OTP	33 (10-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C774/P-ND	12.25	7.56	7.31
4K x 14	256 x 8	OTP	33 (10-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C774/L-ND	13.23	8.16	7.90
4K x 14	256 x 8	OTP	33 (10-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16LC774/P-ND	12.88	7.94	7.68
4K x 14	256 x 8	OTP	33 (10-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16LC774/L-ND	13.85	8.55	8.28
4K x 14	256 x 8	OTP	33 (10-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C774-I/P-ND	13.48	8.32	8.05
4K x 14	256 x 8	OTP	33 (10-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C774-I/L-ND	14.45	8.91	8.62

Specifications are subject to change based on device characterization.

★ *Digi-Key now offers a programming service using customer supplied Master IC and software disk for Microchips PIC family. The following formats are supported by our programming center: BIN16 — 16-bit binary format (default for PGM16/TASM16), INHXM8 — Merged 8-bit Intel™ Hex (Parallax) format, INHXS8 — Split 8-bit Intel™ Hex format, INHX16 — 16-bit Intel™ Hex format. For further information and price quotes, please call 1-800-344-4539, and request the programming center.*

MICROCHIP

PIC18CXXX Series
High Performance Microcontroller w/10bit A/D

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PIC18CXXX Architecture

The PIC18CXXX architecture is an enhanced RISC core that is upwardly compatible from Microchip's PIC16C5X 12-bit architecture, PIC12CXXX and PIC16CXXX 14-bit architecture, and PIC17CXXX 16-bit architecture—providing a seamless software migration path to higher integration.

The PIC18CXXX architecture has two million bytes of program memory address space, a C compiler optimized core, a user-friendly development environment and 10 MIPS performance. With the flexible PICmicro architecture and maximum design reusability, you can be assured of having reliable technology, products and support to meet your design challenges.

High-Performance RISC CPU:

• C-compiler optimized architecture/instruction set (source code compatible with the PIC16CXX instruction set • Linear program memory addressing to 2M bytes • Linear data memory addressing to 4K bytes • Up to 10 MIPs operation: DC - 40 MHz osc./clock input; 4 MHz - 10 MHz osc./clock input with PLL active • 16-bit wide instructions, 8-bit wide data path • Priority levels for interrupts • 8 x 8 Single Cycle Hardware Multiplier

Peripheral Features:

• High current sink/source 25 mA/25 mA • Three external interrupt pins • **Timer0** module: 8-bit/16-bit timer/counter with 8-bit programmable prescaler • **Timer1** module: 16-bit timer/counter • **Timer2** module: 8-bit timer/counter with 8-bit period register (time-base for PWM) • **Timer3** module: 16-bit timer/counter • Secondary oscillator clock option – Timer1/Timer3 • Two **Capture/Compare/PWM** (CCP) modules. CCP pins that can be configured as: – Capture input: capture is 16-bit, max. resolution 6.25 ns (TCY/16) – Compare is 16-bit, max. resolution 100 ns (TCY) • PWM output: PWM resolution is 1- to 10-bit. Max. PWM freq. @: 8-bit resolution = 156 kHz; 10-bit resolution = 39 kHz • **Master Synchronous Serial Port** (MSSP) module. Two modes of operation: 3-wire SPI™ (supports all 4 SPI modes); I^2C™ master and slave mode • **Addressable USART** module: Supports interrupt on Address bit • **Parallel Slave Port** (PSP) module

Analog Features:

• **10-bit Analog-to-Digital** module (A/D) with: Fast sampling rate; Conversion available during sleep; DNL = ±1 LSb, INL = ±1 LSb • Programmable **Low-Voltage Detection** (LVD) module Supports interrupt on low voltage detection • Programmable Brown-out Reset (BOR)

Special Microcontroller Features:

• Power-on Reset (POR), Power-up Timer (PWRT) and Oscillator Start-up Timer (OST) • Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation • Programmable code-protection • Power saving SLEEP mode • Selectable oscillator options including: 4X Phase Lock Loop (of primary oscillator); Secondary Oscillator (32kHz) clock input • In-Circuit Serial Programming (ICSP™) via two pins

CMOS Technology:

• Low-power, high-speed EPROM technology • Fully static design • Wide operating voltage range (2.5V to 5.5V) • Industrial and Extended temperature ranges • Low-power consumption

SW006011-ND C Compiler for the PIC18CXXX Family **$495.00**

Memory Size		Config-uration	I/O Lines	Frequency Range MIn./Max.	Operating Temperature Range	Package	Digi-Key Part No.	Price Each		
EPROM	RAM							1	25	100
8K x 16	512	EPROM	*23 (5-Ch. 10-bit A/D)	DC - 40 MHz	–40° to 185°F (–40° to 85°C)	28-CDip	PIC18C242/JW-ND	14.58	—	—
8K x 16	512	OTP	*23 (5-Ch. 10-bit A/D)	DC - 40 MHz	–40° to 185°F (–40° to 85°C)	28-Dip .3"	PIC18C242-I/SP-ND	7.58	4.67	4.52
8K x 16	512	OTP	*23 (5-Ch. 10-bit A/D)	DC - 40 MHz	–40° to 185°F (–40° to 85°C)	28-SOIC	PIC18C242-I/SO-ND	7.58	4.67	4.52
16K x 16	1536	EPROM	*23 (5-Ch. 10-bit A/D)	DC - 40 MHz	–40° to 185°F (–40° to 85°C)	28-CDip	PIC18C252/JW-ND	15.85	—	—
16K x 16	1536	OTP	*23 (5-Ch. 10-bit A/D)	DC - 40 MHz	–40° to 185°F (–40° to 85°C)	28-Dip .3"	PIC18C252-I/SP-ND	9.75	6.02	5.82
16K x 16	1536	OTP	*23 (5-Ch. 10-bit A/D)	DC - 40 MHz	–40° to 185°F (–40° to 85°C)	28-SOIC	PIC18C252-I/SO-ND	9.75	6.02	5.82
8K x 16	512	EPROM	**34 (8-Ch. 10-bit A/D)	DC - 40 MHz	–40° to 185°F (–40° to 85°C)	40-CDip	PIC18C442/JW-ND	16.27	—	—
8K x 16	512	OTP	**34 (8-Ch. 10-bit A/D)	DC - 40 MHz	–40° to 185°F (–40° to 85°C)	40-Dip	PIC18C442-I/P-ND	8.45	5.21	5.05
8K x 16	512	OTP	**34 (8-Ch. 10-bit A/D)	DC - 40 MHz	–40° to 185°F (–40° to 85°C)	40-PLCC	PIC18C442-I/L-ND	11.20	6.92	6.69
16K x 16	1536	EPROM	**34 (8-Ch. 10-bit A/D)	DC - 40 MHz	–40° to 185°F (–40° to 85°C)	40-CDip	PIC18C452/JW-ND	17.54	—	—
16K x 16	1536	OTP	**34 (8-Ch. 10-bit A/D)	DC - 40 MHz	–40° to 185°F (–40° to 85°C)	40-Dip	PIC18C452-I/P-ND	10.80	6.66	6.44
16K x 16	1536	OTP	**34 (8-Ch. 10-bit A/D)	DC - 40 MHz	–40° to 185°F (–40° to 85°C)	40-PLCC	PIC18C452-I/L-ND	10.23	6.30	6.10

* 22 are i/o and 1 is output only ** 33 are i/o and 1 is output only

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MICROCHIP

High-Performance 8-Bit CMOS EPROM Microcontrollers

PIC17C4X, PIC17C75X, and PIC17C76X Series

PIC17C4X (Use Programmer PICSTART Plus)

Overview: All PIC16/17 microcontrollers employ an advanced RISC architecture. The PIC17CXX has enhanced core features, 16-level deep stack, and multiple internal and external interrupt sources. The separate instruction and data buses of the Harvard architecture allow a 16-bit wide instruction word with a separate 8-bit wide data. The two stage instruction pipeline allows all instructions to execute in a single cycle, except for program branches (which require two cycles). A total of 55 instructions (reduced instruction set) are available in the PIC17C42 and 58 instructions in all the other devices. Additionally, a large register set gives some of the architectural innovations used to achieve a very high performance. For mathematical intensive applications all devices have a single cycle 8 x 8 Hardware Multiplier.

Microcontroller Core Features: • Only 58 single word instructions to learn • All single cycle instructions (121ns) except for program branches and table reads/writes which are two-cycle • Operating Speed: DC - 33MHz clock input, DC - 121ns instruction cycle • Hardware Multiplier • Interrupt capability • 16 levels deep hardware stack • Direct, indirect and relative addressing modes • Internal/External program memory execution • 64K x 16 addressable program memory space

Peripheral Features: • 33 I/O pins with individual direction control • High current sink/source for direct LED drive: RA2 and RA3 are open drain, high voltage (12V), high current (60mA), I/O • Two capture inputs and two PWM outputs: Captures are 16-bit, max resolution 160ns, PWM resolution is 1- to 10-bit • TMR0: 16-bit timer/counter with 8-bit programmable prescaler • TMR1: 8-bit timer/counter • TMR2: 8-bit timer/counter • TMR3: 16-bit timer/counter • Universal Synchronous Asynchronous Receiver Transmitter (USART/SCI)

Special Microcontroller Features: • Power-on Reset (POR), Power-up Timer (PWRT) and Oscillator Start-up Timer (OST) • Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation • Code-protection • Power Saving SLEEP mode • Selectable oscillator options

PIC17C756

Overview: The PIC17C75X devices are 68-Pin, EPROM-based members of the versatile PIC17CXXX family of low-cost, high-performance, CMOS, fully-static, 8-bit microcontrollers.

All PIC16/17 microcontrollers employ an advanced RISC architecture. The PIC17CXXX has enhanced core features, 16-level deep stack, and multiple internal and external interrupt sources. The separate instruction and data buses of the Harvard architecture allow a 16-bit wide instruction word with a separate 8-bit wide data path. The two stage instruction pipeline allows all instructions to execute in a single cycle, except for program branches (which require two cycles). A total of 58 instructions (reduced instruction set) are available. Additionally, a large register set gives some of the architectural innovations used to achieve a very high performance. For mathematical intensive applications, all devices have a single cycle 8 x 8 Hardware Multiplier.

Microcontroller Core Features: • Only 58 single word instructions to learn • All single cycle instructions (121ns) except for program branches and table reads/writes which are two-cycle • Operating Speed: DC - 33MHz clock input, DC - 121ns instruction cycle • Hardware Multiplier • Interrupt capability • 16 level deep hardware stack • Direct, indirect and relative addressing modes • Internal/External program memory execution • Capable of addressing 64K x 16 program memory space

Peripheral Features: • 50 I/O pins with individual direction control • High current sink/source for direct LED drive: RA2 and RA3 are open drain, high voltage (12V), high current (60mA), I/O pins • Four capture input pins: Captures are 16-bit, max resolution 121ns • Three PWM outputs: PWM resolution is 1- to 10-bits • TMR0: 16-bit timer/counter with 8-bit programmable prescaler • TMR1: 8-bit timer/counter • TMR2: 8-bit timer/counter • TMR3: 16-bit timer/counter • Two Universal Synchronous Asynchronous Receiver Transmitter (USART/SCI): Independent baud rate generators • 10-bit, 12 channel analog-to-digital converter • Synchronous Serial Port (SSP) with SPI™ and 1^2C™ modes (including 1^2C master mode)

Special Microcontroller Features: • Power-on Reset (POR), Power-up Timer (PWRT) and Oscillator Start-up Timer (OST) • Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation • Brown-out Reset • Code-protection • Power Saving SLEEP mode • Selectable oscillator options

DS00092D-ND	Embedded Control Handbook, Volume 1	**$9.95**
DS00711-ND	Embedded Control Handbook, Update 2000	**$5.00**
DS00161-ND	CD-ROM Microchip Technical Library	**$2.25**

Memory Size		Config-uration	I/O Lines	Oscillator Type External	Frequency Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
2K x 16	232 x 8	OTP	33	Xtal/RC	DC-16MHz	32° – 158°F (0° - 70°C)	40-Dip	PIC17C42A-16/P-ND★	10.38	6.38	6.19
2K x 16	232 x 8	OTP	33	Xtal/RC	DC-16MHz	32° – 158°F (0° - 70°C)	44-PLCC	PIC17C42A-16/L-ND★	10.93	6.79	6.52
2K x 16	232 x 8	OTP	33	Xtal/RC	DC-25MHz	32° – 158°F (0° - 70°C)	40-Dip	PIC17C42A-25/P-ND★	11.08	6.82	6.61
4K x 16	454 x 8	EPROM	33	Xtal/RC	DC-33MHz	32° – 158°F (0° - 70°C)	40-CDip	PIC17C43/JW-ND★	15.45	—	—
4K x 16	454 x 8	OTP	33	Xtal/RC	DC-16MHz	32° – 158°F (0° - 70°C)	40-Dip	PIC17C43-16/P-ND★	11.70	7.20	6.99
4K x 16	454 x 8	OTP	33	Xtal/RC	DC-16MHz	32° – 158°F (0° - 70°C)	44-PLCC	PIC17C43-16/L-ND★	12.28	7.61	7.32
4K x 16	454 x 8	OTP	33	Xtal/RC	DC-25MHz	32° – 158°F (0° - 70°C)	40-Dip	PIC17C43-25/P-ND★	12.53	7.71	7.48
4K x 16	454 x 8	OTP	33	Xtal/RC	DC-25MHz	32° – 158°F (0° - 70°C)	44-PLCC	PIC17C43-25/L-ND★	13.10	8.12	7.81
8K x 16	454 x 8	EPROM	33	Xtal/RC	DC-33MHz	32° – 158°F (0° - 70°C)	40-CDip	PIC17C44/JW-ND	18.12	—	—
8K x 16	454 x 8	OTP	33	Xtal/RC	DC-16MHz	32° – 158°F (0° - 70°C)	40-Dip	PIC17C44-16/P-ND★	14.50	8.92	8.66
8K x 16	454 x 8	OTP	33	Xtal/RC	DC-16MHz	32° – 158°F (0° - 70°C)	44-PLCC	PIC17C44-16/L-ND★	15.15	9.33	8.99
8K x 16	454 x 8	OTP	33	Xtal/RC	DC-25MHz	32° – 158°F (0° - 70°C)	40-Dip	PIC17C44-25/P-ND★	15.53	9.55	9.27
8K x 16	454 x 8	OTP	33	Xtal/RC	DC-25MHz	32° – 158°F (0° - 70°C)	44PLCC	PIC17C44-25/L-ND★	16.18	9.96	9.60
8K x 16	454 x 8	OTP	33	Xtal/RC	DC-33MHz	32° – 158°F (0° - 70°C)	40-Dip	PIC17C44-33/P-ND★	15.53	9.55	9.27
8K x 16	454 x 8	OTP	33	Xtal/RC	DC-33MHz	32° – 158°F (0° - 70°C)	44-PLCC	PIC17C44-33/L-ND★	16.18	9.96	9.60
8K x 16	678	OTP	50 (12-Ch 10-Bit A/D)	Xtal/RC	DC - 16MHz	32° – 158°F (0° - 70°C)	68-PLCC	PIC17C752-16/L-ND	13.73	8.46	8.20
8K x 16	678	OTP	50 (12-Ch 10-Bit A/D)	Xtal/RC	DC - 33MHz	32° – 158°F (0° - 70°C)	68-PLCC	PIC17C752-33/L-ND	14.68	9.05	8.77
16K x 16	902	EPROM	50 (12-Ch 10-Bit A/D)	Xtal/RC	DC - 33MHz	32° – 158°F (0° - 70°C)	68-CLCC	PIC17C756A/CL-ND	17.60	—	—
16K x 16	902	OTP	50 (12-Ch 10-Bit A/D)	Xtal/RC	DC - 16MHz	32° – 158°F (0° - 70°C)	68-PLCC	PIC17C756A-16/L-ND	14.35	8.84	8.57
16K x 16	902	OTP	50 (12-Ch 10-Bit A/D)	Xtal/RC	DC - 16MHz	-40° – 185°F (-40° - 85°C)	68-PLCC	PIC17C756A-16I/L-ND	15.78	9.73	9.42
16K x 16	902	OTP	50 (12-Ch 10-Bit A/D)	Xtal/RC	DC - 33MHz	-40° – 185°F (-40° - 85°C)	68-PLCC	PIC17C756A-33I/L-ND	16.88	10.41	10.08
8K x 16	678	OTP	66 (16-Ch 10-Bit A/D)	Xtal/RC	DC - 16MHz	32° – 158°F (0° - 70°C)	84-PLCC	PIC17C762-16/L-ND	16.78	10.35	10.02
8K x 16	678	OTP	66 (16-Ch 10-Bit A/D)	Xtal/RC	DC - 33MHz	32° – 158°F (0° - 70°C)	84-PLCC	PIC17C762-33/L-ND	17.95	11.07	10.72
16K x 16	902	EPROM	66 (16-Ch 10-Bit A/D)	Xtal/RC	DC - 33MHz	32° – 158°F (0° - 70°C)	84-CLCC	PIC17C766/CL-ND	18.38	—	—
16K x 16	902	OTP	66 (16-Ch 10-Bit A/D)	Xtal/RC	DC - 16MHz	32° – 158°F (0° - 70°C)	84-PLCC	PIC17C766-16/L-ND	17.98	11.08	10.74
16K x 16	902	OTP	66 (16-Ch 10-Bit A/D)	Xtal/RC	DC - 33MHz	32° – 158°F (0° - 70°C)	84-PLCC	PIC17C766-33/L-ND	18.43	11.35	11.00
16K x 16	902	OTP	66 (16-Ch 10-Bit A/D)	Xtal/RC	DC - 16MHz	-40° – 185°F (-40° - 85°C)	84-PLCC	PIC17C766-16I/L-ND	18.93	11.67	11.31
16K x 16	902	OTP	66 (16-Ch 10-Bit A/D)	Xtal/RC	DC - 33MHz	-40° – 185°F (-40° - 85°C)	84-PLCC	PIC17C766-33I/L-ND	20.25	12.49	12.10

★ *Digi-Key now offers a programming service using customer supplied Master IC and software disk for Microchips PIC family. The following formats are supported by our programming center: BIN16 — 16-bit binary format (default for PGM16/TASM16), INHXM8 — Merged 8-bit Intel™ Hex (Parallax) format, INHXS8 — Split 8-bit Intel™ Hex format, INHX16 — 16-bit Intel™ Hex format. For further information and price quotes, please call 1-800-344-4539, and request the programming center.*

MICROCHIP 28-Pin Programmable Mixed Signal Controller — PIC14000

General Description: The **PIC14000** is a low-cost, high-performance, CMOS, fully-static, mixed signal, factory calibrated, 8-bit microcontroller. Its features include medium to high resolution A/D conversion (10 to 16 bits), temperature sensing, closed loop charge control, serial communication, and low power operation.

(Use Programmer PICSTART Plus.) The **PIC14000** is based on the high-performance PIC16C74 core. It uses a RISC-like Harvard architecture CPU with separate 14-bit instruction and 8-bit data buses. A two-stage instruction pipeline allows all instructions to execute in a single cycle, except for program branches, which require two cycles. A total of 35 instructions are available. Additionally, a large register set is included.

High-Performance RISC CPU: • Based on PIC16C74 microcontroller • Only 35 single word instructions to learn • All single cycle instructions except for program branches which are two-cycle • Operating speed: DC - 20MHz clock input • 4096 x 14 on-chip EPROM program memory • 192 x 8 general purpose registers (SRAM) • 6 internal and 5 external interrupt sources • 38 special function hardware registers • Eight level deep hardware stack

Analog Peripherals Features: • Slope Analog-to-Digital (A/D) converter: Eight external input channels (two channels with selectable input ranges of -0.3V to VDD -2.0V or 0V to VDD -1.5V), Seven internal input channels, Programmable A/D resolution, up to 16 bits, 16 ms maximum conversion time at maximum (16-bit) resolution and 4 MHz clock, 4-bit current DAC, Internal bandgap voltage reference, Factory calibrated with calibration constants stored in EPROM, Provisions for measuring energy in high frequency pulses (e.g., GSM cellular telephone) • On-chip temperature sensor • Voltage regulator control output for 5V operation • Two multi-range DACs for programmable level/window detect or constant current/voltage charge control • On-chip low voltage detector

Special Microcontroller Features: • Power-on Reset (POR), Power-up Timer (PWRT) and Oscillator Start-up Timer (OST) • Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation • Multi-segment programmable code-protection • Selectable oscillator options: Internal 4 MHz oscillator, External crystal oscillator • Two pin serial in-system EPROM programming

Digital Peripherals Features: • 20 I/O pins with individual direction control • High current sink/source for direct LED drive • ADTMR: A/D counter, 16-bit counter with pre-load and capture • TMR0: 8-bit timer/counter with 8-bit programmable prescaler • I²C™ serial port compatible with: ACCESS.bus™, SMBus (System Management Bus)

Memory Size		Config-uration	I/O LInes	Oscillator Type External	Frequency Range MIn./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
4K x 14	192 x 8	EPROM	20	Xtal	DC-4MHz	32° – 158°F (0° - 70°C)	28-CDip .3”	PIC14000/JW-ND	17.80	—	—
4K x 14	192 x 8	OTP	20	Xtal	DC-4MHz	32° – 158°F (0° - 70°C)	28-SDip .3”	PIC14000-04/SP-ND★	10.25	8.19	6.83
4K x 14	192 x 8	OTP	20	Xtal	DC-4MHz	32° – 158°F (0° - 70°C)	28-Soic	PIC14000-04/SO-ND★	10.45	8.36	6.96
4K x 14	192 x 8	OTP	20	Xtal	DC-4MHz	32° – 158°F (0° - 70°C)	28-SSOP	PIC14000-04/SS-ND	11.50	9.19	7.66
4K x 14	192 x 8	OTP	20	Xtal	DC-4MHz	-40° – 185°F (-40° - 85°C)	28-SDip .3”	PIC14000-04I/SP-ND★	11.28	9.01	7.51
4K x 14	192 x 8	OTP	20	Xtal	DC-4MHz	-40° – 185°F (-40° - 85°C)	28-Soic	PIC14000-04I/SO-ND★	11.50	9.19	7.66
4K x 14	192 x 8	OTP	20	Xtal	DC-4MHz	-40° – 185°F (-40° - 85°C)	28-SSOP	PIC14000-04I/SS-ND	12.65	10.11	8.43

★ *This part can be programmed by Digi-Key. For further information please call 1-800-344-4539, and request programming center.*

PRO MATE-II™ Universal Programmer

Programs all PIC16C5X, PIC16CXX and PIC17CXX Microcontrollers:

PRO MATE-II™ is a universal programmer/development tool that provides product developers with the ability to program user software into PIC16C5X, PIC16CXX and PIC17CXX 8-bit microcontrollers. It comes with Microchip's PIC16CXX simulator/assembler software and PIC17CXX assembler software.

The PRO MATE-II™ programmer operates either as a stand-alone unit or in conjunction with a PC host system. PC host software provides file display and editing and transfer to and from the programming unit. The PRO MATE-II™ is compatible with and is replacing the existing PRO MATE™ programmer.

The PRO MATE-II™ was designed primarily to comply with the new European "CE" requirements for radiated emissions and ESD. The PRO MATE-II™ provides improved socket module alignment and improved LCD display and buttons.

Description of Contents:

• PRO MATE-II™ Universal Programmer Unit • PRO MATE-II™ Universal Power Supply • PRO MATE-II™, PIC16CXX Assembler/Simulator and PIC17CXX Assembler Software • PRO MATE-II™ Documentation • RS-232 Interface Cable

Description	Digi-Key Part No.	Price Each
Programmer		
PRO MATE-II™ Universal Programmer	DV007003-ND	695.00
Sockets for PRO MATE-II™ / PRO MATE™		
Dip Socket Module for PRO MATE-II™ PIC14000	AC144001-ND	159.00
PIC16C52, 54, HV540, 55, 56, 57, 58A, HCS5XX PDIP PRO MATE-II 18 & 28 LD	AC164001-ND	159.00
PIC16C52, 54, HV540, 55, 56, 57, 58A, HCS5XX SOIC PRO MATE-II 18 & 28 LD	AC164002-ND	159.00
PIC16C54, HV540, 55, 56, 57, 58 SSOP PRO MATE-II™20 & 28 LD	AC164015-ND	189.00
PIC16C554, 558, 61, 620, 621, 622, 71, 710, 711, 715, 83, 84 PDIP/SOIC PRO MATE-II™ 18 LD	AC164010-ND	159.00
PIC16C620, 621, 622, 710, 711, 554, 558 SSOP PRO MATE-II™ 20 LD	AC164018-ND	159.00
PIC16C62, 63, 64, 65, 66, 67, 642, 662, 72, 73, 74, 76, 77, 773, 774, 87X, 18CXX2 PDIP PRO MATE-II 28 & 40 LD (and "A" & "B" Versions)	AC164012-ND	159.00
PIC16C64, 65, 662, 67, 74, 77, 774, 874, 877, 18C4X2 PLCC PRO MATE-II™ 44 LD	AC164013-ND	159.00
PIC16C64, 65, 662, 67, 74, 77, 774, 874, 877, PQFP PRO MATE-II™ 44 LD	AC164014-ND	159.00
PIC16C62, 63, 66, 642, 72, 73, 76, 773, 873, 876, 18C2X2 SOIC PRO MATE-II™ 28 LD	AC164017-ND	159.00
PIC17C42A, 43, 44 PDIP PRO MATE-II™ 40 LD	AC174001-ND	159.00
PIC17C42A, 43, 44 PLCC PRO MATE-II™ 44 LD	AC174002-ND	159.00
PIC17C75X, PLCC PRO MATE-II™ 68 LD	AC174007-ND	159.00
PIC12C50X, 50XA, 51X, 67X, CE67X, 16C505(DIP) DIP/SOIC (208 mil) PRO MATE-II™	AC124001-ND	129.00
PIC16C923, 924, PLCC PRO MATE-II™ 68 LD	AC164022-ND	159.00
PIC16C923, 924, TQFP PRO MATE-II™ 68 LD	AC164023-ND	159.00
PIC16C64, 65, 662, 67, 74, 77, 774, 874, 877, 18C4X2 TQFP PRO MATE-II™ 44LD	AC164020-ND	159.00
PIC16C62, 63A, 72, 73B, 773 SSOP PRO MATE-II™ 28 LD	AC164021-ND	159.00
PIC16C923, 924 SDIP PRO MATE-II™ 64 LD	AC164025-ND	159.00
PIC16C505, 12CE51X, 12C50XA SOIC/TSSOP (150 mil) PRO MATE-II™ 8 & 14 LD	AC164026-ND	159.00
PIC16C770, 771 PDIP/SOIC PRO MATE-II™ 20 LD	AC164028-ND	159.00
PIC17C42A, 43, 44 TQFP PRO MATE-II™ 44 LD	AC174005-ND	159.00
PIC17C75X TQFP PRO MATE-II™ 64 LD	AC174008-ND	159.00
PIC17C75X SDIP PRO MATE-II™ 64 LD	AC174009-ND	159.00
PIC17C76X TQFP PRO MATE-II™ 80 LD	AC174011-ND	159.00
PIC17C76X PLCC PRO MATE-II™ 84 LD	AC174012-ND	159.00
PIC17C76X PLCC Socket Adapter for PICSTART Plus - 84 LD	AC164027-ND	159.00
Serial E^2 24, 93 series and HCS200, 201, 300, 301, 320, 36X, 410, 412 DIP for PRO MATE-II™ 16 LD	AC004001-ND	159.00
Serial E^2 24, 93 series and HCS200, 201, 300, 301, 320, 36X, 410, 412 SOIC/SOIC for PRO MATE-II™ 16 LD	AC004002-ND	199.00
ICSP Programming Socket for PRO MATE-II™	AC004004-ND	349.00

PICMASTER Universal In-Circuit Emulator System

Description	Digi-Key Part No.	Price Each
Emulators		
16C61 with PRO MATE-II™ (10Mhz)	EM167021-ND	1698.99
16C61 without PRO MATE-II™ (10Mhz)	EM167022-ND	999.00
16C71/710/711 w/ PRO MATE-II™ (10Mhz)	EM167027-ND	1698.99
PIC16C84, 16F83, F84 with PRO MATE-II™	EM167029-ND	1698.99
16C92X with PRO MATE-II™ (10Mhz)	EM167031-ND	1698.99
PIC16C715 with PRO MATE-II™ (10Mhz)	EM167037-ND	1698.99
PIC16C715 without PRO MATE-II™ (10Mhz)	EM167038-ND	999.00
PIC16C66,67, 76, 77 w/ PRO MATE-II™ (10Mhz)	EM167041-ND	1698.99

PICSTART Plus Programmer *One Tool Does It All!*

PICSTART Plus is an entry level development kit that will *SUPPORT ALL* PIC12C5XX, PIC12C67X, PIC12CE, PIC16C, PIC16F8XX and PIC17C MICROCONTROLLERS *including* the PIC14000, PIC17C4X and PIC17C75X families.

Kit Includes:

- PICSTART Plus programmer system
- RS232 cable
- Power supply
- PIC16F84 EEPROM microcontroller sample
- MPLAB software diskette: includes MPLAB, MPASM-Windows, MPLAB-SIM simulator
- PICSTART Plus software diskette Windows based user interface software for PICSTART Plus, runs under MPLAB
- User's manual for PICSTART Plus
- User's manual for MPSIM
- User's manual for MPLAB, covers MPLAB, MPLAB-SIM and Editor
- *CD-ROM: Includes databook and Embedded Control Handbook*

DV003001-ND		**$199.00**
AC164024-ND	PIC16C92X, PIC17C75X 68PLCC Adapter	**$129.00**
AC164027-ND	PLCC Socket Adapter for PICSTART Plus 84 LD	**$159.00**

PICDEM-1 Low-Cost PIC16/17 Demonstration Board

The PICDEM-1 is a simple board which demonstrates the capabilities of several of Microchip's microcontrollers. The microcontrollers supported are: PIC16C5X (PIC16C54 to PIC16C58), PIC16C62X, PIC16C71, PIC16C84, and PIC17C42.

Kit contents: PICDEM-1 demonstration board, PIC16/17 product samples, demo/tutorial software, complete documentation

DM163001-ND $99.00

PICDEM-2 Low-Cost PIC16CXX Demonstration Board

The PICDEM-2 is a simple board that supports the PIC16C64, PIC16C65, PIC16C73, and PIC16C74 microcontrollers. All the necessary hardware and software is included to run the basic demonstration programs.

Kit contents: PICDEM-2 demonstration board, demo/tutorial software, complete documentation

DM163002-ND $99.00

UK163002-ND Internet Ready Upgrade Kit For PICDEM-2........ $9.00

PICDEM-3 Low-Cost PIC16C9XX Demonstration Board

The PICDEM-3 is a simple board which demonstrates the capabilities of Microchip's microcontroller LCD family. All necessary hardware is included to run basic demo programs, which are supplied on a 3.5" disk. A programmed sample is included, and the user may erase it and program it with the other sample programs using the PRO MATE® or PICSTART®Plus programmer. The PICSTART®Plus requires a 68- to 40-pin converter socket.

Features:

• 68-pin PLCC sockets • On board +5V regulator for direct input from 9V AC/DC wall adapter or 9V battery • 5K pot for analog input to the PIC16C9XX • Thermistor for use with A/D converter • LCD Panel with 4 backplanes and 12 segments

DM163003-ND $129.00

PIC14000 Demo Board

DM143001-ND $129.00

NEW! PICDEM NET

The PICDEM.net™ demonstration board is an Internet/Ethernet demonstration board using the PIC16F877 microcontroller and TCP/IP firmware. The board supports any 40-pin DIP device that conforms to the standard pin out used by the PIC16F877 or PIC18C452. The board comes preconfigured with an Ethernet and IP address. Simple set-up instructions are provided. The demo board is also equipped with a 6-pin modular connector to interface directly with the Microchip In-Circuit Debugger (ICD). A generous breadboarding area is also available. Several status indicators and user interface devices are provided, including a 16 x 2 LCD indicator and LEDs.

Features

• 24L256 Serial EEPROM • ICSP™/ICD interface connector • Ethernet interface • RS-232 interface • Demo Board • Textbook • PIC16F877 MCU • Firmware by Iosoft Ltd. • MPLAB® IDE Software • PICDEM.net User's Guide • CAT 5 Ethernet Cable • DB9 Serial Cable • Universal Power Supply

DM163004-ND PIC16F877 Demo Board with TCP/IP that connects to LAN........ $299.00

In-Circuit Emulator MPLAB-ICE High-Performance, Real-Time In-Circuit Emulator

MPLAB-ICE is Microchip's new Universal In-Circuit Emulator (ICE) for the 8-bit PICmicro™ microcontrollers (MCU). MPLAB-ICE has been designed with the user requirements in mind. The system is small, portable and lightweight, while at the same time, offers improved performance and value. For quick hook up to portables or desktop PCs, MPLAB-ICE easily connects to the parallel (printer) port. In addition, MPLAB-ICE provides a migration path for existing customers designing with PICMASTER® Probe Kits.

Interchangeable processor modules allow the system to be easily configured to emulate different processors. This modular system consists of an emulator pod, a processor module, a device adapter, and a translation socket.

Also included is Microchip's MPLAB IDE featuring MPASM macro assembler, MPLAB programmer's editor, symbolic debugger, and project manager with built-in support for high-level languages that supports the Common Object Description format (i.e., MPASM and MPLAB-C17).

MPLAB-ICE 2000 is a premium quality emulator system providing full-speed emulation, low voltage operation, 32K by 128-bit trace, and 65,535 breakpoints.

Features:

• High-performance PC-based development system for PICmicro™ MCUs • Includes MPLAB IDE • Assembly and C source level debugging • Real-time in-circuit emulation to maximum speed of PICmicro MCUs • Program memory emulation and memory mapping capability up to 64K words • Real-time trace with up to 32K deep by 128 bit wide buffer • Low voltage emulation (as low as 2.0 volts) • Unlimited software breakpoints • Trigger/break/trace on program address and data; internal register address and data; eight external inputs; and access type • Complex breakpoints with four levels of advance trigger features, including sequential events, AND/OR events, filtered trace, pass counters, delay triggering, and time between two events • External trigger input and output allows logic analyzer/scope interface • Time-stamp function • Software programmable target clock speeds (32kHz to 40MHz) • Parallel port (printer) interface • Sup-ports all PICmicro package types, including all through-hole and surface-mount packages • Interchangeable processor modules.

Host System Requirements:

• PC with 386 or higher processor (Pentium™ recommended) • 8MB Memory (32MB recommended) • 16MB hard disk space (20MB recommended) • VGA or Super VGA Monitor • Microsoft Windows 3.1 or greater • Parallel Port

Features	MPLAB-ICE 2000
Real-Time Emulation	Full Speed
Low-Voltage Emulation	2.0 to 5.5 volts
Trace Memory	32K x 128 bit
Monitoring Internal Registers	Yes
Software Breakpoints	Program Address
Complex Hardware Trigger / Breakpoints	Program Address and Data InternalRegister and Data; Address Type;and 8 External Inputs
Logic Analyzer Trigger	1 External Input and Output
Multi-level Trigger	Yes (4 levels)
Pass Counter	Yes
Delay Counter	Yes
Time Stamp	Yes
Programmable Clock	32 kHz to 40 MHz
Logic Probes	Yes
Communications	Parallel (printer) Port
Code Coverage Profiling	Yes

Description	Digi-Key Part No.	Price Each
MPLAB-ICE Emulator Pods		
MPLAB-ICE 2000 Universal Emulator Pod Kit	ICE2000-ND	1525.00
MPLAB-ICE Processor Modules (Probes)		
PIC 12C671, 672, CE673, CE674 Processor Module	PCM12XA0-ND	445.00
PIC12C50X, CE51X, PIC16C505, 52, 54, 54A, 54B, 55, 55A, 56, 56A, 57, 57C, 58A, 58B Processor Module	PCM16XA0-ND	445.00
PIC16C62A, 63, 64A, 65A, 72, 73A, 74A Processor Module	PCM16XB1-ND	445.00
PIC16C554, 558, 620, 620A, 621, 621A, 622, 622A, CE623, CE624, CE625 Processor Module	PCM16XC0-ND	445.00
PIC16C642, 662 Processor Module	PCM16XD0-ND	445.00
PIC16C63A, 65B, 66, 67, 72A, 73B, 74B, 76, 77, 712, 716 Processor Module	PCM16XE1-ND	445.00
PIC16C71, 710, 711 Processor Module	PCM16XF0-ND	445.00
PIC16C715 Processor Module	PCM16XG0-ND	445.00
PIC16F83, F84, F84A,Processor Module	PCM16XH1-ND	445.00
PIC16C923, 924 Processor Module	PCM16XJ0-ND	445.00
PIC16F87X Processor Module	PCM16XK0-ND	445.00
PIC16C773, 774 Processor Module	PCM16XL0-ND	445.00
PIC16C717, 770, 771 Processor Module	PCM16XN0-ND *NEW!*	445.00
PIC16F627, 628 Processor Module	PCM16XP0-ND *NEW!*	445.00
PIC16C745/765 Processor Module	PCM16XQ0-ND	445.00
PIC16C870, 871 Processor Module	PCM16XR0-ND	445.00
PIC16F7X Processor Module	PCM16XS0-ND *NEW!*	445.00
PIC16C925/926 Processor Module	PCM16XT0-ND *NEW!*	445.00
PIC17C42A, 43, 44, 752, 756, 756A, 76X Processor Module	PCM17XA0-ND	445.00
PIC18CXX2 Processor Module	PCM18XA0-ND	445.00
PIC18CXX8 Processor Module	PCM18XB0-ND *NEW!*	445.00
MPLAB-ICE Device Adapters		
PIC12C50X, CE51X PDIP and SOIC 8 LD Device Adapter	DVA12XP080-ND†	75.00
PIC12C67X, CE67X PDIP and SOIC 8 LD Device Adapter	DVA12XP081-ND†	75.00
PIC16C64A, 65A, 65B, 67, 662, 74A, 74B, 765, 77, 774, F871, 874, 877, PIC18CXX2 PQFP and TQFP 44 LD Device Adapter	DVA16PQ441-ND†	225.00
PIC16C923 and 924 TQFP 64 LD Device Adapter	DVA16PQ640-ND†	225.00
PIC16C64A, 65A, 65B, 67, 662, 74A, 74B, 77, 774, 874, 877, PIC18CXX2 PLCC 44 LD Device Adapter	DVA16XL441-ND	165.00
PIC16C923 and 924 PLCC 68 LD Device Adapter	DVA16XL680-ND	165.00
PIC16C505 PDIP and SOIC (150 mil) 14 LD Device Adapter	DVA16XP140-ND†	75.00
PIC16C52, 54, 54A, 54B, 56, 56A, 58A, 58B, 554, 558, 620, 620A, 621, 621A, 622, 622A, CE623, CE624, CE625, 71, 710, 711, 715,F83, F84, F84A PDIP, SOIC, and SSOP 18/20 LD Device Adapter	DVA16XP180-ND†	75.00

Description	Digi-Key Part No.	Price Each
PIC16C712, 716, PDIP, SOIC, SSOP, 18 LD Device Adapter	DVA16XP182-ND†	165.00
PIC16F627, 628 PDIP, SOIC, SSOP 18 LD Device Adapter	DVA16XP183-ND *NEW!*	165.00
PIC16C717, 18 LD P Device Adapter	DVA16XP184-ND *NEW!*	165.00
PIC16C717, 770, 771 P,SO SS 20 LD Device Adapter	DVA16XP200-ND *NEW!*	165.00
PIC16C55, 55A, 57, 57C, PDIP, SOIC, and SSOP 28 LD Device Adapter	DVA16XP280-ND†	75.00
PIC16C62A, 63, 63A, 642, 66, 72, 72A, 73A, 73B, 76, 773, 873, 876, PIC18CXX2 PDIP, SOIC,and SSOP 28 LD Device Adapter	DVA16XP282-ND	165.00
PIC16C64A, 65A, 65B, 67, 662, 74A, 74B, 77, 774, 874, 877, PIC18CXX2 PDIP 40 LD Device Adapter	DVA16XP401-ND	165.00
PIC16C923 and 924 SDIP 64 LD Device Adapter	DVA16XP640-ND	165.00
PIC17C42A, 43, and 44 TQFP and PQFP 44 LD Device Adapter	DVA17PQ441-ND† *NEW!*	225.00
PIC17C752, 756, and 756A TQFP 64 LD Device Adapter	DVA17PQ641-ND† *NEW!*	225.00
PIC17C762 and 766 TQFP 80 LD Device Adapter	DVA17PQ801-ND† *NEW!*	225.00
PIC17C42A, 43, and 44 PLCC 44 LD Device Adapter	DVA17XL441-ND *NEW!*	165.00
PIC17C752, 756, and 756A PLCC 68 LD Device Adapter	DVA17XL681-ND *NEW!*	165.00
PIC17C762 and 766 PLCC 84 LD Device Adapter	DVA17XL841-ND *NEW!*	165.00
PIC17C42A, 43, and 44 PDIP 40 LD Device Adapter	DVA17XP401-ND *NEW!*	75.00
PIC18C658 TQFP 64 LD Device Adapter	DVA18PQ640-ND *NEW!*	225.00
PIC18C858 TQFP 80 LD Device Adapter	DVA18PQ800-ND *NEW!*	225.00
PIC18C658 PLCC 68 LD Device Adapter	DVA18XL680-ND *NEW!*	225.00
PIC18C858 PLCC 84 LD Device Adapter	DVA18XL840-ND *NEW!*	225.00
MPLAB-ICE Transition Sockets		
8 LD (150 & 208 mil SOIC) Small Outline Translation Socket	XLT08SO-ND	35.00
14 LD (150 & 208 mil SOIC) Small Outline Translation Socket	XLT14SO-ND	35.00
18 LD (SOIC 300 mil) Small Outline Translation Socket	XLT18SO-ND	75.00
20 LD (300 mil SO) Small Outline Translation Socket	XLT20SO1-ND	75.00
20 LD (SSOP) Small Outline Translation Socket	XLT20SS1-ND *NEW!*	75.00
28 LD (SOIC 300 mil) Small Outline Translation Socket	XLT28SO-ND	75.00
28 LD (300 mil to 600 mil) PDIP Translation Socket	XLT28XP-ND	75.00
20 LD (SSOP) Shrink Small Outline Translation Socket	XLT20SS-ND	75.00
28 LD (SSOP 300 mil) Small Outline Translation Socket	XLT28SS-ND	75.00
28 LD (SSOP 300 mil) Small Outline Translation Socket PIC16C55, 55A, 57, 57C	XLT28SS2-ND	75.00
44 LD Plastic Quad Flatpack (PQFP) and Plastic Thin Quad Flatpack (TQFP) Translation Socket	XLT44PT-ND	55.00
64 LD Plastic Thin Quad Flatpack (TQFP) Translation Socket for PIC16C92X	XLT64PT1-ND	75.00
64 LD Plastic Thin Quad Flatpack (TQFP) Translation Socket for PIC17C75X	XLT64PT2-ND	75.00
80 LD Plastic Thin Quad Flatpack (TQFP) Translation Socket	XLT80PT-ND	95.00

† For SOIC, SSOP, PQFP, and TQFP support, product requires additional Transition Socket which is sold seperately.

Microchip's Internet home page can be reached at: *www.microchip.com.*

ICD In-Circuit Debugger for PIC16F87X Flash Microcontrollers

MPLAB-ICD uses the in-circuit debugging capability of the PIC16F87X family and Microchip's In-Circuit Serial Programming™ (ICSP™) to debug source code in the application, debug hardware in real-time and program a target PIC16F87X device. Operating under Microchip's MPLAB Integrated Development Environment (IDE), MPLAB-ICD offers real-time code execution, in-circuit debugging, built-in programmer and 3.0-5.5V operating range.

Components of the system include an in-circuit debugging module, header, demo board and MPLAB software.

DV164001-ND	MPLAB-ICD Evaluation Package	$159.00
NEW! DV164002-ND	ICD Simple Suite Debugger Module	$99.00
NEW! DV164003-ND	ICD In-Circuit Debugger F87X PS	$189.00

MCP2510 CAN Developer's Kit

Features: For an introduction to CAN, this tool can be used to demonstrate basic communication on a CAN bus via message transmission and reception. Messages are created on a host PC for transmission to the target board. As messages are sent or received, LEDs connected to the MCP2510 transmission pins toggle to show message traffic.

Push-button switches on the target board show how digital inputs are handled, while a potentiometer shows how to handle analog inputs via the CAN bus. In this manner, both the transmission and reception of messages can be easily demonstrated and understood.

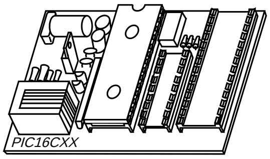
MCP2510 software development is made easy by offering a variety of features designed to manipulate the functionality of the MCP2510. CAN messages are created and can be saved for later use and modification. Also, received messages are displayed in a separate window on the PC in a destuffed format to easily identify message contents. In addition, this tool provides the ability to read, display and modify all registers of the MCP2510. All of these features are designed to jump-start system designers' understanding of the MCP2510 and speed software development.

DV251001-ND	MCP2510CAN Developer's Kit	$239.00

Stand-Alone CAN Controller with SPI Interface

MCP2510-I/P-ND	Ind Temp. 18-Dip	$5.15	MCP2510-E/P-ND	Extended Temp. 18-Dip	$6.45
MCP2510-I/SO-ND	Ind Temp. 18-Soic	$5.15	MCP2510-E/SO-ND	Extended Temp. 18-Soic	$6.45

PICWriter Programmer



PICWriter Programmer

• PicWriter programs ALL 12 and 14 bit Microchip PIC processors. This includes all 12C, 14000, 16C and 16F families; about 90 devices. • Upgrades to support new devices are available as FREE downloads from the TechTools web pages (www.tech-tools.com). New data tables are posted to the web page as Microchip releases new devices. The latest firmware is always posted as well. PicWriter can program his own firmware updates. • Operates under all versions of Windows from 3.1 through NT. • Includes the TechTools Development Environment (TDE), a full featured Windows hosted IDE. TDE supports development with all popular PIC C compilers and assemblers. TDE includes a multi-file editor, integrated MAKE and one-click cross referencing of compiler errors. TDE also interfaces to the TechTools ClearView Mathias (not included) for full featured, real-time in-circuit emulation and source level debugging. • Includes TechTools' PIC assembler, CVASM16. CVASM16 supports ALL 12 and 14 bit PIC processors. CVASM16 assembles Parallax source files (SPASM format) and accepts Microchip mnemonics. • Programmer includes LIF sockets for direct support for 5x devices in 18 and 28 pin DIP packages and XX devices in 18 pin DIP packages. The ZIF40 adapter provides support for 28 and 40 pin XX devices. Additional adapters are available to support surface mount devices and 8/14 pin DIP devices. • Cables and power supply included.

Description	Digi-Key Part No.	Price Each	TechTools Part No.
PIC16CXX PICWriter Programmer	MP-PROG-ND	199.00	MP-PROG
40-Pin ZIF Adapter	MP-ZIF40-ND	49.00	MP-ZIF40
18/28-Pin ZIF Adapter	MP-ZIF18/28-ND	69.00	MP-ZIF18/28
14-Pin ZIF Adapter	MP-ZIF14-ND	59.00	MP-ZIF14
12CXXX Adapter	MP-12CXXX-ND	49.00	MP-12CXXX
44-Pin PLCC Adapter	MP-PLCC44-ND	129.00	MP-PLCC44
28-Pin SOIC Adapter	MP-SOIC28-ND	129.00	MP-SOIC28
18-Pin SOIC Adapter	MP-SOIC18-ND	79.00	MP-SOIC18
8/14-Pin SOIC Adapter	MP-SOIC8/14-ND	89.00	MP-SOIC814
PIC14000 Adapter	MP-14000-ND	59.00	MP-14000
28-Pin SSOP Adapter	MP-SSOP28-ND	99.00	MP-SSOP28
18-Pin SSOP Adapter	MP-SSOP18-ND	79.00	MP-SSOP18

NEW! FR3 FlexROM III FLASH, EPROM and SRAM Emulator

FlexROM III emulators provide engineers with a fast flexible development tool for any Embedded project that uses an external FLASH, EPROM or SRAM device. The FR3 increases productivity by elimination the "burn/insert/test/erase" cycle and by downloading firmware code or data into the emulator at a fast 2.5 Mbits per second.

Features:

• Active Cable Modules (ACM™) contain Target interface and Control Logic • Provides adaptability to new Target Technologies • Hardware Instrumentation: Target Voltage Measurement, Address Snap-Shot Circuit, Address Match & Trigger Circuit • Reverse Voltage Protection • Adjustable Timing Parameters • Integrated Low-Voltage Support • External Power Option • Jumper-less Address Configuration • Up to 256Mbit/32MByte Emulation in a single unit • Replaces standard EPROM, FLASH, or SRAM device during development • Emulates up to 45ns devices • TARGET random access Read/Write capability • HOST random access Read/Write capability • Auto/Manual Target Reset on download • Downloads up to 2.5 Mbit per second • Read-back, Verify and Self-test functions • Connects to any Parallel Port • All sizes and speeds can be Daisy-chained together • Daisy-chain cable included • Mini-clip cable included for Reset connection • LPT cable included • Target cable(s) included • Includes 2 versions of software: 16 bit DOS version & 32 bit Win9X/NT/2000 version • QuickLoader with Full-screen editor included • Batchable loader & utilities included • Accepts Intel HEX., Tektronix HEX, Motorola 'S' records and binary files • Free software updates via WEB downloads

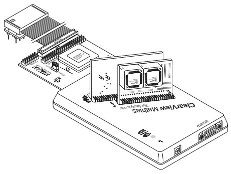
Size	Organization	Speed	Digi-Key Part No.	Price Each
*Base Unit**				
1 Mbit	128Kx8/64Kx16	45ns	FR3-1M-ND	279.00
4 Mbit	512Kx8/256Kx16	45ns	FR3-4M-ND	379.00
8 Mbit	1Mx8/512Kx16	45ns	FR3-8M-ND	529.00
16 Mbit	2Mx8/1Mx16	45ns	FR3-16M-ND	679.00

*Base Unit requires at least one ACM™ target interface

Description	Digi-Key Part No.	Price Each
Active Cable Module (ACM™)		
8 bit interface with DIP28 and DIP32 cable	ACM-8-ND	120.00
16 bit interface with DIP40 cable	ACM-16-ND	120.00

PIC Emulators

ClearView™Mathias



CVM1 supports emulation for 16C5X and 16CXX devices using Microsoft Windows™ for a complete integrated design environment. "Family" modules select 5X or XX device family, while "Member" modules select specific device. Optional timing module shows execution time and number of processor cycles. Optional 16K trace buffer module additionally provides execution history and 8 external trace inputs. Provides full emulation of program and register memory and I/O activity with unlimited hardware breakpoints. Built-in PLL oscillator generates any frequencies from 32KHz to 33MHz.

System requirements: IBM PC or compatible, VGA monitor, serial port, 3.5" disk drive, and Windows™ 3.1, Win95, Win98 or NT'.

Description	Digi-Key Part No.	Price Each	TechTools Part No.
Emulators			
ClearView Mathias 16C5x/16CXX	CVM1-ND	495.00	CVM1
Family Module			
Advanced 14 Bit Family Module w/Data Breakpoints	CVM03F-ND	200.00	CVM03F
PIC16C5X Family Module	CVM5XF-ND	150.00	CVM5XF
PIC16CXX Family Module	CVMXXF-ND	150.00	CVMXXF
Member Module			
PIC16C55X/62X/CE62X	CVM001M-ND	200.00	CVM001M
PIC12C508/509	CVM50XM-ND	75.00	CVM50XM
PIC16C50X/CE51X/16C505	CVM5XXM-ND	100.00	CVM5XXM
PIC12C671/672	CVM67XM-ND†	100.00	CVM67XM
PIC16C5X	CVM5XM-ND	50.00	CVM5XM
PIC16C554/556/558	CVM55XM-ND	100.00	CVM55XM
PIC16C61	CVM61M-ND	100.00	CVM61M
PIC16C62X	CVM62XM-ND	100.00	CVM62XM
PIC16C62X/61/71/84	CVM6/8M-ND	200.00	CVM6/8M
PIC16C641/642/661/662	CVM66XM-ND	200.00	CVM66XM
PIC16C715	CVM715M-ND	100.00	CVM715M
PIC16C70,71,710,711	CVM711M-ND	100.00	CVM711M
PIC16C62-65/72-74	CVM7XM-ND	200.00	CVM7XM
PIC16C66/67/76/77	CVM77M-ND	200.00	CVM77M
PIC16C773,774	CVM77XM-ND	200.00	CVM77XM
PIC16F83,F84,C83,C84	CVMF84M-ND	100.00	CVMF84M
PIC16F873,874,876,877	CVM87XM-ND	200.00	CVM87XM
Trace Buffer and Timing Module			
Mathias Timing Module	CVMT1-ND	130.00	CVMT1
Mathias Trace Buffer and Timing Module	CVMT2-ND	270.00	CVMT2
Kit Module			
Firmware/Logic Field Upgrade Kit	CVM1-FWL-ND*	55.00	CVM1-FWL

† Requires the CVM03F Family Module.

* For use with TDE 4.0 software features of: Stack Viewing, Variable Trace Size, faster Step-out function, and faster Register Window Updates. Contains firmware V2.2 and UC13 Ver C.

NEW! ER3 EconoROM III Economical EPROM Emulator

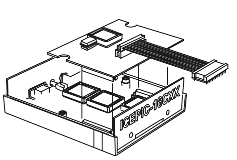
EconoROM III is designed for quick, in-circuit firmware test cycles. If you want to stop the "burn/insert/test/remove/erase" cycle, then this is the tool for you. The ER3 will speed up your firmware development by eliminating the need to remove-erase-program and re-install EPROMs each time you test a code change. These devices plug into the EPROM socket on your target board and emulate the EPROM throughout the development process.

Features:

• Integrated Low-Voltage Support • Target Voltage Sense & Measurement • External Power Option • Jumper-less Address Configuration • Up to 8Mbit Emulation in a single unit • Fast Downloads (up to 2.5 Mbit per second) • Replaces standard EPROM device during development • Connects to any Parallel Port • Auto/Manual Target Reset on download • Read-back, Verify and Self-test functions • Daisy-chain cable included • LPT cable (8 wire Modular Cable and DB25 adapter) included • Target cables (standard IDC to DIP Ribbon Cable) included • Includes 2 versions of software: 16 bit DOS version & 32 bit Win9X/NT/2000 version • QuickLoader with Full-screen editor included • Batchable loader & utilities included • Accepts Intel HEX, Tektronix HEX, Motorola 'S' records and binary files • Free software updates via WEB downloads

Capacity	Cables Supplied	Speed	Digi-Key Part No.	Price Each
256Kbit/ 32K x 8	28 pin Dip	45ns	ER3-256-ND	179.00
512Kbit/ 64K x 8	28 pin Dip	45ns	ER3-512-ND	239.00
1Mbit/ 128K x 8	28 & 32 pin Dip	45ns	ER3-1M-ND	299.00
4Mbit/ 512K x 8	28 & 32 pin Dip	45ns	ER3-4M-ND	399.00
8Mbit/ 1M x 8	28 & 32 pin Dip	45ns	ER3-8M-ND	499.00

ICEPIC and ICEPIC2 PIC Emulators



ICEPIC and ICEPIC2 are fully modular, real time, in-circuit emulator systems, for use with Microchip 12CXX, 16CXX, and 17CXX processors, using interchangeable 'personality daughter-boards' which are sold separately. Both emulators are supplied with their own 32 bit operating software, but can also be used with Microchip's MPLAB™ development software.

System Requirements: IBM PC or compatible, VGA monitor, RS-232"C", 3.5" disk drive, and Microsoft Windows 3.1, Win 95, Win 98 or NT.

Both ICEPIC & ICEPIC2 are supplied as a complete system with power supply, cables, manual and a copy of Microchip's MPASM assembler. They both use the same windows software user operating environment (IDE) with a comprehensive GUI under Microsoft Windows software (also MPLAB™).

The emulator system is configured to handle the appropriate PIC microcontroller according to the personality daughter boards which are ordered separately. These daughter boards configure the emulator to handle specific devices from a wide range of PIC microcontrollers. This enables the user to adapt their ICEPIC system to support new PIC processors as they became available.

Features	ICEPIC	ICEPICIC2
Real-Time Emulation	32KHz to 20 MHz	32KHz to 33 MHz
Device Emulated	12C, 16C	12C, 16C, 17C
Runs Under MPLAB	Yes	Yes
Source Level Debug	Yes	Yes
"C" Source Level Debug	Yes	Yes
Real Time Trace	No	Yes
Time Stamp	Yes	Yes
Freeze Mode	Yes	Yes
Break Points	Unlimited	Unlimited
Stack Breaks	Yes	Yes
WDT Breaks	Yes	Yes
Stack View	Yes	Yes
Custom Watch	Yes	Yes
Assembler Support	MPASM	MPASM
Communications	RS-232"C"	RS-232"C"

Description	Digi-Key Part No.	Price Each
ICEPIC Emulators		
ICEPIC Emulator System	ICEPIC-ND	445.00
ICEPIC2 Emulator System	ICEPIC2-ND	745.00
ICEPIC Daughter Boards		
12C671, 16C672	DB12C67X-ND	305.00
12C508/509, 16C54/55/56/57/58, 16C505	DB5XA-ND	259.00
16C554, 16C556, 16C558	DB55X-ND	305.00
16C620, 16C621, 16C622	DB62X-ND	305.00
16C641, 16C642, 16C661, 16C662	DB66X-ND	365.00
16C61, 16C71, 16C710, 16C711	DB711-ND	305.00
16C715	DB715-ND	305.00
16C62/63/64/65/72/73/74	DB74A-ND	365.00
16C66, 16C67, 16C76, 16C77	DB77-ND	365.00
16C772, 16C773, 16C774	DB77X-ND	305.00
16C84, 16F83, 16F84	DB84A-ND	305.00
16F872/873/874/876/877	DB877-ND	305.00
17C42/43/44, 17C752/756 (For ICEPIC2 Only)	DB756-ND	305.00
Accessories		
44 Pin PLCC Adapter (For emulation of 16Cxx In PLCC Only)	PLCC44-ND	105.00

SEEPROM Designer's Development Kit

Supports all Microchip 2-wire and 3-wire SERIAL EEPROMs

The Serial EEPROM Designer's Kit includes everything necessary to read, write, erase or program special features of any Microchip Serial EEPROM products including *Smart Serials™* and secure serials. **Description of Contents:** • SEEVAL™ Evaluation and Programming System • Total Endurance Software Model • Serial EEPROM Handbook • SEEVAL software • RS-232 Interface Cable • Serial EEPROM Sample Pack • Power Supply

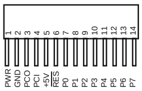
PICSEE™ Introduction Design Kit

• PICSEE PDIP and SOIC to PIC16C54 or 24LC01B Programming Adapter Sockets • Header Interface for PICStart-16B, PICMASTER-16A and PICPROBE-16A • Serial EEPROM Example Software Disk • MTA81010 Product Samples • 8- and 18-Pin Programming Adapter Plugs • Complete Systems Documentation

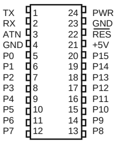
Description	Digi-Key Part No.	Price Each
SEEPROM Designer's Development Kit	DV243001-ND	149.00
PICSEE™ Introduction Design Kit	AC812001-ND	330.00
IC TrueGauge™ Battery Fuel Gauge (28-DIP .3")	MTA11200B/SP-ND	7.37

BASIC Stamp Modules

BS1-IC



BS2-IC, BS2E-IC, and BS2SX-IC



Stamp-Sized Modules Run BASIC

These modules are general-purpose I/O computers which are programmed in BASIC. The language set has instructions for interfacing with electronic circuitry including shift registers, integrated circuits that use SPI, solid state relays, or devices that use asynchronous serial protocols.

BS1-IC and BS2-IC: The BS1-IC has 8 I/O lines, program storage for 80 lines of BASIC code, 4MHz operation, and comes in a 14-pin SIP package. The BS2-IC has 16 I/O lines, program storage for 600 BASIC instructions, 20-MHz operation, and comes in a 24-pin DIP package. Both modules are perfect for small control applications. The modules require power from a regulated or unregulated voltage source from 5-12VDC. For ease in programming and prototyping, different types of boards are available for prototype development or permanent applications.

BS2SX-IC: Using Scenix SX microcontroller, the BS2SX-IC provides the highest speed, largest program memory, and fastest serial I/O in the BASIC Stamp family. Great solution for those needing more horsepower than a BS2-IC. **Features:** • Microcontroller: Scenix SX28AC/SS, • Speed: 50 MHz/10,000 instructions per sec. • EEPROM: 16K bytes (program and data in 8 x 2K program spaces) • Program Length: 4,000 lines of PBASIC • RAM: 32 bytes (6 for I/Os and 26 for variables) plus 63 bytes “scratch pad RAM” for interprogram sharing • Inputs/Outputs: 16 (up to 17 RS-232 communication ports) • Source/Sink Current: 30 mA/30 mA • Serial Communication: 305-115k baud I/O • Current Requirements: 60 mA running, 200 uA in sleep, • PC Interface: Serial port • Package: 24 pin DIP module

BS2E-IC: Using Scenix SX microcontroller, the BS2E-IC runs at the same speed as BASIC Stamp II, but has the RAM and EEPROM size benefits of the BS2SX, but without the speed and power consumption. Ideal for those who use the BS2 but would like more variable or program space.

Stamp Programming:

To get started programming BASIC Stamps you need a BASIC Stamp module, prototyping board (Carrier Board, Board of Education, or BASIC Stamp Activity Board), serial cable, and software (available for internet download and on the CD-ROM). Getting started is easiest with the BASIC Stamp I, II, or IISX Starter Kits.

System requirements: IBM PC or compatible, VGA monitor, parallel port (BS1-IC), serial port (BS2-IC, BS2SX-IC, or BS2E-IC), CD-ROM drive, DOS or Win98 operating system.

BASIC Stamp I Starter Kit: The BASIC Stamp I Starter Kit includes one BASIC Stamp I module, SuperCarrier Board, BASIC Stamp manual version 2.0, a Parallax CD-ROM (include software) and a parallel cable.

BASIC Stamp II Starter Kit: The BASIC Stamp II Starter Kit includes one BASIC Stamp II module, Board of Education, BASIC Stamp manual version 2.0, a Parallax CD-Rom (include software) and a serial cable.

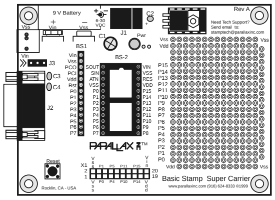
BASIC Stamp IISX Starter Kit: The BASIC Stamp IISX Starter Kit includes one BASIC Stamp IISX module, Board of Education, BASIC Stamp manual version 2.0, a Parallax CD-ROM (include software) and a serial cable.

Board of Education “Full Kit”: The Board of Education “Full Kit” contains a Board of Education, BASIC Stamp II module, pluggable wires, serial cable, and power supply. The B.O.E. Manual is in PDF format on CD-ROM.

BASIC Stamp Super Carrier Board:

The Super Carrier Board provides wire-wrap/solder application space and holes placed to accommodate DIP ICs. The Super Carrier supports the BS1-IC and BS2-IC.

• 3” x 4” Double-sided plated through-hole prototype board • On-board voltage regulator accepts 6-30 VDC, from wall-pack or battery • 3-pin parallel (BS1-IC) and DB-9 serial ports (BS2-IC) are used for programming and run-time communication • Protoype area (1.5” x 2.0”) holes arranged to easily support servos, 300 and 600 mil DIP ICs, DB9, DB25, RJ-11 connectors • size measures 7.7 x 10.2 cm (3 x 4”).

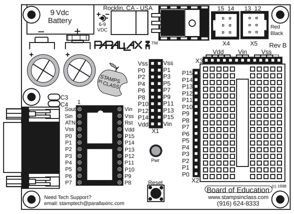

9 V Battery
6-30 VDC
Rev A
Need Tech Support? Send email to: stamptech@parallaxinc.com
BS1
BS-2
J1
J2
J3
Pwr
Reset
PARALLAX
Basic Stamp Super Carrier
www.parallaxinc.com (916) 624-8333 ©1999
Rocklin, CA - USA

Board of Education

The Stamps in Class curriculum requires a BASIC Stamp II with a Board of Education (BOE). The BOE is a project development space with breadboard.

Features:

• Mechanically interlocked power supply to prevent dual connection of wall-pack and 9-volt battery • DB9 connector for BS2-IC programming and serial communication during run-time • P0 - P15 I/O pins, Vdd and Vss connections brought adjacent to 5.1 x 3.5 cm (2” x 1 3/8”) breadboard area • Includes set of ten (10) color-coded 22 gauge wires • Traces on top of the board show connections between BS2-IC and breadboard connections for easy understanding by students

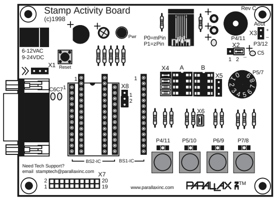


BASIC Stamp Activity Board:

A demonstration board for Parallax BASIC Stamps designed to teach the PBASIC language and hardware control through the BASIC Stamp I/O pins and a set of built-in components. Package includes the BASIC Stamp Activity Board, sample programs on disk, and a 9-volt wall-pack power supply.

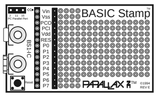
Features include:

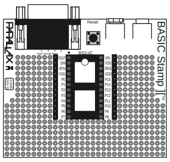
- (4) pushbuttons to stimulate inputs, and (4) LEDs to indicate their status
- 32 Ohm speaker outputs frequencies of 500-8K Hz
- potentiometer for analog input
- RC network for changing PWM into a smooth analog output
- (2) sockets for 8-pin DIP ICs (from AppKits)
- X-10 interface via RJ-11 connection (BS2-IC only)
- Measures 7.7 x 10.2 cm (3 x 4”).



BS1-IC and BS2-IC Carrier Boards:

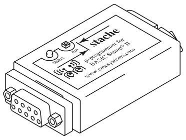
BASIC Stamp carrier boards are small through-hole boards that have a socket for the BS1-IC or BS2-IC, and a 9-volt battery clip plus project space.





Stache Field Programmer

Stache is a small field programmer for the BS2-IC. Stache is loaded with your BASIC Stamp programs from the PC, and may then be taken to the field by untrained personnel to reprogram BASIC Stamps. One pushbutton is used for field programming. Holds up to 15 BS2-IC programs.

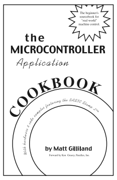


Basic Stamp Books

Programming and Customizing the BASIC Stamp by Scott Edwares is a 350-page introductory text to the BASIC Stamp. The benefit of this book is the general background on electronics, breadboarding, and applications. Microcontroller Projects with BASIC Stamps by Al Williams is a 300-page BASIC code syntax guide for the BASIC Stamp, and also includes an assortment of applications.

Microcontroller Application Cookbook:

The Microcontroller Application Cookbook by Matt Gilliland is a 248-page selection of circuits and code for the BS2-IC. The intent of the book is to provide circuits and code snippets which could be combined to develop larger projects. Examples include the use of relays with high voltage, D/A and A/D conversion, serial protocols for synchronous/asynchronous communication, shift registers, and buffering I/O pins for protection.



Parallax CD-ROM:

The Parallax CD-ROM consists of every resource published by Parallax. Includes source code and schematics for BASIC Stamp circuits, printed manuals, Stamps in Class documentation, and images. Approximately 585 MB. This is included in the BASIC Stamp Starter Kits and Board of Education Full Kit.

Stamps in Class Educational Kits:

The Stamps in Class program (www.stampsinclass.com) consists of educational curriculum and parts kits for high school, community college, and university level classes. The purpose of the curriculum is to teach microcontroller interfacing, electronics, and programming. Authored by Parallax and educational consultants. Each kit includes a printed text and complete parts kits for the experiments.

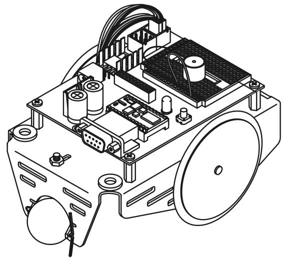
Stamps in Class curriculum requires a Board of Education and BS2-IC. Each text typically requires 40-80 hours to complete.

What’s a Microcontroller? .... **Text and Parts**
This 128-page introductory text shows how to load and customize programs in a BASIC Stamp for controlling LEDs, pushbuttons, and a servo motor. Challenge level is easy

Basic Analog and Digital .... **Text and Parts**
This 140-page text instructs the essentials of 8-bit A/D conversion and D/A conversion with potentiometers and sensors. Introduces math concepts required to scale output, resistive ladder networks. Difficulty is easy/moderate.

Earth Measurements .... **Text and Parts**
Earth Measurements is a 144-page text in which you build an environmental data logger that measures air temperature, water temperature, light levels, and conductivity in water with a closed-loop pump feedback system to control water level. Data is stored in BASIC Stamp EEPROM for future retrieval. Challenge is moderate/high.

Robotics! .... **Text and Parts**
With the Boe-Bot kit you’ll mount the Board of Education on a robot chassis. The robot is capable of basic movement, object detection with whiskers and infrared, detecting an edge of table, following another robot, and following/avoiding light. These experiments may also be built on the robot simultaneously. Challenge of this text is easy/moderate. Have some fun with electronics!



Industrial Control .... **Text and Parts**
Industrial Control is a 194-page tutorial on the essentials of process control, including on-off, differential gap, proportional, integral, and derivative (PID) theories. This text includes a software utility program that graphs and stores data. Challenge is moderate/high.

Description	Digi-Key Part No.	Price Each 1	5	10	25
BASIC Stamp Modules					
BS1-IC BASIC Stamp Module	STAMP1-ND	34.00	—	30.60	28.90
BS2-IC BASIC Stamp Module	STAMP2-ND	49.00	—	44.10	41.65
BASIC STAMP 2E MODULE	BS2E-IC-ND *NEW!*	54.00	—	48.60	45.90
BASIC STAMP 2SX MODULE	BS2SX-IC-ND *NEW!*	59.00	56.05	53.10	50.15
BASIC Stamp Starter Kits					
BASIC Stamp I Starter Kit	27205-ND	109.00	103.55	98.10	—
BASIC Stamp II Starter Kit	27203-ND	149.00	141.55	134.10	—
BASIC Stamp IISX Starter Kit:	27206-ND *NEW!*	159.00	151.05	143.10	—
Board of Education Full Kit	28102-ND	109.00	—	89.38	87.20
Prototype and Development Boards					
BASIC Stamp Super Carrier Board	27130-ND *NEW!*	49.00	—	44.10	41.65
Board of Education	28150-ND *NEW!*	59.00	—	48.38	44.25
BASIC Stamp Activity Board	27905-ND	89.00	—	75.65	71.20
BS1-IC Carrier Board	STAMP1C-ND	15.00	—	13.50	12.75
BS2-IC Carrier Board	STAMP2C-ND	20.00	—	18.00	17.00
BASIC Stamp Accessory Modules					
Pocket Watch B	27962-ND	29.00	27.55	—	—
Motor Mind B	27961-ND	29.00	27.55	—	—
Application Kits					
DTMF Transceiver Kit	27915-ND	26.00	20.80	—	—
Digital Thermometer Kit	27917-ND	26.00	20.80	—	—
8K Serial EEPROM Kit	27918-ND	26.00	20.80	—	—
8-Digit LED Driver Kit	27914-ND	26.00	20.80	—	—

Description	Digi-Key Part No.	Price Each 1	5	10	25
12-Bit A/D Converter Kit	27916-ND	26.00	20.80	—	—
Stache Field Programmer	27330-ND *NEW!*	139.00	—	122.32	—
Serial LCD Module 2x16	27910-ND	49.00	—	—	—
Serial LCD Module 2x16 Backlit	27923-ND *NEW!*	59.00	56.05	53.10	—
Parallax Standard Servo Motor	900-00005-ND *NEW!*	12.00	11.40	10.80	—
Mini SSC (Serial Servo Controller) II	27912-ND *NEW!*	49.00	46.55	—	—
Little Step U-Stepper Motor Controller	27938-ND *NEW!*	69.00	65.55	62.10	—
Books					
Programming and Customizing the Basic Stamp	27951-ND *NEW!*	34.95	—	33.20	—
Microcontroller Projects with Basic Stamps	27952-ND *NEW!*	44.95	—	—	—
Microcontroller Application Cookbook	28111-ND *NEW!*	29.95	28.45	26.36	—
Basic Stamp Manual Ver.2.0	27218-ND *NEW!*	49.00	44.10	39.20	—
Parallax CD-ROM	27000-ND *NEW!*	3.00	—	—	—
*Stamps in Class Educational Kits**					
“What's a Microcontroller?” Parts Kit and Text	28152-ND *NEW!*	45.00	—	40.50	—
“Earth Measurements” Parts Kit and Text	28153-ND *NEW!*	69.00	—	62.10	—
“Robotics!” Parts Kit and Text	28154-ND *NEW!*	119.00	—	107.10	—
“Industrial Control” Parts Kit and Text	28156-ND *NEW!*	49.00	—	44.10	—
“Basic Analog and Digital” Parts Kit and Text	28155-ND *NEW!*	39.00	—	35.10	—

* Requires the Board of Education Full Kit or BASIC Stamp II Starter Kit

ZiLOG
Totally Logical

Real-Time, In-Circuit Emulation and Programming for only $99.00

Z86CCP01ZEM Emulator/Programmer for Zilog's Z8® Microcontrollers with up to 8K Program Memory

Digi-Key Part No. **269-2002-ND**
(See Z8 chart for applicable devices.)

GENERAL DESCRIPTION: Zilog's in-circuit emulator/programmer is an interactive, Windows™ based development tool providing a real-time environment for emulation and debugging, which includes a full-featured macro cross assembler to enhance programmer productivity. The Z86CCP01ZEM is a member of Zilog's ICEBOX™ product family of in-circuit emulators providing support for the Z8 microcontrollers. The emulator provides essential timing and I/O circuitry to simplify user emulation of the prototype hardware and software product. The Z8 CCP emulator provides users with a hardware platform to develop and debug software in a real-time environment. In contrast, software simulators provide significantly slower operation making them less practical for code development. The Z8 CCP emulator can be connected to a serial port (COM1, COM2, COM3, and COM4) of the host computer and uses Zilog Developer Studio (ZDS).**Z8 CCP Emulator Kit Contents:** Circuit Board: CMOS Z86C9320VSC, 20MHZ CMOS Z86C5020FSE ICE Chip, 8K x 8 Static RAM (for Code Memory) 18-Pin DIP ZIF Programming Socket, Holes Available for 28/40-Pin ZIF Programming Sockets, Sockets for 28/40-Pin Target Cables, 25-pin RS-232C Interface Connector: 18-Pin DIP Target Cable, Power Cable **Documentation:** Emulator User's Manual ***NOTE:*** *Power Supply RS-232C not included with Z86CCP01ZEM (recommended wall transformer T404-ND)*
FEATURES: • In-Circuit Debug Emulation • Real-Time Emulation • Z8 GUI ZDS Emulator Software • Window-Based User Interface • On-Line Help • One-Time Programmable (OTP) Support • Selectable Baud Rates: 9600 to 57.6 Kbps • Bisync Error-Correcting Communications Protocol • Source-Level Debugging • Symbolic Disassembly in the Debug Window • Zilog Developer Studio (ZDS): – ZMASM, – Structured Assembly and Data Code, – Source-Level Debug Support, – Built-In Register Equates, – Linker, – Windows 95TM Integrated Editor

SPECIFICATIONS: Operating Temperature: 20°C ± 10°C **Supply Voltage:** +7.5 VDC to 10.0 VDC **Minimum Emulation Speed:** 1 MHz internal SCLK **Maximum Emulation Speed:** 6 MHz internal SCLK12 MHz external Crystal (shipped with 8 MHZ crystal) **Operating Humidity:** 10-90% RH (non-condensing) **Power Requirements:** +8.0 VDC @ 0.5A typical, 0.8A max. **Dimensions:Width:** 7.0 in. (17.7 cm) **Length:** 9.0 in. (22.9 cm) **Height:** 0.9 in. (2.3 cm) **Serial Interface :**RS-232C @ 9600, 19200 (default), 28800, or 57600 Baud

Z8® Series Microcontrollers

Z8 MCU Family

Overview: Zilog MCU products are targeted for cost-sensitive, high-volume applications including consumer, automotive, security, and HVAC. One-time programmable (OTPs) for prototyping as well as volume production where time to market or code flexibility is critical. A variety of packaging options are available. The same on-chip peripherals are used across the MCU product line with the primary differences being the amount of ROM/RAM, number of I/O lines present, and packaging/temperature ranges available. This allows code written for one MCU device to be easily ported to another family member.

Features: • **General-Purpose Register (GPR) File Architecture:** Every RAM register acts like an accumulator, speeding instruction execution and maximizing coding efficiency. Working register groups allow fast context switching. • **Flexible I/O:** I/O byte, nibble, and/or bit programmable as inputs or outputs. Outputs are software programmable as open-drain or push-pull on a port basis. Inputs are Schmitt-triggered with auto latches to hold unused inputs at a known voltage state. • **Analog Inputs:** Three input pins are software programmable as digital or analog inputs. When in the analog mode, two comparator inputs are provided with a common reference input. • **Timer/Counter (T/C):** The T/C consists of a programmable 6-bit prescaler and 8-bit downcounter, with maskable interrupt upon end-of-count. • **Interrupts:** There are six vectored interrupt sources with software-programmable enable and priority for each of the six sources. • **Watch-Dog Timer (WDT):** An internal WDT circuit is included as a fail-safe mechanism so that if software strays outside the bounds of normal operation, the WDT will timeout and reset the MCU. • **Auto Reset:** All family devices have internal Power-On Reset. • **Low-EMI Operation:** Mode is programmable via software or as a mask option. This new option provides for reduced radiated emission via clock and output drive circuit changes. • **Low-Power:** CMOS with two standby modes; STOP and HALT. • **Full Z8 Instruction Set:** Forty-eight basic instructions, supported by six addressing modes with the ability to operate on bits, nibbles, bytes, and words.

EMULATORS/PROGRAMMERS for 8, 16 and 32K Devices

Z86C1200ZEM Emulator

SPECIFICATIONS: • **Minimum Emulation Speed:** 1 MHz • **Maximum Emulation Speed:** 16 MHz* • **Power Requirements:** +5.0 VDC @ 0.5A • **Dimensions:** Width: 6.25 in. (15.8 cm); Length: 9.5 in. (24.1 cm); Height: 2.5 in. (6.35 cm) • **Serial Interface:** RS-232C @ 9600, 19200 (default), 28800, or 57600 Baud. **(Shipped with 12MHz Crystal)*

KIT CONTENTS: Z86C12 Emulator: Emulation Base Board includes: CMOS Z86C9320PSC; 8K x 8 EPROM (Programmed with Debug Monitor); 32K x 8 Static RAM; Three 64K x 4 Static RAM; RS-232C Interface; Reset Switch. Emulation Daughterboard includes: 16MHz CMOS Z86C1216GSE ICE Chip; 2K x 8 Static RAM; 18/40-Pin DIP Zero Insertion Force (ZIF) Programming Sockets; 40/60/80-Pin Target Connectors. • **Cables/Pods:** Power Cable with Banana Plugs; Power Cable with 1A Slow-Blow Fuse; DB25 RS-232C Cable; 18-Pin, 28-Pin, and 40-Pin DIP Emulation Pod Cable. • **Devices:** One Z86E0812PSD (18-Pin DIP OTP) and One Z86E2112PSC (40-Pin DIP OTP).

NOTE: Z86C1200ZEM Emulator does not come with power supply.

Z86C5000ZEM Emulator

SPECIFICATIONS: • **Minimum Emulation Speed:** 1 MHz. • **Maximum Emulation Speed:** 20 MHz • **Power Requirements:** +5.0 VDC @ 1.0A Minimum • **Dimensions:** Width: 6.25 in. (15.8 cm); Length: 9.5 in. (24.1 cm); Height: 2.5 in. (6.35 cm). • **Serial Interface:** RS-232C @ 9600, 19200 (default), 28800, or 57600 Baud.

KIT CONTENTS: • Emulation Base Board with CMOS Z86C9320PSC; 8K x 8 EPROM (Programmed with Debug Monitor); 32K x 8 Static RAM; Three 64K x 4 Static RAM; RS-232C Interface; Reset Switch • Emulation Daughterboard with 20 MHz CMOS Z86C5020GSE ICE Chip; 2K x 8 Static RAM; 18/28/40-Pin ZIF OTP Sockets; Six HP-16500A Logic Analysis System Interface Connectors; 40/60/80-Pin Target Connectors • **Cables:** Power Cable with Banana Plugs; DB25 RS-232C Cable; 18-Pin, 28-Pin, and 40-Pin DIP Emulation Cables • Power Cable with 1A Slow-Blow Fuse • **Devices:** One Z86E3012PSC (28-Pin DIP OTP) and One Z86E4012PSC (40-Pin DIP OTP).

NOTE: Z86C5000ZEM Emulator does not come with power supply.

ACCESSORY KIT

The Z86CCP00ZAC is the accessory kit for the Z86CCP01ZEM. The kit contains all accessories to fully populate and operate all functions of the Z86CCP01ZEM.

Kit Contains: 28-Pin DIP ZIF Socket, 28-Pin Target Connector Cable, 40-Pin DIP ZIF Socket, 40-Pin Target Connector Cable, RS-232 Cable, Power Cable.

Memory Size		I/O	Oscillator Type	Freq. Range	Supply Voltage	Operating		Req. Emulator	Req. OTP Prog.	Digi-Key	Price Each			Zilog
Eprom	Ram	Lines	External	Min./Max.	Range	Temp. (°C)	Pkg.	Tools	Tools	Part No.	1	25	100	Part No.
0.5K	61	14	XTAL/RC	DC-8MHz	4.5-5.5	-40-105	18-DIP	A	A	269-1011-ND	2.49	1.87	1.14	Z86E0208PEC1925
0.5K	61	14	XTAL/RC	DC-8MHz	3.5-5.5	0-70	18-DIP	A	A	269-1012-ND	2.28	1.71	1.04	Z86E0208PSC1925
0.5K	61	14	XTAL/RC	DC-8MHz	4.5-5.5	-40-105	18-SOIC	*	A, 2	269-1013-ND	2.49	1.87	1.14	Z86E0208SEC1925
0.5K	61	14	XTAL/RC	DC-8MHz	3.5-5.5	0-70	18-SOIC	*	A, 2	269-1014-ND	2.28	1.71	1.04	Z86E0208SSC1925
0.5K	61	14	XTAL	DC-8MHz	4.5-5.5	0-70	18-DIP	A	A, 1	269-1083-ND	5.25	3.94	2.28	Z86E0308PSC
0.5K	61	14	XTAL	DC-8MHz	4.5-5.5	-40-105	20-SSOP	—	—	269-3068-ND	2.73	2.05	1.24	Z86E0208HEC1925
0.5K	61	14	XTAL	DC-8MHz	3.5-5.5	0-70	20-SSOP	—	—	269-3069-ND	2.49	1.87	1.12	Z86E0208HSC1925
1K	125	14	RC	DC-8MHz	4.5-5.5	0-70	18-SOIC	*	A, 2	269-1022-ND	3.03	2.28	1.44	Z86E0408SSC1903
1K	125	14	XTAL	DC-12MHz	4.5-5.5	0-70	18-DIP	A	A, 1	269-1085-ND	6.39	4.80	2.77	Z86E0612PSC
1K	125	14	XTAL	DC-12MHz	4.5-5.5	0-70	18-SOIC	*	A, 2	269-1086-ND	6.39	4.80	2.77	Z86E0612SSC
1K	125	14	XTAL	DC-12MHz	4.5-5.5	-40-105	18-DIP	A	A	269-1093-ND	3.90	2.93	1.69	Z86E0412PEC
1K	125	14	RC	DC-12MHz	4.5-5.5	-40-105	18-DIP	A	A	269-1094-ND	3.90	2.93	1.69	Z86E0412PEC1903
1K	125	14	XTAL	DC-12MHz	4.5-5.5	0-70	18-DIP	A	A	269-1095-ND	3.54	2.66	1.54	Z86E0412PSC1866
1K	125	14	RC	DC-12MHz	4.5-5.5	0-70	18-DIP	A	A	269-1096-ND	3.54	2.66	1.54	Z86E0412PSC1903
1K	125	14	XTAL	DC-12MHz	4.5-5.5	-40-105	18-SOIC	*	A, 2	269-1097-ND	3.90	2.93	1.69	Z86E0412SEC
1K	125	14	RC	DC-12MHz	4.5-5.5	-40-105	18-SOIC	*	A, 2	269-1098-ND	3.90	2.93	1.69	Z86E0412SEC1903
1K	125	14	XTAL	DC-12MHz	4.5-5.5	0-70	18-SOIC	*	A, 2	269-1099-ND	3.54	2.66	1.54	Z86E0412SSC1866
1K	125	14	RC	DC-12MHz	4.5-5.5	0-70	18-SOIC	*	A, 2	269-1100-ND	3.54	2.66	1.54	Z86E0412SSC1903
1K	125	14	XTAL	DC-12MHz	4.5-5.5	-40-105	20-SSOP	—	—	269-3074-ND	4.14	3.11	1.80	Z86E0412HEC1866
1K	125	14	RC	DC-12MHz	4.5-5.5	-40-105	20-SSOP	—	—	269-3075-ND	4.14	3.11	1.80	Z86E0412HEC1903
1K	125	14	XTAL	DC-12MHz	4.5-5.5	0-70	20-SSOP	—	—	269-3076-ND	3.75	2.82	1.63	Z86E0412HSC1866
1K	125	14	RC	DC-12MHz	4.5-5.5	0-70	20-SSOP	—	—	269-3077-ND	3.75	2.82	1.63	Z86E0412HSC1903
2K	125	14	XTAL	DC-12MHz	4.5-5.5	-40-105	18-DIP	A	A	269-1023-ND	4.77	3.58	2.07	Z86E0812PEC
2K	125	14	XTAL	DC-12MHz	4.5-5.5	0-70	18-DIP	A	A	269-1025-ND	4.35	3.27	1.89	Z86E0812PSC1866
2K	125	14	RC	DC-12MHz	4.5-5.5	0-70	18-DIP	A	A	269-1026-ND	4.35	3.27	1.89	Z86E0812PSC1903
2K	125	14	XTAL	DC-12MHz	4.5-5.5	-40-105	18-SOIC	*	A, 2	269-1027-ND	4.77	3.58	2.07	Z86E0812SEC
2K	125	14	RC	DC-12MHz	4.5-5.5	-40-105	18-SOIC	*	A, 2	269-1028-ND	4.77	3.58	2.07	Z86E0812SEC1903
2K	125	14	XTAL	DC-12MHz	4.5-5.5	0-70	18-SOIC	*	A, 2	269-1029-ND	4.35	3.27	1.89	Z86E0812SSC1866
2K	125	14	RC	DC-12MHz	4.5-5.5	0-70	18-SOIC	*	A, 2	269-1030-ND	4.35	3.27	1.89	Z86E0812SSC1903
2K	125	14	XTAL	DC-12MHz	4.5-5.5	-40-105	20-SSOP	—	—	269-3086-ND	4.38	3.29	1.90	Z86E0812HEC1866
2K	125	14	RC	DC-12MHz	4.5-5.5	-40-105	20-SSOP	—	—	269-3087-ND	5.01	3.76	2.18	Z86E0812HEC1903
2K	125	14	XTAL	DC-12MHz	4.5-5.5	0-70	20-SSOP	—	—	269-3088-ND	4.53	3.40	1.97	Z86E0812HSC1866
2K	125	14	RC	DC-12MHz	4.5-5.5	0-70	20-SSOP	—	—	269-3089-ND	4.53	3.40	1.97	Z86E0812HSC1903
2K	125	24	XTAL/RC	DC-16MHz	4.5-5.5	-40-105	28-DIP	A	A, 3	269-1052-ND	7.05	5.29	3.40	Z86E3116PEC
2K	125	24	XTAL/RC	DC-16MHz	3.5-5.5	0-70	28-DIP	A	A, 3	269-1053-ND	6.39	4.80	3.09	Z86E3116PSC
2K	125	24	XTAL/RC	DC-16MHz	4.5-5.5	-40-105	28-SOIC	*	A, 3, 4	269-1054-ND	7.05	5.29	3.40	Z86E3116SEC
2K	125	24	XTAL/RC	DC-16MHz	3.5-5.5	0-70	28-SOIC	*	A, 3, 4	269-1055-ND	6.39	4.80	3.09	Z86E3116SSC
4K	237	24	XTAL/RC	DC-16MHz	4.5-5.5	-40-105	28-DIP	A	A, 4	269-1040-ND	8.49	6.37	3.68	Z86E3016PEC
4K	237	24	XTAL/RC	DC-16MHz	3.5-5.5	0-70	28-DIP	A	A, 4	269-1041-ND	7.71	5.79	3.35	Z86E3016PSC
4K	237	24	XTAL/RC	DC-16MHz	3.5-5.5	0-70	28-SOIC	*	A, 3, 4	269-1043-ND	7.71	5.79	3.35	Z86E3016SSC
4K	237	24	XTAL/RC	DC-16MHz	3.5-5.5	0-70	28-PLCC	A	A, 3, 4	269-1045-ND	7.71	5.79	3.35	Z86E3016VSC
4K	237	24	XTAL/RC	DC-12MHz	3.5-5.5	0-70	28-DIP	A	A, 7	269-1036-ND	7.98	5.99	3.46	Z86E3312PSC
4K	237	24	XTAL/RC	DC-12MHz	3.5-5.5	0-70	28-SOIC	*	A, 8	269-1103-ND	7.98	5.99	3.46	Z86E3312SSC
4K	237	24	XTAL/RC	DC-12MHz	3.5-5.5	0-70	28-PLCC	*	A, 9	269-1104-ND	7.98	5.99	3.46	Z86E3312VSC
4K	236	32	XTAL/RC	DC-16MHz	4.5-5.5	-40-105	40-DIP	A	A, 3	269-1071-ND	10.08	7.56	4.87	Z86E4016PEC
4K	236	32	XTAL/RC	DC-16MHz	4.5-5.5	-40-105	44-PQFP	*	A, 3, 15	269-1106-ND	10.53	7.90	4.87	Z86E4016FEC
4K	236	32	XTAL/RC	DC-16MHz	4.5-5.5	0-70	44-PQFP	*	A, 3, 15	269-1107-ND	9.57	7.18	4.42	Z86E4016FSC
4K	236	32	XTAL/RC	DC-16MHz	3.5-5.5	0-70	40-DIP	A	A, 3	269-1072-ND	9.18	6.89	4.42	Z86E4016PSC
4K	236	32	XTAL/RC	DC-16MHz	3.5-5.5	0-70	44-PLCC	*	A, 3, 6	269-1074-ND	9.18	6.89	4.42	Z86E4016VSC
4K	236	32	XTAL/RC	DC-12MHz	3.5-5.5	0-70	40-DIP	A	A, 10	269-1037-ND	9.75	7.32	4.23	Z86E4312PSC
4K	236	32	XTAL/RC	DC-12MHz	3.5-5.5	0-70	44-PLCC	*	A, 11	269-1038-ND	9.75	7.32	4.23	Z86E4312VSC
4K	236	32	XTAL/RC	DC-12MHz	3.5-5.5	0-70	44-PQFP	*	A, 3, 16	269-1108-ND	10.17	7.63	4.41	Z86E4312FSC
8K	237	24	XTAL/RC	DC-12MHz	3.5-5.5	0-70	28-SOIC	*	A, 8	269-1047-ND	9.72	7.29	4.50	Z8673312SSC
8K	237	24	XTAL/RC	DC-12MHz	3.5-5.5	0-70	28-DIP	A	A, 7	269-1112-ND	9.72	7.29	4.50	Z8673312PSC
8K	237	24	XTAL/RC	DC-12MHz	3.5-5.5	0-70	28-PLCC	*	A, 9	269-1113-ND	9.72	7.29	4.50	Z8673312VSC
8K	236	32	XTAL/RC	DC-12MHz	3.5-5.5	0-70	44-PLCC	*	A, 11	269-1048-ND	11.28	8.46	5.44	Z8674312VSC
8K	236	32	XTAL	DC-12MHz	4.5-5.5	0-70	40-DIP	B	B	269-1033-ND	18.93	14.20	8.27	Z86E2116PSC
8K	236	32	XTAL/RC	DC-12MHz	3.5-5.5	0-70	44-PQFP	*	A, 16	269-1114-ND	11.70	8.78	5.44	Z8674312FSC
8K	236	32	XTAL/RC	DC-12MHz	3.5-5.5	0-70	40-DIP	A	A, 10	269-1115-ND	11.28	8.46	5.44	Z8674312PSC
8K	236	32	XTAL	DC-16MHz	4.5-5.5	0-70	44-PQFP	*	B, 14	269-1101-ND	18.93	14.20	8.27	Z86E2116FSC
8K	236	32	XTAL	DC-16MHz	4.5-5.5	0-70	44-PLCC	*	B, 12	269-1102-ND	18.93	14.20	8.27	Z86E2116VSC
16K	237	24	XTAL/RC	DC-12MHz	3.5-5.5	0-70	28-SOIC	*	C, 8	269-1035-ND	12.84	9.63	6.03	Z86E3412SSC
16K	237	24	XTAL/RC	DC-12MHz	3.5-5.5	0-70	28-PLCC	*	C, 9	269-1039-ND	12.84	9.63	6.03	Z86E3412VSC
16K	237	24	XTAL/RC	DC-12MHz	3.5-5.5	0-70	28-DIP	C	C, 7	269-1105-ND	12.84	9.63	6.03	Z86E3412PSC
16K	236	32	XTAL/RC	DC-12MHz	3.5-5.5	0-70	40-DIP	C	C, 10	269-1034-ND	14.43	10.83	6.26	Z86E4412PSC
16K	236	32	XTAL/RC	DC-12MHz	3.5-5.5	0-70	44-PLCC	*	C, 11	269-1046-ND	14.43	10.83	6.26	Z86E4412VSC
16K	236	32	XTAL/RC	DC-12MHz	3.5-5.5	0-70	44-PQFP	*	C, 16	269-1109-ND	14.82	11.12	6.43	Z86E4412FSC
16K	236	32	XTAL	DC-16MHz	4.5-5.5	0-70	44-PQFP	*	B, 14	269-1110-ND	23.01	17.26	9.98	Z86E6116FSC
32K	236	32	XTAL	DC-16MHz	4.5-5.5	0-70	40-DIP	B	B	269-1091-ND	29.22	21.92	12.67	Z86E6316PSC
32K	236	32	XTAL	DC-16MHz	4.5-5.5	0-70	44-PQFP	*	B, 14	269-1111-ND	29.22	21.92	12.67	Z86E6316FSC

Key	Description	Digi-Key Part No.	Price Each	Zilog Part No.
	Emulators/Programmers			
A	Z8 Emulator/Programmer Board	269-2002-ND	99.00	Z86CCP01ZEM
B	Z8 Emulator/Programmer Board	269-2003-ND	1250.00	Z86C1200ZEM
C	Z8 Emulator/Programmer Board	269-2004-ND	1335.00	Z86C5000ZEM
	OTP Programming Adapters			
1	18 Pin DIP/SOIC Adapter	269-2005-ND	180.00	Z86E0601ZDP
2	18 Pin SOIC Adapter	269-2006-ND	95.00	Z86E0700ZDP
3	Z8 Accessory Kit (28-DIP, 40-DIP) for Z86CCP01ZEM	269-2001-ND	86.66	Z86CCP00ZAC
4	Z8 Accessory Kit (28 Pin SOIC/PLCC) for Z86CCP01ZEM	269-2007-ND	102.00	Z86C3000ZAC
6	44 Pin PLCC Adapter	269-2008-ND	74.83	Z86E4001ZDV
7	28 Pin Dip Adapter	269-2009-ND	35.10	Z86E3400ZDP
8	28 Pin SOIC Adapter	269-2010-ND	52.65	Z86E3400ZDS
9	28 Pin PLCC Adapter	269-2011-ND	40.95	Z86E3400ZDV
10	40 Pin DIP Adapter	269-2012-ND	42.00	Z86E4400ZDP
11	44 Pin PLCC Adapter	269-2013-ND	48.00	Z86E4400ZDV
12	44 Pin PLCC Adapter	269-2014-ND	132.00	Z86E2101ZDV
13	44 Pin PLCC Adapter	269-2015-ND	74.77	Z86E4000ZDV
14	44 Pin PQFP to 40 Dip Adapter	269-2021-ND	198.00	Z86E2101ZDF
15	44 Pin PQFP to 40 Dip Adapter	269-2022-ND	118.83	Z86E4001ZDF
16	44 Pin PQFP to 40 Dip Adapter	269-2023-ND	54.00	Z86E4400ZDF
17	20 Pin SSOP to 18 Dip Adapter	269-2032-ND	65.00	Z8E00101ZDH

* Zilog's emulators support this part, but the in-circuit target cable is configured for DIP only. For designs that require a surface mount package, see logic system adapters in the manufacturers index.

ZiLOG
Totally Logical

Z8Plus™ Microcontrollers

Employing the experience gained from the industry-standard Z80 and Z8 cores, the Z8Plus offers increased functionality, significantly higher performance, lower power requirements, and greater cost savings over other 8-bit microcontrollers. The Z8Plus is designed to be easy to use, even for designers who have never used a microcontroller before.

With single-cycle execution, powerful I/O capabilities and register-to-register architecture, the Z8Plus offers state-of-the-art flexibility and freedom for any designer in search of a low-cost solution for a variety of microcontroller applications.

The Z8Plus core offers several significant advantages compared to the current Z8 core. Foremost is performance improvement due to a reduced system clock division and a fixed instruction cycle time. The improvement is nearly 50%, depending upon instruction mix. For example, a Z8Plus-based part at 10MHz has performance comparable to a 16MHz part in production today. This, along with significant design improvements, leads to lower power and lower noise operation.

The Z8PE002 and Z8PE003 microcontrollers are the newest members of the popular Z8E001 Z8 Plus 8-bit microcontroller family. New features include voltage brown-out protection and power-on reset. Additionally, the "RESET" pin has been replaced with a general purpose I/O pin and oscillator circuitry to support RC configurations. These new parts are targeted at customers who require a powerful, yet small OTP microcontroller for use in general purpose applications.

EMULATOR/PROGRAMMER

FEATURES: • In-Circuit Program Debug Emulation • Real-Time Emulation • ZDS Emulator Software • Window-Based User Interface • On-Line Help • One-Time Programmable (OTP) Support • Selectable Baud Rates: 9600 to 57.6 Kbps • Bisync Error-Correcting Communications Protocol

SPECIFICATIONS: OPERATING TEMPERATURE: 20°C ± 10ºC **POWER REQUIREMENT:** +9.0 VDC @ 0.5A Minimum (Typical). **DIMENSIONS:** • Width: 6.75 in. (17.15 cm) • 7.50 in. (19.05 cm) • 0.90 in. (2.30 cm). **SERIAL INTERFACE:** RS-232C @ 9600, 19200 (default), 28800, or 57600 Baud

HOST COMPUTER: Minimum Requirements: IBM PC (or 100% Compatible) 386-Based Machine: • 33 MHz • 4 MB RAM • VGA Video Adapter • Hard Disk Drive (2.5 MB Free Space) • 3.5-inch, High-Density (HD) Floppy Disk Drive • RS-232C Com Port • Mouse or Pointing Device • Microsoft Windows 3.1

KIT CONTENTS (One of Each): Z8M001 Emulator Board; • **Cable/Pods:** 18-Pin Emulation Pod Cable; 9-Pin M-F Serial Cable (6 ft.) • **Host Software:** Z8 Graphical User Interface (GUI); ZiLOG Macro Cross Assembler (ZMASM)/ZiLOG Developer Studio (ZDS) • **Documentation:** ZiLOG 1999 Technical Library CD ROM, which contains Z8 device data sheets, user manuals, application notes; Z8M001 Emulator User's Manual

Memory Size Eprom	Memory Size Ram	I/O Lines	Oscillator Type External	Frequency Range Min/Max	Supply Voltage Range	Operating Temp. (°C)	Package	Required Emulator Tools	Required OTP Programming Tools	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 100	Zilog Part No.
512	32	13	XTAL/LC	DC - 10MHz	4.5 - 5.5	-40 – 105	18-DIP	D	D	269-1116-ND	2.52	1.89	1.17	Z8E00010PEC
512	32	13	XTAL/LC	DC - 10MHz	3.5 - 5.5	0 – 70	18-DIP	D	D	269-1117-ND	2.10	1.58	1.02	Z8E00010PSC
512	32	13	XTAL/LC	DC - 10MHz	4.5 - 5.5	-40 – 105	18-SOIC	*	D,2	269-1118-ND	2.52	1.89	1.17	Z8E00010SEC
512	32	13	XTAL/LC	DC - 10MHz	3.5 - 5.5	0 – 70	18-SOIC	*	D,2	269-1119-ND	2.10	1.58	1.02	Z8E00010SSC
1K	64	13	XTAL/LC	DC - 10MHz	4.5 - 5.5	-40 – 105	18-DIP	D	D	269-1120-ND	2.91	2.19	1.41	Z8E00110PEC
1K	64	13	XTAL/LC	DC - 10MHz	3.5 - 5.5	0 – 70	18-DIP	D	D	269-1121-ND	2.64	1.98	1.28	Z8E00110PSC
1K	64	13	XTAL/LC	DC - 10MHz	4.5 - 5.5	-40 – 105	18-SOIC	*	D,2	269-1122-ND	2.91	2.19	1.41	Z8E00110SEC
1K	64	13	XTAL/LC	DC - 10MHz	3.5 - 5.5	0 – 70	18-SOIC	*	D,2	269-1123-ND	2.64	1.98	1.28	Z8E00110SSC
Z8PE002 / Z8PE003 Series														
512	64	14	XTAL/LC	DC - 10MHz	3.0 - 5.5	0 – 70	18-DIP	D	D	269-1130-ND	2.25	1.69	1.11	Z8PE002PZ010SC
512	64	14	XTAL/LC	DC - 10MHz	3.0 - 5.5	0 – 70	18-SOIC	*	D,2	269-1131-ND	2.25	1.69	1.11	Z8PE002SZ010SC
512	64	14	XTAL/LC	DC - 10MHz	3.0 - 5.5	0 – 70	20-SSOP	*	D,17	269-1132-ND	2.43	1.83	1.22	Z8PE002HZ010SC
512	64	14	XTAL/LC	DC - 10MHz	4.5 - 5.5	-40 – 105	18-DIP	D	D	269-1133-ND	2.46	1.85	1.22	Z8PE002PZ010EC
512	64	14	XTAL/LC	DC - 10MHz	4.5 - 5.5	-40 – 105	18-SOIC	*	D,2	269-1134-ND	2.46	1.85	1.22	Z8PE002SZ010EC
512	64	14	XTAL/LC	DC - 10MHz	4.5 - 5.5	-40 – 105	20-SSOP	*	D,17	269-1135-ND	2.67	2.01	1.34	Z8PE002HZ010EC
1K	64	14	XTAL/LC	DC - 10MHz	3.0 - 5.5	0 – 70	18-DIP	D	D	269-1136-ND	3.12	2.34	1.56	Z8PE003PZ010SC
1K	64	14	XTAL/LC	DC - 10MHz	3.0 - 5.5	0 – 70	18-SOIC	*	D,2	269-1137-ND	3.12	2.34	1.56	Z8PE003SZ010SC
1K	64	14	XTAL/LC	DC - 10MHz	3.0 - 5.5	0 – 70	20-SSOP	*	D,17	269-1138-ND	3.30	2.48	1.65	Z8PE003HZ010SC
1K	64	14	XTAL/LC	DC - 10MHz	4.5 - 5.5	-40 – 105	18-DIP	D	D	269-1139-ND	3.42	2.57	1.72	Z8PE003PZ010EC
1K	64	14	XTAL/LC	DC - 10MHz	4.5 - 5.5	-40 – 105	18-SOIC	*	D,2	269-1140-ND	3.42	2.57	1.72	Z8PE003SZ010EC
1K	64	14	XTAL/LC	DC - 10MHz	4.5 - 5.5	-40 – 105	20-SSOP	*	D,17	269-1141-ND	3.66	2.75	1.82	Z8PE003HZ010EC

Emulator/Programmer†

Key	Description	Digi-Key Part No.	Price Each	Zilog Part No.
D	Z8 Plus Emulator/Programmer .... (Power supply sold separately T405-ND recommended)	269-2033-ND	99.00	Z8ICE001ZEM

† For OTP programming adapters, please refer to Z8 Series.

* Zilog's emulators support this part, but the in-circuit target cable is configured for DIP only. For designs that require a surface mount package, accommodations will have to be made to use the emulator for in-circuit DIP emulation.

3XX Series Digital Signal Processors

3X1 FEATURES: • 16-Bit Fixed-Point, Single-Cycle Deterministic Instruction Execution • 20 MIPS • 24-Bit Accumulator • 2x 256W Data RAM • 4KW Program Memory • Counter/Timer • Dual CODEC Interface (2nd Timer) • ROM and OTP Drop-In Replacements

3X3 FEATURES: • 16-Bit Fixed-Point, Single-Cycle Deterministic Instruction Execution • 20 MIPS • 24-Bit Accumulator • 2x 256W Data RAM • 8KW Program Memory • SPI • 4-Channel 8-Bit A/D Converter • 3x Counter/Timers, 2x PWM/WDT • Up to 40 I/O Pins • PLL-Driven System Clock • Smart Power-Saver Modes • ROM and TOP Drop-In Replacements

DSP Development Tools

SPECIFICATIONS: OPERATING CONDITIONS: • Operating Temperature: 20°C ±10°C • Supply Voltage: 9.0 VDC • Minimum Emulation Speed: 1 MHz • Maximum Emulation speed: 20 MHz. **SERIAL INTERFACE:** RS-232 @ 9600, 19200 (default), 28800, or 57600 Baud **EMULATION MEMORY:** DSP = 64K words (maximum) **NUMBER OF BREAKPOINTS:** DSP = 256 (maximum)

HOST COMPUTER: Minimum Requirements: IBM PC (or 100% compatible) 486-Based Machine: • 33 MHz • 4 MB RAM • VGA Video Adapter • Hard Disk Drive (3.0 MB free space) • 3.5-inch, High-Density (HD) Floppy Disk Drive • RS-232 COM Port • Mouse or Pointing Device • Microsoft Windows 3.1 or Greater (Utilized with DSPICE software)

Z8932101ZEM AND Z8932102ZEM

FEATURES: • Provides Source-Level Debugging for DSP Codes • Symbolic Disassembly in the Debug Window • Selectable Baud Rates: 9600 to 57.6 Kbps • Windows-Based User Interface • RS-232 Connector **ZDS (w/ZiLOG Macro Cross Assembler):** • Project Front End Interface (graphical-based) • Structured Assembly Code ('C' language-like) • Listing, Map, and Linker Control Files • ZDS Syntax-Highlighting Editor (Windows 95 Only) • ZDS Faster Error Correction (Windows 95 Only)

Z8932101ZEM KIT CONTENTS: Z8932101ZEM Emulator Board • **Cable/Pods:** RS-232 Serial Cable, 9-Pin M-F; 9 VDC @ 1.2A Wall Adapter • **Host Software:** ZDS/DSP GUI diskette; ZDS/ZiLOG Macro Cross Assembler Diskette • **Documentation:** Z8932101ZEM Emulator User's Manual; ZiLOG Macro Cross Assembler User's Manual; Software License and Limited Warranty Agreement • **DIMENSIONS:** • Width: 7.375 in (18.733 cm) • Length: 9.75 in. (24.765 cm) • Height: 0.50 in (1.27 cm)

Z8932102ZEM KIT CONTENTS: Z8932102ZEM Emulator Board • **Cable/Pods:** Z89371 40-Pin PDIP Emulation Pod; Z89371 44-Pin PLCC Emulation Pod with Cable; Z89371 44-Pin QFP Adapter; RS-232 Serial Cable, 9-Pin M-F; 9 VDC @ 1.2A Wall Adapter; Z89371 PLCC Program Adapter; Z89371 QFP Program Adapter • **Host Software:** ZDS/DSP GUI Diskette; ZDS/ZiLOG Macro Cross Assembler; Software License and Limited Warranty Agreement • **Documentation:** Z8932102ZEM Emulator User's Manual; ZiLOG Macro Cross Assembler User's Manual • **DIMENSIONS:** • Width: 7.375 in (18.733 cm) • Length: 9.75 in. (24.765 cm) • Height: 0.50 in (1.27 cm)

Z8932301ZEM

FEATURES: • ICEBOX Emulator Provides Source-Level Debugging for DSP Codes • Symbolic Disassembly in the Debug Window • Selectable Baud Rates: 9600 to 57.6 Kbps • Windows-Based User Interface • RS-232C Connector **ZiLOG Macro Cross Assembler (ZMASM):** • Structured Assembly and Data Code • Source-Level Debug Support • Built-In Register Equates • Linker

KIT CONTENTS : Z89323 Emulator Board • **Cable/Pods:** RS-232C Serial Cable, 9-Pin M-F; 9 VDC AC Adapter • **Host Software:** ZDS/DSP GUI Diskette; ZDS/ZiLOG Macro Cross Assembler diskette • **Documentation:** Emulator User's Manual; ZiLOG Macro Cross Assembler User's Manual; Software License and Limited Warranty Agreement; Registration Card (2) • **DIMENSIONS:** • Width: 5.25 in. (13.335 cm) • Length: 9.50 in. (24.13 cm) • Height: 0.50 in. (1.27 cm)

Z8932302ZEM

FEATURES: • ICEBOX Emulator Provides Source-Level Debugging for DSP Codes • HP Logic Analyzer Interface • 64K of External Data Memory • Symbolic Disassembly in the Debug Window • Selectable Baud Rates: 9600 to 57.6 Kbps • Windows-Based User Interface • RS-232C Connector **Zilog Macro Cross Assembler (ZMASM, ZDS):** • Structured Assembly and Data Code • Source-Level Debug Support • Built-In Register Equates • Linker

KIT CONTENTS: Z89323 Emulator Board • **Cables/Pods:** RS-232C Serial Cable, 9-Pin M-F; 9 VDC AC Adapter; Emulation Pod, 68 PLCC; Power Cable Assembly, 4-Leads; Programming Adapter, 68-PLCC/80-QFP. • **Host Software:** DSP GUI diskette; ZMASM (w/ZDS) Diskette • **Documentation:** Emulator User's Manual; ZiLOG Macro Cross Assembler User's Manual; Software License and Limited Warranty Agreement; Registration Card (2) • **DIMENSIONS:** • Width: 8.00 in. (20.32 cm) • Length: 9.75 in. (24.765 cm) • Height: 0.50 in. (1.27 cm)

OTP (KWORDS)	DSP RAM (WORDS)	MIPS	A/D	Supply Voltage Range	Operating Temp. (°C)	Package	Required Emulator Tools	Required OTP Programming Tools	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 100	Zilog Part No.
4	512	20	NO	4.5 - 5.5	0 – 70	44-PQFP	—	A,3 or A,4 or B	269-1125-ND	13.20	9.90	5.72	Z8937120FSC
4	512	20	NO	4.5 - 5.5	0 – 70	40-DIP	A,4 or B,4	A or B	269-1126-ND	12.57	9.43	5.45	Z8937120PSC
4	512	20	NO	4.5 - 5.5	0 – 70	44-PLCC	A,4 or B	A,3 or A,4 or B	269-1127-ND	13.11	9.84	5.69	Z8937120VSC
8	512	20	YES	4.5 - 5.5	0 – 70	44-PLCC	C,1 or D,2	C or D,2	269-1124-ND	31.32	23.49	13.58	Z8927320VSC
8	512	20	YES	4.5 - 5.5	0 – 70	68-PLCC	C,6 or D	C,5 or C,6 or D	269-1129-ND	32.43	24.33	14.06	Z8937320VSC

Emulators/Programmers

Key	Description	Digi-Key Part No.	Price Each	Zilog Part No.
A	Z89321/371 DSP Family Emulator/Programmer	269-2017-ND	99.00	Z8932101ZEM
B	Z89321/371 DSP Family Emulator/Programmer	269-2018-ND	399.00	Z8932102ZEM
C	Z89223/273/323/373 DSP Family Emulator/Programmer	269-2019-ND	99.00	Z8932301ZEM
D	Z89223/273/323/373 DSP Family Emulator/Programmer	269-2020-ND	399.00	Z8932302ZEM

Accessory Kits

Key	Description	Digi-Key Part No.	Price Each	Zilog Part No.
1	Z89273 44-PLCC Accessory Kit..	269-2026-ND	99.00	Z8927301ZAC
2	Z89273 44-PLCC Accessory Kit..	269-2027-ND	99.00	Z8927302ZAC
3	Z89371 44-PLCC, 44-PQFP Accessory Kit	269-2028-ND	71.83	Z8937100ZAC
4	Z89371 44-PLCC, 44-PQFP, 40-DIP Accessory Kit	269-2029-ND	195.00	Z8937101ZAC
5	Z89373 68-PLCC, 80-PQFP Accessory Kit	269-2030-ND	71.86	Z8937300ZAC
6	Z89373 68-PLCC, 80-PQFP Accessory Kit	269-2031-ND	195.00	Z8937301ZAC

STATIC PROTECTION

Protection of static sensitive parts is a MUST in today's semiconductor market.
To ensure the quality that Digi-Key customers have come to expect,
the Digi-Key static control program includes proper static safety protection in the following areas:

- ***Receiving, Incoming Inspection, and QC***
- ***Order Picking***
- ***Final Inspection***
- ***Packaging and Shipping***

Shielded metalized bags are used in order picking, and anti-static, non-CFC, photo degradable packaging peanuts are used in packaging and shipping.

As our program is continuously updated with the latest static control technology, you can be reassured that Digi-Key's static sensitive parts are quality safe, *all the way to your door step!*

NEW! EMBEDDED INTEL ARCHITECTURE MICROPROCESSORS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
KU80386EXTB25	807262-ND	25MHz 386EX Integrated Processor, 3.3V	132-QFP	27.30	21.58	17.55
KU80386EXTC25	807271-ND	25MHz 386EX Integrated Processor, 5.0V	132-QFP	23.10	18.26	14.85
KU80386EXTC33	807277-ND	33MHz 386EX Integrated Processor, 5.0V	132-QFP	23.63	18.68	15.19
A80486DX4WB100SK096	801069-ND	100MHz 486DX4 32-Bit Microprocessor, 3.3V	168-PGA	65.46	51.68	44.79
A8050266100SL2TU	818463-ND	100MHz Pentium I, 66MHz Bus, 3.3V	296-CPGA	66.54	52.53	45.53
A8050266133SY022	801827-ND	133MHz Pentium I, 66MHz Bus, 3.3V	296-CPGA	66.54	52.53	45.53
A8050266166SY016	801878-ND	166MHz Pentium I, 66MHz Bus, 3.3V	296-CPGA	83.60	66.00	57.20
FV8050366200SL27J	813127-ND	200MHz Pentium I with MMX, 66MHz Bus, 2.8V	296-PGA	72.20	57.00	49.40
FV8050366233SL27S	813324-ND	233MHz Pentium I with MMX, 66MHz Bus, 2.8V	296-PGA	76.00	60.00	52.00
FV80503CSM66166SL2ZX	819416-ND	166MHz Pentium I with MMX, 66MHz Bus, 1.9V	296-PGA	76.46	60.36	52.32
GC80503CSM66166SL388	821225-ND	166MHz Pentium I with MMX, 66MHz Bus, 1.9V	352-BGA	70.07	55.32	47.95
FV80503CSM66266SL2Z4	819033-ND	266MHz Pentium I with MMX, 66MHz Bus, 1.9V	296-PGA	79.30	69.69	61.28
GC80503CSM66266SL389	821226-ND	266MHz Pentium I with MMX, 66MHz Bus, 1.9V	352-BGA	73.77	64.83	57.01
KC80524KX266256SL32Q	820516-ND	266MHz Pentium II, 66MHz Bus, 256K L2 Cache, 1.6V	615-BGA	118.02	103.72	91.21
KC80524KX333256SL32S	820520-ND	333MHz Pentium II, 66MHz Bus, 256K L2 Cache, 1.6V	615-BGA	121.70	106.96	94.05
FV80524RX300128SL36A	820704-ND	300MHz Celeron, 66MHz Bus, 128K L2 Cache, 2.0V	370-PGA	82.82	65.39	56.67
FV80524RX366128SL36C	820706-ND	366MHz Celeron, 66MHz Bus, 128K L2 Cache, 2.0V	370-PGA	86.67	76.17	66.98
FV80524RX433128SL3BA	821636-ND	433MHz Celeron, 66MHz Bus, 128K L2 Cache, 2.0V	370-PGA	82.98	72.93	64.12
TN80C186EB20	802875-ND	20MHz Enhanced 80C186 16-Bit MPU, 5V	84-PLCC	17.74	13.97	10.57
KU80C186EC20	802933-ND	20MHz Enhanced 80C186 16-Bit MPU, 5V	100-QFP	21.15	16.65	12.60
KU80C186EC25	802951-ND	25MHz Enhanced 80C186 16-Bit MPU, 5V	100-QFP	21.15	16.65	12.60
N80C186XL12	803020-ND	12MHz 80C186XL 16-Bit Microprocessor, 5V	68-PLCC	11.14	8.91	5.88
N80C186XL20	803140-ND	20MHz 80C186XL 16-Bit Microprocessor, 5V	68-PLCC	11.28	9.02	5.95
TN80C186XL20	803212-ND	20MHz 80C186XL 16-Bit Microprocessor, 5V, Ext. Temp.	68-PLCC	11.28	9.02	5.95
TN80C188EB13	803537-ND	13MHz Enhanced 80C188 16-Bit MPU, 5V, Ext. Temp.	84-PLCC	17.74	13.97	10.57
TN80C188EB20	803562-ND	20MHz Enhanced 80C188 16-Bit MPU, 5V, Ext. Temp.	84-PLCC	17.74	13.97	10.57
TS80C188EB20	803586-ND	20MHz Enhanced 80C188 16-Bit MPU, 5V, Ext. Temp.	80-QFP	17.27	13.60	10.29
N80C188XL12	803698-ND	12MHz 80C188XL 16-Bit Microprocessor, 5V	68-PLCC	11.14	8.91	5.88
N80C188XL20	803820-ND	20MHz 80C188XL 16-Bit Microprocessor, 5V	68-PLCC	11.28	9.02	5.95

NEW! PROCESSOR MODULES

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
LPM22CUBF500A	833443-ND	Pentium III 500MHz Low Pwr. Module	—	355.27	333.90	320.55
LPM22PDF333A	833446-ND	Pentium II 333MHz Low Pwr. Module	—	303.24	285.00	273.60
LPM25P2F266A	833449-ND	Pentium II 266MHz Low Pwr. Module	—	358.24	336.69	323.22

NEW! STRONG ARM® PROCESSORS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
21281EB	821352-ND	233MHz Strong Arm SA-110 Microprocessor	144-TQFP	67.18	53.04	45.97
21285AB	821310-ND	Core Logic for SA-110 Microprocessor	256-BGA	49.88	39.43	32.07

NEW! NETWORK PROCESSORS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
GCIXP1200EA	829314-ND	2V, 166MHz Network Processor	432-BGA	221.71	208.38	200.04

NEW! I/O PROCESSORS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
GC80960RN100SL3YW	827744-ND	100MHz, i960RN 32-Bit I/O Processor, 64Bit PCI-PCI Bridge	540-BGA	145.37	127.75	112.33
GC80960RS100SL3ZJ	827890-ND	100MHz, i960RS 32-Bit I/O Processor, 32-Bit PCI-PCI Bridge	540-BGA	88.11	77.43	68.09

NEW! MCS® 51 MICROCONTROLLERS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
N80C31BH1SF88	809480-ND	5V, 16MHz, 8-Bit MPU	44-PLCC	4.20	3.36	2.00
TS80C31BH1SF88	809489-ND	5V, 16MHz, 8-Bit MPU, Ext. Temp.	44-QFP	6.00	4.80	2.85
P80C31BH1SF88	809484-ND	5V, 16MHz, 8-Bit MPU	40-Dip	4.20	3.36	2.00
TP80C31BH1SF88	809488-ND	5V, 16MHz, 8-Bit MPU, Ext. Temp.	40-Dip	6.00	4.80	2.85
N80C321SF88	809512-ND	5V, 16MHz, 8-Bit MPU	44-PLCC	4.40	3.52	2.09
P80C321SF88	809515-ND	5V, 16MHz, 8-Bit MPU	40-Dip	4.40	3.52	2.09
N80C3224SF88	809521-ND	5V, 24MHz, 8-Bit MPU	44-PLCC	4.40	3.52	2.09
P80C51FA1SF88	810046-ND	5V, 16MHz, 8-Bit, MPU	40-Dip	6.40	5.12	3.04
TN80C51FA1SF88	809574-ND	5V, 16MHz, 8-Bit MPU, Extended Temperature	44-PLCC	8.20	6.56	3.90
N87C511SF76	810977-ND	5V, 16MHz, 8-Bit, 4K OTP EPROM MCU	44-PLCC	7.98	6.38	4.21
P87C511SF76	810992-ND	5V, 16MHz, 8-Bit, 4K OTP EPROM MCU	40-Dip	7.98	6.38	4.21
N87C51FA1SF76	810760-ND	5V, 16MHz, 8-Bit, 8K OTP EPROM MCU	44-PLCC	11.00	8.80	5.80
TS87C51FA1SF76	811518-ND	5V, 16MHz, 8-Bit, 8K OTP EPROM MCU, Extended Temp.	44-QFP	12.24	9.79	6.46
N87C51FA24SF76	810758-ND	5V, 24MHz, 8-Bit, 8K OTP EPROM MCU	44-PLCC	11.00	8.80	5.80
P87C51FB1SF76	811013-ND	5V, 16MHz, 8-Bit, 16K OTP EPROM MCU	40-Dip	12.57	9.90	7.49
N87C51FC1	811087-ND	5V, 16MHz, 8-Bit, 32K OTP EPROM MCU	44-PLCC	16.10	12.68	9.59
N87C51RB1	807251-ND	5V, 16MHz, 8-Bit, 16K OTP EPROM MCU	44-PLCC	12.62	9.94	7.52
N87C51RC1	800186-ND	5V, 16MHz, 8-Bit, 32K OTP EPROM MCU	44-PLCC	15.63	12.31	9.31
N87C521SF76	810755-ND	5V, 16MHz, 8-Bit, 8K OTP EPROM MCU	44-PLCC	8.25	6.60	4.35
P87C521SF76	810765-ND	5V, 16MHz, 8-Bit, 8K OTP EPROM MCU	40-Dip	8.25	6.60	4.35
TP80C321SF88	809518-ND	5V, 16MHz, 8-Bit MPU, Ext. Temp.	40-Dip	6.20	4.96	2.95

NEW! MCS® 96 MICROCONTROLLERS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
N80C196KB16	804072-ND	5V, 16MHz, 16-Bit MPU	68-PLCC	12.07	9.66	6.37
TN80C196KB16	808448-ND	5V, 16MHz, 16-Bit MPU, Ext. Temp.	68-PLCC	13.31	10.65	7.02
N80C196KC20	804097-ND	5V, 20MHz, 16-Bit MPU	68-PLCC	15.51	12.21	9.24
N87C196KC20	802695-ND	5V, 20MHz, 16-Bit, 16K OTP MCU	68-PLCC	23.29	18.41	14.98
N87C196MC	803344-ND	5V, 16MHz, 16-Bit, 16K OTP Industrial Motor Control MCU	84-PLCC	24.05	19.01	15.46
S87C196MH	803677-ND	5V, 16MHz, 16-Bit, 32K OTP Industrial Motor Control MCU	80-QFP	28.98	22.91	18.63

NEW! MCS® 296 MICROPROCESSORS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
S80296SA50	806844-ND	5V, 50MHz, 16-Bit MPU	100-QFP	26.57	21.00	17.08

NEW! i960 MICROPROCESSORS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
KU80960CA25	802900-ND	25MHz, i960CA, 32-Bit MPU with DMA, 5V	196-QFP	57.00	45.00	39.00
A80960HD66SL2GJ	815230-ND	66MHz, i960HD, 32-Bit MPU, 33MHz Bus, 3.3V	168-CPGA	91.66	80.55	70.83
A80960HD80SL2GK	815177-ND	80MHz, i960HD, 32-Bit MPU, 40MHz Bus, 3.3V	168-CPGA	113.87	100.07	87.99
FC80960HD80SL2LZ	815242-ND	80MHz, i960HD, 32-Bit MPU, 40MHz Bus, 3.3V	208-QFP	95.78	84.18	74.02
NG80960JA3V16819544	819544-ND	16MHz, i960JA, 32-Bit MPU, 2K Cache, 3.3V	132-QFP	23.45	18.47	13.98
GC80960RP3V33SL396	821217-ND	33MHz, i960RP, 32-Bit MPU, PCI-PCI Bridge, 3.3V	352-BGA	78.57	62.03	53.76
N80960SA20	803852-ND	20MHz, i960SA, 32-Bit MPU, 5V	84-PLCC	22.74	17.98	14.63

NEW! CONTROLLERS (PCI / LAN / WAN)

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
21143PD	821337-ND	PCI/CardBus 10/100 Ethernet LAN Controller	144-QFP	18.80	14.80	11.20
21143TD	821339-ND	PCI/CardBus 10/100 Ethernet LAN Controller	144-TQFP	18.80	14.80	11.20
SB82371SBSU093	805436-ND	PCI ISA IDE Xcelerator (PIIX3)	208-QFP	18.80	14.80	11.20
FW82439HXSU115	807787CT-ND	82439HX System Controller (MHXC)	324-BGA	26.00	21.58	17.55
FW82439HXSU115	807787TR-ND	82439HX System Controller (MHXC)	324-BGA		6084.00/360	
FW82439TXSL28T	813149CT-ND	82439TX System Controller (MTXC)	324-BGA	20.56	16.19	12.25
FW82439TXSL28T	813149TR-ND	82439TX System Controller (MTXC)	324-BGA		4189.68/360	
GD82550EYSL4MJ	830751-ND	Fast Ethernet Multifunction PCI/Cardbus Controller	196-BGA	40.85	32.29	26.26

(Continued)

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intel NEW! CONTROLLERS (PCI / LAN / WAN) *(Continued)*

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
GD82559ERSL3DG	825111-ND	Fast Ethernet Multifunction PCI/Cardbus Controller	196-BGA	23.43	18.45	13.96
GD82559SL3HD	822772-ND	Fast Ethernet Multifunction PCI/Cardbus Controller	196-BGA	42.61	33.69	27.40
DA82562ET	829706-ND	Platform LAN Connect (PLC) Control.	48-SSOP	21.03	16.56	12.53
SCD240210QCM	832517-ND	Intelligent Multiprotocol WAN Communications Controller	160-QFP	21.15	16.65	12.60
SCD248110QCD	832519-ND	Programmable 4-Channel WAN Communications Controller	100-QFP	40.43	31.96	25.99
GCIXF440AC	831001-ND	Multiport 10/100 Mbps Ethernet Controller	352-BGA	67.64	53.40	46.28
FLIXF6151BEA2834984	834984-ND	28 T1/E1 Mapper	352-BGA	141.39	132.89	127.58

intel NEW! ETHERNET TRANSCEIVERS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
FLLXT1000BAC4QE000	835251-ND	Gigabit Ethernet Transceiver	492-BGA	86.64	68.40	59.28
FLLXT384BEA5834969	834969-ND	8-Port T1/E1 Short-Haul Xcvr.	160-BGA	72.60	63.80	56.10
DJLXT384LEA5834967	834967-ND	8-Port T1/E1 Short-Haul Xcvr.	144-LQFP	79.80	63.00	54.60
FLLXT386BEB2834206	834206-ND	Quad T1/E1/J1 Short-Haul Xcvr.	160-BGA	48.30	38.18	31.05
DJLXT386LEB2834195	834195-ND	Quad T1/E1/J1 Short-Haul Xcvr.	100-LQFP	45.15	35.69	29.03
DJLXT388LEB2834197	834197-ND	Dual T1/E1/J1 Short-Haul Xcvr.	100-LQFP	27.93	22.08	17.96
FLLXT971ABCA4834103	834103-ND	3.3V, Fast Ethernet Transceiver	64-BGA	10.50	8.27	6.26
FLLXT971ABEA4834104	834104-ND	3.3V, Fast Ethernet Transceiver	64-BGA	12.81	10.09	7.63
DJLXT971ALCA4834105	834105-ND	3.3V, Fast Ethernet Transceiver	64-LQFP	11.55	9.24	6.09
DJLXT972ALCA4834109	834109-ND	3.3V, Fast Ethernet Transceiver	64-LQFP	10.12	8.10	5.34
HBLXT9761HCB2835066	835066-ND	6-Port Fast Ethernet Xcvr. (RMII)	208-HQFP	23.94	18.93	15.39
HBLXT9762HCB2835376	835376-ND	6-Port Fast Ethernet Xcvr. (SMII)	208-HQFP	23.94	18.93	15.39
HBLXT9763HCA9831634	831634-ND	6-Port Fast Ethernet Xcvr. (MII)	208-HQFP	23.94	18.93	15.39
FWLXT9781BCA9831679	831679-ND	8-Port Fast Ethernet Xcvr. (RMII)	272-BGA	31.92	25.24	20.52
HBLXT9781HCA9831642	831642-ND	8-Port Fast Ethernet Xcvr. (RMII)	208-HQFP	27.93	22.08	17.96
FWLXT9782BCA9831681	831681-ND	8-Port Fast Ethernet Xcvr. (SMII)	272-BGA	31.92	25.24	20.52
FWLXT9784BCA3834928	834928-ND	8-Port Fast Ethernet Transceiver (SMII, RMII)	324-BGA	28.14	22.25	18.09
FWLXT9785BCB1QE000	835557-ND	Low-Power 8-Port Fast Ethernet Transceiver	241-BGA	28.94	22.88	18.61
HBLXT9785EHCB1QE000	836131-ND	Low-Power 8-Port Fast Ethernet Transceiver	208-HQFP	30.14	23.83	19.38

intel NEW! ETHERNET REPEATERS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
HBLXT9860HCB3831549	831549-ND	6-Port Dual Speed 10/100 Fast Ethernet Repeater	208-HQFP	42.71	33.77	27.46
HBLXT9863HCB3834131	834131-ND	6-Port Dual Speed 10/100 Fast Ethernet Repeater	208-HQFP	24.42	19.31	15.71
HBLXT9880HCB3834132	834132-ND	8-Port Dual Speed 10/100 Fast Ethernet Repeater	208-HQFP	47.78	37.77	30.72
HBLXT9883HCB3834133	834133-ND	8-Port Dual Speed 10/100 Fast Ethernet Repeater	208-HQFP	30.53	24.14	19.63

intel NEW! TELECOM BROADBAND

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
IXF6401BEC7A1835148	835148-ND	Broadband Access Processor	352-BGA	347.46	326.57	313.50
SLXT6051QEA1831841	831841-ND	SDH/SONET Overhead Terminator	208-QFP	158.33	139.15	122.35
DJLXT6155LEA4QE001	831868-ND	SDH/SONET/ATM Transceiver	64-LQFP	56.68	44.75	38.78
SLXT6234QEA2831690	831690-ND	E-Rate Multiplexer	100-QFP	48.98	38.67	33.52
DJLXT6282LEA3831836	831836-ND	Octal E1 Digital Interface Xcvr.	144-LQFP	61.57	48.68	39.59

intel NEW! PCI-to-PCI BRIDGES

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
21050AB	821286-ND	PCI-to-PCI Bridge	208-QFP	36.04	28.49	23.17
SB21150AC	823168-ND	32-Bit, 33MHz Transparent PCI-to-PCI Bridge	208-QFP	31.92	25.24	20.52
SB21150BC	822894-ND	32-Bit, 66MHz Transparent PCI-to-PCI Bridge	208-QFP	38.91	30.76	25.02
21152AB	821298-ND	32-Bit, 33MHz Transparent PCI-to-PCI Bridge	160-QFP	26.54	20.99	17.07
21154AC	821305-ND	64-Bit, 33MHz Transparent PCI-to-PCI Bridge	304-BGA	49.88	39.43	32.07
21154BC	821308-ND	64-Bit, 66MHz Transparent PCI-to-PCI Bridge	304-BGA	54.15	42.75	37.05
21554AA	821311-ND	64-Bit, 33MHz Non-Transparent PCI-to-PCI Bridge	304-BGA	57.76	45.60	39.52

intel NEW! INTERFACE ADAPTERS/CARDS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
MBLA3400C3	829954-ND	PRO/100 SR Mobile Adapter	—	158.00	148.50	142.56
MBLA3456C3	829957-ND	PRO/100 SR Combo Mobile Adapter	—	243.26	228.63	219.48
CNLA6000PK5	830447-ND	PRO/100 VE Desktop adapter 5-pak	—	178.95	168.19	161.46
PILA8460C	832696-ND	PRO/100 S Desktop Adapter	—	103.95	91.35	80.33
PILA8470C3	832702-ND	PRO/100 S Server Adapter	—	128.70	113.10	99.45
PWLA8490SX	825706-ND	PRO/1000 F Server Adapter Card (1000BASE-SX)	—	675.00	664.20	648.00
PWLA8490T	825708-ND	PRO/1000 T Server Adapter Card (1000BASE-T)	—	198.17	186.25	178.80
DZPD6710VCB	832520-ND	ISA-to-PC-Card Host Adapter	144-VQFP	21.88	17.23	13.04
SPD6729QCC	832533-ND	PCI-to-PCMCIA Host Adapter	208-QFP	22.33	17.58	13.30

intel NEW! FLASH MEMORY

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
E28F128J3A150SL56J	833865-ND	128Mb, 3V, FLASH Memory (16Mx8, 8Mx16)	56-TSOP	60.23	47.55	41.21
RC28F128J3A150SL56J	833867-ND	128Mb, 3V, FLASH Memory (16Mx8, 8Mx16)	64-BGA	60.80	48.00	41.60
RC28F320J3A110	834965-ND	32Mb, 3V, FLASH Memory (4Mx8, 2Mx16)	64-BGA	20.90	16.52	13.44
E28F320J3A110	834996-ND	32Mb, 3V, FLASH Memory (4Mx8, 2Mx16)	56-TSOP	20.16	15.94	12.96
E28F640J3A120SL5AQ	834162-ND	64Mb, 3V, FLASH Memory (8Mx8, 4Mx16)	56-TSOP	33.81	26.73	21.74
RC28F640J3A120SL5AQ	834165-ND	64Mb, 3V, FLASH Memory (8Mx8, 4Mx16)	64-BGA	34.65	27.39	22.28

ZiLOG Totally Logical COUNTERS/ TIMERS

Zilog Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
Z84C3006FEC	269-3036-ND	6MHz Z80 CMOS Counter/Timer Circuit	44-QFP	5.10	3.83	2.62
Z84C3006PEC	269-3037-ND	6MHz Z80 CMOS Counter/Timer Circuit	28-Dip	5.10	3.83	2.62
Z84C3006VEC	269-3038-ND	6MHz Z80 CMOS Counter/Timer Circuit	44-PLCC	5.10	3.83	2.62
Z84C3008PEC	269-3039-ND	8MHz Z80 CMOS Counter/Timer Circuit	28-Dip	5.10	3.83	2.62
Z84C3008VEC	269-3040-ND	8MHz Z80 CMOS Counter/Timer Circuit	44-PLCC	5.10	3.83	2.62
Z84C3010FEC	269-3041-ND	10MHz Z80 CMOS Counter/Timer Circuit	44-QFP	5.10	3.83	2.62
Z84C3010PEC	269-3042-ND	10MHz Z80 CMOS Counter/Timer Circuit	28-Dip	5.10	3.83	2.62
Z84C3010VEC	269-3043-ND	10MHz Z80 CMOS Counter/Timer Circuit	44-PLCC	5.10	3.83	2.62

ZiLOG Totally Logical MICROPROCESSORS

Zilog Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
Z8018006FSC	269-3004-ND	6MHz Z180 CMOS Enhanced Microprocessor	80-QFP	10.14	7.61	5.20
Z8018006PEC	269-3005-ND	6MHz Z180 CMOS Enhanced Microprocessor	64-Dip	11.43	8.58	5.86
Z8018006PSC	269-3006-ND	6MHz Z180 CMOS Enhanced Microprocessor	64-Dip	9.60	7.20	4.92
Z8018006VEC	269-3007-ND	6MHz Z180 CMOS Enhanced Microprocessor	68-PLCC	11.43	8.58	5.86
Z8018006VSC	269-3008-ND	6MHz Z180 CMOS Enhanced Microprocessor	68-PLCC	9.60	7.20	4.92
Z8018008FSC	269-3009-ND	8MHz Z180 CMOS Enhanced Microprocessor	80-QFP	10.74	8.06	5.51
Z8018008PEC	269-3010-ND	8MHz Z180 CMOS Enhanced Microprocessor	64-Dip	12.12	9.09	6.22
Z8018008PSC	269-3011-ND	8MHz Z180 CMOS Enhanced Microprocessor	64-Dip	9.99	7.50	5.12
Z8018008VEC	269-3012-ND	8MHz Z180 CMOS Enhanced Microprocessor	68-PLCC	13.83	10.38	7.09
Z8018008VSC	269-3013-ND	8MHz Z180 CMOS Enhanced Microprocessor	68-PLCC	9.99	7.50	5.12
Z8018010FSC	269-3014-ND	10MHz Z180 CMOS Enhanced Microprocessor	80-QFP	12.12	9.09	6.22
Z8018010PEC	269-3015-ND	10MHz Z180 CMOS Enhanced Microprocessor	64-Dip	14.19	10.65	7.28
Z8018010PSC	269-3016-ND	10MHz Z180 CMOS Enhanced Microprocessor	64-Dip	11.67	8.76	5.98
Z8018010VEC	269-3017-ND	10MHz Z180 CMOS Microprocessor	68-PLCC	14.19	10.65	7.28
Z8018010VSC	269-3018-ND	10MHz Z180 CMOS Microprocessor	68-PLCC	11.67	8.76	5.98
Z84C0006FEC	269-3019-ND	6MHz Z80 CMOS Microprocessor	44-QFP	5.10	3.83	2.62
Z84C0006PEC	269-3020-ND	6MHz Z80 CMOS Microprocessor	40-Dip	5.10	3.83	2.62
Z84C0006VEC	269-3021-ND	6MHz Z80 CMOS Microprocessor	44-PLCC	5.10	3.83	2.62
Z84C0008FEC	269-3022-ND	8MHz Z80 CMOS Microprocessor	44-QFP	5.10	3.83	2.62
Z84C0008PEC	269-3023-ND	8MHz Z80 CMOS Microprocessor	40-Dip	5.10	3.83	2.62
Z84C0008VEC	269-3024-ND	8MHz Z80 CMOS Microprocessor	44-PLCC	5.10	3.83	2.62
Z84C0010FEC	269-3025-ND	10MHz Z80 CMOS Microprocessor	44-QFP	5.10	3.83	2.62
Z84C0010PEC	269-3026-ND	10MHz Z80 CMOS Microprocessor	40-Dip	5.10	3.83	2.62
Z84C0010VEC	269-3027-ND	10MHz Z80 CMOS Microprocessor	44-PLCC	5.10	3.83	2.62
Z84C0020FEC	269-3028-ND	20MHz Z80 CMOS Microprocessor	40-QFP	12.63	9.48	6.48
Z84C0020PEC	269-3029-ND	20MHz Z80 CMOS Microprocessor	40-Dip	12.63	9.48	6.48
Z84C0020VEC	269-3030-ND	20MHz Z80 CMOS Microprocessor	44-PLCC	12.63	9.48	6.48
Z8S18010FSC	269-3098-ND	10MHz Static Z180 Microprocessor	80-QFP	10.14	7.61	5.20
Z8S18010PEC	269-3099-ND	10MHz Static Z180 Microprocessorr X-Temp.	64-Dip	11.43	8.58	5.86
Z8S18010PSC	269-3100-ND	10MHz Static Z180 Microprocessor	64-Dip	9.60	7.20	4.92
Z8S18010VEC	269-3101-ND	10MHz Static Z180 Microprocessorr X-Temp.	68-PLCC	11.43	8.58	5.86
Z8S18010VSC	269-3102-ND	10MHz Static Z180 Microprocessor	68-PLCC	9.60	7.20	4.92
Z8S18020FEC	269-3103-ND	20MHz Static Z180 Microprocessorr X-Temp.	80-QFP	16.17	12.13	8.20
Z8S18020FEC1960	269-3104-ND	20MHz Static Z180 Microprocessorr X-Temp.	80-QFP	16.17	12.13	8.20
Z8S18020FSC	269-3105-ND	20MHz Static Z180 Microprocessor	80-QFP	13.35	10.02	6.71
Z8S18020FSC1960	269-3106-ND	20MHz Static Z180 Microprocessor	80-QFP	13.35	10.02	6.77
Z8S18020PSC	269-3107-ND	20MHz Static Z180 Microprocessor	64-Dip	13.35	10.02	6.85
Z8S18020PSC1960	269-3108-ND	20MHz Static Z180 Microprocessor	64-Dip	13.35	10.02	6.85
Z8S18020VEC	269-3109-ND	20MHz Static Z180 Microprocessor X-Temp.	68-PLCC	16.17	12.13	8.13
Z8S18020VEC1960	269-3110-ND	20MHz Static Z180 Microprocessor X-Temp.	68-PLCC	16.17	12.13	8.20
Z8S18020VSC	269-3111-ND	20MHz Static Z180 Microprocessor	68-PLCC	13.35	10.02	6.77
Z8S18020VSC1960	269-3112-ND	20MHz Static Z180 Microprocessor	68-PLCC	13.35	10.02	6.77
Z8S18033FEC	269-3113-ND	33MHz Static Z180 Microprocessor X-Temp.	80-QFP	17.73	13.30	8.99
Z8S18033FSC	269-3114-ND	33MHz Static Z180 Microprocessor	80-QFP	14.73	11.05	7.56
Z8S18033VEC	269-3115-ND	33MHz Static Z180 Microprocessor X-Temp.	68-PLCC	17.73	13.30	8.99
Z8S18033VSC	269-3116-ND	33MHz Static Z180 Microprocessor	68-PLCC	14.73	11.05	7.56

ZiLOG Totally Logical PERIPHERAL CONTROLLERS

Zilog Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
Z84C1506FEC	269-3031-ND	6MHz Z80 Intelligent Peripheral Controller	100-QFP	15.36	11.52	7.88
Z84C1510AEC	269-3032-ND	10MHz Z80 Intelligent Peripheral Controller	100-VQFP	15.36	11.52	7.88
Z84C1510FEC	269-3033-ND	10MHz Z80 Intelligent Peripheral Controller	100-QFP	15.36	11.52	7.88
Z84C1516ASC	269-3034-ND	16MHz Z80 Intelligent Peripheral Controller	100-VQFP	20.37	15.28	10.45
Z84C1516FSC	269-3035-ND	16MHz Z80 Intelligent Peripheral Controller	100-QFP	19.98	14.99	10.25

ZiLOG Totally Logical SERIAL COMMUNICATION CONTROLLERS

Zilog Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
Z8523008PEC	269-3044-ND	8MHz Enhanced Serial Communication Controller, Ext. Temp	40-Dip	24.57	18.43	12.60
Z8523008PSC	269-3045-ND	8MHz Enhanced Serial Communication Controller	40-Dip	14.97	11.23	6.49
Z8523008VEC	269-3046-ND	8MHz Enhanced Serial Communication Controller, Ext. Temp	44-PLCC	21.60	16.20	9.36

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ZiLOG Totally Logical — SERIAL COMMUNICATION CONTROLLERS *(Continued)*

Zilog Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★		
				1	25	100
Z8523008VSC	269-3047-ND	8MHz Enhanced Serial Communication Controller	44-PLCC	14.97	11.23	6.49
Z8523010PEC	269-3048-ND	10MHz Enhanced Serial Communication Controller XTemp	40-Dip	30.66	23.00	13.29
Z8523010PSC	269-3049-ND	10MHz Enhanced Serial Communication Controller	40-Dip	18.90	14.18	8.19
Z8523010VEC	269-3050-ND	10MHz Enhanced Serial Communication Controller XTemp	44-PLCC	30.66	23.00	13.29
Z8523010VSC	269-3051-ND	10MHz Enhanced Serial Communication Controller	44-PLCC	18.90	14.18	8.19
Z8523016PEC	269-3052-ND	16MHz Enhanced Serial Communication Controller XTemp	40-Dip	37.80	28.35	16.38
Z8523016PSC	269-3053-ND	16MHz Enhanced Serial Communication Controller	40-Dip	24.24	18.18	10.51
Z8523016VEC	269-3054-ND	16MHz Enhanced Serial Communication Controller XTemp	44-PLCC	37.80	28.35	16.38
Z8523016VSC	269-3055-ND	16MHz Enhanced Serial Communication Controller	44-PLCC	24.24	18.18	10.51
Z8523020PSC	269-3056-ND	20MHz Enhanced Serial Communication Controller	40-Dip	32.01	24.01	13.88
Z8523020VSC	269-3057-ND	20MHz Enhanced Serial Communication Controller	44-PLCC	32.01	24.01	13.88
Z85C3008PEC	269-3058-ND	8MHz Z8500 CMOS Serial Communication Controller	40-Dip	12.81	9.61	6.57
Z85C3008PSC	269-3059-ND	8MHz Z8500 CMOS Serial Communication Controller	40-Dip	8.55	6.42	4.38
Z85C3008VEC	269-3060-ND	8MHz Z8500 CMOS Serial Communication Controller	44-PLCC	12.81	9.61	6.57
Z85C3008VSC	269-3061-ND	8MHz Z8500 CMOS Serial Communication Controller	44-PLCC	8.55	6.42	4.38
Z85C3010PEC	269-3062-ND	10MHz Z8500 CMOS Serial Communication Controller	40-Dip	14.55	10.92	7.46
Z85C3010PSC	269-3063-ND	10MHz Z8500 CMOS Serial Communication Controller	40-Dip	9.75	7.32	5.00
Z85C3010VEC	269-3064-ND	10MHz Z8500 CMOS Serial Communication Controller	44-PLCC	14.55	10.92	7.46
Z85C3010VSC	269-3065-ND	10MHz Z8500 CMOS Serial Communication Controller	44-PLCC	9.75	7.32	5.00
Z85C3016PSC	269-3066-ND	16MHz Z8500 CMOS Serial Communication Controller	40-Dip	14.25	10.69	7.31
Z85C3016VSC	269-3067-ND	16MHz Z8500 CMOS Serial Communication Controller	44-PLCC	14.25	10.69	7.31

ZiLOG Totally Logical — SPECIALIZED INTEGRATED CIRCUITS

Zilog Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★		
				1	25	100
ZSBI010PZ000SC	269-3119-ND	Passive Infra-Red Amplifier	8-Dip	2.82	2.12	1.25
ZSBI010SZ000SC	269-3120-ND	Passive Infra-Red Amplifier	8-SOIC	2.82	2.12	1.25

TEXAS INSTRUMENTS — DIGITAL LOGIC

4000 Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
CD4001BE	296-2028-5-ND	Quad 2-Input NOR Gate	14-Dip	.42	.35	.24
CD4001BM	296-3500-5-ND	Quad 2-Input NOR Gate *NEW!*	14-SOP	.68	.51	.39
CD4002BE	296-2029-5-ND	Dual 4-Input NOR Gate	14-Dip	.45	.38	.25
CD4007UBE	296-3501-5-ND	Dual Complementary Pair Plus Inverter *NEW!*	14-Dip	.60	.45	.34
CD4007UBM	296-3502-5-ND	Dual Complementary Pair Plus Inverter *NEW!*	14-SOP	.60	.45	.34
CD4009UBE	296-2030-5-ND	Hex Inverter Buffer	16-Dip	.84	.70	.47
CD4011BE	296-2031-5-ND	Quad 2-Input NAND Gate	14-Dip	.45	.38	.25
CD4011BM	296-3507-5-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	.72	.54	.41
CD4012BE	296-2032-5-ND	Dual 4-Input NAND Gate	14-Dip	.42	.35	.24
CD4013BE	296-2033-5-ND	Dual D-Type Flip-Flop	14-Dip	.48	.40	.27
CD4014BE	296-2034-5-ND	8-Bit Shift Register	16-Dip	1.14	.95	.63
CD4015BE	296-2035-5-ND	Dual 4-Bit Shift Register	16-Dip	1.02	.85	.57
CD4016BE	296-2036-5-ND	Quad Bilateral Switch	14-Dip	.54	.45	.30
CD4017BE	296-2037-5-ND	Decade Counter/Divider	16-Dip	1.02	.85	.57
CD4019BE	296-2038-5-ND	Quad AND/OR Select Gate	16-Dip	.51	.43	.29
CD4020BE	296-2039-5-ND	14-Bit Binary Counter	16-Dip	.99	.83	.55
CD4021BE	296-2040-5-ND	8-Bit Shift Register	16-Dip	.99	.83	.55
CD4023BE	296-2041-5-ND	Triple 3-Input NAND Gate	14-Dip	.45	.38	.25
CD4024BE	296-2042-5-ND	7-Bit Binary Counter	14-Dip	.72	.60	.40
CD4025BE	296-2043-5-ND	Triple 3-Input NOR Gate	14-Dip	.45	.38	.25
CD4027BE	296-2044-5-ND	Dual JK M/S Flip-Flop	16-Dip	.69	.58	.38
CD4027BM	296-3511-5-ND	Dual JK Master/Slave Flip-Flop *NEW!*	16-SOP	.92	.69	.52
CD4028BE	296-2045-5-ND	BCD-to-Decimal Decoder	16-Dip	.99	.83	.55
CD4029BE	296-2046-5-ND	Preset Up/Down Binary Count	16-Dip	.99	.83	.55
CD4030BE	296-2047-5-ND	Quad Exclusive OR Gate	14-Dip	.66	.55	.37
CD4040BE	296-2048-5-ND	12-Bit Binary Counter	16-Dip	.99	.83	.55
CD4042BE	296-2049-5-ND	Quad D-Type Latch	16-Dip	.75	.63	.42
CD4043BE	296-2050-5-ND	Quad NOR R/S Latch	16-Dip	.99	.83	.55
CD4044BE	296-2051-5-ND	Quad NAND R/S Latch	16-Dip	.99	.83	.55
CD4045BE	296-3512-5-ND	21-Stage Counter *NEW!*	16-Dip	.99	.83	.66
CD4046BE	296-2052-5-ND	Micropower Phase Lock Loop	16-Dip	1.14	.95	.63
CD4047BE	296-2053-5-ND	Monostable Multivibrator	14-Dip	1.02	.85	.57
CD4048BE	296-2054-5-ND	Expandable 8-Input Gate	16-Dip	.81	.68	.45
CD4049UBE	296-2055-5-ND	Hex Inverting Buffer	16-Dip	.54	.45	.30
CD4050BE	296-2056-5-ND	Hex Buffer	16-Dip	.60	.50	.33
CD4051BE	296-2057-5-ND	8-Channel Analog Mux/Demux	16-Dip	.84	.70	.47
CD4052BE	296-2058-5-ND	4-Channel Analog Mux/Demux	16-Dip	.84	.70	.47
CD4053BE	296-2059-5-ND	Triple 2-Channel Analog Mux/Demux	16-Dip	.84	.70	.47
CD4054BE	296-3514-5-ND	CMOS 4-Segment LCD Counter *NEW!*	16-Dip	1.08	.90	.72
CD4059AE	296-3515-5-ND	CMOS Programmable Divide by “N” Counter *NEW!*	24-Dip	5.15	4.13	3.21
CD4060BE	296-2060-5-ND	14-Bit Binary Counter	16-Dip	.96	.80	.53
CD4066BE	296-2061-5-ND	Quad Bilateral Switch	14-Dip	.60	.50	.33
CD4066BM	296-3516-5-ND	Quad Bilateral Switch *NEW!*	14-SOP	.96	.72	.54
CD4067BE	296-3517-5-ND	Single 16-Ch. Analog Mux/Demux *NEW!*	24-Dip	2.38	1.90	1.43
CD4069UBE	296-3518-5-ND	Hex Inverter *NEW!*	14-Dip	.60	.45	.34
CD4069UBM	296-3519-5-ND	Hex Inverter *NEW!*	14-SOP	.72	.54	.41
CD4071BE	296-2062-5-ND	Quad 2-Input OR Gate	14-Dip	.45	.38	.25
CD4072BE	296-2063-5-ND	Dual 4-Input Buffed Gate	14-Dip	.45	.38	.25
CD4073BE	296-2064-5-ND	Triple 3-Input AND Gate	14-Dip	.42	.35	.24
CD4073BM	296-3520-5-ND	Triple 3-Input AND Gate *NEW!*	14-SOP	.68	.51	.39
CD4075BE	296-2065-5-ND	Triple 3-Input OR Gate	14-Dip	.42	.35	.24
CD4078BE	296-3521-5-ND	8-Input NOR/OR Gate *NEW!*	14-Dip	.60	.45	.34
CD4081BE	296-2066-5-ND	Quad 2-Input AND Gate	14-Dip	.45	.38	.25
CD4082BE	296-2067-5-ND	Dual 4-Input AND Gate	14-Dip	.45	.38	.25
CD4085BE	296-3522-5-ND	Dual 2-Wide/2-Input AND/OR Invert Gate *NEW!*	14-Dip	.75	.63	.50
CD4089BPWR	296-3523-1-ND	Binary Rate Multiplier *NEW!*	16-TSSOP	1.30	1.04	.78
CD4089BPWR	296-3523-2-ND	Binary Rate Multiplier *NEW!*	16-TSSOP	1352.00/2,000		
CD4093BE	296-2068-5-ND	Quad 2-Input NAND Trigger	14-Dip	.57	.48	.32
CD4093BM	296-3524-5-ND	Quad 2-Input NAND Trigger *NEW!*	14-SOP	.92	.69	.52
CD4094BE	296-2069-5-ND	8-Bit Shift Register with Latch	16-Dip	.90	.75	.50
CD4097BE	296-3525-5-ND	Diff. 8-Ch. Analog Mux/Demux *NEW!*	24-Dip	2.36	1.89	1.47
CD4098BE	296-3526-5-ND	Dual Monostable Multivibrator *NEW!*	16-Dip	.93	.78	.62
CD4099BE	296-2070-5-ND	8-Bit Addressable Latch	16-Dip	1.14	.95	.63
CD4503BE	296-2071-5-ND	Tri-State Hex Buffer	16-Dip	.93	.78	.52
CD4504BE	296-3527-5-ND	Hex Voltage-Level Shifter *NEW!*	16-Dip	1.63	1.30	.98
CD4511BE	296-2072-5-ND	BCD T Sig Latch/Decoder/Driver	16-Dip	1.14	.95	.63
CD4511BNSR	296-3528-1-ND	BCD-to-7 Segment LED Latch/Decoder/Driver *NEW!*	16-SOP	1.29	1.08	.86
CD4511BNSR	296-3528-2-ND	BCD-to-7 Segment LED Latch/Decoder/Driver *NEW!*	16-SOP	1144.00/2,000		
CD4511BPWR	296-3529-1-ND	BCD-to-7 Segment LED Latch/Decoder/Driver *NEW!*	16-TSSOP	1.14	.95	.76
CD4511BPWR	296-3529-2-ND	BCD-to-7 Segment LED Latch/Decoder/Driver *NEW!*	16-TSSOP	1010.00/2,000		
CD4512BE	296-2073-5-ND	8-Channel Data Selector	16-Dip	1.05	.88	.58
CD4514BE	296-2074-5-ND	4-Bit Latch/Line Decoder	24-Dip	2.55	2.13	1.41
CD4516BE	296-2075-5-ND	Binary Up/Down Counter	16-Dip	1.11	.93	.62
CD4516BPWR	296-3530-1-ND	Binary Up/Down Counter *NEW!*	16-TSSOP	1.11	.93	.74
CD4516BPWR	296-3530-2-ND	Binary Up/Down Counter *NEW!*	16-TSSOP	984.00/2,000		
CD4518BE	296-2076-5-ND	Dual BCD Up Counter	16-Dip	1.14	.95	.63
CD4520BE	296-2077-5-ND	Dual Binary Up Counter	16-Dip	1.05	.88	.58
CD4522BE	296-3531-5-ND	Programmable BCD Divide by “N” Counter *NEW!*	16-Dip	1.44	1.20	.96
CD4527BE	296-3532-5-ND	BCD Rate Multiplier *NEW!*	16-Dip	1.23	1.03	.82
CD4532BE	296-3533-5-ND	8-Bit Priority Encoder *NEW!*	16-Dip	1.41	1.18	.94
CD4536BE	296-3534-5-ND	Programmable Timer *NEW!*	16-Dip	1.60	1.28	.96
CD4541BE	296-2078-5-ND	Programmable Timer	14-Dip	.72	.60	.40
CD4541BM	296-3535-5-ND	Programmable Timer *NEW!*	14-SOP	.96	.72	.54
CD4541BM96	296-3536-1-ND	Programmable Timer *NEW!*	14-SOP	.96	.72	.54
CD4541BM96	296-3536-2-ND	Programmable Timer *NEW!*	14-SOP	780.00/2,500		
CD4543BE	296-2079-5-ND	BCD to 7-Segment Decoder Driver	16-Dip	1.02	.85	.57
CD4556BE	296-3537-5-ND	Dual Binary to 1-of-4 Decoder/Demux with Output *NEW!*	16-Dip	1.02	.85	.68
CD4585BE	296-2080-5-ND	4-Bit Magnitude Comparator	16-Dip	1.14	.95	.63
CD40106BE	296-3503-5-ND	Hex Schmitt Trigger *NEW!*	14-Dip	.80	.60	.45
CD40107BE	296-3504-5-ND	Dual 2-Input NAND Buffer/Driver *NEW!*	8-Dip	.88	.66	.50
CD40109BE	296-3505-5-ND	Quad Low-High Volt. Level Shifter *NEW!*	16-Dip	1.14	.95	.76
CD40110BE	296-3506-5-ND	Decade Up-Down Counter/Latch/Display Driver *NEW!*	16-Dip	1.50	1.20	.90
CD40174BE	296-3508-5-ND	Hex D-Type Flip-Flop *NEW!*	16-Dip	1.02	.85	.68
CD40192BE	296-3509-5-ND	Presettable Up/Down BCD Counter (Dual Clock w/Reset) *NEW!*	16-Dip	1.44	1.20	.96
CD40193BE	296-3510-5-ND	Presettable Up/Down Binary Counter (Dual Clock w/Reset) *NEW!*	16-Dip	1.25	1.00	.75

TTL Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN7400D	296-8752-5-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	.75	.63	.50
SN7405D	296-8753-5-ND	Hex Inverter w/OC Output *NEW!*	14-SOP	.75	.63	.50
SN7406D	296-1017-5-ND	Hex Inverter Buffer/Driver with HV Output *NEW!*	14-SOP	.90	.75	.60
SN7406DR	296-1017-1-ND	Hex Inverter Buffer/Driver w/HV Output	14-SOP	.96	.80	.64
SN7406DR	296-1017-2-ND	Hex Inverter Buffer/Driver w/HV Output	14-SOP	1040.00/2,500		
SN7406N	296-1435-5-ND	Hex Inverter Buffer/Driver w/HV Output	14-Dip	.90	.75	.60
SN7406NSR	296-8754-1-ND	Hex Inverter Buffer/Driver with HV Output *NEW!*	14-SOP	1.05	.88	.70
SN7406NSR	296-8754-2-ND	Hex Inverter Buffer/Driver with HV Output *NEW!*	14-SOP	932.00/2,000		
SN7407D	296-1018-5-ND	Hex Buffer/Driver w/OC HV Out *NEW!*	14-SOP	.90	.75	.60
SN7407DR	296-1018-1-ND	Hex Buffer/Driver w/OC HV Output	14-SOP	.96	.80	.64
SN7407DR	296-1018-2-ND	Hex Buffer/Driver w/OC HV Output	14-SOP	1040.00/2,500		
SN7407N	296-1436-5-ND	Hex Buffer/Driver w/OC HV Output	14-Dip	.90	.75	.60
SN74128D	296-8756-5-ND	50-Ohm Line Driver *NEW!*	14-SOP	1.08	.90	.72
SN74154N	296-8757-5-ND	4-Line to 16-Line Decoder/Demux *NEW!*	24-Dip	2.13	1.70	1.28
SN74367AN	296-8758-5-ND	Tri-State Hex Bus Driver *NEW!*	16-Dip	1.38	1.10	.83
SN74368AN	296-8759-5-ND	6-Bit Buffer/Line Driver *NEW!*	16-Dip	1.38	1.10	.83
SN7437N	296-8760-5-ND	Quad 2-Input NAND Buffer *NEW!*	14-Dip	1.02	.85	.68
SN7445N	296-8761-5-ND	BCD-To-Decimal Decoder/Driver *NEW!*	16-Dip	1.35	1.08	.81
SN7474N	296-8762-5-ND	Dual D-Type Flip-Flop with Preset and Clear *NEW!*	14-Dip	.78	.65	.52

ABT Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74ABT125D	296-1019-5-ND	Tri-State Quad Bus Buffer Gate	14-SOP	.87	.73	.58
SN74ABT125DR	296-1019-2-ND	Tri-State Quad Bus Buffer Gate	14-SOP	942.50/2,500		
SN74ABT125DBR	296-3875-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SSOP	.87	.73	.58
SN74ABT125DBR	296-3875-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SSOP	772.00/2,000		
SN74ABT125N	296-3876-5-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-Dip	.87	.73	.58
SN74ABT125PWR	296-3877-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-TSSOP	1.05	.88	.70
SN74ABT125PWR	296-3877-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-TSSOP	932.00/2,000		
SN74ABT126D	296-1020-5-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SOP	.87	.73	.58
SN74ABT126DR	296-1020-1-ND	Tri-State Quad Bus Buffer Gate	14-SOP	1.05	.88	.70
SN74ABT126DR	296-1020-2-ND	Tri-State Quad Bus Buffer Gate	14-SOP	942.50/2,500		
SN74ABT126DBR	296-3878-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SSOP	.87	.73	.58
SN74ABT126DBR	296-3878-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SSOP	772.00/2,000		
SN74ABT126N	296-3879-5-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-Dip	.87	.73	.58
SN74ABT126PWR	296-3880-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-TSSOP	1.05	.88	.70
SN74ABT126PWR	296-3880-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-TSSOP	932.00/2,000		
SN74ABT240ADBR	296-3959-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	1.02	.85	.68
SN74ABT240ADBR	296-3959-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	904.00/2,000		
SN74ABT240ADW	296-3960-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1.02	.85	.68
SN74ABT240AN	296-3961-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	1.02	.85	.68
SN74ABT240APWR	296-3962-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	1.35	1.13	.90

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74ABT240APWR	296-3962-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	1198.00/2,000		
SN74ABT241ADBR	296-3963-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	1.02	.85	.68
SN74ABT241ADBR	296-3963-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	904.00/2,000		
SN74ABT241ADW	296-3964-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1.02	.85	.68
SN74ABT241AN	296-3965-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	1.02	.85	.68
SN74ABT241APWR	296-3966-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	1.35	1.13	.90
SN74ABT241APWR	296-3966-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	1198.00/2,000		
SN74ABT244ADBR	296-1037-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	1.02	.85	.68
SN74ABT244ADBR	296-1037-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	904.00/2,000		
SN74ABT244ADW	296-1038-5-ND	Tri-State Octal Buffer/Driver	20-SOP	1.02	.85	.68
SN74ABT244ADWR	296-1038-2-ND	Tri-State Octal Buffer/Driver	20-SOP	904.00/2,000		
SN74ABT244AN	296-3967-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	1.02	.85	.68
SN74ABT244APWR	296-3968-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	1.35	1.13	.90
SN74ABT244APWR	296-3968-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	1198.00/2,000		
SN74ABT245BDBR	296-1039-1-ND	Tri-State Octal Bus Transceiver	20-SSOP	1.02	.85	.68
SN74ABT245BDBR	296-1039-2-ND	Tri-State Octal Bus Transceiver	20-SSOP	904.00/2,000		
SN74ABT245BDGVR	296-3969-1-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TVSOP	1.02	.85	.68
SN74ABT245BDGVR	296-3969-2-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TVSOP	904.00/2,000		
SN74ABT245BDW	296-1040-5-ND	Tri-State Octal Bus Transceiver	20-SOP	1.02	.85	.68
SN74ABT245BDWR	296-1040-2-ND	Tri-State Octal Bus Transceiver	20-SOP	904.00/2,000		
SN74ABT245BN	296-3970-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-Dip	1.02	.85	.68
SN74ABT245BPWR	296-3971-1-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TSSOP	1.35	1.13	.90
SN74ABT245BPWR	296-3971-2-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TSSOP	1198.00/2,000		
SN74ABT273DBR	296-1041-1-ND	Octal D-Type Flip-Flop	20-SSOP	1.35	1.13	.90
SN74ABT273DBR	296-1041-2-ND	Octal D-Type Flip-Flop	20-SSOP	904.00/2,000		
SN74ABT273DW	296-1042-5-ND	Octal D-Type Flip-Flop *NEW!*	20-SOP	1.02	.85	.68
SN74ABT273DWR	296-1042-1-ND	Octal D-Type Flip-Flop	20-SOP	1.02	.85	.68
SN74ABT273DWR	296-1042-2-ND	Octal D-Type Flip-Flop	20-SOP	904.00/2,000		
SN74ABT273N	296-3972-5-ND	Octal D-Type Flip-Flop *NEW!*	20-Dip	1.02	.85	.68
SN74ABT273PWR	296-3973-1-ND	Octal D-Type Flip-Flop *NEW!*	20-TSSOP	1.35	1.13	.90
SN74ABT273PWR	296-3973-2-ND	Octal D-Type Flip-Flop *NEW!*	20-TSSOP	1198.00/2,000		
SN74ABT373DBR	296-4002-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SSOP	1.02	.85	.68
SN74ABT373DBR	296-4002-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SSOP	904.00/2,000		
SN74ABT373DW	296-1043-5-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SOP	1.02	.85	.68
SN74ABT373DWR	296-1043-1-ND	Tri-State Octal Transparent D-Type Latch	20-SOP	1.02	.85	.68
SN74ABT373DWR	296-1043-2-ND	Tri-State Octal Transparent D-Type Latch	20-SOP	904.00/2,000		
SN74ABT373N	296-4003-5-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-Dip	1.02	.85	.68
SN74ABT373PWR	296-4004-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TSSOP	1.35	1.13	.90
SN74ABT373PWR	296-4004-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TSSOP	1198.00/2,000		
SN74ABT374ADBR	296-4005-1-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	1.02	.85	.68
SN74ABT374ADBR	296-4005-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	904.00/2,000		
SN74ABT374ADW	296-1044-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	1.02	.85	.68
SN74ABT374ADWR	296-1044-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	1.02	.85	.68
SN74ABT374ADWR	296-1044-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	904.00/2,000		
SN74ABT374AN	296-4006-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-Dip	1.02	.85	.68
SN74ABT374APWR	296-4007-1-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	1.35	1.13	.90
SN74ABT374APWR	296-4007-2-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	1198.00/2,000		
SN74ABT377ADBR	296-4008-1-ND	Octal D-Type Flip-Flop with Clock Enable *NEW!*	20-SSOP	1.02	.85	.68
SN74ABT377ADBR	296-4008-2-ND	Octal D-Type Flip-Flop with Clock Enable *NEW!*	20-SSOP	904.00/2,000		
SN74ABT377ADW	296-4009-5-ND	Octal D-Type Flip-Flop with Clock Enable *NEW!*	20-SOP	1.02	.85	.68
SN74ABT377ADWR	296-4009-2-ND	Octal D-Type Flip-Flop with Clock Enable *NEW!*	20-SOP	904.00/2,000		
SN74ABT377AN	296-4010-5-ND	Octal D-Type Flip-Flop with Clock Enable *NEW!*	20-Dip	1.02	.85	.68
SN74ABT377APWR	296-4011-1-ND	Octal D-Type Flip-Flop with Clock Enable *NEW!*	20-TSSOP	1.25	1.00	.75
SN74ABT377APWR	296-4011-2-ND	Octal D-Type Flip-Flop with Clock Enable *NEW!*	20-TSSOP	1300.00/2,000		
SN74ABT533ADBR	296-4012-1-ND	Tri-St. Transp. D-Type Latch *NEW!*	20-SSOP	2.25	1.80	1.40
SN74ABT533ADBR	296-4012-2-ND	Tri-St. Transp. D-Type Latch *NEW!*	20-SSOP	2550.00/2,000		
SN74ABT533ADW	296-4013-5-ND	Tri-St. Transp. D-Type Latch *NEW!*	20-SOP	2.25	1.80	1.40
SN74ABT533ADWR	296-4013-2-ND	Tri-St. Transp. D-Type Latch *NEW!*	20-SOP	2602.00/2,000		
SN74ABT533APWR	296-4014-1-ND	Tri-St. Transp. D-Type Latch *NEW!*	20-TSSOP	2.25	1.80	1.40
SN74ABT533APWR	296-4014-2-ND	Tri-St. Transp. D-Type Latch *NEW!*	20-TSSOP	2550.00/2,000		
SN74ABT534ADBR	296-4015-1-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	2.25	1.80	1.40
SN74ABT534ADBR	296-4015-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	2550.00/2,000		
SN74ABT534ADW	296-4016-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	2.25	1.80	1.40
SN74ABT534ADWR	296-4016-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	2602.00/2,000		
SN74ABT534APWR	296-4017-1-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	2.25	1.80	1.40
SN74ABT534APWR	296-4017-2-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	2550.00/2,000		
SN74ABT540DBR	296-4022-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	1.17	.98	.78
SN74ABT540DBR	296-4022-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	1038.00/2,000		
SN74ABT540DW	296-4023-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1.17	.98	.78
SN74ABT540N	296-4024-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	1.17	.98	.78
SN74ABT541BDBR	296-4025-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	1.17	.98	.78
SN74ABT541BDBR	296-4025-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	1038.00/2,000		
SN74ABT541BDW	296-4026-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1.17	.98	.78
SN74ABT541BN	296-4027-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	1.17	.98	.78
SN74ABT541BPWR	296-4028-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	1.50	1.20	.90
SN74ABT541BPWR	296-4028-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	1560.00/2,000		
SN74ABT543ADBR	296-4029-1-ND	Tri-State Octal Registered Xcvr. *NEW!*	24-SSOP	2.18	1.74	1.31
SN74ABT543ADBR	296-4029-2-ND	Tri-State Octal Registered Xcvr. *NEW!*	24-SSOP	2262.00/2,000		
SN74ABT543ADW	296-4030-5-ND	Tri-State Octal Registered Xcvr. *NEW!*	24-SOP	2.18	1.74	1.31
SN74ABT543ANT	296-4031-5-ND	Tri-State Octal Registered Xcvr. *NEW!*	24-Dip	2.18	1.74	1.31
SN74ABT543APWR	296-4032-1-ND	Tri-St. Octal Registered Xcvr. *NEW!*	24-TSSOP	2.25	1.80	1.40
SN74ABT543APWR	296-4032-2-ND	Tri-St. Octal Registered Xcvr. *NEW!*	24-TSSOP	2550.00/2,000		
SN74ABT573ADBR	296-4033-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SSOP	1.35	1.13	.90
SN74ABT573ADBR	296-4033-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SSOP	1198.00/2,000		
SN74ABT573ADW	296-1045-5-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SOP	1.11	.93	.74
SN74ABT573ADWR	296-1045-1-ND	Tri-State Octal Transparent D-Type Latch	20-SOP	1.11	.93	.74
SN74ABT573ADWR	296-1045-2-ND	Tri-State Octal Transparent D-Type Latch	20-SOP	984.00/2,000		
SN74ABT573AN	296-4034-5-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-Dip	1.11	.93	.74
SN74ABT573APWR	296-4035-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TSSOP	1.35	1.13	.90
SN74ABT573APWR	296-4035-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TSSOP	1198.00/2,000		
SN74ABT574ADBR	296-4036-1-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	1.11	.93	.74
SN74ABT574ADBR	296-4036-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	984.00/2,000		
SN74ABT574ADW	296-4037-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	1.11	.93	.74
SN74ABT574ADWR	296-1046-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	1.11	.93	.74
SN74ABT574ADWR	296-1046-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	984.00/2,000		
SN74ABT574AN	296-4038-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-Dip	1.11	.93	.74
SN74ABT574APWR	296-4039-1-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	1.35	1.13	.90
SN74ABT574APWR	296-4039-2-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	1198.00/2,000		
SN74ABT620DBR	296-4040-1-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-SSOP	2.36	1.89	1.47
SN74ABT620DBR	296-4040-2-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-SSOP	2678.00/2,000		
SN74ABT620DW	296-4041-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	2.36	1.89	1.47
SN74ABT620N	296-4042-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-Dip	2.36	1.89	1.47
SN74ABT623DBR	296-4043-1-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SSOP	2.81	2.25	1.75
SN74ABT623DBR	296-4043-2-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SSOP	3188.00/2,000		
SN74ABT623DW	296-4044-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	2.81	2.25	1.75
SN74ABT623N	296-4045-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-Dip	2.81	2.25	1.75
SN74ABT640DBR	296-4046-1-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SSOP	2.36	1.89	1.47
SN74ABT640DBR	296-4046-2-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SSOP	2678.00/2,000		
SN74ABT640DW	296-4047-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	2.36	1.89	1.47
SN74ABT640N	296-4048-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-Dip	2.36	1.89	1.47
SN74ABT640PWR	296-4049-1-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TSSOP	2.36	1.89	1.47
SN74ABT640PWR	296-4049-2-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TSSOP	2678.00/2,000		
SN74ABT646ADBR	296-4050-1-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-SSOP	3.83	3.06	2.38
SN74ABT646ADBR	296-4050-2-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-SSOP	4336.00/2,000		
SN74ABT646ADGVR	296-4051-1-ND	Tri-State Octal Bus Transceiver/Register *NEW!*	24-TVSOP	4.05	3.24	2.52
SN74ABT646ADGVR	296-4051-2-ND	Tri-State Octal Bus Transceiver/Register *NEW!*	24-TVSOP	4590.00/2,000		
SN74ABT646ADW	296-4052-5-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-SOP	3.83	3.06	2.38
SN74ABT646ANT	296-4053-5-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-Dip	3.83	3.06	2.38
SN74ABT646DBR	296-4054-1-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-SSOP	3.38	2.70	2.10
SN74ABT646DBR	296-4054-2-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-SSOP	3826.00/2,000		
SN74ABT646DGVR	296-4055-1-ND	Tri-State Octal Bus Transceiver/Register *NEW!*	24-TVSOP	3.60	2.88	2.24
SN74ABT646DGVR	296-4055-2-ND	Tri-State Octal Bus Transceiver/Register *NEW!*	24-TVSOP	4080.00/2,000		
SN74ABT646DW	296-4056-5-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-SOP	3.38	2.70	2.10
SN74ABT646NT	296-4057-5-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-Dip	3.38	2.70	2.10
SN74ABT646PWR	296-4058-1-ND	Tri-State Octal Bus Transceiver/Register *NEW!*	24-TSSOP	3.38	2.70	2.10
SN74ABT646PWR	296-4058-2-ND	Tri-State Octal Bus Transceiver/Register *NEW!*	24-TSSOP	3826.00/2,000		
SN74ABT651DBR	296-4059-1-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-SSOP	5.40	4.32	3.36
SN74ABT651DBR	296-4059-2-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-SSOP	6120.00/2,000		
SN74ABT651DW	296-4060-5-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-SOP	5.40	4.32	3.36
SN74ABT651NT	296-4061-5-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-Dip	5.40	4.32	3.36
SN74ABT652ADBR	296-4062-1-ND	Tri-St. Octal Registered Xcvr. *NEW!*	24-SSOP	3.83	3.06	2.38
SN74ABT652ADBR	296-4062-2-ND	Tri-St. Octal Registered Xcvr. *NEW!*	24-SSOP	4336.00/2,000		
SN74ABT652ADW	296-1047-5-ND	Tri-State Octal Registered Xcvr. *NEW!*	24-SOP	3.83	3.06	2.38
SN74ABT652ADWR	296-1047-1-ND	Tri-State Octal Registered Transceiver	24-SOP	3.87	3.10	2.41
SN74ABT652ADWR	296-1047-2-ND	Tri-State Octal Registered Transceiver	24-SOP	4386.00/2,000		
SN74ABT652ANT	296-4063-5-ND	Tri-State Octal Registered Xcvr. *NEW!*	24-Dip	3.83	3.06	2.38
SN74ABT652DBR	296-4064-1-ND	Tri-State Octal Xcvr./Register *NEW!*	24-SSOP	3.38	2.70	2.10
SN74ABT652DBR	296-4064-2-ND	Tri-State Octal Xcvr./Register *NEW!*	24-SSOP	3826.00/2,000		
SN74ABT652DW	296-4065-5-ND	Tri-State Octal Xcvr./Register *NEW!*	24-SOP	3.38	2.70	2.10
SN74ABT652DWR	296-4065-2-ND	Tri-State Octal Xcvr./Register *NEW!*	24-SOP	3876.00/2,000		
SN74ABT652NT	296-4066-5-ND	Tri-State Octal Xcvr./Register *NEW!*	24-Dip	3.38	2.70	2.10
SN74ABT657ADBR	296-4067-1-ND	Tri-State 8-Bit Octal Transceiver with Parity Generator *NEW!*	24-SSOP	3.60	2.88	2.24
SN74ABT657ADBR	296-4067-2-ND	Tri-State 8-Bit Octal Transceiver with Parity Generator *NEW!*	24-SSOP	4080.00/2,000		
SN74ABT657ADW	296-4068-5-ND	Tri-State 8-Bit Octal Transceiver with Parity Generator *NEW!*	24-SOP	3.60	2.88	2.24
SN74ABT657ANT	296-4069-5-ND	Tri-State 8-Bit Octal Transceiver with Parity Generator *NEW!*	24-Dip	3.60	2.88	2.24
SN74ABT821ADBR	296-4088-1-ND	Tri-State 10-Bit Bus Interface Flip-Flop *NEW!*	24-SSOP	2.70	2.16	1.68
SN74ABT821ADBR	296-4088-2-ND	Tri-State 10-Bit Bus Interface Flip-Flop *NEW!*	24-SSOP	3060.00/2,000		
SN74ABT821ADW	296-4089-5-ND	Tri-St. 10-Bit Bus Interface Flip-Flop *NEW!*	24-SOP	2.70	2.16	1.68
SN74ABT821ANT	296-4090-5-ND	Tri-St. 10-Bit Bus Interface Flip-Flop *NEW!*	24-Dip	2.70	2.16	1.68
SN74ABT823DBR	296-1048-1-ND	Tri-State 9-Bit Bus Interface Flip-Flop	24-SSOP	2.59	2.07	1.61
SN74ABT823DBR	296-1048-2-ND	Tri-State 9-Bit Bus Interface Flip-Flop	24-SSOP	2932.00/2,000		
SN74ABT823DW	296-4091-5-ND	Tri-St. 9-Bit Bus Interface Flip-Flop *NEW!*	24-SOP	2.59	2.07	1.61
SN74ABT823NT	296-4092-5-ND	Tri-St. 9-Bit Bus Interface Flip-Flop *NEW!*	24-Dip	2.59	2.07	1.61
SN74ABT827DBR	296-4094-1-ND	Tri-State 10-Bit Buffer/Driver *NEW!*	24-SSOP	2.70	2.16	1.68
SN74ABT827DBR	296-4094-2-ND	Tri-State 10-Bit Buffer/Driver *NEW!*	24-SSOP	3060.00/2,000		
SN74ABT827DW	296-4095-5-ND	Tri-State 10-Bit Buffer/Driver *NEW!*	24-SOP	2.70	2.16	1.68
SN74ABT827NT	296-4096-5-ND	Tri-State 10-Bit Buffer/Driver *NEW!*	24-Dip	2.70	2.16	1.68
SN74ABT827PWR	296-4097-1-ND	Tri-State 10-Bit Buffer/Driver *NEW!*	24-TSSOP	2.70	2.16	1.68
SN74ABT827PWR	296-4097-2-ND	Tri-State 10-Bit Buffer/Driver *NEW!*	24-TSSOP	3060.00/2,000		
SN74ABT833DW	296-4098-5-ND	8-9 Bit Parity Bus Transceiver *NEW!*	24-SOP	2.97	2.38	1.85
SN74ABT833NT	296-4099-5-ND	8-9 Bit Parity Bus Transceiver *NEW!*	24-Dip	2.97	2.38	1.85
SN74ABT841ADBR	296-1049-1-ND	Tri-State 10-Bit Bus D-Type Latch	24-SSOP	2.81	2.25	1.75
SN74ABT841ADBR	296-1049-2-ND	Tri-State 10-Bit Bus D-Type Latch	24-SSOP	3188.00/2,000		
SN74ABT841ADW	296-4100-5-ND	Tri-St. 10-Bit Bus D-Type Latch *NEW!*	24-SOP	2.81	2.25	1.75
SN74ABT841ANT	296-4101-5-ND	Tri-St. 10-Bit Bus D-Type Latch *NEW!*	24-Dip	2.81	2.25	1.75
SN74ABT841APWR	296-4102-1-ND	Tri-St. 10-Bit Bus D-Type Latch *NEW!*	24-TSSOP	2.81	2.25	1.75
SN74ABT841APWR	296-4102-2-ND	Tri-St. 10-Bit Bus D-Type Latch *NEW!*	24-TSSOP	3188.00/2,000		
SN74ABT843DBR	296-4103-1-ND	Tri-St. 9-Bit Bus D-Type Latch *NEW!*	24-SSOP	2.81	2.25	1.75
SN74ABT843DBR	296-4103-2-ND	Tri-St. 9-Bit Bus D-Type Latch *NEW!*	24-SSOP	3188.00/2,000		
SN74ABT843NT	296-4104-5-ND	Tri-State 9-Bit Bus D-Type Latch *NEW!*	24-Dip	2.81	2.25	1.75
SN74ABT853DW	296-4105-5-ND	8-9 Bit Parity Bus Transceiver *NEW!*	24-SOP	4.28	3.42	2.66
SN74ABT853NT	296-4106-5-ND	8-9 Bit Parity Bus Transceiver *NEW!*	24-Dip	4.28	3.42	2.66
SN74ABT861NT	296-4109-5-ND	Tri-State 10-Bit Transceiver *NEW!*	24-Dip	3.60	2.88	2.24
SN74ABT863DBR	296-4110-1-ND	Tri-State 9-Bit Bus Transceiver *NEW!*	24-SSOP	3.26	2.61	2.03
SN74ABT863DBR	296-4110-2-ND	Tri-State 9-Bit Bus Transceiver *NEW!*	24-SSOP	3698.00/2,000		
SN74ABT863DWR	296-4111-1-ND	Tri-State 9-Bit Bus Transceiver *NEW!*	24-SOP	3.31	2.65	2.06
SN74ABT863DWR	296-4111-2-ND	Tri-State 9-Bit Bus Transceiver *NEW!*	24-SOP	3748.00/2,000		

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ABT2240ADBR	296-3945-1-ND	Tri-State Octal Buffer/Line/MOS Driver *NEW!*	20-SSOP	1.05	.88	.70
SN74ABT2240ADBR	296-3945-2-ND	Tri-State Octal Buffer/Line/MOS Driver *NEW!*	20-SSOP	932.00/2,000		
SN74ABT2240ADW	296-3946-5-ND	Tri-St. Octal Buffer/Line/MOS Drvr. *NEW!*	20-SOP	1.05	.88	.70
SN74ABT2240ADWR	296-3946-2-ND	Tri-St. Octal Buffer/Line/MOS Drvr. *NEW!*	20-SOP	932.00/2,000		
SN74ABT2240APWR	296-3947-1-ND	Tri-State Octal Buffer/Line/MOS Driver *NEW!*	20-TSSOP	1.35	1.13	.90
SN74ABT2240APWR	296-3947-2-ND	Tri-State Octal Buffer/Line/MOS Driver *NEW!*	20-TSSOP	1198.00/2,000		
SN74ABT2241DBR	296-3948-1-ND	Tri-State Octal Buffer/Line/MOS Driver *NEW!*	20-SSOP	1.05	.88	.70
SN74ABT2241DBR	296-3948-2-ND	Tri-State Octal Buffer/Line/MOS Driver *NEW!*	20-SSOP	932.00/2,000		
SN74ABT2241DW	296-3949-5-ND	Tri-St. Octal Buffer/Line/MOS Drvr. *NEW!*	20-SOP	1.05	.88	.70
SN74ABT2241N	296-3950-5-ND	Tri-St. Octal Buffer/Line/MOS Drvr. *NEW!*	20-Dip	1.05	.88	.70
?SN74ABT2241PW	296-3951-1-ND	Tri-State Octal Buffer/Line/MOS Driver *NEW!*	20-TSSOP	1.35	1.13	.90
SN74ABT2241PWR	296-3951-2-ND	Tri-State Octal Buffer/Line/MOS Driver *NEW!*	20-TSSOP	1198.00/2,000		
SN74ABT2244ADBR	296-1036-1-ND	Tri-State Octal Buffer/Line/MOS Driver	20-SSOP	1.05	.88	.70
SN74ABT2244ADBR	296-1036-2-ND	Tri-State Octal Buffer/Line/MOS Driver	20-SSOP	932.00/2,000		
SN74ABT2244ADWR	296-3952-1-ND	Tri-St. Octal Buffer/Line/MOS Drvr. *NEW!*	20-SOP	1.05	.88	.70
SN74ABT2244ADWR	296-3952-2-ND	Tri-St. Octal Buffer/Line/MOS Drvr. *NEW!*	20-SOP	932.00/2,000		
SN74ABT2244AN	296-3953-5-ND	Tri-St. Octal Buffer/Line/MOS Drvr. *NEW!*	20-Dip	1.05	.88	.70
SN74ABT2244APWR	296-3954-1-ND	Tri-State Octal Buffer/Line/MOS Driver *NEW!*	20-TSSOP	1.35	1.13	.90
SN74ABT2244APWR	296-3954-2-ND	Tri-State Octal Buffer/Line/MOS Driver *NEW!*	20-TSSOP	1198.00/2,000		
SN74ABT2245DBR	296-3955-1-ND	Tri-State Octal Xcvr./Line/MOS Driver *NEW!*	20-SSOP	1.05	.88	.70
SN74ABT2245DBR	296-3955-2-ND	Tri-State Octal Xcvr./Line/MOS Driver *NEW!*	20-SSOP	932.00/2,000		
SN74ABT2245DW	296-3956-5-ND	Tri-St. Octal Xcvr./Line/MOS Drvr. *NEW!*	20-SOP	1.05	.88	.70
SN74ABT2245N	296-3957-5-ND	Tri-St. Octal Xcvr./Line/MOS Driver *NEW!*	20-Dip	1.05	.88	.70
SN74ABT2245PWR	296-3958-1-ND	Tri-State Octal Xcvr./Line/MOS Driver *NEW!*	20-TSSOP	1.25	1.00	.75
SN74ABT2245PWR	296-3958-2-ND	Tri-State Octal Xcvr./Line/MOS Driver *NEW!*	20-TSSOP	1300.00/2,000		
SN74ABT2827DWR	296-3974-1-ND	Tri-State 10-Bit Buffer/Driver *NEW!*	24-SOP	3.76	3.01	2.34
SN74ABT2827DWR	296-3974-2-ND	Tri-State 10-Bit Buffer/Driver *NEW!*	24-SOP	4258.00/2,000		
SN74ABT2952ADBR	296-3975-1-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-SSOP	4.50	3.60	2.80
SN74ABT2952ADBR	296-3975-2-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-SSOP	5100.00/2,000		
SN74ABT2952ADW	296-3976-5-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-SOP	4.50	3.60	2.80
SN74ABT2952ANT	296-3977-5-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-Dip	4.50	3.60	2.80
SN74ABT3611-15PCB	296-3978-ND	64x36 Synch. FIFO Memory *NEW!*	120-HLQFP	23.25	21.70	20.15
SN74ABT3611-15PQ	296-3979-ND	65x36 Synch. FIFO Memory *NEW!*	132-BQFP	23.25	21.70	20.15
SN74ABT3611-20PCB	296-3980-ND	66x36 Synch. FIFO Memory *NEW!*	120-HLQFP	21.00	19.60	18.20
SN74ABT3611-20PQ	296-3981-ND	67x36 Synch. FIFO Memory *NEW!*	132-BQFP	21.00	19.60	18.20
SN74ABT3611-30PCB	296-3982-ND	68x36 Synch. FIFO Memory *NEW!*	120-HLQFP	18.75	17.50	16.25
SN74ABT3611-30PQ	296-3983-ND	69x36 Synch. FIFO Memory *NEW!*	132-BQFP	18.75	17.50	16.25
SN74ABT3612-15PCB	296-3984-ND	64x36x2 Bi-Directional Synch. FIFO Memory *NEW!*	120-HLQFP	30.75	28.70	26.65
SN74ABT3612-15PQ	296-3985-ND	65x36x2 Bi-Directional Synch. FIFO Memory *NEW!*	132-BQFP	30.75	28.70	26.65
SN74ABT3612-20PCB	296-3986-ND	66x36x2 Bi-Directional Synch. FIFO Memory *NEW!*	120-HLQFP	24.75	23.10	21.45
SN74ABT3612-20PQ	296-3987-ND	67x36x2 Bi-Directional Synch. FIFO Memory *NEW!*	132-BQFP	24.75	23.10	21.45
SN74ABT3612-30PCB	296-3988-ND	68x36x2 Bi-Directional Synch. FIFO Memory *NEW!*	120-HLQFP	21.00	19.60	18.20
SN74ABT3612-30PQ	296-3989-ND	69x36x2 Bi-Directional Synch. FIFO Memory *NEW!*	132-BQFP	21.00	19.60	18.20
SN74ABT3613-15PCB	296-3990-ND	64x36 Synch. FIFO Memory *NEW!*	120-HLQFP	23.25	21.70	20.15
SN74ABT3613-15PQ	296-3991-ND	65x36 Synch. FIFO Memory *NEW!*	132-BQFP	23.25	21.70	20.15
SN74ABT3613-20PCB	296-3992-ND	66x36 Synch. FIFO Memory *NEW!*	120-HLQFP	21.00	19.60	18.20
SN74ABT3613-20PQ	296-3993-ND	67x36 Synch. FIFO Memory *NEW!*	132-BQFP	21.00	19.60	18.20
SN74ABT3613-30PCB	296-3994-ND	68x36 Synch. FIFO Memory *NEW!*	120-HLQFP	18.75	17.50	16.25
SN74ABT3613-30PQ	296-3995-ND	69x36 Synch. FIFO Memory *NEW!*	132-BQFP	18.75	17.50	16.25
SN74ABT3614-15PCB	296-3996-ND	64x36x2 Bi-Directional Synch. FIFO Memory *NEW!*	120-HLQFP	30.75	28.70	26.65
SN74ABT3614-15PQ	296-3997-ND	65x36x2 Bi-Directional Synch. FIFO Memory *NEW!*	132-BQFP	30.75	28.70	26.65
SN74ABT3614-20PCB	296-3998-ND	66x36x2 Bi-Directional Synch. FIFO Memory *NEW!*	120-HLQFP	24.75	23.10	21.45
SN74ABT3614-20PQ	296-3999-ND	67x36x2 Bi-Directional Synch. FIFO Memory *NEW!*	132-BQFP	24.75	23.10	21.45
SN74ABT3614-30PCB	296-4000-ND	68x36x2 Bi-Directional Synch. FIFO Memory *NEW!*	120-HLQFP	21.00	19.60	18.20
SN74ABT3614-30PQ	296-4001-ND	69x36x2 Bi-Directional Synch. FIFO Memory *NEW!*	132-BQFP	21.00	19.60	18.20
SN74ABT5400ADW	296-4018-1-ND	Tri-St. 11-Bit Line/Memory Driver *NEW!*	28-SOP	3.15	2.52	1.96
SN74ABT5400ADW	296-4018-2-ND	Tri-St. 11-Bit Line/Memory Driver *NEW!*	28-SOP	1785.00/1,000		
SN74ABT5401DW	296-4019-1-ND	Tri-St. 11-Bit Line/Memory Driver *NEW!*	28-SOP	3.15	2.52	1.96
SN74ABT5401DW	296-4019-2-ND	Tri-St. 11-Bit Line/Memory Driver *NEW!*	28-SOP	1785.00/1,000		
SN74ABT5402ADW	296-4020-1-ND	Tri-St. 12-Bit Line/Memory Driver *NEW!*	28-SOP	3.38	2.70	2.10
SN74ABT5402ADW	296-4020-2-ND	Tri-St. 12-Bit Line/Memory Driver *NEW!*	28-SOP	1913.00/1,000		
SN74ABT5403DW	296-4021-1-ND	Tri-St. 12-Bit Line/Memory Driver *NEW!*	28-SOP	3.38	2.70	2.10
SN74ABT5403DW	296-4021-2-ND	Tri-St. 12-Bit Line/Memory Driver *NEW!*	28-SOP	1913.00/1,000		
SN74ABT7819-10PH	296-4070-ND	512x18x2 Bi-Directional Synch. FIFO Memory *NEW!*	80-QFP	36.75	34.30	31.85
SN74ABT7819-10PN	296-4071-ND	513x18x2 Bi-Directional Synch. FIFO Memory *NEW!*	80-LQFP	36.75	34.30	31.85
SN74ABT7819-12PH	296-4072-ND	514x18x2 Bi-Directional Synch. FIFO Memory *NEW!*	80-QFP	34.50	32.20	29.90
SN74ABT7819-12PN	296-4073-ND	515x18x2 Bi-Directional Synch. FIFO Memory *NEW!*	80-LQFP	34.50	32.20	29.90
SN74ABT7819-15PH	296-4074-ND	516x18x2 Bi-Directional Synch. FIFO Memory *NEW!*	80-QFP	33.75	31.50	29.25
SN74ABT7819-15PN	296-4075-ND	517x18x2 Bi-Directional Synch. FIFO Memory *NEW!*	80-LQFP	33.75	31.50	29.25
SN74ABT7819-20PH	296-4076-ND	518x18x2 Bi-Directional Synch. FIFO Memory *NEW!*	80-QFP	27.75	25.90	24.05
SN74ABT7819-20PN	296-4077-ND	519x18x2 Bi-Directional Synch. FIFO Memory *NEW!*	80-LQFP	27.75	25.90	24.05
SN74ABT7819-30PH	296-4078-ND	520x18x2 Bi-Directional Synch. FIFO Memory *NEW!*	80-QFP	24.75	23.10	21.45
SN74ABT7819-30PN	296-4079-ND	521x18x2 Bi-Directional Synch. FIFO Memory *NEW!*	80-LQFP	24.75	23.10	21.45
SN74ABT7820-15PH	296-4080-ND	512x18x2 Bi-Directional Asynch. FIFO Memory *NEW!*	80-QFP	33.75	31.50	29.25
SN74ABT7820-15PN	296-4081-ND	513x18x2 Bi-Directional Asynch. FIFO Memory *NEW!*	80-LQFP	33.75	31.50	29.25
SN74ABT7820-20PH	296-4082-ND	514x18x2 Bi-Directional Asynch. FIFO Memory *NEW!*	80-QFP	27.75	25.90	24.05
SN74ABT7820-20PN	296-4083-ND	515x18x2 Bi-Directional Asynch. FIFO Memory *NEW!*	80-LQFP	27.75	25.90	24.05
SN74ABT7820-25PH	296-4084-ND	516x18x2 Bi-Directional Asynch. FIFO Memory *NEW!*	80-QFP	26.25	24.50	22.75
SN74ABT7820-25PN	296-4085-ND	517x18x2 Bi-Directional Asynch. FIFO Memory *NEW!*	80-LQFP	26.25	24.50	22.75
SN74ABT7820-30PH	296-4086-ND	518x18x2 Bi-Directional Asynch. FIFO Memory *NEW!*	80-QFP	24.75	23.10	21.45
SN74ABT7820-30PN	296-4087-ND	519x18x2 Bi-Directional Asynch. FIFO Memory *NEW!*	80-LQFP	24.75	23.10	21.45
SN74ABT8245DW	296-4093-5-ND	Scan Test Device with Octal Bus Transceiver *NEW!*	24-SOP	9.00	7.20	6.08
SN74ABT8543DL	296-4107-5-ND	Scan Test Device with Octal Bus Transceiver *NEW!*	28-SSOP	9.00	7.20	6.08
SN74ABT8543DW	296-4108-5-ND	Scan Test Device with Octal Bus Transceiver *NEW!*	28-SOP	9.00	7.20	6.08
SN74ABT8646DL	296-4112-5-ND	Scan Test Device with Octal Bus Transceiver/Register *NEW!*	28-SSOP	9.00	7.20	6.08
SN74ABT8646DW	296-4113-5-ND	Scan Test Device with Octal Bus Transceiver/Register *NEW!*	28-SOP	9.00	7.20	6.08
SN74ABT8652DL	296-4114-5-ND	Scan Test Device with Octal Bus Transceiver/Register *NEW!*	28-SSOP	9.00	7.20	6.08
SN74ABT8952DL	296-4115-5-ND	Scan Test Device with Octal Bus Transceiver *NEW!*	28-SSOP	9.00	7.20	6.08
SN74ABT8952DW	296-4116-5-ND	Scan Test Device with Octal Bus Transceiver *NEW!*	28-SOP	9.00	7.20	6.08
SN74ABT8996DW	296-4117-5-ND	10-Bit Addressable Scan Port *NEW!*	24-SOP	10.00	9.00	7.98
SN74ABT8996DWR	296-4117-2-ND	10-Bit Addressable Scan Port *NEW!*	24-SOP	14820.00/2,000		
SN74ABT8996PWR	296-4118-1-ND	10-Bit Addressable Scan Port *NEW!*	24-TSSOP	10.00	9.00	7.98
SN74ABT8996PWR	296-4118-2-ND	10-Bit Addressable Scan Port *NEW!*	24-TSSOP	14820.00/2,000		
SN74ABT16240ADGGR	296-3882-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2.03	1.62	1.22
SN74ABT16240ADGGR	296-3882-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2106.00/2,000		
SN74ABT16240ADGVR	296-3883-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	2.15	1.72	1.29
SN74ABT16240ADGVR	296-3883-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	2236.00/2,000		
SN74ABT16240ADLR	296-3884-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	2.03	1.62	1.22
SN74ABT16240ADLR	296-3884-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	1053.00/1,000		
SN74ABT16241ADGGR	296-3885-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2.03	1.62	1.22
SN74ABT16241ADGGR	296-3885-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2106.00/2,000		
SN74ABT16241ADGVR	296-3886-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	2.15	1.72	1.29
SN74ABT16241ADGVR	296-3886-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	2236.00/2,000		
SN74ABT16241ADL	296-3887-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	2.03	1.62	1.22
SN74ABT16244ADGGR	296-1023-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2.25	1.80	1.40
SN74ABT16244ADGGR	296-1023-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2106.00/2,000		
SN74ABT16244ADGVR	296-3888-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	2.15	1.72	1.29
SN74ABT16244ADGVR	296-3888-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	2236.00/2,000		
SN74ABT16244ADL	296-1024-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.03	1.62	1.22
SN74ABT16244ADLR	296-1024-2-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1053.00/1,000		
SN74ABT16245ADGGR	296-1025-1-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2.36	1.89	1.47
SN74ABT16245ADGGR	296-1025-2-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2106.00/2,000		
SN74ABT16245ADGVR	296-3889-1-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-TVSOP	2.15	1.72	1.29
SN74ABT16245ADGVR	296-3889-2-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-TVSOP	2236.00/2,000		
SN74ABT16245ADL	296-1026-5-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	2.03	1.62	1.22
SN74ABT16245ADLR	296-1026-2-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	1053.00/1,000		
SN74ABT16373ADGGR	296-3899-1-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	48-TSSOP	2.03	1.62	1.22
SN74ABT16373ADGGR	296-3899-2-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	48-TSSOP	2106.00/2,000		
SN74ABT16373ADL	296-1029-5-ND	Tri-St. 16-Bit Transparent D-Type Latch	48-SSOP	2.03	1.62	1.22
SN74ABT16373ADLR	296-1029-2-ND	Tri-St. 16-Bit Transparent D-Type Latch	48-SSOP	1053.00/1,000		
SN74ABT16374ADGGR	296-3900-1-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-TSSOP	2.03	1.62	1.22
SN74ABT16374ADGGR	296-3900-2-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-TSSOP	2106.00/2,000		
SN74ABT16374ADL	296-1030-5-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SSOP	2.03	1.62	1.22
SN74ABT16374ADLR	296-1030-2-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SSOP	1053.00/1,000		
SN74ABT16470DGGR	296-3901-1-ND	Tri-St. 16-Bit Registered Xcvr. *NEW!*	56-TSSOP	8.00	6.40	5.40
SN74ABT16470DGGR	296-3901-2-ND	Tri-St. 16-Bit Registered Xcvr. *NEW!*	56-TSSOP	10000.00/2,000		
SN74ABT16470DL	296-3902-5-ND	Tri-St. 16-Bit Registered Xcvr. *NEW!*	56-SSOP	8.00	6.40	5.40
SN74ABT16500BDGGR	296-3903-1-ND	Tri-St. 18-Bit Univ. Bus Xcvr. *NEW!*	56-TSSOP	3.53	2.83	2.20
SN74ABT16500BDGGR	296-3903-2-ND	Tri-St. 18-Bit Univ. Bus Xcvr. *NEW!*	56-TSSOP	4004.00/2,000		
SN74ABT16500BDL	296-3904-5-ND	Tri-St. 18-Bit Univ. Bus Xcvr. *NEW!*	56-SSOP	3.53	2.83	2.20
SN74ABT16501DGGR	296-3905-1-ND	Tri-St. 18-Bit Univ. Bus Xcvr. *NEW!*	56-TSSOP	3.53	2.83	2.20
SN74ABT16501DGGR	296-3905-2-ND	Tri-St. 18-Bit Univ. Bus Xcvr. *NEW!*	56-TSSOP	4004.00/2,000		
SN74ABT16501DLR	296-1031-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	3.53	2.83	2.20
SN74ABT16501DLR	296-1031-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	2002.00/1,000		
SN74ABT16540ADGGR	296-3906-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	3.40	2.72	2.12
SN74ABT16540ADGGR	296-3906-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	3850.00/2,000		
SN74ABT16540ADGVR	296-3907-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	3.51	2.81	2.19
SN74ABT16540ADGVR	296-3907-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	3978.00/2,000		
SN74ABT16540ADL	296-3908-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	3.40	2.72	2.12
SN74ABT16541ADGGR	296-3909-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	3.40	2.72	2.12
SN74ABT16541ADGGR	296-3909-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	3850.00/2,000		
SN74ABT16541ADGVR	296-3910-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	3.51	2.81	2.19
SN74ABT16541ADGVR	296-3910-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	3978.00/2,000		
SN74ABT16541ADL	296-1032-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	3.40	2.72	2.12
SN74ABT16541ADLR	296-1032-1-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	3.40	2.72	2.12
SN74ABT16541ADLR	296-1032-2-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1925.00/1,000		
SN74ABT16543DGGR	296-3911-1-ND	Tri-St. 16-Bit Registered Xcvr. *NEW!*	56-TSSOP	3.58	2.87	2.23
SN74ABT16543DGGR	296-3911-2-ND	Tri-St. 16-Bit Registered Xcvr. *NEW!*	56-TSSOP	4054.00/2,000		
SN74ABT16543DLR	296-1033-1-ND	Tri-State 16-Bit Registered Transceiver	56-SSOP	3.58	2.87	2.23
SN74ABT16543DLR	296-1033-2-ND	Tri-State 16-Bit Registered Transceiver	56-SSOP	2027.00/1,000		
SN74ABT16600DLR	296-3912-1-ND	Tri-St. 18-Bit Univ. Bus Xcvr. *NEW!*	56-SSOP	7.04	5.64	4.76

(Continued)

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T. I.	Digi-Key			Price Each★		
Part No.	**Part No.**	**Description**	**Pkg.**	**1**	**25**	**100**
SN74ABT16600DLR	296-3912-2-ND	Tri-St. 18-Bit Univ. Bus Xcvr. *NEW!*	56-SSOP	4400.00/1,000		
SN74ABT16601DGGR	296-1034-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	7.00	5.60	4.73
SN74ABT16601DGGR	296-1034-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	8750.00/2,000		
SN74ABT16601DL	296-3913-5-ND	Tri-State 18-Bit Univ. Bus Xcvr. *NEW!*	56-SSOP	7.00	5.60	4.73
SN74ABT16623DGGR	296-3914-1-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-TSSOP	5.18	4.14	3.22
SN74ABT16623DGGR	296-3914-2-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-TSSOP	5866.00/2,000		
SN74ABT16623DL	296-3915-5-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-SSOP	5.18	4.14	3.22
SN74ABT16623DLR	296-3915-2-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-SSOP	2958.00/1,000		
SN74ABT16640DGGR	296-3916-1-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-TSSOP	5.18	4.14	3.22
SN74ABT16640DGGR	296-3916-2-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-TSSOP	5866.00/2,000		
SN74ABT16640DLR	296-3917-1-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-SSOP	5.22	4.18	3.25
SN74ABT16640DLR	296-3917-2-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-SSOP	2958.00/1,000		
SN74ABT16646DGGR	296-3918-1-ND	Tri-State 16-Bit Bus Transceiver/Register *NEW!*	56-TSSOP	5.18	4.14	3.22
SN74ABT16646DGGR	296-3918-2-ND	Tri-State 16-Bit Bus Transceiver/Register *NEW!*	56-TSSOP	5866.00/2,000		
SN74ABT16646DLR	296-1035-1-ND	Tri-St. 16-Bit Bus Transceiver/Register	56-SSOP	5.18	4.14	3.22
SN74ABT16646DLR	296-1035-2-ND	Tri-St. 16-Bit Bus Transceiver/Register	56-SSOP	2933.00/1,000		
SN74ABT16652DL	296-3919-5-ND	Tri-State 16-Bit Bus Transceiver/Register *NEW!*	56-SSOP	5.18	4.14	3.22
SN74ABT16657DGGR	296-3920-1-ND	Tri-State 16-Bit Transceiver with Parity Gen/Checker *NEW!*	56-TSSOP	5.18	4.14	3.22
SN74ABT16657DGGR	296-3920-2-ND	Tri-State 16-Bit Transceiver with Parity Gen/Checker *NEW!*	56-TSSOP	5866.00/2,000		
SN74ABT16657DLR	296-3921-1-ND	Tri-State 16-Bit Transceiver with Parity Gen/Checker *NEW!*	56-SSOP	5.22	4.18	3.25
SN74ABT16657DLR	296-3921-2-ND	Tri-State 16-Bit Transceiver with Parity Gen/Checker *NEW!*	56-SSOP	2958.00/1,000		
SN74ABT16821DGGR	296-3922-1-ND	Tri-State 20-Bit Bus-Interface Flip-Flop *NEW!*	56-TSSOP	5.40	4.32	3.36
SN74ABT16821DGGR	296-3922-2-ND	Tri-State 20-Bit Bus-Interface Flip-Flop *NEW!*	56-TSSOP	6120.00/2,000		
SN74ABT16821DLR	296-3923-1-ND	Tri-State 20-Bit Bus-Interface Flip-Flop *NEW!*	56-SSOP	5.45	4.36	3.39
SN74ABT16821DLR	296-3923-2-ND	Tri-State 20-Bit Bus-Interface Flip-Flop *NEW!*	56-SSOP	3086.00/1,000		
SN74ABT16823DGGR	296-3924-1-ND	Tri-State 18-Bit Bus-Interface Flip-Flop *NEW!*	56-TSSOP	5.18	4.14	3.22
SN74ABT16823DGGR	296-3924-2-ND	Tri-State 18-Bit Bus-Interface Flip-Flop *NEW!*	56-TSSOP	5866.00/2,000		
SN74ABT16823DLR	296-3925-1-ND	Tri-State 18-Bit Bus-Interface Flip-Flop *NEW!*	56-SSOP	5.22	4.18	3.25
SN74ABT16823DLR	296-3925-2-ND	Tri-State 18-Bit Bus-Interface Flip-Flop *NEW!*	56-SSOP	2958.00/1,000		
SN74ABT16825DL	296-3926-5-ND	Tri-State 18-Bit Buffer/Driver *NEW!*	56-SSOP	5.18	4.14	3.22
SN74ABT16827DLR	296-3928-1-ND	Tri-State 20-Bit Buffer/Driver *NEW!*	56-SSOP	5.45	4.36	3.39
SN74ABT16827DLR	296-3928-2-ND	Tri-State 20-Bit Buffer/Driver *NEW!*	56-SSOP	3086.00/1,000		
SN74ABT16833DLR	296-3929-1-ND	Dual 8-9 Bit Parity Bus Xcvr. *NEW!*	56-SSOP	5.22	4.18	3.25
SN74ABT16833DLR	296-3929-2-ND	Dual 8-9 Bit Parity Bus Xcvr. *NEW!*	56-SSOP	2958.00/1,000		
SN74ABT16841DL	296-3930-5-ND	Tri-State 20-Bit Bus-Interface D-Type Latch *NEW!*	56-SSOP	6.40	5.12	4.32
SN74ABT16843DGGR	296-3931-1-ND	Tri-State 18-Bit Bus-Interface D-Type Latch *NEW!*	56-TSSOP	5.18	4.14	3.22
SN74ABT16843DGGR	296-3931-2-ND	Tri-State 18-Bit Bus-Interface D-Type Latch *NEW!*	56-TSSOP	5866.00/2,000		
SN74ABT16843DLR	296-3932-1-ND	Tri-State 18-Bit Bus-Interface D-Type Latch *NEW!*	56-SSOP	5.22	4.18	3.25
SN74ABT16843DLR	296-3932-2-ND	Tri-State 18-Bit Bus-Interface D-Type Latch *NEW!*	56-SSOP	2958.00/1,000		
SN74ABT16853DLR	296-3933-1-ND	Dual 8-9 Bit Parity Transceiver *NEW!*	56-SSOP	7.64	6.12	5.16
SN74ABT16853DLR	296-3933-2-ND	Dual 8-9 Bit Parity Transceiver *NEW!*	56-SSOP	4775.00/1,000		
SN74ABT16863DLR	296-3934-1-ND	Tri-State 18-Bit Bus Xcvr. *NEW!*	56-SSOP	5.84	4.68	3.95
SN74ABT16863DLR	296-3934-2-ND	Tri-State 18-Bit Bus Xcvr. *NEW!*	56-SSOP	3650.00/1,000		
SN74ABT16952DGGR	296-3935-1-ND	Tri-St. 16-Bit Registered Xcvr. *NEW!*	56-TSSOP	5.18	4.14	3.22
SN74ABT16952DGGR	296-3935-2-ND	Tri-St. 16-Bit Registered Xcvr. *NEW!*	56-TSSOP	5866.00/2,000		
SN74ABT16952DLR	296-3936-1-ND	Tri-St. 16-Bit Registered Xcvr. *NEW!*	56-SSOP	5.18	4.14	3.22
SN74ABT16952DLR	296-3936-2-ND	Tri-St. 16-Bit Registered Xcvr. *NEW!*	56-SSOP	2933.00/1,000		
SN74ABT18245ADGGR	296-3937-1-ND	Scan Test Device with 18-Bit Bus Transceiver *NEW!*	56-TSSOP	9.16	8.25	7.32
SN74ABT18245ADGGR	296-3937-2-ND	Scan Test Device with 18-Bit Bus Transceiver *NEW!*	56-TSSOP	13586.00/2,000		
SN74ABT18245ADL	296-3938-5-ND	Scan Test Device with 18-Bit Bus Transceiver *NEW!*	56-SSOP	9.16	8.25	7.32
SN74ABT18245ADLR	296-3938-2-ND	Scan Test Device with 18-Bit Bus Transceiver *NEW!*	56-SSOP	6817.00/1,000		
SN74ABT18502PM	296-3939-ND	Scan Test Device with 18-Bit Bus Transceiver *NEW!*	64-TQFP	14.99	13.50	11.97
SN74ABT18504PM	296-3940-ND	Scan Test Device with 20-Bit Bus Transceiver *NEW!*	64-TQFP	14.99	13.50	11.97
SN74ABT18640DGGR	296-3941-1-ND	Scan Test Device with 18-Bit Inv. Bus Transceiver *NEW!*	56-TSSOP	9.58	8.63	7.65
SN74ABT18640DGGR	296-3941-2-ND	Scan Test Device with 18-Bit Inv. Bus Transceiver *NEW!*	56-TSSOP	14202.00/2,000		
SN74ABT18640DL	296-3942-5-ND	Scan Test Device with 18-Bit Inv. Bus Transceiver *NEW!*	56-SSOP	9.58	8.63	7.65
SN74ABT18646PM	296-3943-ND	Scan Test Device with 18-Bit Bus Transceiver/Register *NEW!*	64-TQFP	15.24	13.73	12.17
SN74ABT18652PM	296-3944-ND	Scan Test Device with 18-Bit Bus Transceiver/Register *NEW!*	64-TQFP	15.24	13.73	12.17
SN74ABT162244DGVR	296-3881-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	2.15	1.72	1.29
SN74ABT162244DGVR	296-3881-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	2236.00/2,000		
SN74ABT162244DL	296-1021-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.03	1.62	1.22
SN74ABT162244DLR	296-1021-2-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1053.00/1,000		
SN74ABT162245DLR	296-1022-1-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	2.03	1.62	1.22
SN74ABT162245DLR	296-1022-2-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	1053.00/1,000		
SN74ABT162500DL	296-3890-5-ND	Tri-St. 18-Bit Univ. Bus Xcvr. *NEW!*	56-SSOP	3.53	2.83	2.20
SN74ABT162501DGGR	296-3891-1-ND	Tri-St. 18-Bit Univ. Bus Xcvr. *NEW!*	56-TSSOP	3.53	2.83	2.20
SN74ABT162501DGGR	296-3891-2-ND	Tri-St. 18-Bit Univ. Bus Xcvr. *NEW!*	56-TSSOP	4004.00/2,000		
SN74ABT162501DLR	296-1027-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	3.98	3.19	2.48
SN74ABT162501DLR	296-1027-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	2002.00/1,000		
SN74ABT162601DGG	296-3892-1-ND	Tri-St. 18-Bit Univ. Bus Xcvr. *NEW!*	56-TSSOP	8.83	7.95	7.05
SN74ABT162601DGGR	296-3892-2-ND	Tri-St. 18-Bit Univ. Bus Xcvr. *NEW!*	56-TSSOP	13092.00/2,000		
SN74ABT162601DLR	296-1028-1-ND	Tri-State 18-Bit Univ Bus Transceiver	56-SSOP	8.86	7.98	7.08
SN74ABT162601DLR	296-1028-2-ND	Tri-State 18-Bit Univ Bus Transceiver	56-SSOP	6570.00/1,000		
SN74ABT162823ADGGR	296-3893-1-ND	Tri-State 18-Bit Bus-Interface Flip-Flop *NEW!*	56-TSSOP	5.40	4.32	3.36
SN74ABT162823ADGGR	296-3893-2-ND	Tri-State 18-Bit Bus-Interface Flip-Flop *NEW!*	56-TSSOP	6120.00/2,000		
SN74ABT162823ADLR	296-3894-1-ND	Tri-State 18-Bit Bus-Interface Flip-Flop *NEW!*	56-SSOP	5.45	4.36	3.39
SN74ABT162823ADLR	296-3894-2-ND	Tri-State 18-Bit Bus-Interface Flip-Flop *NEW!*	56-SSOP	3086.00/1,000		
SN74ABT162827ADGGR	296-3895-1-ND	Tri-State 20-Bit Buffer/Driver *NEW!*	56-TSSOP	5.40	4.32	3.36
SN74ABT162827ADGGR	296-3895-2-ND	Tri-State 20-Bit Buffer/Driver *NEW!*	56-TSSOP	6120.00/2,000		
SN74ABT162827ADL	296-3896-5-ND	Tri-State 20-Bit Buffer/Driver *NEW!*	56-SSOP	5.40	4.32	3.36
SN74ABT162841DGGR	296-3897-1-ND	Tri-State 20-Bit Bus-Interface D-Type Latch *NEW!*	56-TSSOP	5.00	4.00	3.38
SN74ABT162841DGGR	296-3897-2-ND	Tri-State 20-Bit Bus-Interface D-Type Latch *NEW!*	56-TSSOP	6250.00/2,000		
SN74ABT162841DL	296-3898-5-ND	Tri-State 20-Bit Bus-Interface D-Type Latch *NEW!*	56-SSOP	5.00	4.00	3.38
SN74ABTE16246DGGR	296-4119-1-ND	Tri-State 11-Bit Incident-Wave Bus Transceiver *NEW!*	48-TSSOP	8.20	6.56	5.54
SN74ABTE16246DGGR	296-4119-2-ND	Tri-State 11-Bit Incident-Wave Bus Transceiver *NEW!*	48-TSSOP	10250.00/2,000		
SN74ABTE16246DL	296-4120-5-ND	Tri-State 11-Bit Incident-Wave Bus Transceiver *NEW!*	48-SSOP	8.20	6.56	5.54
SN74ABTE16246DLR	296-4120-2-ND	Tri-State 11-Bit Incident-Wave Bus Transceiver *NEW!*	48-SSOP	5150.00/1,000		
SN74ABTH245DBR	296-4138-1-ND	Tri-State Octal Bus Transceiver *NEW!*	64-SSOP	1.02	.85	.68
SN74ABTH245DBR	296-4138-2-ND	Tri-State Octal Bus Transceiver *NEW!*	64-SSOP	904.00/2,000		
SN74ABTH245DGVR	296-4139-1-ND	Tri-State Octal Bus Xcvr. *NEW!*	64-TVSOP	1.17	.98	.78
SN74ABTH245DGVR	296-4139-2-ND	Tri-State Octal Bus Xcvr. *NEW!*	64-TVSOP	1038.00/2,000		
SN74ABTH245DWR	296-4140-1-ND	Tri-State Octal Bus Transceiver *NEW!*	64-SOP	1.02	.85	.68
SN74ABTH245DWR	296-4140-2-ND	Tri-State Octal Bus Transceiver *NEW!*	64-SOP	904.00/2,000		
SN74ABTH245N	296-4141-5-ND	Tri-State Octal Bus Transceiver *NEW!*	64-Dip	1.02	.85	.68
SN74ABTH245PWR	296-4142-1-ND	Tri-State Octal Bus Xcvr. *NEW!*	64-TSSOP	1.35	1.13	.90
SN74ABTH245PWR	296-4142-2-ND	Tri-State Octal Bus Xcvr. *NEW!*	64-TSSOP	1198.00/2,000		
SN74ABTH25245DW	296-4143-5-ND	Tri-St. 25-Ohm Octal Bus Xcvr. *NEW!*	24-SOP	4.39	3.51	2.73
SN74ABTH25245NT	296-4144-5-ND	Tri-St. 25-Ohm Octal Bus Xcvr. *NEW!*	24-Dip	4.39	3.51	2.73
SN74ABTH32245PZ	296-4145-ND	Tri-State 36-Bit Bus Xcvr. *NEW!*	100-LQFP	15.83	14.25	12.64
SN74ABTH32316PN	296-4146-ND	Tri-Port 16-Bit Universal Bus Exchanger *NEW!*	80-LQFP	14.16	12.75	11.31
SN74ABTH32543PZ	296-4147-ND	Tri-State 36-Bit Registered Bus Transceiver *NEW!*	100-LQFP	15.75	14.70	13.65
SN74ABTH16244DGGR	296-4122-1-ND	Tri-St. 16-Bit Bus Buffer/Driver *NEW!*	48-TSSOP	2.03	1.62	1.22
SN74ABTH16244DGGR	296-4122-2-ND	Tri-St. 16-Bit Bus Buffer/Driver *NEW!*	48-TSSOP	2106.00/2,000		
SN74ABTH16244DL	296-4123-5-ND	Tri-St. 16-Bit Bus Buffer/Driver *NEW!*	48-SSOP	2.03	1.62	1.22
SN74ABTH16244DLR	296-4123-2-ND	Tri-St. 16-Bit Bus Buffer/Driver *NEW!*	48-SSOP	1118.00/1,000		
SN74ABTH16245DGGR	296-4124-1-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-TSSOP	2.03	1.62	1.22
SN74ABTH16245DGGR	296-4124-2-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-TSSOP	2106.00/2,000		
SN74ABTH16245DGVR	296-4125-1-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-TVSOP	2.15	1.72	1.29
SN74ABTH16245DGVR	296-4125-2-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-TVSOP	2236.00/2,000		
SN74ABTH16245DL	296-4126-5-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-SSOP	2.03	1.62	1.22
SN74ABTH16260DL	296-1446-5-ND	Tri-State 12-24 Bit Mux D-Type Latch	56-SSOP	5.00	4.00	3.38
SN74ABTH16260DLR	296-1446-2-ND	Tri-State 12-24 Bit Mux D-Type Latch *NEW!*	56-SSOP	3150.00/1,000		
SN74ABTH16460DGGR	296-4127-1-ND	Tri-State 12-24 Bit Mux D-Type Latch *NEW!*	56-TSSOP	7.70	6.16	5.20
SN74ABTH16460DGGR	296-4127-2-ND	Tri-State 12-24 Bit Mux D-Type Latch *NEW!*	56-TSSOP	9626.00/2,000		
SN74ABTH16460DL	296-4128-5-ND	Tri-State 12-24 Bit Mux D-Type Latch *NEW!*	56-SSOP	7.70	6.16	5.20
SN74ABTH16823DGGR	296-4129-1-ND	Tri-State 18-Bit Bus-Interface Flip-Flop *NEW!*	56-TSSOP	5.20	4.16	3.51
SN74ABTH16823DGGR	296-4129-2-ND	Tri-State 18-Bit Bus-Interface Flip-Flop *NEW!*	56-TSSOP	6500.00/2,000		
SN74ABTH16823DLR	296-4130-1-ND	Tri-State 18-Bit Bus-Interface Flip-Flop *NEW!*	56-SSOP	5.24	4.20	3.54
SN74ABTH16823DLR	296-4130-2-ND	Tri-State 18-Bit Bus-Interface Flip-Flop *NEW!*	56-SSOP	3275.00/1,000		
SN74ABTH32318PN	296-1447-5-ND	18-Bit Tri-Port Univ Bus Exchange	80-LQFP	14.58	13.13	11.64
SN74ABTH32501PZ	296-1448-5-ND	36-Bit Bus Transceiver	100-LQFP	16.50	15.40	14.30
SN74ABTH162245DGGR	296-1050-1-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2.03	1.62	1.22
SN74ABTH162245DGGR	296-1050-2-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2106.00/2,000		
SN74ABTH162245DGVR	296-4121-1-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-TVSOP	2.15	1.72	1.29
SN74ABTH162245DGVR	296-4121-2-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-TVSOP	2236.00/2,000		
SN74ABTH162245DL	296-1445-5-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	2.03	1.62	1.22
SN74ABTH162260DLR	296-1051-1-ND	12-24-Bit Mux D-Type Latch	56-SSOP	5.04	4.04	3.41
SN74ABTH162260DLR	296-1051-2-ND	Tri-State 12-24 Bit Mux. D-Type Latch	56-SSOP	3150.00/1,000		
SN74ABTH182502APM	296-4131-ND	Scan Test Device with 18-Bit Univ. Bus Transceiver *NEW!*	64-TQFP	12.66	11.40	10.11
SN74ABTH182504APM	296-4132-ND	Scan Test Device with 20-Bit Univ. Bus Transceiver *NEW!*	64-TQFP	12.66	11.40	10.11
SN74ABTH182646APM	296-4133-ND	Scan Test Device with 18-Bit Transceiver/Register *NEW!*	64-TQFP	13.74	12.38	10.98
SN74ABTH18502APM	296-4134-ND	Scan Test Device with 18-Bit Univ. Bus Transceiver *NEW!*	64-TQFP	12.66	11.40	10.11
SN74ABTH18504APM	296-4135-ND	Scan Test Device with 20-Bit Univ. Bus Transceiver *NEW!*	64-TQFP	12.66	11.40	10.11
SN74ABTH18646APM	296-4136-ND	Scan Test Device with 18-Bit Transceiver/Register *NEW!*	64-TQFP	13.74	12.38	10.98
SN74ABTH18652APM	296-4137-ND	Scan Test Device with 18-Bit Transceiver/Register *NEW!*	64-TQFP	13.74	12.38	10.98
SN74ABTR2245DBR	296-4148-1-ND	Tri-State Octal Transceiver/Line/ Memory Driver *NEW!*	20-SSOP	1.05	.88	.70
SN74ABTR2245DBR	296-4148-2-ND	Tri-State Octal Transceiver/Line/ Memory Driver *NEW!*	20-SSOP	932.00/2,000		
SN74ABTR2245DW	296-4149-5-ND	Tri-State Octal Transceiver/Line/ Memory Driver *NEW!*	20-SOP	1.05	.88	.70
SN74ABTR2245PWR	296-4150-1-ND	Tri-State Octal Transceiver/Line/ Memory Driver *NEW!*	20-TSSOP	1.35	1.13	.90
SN74ABTR2245PWR	296-4150-2-ND	Tri-State Octal Transceiver/Line/ Memory Driver *NEW!*	20-TSSOP	1198.00/2,000		

(Continued)

AC / ACT Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
74AC11004DW	296-4152-5-ND	Hex Inverter *NEW!*	20-SOP	1.05	.88	.70
74AC11004DWR	296-4152-2-ND	Hex Inverter *NEW!*	20-SOP	984.00/2,000		
74AC11004N	296-4153-5-ND	Hex Inverter *NEW!*	20-Dip	1.05	.88	.70
74AC11008N	296-4154-5-ND	Quad 2-Input AND Gate *NEW!*	16-Dip	1.05	.88	.70
74AC11008PWR	296-4155-1-ND	Quad 2-Input AND Gate *NEW!*	16-TSSOP	1.05	.88	.70
74AC11008PWR	296-4155-2-ND	Quad 2-Input AND Gate *NEW!*	16-TSSOP	932.00/2,000		
74AC11032D	296-4156-5-ND	Quad 2-Input OR Gate *NEW!*	16-SOP	1.05	.88	.70
74AC11032DBR	296-4157-1-ND	Quad 2-Input OR Gate *NEW!*	16-SSOP	1.05	.88	.70
74AC11032DBR	296-4157-2-ND	Quad 2-Input OR Gate *NEW!*	16-SSOP	932.00/2,000		
74AC11032N	296-4158-5-ND	Quad 2-Input OR Gate *NEW!*	16-Dip	1.05	.88	.70
74AC11074D	296-4159-5-ND	Dual D-Type Flip-Flop *NEW!*	14-SOP	1.14	.95	.76
74AC11074PWR	296-4160-1-ND	Dual D-Type Flip-Flop *NEW!*	14-TSSOP	1.14	.95	.76
74AC11074PWR	296-4160-2-ND	Dual D-Type Flip-Flop *NEW!*	14-TSSOP	1010.00/2,000		
74AC11086D	296-4161-5-ND	Quad 2-Input EX-OR Gate *NEW!*	16-SOP	1.14	.95	.76
74AC11138N	296-4162-5-ND	3-8 Decoder/Demultiplexer *NEW!*	16-Dip	1.35	1.13	.90
74AC11138PWR	296-4163-1-ND	3-8 Decoder/Demultiplexer *NEW!*	16-TSSOP	1.35	1.13	.90
74AC11138PWR	296-4163-2-ND	3-8 Decoder/Demultiplexer *NEW!*	16-TSSOP	1198.00/2,000		
74AC11175N	296-4166-5-ND	Quad D-Type Flip-Flop *NEW!*	20-Dip	1.35	1.13	.90
74AC11240DBR	296-4167-1-ND	Octal Buffer/Line Driver *NEW!*	24-SSOP	1.70	1.36	1.02
74AC11240DBR	296-4167-2-ND	Octal Buffer/Line Driver *NEW!*	24-SSOP	1768.00/2,000		
74AC11244DBR	296-4168-1-ND	Octal Buffer/Line Driver *NEW!*	24-SSOP	1.70	1.36	1.02
74AC11244DBR	296-4168-2-ND	Octal Buffer/Line Driver *NEW!*	24-SSOP	1768.00/2,000		
74AC11244DW	296-4169-5-ND	Octal Buffer/Line Driver *NEW!*	24-SOP	1.70	1.36	1.02
74AC11244PWR	296-1000-1-ND	Octal Buffer/Line Driver	24-TSSOP	1.70	1.36	1.02
74AC11244PWR	296-1000-2-ND	Octal Buffer/Line Driver	24-TSSOP	1768.00/2,000		
74AC11245DW	296-4170-5-ND	Octal Bus Transceiver *NEW!*	24-SOP	1.83	1.46	1.10
74AC16244DL	296-4173-5-ND	16-Bit Buffer/Line Driver *NEW!*	48-SSOP	4.16	3.33	2.59
74AC16245DL	296-4174-5-ND	16-Bit Bus Transceiver *NEW!*	48-SSOP	4.28	3.42	2.66
74ACT11000D	296-4175-5-ND	Dual 2-Input NAND Gate *NEW!*	16-SOP	1.05	.88	.70
74ACT11000N	296-4176-5-ND	Dual 2-Input NAND Gate *NEW!*	16-Dip	1.05	.88	.70
74ACT11004DW	296-4177-5-ND	Hex Inverter *NEW!*	20-SOP	1.05	.88	.70
74ACT11008D	296-4178-5-ND	Quad 2-Input AND Gate *NEW!*	16-SOP	1.05	.88	.70
74ACT11008N	296-4179-5-ND	Quad 2-Input AND Gate *NEW!*	16-Dip	1.05	.88	.70
74ACT11030DR	296-4180-1-ND	8-Input NAND Gate *NEW!*	14-SOP	1.11	.93	.74
74ACT11030DR	296-4180-2-ND	8-Input NAND Gate *NEW!*	14-SOP	1202.50/2,500		
74ACT11032DBR	296-4181-2-ND	Quad 2-Input NAND Schmitt-Trigger Gate *NEW!*	16-SSOP	932.00/2,000		
74ACT11032DR	296-4182-1-ND	Quad 2-Input OR Gate *NEW!*	16-SOP	1.11	.93	.74
74ACT11032DR	296-4182-2-ND	Quad 2-Input OR Gate *NEW!*	16-SOP	1202.50/2,500		
74ACT11032N	296-4183-5-ND	Quad 2-Input OR Gate *NEW!*	16-Dip	1.05	.88	.70
74ACT11074DBR	296-4184-1-ND	Dual D-Type Flip-Flop *NEW!*	14-SSOP	1.14	.95	.76
74ACT11074DBR	296-4184-2-ND	Dual D-Type Flip-Flop *NEW!*	14-SSOP	1010.00/2,000		
74ACT11139D	296-4185-5-ND	2-4 Decoder/Demux *NEW!*	16-SOP	1.35	1.13	.90
74ACT11139PWR	296-4186-1-ND	Dual 2-4 Decoder/Demux *NEW!*	16-SSOP	1.35	1.13	.90
74ACT11139PWR	296-4186-2-ND	Dual 2-4 Decoder/Demux *NEW!*	16-SSOP	1198.00/2,000		
74ACT11240DW	296-4187-5-ND	Octal Buffer/Line Driver *NEW!*	24-SOP	1.70	1.36	1.02
74ACT11240NT	296-4188-5-ND	Octal Buffer/Line Driver *NEW!*	24-Dip	1.70	1.36	1.02
74ACT11244DBR	296-4189-1-ND	Octal Buffer/Line Driver *NEW!*	24-SSOP	1.70	1.36	1.02
74ACT11244DBR	296-4189-2-ND	Octal Buffer/Line Driver *NEW!*	24-SSOP	1768.00/2,000		
74ACT11244DW	296-1001-5-ND	Octal Buffer/Line Driver *NEW!*	24-SOP	1.70	1.36	1.02
74ACT11244DWR	296-1001-1-ND	Octal Buffer/Line Driver	24-SOP	1.75	1.40	1.05
74ACT11244DWR	296-1001-2-ND	Octal Buffer/Line Driver	24-SOP	1820.00/2,000		
74ACT11244NT	296-4190-5-ND	Octal Buffer/Line Driver *NEW!*	24-Dip	1.63	1.30	.98
74ACT11244PWR	296-1002-1-ND	Octal Buffer/Line Driver	24-TSSOP	1.70	1.36	1.02
74ACT11244PWR	296-1002-2-ND	Octal Buffer/Line Driver	24-TSSOP	1768.00/2,000		
74ACT11245DBR	296-4191-1-ND	Octal Bus Transceiver *NEW!*	24-SSOP	1.83	1.46	1.10
74ACT11245DBR	296-4191-2-ND	Octal Bus Transceiver *NEW!*	24-SSOP	1898.00/2,000		
74ACT11245DW	296-4192-5-ND	Octal Bus Transceiver *NEW!*	24-SOP	1.83	1.46	1.10
74ACT11245NT	296-4193-5-ND	Octal Bus Transceiver *NEW!*	24-Dip	1.83	1.46	1.10
74ACT11245PWR	296-1003-1-ND	Octal Bus Transceiver	24-TSSOP	1.83	1.46	1.10
74ACT11245PWR	296-1003-2-ND	Octal Bus Transceiver	24-TSSOP	1898.00/2,000		
74ACT11257DBR	296-4194-1-ND	Quad 2-1 Multiplexer *NEW!*	20-SSOP	1.35	1.13	.90
74ACT11257DBR	296-4194-2-ND	Quad 2-1 Multiplexer *NEW!*	20-SSOP	1198.00/2,000		
74ACT11257DW	296-4195-5-ND	Quad 2-1 Multiplexer *NEW!*	20-SOP	1.35	1.13	.90
74ACT11257DWR	296-4195-2-ND	Quad 2-1 Multiplexer *NEW!*	20-SOP	1250.00/2,000		
74ACT11286D	296-4196-5-ND	9-Bit Parity Generator/Checker *NEW!*	14-SOP	1.41	1.18	.94
74ACT11286DR	296-4196-2-ND	9-Bit Parity Generator/Checker *NEW!*	14-SOP	1592.50/2,500		
74ACT11373DBR	296-4197-1-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	24-SSOP	1.70	1.36	1.02
74ACT11373DBR	296-4197-2-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	24-SSOP	1768.00/2,000		
74ACT11373DW	296-4198-5-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	24-SOP	1.70	1.36	1.02
74ACT11374DW	296-4199-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	24-SOP	1.70	1.36	1.02
74ACT11543DWR	296-4200-1-ND	Tri-State Octal Latched Xcvr. *NEW!*	28-SOP	3.98	3.19	2.48
74ACT11543DWR	296-4200-2-ND	Tri-State Octal Latched Xcvr. *NEW!*	28-SOP	2257.00/1,000		
74ACT11652DWR	296-4201-1-ND	Tri-St. Octal Register Bus Xcvr. *NEW!*	28-SOP	5.04	4.04	3.41
74ACT11652DWR	296-4201-2-ND	Tri-St. Octal Register Bus Xcvr. *NEW!*	28-SOP	3150.00/1,000		
74ACT16240DL	296-4202-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	3.83	3.06	2.38
74ACT16244DGGR	296-1004-1-ND	16-Bit Buffer/Line Driver	48-TSSOP	3.83	3.06	2.38
74ACT16244DGGR	296-1004-2-ND	Tri-State 16-Bit Buffer/Line Driver	48-TSSOP	4336.00/2,000		
74ACT16244DL	296-1005-5-ND	Tri-State 16-Bit Buffer/Line Driver	48-SSOP	3.83	3.06	2.38
74ACT16244DLR	296-1005-2-ND	Tri-State 16-Bit Buffer/Line Driver	48-SSOP	2193.00/1,000		
74ACT16245DGGR	296-4203-1-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-TSSOP	3.94	3.15	2.45
74ACT16245DGGR	296-4203-2-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-TSSOP	4462.00/2,000		
74ACT16245DL	296-1006-5-ND	Tri-State 16-Bit Buffer/Line Driver	48-SSOP	3.94	3.15	2.45
74ACT16245DLR	296-1006-2-ND	Tri-State 16-Bit Buffer/Line Driver	48-SSOP	2257.00/1,000		
74ACT16373DL	296-1007-5-ND	Tri-St. 16-Bit D-Type Transparent Latch	48-SSOP	3.83	3.06	2.38
74ACT16373DLR	296-1007-2-ND	Tri-St. 16-Bit D-Type Transparent Latch	48-SSOP	2193.00/1,000		
74ACT16374DL	296-1008-5-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SSOP	3.83	3.06	2.38
74ACT16374DLR	296-1008-2-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SSOP	2193.00/1,000		
74ACT16543DL	296-1009-5-ND	Tri-State 16-Bit Registered Xcvr. *NEW!*	56-SSOP	5.60	4.48	3.78
74ACT16543DLR	296-1009-1-ND	Tri-State 16-Bit Registered Transceiver	56-SSOP	5.64	4.52	3.81
74ACT16543DLR	296-1009-2-ND	Tri-State 16-Bit Registered Transceiver	56-SSOP	3525.00/1,000		
74ACT16623DL	296-4204-5-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-SSOP	4.28	3.42	2.66
74ACT16623DLR	296-4204-2-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-SSOP	2448.00/1,000		
74ACT16646DL	296-4205-5-ND	Tri-St. 16-Bit Bus Xcvr./Register *NEW!*	56-SSOP	6.60	5.28	4.46
74ACT16646DLR	296-4205-2-ND	Tri-St. 16-Bit Bus Xcvr./Register *NEW!*	56-SSOP	4150.00/1,000		
74ACT16651DL	296-4206-5-ND	Tri-State 16-Bit Xcvr./Register *NEW!*	56-SSOP	6.60	5.28	4.46
74ACT16657DL	296-4207-5-ND	Tri-State 16-Bit Transceiver *NEW!*	56-SSOP	8.50	6.80	5.74
74ACT16823DL	296-4208-5-ND	Tri-St. 18-Bit D-Type Flip-Flop *NEW!*	56-SSOP	5.20	4.16	3.51
74ACT16825DL	296-4209-5-ND	Tri-St. 18-Bit Buffer/Line Driver *NEW!*	56-SSOP	5.20	4.16	3.51
74ACT16825DLR	296-4209-2-ND	Tri-St. 18-Bit Buffer/Line Driver *NEW!*	56-SSOP	3275.00/1,000		
74ACT16841DL	296-4210-5-ND	Tri-State 20-Bit D-Type Latch *NEW!*	56-SSOP	5.20	4.16	3.51
74ACT16861DL	296-4211-5-ND	Tri-St. 20-Bit Bi-Dir. Xcvr. *NEW!*	56-SSOP	5.20	4.16	3.51
74ACT16861DLR	296-4211-2-ND	Tri-St. 20-Bit Bi-Dir. Xcvr. *NEW!*	56-SSOP	3275.00/1,000		
74ACT16863DL	296-4212-5-ND	Tri-State 18-Bit Transceiver *NEW!*	56-SSOP	5.20	4.16	3.51
74ACT16952DLR	296-4213-1-ND	Tri-St. 16-Bit Registered Xcvr. *NEW!*	56-SSOP	6.04	4.84	4.08
74ACT16952DLR	296-4213-2-ND	Tri-State 16-Bit Registered Transceiver *NEW!*	56-SSOP	3775.00/1,000		
CD74AC00E	296-4214-5-ND	Quad 2-Input NAND Gate *NEW!*	14-Dip	.80	.60	.45
CD74AC00M	296-4215-5-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	.84	.63	.48
CD74AC00M96	296-4215-2-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	715.00/2,500		
CD74AC02M96	296-4216-1-ND	Quad 2-Input NOR Gate *NEW!*	14-SOP	.88	.66	.50
CD74AC02M96	296-4216-2-ND	Quad 2-Input NOR Gate *NEW!*	14-SOP	715.00/2,500		
CD74AC04E	296-4217-5-ND	Hex Inverter *NEW!*	14-Dip	.80	.60	.45
CD74AC04M96	296-4218-1-ND	Hex Inverter *NEW!*	14-SOP	.88	.66	.50
CD74AC04M96	296-4218-2-ND	Hex Inverter *NEW!*	14-SOP	715.00/2,500		
CD74AC05E	296-4219-5-ND	Hex Inverter *NEW!*	14-Dip	.84	.63	.48
CD74AC05M	296-4220-5-ND	Hex Inverter *NEW!*	14-SOP	.88	.66	.50
CD74AC08M	296-1377-5-ND	Quad 2-Input AND Gate	14-SOIC	.84	.63	.48
CD74AC10M	296-4222-5-ND	Triple 3-Input NAND Gate *NEW!*	14-SOP	.84	.63	.48
CD74AC10M96	296-4222-2-ND	Triple 3-Input NAND Gate *NEW!*	14-SOP	715.00/2,500		
CD74AC14M	296-1981-5-ND	Hex Inverter Schmitt Trigger *NEW!*	14-SOP	.92	.69	.52
CD74AC14M96	296-1981-1-ND	Hex Inverter Schmitt Trigger	14-SOP	.96	.72	.54
CD74AC14M96	296-1981-2-ND	Hex Inverter Schmitt Trigger	14-SOP	780.00/2,500		
CD74AC20E	296-4237-5-ND	Dual 4-Input NAND Gate *NEW!*	14-Dip	.80	.60	.45
CD74AC20M	296-4238-5-ND	Dual 4-Input NAND Gate *NEW!*	14-SOP	.80	.60	.45
CD74AC32M96	296-1985-1-ND	Quad 2-Input OR Gate	14-SOP	.80	.60	.45
CD74AC32M96	296-1985-2-ND	Quad 2-Input OR Gate	14-SOP	650.00/2,500		
CD74AC74M	296-4249-5-ND	Dual D-Type Flip-Flop with Set/Reset *NEW!*	14-SOP	.96	.72	.54
CD74AC109M96	296-4221-1-ND	Dual JK Flip-Flop with Set/Reset *NEW!*	16-SOP	.78	.65	.52
CD74AC109M96	296-4221-2-ND	Dual JK Flip-Flop with Set/Reset *NEW!*	16-SOP	845.00/2,500		
CD74AC112E	296-4223-5-ND	Dual JK Flip-Flop with Set/Reset *NEW!*	16-Dip	1.23	1.03	.82
CD74AC112M	296-4224-5-ND	Dual JK Flip-Flop with Set/Reset *NEW!*	16-SOP	1.23	1.03	.82
CD74AC138E	296-4225-5-ND	3-8 Line Decoder/Demultiplexer *NEW!*	16-Dip	1.02	.85	.68
CD74AC138M	296-4226-5-ND	3-8 Line Decoder/Demultiplexer *NEW!*	16-SOP	1.05	.88	.70
CD74AC139M96	296-4227-1-ND	2-4 Line Decoder/Demultiplexer *NEW!*	16-SOP	1.08	.90	.72
CD74AC139M96	296-4227-2-ND	2-4 Line Decoder/Demultiplexer *NEW!*	16-SOP	1170.00/2,500		
CD74AC151M96	296-4228-1-ND	8-Input Multiplexer *NEW!*	16-SOP	1.08	.90	.72
CD74AC151M96	296-4228-2-ND	8-Input Multiplexer *NEW!*	16-SOP	1170.00/2,500		
CD74AC153M96	296-4229-1-ND	Dual 4-Input Multiplexer *NEW!*	16-SOP	1.08	.90	.72
CD74AC153M96	296-4229-2-ND	Dual 4-Input Multiplexer *NEW!*	16-SOP	1170.00/2,500		
CD74AC157E	296-4230-5-ND	Quad 2-Input Multiplexer *NEW!*	16-Dip	1.02	.85	.68
CD74AC157M	296-4231-5-ND	Quad 2-Input Multiplexer *NEW!*	16-SOP	1.05	.88	.70
CD74AC161M	296-4232-5-ND	4-Bit Sync Binary Counter *NEW!*	16-SOP	1.40	1.12	.84
CD74AC163E	296-4233-5-ND	4-Bit Synch. Binary Counter *NEW!*	16-Dip	1.40	1.12	.84
CD74AC163M96	296-4234-1-ND	4-Bit Synch. Binary Counter *NEW!*	16-SOP	1.40	1.12	.84
CD74AC163M96	296-4234-2-ND	4-Bit Synch. Binary Counter *NEW!*	16-SOP	1792.50/2,500		
CD74AC164E	296-4235-5-ND	8-Bit Serial-In/Parallel-Out Shift Register *NEW!*	14-Dip	1.40	1.12	.84
CD74AC174E	296-4236-5-ND	Hex D-Type Flip-Flop with Reset *NEW!*	16-SOP	1.05	.88	.70
CD74AC238M96	296-4239-1-ND	3-8 Line Decoder/Demux *NEW!*	16-SOP	1.20	1.00	.80
CD74AC238M96	296-4239-2-ND	3-8 Line Decoder/Demux *NEW!*	16-SOP	1300.00/2,500		
CD74AC240M	296-4240-5-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-SOP	1.28	1.02	.77
CD74AC253M	296-4242-5-ND	Tri-State Dual 4-Input Mux *NEW!*	16-SOP	1.05	.88	.70
CD74AC257M	296-4243-5-ND	Tri-State Quad 2-Input Mux *NEW!*	16-SOP	1.05	.88	.70
CD74AC273E	296-1378-5-ND	Octal D-Type Flip-Flop with Reset	20-Dip	1.25	1.00	.75
CD74AC280E	296-4245-5-ND	9-Bit Odd/Even Parity-Generator/Checker *NEW!*	14-Dip	1.11	.93	.74
CD74AC280M96	296-4246-1-ND	9-Bit Odd/Even Parity-Generator/Checker *NEW!*	14-SOP	1.17	.98	.78
CD74AC280M96	296-4246-2-ND	9-Bit Odd/Even Parity-Generator/Checker *NEW!*	14-SOP	1267.50/2,500		
CD74AC534M96	296-4247-1-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	1.43	1.14	.86
CD74AC534M96	296-4247-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	1482.00/2,000		
CD74AC541E	296-4248-5-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-Dip	1.33	1.06	.80
CD74AC573E	296-1379-5-ND	Octal Transparent Latch	20-Dip	1.35	1.08	.81
CD74ACT00M	296-4250-5-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	.84	.63	.48
CD74ACT02M	296-4251-5-ND	Quad 2-Input NOR Gate *NEW!*	14-SOP	.84	.63	.48
CD74ACT04M	296-1983-5-ND	Hex Inverter *NEW!*	14-SOP	.84	.63	.48
CD74ACT04M96	296-1983-1-ND	Hex Inveter	14-SOP	.88	.66	.50
CD74ACT05M	296-4252-5-ND	Hex Inverter with Open Drain *NEW!*	14-SOP	.84	.63	.48
CD74ACT08M	296-4253-5-ND	Quad 2-Input AND Gate *NEW!*	14-SOP	.84	.63	.48
CD74ACT14M	296-1380-5-ND	Hex-Schmitt Trigger Inverter	14-SOP	.92	.69	.52
CD74ACT20E	296-4266-5-ND	Dual 4-Input NAND Gate *NEW!*	14-Dip	.88	.66	.50
CD74ACT20M	296-4267-5-ND	Dual 4-Input NAND Gate *NEW!*	14-SOP	.88	.66	.50
CD74ACT32M	296-4278-5-ND	Quad 2-Input OR Gate *NEW!*	14-SOP	.88	.66	.50
CD74ACT74M	296-4285-5-ND	Dual D-Type Flip-Flop with Set/Reset *NEW!*	14-SOP	.96	.72	.54
CD74ACT86E	296-4286-5-ND	Quad 2-Input EX-OR Gate *NEW!*	14-Dip	.93	.78	.62
CD74ACT109M	296-4254-5-ND	Dual JK Flip-Flop with Set/Reset *NEW!*	16-SOP	.81	.68	.54
CD74ACT138M	296-4255-5-ND	3-8 Line Decoder/Demultiplexer *NEW!*	16-SOP	1.05	.88	.70
CD74ACT139E	296-4256-5-ND	Dual 2-4 Line Decoder/Demux *NEW!*	16-SOP	1.02	.85	.68
CD74ACT139M	296-4257-5-ND	Dual 2-4 Line Decoder/Demux *NEW!*	16-SOP	1.05	.88	.70
CD74ACT153E	296-4258-5-ND	Dual 4-Input Multiplexer *NEW!*	16-Dip	1.11	.93	.74
CD74ACT153M	296-4259-5-ND	Dual 4-Input Multiplexer *NEW!*	16-SOP	1.11	.93	.74
CD74ACT157E	296-4260-5-ND	Quad 2-Input Multiplexer *NEW!*	16-Dip	1.11	.93	.74
CD74ACT157M	296-4261-5-ND	Quad 2-Input Multiplexer *NEW!*	16-SOP	1.11	.93	.74
CD74ACT158M96	296-4262-1-ND	Quad 2-Input Multiplexer *NEW!*	16-SOP	1.08	.90	.72
CD74ACT158M96	296-4262-2-ND	Quad 2-Input Multiplexer *NEW!*	16-SOP	1170.00/2,500		
CD74ACT161M	296-4263-5-ND	4-Bit Synch. Binary Counter *NEW!*	16-SOP	1.30	1.04	.78
CD74ACT163M	296-4264-5-ND	4-Bit Synch. Binary Counter *NEW!*	16-SOP	1.30	1.04	.78
CD74ACT164E	296-4265-5-ND	8-Bit Serial-In/Parallel-Out Shift Register *NEW!*	14-Dip	1.40	1.12	.84
CD74ACT164M	296-1381-5-ND	8-Bit Serial-In/Parallel-Out Shift Register	14-SOP	1.43	1.14	.86
CD74ACT241M96	296-4268-1-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-SSOP	1.25	1.00	.75
CD74ACT241M96	296-4268-2-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-SSOP	1300.00/2,000		
CD74ACT244E	296-4269-5-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-Dip	1.25	1.00	.75
CD74ACT244M	296-4270-5-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOP	1.28	1.02	.77
CD74ACT245M	296-4271-5-ND	Tri-State Octal Bus Non-Inverting Transceiver *NEW!*	20-SOP	1.40	1.12	.84

(Continued)

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T. I.	Digi-Key			Price Each★		
Part No.	Part No.	Description	Pkg.	1	25	100
CD74ACT273E	296-4272-5-ND	Octal D-Type Flip-Flop w/Reset *NEW!*	20-Dip	1.25	1.00	.75
CD74ACT273M	296-4273-5-ND	Octal D-Type Flip-Flop w/Reset *NEW!*	20-SOP	1.28	1.02	.77
CD74ACT273SM96	296-4274-1-ND	Octal D-Type Flip-Flop w/Reset *NEW!*	20-SSOP	1.48	1.18	.89
CD74ACT273SM96	296-4274-2-ND	Octal D-Type Flip-Flop w/Reset *NEW!*	20-SSOP	1534.00/2,000		
CD74ACT283E	296-4275-5-ND	4-Bit Binary Fill Adder w/Fast-Carry *NEW!*	16-Dip	1.25	1.00	.75
CD74ACT297M	296-4276-5-ND	Digital Phase-Locked Loop *NEW!*	16-SOP	1.63	1.30	.98
CD74ACT299M	296-4277-5-ND	8-In Univ. Shift/Storage Register *NEW!*	20-SOP	2.54	2.04	1.59
CD74ACT374E	296-4279-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-Dip	1.30	1.04	.78
CD74ACT541E	296-1382-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	1.33	1.06	.80
CD74ACT541M	296-4280-5-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOP	1.35	1.08	.81
CD74ACT573M	296-4282-5-ND	Tri-State Octal Transparent Latch *NEW!*	20-SOP	1.35	1.08	.81
CD74ACT623M96	296-4283-1-ND	Tri-State Octal-Bus Non-Inverting Transceiver *NEW!*	20-SOP	1.63	1.30	.98
CD74ACT623M96	296-4283-2-ND	Tri-State Octal-Bus Non-Inverting Transceiver *NEW!*	20-SOP	1690.00/2,000		
CD74ACT652M	296-4284-5-ND	Tri-St. Octal-Bus Xcvr./Register *NEW!*	24-SOP	5.06	4.05	3.15
SN74AC00D	296-1052-5-ND	Quad 2-Input NAND Gate	14-SOP	.60	.45	.34
SN74AC00DR	296-1052-2-ND	Quad 2-Input NAND Gate	14-SOP	552.50/2,500		
SN74AC00N	296-4287-5-ND	Quad 2-Input NAND Gate *NEW!*	14-Dip	.60	.45	.34
SN74AC00PWR	296-4288-1-ND	Quad 2-Input NAND Gate *NEW!*	14-TSSOP	.60	.45	.34
SN74AC00PWR	296-4288-2-ND	Quad 2-Input NAND Gate *NEW!*	14-TSSOP	400.00/2,000		
SN74AC04D	296-1053-5-ND	Hex Inverter	14-SOP	.60	.45	.34
SN74AC04DR	296-1053-2-ND	Hex Inverter	14-SOP	552.50/2,500		
SN74AC04DBR	296-4289-1-ND	Hex Inverter *NEW!*	14-SSOP	.60	.45	.34
SN74AC04DBR	296-4289-2-ND	Hex Inverter *NEW!*	14-SSOP	400.00/2,000		
SN74AC04N	296-4290-5-ND	Hex Inverter *NEW!*	14-Dip	.60	.45	.34
SN74AC04PWR	296-1054-1-ND	Hex Inverter	14-TSSOP	.60	.45	.34
SN74AC04PWR	296-1054-2-ND	Hex Inverter	14-TSSOP	400.00/2,000		
SN74AC08DBR	296-4291-1-ND	Quad 2-Input AND Gate *NEW!*	14-SSOP	.60	.45	.34
SN74AC08DBR	296-4291-2-ND	Quad 2-Input AND Gate *NEW!*	14-SSOP	400.00/2,000		
SN74AC08DR	296-1055-1-ND	Quad 2-Input AND Gate	14-SOP	.68	.51	.39
SN74AC08DR	296-1055-2-ND	Quad 2-Input AND Gate	14-SOP	552.50/2,500		
SN74AC08PWR	296-4292-1-ND	Quad 2-Input AND Gate *NEW!*	14-TSSOP	.60	.45	.34
SN74AC08PWR	296-4292-2-ND	Quad 2-Input AND Gate *NEW!*	14-TSSOP	400.00/2,000		
SN74AC10DBR	296-4293-1-ND	Triple 3-Input NAND Gate *NEW!*	14-SSOP	.60	.45	.34
SN74AC10DBR	296-4293-2-ND	Triple 3-Input NAND Gate *NEW!*	14-SSOP	400.00/2,000		
SN74AC10D	296-4294-5-ND	Triple 3-Input NAND Gate *NEW!*	14-SOP	.60	.45	.34
SN74AC10DR	296-4294-2-ND	Triple 3-Input NAND Gate *NEW!*	14-SOP	552.50/2,500		
SN74AC10PWR	296-4295-1-ND	Triple 3-Input NAND Gate *NEW!*	14-TSSOP	.60	.45	.34
SN74AC10PWR	296-4295-2-ND	Triple 3-Input NAND Gate *NEW!*	14-TSSOP	400.00/2,000		
SN74AC11DBR	296-4296-1-ND	Triple 3-Input AND Gate *NEW!*	14-SSOP	.60	.45	.34
SN74AC11DBR	296-4296-2-ND	Triple 3-Input AND Gate *NEW!*	14-SSOP	400.00/2,000		
SN74AC11D	296-4297-5-ND	Triple 3-Input AND Gate *NEW!*	14-SOP	.60	.45	.34
SN74AC11DR	296-4297-2-ND	Triple 3-Input AND Gate *NEW!*	14-SOP	552.50/2,500		
SN74AC11PWR	296-4298-1-ND	Triple 3-Input AND Gate *NEW!*	14-TSSOP	.60	.45	.34
SN74AC11PWR	296-4298-2-ND	Triple 3-Input AND Gate *NEW!*	14-TSSOP	400.00/2,000		
SN74AC14DBR	296-4299-1-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SSOP	.64	.48	.36
SN74AC14DBR	296-4299-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SSOP	426.00/2,000		
SN74AC14D	296-4300-5-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SOP	.64	.48	.36
SN74AC14DR	296-4300-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SOP	585.00/2,500		
SN74AC14N	296-4301-5-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-Dip	.64	.48	.36
SN74AC14PWR	296-4302-1-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TSSOP	.64	.48	.36
SN74AC14PWR	296-4302-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TSSOP	426.00/2,000		
SN74AC32D	296-1059-5-ND	Quad 2-Input OR Gate	14-SOP	.60	.45	.34
SN74AC32DR	296-1059-2-ND	Quad 2-Input OR Gate	14-SOP	552.50/2,500		
SN74AC32DBR	296-4317-1-ND	Quad 2-Input OR Gate *NEW!*	14-SSOP	.60	.45	.34
SN74AC32DBR	296-4317-2-ND	Quad 2-Input OR Gate *NEW!*	14-SSOP	400.00/2,000		
SN74AC32N	296-4318-5-ND	Quad 2-Input OR Gate *NEW!*	14-Dip	.60	.45	.34
SN74AC32PWR	296-4319-1-ND	Quad 2-Input OR Gate *NEW!*	14-TSSOP	.60	.45	.34
SN74AC32PWR	296-4319-2-ND	Quad 2-Input OR Gate *NEW!*	14-TSSOP	400.00/2,000		
SN74AC74D	296-1063-5-ND	Dual D-Type Flip-Flop with Clear/Preset *NEW!*	14-SOP	.68	.51	.39
SN74AC74DR	296-1063-1-ND	Dual D-Type Flip-Flop with Clear/Preset	14-SOP	.76	.57	.43
SN74AC74DR	296-1063-2-ND	Dual D-Type Flip-Flop with Clear/Preset	14-SOP	617.50/2,500		
SN74AC74DBR	296-4341-1-ND	Dual D-Type Flip-Flop with Clear/Preset *NEW!*	14-SSOP	.68	.51	.39
SN74AC74DBR	296-4341-2-ND	Dual D-Type Flip-Flop with Clear/Preset *NEW!*	14-SSOP	452.00/2,000		
SN74AC74N	296-4342-5-ND	Dual D-Type Flip-Flop with Clear/Preset *NEW!*	14-Dip	.68	.51	.39
SN74AC74PWR	296-1064-1-ND	Dual D-Type Flip-Flop with Clear/Preset	14-TSSOP	.68	.51	.39
SN74AC74PWR	296-1064-2-ND	Dual D-Type Flip-Flop with Clear/Preset	14-TSSOP	452.00/2,000		
SN74AC86D	296-4343-5-ND	Quad 2-Input EX-OR Gate *NEW!*	14-SOP	.68	.51	.39
SN74AC86DBR	296-4344-1-ND	Quad 2-Input EX-OR Gate *NEW!*	14-SSOP	.68	.51	.39
SN74AC86DBR	296-4344-2-ND	Quad 2-Input EX-OR Gate *NEW!*	14-SSOP	452.00/2,000		
SN74AC86N	296-4345-5-ND	Quad 2-Input EX-OR Gate *NEW!*	14-Dip	.68	.51	.39
SN74AC86PWR	296-4346-1-ND	Quad 2-Input EX-OR Gate *NEW!*	14-TSSOP	.68	.51	.39
SN74AC86PWR	296-4346-2-ND	Quad 2-Input EX-OR Gate *NEW!*	14-TSSOP	452.00/2,000		
SN74AC240DBR	296-4303-1-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-SSOP	.96	.80	.64
SN74AC240DBR	296-4303-2-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-SSOP	852.00/2,000		
SN74AC240DW	296-4304-5-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-SOP	.96	.80	.64
SN74AC240N	296-4305-5-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-Dip	.96	.80	.64
SN74AC240PWR	296-4306-1-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-TSSOP	.96	.80	.64
SN74AC240PWR	296-4306-2-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-TSSOP	852.00/2,000		
SN74AC241DBR	296-4307-1-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-SSOP	.96	.80	.64
SN74AC241DBR	296-4307-2-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-SSOP	852.00/2,000		
SN74AC241DW	296-1056-5-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-SOP	.96	.80	.64
SN74AC241DWR	296-1056-1-ND	Tri-State Octal Buffer/Line Driver	20-SOP	1.02	.85	.68
SN74AC241DWR	296-1056-2-ND	Tri-State Octal Buffer/Line Driver	20-SOP	904.00/2,000		
SN74AC241N	296-4308-5-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-Dip	.96	.80	.64
SN74AC241PWR	296-4309-1-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-TSSOP	1.05	.88	.70
SN74AC241PWR	296-4309-2-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-TSSOP	932.00/2,000		
SN74AC244DBR	296-4310-1-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-SSOP	.96	.80	.64
SN74AC244DBR	296-4310-2-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-SSOP	852.00/2,000		
SN74AC244DWR	296-1057-1-ND	Tri-State Octal Buffer/Line Driver	20-SOP	1.02	.85	.68
SN74AC244DWR	296-1057-2-ND	Tri-State Octal Buffer/Line Driver	20-SOP	904.00/2,000		
SN74AC244N	296-4311-5-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-Dip	.96	.80	.64
SN74AC244NSR	296-4312-1-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOP	1.11	.93	.74
SN74AC244NSR	296-4312-2-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOP	984.00/2,000		
SN74AC244PWR	296-4313-1-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-TSSOP	.96	.80	.64
SN74AC244PWR	296-4313-2-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-TSSOP	852.00/2,000		
SN74AC245DBR	296-4314-1-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SSOP	.96	.80	.64
SN74AC245DBR	296-4314-2-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SSOP	852.00/2,000		
SN74AC245DW	296-1058-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	.96	.80	.64
SN74AC245DWR	296-1058-1-ND	Tri-State Octal Bus Transceiver	20-SOP	1.02	.85	.68
SN74AC245DWR	296-1058-2-ND	Tri-State Octal Bus Transceiver	20-SOP	904.00/2,000		
SN74AC245N	296-4315-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-Dip	.96	.80	.64
SN74AC245PWR	296-4316-1-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TSSOP	.96	.80	.64
SN74AC245PWR	296-4316-2-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TSSOP	852.00/2,000		
SN74AC373DBR	296-4320-1-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SSOP	.96	.80	.64
SN74AC373DBR	296-4320-2-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SSOP	852.00/2,000		
SN74AC373DWR	296-4321-1-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SOP	1.02	.85	.68
SN74AC373DWR	296-4321-2-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SOP	904.00/2,000		
SN74AC373NSR	296-4322-1-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SOP	1.11	.93	.74
SN74AC373NSR	296-4322-2-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SOP	984.00/2,000		
SN74AC373PWR	296-4323-1-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-TSSOP	.96	.80	.64
SN74AC373PWR	296-4323-2-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-TSSOP	852.00/2,000		
SN74AC374DBR	296-4324-1-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	.96	.80	.64
SN74AC374DBR	296-4324-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	852.00/2,000		
SN74AC374DW	296-1060-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	.96	.80	.64
SN74AC374DWR	296-1060-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	1.02	.85	.68
SN74AC374DWR	296-1060-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	904.00/2,000		
SN74AC374PWR	296-4325-1-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	.96	.80	.64
SN74AC374PWR	296-4325-2-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	852.00/2,000		
SN74AC533DBR	296-4326-1-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SSOP	1.05	.88	.70
SN74AC533DBR	296-4326-2-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SSOP	932.00/2,000		
SN74AC533DW	296-4327-5-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SOP	1.05	.88	.70
SN74AC533PWR	296-4328-1-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-TSSOP	1.05	.88	.70
SN74AC533PWR	296-4328-2-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-TSSOP	932.00/2,000		
SN74AC534DBR	296-4329-1-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	1.05	.88	.70
SN74AC534DBR	296-4329-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	932.00/2,000		
SN74AC534DW	296-4330-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	1.05	.88	.70
SN74AC534N	296-4331-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-Dip	1.05	.88	.70
SN74AC534PWR	296-4332-1-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	1.05	.88	.70
SN74AC534PWR	296-4332-2-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	932.00/2,000		
SN74AC563DBR	296-4333-1-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SSOP	1.05	.88	.70
SN74AC563DBR	296-4333-2-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SSOP	932.00/2,000		
SN74AC563DW	296-4334-5-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SOP	1.05	.88	.70
SN74AC563PWR	296-4335-1-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-TSSOP	1.05	.88	.70
SN74AC563PWR	296-4335-2-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-TSSOP	932.00/2,000		
SN74AC564DW	296-4336-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	1.05	.88	.70
SN74AC573DBR	296-4337-1-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SSOP	.96	.80	.64
SN74AC573DBR	296-4337-2-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SSOP	852.00/2,000		
SN74AC573DW	296-1061-5-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SOP	.96	.80	.64
SN74AC573DWR	296-1061-1-ND	Tri-State Octal D-Type Transparent Latch	20-SOP	1.02	.85	.68
SN74AC573DWR	296-1061-2-ND	Tri-State Octal D-Type Transparent Latch	20-SOP	904.00/2,000		
SN74AC573PWR	296-4338-1-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-TSSOP	.96	.80	.64
SN74AC573PWR	296-4338-2-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-TSSOP	852.00/2,000		
SN74AC574DBR	296-4339-1-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	.96	.80	.64
SN74AC574DBR	296-4339-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	852.00/2,000		
SN74AC574DW	296-1062-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	.96	.80	.64
SN74AC574DWR	296-1062-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	1.02	.85	.68
SN74AC574DWR	296-1062-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	904.00/2,000		
SN74AC574PWR	296-4340-1-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	.96	.80	.64
SN74AC574PWR	296-4340-2-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	852.00/2,000		
SN74ACT00D	296-1452-5-ND	Quad 2-Input NAND Gate	14-SOP	.60	.45	.34
SN74ACT00DBR	296-4347-1-ND	Quad 2-Input NAND Gate *NEW!*	14-SSOP	.60	.45	.34
SN74ACT00DBR	296-4347-2-ND	Quad 2-Input NAND Gate *NEW!*	14-SSOP	400.00/2,000		
SN74ACT00N	296-4348-5-ND	Quad 2-Input NAND Gate *NEW!*	14-Dip	.60	.45	.34
SN74ACT00PWR	296-4349-1-ND	Quad 2-Input NAND Gate *NEW!*	14-TSSOP	.60	.45	.34
SN74ACT00PWR	296-4349-2-ND	Quad 2-Input NAND Gate *NEW!*	14-TSSOP	400.00/2,000		
SN74ACT04D	296-1065-5-ND	Hex Inverter	14-SOP	.60	.45	.34
SN74ACT04DR	296-1065-2-ND	Hex Inverter	14-SOP	552.50/2,500		
SN74ACT04DBR	296-4350-1-ND	Hex Inverter *NEW!*	14-SSOP	.60	.45	.34
SN74ACT04DBR	296-4350-2-ND	Hex Inverter *NEW!*	14-SSOP	400.00/2,000		
SN74ACT04N	296-4351-5-ND	Hex Inverter *NEW!*	14-Dip	.60	.45	.34
SN74ACT04PWR	296-4352-2-ND	Hex Inverter *NEW!*	14-TSSOP	400.00/2,000		
SN74ACT08D	296-1066-5-ND	Quad 2-Input AND Gate	14-SOP	.60	.45	.34
SN74ACT08DR	296-1066-2-ND	Quad 2-Input AND Gate	14-SOP	552.50/2,500		
SN74ACT08DBR	296-4353-1-ND	Quad 2-Input AND Gate *NEW!*	14-SSOP	.60	.45	.34
SN74ACT08DBR	296-4353-2-ND	Quad 2-Input AND Gate *NEW!*	14-SSOP	400.00/2,000		
SN74ACT08N	296-4354-5-ND	Quad 2-Input AND Gate *NEW!*	14-Dip	.60	.45	.34
SN74ACT08PWR	296-4355-1-ND	Quad 2-Input AND Gate *NEW!*	14-TSSOP	.60	.45	.34
SN74ACT08PWR	296-4355-2-ND	Quad 2-Input AND Gate *NEW!*	14-TSSOP	400.00/2,000		
SN74ACT10D	296-4359-5-ND	Triple 3-Input NAND Gate *NEW!*	14-SOP	.60	.45	.34
SN74ACT10DR	296-4360-2-ND	Triple 3-Input NAND Gate *NEW!*	14-SOP	552.50/2,500		
SN74ACT10DBR	296-4358-1-ND	Triple 3-Input NAND Gate *NEW!*	14-SSOP	.60	.45	.34
SN74ACT10DBR	296-4358-2-ND	Triple 3-Input NAND Gate *NEW!*	14-SSOP	400.00/2,000		
SN74ACT10PWR	296-4361-1-ND	Triple 3-Input NAND Gate *NEW!*	14-TSSOP	.60	.45	.34
SN74ACT10PWR	296-4361-2-ND	Triple 3-Input NAND Gate *NEW!*	14-TSSOP	400.00/2,000		
SN74ACT11D	296-1455-5-ND	Triple 3-Input AND Gate	14-SOP	.60	.45	.34

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74ACT11DBR	296-4362-1-ND	Triple 3-Input NAND Gate *NEW!*	14-SSOP	.60	.45	.34
SN74ACT11DBR	296-4362-2-ND	Triple 3-Input NAND Gate *NEW!*	14-SSOP	400.00/2,000		
SN74ACT11N	296-4363-5-ND	Triple 3-Input NAND Gate *NEW!*	14-Dip	.60	.45	.34
SN74ACT11PWR	296-4364-1-ND	Triple 3-Input NAND Gate *NEW!*	14-TSSOP	.60	.45	.34
SN74ACT11PWR	296-4364-2-ND	Triple 3-Input NAND Gate *NEW!*	14-TSSOP	400.00/2,000		
SN74ACT14D	296-1068-5-ND	Hex Schmitt-Trigger Inverter	14-SOP	.64	.48	.36
SN74ACT14DR	296-1068-2-ND	Hex Schmitt-Trigger Inverter	14-SOP	585.00/2,500		
SN74ACT14DBR	296-4367-1-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SSOP	.64	.48	.36
SN74ACT14DBR	296-4367-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SSOP	426.00/2,000		
SN74ACT14N	296-4368-5-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-Dip	.64	.48	.36
SN74ACT14PWR	296-4369-1-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TSSOP	.64	.48	.36
SN74ACT14PWR	296-4369-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TSSOP	426.00/2,000		
SN74ACT32D	296-1074-5-ND	Quad 2-Input OR Gate *NEW!*	14-SOP	.60	.45	.34
SN74ACT32DR	296-1074-1-ND	Quad 2-Input OR Gate	14-SOP	.68	.51	.39
SN74ACT32DR	296-1074-2-ND	Quad 2-Input OR Gate	14-SOP	552.50/2,500		
SN74ACT32DBR	296-4387-1-ND	Quad 2-Input OR Gate *NEW!*	14-SSOP	.60	.45	.34
SN74ACT32DBR	296-4387-2-ND	Quad 2-Input OR Gate *NEW!*	14-SSOP	400.00/2,000		
SN74ACT32N	296-4388-5-ND	Quad 2-Input OR Gate *NEW!*	14-Dip	.60	.45	.34
SN74ACT32PWR	296-4389-1-ND	Quad 2-Input OR Gate *NEW!*	14-TSSOP	.60	.45	.34
SN74ACT32PWR	296-4389-2-ND	Quad 2-Input OR Gate *NEW!*	14-TSSOP	400.00/2,000		
SN74ACT74D	296-1079-5-ND	Dual D-Type Flip-Flop	14-SOP	.68	.51	.39
SN74ACT74DR	296-1079-2-ND	Dual D-Type Flip-Flop	14-SOP	617.50/2,500		
SN74ACT74DBR	296-4443-1-ND	Dual D-Type Flip-Flop *NEW!*	14-SSOP	.68	.51	.39
SN74ACT74DBR	296-4443-2-ND	Dual D-Type Flip-Flop *NEW!*	14-SSOP	452.00/2,000		
SN74ACT74N	296-4444-5-ND	Dual D-Type Flip-Flop *NEW!*	14-Dip	.68	.51	.39
SN74ACT74PWR	296-4446-1-ND	Dual D-Type Flip-Flop *NEW!*	14-TSSOP	.68	.51	.39
SN74ACT74PWR	296-4446-2-ND	Dual D-Type Flip-Flop *NEW!*	14-TSSOP	452.00/2,000		
SN74ACT86D	296-1463-5-ND	Quad 2-Input EX-OR Gate	14-SOP	.68	.51	.39
SN74ACT86DBR	296-4502-1-ND	Quad 2-Input EX-OR Gate *NEW!*	14-SSOP	.68	.51	.39
SN74ACT86DBR	296-4502-2-ND	Quad 2-Input EX-OR Gate *NEW!*	14-SSOP	452.00/2,000		
SN74ACT86N	296-4503-5-ND	Quad 2-Input EX-OR Gate *NEW!*	14-Dip	.68	.51	.39
SN74ACT86PWR	296-4504-1-ND	Quad 2-Input EX-OR Gate *NEW!*	14-TSSOP	.68	.51	.39
SN74ACT86PWR	296-4504-2-ND	Quad 2-Input EX-OR Gate *NEW!*	14-TSSOP	452.00/2,000		
SN74ACT240DBR	296-4377-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	.96	.80	.64
SN74ACT240DBR	296-4377-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	852.00/2,000		
SN74ACT240DWR	296-4378-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1.02	.85	.68
SN74ACT240DWR	296-4378-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	904.00/2,000		
SN74ACT240N	296-4379-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	.96	.80	.64
SN74ACT240PWR	296-4380-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	.96	.80	.64
SN74ACT240PWR	296-4380-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	852.00/2,000		
SN74ACT241DBR	296-4381-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	.96	.80	.64
SN74ACT241DBR	296-4381-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	852.00/2,000		
SN74ACT241DW	296-4382-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	.96	.80	.64
SN74ACT241N	296-4383-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	.96	.80	.64
SN74ACT241PWR	296-4384-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	.96	.80	.64
SN74ACT241PWR	296-4384-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	852.00/2,000		
SN74ACT244DBR	296-1069-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.96	.80	.64
SN74ACT244DBR	296-1069-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	852.00/2,000		
SN74ACT244DW	296-1070-5-ND	Tri-State Octal Buffer/Driver	20-SOP	.96	.80	.64
SN74ACT244DWR	296-1070-2-ND	Tri-State Octal Buffer/Driver	20-SOP	904.00/2,000		
SN74ACT244N	296-4385-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	.96	.80	.64
SN74ACT244PWR	296-1071-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.96	.80	.64
SN74ACT244PWR	296-1071-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	852.00/2,000		
SN74ACT245DBR	296-4386-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	.96	.80	.64
SN74ACT245DBR	296-4386-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	852.00/2,000		
SN74ACT245DW	296-1072-5-ND	Tri-State Octal Buffer/Driver	20-SOP	.96	.80	.64
SN74ACT245DWR	296-1072-2-ND	Tri-State Octal Buffer/Driver	20-SOP	904.00/2,000		
SN74ACT245N	296-1460-5-ND	Tri-State Octal Buffer/Driver	20-Dip	.96	.80	.64
SN74ACT245PWR	296-1073-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.96	.80	.64
SN74ACT245PWR	296-1073-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	852.00/2,000		
SN74ACT373DBR	296-4420-1-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SSOP	.96	.80	.64
SN74ACT373DBR	296-4420-2-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SSOP	852.00/2,000		
SN74ACT373DW	296-4421-5-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SOP	.96	.80	.64
SN74ACT373N	296-4422-5-ND	Tri-St. Octal D-Type Transp. Latch *NEW!*	20-Dip	.96	.80	.64
SN74ACT373PWR	296-1075-1-ND	Tri-St. Octal D-Type Transparent Latch	20-TSSOP	.96	.80	.64
SN74ACT373PWR	296-1075-2-ND	Tri-St. Octal D-Type Transparent Latch	20-TSSOP	852.00/2,000		
SN74ACT374DBR	296-1076-1-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	.96	.80	.64
SN74ACT374DBR	296-1076-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	852.00/2,000		
SN74ACT374DW	296-1077-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	.96	.80	.64
SN74ACT374DWR	296-1077-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	904.00/2,000		
SN74ACT374PWR	296-4423-1-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	.96	.80	.64
SN74ACT374PWR	296-4423-2-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	852.00/2,000		
SN74ACT533DBR	296-4424-1-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SSOP	1.05	.88	.70
SN74ACT533DBR	296-4424-2-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SSOP	932.00/2,000		
SN74ACT533DW	296-4425-5-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SOP	1.05	.88	.70
SN74ACT533N	296-4426-5-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-Dip	1.05	.88	.70
SN74ACT533PWR	296-4427-1-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-TSSOP	1.05	.88	.70
SN74ACT533PWR	296-4427-2-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-TSSOP	932.00/2,000		
SN74ACT534DBR	296-4428-1-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	1.05	.88	.70
SN74ACT534DBR	296-4428-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	932.00/2,000		
SN74ACT534DW	296-4429-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	1.05	.88	.70
SN74ACT534DWR	296-4429-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	984.00/2,000		
SN74ACT534PWR	296-4430-1-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	1.05	.88	.70
SN74ACT534PWR	296-4430-2-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	932.00/2,000		
SN74ACT563DBR	296-4431-1-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SSOP	1.05	.88	.70
SN74ACT563DBR	296-4431-2-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SSOP	932.00/2,000		
SN74ACT563DW	296-4432-5-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SOP	1.05	.88	.70
SN74ACT564DBR	296-4433-1-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	1.05	.88	.70
SN74ACT564DBR	296-4433-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	932.00/2,000		
SN74ACT564DW	296-4434-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	1.05	.88	.70
SN74ACT564PWR	296-4435-1-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	1.05	.88	.70
SN74ACT564PWR	296-4435-2-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	932.00/2,000		
SN74ACT573DBR	296-4436-1-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SSOP	.96	.80	.64
SN74ACT573DBR	296-4436-2-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SSOP	852.00/2,000		
SN74ACT573DW	296-4437-5-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SOP	.96	.80	.64
SN74ACT573N	296-4438-5-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-Dip	.96	.80	.64
SN74ACT573PWR	296-4439-2-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-TSSOP	852.00/2,000		
SN74ACT574DBR	296-4440-1-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	.96	.80	.64
SN74ACT574DBR	296-4440-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	852.00/2,000		
SN74ACT574DW	296-4441-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	.96	.80	.64
SN74ACT574N	296-4442-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-Dip	.96	.80	.64
SN74ACT574PWR	296-1078-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	.96	.80	.64
SN74ACT574PWR	296-1078-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	852.00/2,000		
SN74ACT1071D	296-4356-5-ND	10-Bit Bus Termination Array *NEW!*	14-SOP	2.25	1.80	1.35
SN74ACT1073DW	296-4357-5-ND	16-Bit Bus Termination Array *NEW!*	20-SOP	2.36	1.89	1.47
SN74ACT1284DBR	296-4365-1-ND	Tri-State 7-Bit Bus Interface *NEW!*	20-SSOP	1.38	1.15	.92
SN74ACT1284DBR	296-4365-2-ND	Tri-State 7-Bit Bus Interface *NEW!*	20-SSOP	1224.00/2,000		
SN74ACT1284DW	296-1067-5-ND	Tri-State 7-Bit Bus Interface	20-SOP	1.38	1.15	.92
SN74ACT1284DWR	296-1067-2-ND	Tri-State 7-Bit Bus Interface	20-SOP	1276.00/2,000		
SN74ACT1284PWR	296-4366-1-ND	Tri-State 7-Bit Bus Interface *NEW!*	20-TSSOP	1.38	1.15	.92
SN74ACT1284PWR	296-4366-2-ND	Tri-State 7-Bit Bus Interface *NEW!*	20-TSSOP	1224.00/2,000		
SN74ACT2226DW	296-4370-5-ND	Dual 64x1 FIFO Memory *NEW!*	24-SOP	5.90	4.72	3.99
SN74ACT2227DW	296-4371-5-ND	Dual 64x1 FIFO Memory *NEW!*	28-SOP	8.10	6.48	5.47
SN74ACT2228DW	296-4372-5-ND	Dual 64x1 FIFO Memory *NEW!*	24-SOP	6.30	5.04	4.26
SN74ACT2229DW	296-4373-5-ND	Dual 64x1 FIFO Memory *NEW!*	28-SOP	9.00	7.20	6.08
SN74ACT2235-20PAG	296-4374-ND	1024x9x2 Asynch. Bi-Directional FIFO Memory *NEW!*	64-TQFP	24.33	22.71	21.09
SN74ACT2235-40FN	296-4375-5-ND	1024x9x2 Asynch. Bi-Directional FIFO Memory *NEW!*	44-PLCC	14.19	12.78	11.34
SN74ACT2235-60FN	296-4376-5-ND	1024x9x2 Asynch. Bi-Directional FIFO Memory *NEW!*	44-PLCC	13.01	11.72	10.39
SN74ACT3622-15PCB	296-4390-ND	256x36x2 Bi-Directional Synch. FIFO Memory *NEW!*	120-TQFP	33.75	31.50	29.25
SN74ACT3622-15PQ	296-4391-ND	256x36x2 Bi-Directional Synch. FIFO Memory *NEW!*	132-PQFP	33.75	31.50	29.25
SN74ACT3622-20PCB	296-4392-ND	256x36x2 Bi-Directional Synch. FIFO Memory *NEW!*	120-TQFP	27.75	25.90	24.05
SN74ACT3622-20PQ	296-4393-ND	256x36x2 Bi-Directional Synch. FIFO Memory *NEW!*	132-PQFP	27.75	25.90	24.05
SN74ACT3622-30PCB	296-4394-ND	256x36x2 Bi-Directional Synch. FIFO Memory *NEW!*	120-TQFP	24.75	23.10	21.45
SN74ACT3622-30PQ	296-4395-ND	256x36x2 Bi-Directional Synch. FIFO Memory *NEW!*	132-PQFP	24.75	23.10	21.45
SN74ACT3631-15PCB	296-4396-ND	512x36 Clocked FIFO Memory *NEW!*	120-TQFP	33.75	31.50	29.25
SN74ACT3631-15PQ	296-4397-ND	512x36 Clocked FIFO Memory *NEW!*	132-PQFP	33.75	31.50	29.25
SN74ACT3631-20PCB	296-4398-ND	512x36 Clocked FIFO Memory *NEW!*	120-TQFP	27.75	25.90	24.05
SN74ACT3631-20PQ	296-4399-ND	512x36 Clocked FIFO Memory *NEW!*	132-PQFP	27.75	25.90	24.05
SN74ACT3631-30PCB	296-4400-ND	512x36 Clocked FIFO Memory *NEW!*	120-TQFP	24.75	23.10	21.45
SN74ACT3631-30PQ	296-4401-ND	512x36 Clocked FIFO Memory *NEW!*	132-PQFP	24.75	23.10	21.45
SN74ACT3632-15PCB	296-4402-ND	512x36x2 Bi-Dir. FIFO Memory *NEW!*	120-TQFP	36.75	34.30	31.85
SN74ACT3632-15PQ	296-4403-ND	512x36x2 Bi-Dir. FIFO Memory *NEW!*	132-PQFP	36.75	34.30	31.85
SN74ACT3632-20PCB	296-4404-ND	512x36x2 Bi-Dir. FIFO Memory *NEW!*	120-TQFP	30.75	28.70	26.65
SN74ACT3632-20PQ	296-4405-ND	512x36x2 Bi-Dir. FIFO Memory *NEW!*	132-PQFP	30.75	28.70	26.65
SN74ACT3632-30PCB	296-4406-ND	512x36x2 Bi-Dir. FIFO Memory *NEW!*	120-TQFP	29.25	27.30	25.35
SN74ACT3632-30PQ	296-4407-ND	512x36x2 Bi-Dir. FIFO Memory *NEW!*	132-PQFP	29.25	27.30	25.35
SN74ACT3641-15PCB	296-4408-ND	1K x 36 Clocked FIFO Memory *NEW!*	120-TQFP	36.75	34.30	31.85
SN74ACT3641-15PQ	296-4409-ND	1K x 36 Clocked FIFO Memory *NEW!*	132-PQFP	36.75	34.30	31.85
SN74ACT3641-20PCB	296-4410-ND	1K x 36 Clocked FIFO Memory *NEW!*	120-TQFP	30.75	28.70	26.65
SN74ACT3641-20PQ	296-4411-ND	1K x 36 Clocked FIFO Memory *NEW!*	132-PQFP	30.75	28.70	26.65
SN74ACT3641-30PCB	296-4412-ND	1K x 36 Clocked FIFO Memory *NEW!*	120-TQFP	29.25	27.30	25.35
SN74ACT3641-30PQ	296-4413-ND	1K x 36 Clocked FIFO Memory *NEW!*	132-PQFP	29.25	27.30	25.35
SN74ACT3651-15PCB	296-4414-ND	2K x 36 Synch. FIFO Memory *NEW!*	120-TQFP	39.75	37.10	34.45
SN74ACT3651-15PQ	296-4415-ND	2K x 36 Synch. FIFO Memory *NEW!*	132-PQFP	39.75	37.10	34.45
SN74ACT3651-20PCB	296-4416-ND	2K x 36 Synch. FIFO Memory *NEW!*	120-TQFP	36.75	34.30	31.85
SN74ACT3651-20PQ	296-4417-ND	2K x 36 Synch. FIFO Memory *NEW!*	132-PQFP	36.75	34.30	31.85
SN74ACT3651-30PCB	296-4418-ND	2K x 36 Synch. FIFO Memory *NEW!*	120-TQFP	33.75	31.50	29.25
SN74ACT3651-30PQ	296-4419-ND	2K x 36 Synch. FIFO Memory *NEW!*	132-PQFP	33.75	31.50	29.25
SN74ACT7802-25FN	296-4447-ND	1K x 18 Strobed FIFO Memory *NEW!*	68-TQFP	16.58	14.93	13.24
SN74ACT7802-25PN	296-4448-ND	1K x 18 Strobed FIFO Memory *NEW!*	80-TQFP	16.58	14.93	13.24
SN74ACT7803-15DL	296-4449-5-ND	512 x 18 Clocked FIFO Memory *NEW!*	56-SOP	21.00	19.60	18.20
SN74ACT7803-15DLR	296-4449-2-ND	512 x 18 Clocked FIFO Memory *NEW!*	56-SOP	34580.00/2,000		
SN74ACT7803-20DL	296-4450-5-ND	512 x 18 Clocked FIFO Memory *NEW!*	56-SOP	18.75	17.50	16.25
SN74ACT7803-25DL	296-4451-5-ND	512 x 18 Clocked FIFO Memory *NEW!*	56-SOP	15.75	14.70	13.65
SN74ACT7803-25DLR	296-4451-2-ND	512 x 18 Clocked FIFO Memory *NEW!*	56-SOP	25936.00/2,000		
SN74ACT7803-40DL	296-4452-5-ND	512 x 18 Clocked FIFO Memory *NEW!*	56-SOP	14.99	13.50	11.97
SN74ACT7804-20DL	296-4453-5-ND	512 x 18 Strobed FIFO Memory *NEW!*	56-SOP	18.75	17.50	16.25
SN74ACT7804-40DLR	296-4454-1-ND	512 x 18 Strobed FIFO Memory *NEW!*	56-SOP	14.99	13.50	11.97
SN74ACT7804-40DLR	296-4454-2-ND	512 x 18 Strobed FIFO Memory *NEW!*	56-SOP	22230.00/2,000		
SN74ACT7805-15DL	296-4455-5-ND	256 x 18 Clocked FIFO Memory *NEW!*	56-SOP	20.25	18.90	17.55
SN74ACT7805-20DL	296-4456-5-ND	256 x 18 Clocked FIFO Memory *NEW!*	56-SOP	18.00	16.80	15.60
SN74ACT7805-25DLR	296-4457-1-ND	256 x 18 Clocked FIFO Memory *NEW!*	56-SOP	15.00	14.00	13.00
SN74ACT7805-25DLR	296-4457-2-ND	256 x 18 Clocked FIFO Memory *NEW!*	56-SOP	24700.00/2,000		
SN74ACT7805-40DL	296-4458-5-ND	256 x 18 Clocked FIFO Memory *NEW!*	56-SOP	14.16	12.75	11.31
SN74ACT7806-20DL	296-4459-5-ND	256 x 18 Strobed FIFO Memory *NEW!*	56-SOP	18.00	16.80	15.60
SN74ACT7807-15FN	296-4460-5-ND	2K x 9 Clocked FIFO Memory *NEW!*	44-PLCC	25.43	23.73	22.04
SN74ACT7807-15PAG	296-4461-ND	2K x 9 Clocked FIFO Memory *NEW!*	64-TQFP	29.18	27.23	25.29
SN74ACT7807-20FN	296-4462-5-ND	2K x 9 Clocked FIFO Memory *NEW!*	44-PLCC	21.33	19.91	18.49
SN74ACT7807-20PAG	296-4463-ND	2K x 9 Clocked FIFO Memory *NEW!*	64-TQFP	25.08	23.41	21.74
SN74ACT7807-25FN	296-4464-5-ND	2K x 9 Clocked FIFO Memory *NEW!*	44-PLCC	19.43	18.13	16.84
SN74ACT7807-25PAG	296-4465-ND	2K x 9 Clocked FIFO Memory *NEW!*	64-TQFP	23.18	21.63	20.09
SN74ACT7807-40FN	296-4466-5-ND	2K x 9 Clocked FIFO Memory *NEW!*	44-PLCC	16.49	15.39	14.29
SN74ACT7807-40PAG	296-4467-ND	2K x 9 Clocked FIFO Memory *NEW!*	64-TQFP	20.24	18.89	17.54
SN74ACT7808-20FN	296-4468-5-ND	2K x 9 Strobed FIFO Memory *NEW!*	44-PLCC	19.43	18.13	16.84
SN74ACT7808-20PAG	296-4469-ND	2K x 9 Strobed FIFO Memory *NEW!*	64-TQFP	23.18	21.63	20.09
SN74ACT7808-25FN	296-4470-5-ND	2K x 9 Strobed FIFO Memory *NEW!*	44-PLCC	17.43	16.27	15.11
SN74ACT7808-25PAG	296-4471-ND	2K x 9 Strobed FIFO Memory *NEW!*	64-TQFP	21.18	19.77	18.36
SN74ACT7808-30FN	296-4472-5-ND	2K x 9 Strobed FIFO Memory *NEW!*	44-PLCC	15.32	14.30	13.28
SN74ACT7808-30PAG	296-4473-ND	2K x 9 Strobed FIFO Memory *NEW!*	64-TQFP	19.07	17.80	16.53
SN74ACT7808-40FN	296-4474-5-ND	2K x 9 Strobed FIFO Memory *NEW!*	44-PLCC	11.83	10.65	9.45
SN74ACT7808-40PAG	296-4475-ND	2K x 9 Strobed FIFO Memory *NEW!*	64-TQFP	15.99	14.40	12.77
SN74ACT7811-15FN	296-4476-5-ND	1K x 18 Clocked FIFO Memory *NEW!*	68-PLCC	30.75	28.70	26.65

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74ACT7811-15PN	296-4477-ND	1K x 18 Clocked FIFO Memory *NEW!*	80-TQFP	30.75	28.70	26.65
SN74ACT7811-18FN	296-4478-5-ND	1K x 18 Clocked FIFO Memory *NEW!*	68-PLCC	27.75	25.90	24.05
SN74ACT7811-18PN	296-4479-ND	1K x 18 Clocked FIFO Memory *NEW!*	80-TQFP	27.75	25.90	24.05
SN74ACT7811-20FN	296-4480-5-ND	1K x 18 Clocked FIFO Memory *NEW!*	68-PLCC	24.75	23.10	21.45
SN74ACT7811-20PN	296-4481-ND	1K x 18 Clocked FIFO Memory *NEW!*	80-TQFP	24.75	23.10	21.45
SN74ACT7811-25FN	296-4482-5-ND	1K x 18 Clocked FIFO Memory *NEW!*	68-PLCC	23.25	21.70	20.15
SN74ACT7811-25PN	296-4483-ND	1K x 18 Clocked FIFO Memory *NEW!*	80-TQFP	23.25	21.70	20.15
SN74ACT7813-15DL	296-4484-5-ND	64 x 18 Clocked FIFO Memory *NEW!*	56-SOP	20.25	18.90	17.55
SN74ACT7813-15DLR	296-4484-2-ND	64 x 18 Clocked FIFO Memory *NEW!*	56-SOP	33346.00/2,000		
SN74ACT7813-20DL	296-4485-5-ND	64 x 18 Clocked FIFO Memory *NEW!*	56-SOP	17.25	16.10	14.95
SN74ACT7813-25DL	296-4486-5-ND	64 x 18 Clocked FIFO Memory *NEW!*	56-SOP	15.83	14.25	12.64
SN74ACT7813-40DL	296-4487-5-ND	64 x 18 Clocked FIFO Memory *NEW!*	56-SOP	12.50	11.25	9.98
SN74ACT7814-20DL	296-4488-5-ND	64 x 18 Strobed FIFO Memory *NEW!*	56-SOP	17.25	16.10	14.95
SN74ACT7814-40DLR	296-4489-1-ND	64 x 18 Strobed FIFO Memory *NEW!*	56-SOP	12.50	11.25	9.98
SN74ACT7814-40DLR	296-4489-2-ND	64 x 18 Strobed FIFO Memory *NEW!*	56-SOP	18526.00/2,000		
SN74ACT7881-15FN	296-4490-5-ND	1K x 18 Clocked FIFO Memory *NEW!*	68-PLCC	30.75	28.70	26.65
SN74ACT7881-15PN	296-4491-ND	1K x 18 Clocked FIFO Memory *NEW!*	80-TQFP	30.75	28.70	26.65
SN74ACT7881-20FN	296-4492-5-ND	1K x 18 Clocked FIFO Memory *NEW!*	68-PLCC	24.75	23.10	21.45
SN74ACT7881-20PN	296-4493-ND	1K x 18 Clocked FIFO Memory *NEW!*	80-TQFP	24.75	23.10	21.45
SN74ACT7881-30FN	296-4494-5-ND	1K x 18 Clocked FIFO Memory *NEW!*	68-PLCC	23.25	21.70	20.15
SN74ACT7881-30PN	296-4495-ND	1K x 18 Clocked FIFO Memory *NEW!*	80-TQFP	23.25	21.70	20.15
SN74ACT7882-15FN	296-4496-5-ND	2K x 18 Clocked FIFO Memory *NEW!*	68-PLCC	36.75	34.30	31.85
SN74ACT7882-15PN	296-4497-ND	2K x 18 Clocked FIFO Memory *NEW!*	80-LQFP	36.75	34.30	31.85
SN74ACT7882-20FN	296-4498-5-ND	2K x 18 Clocked FIFO Memory *NEW!*	68-PLCC	30.75	28.70	26.65
SN74ACT7882-20PN	296-4499-ND	2K x 18 Clocked FIFO Memory *NEW!*	80-LQFP	30.75	28.70	26.65
SN74ACT7882-30FN	296-4500-5-ND	2K x 18 Clocked FIFO Memory *NEW!*	68-PLCC	29.25	27.30	25.35
SN74ACT7882-30PN	296-4501-ND	2K x 18 Clocked FIFO Memory *NEW!*	80-LQFP	29.25	27.30	25.35
SN74ACT8990FN	296-4505-5-ND	16-Bit Test-Bus Controller Tap Master *NEW!*	44-PLCC	27.00	25.20	23.40
SN74ACT8990FNR	296-4505-2-ND	16-Big Test-Bus Controller Tap Master *NEW!*	44-PLCC	11262.50/500		
SN74ACT8997DW	296-4506-5-ND	Scan Path Linker with 4-Bit ID *NEW!*	28-SOP	8.33	7.50	6.65

AHC / AHCT Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
SN74AHC00DBR	296-4507-1-ND	Quad 2-Input NAND Gate *NEW!*	14-SSOP	.56	.42	.32
SN74AHC00DBR	296-4507-2-ND	Quad 2-Input NAND Gate *NEW!*	14-SSOP	372.00/2,000		
SN74AHC00DGVR	296-4508-1-ND	Quad 2-Input NAND Gate *NEW!*	14-TVSOP	.76	.57	.43
SN74AHC00DGVR	296-4508-2-ND	Quad 2-Input NAND Gate *NEW!*	14-TVSOP	506.00/2,000		
SN74AHC00DR	296-4509-1-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	.64	.48	.36
SN74AHC00DR	296-4509-2-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	520.00/2,500		
SN74AHC00N	296-4510-5-ND	Quad 2-Input NAND Gate *NEW!*	14-Dip	.56	.42	.32
SN74AHC00PWR	296-1080-1-ND	Quad 2-Input NAND Gate	14-TSSOP	.56	.42	.32
SN74AHC00PWR	296-1080-2-ND	Quad 2-Input NAND Gate	14-TSSOP	372.00/2,000		
SN74AHC02D	296-4511-5-ND	Quad 2-Input NOR Gate *NEW!*	14-SOP	.56	.42	.32
SN74AHC02DR	296-4511-2-ND	Quad 2-Input NOR Gate *NEW!*	14-SOP	520.00/2,500		
SN74AHC02DBR	296-4512-1-ND	Quad 2-Input NOR Gate *NEW!*	14-SSOP	.56	.42	.32
SN74AHC02DBR	296-4512-2-ND	Quad 2-Input NOR Gate *NEW!*	14-SSOP	372.00/2,000		
SN74AHC02DGVR	296-4513-1-ND	Quad 2-Input NOR Gate *NEW!*	14-TVSOP	.76	.57	.43
SN74AHC02DGVR	296-4513-2-ND	Quad 2-Input NOR Gate *NEW!*	14-TVSOP	506.00/2,000		
SN74AHC02N	296-4514-5-ND	Quad 2-Input NOR Gate *NEW!*	14-Dip	.56	.42	.32
SN74AHC02PWR	296-4515-2-ND	Quad 2-Input NOR Gate *NEW!*	14-TSSOP	372.00/2,000		
SN74AHC04D	296-4516-5-ND	Hex Inverter *NEW!*	14-SOP	.56	.42	.32
SN74AHC04DR	296-4516-2-ND	Hex Inverter *NEW!*	14-SOP	520.00/2,500		
SN74AHC04DBR	296-4517-1-ND	Hex Inverter *NEW!*	14-SSOP	.56	.42	.32
SN74AHC04DBR	296-4517-2-ND	Hex Inverter *NEW!*	14-SSOP	372.00/2,000		
SN74AHC04DGVR	296-4518-1-ND	Hex Inverter *NEW!*	14-TVSOP	.76	.57	.43
SN74AHC04DGVR	296-4518-2-ND	Hex Inverter *NEW!*	14-TVSOP	506.00/2,000		
SN74AHC04N	296-4519-5-ND	Hex Inverter *NEW!*	14-Dip	.56	.42	.32
SN74AHC04PWR	296-1081-1-ND	Hex Inverter	14-TSSOP	.56	.42	.32
SN74AHC04PWR	296-1081-2-ND	Hex Inverter	14-TSSOP	372.00/2,000		
SN74AHC05D	296-1997-5-ND	Hex Inverter with OD Out.	14-SOP	.56	.42	.32
SN74AHC05DR	296-1997-2-ND	Hex Inverter with OD Output *NEW!*	14-SOP	520.00/2,500		
SN74AHC05N	296-1464-5-ND	Hex Inverter with OD Out.	14-Dip	.56	.42	.32
SN74AHC05PWR	296-4520-1-ND	Hex Inverter with OD Output *NEW!*	14-TSSOP	.56	.42	.32
SN74AHC05PWR	296-4520-2-ND	Hex Inverter with OD Output *NEW!*	14-TSSOP	372.00/2,000		
SN74AHC08DBR	296-4521-1-ND	Quad 2-Input AND Gate *NEW!*	14-SSOP	.56	.42	.32
SN74AHC08DBR	296-4521-2-ND	Quad 2-Input AND Gate *NEW!*	14-SSOP	372.00/2,000		
SN74AHC08DGVR	296-4522-1-ND	Quad 2-Input AND Gate *NEW!*	14-TVSOP	.76	.57	.43
SN74AHC08DGVR	296-4522-2-ND	Quad 2-Input AND Gate *NEW!*	14-TVSOP	506.00/2,000		
SN74AHC08D	296-4523-5-ND	Quad 2-Input AND Gate *NEW!*	14-SOP	.56	.42	.32
SN74AHC08DR	296-4523-2-ND	Quad 2-Input AND Gate *NEW!*	14-SOP	520.00/2,500		
SN74AHC08N	296-4524-5-ND	Quad 2-Input AND Gate *NEW!*	14-Dip	.56	.42	.32
SN74AHC08PWR	296-1082-1-ND	Quad 2-Input AND Gate	14-TSSOP	.56	.42	.32
SN74AHC08PWR	296-1082-2-ND	Quad 2-Input AND Gate	14-TSSOP	372.00/2,000		
SN74AHC14DBR	296-4548-1-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SSOP	.56	.42	.32
SN74AHC14DBR	296-4548-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SSOP	372.00/2,000		
SN74AHC14DGVR	296-4549-1-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TVSOP	.76	.57	.43
SN74AHC14DGVR	296-4549-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TVSOP	506.00/2,000		
SN74AHC14DR	296-1085-1-ND	Hex Schmitt Trigger Inverter	14-SOP	.64	.48	.36
SN74AHC14DR	296-1085-2-ND	Hex Schmitt-Trigger Inverter	14-SOP	520.00/2,500		
SN74AHC14N	296-4550-5-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-Dip	.56	.42	.32
SN74AHC14PWR	296-1086-1-ND	Hex Schmitt Trigger Inverter	14-TSSOP	.56	.42	.32
SN74AHC14PWR	296-1086-2-ND	Hex Schmitt-Trigger Inverter	14-TSSOP	372.00/2,000		
SN74AHC32DBR	296-4593-1-ND	Quad 2-Input OR Gate *NEW!*	14-SSOP	.56	.42	.32
SN74AHC32DBR	296-4593-2-ND	Quad 2-Input OR Gate *NEW!*	14-SSOP	372.00/2,000		
SN74AHC32DGVR	296-4594-1-ND	Quad 2-Input OR Gate *NEW!*	14-TVSOP	.76	.57	.43
SN74AHC32DGVR	296-4594-2-ND	Quad 2-Input OR Gate *NEW!*	14-TVSOP	506.00/2,000		
SN74AHC32DR	296-4595-1-ND	Quad 2-Input OR Gate *NEW!*	14-SOP	.64	.48	.36
SN74AHC32DR	296-4595-2-ND	Quad 2-Input OR Gate *NEW!*	14-SOP	520.00/2,500		
SN74AHC32N	296-4596-5-ND	Quad 2-Input OR Gate *NEW!*	14-Dip	.56	.42	.32
SN74AHC32PWR	296-1099-1-ND	Quad 2-Input OR Gate	14-TSSOP	.56	.42	.32
SN74AHC32PWR	296-1099-2-ND	Quad 2-Input OR Gate	14-TSSOP	372.00/2,000		
SN74AHC74D	296-1105-5-ND	Dual D-Type Flip-Flop with Clear/Preset *NEW!*	14-SOP	.60	.45	.34
SN74AHC74DR	296-1105-1-ND	Dual D-Type Flip-Flop with Clear/Preset.	14-SOP	.68	.51	.39
SN74AHC74DR	296-1105-2-ND	Dual D-Type Flip-Flop with Clear/Preset.	14-SOP	552.50/2,500		
SN74AHC74DBR	296-4621-1-ND	Dual D-Type Flip-Flop with Clear/Preset *NEW!*	14-SSOP	.60	.45	.34
SN74AHC74DBR	296-4621-2-ND	Dual D-Type Flip-Flop with Clear/Preset *NEW!*	14-SSOP	400.00/2,000		
SN74AHC74DGVR	296-4622-1-ND	Dual D-Type Flip-Flop with Clear/Preset *NEW!*	14-TVSOP	.80	.60	.45
SN74AHC74DGVR	296-4622-2-ND	Dual D-Type Flip-Flop with Clear/Preset *NEW!*	14-TVSOP	532.00/2,000		
SN74AHC74N	296-4623-5-ND	Dual D-Type Flip-Flop with Clear/Preset *NEW!*	14-Dip	.60	.45	.34
SN74AHC74PWR	296-4624-1-ND	Dual D-Type Flip-Flop with Clear/Preset *NEW!*	14-TSSOP	.60	.45	.34
SN74AHC74PWR	296-4624-2-ND	Dual D-Type Flip-Flop with Clear/Preset *NEW!*	14-TSSOP	400.00/2,000		
SN74AHC86D	296-4625-5-ND	Quad 2-Input EX-OR Gate *NEW!*	14-SOP	.72	.54	.41
SN74AHC86DR	296-4625-2-ND	Quad 2-Input EX-OR Gate *NEW!*	14-SOP	650.00/2,500		
SN74AHC86DBR	296-4626-1-ND	Quad 2-Input EX-OR Gate *NEW!*	14-SSOP	.72	.54	.41
SN74AHC86DBR	296-4626-2-ND	Quad 2-Input EX-OR Gate *NEW!*	14-SSOP	478.00/2,000		
SN74AHC86N	296-4627-5-ND	Quad 2-Input EX-OR Gate *NEW!*	14-Dip	.72	.54	.41
SN74AHC86PWR	296-4628-1-ND	Quad 2-Input EX-OR Gate *NEW!*	14-TSSOP	.72	.54	.41
SN74AHC86PWR	296-4628-2-ND	Quad 2-Input EX-OR Gate *NEW!*	14-TSSOP	478.00/2,000		
SN74AHC123ADBR	296-4525-1-ND	Dual Retrig Mono. Multivibrator *NEW!*	16-SSOP	.72	.54	.41
SN74AHC123ADBR	296-4525-2-ND	Dual Retrig Mono. Multivibrator *NEW!*	16-SSOP	478.00/2,000		
SN74AHC123ADGVR	296-4526-1-ND	Dual Retrig Monostable Multivibrator *NEW!*	16-TVSOP	.92	.69	.52
SN74AHC123ADGVR	296-4526-2-ND	Dual Retrig Monostable Multivibrator *NEW!*	16-TVSOP	612.00/2,000		
SN74AHC123ADR	296-4527-1-ND	Dual Retrig Mono. Multivibrator *NEW!*	16-SOP	.72	.54	.41
SN74AHC123ADR	296-4527-2-ND	Dual Retrig Mono. Multivibrator *NEW!*	16-SOP	585.00/2,500		
SN74AHC123APWR	296-4528-1-ND	Dual Retrig Monostable Multivibrator *NEW!*	16-TSSOP	.72	.54	.41
SN74AHC123APWR	296-4528-2-ND	Dual Retrig Monostable Multivibrator *NEW!*	16-TSSOP	478.00/2,000		
SN74AHC125DBR	296-4529-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SSOP	.72	.54	.41
SN74AHC125DBR	296-4529-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SSOP	478.00/2,000		
SN74AHC125DR	296-4530-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SOP	.80	.60	.45
SN74AHC125DR	296-4530-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SOP	650.00/2,500		
SN74AHC125N	296-4531-5-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-Dip	.72	.54	.41
SN74AHC125PWR	296-1083-1-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	.72	.54	.41
SN74AHC125PWR	296-1083-2-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	478.00/2,000		
SN74AHC126DBR	296-4532-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SSOP	.72	.54	.41
SN74AHC126DBR	296-4532-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SSOP	478.00/2,000		
SN74AHC126DGVR	296-4533-1-ND	Tri-St. Quad Bus Buffer Gate *NEW!*	14-TVSOP	.92	.69	.52
SN74AHC126DGVR	296-4533-2-ND	Tri-St. Quad Bus Buffer Gate *NEW!*	14-TVSOP	612.00/2,000		
SN74AHC126DR	296-4534-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SOP	.80	.60	.45
SN74AHC126DR	296-4534-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SOP	650.00/2,500		
SN74AHC126N	296-4535-5-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-Dip	.72	.54	.41
SN74AHC126PWR	296-4536-2-ND	Tri-St. Quad Bus Buffer Gate *NEW!*	14-TSSOP	478.00/2,000		
SN74AHC132D	296-1465-5-ND	Quad NAND Gate	14-SOP	.72	.54	.41
SN74AHC132DBR	296-4537-1-ND	Quad NAND Gate *NEW!*	14-SSOP	.72	.54	.41
SN74AHC132DBR	296-4537-2-ND	Quad NAND Gate *NEW!*	14-SSOP	478.00/2,000		
SN74AHC132DGVR	296-4538-1-ND	Quad NAND Gate *NEW!*	14-TVSOP	.92	.69	.52
SN74AHC132DGVR	296-4538-2-ND	Quad NAND Gate *NEW!*	14-TVSOP	612.00/2,000		
SN74AHC132DR	296-1465-2-ND	Quad NAND Gate *NEW!*	14-SOP	650.00/2,500		
SN74AHC132N	296-1466-5-ND	Quad NAND Gate	14-Dip	.72	.54	.41
SN74AHC132PWR	296-4539-1-ND	Quad NAND Gate *NEW!*	14-TSSOP	.72	.54	.41
SN74AHC132PWR	296-4539-2-ND	Quad NAND Gate *NEW!*	14-TSSOP	478.00/2,000		
SN74AHC138D	296-4540-5-ND	3-8 Line Decoder/Demultiplexer *NEW!*	16-SOP	.72	.54	.41
SN74AHC138DR	296-4540-2-ND	3-8 Line Decoder/Demultiplexer *NEW!*	16-SOP	715.00/2,500		
SN74AHC138DBR	296-4541-1-ND	3-8 Line Decoder/Demultiplexer *NEW!*	16-SSOP	.72	.54	.41
SN74AHC138DBR	296-4541-2-ND	3-8 Line Decoder/Demultiplexer *NEW!*	16-SSOP	478.00/2,000		
SN74AHC138N	296-4542-5-ND	3-8 Line Decoder/Demultiplexer *NEW!*	16-Dip	.72	.54	.41
SN74AHC138PWR	296-1084-1-ND	3-8 Line Decoder/Demultiplexer	16-TSSOP	.72	.54	.41
SN74AHC138PWR	296-1084-2-ND	3-8 Line Decoder/Demultiplexer	16-TSSOP	478.00/2,000		
SN74AHC139D	296-4543-5-ND	Dual 2-4 Decoder/Demux *NEW!*	16-SOP	.72	.54	.41
SN74AHC139DBR	296-4544-1-ND	Dual 2-4 Decoder/Demux *NEW!*	16-SSOP	.72	.54	.41
SN74AHC139DBR	296-4544-2-ND	Dual 2-4 Decoder/Demux *NEW!*	16-SSOP	478.00/2,000		
SN74AHC139DGVR	296-4545-1-ND	Dual 2-4 Decoder/Demux *NEW!*	16-TVSOP	.92	.69	.52
SN74AHC139DGVR	296-4545-2-ND	Dual 2-4 Decoder/Demux *NEW!*	16-TVSOP	612.00/2,000		
SN74AHC139N	296-4546-5-ND	Dual 2-4 Decoder/Demux *NEW!*	16-Dip	.72	.54	.41
SN74AHC139PWR	296-4547-1-ND	Dual 2-4 Decoder/Demux *NEW!*	16-TSSOP	.72	.54	.41
SN74AHC139PWR	296-4547-2-ND	Dual 2-4 Decoder/Demux *NEW!*	16-TSSOP	478.00/2,000		
SN74AHC157D	296-4551-5-ND	Quad 2-1 Data Selector/Mux *NEW!*	16-SOP	.72	.54	.41
SN74AHC157DBR	296-4552-1-ND	Quad 2-1 Data Selector/Mux *NEW!*	16-SSOP	.72	.54	.41
SN74AHC157DBR	296-4552-2-ND	Quad 2-1 Data Selector/Mux *NEW!*	16-SSOP	478.00/2,000		
SN74AHC157DGVR	296-4553-1-ND	Quad 2-1 Data Selector/Mux *NEW!*	16-TVSOP	.92	.69	.52
SN74AHC157DGVR	296-4553-2-ND	Quad 2-1 Data Selector/Mux *NEW!*	16-TVSOP	612.00/2,000		
SN74AHC157N	296-4554-5-ND	Quad 2-1 Data Selector/Mux *NEW!*	16-Dip	.72	.54	.41
SN74AHC157PWR	296-4555-1-ND	Quad 2-1 Data Selector/Mux *NEW!*	16-TSSOP	.72	.54	.41
SN74AHC157PWR	296-4555-2-ND	Quad 2-1 Data Selector/Mux *NEW!*	16-TSSOP	478.00/2,000		
SN74AHC158DBR	296-4556-1-ND	Quad 2-1 Data Selector/Mux *NEW!*	16-SSOP	.72	.54	.41
SN74AHC158DBR	296-4556-2-ND	Quad 2-1 Data Selector/Mux *NEW!*	16-SSOP	478.00/2,000		
SN74AHC158DGVR	296-4557-1-ND	Quad 2-1 Data Selector/Mux *NEW!*	16-TVSOP	.92	.69	.52
SN74AHC158DGVR	296-4557-2-ND	Quad 2-1 Data Selector/Mux *NEW!*	16-TVSOP	612.00/2,000		
SN74AHC158DR	296-4558-1-ND	Quad 2-1 Data Selector/Mux *NEW!*	16-SOP	.88	.66	.50
SN74AHC158DR	296-4558-2-ND	Quad 2-1 Data Selector/Mux *NEW!*	16-SOP	715.00/2,500		
SN74AHC158PWR	296-4559-1-ND	Quad 2-1 Data Selector/Mux *NEW!*	16-TSSOP	.72	.54	.41
SN74AHC158PWR	296-4559-2-ND	Quad 2-1 Data Selector/Mux *NEW!*	16-TSSOP	478.00/2,000		
SN74AHC174D	296-1467-5-ND	Hex D-Type Flip-Flop with Clear	16-SOP	.84	.63	.48
SN74AHC174DBR	296-4578-1-ND	Hex D-Type Flip-Flop with Clear *NEW!*	16-SSOP	.84	.63	.48
SN74AHC174DBR	296-4578-2-ND	Hex D-Type Flip-Flop with Clear *NEW!*	16-SSOP	558.00/2,000		
SN74AHC174N	296-1468-5-ND	Hex D-Type Flip-Flop with Clear	16-Dip	.84	.63	.48
SN74AHC240DBR	296-4579-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	.96	.72	.54
SN74AHC240DBR	296-4579-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	638.00/2,000		
SN74AHC240DW	296-4580-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	.96	.72	.54
SN74AHC240DWR	296-4580-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	692.00/2,000		
SN74AHC240N	296-4581-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	.96	.72	.54
SN74AHC240PWR	296-4582-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	.96	.72	.54
SN74AHC240PWR	296-4582-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	638.00/2,000		
SN74AHC244DBR	296-4583-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	.96	.72	.54
SN74AHC244DBR	296-4583-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	638.00/2,000		
SN74AHC244DGVR	296-4584-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TVSOP	1.02	.85	.68
SN74AHC244DGVR	296-4584-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TVSOP	904.00/2,000		
SN74AHC244DW	296-1096-5-ND	Tri-State Octal Buffer/Driver	20-SOP	.96	.72	.54
SN74AHC244DWR	296-1096-2-ND	Tri-State Octal Buffer/Driver	20-SOP	692.00/2,000		
SN74AHC244N	296-4585-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	.96	.72	.54
SN74AHC244PWR	296-1097-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.96	.72	.54
SN74AHC244PWR	296-1097-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	638.00/2,000		
SN74AHC245DBR	296-4586-1-ND	Tri-State Octal Bus Xcvr. *NEW!*	20-SSOP	.96	.72	.54
SN74AHC245DBR	296-4586-2-ND	Tri-State Octal Bus Xcvr. *NEW!*	20-SSOP	638.00/2,000		
SN74AHC245DGVR	296-4587-1-ND	Tri-State Octal Bus Xcvr. *NEW!*	20-TVSOP	1.02	.85	.68

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74AHC245DGVR	296-4587-2-ND	Tri-State Octal Bus Xcvr. *NEW!*	20-TVSOP	904.00/2,000		
SN74AHC245DW	296-4588-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	.96	.72	.54
SN74AHC245N	296-4589-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-Dip	.96	.72	.54
SN74AHC245PWR	296-1098-1-ND	Tri-State Octal Transceiver	20-TSSOP	.96	.72	.54
SN74AHC245PWR	296-1098-2-ND	Tri-State Octal Transceiver	20-TSSOP	638.00/2,000		
SN74AHC273DBR	296-4590-1-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-SSOP	.96	.72	.54
SN74AHC273DBR	296-4590-2-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-SSOP	638.00/2,000		
SN74AHC273DGVR	296-4591-1-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-TVSOP	.87	.73	.58
SN74AHC273DGVR	296-4591-2-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-TVSOP	772.00/2,000		
SN74AHC273DW	296-1470-5-ND	Octal D-Type Flip-Flop	20-SOP	.96	.72	.54
SN74AHC273DWR	296-1470-2-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-SOP	744.00/2,000		
SN74AHC273N	296-1471-5-ND	Octal D-Type Flip-Flop	20-Dip	.96	.72	.54
SN74AHC273PWR	296-4592-1-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-TSSOP	.96	.72	.54
SN74AHC273PWR	296-4592-2-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-TSSOP	638.00/2,000		
SN74AHC367DR	296-4597-1-ND	Tri-State Hex Buff/Driver *NEW!*	16-SOP	1.05	.88	.70
SN74AHC367DR	296-4597-2-ND	Tri-State Hex Buff/Driver *NEW!*	16-SOP	1137.50/2,500		
SN74AHC373DBR	296-4598-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SSOP	.96	.72	.54
SN74AHC373DBR	296-4598-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SSOP	638.00/2,000		
SN74AHC373DW	296-4599-5-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SOP	.96	.72	.54
SN74AHC373N	296-4600-5-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-Dip	.96	.72	.54
SN74AHC373PWR	296-1100-1-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	.96	.72	.54
SN74AHC373PWR	296-1100-2-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	638.00/2,000		
SN74AHC374DBR	296-1101-1-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	.96	.72	.54
SN74AHC374DBR	296-1101-2-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	638.00/2,000		
SN74AHC374DGVR	296-4601-1-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TVSOP	1.02	.85	.68
SN74AHC374DGVR	296-4601-2-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TVSOP	904.00/2,000		
SN74AHC374DW	296-4602-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	.96	.72	.54
SN74AHC374DWR	296-4602-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	692.00/2,000		
SN74AHC374N	296-4603-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-Dip	.96	.72	.54
SN74AHC374PWR	296-1102-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	.96	.72	.54
SN74AHC374PWR	296-1102-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	638.00/2,000		
SN74AHC540DBR	296-4604-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	.96	.72	.54
SN74AHC540DBR	296-4604-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	638.00/2,000		
SN74AHC540DW	296-4605-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	.96	.72	.54
SN74AHC540DWR	296-4605-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	692.00/2,000		
SN74AHC540N	296-4606-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	.96	.72	.54
SN74AHC540PWR	296-4607-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	.96	.72	.54
SN74AHC540PWR	296-4607-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	638.00/2,000		
SN74AHC541DBR	296-4608-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	.96	.72	.54
SN74AHC541DBR	296-4608-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	638.00/2,000		
SN74AHC541DWR	296-4609-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	.78	.65	.52
SN74AHC541DWR	296-4609-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	692.00/2,000		
SN74AHC541N	296-4610-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	.96	.72	.54
SN74AHC541PWR	296-1103-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.96	.72	.54
SN74AHC541PWR	296-1103-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	638.00/2,000		
SN74AHC573DBR	296-4611-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SSOP	.96	.72	.54
SN74AHC573DBR	296-4611-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SSOP	638.00/2,000		
SN74AHC573DW	296-4612-5-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SOP	.96	.72	.54
SN74AHC573DWR	296-4612-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SOP	692.00/2,000		
SN74AHC573N	296-4613-5-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-Dip	.96	.72	.54
SN74AHC573PWR	296-1104-1-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	.96	.72	.54
SN74AHC573PWR	296-1104-2-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	638.00/2,000		
SN74AHC574DBR	296-4614-1-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	.96	.72	.54
SN74AHC574DBR	296-4614-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	638.00/2,000		
SN74AHC574DWR	296-4615-1-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	.78	.65	.52
SN74AHC574DWR	296-4615-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	692.00/2,000		
SN74AHC574N	296-4616-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-Dip	.96	.72	.54
SN74AHC574PWR	296-4617-1-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	.96	.72	.54
SN74AHC574PWR	296-4617-2-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	638.00/2,000		
SN74AHC595D	296-4618-5-ND	Tri-State 8-Bit Shift Register *NEW!*	16-SOP	.96	.72	.54
SN74AHC595N	296-4619-5-ND	Tri-State 8-Bit Shift Register *NEW!*	16-Dip	.96	.72	.54
SN74AHC595PWR	296-4620-1-ND	Tri-State 8-Bit Shift Register *NEW!*	16-TSSOP	.96	.72	.54
SN74AHC595PWR	296-4620-2-ND	Tri-State 8-Bit Shift Register *NEW!*	16-TSSOP	638.00/2,000		
SN74AHC16240DGGR	296-4560-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	1.45	1.16	.87
SN74AHC16240DGGR	296-4560-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	1508.00/2,000		
SN74AHC16240DGVR	296-4561-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	1.95	1.56	1.17
SN74AHC16240DGVR	296-4561-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	2028.00/2,000		
SN74AHC16240DL	296-4562-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	1.45	1.16	.87
SN74AHC16244DGGR	296-4563-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	1.45	1.16	.87
SN74AHC16244DGGR	296-4563-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	1508.00/2,000		
SN74AHC16244DGVR	296-4564-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	1.95	1.56	1.17
SN74AHC16244DGVR	296-4564-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	2028.00/2,000		
SN74AHC16244DL	296-4565-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	1.45	1.16	.87
SN74AHC16373DGGR	296-4566-1-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	48-TSSOP	1.45	1.16	.87
SN74AHC16373DGGR	296-4566-2-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	48-TSSOP	1508.00/2,000		
SN74AHC16373DGVR	296-4567-1-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	48-TVSOP	1.95	1.56	1.17
SN74AHC16373DGVR	296-4567-2-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	48-TVSOP	2028.00/2,000		
SN74AHC16373DL	296-4568-5-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	48-SSOP	1.45	1.16	.87
SN74AHC16373DLR	296-4568-2-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	48-SSOP	780.00/1,000		
SN74AHC16374DGGR	296-4569-1-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-TSSOP	1.45	1.16	.87
SN74AHC16374DGGR	296-4569-2-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-TSSOP	1508.00/2,000		
SN74AHC16374DGVR	296-4570-1-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-TVSOP	1.95	1.56	1.17
SN74AHC16374DGVR	296-4570-2-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-TVSOP	2028.00/2,000		
SN74AHC16374DL	296-4571-5-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-SSOP	1.45	1.16	.87
SN74AHC16540DGGR	296-4572-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	1.45	1.16	.87
SN74AHC16540DGGR	296-4572-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	1508.00/2,000		
SN74AHC16540DGVR	296-4573-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	1.95	1.56	1.17
SN74AHC16540DGVR	296-4573-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	2028.00/2,000		
SN74AHC16540DL	296-4574-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	1.45	1.16	.87
SN74AHC16541DGGR	296-4575-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	1.45	1.16	.87
SN74AHC16541DGGR	296-4575-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	1508.00/2,000		
SN74AHC16541DGVR	296-4576-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	1.95	1.56	1.17
SN74AHC16541DGVR	296-4576-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	2028.00/2,000		
SN74AHC16541DL	296-4577-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	1.45	1.16	.87
SN74AHCT00D	296-4629-5-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	.56	.42	.32
SN74AHCT00DR	296-4629-2-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	520.00/2,500		
SN74AHCT00DBR	296-4630-1-ND	Quad 2-Input NAND Gate *NEW!*	14-SSOP	.56	.42	.32
SN74AHCT00DBR	296-4630-2-ND	Quad 2-Input NAND Gate *NEW!*	14-SSOP	372.00/2,000		
SN74AHCT00DGVR	296-4631-1-ND	Quad 2-Input NAND Gate *NEW!*	14-TVSOP	.76	.57	.43
SN74AHCT00DGVR	296-4631-2-ND	Quad 2-Input NAND Gate *NEW!*	14-TVSOP	506.00/2,000		
SN74AHCT00N	296-4632-5-ND	Quad 2-Input NAND Gate *NEW!*	14-Dip	.56	.42	.32
SN74AHCT00PWR	296-4633-1-ND	Quad 2-Input NAND Gate *NEW!*	14-TSSOP	.56	.42	.32
SN74AHCT00PWR	296-4633-2-ND	Quad 2-Input NAND Gate *NEW!*	14-TSSOP	372.00/2,000		
SN74AHCT02D	296-4634-5-ND	Quad 2-Input NOR Gate *NEW!*	14-SOP	.56	.42	.32
SN74AHCT02DR	296-4635-2-ND	Quad 2-Input NOR Gate *NEW!*	14-SOP	520.00/2,500		
SN74AHCT02DBR	296-4636-1-ND	Quad 2-Input NOR Gate *NEW!*	14-SSOP	.56	.42	.32
SN74AHCT02DBR	296-4636-2-ND	Quad 2-Input NOR Gate *NEW!*	14-SSOP	372.00/2,000		
SN74AHCT02DGVR	296-4637-1-ND	Quad 2-Input NOR Gate *NEW!*	14-TVSOP	.76	.57	.43
SN74AHCT02DGVR	296-4637-2-ND	Quad 2-Input NOR Gate *NEW!*	14-TVSOP	506.00/2,000		
SN74AHCT02N	296-4638-5-ND	Quad 2-Input NOR Gate *NEW!*	14-Dip	.56	.42	.32
SN74AHCT02PWR	296-4639-1-ND	Quad 2-Input NOR Gate *NEW!*	14-TSSOP	.56	.42	.32
SN74AHCT02PWR	296-4639-2-ND	Quad 2-Input NOR Gate *NEW!*	14-TSSOP	372.00/2,000		
SN74AHCT04DBR	296-4640-1-ND	Hex Inverter *NEW!*	14-SSOP	.56	.42	.32
SN74AHCT04DBR	296-4640-2-ND	Hex Inverter *NEW!*	14-SSOP	372.00/2,000		
SN74AHCT04DGVR	296-4641-1-ND	Hex Inverter *NEW!*	14-TVSOP	.76	.57	.43
SN74AHCT04DGVR	296-4641-2-ND	Hex Inverter *NEW!*	14-TVSOP	506.00/2,000		
SN74AHCT04DR	296-4642-1-ND	Hex Inverter *NEW!*	14-SOP	.64	.48	.36
SN74AHCT04DR	296-4642-2-ND	Hex Inverter *NEW!*	14-SOP	520.00/2,500		
SN74AHCT04N	296-4643-5-ND	Hex Inverter *NEW!*	14-Dip	.56	.42	.32
SN74AHCT04PWR	296-1106-1-ND	Hex Inverter	14-TSSOP	.56	.42	.32
SN74AHCT04PWR	296-1106-2-ND	Hex Inverter	14-TSSOP	372.00/2,000		
SN74AHCT08D	296-4644-5-ND	Quad 2-Input AND Gate *NEW!*	14-SOP	.56	.42	.32
SN74AHCT08DR	296-4644-2-ND	Quad 2-Input AND Gate *NEW!*	14-SOP	520.00/2,500		
SN74AHCT08DBR	296-4645-1-ND	Quad 2-Input AND Gate *NEW!*	14-SSOP	.56	.42	.32
SN74AHCT08DBR	296-4645-2-ND	Quad 2-Input AND Gate *NEW!*	14-SSOP	372.00/2,000		
SN74AHCT08DGVR	296-4646-1-ND	Quad 2-Input AND Gate *NEW!*	14-TVSOP	.76	.57	.43
SN74AHCT08DGVR	296-4646-2-ND	Quad 2-Input AND Gate *NEW!*	14-TVSOP	506.00/2,000		
SN74AHCT08N	296-4647-5-ND	Quad 2-Input AND Gate *NEW!*	14-Dip	.56	.42	.32
SN74AHCT08PWR	296-1107-1-ND	Quad 2-Input AND Gate	14-TSSOP	.56	.42	.32
SN74AHCT08PWR	296-1107-2-ND	Quad 2-Input AND Gate	14-TSSOP	372.00/2,000		
SN74AHCT14D	296-1474-5-ND	Hex Schmitt-Trigger Inverter	14-SOP	.56	.42	.32
SN74AHCT14DBR	296-4672-1-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SSOP	.56	.42	.32
SN74AHCT14DBR	296-4672-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SSOP	372.00/2,000		
SN74AHCT14DGVR	296-4673-1-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TVSOP	.76	.57	.43
SN74AHCT14DGVR	296-4673-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TVSOP	506.00/2,000		
SN74AHCT14DR	296-1474-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SOP	520.00/2,500		
SN74AHCT14N	296-4674-5-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-Dip	.56	.42	.32
SN74AHCT14PWR	296-1110-1-ND	Hex Schmitt-Trigger Inverter	14-TSSOP	.56	.42	.32
SN74AHCT14PWR	296-1110-2-ND	Hex Schmitt-Trigger Inverter	14-TSSOP	372.00/2,000		
SN74AHCT32D	296-4728-5-ND	Quad 2-Input OR Gate *NEW!*	14-SOP	.56	.42	.32
SN74AHCT32DB	296-4729-5-ND	Quad 2-Input OR Gate *NEW!*	14-SSOP	.56	.42	.32
SN74AHCT32DBR	296-4729-2-ND	Quad 2-Input OR Gate *NEW!*	14-SSOP	372.00/2,000		
SN74AHCT32DGVR	296-4730-1-ND	Quad 2-Input OR Gate *NEW!*	14-TVSOP	.76	.57	.43
SN74AHCT32DGVR	296-4730-2-ND	Quad 2-Input OR Gate *NEW!*	14-TVSOP	506.00/2,000		
SN74AHCT32DR	296-4731-1-ND	Quad 2-Input OR Gate *NEW!*	14-SOP	.64	.48	.36
SN74AHCT32DR	296-4731-2-ND	Quad 2-Input OR Gate *NEW!*	14-SOP	520.00/2,500		
SN74AHCT32N	296-4732-5-ND	Quad 2-Input OR Gate *NEW!*	14-Dip	.56	.42	.32
SN74AHCT32PWR	296-1119-1-ND	Quad 2-Input OR Gate	14-TSSOP	.56	.42	.32
SN74AHCT32PWR	296-1119-2-ND	Quad 2-Input OR Gate	14-TSSOP	372.00/2,000		
SN74AHCT74D	296-4769-5-ND	Dual D-Type Flip-Flop with Clear/Preset *NEW!*	14-SOP	.60	.45	.34
SN74AHCT74DBR	296-4770-1-ND	Dual D-Type Flip-Flop with Clear/Preset *NEW!*	14-SSOP	.60	.45	.34
SN74AHCT74DBR	296-4770-2-ND	Dual D-Type Flip-Flop with Clear/Preset *NEW!*	14-SSOP	400.00/2,000		
SN74AHCT74DGVR	296-4771-1-ND	Dual D-Type Flip-Flop with Clear/Preset *NEW!*	14-TVSOP	.80	.60	.45
SN74AHCT74DGVR	296-4771-2-ND	Dual D-Type Flip-Flop with Clear/Preset *NEW!*	14-TVSOP	532.00/2,000		
SN74AHCT74N	296-4772-5-ND	Dual D-Type Flip-Flop with Clear/Preset *NEW!*	14-Dip	.60	.45	.34
SN74AHCT74PWR	296-4773-1-ND	Dual D-Type Flip-Flop with Clear/Preset *NEW!*	14-TSSOP	.60	.45	.34
SN74AHCT74PWR	296-4773-2-ND	Dual D-Type Flip-Flop with Clear/Preset *NEW!*	14-TSSOP	400.00/2,000		
SN74AHCT86DBR	296-4774-1-ND	Quad 2-Input EX-OR Gate *NEW!*	14-SSOP	.72	.54	.41
SN74AHCT86DBR	296-4774-2-ND	Quad 2-Input EX-OR Gate *NEW!*	14-SSOP	478.00/2,000		
SN74AHCT86DGVR	296-4775-1-ND	Quad 2-Input EX-OR Gate *NEW!*	14-TVSOP	.92	.69	.52
SN74AHCT86DGVR	296-4775-2-ND	Quad 2-Input EX-OR Gate *NEW!*	14-TVSOP	612.00/2,000		
SN74AHCT86DR	296-4776-1-ND	Quad 2-Input EX-OR Gate *NEW!*	14-SOP	.80	.60	.45
SN74AHCT86DR	296-4776-2-ND	Quad 2-Input EX-OR Gate *NEW!*	14-SOP	650.00/2,500		
SN74AHCT86N	296-4777-1-ND	Quad 2-Input EX-OR Gate *NEW!*	14-Dip	.72	.54	.41
SN74AHCT86N	296-4777-2-ND	Quad 2-Input EX-OR Gate *NEW!*	14-Dip	239.00/1,000		
SN74AHCT86PWR	296-4778-1-ND	Quad 2-Input EX-OR Gate *NEW!*	14-TSSOP	.72	.54	.41
SN74AHCT86PWR	296-4778-2-ND	Quad 2-Input EX-OR Gate *NEW!*	14-TSSOP	478.00/2,000		
SN74AHCT123ADBR	296-4648-1-ND	Dual Retrig. Mono Multivibrator *NEW!*	16-SSOP	.72	.54	.41
SN74AHCT123ADBR	296-4648-2-ND	Dual Retrig. Mono Multivibrator *NEW!*	16-SSOP	478.00/2,000		
SN74AHCT123ADGVR	296-4649-1-ND	Dual Retrig. Mono Multivibrator *NEW!*	16-TVSOP	.92	.69	.52
SN74AHCT123ADGVR	296-4649-2-ND	Dual Retrig. Mono Multivibrator *NEW!*	16-TVSOP	612.00/2,000		
SN74AHCT123ADR	296-4650-1-ND	Dual Retrig. Mono Multivibrator *NEW!*	16-SOP	.72	.54	.41
SN74AHCT123ADR	296-4650-2-ND	Dual Retrig. Mono Multivibrator *NEW!*	16-SOP	585.00/2,500		
SN74AHCT123APWR	296-4651-1-ND	Dual Retrig. Monostable Multivibrator *NEW!*	16-TSSOP	.72	.54	.41
SN74AHCT123APWR	296-4651-2-ND	Dual Retrig. Monostable Multivibrator *NEW!*	16-TSSOP	478.00/2,000		
SN74AHCT125D	296-4652-5-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SOP	.72	.54	.41
SN74AHCT125DR	296-4652-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SOP	650.00/2,500		
SN74AHCT125DBR	296-4653-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SSOP	.72	.54	.41
SN74AHCT125DBR	296-4653-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SSOP	478.00/2,000		
SN74AHCT125DGVR	296-4654-1-ND	Tri-St. Quad Bus Buffer Gate *NEW!*	14-TVSOP	.92	.69	.52
SN74AHCT125DGVR	296-4654-2-ND	Tri-St. Quad Bus Buffer Gate *NEW!*	14-TVSOP	612.00/2,000		

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74AHCT125N	296-4655-5-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-Dip	.72	.54	.41
SN74AHCT125PWR	296-1108-1-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	.72	.54	.41
SN74AHCT125PWR	296-1108-2-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	478.00/2,000		
SN74AHCT126DBR	296-4656-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SSOP	.72	.54	.41
SN74AHCT126DBR	296-4656-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SSOP	478.00/2,000		
SN74AHCT126DGVR	296-4657-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-TVSOP	.92	.69	.52
SN74AHCT126DGVR	296-4657-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-TVSOP	612.00/2,000		
SN74AHCT126DR	296-4658-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SOP	.80	.60	.45
SN74AHCT126DR	296-4658-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SOP	650.00/2,500		
SN74AHCT126N	296-4659-5-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-Dip	.72	.54	.41
SN74AHCT126PWR	296-4660-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-TSSOP	.72	.54	.41
SN74AHCT126PWR	296-4660-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-TSSOP	478.00/2,000		
SN74AHCT132D	296-1472-5-ND	Quad NAND Gate	14-SOP	1.11	.93	.74
SN74AHCT132DBR	296-4661-1-ND	Quad NAND Gate with Schmitt-Trigger *NEW!*	14-SSOP	1.11	.93	.74
SN74AHCT132DBR	296-4661-2-ND	Quad NAND Gate with Schmitt-Trigger *NEW!*	14-SSOP	984.00/2,000		
SN74AHCT132N	296-1473-5-ND	Quad NAND Gate	14-Dip	1.11	.93	.74
SN74AHCT132PWR	296-4662-1-ND	Quad NAND Gate with Schmitt-Trigger *NEW!*	14-TSSOP	1.11	.93	.74
SN74AHCT132PWR	296-4662-2-ND	Quad NAND Gate with Schmitt-Trigger *NEW!*	14-TSSOP	984.00/2,000		
SN74AHCT138D	296-4663-5-ND	3-8 Line Decoder/Demux *NEW!*	16-SOP	.72	.54	.41
SN74AHCT138DBR	296-4664-1-ND	3-8 Line Decoder/Demux *NEW!*	16-SSOP	.72	.54	.41
SN74AHCT138DBR	296-4664-2-ND	3-8 Line Decoder/Demux *NEW!*	16-SSOP	478.00/2,000		
SN74AHCT138DGVR	296-4665-1-ND	3-8 Line Decoder/Demux *NEW!*	16-TVSOP	.92	.69	.52
SN74AHCT138DGVR	296-4665-2-ND	3-8 Line Decoder/Demux *NEW!*	16-TVSOP	612.00/2,000		
SN74AHCT138N	296-4666-5-ND	3-8 Line Decoder/Demux *NEW!*	16-Dip	.72	.54	.41
SN74AHCT138PWR	296-1109-1-ND	3-8 Line Decoder/Demultiplexer	16-TSSOP	.72	.54	.41
SN74AHCT138PWR	296-1109-2-ND	3-8 Line Decoder/Demultiplexer	16-TSSOP	478.00/2,000		
SN74AHCT139D	296-4667-5-ND	Dual 2-4 Decoder/Demux *NEW!*	16-SOP	.72	.54	.41
SN74AHCT139DBR	296-4668-1-ND	Dual 2-4 Decoder/Demux *NEW!*	16-SSOP	.72	.54	.41
SN74AHCT139DBR	296-4668-2-ND	Dual 2-4 Decoder/Demux *NEW!*	16-SSOP	478.00/2,000		
SN74AHCT139DGVR	296-4669-1-ND	Dual 2-4 Decoder/Demux *NEW!*	16-TVSOP	.92	.69	.52
SN74AHCT139DGVR	296-4669-2-ND	Dual 2-4 Decoder/Demux *NEW!*	16-TVSOP	612.00/2,000		
SN74AHCT139N	296-4670-5-ND	Dual 2-4 Decoder/Demux *NEW!*	16-Dip	.72	.54	.41
SN74AHCT139PWR	296-4671-1-ND	Dual 2-4 Decoder/Demux *NEW!*	16-TSSOP	.72	.54	.41
SN74AHCT139PWR	296-4671-2-ND	Dual 2-4 Decoder/Demux *NEW!*	16-TSSOP	478.00/2,000		
SN74AHCT157D	296-4675-5-ND	Quad 2-to-1 Data Selector/Mux *NEW!*	16-SOP	.72	.54	.41
SN74AHCT157DBR	296-4676-1-ND	Quad 2-to-1 Data Selector/Mux *NEW!*	16-SSOP	.72	.54	.41
SN74AHCT157DBR	296-4676-2-ND	Quad 2-to-1 Data Selector/Mux *NEW!*	16-SSOP	478.00/2,000		
SN74AHCT157DGVR	296-4677-1-ND	Quad 2-to-1 Data Selector/Mux *NEW!*	16-TVSOP	.92	.69	.52
SN74AHCT157DGVR	296-4677-2-ND	Quad 2-to-1 Data Selector/Mux *NEW!*	16-TVSOP	612.00/2,000		
SN74AHCT157PWR	296-4678-1-ND	Quad 2-to-1 Data Selector/Mux *NEW!*	16-TSSOP	.72	.54	.41
SN74AHCT157PWR	296-4678-2-ND	Quad 2-to-1 Data Selector/Mux *NEW!*	16-TSSOP	478.00/2,000		
SN74AHCT158D	296-4679-5-ND	Quad 2-to-1 Data Selector/Mux *NEW!*	16-SOP	.72	.54	.41
SN74AHCT158PWR	296-4680-1-ND	Quad 2-to-1 Data Selector/Mux *NEW!*	16-TSSOP	.72	.54	.41
SN74AHCT158PWR	296-4680-2-ND	Quad 2-to-1 Data Selector/Mux *NEW!*	16-TSSOP	478.00/2,000		
SN74AHCT174D	296-1475-5-ND	Hex D-Type Flip-Flop	16-SOP	.72	.54	.41
SN74AHCT174DBR	296-4702-1-ND	Hex D-Type Flip-Flop *NEW!*	16-SSOP	.72	.54	.41
SN74AHCT174DBR	296-4702-2-ND	Hex D-Type Flip-Flop *NEW!*	16-SSOP	478.00/2,000		
SN74AHCT240DBR	296-4716-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	.96	.72	.54
SN74AHCT240DBR	296-4716-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	638.00/2,000		
SN74AHCT240DW	296-4717-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	.96	.72	.54
SN74AHCT240DWR	296-4717-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	692.00/2,000		
SN74AHCT240N	296-4718-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	.96	.72	.54
SN74AHCT240PWR	296-4719-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	.96	.72	.54
SN74AHCT240PWR	296-4719-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	638.00/2,000		
SN74AHCT244DBR	296-4720-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	.96	.72	.54
SN74AHCT244DBR	296-4720-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	638.00/2,000		
SN74AHCT244DGVR	296-4721-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TVSOP	1.02	.85	.68
SN74AHCT244DGVR	296-4721-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TVSOP	904.00/2,000		
SN74AHCT244DW	296-4722-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	.96	.72	.54
SN74AHCT244DWR	296-4722-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	692.00/2,000		
SN74AHCT244N	296-4723-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	.96	.72	.54
SN74AHCT244PWR	296-1116-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.96	.72	.54
SN74AHCT244PWR	296-1116-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	638.00/2,000		
SN74AHCT245DBR	296-4724-1-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-SSOP	.96	.72	.54
SN74AHCT245DBR	296-4724-2-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-SSOP	638.00/2,000		
SN74AHCT245DGVR	296-4725-1-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TVSOP	1.02	.85	.68
SN74AHCT245DGVR	296-4725-2-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TVSOP	904.00/2,000		
SN74AHCT245DW	296-1117-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	.96	.72	.54
SN74AHCT245DWR	296-1117-1-ND	Tri-State Octal Bus Transceiver	20-SOP	.78	.65	.52
SN74AHCT245DWR	296-1117-2-ND	Tri-State Octal Bus Transceiver	20-SOP	692.00/2,000		
SN74AHCT245N	296-1476-5-ND	Octal Bus Transceiver	20-Dip	.96	.72	.54
SN74AHCT245PWR	296-1118-1-ND	Tri-State Octal Bus Transceiver	20-TSSOP	.96	.72	.54
SN74AHCT245PWR	296-1118-2-ND	Tri-State Octal Bus Transceiver	20-TSSOP	638.00/2,000		
SN74AHCT273DBR	296-4726-1-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-SSOP	.96	.72	.54
SN74AHCT273DBR	296-4726-2-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-SSOP	638.00/2,000		
SN74AHCT273PWR	296-4727-1-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-TSSOP	.96	.72	.54
SN74AHCT273PWR	296-4727-2-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-TSSOP	638.00/2,000		
SN74AHCT367DBR	296-4733-1-ND	Tri-State Hex Buffer/Driver *NEW!*	16-SSOP	1.05	.88	.70
SN74AHCT367DBR	296-4733-2-ND	Tri-State Hex Buffer/Driver *NEW!*	16-SSOP	932.00/2,000		
SN74AHCT367DGVR	296-4734-1-ND	Tri-State Hex Buffer/Driver *NEW!*	16-TVSOP	1.20	1.00	.80
SN74AHCT367DGVR	296-4734-2-ND	Tri-State Hex Buffer/Driver *NEW!*	16-TVSOP	1064.00/2,000		
SN74AHCT367DR	296-4735-1-ND	Tri-State Hex Buffer/Driver *NEW!*	16-SOP	1.05	.88	.70
SN74AHCT367DR	296-4735-2-ND	Tri-State Hex Buffer/Driver *NEW!*	16-SOP	1137.50/2,500		
SN74AHCT367PWR	296-4736-1-ND	Tri-State Hex Buffer/Driver *NEW!*	16-TSSOP	1.05	.88	.70
SN74AHCT367PWR	296-4736-2-ND	Tri-State Hex Buffer/Driver *NEW!*	16-TSSOP	932.00/2,000		
SN74AHCT373DBR	296-4737-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SSOP	.96	.72	.54
SN74AHCT373DBR	296-4737-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SSOP	638.00/2,000		
SN74AHCT373DW	296-4739-5-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SOP	.96	.72	.54
SN74AHCT373DWR	296-4739-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SOP	692.00/2,000		
SN74AHCT373N	296-4740-5-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-Dip	.96	.72	.54
SN74AHCT373PWR	296-4741-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TSSOP	.96	.72	.54

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74AHCT373PWR	296-4741-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TSSOP	638.00/2,000		
SN74AHCT374DBR	296-4742-1-ND	Tri-State Octal D-Type Edge-Triggered Flip-Flop *NEW!*	20-SSOP	.96	.72	.54
SN74AHCT374DBR	296-4742-2-ND	Tri-State Octal D-Type Edge-Triggered Flip-Flop *NEW!*	20-SSOP	638.00/2,000		
SN74AHCT374DGVR	296-4743-1-ND	Tri-State Octal D-Type Edge-Triggered Flip-Flop *NEW!*	20-TVSOP	1.02	.85	.68
SN74AHCT374DGVR	296-4743-2-ND	Tri-State Octal D-Type Edge-Triggered Flip-Flop *NEW!*	20-TVSOP	904.00/2,000		
SN74AHCT374DWR	296-4744-1-ND	Tri-State Octal D-Type Edge-Triggered Flip-Flop *NEW!*	20-SOP	.78	.65	.52
SN74AHCT374DWR	296-4744-2-ND	Tri-State Octal D-Type Edge-Triggered Flip-Flop *NEW!*	20-SOP	692.00/2,000		
SN74AHCT374N	296-4745-5-ND	Tri-State Octal D-Type Edge-Triggered Flip-Flop *NEW!*	20-Dip	.96	.72	.54
SN74AHCT374PWR	296-4746-1-ND	Tri-State Octal D-Type Edge-Triggered Flip-Flop *NEW!*	20-TSSOP	.96	.72	.54
SN74AHCT374PWR	296-4746-2-ND	Tri-State Octal D-Type Edge-Triggered Flip-Flop *NEW!*	20-TSSOP	638.00/2,000		
SN74AHCT540DBR	296-4747-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	.96	.72	.54
SN74AHCT540DBR	296-4747-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	638.00/2,000		
SN74AHCT540DGVR	296-4748-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TVSOP	1.02	.85	.68
SN74AHCT540DGVR	296-4748-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TVSOP	904.00/2,000		
SN74AHCT540DW	296-4749-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	.96	.72	.54
SN74AHCT540DWR	296-4749-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	692.00/2,000		
SN74AHCT540N	296-4750-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	.96	.72	.54
SN74AHCT540PWR	296-4751-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	.96	.72	.54
SN74AHCT540PWR	296-4751-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	638.00/2,000		
SN74AHCT541DBR	296-4752-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	.96	.72	.54
SN74AHCT541DBR	296-4752-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	638.00/2,000		
SN74AHCT541DWR	296-4754-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	.78	.65	.52
SN74AHCT541DWR	296-4754-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	692.00/2,000		
SN74AHCT541N	296-4755-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	.96	.72	.54
SN74AHCT541PWR	296-1120-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.96	.72	.54
SN74AHCT541PWR	296-1120-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	638.00/2,000		
SN74AHCT573DBR	296-4756-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SSOP	.96	.72	.54
SN74AHCT573DBR	296-4756-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SSOP	638.00/2,000		
SN74AHCT573DGVR	296-4757-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TVSOP	1.02	.85	.68
SN74AHCT573DGVR	296-4757-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TVSOP	904.00/2,000		
SN74AHCT573DW	296-4758-5-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SOP	.96	.72	.54
SN74AHCT573DWR	296-4758-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SOP	692.00/2,000		
SN74AHCT573N	296-4759-5-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-Dip	.96	.72	.54
SN74AHCT573PWR	296-1121-1-ND	Tri-St. Octal Transparent D-Type Latch.	20-TSSOP	.96	.72	.54
SN74AHCT573PWR	296-1121-2-ND	Tri-St. Octal Transparent D-Type Latch	20-TSSOP	638.00/2,000		
SN74AHCT574DBR	296-4760-1-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	.96	.72	.54
SN74AHCT574DBR	296-4760-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	638.00/2,000		
SN74AHCT574DGVR	296-4761-1-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TVSOP	1.02	.85	.68
SN74AHCT574DGVR	296-4761-2-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TVSOP	904.00/2,000		
SN74AHCT574DWR	296-4762-1-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	.78	.65	.52
SN74AHCT574DWR	296-4762-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	692.00/2,000		
SN74AHCT574N	296-4763-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-Dip	.96	.72	.54
SN74AHCT574PWR	296-4764-1-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	.96	.72	.54
SN74AHCT574PWR	296-4764-2-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	638.00/2,000		
SN74AHCT594D	296-4765-5-ND	8-Bit Shift Register with Output Register *NEW!*	16-SOP	.96	.72	.54
SN74AHCT594DBR	296-4766-1-ND	8-Bit Shift Register with Output Register *NEW!*	16-SSOP	.96	.72	.54
SN74AHCT594DBR	296-4766-2-ND	8-Bit Shift Register with Output Register *NEW!*	16-SSOP	638.00/2,000		
SN74AHCT594PWR	296-4767-1-ND	8-Bit Shift Register with Output Register *NEW!*	16-TSSOP	.96	.72	.54
SN74AHCT594PWR	296-4767-2-ND	8-Bit Shift Register with Output Register *NEW!*	16-TSSOP	638.00/2,000		
SN74AHCT595PWR	296-4768-1-ND	Tri-State 8-Bit Shift Register *NEW!*	16-TSSOP	.96	.72	.54
SN74AHCT16240DGGR	296-4681-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	1.45	1.16	.87
SN74AHCT16240DGGR	296-4681-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	1508.00/2,000		
SN74AHCT16240DGVR	296-4682-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	1.95	1.56	1.17
SN74AHCT16240DGVR	296-4682-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	2028.00/2,000		
SN74AHCT16240DL	296-4683-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	1.45	1.16	.87
SN74AHCT16244DGGR	296-4684-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	1.45	1.16	.87
SN74AHCT16244DGGR	296-4684-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	1508.00/2,000		
SN74AHCT16244DGVR	296-4685-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	1.95	1.56	1.17
SN74AHCT16244DGVR	296-4685-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	2028.00/2,000		
SN74AHCT16244DL	296-4686-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	1.45	1.16	.87
SN74AHCT16245DGGR	296-4687-1-ND	Tri-St. 16-Bit Bus Transceiver *NEW!*	48-TSSOP	1.45	1.16	.87
SN74AHCT16245DGGR	296-4687-2-ND	Tri-St. 16-Bit Bus Transceiver *NEW!*	48-TSSOP	1508.00/2,000		
SN74AHCT16245DGVR	296-4688-1-ND	Tri-St. 16-Bit Bus Transceiver *NEW!*	48-TVSOP	1.95	1.56	1.17
SN74AHCT16245DGVR	296-4688-2-ND	Tri-St. 16-Bit Bus Transceiver *NEW!*	48-TVSOP	2028.00/2,000		
SN74AHCT16245DL	296-4689-5-ND	Tri-St. 16-Bit Bus Transceiver *NEW!*	48-SSOP	1.45	1.16	.87
SN74AHCT16373DGGR	296-4690-1-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	48-TSSOP	1.45	1.16	.87
SN74AHCT16373DGGR	296-4690-2-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	48-TSSOP	1508.00/2,000		
SN74AHCT16373DGVR	296-4691-1-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	48-TVSOP	1.95	1.56	1.17
SN74AHCT16373DGVR	296-4691-2-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	48-TVSOP	2028.00/2,000		
SN74AHCT16373DL	296-4692-5-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	48-SSOP	1.45	1.16	.87
SN74AHCT16374DGGR	296-4693-1-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-TSSOP	1.45	1.16	.87
SN74AHCT16374DGGR	296-4693-2-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-TSSOP	1508.00/2,000		
SN74AHCT16374DGVR	296-4694-1-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-TVSOP	1.95	1.56	1.17
SN74AHCT16374DGVR	296-4694-2-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-TVSOP	2028.00/2,000		
SN74AHCT16374DLR	296-4695-1-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-SSOP	1.50	1.20	.90

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74AHCT16374DLR	296-4695-2-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-SSOP	780.00/1,000		
SN74AHCT16540DGGR	296-4696-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	1.45	1.16	.87
SN74AHCT16540DGGR	296-4696-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	1508.00/2,000		
SN74AHCT16540DGVR	296-4697-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	1.95	1.56	1.17
SN74AHCT16540DGVR	296-4697-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	2028.00/2,000		
SN74AHCT16540DL	296-4698-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	1.45	1.16	.87
SN74AHCT16541DGGR	296-4699-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	1.45	1.16	.87
SN74AHCT16541DGGR	296-4699-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	1508.00/2,000		
SN74AHCT16541DGVR	296-4700-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	1.95	1.56	1.17
SN74AHCT16541DGVR	296-4700-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	2028.00/2,000		
SN74AHCT16541DL	296-4701-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	1.45	1.16	.87

Microgate Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74AHC1G00DBVR	296-1087-1-ND	Single 2-Input NAND Gate	SOT-23-5	.56	.42	.32
SN74AHC1G00DBVR	296-1087-2-ND	Single 2-Input NAND Gate	SOT-23-5	546.00/3,000		
SN74AHC1G00DCKR	296-8741-1-ND	Single 2-Input NAND Gate *NEW!*	5-SOP	.60	.45	.34
SN74AHC1G00DCKR	296-8741-2-ND	Single 2-Input NAND Gate *NEW!*	5-SOP	585.00/3,000		
SN74AHC1G02DBVR	296-1088-1-ND	Single 2-Input NOR Gate	SOT-23-5	.56	.42	.32
SN74AHC1G02DBVR	296-1088-2-ND	Single 2-Input NOR Gate	SOT-23-5	546.00/3,000		
SN74AHC1G02DCKR	296-8742-1-ND	Single 2-Input NOR Gate *NEW!*	5-SOP	.60	.45	.34
SN74AHC1G02DCKR	296-8742-2-ND	Single 2-Input NOR Gate *NEW!*	5-SOP	585.00/3,000		
SN74AHC1G04DBVR	296-1089-1-ND	Single Inverter Gate	SOT-23-5	.56	.42	.32
SN74AHC1G04DBVR	296-1089-2-ND	Single Inverter Gate	SOT-23-5	546.00/3,000		
SN74AHC1G04DCKR	296-1090-1-ND	Single Inverter Gate	5-SOP	.60	.45	.34
SN74AHC1G04DCKR	296-1090-2-ND	Single Inverter Gate	5-SOP	585.00/3,000		
SN74AHC1G08DBVR	296-1091-1-ND	Single 2-Input AND Gate	SOT-23-5	.56	.42	.32
SN74AHC1G08DBVR	296-1091-2-ND	Single 2-Input AND Gate	SOT-23-5	546.00/3,000		
SN74AHC1G08DCKR	296-8743-1-ND	Single 2-Input AND Gate *NEW!*	5-SOP	.60	.45	.34
SN74AHC1G08DCKR	296-8743-2-ND	Single 2-Input AND Gate *NEW!*	5-SOP	585.00/3,000		
SN74AHC1G14DBVR	296-1092-1-ND	Single Schmitt-Trigger Inverter	SOT-23-5	.56	.42	.32
SN74AHC1G14DBVR	296-1092-2-ND	Single Schmitt-Trigger Inverter	SOT-23-5	546.00/3,000		
SN74AHC1G14DCKR	296-8748-1-ND	Single Schmitt-Trigger Inverter *NEW!*	5-SOP	.60	.45	.34
SN74AHC1G14DCKR	296-8748-2-ND	Single Schmitt-Trigger Inverter *NEW!*	5-SOP	585.00/3,000		
SN74AHC1G32DBVR	296-1093-1-ND	Single 2-Input OR Gate	SOT-23-5	.56	.42	.32
SN74AHC1G32DBVR	296-1093-2-ND	Single 2-Input OR Gate	SOT-23-5	546.00/3,000		
SN74AHC1G32DCKR	296-8749-1-ND	Single 2-Input OR Gate *NEW!*	5-SOP	.56	.42	.32
SN74AHC1G32DCKR	296-8749-2-ND	Single 2-Input OR Gate *NEW!*	5-SOP	546.00/3,000		
SN74AHC1G86DBVR	296-1094-1-ND	Single 2-Input Exclusive-OR Gate	SOT-23-5	.56	.42	.32
SN74AHC1G86DBVR	296-1094-2-ND	Single 2-Input Exclusive-OR Gate	SOT-23-5	546.00/3,000		
SN74AHC1G86DCKR	296-8750-1-ND	Single 2-Input Exclusive-OR Gate *NEW!*	5-SOP	.60	.45	.34
SN74AHC1G86DCKR	296-8750-2-ND	Single 2-Input Exclusive-OR Gate *NEW!*	5-SOP	585.00/3,000		
SN74AHC1G125DBVR	296-8744-1-ND	Tri-State Single Bus Buffer Gate *NEW!*	SOT-23-5	.56	.42	.32
SN74AHC1G125DBVR	296-8744-2-ND	Tri-State Single Bus Buffer Gate *NEW!*	SOT-23-5	546.00/3,000		
SN74AHC1G125DCKR	296-8745-1-ND	Tri-State Single Bus Buffer Gate *NEW!*	5-SOP	.60	.45	.34
SN74AHC1G125DCKR	296-8745-2-ND	Tri-State Single Bus Buffer Gate *NEW!*	5-SOP	585.00/3,000		
SN74AHC1G126DBVR	296-8746-1-ND	Tri-State Single Bus Buffer Gate *NEW!*	SOT-23-5	.56	.42	.32
SN74AHC1G126DBVR	296-8746-2-ND	Tri-State Single Bus Buffer Gate *NEW!*	SOT-23-5	546.00/3,000		
SN74AHC1G126DCKR	296-8747-1-ND	Tri-State Single Bus Buffer Gate *NEW!*	5-SOP	.60	.45	.34
SN74AHC1G126DCKR	296-8747-2-ND	Tri-State Single Bus Buffer Gate *NEW!*	5-SOP	585.00/3,000		
SN74AHC1GU04DBVR	296-1095-1-ND	Single Inverter Gate	SOT-23-5	.56	.42	.32
SN74AHC1GU04DBVR	296-1095-2-ND	Single Inverter Gate	SOT-23-5	546.00/3,000		
SN74AHC1GU04DCKR	296-8751-1-ND	Single Inverter Gate *NEW!*	5-SOP	.60	.45	.34
SN74AHC1GU04DCKR	296-8751-2-ND	Single Inverter Gate *NEW!*	5-SOP	585.00/3,000		
SN74AHCT1G00DBVR	296-1111-1-ND	Single 2-Input NAND Gate	SOT-23-5	.56	.42	.32
SN74AHCT1G00DBVR	296-1111-2-ND	Single 2-Input NAND Gate	SOT-23-5	546.00/3,000		
SN74AHCT1G00DCKR	296-4703-1-ND	Single 2-Input NAND Gate *NEW!*	5-SOT	.60	.45	.34
SN74AHCT1G00DCKR	296-4703-2-ND	Single 2-Input NAND Gate *NEW!*	5-SOT	585.00/3,000		
SN74AHCT1G02DBVR	296-4704-1-ND	Single 2-Input NOR Gate *NEW!*	SOT-23-5	.56	.42	.32
SN74AHCT1G02DBVR	296-4704-2-ND	Single 2-Input NOR Gate *NEW!*	SOT-23-5	546.00/3,000		
SN74AHCT1G02DCKR	296-4705-1-ND	Single 2-Input NOR Gate *NEW!*	5-SOT	.60	.45	.34
SN74AHCT1G02DCKR	296-4705-2-ND	Single 2-Input NOR Gate *NEW!*	5-SOT	585.00/3,000		
SN74AHCT1G04DBVR	296-1112-1-ND	Single Inverter Gate	SOT-23-5	.56	.42	.32
SN74AHCT1G04DBVR	296-1112-2-ND	Single Inverter Gate	SOT-23-5	546.00/3,000		
SN74AHCT1G04DCKR	296-4706-1-ND	Single Inverter Gate *NEW!*	5-SOT	.60	.45	.34
SN74AHCT1G04DCKR	296-4706-2-ND	Single Inverter Gate *NEW!*	5-SOT	585.00/3,000		
SN74AHCT1G08DBVR	296-1113-1-ND	Single 2-Input AND Gate	SOT-23-5	.56	.42	.32
SN74AHCT1G08DBVR	296-1113-2-ND	Single 2-Input AND Gate	SOT-23-5	546.00/3,000		
SN74AHCT1G08DCKR	296-4707-1-ND	Single 2-Input AND Gate *NEW!*	5-SOT	.60	.45	.34
SN74AHCT1G08DCKR	296-4707-2-ND	Single 2-Input AND Gate *NEW!*	5-SOT	585.00/3,000		
SN74AHCT1G14DBVR	296-1114-1-ND	Single Schmitt-Trigger Inverter	SOT-23-5	.56	.42	.32
SN74AHCT1G14DBVR	296-1114-2-ND	Single Schmitt-Trigger Inverter	SOT-23-5	546.00/3,000		
SN74AHCT1G14DCKR	296-4712-1-ND	Single Schmitt-Trigger Inverter Gate *NEW!*	5-SOT	.60	.45	.34
SN74AHCT1G14DCKR	296-4712-2-ND	Single Schmitt-Trigger Inverter Gate *NEW!*	5-SOT	585.00/3,000		
SN74AHCT1G32DBVR	296-1115-1-ND	Single 2-Input OR Gate	SOT-23-5	.56	.42	.32
SN74AHCT1G32DBVR	296-1115-2-ND	Single 2-Input OR Gate	SOT-23-5	546.00/3,000		
SN74AHCT1G32DCKR	296-4713-1-ND	Single 2-Input OR Gate *NEW!*	5-SOT	.60	.45	.34
SN74AHCT1G32DCKR	296-4713-2-ND	Single 2-Input OR Gate *NEW!*	5-SOT	585.00/3,000		
SN74AHCT1G86DBVR	296-4714-1-ND	Single 2-Input EX-OR Gate *NEW!*	SOT-23-5	.56	.42	.32
SN74AHCT1G86DBVR	296-4714-2-ND	Single 2-Input EX-OR Gate *NEW!*	SOT-23-5	546.00/3,000		
SN74AHCT1G86DCKR	296-4715-1-ND	Single 2-Input EX-OR Gate *NEW!*	5-SOT	.60	.45	.34
SN74AHCT1G86DCKR	296-4715-2-ND	Single 2-Input EX-OR Gate *NEW!*	5-SOT	585.00/3,000		
SN74AHCT1G125DBVR	296-4708-1-ND	Tri-St. Single Bus Buffer Gate *NEW!*	SOT-23-5	.56	.42	.32
SN74AHCT1G125DBVR	296-4708-2-ND	Tri-St. Single Bus Buffer Gate *NEW!*	SOT-23-5	546.00/3,000		
SN74AHCT1G125DCKR	296-4709-1-ND	Tri-State Single Bus Buffer Gate *NEW!*	5-SOT	.56	.42	.32
SN74AHCT1G125DCKR	296-4709-2-ND	Tri-State Single Bus Buffer Gate *NEW!*	5-SOT	546.00/3,000		
SN74AHCT1G126DBVR	296-4710-1-ND	Tri-St. Single Bus Buffer Gate *NEW!*	SOT-23-5	.56	.42	.32
SN74AHCT1G126DBVR	296-4710-2-ND	Tri-St. Single Bus Buffer Gate *NEW!*	SOT-23-5	546.00/3,000		
SN74AHCT1G126DCKR	296-4711-1-ND	Tri-State Single Bus Buffer Gate *NEW!*	5-SOT	.60	.45	.34
SN74AHCT1G126DCKR	296-4711-2-ND	Tri-State Single Bus Buffer Gate *NEW!*	5-SOT	585.00/3,000		

ALS Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ALS00AD	296-1477-5-ND	Quad 2-Input NAND Gate	14-SOP	.68	.51	.39
SN74ALS00ADR	296-1477-2-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	617.50/2,500		
SN74ALS00ADBR	296-5000-2-ND	Quad 2-Input NAND Gate *NEW!*	14-SSOP	452.00/2,000		
SN74ALS00AN	296-1478-5-ND	Quad 2-Input NAND Gate.	14-Dip	.64	.48	.36
SN74ALS00ANSR	296-5001-1-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	.88	.66	.50
SN74ALS00ANSR	296-5001-2-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	586.00/2,000		
SN74ALS02AD	296-5002-5-ND	Quad 2-Input NOR Gate *NEW!*	14-SOP	.68	.51	.39
SN74ALS02AN	296-1479-5-ND	Quad 2-Input NOR Gate	14-Dip	.64	.48	.36
SN74ALS03BN	296-5003-5-ND	Quad 2-Input NAND Buffer with OC Output *NEW!*	14-SOP	1.02	.85	.68
SN74ALS04BD	296-1122-5-ND	Hex Inverter	14-SOP	.68	.51	.39
SN74ALS04BDR	296-1122-2-ND	Hex Inverter	14-SOP	617.50/2,500		
SN74ALS04BDBR	296-5004-1-ND	Hex Inverter *NEW!*	14-SSOP	.68	.51	.39
SN74ALS04BDBR	296-5004-2-ND	Hex Inverter *NEW!*	14-SSOP	452.00/2,000		
SN74ALS04BN	296-1481-5-ND	Hex Inverter	14-Dip	.64	.48	.36
SN74ALS05AD	296-5005-5-ND	Hex Inverter with OC *NEW!*	14-SOP	.96	.72	.54
SN74ALS05AN	296-1482-5-ND	Hex Inverter with OC	14-Dip	.88	.66	.50
SN74ALS08D	296-1123-5-ND	Quad 2-Input AND Gate	14-SOP	.68	.51	.39
SN74ALS08DR	296-1123-2-ND	Quad 2-Input AND Gate	14-SOP	617.50/2,500		
SN74ALS08N	296-1484-5-ND	Quad 2-Input AND Gate	14-Dip	.64	.48	.36
SN74ALS09D	296-5006-5-ND	Quad 2-Input AND Gate with OC Output *NEW!*	14-SOP	.96	.80	.64
SN74ALS10AD	296-5010-5-ND	Triple 3-Input NAND Gate *NEW!*	14-SOP	.68	.51	.39
SN74ALS10AN	296-5011-5-ND	Triple 3-Input NAND Gate *NEW!*	14-Dip	.64	.48	.36
SN74ALS11AN	296-5014-5-ND	Triple 3-Input AND Gate *NEW!*	14-Dip	.80	.60	.45
SN74ALS20ADR	296-5036-1-ND	Dual 4-Input NAND Gate *NEW!*	14-SOP	1.08	.90	.72
SN74ALS20ADR	296-5036-2-ND	Dual 4-Input NAND Gate *NEW!*	14-SOP	1170.00/2,500		
SN74ALS21AD	296-5045-5-ND	Dual 4-Input AND Gate *NEW!*	14-SOP	1.02	.85	.68
SN74ALS21ADR	296-5045-2-ND	Dual 4-Input AND Gate *NEW!*	14-SOP	1170.00/2,500		
SN74ALS30AN	296-1494-5-ND	8-Input NAND Gate	14-Dip	.75	.63	.50
SN74ALS32D	296-1127-5-ND	Quad 2-Input OR Gate *NEW!*	14-SOP	.68	.51	.39
SN74ALS32DR	296-1127-1-ND	Quad 2-Input OR Gate.	14-SOP	.76	.57	.43
SN74ALS32DR	296-1127-2-ND	Quad 2-Input OR Gate.	14-SOP	617.50/2,500		
SN74ALS32N	296-1495-5-ND	Quad 2-Input OR Gate.	14-Dip	.64	.48	.36
SN74ALS38BD	296-5059-5-ND	Quad 2-Input NAND Buffer with OC Output *NEW!*	14-SOP	1.26	1.05	.84
SN74ALS38BN	296-5060-5-ND	Quad 2-Input NAND Buffer with OC Output *NEW!*	14-Dip	1.26	1.05	.84
SN74ALS74AD	296-1130-5-ND	Dual D-Type Flip-Flop	14-SOP	.84	.63	.48
SN74ALS74ADR	296-1130-2-ND	Dual D-Type Flip-Flop	14-SOP	747.50/2,500		
SN74ALS74AN	296-1506-5-ND	Dual D-Type Flip-Flop	14-Dip	.80	.60	.45
SN74ALS86D	296-5092-5-ND	Quad 2-Input EX-OR Gate *NEW!*	14-SOP	.84	.63	.48
SN74ALS86N	296-5093-5-ND	Quad 2-Input EX-OR Gate *NEW!*	14-Dip	.80	.60	.45
SN74ALS112AD	296-5012-5-ND	Dual JK Neg-Edge-Trig Flip-Flop with Clear/Preset *NEW!*	16-SOP	.75	.63	.50
SN74ALS112AN	296-5013-5-ND	Dual JK Neg-Edge-Trig Flip-Flop with Clear/Preset *NEW!*	16-Dip	.75	.63	.50
SN74ALS133N	296-5017-5-ND	13-Input NAND Gate *NEW!*	16-Dip	1.65	1.32	.99
SN74ALS138AD	296-5018-5-ND	3-8 Line Decoder/Demultiplexer *NEW!*	16-SOP	.96	.80	.64
SN74ALS138AN	296-1485-5-ND	3-8 Line Decoder/Demultiplexer	16-Dip	.90	.75	.60
SN74ALS139D	296-5019-5-ND	Dual 2-4 Decoder/Demultiplexer *NEW!*	16-SOP	1.17	.98	.78
SN74ALS139N	296-1486-5-ND	Dual 2-4 Decoder/Demultiplexer	16-Dip	1.08	.90	.72
SN74ALS151N	296-5020-5-ND	1-of-8 Data Selector/Mux *NEW!*	16-Dip	1.08	.90	.72
SN74ALS153DR	296-5021-1-ND	Dual 1-of-4 Data Selector/Mux *NEW!*	16-SOP	1.23	1.03	.82
SN74ALS153DR	296-5021-2-ND	Dual 1-of-4 Data Selector/Mux *NEW!*	16-SOP	1332.50/2,500		
SN74ALS153N	296-5022-5-ND	Dual 1-of-4 Data Selector/Mux *NEW!*	16-Dip	1.08	.90	.72
SN74ALS158N	296-5023-5-ND	Quad 1-of-2 Data Selector/Mux *NEW!*	16-Dip	1.90	1.52	1.14
SN74ALS161BD	296-5024-5-ND	4-Bit Asynch. Binary Counter *NEW!*	16-SOP	1.11	.93	.74
SN74ALS161BN	296-1487-5-ND	4-Bit Synchronous Binary Counter	16-Dip	1.05	.88	.70
SN74ALS163BN	296-1488-5-ND	4-Bit Synchronous Binary Counter	16-Dip	1.05	.88	.70
SN74ALS164AD	296-5026-5-ND	8-Bit Parallel-Out Shift Register *NEW!*	14-SOP	1.20	1.00	.80
SN74ALS166DBR	296-5027-1-ND	8-Bit Par.-Load Shift Register *NEW!*	16-SSOP	2.81	2.25	1.75
SN74ALS166DBR	296-5027-2-ND	8-Bit Par.-Load Shift Register *NEW!*	16-SSOP	3188.00/2,000		
SN74ALS174D	296-5029-5-ND	Hex D-Type Flip-Flop with Clear *NEW!*	16-SOP	.96	.80	.64
SN74ALS174N	296-5030-5-ND	Hex D-Type Flip-Flop with Clear *NEW!*	16-Dip	.90	.75	.60
SN74ALS174NSR	296-5031-1-ND	Hex D-Type Flip-Flop with Clear *NEW!*	16-SOP	1.11	.93	.74
SN74ALS174NSR	296-5031-2-ND	Hex D-Type Flip-Flop with Clear *NEW!*	16-SOP	984.00/2,000		
SN74ALS175D	296-5032-5-ND	Quad D-Type Flip-Flop with Clear *NEW!*	16-SOP	.96	.80	.64
SN74ALS175N	296-5033-5-ND	Quad D-Type Flip-Flop with Clear *NEW!*	16-Dip	.90	.75	.60
SN74ALS191AN	296-5034-5-ND	4-Bit Sync. Up/Down Binary Counter *NEW!*	16-Dip	1.35	1.13	.90
SN74ALS193AD	296-5035-5-ND	4-Bit Sync. Up/Down Binary Counter with Dual-Clock *NEW!*	16-SOP	1.30	1.04	.78
SN74ALS232BDW	296-5038-5-ND	16 x 4 Async. FIFO Memory *NEW!*	16-SOP	9.00	7.20	6.08
SN74ALS232BN	296-5039-5-ND	16 x 4 Async. FIFO Memory *NEW!*	16-Dip	9.00	7.20	6.08
SN74ALS240A-1DWR	296-5040-1-ND	Octal Buffer/Bus Driver *NEW!*	20-SOP	1.88	1.50	1.13
SN74ALS240A-1DWR	296-5040-2-ND	Octal Buffer/Bus Driver *NEW!*	20-SOP	1950.00/2,000		
SN74ALS240A-1N	296-5041-5-ND	Octal Buffer/Bus Driver *NEW!*	20-Dip	1.75	1.40	1.05
SN74ALS240ADW	296-5042-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1.26	1.05	.84
SN74ALS241CDW	296-5043-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1.26	1.05	.84
SN74ALS243AN	296-5044-5-ND	Tri-State Quad Bus Transceiver *NEW!*	14-Dip	3.31	2.65	2.06
SN74ALS244CDBR	296-5046-1-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-SSOP	1.26	1.05	.84
SN74ALS244CDBR	296-5046-2-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-SSOP	1118.00/2,000		
SN74ALS244CDW	296-1124-5-ND	Tri-State Octal Buffer/Line Driver	20-SOP	1.26	1.05	.84
SN74ALS244CDWR	296-1124-2-ND	Tri-State Octal Buffer/Line Driver	20-SOP	1170.00/2,000		
SN74ALS244CN	296-1490-5-ND	Tri-State Octal Buffer/Line Driver.	20-Dip	1.20	1.00	.80
SN74ALS245A-1DW	296-5047-5-ND	Octal Bus Transceiver *NEW!*	20-SOP	1.88	1.50	1.13
SN74ALS245A-1N	296-5048-5-ND	Octal Bus Transceiver *NEW!*	20-Dip	1.80	1.44	1.08
SN74ALS245ADBR	296-5049-1-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SSOP	1.26	1.05	.84
SN74ALS245ADBR	296-5049-2-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SSOP	1118.00/2,000		
SN74ALS245ADW	296-1125-5-ND	Tri-State Octal Buffer/Line Driver	20-SOP	1.26	1.05	.84
SN74ALS245ADWR	296-1125-2-ND	Tri-State Octal Buffer/Line Driver	20-SOP	1170.00/2,000		
SN74ALS245AN	296-1492-5-ND	Tri-State Octal Buffer/Line Driver.	20-Dip	1.20	1.00	.80
SN74ALS257AD	296-5050-5-ND	Tri-State Quad 2-1 Data Selector/Multiplexer *NEW!*	16-SOP	.96	.80	.64
SN74ALS257AN	296-5051-5-ND	Tri-State Quad 2-1 Data Selector/Multiplexer *NEW!*	16-Dip	.90	.75	.60
SN74ALS258AD	296-5052-5-ND	Tri-State Quad 2-1 Data Selector/Multiplexer *NEW!*	16-SOP	1.90	1.52	1.14
SN74ALS259N	296-5053-5-ND	Octal Addressable Latch *NEW!*	16-Dip	1.88	1.50	1.13
SN74ALS273DW	296-1126-5-ND	Octal D-Type Flip-Flop with Clear *NEW!*	20-SOP	1.38	1.15	.92
SN74ALS273DWR	296-1126-1-ND	Octal D-Type Flip-Flop with Clear	20-SOP	1.44	1.20	.96
SN74ALS273DWR	296-1126-2-ND	Octal D-Type Flip-Flop with Clear	20-SOP	1276.00/2,000		
SN74ALS273N	296-1493-5-ND	Octal D-Type Flip-Flop with Clear	20-SOP	1.38	1.15	.92
SN74ALS280DR	296-5054-1-ND	9-Bit Odd/Even Parity Generator/Checker *NEW!*	14-SOP	2.43	1.94	1.46
SN74ALS280DR	296-5054-2-ND	9-Bit Odd/Even Parity Generator/Checker *NEW!*	14-SOP	3105.00/2,500		
SN74ALS373ADBR	296-5056-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SSOP	1.26	1.05	.84
SN74ALS373ADBR	296-5056-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SSOP	1118.00/2,000		
SN74ALS373ADW	296-5057-5-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SOP	1.26	1.05	.84
SN74ALS373AN	296-1496-5-ND	Tri-State Octal Transparent D-Type Latch	20-Dip	1.20	1.00	.80

(Continued)

★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ALS374ADBR	296-5058-1-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	1.26	1.05	.84
SN74ALS374ADBR	296-5058-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	1118.00/2,000		
SN74ALS374ADW	296-1128-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	1.26	1.05	.84
SN74ALS374ADWR	296-1128-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	1170.00/2,000		
SN74ALS374AN	296-1498-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	1.20	1.00	.80
SN74ALS520DW	296-5061-5-ND	Octal Binary/BCD Identity Comp. *NEW!*	20-SOP	3.26	2.61	2.03
SN74ALS521DW	296-5062-5-ND	8-Bit Identity Comp. w/OC Out *NEW!*	20-SOP	3.26	2.61	2.03
SN74ALS533ADW	296-5063-5-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SOP	2.25	1.80	1.35
SN74ALS534AN	296-5064-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-Dip	1.88	1.50	1.13
SN74ALS541-1N	296-5065-5-ND	Octal Buffer/Line Driver *NEW!*	20-Dip	2.93	2.34	1.82
SN74ALS541DW	296-1499-5-ND	Tri-State Octal Buffer/Line Driver	20-SOP	1.78	1.42	1.07
SN74ALS541N	296-1500-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	1.70	1.36	1.02
SN74ALS564BDW	296-5066-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	2.13	1.70	1.28
SN74ALS573CDW	296-1129-5-ND	Tri-State Octal D-Type Transparent Latch	20-SOP	1.17	.98	.78
SN74ALS573CDWR	296-1129-2-ND	Tri-State Octal D-Type Transparent Latch	20-SOP	1090.00/2,000		
SN74ALS573CN	296-1502-5-ND	Tri-State Octal D-Type Transparent Latch	20-Dip	1.17	.98	.78
SN74ALS574BDW	296-1503-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	1.17	.98	.78
SN74ALS574BN	296-1504-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	1.17	.98	.78
SN74ALS623ADW	296-5067-5-ND	Octal Bus Transceiver *NEW!*	20-SOP	2.48	1.98	1.49
SN74ALS623ADWR	296-5067-2-ND	Octal Bus Transceiver *NEW!*	20-SOP	2576.00/2,000		
SN74ALS639AN	296-5068-5-ND	Octal Bus Transceiver *NEW!*	20-Dip	2.93	2.34	1.82
SN74ALS641ADWR	296-5069-1-ND	Octal Bus Transcvr. w/OC Output *NEW!*	20-SOP	2.30	1.84	1.43
SN74ALS641ADWR	296-5069-2-ND	Octal Bus Transcvr. w/OC Output *NEW!*	20-SOP	2602.00/2,000		
SN74ALS641AN	296-5070-5-ND	Octal Bus Transcvr. w/OC Output *NEW!*	20-Dip	2.25	1.80	1.40
SN74ALS642A-1DW	296-5071-5-ND	Octal Bus Transcvr. w/OC Output *NEW!*	20-SOP	2.93	2.34	1.82
SN74ALS642A-1N	296-5072-5-ND	Octal Bus Transcvr. w/OC Output *NEW!*	20-Dip	2.93	2.34	1.82
SN74ALS645A-1DW	296-5073-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	2.36	1.89	1.47
SN74ALS645A-1N	296-5074-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-Dip	2.36	1.89	1.47
SN74ALS645ADW	296-5075-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	1.98	1.58	1.19
SN74ALS645AN	296-5076-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-Dip	1.98	1.58	1.19
SN74ALS646A-1DW	296-5077-5-ND	Tri-State Octal Registered Bus Transceiver *NEW!*	24-SOP	6.10	4.88	4.12
SN74ALS652A-1DW	296-5079-5-ND	Tri-State Octal Bus Transceiver/Register *NEW!*	24-SOP	5.50	4.40	3.72
SN74ALS652ADW	296-5080-5-ND	Tri-State Octal Bus Transceiver/Register *NEW!*	24-SOP	4.84	3.87	3.01
SN74ALS666DW	296-5081-5-ND	Tri-State Octal D-Type Read-Back Latch *NEW!*	24-SOP	7.00	5.60	4.73
SN74ALS688DW	296-5082-5-ND	8-Bit Identity Comparator *NEW!*	20-SOP	3.60	2.88	2.24
SN74ALS688DWR	296-5082-2-ND	8-Bit Identity Comparator *NEW!*	20-SOP	4132.00/2,000		
SN74ALS760DWR	296-5083-1-ND	Octal Buffer/Driver w/OC Output *NEW!*	20-SOP	2.45	1.96	1.47
SN74ALS760DWR	296-5083-2-ND	Octal Buffer/Driver w/OC Output *NEW!*	20-SOP	2548.00/2,000		
SN74ALS804ADWR	296-5084-1-ND	Hex 2-Input NAND Driver *NEW!*	20-SOP	3.29	2.63	2.05
SN74ALS804ADWR	296-5084-2-ND	Hex 2-Input NAND Driver *NEW!*	20-SOP	3724.00/2,000		
SN74ALS804AN	296-5085-5-ND	Hex 2-Input NAND Driver *NEW!*	20-Dip	3.24	2.60	2.02
SN74ALS841DW	296-5086-5-ND	Tri-State 10-Bit Interface D-Type Latch *NEW!*	24-SOP	3.71	2.97	2.31
SN74ALS841NT	296-5087-5-ND	Tri-State 10-Bit Interface D-Type Latch *NEW!*	24-Dip	3.71	2.97	2.31
SN74ALS867ADW	296-5088-5-ND	Sync. 8-Bit Up/Down Binary Counter *NEW!*	24-SOP	6.30	5.04	4.26
SN74ALS867ANT	296-5089-5-ND	Sync. 8-Bit Up/Down Binary Counter *NEW!*	24-Dip	6.30	5.04	4.26
SN74ALS869DW	296-5090-5-ND	Sync. 8-Bit Up/Down Binary Counter *NEW!*	24-SOP	6.30	5.04	4.26
SN74ALS869NT	296-5091-5-ND	Sync. 8-Bit Up/Down Binary Counter *NEW!*	24-Dip	6.30	5.04	4.26
SN74ALS873BDW	296-5094-5-ND	Tri-State Dual 4-Bit D-Type Latch *NEW!*	24-SOP	2.93	2.34	1.82
SN74ALS874BDW	296-5095-5-ND	Tri-St. Dual 4-Bit D-Type Flip-Flop *NEW!*	24-SOP	2.48	1.98	1.49
SN74ALS990DW	296-5096-5-ND	Octal D-Type Transparent Read-Back Latch *NEW!*	20-SOP	5.18	4.14	3.22
SN74ALS992NT	296-5097-5-ND	Tri-State 9-Bit D-Type Read-Back Latch *NEW!*	24-Dip	9.20	7.36	6.21
SN74ALS996DW	296-5098-5-ND	Octal D-Type Read-Back Latch *NEW!*	24-SOP	8.00	6.40	5.40
SN74ALS996DWR	296-5098-2-ND	Octal D-Type Read-Back Latch *NEW!*	24-SOP	10000.00/2,000		
SN74ALS996NT	296-1507-5-ND	8-Bit READ-BACK Latch	24-Dip	8.00	6.40	5.40
SN74ALS1034D	296-5007-5-ND	Hex Non-Inverting Driver *NEW!*	14-SOP	1.25	1.00	.75
SN74ALS1035D	296-5008-5-ND	Hex Non-Inverting Buffer with OC Output *NEW!*	14-SOP	1.08	.90	.72
SN74ALS1035N	296-5009-5-ND	Hex Non-Inverting Buffer with OC Output *NEW!*	14-Dip	.75	.63	.50
SN74ALS1244ADWR	296-5015-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	2.18	1.74	1.31
SN74ALS1244ADWR	296-5015-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	2262.00/2,000		
SN74ALS1244AN	296-5016-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	2.13	1.70	1.28
SN74ALS1640AN	296-5025-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-Dip	4.46	3.57	2.78
SN74ALS2240DW	296-5037-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	4.68	3.75	2.92
SN74ALS29827DW	296-5055-5-ND	Tri-State 10-Bit Buffer/Driver *NEW!*	24-SOP	4.61	3.69	2.87

ALVC Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ALVC00DGVR	296-5100-1-ND	Quad 2-Input NAND Gate *NEW!*	14-TVSOP	.96	.80	.64
SN74ALVC00DGVR	296-5100-2-ND	Quad 2-Input NAND Gate *NEW!*	14-TVSOP	852.00/2,000		
SN74ALVC00DR	296-5101-1-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	.87	.73	.58
SN74ALVC00DR	296-5101-2-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	942.50/2,500		
SN74ALVC00NSR	296-5103-1-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	.81	.68	.54
SN74ALVC00NSR	296-5103-2-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	718.00/2,000		
SN74ALVC00PWR	296-5104-1-ND	Quad 2-Input NAND Gate *NEW!*	14-Dip	.81	.68	.54
SN74ALVC00PWR	296-5104-2-ND	Quad 2-Input NAND Gate *NEW!*	14-Dip	718.00/2,000		
SN74ALVC04D	296-1508-5-ND	Hex Inverter	14-SOP	.81	.68	.54
SN74ALVC04DGVR	296-5105-1-ND	Hex Inverter *NEW!*	14-TVSOP	.96	.80	.64
SN74ALVC04DGVR	296-5105-2-ND	Hex Inverter *NEW!*	14-TVSOP	852.00/2,000		
SN74ALVC04PWR	296-5106-1-ND	Hex Inverter *NEW!*	14-Dip	.81	.68	.54
SN74ALVC04PWR	296-5106-2-ND	Hex Inverter *NEW!*	14-Dip	718.00/2,000		
SN74ALVC08DGVR	296-5107-1-ND	Quad 2-Input AND Gate *NEW!*	14-TVSOP	.96	.80	.64
SN74ALVC08DGVR	296-5107-2-ND	Quad 2-Input AND Gate *NEW!*	14-TVSOP	852.00/2,000		
SN74ALVC08DR	296-5108-1-ND	Quad 2-Input AND Gate *NEW!*	14-SOP	.87	.73	.58
SN74ALVC08DR	296-5108-2-ND	Quad 2-Input AND Gate *NEW!*	14-SOP	942.50/2,500		
SN74ALVC08PWR	296-5109-1-ND	Quad 2-Input AND Gate *NEW!*	14-Dip	.81	.68	.54
SN74ALVC08PWR	296-5109-2-ND	Quad 2-Input AND Gate *NEW!*	14-Dip	718.00/2,000		
SN74ALVC10D	296-1509-5-ND	Triple 3-Input NAND Gate	14-SOP	.81	.68	.54
SN74ALVC10DR	296-1509-2-ND	Triple 3-Input NAND Gate *NEW!*	14-SOP	877.50/2,500		
SN74ALVC10DGVR	296-5110-1-ND	Triple 3-Input NAND Gate *NEW!*	14-TVSOP	.96	.80	.64
SN74ALVC10DGVR	296-5110-2-ND	Triple 3-Input NAND Gate *NEW!*	14-TVSOP	852.00/2,000		
SN74ALVC10NSR	296-5111-1-ND	Triple 3-Input NAND Gate *NEW!*	14-SOP	.96	.80	.64
SN74ALVC10NSR	296-5111-2-ND	Triple 3-Input NAND Gate *NEW!*	14-SOP	852.00/2,000		
SN74ALVC10PWR	296-5112-1-ND	Triple 3-Input NAND Gate *NEW!*	14-Dip	.81	.68	.54
SN74ALVC10PWR	296-5112-2-ND	Triple 3-Input NAND Gate *NEW!*	14-Dip	718.00/2,000		
SN74ALVC14DGVR	296-5119-1-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TVSOP	.96	.80	.64
SN74ALVC14DGVR	296-5119-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TVSOP	852.00/2,000		
SN74ALVC14DR	296-5120-1-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SOP	.81	.68	.54
SN74ALVC14DR	296-5120-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SOP	877.50/2,500		
SN74ALVC14PWR	296-5121-1-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-Dip	.81	.68	.54
SN74ALVC14PWR	296-5121-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-Dip	718.00/2,000		
SN74ALVC32DGVR	296-5139-1-ND	Quad 2-Input OR Gate *NEW!*	14-TVSOP	.96	.80	.64
SN74ALVC32DGVR	296-5139-2-ND	Quad 2-Input OR Gate *NEW!*	14-TVSOP	852.00/2,000		
SN74ALVC32DR	296-5140-1-ND	Quad 2-Input OR Gate *NEW!*	14-SOP	.87	.73	.58
SN74ALVC32DR	296-5140-2-ND	Quad 2-Input OR Gate *NEW!*	14-SOP	942.50/2,500		
SN74ALVC32NSR	296-5141-1-ND	Quad 2-Input OR Gate *NEW!*	14-SOP	.81	.68	.54
SN74ALVC32NSR	296-5141-2-ND	Quad 2-Input OR Gate *NEW!*	14-SOP	718.00/2,000		
SN74ALVC32PWR	296-5142-1-ND	Quad 2-Input OR Gate *NEW!*	14-Dip	.81	.68	.54
SN74ALVC32PWR	296-5142-2-ND	Quad 2-Input OR Gate *NEW!*	14-Dip	718.00/2,000		
SN74ALVC125D	296-1510-5-ND	Tri-State Quad Bus Buffer Gate	14-SOP	.81	.68	.54
SN74ALVC125DR	296-1510-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SOP	877.50/2,500		
SN74ALVC125DGVR	296-5113-1-ND	Tri-St. Quad Bus Buffer Gate *NEW!*	14-TVSOP	.96	.80	.64
SN74ALVC125DGVR	296-5113-2-ND	Tri-St. Quad Bus Buffer Gate *NEW!*	14-TVSOP	852.00/2,000		
SN74ALVC125NSR	296-5114-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SOP	.96	.80	.64
SN74ALVC125NSR	296-5114-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SOP	852.00/2,000		
SN74ALVC125PWR	296-5115-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-Dip	.81	.68	.54
SN74ALVC125PWR	296-5115-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-Dip	718.00/2,000		
SN74ALVC126DGVR	296-5116-1-ND	Tri-St. Quad Bus Buffer Gate *NEW!*	14-TVSOP	.96	.80	.64
SN74ALVC126DGVR	296-5116-2-ND	Tri-St. Quad Bus Buffer Gate *NEW!*	14-TVSOP	852.00/2,000		
SN74ALVC126DR	296-5117-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SOP	.81	.68	.54
SN74ALVC126DR	296-5117-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SOP	877.50/2,500		
SN74ALVC126PWR	296-5118-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-Dip	.81	.68	.54
SN74ALVC126PWR	296-5118-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-Dip	718.00/2,000		
SN74ALVC244DW	296-5135-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1.25	1.00	.75
SN74ALVC244DWR	296-5135-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1300.00/2,000		
SN74ALVC244PWR	296-5136-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	1.25	1.00	.75
SN74ALVC244PWR	296-5136-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	1300.00/2,000		
SN74ALVC245DGVR	296-5137-1-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TVSOP	1.50	1.20	.90
SN74ALVC245DGVR	296-5137-2-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TVSOP	1560.00/2,000		
SN74ALVC245DWR	296-5138-1-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	1.25	1.00	.75
SN74ALVC245DWR	296-5138-2-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	1300.00/2,000		
SN74ALVC3631-10PCB	296-5143-ND	512x36, 3.3V Synchronous FIFO Memory *NEW!*	120-HLQFP	36.00	33.60	31.20
SN74ALVC3631-10PQ	296-5144-ND	512x36, 3.3V Synchronous FIFO Memory *NEW!*	132-BQFP	36.00	33.60	31.20
SN74ALVC3631-15PCB	296-5145-ND	512x36, 3.3V Synchronous FIFO Memory *NEW!*	120-HLQFP	33.75	31.50	29.25
SN74ALVC3631-15PQ	296-5146-ND	512x36, 3.3V Synchronous FIFO Memory *NEW!*	132-BQFP	33.75	31.50	29.25
SN74ALVC3631-20PCB	296-5147-ND	512x36, 3.3V Synchronous FIFO Memory *NEW!*	120-HLQFP	27.75	25.90	24.05
SN74ALVC3631-20PQ	296-5148-ND	512x36, 3.3V Synchronous FIFO Memory *NEW!*	132-BQFP	27.75	25.90	24.05
SN74ALVC3641-10PCB	296-5149-ND	518x36, 3.3V Synchronous FIFO Memory *NEW!*	120-HLQFP	39.00	36.40	33.80
SN74ALVC3641-10PQ	296-5150-ND	518x36, 3.3V Synchronous FIFO Memory *NEW!*	132-BQFP	39.00	36.40	33.80
SN74ALVC3641-15PCB	296-5151-ND	518x36, 3.3V Synchronous FIFO Memory *NEW!*	120-HLQFP	36.75	34.30	31.85
SN74ALVC3641-15PQ	296-5152-ND	518x36, 3.3V Synchronous FIFO Memory *NEW!*	132-BQFP	36.75	34.30	31.85
SN74ALVC3641-20PCB	296-5153-ND	518x36, 3.3V Synchronous FIFO Memory *NEW!*	120-HLQFP	30.75	28.70	26.65
SN74ALVC3641-20PQ	296-5154-ND	518x36, 3.3V Synchronous FIFO Memory *NEW!*	132-BQFP	30.75	28.70	26.65
SN74ALVC3651-10PCB	296-5155-ND	524x36, 3.3V Synchronous FIFO Memory *NEW!*	120-HLQFP	42.00	39.20	36.40
SN74ALVC3651-10PQ	296-5156-ND	524x36, 3.3V Synchronous FIFO Memory *NEW!*	132-BQFP	42.00	39.20	36.40
SN74ALVC3651-15PCB	296-5157-ND	524x36, 3.3V Synchronous FIFO Memory *NEW!*	120-HLQFP	39.75	37.10	34.45
SN74ALVC3651-15PQ	296-5158-ND	524x36, 3.3V Synchronous FIFO Memory *NEW!*	132-BQFP	39.75	37.10	34.45
SN74ALVC3651-20PCB	296-5159-ND	524x36, 3.3V Synchronous FIFO Memory *NEW!*	120-HLQFP	36.75	34.30	31.85
SN74ALVC3651-20PQ	296-5160-ND	524x36, 3.3V Synchronous FIFO Memory *NEW!*	132-BQFP	36.75	34.30	31.85
SN74ALVC7803-20DL	296-5161-5-ND	512x18, 3.3V Synchronous FIFO Memory *NEW!*	56-SSOP	18.75	17.50	16.25
SN74ALVC7803-25DL	296-5162-5-ND	512x18, 3.3V Synchronous FIFO Memory *NEW!*	56-SSOP	15.75	14.70	13.65
SN74ALVC7803-40DL	296-5163-5-ND	512x18, 3.3V Synchronous FIFO Memory *NEW!*	56-SSOP	14.99	13.50	11.97
SN74ALVC7804-25DL	296-5164-5-ND	512x18, 3.3V Asynchronous FIFO Memory *NEW!*	56-SSOP	15.75	14.70	13.65
SN74ALVC7805-20DL	296-5165-5-ND	526x18, 3.3V Synchronous FIFO Memory *NEW!*	56-SSOP	18.00	16.80	15.60
SN74ALVC7805-25DL	296-5166-5-ND	526x18, 3.3V Synchronous FIFO Memory *NEW!*	56-SSOP	15.00	14.00	13.00
SN74ALVC7805-40DL	296-5167-5-ND	526x18, 3.3V Synchronous FIFO Memory *NEW!*	56-SSOP	14.16	12.75	11.31
SN74ALVC7806-25DL	296-5168-5-ND	526x18, 3.3V Asynchronous FIFO Memory *NEW!*	56-SSOP	15.00	14.00	13.00
SN74ALVC7813-20DL	296-5169-5-ND	64x18, 3.3V Synchronous FIFO Memory *NEW!*	56-SSOP	23.25	21.70	20.15
SN74ALVC7813-25DL	296-5170-5-ND	64x18, 3.3V Synchronous FIFO Memory *NEW!*	56-SSOP	20.25	18.90	17.55
SN74ALVC7813-40DL	296-5171-5-ND	64x18, 3.3V Synchronous FIFO Memory *NEW!*	56-SSOP	17.25	16.10	14.95
SN74ALVC7814-25DL	296-5172-5-ND	64x18, 3.3V Asynchronous FIFO Memory *NEW!*	56-SSOP	15.83	14.25	12.64
SN74ALVC7814-40DL	296-5173-5-ND	64x18, 3.3V Asynchronous FIFO Memory *NEW!*	56-SSOP	12.50	11.25	9.98
SN74ALVC16244ADGGR	296-5123-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2.25	1.80	1.40
SN74ALVC16244ADGGR	296-5123-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2550.00/2,000		
SN74ALVC16244ADL	296-5124-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	2.25	1.80	1.40
SN74ALVC16334DGGR	296-1134-1-ND	Tri-State 16-Bit Univ. Bus Driver	48-TSSOP	3.71	2.97	2.31
SN74ALVC16334DGGR	296-1134-2-ND	Tri-State 16-Bit Univ. Bus Driver	48-TSSOP	4208.00/2,000		

(Continued)

★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ALVC16334DGVR	296-5130-1-ND	Tri-St. 16-Bit Univ. Bus Driver *NEW!*	48-TVSOP	4.16	3.33	2.59
SN74ALVC16334DGVR	296-5130-2-ND	Tri-St. 16-Bit Univ. Bus Driver *NEW!*	48-TVSOP	4718.00/2,000		
SN74ALVC16334DL	296-1515-5-ND	Tri-State 16-Bit Univ. Bus Driver	48-SSOP	3.71	2.97	2.31
SN74ALVC16834DGGR	296-1136-1-ND	Tri-State 18-Bit Univ. Bus Driver	56-TSSOP	3.71	2.97	2.31
SN74ALVC16834DGGR	296-1136-2-ND	Tri-State 18-Bit Univ. Bus Driver	56-TSSOP	4208.00/2,000		
SN74ALVC16834DL	296-1516-5-ND	Tri-State 18-Bit Univ. Bus Driver	56-SSOP	3.71	2.97	2.31
SN74ALVC16834GQLR	296-5132-1-ND	Tri-St. 18-Bit Univ. Bus Driver *NEW!*	56-TVFBGA	4.83	3.87	3.01
SN74ALVC16834GQLR	296-5132-2-ND	Tri-St. 18-Bit Univ. Bus Driver *NEW!*	56-TVFBGA	2735.00/1,000		
SN74ALVC16835DGGR	296-1137-1-ND	Tri-State 18-Bit Univ. Bus Driver	56-TSSOP	3.71	2.97	2.31
SN74ALVC16835DGGR	296-1137-2-ND	Tri-State 18-Bit Univ. Bus Driver	56-TSSOP	4208.00/2,000		
SN74ALVC16835DGVR	296-5133-1-ND	Tri-St. 18-Bit Univ. Bus Driver *NEW!*	56-TVSOP	4.16	3.33	2.59
SN74ALVC16835DGVR	296-5133-2-ND	Tri-St. 18-Bit Univ. Bus Driver *NEW!*	56-TVSOP	4718.00/2,000		
SN74ALVC16835DL	296-5134-5-ND	Tri-State 18-Bit Univ. Bus Driver *NEW!*	56-SSOP	3.71	2.97	2.31
SN74ALVC162334DGGR	296-1131-1-ND	Tri-State 16-Bit Universal Bus Driver	48-TSSOP	3.71	2.97	2.31
SN74ALVC162334DGGR	296-1131-2-ND	Tri-State 16-Bit Universal Bus Driver	48-TSSOP	4208.00/2,000		
SN74ALVC162334DGVR	296-5122-1-ND	Tri-St. 16-Bit Univ. Bus Driver *NEW!*	48-TVSOP	4.16	3.33	2.59
SN74ALVC162334DGVR	296-5122-2-ND	Tri-St. 16-Bit Univ. Bus Driver *NEW!*	48-TVSOP	4718.00/2,000		
SN74ALVC162334DLR	296-1511-2-ND	Tri-St. 16-Bit Univ. Bus Driver *NEW!*	48-SSOP	2104.00/1,000		
SN74ALVC162334DL	296-1511-5-ND	Tri-State 16-Bit Universal Bus Driver	48-SSOP	3.71	2.97	2.31
SN74ALVC162831DBBR	296-5125-1-ND	Tri-State 1-4 Bit Address Register/Driver *NEW!*	80-TVSOP	5.80	4.64	3.92
SN74ALVC162831DBBR	296-5125-2-ND	Tri-State 1-4 Bit Address Register/Driver *NEW!*	80-TVSOP	7250.00/2,000		
SN74ALVC162834DL	296-1512-5-ND	Tri-State 18-Bit Universal Bus Driver	56-SSOP	2.81	2.25	1.75
SN74ALVC162834DLR	296-1512-2-ND	Tri-St. 18-Bit Univ. Bus Driver *NEW!*	56-SSOP	1594.00/1,000		
SN74ALVC162834GR	296-5126-1-ND	Tri-St. 18-Bit Univ. Bus Driver *NEW!*	56-TSSOP	2.81	2.25	1.75
SN74ALVC162834GR	296-5126-2-ND	Tri-St. 18-Bit Univ. Bus Driver *NEW!*	56-TSSOP	3188.00/2,000		
SN74ALVC162834VR	296-5127-1-ND	Tri-St. 18-Bit Univ. Bus Driver *NEW!*	56-TVSOP	3.26	2.61	2.03
SN74ALVC162834VR	296-5127-2-ND	Tri-St. 18-Bit Univ. Bus Driver *NEW!*	56-TVSOP	3698.00/2,000		
SN74ALVC162835DGGR	296-1132-1-ND	Tri-State 18-Bit Universal Bus Driver	56-TSSOP	3.71	2.97	2.31
SN74ALVC162835DGGR	296-1132-2-ND	Tri-State 18-Bit Universal Bus Driver	56-TSSOP	4208.00/2,000		
SN74ALVC162835DGVR	296-5128-1-ND	Tri-St. 18-Bit Univ. Bus Driver *NEW!*	56-TVSOP	4.16	3.33	2.59
SN74ALVC162835DGVR	296-5128-2-ND	Tri-St. 18-Bit Univ. Bus Driver *NEW!*	56-TVSOP	4718.00/2,000		
SN74ALVC162835DL	296-1513-5-ND	Tri-State 18-Bit Universal Bus Driver	56-SSOP	3.71	2.97	2.31
SN74ALVC162836DGGR	296-1133-1-ND	Tri-State 20-Bit Universal Bus Driver	56-TSSOP	3.71	2.97	2.31
SN74ALVC162836DGGR	296-1133-2-ND	Tri-State 20-Bit Universal Bus Driver	56-TSSOP	4208.00/2,000		
SN74ALVC162836DGVR	296-5129-1-ND	Tri-St. 20-Bit Univ. Bus Driver *NEW!*	56-TVSOP	4.16	3.33	2.59
SN74ALVC162836DGVR	296-5129-2-ND	Tri-St. 20-Bit Univ. Bus Driver *NEW!*	56-TVSOP	4718.00/2,000		
SN74ALVC162836DL	296-1514-5-ND	Tri-State 20-Bit Universal Bus Driver	56-SSOP	3.71	2.97	2.31
SN74ALVC164245DGGR	296-1135-1-ND	Tri-State 16-Bit Level Shift Transceiver	48-TSSOP	4.16	3.33	2.59
SN74ALVC164245DGGR	296-1135-2-ND	Tri-State 16-Bit Level Shift Transceiver	48-SSOP	4718.00/2,000		
SN74ALVC164245DL	296-5131-5-ND	Tri-St. 16-Bit Level Shift Xcvr. *NEW!*	48-SSOP	4.16	3.33	2.59

ALVCH / ALVTH Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ALVCH244DGVR	296-6274-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1.50	1.20	.90
SN74ALVCH244DGVR	296-6274-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1560.00/2,000		
SN74ALVCH244DW	296-1517-5-ND	Tri-State Octal Buffer/Driver	20-SOP	1.25	1.00	.75
SN74ALVCH244DWR	296-1517-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1352.00/2,000		
SN74ALVCH244PWR	296-6275-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	1.25	1.00	.75
SN74ALVCH244PWR	296-6275-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	1300.00/2,000		
SN74ALVCH245DGVR	296-6276-1-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	1.50	1.20	.90
SN74ALVCH245DGVR	296-6276-2-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	1560.00/2,000		
SN74ALVCH245DWR	296-6277-1-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	1.25	1.00	.75
SN74ALVCH245DWR	296-6277-2-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	1300.00/2,000		
SN74ALVCH245PWR	296-6278-1-ND	Tri-State Octal Bus Xcvr. *NEW!*	20-TSSOP	1.25	1.00	.75
SN74ALVCH245PWR	296-6278-2-ND	Tri-State Octal Bus Xcvr. *NEW!*	20-TSSOP	1300.00/2,000		
SN74ALVCH373DGVR	296-6283-1-ND	Tri-St. Octal Trans. D-Type Latch *NEW!*	20-SOP	1.38	1.10	.83
SN74ALVCH373DGVR	296-6283-2-ND	Tri-St. Octal Trans. D-Type Latch *NEW!*	20-SOP	1430.00/2,000		
SN74ALVCH373DWR	296-6284-1-ND	Tri-St. Octal Trans. D-Type Latch *NEW!*	20-SOP	1.25	1.00	.75
SN74ALVCH373DWR	296-6284-2-ND	Tri-St. Octal Trans. D-Type Latch *NEW!*	20-SOP	1300.00/2,000		
SN74ALVCH373PWR	296-6285-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TSSOP	1.25	1.00	.75
SN74ALVCH373PWR	296-6285-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TSSOP	1300.00/2,000		
SN74ALVCH16240DGGR	296-5185-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2.59	2.07	1.61
SN74ALVCH16240DGGR	296-5185-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2932.00/2,000		
SN74ALVCH16240DL	296-5186-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	2.59	2.07	1.61
SN74ALVCH16240DLR	296-5186-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	1466.00/1,000		
SN74ALVCH16244DGGR	296-1139-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2.25	1.80	1.40
SN74ALVCH16244DGGR	296-1139-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2550.00/2,000		
SN74ALVCH16244DGVR	296-5187-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SOP	2.70	2.16	1.68
SN74ALVCH16244DGVR	296-5187-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SOP	3060.00/2,000		
SN74ALVCH16244DL	296-5188-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	2.25	1.80	1.40
SN74ALVCH16244DLR	296-5188-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	1275.00/1,000		
SN74ALVCH16244KR	296-5189-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-BGA	2.93	2.34	1.82
SN74ALVCH16244KR	296-5189-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-BGA	1658.00/1,000		
SN74ALVCH16245DGGR	296-5190-1-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-TSSOP	2.25	1.80	1.40
SN74ALVCH16245DGGR	296-5190-2-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-TSSOP	2550.00/2,000		
SN74ALVCH16245DGVR	296-5191-1-ND	Tri-State 16-Bit Bus Transceiver *NEW!*	48-SOP	2.70	2.16	1.68
SN74ALVCH16245DGVR	296-5191-2-ND	Tri-State 16-Bit Bus Transceiver *NEW!*	48-SOP	3060.00/2,000		
SN74ALVCH16245DL	296-5192-5-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-SSOP	2.25	1.80	1.40
SN74ALVCH16245DLR	296-5192-2-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-SSOP	1275.00/1,000		
SN74ALVCH16245KR	296-5193-1-ND	Tri-State 16-Bit Bus Transceiver *NEW!*	48-BGA	2.93	2.34	1.82
SN74ALVCH16245KR	296-5193-2-ND	Tri-State 16-Bit Bus Transceiver *NEW!*	48-BGA	1658.00/1,000		
SN74ALVCH16260DGGR	296-1140-1-ND	Tri-State 12-24-Bit Mux D-Type Latch	56-TSSOP	3.38	2.70	2.10
SN74ALVCH16260DGGR	296-1140-2-ND	Tri-State 12-24-Bit Mux D-Type Latch	56-TSSOP	3826.00/2,000		
SN74ALVCH16260DL	296-1141-5-ND	Tri-State 12-24-Bit Multiplexer D-Type Latch *NEW!*	56-SSOP	3.38	2.70	2.10
SN74ALVCH16260DLR	296-1141-1-ND	Tri-State 12-24-Bit Mux D-Type Latch	56-SSOP	3.38	2.70	2.10
SN74ALVCH16260DLR	296-1141-2-ND	Tri-State 12-24-Bit Mux D-Type Latch	56-SSOP	1913.00/1,000		
SN74ALVCH16269DGGR	296-5198-1-ND	Tri-State 12-24-Bit Registered Bus Exchanger *NEW!*	56-TSSOP	3.71	2.97	2.31
SN74ALVCH16269DGGR	296-5198-2-ND	Tri-State 12-24-Bit Registered Bus Exchanger *NEW!*	56-TSSOP	4208.00/2,000		
SN74ALVCH16269DL	296-5199-5-ND	Tri-State 12-24-Bit Registered Bus Exchanger *NEW!*	56-SSOP	3.71	2.97	2.31
SN74ALVCH16270DGGR	296-5200-1-ND	Tri-State 12-24-Bit Registered Bus Exchanger *NEW!*	56-TSSOP	3.71	2.97	2.31
SN74ALVCH16270DGGR	296-5200-2-ND	Tri-State 12-24-Bit Registered Bus Exchanger *NEW!*	56-TSSOP	4208.00/2,000		
SN74ALVCH16270DL	296-5201-5-ND	Tri-State 12-24-Bit Registered Bus Exchanger *NEW!*	56-SSOP	3.71	2.97	2.31
SN74ALVCH16270DLR	296-5201-2-ND	Tri-State 12-24-Bit Registered Bus Exchanger *NEW!*	56-SSOP	2104.00/1,000		
SN74ALVCH16271DGGR	296-5202-1-ND	Tri-State 12-24-Bit Registered Bus Exchanger *NEW!*	56-TSSOP	3.71	2.97	2.31
SN74ALVCH16271DGGR	296-5202-2-ND	Tri-State 12-24-Bit Registered Bus Exchanger *NEW!*	56-TSSOP	4208.00/2,000		
SN74ALVCH16271DL	296-5203-5-ND	Tri-State 12-24-Bit Registered Bus Exchanger *NEW!*	56-SSOP	3.71	2.97	2.31
SN74ALVCH16282DBBR	296-5210-1-ND	Tri-State 18-36-Bit Registered Bus Exchanger *NEW!*	80-SOP	7.50	6.00	5.07
SN74ALVCH16282DBBR	296-5210-2-ND	Tri-State 18-36-Bit Registered Bus Exchanger *NEW!*	80-SOP	9376.00/2,000		
SN74ALVCH16334DGGR	296-5220-1-ND	Tri-St. 16-Bit Univ. Bus Driver *NEW!*	48-TSSOP	3.71	2.97	2.31
SN74ALVCH16334DGGR	296-5220-2-ND	Tri-St. 16-Bit Univ. Bus Driver *NEW!*	48-TSSOP	4208.00/2,000		
SN74ALVCH16334DL	296-5221-5-ND	Tri-St. 16-Bit Univ. Bus Driver *NEW!*	48-SSOP	3.71	2.97	2.31
SN74ALVCH16344DGGR	296-5222-1-ND	Tri-St. 1-4-Bit Address Driver *NEW!*	56-TSSOP	3.71	2.97	2.31
SN74ALVCH16344DGGR	296-5222-2-ND	Tri-St. 1-4-Bit Address Driver *NEW!*	56-TSSOP	4208.00/2,000		
SN74ALVCH16344DLR	296-5223-1-ND	Tri-State 1-4-Bit Address Driver *NEW!*	56-SSOP	3.71	2.97	2.31
SN74ALVCH16344DLR	296-5223-2-ND	Tri-State 1-4-Bit Address Driver *NEW!*	56-SSOP	2104.00/1,000		
SN74ALVCH16373DGGR	296-5224-1-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	48-TSSOP	2.25	1.80	1.40
SN74ALVCH16373DGGR	296-5224-2-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	48-TSSOP	2550.00/2,000		
SN74ALVCH16373DL	296-5225-5-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	48-SSOP	2.25	1.80	1.40
SN74ALVCH16374DGGR	296-1144-1-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TSSOP	2.25	1.80	1.40
SN74ALVCH16374DGGR	296-1144-2-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TSSOP	2550.00/2,000		
SN74ALVCH16374DL	296-5226-5-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-SSOP	2.25	1.80	1.40
SN74ALVCH16374DLR	296-5226-1-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-SSOP	2.25	1.80	1.40
SN74ALVCH16374DLR	296-5226-2-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-SSOP	1275.001,000		
SN74ALVCH16409DGGR	296-5227-1-ND	Tri-State 9-Bit 4-Port Universal Bus Exchanger *NEW!*	56-TSSOP	7.90	6.32	5.34
SN74ALVCH16409DGGR	296-5227-2-ND	Tri-State 9-Bit 4-Port Universal Bus Exchanger *NEW!*	56-TSSOP	9876.00/2,000		
SN74ALVCH16409DL	296-5228-5-ND	Tri-State 9-Bit 4-Port Universal Bus Exchanger *NEW!*	56-SSOP	7.90	6.32	5.34
SN74ALVCH16500DGGR	296-5229-1-ND	Tri-St. 18-Bit Univ. Bus Xcvr. *NEW!*	56-TSSOP	4.39	3.51	2.73
SN74ALVCH16500DGGR	296-5229-2-ND	Tri-St. 18-Bit Univ. Bus Xcvr. *NEW!*	56-TSSOP	4972.00/2,000		
SN74ALVCH16500DLR	296-5230-1-ND	Tri-St. 18-Bit Univ. Bus Xcvr. *NEW!*	56-SSOP	4.39	3.51	2.73
SN74ALVCH16500DLR	296-5230-2-ND	Tri-St. 18-Bit Univ. Bus Xcvr. *NEW!*	56-SSOP	2486.00/1,000		
SN74ALVCH16501DGGR	296-1145-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	4.39	3.51	2.73
SN74ALVCH16501DGGR	296-1145-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	4972.00/2,000		
SN74ALVCH16501DL	296-5231-5-ND	Tri-St. 18-Bit Univ. Bus Xcvr. *NEW!*	56-SSOP	4.39	3.51	2.73
SN74ALVCH16524DGGR	296-5232-1-ND	Tri-St. 18-Bit Reg. Bus Xcvr. *NEW!*	56-TSSOP	8.00	6.40	5.40
SN74ALVCH16524DGGR	296-5232-2-ND	Tri-St. 18-Bit Reg. Bus Xcvr. *NEW!*	56-TSSOP	10000.00/2,000		
SN74ALVCH16525DGGR	296-5233-1-ND	Tri-St. 18-Bit Reg. Bus Xcvr. *NEW!*	56-TSSOP	8.10	6.48	5.47
SN74ALVCH16525DGGR	296-5233-2-ND	Tri-St. 18-Bit Reg. Bus Xcvr. *NEW!*	56-TSSOP	10126.00/2,000		
SN74ALVCH16543DGGR	296-5236-1-ND	Tri-State 16-Bit Reg. Xcvr. *NEW!*	56-TSSOP	5.40	4.32	3.36
SN74ALVCH16543DGGR	296-5236-2-ND	Tri-State 16-Bit Reg. Xcvr. *NEW!*	56-TSSOP	6120.00/2,000		
SN74ALVCH16543DL	296-5237-5-ND	Tri-State 16-Bit Reg. Xcvr. *NEW!*	56-SSOP	5.40	4.32	3.36
SN74ALVCH16600DGGR	296-5238-1-ND	Tri-St. 18-Bit Univ. Bus Xcvr. *NEW!*	56-TSSOP	4.84	3.87	3.01
SN74ALVCH16600DGGR	296-5238-2-ND	Tri-St. 18-Bit Univ. Bus Xcvr. *NEW!*	56-TSSOP	5482.00/2,000		
SN74ALVCH16600DLR	296-5239-1-ND	Tri-State 18-Bit Univ. Bus Xcvr. *NEW!*	56-SSOP	4.84	3.87	3.01
SN74ALVCH16600DLR	296-5239-2-ND	Tri-State 18-Bit Univ. Bus Xcvr. *NEW!*	56-SSOP	2741.00/1,000		
SN74ALVCH16601DGGR	296-1146-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	4.84	3.87	3.01
SN74ALVCH16601DGGR	296-1146-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	5482.00/2,000		
SN74ALVCH16601DL	296-5240-5-ND	Tri-State 18-Bit Univ. Bus Xcvr. *NEW!*	56-SSOP	4.84	3.87	3.01
SN74ALVCH16601DLR	296-5241-1-ND	Tri-State 18-Bit Univ. Bus Xcvr. *NEW!*	56-SSOP	4.84	3.87	3.01
SN74ALVCH16601DLR	296-5241-2-ND	Tri-State 18-Bit Univ. Bus Xcvr. *NEW!*	56-SSOP	2741.00/1,000		
SN74ALVCH16646DGGR	296-5242-1-ND	Tri-State 16-Bit Bus Transceiver/Register *NEW!*	56-TSSOP	4.05	3.24	2.52
SN74ALVCH16646DGGR	296-5242-2-ND	Tri-State 16-Bit Bus Transceiver/Register *NEW!*	56-TSSOP	4590.00/2,000		
SN74ALVCH16646DGVR	296-5243-1-ND	Tri-State 16-Bit Bus Transceiver/Register *NEW!*	56-SOP	4.50	3.60	2.80
SN74ALVCH16646DGVR	296-5243-2-ND	Tri-State 16-Bit Bus Transceiver/Register *NEW!*	56-SOP	5100.00/2,000		
SN74ALVCH16646DL	296-5244-5-ND	Tri-State 16-Bit Bus Transceiver/Register *NEW!*	56-SSOP	4.05	3.24	2.52
SN74ALVCH16646DLR	296-5244-2-ND	Tri-State 16-Bit Bus Transceiver/Register *NEW!*	56-SSOP	2295.00/1,000		
SN74ALVCH16721DGGR	296-1147-1-ND	Tri-State 3.3V 20-Bit Flip-Flop	56-TSSOP	3.49	2.79	2.17
SN74ALVCH16721DGGR	296-1147-2-ND	Tri-State 3.3V 20-Bit Flip-Flop	56-TSSOP	3952.00/2,000		
SN74ALVCH16721DGVR	296-5245-1-ND	Tri-State 3.3V 20-Bit Flip-Flop *NEW!*	56-SOP	3.94	3.15	2.45
SN74ALVCH16721DGVR	296-5245-2-ND	Tri-State 3.3V 20-Bit Flip-Flop *NEW!*	56-SOP	4462.00/2,000		
SN74ALVCH16721DLR	296-5246-1-ND	Tri-State 3.3V 20-Bit Flip-Flop *NEW!*	56-SSOP	3.49	2.79	2.17
SN74ALVCH16721DLR	296-5246-2-ND	Tri-State 3.3V 20-Bit Flip-Flop *NEW!*	56-SSOP	1976.00/1,000		
SN74ALVCH16820DGGR	296-5247-1-ND	Tri-State/Dual Output 3.3V 10-Bit Flip-Flop *NEW!*	56-TSSOP	3.49	2.79	2.17
SN74ALVCH16820DGGR	296-5247-2-ND	Tri-State/Dual Output 3.3V 10-Bit Flip-Flop *NEW!*	56-TSSOP	3952.00/2,000		
SN74ALVCH16820DLR	296-5248-1-ND	Tri-State/Dual Output 3.3V 10-Bit Flip-Flop *NEW!*	56-SSOP	3.49	2.79	2.17
SN74ALVCH16820DLR	296-5248-2-ND	Tri-State/Dual Output 3.3V 10-Bit Flip-Flop *NEW!*	56-SSOP	1976.00/1,000		
SN74ALVCH16821DGGR	296-5249-1-ND	Tri-State 3.3V 20-Bit Bus-Interface Flip-Flop *NEW!*	56-TSSOP	3.49	2.79	2.17
SN74ALVCH16821DGGR	296-5249-2-ND	Tri-State 3.3V 20-Bit Bus-Interface Flip-Flop *NEW!*	56-TSSOP	3952.00/2,000		
SN74ALVCH16821DL	296-5250-5-ND	Tri-State 3.3V 20-Bit Bus-Interface Flip-Flop *NEW!*	56-SSOP	3.49	2.79	2.17
SN74ALVCH16821DLR	296-5250-2-ND	Tri-State 3.3V 20-Bit Bus-Interface Flip-Flop *NEW!*	56-SSOP	1976.00/1,000		
SN74ALVCH16823DGGR	296-1148-1-ND	Tri-State 18-Bit Bus-Interface Flip-Flop	56-TSSOP	3.49	2.79	2.17
SN74ALVCH16823DGGR	296-1148-2-ND	Tri-State 18-Bit Bus-Interface Flip-Flop	56-TSSOP	3952.00/2,000		
SN74ALVCH16823DL	296-5251-5-ND	Tri-State 18-Bit Bus-Interface Flip-Flop *NEW!*	56-SSOP	3.49	2.79	2.17
SN74ALVCH16825DGGR	296-5252-1-ND	Tri-State 18-Bit Buffer/Driver *NEW!*	56-TSSOP	3.49	2.79	2.17
SN74ALVCH16825DGGR	296-5252-2-ND	Tri-State 18-Bit Buffer/Driver *NEW!*	56-TSSOP	3952.00/2,000		
SN74ALVCH16825DL	296-5253-5-ND	Tri-State 18-Bit Buffer/Driver *NEW!*	56-SSOP	3.49	2.79	2.17
SN74ALVCH16827DGGR	296-5254-1-ND	Tri-State 20-Bit Buffer/Driver *NEW!*	56-TSSOP	3.49	2.79	2.17
SN74ALVCH16827DGGR	296-5254-2-ND	Tri-State 20-Bit Buffer/Driver *NEW!*	56-TSSOP	3952.00/2,000		
SN74ALVCH16827DL	296-5255-5-ND	Tri-State 20-Bit Buffer/Driver *NEW!*	56-SSOP	3.49	2.79	2.17
SN74ALVCH16831DBBR	296-5256-1-ND	Tri-St. 1-4 Address Register/Dvr. *NEW!*	80-SOP	5.84	4.68	3.95
SN74ALVCH16831DBBR	296-5256-2-ND	Tri-St. 1-4 Address Register/Dvr. *NEW!*	80-SOP	7300.00/2,000		
SN74ALVCH16832DGGR	296-5257-1-ND	Tri-State 1-4 Address Register/Driver *NEW!*	64-TSSOP	5.80	4.64	3.92

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ALVCH16832DGGR	296-5257-2-ND	Tri-State 1-4 Address Register/Driver *NEW!*	64-TSSOP	7250.00/2,000		
SN74ALVCH16835DGGR	296-1149-1-ND	Tri-State 18-Bit Universal Bus Driver	56-TSSOP	3.71	2.97	2.31
SN74ALVCH16835DGGR	296-1149-2-ND	Tri-State 18-Bit Universal Bus Driver	56-TSSOP	4208.00/2,000		
SN74ALVCH16835DGVR	296-5258-1-ND	Tri-State 18-Bit Univ. Bus Driver *NEW!*	56-SOP	4.16	3.33	2.59
SN74ALVCH16835DGVR	296-5258-2-ND	Tri-State 18-Bit Univ. Bus Driver *NEW!*	56-SOP	4718.00/2,000		
SN74ALVCH16835DL	296-5259-5-ND	Tri-St. 18-Bit Univ. Bus Driver *NEW!*	56-SSOP	3.71	2.97	2.31
SN74ALVCH16835DLR	296-5259-2-ND	Tri-St. 18-Bit Univ. Bus Driver *NEW!*	56-SSOP	2104.00/1,000		
SN74ALVCH16835KR	296-5260-1-ND	Tri-State 18-Bit Univ. Bus Driver *NEW!*	56-BGA	4.83	3.87	3.01
SN74ALVCH16835KR	296-5260-2-ND	Tri-State 18-Bit Univ. Bus Driver *NEW!*	56-BGA	2735.00/1,000		
SN74ALVCH16841DGGR	296-6261-1-ND	Tri-State 20-Bit Bus-Interface D-Type Latch *NEW!*	56-TSSOP	3.71	2.97	2.31
SN74ALVCH16841DGGR	296-6261-2-ND	Tri-State 20-Bit Bus-Interface D-Type Latch *NEW!*	56-TSSOP	4208.00/2,000		
SN74ALVCH16841DL	296-6266-5-ND	Tri-State 20-Bit Bus-Interface D-Type Latch *NEW!*	56-SSOP	3.71	2.97	2.31
SN74ALVCH16863DGGR	296-6267-1-ND	Tri-State 18-Bit Transceiver *NEW!*	56-TSSOP	3.49	2.79	2.17
SN74ALVCH16863DGGR	296-6267-2-ND	Tri-State 18-Bit Transceiver *NEW!*	56-TSSOP	3952.00/2,000		
SN74ALVCH16863DLR	296-6268-1-ND	Tri-State 18-Bit Transceiver *NEW!*	56-SSOP	3.49	2.79	2.17
SN74ALVCH16863DLR	296-6268-2-ND	Tri-State 18-Bit Transceiver *NEW!*	56-SSOP	1976.00/1,000		
SN74ALVCH16901DGGR	296-6269-1-ND	18-Bit Univ. Bus Transceiver with Parity-Generator/Checker *NEW!*	64-TSSOP	8.70	6.96	5.88
SN74ALVCH16901DGGR	296-6269-2-ND	18-Bit Univ. Bus Transceiver with Parity-Generator/Checker *NEW!*	64-TSSOP	10876.00/2,000		
SN74ALVCH16903DGGR	296-6270-1-ND	Tri-State/Dual Output 3.3V 12-Bit Univ. Bus Driver *NEW!*	56-TSSOP	8.50	6.80	5.74
SN74ALVCH16903DGGR	296-6270-2-ND	Tri-State/Dual Output 3.3V 12-Bit Univ. Bus Driver *NEW!*	56-TSSOP	10626.00/2,000		
SN74ALVCH16903DGVR	296-6271-1-ND	Tri-State/Dual Output 3.3V 12-Bit Univ. Bus Driver *NEW!*	56-SOP	8.90	7.12	6.01
SN74ALVCH16903DGVR	296-6271-2-ND	Tri-State/Dual Output 3.3V 12-Bit Univ. Bus Driver *NEW!*	56-SOP	11126.00/2,000		
SN74ALVCH16952DGVR	296-6272-1-ND	Tri-State 16-Bit Registered Xcvr. *NEW!*	56-SOP	4.50	3.60	2.80
SN74ALVCH16952DGVR	296-6272-2-ND	Tri-State 16-Bit Registered Xcvr. *NEW!*	56-SOP	5100.00/2,000		
SN74ALVCH16952DL	296-6273-5-ND	Tri-St. 16-Bit Registered Xcvr. *NEW!*	56-SSOP	4.05	3.24	2.52
SN74ALVCH16952DLR	296-6273-2-ND	Tri-St. 16-Bit Registered Xcvr. *NEW!*	56-SSOP	2321.00/1,000		
SN74ALVCH32244KR	296-6279-1-ND	Tri-State 32-Bit Buffer/Driver *NEW!*	96-BGA	4.73	3.78	2.94
SN74ALVCH32244KR	296-6279-2-ND	Tri-State 32-Bit Buffer/Driver *NEW!*	96-BGA	2678.00/1,000		
SN74ALVCH32245KR	296-6280-1-ND	Tri-State 32-Bit Bus Transceiver *NEW!*	96-BGA	4.73	3.78	2.94
SN74ALVCH32245KR	296-6280-2-ND	Tri-State 32-Bit Bus Transceiver *NEW!*	96-BGA	2678.00/1,000		
SN74ALVCH32374KR	296-6281-1-ND	Tri-State 32-Bit D-Type Flip-Flop *NEW!*	96-BGA	4.73	3.78	2.94
SN74ALVCH32374KR	296-6281-2-ND	Tri-State 32-Bit D-Type Flip-Flop *NEW!*	96-BGA	2678.00/1,000		
SN74ALVCH32501KR	296-6282-1-ND	Tri-State 36-Bit Univ. Bus Xcvr. *NEW!*	114-BGA	8.20	6.56	5.54
SN74ALVCH32501KR	296-6282-2-ND	Tri-State 36-Bit Univ. Bus Xcvr. *NEW!*	114-BGA	5125.00/1,000		
SN74ALVCH162244DL	296-5174-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	2.59	2.07	1.61
SN74ALVCH162244DLR	296-5174-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	1466.00/1,000		
SN74ALVCH162244GR	296-5175-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2.59	2.07	1.61
SN74ALVCH162244GR	296-5175-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2932.00/2,000		
SN74ALVCH162260DL	296-5176-5-ND	Tri-State 12-24-Bit Multiplexer D-Type Latch *NEW!*	56-SSOP	3.71	2.97	2.31
SN74ALVCH162260GR	296-1138-1-ND	Tri-State 12-24-Bit Mux D-Type Latch	56-TSSOP	3.71	2.97	2.31
SN74ALVCH162260GR	296-1138-2-ND	Tri-State 12-24-Bit Mux D-Type Latch	56-TSSOP	4208.00/2,000		
SN74ALVCH162268DL	296-5177-5-ND	Tri-State 12-24-Bit Registered Bus Exchanger *NEW!*	56-SSOP	3.71	2.97	2.31
SN74ALVCH162268GR	296-5178-1-ND	Tri-State 12-24-Bit Registered Bus Exchanger *NEW!*	56-TSSOP	3.71	2.97	2.31
SN74ALVCH162268GR	296-5178-2-ND	Tri-State 12-24-Bit Registered Bus Exchanger *NEW!*	56-TSSOP	4208.00/2,000		
SN74ALVCH162334DL	296-5179-5-ND	Tri-St. 16-Bit Univ. Bus Driver *NEW!*	56-SSOP	3.71	2.97	2.31
SN74ALVCH162334GR	296-5180-1-ND	Tri-St. 16-Bit Univ. Bus Driver *NEW!*	56-TSSOP	3.71	2.97	2.31
SN74ALVCH162334GR	296-5180-2-ND	Tri-St. 16-Bit Univ. Bus Driver *NEW!*	56-TSSOP	4208.00/2,000		
SN74ALVCH162344DL	296-5181-5-ND	Tri-St. 1-to-4-Bit Address Dvr. *NEW!*	56-SSOP	3.71	2.97	2.31
SN74ALVCH162344GR	296-5182-1-ND	Tri-St. 1-to-4-Bit Address Dvr. *NEW!*	56-TSSOP	3.71	2.97	2.31
SN74ALVCH162344GR	296-5182-2-ND	Tri-St. 1-to-4-Bit Address Dvr. *NEW!*	56-TSSOP	4208.00/2,000		
SN74ALVCH162374DL	296-5183-5-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-SSOP	2.81	2.25	1.75
SN74ALVCH162374GR	296-5184-1-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-TSSOP	2.81	2.25	1.75
SN74ALVCH162374GR	296-5184-2-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-TSSOP	3188.00/2,000		
SN74ALVCH162525GR	296-5194-1-ND	Tri-State 18-Bit Reg. Xcvr. *NEW!*	56-TSSOP	8.10	6.48	5.47
SN74ALVCH162525GR	296-5194-2-ND	Tri-State 18-Bit Reg. Xcvr. *NEW!*	56-TSSOP	10126.00/2,000		
SN74ALVCH162601DL	296-5195-5-ND	Tri-State 18-Bit Reg. Xcvr. *NEW!*	56-SSOP	4.84	3.87	3.01
SN74ALVCH162601GR	296-5196-1-ND	Tri-State 18-Bit Reg. Xcvr. *NEW!*	56-TSSOP	4.84	3.87	3.01
SN74ALVCH162601GR	296-5196-2-ND	Tri-State 18-Bit Reg. Xcvr. *NEW!*	56-TSSOP	5482.00/2,000		
SN74ALVCH162721DL	296-5204-5-ND	Tri-State 3.3V 20-Bit Flip-Flop *NEW!*	56-SSOP	3.71	2.97	2.31
SN74ALVCH162721DLR	296-5204-2-ND	Tri-State 3.3V 20-Bit Flip-Flop *NEW!*	56-SSOP	2104.00/1,000		
SN74ALVCH162721GR	296-5205-1-ND	Tri-State 3.3V 20-Bit Flip-Flop *NEW!*	56-TSSOP	3.71	2.97	2.31
SN74ALVCH162721GR	296-5205-2-ND	Tri-State 3.3V 20-Bit Flip-Flop *NEW!*	56-TSSOP	4208.00/2,000		
SN74ALVCH162820DL	296-5206-5-ND	Tri-State 3.3V 10-Bit Flip-Flop with Dual Output *NEW!*	56-SSOP	3.71	2.97	2.31
SN74ALVCH162820GR	296-5207-1-ND	Tri-State 3.3V 10-Bit Flip-Flop with Dual Output *NEW!*	56-TSSOP	3.71	2.97	2.31
SN74ALVCH162820GR	296-5207-2-ND	Tri-State 3.3V 10-Bit Flip-Flop with Dual Output *NEW!*	56-TSSOP	4208.00/2,000		
SN74ALVCH162827DL	296-5208-5-ND	Tri-State 20-Bit Buffer/Driver *NEW!*	56-SSOP	3.71	2.97	2.31
SN74ALVCH162827GR	296-1142-1-ND	Tri-State 20-Bit Buffer/Driver	56-TSSOP	3.71	2.97	2.31
SN74ALVCH162827GR	296-1142-2-ND	Tri-State 20-Bit Buffer/Driver	56-TSSOP	4208.00/2,000		
SN74ALVCH162827VR	296-5209-1-ND	Tri-State 20-Bit Buffer/Driver *NEW!*	56-SOP	4.16	3.33	2.59
SN74ALVCH162827VR	296-5209-2-ND	Tri-State 20-Bit Buffer/Driver *NEW!*	56-SOP	4718.00/2,000		
SN74ALVCH162830GR	296-5211-1-ND	Tri-St. 1-2-Bit Address Driver *NEW!*	80-TSSOP	5.80	4.64	3.92
SN74ALVCH162830GR	296-5211-2-ND	Tri-St. 1-2-Bit Address Driver *NEW!*	80-TSSOP	7250.00/2,000		
SN74ALVCH162831GR	296-5212-1-ND	Tri-State 1-4-Bit Address Register/Driver *NEW!*	80-TSSOP	5.84	4.68	3.95
SN74ALVCH162831GR	296-5212-2-ND	Tri-State 1-4-Bit Address Register/Driver *NEW!*	80-TSSOP	7300.00/2,000		
SN74ALVCH162832GR	296-5213-1-ND	Tri-State 1-4-Bit Address Register/Driver *NEW!*	64-TSSOP	5.80	4.64	3.92
SN74ALVCH162832GR	296-5213-2-ND	Tri-State 1-4-Bit Address Register/Driver *NEW!*	64-TSSOP	7250.00/2,000		
SN74ALVCH162835DL	296-5214-5-ND	Tri-St. 18-Bit Univ. Bus Driver *NEW!*	56-SSOP	3.71	2.97	2.31
SN74ALVCH162835GR	296-5215-1-ND	Tri-St. 18-Bit Univ. Bus Driver *NEW!*	56-TSSOP	3.71	2.97	2.31
SN74ALVCH162835GR	296-5215-2-ND	Tri-St. 18-Bit Univ. Bus Driver *NEW!*	56-TSSOP	4208.00/2,000		
SN74ALVCH162836GR	296-5216-1-ND	Tri-St. 20-Bit Univ. Bus Driver *NEW!*	56-TSSOP	3.94	3.15	2.45
SN74ALVCH162836GR	296-5216-2-ND	Tri-St. 20-Bit Univ. Bus Driver *NEW!*	56-TSSOP	4462.00/2,000		
SN74ALVCH162836VR	296-5217-1-ND	Tri-St. 20-Bit Univ. Bus Driver *NEW!*	56-SOP	4.39	3.51	2.73
SN74ALVCH162836VR	296-5217-2-ND	Tri-St. 20-Bit Univ. Bus Driver *NEW!*	56-SOP	4972.00/2,000		
SN74ALVCH162841DL	296-5218-5-ND	Tri-State 20-Bit Bus-Interface D-Type Latch *NEW!*	56-SSOP	5.40	4.32	3.36
SN74ALVCH162841GR	296-5219-1-ND	Tri-State 20-Bit Bus-Interface D-Type Latch *NEW!*	56-TSSOP	5.40	4.32	3.36
SN74ALVCH162841GR	296-5219-2-ND	Tri-State 20-Bit Bus-Interface D-Type Latch *NEW!*	56-TSSOP	6120.00/2,000		
SN74ALVCHG162280GR	296-6286-1-ND	Tri-State 16-32-Bit Registered Bus Exchanger w/Byte Mask *NEW!*	80-TSSOP	9.00	7.20	6.08
SN74ALVCHG162280GR	296-6286-2-ND	Tri-State 16-32-Bit Registered Bus Exchanger w/Byte Mask *NEW!*	80-TSSOP	11250.00/2,000		
SN74ALVCHR16245GR	296-6287-1-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-TSSOP	2.59	2.07	1.61
SN74ALVCHR16245GR	296-6287-2-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-TSSOP	2932.00/2,000		
SN74ALVCHR16245LR	296-6288-1-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-SSOP	2.59	2.07	1.61
SN74ALVCHR16245LR	296-6288-2-ND	Tri-State 16-Bit Bus Xcvr. *NEW!*	48-SSOP	1466.00/1,000		
SN74ALVCHR16269AGR	296-1280-1-ND	Tri-St. 12-24-Bit Reg. Bus Exchanger	56-TSSOP	3.71	2.97	2.31
SN74ALVCHR16269AGR	296-1280-2-ND	Tri-St. 12-24-Bit Reg. Bus Exchanger	56-TSSOP	4208.00/2,000		
SN74ALVCHR16269ALR	296-6289-1-ND	Tri-State 12-24-Bit Registered Bus Exchanger *NEW!*	56-SSOP	3.71	2.97	2.31
SN74ALVCHR16269ALR	296-6289-2-ND	Tri-State 12-24-Bit Registered Bus Exchanger *NEW!*	56-SSOP	2104.00/1,000		
SN74ALVCHR16269AVR	296-6290-1-ND	Tri-State 12-24-Bit Registered Bus Exchanger *NEW!*	56-SOP	4.16	3.33	2.59
SN74ALVCHR16269AVR	296-6290-2-ND	Tri-State 12-24-Bit Registered Bus Exchanger *NEW!*	56-SOP	4718.00/2,000		
SN74ALVCHR16409LR	296-6291-1-ND	Tri-State 9-Bit, 4-Port Universal Bus Exchanger *NEW!*	56-SSOP	7.94	6.36	5.36
SN74ALVCHR16409LR	296-6291-2-ND	Tri-State 9-Bit, 4-Port Universal Bus Exchanger *NEW!*	56-SSOP	4963.00/1,000		
SN74ALVCHR16601GR	296-1150-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	4.84	3.87	3.01
SN74ALVCHR16601GR	296-1150-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	5482.00/2,000		
SN74ALVCHR16601LR	296-6292-1-ND	Tri-State 18-Bit Univ. Bus Xcvr. *NEW!*	56-SSOP	4.84	3.87	3.01
SN74ALVCHR16601LR	296-6292-2-ND	Tri-State 18-Bit Univ. Bus Xcvr. *NEW!*	56-SSOP	2741.00/1,000		
SN74ALVCHS162830GR	296-6293-1-ND	Tri-St. 1-2-Bit Address Driver *NEW!*	80-TSSOP	6.50	5.20	4.39
SN74ALVCHS162830GR	296-6293-2-ND	Tri-St. 1-2-Bit Address Driver *NEW!*	80-TSSOP	8126.00/2,000		
SN74ALVTH16240DLR	296-6296-1-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	48-SSOP	4.16	3.33	2.59
SN74ALVTH16240DLR	296-6296-2-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	48-SSOP	2359.00/1,000		
SN74ALVTH16240GR	296-6297-1-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	48-TSSOP	4.16	3.33	2.59
SN74ALVTH16240GR	296-6297-2-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	48-TSSOP	4718.00/2,000		
SN74ALVTH16240VR	296-6298-1-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	48-SOP	4.61	3.69	2.87
SN74ALVTH16240VR	296-6298-2-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	48-SOP	5228.00/2,000		
SN74ALVTH16244DL	296-1519-5-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver	48-SSOP	4.16	3.33	2.59
SN74ALVTH16244DLR	296-1519-2-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	48-SSOP	2359.00/1,000		
SN74ALVTH16244GR	296-6299-1-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	48-TSSOP	4.16	3.33	2.59
SN74ALVTH16244GR	296-6299-2-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	48-TSSOP	4718.00/2,000		
SN74ALVTH16244KR	296-6300-1-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	48-BGA	5.41	4.33	3.37
SN74ALVTH16244KR	296-6300-2-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	48-BGA	3066.00/1,000		
SN74ALVTH16244VR	296-6301-1-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	48-SOP	4.61	3.69	2.87
SN74ALVTH16244VR	296-6301-2-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	48-SOP	5228.00/2,000		
SN74ALVTH16373DLR	296-6305-1-ND	Tri-State 2.5V/3.3V 16-Bit D-Type Latch *NEW!*	48-SSOP	4.16	3.33	2.59
SN74ALVTH16373DLR	296-6305-2-ND	Tri-State 2.5V/3.3V 16-Bit D-Type Latch *NEW!*	48-SSOP	2359.00/1,000		
SN74ALVTH16373GR	296-6306-1-ND	Tri-State 2.5V/3.3V 16-Bit D-Type Latch *NEW!*	48-TSSOP	4.16	3.33	2.59
SN74ALVTH16373GR	296-6306-2-ND	Tri-State 2.5V/3.3V 16-Bit D-Type Latch *NEW!*	48-TSSOP	4718.00/2,000		
SN74ALVTH16373VR	296-6307-1-ND	Tri-State 2.5V/3.3V 16-Bit D-Type Latch *NEW!*	48-SOP	4.61	3.69	2.87
SN74ALVTH16373VR	296-6307-2-ND	Tri-State 2.5V/3.3V 16-Bit D-Type Latch *NEW!*	48-SOP	5228.00/2,000		
SN74ALVTH16374DLR	296-6308-1-ND	Tri-State 2.5V/3.3V 16-Bit D-Type Flip-Flop *NEW!*	48-SSOP	4.16	3.33	2.59
SN74ALVTH16374DLR	296-6308-2-ND	Tri-State 2.5V/3.3V 16-Bit D-Type Flip-Flop *NEW!*	48-SSOP	2359.00/1,000		
SN74ALVTH16374GR	296-6309-1-ND	Tri-State 2.5V/3.3V 16-Bit D-Type Flip-Flop *NEW!*	48-TSSOP	4.16	3.33	2.59
SN74ALVTH16374GR	296-6309-2-ND	Tri-State 2.5V/3.3V 16-Bit D-Type Flip-Flop *NEW!*	48-TSSOP	4718.00/2,000		
SN74ALVTH16374KR	296-6310-1-ND	Tri-State 2.5V/3.3V 16-Bit D-Type Flip-Flop *NEW!*	48-BGA	5.41	4.33	3.37
SN74ALVTH16374KR	296-6310-2-ND	Tri-State 2.5V/3.3V 16-Bit D-Type Flip-Flop *NEW!*	48-BGA	3066.00/1,000		
SN74ALVTH16374VR	296-6311-1-ND	Tri-State 2.5V/3.3V 16-Bit D-Type Flip-Flop *NEW!*	48-BGA	4.61	3.69	2.87
SN74ALVTH16374VR	296-6311-2-ND	Tri-State 2.5V/3.3V 16-Bit D-Type Flip-Flop *NEW!*	48-BGA	5228.00/2,000		
SN74ALVTH16601DLR	296-6312-1-ND	Tri-State 2.5V/3.3V 18-Bit Univ. Bus Transceiver *NEW!*	56-SSOP	6.00	4.80	4.05
SN74ALVTH16601DLR	296-6312-2-ND	Tri-State 2.5V/3.3V 18-Bit Univ. Bus Transceiver *NEW!*	56-SSOP	3750.00/1,000		
SN74ALVTH16601GR	296-6313-1-ND	Tri-State 2.5V/3.3V 18-Bit Univ. Bus Transceiver *NEW!*	56-TSSOP	6.00	4.80	4.05
SN74ALVTH16601GR	296-6313-2-ND	Tri-State 2.5V/3.3V 18-Bit Univ. Bus Transceiver *NEW!*	56-TSSOP	7500.00/2,000		
SN74ALVTH16601VR	296-6314-1-ND	Tri-State 2.5V/3.3V 18-Bit Univ. Bus Transceiver *NEW!*	56-SOP	6.40	5.12	4.32
SN74ALVTH16601VR	296-6314-2-ND	Tri-State 2.5V/3.3V 18-Bit Univ. Bus Transceiver *NEW!*	56-SOP	8000.00/2,000		

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74ALVTH16821DL	296-1520-5-ND	Tri-State 2.5V/3.3V 20-Bit Bus-Interface Flip-Flop	56-SSOP	4.16	3.33	2.59
SN74ALVTH16821DLR	296-1520-2-ND	Tri-State 2.5V/3.3V 20-Bit Bus-Interface Flip-Flop *NEW!*	56-SSOP	2359.00/1,000		
SN74ALVTH16821GR	296-6315-1-ND	Tri-State 2.5V/3.3V 20-Bit Bus-Interface Flip-Flop *NEW!*	56-TSSOP	4.16	3.33	2.59
SN74ALVTH16821GR	296-6315-2-ND	Tri-State 2.5V/3.3V 20-Bit Bus-Interface Flip-Flop *NEW!*	56-TSSOP	4718.00/2,000		
SN74ALVTH16821VR	296-6316-1-ND	Tri-State 2.5V/3.3V 20-Bit Bus-Interface Flip-Flop *NEW!*	56-SOP	4.61	3.69	2.87
SN74ALVTH16821VR	296-6316-2-ND	Tri-State 2.5V/3.3V 20-Bit Bus-Interface Flip-Flop *NEW!*	56-SOP	5228.00/2,000		
SN74ALVTH16827DL	296-6317-5-ND	Tri-State 2.5V/3.3V 20-Bit Buffer/Driver *NEW!*	56-SSOP	4.16	3.33	2.59
SN74ALVTH16827DLR	296-6317-2-ND	Tri-State 2.5V/3.3V 20-Bit Buffer/Driver *NEW!*	56-SSOP	2359.00/1,000		
SN74ALVTH16827GR	296-6318-1-ND	Tri-State 2.5V/3.3V 20-Bit Buffer/Driver *NEW!*	56-TSSOP	4.16	3.33	2.59
SN74ALVTH16827GR	296-6318-2-ND	Tri-State 2.5V/3.3V 20-Bit Buffer/Driver *NEW!*	56-TSSOP	4718.00/2,000		
SN74ALVTH16827VR	296-6319-1-ND	Tri-State 2.5V/3.3V 20-Bit Buffer/Driver *NEW!*	56-SOP	4.61	3.69	2.87
SN74ALVTH16827VR	296-6319-2-ND	Tri-State 2.5V/3.3V 20-Bit Buffer/Driver *NEW!*	56-SOP	5228.00/2,000		
SN74ALVTH32244KR	296-6320-1-ND	Tri-State 2.5V/3.3V 32-Bit Buffer/Driver *NEW!*	96-BGA	7.70	6.16	5.20
SN74ALVTH32244KR	296-6320-2-ND	Tri-State 2.5V/3.3V 32-Bit Buffer/Driver *NEW!*	96-BGA	4813.00/1,000		
SN74ALVTH32373KR	296-6321-1-ND	Tri-State 2.5V/3.3V 32-Bit Transparent D-Type Latch *NEW!*	96-BGA	7.70	6.16	5.20
SN74ALVTH32373KR	296-6321-2-ND	Tri-State 2.5V/3.3V 32-Bit Transparent D-Type Latch *NEW!*	96-BGA	4813.00/1,000		
SN74ALVTH32374KR	296-6322-1-ND	Tri-State 2.5V/3.3V 32-Bit D-Type Flip-Flop *NEW!*	96-BGA	7.70	6.16	5.20
SN74ALVTH32374KR	296-6322-2-ND	Tri-State 2.5V/3.3V 32-Bit D-Type Flip-Flop *NEW!*	96-BGA	4813.00/1,000		
SN74ALVTH162244DL	296-1518-5-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver	48-SSOP	4.16	3.33	2.59
SN74ALVTH162244GR	296-6294-1-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	48-TSSOP	4.16	3.33	2.59
SN74ALVTH162244GR	296-6294-2-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	48-TSSOP	4718.00/2,000		
SN74ALVTH162244VR	296-6295-1-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	48-SOP	4.61	3.69	2.87
SN74ALVTH162244VR	296-6295-2-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	48-SOP	5228.00/2,000		
SN74ALVTH162827DL	296-6302-5-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	56-SSOP	4.16	3.33	2.59
SN74ALVTH162827GR	296-6303-1-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	56-TSSOP	4.16	3.33	2.59
SN74ALVTH162827GR	296-6303-2-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	56-TSSOP	4718.00/2,000		
SN74ALVTH162827VR	296-6304-1-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	56-SOP	4.61	3.69	2.87
SN74ALVTH162827VR	296-6304-2-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver *NEW!*	56-SOP	5228.00/2,000		
		AS Family				
SN74AS00D	296-6323-5-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	.92	.69	.52
SN74AS00N	296-1521-5-ND	Quad 2-Input NAND Gate	14-Dip	.80	.60	.45
SN74AS04D	296-6324-5-ND	Hex Inverter *NEW!*	14-SOP	.92	.69	.52
SN74AS04N	296-1522-5-ND	Hex Inverter	14-Dip	.80	.60	.45
SN74AS08DR	296-6325-1-ND	Quad 2-Input AND Gate *NEW!*	14-SOP	.75	.63	.50
SN74AS08DR	296-6325-2-ND	Quad 2-Input AND Gate *NEW!*	14-SOP	812.50/2,500		
SN74AS08N	296-1523-5-ND	Quad 2-Input AND Gate	14-Dip	.80	.60	.45
SN74AS10DR	296-6333-1-ND	Triple 3-Input NAND Gate *NEW!*	14-SOP	.96	.80	.64
SN74AS10DR	296-6333-2-ND	Triple 3-Input NAND Gate *NEW!*	14-SOP	1040.00/2,500		
SN74AS10N	296-6334-5-ND	Triple 3-Input NAND Gate *NEW!*	14-Dip	.90	.75	.60
SN74AS20D	296-6342-5-ND	Dual 4-Input NAND Gate *NEW!*	14-SOP	.90	.75	.60
SN74AS20DR	296-6342-2-ND	Dual 4-Input NAND Gate *NEW!*	14-SOP	1040.00/2,500		
SN74AS27D	296-6350-5-ND	Triple 3-Input NOR Gate *NEW!*	14-SOP	.92	.69	.52
SN74AS30DR	296-6353-1-ND	8-Input NAND Gate *NEW!*	14-SOP	1.32	1.10	.88
SN74AS30DR	296-6353-2-ND	8-Input NAND Gate *NEW!*	14-SOP	1430.00/2,500		
SN74AS32D	296-6354-5-ND	Quad 2-Input OR Gate *NEW!*	14-SOP	.92	.69	.52
SN74AS32DR	296-6354-2-ND	Quad 2-Input OR Gate *NEW!*	14-SOP	812.50/2,500		
SN74AS32N	296-1524-5-ND	Quad 2-Input OR Gate	14-Dip	.80	.60	.45
SN74AS74AD	296-6370-5-ND	Dual D-Type Flip-Flop *NEW!*	14-SOP	.87	.73	.58
SN74AS74AN	296-1525-5-ND	Dual D-Type Flip-Flop	14-Dip	.75	.63	.50
SN74AS109AD	296-6331-5-ND	Dual JK Pos Flip-Flop with Clear and Preset *NEW!*	16-SOP	1.14	.95	.76
SN74AS109AN	296-6332-5-ND	Dual JK Pos Flip-Flop with Clear and Preset *NEW!*	16-Dip	1.14	.95	.76
SN74AS153D	296-6335-5-ND	Dual 1-of-4 Data Selector/Mux *NEW!*	16-SOP	1.28	1.02	.77
SN74AS161N	296-6336-5-ND	Synch. 4-Bit Binary Counter *NEW!*	16-Dip	2.48	1.98	1.54
SN74AS163N	296-6337-5-ND	Synch. 4-Bit Binary Counter *NEW!*	16-Dip	2.48	1.98	1.54
SN74AS169AD	296-6338-5-ND	Synch. 4-Bit Up/Down Binary Counter *NEW!*	16-SOP	3.15	2.52	1.96
SN74AS169AN	296-6339-5-ND	Synch. 4-Bit Up/Down Binary Counter *NEW!*	16-Dip	3.15	2.52	1.96
SN74AS175BN	296-6340-5-ND	Quad D-Type Flip-Flop with Clear *NEW!*	16-Dip	1.88	1.50	1.13
SN74AS194D	296-6341-5-ND	4-Bit Bi-Dir. Univ. Shift Register *NEW!*	16- SOP	2.43	1.94	1.46
SN74AS194DR	296-6341-2-ND	4-Bit Bi-Dir. Univ. Shift Register *NEW!*	16-SOP	3167.50/2,500		
SN74AS240ADW	296-6344-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	2.30	1.84	1.38
SN74AS245DW	296-6345-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	2.40	1.92	1.44
SN74AS245N	296-6346-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-Dip	2.25	1.80	1.35
SN74AS250ADW	296-6347-5-ND	Tri-State 1-of-16 Data Generator/ Multiplexer *NEW!*	24-SOP	3.38	2.70	2.10
SN74AS250ANT	296-6348-5-ND	Tri-State 1-of-16 Data Generator/ Multiplexer *NEW!*	24-Dip	3.38	2.70	2.10
SN74AS258D	296-6349-5-ND	Tri-State Quad 2-to-1 Data Selector/ Multiplexer *NEW!*	16-SOP	1.43	1.14	.86
SN74AS280DR	296-6351-1-ND	9-Bit Parity Generator/Checker *NEW!*	14-SOP	1.70	1.36	1.02
SN74AS280DR	296-6351-2-ND	9-Bit Parity Generator/Checker *NEW!*	14-SOP	2175.00/2,500		
SN74AS286N	296-6352-5-ND	9-Bit Parity Generator/Checker *NEW!*	14-Dip	1.50	1.20	.90
SN74AS373N	296-6355-5-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-Dip	2.13	1.70	1.28
SN74AS374DW	296-6356-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	2.30	1.84	1.38
SN74AS374N	296-6357-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-Dip	2.13	1.70	1.28
SN74AS533ADWR	296-6359-1-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SOP	3.56	2.85	2.22
SN74AS533ADWR	296-6359-2-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SOP	4030.00/2,000		
SN74AS533AN	296-6360-5-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-Dip	3.51	2.81	2.19
SN74AS573ADW	296-6361-5-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SOP	2.40	1.92	1.44
SN74AS573AN	296-6362-5-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-Dip	2.25	1.80	1.35
SN74AS574DW	296-6363-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	2.40	1.92	1.44
SN74AS576DW	296-6364-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	4.46	3.57	2.78
SN74AS576N	296-6365-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-Dip	4.46	3.57	2.78
SN74AS640DWR	296-6366-1-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	2.45	1.97	1.53
SN74AS640DWR	296-6366-2-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	2780.00/2,000		
SN74AS640N	296-6367-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-Dip	2.25	1.80	1.40
SN74AS645DW	296-6368-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	2.88	2.31	1.80
SN74AS652NT	296-6369-5-ND	Tri-State Octal Bus Xcvr./Register *NEW!*	24-Dip	5.00	4.00	3.38
SN74AS760DW	296-6371-5-ND	Octal Buffer/Line Driver with OC Output *NEW!*	20-SOP	3.38	2.70	2.10
SN74AS804BDW	296-6372-5-ND	Hex 2-Input NAND Driver *NEW!*	20-SOP	2.30	1.84	1.43
SN74AS804BN	296-6373-5-ND	Hex 2-Input NAND Driver *NEW!*	20-Dip	2.38	1.90	1.43
SN74AS808BN	296-6374-5-ND	Hex 2-Input AND Driver *NEW!*	20-Dip	2.38	1.90	1.43
SN74AS821ADW	296-6375-5-ND	Tri-State 10-Bit Bus-Interface Flip-Flop *NEW!*	24-SOP	4.28	3.42	2.66
SN74AS821ANT	296-6376-5-ND	Tri-State 10-Bit Bus-Interface Flip-Flop *NEW!*	24-Dip	4.28	3.42	2.66
SN74AS825ANT	296-6377-5-ND	Tri-State 8-Bit Bus-Interface Flip-Flop *NEW!*	24-Dip	5.70	4.56	3.85
SN74AS832BDWR	296-6378-1-ND	Hex 2-Input OR Driver *NEW!*	20-SOP	2.97	2.38	1.85
SN74AS832BDWR	296-6378-2-ND	Hex 2-Input OR Driver *NEW!*	20-SOP	3366.00/2,000		
SN74AS867DW	296-6379-5-ND	Synch. 8-Bit Up/Down Counter *NEW!*	24-SOP	6.30	5.04	4.26
SN74AS867NT	296-6380-5-ND	Synch. 8-Bit Up/Down Counter *NEW!*	24-Dip	5.70	4.56	3.85
SN74AS874NT	296-6381-5-ND	Dual 4-Bit D-Type Flip-Flop *NEW!*	24-Dip	4.28	3.42	2.66
SN74AS885DW	296-6382-5-ND	Octal Magnitude Comparator *NEW!*	24-SOP	7.80	6.24	5.27
SN74AS885DWR	296-6383-5-ND	Octal Magnitude Comparator *NEW!*	24-SOP	7.80	6.24	5.27
SN74AS885NT	296-6384-5-ND	Octal Magnitude Comparator *NEW!*	24-Dip	7.80	6.24	5.27
SN74AS1000AD	296-6326-5-ND	Quad 2-In NAND Buffer/Driver *NEW!*	14-SOP	1.44	1.20	.96
SN74AS1004AD	296-6327-5-ND	Hex Inverting Driver *NEW!*	14-SOP	1.44	1.20	.96
SN74AS1004AN	296-6328-5-ND	Hex Inverting Driver *NEW!*	14-Dip	1.35	1.13	.90
SN74AS1032AD	296-6329-5-ND	Quad 2-Input OR Buffer/Driver *NEW!*	14-SOP	1.44	1.20	.96
SN74AS1034AD	296-6330-5-ND	Quad 2-Input OR Hex Driver *NEW!*	14-SOP	1.44	1.20	.96
SN74AS4374BDW	296-6358-5-ND	Tri-State Octal D-Type Dual-Rank Flip-Flop *NEW!*	20-SOP	4.28	3.42	2.66
		BCT Family				
SN74BCT244DBR	296-1151-1-ND	Octal Buffer/Driver	20-SSOP	2.25	1.80	1.35
SN74BCT244DW	296-1152-5-ND	Octal Buffer/Driver	20-SOP	2.25	1.80	1.35
SN74BCT244DWR	296-1152-2-ND	Octal Buffer/Driver	20-SOP	2392.00/2,000		
SN74BCT245DBR	296-1153-1-ND	Octal Bus Transceiver	20-SSOP	2.38	1.90	1.43
SN74BCT245DW	296-1154-5-ND	Octal Bus Transceiver	20-SOP	2.38	1.90	1.43
SN74BCT245DWR	296-1154-2-ND	Octal Bus Transceiver	20-SOP	2522.00/2,000		
SN74BCT245N	296-1528-5-ND	Octal Bus Transceiver	20-Dip	2.38	1.90	1.43
SN74BCT29863BDW	296-1529-5-ND	9-Bit Bus Transceiver	24-SOP	2.70	2.16	1.68
SN74BCT652DWR	296-1155-1-ND	Octal Bus Transceiver	24-SOP	6.04	4.84	4.08
SN74BCT760DW	296-1530-5-ND	Octal Buffer/Driver (O.C.)	20-SOP	2.25	1.80	1.40
		Bus Switch Family				
SN74CBT1G125DBVR	296-1164-1-ND	Single FET Bus Switch	5-TSSOP	.56	.42	.32
SN74CBT1G125DBVR	296-1164-2-ND	Single FET Bus Switch	5-SOP	546.00/3,000		
SN74CBT1G125DCKR	296-6410-1-ND	Single FET Bus Switch *NEW!*	5-SOP	.64	.48	.36
SN74CBT1G125DCKR	296-6410-2-ND	Single FET Bus Switch *NEW!*	5-SOP	624.00/3,000		
SN74CBT1G384DBVR	296-6411-1-ND	Single FET Bus Switch *NEW!*	SOT-23-5	.56	.42	.32
SN74CBT1G384DBVR	296-6411-2-ND	Single FET Bus Switch *NEW!*	SOT-23-5	546.00/3,000		
SN74CBT1G384DCKR	296-6412-1-ND	Single FET Bus Switch *NEW!*	5-SOP	.64	.48	.36
SN74CBT1G384DCKR	296-6412-2-ND	Single FET Bus Switch *NEW!*	5-SOP	624.00/3,000		
SN74CBT3125D	296-1165-5-ND	Quad FET Bus Switch	14-SOP	1.35	1.13	.90
SN74CBT3125DR	296-1165-2-ND	Quad FET Bus Switch	14-SOP	1527.50/2,500		
SN74CBT3125DBQR	296-6413-1-ND	Quad FET Bus Switch *NEW!*	16-SOP	1.25	1.00	.75
SN74CBT3125DBQR	296-6413-2-ND	Quad FET Bus Switch *NEW!*	16-SOP	1600.00/2,500		
SN74CBT3125DBR	296-6414-1-ND	Quad FET Bus Switch *NEW!*	14-SSOP	1.35	1.13	.90
SN74CBT3125DBR	296-6414-2-ND	Quad FET Bus Switch *NEW!*	14-SSOP	1198.00/2,000		
SN74CBT3125DGVR	296-6415-1-ND	Quad FET Bus Switch *NEW!*	14-TVSOP	1.25	1.00	.75
SN74CBT3125DGVR	296-6415-2-ND	Quad FET Bus Switch *NEW!*	14-TVSOP	1300.00/2,000		
SN74CBT3125PWR	296-6416-1-ND	Quad FET Bus Switch *NEW!*	14-TSSOP	1.35	1.13	.90
SN74CBT3125PWR	296-6416-2-ND	Quad FET Bus Switch *NEW!*	14-TSSOP	1198.00/2,000		
SN74CBT3126D	296-1537-5-ND	Quad FET Bus Switch	14-SOP	1.35	1.13	.90
SN74CBT3126DR	296-1537-2-ND	Quad FET Bus Switch *NEW!*	14-SOP	1527.50/2,500		
SN74CBT3126DBQR	296-6417-1-ND	Quad FET Bus Switch *NEW!*	16-SOP	1.25	1.00	.75
SN74CBT3126DBQR	296-6417-2-ND	Quad FET Bus Switch *NEW!*	16-SOP	1600.00/2,500		
SN74CBT3126DBR	296-6418-1-ND	Quad FET Bus Switch *NEW!*	14-SSOP	1.35	1.13	.90
SN74CBT3126DBR	296-6418-2-ND	Quad FET Bus Switch *NEW!*	14-SSOP	1198.00/2,000		
SN74CBT3126DGVR	296-6419-1-ND	Quad FET Bus Switch *NEW!*	14-TVSOP	1.25	1.00	.75
SN74CBT3126DGVR	296-6419-2-ND	Quad FET Bus Switch *NEW!*	14-TVSOP	1300.00/2,000		
SN74CBT3126PWR	296-6420-1-ND	Quad FET Bus Switch *NEW!*	14-TSSOP	1.35	1.13	.90
SN74CBT3126PWR	296-6420-2-ND	Quad FET Bus Switch *NEW!*	14-TSSOP	1198.00/2,000		
SN74CBT3244DBQR	296-6421-1-ND	Octal FET Bus Switch *NEW!*	20-SOP	1.50	1.20	.90
SN74CBT3244DBQR	296-6421-2-ND	Octal FET Bus Switch *NEW!*	20-SOP	1920.00/2,500		
SN74CBT3244DBR	296-6422-1-ND	Octal FET Bus Switch *NEW!*	20-SSOP	1.25	1.00	.75
SN74CBT3244DBR	296-6422-2-ND	Octal FET Bus Switch *NEW!*	20-SSOP	1300.00/2,000		
SN74CBT3244DGVR	296-6423-1-ND	Octal FET Bus Switch *NEW!*	20-TVSOP	1.50	1.20	.90
SN74CBT3244DGVR	296-6423-2-ND	Octal FET Bus Switch *NEW!*	20-TVSOP	1560.00/2,000		
SN74CBT3244DW	296-1538-5-ND	Octal FET Bus Switch	20-SOP	1.25	1.00	.75
SN74CBT3244PWR	296-1166-1-ND	Octal FET Bus Switch	20-TSSOP	1.25	1.00	.75
SN74CBT3245ADBQR	296-6424-1-ND	Octal FET Bus Switch *NEW!*	20-SOP	1.50	1.20	.90
SN74CBT3245ADBQR	296-6424-2-ND	Octal FET Bus Switch *NEW!*	20-SOP	1920.00/2,500		
SN74CBT3245ADBR	296-6425-1-ND	Octal FET Bus Switch *NEW!*	20-SSOP	1.25	1.00	.75
SN74CBT3245ADBR	296-6425-2-ND	Octal FET Bus Switch *NEW!*	20-SSOP	1300.00/2,000		

(Continued)

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74CBT3245ADGVR	296-6460-1-ND	Octal FET Bus Switch *NEW!*	20-TVSOP	1.50	1.20	.90
SN74CBT3245ADGVR	296-6460-2-ND	Octal FET Bus Switch *NEW!*	20-TVSOP	1560.00/2,000		
SN74CBT3245ADW	296-6426-5-ND	Octal FET Bus Switch *NEW!*	20-SOP	1.25	1.00	.75
SN74CBT3245APWR	296-6427-1-ND	Octal FET Bus Switch *NEW!*	20-TSSOP	1.25	1.00	.75
SN74CBT3245APWR	296-6427-2-ND	Octal FET Bus Switch *NEW!*	20-TSSOP	1300.00/2,000		
SN74CBT3251D	296-6428-5-ND	1-of-8 FET Mux/Demux *NEW!*	16-SOP	1.38	1.10	.83
SN74CBT3251DBQR	296-6429-1-ND	1-of-8 FET Mux/Demux *NEW!*	16-SOP	1.63	1.30	.98
SN74CBT3251DBQR	296-6429-2-ND	1-of-8 FET Mux/Demux *NEW!*	16-SOP	2080.00/2,500		
SN74CBT3251DBR	296-6430-1-ND	1-of-8 FET Mux/Demux *NEW!*	16-SSOP	1.38	1.10	.83
SN74CBT3251DBR	296-6430-2-ND	1-of-8 FET Mux/Demux *NEW!*	16-SSOP	1430.00/2,000		
SN74CBT3251PWR	296-6431-1-ND	1-of-8 FET Mux/Demux *NEW!*	16-TSSOP	1.38	1.10	.83
SN74CBT3251PWR	296-6431-2-ND	1-of-8 FET Mux/Demux *NEW!*	16-TSSOP	1430.00/2,000		
SN74CBT3253D	296-6432-5-ND	Dual 1-of-4 FET Mux/Demux *NEW!*	16-SOP	1.38	1.10	.83
SN74CBT3253DBQR	296-6433-1-ND	Dual 1-of-4 FET Mux/Demux *NEW!*	16-SOP	1.63	1.30	.98
SN74CBT3253DBQR	296-6433-2-ND	Dual 1-of-4 FET Mux/Demux *NEW!*	16-SOP	2080.00/2,500		
SN74CBT3253DBR	296-6434-1-ND	Dual 1-of-4 FET Mux/Demux *NEW!*	16-SSOP	1.38	1.10	.83
SN74CBT3253DBR	296-6434-2-ND	Dual 1-of-4 FET Mux/Demux *NEW!*	16-SSOP	1430.00/2,000		
SN74CBT3253PWR	296-1167-1-ND	Dual 1-of-4 FET Mux/Demux	16-TSSOP	1.38	1.10	.83
SN74CBT3253PWR	296-1167-2-ND	Dual 1-of-4 FET Mux/Demux	16-TSSOP	1430.00/2,000		
SN74CBT3257D	296-1168-5-ND	4-Bit, 1-of-2 FET Mux/Demux	16-SOP	1.38	1.10	.83
SN74CBT3257DR	296-1168-2-ND	4-Bit, 1-of-2 FET Mux/Demux	16-SOP	1760.00/2,500		
SN74CBT3257DBQR	296-6435-1-ND	4-Bit, 1-of-2 FET Mux/Demux *NEW!*	16-SOP	1.63	1.30	.98
SN74CBT3257DBQR	296-6435-2-ND	4-Bit, 1-of-2 FET Mux/Demux *NEW!*	16-SOP	2080.00/2,500		
SN74CBT3257DBR	296-6436-1-ND	4-Bit, 1-of-2 FET Mux/Demux *NEW!*	16-SSOP	1.38	1.10	.83
SN74CBT3257DBR	296-6436-2-ND	4-Bit, 1-of-2 FET Mux/Demux *NEW!*	16-SSOP	1430.00/2,000		
SN74CBT3257PWR	296-6437-1-ND	4-Bit, 1-of-2 FET Mux/Demux *NEW!*	16-TSSOP	1.38	1.10	.83
SN74CBT3257PWR	296-6437-2-ND	4-Bit, 1-of-2 FET Mux/Demux *NEW!*	16-TSSOP	1430.00/2,000		
SN74CBT3306D	296-1540-5-ND	Dual FET Bus Switch	8-SOP	1.35	1.13	.90
SN74CBT3306DR	296-1540-2-ND	Dual FET Bus Switch *NEW!*	8-SOP	1592.50/2,500		
SN74CBT3306PWR	296-6438-1-ND	Dual FET Bus Switch *NEW!*	8-TSSOP	1.35	1.13	.90
SN74CBT3306PWR	296-6438-2-ND	Dual FET Bus Switch *NEW!*	8-TSSOP	1198.00/2,000		
SN74CBT3345DBR	296-6439-1-ND	8-Bit, FET Bus Switch *NEW!*	20-SSOP	1.75	1.40	1.05
SN74CBT3345DBR	296-6439-2-ND	8-Bit, FET Bus Switch *NEW!*	20-SSOP	1820.00/2,000		
SN74CBT3345DGVR	296-6440-1-ND	8-Bit, FET Bus Switch *NEW!*	20-TVSOP	2.00	1.60	1.20
SN74CBT3345DGVR	296-6440-2-ND	8-Bit, FET Bus Switch *NEW!*	20-TVSOP	2080.00/2,000		
SN74CBT3345DW	296-6441-5-ND	8-Bit, FET Bus Switch *NEW!*	20-SOP	1.75	1.40	1.05
SN74CBT3345PWR	296-6442-1-ND	8-Bit, FET Bus Switch *NEW!*	20-TSSOP	1.75	1.40	1.05
SN74CBT3345PWR	296-6442-2-ND	8-Bit, FET Bus Switch *NEW!*	20-TSSOP	1820.00/2,000		
SN74CBT3383DBQR	296-6443-1-ND	10-Bit, FET Bus-Exch. Switch *NEW!*	24-SOP	1.38	1.10	.83
SN74CBT3383DBQR	296-6443-2-ND	10-Bit, FET Bus-Exch. Switch *NEW!*	24-SOP	1760.00/2,500		
SN74CBT3383DBR	296-6444-1-ND	10-Bit, FET Bus-Exch. Switch *NEW!*	24-SSOP	1.25	1.00	.75
SN74CBT3383DBR	296-6444-2-ND	10-Bit, FET Bus-Exch. Switch *NEW!*	24-SSOP	1300.00/2,000		
SN74CBT3383DW	296-6445-5-ND	10-Bit, FET Bus-Exch. Switch *NEW!*	24-SOP	1.25	1.00	.75
SN74CBT3383PWR	296-6446-1-ND	10-Bit, FET Bus-Exch. Switch *NEW!*	24-TSSOP	1.25	1.00	.75
SN74CBT3383PWR	296-6446-2-ND	10-Bit, FET Bus-Exch. Switch *NEW!*	24-TSSOP	1300.00/2,000		
SN74CBT3384ADBQR	296-6447-1-ND	10-Bit, FET Bus Switch *NEW!*	24-SOP	1.25	1.00	.75
SN74CBT3384ADBQR	296-6447-2-ND	10-Bit, FET Bus Switch *NEW!*	24-SOP	1600.00/2,500		
SN74CBT3384ADBR	296-6448-1-ND	10-Bit, FET Bus Switch *NEW!*	24-SSOP	1.25	1.00	.75
SN74CBT3384ADBR	296-6448-2-ND	10-Bit, FET Bus Switch *NEW!*	24-SSOP	1300.00/2,000		
SN74CBT3384ADGVR	296-6449-1-ND	10-Bit, FET Bus Switch *NEW!*	24-TVSOP	1.50	1.20	.90
SN74CBT3384ADGVR	296-6449-2-ND	10-Bit, FET Bus Switch *NEW!*	24-TVSOP	1560.00/2,000		
SN74CBT3384ADW	296-1169-5-ND	10-Bit, FET Bus Switch *NEW!*	24-SOP	1.25	1.00	.75
SN74CBT3384ADWR	296-1169-1-ND	10-Bit, FET Bus Switch	24-SOP	1.25	1.00	.75
SN74CBT3384APWR	296-1170-1-ND	10-Bit, FET Bus Switch	24-TSSOP	1.25	1.00	.75
SN74CBT3384APWR	296-1170-2-ND	10-Bit, FET Bus Switch	24-TSSOP	1300.00/2,000		
SN74CBT3861DBQR	296-6450-1-ND	10-Bit, FET Bus Switch *NEW!*	24-SOP	1.38	1.10	.83
SN74CBT3861DBQR	296-6450-2-ND	10-Bit, FET Bus Switch *NEW!*	24-SOP	1760.00/2,500		
SN74CBT3861DGVR	296-6451-1-ND	10-Bit, FET Bus Switch *NEW!*	24-TVSOP	1.63	1.30	.98
SN74CBT3861DGVR	296-6451-2-ND	10-Bit, FET Bus Switch *NEW!*	24-TVSOP	1690.00/2,000		
SN74CBT3861DWR	296-6452-1-ND	10-Bit, FET Bus Switch *NEW!*	24-SOP	1.38	1.10	.83
SN74CBT3861DWR	296-6452-2-ND	10-Bit, FET Bus Switch *NEW!*	24-SOP	1430.00/2,000		
SN74CBT3861PWR	296-6453-1-ND	10-Bit, FET Bus Switch *NEW!*	24-TSSOP	1.38	1.10	.83
SN74CBT3861PWR	296-6453-2-ND	10-Bit, FET Bus Switch *NEW!*	24-TSSOP	1430.00/2,000		
SN74CBT6800ADBQR	296-6454-1-ND	10-Bit, FET Bus Switch with Precharged Output *NEW!*	24-SOP	1.63	1.30	.98
SN74CBT6800ADBQR	296-6454-2-ND	10-Bit, FET Bus Switch with Precharged Output *NEW!*	24-SOP	2080.00/2,500		
SN74CBT6800ADBR	296-6455-1-ND	10-Bit, FET Bus Switch with Precharged Output *NEW!*	24-SSOP	1.63	1.30	.98
SN74CBT6800ADBR	296-6455-2-ND	10-Bit, FET Bus Switch with Precharged Output *NEW!*	24-SSOP	1690.00/2,000		
SN74CBT6800ADGVR	296-6456-1-ND	10-Bit, FET Bus Switch with Precharged Output *NEW!*	24-TVSOP	1.75	1.40	1.05
SN74CBT6800ADGVR	296-6456-2-ND	10-Bit, FET Bus Switch with Precharged Output *NEW!*	24-TVSOP	1820.00/2,000		
SN74CBT6800ADW	296-6457-5-ND	10-Bit, FET Bus Switch with Precharged Output *NEW!*	24-SOP	1.63	1.30	.98
SN74CBT6800ADWR	296-6457-2-ND	10-Bit, FET Bus Switch with Precharged Output *NEW!*	24-SOP	1690.00/2,000		
SN74CBT6800APWR	296-6458-1-ND	10-Bit, FET Bus Switch with Precharged Output *NEW!*	24-TSSOP	1.63	1.30	.98
SN74CBT6800APWR	296-6458-2-ND	10-Bit, FET Bus Switch with Precharged Output *NEW!*	24-TSSOP	1690.00/2,000		
SN74CBT6800DBQR	296-6459-1-ND	10-Bit, FET Bus Switch with Precharged Output *NEW!*	24-SOP	1.63	1.30	.98
SN74CBT6800DBQR	296-6459-2-ND	10-Bit, FET Bus Switch with Precharged Output *NEW!*	24-SOP	2080.00/2,500		
SN74CBT6800DBR	296-6470-1-ND	10-Bit, FET Bus Switch with Precharged Output *NEW!*	24-SSOP	1.63	1.30	.98
SN74CBT6800DBR	296-6470-2-ND	10-Bit, FET Bus Switch with Precharged Output *NEW!*	24-SSOP	1690.00/2,000		
SN74CBT6800DGVR	296-6471-1-ND	10-Bit, FET Bus Switch with Precharged Output *NEW!*	24-TVSOP	1.88	1.50	1.13
SN74CBT6800DGVR	296-6471-2-ND	10-Bit, FET Bus Switch with Precharged Output *NEW!*	24-TVSOP	1950.00/2,000		
SN74CBT6800DW	296-6472-5-ND	10-Bit, FET Bus Switch with Precharged Output *NEW!*	24-SOP	1.63	1.30	.98
SN74CBT6800PWR	296-6473-1-ND	10-Bit, FET Bus Switch with Precharged Output *NEW!*	24-TSSOP	1.63	1.30	.98
SN74CBT6800PWR	296-6473-2-ND	10-Bit, FET Bus Switch with Precharged Output *NEW!*	24-TSSOP	1690.00/2,000		
SN74CBT16209ADGGR	296-1156-1-ND	18-Bit, FET Bus-Exchange Switch	48-TSSOP	2.70	2.16	1.68
SN74CBT16209ADGGR	296-1156-2-ND	18-Bit, FET Bus-Exchange Switch	48-TSSOP	3060.00/2,000		
SN74CBT16209ADGVR	296-6385-1-ND	18-Bit, FET Bus-Exch. Switch *NEW!*	48-TVSOP	3.15	2.52	1.96
SN74CBT16209ADGVR	296-6385-2-ND	18-Bit, FET Bus-Exch. Switch *NEW!*	48-TVSOP	3570.00/2,000		
SN74CBT16209ADL	296-1531-5-ND	18-Bit, FET Bus-Exchange Switch	48-SSOP	2.70	2.16	1.68
SN74CBT16210DGGR	296-6386-1-ND	20-Bit, FET Bus Switch *NEW!*	48-TSSOP	2.48	1.98	1.54
SN74CBT16210DGGR	296-6386-2-ND	20-Bit, FET Bus Switch *NEW!*	48-TSSOP	2806.00/2,000		
SN74CBT16210DGVR	296-6387-1-ND	20-Bit, FET Bus Switch *NEW!*	48-TVSOP	2.93	2.34	1.82
SN74CBT16210DGVR	296-6387-2-ND	20-Bit, FET Bus Switch *NEW!*	48-TVSOP	3316.00/2,000		
SN74CBT16210DL	296-6388-5-ND	20-Bit, FET Bus Switch *NEW!*	48-SSOP	2.48	1.98	1.54
SN74CBT16210DLR	296-6388-2-ND	20-Bit, FET Bus Switch *NEW!*	48-SSOP	1403.00/1,000		
SN74CBT16211ADGGR	296-1157-1-ND	24-Bit FET Bus Switch	56-TSSOP	2.70	2.16	1.68
SN74CBT16211ADGVR	296-6389-1-ND	24-Bit, FET Bus Switch *NEW!*	56-TVSOP	3.15	2.52	1.96
SN74CBT16211ADGVR	296-6389-2-ND	24-Bit, FET Bus Switch *NEW!*	56-TVSOP	3570.00/2,000		
SN74CBT16211ADL	296-1532-5-ND	24-Bit FET Bus Switch	56-SSOP	2.70	2.16	1.68
SN74CBT16211ADLR	296-1532-2-ND	24-Bit, FET Bus Switch *NEW!*	56-SSOP	1530.00/1,000		
SN74CBT16212ADGGR	296-1158-1-ND	24-Bit, FET Bus-Exchange Switch	56-TSSOP	2.70	2.16	1.68
SN74CBT16212ADGGR	296-1158-2-ND	24-Bit, FET Bus-Exchange Switch	56-TSSOP	3060.00/2,000		
SN74CBT16212ADGVR	296-6390-1-ND	24-Bit, FET Bus-Exch. Switch *NEW!*	56-TVSOP	3.15	2.52	1.96
SN74CBT16212ADGVR	296-6390-2-ND	24-Bit, FET Bus-Exch. Switch *NEW!*	56-TVSOP	3570.00/2,000		
SN74CBT16212ADLR	296-1159-1-ND	24-Bit, FET Bus-Exchange Switch	56-SSOP	2.70	2.16	1.68
SN74CBT16212ADLR	296-1159-2-ND	24-Bit, FET Bus-Exchange Switch	56-TSSOP	1530.00/1,000		
SN74CBT16213DGGR	296-6391-1-ND	24-Bit, FET Bus-Exch. Switch *NEW!*	56-TSSOP	3.49	2.79	2.17
SN74CBT16213DGGR	296-6391-2-ND	24-Bit, FET Bus-Exch. Switch *NEW!*	56-TSSOP	3952.00/2,000		
SN74CBT16213DL	296-6392-5-ND	24-Bit, FET Bus-Exch. Switch *NEW!*	56-SSOP	3.49	2.79	2.17
SN74CBT16214DGGR	296-6393-1-ND	12-Bit, 1-of-3 FET Mux/Demux *NEW!*	56-TSSOP	3.49	2.79	2.17
SN74CBT16214DGGR	296-6393-2-ND	12-Bit, 1-of-3 FET Mux/Demux *NEW!*	56-TSSOP	3952.00/2,000		
SN74CBT16214DL	296-6394-5-ND	12-Bit, 1-of-3 FET Mux/Demux *NEW!*	56-SSOP	3.49	2.79	2.17
SN74CBT16232DGGR	296-6395-1-ND	Synchronous 16-Bit, 1-of-2 FET Mux/Demux *NEW!*	56-TSSOP	5.18	4.14	3.22
SN74CBT16232DGGR	296-6395-2-ND	Synchronous 16-Bit, 1-of-2 FET Mux/Demux *NEW!*	56-TSSOP	5866.00/2,000		
SN74CBT16232DLR	296-6396-1-ND	Synchronous 16-Bit, 1-of-2 FET Mux/Demux *NEW!*	56-SSOP	5.18	4.14	3.22
SN74CBT16232DLR	296-6396-2-ND	Synchronous 16-Bit, 1-of-2 FET Mux/Demux *NEW!*	56-SSOP	2933.00/1,000		
SN74CBT16233DGGR	296-1161-1-ND	16-Bit, 1-of-2 FET Mux/Demux	56-TSSOP	5.18	4.14	3.22
SN74CBT16233DGGR	296-1161-2-ND	16-Bit, 1-of-2 FET Mux/Demux	56-TSSOP	5866.00/2,000		
SN74CBT16233DGVR	296-6397-1-ND	16-Bit, 1-of-2 FET Mux/Demux *NEW!*	56-TVSOP	5.00	4.00	3.38
SN74CBT16233DGVR	296-6397-2-ND	16-Bit, 1-of-2 FET Mux/Demux *NEW!*	56-TVSOP	6250.00/2,000		
SN74CBT16233DL	296-6398-5-ND	16-Bit, 1-of-2 FET Mux/Demux *NEW!*	56-SSOP	5.18	4.14	3.22
SN74CBT16233DLR	296-6398-2-ND	16-Bit, 1-of-2 FET Mux/Demux *NEW!*	56-SSOP	2933.00/1,000		
SN74CBT16244DGGR	296-6399-1-ND	16-Bit, FET Bus Switch *NEW!*	48-TSSOP	3.04	2.43	1.89
SN74CBT16244DGGR	296-6399-2-ND	16-Bit, FET Bus Switch *NEW!*	48-TSSOP	3442.00/2,000		
SN74CBT16244DGVR	296-6400-1-ND	16-Bit, FET Bus Switch *NEW!*	48-TVSOP	3.49	2.79	2.17
SN74CBT16244DGVR	296-6400-2-ND	16-Bit, FET Bus Switch *NEW!*	48-TVSOP	3952.00/2,000		
SN74CBT16244DLR	296-6401-1-ND	16-Bit, FET Bus Switch *NEW!*	48-SSOP	3.08	2.47	1.92
SN74CBT16244DLR	296-6401-2-ND	16-Bit, FET Bus Switch *NEW!*	48-SSOP	1747.00/1,000		
SN74CBT16245DGGR	296-6402-1-ND	16-Bit, FET Bus Switch *NEW!*	48-TSSOP	3.04	2.43	1.89
SN74CBT16245DGGR	296-6402-2-ND	16-Bit, FET Bus Switch *NEW!*	48-TSSOP	3442.00/2,000		
SN74CBT16245DGVR	296-6403-1-ND	16-Bit, FET Bus Switch *NEW!*	48-TVSOP	3.15	2.52	1.96
SN74CBT16245DGVR	296-6403-2-ND	16-Bit, FET Bus Switch *NEW!*	48-TVSOP	3570.00/2,000		
SN74CBT16245DLR	296-6404-1-ND	16-Bit, FET Bus Switch *NEW!*	48-SSOP	3.04	2.43	1.89
SN74CBT16245DLR	296-6404-2-ND	16-Bit, FET Bus Switch *NEW!*	48-SSOP	1721.00/1,000		
SN74CBT16292DGGR	296-1162-1-ND	12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-TSSOP	2.70	2.16	1.68
SN74CBT16292DGGR	296-1162-2-ND	12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-TSSOP	3060.00/2,000		
SN74CBT16292DGVR	296-6405-1-ND	12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor *NEW!*	56-TVSOP	3.15	2.52	1.96
SN74CBT16292DGVR	296-6405-2-ND	12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor *NEW!*	56-TVSOP	3570.00/2,000		
SN74CBT16292DL	296-1534-5-ND	12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-SSOP	2.70	2.16	1.68
SN74CBT16292DLR	296-1534-2-ND	12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor *NEW!*	56-SSOP	1530.00/1,000		
SN74CBT16390DGGR	296-1163-1-ND	16-Bit, 32-Bit, FET Mux/Demux Bus Switch	56-TSSOP	5.18	4.14	3.22
SN74CBT16390DGGR	296-1163-2-ND	16-Bit, 32-Bit, FET Mux/Demux Bus Switch	56-TSSOP	5866.00/2,000		
SN74CBT16390DGVR	296-6406-1-ND	16-Bit, 32-Bit, FET Mux/Demux Bus Switch *NEW!*	56-TVSOP	5.00	4.00	3.38
SN74CBT16390DGVR	296-6406-2-ND	16-Bit, 32-Bit, FET Mux/Demux Bus Switch *NEW!*	56-TVSOP	6250.00/2,000		
SN74CBT16390DL	296-1535-5-ND	16-Bit, 32-Bit, FET Mux/Demux Bus Switch	56-SSOP	5.18	4.14	3.22
SN74CBT16861DGGR	296-6407-1-ND	20-Bit, FET Bus Switch *NEW!*	48-TSSOP	2.48	1.98	1.54
SN74CBT16861DGGR	296-6407-2-ND	20-Bit, FET Bus Switch *NEW!*	48-TSSOP	2806.00/2,000		
SN74CBT16861DGVR	296-6408-1-ND	20-Bit, FET Bus Switch *NEW!*	48-TVSOP	2.59	2.07	1.61
SN74CBT16861DGVR	296-6408-2-ND	20-Bit, FET Bus Switch *NEW!*	48-TVSOP	2932.00/2,000		
SN74CBT16861DLR	296-6409-1-ND	20-Bit, FET Bus Switch *NEW!*	48-SSOP	2.48	1.98	1.54
SN74CBT16861DLR	296-6409-2-ND	20-Bit, FET Bus Switch *NEW!*	48-SSOP	1403.00/1,000		
SN74CBT162292DGGR	296-1160-1-ND	12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-TSSOP	2.70	2.16	1.68
SN74CBT162292DGGR	296-1160-2-ND	12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-TSSOP	3060.00/2,000		
SN74CBT162292DL	296-1533-5-ND	12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-SSOP	2.70	2.16	1.68
SN74CBTD1G125DCKR	296-6476-1-ND	Single FET Bus Switch with Level Shifting *NEW!*	5-SOP	.64	.48	.36
SN74CBTD1G125DCKR	296-6476-2-ND	Single FET Bus Switch with Level Shifting *NEW!*	5-SOP	624.00/3,000		
SN74CBTD3306D	296-6477-5-ND	Dual FET Bus Switch with Level Shifting *NEW!*	8-SOP	1.35	1.13	.90
SN74CBTD3306PWR	296-6478-1-ND	Dual FET Bus Switch with Level Shifting *NEW!*	8-TSSOP	1.35	1.13	.90
SN74CBTD3306PWR	296-6478-2-ND	Dual FET Bus Switch with Level Shifting *NEW!*	8-TSSOP	1198.00/2,000		
SN74CBTD3384DBQR	296-6479-1-ND	10-Bit, FET Bus Switch with Level Shifting *NEW!*	24-SOP	2.00	1.60	1.20
SN74CBTD3384DBQR	296-6479-2-ND	10-Bit, FET Bus Switch with Level Shifting *NEW!*	24-SOP	2560.00/2,500		
SN74CBTD3384DBR	296-6480-1-ND	10-Bit, FET Bus Switch with Level Shifting *NEW!*	24-SSOP	1.75	1.40	1.05
SN74CBTD3384DBR	296-6480-2-ND	10-Bit, FET Bus Switch with Level Shifting *NEW!*	24-SSOP	1820.00/2,000		
SN74CBTD3384DGVR	296-6481-1-ND	10-Bit, FET Bus Switch with Level Shifting *NEW!*	24-TVSOP	2.00	1.60	1.20

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74CBTD3384DGVR	296-6481-2-ND	10-Bit, FET Bus Switch with Level Shifting *NEW!*	24-TVSOP	2080.00/2,000		
SN74CBTD3384DW	296-6482-5-ND	10-Bit, FET Bus Switch with Level Shifting *NEW!*	24-SOP	1.75	1.40	1.05
SN74CBTD3384DWR	296-6482-2-ND	10-Bit, FET Bus Switch with Level Shifting *NEW!*	24-SOP	1872.00/2,000		
SN74CBTD3384PWR	296-1173-1-ND	10-Bit, FET Bus Switch with Level Shifting	24-TSSOP	1.75	1.40	1.05
SN74CBTD3384PWR	296-1173-2-ND	10-Bit, FET Bus Switch with Level Shifting	24-TSSOP	1820.00/2,000		
SN74CBTD3861DBQR	296-6483-1-ND	10-Bit, FET Bus Switch with Level Shifting *NEW!*	24-SOP	1.38	1.10	.83
SN74CBTD3861DBQR	296-6483-2-ND	10-Bit, FET Bus Switch with Level Shifting *NEW!*	24-SOP	1760.00/2,500		
SN74CBTD3861DBR	296-6484-1-ND	10-Bit, FET Bus Switch with Level Shifting *NEW!*	24-SSOP	1.38	1.10	.83
SN74CBTD3861DBR	296-6484-2-ND	10-Bit, FET Bus Switch with Level Shifting *NEW!*	24-SSOP	1430.00/2,000		
SN74CBTD3861DGVR	296-6485-1-ND	10-Bit, FET Bus Switch with Level Shifting *NEW!*	24-TVSOP	1.63	1.30	.98
SN74CBTD3861DGVR	296-6485-2-ND	10-Bit, FET Bus Switch with Level Shifting *NEW!*	24-TVSOP	1690.00/2,000		
SN74CBTD3861DW	296-6486-5-ND	10-Bit, FET Bus Switch with Level Shifting *NEW!*	24-SOP	1.38	1.10	.83
SN74CBTD3861PWR	296-6487-1-ND	10-Bit, FET Bus Switch with Level Shifting *NEW!*	24-TSSOP	1.38	1.10	.83
SN74CBTD3861PWR	296-6487-2-ND	10-Bit, FET Bus Switch with Level Shifting *NEW!*	24-TSSOP	1430.00/2,000		
SN74CBTD16210DGGR	296-1171-1-ND	20-Bit, FET Bus Switch with Level Shifting	48-TSSOP	2.48	1.98	1.54
SN74CBTD16210DGGR	296-1171-2-ND	20-Bit, FET Bus Switch with Level Shifting	48-TSSOP	2806.00/2,000		
SN74CBTD16210DGVR	296-6474-1-ND	20-Bit, FET Bus Switch with Level Shifting *NEW!*	48-TVSOP	2.93	2.34	1.82
SN74CBTD16210DGVR	296-6474-2-ND	20-Bit, FET Bus Switch with Level Shifting *NEW!*	48-TVSOP	3316.00/2,000		
SN74CBTD16210DL	296-1541-5-ND	20-Bit, FET Bus Switch w/Level Shifting	48-SSOP	2.48	1.98	1.54
SN74CBTD16210DLR	296-1541-2-ND	20-Bit, FET Bus Switch with Level Shifting *NEW!*	48-SSOP	1428.00/1,000		
SN74CBTD16211DGGR	296-1172-1-ND	24-Bit, FET Bus Switch with Level Shifting	56-TSSOP	2.70	2.16	1.68
SN74CBTD16211DGGR	296-1172-2-ND	24-Bit, FET Bus Switch with Level Shifting	56-TSSOP	3060.00/2,000		
SN74CBTD16211DGVR	296-6475-1-ND	24-Bit, FET Bus Switch with Level Shifting *NEW!*	56-TVSOP	3.15	2.52	1.96
SN74CBTD16211DGVR	296-6475-2-ND	24-Bit, FET Bus Switch with Level Shifting *NEW!*	56-TVSOP	3570.00/2,000		
SN74CBTD16211DL	296-1542-5-ND	24-Bit, FET Bus Switch w/Level Shifting	56-SSOP	2.70	2.16	1.68
SN74CBTH16211DGGR	296-6461-1-ND	24-Bit, FET Bus Switch with Bus Hold *NEW!*	56-TSSOP	2.70	2.16	1.68
SN74CBTH16211DGGR	296-6461-2-ND	24-Bit, FET Bus Switch with Bus Hold *NEW!*	56-TSSOP	3060.00/2,000		
SN74CBTH16211DL	296-1543-5-ND	24-Bit, FET Bus Switch with Bus Hold	56-SSOP	2.70	2.16	1.68
SN74CBTK6800DBQR	296-6492-1-ND	10-Bit, FET Bus Switch *NEW!*	24-SOP	1.63	1.30	.98
SN74CBTK6800DBQR	296-6492-2-ND	10-Bit, FET Bus Switch *NEW!*	24-SOP	2080.00/2,500		
SN74CBTK6800DGVR	296-6493-1-ND	10-Bit, FET Bus Switch *NEW!*	24-TVSOP	1.75	1.40	1.05
SN74CBTK6800DGVR	296-6493-2-ND	10-Bit, FET Bus Switch *NEW!*	24-TVSOP	1820.00/2,000		
SN74CBTK6800DWR	296-6494-1-ND	10-Bit, FET Bus Switch *NEW!*	24-SOP	1.63	1.30	.98
SN74CBTK6800DWR	296-6494-2-ND	10-Bit, FET Bus Switch *NEW!*	24-SOP	1690.00/2,000		
SN74CBTK6800PWR	296-6495-1-ND	10-Bit, FET Bus Switch *NEW!*	24-TSSOP	1.63	1.30	.98
SN74CBTK6800PWR	296-6495-2-ND	10-Bit, FET Bus Switch *NEW!*	24-TSSOP	1690.00/2,000		
SN74CBTK16245DGGR	296-6488-1-ND	16-Bit, FET Bus Switch *NEW!*	48-TSSOP	3.15	2.52	1.96
SN74CBTK16245DGGR	296-6488-2-ND	16-Bit, FET Bus Switch *NEW!*	48-TSSOP	3570.00/2,000		
SN74CBTK16245DGVR	296-6489-1-ND	16-Bit, FET Bus Switch *NEW!*	48-TVSOP	3.26	2.61	2.03
SN74CBTK16245DGVR	296-6489-2-ND	16-Bit, FET Bus Switch *NEW!*	48-TVSOP	3698.00/2,000		
SN74CBTK16245DLR	296-6490-1-ND	16-Bit, FET Bus Switch *NEW!*	48-SSOP	3.15	2.52	1.96
SN74CBTK16245DLR	296-6490-2-ND	16-Bit, FET Bus Switch *NEW!*	48-SSOP	1785.00/1,000		
SN74CBTK32245GKER	296-6491-1-ND	16-Bit, FET Bus Switch *NEW!*	96-BGA	8.33	7.50	6.65
SN74CBTK32245GKER	296-6491-2-ND	16-Bit, FET Bus Switch *NEW!*	96-BGA	6175.00/1,000		
SN74CBTLV1G125DBVR	296-9109-1-ND	LV Single FET Bus Switch *NEW!*	SOT-23-5	.72	.54	.41
SN74CBTLV1G125DBVR	296-9109-2-ND	LV Single FET Bus Switch *NEW!*	SOT-23-5	702.00/3,000		
SN74CBTLV1G125DCKR	296-9110-1-ND	LV Single FET Bus Switch *NEW!*	5-SOP	.80	.60	.45
SN74CBTLV1G125DCKR	296-9110-2-ND	LV Single FET Bus Switch *NEW!*	5-SOP	780.00/3,000		
SN74CBTLV3125DBQR	296-9111-1-ND	LV Quad FET Bus Switch *NEW!*	16-SOP	1.58	1.26	.95
SN74CBTLV3125DBQR	296-9111-2-ND	LV Quad FET Bus Switch *NEW!*	16-SOP	2015.00/2,500		
SN74CBTLV3125DGVR	296-9112-1-ND	LV Quad FET Bus Switch *NEW!*	14-TVSOP	1.58	1.26	.95
SN74CBTLV3125DGVR	296-9112-2-ND	LV Quad FET Bus Switch *NEW!*	14-TVSOP	1638.00/2,000		
SN74CBTLV3125DR	296-9113-1-ND	LV Quad FET Bus Switch *NEW!*	14-SOP	1.45	1.16	.87
SN74CBTLV3125DR	296-9113-2-ND	LV Quad FET Bus Switch *NEW!*	14-SOP	1855.00/2,500		
SN74CBTLV3125PWR	296-9114-1-ND	LV Quad FET Bus Switch *NEW!*	14-TSSOP	1.50	1.20	.90
SN74CBTLV3125PWR	296-9114-2-ND	LV Quad FET Bus Switch *NEW!*	14-TSSOP	1560.00/2,000		
SN74CBTLV3126DBQR	296-9115-1-ND	LV Quad FET Bus Switch *NEW!*	16-SOP	1.38	1.10	.83
SN74CBTLV3126DBQR	296-9115-2-ND	LV Quad FET Bus Switch *NEW!*	16-SOP	1760.00/2,500		
SN74CBTLV3126DGVR	296-9116-1-ND	LV Quad FET Bus Switch *NEW!*	14-TVSOP	1.50	1.20	.90
SN74CBTLV3126DGVR	296-9116-2-ND	LV Quad FET Bus Switch *NEW!*	14-TVSOP	1560.00/2,000		
SN74CBTLV3126DR	296-9117-1-ND	LV Quad FET Bus Switch *NEW!*	14-SOP	1.38	1.10	.83
SN74CBTLV3126DR	296-9117-2-ND	LV Quad FET Bus Switch *NEW!*	14-SOP	1760.00/2,500		
SN74CBTLV3126PWR	296-9118-1-ND	LV Quad FET Bus Switch *NEW!*	14-TSSOP	1.38	1.10	.83
SN74CBTLV3126PWR	296-9118-2-ND	LV Quad FET Bus Switch *NEW!*	14-TSSOP	1430.00/2,000		
SN74CBTLV3245ADBQR	296-9119-1-ND	LV Octal FET Bus Switch *NEW!*	20-SOP	1.75	1.40	1.05
SN74CBTLV3245ADBQR	296-9119-2-ND	LV Octal FET Bus Switch *NEW!*	20-SOP	2240.00/2,500		
SN74CBTLV3245ADGVR	296-9120-1-ND	LV Octal FET Bus Switch *NEW!*	20-TVSOP	1.75	1.40	1.05
SN74CBTLV3245ADGVR	296-9120-2-ND	LV Octal FET Bus Switch *NEW!*	20-TVSOP	1820.00/2,000		
SN74CBTLV3245ADW	296-1544-5-ND	LV Octal FET Bus Switch	20-SOP	1.50	1.20	.90
SN74CBTLV3245ADWR	296-1544-2-ND	LV Octal FET Bus Switch *NEW!*	20-SOP	1560.00/2,000		
SN74CBTLV3245APWR	296-9121-1-ND	LV Octal FET Bus Switch *NEW!*	20-TSSOP	1.50	1.20	.90
SN74CBTLV3245APWR	296-9121-2-ND	LV Octal FET Bus Switch *NEW!*	20-TSSOP	1560.00/2,000		
SN74CBTLV3245DBR	296-9122-1-ND	LV Octal FET Bus Switch *NEW!*	20-SSOP	1.50	1.20	.90
SN74CBTLV3245DBR	296-9122-2-ND	LV Octal FET Bus Switch *NEW!*	20-SSOP	1560.00/2,000		
SN74CBTLV3245DGVR	296-9123-1-ND	LV Octal FET Bus Switch *NEW!*	20-TVSOP	1.75	1.40	1.05
SN74CBTLV3245DGVR	296-9123-2-ND	LV Octal FET Bus Switch *NEW!*	20-TVSOP	1820.00/2,000		
SN74CBTLV3245PWR	296-9125-1-ND	LV Octal FET Bus Switch *NEW!*	20-TSSOP	1.50	1.20	.90

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74CBTLV3245PWR	296-9125-2-ND	LV Octal FET Bus Switch *NEW!*	20-TSSOP	1560.00/2,000		
SN74CBTLV3251DBQR	296-9126-1-ND	LV 1-of-8 FET Mux/Demux *NEW!*	16-SOP	1.88	1.50	1.13
SN74CBTLV3251DBQR	296-9126-2-ND	LV 1-of-8 FET Mux/Demux *NEW!*	16-SOP	2400.00/2,500		
SN74CBTLV3251DGVR	296-9127-1-ND	LV 1-of-8 FET Mux/Demux *NEW!*	16-TVSOP	1.75	1.40	1.05
SN74CBTLV3251DGVR	296-9127-2-ND	LV 1-of-8 FET Mux/Demux *NEW!*	16-TVSOP	1820.00/2,000		
SN74CBTLV3251DR	296-9128-1-ND	LV 1-of-8 FET Mux/Demux *NEW!*	16-SOP	1.63	1.30	.98
SN74CBTLV3251DR	296-9128-2-ND	LV 1-of-8 FET Mux/Demux *NEW!*	16-SOP	2080.00/2,500		
SN74CBTLV3251PWR	296-9129-1-ND	LV 1-of-8 FET Mux/Demux *NEW!*	16-TSSOP	1.63	1.30	.98
SN74CBTLV3251PWR	296-9129-2-ND	LV 1-of-8 FET Mux/Demux *NEW!*	16-TSSOP	1690.00/2,000		
SN74CBTLV3253DBQR	296-9130-1-ND	LV Dual 1-of-4 FET Mux/Demux *NEW!*	16-SOP	1.63	1.30	.98
SN74CBTLV3253DBQR	296-9130-2-ND	LV Dual 1-of-4 FET Mux/Demux *NEW!*	16-SOP	2080.00/2,500		
SN74CBTLV3253DGVR	296-9131-1-ND	Low-Voltage Dual 1-of-4 FET Mux/Demux *NEW!*	16-TVSOP	1.88	1.50	1.13
SN74CBTLV3253DGVR	296-9131-2-ND	Low-Voltage Dual 1-of-4 FET Mux/Demux *NEW!*	16-TVSOP	1950.00/2,000		
SN74CBTLV3253DR	296-9132-1-ND	LV Dual 1-of-4 FET Mux/Demux *NEW!*	16-SOP	1.63	1.30	.98
SN74CBTLV3253DR	296-9132-2-ND	LV Dual 1-of-4 FET Mux/Demux *NEW!*	16-SOP	2080.00/2,500		
SN74CBTLV3253PWR	296-9133-1-ND	Low-Voltage Dual 1-of-4 FET Mux/Demux *NEW!*	16-TSSOP	1.63	1.30	.98
SN74CBTLV3253PWR	296-9133-2-ND	Low-Voltage Dual 1-of-4 FET Mux/Demux *NEW!*	16-TSSOP	1690.00/2,000		
SN74CBTLV3257D	296-9134-5-ND	LV 4-Bit, 1-of-2 FET Mux/Demux *NEW!*	16-SOP	1.63	1.30	.98
SN74CBTLV3257DBQR	296-9135-1-ND	LV 4-Bit, 1-of-2 FET Mux/Demux *NEW!*	16-SOP	1.88	1.50	1.13
SN74CBTLV3257DBQR	296-9135-2-ND	LV 4-Bit, 1-of-2 FET Mux/Demux *NEW!*	16-SOP	2400.00/2,500		
SN74CBTLV3257DGVR	296-9136-1-ND	Low-Voltage 4-Bit, 1-of-2 FET Mux/Demux *NEW!*	16-TVSOP	1.88	1.50	1.13
SN74CBTLV3257DGVR	296-9136-2-ND	Low-Voltage 4-Bit, 1-of-2 FET Mux/Demux *NEW!*	16-TVSOP	1950.00/2,000		
SN74CBTLV3257DR	296-9137-1-ND	LV 4-Bit, 1-of-2 FET Mux/Demux *NEW!*	16-SOP	1.63	1.30	.98
SN74CBTLV3257DR	296-9137-2-ND	LV 4-Bit, 1-of-2 FET Mux/Demux *NEW!*	16-SOP	2080.00/2,500		
SN74CBTLV3257PWR	296-9138-1-ND	Low-Voltage 4-Bit, 1-of-2 FET Mux/Demux *NEW!*	16-TSSOP	1.63	1.30	.98
SN74CBTLV3257PWR	296-9138-2-ND	Low-Voltage 4-Bit, 1-of-2 FET Mux/Demux *NEW!*	16-TSSOP	1690.00/2,000		
SN74CBTLV3383DBQR	296-9139-1-ND	LV 10-Bit, FET Bus-Exch, Switch *NEW!*	24-SOP	1.75	1.40	1.05
SN74CBTLV3383DBQR	296-9139-2-ND	LV 10-Bit, FET Bus-Exch. Switch *NEW!*	24-SOP	2240.00/2,500		
SN74CBTLV3383DGVR	296-9140-1-ND	LV 10-Bit, FET Bus-Exchange Switch *NEW!*	24-TVSOP	1.75	1.40	1.05
SN74CBTLV3383DGVR	296-9140-2-ND	LV 10-Bit, FET Bus-Exchange Switch *NEW!*	24-TVSOP	1820.00/2,000		
SN74CBTLV3383DW	296-1545-5-ND	LV 10-Bit, FET Bus-Exchange Switch	24-SOP	1.50	1.20	.90
SN74CBTLV3383DWR	296-1545-2-ND	LV 10-Bit, FET Bus-Exch. Switch *NEW!*	24-SOP	1560.00/2,000		
SN74CBTLV3383PWR	296-9141-1-ND	Low-Voltage 10-Bit, FET Bus-Exchange Switch *NEW!*	24-TSSOP	1.50	1.20	.90
SN74CBTLV3383PWR	296-9141-2-ND	Low-Voltage 10-Bit, FET Bus-Exchange Switch *NEW!*	24-TSSOP	1560.00/2,000		
SN74CBTLV3384DBQR	296-9142-1-ND	LV 10-Bit, FET Bus Switch *NEW!*	24-SOP	1.75	1.40	1.05
SN74CBTLV3384DBQR	296-9142-2-ND	LV 10-Bit, FET Bus Switch *NEW!*	24-SOP	2240.00/2,500		
SN74CBTLV3384DGVR	296-9143-1-ND	LV 10-Bit, FET Bus Switch *NEW!*	24-TVSOP	1.75	1.40	1.05
SN74CBTLV3384DGVR	296-9143-2-ND	LV 10-Bit, FET Bus Switch *NEW!*	24-TVSOP	1820.00/2,000		
SN74CBTLV3384DW	296-1546-5-ND	LV 10-Bit, FET Bus Switch	24-SOP	1.50	1.20	.90
SN74CBTLV3384DWR	296-1546-2-ND	LV 10-Bit, FET Bus Switch *NEW!*	24-SOP	1560.00/2,000		
SN74CBTLV3384PWR	296-9144-1-ND	LV 10-Bit, FET Bus Switch *NEW!*	24-TSSOP	1.50	1.20	.90
SN74CBTLV3384PWR	296-9144-2-ND	LV 10-Bit, FET Bus Switch *NEW!*	24-TSSOP	1560.00/2,000		
SN74CBTLV3857DBQR	296-9145-1-ND	LV 10-Bit, FET Bus Switch with Internal Pulldown Resistor *NEW!*	24-SOP	1.88	1.50	1.13
SN74CBTLV3857DBQR	296-9145-2-ND	LV 10-Bit, FET Bus Switch with Internal Pulldown Resistor *NEW!*	24-SOP	2400.00/2,500		
SN74CBTLV3857DGVR	296-9146-1-ND	LV 10-Bit, FET Bus Switch with Internal Pulldown Resistor *NEW!*	24-TVSOP	1.88	1.50	1.13
SN74CBTLV3857DGVR	296-9146-2-ND	LV 10-Bit, FET Bus Switch with Internal Pulldown Resistor *NEW!*	24-TVSOP	1950.00/2,000		
SN74CBTLV3857DW	296-9147-5-ND	LV 10-Bit, FET Bus Switch with Internal Pulldown Resistor *NEW!*	24-SOP	1.63	1.30	.98
SN74CBTLV3857DWR	296-9147-2-ND	LV 10-Bit, FET Bus Switch with Internal Pulldown Resistor *NEW!*	24-SOP	1690.00/2,000		
SN74CBTLV3857PWR	296-9148-1-ND	LV 10-Bit, FET Bus Switch with Internal Pulldown Resistor *NEW!*	24-TSSOP	1.63	1.30	.98
SN74CBTLV3857PWR	296-9148-2-ND	LV 10-Bit, FET Bus Switch with Internal Pulldown Resistor *NEW!*	24-TSSOP	1690.00/2,000		
SN74CBTLV3861DBQR	296-9149-1-ND	LV 10-Bit, FET Bus Switch *NEW!*	24-SOP	1.63	1.30	.98
SN74CBTLV3861DBQR	296-9149-2-ND	LV 10-Bit, FET Bus Switch *NEW!*	24-SOP	2080.00/2,500		
SN74CBTLV3861DGVR	296-9150-1-ND	LV 10-Bit, FET Bus Switch *NEW!*	24-TVSOP	1.75	1.40	1.05
SN74CBTLV3861DGVR	296-9150-2-ND	LV 10-Bit, FET Bus Switch *NEW!*	24-TVSOP	1820.00/2,000		
SN74CBTLV3861DWR	296-9151-1-ND	LV 10-Bit, FET Bus Switch *NEW!*	24-SOP	1.63	1.30	.98
SN74CBTLV3861DWR	296-9151-2-ND	LV 10-Bit, FET Bus Switch *NEW!*	24-SOP	1690.00/2,000		
SN74CBTLV3861DGVR	296-9152-1-ND	LV 10-Bit, FET Bus Switch *NEW!*	24-TVSOP	1.75	1.40	1.05
SN74CBTLV3861DGVR	296-9152-2-ND	LV 10-Bit, FET Bus Switch *NEW!*	24-TVSOP	1820.00/2,000		
SN74CBTLV3861PWR	296-9153-1-ND	LV 10-Bit, FET Bus Switch *NEW!*	24-TSSOP	1.63	1.30	.98
SN74CBTLV3861PWR	296-9153-2-ND	LV 10-Bit, FET Bus Switch *NEW!*	24-TSSOP	1690.00/2,000		
SN74CBTLV16210DLR	296-6496-1-ND	LV 20-Bit, FET Bus Switch *NEW!*	48-SSOP	3.38	2.70	2.10
SN74CBTLV16210DLR	296-6496-2-ND	LV 20-Bit, FET Bus Switch *NEW!*	48-SSOP	1913.00/1,000		
SN74CBTLV16210GR	296-6497-1-ND	LV 20-Bit, FET Bus Switch *NEW!*	48-TSSOP	3.38	2.70	2.10
SN74CBTLV16210GR	296-6497-2-ND	LV 20-Bit, FET Bus Switch *NEW!*	48-TSSOP	3826.00/2,000		
SN74CBTLV16210VR	296-6498-1-ND	LV 20-Bit, FET Bus Switch *NEW!*	48-TVSOP	3.83	3.06	2.38
SN74CBTLV16210VR	296-6498-2-ND	LV 20-Bit, FET Bus Switch *NEW!*	48-TVSOP	4336.00/2,000		
SN74CBTLV16211DLR	296-6499-1-ND	LV 24-Bit, FET Bus Switch *NEW!*	48-SSOP	3.38	2.70	2.10
SN74CBTLV16211DLR	296-6499-2-ND	LV 24-Bit, FET Bus Switch *NEW!*	48-SSOP	1913.00/1,000		
SN74CBTLV16211GR	296-6500-1-ND	LV 24-Bit, FET Bus Switch *NEW!*	48-TSSOP	3.38	2.70	2.10
SN74CBTLV16211GR	296-6500-2-ND	LV 24-Bit, FET Bus Switch *NEW!*	48-TSSOP	3826.00/2,000		
SN74CBTLV16211VR	296-9100-1-ND	LV 24-Bit, FET Bus Switch *NEW!*	48-TVSOP	3.83	3.06	2.38
SN74CBTLV16211VR	296-9100-2-ND	LV 24-Bit, FET Bus Switch *NEW!*	48-TVSOP	4336.00/2,000		
SN74CBTLV16212DLR	296-9101-1-ND	LV 24-Bit, FET Bus-Exch. Switch *NEW!*	56-SSOP	3.38	2.70	2.10
SN74CBTLV16212DLR	296-9101-2-ND	LV 24-Bit, FET Bus-Exch. Switch *NEW!*	56-SSOP	1913.00/1,000		
SN74CBTLV16212GR	296-9102-1-ND	Low-Voltage 24-Bit, FET Bus-Exchange Switch *NEW!*	56-TSSOP	3.38	2.70	2.10
SN74CBTLV16212GR	296-9102-2-ND	Low-Voltage 24-Bit, FET Bus-Exchange Switch *NEW!*	56-TSSOP	3826.00/2,000		
SN74CBTLV16212VR	296-9103-1-ND	Low-Voltage 24-Bit, FET Bus-Exchange Switch *NEW!*	56-TVSOP	3.83	3.06	2.38
SN74CBTLV16212VR	296-9103-2-ND	Low-Voltage 24-Bit, FET Bus-Exchange Switch *NEW!*	56-TVSOP	4336.00/2,000		

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74CBTLV16292DLR	296-9104-1-ND	Low-Voltage 12-Bit, 1-of-2 FET Mux/Demux *NEW!*	56-SSOP	3.15	2.52	1.96
SN74CBTLV16292DLR	296-9104-2-ND	Low-Voltage 12-Bit, 1-of-2 FET Mux/Demux *NEW!*	56-SSOP	1785.00/1,000		
SN74CBTLV16292GR	296-9105-1-ND	Low-Voltage 12-Bit, 1-of-2 FET Mux/Demux *NEW!*	56-TSSOP	3.15	2.52	1.96
SN74CBTLV16292GR	296-9105-2-ND	Low-Voltage 12-Bit, 1-of-2 FET Mux/Demux *NEW!*	56-TSSOP	3570.00/2,000		
SN74CBTLV16800DLR	296-9106-1-ND	Low-Voltage 12-Bit, 1-of-2 FET Mux/Demux *NEW!*	48-SSOP	3.26	2.61	2.03
SN74CBTLV16800DLR	296-9106-2-ND	Low-Voltage 12-Bit, 1-of-2 FET Mux/Demux *NEW!*	48-SSOP	1849.00/1,000		
SN74CBTLV16800GR	296-9107-1-ND	Low-Voltage 12-Bit, 1-of-2 FET Mux/Demux *NEW!*	48-TSSOP	3.26	2.61	2.03
SN74CBTLV16800GR	296-9107-2-ND	Low-Voltage 12-Bit, 1-of-2 FET Mux/Demux *NEW!*	48-TSSOP	3698.00/2,000		
SN74CBTLV16800VR	296-9108-1-ND	Low-Voltage 12-Bit, 1-of-2 FET Mux/Demux *NEW!*	48-TVSOP	3.71	2.97	2.31
SN74CBTLV16800VR	296-9108-2-ND	Low-Voltage 12-Bit, 1-of-2 FET Mux/Demux *NEW!*	48-TVSOP	4208.00/2,000		
SN74CBTLVR16292GR	296-9154-1-ND	LV 12-Bit, 1-of-2 FET Mux/Demux w/Internal Pulldown Resistor *NEW!*	56-TSSOP	3.15	2.52	1.96
SN74CBTLVR16292GR	296-9154-2-ND	LV 12-Bit, 1-of-2 FET Mux/Demux w/Internal Pulldown Resistor *NEW!*	56-TSSOP	3570.00/2,000		
SN74CBTLVR16292LR	296-9155-1-ND	LV 12-Bit, 1-of-2 FET Mux/Demux w/Internal Pulldown Resistor *NEW!*	56-SSOP	3.15	2.52	1.96
SN74CBTLVR16292LR	296-9155-2-ND	LV 12-Bit, 1-of-2 FET Mux/Demux w/Internal Pulldown Resistor *NEW!*	56-SSOP	1785.00/1,000		
SN74CBTLVR16292VR	296-9156-1-ND	LV 12-Bit, 1-of-2 FET Mux/Demux w/Internal Pulldown Resistor *NEW!*	56-TVSOP	3.26	2.61	2.03
SN74CBTLVR16292VR	296-9156-2-ND	LV 12-Bit, 1-of-2 FET Mux/Demux w/Internal Pulldown Resistor *NEW!*	56-TVSOP	3698.00/2,000		
SN74CBTS3306DR	296-9157-1-ND	Dual FET Bus Switch with Schottky Diode Clamping *NEW!*	8-SOP	1.41	1.18	.94
SN74CBTS3306DR	296-9157-2-ND	Dual FET Bus Switch with Schottky Diode Clamping *NEW!*	8-SOP	1527.50/2,500		
SN74CBTS3306PWR	296-9158-1-ND	Dual FET Bus Switch with Schottky Diode Clamping *NEW!*	8-TSSOP	1.35	1.13	.90
SN74CBTS3306PWR	296-9158-2-ND	Dual FET Bus Switch with Schottky Diode Clamping *NEW!*	8-TSSOP	1198.00/2,000		
SN74CBTS3384DBQR	296-9159-1-ND	10-Bit, FET Bus Switch with Schottky Diode Clamping *NEW!*	24-SOP	2.00	1.60	1.20
SN74CBTS3384DBQR	296-9159-2-ND	10-Bit, FET Bus Switch with Schottky Diode Clamping *NEW!*	24-SOP	2560.00/2,500		
SN74CBTS3384DBR	296-9160-1-ND	10-Bit, FET Bus Switch with Schottky Diode Clamping *NEW!*	24-SSOP	1.75	1.40	1.05
SN74CBTS3384DBR	296-9160-2-ND	10-Bit, FET Bus Switch with Schottky Diode Clamping *NEW!*	24-SSOP	1820.00/2,000		
SN74CBTS3384DW	296-9161-5-ND	10-Bit, FET Bus Switch with Schottky Diode Clamping *NEW!*	24-SOP	1.75	1.40	1.05
SN74CBTS3384PWR	296-9162-1-ND	10-Bit, FET Bus Switch withSchottky Diode Clamping *NEW!*	24-TSSOP	1.75	1.40	1.05
SN74CBTS3384PWR	296-9162-2-ND	10-Bit, FET Bus Switch withSchottky Diode Clamping *NEW!*	24-TSSOP	1820.00/2,000		
SN74CBTS6800DBQR	296-9163-1-ND	10-Bit, FET Bus Switch w/Precharged Out/Schottky Clamping Diode *NEW!*	24-SOP	1.63	1.30	.98
SN74CBTS6800DBQR	296-9163-2-ND	10-Bit, FET Bus Switch w/Precharged Out/Schottky Clamping Diode *NEW!*	24-SOP	2080.00/2,500		
SN74CBTS6800DGVR	296-9164-1-ND	10-Bit, FET Bus Switch w/Precharged Out/Schottky Clamping Diode *NEW!*	24-TVSOP	1.88	1.50	1.13
SN74CBTS6800DGVR	296-9164-2-ND	10-Bit, FET Bus Switch w/Precharged Out/Schottky Clamping Diode *NEW!*	24-TVSOP	1950.00/2,000		
SN74CBTS6800DWR	296-9165-1-ND	10-Bit, FET Bus Switch w/Precharged Out/Schottky Clamping Diode *NEW!*	24-SOP	1.63	1.30	.98
SN74CBTS6800DWR	296-9165-2-ND	10-Bit, FET Bus Switch w/Precharged Out/Schottky Clamping Diode *NEW!*	24-SOP	1690.00/2,000		
SN74CBTS6800PWR	296-9166-1-ND	10-Bit, FET Bus Switch w/Precharged Out/Schottky Clamping Diode *NEW!*	24-TSSOP	1.63	1.30	.98
SN74CBTS6800PWR	296-9166-2-ND	10-Bit, FET Bus Switch w/Precharged Out/Schottky Clamping Diode *NEW!*	24-TSSOP	1690.00/2,000		
SN74CBTS16211DGGR	296-1174-1-ND	24-Bit, FET Bus Switch with Schottky Diode Clamp	56-TSSOP	3.38	2.70	2.10
SN74CBTS16211DGGR	296-1174-2-ND	24-Bit, FET Bus Switch with Schottky Diode Clamp	56-TSSOP	3826.00/2,000		
SN74CBTS16211DL	296-1547-5-ND	24-Bit, FET Bus Switch with Schottky Diode Clamp	56-SSOP	3.38	2.70	2.10
SN74CBTS16212DGGR	296-1175-1-ND	24-Bit, FET Bus Switch with Schottky Diode Clamp	56-TSSOP	3.38	2.70	2.10
SN74CBTS16212DGGR	296-1175-2-ND	24-Bit, FET Bus Switch with Schottky Diode Clamp	56-TSSOP	3826.00/2,000		
SN74CBTS16212DL	296-1548-5-ND	24-Bit, FET Bus Switch with Schottky Diode Clamp	56-SSOP	3.38	2.70	2.10

74F Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74F00D	296-1176-5-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	.68	.51	.39
SN74F00DR	296-1176-1-ND	Quad 2-Input NAND Gate	14-SOP	.76	.57	.43
SN74F00DR	296-1176-2-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	617.50/2,500		
SN74F00N	296-3539-5-ND	Quad 2-Input NAND Gate *NEW!*	14-Dip	.68	.51	.39
SN74F02D	296-3540-5-ND	Quad 2-Input NOR Gate *NEW!*	14-SOP	.68	.51	.39
SN74F02N	296-3541-5-ND	Quad 2-Input NOR Gate *NEW!*	14-Dip	.68	.51	.39
SN74F04D	296-1177-5-ND	Hex Inverter	14-SOP	.68	.51	.39
SN74F04DR	296-1177-2-ND	Hex Inverter	14-SOP	617.50/2,500		
SN74F04N	296-3542-5-ND	Hex Inverter *NEW!*	14-Dip	.68	.51	.39
SN74F08D	296-1178-5-ND	Quad 2-Input AND Gate	14-SOP	.68	.51	.39
SN74F08DR	296-1178-2-ND	Quad 2-Input AND Gate	14-SOP	617.50/2,500		
SN74F08N	296-3543-5-ND	Quad 2-Input AND Gate *NEW!*	14-Dip	.68	.51	.39
SN74F10D	296-3545-5-ND	Triple 3-Input NAND Gate *NEW!*	14-SOP	.68	.51	.39
SN74F10N	296-3546-5-ND	Triple 3-Input NAND Gate *NEW!*	14-Dip	.68	.51	.39
SN74F11N	296-3547-5-ND	Triple 3-Input AND Gate *NEW!*	14-Dip	.68	.51	.39
SN74F20N	296-3563-5-ND	Dual 4-Input NAND Gate *NEW!*	14-Dip	.90	.75	.60
SN74F20NSR	296-3564-1-ND	Dual 4-Input NAND Gate *NEW!*	14-SOP	1.05	.88	.70
SN74F20NSR	296-3564-2-ND	Dual 4-Input NAND Gate *NEW!*	14-SOP	932.00/2,000		
SN74F21DR	296-3565-1-ND	Dual 4-Input AND Gate *NEW!*	14-SOP	.96	.80	.64
SN74F21DR	296-3565-2-ND	Dual 4-Input AND Gate *NEW!*	14-SOP	1040.00/2,500		
SN74F27DR	296-3576-1-ND	Triple 3-Input NOR Gate *NEW!*	14-SOP	.78	.65	.52
SN74F27DR	296-3576-2-ND	Triple 3-Input NOR Gate *NEW!*	14-SOP	845.00/2,500		
SN74F27N	296-3577-5-ND	Triple 3-Input NOR Gate *NEW!*	14-Dip	.96	.72	.54
SN74F30D	296-3581-5-ND	8-Input NAND Gate *NEW!*	14-SOP	.68	.51	.39
SN74F30DR	296-3581-2-ND	8-Input NAND Gate *NEW!*	14-SOP	552.50/2,500		
SN74F30NSR	296-3582-1-ND	8-Input NAND Gate *NEW!*	14-SOP	.88	.66	.50
SN74F30NSR	296-3582-2-ND	8-Input NAND Gate *NEW!*	14-SOP	586.00/2,000		
SN74F32D	296-1182-5-ND	Quad 2-Input OR Gate	14-SOP	.68	.51	.39
SN74F32DR	296-1182-2-ND	Quad 2-Input OR Gate	14-SOP	617.50/2,500		
SN74F32N	296-3583-5-ND	Quad 2-Input OR Gate *NEW!*	14-Dip	.68	.51	.39
SN74F38D	296-3589-5-ND	Quad 2-Input NAND Buffer with OC Output *NEW!*	14-SOP	.84	.63	.48
SN74F38N	296-3590-5-ND	Quad 2-Input NAND Buffer with OC Output *NEW!*	14-Dip	.84	.63	.48
SN74F74D	296-1183-5-ND	Dual D-Type Flip-Flop	14-SOP	.76	.57	.43
SN74F74DR	296-1183-2-ND	Dual D-Type Flip-Flop	14-SOP	682.50/2,500		
SN74F74N	296-1558-5-ND	Dual D-Type Flip-Flop	14-Dip	.76	.57	.43
SN74F86N	296-3602-5-ND	Quad 2-Input Exclusive OR Gate *NEW!*	14-Dip	.90	.75	.60
SN74F125D	296-1179-5-ND	Tri-State Quad Bus Buffer	14-SOP	1.02	.85	.68
SN74F125DR	296-1179-2-ND	Tri-State Quad Bus Buffer	14-SOP	1170.00/2,500		
SN74F125N	296-3548-5-ND	Tri-State Quad Bus Buffer *NEW!*	14-Dip	.90	.75	.60
SN74F126D	296-3549-5-ND	Tri-State Quad Bus Buffer *NEW!*	14-SOP	1.02	.85	.68
SN74F126N	296-3550-5-ND	Tri-State Quad Bus Buffer *NEW!*	14-Dip	.90	.75	.60
SN74F138D	296-3551-5-ND	3-8 Line Decoder/Multiplexer *NEW!*	16-SOP	.90	.75	.60
SN74F138N	296-3552-5-ND	3-8 Line Decoder/Multiplexer *NEW!*	16-Dip	.75	.63	.50
SN74F151BD	296-3553-5-ND	1-of-8 Data Selector/Multiplexer *NEW!*	16-SOP	.87	.73	.58
SN74F153D	296-3554-5-ND	Dual 1-of-4 Data Selector/Mux *NEW!*	16-SOP	.90	.75	.60
SN74F153N	296-3555-5-ND	Dual 1-of-4 Data Selector/Mux *NEW!*	16-Dip	.90	.75	.60
SN74F157AD	296-3556-5-ND	Quad 2:1 Data Selector/Mux *NEW!*	16-SOP	.87	.73	.58
SN74F157AN	296-1552-5-ND	Quad 2:1 Data Selector/Multiplexer	16-Dip	.75	.63	.50
SN74F161AD	296-3557-5-ND	Synch. 4-Bit Binary Counter *NEW!*	16-SOP	1.11	.93	.74
SN74F161AN	296-3558-5-ND	Synch. 4-Bit Binary Counter *NEW!*	16-Dip	1.05	.88	.70
SN74F163ADR	296-3559-1-ND	Synch. 4-Bit Binary Counter *NEW!*	16-SOP	1.17	.98	.78
SN74F163ADR	296-3559-2-ND	Synch. 4-Bit Binary Counter *NEW!*	16-SOP	1267.50/2,500		
SN74F169N	296-3560-5-ND	Synch. 4-Bit Up/Down Binary Counter *NEW!*	16-Dip	2.63	2.11	1.64
SN74F175D	296-3561-5-ND	Quad D-Type Flip-Flop with Clear *NEW!*	16-SOP	.90	.75	.60
SN74F175N	296-3562-5-ND	Quad D-Type Flip-Flop with Clear *NEW!*	16-Dip	.90	.75	.60
SN74F240DBR	296-3566-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	1.05	.88	.70
SN74F240DBR	296-3566-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	932.00/2,000		
SN74F240DW	296-3567-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1.05	.88	.70
SN74F240N	296-3568-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	1.02	.85	.68
SN74F241DW	296-3569-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1.40	1.12	.84
SN74F241DWR	296-3569-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1508.00/2,000		
SN74F244DBR	296-3570-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	1.05	.88	.70
SN74F244DBR	296-3570-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	932.00/2,000		
SN74F244DW	296-1180-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1.05	.88	.70
SN74F244DWR	296-1180-1-ND	Tri-State Octal Buffer/Driver	20-SOP	1.11	.93	.74
SN74F244DWR	296-1180-2-ND	Tri-State Octal Buffer/Driver	20-SOP	984.00/2,000		
SN74F244N	296-1553-5-ND	Tri-State Octal Buffer/Driver	20-Dip	1.02	.85	.68
SN74F245DBR	296-3571-1-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SSOP	1.05	.88	.70
SN74F245DBR	296-3571-2-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SSOP	932.00/2,000		
SN74F245DW	296-1181-5-ND	Tri-State Octal Bus Transceiver	20-SOP	1.05	.88	.70
SN74F245DWR	296-1181-2-ND	Tri-State Octal Bus Transceiver	20-SOP	984.00/2,000		
SN74F245N	296-3572-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-Dip	1.02	.85	.68
SN74F253D	296-3573-5-ND	Tri-State Dual 1-of-4 Data Select/Multiplexer *NEW!*	16-SOP	1.26	1.05	.84
SN74F253N	296-3574-5-ND	Tri-State Dual 1-of-4 Data Select/Multiplexer *NEW!*	16-Dip	1.14	.95	.76
SN74F257D	296-1555-5-ND	Tri-State Quad 2-1 Data Select/Mux	16-SOP	.87	.73	.58
SN74F257DR	296-1555-2-ND	Tri-St. Quad 2-1 Data Select/Mux *NEW!*	16-SOP	1007.50/2,500		
SN74F257N	296-3575-5-ND	Tri-St. Quad 2-1 Data Select/Mux *NEW!*	16-Dip	.81	.68	.54
SN74F280BD	296-3578-5-ND	9-Bit Parity Generator/Checker *NEW!*	14-SOP	.90	.75	.60
SN74F280BN	296-3579-5-ND	9-Bit Parity Generator/Checker *NEW!*	14-Dip	.75	.63	.50
SN74F283N	296-3580-5-ND	4-Bit Binary Full Adder with Fast Carry *NEW!*	16-Dip	1.25	1.00	.75
SN74F373DBR	296-3584-1-ND	Tri-State Octal D-Type Latch *NEW!*	20-SSOP	1.05	.88	.70
SN74F373DBR	296-3584-2-ND	Tri-State Octal D-Type Latch *NEW!*	20-SSOP	932.00/2,000		
SN74F373DW	296-3585-5-ND	Tri-State Octal D-Type Latch *NEW!*	20-SOP	1.05	.88	.70
SN74F373N	296-3586-5-ND	Tri-State Octal D-Type Latch *NEW!*	20-Dip	1.02	.85	.68
SN74F374DBR	296-3587-1-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	1.05	.88	.70
SN74F374DBR	296-3587-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	932.00/2,000		
SN74F374N	296-3588-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-Dip	1.02	.85	.68
SN74F521DW	296-3592-5-ND	8-Bit Identity Comparator *NEW!*	20-SOP	1.33	1.06	.80
SN74F541DW	296-3593-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	3.38	2.70	2.10
SN74F541N	296-3594-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	3.38	2.70	2.10
SN74F543DBR	296-3595-1-ND	Tri-State Octal Registered Xcvr. *NEW!*	24-SSOP	2.77	2.22	1.73
SN74F543DBR	296-3595-2-ND	Tri-State Octal Registered Xcvr. *NEW!*	24-SSOP	3136.00/2,000		
SN74F543DW	296-3596-5-ND	Tri-State Octal Registered Xcvr. *NEW!*	24-SOP	2.77	2.22	1.73
SN74F543NT	296-3597-5-ND	Tri-State Octal Registered Xcvr. *NEW!*	24-Dip	2.59	2.07	1.61
SN74F573DW	296-3598-5-ND	Tri-State Octal D-Type Latch *NEW!*	20-SOP	1.44	1.20	.96
SN74F573N	296-3599-5-ND	Tri-State Octal D-Type Latch *NEW!*	20-Dip	1.38	1.15	.92
SN74F574DW	296-3600-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	1.44	1.20	.96
SN74F623DW	296-3601-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	5.06	4.05	3.15
SN74F1016DW	296-3544-5-ND	16-Bit Barrier Diode R-C Bus-Term Array *NEW!*	20-SOP	3.83	3.06	2.38
SN74F1016DWR	296-3544-2-ND	16-Bit Barrier Diode R-C Bus-Term Array *NEW!*	20-SOP	4336.00/2,000		
SN74FB1650PCA	296-3603-ND	18-Bit TTL/BTL Univ Storage Transceiver *NEW!*	100-HLQFP	15.15	14.14	13.13
SN74FB1651PCA	296-3604-ND	17-Bit TTL/BTL Univ Storage Transceiver *NEW!*	100-HLQFP	15.15	14.14	13.13
SN74FB2033KRC	296-3605-ND	8-Bit TTL/BTL Registered Xcvr. *NEW!*	52-QFP	10.33	9.30	8.25
SN74FB2040RC	296-3606-ND	8-Bit TTL/BTL Transceiver *NEW!*	52-QFP	9.58	8.63	7.65
SN74FB2041ARC	296-3607-ND	7-Bit TTL/BTL Transceiver *NEW!*	52-QFP	9.58	8.63	7.65

HC / HCT Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
CD74HC00M	296-9167-5-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	.60	.45	.34
CD74HC08M	296-9169-5-ND	Quad 2-Input AND Gate *NEW!*	14-SOP	.60	.45	.34
CD74HC11M	296-9170-5-ND	Triple 3-Input AND Gate *NEW!*	14-SOP	.68	.51	.39
CD74HC14M	296-9178-5-ND	Hex Schmitt Trigger Inverter *NEW!*	14-SOP	.72	.54	.41
CD74HC14M96	296-9179-5-ND	Hex Schmitt Trigger Inverter *NEW!*	14-SOP	.80	.60	.45

(Continued)

★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
CD74HC21M	296-9186-5-ND	Dual 4-Input AND Gate *NEW!*	14-SOP	.72	.54	.41
CD74HC30E	296-9196-5-ND	8-Input NAND Gate *NEW!*	14-Dip	.56	.42	.32
CD74HC30M	296-9197-5-ND	8-Input NAND Gate *NEW!*	14-SOP	.60	.45	.34
CD74HC75E	296-9240-5-ND	Dual 2-Bit Bistable Transp. Latch *NEW!*	16-Dip	.80	.60	.45
CD74HC85M	296-9241-5-ND	4-Bit Magnitude Comparator *NEW!*	16-SOP	.90	.75	.60
CD74HC85M96	296-9242-5-ND	4-Bit Magnitude Comparator *NEW!*	16-SOP	.96	.80	.64
CD74HC93M96	296-9243-5-ND	4-Bit Binary Ripple Counter *NEW!*	14-SOP	.93	.78	.62
CD74HC123E	296-9171-5-ND	Dual Retrig. Mono. Multivibrator *NEW!*	16-Dip	.87	.73	.58
CD74HC123M	296-9172-5-ND	Dual Retrig. Mono. Multivibrator *NEW!*	16-SOP	.93	.78	.62
CD74HC125M	296-9173-5-ND	Quad Tri-State Buffer *NEW!*	14-SOP	.88	.66	.50
CD74HC132M	296-9174-5-ND	Quad 2-In Schmitt-Trig. NAND Gate *NEW!*	14-SOP	.87	.73	.58
CD74HC132M96	296-9175-5-ND	Quad 2-In Schmitt-Trig. NAND Gate *NEW!*	14-SOP	.90	.75	.60
CD74HC137E	296-9176-5-ND	3-8 Line Decoder/Demux with Address Latch *NEW!*	16-Dip	.84	.70	.56
CD74HC138M	296-9177-5-ND	3-8 Line Decoder/Demux, Inverting/Non-Inverting *NEW!*	16-SOP	.96	.72	.54
CD74HC154E	296-9180-5-ND	4-16 Line Decoder/Demux *NEW!*	24-Dip	2.15	1.72	1.29
CD74HC154EN	296-9181-5-ND	4-16 Line Decoder/Demux *NEW!*	24-Dip	2.59	2.07	1.61
CD74HC154M	296-9182-5-ND	4-16 Line Decoder/Demux *NEW!*	24-SOP	2.25	1.80	1.40
CD74HC194E	296-9183-5-ND	4-Bit Bi-Dir. Shift Register *NEW!*	16-Dip	.87	.73	.58
CD74HC194M	296-9184-5-ND	4-Bit Bi-Dir. Shift Register *NEW!*	16-SOP	.90	.75	.60
CD74HC194M96	296-9185-5-ND	4-Bit Bi-Dir. Shift Register *NEW!*	16-SOP	.96	.80	.64
CD74HC221E	296-9187-5-ND	Dual Mono Multivibrator w/Reset *NEW!*	16-Dip	.93	.78	.62
CD74HC238M	296-9188-5-ND	3-8 Line Decoder/Demux, Inverting/Non-Inverting *NEW!*	16-SOP	1.17	.98	.78
CD74HC243M96	296-9189-5-ND	Tri-State Quad Bus Transceiver *NEW!*	16-SOP	.96	.80	.64
CD74HC258M	296-9190-5-ND	Tri-St. Quad 2-In Mux, Inverting *NEW!*	16-Dip	.93	.78	.62
CD74HC259M	296-9191-5-ND	8-Bit Addressable Latch *NEW!*	16-SOP	.99	.83	.66
CD74HC259M96	296-9192-5-ND	8-Bit Addressable Latch *NEW!*	16-SOP	1.08	.90	.72
CD74HC297E	296-9193-5-ND	Digital Phase-Locked-Loop *NEW!*	16-Dip	1.88	1.50	1.13
CD74HC299E	296-9194-5-ND	Tri-St. 8-Bit Univ. Shift Register *NEW!*	20-Dip	1.44	1.20	.96
CD74HC299M	296-9195-5-ND	Tri-St. 8-Bit Univ. Shift Register *NEW!*	20-SOP	1.47	1.23	.98
CD74HC354E	296-9198-5-ND	Tri-State 8-Input Mux/Register *NEW!*	8-Dip	.99	.83	.66
CD74HC390E	296-9199-5-ND	Dual Decade Ripple Counter *NEW!*	16-Dip	.90	.75	.60
CD74HC423E	296-9229-5-ND	Dual Retrig. Monostable Multivibrator with Reset *NEW!*	16-Dip	.87	.73	.58
CD74HC646M	296-9235-5-ND	Tri-State Octal Bus Xcvr./Register *NEW!*	24-Dip	3.51	2.81	2.19
CD74HC670M96	296-9236-5-ND	4-By-4 Register File *NEW!*	16-SOP	1.20	1.00	.80
CD74HC4016E	296-9204-5-ND	Quad Bilateral Switch *NEW!*	14-Dip	.96	.80	.64
CD74HC4016M96	296-9205-5-ND	Quad Bilateral Switch *NEW!*	14-SOP	.96	.80	.64
CD74HC4024E	296-9206-5-ND	7-Stage Binary Ripple Counter *NEW!*	14-Dip	.78	.65	.52
CD74HC4024M	296-9207-5-ND	7-Stage Binary Ripple Counter *NEW!*	14-SOP	.87	.73	.58
CD74HC4046AE	296-9208-5-ND	Phase-Locked-Loop with VCO *NEW!*	16-Dip	1.75	1.40	1.05
CD74HC4046AM	296-9209-5-ND	Phase-Locked-Loop with VCO *NEW!*	16-SOP	1.83	1.46	1.10
CD74HC4046APWR	296-9210-1-ND	Phase-Locked-Loop with VCO *NEW!*	16-TSSOP	1.90	1.52	1.14
CD74HC4046APWR	296-9210-2-ND	Phase-Locked-Loop with VCO *NEW!*	16-TSSOP	1976.00/2,000		
CD74HC4049E	296-9211-5-ND	Hex Inverting Buffer *NEW!*	16-Dip	.84	.70	.56
CD74HC4049M	296-9212-5-ND	Hex Inverting Buffer *NEW!*	16-SOP	.87	.73	.58
CD74HC4050E	296-9213-5-ND	Hex Non-Inverting Buffer *NEW!*	16-Dip	.84	.70	.56
CD74HC4050M	296-9214-5-ND	Hex Non-Inverting Buffer *NEW!*	16-SOP	.87	.73	.58
CD74HC4050PWR	296-9215-1-ND	Hex Non-Inverting Buffer *NEW!*	16-TSSOP	.96	.80	.64
CD74HC4050PWR	296-9215-2-ND	Hex Non-Inverting Buffer *NEW!*	16-TSSOP	852.00/2,000		
CD74HC4051M	296-9216-5-ND	8-Channel Analog Mux/Demux *NEW!*	16-SOP	1.17	.98	.78
CD74HC4052E	296-9217-5-ND	Dual 4-Chan. Analog Mux/Demux *NEW!*	16-Dip	1.05	.88	.70
CD74HC4052M	296-9218-5-ND	Dual 4-Ch. Analog Mux/Demux *NEW!*	16-SOP	1.08	.90	.72
CD74HC4053E	296-9219-5-ND	Triple 2-Ch. Analog Mux/Demux *NEW!*	16-Dip	1.08	.90	.72
CD74HC4053M	296-9220-5-ND	Triple 2-Ch. Analog Mux/Demux *NEW!*	16-SOP	1.17	.98	.78
CD74HC4059M96	296-9221-5-ND	CMOS Programmable Divide-by-N Counter *NEW!*	24-SOP	2.48	1.98	1.49
CD74HC4060M	296-9222-5-ND	14-Stage Bin. Counter w/Oscillator *NEW!*	16-SOP	1.08	.90	.72
CD74HC4066M	296-9223-5-ND	Quad Bilateral Switch *NEW!*	14-SOP	.90	.75	.60
CD74HC4066M96	296-9224-5-ND	Quad Bilateral Switch *NEW!*	14-SOP	.99	.83	.66
CD74HC4067M	296-9225-5-ND	16-Channel Analog Mux/Demux *NEW!*	24-SOP	2.38	1.90	1.43
CD74HC4067SM96	296-9226-5-ND	16-Channel Analog Mux/Demux *NEW!*	24-SSOP	2.38	1.90	1.43
CD74HC4075M	296-9227-5-ND	Triple 3-Input OR Gate *NEW!*	14-SOP	.88	.66	.50
CD74HC4075PWR	296-9228-1-ND	Triple 3-Input OR Gate *NEW!*	14-TSSOP	.92	.69	.52
CD74HC4075PWR	296-9228-2-ND	Triple 3-Input OR Gate *NEW!*	14-TSSOP	612.00/2,000		
CD74HC4316M	296-9230-5-ND	Quad Analog Switch with Level Translation *NEW!*	16-SOP	1.02	.85	.68
CD74HC4351E	296-9231-5-ND	Analog Mux/Demux with Latch *NEW!*	20-Dip	1.29	1.08	.86
CD74HC4511M	296-9232-5-ND	BCD-to-7 Segment Latch/Decoder/Driver *NEW!*	16-SOP	.99	.83	.66
CD74HC4515M	296-9233-5-ND	4-16 Line Decoder/Demux with Input Latch *NEW!*	24-SOP	2.13	1.70	1.28
CD74HC4538M	296-9234-5-ND	Dual Retrig. Precision Monostable Multivibrator *NEW!*	16-SOP	1.29	1.08	.86
CD74HC7046AE	296-9237-5-ND	Phase-Locked Loop with VCO and Lock Detector *NEW!*	16-Dip	1.93	1.54	1.16
CD74HC7046AM	296-9238-5-ND	Phase-Locked Loop with VCO and Lock Detector *NEW!*	16-SOP	2.23	1.78	1.34
CD74HC7266M	296-9239-5-ND	Quad 2-Input EX-NOR Gate *NEW!*	14-SOP	.96	.80	.64
CD74HC40103E	296-9200-5-ND	8-Stage Synch. Down Counter *NEW!*	16-Dip	1.23	1.03	.82
CD74HC40103M	296-9201-5-ND	8-Stage Synch. Down Counter *NEW!*	16-SOP	1.29	1.08	.86
CD74HC40105E	296-9202-5-ND	4-Bit by 16-Word FIFO Register *NEW!*	16-Dip	1.29	1.08	.86
CD74HC40105M96	296-9203-5-ND	4-Bit by 16-Word FIFO Register *NEW!*	16-SOP	1.28	1.02	.77
CD74HCT00E	296-2081-5-ND	Quad 2-Input NAND Gate	14-Dip	.39	.32	.24
CD74HCT00M	296-9244-5-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	.60	.45	.34
CD74HCT02E	296-2082-5-ND	Quad 2-Input NOR Gate	14-Dip	.39	.32	.24
CD74HCT03M96	296-9245-5-ND	Quad 2-Input NAND Gate w/OD *NEW!*	14-SOP	.72	.54	.41
CD74HCT04E	296-2083-5-ND	Hex Inverter/Buffer	14-Dip	.39	.32	.24
CD74HCT04M	296-9246-5-ND	Hex Inverter/Buffer *NEW!*	14-SOP	.60	.45	.34
CD74HCT08E	296-2084-5-ND	Quad 2-Input AND Gate	14-Dip	.39	.32	.24
CD74HCT10E	296-2086-5-ND	Triple 3-Input NAND Gate	14-Dip	.39	.32	.24
CD74HCT10M	296-9247-5-ND	Triple 3-Input NAND Gate *NEW!*	14-SOP	.60	.45	.34
CD74HCT11E	296-2087-5-ND	Triple 3-Input AND Gate	14-Dip	.44	.36	.27
CD74HCT11M96	296-9249-5-ND	Triple 3-Input AND Gate *NEW!*	14-SOP	.72	.54	.41
CD74HCT14E	296-2093-5-ND	Hex Schmitt Trigger Inverter	14-Dip	.47	.39	.29
CD74HCT14M	296-9253-5-ND	Hex Schmitt-Trig. Inverter *NEW!*	14-SOP	.72	.54	.41
CD74HCT21E	296-9262-5-ND	Dual 4-Input AND Gate *NEW!*	14-Dip	.68	.51	.39
CD74HCT30E	296-2111-5-ND	8-Input NAND Gate	14-Dip	.39	.32	.24
CD74HCT30M	296-9267-5-ND	8-Input NAND Gate *NEW!*	14-SOP	.60	.45	.34
CD74HCT32E	296-2112-5-ND	Quad 2-Input OR Gate	14-Dip	.41	.34	.25
CD74HCT73E	296-9297-5-ND	Dual Neg-Edge-Trig. J-K Flip-Flop with Reset *NEW!*	14-Dip	.80	.60	.45
CD74HCT73M	296-9298-5-ND	Dual Neg-Edge-Trig. J-K Flip-Flop with Reset *NEW!*	14-SOP	.80	.60	.45
CD74HCT74M	296-9299-5-ND	Dual Pos-Edge-Trig. D-Type Flip-Flop with Set and Reset *NEW!*	14-SOP	.80	.60	.45
CD74HCT74E	296-2132-5-ND	Dual D-Type Flip-Flop with Set and Reset	14-Dip	.47	.39	.29
CD74HCT86E	296-2133-5-ND	Quad 2-Input Exclusive OR Gate	14-Dip	.52	.43	.32
CD74HCT86M	296-8201-5-ND	Quad 2-Input EX-OR Gate *NEW!*	14-SOP	.88	.66	.50
CD74HCT86M96	296-8201-2-ND	Quad 2-Input EX-OR Gate *NEW!*	14-SOP	715.00/2,500		
CD74HCT109E	296-2085-5-ND	Dual J-K Flip-Flop with Set and Reset	16-Dip	.55	.45	.33
CD74HCT112E	296-9248-5-ND	Dual Neg-Edge-Trig J-K Flip-Flop with Set and Reset *NEW!*	16-SOP	.87	.73	.58
CD74HCT123E	296-2088-5-ND	Dual Retriggerable Monostable Multivibrator with Reset	16-Dip	.80	.66	.48
CD74HCT123M	296-9250-5-ND	Dual Retrig. Monostable Multivibrator with Reset *NEW!*	16-SOP	.96	.80	.64
CD74HCT125E	296-2089-5-ND	Quad 3-State Buffer	14-Dip	.69	.57	.42
CD74HCT126E	296-9251-5-ND	Tri-State Quad Buffer *NEW!*	14-Dip	.75	.63	.50
CD74HCT132E	296-2090-5-ND	Quad 2-Input NAND Schmitt Trigger	14-Dip	.77	.63	.47
CD74HCT138E	296-2091-5-ND	3-to-8 Line Decoder/Demux, Inverting	16-Dip	.55	.45	.33
CD74HCT139E	296-2092-5-ND	Dual 2-of-4 Line Decoder/Demux	16-Dip	.69	.57	.42
CD74HCT147E	296-9252-5-ND	10-4 Line Priority Encoder *NEW!*	16-Dip	.90	.75	.60
CD74HCT151M	296-9254-5-ND	8-Input Multiplexer *NEW!*	16-SOP	.78	.65	.52
CD74HCT153E	296-2094-5-ND	Dual 4-Input Multiplexer	16-Dip	.63	.52	.38
CD74HCT153M	296-9255-5-ND	Dual 4-Input Multiplexer *NEW!*	16-SOP	.78	.65	.52
CD74HCT157E	296-2095-5-ND	Quad 2-Input Multiplexer	16-Dip	.61	.50	.37
CD74HCT161E	296-2096-5-ND	Sync 4-Bit Binary Counter, Asynch. Reset	16-Dip	.66	.54	.40
CD74HCT161M	296-9256-5-ND	Sync 4-Bit Binary Counter, Asynch. Reset *NEW!*	16-SOP	.90	.75	.60
CD74HCT164E	296-2097-5-ND	8-Bit Serial-In Parallel-Out Shift Register	14-Dip	.69	.57	.42
CD74HCT164M	296-9257-5-ND	8-Bit Serial-In/Parallel-Out Shift Register *NEW!*	14-SOP	.81	.68	.54
CD74HCT165E	296-2098-5-ND	8-Bit Parallel-In Serial-Out Shift Register	16-Dip	.69	.57	.42
CD74HCT165M	296-9258-5-ND	Asynch. 8-Bit Parallel-In/Serial-Out Shift Register *NEW!*	16-SOP	.84	.70	.56
CD74HCT166E	296-2099-5-ND	8-Bit Parallel-In Serial-Out Shift Register	16-Dip	.83	.68	.50
CD74HCT166M	296-9259-5-ND	Synch. 8-Bit Parallel-In/Serial-Out Shift Register *NEW!*	16-SOP	.99	.83	.66
CD74HCT174E	296-2100-5-ND	Hex D-Type Flip-Flop with Reset	16-Dip	.61	.50	.37
CD74HCT174M	296-9260-5-ND	Hex D-Type Flip-Flop with Reset *NEW!*	16-SOP	.75	.63	.50
CD74HCT175E	296-2101-5-ND	Quad D-Type Flip-Flop with Reset	16-Dip	.55	.45	.33
CD74HCT191M	296-9261-5-ND	Presettable Synch. 4-Bit Binary Up/Down Counter *NEW!*	16-SOP	.99	.83	.66
CD74HCT221M96	296-9263-5-ND	Dual Monostable Multivibrator with Reset *NEW!*	16-SOP	1.11	.93	.74
CD74HCT240E	296-2103-5-ND	Tri-State Inverting Octal Buffer Line Driver	20-Dip	.83	.68	.50
CD74HCT240M	296-9264-5-ND	Tri-State Inverting Octal Buffer Line Driver *NEW!*	20-SOP	.96	.80	.64
CD74HCT244E	296-2104-5-ND	Tri-State Octal Buffer Line Driver	20-Dip	.85	.70	.52
CD74HCT245E	296-2105-5-ND	Tri-State Octal Bus Transceiver	20-Dip	.85	.70	.52
CD74HCT251E	296-2106-5-ND	Tri-State 8-Input Multiplexer	16-PDip	.72	.59	.43
CD74HCT253E	296-2107-5-ND	Tri-State Dual 4-Input Multiplexer	16-Dip	.72	.59	.43
CD74HCT253M	296-9265-5-ND	Tri-State Dual 4-Input Mux *NEW!*	16-SOP	.87	.73	.58
CD74HCT257E	296-2108-5-ND	Tri-St. Quad 2-Input Mux, Non-Invert Out	16-Dip	.72	.59	.43
CD74HCT259E	296-2109-5-ND	8-Bit Addressable Latch	16-Dip	.85	.70	.52
CD74HCT273E	296-2110-5-ND	Octal D-Type Flip-Flop with Reset	20-Dip	.83	.68	.50
CD74HCT299M	296-9266-5-ND	Tri-St. 8-Bit Univ. Shift Register *NEW!*	20-SOP	1.47	1.23	.98
CD74HCT367E	296-2113-5-ND	Tri-State Hex Buffer/Line Driver	16-Dip	.83	.68	.50
CD74HCT368M	296-9268-5-ND	Tri-State Inverting Hex Buffer/Line Driver *NEW!*	16-SOP	1.05	.88	.70
CD74HCT373E	296-2114-5-ND	Tri-State Octal Transparent Latch	20-Dip	.83	.68	.50
CD74HCT374E	296-2115-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	.83	.68	.50
CD74HCT374M96	296-9269-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	1.05	.88	.70
CD74HCT390M	296-9270-5-ND	Dual Decade Ripple Counter *NEW!*	16-SOP	1.05	.88	.70
CD74HCT393E	296-2116-5-ND	Dual 4-Stage Binary Counter	14-Dip	.83	.68	.50
CD74HCT393M	296-9271-5-ND	Dual 4-Stage Binary Counter *NEW!*	14-SOP	.93	.78	.62
CD74HCT540E	296-2126-5-ND	Tri-State Inverting Octal Buffer Line Driver	20-Dip	1.02	.84	.62
CD74HCT541E	296-2127-5-ND	Tri-State Octal Buffer Line Driver	20-Dip	1.05	.86	.63
CD74HCT541M	296-9287-5-ND	Tri-State Non-Inverting Octal Buffer Line Driver *NEW!*	20-SOP	1.17	.98	.78
CD74HCT541M96	296-9288-5-ND	Tri-State Non-Inverting Octal Buffer Line Driver *NEW!*	20-SOP	1.20	1.00	.80
CD74HCT563M	296-9289-5-ND	Tri-State Octal Transparent Inverting Latch *NEW!*	20-SOP	1.20	1.00	.80
CD74HCT564M	296-9290-5-ND	Tri-State Inverting Octal D-Type Flip-Flop *NEW!*	20-SOP	1.41	1.18	.94
CD74HCT573E	296-2128-5-ND	Tri-State Octal Transparent Latch	20-Dip	1.10	.90	.66
CD74HCT573M96	296-9291-5-ND	Tri-State Octal Transparent Latch *NEW!*	20-SOP	1.32	1.10	.88
CD74HCT574E	296-2129-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	1.05	.86	.63
CD74HCT574M96	296-9292-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	1.32	1.10	.88
CD74HCT597E	296-2130-5-ND	8-Bit Shift Register w/Input Storage	16-Dip	.96	.79	.58
CD74HCT646M96	296-9293-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	24-SOP	4.75	3.80	2.96
CD74HCT670M	296-9294-5-ND	4-By-4 Register File *NEW!*	16-SOP	4.73	3.78	2.94
CD74HCT688E	296-2131-5-ND	8-Bit Magnitude Comparator	20-Dip	1.07	.88	.65
CD74HCT688M	296-9295-5-ND	8-Bit Magnitude Comparator *NEW!*	20-SOP	1.29	1.08	.86
CD74HCT4040E	296-2118-5-ND	12-Bit Binary Counter	16-Dip	.88	.72	.53
CD74HCT4020M	296-9273-5-ND	14-Stage Binary Counter *NEW!*	16-SOP	1.05	.88	.70
CD74HCT4024M	296-9274-5-ND	7-Stage Binary Ripple Counter *NEW!*	14-SOP	.87	.73	.58
CD74HCT4046AM	296-9275-5-ND	Phase-Locked-Loop w/VCO *NEW!*	16-SOP	1.83	1.46	1.10
CD74HCT4051E	296-2119-5-ND	8-Channel Analog Multiplexer/Demux	16-Dip	.99	.81	.60
CD74HCT4051M	296-9276-5-ND	8 Channel Analog Mux/Demux *NEW!*	16-SOP	1.17	.98	.78
CD74HCT4052E	296-2120-5-ND	Dual 4-Channel Analog Mux/Demux	16-Dip	.96	.79	.58
CD74HCT4052M96	296-9277-5-ND	Dual 4-Ch. Analog Mux/Demux *NEW!*	16-SOP	1.14	.95	.76
CD74HCT4053E	296-2121-5-ND	Triple 2-Channel Analog Mux/Demux	16-Dip	.99	.81	.60
CD74HCT4053M	296-9278-5-ND	Triple 2-Ch. Analog Mux/Demux *NEW!*	16-SOP	1.17	.98	.78
CD74HCT4053PWR	296-9279-1-ND	Triple 2-Channel Analog Multiplexer/Demux *NEW!*	16-TSSOP	1.29	1.08	.86
CD74HCT4053PWR	296-9279-2-ND	Triple 2-Channel Analog Multiplexer/Demux *NEW!*	16-TSSOP	1144.00/2,000		
CD74HCT4060M	296-9280-5-ND	14-Stage Binary Counter with Oscillator *NEW!*	16-SOP	1.08	.90	.72
CD74HCT4066M96	296-9281-5-ND	Quad Bilateral Switch *NEW!*	14-SOP	.99	.83	.66
CD74HCT4066E	296-2122-5-ND	Quad Bilateral Switch	14-Dip	.77	.63	.47
CD74HCT4094E	296-2123-5-ND	8-Stage Shift-and-Store Bus Register	16-Dip	.80	.66	.48

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
CD74HCT4316E	296-2124-5-ND	Quad Analog Switch	16-Dip	.94	.77	.57
CD74HCT4511E	296-9282-5-ND	BCD-to-7 Segment Latch/Decoder/Driver *NEW!*	16-SOP	1.14	.95	.76
CD74HCT4514E	296-9283-5-ND	4-to-16 Line Decoder/Demux with Input Latch *NEW!*	24-SOP	2.25	1.88	1.13
CD74HCT4520E	296-9284-5-ND	Dual Binary Up-Counter *NEW!*	16-Dip	1.05	.88	.70
CD74HCT4520M	296-9285-5-ND	Dual Binary Up-Counter *NEW!*	16-SOP	1.11	.93	.74
CD74HCT4538E	296-2125-5-ND	Dual Prec. Monostable Multivibrator	16-Dip	1.05	.86	.63
CD74HCT4538M	296-9286-5-ND	Dual Retrig. Precision Monostable Multivibrator *NEW!*	16-SOP	1.29	1.08	.86
CD74HCT7046AM	296-9296-5-ND	Phase-Locked Loop with VCO and Lock Detector *NEW!*	16-SOP	2.23	1.78	1.34
CD74HCT40103M	296-9272-5-ND	8-Stage Synch. Down Counter *NEW!*	16-SOP	1.29	1.08	.86
CD74HCT40105E	296-2117-5-ND	4 Bits x 16 Words FIFO Register	16-Dip	1.18	.97	.71
SN74HC00D	296-1187-5-ND	Quad 2-Input NAND Gate	14-SOP	.60	.45	.34
SN74HC00DR	296-1187-2-ND	Quad 2-Input NAND Gate	14-SOP	552.50/2,500		
SN74HC00N	296-1563-5-ND	Quad 2-Input NAND Gate	14-Dip	.56	.42	.32
SN74HC00NSR	296-8202-1-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	.80	.60	.45
SN74HC00NSR	296-8202-2-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	532.00/2,000		
SN74HC00PWR	296-8203-1-ND	Quad 2-Input NAND Gate *NEW!*	14-TSSOP	.60	.45	.34
SN74HC00PWR	296-8203-2-ND	Quad 2-Input NAND Gate *NEW!*	14-TSSOP	400.00/2,000		
SN74HC02D	296-1188-5-ND	Quad 2-Input NOR Gate *NEW!*	14-SOP	.60	.45	.34
SN74HC02DR	296-1188-1-ND	Quad 2-Input NOR Gate	14-SOP	.68	.51	.39
SN74HC02DBR	296-8204-1-ND	Quad 2-Input NOR Gate *NEW!*	14-SSOP	.60	.45	.34
SN74HC02DBR	296-8204-2-ND	Quad 2-Input NOR Gate *NEW!*	14-SSOP	400.00/2,000		
SN74HC02N	296-1564-5-ND	Quad 2-Input NOR Gate	14-Dip	.56	.42	.32
SN74HC02NSR	296-8205-1-ND	Quad 2-Input NOR Gate *NEW!*	14-SOP	.80	.60	.45
SN74HC02NSR	296-8205-2-ND	Quad 2-Input NOR Gate *NEW!*	14-SOP	532.00/2,000		
SN74HC02PWR	296-8206-1-ND	Quad 2-Input NOR Gate *NEW!*	14-TSSOP	.60	.45	.34
SN74HC02PWR	296-8206-2-ND	Quad 2-Input NOR Gate *NEW!*	14-TSSOP	400.00/2,000		
SN74HC03D	296-9817-5-ND	Quad 2-Input NAND Gate with Open-Drain Output *NEW!*	14-SOP	.90	.75	.60
SN74HC03N	296-8207-5-ND	Quad 2-Input NAND Gate with Open-Drain Output *NEW!*	14-Dip	.90	.75	.60
SN74HC04D	296-1189-5-ND	Hex Inverter	14-SOP	.60	.45	.34
SN74HC04DR	296-1189-2-ND	Hex Inverter	14-SOP	552.50/2,500		
SN74HC04N	296-1566-5-ND	Hex Inverter	14-Dip	.56	.42	.32
SN74HC04PWR	296-8208-1-ND	Hex Inverter *NEW!*	14-TSSOP	.60	.45	.34
SN74HC04PWR	296-8208-2-ND	Hex Inverter *NEW!*	14-TSSOP	400.00/2,000		
SN74HC05D	296-1190-5-ND	Hex Inverter with OD	14-SOP	.72	.54	.41
SN74HC05DR	296-1190-2-ND	Hex Inverter with OD	14-SOP	650.00/2,500		
SN74HC05N	296-1568-5-ND	Hex Inverter with OD	14-Dip	.68	.51	.39
SN74HC08D	296-1191-5-ND	Quad 2-Input AND Gate	14-SOP	.60	.45	.34
SN74HC08DR	296-1191-2-ND	Quad 2-Input AND Gate	14-SOP	552.50/2,500		
SN74HC08N	296-1570-5-ND	Quad 2-Input AND Gate	14-Dip	.56	.42	.32
SN74HC08PWR	296-8210-1-ND	Quad 2-Input AND Gate *NEW!*	14-TSSOP	.60	.45	.34
SN74HC08PWR	296-8210-2-ND	Quad 2-Input AND Gate *NEW!*	14-TSSOP	400.00/2,000		
SN74HC10D	296-8213-5-ND	Triple 3-Input NAND Gate *NEW!*	14-SOP	.60	.45	.34
SN74HC10N	296-8214-5-ND	Triple 3-Input NAND Gate *NEW!*	14-Dip	.56	.42	.32
SN74HC11D	296-8216-5-ND	Triple 3-Input AND Gate *NEW!*	14-SOP	.90	.75	.60
SN74HC11N	296-8217-5-ND	Triple 3-Input AND Gate *NEW!*	14-Dip	.90	.75	.60
SN74HC14D	296-1194-5-ND	Hex Schmitt-Trigger Inverter	14-SOP	.60	.45	.34
SN74HC14DR	296-1194-2-ND	Hex Schmitt-Trigger Inverter	14-SOP	552.50/2,500		
SN74HC14N	296-1577-5-ND	Hex Schmitt-Trigger Inverter	14-Dip	.56	.42	.32
SN74HC14PWR	296-8234-1-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TSSOP	.60	.45	.34
SN74HC14PWR	296-8234-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TSSOP	400.00/2,000		
SN74HC20DR	296-8263-1-ND	Dual 4-Input NAND Gate *NEW!*	14-SOP	.96	.80	.64
SN74HC20DR	296-8263-2-ND	Dual 4-Input NAND Gate *NEW!*	14-SOP	1040.00/2,500		
SN74HC21D	296-8265-5-ND	Dual 4-Input AND Gate *NEW!*	14-SOP	.90	.75	.60
SN74HC21N	296-8266-5-ND	Dual 4-Input AND Gate *NEW!*	14-Dip	.90	.75	.60
SN74HC27D	296-8298-5-ND	Triple 3-Input NOR Gate *NEW!*	14-SOP	.90	.75	.60
SN74HC27NSR	296-8299-1-ND	Triple 3-Input NOR Gate *NEW!*	14-SOP	1.05	.88	.70
SN74HC27NSR	296-8299-2-ND	Triple 3-Input NOR Gate *NEW!*	14-SOP	932.00/2,000		
SN74HC32D	296-1199-5-ND	Quad 2-Input OR Gate	14-SOP	.60	.45	.34
SN74HC32DR	296-1199-2-ND	Quad 2-Input OR Gate	14-SOP	552.50/2,500		
SN74HC32DBR	296-8301-1-ND	Quad 2-Input OR Gate *NEW!*	14-SSOP	.60	.45	.34
SN74HC32DBR	296-8301-2-ND	Quad 2-Input OR Gate *NEW!*	14-SSOP	400.00/2,000		
SN74HC32N	296-1589-5-ND	Quad 2-Input OR Gate	14-Dip	.56	.42	.32
SN74HC32PWR	296-8302-1-ND	Quad 2-Input OR Gate *NEW!*	14-TSSOP	.60	.45	.34
SN74HC32PWR	296-8302-2-ND	Quad 2-Input OR Gate *NEW!*	14-TSSOP	400.00/2,000		
SN74HC42D	296-8331-5-ND	4-to-10 Line Decoder (1 of 10) *NEW!*	16-SOP	.75	.63	.50
SN74HC42DR	296-8331-2-ND	4-to-10 Line Decoder (1 of 10) *NEW!*	16-SOP	877.50/2,500		
SN74HC42N	296-8332-5-ND	4-to-10 Line Decoder (1 of 10) *NEW!*	16-Dip	.75	.63	.50
SN74HC74D	296-1204-5-ND	Dual D-Type Flip-Flop	14-SOP	.64	.48	.36
SN74HC74DR	296-1204-2-ND	Dual D-Type Flip-Flop	14-SOP	585.00/2,500		
SN74HC74DBR	296-8370-1-ND	Dual D-Type Flip-Flop with Clear and Preset *NEW!*	14-SSOP	.64	.48	.36
SN74HC74DBR	296-8370-2-ND	Dual D-Type Flip-Flop with Clear and Preset *NEW!*	14-SSOP	426.00/2,000		
SN74HC74N	296-1602-5-ND	Dual D-Type Flip-Flop	14-Dip	.60	.45	.34
SN74HC74NSR	296-8371-1-ND	Dual D-Type Flip-Flop with Clear and Preset *NEW!*	14-SOP	.84	.63	.48
SN74HC74NSR	296-8371-2-ND	Dual D-Type Flip-Flop with Clear and Preset *NEW!*	14-SOP	558.00/2,000		
SN74HC74PWR	296-8372-1-ND	Dual D-Type Flip-Flop with Clear and Preset *NEW!*	14-TSSOP	.64	.48	.36
SN74HC74PWR	296-8372-2-ND	Dual D-Type Flip-Flop with Clear and Preset *NEW!*	14-TSSOP	426.00/2,000		
SN74HC86D	296-8374-5-ND	Quad 2-Input EX-OR Gate *NEW!*	14-SOP	.84	.63	.48
SN74HC86N	296-8375-5-ND	Quad 2-Input EX-OR Gate *NEW!*	14-Dip	.72	.54	.41
SN74HC86PWR	296-8376-1-ND	Quad 2-Input EX-OR Gate *NEW!*	14-TSSOP	.84	.63	.48
SN74HC86PWR	296-8376-2-ND	Quad 2-Input EX-OR Gate *NEW!*	14-TSSOP	558.00/2,000		
SN74HC109D	296-8211-5-ND	Dual J-K Flip-Flop with Clear and Preset *NEW!*	16-SOP	.90	.75	.60
SN74HC109N	296-8212-5-ND	Dual J-K Flip-Flop with Clear and Preset *NEW!*	16-Dip	.90	.75	.60
SN74HC112D	296-8215-5-ND	Dual J-K Flip-Flop with Clear and Preset *NEW!*	16-SOP	.90	.75	.60
SN74HC125D	296-1192-5-ND	Quad Bus Buffer Gate	14-SOP	.88	.66	.50
SN74HC125DR	296-1192-2-ND	Quad Bus Buffer Gate	14-SOP	780.00/2,500		
SN74HC125DBR	296-8218-1-ND	Quad Tri-State Bus Buffer Gate *NEW!*	14-SSOP	.88	.66	.50
SN74HC125DBR	296-8218-2-ND	Quad Tri-State Bus Buffer Gate *NEW!*	14-SSOP	586.00/2,000		
SN74HC125N	296-1572-5-ND	Quad Bus Buffer Gate	14-Dip	.72	.54	.41
SN74HC126D	296-8219-5-ND	Quad Tri-State Bus Buffer Gate *NEW!*	14-SOP	.96	.80	.64
SN74HC126DBR	296-8220-1-ND	Quad Tri-State Bus Buffer Gate *NEW!*	14-SSOP	.96	.80	.64
SN74HC126DBR	296-8220-2-ND	Quad Tri-State Bus Buffer Gate *NEW!*	14-SSOP	852.00/2,000		
SN74HC126N	296-8221-5-ND	Quad Tri-State Bus Buffer Gate *NEW!*	14-Dip	.96	.80	.64
SN74HC126NSR	296-8222-1-ND	Quad Tri-State Bus Buffer Gate *NEW!*	14-SOP	1.11	.93	.74
SN74HC126NSR	296-8222-2-ND	Quad Tri-State Bus Buffer Gate *NEW!*	14-SOP	984.00/2,000		
SN74HC132D	296-8224-5-ND	Quad NAND Gate with Schmitt-Trigger Input *NEW!*	14-SOP	1.11	.93	.74
SN74HC132DBR	296-8225-1-ND	Quad NAND Gate with Schmitt-Trigger Input *NEW!*	14-SSOP	1.11	.93	.74
SN74HC132DBR	296-8225-2-ND	Quad NAND Gate with Schmitt-Trigger Input *NEW!*	14-SSOP	984.00/2,000		
SN74HC132N	296-1573-5-ND	Quad NAND Gate w/Schmitt-Trigger Input	14-Dip	.99	.83	.66
SN74HC132PWR	296-8226-1-ND	Quad NAND Gate with Schmitt-Trigger Input *NEW!*	14-TSSOP	1.11	.93	.74
SN74HC132PWR	296-8226-2-ND	Quad NAND Gate with Schmitt-Trigger Input *NEW!*	14-TSSOP	984.00/2,000		
SN74HC138D	296-1193-5-ND	3-8 Line Decoder/Demultiplexer	16-SOP	.84	.63	.48
SN74HC138DR	296-1193-2-ND	3-8 Line Decoder/Demultiplexer	16-SOP	747.50/2,500		
SN74HC138DBR	296-8227-1-ND	3-8 Line Decoder/Demultiplexer *NEW!*	16-SSOP	.84	.63	.48
SN74HC138DBR	296-8227-2-ND	3-8 Line Decoder/Demultiplexer *NEW!*	16-SSOP	558.00/2,000		
SN74HC138N	296-1575-5-ND	3-8 Line Decoder/Demultiplexer	16-Dip	.80	.60	.45
SN74HC138PWR	296-8228-1-ND	3-8 Line Decoder/Demux *NEW!*	16-TSSOP	.84	.63	.48
SN74HC138PWR	296-8228-2-ND	3-8 Line Decoder/Demux *NEW!*	16-TSSOP	558.00/2,000		
SN74HC139D	296-8229-5-ND	Dual 2-4 Line Decoder/Demux *NEW!*	16-SOP	.88	.66	.50
SN74HC139N	296-8230-5-ND	Dual 2-4 Line Decoder/Demux *NEW!*	16-Dip	.84	.63	.48
SN74HC139PWR	296-8231-1-ND	Dual 2-4 Line Decoder/Demux *NEW!*	16-TSSOP	.88	.66	.50
SN74HC139PWR	296-8231-2-ND	Dual 2-4 Line Decoder/Demux *NEW!*	16-TSSOP	586.00/2,000		
SN74HC148D	296-8232-5-ND	8-3 Line Priority Encoder *NEW!*	16-SOP	1.38	1.10	.83
SN74HC148N	296-8233-5-ND	8-3 Line Priority Encoder *NEW!*	16-Dip	1.38	1.10	.83
SN74HC151D	296-8235-5-ND	8-1 Line Data Selector/Mux *NEW!*	16-SOP	.75	.63	.50
SN74HC151N	296-8236-5-ND	8-1 Line Data Selector/Mux *NEW!*	16-Dip	.84	.63	.48
SN74HC153D	296-8237-5-ND	Dual 4-1 Line Data Selector/Mux *NEW!*	16-SOP	.90	.75	.60
SN74HC153N	296-8238-5-ND	Dual 4-1 Line Data Selector/Mux *NEW!*	16-Dip	.90	.75	.60
SN74HC157D	296-8239-5-ND	Quad 2-1 Data Selector/Mux *NEW!*	16-SOP	.84	.63	.48
SN74HC157N	296-1578-5-ND	Quad 2-1 Data Selector/Multiplexer	16-Dip	.80	.60	.45
SN74HC157NSR	296-8240-1-ND	Quad 2-1 Data Selector/Mux *NEW!*	16-SOP	.78	.65	.52
SN74HC157NSR	296-8240-2-ND	Quad 2-1 Data Selector/Mux *NEW!*	16-SOP	692.00/2,000		
SN74HC161D	296-8243-5-ND	4-Bit Synch. Binary Counter *NEW!*	16-SOP	.93	.78	.62
SN74HC161N	296-8244-5-ND	4-Bit Synch. Binary Counter *NEW!*	16-Dip	.81	.68	.54
SN74HC163D	296-8245-5-ND	4-Bit Synch. Binary Counter *NEW!*	16-SOP	.93	.78	.62
SN74HC163N	296-8246-5-ND	4-Bit Synch. Binary Counter *NEW!*	16-Dip	.81	.68	.54
SN74HC164D	296-8247-5-ND	8-Bit Parallel-Out Serial Shift Register *NEW!*	14-SOP	.93	.78	.62
SN74HC164N	296-8248-5-ND	8-Bit Parallel-Out Serial Shift Register *NEW!*	14-Dip	.81	.68	.54
SN74HC165D	296-8249-5-ND	8-Bit Parallel-Load Shift Register *NEW!*	16-SOP	.93	.78	.62
SN74HC165DR	296-8250-2-ND	8-Bit Parallel-Load Shift Register *NEW!*	16-SOP	1072.50/2,500		
SN74HC165N	296-8251-5-ND	8-Bit Parallel-Load Shift Register *NEW!*	16-Dip	.81	.68	.54
SN74HC165NSR	296-8252-1-ND	8-Bit Parallel-Load Shift Register *NEW!*	16-SOP	1.08	.90	.72
SN74HC165NSR	296-8252-2-ND	8-Bit Parallel-Load Shift Register *NEW!*	16-SOP	958.00/2,000		
SN74HC165PWR	296-8253-1-ND	8-Bit Par.-Load Shift Register *NEW!*	16-TSSOP	.93	.78	.62
SN74HC165PWR	296-8253-2-ND	8-Bit Par.-Load Shift Register *NEW!*	16-TSSOP	824.00/2,000		
SN74HC166D	296-8254-5-ND	8-Bit Parallel-Load Shift Register *NEW!*	16-SOP	1.47	1.23	.98
SN74HC166N	296-8255-5-ND	8-Bit Parallel-Load Shift Register *NEW!*	16-Dip	1.35	1.13	.90
SN74HC174D	296-1195-5-ND	Hex D-Type Flip-Flop with Clear *NEW!*	16-SOP	.78	.65	.52
SN74HC174DR	296-1195-1-ND	Hex D-Type Flip-Flop with Clear	16-SOP	.84	.70	.56
SN74HC174DR	296-1195-2-ND	Hex D-Type Flip-Flop with Clear	16-SOP	910.00/2,500		
SN74HC174N	296-1579-5-ND	Hex D-Type Flip-Flop with Clear	16-Dip	.84	.63	.48
SN74HC175D	296-8256-5-ND	Quad D-Type Flip-Flop with Clear *NEW!*	16-SOP	.78	.65	.52
SN74HC175N	296-8257-5-ND	Quad D-Type Flip-Flop with Clear *NEW!*	16-Dip	.84	.63	.48
SN74HC175PWR	296-8258-1-ND	Quad D-Type Flip-Flop w/Clear *NEW!*	16-TSSOP	.78	.65	.52
SN74HC175PWR	296-8258-2-ND	Quad D-Type Flip-Flop w/Clear *NEW!*	16-TSSOP	692.00/2,000		
SN74HC191D	296-8259-5-ND	4-Bit Synch. Up/Down Binary Counter *NEW!*	16-SOP	1.20	1.00	.80
SN74HC191N	296-8260-5-ND	4-Bit Synch. Up/Down Binary Counter *NEW!*	16-Dip	1.20	1.00	.80
SN74HC193D	296-8261-5-ND	4-Bit Synch. Up/Down Counter (Dual Clock with Clear) *NEW!*	16-SOP	1.20	1.00	.80
SN74HC193N	296-8262-5-ND	4-Bit Synch. Up/Down Counter (Dual Clock with Clear) *NEW!*	16-Dip	1.20	1.00	.80
SN74HC240DW	296-8267-1-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOP	1.14	.95	.76
SN74HC240DW	296-8267-2-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOP	505.00/1,000		
SN74HC240N	296-1580-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	1.08	.90	.72
SN74HC240PWR	296-8269-1-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-TSSOP	1.14	.95	.76
SN74HC240PWR	296-8269-2-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-TSSOP	1010.00/2,000		
SN74HC241DW	296-8270-5-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOP	1.14	.95	.76
SN74HC241N	296-8271-5-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-Dip	.87	.73	.58
SN74HC244DBR	296-8273-1-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-SSOP	1.14	.95	.76
SN74HC244DBR	296-8273-2-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-SSOP	1010.00/2,000		
SN74HC244DW	296-1196-5-ND	Tri-State Octal Buffer/Line Driver	20-SOP	1.14	.95	.76
SN74HC244DWR	296-1196-2-ND	Tri-State Octal Buffer/Line Driver	20-SOP	1064.00/2,000		
SN74HC244N	296-1582-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	.87	.73	.58
SN74HC244NSR	296-8274-1-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOP	1.29	1.08	.86
SN74HC244NSR	296-8274-2-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOP	1144.00/2,000		
SN74HC244PWR	296-8276-1-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-TSSOP	1.14	.95	.76
SN74HC244PWR	296-8276-2-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-TSSOP	1010.00/2,000		
SN74HC245DBR	296-8277-1-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SSOP	1.17	.98	.78
SN74HC245DBR	296-8277-2-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SSOP	1038.00/2,000		
SN74HC245DW	296-1197-5-ND	Tri-State Octal Bus Transceiver	20-SOP	1.17	.98	.78
SN74HC245DWR	296-1197-2-ND	Tri-State Octal Bus Transceiver	20-SOP	1090.00/2,000		
SN74HC245N	296-1584-5-ND	Tri-State Octal Bus Transceiver	20-Dip	1.08	.90	.72
SN74HC245NSR	296-8278-1-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	1.32	1.10	.88
SN74HC245NSR	296-8278-2-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	1170.00/2,000		
SN74HC245PWR	296-8279-1-ND	Tri-State Octal Bus Xcvr. *NEW!*	20-TSSOP	1.17	.98	.78
SN74HC245PWR	296-8279-2-ND	Tri-State Octal Bus Xcvr. *NEW!*	20-TSSOP	1038.00/2,000		
SN74HC251D	296-8280-5-ND	Tri-State Data Selector/Mux *NEW!*	16-SOP	.78	.65	.52
SN74HC251N	296-1585-5-ND	Data Selector/Multiplexer	16-Dip	.88	.66	.50
SN74HC253D	296-8281-5-ND	Tri-State Dual 4-1 Line Data Selector/Mux *NEW!*	16-SOP	.87	.73	.58
SN74HC253DBR	296-8282-1-ND	Tri-State Dual 4-1 Line Data Selector/Mux *NEW!*	16-SSOP	.78	.65	.52
SN74HC253DBR	296-8282-2-ND	Tri-State Dual 4-1 Line Data Selector/Mux *NEW!*	16-SSOP	692.00/2,000		
SN74HC253N	296-8283-5-ND	Tri-State Dual 4-1 Line Data Selector/Mux *NEW!*	16-Dip	.87	.73	.58
SN74HC257D	296-8284-5-ND	Tri-State Quad 2-1 Line Data Selector/Mux *NEW!*	16-SOP	.78	.65	.52

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★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74HC257N	296-8285-5-ND	Tri-State Quad 2-1 Line Data Selector/Mux *NEW!*	16-Dip	.88	.66	.50
SN74HC257NSR	296-8286-1-ND	Tri-State Quad 2-1 Line Data Selector/Mux *NEW!*	16-SOP	.93	.78	.62
SN74HC257NSR	296-8286-2-ND	Tri-State Quad 2-1 Line Data Selector/Mux *NEW!*	16-SOP	824.00/2,000		
SN74HC257PWR	296-8287-1-ND	Tri-State Quad 2-1 Line Data Selector/Mux *NEW!*	16-TSSOP	.78	.65	.52
SN74HC257PWR	296-8287-2-ND	Tri-State Quad 2-1 Line Data Selector/Mux *NEW!*	16-TSSOP	692.00/2,000		
SN74HC259D	296-8290-5-ND	8-Bit Addressable Latch *NEW!*	16-SOP	1.32	1.10	.88
SN74HC259N	296-8291-5-ND	8-Bit Addressable Latch *NEW!*	16-Dip	1.20	1.00	.80
SN74HC259PWR	296-8292-1-ND	8-Bit Addressable Latch *NEW!*	16-TSSOP	1.32	1.10	.88
SN74HC259PWR	296-8292-2-ND	8-Bit Addressable Latch *NEW!*	16-TSSOP	1170.00/2,000		
SN74HC266D	296-8293-5-ND	Quad 2-Input EX-NOR Gate with Open-Drain Output *NEW!*	14-SOP	1.85	1.48	1.11
SN74HC266N	296-8294-5-ND	Quad 2-Input EX-NOR Gate with Open-Drain Output *NEW!*	14-Dip	1.85	1.48	1.11
SN74HC273DBR	296-8295-1-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-SSOP	1.14	.95	.76
SN74HC273DBR	296-8295-2-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-SSOP	1010.00/2,000		
SN74HC273DW	296-1198-5-ND	Octal D-Type Flip-Flop	20-SOP	1.14	.95	.76
SN74HC273DWR	296-1198-2-ND	Octal D-Type Flip-Flop	20-SOP	1064.00/2,000		
SN74HC273N	296-1587-5-ND	Octal D-Type Flip-Flop	20-Dip	1.08	.90	.72
SN74HC273NSR	296-8296-1-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-SOP	1.29	1.08	.86
SN74HC273NSR	296-8296-2-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-SOP	1144.00/2,000		
SN74HC273PWR	296-8297-1-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-TSSOP	1.14	.95	.76
SN74HC273PWR	296-8297-2-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-TSSOP	1010.00/2,000		
SN74HC365D	296-8303-5-ND	Tri-State Hex Buffer/Line Driver *NEW!*	16-SOP	1.17	.98	.78
SN74HC365N	296-8304-5-ND	Tri-State Hex Buffer/Line Driver *NEW!*	16-Dip	1.17	.98	.78
SN74HC367D	296-8305-5-ND	Tri-State Hex Buffer/Line Driver *NEW!*	16-SOP	1.05	.88	.70
SN74HC367N	296-8306-5-ND	Tri-State Hex Buffer/Line Driver *NEW!*	16-Dip	1.05	.88	.70
SN74HC368D	296-8307-5-ND	Tri-State Hex Buffer/Line Driver *NEW!*	16-SOP	1.05	.88	.70
SN74HC368N	296-8308-5-ND	Tri-State Hex Buffer/Line Driver *NEW!*	16-Dip	1.05	.88	.70
SN74HC373DBR	296-8309-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SSOP	.90	.75	.60
SN74HC373DBR	296-8309-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SSOP	798.00/2,000		
SN74HC373DW	296-1200-5-ND	Tri-State Octal Transparent D-Type Latch	20-SOP	.90	.75	.60
SN74HC373DWR	296-1200-2-ND	Tri-State Octal Transparent D-Type Latch	20-SOP	852.00/2,000		
SN74HC373N	296-1591-5-ND	Tri-State Octal Transparent D-Type Latch	20-Dip	.87	.73	.58
SN74HC373NSR	296-8310-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SOP	1.05	.88	.70
SN74HC373NSR	296-8310-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SOP	932.00/2,000		
SN74HC373PWR	296-8311-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TSSOP	.90	.75	.60
SN74HC373PWR	296-8311-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TSSOP	798.00/2,000		
SN74HC374DBR	296-8312-1-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	.90	.75	.60
SN74HC374DBR	296-8312-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	798.00/2,000		
SN74HC374DW	296-1201-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	.90	.75	.60
SN74HC374DWR	296-1201-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	.96	.80	.64
SN74HC374DWR	296-1201-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	852.00/2,000		
SN74HC374N	296-1592-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	.87	.73	.58
SN74HC374NSR	296-8313-1-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	1.05	.88	.70
SN74HC374NSR	296-8313-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	932.00/2,000		
SN74HC374PWR	296-8314-1-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	.90	.75	.60
SN74HC374PWR	296-8314-2-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	798.00/2,000		
SN74HC377DW	296-8315-5-ND	Octal D-Type Flip-Flop with Clock Enable *NEW!*	20-SOP	2.25	1.80	1.35
SN74HC377N	296-8316-5-ND	Octal D-Type Flip-Flop with Clock Enable *NEW!*	20-Dip	1.60	1.28	.96
SN74HC393D	296-8317-5-ND	Dual 4-Bit Binary Counter *NEW!*	14-SOP	1.08	.90	.72
SN74HC393DBR	296-8318-1-ND	Dual 4-Bit Binary Counter *NEW!*	14-SSOP	1.08	.90	.72
SN74HC393DBR	296-8318-2-ND	Dual 4-Bit Binary Counter *NEW!*	14-SSOP	958.00/2,000		
SN74HC393N	296-8319-5-ND	Dual 4-Bit Binary Counter *NEW!*	14-Dip	1.08	.90	.72
SN74HC540DWR	296-8333-1-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOP	1.28	1.02	.77
SN74HC540DWR	296-8333-2-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOP	1326.00/2,000		
SN74HC540N	296-8334-5-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-Dip	1.35	1.13	.90
SN74HC541DW	296-1202-5-ND	Tri-State Octal Buffer/Line Driver	20-SOP	1.47	1.23	.98
SN74HC541DWR	296-1202-2-ND	Tri-State Octal Buffer/Line Driver	20-SOP	1326.00/2,000		
SN74HC541N	296-1594-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	1.35	1.13	.90
SN74HC541PWR	296-8335-1-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-TSSOP	1.47	1.23	.98
SN74HC541PWR	296-8335-2-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-TSSOP	1304.00/2,000		
SN74HC573ADW	296-1203-5-ND	Tri-State Octal D-Type Latch	20-SOP	1.53	1.28	1.02
SN74HC573ADWR	296-1203-2-ND	Tri-State Octal D-Type Latch	20-SOP	1326.00/2,000		
SN74HC573AN	296-1596-5-ND	Tri-State Octal D-Type Latch	20-Dip	1.35	1.13	.90
SN74HC573APWR	296-8338-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TSSOP	1.47	1.23	.98
SN74HC573APWR	296-8338-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TSSOP	1304.00/2,000		
SN74HC574DW	296-1597-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	1.14	.95	.76
SN74HC574DWR	296-1597-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	1064.00/2,000		
SN74HC574N	296-1598-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	1.11	.93	.74
SN74HC574PWR	296-8339-1-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	1.47	1.23	.98
SN74HC574PWR	296-8339-2-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	1304.00/2,000		
SN74HC590AD	296-8340-5-ND	Tri-State 8-Bit Binary Counter *NEW!*	16-SOP	1.35	1.13	.90
SN74HC590ADW	296-8341-5-ND	Tri-State 8-Bit Binary Counter *NEW!*	16-SOP	1.98	1.58	1.19
SN74HC590AN	296-1599-5-ND	Tri-State 8-Bit Binary Counter	16-Dip	1.88	1.50	1.13
SN74HC594DW	296-8342-5-ND	8-Bit Shift Register with Output Register *NEW!*	16-SOP	2.66	2.13	1.66
SN74HC594N	296-8343-5-ND	8-Bit Shift Register with Output Register *NEW!*	16-Dip	2.66	2.13	1.66
SN74HC595D	296-8344-5-ND	Tri-State 8-Bit Shift Register *NEW!*	16-SOP	.90	.75	.60
SN74HC595DW	296-8345-5-ND	Tri-State 8-Bit Shift Register *NEW!*	16-SOP	2.40	1.92	1.44
SN74HC595N	296-1600-5-ND	Tri-State 8-Bit Shift Register	16-Dip	.90	.75	.60
SN74HC623DW	296-8346-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	5.20	4.16	3.51
SN74HC623N	296-8347-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-Dip	5.20	4.16	3.51
SN74HC640DW	296-8348-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	1.35	1.13	.90
SN74HC640N	296-8349-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-Dip	1.35	1.13	.90
SN74HC645DW	296-8350-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	2.59	2.07	1.61
SN74HC645N	296-8351-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-Dip	2.59	2.07	1.61
SN74HC646DW	296-8352-5-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-SOP	3.51	2.81	2.19
SN74HC646NT	296-8353-5-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-Dip	3.51	2.81	2.19
SN74HC652DW	296-8354-5-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-SOP	5.18	4.14	3.22
SN74HC652NT	296-8355-5-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-Dip	5.18	4.14	3.22
SN74HC682DWR	296-8356-1-ND	8-Bit Magnitude Comparator *NEW!*	20-SOP	3.35	2.69	2.09
SN74HC682DWR	296-8356-2-ND	8-Bit Magnitude Comparator *NEW!*	20-SOP	3800.00/2,000		
SN74HC682N	296-8357-5-ND	8-Bit Magnitude Comparator *NEW!*	20-Dip	3.31	2.65	2.06
SN74HC684DW	296-8358-5-ND	8-Bit Magnitude Comparator *NEW!*	20-SOP	5.76	4.61	3.89
SN74HC684N	296-8359-5-ND	8-Bit Magnitude Comparator *NEW!*	20-Dip	5.76	4.61	3.89
SN74HC688DW	296-8360-5-ND	8-Bit Identity Comparator *NEW!*	20-SOP	2.43	1.95	1.52
SN74HC688N	296-8361-5-ND	8-Bit Identity Comparator *NEW!*	20-Dip	2.43	1.95	1.52
SN74HC688PWR	296-8362-1-ND	8-Bit Identity Comparator *NEW!*	20-TSSOP	2.43	1.95	1.52
SN74HC688PWR	296-8362-2-ND	8-Bit Identity Comparator *NEW!*	20-TSSOP	2754.00/2,000		
SN74HC4020D	296-8320-5-ND	14-Bit Asynch. Binary Counter *NEW!*	16-SOP	1.33	1.06	.80
SN74HC4020N	296-8321-5-ND	14-Bit Asynch. Binary Counter *NEW!*	16-Dip	1.33	1.06	.80
SN74HC4040D	296-8322-5-ND	12-Bit Asynch. Binary Counter *NEW!*	16-SOP	1.32	1.10	.88
SN74HC4040DBR	296-8323-1-ND	12-Bit Asynch. Binary Counter *NEW!*	16-SSOP	1.32	1.10	.88
SN74HC4040DBR	296-8323-2-ND	12-Bit Asynch. Binary Counter *NEW!*	16-SSOP	1170.00/2,000		
SN74HC4040N	296-8324-5-ND	12-Bit Asynch. Binary Counter *NEW!*	16-Dip	1.20	1.00	.80
SN74HC4040PWR	296-8325-1-ND	12-Bit Asynch. Binary Counter *NEW!*	16-TSSOP	1.32	1.10	.88
SN74HC4040PWR	296-8325-2-ND	12-Bit Asynch. Binary Counter *NEW!*	16-TSSOP	1170.00/2,000		
SN74HC4060D	296-8326-5-ND	14-Stage Asynch. Binary Counter and Oscillator *NEW!*	16-SOP	1.20	1.00	.80
SN74HC4060N	296-8209-5-ND	14-Stage Asynch. Binary Counter and Oscillator *NEW!*	16-Dip	1.20	1.00	.80
SN74HC4066D	296-8327-5-ND	Quad Bilateral Analog Switch *NEW!*	14-SOP	.75	.63	.50
SN74HC4066DBR	296-8328-1-ND	Quad Bilateral Analog Switch *NEW!*	14-SSOP	.75	.63	.50
SN74HC4066DBR	296-8328-2-ND	Quad Bilateral Analog Switch *NEW!*	14-SSOP	666.00/2,000		
SN74HC4066N	296-8329-5-ND	Quad Bilateral Analog Switch *NEW!*	14-Dip	.75	.63	.50
SN74HC4066PWR	296-8330-1-ND	Quad Bilateral Analog Switch *NEW!*	14-TSSOP	.75	.63	.50
SN74HC4066PWR	296-8330-2-ND	Quad Bilateral Analog Switch *NEW!*	14-TSSOP	666.00/2,000		
SN74HC7001D	296-8363-5-ND	Quad AND Gate with Schmitt-Trigger Input *NEW!*	14-SOP	1.23	1.03	.82
SN74HC7001N	296-8364-5-ND	Quad AND Gate with Schmitt-Trigger Input *NEW!*	14-Dip	1.23	1.03	.82
SN74HC7002D	296-8365-5-ND	Quad NOR Gate with Schmitt-Trigger Input *NEW!*	14-SOP	2.20	1.76	1.32
SN74HC7002N	296-8366-5-ND	Quad NOR Gate with Schmitt-Trigger Input *NEW!*	14-Dip	2.20	1.76	1.32
SN74HC7032D	296-8367-5-ND	Quad OR Gate with Schmitt-Trigger Input *NEW!*	14-SOP	2.20	1.76	1.32
SN74HC7032N	296-8368-5-ND	Quad OR Gate with Schmitt-Trigger Input *NEW!*	14-Dip	2.20	1.76	1.32
SN74HCT00D	296-8377-5-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	.72	.54	.41
SN74HCT00N	296-1603-5-ND	Quad 2-Input NAND Gate	14-Dip	.68	.51	.39
SN74HCT00PWR	296-8378-1-ND	Quad 2-Input NAND Gate *NEW!*	14-TSSOP	.72	.54	.41
SN74HCT00PWR	296-8378-2-ND	Quad 2-Input NAND Gate *NEW!*	14-TSSOP	478.00/2,000		
SN74HCT02D	296-8379-5-ND	Quad 2-Input NOR Gate *NEW!*	14-SOP	.90	.75	.60
SN74HCT02N	296-8380-5-ND	Quad 2-Input NOR Gate *NEW!*	14-Dip	.90	.75	.60
SN74HCT04D	296-1205-5-ND	Hex Inverter	14-SOP	.72	.54	.41
SN74HCT04DR	296-1205-2-ND	Hex Inverter	14-SOP	650.00/2,500		
SN74HCT04N	296-1605-5-ND	Hex Inverter	14-Dip	.68	.51	.39
SN74HCT04PWR	296-8382-1-ND	Hex Inverter *NEW!*	14-TSSOP	.72	.54	.41
SN74HCT04PWR	296-8382-2-ND	Hex Inverter *NEW!*	14-TSSOP	478.00/2,000		
SN74HCT08D	296-8383-5-ND	Quad 2-Input AND Gate *NEW!*	14-SOP	.72	.54	.41
SN74HCT08DBR	296-8384-1-ND	Quad 2-Input AND Gate *NEW!*	14-SSOP	.72	.54	.41
SN74HCT08DBR	296-8384-2-ND	Quad 2-Input AND Gate *NEW!*	14-SSOP	478.00/2,000		
SN74HCT08N	296-1606-5-ND	Quad 2-Input AND Gate	14-Dip	.68	.51	.39
SN74HCT08PWR	296-8385-1-ND	Quad 2-Input AND Gate *NEW!*	14-TSSOP	.72	.54	.41
SN74HCT08PWR	296-8385-2-ND	Quad 2-Input AND Gate *NEW!*	14-TSSOP	478.00/2,000		
SN74HCT14D	296-8391-5-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SOP	.60	.45	.34
SN74HCT14DBR	296-8392-1-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SSOP	.60	.45	.34
SN74HCT14DBR	296-8392-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SSOP	400.00/2,000		
SN74HCT14DGVR	296-8393-1-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TVSOP	.80	.60	.45
SN74HCT14DGVR	296-8393-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TVSOP	532.00/2,000		
SN74HCT14N	296-8394-5-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-Dip	.60	.45	.34
SN74HCT14PWR	296-8395-1-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TSSOP	.60	.45	.34
SN74HCT14PWR	296-8395-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TSSOP	400.00/2,000		
SN74HCT32D	296-1614-5-ND	Quad 2-Input OR Gate	14-SOP	.72	.54	.41
SN74HCT32DBR	296-8410-1-ND	Quad 2-Input OR Gate *NEW!*	14-SSOP	.72	.54	.41
SN74HCT32DBR	296-8410-2-ND	Quad 2-Input OR Gate *NEW!*	14-SSOP	478.00/2,000		
SN74HCT32N	296-1615-5-ND	Quad 2-Input OR Gate	14-Dip	.68	.51	.39
SN74HCT32PWR	296-8411-1-ND	Quad 2-Input OR Gate *NEW!*	14-TSSOP	.72	.54	.41
SN74HCT32PWR	296-8411-2-ND	Quad 2-Input OR Gate *NEW!*	14-TSSOP	478.00/2,000		
SN74HCT74D	296-1211-5-ND	Dual D-Type Flip-Flop with Clear and Preset *NEW!*	14-SOP	.76	.57	.43
SN74HCT74DR	296-1211-1-ND	Dual D-Type Flip-Flop	14-SOP	.84	.63	.48
SN74HCT74N	296-1625-5-ND	Dual D-Type Flip-Flop	14-Dip	.60	.45	.34
SN74HCT74PWR	296-8429-1-ND	Dual D-Type Flip-Flop with Clear and Preset *NEW!*	14-TSSOP	.76	.57	.43
SN74HCT74PWR	296-8429-2-ND	Dual D-Type Flip-Flop with Clear and Preset *NEW!*	14-TSSOP	506.00/2,000		
SN74HCT125D	296-1206-5-ND	Tri-State Quad Bus Buffer Gate	14-SOP	.90	.75	.60
SN74HCT125DR	296-1206-2-ND	Tri-State Quad Bus Buffer Gate	14-SOP	1040.00/2,500		
SN74HCT125N	296-8386-5-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-Dip	.90	.75	.60
SN74HCT138D	296-8387-5-ND	3-8 Line Decoder/Demux *NEW!*	14-SOP	.75	.63	.50
SN74HCT138N	296-1608-5-ND	3-8 Line Decoder/Demultiplexer	16-Dip	.72	.54	.41
SN74HCT138PWR	296-8388-1-ND	3-8 Line Decoder/Demux *NEW!*	14-TSSOP	.75	.63	.50
SN74HCT138PWR	296-8388-2-ND	3-8 Line Decoder/Demux *NEW!*	14-TSSOP	666.00/2,000		
SN74HCT139D	296-8389-5-ND	Dual 2-to-4 Line Decoder/Demux *NEW!*	16-SOP	1.02	.85	.68
SN74HCT139N	296-8390-5-ND	Dual 2-to-4 Line Decoder/Demux *NEW!*	16-Dip	.87	.73	.58
SN74HCT157D	296-8396-5-ND	Quad 2-to-1 Line Data Selector/Mux *NEW!*	16-SOP	1.05	.88	.70
SN74HCT157N	296-8397-5-ND	Quad 2-to-1 Line Data Selector/Mux *NEW!*	16-Dip	1.05	.88	.70
SN74HCT240DW	296-8398-5-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOP	1.14	.95	.76
SN74HCT240N	296-8399-5-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-Dip	1.08	.90	.72
SN74HCT244DBR	296-8400-1-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SSOP	.90	.75	.60
SN74HCT244DBR	296-8400-2-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SSOP	798.00/2,000		
SN74HCT244DW	296-1207-5-ND	Tri-State Octal Buffer/Line Driver	20-SOP	.90	.75	.60
SN74HCT244DWR	296-1207-2-ND	Tri-State Octal Buffer/Line Driver	20-SOP	852.00/2,000		
SN74HCT244N	296-1610-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	.87	.73	.58
SN74HCT244NSR	296-8401-1-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOP	1.05	.88	.70
SN74HCT244NSR	296-8401-2-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOP	932.00/2,000		
SN74HCT244PWR	296-8402-1-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-TSSOP	.90	.75	.60

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74HCT244PWR	296-8402-2-ND	Tri-St. Octal Buffer/Line Driver *NEW!*	20-TSSOP	798.00/2,000		
SN74HCT245DBR	296-8403-1-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SSOP	.90	.75	.60
SN74HCT245DBR	296-8403-2-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SSOP	798.00/2,000		
SN74HCT245DW	296-1208-5-ND	Tri-State Octal Bus Transceiver	20-SOP	.90	.75	.60
SN74HCT245DWR	296-1208-2-ND	Tri-State Octal Bus Transceiver	20-SOP	852.00/2,000		
SN74HCT245N	296-1612-5-ND	Tri-State Octal Bus Transceiver	20-Dip	.87	.73	.58
SN74HCT245PWR	296-8404-1-ND	Tri-State Octal Bus Xcvr. *NEW!*	20-TSSOP	.90	.75	.60
SN74HCT245PWR	296-8404-2-ND	Tri-State Octal Bus Xcvr. *NEW!*	20-TSSOP	798.00/2,000		
SN74HCT257D	296-8405-5-ND	Tri-State Quad 2-1 Line Data Selector/Mux *NEW!*	16-SOP	1.05	.88	.70
SN74HCT257N	296-8406-5-ND	Tri-State Quad 2-1 Line Data Selector/Mux *NEW!*	16-Dip	1.05	.88	.70
SN74HCT273DBR	296-8407-1-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-SSOP	1.14	.95	.76
SN74HCT273DBR	296-8407-2-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-SSOP	1010.00/2,000		
SN74HCT273DW	296-8408-5-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-SOP	1.14	.95	.76
SN74HCT273N	296-1613-5-ND	Octal D-Type Flip-Flop	20-Dip	1.08	.90	.72
SN74HCT273PWR	296-8409-1-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-TSSOP	1.14	.95	.76
SN74HCT273PWR	296-8409-2-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-TSSOP	1010.00/2,000		
SN74HCT373DW	296-8412-5-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SOP	1.14	.95	.76
SN74HCT373DWR	296-8412-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SOP	1064.00/2,000		
SN74HCT373N	296-1616-5-ND	Tri-State Octal Transparent D-Type Latch	20-Dip	1.08	.90	.72
SN74HCT373NSR	296-8413-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SOP	1.29	1.08	.86
SN74HCT373NSR	296-8413-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SOP	1144.00/2,000		
SN74HCT373PWR	296-8414-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TSSOP	1.14	.95	.76
SN74HCT373PWR	296-8414-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TSSOP	1010.00/2,000		
SN74HCT374DBR	296-8415-1-ND	Tri-State Octal Transparent D-Type Flip-Flop *NEW!*	20-SSOP	.90	.75	.60
SN74HCT374DBR	296-8415-2-ND	Tri-State Octal Transparent D-Type Flip-Flop *NEW!*	20-SSOP	798.00/2,000		
SN74HCT374DW	296-1209-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	.90	.75	.60
SN74HCT374DWR	296-1209-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	.96	.80	.64
SN74HCT374N	296-1617-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	.87	.73	.58
SN74HCT377DW	296-8416-5-ND	Octal D-Type Flip-Flop with Clock Enable *NEW!*	20-SOP	1.20	1.00	.80
SN74HCT377N	296-8417-5-ND	Octal D-Type Flip-Flop with Clock Enable *NEW!*	20-Dip	1.20	1.00	.80
SN74HCT540DW	296-8418-5-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOP	1.43	1.14	.86
SN74HCT540N	296-8419-5-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-Dip	1.43	1.14	.86
SN74HCT541DW	296-1618-5-ND	Octal Buffer/Line Driver	20-SOP	1.47	1.23	.98
SN74HCT541N	296-1619-5-ND	Octal Buffer/Line Driver	20-Dip	1.35	1.13	.90
SN74HCT573DBR	296-8420-1-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SSOP	1.47	1.23	.98
SN74HCT573DBR	296-8420-2-ND	Tri-State Octal D-Type Transparent Latch *NEW!*	20-SSOP	1304.00/2,000		
SN74HCT573DW	296-1210-5-ND	Tri-State Octal D-Type Transparent Latch	20-SOP	1.47	1.23	.98
SN74HCT573DWR	296-1210-2-ND	Tri-State Octal D-Type Transparent Latch	20-SOP	1326.00/2,000		
SN74HCT573N	296-1621-5-ND	Tri-State Octal D-Type Transparent Latch	20-Dip	1.35	1.13	.90
SN74HCT574DW	296-1622-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	1.47	1.23	.98
SN74HCT574N	296-1623-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	1.35	1.13	.90
SN74HCT574PWR	296-8421-1-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	1.47	1.23	.98
SN74HCT574PWR	296-8421-2-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	1304.00/2,000		
SN74HCT623DW	296-8422-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	5.27	4.22	3.28
SN74HCT645DW	296-8423-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	3.74	2.99	2.33
SN74HCT645N	296-8424-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-Dip	3.74	2.99	2.33
SN74HCT646DW	296-8425-5-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-SOP	5.29	4.23	3.29
SN74HCT646NT	296-8426-5-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-Dip	5.18	4.14	3.22
SN74HCT652DW	296-1624-5-ND	Tri-State Octal Bus Transceiver/Register	24-SOP	5.29	4.23	3.29
SN74HCT652DWR	296-1624-2-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-SOP	5992.00/2,000		
SN74HCT652NT	296-8427-5-ND	Tri-St. Octal Bus Xcvr./Register *NEW!*	24-Dip	5.18	4.14	3.22

LS Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74LS00D	296-3614-5-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	.60	.45	.34
SN74LS00DBR	296-3615-1-ND	Quad 2-Input NAND Gate *NEW!*	14-SSOP	.60	.45	.34
SN74LS00DBR	296-3615-2-ND	Quad 2-Input NAND Gate *NEW!*	14-SSOP	400.00/2,000		
SN74LS00N	296-1626-5-ND	Quad 2-Input NAND Gate	14-Dip	.48	.36	.27
SN74LS00NSR	296-3616-1-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	.80	.60	.45
SN74LS00NSR	296-3616-2-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	532.00/2,000		
SN74LS02D	296-3617-5-ND	Quad 2-Input NOR Gate *NEW!*	14-SOP	.60	.45	.34
SN74LS02N	296-1627-5-ND	Quad 2-Input NOR Gate	14-Dip	.48	.36	.27
SN74LS02NSR	296-3618-1-ND	Quad 2-Input NOR Gate *NEW!*	14-SOP	.80	.60	.45
SN74LS02NSR	296-3618-2-ND	Quad 2-Input NOR Gate *NEW!*	14-SOP	532.00/2,000		
SN74LS03DR	296-3619-1-ND	Quad 2-Input NAND Gate w/OC *NEW!*	14-SOP	.88	.66	.50
SN74LS03DR	296-3619-2-ND	Quad 2-Input NAND Gate w/OC *NEW!*	14-SOP	715.00/2,500		
SN74LS03N	296-3620-5-ND	Quad 2-Input NAND Gate w/OC *NEW!*	14-Dip	.80	.60	.45
SN74LS04D	296-1628-5-ND	Hex Inverter	14-SOP	.60	.45	.34
SN74LS04N	296-1629-5-ND	Hex Inverter	14-Dip	.48	.36	.27
SN74LS04NSR	296-3621-1-ND	Hex Inverter *NEW!*	14-SOP	.80	.60	.45
SN74LS04NSR	296-3621-2-ND	Hex Inverter *NEW!*	14-SOP	532.00/2,000		
SN74LS05D	296-1630-5-ND	Hex Inverter with OC	14-SOP	.60	.45	.34
SN74LS05DR	296-1630-2-ND	Hex Inverter with OC Output *NEW!*	14-SOP	552.50/2,500		
SN74LS05DBR	296-3622-1-ND	Hex Inverter with OC Output *NEW!*	14-SSOP	.60	.45	.34
SN74LS05DBR	296-3622-2-ND	Hex Inverter with OC Output *NEW!*	14-SSOP	400.00/2,000		
SN74LS05N	296-1631-5-ND	Hex Inverter with OC	14-Dip	.48	.36	.27
SN74LS06D	296-3623-5-ND	Hex Inv. Buffer/Driver w/HV Out *NEW!*	14-SOP	.96	.80	.64
SN74LS06DBR	296-3624-1-ND	Hex Inv. Buffer/Driver w/HV Out *NEW!*	14-SSOP	.96	.80	.64
SN74LS06DBR	296-3624-2-ND	Hex Inv. Buffer/Driver w/HV Out *NEW!*	14-SSOP	852.00/2,000		
SN74LS06NSR	296-3625-1-ND	Hex Inv. Buffer/Driver w/HV Out *NEW!*	14-SOP	1.11	.93	.74
SN74LS06NSR	296-3625-2-ND	Hex Inv. Buffer/Driver w/HV Out *NEW!*	14-SOP	984.00/2,000		
SN74LS07D	296-3626-5-ND	Hex Buffer/Driver w/HV Output *NEW!*	14-SOP	.96	.80	.64
SN74LS07DBR	296-3627-1-ND	Hex Buffer/Driver w/HV Output *NEW!*	14-SSOP	.96	.80	.64
SN74LS07DBR	296-3627-2-ND	Hex Buffer/Driver w/HV Output *NEW!*	14-SSOP	852.00/2,000		
SN74LS07NSR	296-3628-1-ND	Hex Buffer/Driver w/HV Output *NEW!*	14-SOP	1.11	.93	.74
SN74LS07NSR	296-3628-2-ND	Hex Buffer/Driver w/HV Output *NEW!*	14-SOP	984.00/2,000		
SN74LS08D	296-1632-5-ND	Quad 2-Input AND Gate	14-SOP	.60	.45	.34
SN74LS08N	296-1633-5-ND	Quad 2-Input AND Gate	14-Dip	.48	.36	.27
SN74LS08NSR	296-3629-1-ND	Quad 2-Input AND Gate *NEW!*	14-SOP	.80	.60	.45
SN74LS08NSR	296-3629-2-ND	Quad 2-Input AND Gate *NEW!*	14-SOP	532.00/2,000		
SN74LS09D	296-3630-5-ND	Quad 2-In AND Gate w/OC Out *NEW!*	14-SOP	.80	.60	.45
SN74LS09N	296-3631-5-ND	Quad 2-In AND Gate w/OC Out *NEW!*	14-Dip	.80	.60	.45
SN74LS10D	296-3634-5-ND	Triple 3-Input NAND Gate *NEW!*	14-SOP	.60	.45	.34
SN74LS10N	296-1634-5-ND	Triple 3-Input NAND Gate	14-Dip	.48	.36	.27
SN74LS10NSR	296-3635-1-ND	Triple 3-Input NAND Gate *NEW!*	14-SOP	.80	.60	.45
SN74LS10NSR	296-3635-2-ND	Triple 3-Input NAND Gate *NEW!*	14-SOP	532.00/2,000		
SN74LS11N	296-3638-5-ND	Triple 3-Input AND Gate *NEW!*	14-Dip	.80	.60	.45
SN74LS14D	296-1212-5-ND	Hex Schmitt-Trigger Inverter	14-SOP	.68	.51	.39
SN74LS14DR	296-1212-2-ND	Hex Schmitt-Trigger Inverter	14-SOP	617.50/2,500		
SN74LS14N	296-1643-5-ND	Hex Schmitt-Trigger Inverter	14-Dip	.60	.45	.34
SN74LS14NSR	296-3652-1-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SOP	.88	.66	.50
SN74LS14NSR	296-3652-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SOP	586.00/2,000		
SN74LS20DR	296-3669-2-ND	Dual 4-Input NAND Gate *NEW!*	14-SOP	715.00/2,500		
SN74LS20N	296-3670-5-ND	Dual 4-Input NAND Gate *NEW!*	14-Dip	.80	.60	.45
SN74LS21D	296-3671-5-ND	Dual 4-Input AND Gate *NEW!*	14-SOP	.96	.80	.64
SN74LS21N	296-3672-5-ND	Dual 4-Input AND Gate *NEW!*	14-Dip	.96	.80	.64
SN74LS27DR	296-3686-2-ND	Triple 3-Input NOR Gate *NEW!*	14-SOP	715.00/2,500		
SN74LS30N	296-3693-5-ND	8-Input NAND Gate *NEW!*	14-Dip	.48	.36	.27
SN74LS31N	296-3694-5-ND	Hex Delay Element *NEW!*	16-Dip	1.35	1.13	.90
SN74LS32D	296-3696-5-ND	Quad 2-Input OR Gate *NEW!*	14-SOP	.60	.45	.34
SN74LS32N	296-1658-5-ND	Quad 2-Input OR Gate	14-Dip	.60	.45	.34
SN74LS32NSR	296-3697-1-ND	Quad 2-Input OR Gate *NEW!*	14-SOP	.80	.60	.45
SN74LS32NSR	296-3697-2-ND	Quad 2-Input OR Gate *NEW!*	14-SOP	532.00/2,000		
SN74LS33D	296-3698-5-ND	Quad 2-In NOR Buffer w/OC Out *NEW!*	14-SOP	.96	.80	.64
SN74LS33N	296-3699-5-ND	Quad 2-In NOR Buffer w/OC Out *NEW!*	14-Dip	.96	.80	.64
SN74LS38D	296-3704-5-ND	Quad 2-Input NAND Buffer w/OC *NEW!*	14-SOP	.60	.45	.34
SN74LS38N	296-1664-5-ND	Quad 2-Input NAND Buffer	14-Dip	.64	.48	.36
SN74LS42D	296-3708-5-ND	4-Line BCD to 10-Line Decimal Decoder *NEW!*	16-SOP	1.47	1.23	.98
SN74LS47D	296-3711-5-ND	BCD to 7-Segment Decoder/Dvr. *NEW!*	16-SOP	1.20	1.00	.80
SN74LS47N	296-3712-5-ND	BCD to 7-Segment Decoder/Dvr. *NEW!*	16-Dip	1.20	1.00	.80
SN74LS73ADR	296-3742-2-ND	Dual J-K Flip-Flop w/Clear *NEW!*	14-SOP	1430.00/2,500		
SN74LS74AD	296-3743-5-ND	Dual D-Type Pos.-Edge-Triggered Flip-Flop *NEW!*	14-SOP	.64	.48	.36
SN74LS74AN	296-1668-5-ND	Dual D-Type Flip-Flop	14-Dip	.56	.42	.32
SN74LS75N	296-3744-5-ND	Quad Bistable Latch *NEW!*	16-Dip	1.38	1.15	.92
SN74LS86AD	296-3745-5-ND	Quad 2-Input EX-OR Gate *NEW!*	14-SOP	.92	.69	.52
SN74LS86AN	296-1669-5-ND	Quad 2-Input EX-OR Gate	14-Dip	.56	.42	.32
SN74LS90D	296-3746-5-ND	Decade Counter *NEW!*	14-SOP	1.33	1.06	.80
SN74LS90DR	296-3746-2-ND	Decade Counter *NEW!*	14-SOP	1760.00/2,500		
SN74LS92D	296-3747-5-ND	Divide-By-12 Decade Counter *NEW!*	14-SOP	1.38	1.10	.83
SN74LS92DR	296-3747-2-ND	Divide-By-12 Decade Counter *NEW!*	14-SOP	1760.00/2,500		
SN74LS93D	296-3749-5-ND	4-Bit Binary Counter *NEW!*	14-SOP	1.33	1.06	.80
SN74LS93N	296-3750-5-ND	4-Bit Binary Counter *NEW!*	14-Dip	1.33	1.06	.80
SN74LS107AD	296-3632-5-ND	Dual J-K Flip-Flop w/Clear *NEW!*	14-SOP	1.08	.90	.72
SN74LS109AN	296-3633-5-ND	Dual J-K Edge-Triggered Flip-Flop *NEW!*	16-Dip	.90	.75	.60
SN74LS112ADR	296-3636-2-ND	Dual J-K Neg-Edge-Trig. Flip-Flop *NEW!*	16-SOP	1040.00/2,500		
SN74LS112AN	296-3637-5-ND	Dual J-K Neg-Edge-Trig. Flip-Flop *NEW!*	16-Dip	.90	.75	.60
SN74LS122N	296-3639-5-ND	Retriggerable Mono Multivibrator *NEW!*	14-Dip	.90	.75	.60
SN74LS123D	296-1635-5-ND	Dual Monostable Multivibrator	16-SOP	.87	.73	.58
SN74LS123N	296-1636-5-ND	Dual Monostable Multivibrator	16-Dip	.75	.63	.50
SN74LS125AD	296-1637-5-ND	Tri-State Quad Bus Buffer	14-SOP	.92	.69	.52
SN74LS125ADR	296-1637-2-ND	Tri-State Quad Bus Buffer *NEW!*	14-SOP	812.50/2,500		
SN74LS125AN	296-1638-5-ND	Tri-State Quad Bus Buffer	14-Dip	.80	.60	.45
SN74LS125ANSR	296-3642-1-ND	Tri-State Quad Bus Buffer *NEW!*	14-SOP	.84	.70	.56
SN74LS125ANSR	296-3642-2-ND	Tri-State Quad Bus Buffer *NEW!*	14-SOP	744.00/2,000		
SN74LS126AN	296-3643-5-ND	Tri-State Quad Bus Buffer *NEW!*	14-Dip	.80	.60	.45
SN74LS132D	296-3644-5-ND	Quad 2-In NAND Schmitt-Trigger *NEW!*	14-SOP	1.23	1.03	.82
SN74LS132N	296-3645-5-ND	Quad 2-In NAND Schmitt-Trigger *NEW!*	14-Dip	1.23	1.03	.82
SN74LS136D	296-3646-5-ND	Quad 2-In EX-OR Gate w/OC Out *NEW!*	14-SOP	1.38	1.15	.92
SN74LS136N	296-3647-5-ND	Quad 2-In EX-OR Gate w/OC Out *NEW!*	14-Dip	1.38	1.15	.92
SN74LS138D	296-3648-5-ND	3-8 Line Decoder/Demultiplexer *NEW!*	16-SOP	.96	.72	.54
SN74LS138N	296-1639-5-ND	3-8 Line Decoder/Demultiplexer	16-Dip	.76	.57	.43
SN74LS139AD	296-3649-5-ND	Dual 2-4 Line Decoder/Demux *NEW!*	16-SOP	.75	.63	.50
SN74LS139AN	296-1640-5-ND	Dual 2-4 Line Decoder	16-Dip	.92	.69	.52
SN74LS145N	296-1641-5-ND	BCD-To-Decimal Decoder/Driver	16-Dip	.81	.68	.54
SN74LS148N	296-3651-5-ND	8-3 Line Priority Encoder *NEW!*	16-Dip	1.44	1.20	.96
SN74LS151N	296-1644-5-ND	8-1 Data Selector/Multiplexer	16-Dip	.76	.57	.43
SN74LS153D	296-3653-5-ND	Dual 4-1 Line Data Select/Mux *NEW!*	16-SOP	.96	.72	.54
SN74LS153N	296-3654-5-ND	Dual 4-1 Line Data Select/Mux *NEW!*	16-Dip	.76	.57	.43
SN74LS156N	296-3655-5-ND	Dual 2-4 Line Decod/Demux with OC Output *NEW!*	16-Dip	.76	.57	.43
SN74LS157D	296-3657-5-ND	Quad 2-1 Line Data Selector/Mux *NEW!*	16-SOP	.96	.72	.54
SN74LS157N	296-1645-5-ND	Quad 2-1 Data Selector/Multiplexer	16-Dip	.76	.57	.43
SN74LS157NSR	296-3659-1-ND	Quad 2-1 Line Data Selector/Mux *NEW!*	16-SOP	.87	.73	.58
SN74LS157NSR	296-3659-2-ND	Quad 2-1 Line Data Selector/Mux *NEW!*	16-SOP	772.00/2,000		
SN74LS161AN	296-1646-5-ND	4-Bit Synchronous Counter	16-Dip	.84	.63	.48
SN74LS161ANSR	296-3660-1-ND	4-Bit Synch. Binary Counter *NEW!*	16-SOP	.90	.75	.60
SN74LS161ANSR	296-3660-2-ND	4-Bit Synch. Binary Counter *NEW!*	16-SOP	798.00/2,000		
SN74LS163AN	296-3661-5-ND	4-Bit Synch. Binary Counter *NEW!*	16-Dip	.84	.63	.48
SN74LS164N	296-1647-5-ND	8-Bit Shift Register	14-Dip	.84	.63	.48
SN74LS166AN	296-3662-5-ND	Serial-Out Shifter *NEW!*	16-Dip	1.35	1.13	.90
SN74LS169BN	296-3663-5-ND	Synchronous 4-Bit Up/Down Binary Counter *NEW!*	16-Dip	2.20	1.76	1.32
SN74LS174N	296-3664-5-ND	Hex D-Type Flip-Flop w/Clear *NEW!*	16-Dip	.76	.57	.43
SN74LS175N	296-1648-5-ND	Quad D-Type Flip-Flop	16-Dip	.76	.57	.43
SN74LS193D	296-3665-5-ND	4-Bit Up/Down Counter *NEW!*	16-SOP	.87	.73	.58
SN74LS193N	296-1649-5-ND	4-Bit Up/Down Counter	16-Dip	.75	.63	.50
SN74LS194AN	296-3666-5-ND	Bidirectional Univ. Shift Register *NEW!*	16-Dip	.90	.75	.60
SN74LS221D	296-3673-5-ND	Dual Monostable Multivibrator *NEW!*	16-SOP	1.20	1.00	.80
SN74LS221N	296-3674-5-ND	Dual Monostable Multivibrator *NEW!*	16-Dip	1.08	.90	.72
SN74LS240DW	296-1650-5-ND	Octal Buffer/Line Driver	20-SOP	.90	.75	.60
SN74LS240DWR	296-1650-2-ND	Octal Buffer/Line Driver *NEW!*	20-SOP	852.00/2,000		
SN74LS240N	296-1651-5-ND	Octal Buffer/Line Driver	20-Dip	.84	.70	.56
SN74LS243DR	296-3675-2-ND	Quad Bus Transceiver *NEW!*	14-SOP	1952.50/2,500		
SN74LS243N	296-11619-5-ND	Quad Bus Transceiver *NEW!*	14-Dip	1.48	1.18	.89
SN74LS244DW	296-1213-5-ND	Tri-State Octal Buffer/Line Driver	20-SOP	.90	.75	.60
SN74LS244DWR	296-1213-2-ND	Tri-State Octal Buffer/Line Driver	20-SOP	852.00/2,000		
SN74LS244N	296-1653-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	.84	.70	.56
SN74LS244NSR	296-3676-1-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOP	1.05	.88	.70
SN74LS244NSR	296-3676-2-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOP	932.00/2,000		
SN74LS245DW	296-1214-5-ND	Octal Bus Transceiver	20-SOP	.93	.78	.62
SN74LS245DWR	296-1214-2-ND	Octal Bus Transceiver	20-SOP	878.00/2,000		
SN74LS245N	296-1655-5-ND	Octal Bus Transceiver	20-Dip	.84	.70	.56
SN74LS245NSR	296-3677-1-ND	Octal Bus Transceiver *NEW!*	20-SOP	1.08	.90	.72
SN74LS245NSR	296-3677-2-ND	Octal Bus Transceiver *NEW!*	20-SOP	958.00/2,000		

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74LS247D	296-3678-5-ND	BCD to 7-Segment Decoder/Dvr. *NEW!*	16-SOP	1.26	1.05	.84
SN74LS247N	296-3679-5-ND	BCD to 7-Segment Decoder/Dvr. *NEW!*	16-Dip	1.14	.95	.76
SN74LS251DR	296-3680-2-ND	Tri-State 8-1 Line Data Selector/Multiplexer *NEW!*	16-SOP	812.50/2,500		
SN74LS257BN	296-1656-5-ND	Quad 2-1 Data Selector/Multiplexer	16-Dip	.80	.60	.45
SN74LS266N	296-3681-5-ND	Quad 2-In EX-NOR Gate w/OC Out *NEW!*	14-Dip	.80	.60	.45
SN74LS273DWR	296-3682-2-ND	Octal D-Type Flip-Flop with Clear *NEW!*	20-SOP	958.00/2,000		
SN74LS273N	296-1657-5-ND	Octal D-Type Flip-Flop	20-Dip	.81	.68	.54
SN74LS279AD	296-3683-5-ND	Quad Not-S/Not-R Latch *NEW!*	16-SOP	.75	.63	.50
SN74LS279AN	296-3684-5-ND	Quad Not-S/Not-R Latch *NEW!*	16-Dip	.75	.63	.50
SN74LS280N	296-3687-5-ND	9-Bit Odd/Even Parity Generator/Checker *NEW!*	14-Dip	1.02	.85	.68
SN74LS292N	296-3688-5-ND	Prog. Freq. Divider/Digital Timer *NEW!*	16-Dip	11.66	10.50	9.31
SN74LS294N	296-3689-5-ND	Prog. Freq. Divider/Digital Timer *NEW!*	16-Dip	11.66	10.50	9.31
SN74LS297N	296-3690-5-ND	Digital Phase-Locked-Loop Filter *NEW!*	16-Dip	13.41	12.08	10.71
SN74LS299DW	296-3691-5-ND	Universal Shift/Storage Register *NEW!*	20-SOP	1.88	1.50	1.13
SN74LS299DWR	296-3691-2-ND	Universal Shift/Storage Register *NEW!*	20-SOP	2002.00/2,000		
SN74LS299N	296-3692-5-ND	Universal Shift/Storage Register *NEW!*	20-Dip	1.73	1.38	1.04
SN74LS321N	296-3695-5-ND	Crystal-Controlled Oscillator *NEW!*	16-Dip	3.60	2.88	2.24
SN74LS367ADR	296-3700-2-ND	Tri-State Hex Bus Driver *NEW!*	16-SOP	942.50/2,500		
SN74LS367AN	296-3701-5-ND	Tri-State Hex Bus Driver *NEW!*	16-Dip	.92	.69	.52
SN74LS368AN	296-3702-5-ND	6-Bit Buffer/Line Driver *NEW!*	16-Dip	.92	.69	.52
SN74LS373DW	296-1659-5-ND	Octal D-Type Latch	20-SOP	.90	.75	.60
SN74LS373N	296-1660-5-ND	Octal D-Type Latch	20-Dip	.84	.70	.56
SN74LS374DW	296-1661-5-ND	Octal D-Type Flip-Flop	20-SOP	.90	.75	.60
SN74LS374N	296-1662-5-ND	Octal D-Type Flip-Flop	20-Dip	.84	.70	.56
SN74LS377DWR	296-3703-2-ND	Octal D-Type Flip-Flop with Clock Enable *NEW!*	20-SOP	1170.00/2,000		
SN74LS377N	296-1663-5-ND	Octal D-Type Flip-Flop	20-Dip	1.08	.90	.72
SN74LS393D	296-3705-5-ND	Dual 4-Bit Binary Counter *NEW!*	14-SOP	.99	.83	.66
SN74LS393N	296-1665-5-ND	Dual 4-Bit Binary Counter	14-Dip	.87	.73	.58
SN74LS423D	296-3706-5-ND	Dual Retrig. Mono Multivibrator *NEW!*	16-SOP	1.35	1.13	.90
SN74LS423N	296-3707-5-ND	Dual Retrig. Mono Multivibrator *NEW!*	16-Dip	1.35	1.13	.90
SN74LS442N	296-3709-5-ND	Quad Tri-directional Bus Xcvr. *NEW!*	20-Dip	8.66	7.80	6.92
SN74LS465N	296-3710-5-ND	Tri-State Octal Buffer *NEW!*	20-Dip	3.60	2.88	2.24
SN74LS540DWR	296-3714-2-ND	Octal Buffer/Line Driver *NEW!*	20-SOP	1276.00/2,000		
SN74LS540N	296-3715-5-ND	Octal Buffer/Line Driver *NEW!*	20-Dip	1.20	1.00	.80
SN74LS541DW	296-3716-5-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOP	1.38	1.15	.92
SN74LS541DWR	296-3716-2-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOP	1276.00/2,000		
SN74LS541N	296-1666-5-ND	Tri-State Octal Buffer/Line Drive	20-Dip	1.20	1.00	.80
SN74LS590D	296-3717-5-ND	Tri-State 8-Bit Binary Counter *NEW!*	16-SOP	5.50	4.40	3.72
SN74LS590N	296-3718-5-ND	Tri-State 8-Bit Binary Counter *NEW!*	16-Dip	5.50	4.40	3.72
SN74LS593N	296-3719-5-ND	Tri-State 8-Bit Binary Counter *NEW!*	20-Dip	7.00	5.60	4.73
SN74LS594N	296-3720-5-ND	Serial-In Shift Register with Output Latch *NEW!*	16-Dip	10.58	9.53	8.45
SN74LS597N	296-3721-5-ND	Serial-Out Shift Register with Input Latch *NEW!*	16-Dip	5.50	4.40	3.72
SN74LS624D	296-3722-5-ND	Voltage-Controlled Oscillator *NEW!*	14-SOP	2.10	1.68	1.26
SN74LS624N	296-3723-5-ND	Voltage-Controlled Oscillator *NEW!*	14-Dip	2.10	1.68	1.26
SN74LS628N	296-3724-5-ND	Voltage-Controlled Oscillator *NEW!*	14-Dip	2.10	1.68	1.26
SN74LS629N	296-3725-5-ND	Dual Volt-Controlled Oscillator *NEW!*	16-Dip	2.59	2.07	1.61
SN74LS641DWR	296-3727-2-ND	Dual Volt-Controlled Oscillator *NEW!*	20-SOP	1976.00/2,000		
SN74LS642-1DW	296-3729-5-ND	Octal Bus Transceiver w/OC Out *NEW!*	20-SOP	5.06	4.05	3.15
SN74LS642-1N	296-3730-5-ND	Octal Bus Transceiver w/OC Out *NEW!*	20-Dip	5.06	4.05	3.15
SN74LS645-1DW	296-3731-5-ND	Octal Bus Transceiver *NEW!*	20-SOP	3.38	2.70	2.10
SN74LS645-1N	296-3732-5-ND	Octal Bus Transceiver *NEW!*	20-Dip	3.38	2.70	2.10
SN74LS646NT	296-3733-5-ND	Octal Bus Transceiver & Register *NEW!*	24-Dip	4.39	3.51	2.73
SN74LS652NT	296-3734-5-ND	Octal Bus Transceiver & Register *NEW!*	24-Dip	4.39	3.51	2.73
SN74LS670DR	296-3735-2-ND	Tri-State 4-by-4 Register Files *NEW!*	16-SOP	1632.50/2,500		
SN74LS673DW	296-3736-5-ND	Serial-In Shift Register *NEW!*	24-SOP	27.00	25.20	23.40
SN74LS674N	296-3737-5-ND	Serial-Out Shift Register *NEW!*	24-Dip	14.99	13.50	11.97
SN74LS684DW	296-3739-5-ND	Octal Binary/BCD Magnitude Comparator *NEW!*	20-SOP	3.80	3.05	2.37
SN74LS684DWR	296-3739-2-ND	Octal Binary/BCD Magnitude Comparator *NEW!*	20-SOP	4360.00/2,000		
SN74LS684N	296-3740-5-ND	Octal Binary/BCD Magnitude Comparator *NEW!*	20-Dip	3.80	3.05	2.37
SN74LS688N	296-1667-5-ND	8-Bit Magnitude Comparator	20-Dip	1.88	1.50	1.13
SN74LS697N	296-3741-5-ND	Synchronous 4-Bit Up/Down Binary Counter *NEW!*	20-Dip	3.38	2.70	2.10

LV Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74LV00AD	296-1670-5-ND	Quad 2-Input NAND Gate	14-SOP	.60	.45	.34
SN74LV00ADR	296-1670-2-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	487.50/2,500		
SN74LV00ADBR	296-3751-1-ND	Quad 2-Input NAND Gate *NEW!*	14-SSOP	.60	.45	.34
SN74LV00ADBR	296-3751-2-ND	Quad 2-Input NAND Gate *NEW!*	14-SSOP	400.00/2,000		
SN74LV00ADGVR	296-3752-1-ND	Quad 2-Input NAND Gate *NEW!*	14-TVSOP	.80	.60	.45
SN74LV00ADGVR	296-3752-2-ND	Quad 2-Input NAND Gate *NEW!*	14-TVSOP	532.00/2,000		
SN74LV00APWR	296-3753-1-ND	Quad 2-Input NAND Gate *NEW!*	14-TSSOP	.60	.45	.34
SN74LV00APWR	296-3753-2-ND	Quad 2-Input NAND Gate *NEW!*	14-TSSOP	400.00/2,000		
SN74LV02AD	296-1671-5-ND	Quad 2-Input NOR Gate	14-SOP	.60	.45	.34
SN74LV02ADBR	296-3754-1-ND	Quad 2-Input NOR Gate *NEW!*	14-SSOP	.60	.45	.34
SN74LV02ADBR	296-3754-2-ND	Quad 2-Input NOR Gate *NEW!*	14-SSOP	400.00/2,000		
SN74LV04AD	296-1672-5-ND	Hex Inverter	14-SOP	.60	.45	.34
SN74LV04ADBR	296-3755-1-ND	Hex Inverter *NEW!*	14-SSOP	.60	.45	.34
SN74LV04ADBR	296-3755-2-ND	Hex Inverter *NEW!*	14-SSOP	400.00/2,000		
SN74LV04ADGVR	296-3756-1-ND	Hex Inverter *NEW!*	14-TVSOP	.80	.60	.45
SN74LV04ADGVR	296-3756-2-ND	Hex Inverter *NEW!*	14-TVSOP	532.00/2,000		
SN74LV04APWR	296-3757-1-ND	Hex Inverter *NEW!*	14-TSSOP	.60	.45	.34
SN74LV04APWR	296-3757-2-ND	Hex Inverter *NEW!*	14-TSSOP	400.00/2,000		
SN74LV05ADR	296-3758-2-ND	Hex Inverter w/OD Out *NEW!*	14-SOP	487.50/2,500		
SN74LV05APWR	296-3759-1-ND	Hex Inverter w/OD Out *NEW!*	14-TSSOP	.60	.45	.34
SN74LV05APWR	296-3759-2-ND	Hex Inverter w/OD Out *NEW!*	14-TSSOP	400.00/2,000		
SN74LV06ADBR	296-3760-1-ND	Hex Inverter Buffer/Driver with OD Out *NEW!*	14-SSOP	.60	.45	.34
SN74LV06ADBR	296-3760-2-ND	Hex Inverter Buffer/Driver with OD Out *NEW!*	14-SSOP	400.00/2,000		
SN74LV06ADGVR	296-3761-1-ND	Hex Inverter Buffer/Driver with OD Out *NEW!*	14-TVSOP	.80	.60	.45
SN74LV06ADGVR	296-3761-2-ND	Hex Inverter Buffer/Driver with OD Out *NEW!*	14-TVSOP	532.00/2,000		
SN74LV06ADR	296-3762-2-ND	Hex Inverter Buffer/Driver with OD Out *NEW!*	14-SOP	487.50/2,500		
SN74LV06APWR	296-3763-1-ND	Hex Inverter Buffer/Driver with OD Out *NEW!*	14-TSSOP	.60	.45	.34
SN74LV06APWR	296-3763-2-ND	Hex Inverter Buffer/Driver with OD Out *NEW!*	14-TSSOP	400.00/2,000		
SN74LV07AD	296-3764-5-ND	Hex Buffer/Driver w/OD Out *NEW!*	14-SOP	.60	.45	.34
SN74LV07ADR	296-3764-2-ND	Hex Buffer/Driver w/OD Out *NEW!*	14-SOP	487.50/2,500		
SN74LV07ADBR	296-3765-1-ND	Hex Buffer/Driver w/OD Out *NEW!*	14-SSOP	.60	.45	.34
SN74LV07ADBR	296-3765-2-ND	Hex Buffer/Driver w/OD Out *NEW!*	14-SSOP	400.00/2,000		
SN74LV07ADGVR	296-3766-1-ND	Hex Buffer/Driver w/OD Out *NEW!*	14-TVSOP	.80	.60	.45
SN74LV07ADGVR	296-3766-2-ND	Hex Buffer/Driver w/OD Out *NEW!*	14-TVSOP	532.00/2,000		
SN74LV07APWR	296-3767-1-ND	Hex Buffer/Driver w/OD Out *NEW!*	14-TSSOP	.60	.45	.34
SN74LV07APWR	296-3767-2-ND	Hex Buffer/Driver w/OD Out *NEW!*	14-TSSOP	400.00/2,000		
SN74LV08AD	296-1673-5-ND	Quad 2-Input AND Gate	14-SOP	.60	.45	.34
SN74LV08ADBR	296-3768-1-ND	Quad 2-Input AND Gate *NEW!*	14-SSOP	.60	.45	.34
SN74LV08ADBR	296-3768-2-ND	Quad 2-Input AND Gate *NEW!*	14-SSOP	400.00/2,000		
SN74LV08ADGVR	296-3769-1-ND	Quad 2-Input AND Gate *NEW!*	14-TVSOP	.80	.60	.45
SN74LV08ADGVR	296-3769-2-ND	Quad 2-Input AND Gate *NEW!*	14-TVSOP	532.00/2,000		
SN74LV08APWR	296-3770-1-ND	Quad 2-Input AND Gate *NEW!*	14-TSSOP	.60	.45	.34
SN74LV08APWR	296-3770-2-ND	Quad 2-Input AND Gate *NEW!*	14-TSSOP	400.00/2,000		
SN74LV10AD	296-3771-5-ND	Triple 3-Input NAND Gate *NEW!*	14-SOP	.60	.45	.34
SN74LV10ADR	296-3771-2-ND	Triple 3-Input NAND Gate *NEW!*	14-SOP	487.50/2,500		
SN74LV10ADBR	296-3772-1-ND	Triple 3-Input NAND Gate *NEW!*	14-SSOP	.60	.45	.34
SN74LV10ADBR	296-3772-2-ND	Triple 3-Input NAND Gate *NEW!*	14-SSOP	400.00/2,000		
SN74LV10ADGVR	296-3773-1-ND	Triple 3-Input NAND Gate *NEW!*	14-TVSOP	.80	.60	.45
SN74LV10ADGVR	296-3773-2-ND	Triple 3-Input NAND Gate *NEW!*	14-TVSOP	532.00/2,000		
SN74LV14AD	296-1678-5-ND	Hex Schmitt-Trigger Inverter	14-SOP	.60	.45	.34
SN74LV14ADR	296-1678-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SOP	552.50/2,500		
SN74LV14ADBR	296-3783-1-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SSOP	.60	.45	.34
SN74LV14ADBR	296-3783-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SSOP	400.00/2,000		
SN74LV14ADGVR	296-3784-1-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TVSOP	.80	.60	.45
SN74LV14ADGVR	296-3784-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TVSOP	532.00/2,000		
SN74LV14APWR	296-3785-1-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TSSOP	.60	.45	.34
SN74LV14APWR	296-3785-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TSSOP	400.00/2,000		
SN74LV20AD	296-3794-5-ND	Dual 4-Input NAND Gate *NEW!*	14-SOP	.60	.45	.34
SN74LV20ADR	296-3794-2-ND	Dual 4-Input NAND Gate *NEW!*	14-SOP	487.50/2,500		
SN74LV20ADGVR	296-3795-1-ND	Dual 4-Input NAND Gate *NEW!*	14-TVSOP	.80	.60	.45
SN74LV20ADGVR	296-3795-2-ND	Dual 4-Input NAND Gate *NEW!*	14-TVSOP	532.00/2,000		
SN74LV20APWR	296-3796-1-ND	Dual 4-Input NAND Gate *NEW!*	14-TSSOP	.60	.45	.34
SN74LV20APWR	296-3796-2-ND	Dual 4-Input NAND Gate *NEW!*	14-TSSOP	400.00/2,000		
SN74LV21AD	296-3797-5-ND	Dual 4-Input AND Gate *NEW!*	14-SOP	.60	.45	.34
SN74LV21ADBR	296-3798-1-ND	Dual 4-Input AND Gate *NEW!*	14-SSOP	.60	.45	.34
SN74LV21ADBR	296-3798-2-ND	Dual 4-Input AND Gate *NEW!*	14-SSOP	400.00/2,000		
SN74LV21ADGVR	296-3799-1-ND	Dual 4-Input AND Gate *NEW!*	14-TVSOP	.80	.60	.45
SN74LV21ADGVR	296-3799-2-ND	Dual 4-Input AND Gate *NEW!*	14-TVSOP	532.00/2,000		
SN74LV21APWR	296-3800-1-ND	Dual 4-Input AND Gate *NEW!*	14-TSSOP	.60	.45	.34
SN74LV21APWR	296-3800-2-ND	Dual 4-Input AND Gate *NEW!*	14-TSSOP	400.00/2,000		
SN74LV27AD	296-3813-5-ND	Triple 3-Input NOR Gate *NEW!*	14-SOP	.60	.45	.34
SN74LV27ADBR	296-3814-1-ND	Triple 3-Input NOR Gate *NEW!*	14-SSOP	.60	.45	.34
SN74LV27ADBR	296-3814-2-ND	Triple 3-Input NOR Gate *NEW!*	14-SSOP	400.00/2,000		
SN74LV27ADGVR	296-3815-1-ND	Triple 3-Input NOR Gate *NEW!*	14-TVSOP	.80	.60	.45
SN74LV27ADGVR	296-3815-2-ND	Triple 3-Input NOR Gate *NEW!*	14-TVSOP	532.00/2,000		
SN74LV27APWR	296-3816-1-ND	Triple 3-Input NOR Gate *NEW!*	14-TSSOP	.60	.45	.34
SN74LV27APWR	296-3816-2-ND	Triple 3-Input NOR Gate *NEW!*	14-TSSOP	400.00/2,000		
SN74LV32AD	296-1686-5-ND	Quad 2-Input OR Gate	14-SOP	.60	.45	.34
SN74LV32ADBR	296-3817-1-ND	Quad 2-Input OR Gate *NEW!*	14-SSOP	.60	.45	.34
SN74LV32ADBR	296-3817-2-ND	Quad 2-Input OR Gate *NEW!*	14-SSOP	400.00/2,000		
SN74LV32ADGVR	296-3818-1-ND	Quad 2-Input OR Gate *NEW!*	14-TVSOP	.80	.60	.45
SN74LV32ADGVR	296-3818-2-ND	Quad 2-Input OR Gate *NEW!*	14-TVSOP	532.00/2,000		
SN74LV32APWR	296-3819-1-ND	Quad 2-Input OR Gate *NEW!*	14-TSSOP	.60	.45	.34
SN74LV32APWR	296-3819-2-ND	Quad 2-Input OR Gate *NEW!*	14-TSSOP	400.00/2,000		
SN74LV74AD	296-1692-5-ND	Dual D-Type Flip-Flop	14-SOP	.72	.54	.41
SN74LV74ADBR	296-3844-1-ND	Dual D-Type Flip-Flop *NEW!*	14-SSOP	.72	.54	.41
SN74LV74ADBR	296-3844-2-ND	Dual D-Type Flip-Flop *NEW!*	14-SSOP	478.00/2,000		
SN74LV74APWR	296-3846-1-ND	Dual D-Type Flip-Flop *NEW!*	14-TSSOP	.72	.54	.41
SN74LV74APWR	296-3846-2-ND	Dual D-Type Flip-Flop *NEW!*	14-TSSOP	478.00/2,000		
SN74LV86AD	296-1693-5-ND	Quad 2-Input EX-OR Gate	14-SOP	.72	.54	.41
SN74LV123APWR	296-3774-1-ND	Dual Retrig. Monostable Multivibrator *NEW!*	16-TSSOP	1.05	.88	.70
SN74LV123APWR	296-3774-2-ND	Dual Retrig. Monostable Multivibrator *NEW!*	16-TSSOP	932.00/2,000		
SN74LV125AD	296-1674-5-ND	Tri-State Quad Bus Buffer Gate	14-SOP	.72	.54	.41
SN74LV125ADGVR	296-3775-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-TVSOP	.92	.69	.52
SN74LV125ADGVR	296-3775-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-TVSOP	612.00/2,000		
SN74LV125APWR	296-3776-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-TSSOP	.72	.54	.41
SN74LV125APWR	296-3776-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-TSSOP	478.00/2,000		
SN74LV132AD	296-1675-5-ND	Quad NAND Gate	14-SOP	.88	.66	.50
SN74LV132ADR	296-1675-2-ND	Quad NAND Gate *NEW!*	14-SOP	715.00/2,500		
SN74LV132ADBR	296-3777-1-ND	Quad NAND Gate *NEW!*	14-SSOP	.88	.66	.50
SN74LV132ADBR	296-3777-2-ND	Quad NAND Gate *NEW!*	14-SSOP	586.00/2,000		
SN74LV132ADGVR	296-3778-1-ND	Quad NAND Gate *NEW!*	14-TVSOP	.81	.68	.54
SN74LV132ADGVR	296-3778-2-ND	Quad NAND Gate *NEW!*	14-TVSOP	718.00/2,000		
SN74LV132APWR	296-3779-1-ND	Quad NAND Gate *NEW!*	14-TSSOP	.88	.66	.50
SN74LV132APWR	296-3779-2-ND	Quad NAND Gate *NEW!*	14-TSSOP	586.00/2,000		
SN74LV138AD	296-1676-5-ND	3-to-8 Decoder/Demultiplexer	16-SOP	.88	.66	.50
SN74LV138ADR	296-1676-2-ND	3-to-8 Decoder/Demultiplexer *NEW!*	16-SOP	715.00/2,500		
SN74LV138APWR	296-3780-1-ND	3-to-8 Decoder/Demultiplexer *NEW!*	16-TSSOP	.88	.66	.50
SN74LV138APWR	296-3780-2-ND	3-to-8 Decoder/Demultiplexer *NEW!*	16-TSSOP	586.00/2,000		
SN74LV139AD	296-1677-5-ND	Dual 2-4 Decoder/Demultiplexer	16-SOP	.88	.66	.50
SN74LV139ADBR	296-3781-1-ND	Dual 2-4 Decoder/Demux *NEW!*	16-SSOP	.88	.66	.50
SN74LV139ADBR	296-3781-2-ND	Dual 2-4 Decoder/Demux *NEW!*	16-SSOP	586.00/2,000		
SN74LV139APWR	296-3782-1-ND	Dual 2-4 Decoder/Demux *NEW!*	16-TSSOP	.88	.66	.50
SN74LV139APWR	296-3782-2-ND	Dual 2-4 Decoder/Demux *NEW!*	16-TSSOP	586.00/2,000		
SN74LV164AD	296-1680-5-ND	8-Bit Serial Shift Register	14-SOP	.88	.66	.50
SN74LV164ADBR	296-3787-1-ND	8-Bit Serial Shift Register *NEW!*	14-SSOP	.88	.66	.50
SN74LV164ADBR	296-3787-2-ND	8-Bit Serial Shift Register *NEW!*	14-SSOP	586.00/2,000		
SN74LV164APWR	296-3788-1-ND	8-Bit Serial Shift Register *NEW!*	14-TSSOP	.88	.66	.50
SN74LV164APWR	296-3788-2-ND	8-Bit Serial Shift Register *NEW!*	14-TSSOP	586.00/2,000		
SN74LV165AD	296-1681-5-ND	8-Bit Parallel Load Shift Register	16-SOP	.75	.63	.50
SN74LV165APWR	296-3790-1-ND	8-Bit Parallel Load Shift Reg. *NEW!*	16-TSSOP	.75	.63	.50
SN74LV165APWR	296-3790-2-ND	8-Bit Parallel Load Shift Reg. *NEW!*	16-TSSOP	666.00/2,000		

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LV174AD	296-3791-5-ND	Hex D-Type Flip-Flop w/Clear *NEW!*	16-SOP	.88	.66	.50
SN74LV174APWR	296-3792-1-ND	Hex D-Type Flip-Flop w/Clear *NEW!*	16-TSSOP	.88	.66	.50
SN74LV174APWR	296-3792-2-ND	Hex D-Type Flip-Flop w/Clear *NEW!*	16-TSSOP	586.00/2,000		
SN74LV175AD	296-1682-5-ND	Quad D-Type Flip-Flop with Clear	16-SOP	.88	.66	.50
SN74LV175APWR	296-3793-1-ND	Quad D-Type Flip-Flop w/Clear *NEW!*	16-TSSOP	.88	.66	.50
SN74LV175APWR	296-3793-2-ND	Quad D-Type Flip-Flop w/Clear *NEW!*	16-TSSOP	586.00/2,000		
SN74LV221AD	296-3801-5-ND	Dual Monostable Multivibrator *NEW!*	16-SOP	1.20	1.00	.80
SN74LV221ADR	296-3801-2-ND	Dual Monostable Multivibrator *NEW!*	16-SOP	1300.00/2,500		
SN74LV240ADBR	296-3802-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	.96	.72	.54
SN74LV240ADBR	296-3802-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	638.00/2,000		
SN74LV240ADGVR	296-3803-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TVSOP	1.02	.85	.68
SN74LV240ADGVR	296-3803-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TVSOP	904.00/2,000		
SN74LV240ADW	296-1683-5-ND	Tri-State Octal Buffer/Driver	20-SOP	.96	.72	.54
SN74LV244ADBR	296-3804-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	.96	.72	.54
SN74LV244ADBR	296-3804-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	638.00/2,000		
SN74LV244ADGVR	296-3805-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TVSOP	1.02	.85	.68
SN74LV244ADGVR	296-3805-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TVSOP	904.00/2,000		
SN74LV244ADW	296-1684-5-ND	Tri-State Octal Buffer/Driver	20-SOP	.96	.72	.54
SN74LV244APWR	296-3806-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	.96	.72	.54
SN74LV244APWR	296-3806-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	638.00/2,000		
SN74LV245ADBR	296-3807-1-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SSOP	.78	.65	.52
SN74LV245ADBR	296-3807-2-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SSOP	692.00/2,000		
SN74LV245ADGVR	296-3808-1-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TVSOP	1.02	.85	.68
SN74LV245ADGVR	296-3808-2-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TVSOP	904.00/2,000		
SN74LV245ADW	296-1685-5-ND	Tri-State Octal Bus Transceiver	20-SOP	.96	.72	.54
SN74LV245APWR	296-3809-1-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TSSOP	.96	.72	.54
SN74LV245APWR	296-3809-2-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TSSOP	638.00/2,000		
SN74LV273ADGVR	296-3810-1-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-TVSOP	1.02	.85	.68
SN74LV273ADGVR	296-3810-2-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-TVSOP	904.00/2,000		
SN74LV273ADW	296-3811-5-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-SOP	.96	.72	.54
SN74LV273APWR	296-3812-1-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-TSSOP	.96	.72	.54
SN74LV273APWR	296-3812-2-ND	Octal D-Type Flip-Flop w/Clear *NEW!*	20-TSSOP	638.00/2,000		
SN74LV373ADW	296-1687-5-ND	Octal D-Type Transparent Latch	20-SOP	.96	.72	.54
SN74LV374ADW	296-1688-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	.96	.72	.54
SN74LV374APWR	296-3820-1-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	.96	.72	.54
SN74LV374APWR	296-3820-2-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	638.00/2,000		
SN74LV540ADWR	296-3837-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	.96	.72	.54
SN74LV540ADWR	296-3837-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	638.00/2,000		
SN74LV541ADBR	296-3838-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	.96	.72	.54
SN74LV541ADBR	296-3838-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	638.00/2,000		
SN74LV541ADW	296-1689-5-ND	Tri-State Octal Buffer/Driver	20-SOP	.96	.72	.54
SN74LV573ADBR	296-3839-1-ND	Tri-State Octal D-Type Latch *NEW!*	20-SSOP	.96	.72	.54
SN74LV573ADBR	296-3839-2-ND	Tri-State Octal D-Type Latch *NEW!*	20-SSOP	638.00/2,000		
SN74LV573ADW	296-1690-5-ND	Tri-State Octal D-Type Latch	20-SOP	.96	.72	.54
SN74LV573ADWR	296-1690-2-ND	Tri-State Octal D-Type Latch *NEW!*	20-SOP	638.00/2,000		
SN74LV573APWR	296-3840-1-ND	Tri-State Octal D-Type Latch *NEW!*	20-TSSOP	.96	.72	.54
SN74LV573APWR	296-3840-2-ND	Tri-State Octal D-Type Latch *NEW!*	20-TSSOP	638.00/2,000		
SN74LV574ADW	296-1691-5-ND	Octal D-Type Flip-Flop	20-SOP	.96	.72	.54
SN74LV594ADBR	296-3841-1-ND	8-Bit Shift Register with Output Register *NEW!*	16-SSOP	.96	.72	.54
SN74LV594ADBR	296-3841-2-ND	8-Bit Shift Register with Output Register *NEW!*	16-SSOP	638.00/2,000		
SN74LV594APWR	296-3842-1-ND	8-Bit Shift Register with Output Register *NEW!*	16-TSSOP	.96	.72	.54
SN74LV594APWR	296-3842-2-ND	8-Bit Shift Register with Output Register *NEW!*	16-TSSOP	638.00/2,000		
SN74LV595APWR	296-3843-1-ND	Tri-State 8-Bit Shift Register *NEW!*	16-TSSOP	.96	.72	.54
SN74LV595APWR	296-3843-2-ND	Tri-State 8-Bit Shift Register *NEW!*	16-TSSOP	638.00/2,000		
SN74LV4040ADBR	296-3821-1-ND	12-Bit Async. Binary Counter *NEW!*	16-SSOP	1.20	1.00	.80
SN74LV4040ADBR	296-3821-2-ND	12-Bit Async. Binary Counter *NEW!*	16-SSOP	1064.00/2,000		
SN74LV4040ADGVR	296-3822-1-ND	12-Bit Async. Binary Counter *NEW!*	16-TVSOP	1.35	1.13	.90
SN74LV4040ADGVR	296-3822-2-ND	12-Bit Async. Binary Counter *NEW!*	16-TVSOP	1198.00/2,000		
SN74LV4040APWR	296-3824-1-ND	12-Bit Async. Binary Counter *NEW!*	16-TSSOP	1.20	1.00	.80
SN74LV4040APWR	296-3824-2-ND	12-Bit Async. Binary Counter *NEW!*	16-TSSOP	1064.00/2,000		
SN74LV4051ADBR	296-3825-1-ND	8-Ch. Analog Mux/Demux *NEW!*	16-SSOP	.75	.63	.50
SN74LV4051ADBR	296-3825-2-ND	8-Ch. Analog Mux/Demux *NEW!*	16-SSOP	666.00/2,000		
SN74LV4051ADGVR	296-3826-1-ND	8-Ch. Analog Mux/Demux *NEW!*	16-TVSOP	.90	.75	.60
SN74LV4051ADGVR	296-3826-2-ND	8-Ch. Analog Mux/Demux *NEW!*	16-TVSOP	798.00/2,000		
SN74LV4051ADR	296-3827-1-ND	8-Ch. Analog Mux/Demux *NEW!*	16-SOP	.75	.63	.50
SN74LV4051ADR	296-3827-2-ND	8-Ch. Analog Mux/Demux *NEW!*	16-SOP	812.50/2,500		
SN74LV4051AN	296-3828-5-ND	8-Ch. Analog Mux/Demux *NEW!*	16-Dip	.75	.63	.50
SN74LV4051APWR	296-3829-1-ND	8-Ch. Analog Mux/Demux *NEW!*	16-TSSOP	.75	.63	.50
SN74LV4051APWR	296-3829-2-ND	8-Ch. Analog Mux/Demux *NEW!*	16-TSSOP	666.00/2,000		
SN74LV4052AN	296-3830-5-ND	Dual 4-Ch. Analog Mux/Demux *NEW!*	16-Dip	.75	.63	.50
SN74LV4052APWR	296-3831-2-ND	Dual 4-Ch. Analog Mux/Demux *NEW!*	16-TSSOP	666.00/2,000		
SN74LV4053AN	296-3832-5-ND	Triple 2-Ch. Analog Mux/Demux *NEW!*	16-Dip	.75	.63	.50
SN74LV4053APWR	296-3833-2-ND	Triple 2-Channel Analog Mux/Demux *NEW!*	16-TSSOP	650.00/2,000		
SN74LV4066ADR	296-3834-1-ND	Quad Bilateral Analog Switch *NEW!*	14-SOP	.75	.63	.50
SN74LV4066ADR	296-3834-2-ND	Quad Bilateral Analog Switch *NEW!*	14-SOP	812.50/2,500		
SN74LV4066AN	296-3835-5-ND	Quad Bilateral Analog Switch *NEW!*	14-Dip	.75	.63	.50
SN74LV4066APWR	296-3836-2-ND	Quad Bilateral Analog Switch *NEW!*	14-TSSOP	666.00/2,000		
SN74LV161284DGGR	296-1215-1-ND	19-Bit Bus Interface	48-TSSOP	3.04	2.43	1.89
SN74LV161284DL	296-1679-5-ND	19-Bit Bus Interface	48-SSOP	3.04	2.43	1.89
SN74LV161284DLR	296-3786-2-ND	19-Bit Bus Interface *NEW!*	48-SSOP	1721.00/1,000		
SN74LVU04AD	296-1722-5-ND	Unbuffered Hex Inverter	14-SOP	.60	.45	.34

LVC / LVCH Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVC1G06DBVR	296-8483-1-ND	Single Inverter Buffer/Driver with OD Output *NEW!*	SOT-23-5	.68	.51	.39
SN74LVC1G06DBVR	296-8483-2-ND	Single Inverter Buffer/Driver with OD Output *NEW!*	SOT-23-5	663.00/3,000		
SN74LVC1G06DCKR	296-8484-1-ND	Single Inverter Buffer/Driver with OD Output *NEW!*	5-SOP	.72	.54	.41
SN74LVC1G06DCKR	296-8484-2-ND	Single Inverter Buffer/Driver with OD Output *NEW!*	5-SOP	702.00/3,000		
SN74LVC1G07DBVR	296-8485-1-ND	Single Buffer/Driver with OD Output *NEW!*	SOT-23-5	.68	.51	.39
SN74LVC1G07DBVR	296-8485-2-ND	Single Buffer/Driver with OD Output *NEW!*	SOT-23-5	663.00/3,000		
SN74LVC1G07DCKR	296-8486-1-ND	Single Buffer/Driver w/OD Output *NEW!*	5-SOP	.72	.54	.41
SN74LVC1G07DCKR	296-8486-2-ND	Single Buffer/Driver w/OD Output *NEW!*	5-SOP	702.00/3,000		
SN74LVC1GU04DBVR	296-8487-1-ND	Single Inverter Gate *NEW!*	SOT-23-5	.68	.51	.39
SN74LVC1GU04DBVR	296-8487-2-ND	Single Inverter Gate *NEW!*	SOT-23-5	663.00/3,000		
SN74LVC1GU04DCKR	296-8488-1-ND	Single Inverter Gate *NEW!*	5-SOP	.72	.54	.41
SN74LVC1GU04DCKR	296-8488-2-ND	Single Inverter Gate *NEW!*	5-SOP	702.00/3,000		
SN74LVC00AD	296-1694-5-ND	Quad 2-Input NAND Gate	14-SOP	.72	.54	.41
SN74LVC00ADR	296-1694-2-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	780.00/2,500		
SN74LVC00ADBR	296-8430-1-ND	Quad 2-Input NAND Gate *NEW!*	14-SSOP	.72	.54	.41
SN74LVC00ADBR	296-8430-2-ND	Quad 2-Input NAND Gate *NEW!*	14-SSOP	478.00/2,000		
SN74LVC00APWR	296-1216-1-ND	Quad 2-Input NAND Gate	14-TSSOP	.72	.54	.41
SN74LVC00APWR	296-1216-2-ND	Quad 2-Input NAND Gate	14-TSSOP	478.00/2,000		
SN74LVC02AD	296-8433-5-ND	Quad 2-Input NOR Gate *NEW!*	14-SOP	.72	.54	.41
SN74LVC02ADR	296-8433-1-ND	Quad 2-Input NOR Gate *NEW!*	14-SOP	.96	.72	.54
SN74LVC02ADR	296-8433-2-ND	Quad 2-Input NOR Gate *NEW!*	14-SOP	780.00/2,500		
SN74LVC02ADBR	296-8432-1-ND	Quad 2-Input NOR Gate *NEW!*	14-SSOP	.72	.54	.41
SN74LVC02ADBR	296-8432-2-ND	Quad 2-Input NOR Gate *NEW!*	14-SSOP	478.00/2,000		
SN74LVC02APWR	296-8434-1-ND	Quad 2-Input NOR Gate *NEW!*	14-TSSOP	.72	.54	.41
SN74LVC02APWR	296-8434-2-ND	Quad 2-Input NOR Gate *NEW!*	14-TSSOP	478.00/2,000		
SN74LVC04AD	296-1218-5-ND	Hex Inverter	14-SOP	.72	.54	.41
SN74LVC04ADR	296-1218-1-ND	Hex Inverter	14-SOP	.96	.72	.54
SN74LVC04ADR	296-1218-2-ND	Hex Inverter	14-SOP	780.00/2,500		
SN74LVC04ADBR	296-1217-1-ND	Hex Inverter	14-SSOP	.72	.54	.41
SN74LVC04ADBR	296-1217-2-ND	Hex Inverter	14-SSOP	478.00/2,000		
SN74LVC04ADGVR	296-8435-1-ND	Hex Inverter *NEW!*	14-TVSOP	.92	.69	.52
SN74LVC04ADGVR	296-8435-2-ND	Hex Inverter *NEW!*	14-TVSOP	612.00/2,000		
SN74LVC04APWR	296-1219-1-ND	Hex Inverter	14-TSSOP	.72	.54	.41
SN74LVC04APWR	296-1219-2-ND	Hex Inverter	14-TSSOP	478.00/2,000		
SN74LVC06AD	296-1696-5-ND	Hex Inverter Buffer/Driver with OD	14-SOP	.75	.63	.50
SN74LVC06ADGVR	296-8436-1-ND	Hex Inverter Buffer/Driver with OD *NEW!*	14-TVSOP	.90	.75	.60
SN74LVC06ADGVR	296-8436-2-ND	Hex Inverter Buffer/Driver with OD *NEW!*	14-TVSOP	798.00/2,000		
SN74LVC06APWR	296-8437-1-ND	Hex Inverter Buffer/Driver with OD *NEW!*	14-TSSOP	.75	.63	.50
SN74LVC06APWR	296-8437-2-ND	Hex Inverter Buffer/Driver with OD *NEW!*	14-TSSOP	666.00/2,000		
SN74LVC07AD	296-8441-5-ND	Hex Buffer/Driver with OD *NEW!*	14-SOP	.75	.63	.50
SN74LVC07ADR	296-8441-1-ND	Hex Buffer/Driver with OD *NEW!*	14-SOP	.81	.68	.54
SN74LVC07ADR	296-8441-2-ND	Hex Buffer/Driver with OD *NEW!*	14-SOP	877.50/2,500		
SN74LVC07ADBR	296-8439-1-ND	Hex Buffer/Driver with OD *NEW!*	14-SSOP	.75	.63	.50
SN74LVC07ADBR	296-8439-2-ND	Hex Buffer/Driver with OD *NEW!*	14-SSOP	666.00/2,000		
SN74LVC07ADGVR	296-8440-1-ND	Hex Buffer/Driver with OD *NEW!*	14-TVSOP	.90	.75	.60
SN74LVC07ADGVR	296-8440-2-ND	Hex Buffer/Driver with OD *NEW!*	14-TVSOP	798.00/2,000		
SN74LVC07APWR	296-8442-1-ND	Hex Buffer/Driver with OD *NEW!*	14-TSSOP	.75	.63	.50
SN74LVC07APWR	296-8442-2-ND	Hex Buffer/Driver with OD *NEW!*	14-TSSOP	666.00/2,000		
SN74LVC08AD	296-1697-5-ND	Quad 2-Input AND Gate	14-SOP	.72	.54	.41
SN74LVC08ADR	296-1697-2-ND	Quad 2-Input AND Gate *NEW!*	14-SOP	780.00/2,500		
SN74LVC08ADBR	296-1220-1-ND	Quad 2-Input AND Gate	14-SSOP	.72	.54	.41
SN74LVC08ADBR	296-1220-2-ND	Quad 2-Input AND Gate	14-SSOP	478.00/2,000		
SN74LVC08APWR	296-1221-1-ND	Quad 2-Input AND Gate	14-TSSOP	.72	.54	.41
SN74LVC08APWR	296-1221-2-ND	Quad 2-Input AND Gate	14-TSSOP	478.00/2,000		
SN74LVC10AD	296-8443-5-ND	Triple 3-Input NAND Gate *NEW!*	14-SOP	.72	.54	.41
SN74LVC10ADBR	296-8444-1-ND	Triple 3-Input NAND Gate *NEW!*	14-SSOP	.72	.54	.41
SN74LVC10ADBR	296-8444-2-ND	Triple 3-Input NAND Gate *NEW!*	14-SSOP	478.00/2,000		
SN74LVC10APWR	296-8445-1-ND	Triple 3-Input NAND Gate *NEW!*	14-TSSOP	.72	.54	.41
SN74LVC10APWR	296-8445-2-ND	Triple 3-Input NAND Gate *NEW!*	14-TSSOP	478.00/2,000		
SN74LVC14AD	296-1699-5-ND	Hex Schmitt-Trigger Inverter	14-SOP	.92	.69	.52
SN74LVC14ADR	296-1699-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SOP	877.50/2,500		
SN74LVC14ADBR	296-8463-1-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SSOP	.92	.69	.52
SN74LVC14ADBR	296-8463-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-SSOP	612.00/2,000		
SN74LVC14ADGVR	296-8464-1-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TVSOP	.84	.70	.56
SN74LVC14ADGVR	296-8464-2-ND	Hex Schmitt-Trigger Inverter *NEW!*	14-TVSOP	744.00/2,000		
SN74LVC14APWR	296-1224-1-ND	Hex Schmitt-Trigger Inverter	14-TSSOP	.92	.69	.52
SN74LVC14APWR	296-1224-2-ND	Hex Schmitt-Trigger Inverter	14-TSSOP	612.00/2,000		
SN74LVC32ADBR	296-1234-1-ND	Quad 2-Input OR Gate	14-SSOP	.72	.54	.41
SN74LVC32ADBR	296-1234-2-ND	Quad 2-Input OR Gate	14-SSOP	478.00/2,000		
SN74LVC32ADR	296-1235-1-ND	Quad 2-Input OR Gate	14-SOP	.88	.66	.50
SN74LVC32ADR	296-1235-2-ND	Quad 2-Input OR Gate	14-SOP	715.00/2,500		
SN74LVC32APWR	296-1236-1-ND	Quad 2-Input OR Gate	14-TSSOP	.72	.54	.41
SN74LVC32APWR	296-1236-2-ND	Quad 2-Input OR Gate	14-TSSOP	478.00/2,000		
SN74LVC74AD	296-1240-5-ND	Tri-State Dual D-Type Flip-Flop	14-SOP	.88	.66	.50
SN74LVC74ADR	296-1240-1-ND	Tri-State Dual D-Type Flip-Flop	14-SOP	.78	.65	.52
SN74LVC74ADR	296-1240-2-ND	Tri-State Dual D-Type Flip-Flop	14-SOP	845.00/2,500		
SN74LVC74ADBR	296-1239-1-ND	Tri-State Dual D-Type Flip-Flop	14-SSOP	.88	.66	.50
SN74LVC74ADBR	296-1239-2-ND	Tri-State Dual D-Type Flip-Flop	14-SSOP	586.00/2,000		
SN74LVC74APWR	296-1241-1-ND	Tri-State Dual D-Type Flip-Flop	14-TSSOP	.88	.66	.50
SN74LVC74APWR	296-1241-2-ND	Tri-State Dual D-Type Flip-Flop	14-TSSOP	586.00/2,000		
SN74LVC86AD	296-8561-5-ND	Quad 2-Input EX-OR Gate *NEW!*	14-SOP	.96	.72	.54
SN74LVC86ADBR	296-8562-1-ND	Quad 2-Input EX-OR Gate *NEW!*	14-SSOP	.96	.72	.54
SN74LVC86ADBR	296-8562-2-ND	Quad 2-Input EX-OR Gate *NEW!*	14-SSOP	638.00/2,000		
SN74LVC86APWR	296-1242-1-ND	Quad 2-Input EX-OR Gate	14-TSSOP	.96	.72	.54
SN74LVC86APWR	296-1242-2-ND	Quad 2-Input EX-OR Gate	14-TSSOP	638.00/2,000		
SN74LVC112AD	296-8449-5-ND	Dual Neg-Edge-Trig JK Flip-Flop with Clear/Preset *NEW!*	16-SOP	.90	.75	.60
SN74LVC112ADR	296-8449-1-ND	Dual Neg-Edge-Trig JK Flip-Flop with Clear/Preset *NEW!*	16-SOP	1.08	.90	.72
SN74LVC112ADR	296-8449-2-ND	Dual Neg-Edge-Trig JK Flip-Flop with Clear/Preset *NEW!*	16-SOP	1170.00/2,500		
SN74LVC112ADBR	296-8447-1-ND	Dual Neg-Edge-Trig JK Flip-Flop with Clear/Preset *NEW!*	16-SSOP	.90	.75	.60
SN74LVC112ADBR	296-8447-2-ND	Dual Neg-Edge-Trig JK Flip-Flop with Clear/Preset *NEW!*	16-SSOP	798.00/2,000		
SN74LVC112ADGVR	296-8448-1-ND	Dual Neg-Edge-Trig JK Flip-Flop with Clear/Preset *NEW!*	16-TVSOP	1.05	.88	.70
SN74LVC112ADGVR	296-8448-2-ND	Dual Neg-Edge-Trig JK Flip-Flop with Clear/Preset *NEW!*	16-TVSOP	932.00/2,000		
SN74LVC112APWR	296-8450-1-ND	Dual Neg-Edge-Trig JK Flip-Flop with Clear/Preset *NEW!*	16-TSSOP	.90	.75	.60
SN74LVC112APWR	296-8450-2-ND	Dual Neg-Edge-Trig JK Flip-Flop with Clear/Preset *NEW!*	16-TSSOP	798.00/2,000		
SN74LVC125AD	296-8453-5-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SOP	.90	.75	.60
SN74LVC125ADR	296-8453-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SOP	1.08	.90	.72
SN74LVC125ADR	296-8453-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SOP	1170.00/2,500		
SN74LVC125ADBR	296-8452-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SSOP	.90	.75	.60
SN74LVC125ADBR	296-8452-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SSOP	798.00/2,000		
SN74LVC125APWR	296-1222-1-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	.90	.75	.60
SN74LVC125APWR	296-1222-2-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	798.00/2,000		
SN74LVC126AD	296-8457-5-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SOP	.90	.75	.60

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVC126ADR	296-8457-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SOP	1.08	.90	.72
SN74LVC126ADR	296-8457-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SOP	1170.00/2,500		
SN74LVC126ADBR	296-8455-1-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SSOP	.90	.75	.60
SN74LVC126ADBR	296-8455-2-ND	Tri-State Quad Bus Buffer Gate *NEW!*	14-SSOP	798.00/2,000		
SN74LVC126ADGVR	296-8456-1-ND	Tri-St. Quad Bus Buffer Gate *NEW!*	14-TVSOP	1.05	.88	.70
SN74LVC126ADGVR	296-8456-2-ND	Tri-St. Quad Bus Buffer Gate *NEW!*	14-TVSOP	932.00/2,000		
SN74LVC126APWR	296-8458-1-ND	Tri-St. Quad Bus Buffer Gate *NEW!*	14-TSSOP	.90	.75	.60
SN74LVC126APWR	296-8458-2-ND	Tri-St. Quad Bus Buffer Gate *NEW!*	14-TSSOP	798.00/2,000		
SN74LVC138AD	296-8459-5-ND	3-8 Decoder/Demultiplexer *NEW!*	16-SOP	.90	.75	.60
SN74LVC138ADBR	296-8460-1-ND	3-8 Decoder/Demultiplexer *NEW!*	16-SSOP	.90	.75	.60
SN74LVC138ADBR	296-8460-2-ND	3-8 Decoder/Demultiplexer *NEW!*	16-SSOP	798.00/2,000		
SN74LVC138APWR	296-1223-1-ND	3-8 Decoder/Demultiplexer	16-TSSOP	.90	.75	.60
SN74LVC138APWR	296-1223-2-ND	3-8 Decoder/Demultiplexer	16-TSSOP	798.00/2,000		
SN74LVC139AD	296-1698-5-ND	Dual 2-4 Decoder/Demultiplexer	16-SOP	.75	.63	.50
SN74LVC139ADBR	296-8461-1-ND	Dual 2-4 Decoder/Demux. *NEW!*	16-SSOP	.75	.63	.50
SN74LVC139ADBR	296-8461-2-ND	Dual 2-4 Decoder/Demux. *NEW!*	16-SSOP	666.00/2,000		
SN74LVC139APWR	296-8462-1-ND	Dual 2-4 Decoder/Demux. *NEW!*	16-TSSOP	.75	.63	.50
SN74LVC139APWR	296-8462-2-ND	Dual 2-4 Decoder/Demux. *NEW!*	16-TSSOP	666.00/2,000		
SN74LVC157AD	296-1700-5-ND	Quad 2-1 Data Selector/Multiplexer	16-SOP	.90	.75	.60
SN74LVC157ADBR	296-8465-1-ND	Quad 2-1 Data Selector/Mux. *NEW!*	16-SSOP	.90	.75	.60
SN74LVC157ADBR	296-8465-2-ND	Quad 2-1 Data Selector/Mux. *NEW!*	16-SSOP	798.00/2,000		
SN74LVC157APWR	296-1225-1-ND	Quad 2-1 Data Selector/Multiplexer	16-TSSOP	.90	.75	.60
SN74LVC157APWR	296-1225-2-ND	Quad 2-1 Data Selector/Multiplexer	16-TSSOP	798.00/2,000		
SN74LVC240ADBR	296-8494-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	1.05	.88	.70
SN74LVC240ADBR	296-8494-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	932.00/2,000		
SN74LVC240ADGVR	296-8495-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TVSOP	1.35	1.13	.90
SN74LVC240ADGVR	296-8495-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TVSOP	1198.00/2,000		
SN74LVC240ADW	296-8496-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1.05	.88	.70
SN74LVC240ADWR	296-8496-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1090.00/2,000		
SN74LVC240APWR	296-8498-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	1.05	.88	.70
SN74LVC240APWR	296-8498-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	932.00/2,000		
SN74LVC244ADBR	296-8499-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	1.05	.88	.70
SN74LVC244ADBR	296-8499-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	932.00/2,000		
SN74LVC244ADGVR	296-8500-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TVSOP	1.35	1.13	.90
SN74LVC244ADGVR	296-8500-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TVSOP	1198.00/2,000		
SN74LVC244ADWR	296-1229-1-ND	Tri-State Octal Buffer/Driver	20-SOP	1.23	1.03	.82
SN74LVC244ADWR	296-1229-2-ND	Tri-State Octal Buffer/Driver	20-SOP	1090.00/2,000		
SN74LVC244AN	296-8501-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-Dip	1.35	1.13	.90
SN74LVC244APWR	296-1230-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	1.05	.88	.70
SN74LVC244APWR	296-1230-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	932.00/2,000		
SN74LVC245ADBR	296-1231-1-ND	Tri-State Octal Bus Transceiver	20-SSOP	1.05	.88	.70
SN74LVC245ADBR	296-1231-2-ND	Tri-State Octal Bus Transceiver	20-SSOP	932.00/2,000		
SN74LVC245ADGVR	296-8502-1-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TVSOP	1.35	1.13	.90
SN74LVC245ADGVR	296-8502-2-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TVSOP	1198.00/2,000		
SN74LVC245ADW	296-1232-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	1.05	.88	.70
SN74LVC245ADWR	296-1232-1-ND	Tri-State Octal Bus Transceiver	20-SOP	1.23	1.03	.82
SN74LVC245AN	296-8503-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-Dip	1.05	.88	.70
SN74LVC245APWR	296-1233-1-ND	Tri-State Octal Bus Transceiver	20-TSSOP	1.05	.88	.70
SN74LVC245APWR	296-1233-2-ND	Tri-State Octal Bus Transceiver	20-TSSOP	932.00/2,000		
SN74LVC257AD	296-8504-5-ND	Tri-State Quad 2-1 Data Selector/Multiplexer *NEW!*	16-SOP	1.05	.88	.70
SN74LVC257ADR	296-8504-2-ND	Tri-State Quad 2-1 Data Selector/Multiplexer *NEW!*	16-SOP	1267.50/2,500		
SN74LVC257APWR	296-8506-1-ND	Tri-State Quad 2-1 Data Selector/Multiplexer *NEW!*	16-TSSOP	1.05	.88	.70
SN74LVC257APWR	296-8506-2-ND	Tri-State Quad 2-1 Data Selector/Multiplexer *NEW!*	16-TSSOP	932.00/2,000		
SN74LVC373ADBR	296-1237-1-ND	Tri-State Octal Transp. D-Type Latch	20-SSOP	1.05	.88	.70
SN74LVC373ADBR	296-1237-2-ND	Tri-State Octal Transp. D-Type Latch	20-SSOP	932.00/2,000		
SN74LVC373ADGVR	296-8510-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TVSOP	1.35	1.13	.90
SN74LVC373ADGVR	296-8510-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TVSOP	1198.00/2,000		
SN74LVC373ADW	296-8511-5-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SOP	1.05	.88	.70
SN74LVC373ADWR	296-8511-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SOP	1090.00/2,000		
SN74LVC373APWR	296-8512-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TSSOP	1.05	.88	.70
SN74LVC373APWR	296-8512-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TSSOP	932.00/2,000		
SN74LVC374ADBR	296-8513-1-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-SSOP	1.05	.88	.70
SN74LVC374ADBR	296-8513-2-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-SSOP	932.00/2,000		
SN74LVC374ADW	296-1701-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	1.05	.88	.70
SN74LVC374APWR	296-1238-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	1.05	.88	.70
SN74LVC374APWR	296-1238-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	932.00/2,000		
SN74LVC540ADBR	296-8516-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	1.05	.88	.70
SN74LVC540ADBR	296-8516-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	932.00/2,000		
SN74LVC540ADW	296-8517-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1.05	.88	.70
SN74LVC540ADWR	296-8517-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1038.00/2,000		
SN74LVC541ADBR	296-8518-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	1.05	.88	.70
SN74LVC541ADBR	296-8518-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	932.00/2,000		
SN74LVC541ADGVR	296-8519-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TVSOP	1.35	1.13	.90
SN74LVC541ADGVR	296-8519-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TVSOP	1198.00/2,000		
SN74LVC541ADW	296-8520-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1.05	.88	.70
SN74LVC541APWR	296-8521-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	1.05	.88	.70
SN74LVC541APWR	296-8521-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	932.00/2,000		
SN74LVC543ADBR	296-8522-1-ND	Tri-State Octal Reg. Transceiver *NEW!*	24-SSOP	1.88	1.50	1.13
SN74LVC543ADBR	296-8522-2-ND	Tri-State Octal Reg. Transceiver *NEW!*	24-SSOP	1950.00/2,000		
SN74LVC543ADW	296-8523-5-ND	Tri-State Octal Reg. Transceiver *NEW!*	24-SOP	1.88	1.50	1.13
SN74LVC543APWR	296-8524-1-ND	Tri-State Octal Reg. Transcvr. *NEW!*	24-TSSOP	1.88	1.50	1.13
SN74LVC543APWR	296-8524-2-ND	Tri-State Octal Reg. Transcvr. *NEW!*	24-TSSOP	1950.00/2,000		
SN74LVC573ADBR	296-8525-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SSOP	1.05	.88	.70
SN74LVC573ADBR	296-8525-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SSOP	932.00/2,000		
SN74LVC573ADGVR	296-8526-1-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TVSOP	1.35	1.13	.90
SN74LVC573ADGVR	296-8526-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TVSOP	1198.00/2,000		
SN74LVC573ADW	296-8527-5-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-SOP	1.05	.88	.70
SN74LVC573AN	296-8528-5-ND	Tri-St. Octal Transp. D-Type Latch *NEW!*	20-Dip	1.05	.88	.70
SN74LVC573APWR	296-8529-2-ND	Tri-State Octal Transparent D-Type Latch *NEW!*	20-TSSOP	932.00/2,000		
SN74LVC574ADBR	296-8530-1-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	1.05	.88	.70
SN74LVC574ADBR	296-8530-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	932.00/2,000		
SN74LVC574ADW	296-8531-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SOP	1.05	.88	.70
SN74LVC574APWR	296-8532-1-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	1.05	.88	.70
SN74LVC574APWR	296-8532-2-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	932.00/2,000		
SN74LVC646ADBR	296-8533-1-ND	Tri-St. Octal Bus Transcvr./Reg. *NEW!*	24-SSOP	2.40	1.92	1.44
SN74LVC646ADBR	296-8533-2-ND	Tri-St. Octal Bus Transcvr./Reg. *NEW!*	24-SSOP	2496.00/2,000		
SN74LVC646ADW	296-8534-5-ND	Tri-St. Octal Bus Transcvr./Reg. *NEW!*	24-SOP	2.40	1.92	1.44
SN74LVC646APWR	296-8535-1-ND	Tri-State Octal Bus Transceiver/Register *NEW!*	24-TSSOP	2.40	1.92	1.44
SN74LVC646APWR	296-8535-2-ND	Tri-State Octal Bus Transceiver/Register *NEW!*	24-TSSOP	2496.00/2,000		
SN74LVC652ADBR	296-8536-1-ND	Tri-St. Octal Bus Transcvr./Reg. *NEW!*	24-SSOP	2.36	1.89	1.47
SN74LVC652ADBR	296-8536-2-ND	Tri-St. Octal Bus Transcvr./Reg. *NEW!*	24-SSOP	2678.00/2,000		
SN74LVC652ADW	296-8537-5-ND	Tri-St. Octal Bus Transcvr./Reg. *NEW!*	24-SOP	2.36	1.89	1.47
SN74LVC652APWR	296-8538-2-ND	Tri-State Octal Bus Transceiver/Register *NEW!*	24-TSSOP	2678.00/2,000		
SN74LVC821ADBR	296-8539-1-ND	Tri-St. 10-Bit Interface Flip-Flop *NEW!*	24-SSOP	1.70	1.36	1.02
SN74LVC821ADBR	296-8539-2-ND	Tri-St. 10-Bit Interface Flip-Flop *NEW!*	24-SSOP	1768.00/2,000		
SN74LVC821ADGVR	296-8540-1-ND	Tri-State 10-Bit Interface Flip-Flop *NEW!*	24-TVSOP	1.95	1.56	1.17
SN74LVC821ADGVR	296-8540-2-ND	Tri-State 10-Bit Interface Flip-Flop *NEW!*	24-TVSOP	2028.00/2,000		
SN74LVC821ADW	296-1703-5-ND	Tri-State 10-Bit Interface Flip-Flop	24-SOP	1.70	1.36	1.02
SN74LVC821APWR	296-8541-1-ND	Tri-State 10-Bit Interface Flip-Flop *NEW!*	24-TSSOP	1.70	1.36	1.02
SN74LVC821APWR	296-8541-2-ND	Tri-State 10-Bit Interface Flip-Flop *NEW!*	24-TSSOP	1768.00/2,000		
SN74LVC823ADBR	296-8542-2-ND	Tri-St. 10-Bit Interface Flip-Flop *NEW!*	24-SSOP	2080.00/2,000		
SN74LVC823ADGVR	296-8543-1-ND	Tri-State 10-Bit Interface Flip-Flop *NEW!*	24-TVSOP	2.25	1.80	1.35
SN74LVC823ADGVR	296-8543-2-ND	Tri-State 10-Bit Interface Flip-Flop *NEW!*	24-TVSOP	2340.00/2,000		
SN74LVC823APWR	296-8544-1-ND	Tri-State 10-Bit Interface Flip-Flop *NEW!*	24-TSSOP	2.00	1.60	1.20
SN74LVC823APWR	296-8544-2-ND	Tri-State 10-Bit Interface Flip-Flop *NEW!*	24-TSSOP	2080.00/2,000		
SN74LVC827ADBR	296-8545-1-ND	Tri-State 10-Bit Buffer/Driver *NEW!*	24-SSOP	2.05	1.64	1.23
SN74LVC827ADBR	296-8545-2-ND	Tri-State 10-Bit Buffer/Driver *NEW!*	24-SSOP	2132.00/2,000		
SN74LVC827ADGVR	296-8546-1-ND	Tri-State 10-Bit Buffer/Driver *NEW!*	24-TVSOP	2.30	1.84	1.38
SN74LVC827ADGVR	296-8546-2-ND	Tri-State 10-Bit Buffer/Driver *NEW!*	24-TVSOP	2392.00/2,000		
SN74LVC827ADW	296-8547-5-ND	Tri-State 10-Bit Buffer/Driver *NEW!*	24-SOP	2.05	1.64	1.23
SN74LVC827APWR	296-8548-1-ND	Tri-State 10-Bit Buffer/Driver *NEW!*	24-TSSOP	2.05	1.64	1.23
SN74LVC827APWR	296-8548-2-ND	Tri-State 10-Bit Buffer/Driver *NEW!*	24-TSSOP	2132.00/2,000		
SN74LVC828APWR	296-8549-1-ND	Tri-State 10-Bit Buffer/Driver *NEW!*	24-TSSOP	2.05	1.64	1.23
SN74LVC828APWR	296-8549-2-ND	Tri-State 10-Bit Buffer/Driver *NEW!*	24-TSSOP	2132.00/2,000		
SN74LVC841ADBR	296-8550-1-ND	Tri-State 10-Bit Interface D-Type Latch *NEW!*	24-SSOP	1.70	1.36	1.02
SN74LVC841ADBR	296-8550-2-ND	Tri-State 10-Bit Interface D-Type Latch *NEW!*	24-SSOP	1768.00/2,000		
SN74LVC841ADGVR	296-8551-1-ND	Tri-State 10-Bit Interface D-Type Latch *NEW!*	24-TVSOP	1.95	1.56	1.17
SN74LVC841ADGVR	296-8551-2-ND	Tri-State 10-Bit Interface D-Type Latch *NEW!*	24-TVSOP	2028.00/2,000		
SN74LVC841ADW	296-8552-5-ND	Tri-State 10-Bit Interface D-Type Latch *NEW!*	24-SOP	1.70	1.36	1.02
SN74LVC841APWR	296-8553-1-ND	Tri-State 10-Bit Interface D-Type Latch *NEW!*	24-TSSOP	1.70	1.36	1.02
SN74LVC841APWR	296-8553-2-ND	Tri-State 10-Bit Interface D-Type Latch *NEW!*	24-TSSOP	1768.00/2,000		
SN74LVC861ADGVR	296-8555-1-ND	Tri-St. 10-Bit Bus Transcvr. *NEW!*	24-TVSOP	2.30	1.84	1.38
SN74LVC861ADGVR	296-8555-2-ND	Tri-St. 10-Bit Bus Transcvr. *NEW!*	24-TVSOP	2392.00/2,000		
SN74LVC861ADW	296-8556-5-ND	Tri-State 10-Bit Bus Transceiver *NEW!*	24-SOP	2.05	1.64	1.23
SN74LVC863ADBR	296-8557-2-ND	Tri-State 9-Bit Bus Transceiver *NEW!*	24-SSOP	2132.00/2,000		
SN74LVC863ADGVR	296-8558-1-ND	Tri-St. 9-Bit Bus Transceiver *NEW!*	24-TVSOP	2.30	1.84	1.38
SN74LVC863ADGVR	296-8558-2-ND	Tri-St. 9-Bit Bus Transceiver *NEW!*	24-TVSOP	2392.00/2,000		
SN74LVC863ADW	296-8559-5-ND	Tri-State 9-Bit Bus Transceiver *NEW!*	24-SOP	2.05	1.64	1.23
SN74LVC863APWR	296-8560-1-ND	Tri-St. 9-Bit Bus Transceiver *NEW!*	24-TSSOP	2.05	1.64	1.23
SN74LVC863APWR	296-8560-2-ND	Tri-St. 9-Bit Bus Transceiver *NEW!*	24-TSSOP	2132.00/2,000		
SN74LVC2244ADBR	296-8489-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	1.20	1.00	.80
SN74LVC2244ADBR	296-8489-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	1064.00/2,000		
SN74LVC2244ADW	296-8490-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1.20	1.00	.80
SN74LVC2244ADWR	296-8490-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1170.00/2,000		
SN74LVC2244APWR	296-8491-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	1064.00/2,000		
SN74LVC2952ADW	296-8507-5-ND	Tri-St. Octal Bus Transcvr./Reg. *NEW!*	24-SOP	2.81	2.25	1.75
SN74LVC2952APWR	296-8508-1-ND	Tri-State Octal Bus Xcvr./Reg. *NEW!*	24-TSSOP	2.81	2.25	1.75
SN74LVC2952APWR	296-8508-2-ND	Tri-State Octal Bus Xcvr./Reg. *NEW!*	24-TSSOP	3188.00/2,000		
SN74LVC4245ADBR	296-8514-1-ND	Tri-State Octal Bus Transceiver 3.3V-5V Shifter *NEW!*	24-SSOP	1.38	1.10	.83
SN74LVC4245ADBR	296-8514-2-ND	Tri-State Octal Bus Transceiver 3.3V-5V Shifter *NEW!*	24-SSOP	1430.00/2,000		
SN74LVC4245ADW	296-8515-5-ND	Tri-State Octal Bus Transceiver 3.3V-5V Shifter *NEW!*	24-SOP	1.38	1.10	.83
SN74LVC16244ADGGR	296-1226-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2.48	1.98	1.54
SN74LVC16244ADGGR	296-1226-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2806.00/2,000		
SN74LVC16244ADGVR	296-8471-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	2.93	2.34	1.82
SN74LVC16244ADGVR	296-8471-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	3316.00/2,000		
SN74LVC16244ADL	296-1227-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	2.48	1.98	1.54
SN74LVC16244ADLR	296-1227-1-ND	16-Bit Buffer/Driver	48-SSOP	2.48	1.98	1.54
SN74LVC16244AGQLR	296-8472-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	56-TVFBGA	3.22	2.58	2.01
SN74LVC16244AGQLR	296-8472-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	56-TVFBGA	1823.00/1,000		
SN74LVC16245ADGGR	296-1228-1-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2.59	2.07	1.61
SN74LVC16245ADGGR	296-1228-2-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2932.00/2,000		
SN74LVC16245ADGVR	296-8473-1-ND	Tri-State 16-Bit Bus Transcvr. *NEW!*	48-TVSOP	3.04	2.43	1.89
SN74LVC16245ADGVR	296-8473-2-ND	Tri-State 16-Bit Bus Transcvr. *NEW!*	48-TVSOP	3442.00/2,000		
SN74LVC16245ADL	296-8474-5-ND	Tri-State 16-Bit Bus Transcvr. *NEW!*	48-SSOP	2.59	2.07	1.61
SN74LVC16245ADLR	296-8474-2-ND	Tri-State 16-Bit Bus Transcvr. *NEW!*	48-SSOP	1466.00/1,000		
SN74LVC32244GKER	296-8509-1-ND	Tri-State 32-Bit Buffer/Driver *NEW!*	96-BGA	5.28	4.23	3.57
SN74LVC32244GKER	296-8509-2-ND	Tri-State 32-Bit Buffer/Driver *NEW!*	96-BGA	3300.00/1,000		
SN74LVC161284DGGR	296-8466-1-ND	Tri-State 19-Bit Bus Interface *NEW!*	48-TSSOP	2.25	1.80	1.35
SN74LVC161284DGGR	296-8466-2-ND	Tri-State 19-Bit Bus Interface *NEW!*	48-TSSOP	2340.00/2,000		

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVC161284DL	296-8467-5-ND	Tri-State 19-Bit Bus Interface *NEW!*	48-SSOP	2.25	1.80	1.35
SN74LVC161284DLR	296-8467-2-ND	Tri-State 19-Bit Bus Interface *NEW!*	48-SSOP	1170.00/1,000		
SN74LVCC3245ADBR	296-8563-1-ND	Tri-State Octal Bus Transceiver with Adj Output Volt *NEW!*	24-SSOP	1.35	1.13	.90
SN74LVCC3245ADBR	296-8563-2-ND	Tri-State Octal Bus Transceiver with Adj Output Volt *NEW!*	24-SSOP	1198.00/2,000		
SN74LVCC3245ADW	296-1704-5-ND	Tri-State Octal Bus Transceiver with Adj Output Volt	24-SOP	1.35	1.13	.90
SN74LVCC3245APWR	296-8564-1-ND	Tri-State Octal Bus Transceiver with Adj Output Volt *NEW!*	24-TSSOP	1.35	1.13	.90
SN74LVCC3245APWR	296-8564-2-ND	Tri-State Octal Bus Transceiver with Adj Output Volt *NEW!*	24-TSSOP	1198.00/2,000		
SN74LVCC4245ADBR	296-8565-2-ND	Tri-State Octal Dual Bus Transceiver with Adj Output Volt *NEW!*	24-SSOP	2470.00/2,000		
SN74LVCC4245ADW	296-8566-5-ND	Tri-State Octal Dual Bus Transceiver with Adj Output Volt *NEW!*	24-SOP	2.38	1.90	1.43
SN74LVCC4245APWR	296-8567-1-ND	Tri-State Octal Dual Bus Transceiver with Adj Output Volt *NEW!*	24-TSSOP	2.38	1.90	1.43
SN74LVCC4245APWR	296-8567-2-ND	Tri-State Octal Dual Bus Transceiver with Adj Output Volt *NEW!*	24-TSSOP	2470.00/2,000		
SN74LVCH244ADBR	296-8607-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	1.20	1.00	.80
SN74LVCH244ADBR	296-8607-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SSOP	1064.00/2,000		
SN74LVCH244ADGVR	296-8608-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TVSOP	1.25	1.00	.75
SN74LVCH244ADGVR	296-8608-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TVSOP	1300.00/2,000		
SN74LVCH244ADW	296-8609-5-ND	Tri-State Octal Buffer/Driver *NEW!*	20-SOP	1.20	1.00	.80
SN74LVCH244APWR	296-8610-1-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	1.20	1.00	.80
SN74LVCH244APWR	296-8610-2-ND	Tri-State Octal Buffer/Driver *NEW!*	20-TSSOP	1064.00/2,000		
SN74LVCH245ADBR	296-8611-1-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SSOP	1.35	1.13	.90
SN74LVCH245ADBR	296-8611-2-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SSOP	1198.00/2,000		
SN74LVCH245ADGVR	296-8612-1-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TVSOP	1.38	1.10	.83
SN74LVCH245ADGVR	296-8612-2-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TVSOP	1430.00/2,000		
SN74LVCH245ADW	296-8613-5-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	1.35	1.13	.90
SN74LVCH245APWR	296-1247-1-ND	Tri-State Octal Bus Transceiver	20-TSSOP	1.35	1.13	.90
SN74LVCH245APWR	296-1247-2-ND	Tri-State Octal Bus Transceiver	20-TSSOP	1198.00/2,000		
SN74LVCH16240ADGGR	296-8571-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2.48	1.98	1.54
SN74LVCH16240ADGGR	296-8571-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2806.00/2,000		
SN74LVCH16240ADL	296-8572-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	2.48	1.98	1.54
SN74LVCH16240ADLR	296-8572-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	1403.00/1,000		
SN74LVCH16244ADGGR	296-8573-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2.48	1.98	1.54
SN74LVCH16244ADGGR	296-8573-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2806.00/2,000		
SN74LVCH16244ADGVR	296-8574-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	3.04	2.43	1.89
SN74LVCH16244ADGVR	296-8574-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	3442.00/2,000		
SN74LVCH16244ADL	296-1243-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	2.48	1.98	1.54
SN74LVCH16244ADLR	296-1243-1-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.48	1.98	1.54
SN74LVCH16244ADLR	296-1243-2-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1403.00/1,000		
SN74LVCH16244AGQLR	296-8578-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	56-TVFBGA	3.22	2.58	2.01
SN74LVCH16244AGQLR	296-8578-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	56-TVFBGA	1823.00/1,000		
SN74LVCH16245ADGGR	296-1244-1-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2.59	2.07	1.61
SN74LVCH16245ADGGR	296-1244-2-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2932.00/2,000		
SN74LVCH16245ADGVR	296-8580-1-ND	Tri-St. 16-Bit Bus Transceiver *NEW!*	48-TVSOP	3.04	2.43	1.89
SN74LVCH16245ADGVR	296-8580-2-ND	Tri-St. 16-Bit Bus Transceiver *NEW!*	48-TVSOP	3442.00/2,000		
SN74LVCH16245ADL	296-1245-5-ND	Tri-St. 16-Bit Bus Transceiver *NEW!*	48-SSOP	2.59	2.07	1.61
SN74LVCH16245ADLR	296-1245-1-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	2.59	2.07	1.61
SN74LVCH16245ADLR	296-1245-2-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	1466.00/1,000		
SN74LVCH16245AGQLR	296-8582-1-ND	Tri-St. 16-Bit Bus Transcvr. *NEW!*	56-TVFBGA	3.36	2.70	2.10
SN74LVCH16245AGQLR	296-8582-2-ND	Tri-St. 16-Bit Bus Transcvr. *NEW!*	56-TVFBGA	1906.00/1,000		
SN74LVCH16373ADGGR	296-8583-2-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	48-TSSOP	2806.00/2,000		
SN74LVCH16373ADGVR	296-8584-1-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	48-TVSOP	2.93	2.34	1.82
SN74LVCH16373ADGVR	296-8584-2-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	48-TVSOP	3316.00/2,000		
SN74LVCH16373ADL	296-8585-5-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	48-SSOP	2.48	1.98	1.54
SN74LVCH16373ADLR	296-8585-2-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	48-SSOP	1403.00/1,000		
SN74LVCH16373AGQLR	296-8586-1-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	56-TVFBGA	3.22	2.58	2.01
SN74LVCH16373AGQLR	296-8586-2-ND	Tri-State 16-Bit Transparent D-Type Latch *NEW!*	56-TVFBGA	1823.00/1,000		
SN74LVCH16374ADGGR	296-8587-1-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-TSSOP	2.48	1.98	1.54
SN74LVCH16374ADGGR	296-8587-2-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-TSSOP	2806.00/2,000		
SN74LVCH16374ADGVR	296-8588-1-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-TVSOP	2.93	2.34	1.82
SN74LVCH16374ADGVR	296-8588-2-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-TVSOP	3316.00/2,000		
SN74LVCH16374ADLR	296-8589-1-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-SSOP	2.48	1.98	1.54
SN74LVCH16374ADLR	296-8589-2-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-SSOP	1403.00/1,000		
SN74LVCH16374AGQLR	296-8590-1-ND	Tri-State 16-Bit D-Type Flip-Flop *NEW!*	56-TVFBGA	3.22	2.58	2.01
SN74LVCH16374AGQLR	296-8590-2-ND	Tri-State 16-Bit D-Type Flip-Flop *NEW!*	56-TVFBGA	1823.00/1,000		
SN74LVCH16540ADGGR	296-8591-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2.48	1.98	1.54
SN74LVCH16540ADGGR	296-8591-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2806.00/2,000		
SN74LVCH16540ADGVR	296-8592-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	2.93	2.34	1.82
SN74LVCH16540ADGVR	296-8592-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	3316.00/2,000		
SN74LVCH16540ADL	296-8593-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	2.48	1.98	1.54
SN74LVCH16541ADGGR	296-8594-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2.48	1.98	1.54
SN74LVCH16541ADGGR	296-8594-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2806.00/2,000		
SN74LVCH16541ADGVR	296-8595-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	2.93	2.34	1.82
SN74LVCH16541ADGVR	296-8595-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	3316.00/2,000		
SN74LVCH16541ADL	296-8596-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	2.48	1.98	1.54
SN74LVCH16543ADGGR	296-1246-1-ND	Tri-State 16-Bit Buffer/Driver	56-TSSOP	3.94	3.15	2.45
SN74LVCH16543ADGGR	296-1246-2-ND	Tri-State 16-Bit Buffer/Driver	56-TSSOP	4462.00/2,000		
SN74LVCH16543ADGVR	296-8597-1-ND	Tri-St. 16-Bit Reg. Transceiver *NEW!*	56-TVSOP	4.39	3.51	2.73
SN74LVCH16543ADGVR	296-8597-2-ND	Tri-St. 16-Bit Reg. Transceiver *NEW!*	56-TVSOP	4972.00/2,000		
SN74LVCH16543ADL	296-8598-5-ND	Tri-St. 16-Bit Reg. Transceiver *NEW!*	56-SSOP	3.94	3.15	2.45
SN74LVCH16543ADLR	296-8598-2-ND	Tri-St. 16-Bit Reg. Transceiver *NEW!*	56-SSOP	2231.00/1,000		
SN74LVCH16646ADGGR	296-8599-1-ND	Tri-St. 16-Bit Txcvr. and Reg. *NEW!*	56-TSSOP	3.38	2.70	2.10
SN74LVCH16646ADGGR	296-8599-2-ND	Tri-St. 16-Bit Txcvr. and Reg. *NEW!*	56-TSSOP	3826.00/2,000		
SN74LVCH16646ADL	296-8600-5-ND	Tri-St. 16-Bit Txcvr. and Reg. *NEW!*	56-SSOP	3.38	2.70	2.10
SN74LVCH16652ADGGR	296-8601-1-ND	Tri-St. 16-Bit Txcvr. and Reg. *NEW!*	56-TSSOP	3.38	2.70	2.10
SN74LVCH16652ADGGR	296-8601-2-ND	Tri-St. 16-Bit Txcvr. and Reg. *NEW!*	56-TSSOP	3826.00/2,000		
SN74LVCH16652ADGVR	296-8602-1-ND	Tri-St. 16-Bit Txcvr. and Reg. *NEW!*	56-TVSOP	3.83	3.06	2.38
SN74LVCH16652ADGVR	296-8602-2-ND	Tri-St. 16-Bit Txcvr. and Reg. *NEW!*	56-TVSOP	4336.00/2,000		
SN74LVCH16652ADL	296-8603-5-ND	Tri-St. 16-Bit Txcvr. and Reg. *NEW!*	56-SSOP	3.38	2.70	2.10
SN74LVCH16901DGGR	296-8604-1-ND	18-Bit Univ. Bus Transceiver with Parity Gen/Checker *NEW!*	64-TSSOP	7.50	6.00	5.07
SN74LVCH16901DGGR	296-8604-2-ND	18-Bit Univ. Bus Transceiver with Parity Gen/Checker *NEW!*	64-TSSOP	9376.00/2,000		
SN74LVCH16952ADGGR	296-8605-1-ND	Tri-St. 16-Bit Reg. Transceiver *NEW!*	56-TSSOP	3.60	2.88	2.24
SN74LVCH16952ADGGR	296-8605-2-ND	Tri-St. 16-Bit Reg. Transceiver *NEW!*	56-TSSOP	4080.00/2,000		
SN74LVCH16952ADL	296-8606-5-ND	Tri-St. 16-Bit Reg. Transceiver *NEW!*	56-SSOP	3.60	2.88	2.24
SN74LVCH32244AGKER	296-8614-1-ND	Tri-State 32-Bit Buffer/Driver *NEW!*	96-BGA	5.40	4.32	3.36
SN74LVCH32244AGKER	296-8614-2-ND	Tri-State 32-Bit Buffer/Driver *NEW!*	96-BGA	3060.00/1,000		
SN74LVCH32245AGKER	296-8615-1-ND	Tri-State 32-Bit Bus Transceiver *NEW!*	96-BGA	5.40	4.32	3.36
SN74LVCH32245AGKER	296-8615-2-ND	Tri-State 32-Bit Bus Transceiver *NEW!*	96-BGA	3060.00/1,000		
SN74LVCH32373AGKER	296-8616-1-ND	Tri-State 32-Bit Transparent D-Type Latch *NEW!*	96-BGA	5.18	4.14	3.22
SN74LVCH32373AGKER	296-8616-2-ND	Tri-State 32-Bit Transparent D-Type Latch *NEW!*	96-BGA	2933.00/1,000		
SN74LVCH32374AGKER	296-8617-1-ND	Tri-State 32-Bit D-Type Flip-Flop *NEW!*	96-BGA	5.18	4.14	3.22
SN74LVCH32374AGKER	296-8617-2-ND	Tri-State 32-Bit D-Type Flip-Flop *NEW!*	96-BGA	2933.00/1,000		
SN74LVCH162244ADL	296-8568-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	2.48	1.98	1.54
SN74LVCH162244ADLR	296-8568-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	1403.00/1,000		
SN74LVCH162244AGR	296-8569-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2.48	1.98	1.54
SN74LVCH162244AGR	296-8569-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2806.00/2,000		
SN74LVCH162244AVR	296-8570-1-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	2.93	2.34	1.82
SN74LVCH162244AVR	296-8570-2-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-TVSOP	3316.00/2,000		
SN74LVCHR16245ALR	296-1248-1-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	2.70	2.16	1.68
SN74LVCHR16245ALR	296-1248-2-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	1530.00/1,000		
SN74LVCHR162245ADL	296-8618-5-ND	Tri-St. 16-Bit Bus Transceiver *NEW!*	48-SSOP	2.70	2.16	1.68
SN74LVCR2245ADBR	296-8621-1-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SSOP	1.38	1.10	.83
SN74LVCR2245ADBR	296-8621-2-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SSOP	1430.00/2,000		
SN74LVCR2245ADGVR	296-8622-1-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TVSOP	1.63	1.30	.98
SN74LVCR2245ADGVR	296-8622-2-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TVSOP	1690.00/2,000		
SN74LVCR2245ADWR	296-8623-1-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	1.43	1.14	.86
SN74LVCR2245ADWR	296-8623-2-ND	Tri-State Octal Bus Transceiver *NEW!*	20-SOP	1482.00/2,000		
SN74LVCR2245APWR	296-8624-1-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TSSOP	1.38	1.10	.83
SN74LVCR2245APWR	296-8624-2-ND	Tri-St. Octal Bus Transceiver *NEW!*	20-TSSOP	1430.00/2,000		
SN74LVCR162245DGGR	296-8619-1-ND	Tri-St. 16-Bit Bus Transceiver *NEW!*	48-TSSOP	2.93	2.34	1.82
SN74LVCR162245DGGR	296-8619-2-ND	Tri-St. 16-Bit Bus Transceiver *NEW!*	48-TSSOP	3316.00/2,000		
SN74LVCR162245DL	296-8620-5-ND	Tri-St. 16-Bit Bus Transceiver *NEW!*	48-SSOP	2.93	2.34	1.82

LVT Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVT125D	296-1249-5-ND	Tri-St. 3.3V ABT Quad Bus Buffer *NEW!*	14-SOP	1.63	1.30	.98
SN74LVT125DR	296-1249-1-ND	Tri-State 3.3V ABT Quad Bus Buffer	14-SOP	1.73	1.38	1.04
SN74LVT125DR	296-1249-2-ND	Tri-State 3.3V ABT Quad Bus Buffer	14-SOP	2207.50/2,500		
SN74LVT125PWR	296-1250-1-ND	Tri-State 3.3V ABT Quad Bus Buffer	14-TSSOP	1.63	1.30	.98
SN74LVT125PWR	296-1250-2-ND	Tri-State 3.3V ABT Quad Bus Buffer	14-TSSOP	1690.00/2,000		
SN74LVT240ADW	296-1706-5-ND	Tri-State 3.3V ABT Octal Buffer/Driver	20-SOP	1.35	1.13	.90
SN74LVT240APWR	296-8647-1-ND	Tri-State 3.3V ABT Octal Buffer/Driver *NEW!*	20-TSSOP	1.35	1.13	.90
SN74LVT240APWR	296-8647-2-ND	Tri-State 3.3V ABT Octal Buffer/Driver *NEW!*	20-TSSOP	1198.00/2,000		
SN74LVT244BDBR	296-8648-1-ND	Tri-State 3.3V ABT Octal Buffer/Driver *NEW!*	20-SSOP	1.35	1.13	.90
SN74LVT244BDBR	296-8648-2-ND	Tri-State 3.3V ABT Octal Buffer/Driver *NEW!*	20-SSOP	1198.00/2,000		
SN74LVT244BDW	296-1707-5-ND	Tri-State 3.3V ABT Octal Buffer/Driver	20-SOP	1.35	1.13	.90
SN74LVT244BPWR	296-8649-1-ND	Tri-State 3.3V ABT Octal Buffer/Driver *NEW!*	20-TSSOP	1.35	1.13	.90
SN74LVT244BPWR	296-8649-2-ND	Tri-State 3.3V ABT Octal Buffer/Driver *NEW!*	20-TSSOP	1198.00/2,000		
SN74LVT245BDBR	296-8650-1-ND	Tri-State 3.3V ABT Octal Bus Transceiver *NEW!*	20-SSOP	1.35	1.13	.90
SN74LVT245BDBR	296-8650-2-ND	Tri-State 3.3V ABT Octal Bus Transceiver *NEW!*	20-SSOP	1198.00/2,000		
SN74LVT245BDW	296-8651-5-ND	Tri-State 3.3V ABT Octal Bus Transceiver *NEW!*	20-SOP	1.35	1.13	.90
SN74LVT245BDWR	296-8651-2-ND	Tri-State 3.3V ABT Octal Bus Transceiver *NEW!*	20-SOP	1304.00/2,000		
SN74LVT245BPWR	296-8652-1-ND	Tri-State 3.3V ABT Octal Bus Transceiver *NEW!*	20-TSSOP	1.35	1.13	.90
SN74LVT245BPWR	296-8652-2-ND	Tri-State 3.3V ABT Octal Bus Transceiver *NEW!*	20-TSSOP	1198.00/2,000		
SN74LVT573DBR	296-8654-1-ND	Tri-State 3.3V ABT Octal D-Type Latch *NEW!*	20-SSOP	2.13	1.70	1.28
SN74LVT573DBR	296-8654-2-ND	Tri-State 3.3V ABT Octal D-Type Latch *NEW!*	20-SSOP	2210.00/2,000		
SN74LVT573DWR	296-1255-1-ND	Tri-State 3.3V ABT Octal D-Type Latch	20-SOP	2.23	1.78	1.34
SN74LVT573DWR	296-1255-2-ND	Tri-State 3.3V ABT Octal D-Type Latch	20-SOP	2314.00/2,000		
SN74LVT574DBR	296-1256-1-ND	Tri-State 3.3V Octal D-Type Flip-Flop	20-SSOP	2.13	1.70	1.28
SN74LVT574DBR	296-1256-2-ND	Tri-State 3.3V Octal D-Type Flip-Flop	20-SSOP	2210.000/2,000		
SN74LVT574PWR	296-1257-1-ND	Tri-State 3.3V Octal D-Type Flip-Flop	20-TSSOP	2.13	1.70	1.28
SN74LVT574PWR	296-1257-2-ND	Tri-State 3.3V Octal D-Type Flip-Flop	20-TSSOP	2210.00/2,000		
SN74LVT8980DW	296-8655-5-ND	Embedded Test-Bus Controller (IEEE STD 1149.1) *NEW!*	24-SOP	15.83	14.25	12.64
SN74LVT8980DWR	296-8655-2-ND	Embedded Test-Bus Controller (IEEE STD 1149.1) *NEW!*	24-SOP	23514.00/2,000		
SN74LVT8996DW	296-8656-5-ND	3.3V 10-Bit Addressable Scan Port Xcvr. (IEEE STD 1149.1) *NEW!*	24-SOP	9.00	7.20	6.08
SN74LVT8996DWR	296-8656-2-ND	3.3V 10-Bit Addressable Scan Port Xcvr. (IEEE STD 1149.1) *NEW!*	24-SOP	11250.00/2,000		
SN74LVT8996PW	296-8657-5-ND	3.3V 10-Bit Addressable Scan Port Xcvr. (IEEE STD 1149.1) *NEW!*	24-TSSOP	9.00	7.20	6.08
SN74LVT8996PWR	296-8657-2-ND	3.3V 10-Bit Addressable Scan Port Xcvr. (IEEE STD 1149.1) *NEW!*	24-TSSOP	11250.00/2,000		
SN74LVT16240DGGR	296-8633-1-ND	Tri-State 3.3V ABT 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2.70	2.16	1.68
SN74LVT16240DGGR	296-8633-2-ND	Tri-State 3.3V ABT 16-Bit Buffer/Driver *NEW!*	48-TSSOP	3060.00/2,000		
SN74LVT16240DLR	296-8634-1-ND	Tri-State 3.3V ABT 16-Bit Buffer/Driver *NEW!*	48-SSOP	2.70	2.16	1.68
SN74LVT16240DLR	296-8634-2-ND	Tri-State 3.3V ABT 16-Bit Buffer/Driver *NEW!*	48-SSOP	1530.00/1,000		
SN74LVT16244BDGGR	296-8635-1-ND	Tri-State 3.3V ABT 16-Bit Buffer/Driver *NEW!*	48-TSSOP	2.70	2.16	1.68
SN74LVT16244BDGGR	296-8635-2-ND	Tri-State 3.3V ABT 16-Bit Buffer/Driver *NEW!*	48-TSSOP	3060.00/2,000		
SN74LVT16244BDGVR	296-8636-1-ND	Tri-State 3.3V ABT 16-Bit Buffer/Driver *NEW!*	48-TVSOP	2.81	2.25	1.75

(Continued)

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVT16244BDGVR	296-8636-2-ND	Tri-State 3.3V ABT 16-Bit Buffer/Driver *NEW!*	48-TVSOP	3188.00/2,000		
SN74LVT16244BDLR	296-8637-1-ND	Tri-State 3.3V ABT 16-Bit Buffer/Driver *NEW!*	48-SSOP	2.70	2.16	1.68
SN74LVT16244BDLR	296-8637-2-ND	Tri-State 3.3V ABT 16-Bit Buffer/Driver *NEW!*	48-SSOP	1530.00/1,000		
SN74LVT16244BGQLR	296-8638-1-ND	Tri-State 3.3V ABT 16-Bit Buffer/Driver *NEW!*	48-TVFBGA	3.51	2.81	2.19
SN74LVT16244BGQLR	296-8638-2-ND	Tri-State 3.3V ABT 16-Bit Buffer/Driver *NEW!*	48-TVFBGA	1989.00/1,000		
SN74LVT16245ADGGR	296-1251-1-ND	Tri-State 3.3V ABT 16-Bit Bus Xcvr.	48-TSSOP	4.05	3.24	2.52
SN74LVT16245ADGGR	296-1251-2-ND	Tri-State 3.3V ABT 16-Bit Bus Xcvr.	48-TSSOP	4590.00/2,000		
SN74LVT16245ADL	296-8639-5-ND	Tri-State 3.3V ABT 16-Bit Bus Transceiver *NEW!*	48-SSOP	4.05	3.24	2.52
SN74LVT16245BDGGR	296-8640-1-ND	Tri-State 3.3V ABT 16-Bit Bus Transceiver *NEW!*	48-TSSOP	2.93	2.34	1.82
SN74LVT16245BDGGR	296-8640-2-ND	Tri-State 3.3V ABT 16-Bit Bus Transceiver *NEW!*	48-TSSOP	3316.00/2,000		
SN74LVT16245BDGVR	296-8641-1-ND	Tri-State 3.3V ABT 16-Bit Bus Transceiver *NEW!*	48-TVSOP	3.04	2.43	1.89
SN74LVT16245BDGVR	296-8641-2-ND	Tri-State 3.3V ABT 16-Bit Bus Transceiver *NEW!*	48-TVSOP	3442.00/2,000		
SN74LVT16245BDLR	296-8642-1-ND	Tri-State 3.3V ABT 16-Bit Bus Transceiver *NEW!*	48-SSOP	3.04	2.43	1.89
SN74LVT16245BDLR	296-8642-2-ND	Tri-State 3.3V ABT 16-Bit Bus Transceiver *NEW!*	48-SSOP	1658.00/1,000		
SN74LVT16245BGQLR	296-8643-1-ND	Tri-State 3.3V ABT 16-Bit Bus Transceiver *NEW!*	48-TVFBGA	3.80	3.05	2.37
SN74LVT16245BGQLR	296-8643-2-ND	Tri-State 3.3V ABT 16-Bit Bus Transceiver *NEW!*	48-TVFBGA	2155.00/1,000		
SN74LVT16500DLR	296-8644-1-ND	Tri-State 3.3V ABT 18-Bit Universal Bus Transceiver *NEW!*	56-SSOP	6.90	5.52	4.66
SN74LVT16500DLR	296-8644-2-ND	Tri-State 3.3V ABT 18-Bit Universal Bus Transceiver *NEW!*	56-SSOP	4313.00/1,000		
SN74LVT16501DGGR	296-1252-1-ND	Tri-State 3.3V ABT 18-Bit Universal Bus Transceiver	56-TSSOP	6.90	5.52	4.66
SN74LVT16501DGGR	296-1252-2-ND	Tri-State 3.3V ABT 18-Bit Universal Bus Transceiver	56-TSSOP	8626.00/2,000		
SN74LVT16543DLR	296-8645-1-ND	Tri-State 3.3V ABT 16-Bit Registered Transceiver *NEW!*	56-SSOP	7.30	5.84	4.93
SN74LVT16543DLR	296-8645-2-ND	Tri-State 3.3V ABT 16-Bit Registered Transceiver *NEW!*	56-SSOP	4563.00/1,000		
SN74LVT16952DGGR	296-1253-1-ND	Tri-State 3.3V ABT 16-Bit Registered Transceiver	56-TSSOP	7.30	5.84	4.93
SN74LVT16952DGGR	296-1253-2-ND	Tri-State 3.3V ABT 16-Bit Registered Transceiver	56-TSSOP	9126.00/2,000		
SN74LVT16952DL	296-1254-5-ND	Tri-State 3.3V ABT 16-Bit Registered Transceiver	56-SSOP	7.30	5.84	4.93
SN74LVT16952DLR	296-1254-2-ND	Tri-State 3.3V ABT 16-Bit Registered Transceiver	56-SSOP	4588.00/1,000		
SN74LVT18512DGGR	296-8646-1-ND	3.3V ABT Scan Test Device w/18-Bit Universal Bus XCVR *NEW!*	64-TSSOP	8.66	7.80	6.92
SN74LVT18512DGGR	296-8646-2-ND	3.3V ABT Scan Test Device w/18-Bit Universal Bus XCVR *NEW!*	64-TSSOP	12844.00/2,000		
SN74LVT32244GKER	296-8653-1-ND	Tri-State 3.3V ABT 32-Bit Buffer/Driver *NEW!*	96-BGA	5.76	4.61	3.89
SN74LVT32244GKER	296-8653-2-ND	Tri-State 3.3V ABT 32-Bit Buffer/Driver *NEW!*	96-BGA	3600.00/1,000		
SN74LVT162240DGGR	296-8625-1-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver *NEW!*	48-TSSOP	2.93	2.34	1.82
SN74LVT162240DGGR	296-8625-2-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver *NEW!*	48-TSSOP	3316.00/2,000		
SN74LVT162240DGVR	296-8626-1-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver *NEW!*	48-TVSOP	3.04	2.43	1.89
SN74LVT162240DGVR	296-8626-2-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver *NEW!*	48-TVSOP	3442.00/2,000		
SN74LVT162240DLR	296-8627-1-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver *NEW!*	48-SSOP	2.93	2.34	1.82
SN74LVT162240DLR	296-8627-2-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver *NEW!*	48-SSOP	1658.00/1,000		
SN74LVT162244ADGGR	296-8628-1-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver *NEW!*	48-TSSOP	2.93	2.34	1.82
SN74LVT162244ADGGR	296-8628-2-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver *NEW!*	48-TSSOP	3316.00/2,000		
SN74LVT162244ADGVR	296-8629-1-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver *NEW!*	48-TVSOP	3.04	2.43	1.89
SN74LVT162244ADGVR	296-8629-2-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver *NEW!*	48-TVSOP	3442.00/2,000		
SN74LVT162244ADLR	296-8630-1-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver *NEW!*	48-SSOP	2.93	2.34	1.82
SN74LVT162244ADLR	296-8630-2-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver *NEW!*	48-SSOP	1658.00/1,000		
SN74LVT162245ADGGR	296-8631-1-ND	Tri-State 3.3V ABT 16-Bit Bus Transceiver *NEW!*	48-TSSOP	2.93	2.34	1.82
SN74LVT162245ADGGR	296-8631-2-ND	Tri-State 3.3V ABT 16-Bit Bus Transceiver *NEW!*	48-TSSOP	3316.00/2,000		
SN74LVT162245ADLR	296-8632-1-ND	Tri-State 3.3V ABT 16-Bit Bus Transceiver *NEW!*	48-SSOP	2.93	2.34	1.82
SN74LVT162245ADLR	296-8632-2-ND	Tri-State 3.3V ABT 16-Bit Bus Transceiver *NEW!*	48-SSOP	1658.00/1,000		
LVTH Family						
SN74LVTH125D	296-1708-5-ND	Tri-State ABT Quad Bus Buffer	14-SOP	1.20	1.00	.80
SN74LVTH125DR	296-1708-2-ND	Tri-State ABT Quad Bus Buffer *NEW!*	14-SOP	1300.00/2,500		
SN74LVTH125DBR	296-8658-1-ND	Tri-State ABT Quad Bus Buffer *NEW!*	14-SSOP	1.20	1.00	.80
SN74LVTH125DBR	296-8658-2-ND	Tri-State ABT Quad Bus Buffer *NEW!*	14-SSOP	1064.00/2,000		
SN74LVTH125DGVR	296-8659-1-ND	Tri-State ABT Quad Bus Buffer *NEW!*	14-TVSOP	1.35	1.13	.90
SN74LVTH125DGVR	296-8659-2-ND	Tri-State ABT Quad Bus Buffer *NEW!*	14-TVSOP	1198.00/2,000		
SN74LVTH125PWR	296-8660-1-ND	Tri-State ABT Quad Bus Buffer *NEW!*	14-TSSOP	1.20	1.00	.80
SN74LVTH125PWR	296-8660-2-ND	Tri-State ABT Quad Bus Buffer *NEW!*	14-TSSOP	1064.00/2,000		
SN74LVTH126DBR	296-8661-1-ND	Tri-State ABT Quad Bus Buffer *NEW!*	14-SSOP	1.20	1.00	.80
SN74LVTH126DBR	296-8661-2-ND	Tri-State ABT Quad Bus Buffer *NEW!*	14-SSOP	1064.00/2,000		
SN74LVTH126DGVR	296-8662-1-ND	Tri-State ABT Quad Bus Buffer *NEW!*	14-TVSOP	1.20	1.00	.80
SN74LVTH126DGVR	296-8662-2-ND	Tri-State ABT Quad Bus Buffer *NEW!*	14-TVSOP	1064.00/2,000		
SN74LVTH126DR	296-8663-1-ND	Tri-State ABT Quad Bus Buffer *NEW!*	14-SOP	1.20	1.00	.80
SN74LVTH126DR	296-8663-2-ND	Tri-State ABT Quad Bus Buffer *NEW!*	14-SOP	1300.00/2,500		
SN74LVTH126PWR	296-8664-1-ND	Tri-State ABT Quad Bus Buffer *NEW!*	14-TSSOP	1.20	1.00	.80
SN74LVTH126PWR	296-8664-2-ND	Tri-State ABT Quad Bus Buffer *NEW!*	14-TSSOP	1064.00/2,000		
SN74LVTH240DBR	296-8706-1-ND	Tri-St. ABT Octal Buffer/Driver *NEW!*	20-SSOP	1.35	1.13	.90
SN74LVTH240DBR	296-8706-2-ND	Tri-St. ABT Octal Buffer/Driver *NEW!*	20-SSOP	1198.00/2,000		
SN74LVTH240DWR	296-8707-1-ND	Tri-State ABT Octal Buffer/Driver *NEW!*	20-SOP	1.47	1.23	.98
SN74LVTH240DWR	296-8707-2-ND	Tri-State ABT Octal Buffer/Driver *NEW!*	20-SOP	1304.00/2,000		
SN74LVTH240PWR	296-8708-1-ND	Tri-St. ABT Octal Buffer/Dvr. *NEW!*	20-TSSOP	1.35	1.13	.90
SN74LVTH240PWR	296-8708-2-ND	Tri-St. ABT Octal Buffer/Dvr. *NEW!*	20-TSSOP	1198.00/2,000		
SN74LVTH241DW	296-1715-5-ND	Tri-State ABT Octal Buffer/Driver	20-SOP	1.35	1.13	.90
SN74LVTH241PWR	296-8709-1-ND	Tri-St. ABT Octal Buffer/Dvr. *NEW!*	20-TSSOP	1.35	1.13	.90
SN74LVTH241PWR	296-8709-2-ND	Tri-St. ABT Octal Buffer/Dvr. *NEW!*	20-TSSOP	1198.00/2,000		
SN74LVTH244ADBR	296-1269-1-ND	Tri-State ABT Octal Buffer/Driver	20-SSOP	1.35	1.13	.90
SN74LVTH244ADBR	296-1269-2-ND	Tri-State ABT Octal Buffer/Driver	20-SSOP	1198.00/2,000		
SN74LVTH244ADW	296-1270-5-ND	Tri-State ABT Octal Buffer/Driver *NEW!*	20-SOP	1.35	1.13	.90
SN74LVTH244ADWR	296-1270-1-ND	Tri-State ABT Octal Buffer/Driver	20-SOP	1.47	1.23	.98
SN74LVTH244ADWR	296-1270-2-ND	Tri-State ABT Octal Buffer/Driver	20-SOP	1304.00/2,000		
SN74LVTH244APWR	296-1271-1-ND	Tri-State ABT Octal Buffer/Driver	20-TSSOP	1.35	1.13	.90
SN74LVTH244APWR	296-1271-2-ND	Tri-State ABT Octal Buffer/Driver	20-TSSOP	1198.00/2,000		
SN74LVTH245ADBR	296-8710-1-ND	Tri-State ABT Octal Bus Xcvr. *NEW!*	20-SSOP	1.35	1.13	.90
SN74LVTH245ADBR	296-8710-2-ND	Tri-State ABT Octal Bus Xcvr. *NEW!*	20-SSOP	1198.00/2,000		
SN74LVTH245ADW	296-8711-5-ND	Tri-State ABT Octal Bus Xcvr. *NEW!*	20-SOP	1.35	1.13	.90
SN74LVTH245ADWR	296-8711-2-ND	Tri-State ABT Octal Bus Xcvr. *NEW!*	20-SOP	1304.00/2,000		
SN74LVTH245APWR	296-1272-1-ND	Tri-State ABT Octal Bus Transceiver	20-TSSOP	1.35	1.13	.90
SN74LVTH245APWR	296-1272-2-ND	Tri-State ABT Octal Bus Transceiver	20-TSSOP	1198.00/2,000		
SN74LVTH273DBR	296-8712-1-ND	ABT Octal D-Type Flip-Flop with Clear *NEW!*	20-SSOP	1.35	1.13	.90
SN74LVTH273DBR	296-8712-2-ND	ABT Octal D-Type Flip-Flop with Clear *NEW!*	20-SSOP	1198.00/2,000		
SN74LVTH273DW	296-8713-5-ND	ABT Octal D-Type Flip-Flop with Clear *NEW!*	20-SOP	1.35	1.13	.90
SN74LVTH273PWR	296-1273-1-ND	ABT Octal D-Type Flip-Flop w/Clear	20-TSSOP	1.35	1.13	.90
SN74LVTH273PWR	296-1273-2-ND	ABT Octal D-Type Flip-Flop w/Clear	20-TSSOP	1198.00/2,000		
SN74LVTH373DBR	296-8718-1-ND	Tri-St. ABT Octal D-Type Latch *NEW!*	20-SSOP	1.35	1.13	.90
SN74LVTH373DBR	296-8718-2-ND	Tri-St. ABT Octal D-Type Latch *NEW!*	20-SSOP	1198.00/2,000		
SN74LVTH373DW	296-8719-5-ND	Tri-State ABT Octal D-Type Latch *NEW!*	20-SOP	1.35	1.13	.90
SN74LVTH373PWR	296-8720-1-ND	Tri-St. ABT Octal D-Type Latch *NEW!*	20-TSSOP	1.35	1.13	.90
SN74LVTH373PWR	296-8720-2-ND	Tri-St. ABT Octal D-Type Latch *NEW!*	20-TSSOP	1198.00/2,000		
SN74LVTH374DBR	296-8721-1-ND	Tri-State ABT Octal D-Type Flip-Flop *NEW!*	20-SSOP	1.35	1.13	.90
SN74LVTH374DBR	296-8721-2-ND	Tri-State ABT Octal D-Type Flip-Flop *NEW!*	20-SSOP	1198.00/2,000		
SN74LVTH374DW	296-8722-5-ND	Tri-St. ABT Octal D-Type Flip-Flop *NEW!*	20-SOP	1.35	1.13	.90
SN74LVTH374DWR	296-8722-2-ND	Tri-St. ABT Octal D-Type Flip-Flop *NEW!*	20-SOP	1304.00/2,000		
SN74LVTH374PWR	296-8723-1-ND	Tri-State ABT Octal D-Type Flip-Flop *NEW!*	20-TSSOP	1.35	1.13	.90
SN74LVTH374PWR	296-8723-2-ND	Tri-State ABT Octal D-Type Flip-Flop *NEW!*	20-TSSOP	1198.00/2,000		
SN74LVTH540DBR	296-8724-1-ND	Tri-State ABT Octal Buffer/Driver *NEW!*	20-SSOP	1.25	1.00	.75
SN74LVTH540DBR	296-8724-2-ND	Tri-State ABT Octal Buffer/Driver *NEW!*	20-SSOP	1300.00/2,000		
SN74LVTH540DW	296-8725-5-ND	Tri-State ABT Octal Buffer/Driver *NEW!*	20-SOP	1.25	1.00	.75
SN74LVTH540PWR	296-8726-1-ND	Tri-St. ABT Octal Buffer/Driver *NEW!*	20-TSSOP	1.25	1.00	.75
SN74LVTH540PWR	296-8726-2-ND	Tri-St. ABT Octal Buffer/Driver *NEW!*	20-TSSOP	1300.00/2,000		
SN74LVTH541DBR	296-8727-1-ND	Tri-State ABT Octal Buffer/Driver *NEW!*	20-SSOP	1.25	1.00	.75
SN74LVTH541DBR	296-8727-2-ND	Tri-State ABT Octal Buffer/Driver *NEW!*	20-SSOP	1300.00/2,000		
SN74LVTH541DW	296-8728-5-ND	Tri-State ABT Octal Buffer/Driver *NEW!*	20-SOP	1.25	1.00	.75
SN74LVTH541PWR	296-8729-1-ND	Tri-St. ABT Octal Buffer/Driver *NEW!*	20-TSSOP	1.25	1.00	.75
SN74LVTH541PWR	296-8729-2-ND	Tri-St. ABT Octal Buffer/Driver *NEW!*	20-TSSOP	1300.00/2,000		
SN74LVTH543DBR	296-8730-1-ND	Tri-State ABT Octal Xcvr./Reg. *NEW!*	24-SSOP	2.25	1.80	1.40
SN74LVTH543DBR	296-8730-2-ND	Tri-State ABT Octal Xcvr./Reg. *NEW!*	24-SSOP	2550.00/2,000		
SN74LVTH543DGVR	296-8731-1-ND	Tri-State ABT Octal Xcvr./Reg. *NEW!*	24-TVSOP	2.48	1.98	1.54
SN74LVTH543DGVR	296-8731-2-ND	Tri-State ABT Octal Xcvr./Reg. *NEW!*	24-TVSOP	2806.00/2,000		
SN74LVTH543DW	296-1717-5-ND	Tri-State ABT Octal Transceiver/Register	24-SOP	2.25	1.80	1.40
SN74LVTH543PWR	296-8732-1-ND	Tri-State ABT Octal Xcvr./Reg. *NEW!*	24-TSSOP	2.25	1.80	1.40
SN74LVTH543PWR	296-8732-2-ND	Tri-State ABT Octal Xcvr./Reg. *NEW!*	24-TSSOP	2550.00/2,000		
SN74LVTH573DBR	296-8733-1-ND	Tri-State ABT Octal D-Type Latch *NEW!*	20-SSOP	1.35	1.13	.90
SN74LVTH573DBR	296-8733-2-ND	Tri-State ABT Octal D-Type Latch *NEW!*	20-SSOP	1198.00/2,000		
SN74LVTH573DW	296-1718-5-ND	Tri-State ABT Octal D-Type Latch	20-SOP	1.35	1.13	.90
SN74LVTH573PWR	296-8734-1-ND	Tri-St. ABT Octal D-Type Latch *NEW!*	20-TSSOP	1.35	1.13	.90
SN74LVTH573PWR	296-8734-2-ND	Tri-St. ABT Octal D-Type Latch *NEW!*	20-TSSOP	1198.00/2,000		
SN74LVTH574DBR	296-8735-1-ND	Tri-State ABT Octal D-Type Flip-Flop *NEW!*	20-SSOP	1.35	1.13	.90
SN74LVTH574DBR	296-8735-2-ND	Tri-State ABT Octal D-Type Flip-Flop *NEW!*	20-SSOP	1198.00/2,000		
SN74LVTH574DW	296-1719-5-ND	Tri-State ABT Octal D-Type Flip-Flop	20-SOP	1.35	1.13	.90
SN74LVTH574DWR	296-1719-2-ND	Tri-State ABT Octal D-Type Flip-Flop *NEW!*	20-SOP	1304.00/2,000		
SN74LVTH574PWR	296-8736-1-ND	Tri-State ABT Octal D-Type Flip-Flop *NEW!*	20-TSSOP	1.35	1.13	.90
SN74LVTH574PWR	296-8736-2-ND	Tri-State ABT Octal D-Type Flip-Flop *NEW!*	20-TSSOP	1198.00/2,000		
SN74LVTH646DBR	296-8737-1-ND	Tri-State ABT Octal Bus Transceiver/Register *NEW!*	24-SSOP	2.25	1.80	1.40
SN74LVTH646DBR	296-8737-2-ND	Tri-State ABT Octal Bus Transceiver/Register *NEW!*	24-SSOP	2550.00/2,000		
SN74LVTH646DW	296-1720-5-ND	Tri-State ABT Octal Bus Xcvr./Register	24-SOP	2.25	1.80	1.40
SN74LVTH646PWR	296-8738-1-ND	Tri-State ABT Octal Bus Transceiver/Register *NEW!*	24-TSSOP	2.25	1.80	1.40
SN74LVTH646PWR	296-8738-2-ND	Tri-State ABT Octal Bus Transceiver/Register *NEW!*	24-TSSOP	2550.00/2,000		
SN74LVTH652DBR	296-8739-2-ND	Tri-State ABT Octal Bus Transceiver/Register *NEW!*	24-SSOP	2550.00/2,000		
SN74LVTH652DW	296-1721-5-ND	Tri-State ABT Octal Bus Xcvr./Register	24-SOP	2.25	1.80	1.40
SN74LVTH652PWR	296-8740-1-ND	Tri-State ABT Octal Bus Transceiver/Register *NEW!*	24-TSSOP	2.25	1.80	1.40
SN74LVTH652PWR	296-8740-2-ND	Tri-State ABT Octal Bus Transceiver/Register *NEW!*	24-TSSOP	2550.00/2,000		
SN74LVTH2245DBR	296-8704-1-ND	Tri-State ABT Octal Bus Xcvr. *NEW!*	20-SSOP	1.35	1.13	.90
SN74LVTH2245DBR	296-8704-2-ND	Tri-State ABT Octal Bus Xcvr. *NEW!*	20-SSOP	1198.00/2,000		
SN74LVTH2245DW	296-1714-5-ND	Tri-State ABT Octal Bus Transceiver	20-SOP	1.35	1.13	.90
SN74LVTH2245PWR	296-8705-1-ND	Tri-State ABT Octal Bus Xcvr. *NEW!*	20-TSSOP	1.35	1.13	.90
SN74LVTH2245PWR	296-8705-2-ND	Tri-State ABT Octal Bus Xcvr. *NEW!*	20-TSSOP	1198.00/2,000		
SN74LVTH2952DBR	296-8714-1-ND	Tri-State ABT Octal Bus Transceiver/Register *NEW!*	24-SSOP	2.38	1.90	1.43
SN74LVTH2952DBR	296-8714-2-ND	Tri-State ABT Octal Bus Transceiver/Register *NEW!*	24-SSOP	2470.00/2,000		

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TEXAS INSTRUMENTS DIGITAL LOGIC *(Continued)*

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVTH2952DW	296-1716-5-ND	Tri-State ABT Octal Bus Xcvr./Register	24-SOP	2.38	1.90	1.43
SN74LVTH2952PWR	296-8715-1-ND	Tri-State ABT Octal Bus Transceiver/Register *NEW!*	24-TSSOP	2.38	1.90	1.43
SN74LVTH2952PWR	296-8715-2-ND	Tri-State ABT Octal Bus Transceiver/Register *NEW!*	24-TSSOP	2470.00/2,000		
SN74LVTH16240DGGR	296-8674-1-ND	Tri-St. ABT 16-Bit Buffer/Dvr. *NEW!*	48-TSSOP	2.70	2.16	1.68
SN74LVTH16240DGGR	296-8674-2-ND	Tri-St. ABT 16-Bit Buffer/Dvr. *NEW!*	48-TSSOP	3060.00/2,000		
SN74LVTH16240DL	296-8675-5-ND	Tri-St. ABT 16-Bit Buffer/Dvr. *NEW!*	48-SSOP	2.70	2.16	1.68
SN74LVTH16241DGGR	296-8676-1-ND	Tri-St. ABT 16-Bit Buffer/Dvr. *NEW!*	48-TSSOP	2.70	2.16	1.68
SN74LVTH16241DGGR	296-8676-2-ND	Tri-St. ABT 16-Bit Buffer/Dvr. *NEW!*	48-TSSOP	3060.00/2,000		
SN74LVTH16244ADGGR	296-1260-1-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TSSOP	2.70	2.16	1.68
SN74LVTH16244ADGGR	296-1260-2-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TSSOP	3060.00/2,000		
SN74LVTH16244ADGVR	296-8677-1-ND	Tri-St. ABT 16-Bit Buffer/Dvr. *NEW!*	48-TVSOP	3.60	2.88	2.24
SN74LVTH16244ADGVR	296-8677-2-ND	Tri-St. ABT 16-Bit Buffer/Dvr. *NEW!*	48-TVSOP	4080.00/2,000		
SN74LVTH16244ADL	296-1261-5-ND	Tri-State ABT 16-Bit Buffer/Driver	48-SSOP	2.70	2.16	1.68
SN74LVTH16244ADLR	296-1261-2-ND	Tri-State ABT 16-Bit Buffer/Driver	48-SSOP	1530.00/1,000		
SN74LVTH16244AGQLR	296-8678-1-ND	Tri-St. ABT 16-Bit Buffer/Dvr. *NEW!*	48-TVFBGA	3.51	2.81	2.19
SN74LVTH16244AGQLR	296-8678-2-ND	Tri-St. ABT 16-Bit Buffer/Dvr. *NEW!*	48-TVFBGA	1989.00/1,000		
SN74LVTH16245ADGGR	296-1262-1-ND	Tri-State ABT 16-Bit Bus Transceiver	48-TSSOP	2.93	2.34	1.82
SN74LVTH16245ADGGR	296-1262-2-ND	Tri-State ABT 16-Bit Bus Transceiver	48-TSSOP	3316.00/2,000		
SN74LVTH16245ADGVR	296-8679-1-ND	Tri-State ABT 16-Bit Bus Xcvr. *NEW!*	48-TVSOP	3.83	3.06	2.38
SN74LVTH16245ADGVR	296-8679-2-ND	Tri-State ABT 16-Bit Bus Xcvr. *NEW!*	48-TVSOP	4336.00/2,000		
SN74LVTH16245ADL	296-8680-5-ND	Tri-State ABT 16-Bit Bus Xcvr. *NEW!*	48-SSOP	2.93	2.34	1.82
SN74LVTH16245ADLR	296-8680-2-ND	Tri-State ABT 16-Bit Bus Xcvr. *NEW!*	48-SSOP	1658.00/1,000		
SN74LVTH16245AGQLR	296-8681-1-ND	Tri-State ABT 16-Bit Bus Xcvr. *NEW!*	48-TVFBGA	3.80	3.05	2.37
SN74LVTH16245AGQLR	296-8681-2-ND	Tri-State ABT 16-Bit Bus Xcvr. *NEW!*	48-TVFBGA	2155.00/1,000		
SN74LVTH162541DGGR	296-8682-1-ND	Tri-St. ABT 16-Bit Buffer/Dvr. *NEW!*	48-TSSOP	4.05	3.24	2.52
SN74LVTH162541DGGR	296-8682-2-ND	Tri-St. ABT 16-Bit Buffer/Dvr. *NEW!*	48-TSSOP	4590.00/2,000		
SN74LVTH162541DL	296-8683-5-ND	Tri-St. ABT 16-Bit Buffer/Dvr. *NEW!*	48-SSOP	4.05	3.24	2.52
SN74LVTH16373DGGR	296-8684-1-ND	Tri-State ABT 16-Bit D-Type Latch *NEW!*	48-TSSOP	2.70	2.16	1.68
SN74LVTH16373DGGR	296-8684-2-ND	Tri-State ABT 16-Bit D-Type Latch *NEW!*	48-TSSOP	3060.00/2,000		
SN74LVTH16373DL	296-8685-5-ND	Tri-State ABT 16-Bit D-Type Latch *NEW!*	48-SSOP	2.70	2.16	1.68
SN74LVTH16373DLR	296-8685-2-ND	Tri-State ABT 16-Bit D-Type Latch *NEW!*	48-SSOP	1530.00/1,000		
SN74LVTH16373GQLR	296-8686-1-ND	Tri-State ABT 16-Bit D-Type Latch *NEW!*	48-TVFBGA	3.51	2.81	2.19
SN74LVTH16373GQLR	296-8686-2-ND	Tri-State ABT 16-Bit D-Type Latch *NEW!*	48-TVFBGA	1989.00/1,000		
SN74LVTH16374DGGR	296-1263-1-ND	Tri-State ABT 16-Bit D-Type Flip-Flop	48-TSSOP	2.70	2.16	1.68
SN74LVTH16374DGGR	296-1263-2-ND	Tri-State ABT 16-Bit D-Type Flip-Flop	48-TSSOP	3060.00/2,000		
SN74LVTH16374DLR	296-1264-1-ND	Tri-State ABT 16-Bit D-Type Flip-Flop	48-SSOP	2.70	2.16	1.68
SN74LVTH16374DLR	296-1264-2-ND	Tri-State ABT 16-Bit D-Type Flip-Flop	48-SSOP	1530.00/1,000		
SN74LVTH16374GQLR	296-8688-1-ND	Tri-State ABT 16-Bit D-Type Flip-Flop *NEW!*	48-TVFBGA	3.51	2.81	2.19
SN74LVTH16374GQLR	296-8688-2-ND	Tri-State ABT 16-Bit D-Type Flip-Flop *NEW!*	48-TVFBGA	1989.00/1,000		
SN74LVTH16374DL	296-1264-5-ND	Tri-State ABT 16-Bit D-Type Flip-Flop *NEW!*	48-SSOP	2.70	2.16	1.68
SN74LVTH16500DGGR	296-8689-1-ND	Tri-State ABT 18-Bit Univ. Bus Transceiver *NEW!*	56-TSSOP	4.73	3.78	2.94
SN74LVTH16500DGGR	296-8689-2-ND	Tri-State ABT 18-Bit Univ. Bus Transceiver *NEW!*	56-TSSOP	5356.00/2,000		
SN74LVTH16500DL	296-8690-5-ND	Tri-State ABT 18-Bit Univ. Bus Transceiver *NEW!*	56-SSOP	4.73	3.78	2.94
SN74LVTH16501DGGR	296-8691-1-ND	Tri-State ABT 18-Bit Univ. Bus Transceiver *NEW!*	56-TSSOP	4.73	3.78	2.94
SN74LVTH16501DGGR	296-8691-2-ND	Tri-State ABT 18-Bit Univ. Bus Transceiver *NEW!*	56-TSSOP	5356.00/2,000		
SN74LVTH16501DL	296-8692-5-ND	Tri-State ABT 18-Bit Univ. Bus Transceiver *NEW!*	56-SSOP	4.73	3.78	2.94
SN74LVTH16541DGGR	296-8693-1-ND	Tri-St. ABT 16-Bit Buffer/Dvr. *NEW!*	48-TSSOP	3.60	2.88	2.24
SN74LVTH16541DGGR	296-8693-2-ND	Tri-St. ABT 16-Bit Buffer/Dvr. *NEW!*	48-TSSOP	4080.00/2,000		
SN74LVTH16543DGGR	296-1265-1-ND	Tri-State ABT 16-Bit Xcvr./Register	56-TSSOP	5.50	4.40	3.72
SN74LVTH16543DGGR	296-1265-2-ND	Tri-State ABT 16-Bit Xcvr./Register	56-TSSOP	6876.00/2,000		
SN74LVTH16543DL	296-1710-5-ND	Tri-State ABT 16-Bit Xcvr./Register	56-SSOP	5.50	4.40	3.72
SN74LVTH16543DLR	296-1710-2-ND	Tri-State ABT 16-Bit Xcvr./Reg. *NEW!*	56-SSOP	3438.00/1,000		
SN74LVTH16646DGGR	296-1266-1-ND	Tri-State ABT 16-Bit Xcvr./Register	56-TSSOP	5.70	4.56	3.85
SN74LVTH16646DGGR	296-1266-2-ND	Tri-State ABT 16-Bit Xcvr./Register	56-TSSOP	7126.00/2,000		
SN74LVTH16646DL	296-1711-5-ND	Tri-State ABT 16-Bit Xcvr./Register	56-SSOP	5.70	4.56	3.85
SN74LVTH16652DGGR	296-1267-1-ND	Tri-State ABT 16-Bit Xcvr./Register	56-TSSOP	5.70	4.56	3.85
SN74LVTH16652DGGR	296-1267-2-ND	Tri-State ABT 16-Bit Xcvr./Register	56-TSSOP	7126.00/2,000		
SN74LVTH16652DL	296-1712-5-ND	Tri-State ABT 16-Bit Xcvr./Register	56-SSOP	5.70	4.56	3.85
SN74LVTH16835DGGR	296-8694-1-ND	Tri-State ABT 18-Bit Univ. Bus Driver *NEW!*	56-TSSOP	3.83	3.06	2.38
SN74LVTH16835DGGR	296-8694-2-ND	Tri-State ABT 18-Bit Univ. Bus Driver *NEW!*	56-TSSOP	4336.00/2,000		
SN74LVTH16835DL	296-8695-5-ND	Tri-State ABT 18-Bit Univ. Bus Driver *NEW!*	56-SSOP	3.83	3.06	2.38
SN74LVTH16952DGGR	296-1268-1-ND	Tri-State ABT 16-Bit Xcvr./Register	56-TSSOP	6.10	4.88	4.12
SN74LVTH16952DGGR	296-1268-2-ND	Tri-State ABT 16-Bit Xcvr./Register	56-TSSOP	7626.00/2,000		
SN74LVTH16952DL	296-1713-5-ND	Tri-State ABT 16-Bit Xcvr./Register	56-SSOP	6.10	4.88	4.12
SN74LVTH18502APM	296-8699-ND	ABT Scan Test Device with 18-Bit Transceiver *NEW!*	64-TQFP	13.33	12.00	10.64
SN74LVTH18504APM	296-8700-ND	ABT Scan Test Device with 20-Bit Transceiver *NEW!*	64-TQFP	13.66	12.30	10.91
SN74LVTH18512DGGR	296-8701-1-ND	ABT Scan Test Device with 18-Bit Transceiver *NEW!*	64-TSSOP	8.66	7.80	6.92
SN74LVTH18512DGGR	296-8701-2-ND	ABT Scan Test Device with 18-Bit Transceiver *NEW!*	64-TSSOP	12844.00/2,000		
SN74LVTH18514DGGR	296-8702-1-ND	ABT Scan Test Device with 20-Bit Transceiver *NEW!*	64-TSSOP	9.00	8.10	7.19
SN74LVTH18514DGGR	296-8702-2-ND	ABT Scan Test Device with 20-Bit Transceiver *NEW!*	64-TSSOP	13338.00/2,000		
SN74LVTH18646APM	296-8703-ND	ABT Scan Test Device w/18-Bit Transceiver and Registers *NEW!*	64-TQFP	13.66	12.30	10.91
SN74LVTH32244GKER	296-8716-1-ND	Tri-State ABT 32-Bit Buffer/Driver *NEW!*	96-BGA	5.76	4.61	3.89
SN74LVTH32244GKER	296-8716-2-ND	Tri-State ABT 32-Bit Buffer/Driver *NEW!*	96-BGA	3600.00/1,000		
SN74LVTH32373GKER	296-8717-1-ND	Tri-State ABT 32-Bit D-Type Latch *NEW!*	96-BGA	5.76	4.61	3.89
SN74LVTH32373GKER	296-8717-2-ND	Tri-State ABT 32-Bit D-Type Latch *NEW!*	96-BGA	3600.00/1,000		
SN74LVTH162240DGGR	296-8665-1-ND	Tri-St. ABT 16-Bit Buffer/Dvr. *NEW!*	48-TSSOP	2.70	2.16	1.68
SN74LVTH162240DGGR	296-8665-2-ND	Tri-St. ABT 16-Bit Buffer/Dvr. *NEW!*	48-TSSOP	3060.00/2,000		
SN74LVTH162240DL	296-8666-5-ND	Tri-St. ABT 16-Bit Buffer/Dvr. *NEW!*	48-SSOP	2.70	2.16	1.68
SN74LVTH162241DGGR	296-8667-1-ND	Tri-St. ABT 16-Bit Buffer/Dvr. *NEW!*	48-TSSOP	2.70	2.16	1.68
SN74LVTH162241DGGR	296-8667-2-ND	Tri-St. ABT 16-Bit Buffer/Dvr. *NEW!*	48-TSSOP	3060.00/2,000		
SN74LVTH162244DGGR	296-1258-1-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TSSOP	3.26	2.61	2.03
SN74LVTH162244DGGR	296-1258-2-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TSSOP	3698.00/2,000		
SN74LVTH162244DL	296-1259-5-ND	Tri-St. ABT 16-Bit Buffer/Dvr. *NEW!*	48-SSOP	3.26	2.61	2.03
SN74LVTH162244DLR	296-1259-1-ND	Tri-State ABT 16-Bit Buffer/Driver	48-SSOP	3.26	2.61	2.03
SN74LVTH162244DLR	296-1259-2-ND	Tri-State ABT 16-Bit Buffer/Driver	48-SSOP	1849.00/1,000		
SN74LVTH162245DGGR	296-8669-1-ND	Tri-State ABT 16-Bit Bus Xcvr. *NEW!*	48-TSSOP	2.93	2.34	1.82
SN74LVTH162245DGGR	296-8669-2-ND	Tri-State ABT 16-Bit Bus Xcvr. *NEW!*	48-TSSOP	3316.00/2,000		
SN74LVTH162245DL	296-8670-5-ND	Tri-State ABT 16-Bit Bus Xcvr. *NEW!*	48-SSOP	2.93	2.34	1.82
SN74LVTH162245DLR	296-8670-2-ND	Tri-State ABT 16-Bit Bus Xcvr. *NEW!*	48-SSOP	1658.00/1,000		
SN74LVTH162373DGGR	296-8671-1-ND	Tri-State ABT 16-Bit D-Type Latch *NEW!*	48-TSSOP	3.38	2.70	2.10
SN74LVTH162373DGGR	296-8671-2-ND	Tri-State ABT 16-Bit D-Type Latch *NEW!*	48-TSSOP	3826.00/2,000		
SN74LVTH162374DGGR	296-8672-1-ND	Tri-State ABT 16-Bit D-Type Flip-Flop *NEW!*	48-TSSOP	3.38	2.70	2.10
SN74LVTH162374DGGR	296-8672-2-ND	Tri-State ABT 16-Bit D-Type Flip-Flop *NEW!*	48-TSSOP	3826.00/2,000		
SN74LVTH162374DL	296-8673-5-ND	Tri-State ABT 16-Bit D-Type Flip-Flop *NEW!*	48-SSOP	3.38	2.70	2.10
SN74LVTH182502APM	296-8696-ND	ABT Scan Test Device with 18-Bit Transceiver *NEW!*	64-TQFP	13.33	12.00	10.64
SN74LVTH182504APM	296-8697-ND	ABT Scan Test Device with 20-Bit Transceiver *NEW!*	64-TQFP	13.66	12.30	10.91
SN74LVTH182512DGGR	296-8698-1-ND	ABT Scan Test Device with 18-Bit Transceiver *NEW!*	64-TSSOP	9.00	8.10	7.19
SN74LVTH182512DGGR	296-8698-2-ND	ABT Scan Test Device with 18-Bit Transceiver *NEW!*	64-TSSOP	13338.00/2,000		

74S Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74S00D	296-3847-5-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	.96	.72	.54
SN74S00DR	296-3847-2-ND	Quad 2-Input NAND Gate *NEW!*	14-SOP	845.00/2,500		
SN74S00N	296-1723-5-ND	Quad 2-Input NAND Gate	14-Dip	.92	.69	.52
SN74S04N	296-1724-5-ND	Hex Inverter	14-Dip	.92	.69	.52
SN74S05D	296-3848-5-ND	Hex Inverter with OC Output *NEW!*	14-SOP	.96	.72	.54
SN74S08N	296-1725-5-ND	Quad 2-Input AND Gate	14-Dip	.92	.69	.52
SN74S32DR	296-3869-1-ND	Quad 2-Input OR Gate *NEW!*	14-SOP	.78	.65	.52
SN74S32DR	296-3869-2-ND	Quad 2-Input OR Gate *NEW!*	14-SOP	845.00/2,500		
SN74S32N	296-1731-5-ND	Quad 2-Input OR Gate	14-Dip	.92	.69	.52
SN74S37DR	296-3871-1-ND	Quad 2-Input NAND Buffer *NEW!*	14-SOP	1.14	.95	.76
SN74S37DR	296-3871-2-ND	Quad 2-Input NAND Buffer *NEW!*	14-SOP	1235.00/2,500		
SN74S38D	296-1732-5-ND	Quad 2-Input NAND with OC	14-SOP	1.08	.90	.72
SN74S38N	296-1733-5-ND	Quad 2-Input NAND with OC	14-Dip	1.02	.85	.68
SN74S51D	296-3872-5-ND	Dual 2-wide 2-In/3-In AND-NOR Gate *NEW!*	14-SOP	.96	.72	.54
SN74S51DR	296-3872-2-ND	Dual 2-wide 2-In/3-In AND-NOR Gate *NEW!*	14-SOP	845.00/2,500		
SN74S51N	296-3873-5-ND	Dual 2-wide 2-In/3-In AND-NOR Gate *NEW!*	14-Dip	.92	.69	.52
SN74S74N	296-1734-5-ND	Dual D-Type Flip-Flop	14-Dip	.81	.68	.54
SN74S85N	296-3874-5-ND	4-Bit Binary OR BCD Magnitude Comparator *NEW!*	16-Dip	1.63	1.30	.98
SN74S112AN	296-3855-5-ND	Dual J-K Neg. Flip-Flop with Clear *NEW!*	16-Dip	.93	.78	.62
SN74S124N	296-3856-5-ND	Dual Voltage-Controlled Oscillator *NEW!*	16-Dip	3.94	3.15	2.45
SN74S133D	296-3857-5-ND	13-Input NAND Gate *NEW!*	16-SOP	.84	.70	.56
SN74S138AD	296-3859-5-ND	3-8 Line Decoder/Demultiplexer *NEW!*	16-SOP	1.29	1.08	.86
SN74S138AN	296-1728-5-ND	3-8 Line Decoder/Demultiplexer	16-Dip	1.26	1.05	.84
SN74S140D	296-3860-5-ND	Dual 4-In NAND 50Ω Line Driver *NEW!*	14-SOP	1.33	1.06	.80
SN74S140N	296-3861-5-ND	Dual 4-In NAND 50Ω Line Driver *NEW!*	14-Dip	1.33	1.06	.80
SN74S151N	296-3862-5-ND	8-1 Line Data Selector/Multiplexer *NEW!*	16-Dip	1.26	1.05	.84
SN74S163N	296-3863-5-ND	4-Bit Binary Counter *NEW!*	16-Dip	2.75	2.20	1.71
SN74S175N	296-3864-5-ND	Quad D-Type Flip-Flop w/Clear *NEW!*	16-Dip	1.26	1.05	.84
SN74S240DW	296-3865-5-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOP	2.03	1.62	1.22
SN74S240DWR	296-3865-2-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOP	2106.00/2,000		
SN74S240N	296-1729-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	2.03	1.62	1.22
SN74S241N	296-3866-5-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-Dip	2.03	1.62	1.22
SN74S244N	296-1730-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	2.03	1.62	1.22
SN74S260DR	296-3867-1-ND	Dual 5-Input NOR Gate *NEW!*	14-SOP	.87	.73	.58
SN74S260DR	296-3867-2-ND	Dual 5-Input NOR Gate *NEW!*	14-SOP	942.50/2,500		
SN74S374N	296-3870-5-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-Dip	2.03	1.62	1.22
SN74S1051D	296-3849-5-ND	12-Bit Termination Array *NEW!*	16-SOP	1.88	1.50	1.13
SN74S1051N	296-3850-5-ND	12-Bit Termination Array *NEW!*	16-Dip	1.88	1.50	1.13
SN74S1052DWR	296-3851-1-ND	16-Bit Termination Array *NEW!*	20-SOP	1.93	1.54	1.16
SN74S1052DWR	296-3851-2-ND	16-Bit Termination Array *NEW!*	20-SOP	2002.00/2,000		
SN74S1052N	296-3852-5-ND	16-Bit Termination Array *NEW!*	20-Dip	1.88	1.50	1.13
SN74S1053DW	296-1726-5-ND	16-Bit Termination Array	20-SOP	1.88	1.50	1.13
SN74S1053N	296-1727-5-ND	16-Bit Termination Array	20-Dip	1.88	1.50	1.13

Future Bus Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74FB1653PCA	296-1559-5-ND	17-Bit Universal Storage Transceiver	100-HLQFP	15.83	14.25	12.64
SN74FB2031RC	296-1560-5-ND	9-Bit Address/Data Transceiver	52-QFP	8.91	8.03	7.12
SN74FB2033ARC	296-1561-5-ND	8-Bit Transceiver	52-QFP	9.16	8.25	7.32

GTL Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74GTL1655DGGR	296-1184-1-ND	16-Bit Universal Bus Transceiver	64-TSSOP	10.33	9.30	8.25
SN74GTL16616DGGR	296-1185-1-ND	17-Bit Universal Bus Transceiver	56-TSSOP	9.70	7.76	6.55
SN74GTL16622ADGGR	296-1186-1-ND	18-Bit Bus Transceiver	64-TSSOP	9.08	8.18	7.25

SSTL Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74SSTL16847DGGR	296-1274-1-ND	20-Bit SSTL-3 Buffer	64-TSSOP	7.50	6.00	5.07

TEXAS INSTRUMENTS AMPLIFIERS

Op Amps / General Purpose BiFET Op Amps

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LF347BD	296-7136-5-ND	Quad WB JFET Op Amp *NEW!*	14-SOP	2.81	2.25	1.75
LF347D	296-7137-5-ND	Quad JFET Op Amp *NEW!*	14-SOP	1.75	1.40	1.05
LF347DR	296-7137-2-ND	Quad JFET Op Amp *NEW!*	14-SOP	2305.00/2,500		
LF347N	296-7138-5-ND	Quad JFET Op Amp *NEW!*	14-Dip	1.75	1.40	1.05
LF353D	296-1384-5-ND	Dual JFET-Input Operational Amp	8-SOP	.68	.51	.39
LF353P	296-7139-5-ND	Dual JFET Op Amp *NEW!*	8-Dip	.68	.51	.39
LF412CD	296-7140-5-ND	Dual JFET Op Amp *NEW!*	8-SOP	2.00	1.60	1.20
LF412CP	296-7141-5-ND	Dual JFET Op Amp *NEW!*	8-Dip	2.00	1.60	1.20
TL022CP	296-7142-5-ND	Dual Low Power Op Amp *NEW!*	8-Dip	1.70	1.36	1.02
TL031CD	296-7143-5-ND	Precision LP JFET Op Amp *NEW!*	8-SOP	1.02	.85	.68

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TL031CP	296-7144-5-ND	Precision LP JFET Op Amp *NEW!*	8-Dip	1.02	.85	.68
TL032ACD	296-7145-5-ND	Dual Low Power Enhanced JFET Op Amp *NEW!*	8-SOP	2.48	1.98	1.54
TL032ACP	296-7146-5-ND	Dual Low Power Enhanced JFET Op Amp *NEW!*	8-Dip	2.48	1.98	1.54
TL032AIP	296-7147-5-ND	Dual LP Enhanced JFET Op Amp *NEW!*	8-Dip	2.70	2.16	1.68
TL032CD	296-7148-5-ND	Dual Prec. LP Enh. JFET Op Amp *NEW!*	8-SOP	1.38	1.15	.92
TL032CDR	296-7148-2-ND	Dual Prec. LP Enh. JFET Op Amp *NEW!*	8-SOP	1560.00/2,500		
TL032CP	296-7149-5-ND	Dual Prec. LP Enh. JFET Op Amp *NEW!*	8-Dip	1.38	1.15	.92
TL032ID	296-7150-5-ND	Dual Prec. LP Enh. JFET Op Amp *NEW!*	8-SOP	1.25	1.00	.75
TL032IP	296-7151-5-ND	Dual Prec. LP Enh. JFET Op Amp *NEW!*	8-Dip	1.25	1.00	.75
TL034ACD	296-7152-5-ND	Quad LP Enh. JFET Op Amp *NEW!*	14-SOP	4.57	3.66	2.85
TL034AID	296-7153-5-ND	Quad LP Enh. JFET Op Amp *NEW!*	14-SOP	4.97	3.98	3.10
TL034AIDR	296-7153-2-ND	Quad LP Enh. JFET Op Amp *NEW!*	14-SOP	7025.00/2,500		
TL034CD	296-7154-5-ND	Quad Prec. LP Enh. JFET Op Amp *NEW!*	14-SOP	1.75	1.40	1.05
TL034CN	296-7155-5-ND	Quad Prec. LP Enh. JFET Op Amp *NEW!*	14-Dip	1.75	1.40	1.05
TL034ID	296-7157-5-ND	Quad Prec. LP Enh. JFET Op Amp *NEW!*	14-SOP	2.00	1.60	1.20
TL051CD	296-7159-5-ND	Precision Enh. JFET Op Amp *NEW!*	8-SOP	1.32	1.10	.88
TL052ACD	296-7160-5-ND	Dual Prec. Enh. JFET Op Amp *NEW!*	8-SOP	5.18	4.15	3.50
TL052ACP	296-7161-5-ND	Dual Prec. Enh. JFET Op Amp *NEW!*	8-Dip	4.66	3.73	2.90
TL052CD	296-7162-5-ND	Dual Prec. Enh. JFET Op Amp *NEW!*	8-SOP	1.73	1.38	1.04
TL052CP	296-7163-5-ND	Dual Prec. Enh. JFET Op Amp *NEW!*	8-Dip	1.73	1.38	1.04
TL052ID	296-7164-5-ND	Dual Prec. Enh. JFET Op Amp *NEW!*	8-SOP	1.88	1.50	1.13
TL054ACD	296-7165-5-ND	Quad Prec. Enh. JFET Op Amp *NEW!*	14-SOP	6.48	5.19	4.38
TL054ACN	296-7166-5-ND	Quad Prec. Enh. JFET Op Amp *NEW!*	14-Dip	5.58	4.47	3.77
TL054AIDR	296-7167-1-ND	Quad Prec. Enh. JFET Op Amp *NEW!*	14-SOP	6.92	5.54	4.68
TL054AIDR	296-7167-2-ND	Quad Prec. Enh. JFET Op Amp *NEW!*	14-SOP	10725.00/2,500		
TL054CD	296-7168-5-ND	Quad Prec. Enh. JFET Op Amp *NEW!*	14-SOP	1.90	1.52	1.14
TL054CN	296-7169-5-ND	Quad Prec. Enh. JFET Op Amp *NEW!*	14-Dip	1.90	1.52	1.14
TL061ACD	296-7171-5-ND	Low Power JFET Op Amp *NEW!*	8-SOP	1.05	.88	.70
TL061ACP	296-7172-5-ND	Low Power JFET Op Amp *NEW!*	8-Dip	1.05	.88	.70
TL061ID	296-7173-5-ND	Low Power JFET Op Amp *NEW!*	8-SOP	1.05	.88	.70
TL061IP	296-7174-5-ND	Low Power JFET Op Amp *NEW!*	8-Dip	1.05	.88	.70
TL062ACD	296-7175-5-ND	Low Power JFET Op Amp *NEW!*	8-SOP	1.11	.93	.74
TL062BCP	296-7176-5-ND	Low Power JFET Op Amp *NEW!*	8-Dip	1.75	1.40	1.05
TL062CD	296-1281-5-ND	Low Power JFET Op Amp *NEW!*	8-SOP	.92	.69	.52
TL062CDR	296-1281-1-ND	Dual JFET-Input Operational Amp	8-SOP	.75	.63	.50
TL062CP	296-1771-5-ND	Dual JFET-Input Operational Amp	8-Dip	.92	.69	.52
TL062CPWR	296-7178-1-ND	Dual Low Power JFET Op Amp *NEW!*	8-TSSOP	.92	.69	.52
TL062CPWR	296-7178-2-ND	Dual Low Power JFET Op Amp *NEW!*	8-TSSOP	612.00/2,000		
TL062ID	296-7179-5-ND	Dual Low Power JFET Op Amp *NEW!*	8-SOP	1.11	.93	.74
TL064ACD	296-7180-5-ND	Low Power JFET Op Amp *NEW!*	14-SOP	1.20	1.00	.80
TL064BCD	296-7181-5-ND	Low Power JFET Op Amp *NEW!*	14-SOP	2.00	1.60	1.20
TL064CD	296-1772-5-ND	Quad JFET-Input Operational Amp	14-SOP	.90	.75	.60
TL064CN	296-1773-5-ND	Quad JFET-Input Operational Amp	14-Dip	.90	.75	.60
TL064CPWR	296-7182-1-ND	Quad LP JFET Op Amp *NEW!*	14-TSSOP	.90	.75	.60
TL064CPWR	296-7182-2-ND	Quad LP JFET Op Amp *NEW!*	14-TSSOP	798.00/2,000		
TL064ID	296-7183-5-ND	Quad Low Power JFET Op Amp *NEW!*	14-SOP	1.20	1.00	.80
TL064IN	296-7184-5-ND	Quad Low Power JFET Op Amp *NEW!*	14-Dip	1.20	1.00	.80
TL071ACP	296-7185-5-ND	Low Noise JFET Op Amp *NEW!*	8-Dip	1.05	.88	.70
TL071CP	296-7186-5-ND	Low Noise JFET Op Amp *NEW!*	8-Dip	.84	.63	.48
TL071ID	296-7187-5-ND	Low Noise JFET Op Amp *NEW!*	8-SOP	1.05	.88	.70
TL071IP	296-7188-5-ND	Low Noise JFET Op Amp *NEW!*	8-Dip	1.05	.88	.70
TL072ACD	296-7189-5-ND	Low Noise JFET Op Amp *NEW!*	8-SOP	1.11	.93	.74
TL072ACP	296-7190-5-ND	Low Noise JFET Op Amp *NEW!*	8-Dip	1.11	.93	.74
TL072BCD	296-7191-5-ND	Low Noise JFET Op Amp *NEW!*	8-SOP	1.75	1.40	1.05
TL072BCP	296-7192-5-ND	Low Noise JFET Op Amp *NEW!*	8-Dip	1.75	1.40	1.05
TL072CD	296-1282-5-ND	Dual JFET-Input Operational Amp	8-SOP	.92	.69	.52
TL072CDR	296-1282-2-ND	Dual JFET-Input Operational Amp	8-SOP	812.50/2,500		
TL072CP	296-1775-5-ND	Dual JFET-Input Operational Amp	8-Dip	.92	.69	.52
TL072CPWR	296-7193-1-ND	Dual Low Noise JFET Op Amp *NEW!*	8-TSSOP	.75	.63	.50
TL072CPWR	296-7193-2-ND	Dual Low Noise JFET Op Amp *NEW!*	8-TSSOP	666.00/2,000		
TL072ID	296-7194-5-ND	Dual Low Noise JFET Op Amp *NEW!*	8-SOP	1.11	.93	.74
TL072IDR	296-7194-2-ND	Dual Low Noise JFET Op Amp *NEW!*	8-SOP	1267.50/2,500		
TL074ACD	296-7195-5-ND	Low Noise JFET Op Amp *NEW!*	14-SOP	1.20	1.00	.80
TL074BCD	296-7196-5-ND	Low Noise JFET Op Amp *NEW!*	14-SOP	2.05	1.64	1.23
TL074BCN	296-7197-5-ND	Low Noise JFET Op Amp *NEW!*	14-Dip	2.13	1.70	1.28
TL074CD	296-1283-5-ND	Quad JFET-Input Operational Amp	14-SOP	.90	.75	.60
TL074CDR	296-1283-2-ND	Quad JFET-Input Operational Amp	14-SOP	1040.00/2,500		
TL074CN	296-1777-5-ND	Quad JFET-Input Operational Amp	14-Dip	.90	.75	.60
TL074CPWR	296-7198-1-ND	Quad Low Noise JFET Op Amp *NEW!*	14-TSSOP	.90	.75	.60
TL074CPWR	296-7198-2-ND	Quad Low Noise JFET Op Amp *NEW!*	14-TSSOP	798.00/2,000		
TL074ID	296-7199-5-ND	Quad Low Noise JFET Op Amp *NEW!*	14-SOP	1.20	1.00	.80
TL074IN	296-7200-5-ND	Quad Low Noise JFET Op Amp *NEW!*	14-Dip	1.20	1.00	.80
TL081ACD	296-7201-5-ND	JFET Op Amp *NEW!*	8-SOP	1.05	.88	.70
TL081ACP	296-7202-5-ND	JFET Op Amp *NEW!*	8-Dip	1.05	.88	.70
TL081CP	296-7203-5-ND	JFET Op Amp *NEW!*	8-Dip	.79	.63	.49
TL081ID	296-7204-5-ND	JFET Op Amp *NEW!*	8-SOP	1.05	.88	.70
TL082ACD	296-7205-5-ND	JFET Op Amp *NEW!*	8-SOP	1.11	.93	.74
TL082ACP	296-1778-5-ND	Dual JFET-Input Operational Amp	8-Dip	1.05	.88	.70
TL082BCD	296-7206-5-ND	JFET Op Amp *NEW!*	8-SOP	1.75	1.40	1.05
TL082BCP	296-7207-5-ND	JFET Op Amp *NEW!*	8-Dip	1.75	1.40	1.05
TL082CD	296-1284-5-ND	Dual JFET-Input Operational Amp	8-SOP	.92	.69	.52
TL082CDR	296-1284-2-ND	Dual JFET-Input Operational Amp	8-SOP	812.50/2,500		
TL082CP	296-1780-5-ND	Dual JFET-Input Operational Amp	8-Dip	.92	.69	.52
TL082CPWR	296-7208-1-ND	Dual JFET Op Amp *NEW!*	8-TSSOP	.92	.69	.52
TL082CPWR	296-7208-2-ND	Dual JFET Op Amp *NEW!*	8-TSSOP	612.00/2,000		
TL082ID	296-7209-5-ND	Dual JFET Op Amp *NEW!*	8-SOP	1.05	.88	.70
TL082IP	296-1781-5-ND	Dual JFET-Input Operational Amp	8-Dip	1.05	.88	.70
TL084ACD	296-7210-5-ND	JFET Op Amp *NEW!*	14-SOP	1.20	1.00	.80
TL084ACN	296-1782-5-ND	Quad JFET-Input Operational Amp	14-Dip	1.20	1.00	.80
TL084CD	296-1285-5-ND	Quad JFET-Input Operational Amp	14-SOP	.90	.75	.60
TL084CDR	296-1285-2-ND	Quad JFET-Input Operational Amp	14-SOP	1040.00/2,500		
TL084CN	296-1784-5-ND	Quad JFET-Input Operational Amp	14-Dip	.90	.75	.60
TL084CNSR	296-7211-1-ND	Quad JFET Op Amp *NEW!*	14-SOP	1.05	.88	.70
TL084CNSR	296-7211-2-ND	Quad JFET Op Amp *NEW!*	14-SOP	932.00/2,000		
TL084CPWR	296-7212-1-ND	Quad JFET Op Amp *NEW!*	14-TSSOP	.90	.75	.60
TL084CPWR	296-7212-2-ND	Quad JFET Op Amp *NEW!*	14-TSSOP	798.00/2,000		
TL084ID	296-1785-5-ND	Quad JFET-Input Operational Amp	14-SOP	1.20	1.00	.80
TL084IDR	296-1785-2-ND	Quad JFET Op Amp *NEW!*	14-SOP	1365.00/2,500		
TL084IN	296-7213-5-ND	Quad JFET Op Amp *NEW!*	14-Dip	1.20	1.00	.80
TL084QD	296-7214-5-ND	Quad JFET Op Amp *NEW!*	14-SOP	1.26	1.05	.84
TLC070AIP	296-7216-5-ND	High-Output WB Op Amp *NEW!*	8-Dip	1.23	1.03	.82
TLC070CD	296-2413-5-ND	Single-Supply Op Amp	8-SOP	1.14	.95	.76
TLC070CDR	296-2413-2-ND	High-Output WB Op Amp *NEW!*	8-SOP	1235.00/2,500		
TLC070CDGNR	296-7217-1-ND	High-Output WB Op Amp *NEW!*	8-MSOP	1.14	.95	.76
TLC070CDGNR	296-7217-2-ND	High-Output WB Op Amp *NEW!*	8-MSOP	1235.00/2,500		
TLC070IDGNR	296-7218-1-ND	High-Output WB Op Amp *NEW!*	8-MSOP	1.20	1.00	.80
TLC070IDGNR	296-7218-2-ND	High-Output WB Op Amp *NEW!*	8-MSOP	1300.00/2,500		
TLC070IDR	296-7219-1-ND	High-Output WB Op Amp *NEW!*	8-SOP	1.20	1.00	.80
TLC070IDR	296-7219-2-ND	High-Output WB Op Amp *NEW!*	8-SOP	1300.00/2,500		
TLC070IP	296-7220-5-ND	High-Output WB Op Amp *NEW!*	8-Dip	1.20	1.00	.80
TLC071AIP	296-7221-5-ND	High-Output WB Op Amp *NEW!*	8-Dip	1.14	.95	.76
TLC071CD	296-2414-5-ND	Single-Supply Op Amp	8-SOP	1.02	.85	.68
TLC071CDGNR	296-7222-1-ND	High-Output WB Op Amp *NEW!*	8-MSOP	1.14	.95	.76
TLC071CDGNR	296-7222-2-ND	High-Output WB Op Amp *NEW!*	8-MSOP	1235.00/2,500		
TLC071IDGNR	296-7223-1-ND	High-Output WB Op Amp *NEW!*	8-MSOP	1.20	1.00	.80
TLC071IDGNR	296-7223-2-ND	High-Output WB Op Amp *NEW!*	8-MSOP	1300.00/2,500		
TLC071IDR	296-7224-1-ND	High-Output WB Op Amp *NEW!*	8-SOP	1.08	.90	.72
TLC071IDR	296-7224-2-ND	High-Output WB Op Amp *NEW!*	8-SOP	1170.00/2,500		
TLC071IP	296-7225-5-ND	High-Output WB Op Amp *NEW!*	8-Dip	1.08	.90	.72
TLC072AID	296-7226-5-ND	Dual High-Output WB Op Amp *NEW!*	8-SOP	1.43	1.14	.86
TLC072AIP	296-7227-5-ND	Dual High-Output WB Op Amp *NEW!*	8-Dip	1.43	1.14	.86
TLC072CD	296-2415-5-ND	Dual, Single-Supply Op Amp	8-SOP	1.30	1.04	.78
TLC072CDR	296-2415-2-ND	Dual High-Output WB Op Amp *NEW!*	8-SOP	1665.00/2,500		
TLC072CDGNR	296-7228-1-ND	Dual High-Output WB Op Amp *NEW!*	8-MSOP	1.30	1.04	.78
TLC072CDGNR	296-7228-2-ND	Dual High-Output WB Op Amp *NEW!*	8-MSOP	1665.00/2,500		
TLC072CP	296-7229-5-ND	Dual High-Output WB Op Amp *NEW!*	8-Dip	1.30	1.04	.78
TLC072IDGNR	296-7230-1-ND	Dual High-Output WB Op Amp *NEW!*	8-MSOP	1.35	1.08	.81
TLC072IDGNR	296-7230-2-ND	Dual High-Output WB Op Amp *NEW!*	8-MSOP	1727.50/2,500		
TLC072IDR	296-7231-1-ND	Dual High-Output WB Op Amp *NEW!*	8-SOP	1.35	1.08	.81
TLC072IDR	296-7231-2-ND	Dual High-Output WB Op Amp *NEW!*	8-SOP	1727.50/2,500		
TLC072IP	296-7232-5-ND	Dual High-Output WB Op Amp *NEW!*	8-Dip	1.35	1.08	.81
TLC073AID	296-7233-5-ND	Dual High-Output WB Op Amp *NEW!*	14-SOP	1.55	1.24	.93
TLC073CD	296-2416-5-ND	Dual, Single-Supply Op Amp	14-SOP	1.43	1.14	.86
TLC073CDR	296-2416-2-ND	Dual High-Output WB Op Amp *NEW!*	14-SOP	1825.00/2,500		
TLC073CDGQ	296-7234-5-ND	Dual High-Output WB Op Amp *NEW!*	10-MSOP	1.43	1.14	.86
TLC073CN	296-7235-5-ND	Dual High-Output WB Op Amp *NEW!*	14-Dip	1.43	1.14	.86
TLC073ID	296-7236-5-ND	Dual High-Output WB Op Amp *NEW!*	14-SOP	1.48	1.18	.89
TLC073IDR	296-7236-2-ND	Dual High-Output WB Op Amp *NEW!*	14-SOP	1887.50/2,500		
TLC073IDGQR	296-7237-1-ND	Dual High-Output WB Op Amp *NEW!*	10-MSOP	1.48	1.18	.89
TLC073IDGQR	296-7237-2-ND	Dual High-Output WB Op Amp *NEW!*	10-MSOP	1887.50/2,500		
TLC073IN	296-7238-5-ND	Dual High-Output WB Op Amp *NEW!*	14-Dip	1.48	1.18	.89
TLC074AID	296-7239-5-ND	Quad High-Output WB Op Amp *NEW!*	14-SOP	2.00	1.60	1.20
TLC074AIN	296-7240-5-ND	Quad High-Output WB Op Amp *NEW!*	14-Dip	2.00	1.60	1.20
TLC074AIPWP	296-7241-5-ND	Quad Hi-Output WB Op Amp *NEW!*	20-TSSOP	2.08	1.66	1.25
TLC074CD	296-2417-5-ND	Quad, Single-Supply Op Amp	14-SOP	1.80	1.44	1.08
TLC074CDR	296-2417-2-ND	Quad High-Output WB Op Amp *NEW!*	14-SOP	2305.00/2,500		
TLC074CN	296-7242-5-ND	Quad High-Output WB Op Amp *NEW!*	14-Dip	1.80	1.44	1.08
TLC074CPWPR	296-7243-1-ND	Quad Hi-Output WB Op Amp *NEW!*	20-TSSOP	1.90	1.52	1.14
TLC074CPWPR	296-7243-2-ND	Quad Hi-Output WB Op Amp *NEW!*	20-TSSOP	1976.00/2,000		
TLC074IDR	296-7244-1-ND	Quad High-Output WB Op Amp *NEW!*	14-SOP	1.90	1.52	1.14
TLC074IDR	296-7244-2-ND	Quad High-Output WB Op Amp *NEW!*	14-SOP	2432.50/2,500		
TLC074IN	296-7245-5-ND	Quad High-Output WB Op Amp *NEW!*	14-Dip	1.90	1.52	1.14
TLC074IPWP	296-7246-5-ND	Quad Hi-Output WB Op Amp *NEW!*	20-TSSOP	2.00	1.60	1.20
TLC075AID	296-7247-5-ND	Quad High-Output WB Op Amp *NEW!*	16-SOP	2.18	1.74	1.31
TLC075AIN	296-7248-5-ND	Quad High-Output WB Op Amp *NEW!*	16-Dip	2.18	1.74	1.31
TLC075AIPWP	296-7249-5-ND	Quad Hi-Output WB Op Amp *NEW!*	20-TSSOP	2.25	1.80	1.35
TLC075CD	296-2418-5-ND	Quad, Single-Supply Op Amp	16-SOP	2.00	1.60	1.20
TLC075CDR	296-2418-2-ND	Quad High-Output WB Op Amp *NEW!*	16-SOP	2560.00/2,500		
TLC075CN	296-7250-5-ND	Quad High-Output WB Op Amp *NEW!*	16-Dip	2.00	1.60	1.20
TLC075CPWP	296-7251-5-ND	Quad Hi-Output WB Op Amp *NEW!*	20-TSSOP	2.08	1.66	1.25
TLC075IDR	296-7252-1-ND	Quad High-Output WB Op Amp *NEW!*	16-SOP	2.08	1.66	1.25
TLC075IDR	296-7252-2-ND	Quad High-Output WB Op Amp *NEW!*	16-SOP	2655.00/2,500		
TLC075IN	296-7253-5-ND	Quad High-Output WB Op Amp *NEW!*	16-Dip	2.08	1.66	1.25
TLC075IPWP	296-7254-5-ND	Quad Hi-Output WB Op Amp *NEW!*	20-TSSOP	2.18	1.74	1.31
TLC080AIDR	296-7255-1-ND	High-Output WB Op Amp *NEW!*	8-SOP	1.23	1.03	.82
TLC080AIDR	296-7255-2-ND	High-Output WB Op Amp *NEW!*	8-SOP	1332.50/2,500		
TLC080AIP	296-7256-5-ND	High-Output WB Op Amp *NEW!*	8-Dip	1.23	1.03	.82
TLC080CD	296-2419-5-ND	Single-Supply Op Amp	8-SOP	1.14	.95	.76
TLC080CDR	296-2419-2-ND	High-Output WB Op Amp *NEW!*	8-SOP	1235.00/2,500		
TLC080CDGNR	296-7257-1-ND	High-Output WB Op Amp *NEW!*	8-MSOP	1.14	.95	.76
TLC080CDGNR	296-7257-2-ND	High-Output WB Op Amp *NEW!*	8-MSOP	1235.00/2,500		
TLC080IDGNR	296-7258-1-ND	High-Output WB Op Amp *NEW!*	8-MSOP	1.20	1.00	.80
TLC080IDGNR	296-7258-2-ND	High-Output WB Op Amp *NEW!*	8-MSOP	1300.00/2,500		
TLC080IDR	296-7259-1-ND	High-Output WB Op Amp *NEW!*	8-SOP	1.20	1.00	.80
TLC080IDR	296-7259-2-ND	High-Output WB Op Amp *NEW!*	8-SOP	1300.00/2,500		
TLC080IP	296-7260-5-ND	High-Output WB Op Amp *NEW!*	8-Dip	1.20	1.00	.80
TLC081AIP	296-7261-5-ND	High-Output WB Op Amp *NEW!*	8-Dip	1.14	.95	.76
TLC081CD	296-2420-5-ND	Single-Supply Op Amp	8-SOP	1.02	.85	.68
TLC081CDGN	296-7262-5-ND	High-Output WB Op Amp *NEW!*	8-MSOP	1.14	.95	.76
TLC081CDGNR	296-7262-2-ND	High-Output WB Op Amp *NEW!*	8-MSOP	1235.00/2,500		
TLC081IDGNR	296-7263-1-ND	High-Output WB Op Amp *NEW!*	8-MSOP	1.20	1.00	.80
TLC081IDGNR	296-7263-2-ND	High-Output WB Op Amp *NEW!*	8-MSOP	1300.00/2,500		
TLC081IDR	296-7264-1-ND	High-Output WB Op Amp *NEW!*	8-SOP	1.08	.90	.72
TLC081IDR	296-7264-2-ND	High-Output WB Op Amp *NEW!*	8-SOP	1170.00/2,500		
TLC081IP	296-7265-5-ND	High-Output WB Op Amp *NEW!*	8-Dip	1.08	.90	.72
TLC082AIDR	296-7266-1-ND	Dual High-Output WB Op Amp *NEW!*	8-SOP	1.43	1.14	.86
TLC082AIDR	296-7266-2-ND	Dual High-Output WB Op Amp *NEW!*	8-SOP	1825.00/2,500		
TLC082AIP	296-7267-5-ND	Dual High-Output WB Op Amp *NEW!*	8-Dip	1.43	1.14	.86
TLC082CD	296-2421-5-ND	Dual, Single-Supply Op Amp	8-SOP	1.30	1.04	.78
TLC082CDR	296-2421-2-ND	Dual High-Output WB Op Amp *NEW!*	8-SOP	1665.00/2,500		
TLC082CDGNR	296-7268-1-ND	Dual High-Output WB Op Amp *NEW!*	8-MSOP	1.30	1.04	.78
TLC082CDGNR	296-7268-2-ND	Dual High-Output WB Op Amp *NEW!*	8-MSOP	1665.00/2,500		
TLC082CP	296-7269-5-ND	Dual High-Output WB Op Amp *NEW!*	8-Dip	1.30	1.04	.78
TLC082IDGNR	296-7270-1-ND	Dual High-Output WB Op Amp *NEW!*	8-MSOP	1.35	1.08	.81
TLC082IDGNR	296-7270-2-ND	Dual High-Output WB Op Amp *NEW!*	8-MSOP	1727.50/2,500		
TLC082IDR	296-7271-1-ND	Dual High-Output WB Op Amp *NEW!*	8-SOP	1.35	1.08	.81
TLC082IDR	296-7271-2-ND	Dual High-Output WB Op Amp *NEW!*	8-SOP	1727.50/2,500		
TLC082IP	296-7272-5-ND	Dual High-Output WB Op Amp *NEW!*	8-Dip	1.35	1.08	.81
TLC083AID	296-7273-5-ND	Dual High-Output WB Op Amp *NEW!*	14-SOP	1.55	1.24	.93
TLC083AIN	296-7274-5-ND	Dual High-Output WB Op Amp *NEW!*	14-Dip	1.55	1.24	.93
TLC083CD	296-2422-5-ND	Dual, Single-Supply Op Amp	14-SOP	1.43	1.14	.86
TLC083CDR	296-2422-2-ND	Dual High-Output WB Op Amp *NEW!*	14-SOP	1825.00/2,500		
TLC083CDGQR	296-7275-1-ND	Dual High-Output WB Op Amp *NEW!*	10-MSOP	1.43	1.14	.86
TLC083CDGQR	296-7275-2-ND	Dual High-Output WB Op Amp *NEW!*	10-MSOP	1825.00/2,500		
TLC083CN	296-7276-5-ND	Dual High-Output WB Op Amp *NEW!*	14-Dip	1.43	1.14	.86
TLC083ID	296-7277-5-ND	Dual High-Output WB Op Amp *NEW!*	14-SOP	1.48	1.18	.89
TLC083IDGQ	296-7278-5-ND	Dual High-Output WB Op Amp *NEW!*	10-MSOP	1.48	1.18	.89
TLC083IN	296-7279-5-ND	Dual High-Output WB Op Amp *NEW!*	14-Dip	1.48	1.18	.89

(Continued)

★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TLC084AID	296-7280-5-ND	Quad High-Output WB Op Amp *NEW!*	14-SOP	2.00	1.60	1.20
TLC084AIN	296-7281-5-ND	Quad High-Output WB Op Amp *NEW!*	14-Dip	2.00	1.60	1.20
TLC084AIPWP	296-7282-5-ND	Quad Hi-Output WB Op Amp *NEW!*	20-TSSOP	2.08	1.66	1.25
TLC084CD	296-2423-5-ND	Quad Single-Supply Op Amp	14-SOP	1.80	1.44	1.08
TLC084CDR	296-2423-2-ND	Quad High-Output WB Op Amp *NEW!*	14-SOP	2305.00/2,500		
TLC084CN	296-7283-5-ND	Quad High-Output WB Op Amp *NEW!*	14-Dip	1.80	1.44	1.08
TLC084CPWP	296-7285-5-ND	Quad Hi-Output WB Op Amp *NEW!*	20-TSSOP	1.90	1.52	1.14
TLC084CPWPR	296-7285-2-ND	Quad Hi-Output WB Op Amp *NEW!*	20-TSSOP	1976.00/2,000		
TLC084ID	296-7287-5-ND	Quad High-Output WB Op Amp *NEW!*	14-SOP	1.90	1.52	1.14
TLC084IDR	296-7287-2-ND	Quad High-Output WB Op Amp *NEW!*	14-SOP	2432.50/2,500		
TLC084IPWP	296-7288-5-ND	Quad Hi-Output WB Op Amp *NEW!*	20-TSSOP	2.00	1.60	1.20
TLC085AID	296-7289-5-ND	Quad High-Output WB Op Amp *NEW!*	16-SOP	2.18	1.74	1.31
TLC085AIN	296-7290-5-ND	Quad High-Output WB Op Amp *NEW!*	16-Dip	2.18	1.74	1.31
TLC085AIPWP	296-7291-5-ND	Quad Hi-Output WB Op Amp *NEW!*	20-TSSOP	2.25	1.80	1.35
TLC085CD	296-2424-5-ND	Quad Single-Supply Op Amp	16-SOP	2.00	1.60	1.20
TLC085CDR	296-2424-2-ND	Quad High-Output WB Op Amp *NEW!*	16-SOP	2560.00/2,500		
TLC085CN	296-7292-5-ND	Quad High-Output WB Op Amp *NEW!*	16-Dip	2.00	1.60	1.20
TLC085CPWP	296-7293-5-ND	Quad Hi-Output WB Op Amp *NEW!*	20-TSSOP	2.08	1.66	1.25
TLC085IDR	296-7294-1-ND	Quad High-Output WB Op Amp *NEW!*	16-SOP	2.08	1.66	1.25
TLC085IDR	296-7294-2-ND	Quad High-Output WB Op Amp *NEW!*	16-SOP	2655.00/2,500		
TLC085IN	296-7295-5-ND	Quad High-Output WB Op Amp *NEW!*	16-Dip	2.08	1.66	1.25
TLC085IPWP	296-7296-5-ND	Quad Hi-Output WB Op Amp *NEW!*	20-TSSOP	2.18	1.74	1.31

General Purpose Bipolar Op Amps

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LM224AD	296-7029-5-ND	Quad Operational Amplifiers *NEW!*	14-SOP	1.63	1.30	.98
LM224ADR	296-7029-2-ND	Quad Operational Amplifiers *NEW!*	14-SOP	2080.00/2,500		
LM224N	296-7030-5-ND	Quad Operational Amplifiers *NEW!*	14-Dip	.80	.60	.45
LM236D-2-5	296-7031-5-ND	2.5V Integrated Reference Circuit *NEW!*	8-SOP	1.45	1.16	.87
LM237KC	296-7032-5-ND	3-Terminal Adj. Voltage Reg. *NEW!*	TO-220AB	3.38	2.70	2.10
LM324D	296-1390-5-ND	Quad Operational Amplifier	14-SOP	.56	.42	.32
LM324N	296-1391-5-ND	Quad Operational Amplifier	14-Dip	.56	.42	.32
LM358D	296-1014-5-ND	Dual Operational Amplifier	8-SOP	.52	.39	.30
LM358DR	296-1014-2-ND	Dual Operational Amplifier	8-SOP	422.50/2,500		
LM358P	296-1395-5-ND	Dual Operational Amplifier	8-Dip	.52	.39	.30
LM358PSR	296-1396-1-ND	Dual Operational Amplifier	8-SOP	1.20	1.00	.80
MC1458P	296-1403-5-ND	Dual GP Operational Amplifier	8-Dip	.80	.60	.45
MC3303D	296-7033-5-ND	Quad LP Op Amp -40°C - 85°C *NEW!*	14-SOP	.80	.60	.45
MC3303N	296-7034-5-ND	Quad LP Operational Amplifiers *NEW!*	14-Dip	.80	.60	.45
MC3403D	296-7035-5-ND	Quad LP GP Op Amp 0°C - 70°C *NEW!*	14-SOP	.64	.48	.36
MC3403N	296-1406-5-ND	Quad LP Operational Amplifier	14-Dip	.64	.48	.36
MC3403NSR	296-1407-1-ND	Quad LP Operational Amplifier	14-SOP	.84	.63	.48
MC3403PWR	296-7036-1-ND	Quad LP GP Op Amp *NEW!*	14-TSSOP	.64	.48	.36
MC3403PWR	296-7036-2-ND	Quad LP GP Op Amp *NEW!*	14-TSSOP	426.00/2,000		
MC3486D	296-7037-5-ND	Quad Diff. Line Rcvr. Tri-State *NEW!*	16-SOP	1.20	1.00	.80
MC3486N	296-7038-5-ND	Quad Diff. Line Receiver Tri-State *NEW!*	16-Dip	1.20	1.00	.80
MC3487D	296-7039-5-ND	Quad Differential Line Driver *NEW!*	16-SOP	1.20	1.00	.80
NE5532AP	296-7040-5-ND	Dual LN Operational Amplifiers *NEW!*	8-Dip	1.38	1.10	.83
NE5534AP	296-7042-5-ND	LN Operational Amplifiers *NEW!*	8-Dip	1.50	1.20	.90
NE5532P	296-1410-5-ND	Dual LN Operational Amplifier	8-Dip	1.20	1.00	.80
NE5534P	296-7043-5-ND	LN High-Speed Audio Op Amp *NEW!*	8-Dip	1.14	.95	.76
RC4558P	296-1414-5-ND	Dual GP Operational Amplifier	8-Dip	.80	.60	.45

General Purpose LincMOS Op Amps

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TLC25L2ACD	296-7297-5-ND	Dual Op Amp *NEW!*	8-SOP	2.43	1.95	1.52
TLC25L2BCD	296-7298-5-ND	Dual Op Amp *NEW!*	8-SOP	2.95	2.36	1.84
TLC25L2BCP	296-7299-5-ND	Dual Op Amp *NEW!*	8-Dip	2.95	2.36	1.84
TLC25L2CD	296-7300-5-ND	Dual LV Micropower Op Amp *NEW!*	8-SOP	2.25	1.80	1.35
TLC25L2CP	296-7301-5-ND	Dual LV Micropower Op Amp *NEW!*	8-Dip	2.25	1.80	1.35
TLC25L4ACD	296-7302-5-ND	Quad Op Amp *NEW!*	14-SOP	3.42	2.74	2.13
TLC25L4ACN	296-7303-5-ND	Quad Op Amp *NEW!*	14-Dip	3.42	2.74	2.13
TLC25L4BCD	296-7304-5-ND	Quad Op Amp *NEW!*	14-SOP	4.12	3.30	2.57
TLC25L4BCN	296-7305-5-ND	Quad Op Amp *NEW!*	14-Dip	4.12	3.30	2.57
TLC25L4CD	296-7306-5-ND	Quad LV Micropower Op Amp *NEW!*	14-SOP	2.84	2.27	1.77
TLC25L4CN	296-7307-5-ND	Quad LV Micropower Op Amp *NEW!*	14-Dip	2.84	2.27	1.77
TLC25M2ACD	296-7308-5-ND	Dual Op Amp *NEW!*	8-SOP	2.43	1.95	1.52
TLC25M2ACP	296-7309-5-ND	Dual Op Amp *NEW!*	8-Dip	2.43	1.95	1.52
TLC25M2CP	296-7310-5-ND	Dual LP LV Op Amp *NEW!*	8-Dip	2.25	1.80	1.35
TLC25M4ACD	296-7311-5-ND	Quad Op Amp *NEW!*	14-SOP	3.42	2.74	2.13
TLC25M4BCN	296-7312-5-ND	Quad Op Amp *NEW!*	14-Dip	4.12	3.30	2.57
TLC25M4CD	296-7313-5-ND	Quad LP LV Op Amp *NEW!*	14-SOP	2.84	2.27	1.77
TLC25M4CN	296-7314-5-ND	Quad LP LV Op Amp *NEW!*	14-Dip	2.84	2.27	1.77
TLC27L1ACP	296-10259-5-ND	Low-Power Op Amp *NEW!*	8-Dip	.78	.65	.52
TLC27L1ID	296-10260-5-ND	Low-Power Op Amp *NEW!*	8-SOP	.96	.72	.54
TLC27L2ACD	296-7369-5-ND	Dual Precision Op Amp *NEW!*	8-SOP	.87	.73	.58
TLC27L2ACP	296-7370-5-ND	Dual Precision Op Amp *NEW!*	8-Dip	.87	.73	.58
TLC27L2AID	296-7371-5-ND	Dual Precision Op Amp *NEW!*	8-SOP	.93	.78	.62
TLC27L2AIP	296-7372-5-ND	Dual Precision Op Amp *NEW!*	8-Dip	.93	.78	.62
TLC27L2BCD	296-7373-5-ND	Dual Precision Op Amp *NEW!*	8-SOP	1.05	.88	.70
TLC27L2BCP	296-7374-5-ND	Dual Precision Op Amp *NEW!*	8-Dip	1.05	.88	.70
TLC27L2BID	296-7375-5-ND	Dual Precision Op Amp *NEW!*	8-SOP	1.11	.93	.74
TLC27L2BIP	296-7376-5-ND	Dual Precision Op Amp *NEW!*	8-Dip	1.11	.93	.74
TLC27L2CD	296-1316-5-ND	Dual Precision Operational Amp	8-SOP	.75	.63	.50
TLC27L2CDR	296-1316-2-ND	Dual Precision Operational Amp	8-SOP	812.50/2,500		
TLC27L2CP	296-7377-5-ND	Dual Prec Single-Supply Micropower Op Amp *NEW!*	8-Dip	.75	.63	.50
TLC27L2CPSR	296-7378-1-ND	Dual Prec Single-Supply Micropower Op Amp *NEW!*	8-SOP	.75	.63	.50
TLC27L2CPSR	296-7378-2-ND	Dual Prec Single-Supply Micropower Op Amp *NEW!*	8-SOP	666.00/2,000		
TLC27L2ID	296-1317-5-ND	Dual Prec Single-Supply Micropower Op Amp *NEW!*	8-SOP	.81	.68	.54
TLC27L2IDR	296-1317-1-ND	Dual Precision Operational Amp	8-SOP	1.29	1.08	.86
TLC27L2IP	296-7379-5-ND	Dual Prec Single-Supply Micropower Op Amp *NEW!*	8-Dip	.81	.68	.54
TLC27L2IPW	296-7380-5-ND	Dual Prec Single-Supply Micropower Op Amp *NEW!*	8-TSSOP	.81	.68	.54
TLC27L2MD	296-7381-5-ND	Dual Prec Single-Supply Micropower Op Amp *NEW!*	8-SOP	1.48	1.18	.89
TLC27L4ACD	296-1831-5-ND	Quad Precision Operational Amp	14-SOP	1.02	.85	.68
TLC27L4ACN	296-7382-5-ND	Quad Precision Op Amp *NEW!*	14-Dip	1.02	.85	.68
TLC27L4AID	296-7383-5-ND	Quad Precision Op Amp *NEW!*	14-SOP	1.11	.93	.74
TLC27L4AIN	296-7384-5-ND	Quad Precision Op Amp *NEW!*	14-Dip	1.11	.93	.74
TLC27L4BCD	296-7385-5-ND	Quad Precision Op Amp *NEW!*	14-SOP	1.23	1.03	.82
TLC27L4BCN	296-7386-5-ND	Quad Precision Op Amp *NEW!*	14-Dip	1.23	1.03	.82
TLC27L4BID	296-7387-5-ND	Quad Precision Op Amp *NEW!*	14-SOP	1.32	1.10	.88
TLC27L4BIN	296-7388-5-ND	Quad Precision Op Amp *NEW!*	14-Dip	1.32	1.10	.88
TLC27L4CD	296-1318-5-ND	Quad Prec Single-Supply Micropower Op Amp *NEW!*	14-SOP	.87	.73	.58
TLC27L4CDR	296-1318-1-ND	Quad Precision Operational Amp	14-SOP	1.78	1.42	1.07
TLC27L4CN	296-7389-5-ND	Quad Prec Single-Supply Micropower Op Amp *NEW!*	14-Dip	.87	.73	.58
TLC27L4CPWR	296-7390-1-ND	Quad Prec Single-Supply Micropower Op Amp *NEW!*	14-TSSOP	.87	.73	.58
TLC27L4CPWR	296-7390-2-ND	Quad Prec Single-Supply Micropower Op Amp *NEW!*	14-TSSOP	772.00/2,000		
TLC27L4ID	296-1319-5-ND	Quad Prec Single-Supply Micropower Op Amp *NEW!*	14-SOP	.96	.80	.64
TLC27L4IDR	296-1319-1-ND	Quad Precision Operational Amp	14-SOP	1.85	1.48	1.11
TLC27L4IN	296-7391-5-ND	Quad Prec Single-Supply Micropower Op Amp *NEW!*	14-Dip	.96	.80	.64
TLC27L4IPW	296-7392-5-ND	Quad Prec Single-Supply Micropower Op Amp *NEW!*	14-TSSOP	.96	.80	.64
TLC27L7CD	296-1832-5-ND	Dual Precision Operational Amp	8-SOP	1.50	1.20	.90
TLC27L7CP	296-7393-5-ND	Dual Prec Single-Supply Micropower Op Amp *NEW!*	8-Dip	1.50	1.20	.90
TLC27L7ID	296-1320-5-ND	Dual Precision Operational Amp	8-SOP	1.65	1.32	.99
TLC27L7IDR	296-1320-2-ND	Dual Precision Operational Amp	8-SOP	2112.50/2,500		
TLC27L7IP	296-7394-5-ND	Dual Prec Single-Supply Micropower Op Amp *NEW!*	8-Dip	1.65	1.32	.99
TLC27L9CD	296-7395-5-ND	Quad Prec Single-Supply Micropower Op Amp *NEW!*	14-SOP	2.10	1.68	1.26
TLC27L9CN	296-7396-5-ND	Quad Prec Single-Supply Micropower Op Amp *NEW!*	14-Dip	2.10	1.68	1.26
TLC27L9CNSR	296-7397-1-ND	Quad Prec Single-Supply Micropower Op Amp *NEW!*	14-SOP	2.10	1.68	1.26
TLC27L9CNSR	296-7397-2-ND	Quad Prec Single-Supply Micropower Op Amp *NEW!*	14-SOP	2184.00/2,000		
TLC27L9ID	296-1834-5-ND	Quad Precision Operational Amp	14-SOP	2.33	1.86	1.40
TLC27L9IN	296-7398-5-ND	Quad Prec Single-Supply Micropower Op Amp *NEW!*	14-Dip	2.33	1.86	1.40
TLC27M2ACD	296-7399-5-ND	Dual Precision Op Amp *NEW!*	8-SOP	.87	.73	.58
TLC27M2ACP	296-7400-5-ND	Dual Precision Op Amp *NEW!*	8-Dip	.87	.73	.58
TLC27M2AID	296-7401-5-ND	Dual Precision Op Amp *NEW!*	8-SOP	.93	.78	.62
TLC27M2AIP	296-7402-5-ND	Dual Precision Op Amp *NEW!*	8-Dip	.93	.78	.62
TLC27M2BCD	296-7403-5-ND	Dual Precision Op Amp *NEW!*	8-SOP	1.05	.88	.70
TLC27M2BCP	296-7404-5-ND	Dual Precision Op Amp *NEW!*	8-Dip	1.05	.88	.70
TLC27M2BID	296-7405-5-ND	Dual Precision Op Amp *NEW!*	8-SOP	1.11	.93	.74
TLC27M2BIP	296-7406-5-ND	Dual Precision Op Amp *NEW!*	8-Dip	1.11	.93	.74
TLC27M2CD	296-1321-5-ND	Dual Precision Operational Amp	8-SOP	.75	.63	.50
TLC27M2CDR	296-1321-2-ND	Dual Precision Operational Amp	8-SOP	812.50/2,500		
TLC27M2CP	296-1836-5-ND	Dual Precision Operational Amp	8-Dip	.75	.63	.50
TLC27M2CPWR	296-7407-1-ND	Dual LP Prec Single-Supply Op Amp *NEW!*	8-TSSOP	.75	.63	.50
TLC27M2CPWR	296-7407-2-ND	Dual LP Prec Single-Supply Op Amp *NEW!*	8-TSSOP	666.00/2,000		
TLC27M2ID	296-1322-5-ND	Dual LP Prec Single-Supply Op Amp *NEW!*	8-SOP	.81	.68	.54
TLC27M2IDR	296-1322-1-ND	Dual Precision Operational Amp	8-SOP	1.48	1.18	.89
TLC27M2IP	296-7408-5-ND	Dual LP Prec Single-Supply Op Amp *NEW!*	8-Dip	.81	.68	.54
TLC27M2IPW	296-7409-5-ND	Dual LP Prec Single-Supply Op Amp *NEW!*	8-TSSOP	.81	.68	.54
TLC27M2MD	296-7410-5-ND	Dual LP Prec Single-Supply Op Amp *NEW!*	8-SOP	1.45	1.16	.87
TLC27M4ACD	296-7411-5-ND	Quad Precision Op Amp *NEW!*	14-SOP	1.02	.85	.68
TLC27M4ACN	296-7412-5-ND	Quad Precision Op Amp *NEW!*	14-Dip	1.02	.85	.68
TLC27M4AID	296-7413-5-ND	Quad Precision Op Amp *NEW!*	14-SOP	1.11	.93	.74
TLC27M4AIN	296-7414-5-ND	Quad Precision Op Amp *NEW!*	14-Dip	1.11	.93	.74
TLC27M4BCD	296-7415-5-ND	Quad Precision Op Amp *NEW!*	14-SOP	1.23	1.03	.82
TLC27M4BCN	296-7416-5-ND	Quad Precision Op Amp *NEW!*	14-Dip	1.23	1.03	.82
TLC27M4BID	296-7417-5-ND	Quad Precision Op Amp *NEW!*	14-SOP	1.32	1.10	.88
TLC27M4BIN	296-7418-5-ND	Quad Precision Op Amp *NEW!*	14-Dip	1.32	1.10	.88
TLC27M4CD	296-1837-5-ND	Quad Precision Operational Amp	14-SOP	.87	.73	.58
TLC27M4CN	296-7419-5-ND	Quad LP Prec Single-Supply Op Amp *NEW!*	14-Dip	.87	.73	.58
TLC27M4CPWR	296-7420-1-ND	Quad LP Prec Single-Supply Op Amp *NEW!*	14-TSSOP	.87	.73	.58
TLC27M4CPWR	296-7420-2-ND	Quad LP Prec Single-Supply Op Amp *NEW!*	14-TSSOP	772.00/2,000		
TLC27M4ID	296-7421-5-ND	Quad LP Prec Single-Supply Op Amp *NEW!*	14-SOP	.96	.80	.64
TLC27M4IN	296-7422-5-ND	Quad LP Prec Single-Supply Op Amp *NEW!*	14-Dip	.96	.80	.64
TLC27M4IPWR	296-7423-1-ND	Quad LP Prec Single-Supply Op Amp *NEW!*	14-TSSOP	.96	.80	.64
TLC27M4IPWR	296-7423-2-ND	Quad LP Prec Single-Supply Op Amp *NEW!*	14-TSSOP	852.00/2,000		
TLC27M7CD	296-1323-5-ND	Dual LP Prec Single-Supply Op Amp *NEW!*	8-SOP	1.50	1.20	.90
TLC27M7CDR	296-1323-1-ND	Dual Precision Operational Amp	8-SOP	2.10	1.68	1.26
TLC27M7CP	296-1838-5-ND	Dual Precision Operational Amp	8-Dip	1.50	1.20	.90
TLC27M7ID	296-7424-5-ND	Dual LP Prec Single-Supply Op Amp *NEW!*	8-SOP	1.65	1.32	.99
TLC27M7IP	296-7425-5-ND	Dual LP Prec Single-Supply Op Amp *NEW!*	8-Dip	1.65	1.32	.99
TLC27M9CD	296-7426-5-ND	Quad LP Prec Single-Supply Op Amp *NEW!*	14-SOP	2.10	1.68	1.26
TLC27M9CN	296-7427-5-ND	Quad LP Prec Single-Supply Op Amp *NEW!*	14-Dip	2.10	1.68	1.26
TLC27M9ID	296-7428-5-ND	Quad LP Prec Single-Supply Op Amp *NEW!*	14-SOP	2.33	1.86	1.40
TLC27M9IN	296-7429-5-ND	Quad LP Prec Single-Supply Op Amp *NEW!*	14-Dip	2.33	1.86	1.40
TLC271ACD	296-7338-5-ND	LP Programmable Op Amp *NEW!*	8-SOP	.78	.65	.52
TLC271ACP	296-7339-5-ND	LP Programmable Op Amp *NEW!*	8-Dip	.78	.65	.52
TLC271AID	296-7340-5-ND	LP Programmable Op Amp *NEW!*	8-SOP	.84	.70	.56
TLC271AIP	296-7341-5-ND	LP Programmable Op Amp *NEW!*	8-Dip	.84	.70	.56
TLC271BCD	296-7342-5-ND	LP Programmable Op Amp *NEW!*	8-SOP	.93	.78	.62
TLC271BCP	296-7343-5-ND	LP Programmable Op Amp *NEW!*	8-Dip	.93	.78	.62

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TLC271BID	296-7344-5-ND	LP Programmable Op Amp *NEW!*	8-SOP	.99	.83	.66
TLC271BIP	296-7345-5-ND	LP Programmable Op Amp *NEW!*	8-Dip	.99	.83	.66
TLC271CD	296-1308-5-ND	Programmable LP Operational Amp	8-SOP	.88	.66	.50
TLC271CDR	296-1308-2-ND	Programmable LP Operational Amp	8-SOP	715.00/2,500		
TLC271CP	296-1820-5-ND	Programmable LP Operational Amp	8-Dip	.88	.66	.50
TLC271ID	296-1821-5-ND	Programmable LP Operational Amp	8-SOP	.96	.72	.54
TLC271IDR	296-1821-2-ND	LP Programmable Op Amp *NEW!*	8-SOP	780.00/2,500		
TLC271IP	296-1822-5-ND	Programmable LP Operational Amp	8-Dip	.96	.72	.54
TLC272ACD	296-1309-5-ND	Dual Precision Op Amp *NEW!*	8-SOP	.87	.73	.58
TLC272ACDR	296-1309-1-ND	Dual Precision Operational Amp	8-SOP	1.26	1.05	.84
TLC272ACP	296-7346-5-ND	Dual Precision Op Amp *NEW!*	8-Dip	.87	.73	.58
TLC272AID	296-7347-5-ND	Dual Precision Op Amp *NEW!*	8-SOP	.93	.78	.62
TLC272AIP	296-7348-5-ND	Dual Precision Op Amp *NEW!*	8-Dip	.93	.78	.62
TLC272BCD	296-7349-5-ND	Dual Precision Op Amp *NEW!*	8-SOP	1.05	.88	.70
TLC272BCP	296-7350-5-ND	Dual Precision Op Amp *NEW!*	8-Dip	1.05	.88	.70
TLC272BID	296-7351-5-ND	Dual Precision Op Amp *NEW!*	8-SOP	1.11	.93	.74
TLC272BIP	296-7352-5-ND	Dual Precision Op Amp *NEW!*	8-Dip	1.11	.93	.74
TLC272CD	296-1310-5-ND	Dual Precision Operational Amp	8-SOP	.75	.63	.50
TLC272CDR	296-1310-2-ND	Dual Precision Operational Amp	8-SOP	812.50/2,500		
TLC272CP	296-1824-5-ND	Dual Precision Operational Amp	8-Dip	.75	.63	.50
TLC272CPSR	296-7353-1-ND	Dual Single-Supply Op Amp *NEW!*	8-SOP	.75	.63	.50
TLC272CPSR	296-7353-2-ND	Dual Single-Supply Op Amp *NEW!*	8-SOP	666.00/2,000		
TLC272CPW	296-7354-5-ND	Dual Single-Supply Op Amp *NEW!*	8-TSSOP	.75	.63	.50
TLC272CPWR	296-7354-2-ND	Dual Single-Supply Op Amp *NEW!*	8-TSSOP	666.00/2,000		
TLC272ID	296-1311-5-ND	Dual Single-Supply Op Amp *NEW!*	8-SOP	.81	.68	.54
TLC272IDR	296-1311-1-ND	Dual Precision Operational Amp	8-SOP	1.41	1.18	.94
TLC272IP	296-7355-5-ND	Dual Single-Supply Op Amp *NEW!*	8-Dip	.81	.68	.54
TLC274ACD	296-1825-5-ND	Quad Precision Operational Amp	14-SOP	1.02	.85	.68
TLC274ACN	296-7356-5-ND	Quad Precision Op Amp *NEW!*	14-Dip	1.02	.85	.68
TLC274AID	296-7357-5-ND	Quad Precision Op Amp *NEW!*	14-SOP	1.11	.93	.74
TLC274AIN	296-7358-5-ND	Quad Precision Op Amp *NEW!*	14-Dip	1.11	.93	.74
TLC274BCD	296-7359-5-ND	Quad Precision Op Amp *NEW!*	14-SOP	1.23	1.03	.82
TLC274BCN	296-7360-5-ND	Quad Precision Op Amp *NEW!*	14-Dip	1.23	1.03	.82
TLC274BID	296-1312-5-ND	Quad Precision Op Amp *NEW!*	14-SOP	1.32	1.10	.88
TLC274BIDR	296-1312-1-ND	Quad Precision Operational Amp	14-SOP	1.48	1.18	.89
TLC274BIN	296-7361-5-ND	Quad Precision Op Amp *NEW!*	14-Dip	1.32	1.10	.88
TLC274CD	296-1313-5-ND	Quad Single-Supply Op Amp *NEW!*	14-SOP	.87	.73	.58
TLC274CDR	296-1313-1-ND	Quad Precision Operational Amp	14-SOP	1.30	1.04	.78
TLC274CN	296-1826-5-ND	Quad Precision Operational Amp	14-Dip	.87	.73	.58
TLC274ID	296-1314-5-ND	Quad Precision Operational Amp	14-SOP	.96	.80	.64
TLC274IDR	296-1314-2-ND	Quad Precision Operational Amp	14-SOP	1040.00/2,500		
TLC274IN	296-7362-5-ND	Quad Single-Supply Op Amp *NEW!*	14-Dip	.96	.80	.64
TLC274MD	296-7363-5-ND	Quad Single-Supply Op Amp *NEW!*	14-SOP	2.18	1.74	1.31
TLC277CD	296-7364-5-ND	Dual Prec. Single-Supply Op Amp *NEW!*	8-SOP	1.50	1.20	.90
TLC277CP	296-1828-5-ND	Dual Precision Operational Amp	8-Dip	1.50	1.20	.90
TLC277ID	296-1829-5-ND	Dual Precision Operational Amp	8-SOP	1.65	1.32	.99
TLC277IP	296-7365-5-ND	Dual Prec. Single-Supply Op Amp *NEW!*	8-Dip	1.65	1.32	.99
TLC279CD	296-7366-5-ND	Quad Prec. Single-Supply Op Amp *NEW!*	14-SOP	2.10	1.68	1.26
TLC279CN	296-7367-5-ND	Quad Prec. Single-Supply Op Amp *NEW!*	14-Dip	2.10	1.68	1.26
TLC279ID	296-1315-5-ND	Quad Prec. Single-Supply Op Amp *NEW!*	14-SOP	2.33	1.86	1.40
TLC279IDR	296-1315-1-ND	Quad Precision Operational Amp	14-SOP	2.33	1.86	1.40
TLC279IN	296-7368-5-ND	Quad Prec. Single-Supply Op Amp *NEW!*	14-Dip	2.33	1.86	1.40
TLC2652AC-8D	296-7316-5-ND	Adv Prec Chopper-Stabilized Op Amp *NEW!*	8-SOP	4.16	3.33	2.59
TLC2652AC-14D	296-7315-5-ND	Adv Prec Chopper-Stabilized Op Amp *NEW!*	14-SOP	4.16	3.33	2.59
TLC2652ACN	296-7317-5-ND	Adv Prec Chopper-Stabilized Op Amp *NEW!*	14-Dip	4.16	3.33	2.59
TLC2652ACP	296-7318-5-ND	Adv Prec Chopper-Stabilized Op Amp *NEW!*	8-Dip	4.16	3.33	2.59
TLC2652AI-8D	296-7319-5-ND	Adv Prec Chopper-Stabilized Op Amp *NEW!*	8-SOP	4.50	3.60	2.80
TLC2652AIN	296-7320-5-ND	Adv Prec Chopper-Stabilized Op Amp *NEW!*	14-Dip	4.50	3.60	2.80
TLC2652C-8D	296-7321-5-ND	Prec Chopper-Stabilized Op Amp *NEW!*	8-SOP	3.47	2.78	2.16
TLC2652CN	296-7322-5-ND	Prec Chopper-Stabilized Op Amp *NEW!*	14-Dip	3.47	2.78	2.16
TLC2652CP	296-7323-5-ND	Prec Chopper-Stabilized Op Amp *NEW!*	8-Dip	3.47	2.78	2.16
TLC2652I-8D	296-7324-5-ND	Prec Chopper-Stabilized Op Amp *NEW!*	8-SOP	3.80	3.05	2.37
TLC2652M-8D	296-7325-5-ND	Prec Chopper-Stabilized Op Amp *NEW!*	8-SOP	4.14	3.32	2.58
TLC2652Q-8D	296-7326-5-ND	Prec Chopper-Stabilized Op Amp *NEW!*	8-SOP	3.78	3.03	2.36
TLC2654AC-8D	296-7327-5-ND	Adv LN Chopper-Stabilized Op Amp *NEW!*	8-SOP	2.90	2.33	1.81
TLC2654ACP	296-7328-5-ND	Adv LN Chopper-Stabilized Op Amp *NEW!*	8-Dip	2.90	2.33	1.81
TLC2654AI-8D	296-7329-5-ND	Adv LN Chopper-Stabilized Op Amp *NEW!*	8-SOP	3.15	2.52	1.96
TLC2654AIP	296-7330-5-ND	Adv LN Chopper-Stabilized Op Amp *NEW!*	8-Dip	3.15	2.52	1.96
TLC2654AQ-8D	296-7331-5-ND	Adv LN Chopper-Stabilized Op Amp *NEW!*	8-SOP	3.26	2.61	2.03
TLC2654C-8D	296-7332-5-ND	LN Chopper-Stabilized Op Amp *NEW!*	8-SOP	2.43	1.95	1.52
TLC2654CN	296-7333-5-ND	LN Chopper-Stabilized Op Amp *NEW!*	14-Dip	2.43	1.95	1.52
TLC2654CP	296-7334-5-ND	LN Chopper-Stabilized Op Amp *NEW!*	8-Dip	2.43	1.95	1.52
TLC2654I-8D	296-7335-5-ND	LN Chopper-Stabilized Op Amp *NEW!*	8-SOP	2.66	2.13	1.66
TLC2654IP	296-7336-5-ND	LN Chopper-Stabilized Op Amp *NEW!*	8-Dip	2.66	2.13	1.66
TLC2654Q-8D	296-7337-5-ND	LN Chopper-Stabilized Op Amp *NEW!*	8-SOP	3.11	2.49	1.94
TLV2252AID	296-7430-5-ND	Dual LV Rail-to-Rail Op Amp *NEW!*	8-SOP	1.60	1.28	.96
TLV2252AIP	296-7431-5-ND	Dual LV Rail-to-Rail Op Amp *NEW!*	8-Dip	1.60	1.28	.96
TLV2252AIPW	296-7432-5-ND	Dual LV Rail-to-Rail Op Amp *NEW!*	8-TSSOP	1.60	1.28	.96
TLV2252AQD	296-7433-5-ND	Dual LV Rail-to-Rail Op Amp *NEW!*	8-SOP	1.65	1.32	.99
TLV2252ID	296-7434-5-ND	Dual LP LV Rail-to-Rail Op Amp *NEW!*	8-SOP	1.53	1.22	.92
TLV2252IP	296-7435-5-ND	Dual LP LV Rail-to-Rail Op Amp *NEW!*	8-Dip	1.53	1.22	.92
TLV2252QD	296-7436-5-ND	Dual LP LV Rail-to-Rail Op Amp *NEW!*	8-SOP	1.58	1.26	.95
TLV2254AID	296-7437-5-ND	Quad LV Rail-to-Rail Op Amp *NEW!*	14-SOP	2.23	1.78	1.34
TLV2254AIN	296-7438-5-ND	Quad LV Rail-to-Rail Op Amp *NEW!*	14-Dip	2.23	1.78	1.34
TLV2254AIPWR	296-7439-1-ND	Quad LV Rail-to-Rail Op Amp *NEW!*	14-TSSOP	2.23	1.78	1.34
TLV2254AIPWR	296-7439-2-ND	Quad LV Rail-to-Rail Op Amp *NEW!*	14-TSSOP	2314.00/2,000		
TLV2254AQD	296-7440-5-ND	Quad LV Rail-to-Rail Op Amp *NEW!*	14-SOP	2.30	1.84	1.38
TLV2254ID	296-7441-5-ND	Quad LP LV Rail-to-Rail Op Amp *NEW!*	14-SOP	2.13	1.70	1.28
TLV2254IN	296-7442-5-ND	Quad LP LV Rail-to-Rail Op Amp *NEW!*	14-Dip	2.13	1.70	1.28

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TLV2262AID	296-7443-5-ND	Dual Adv Rail-to-Rail Op Amp *NEW!*	8-SOP	1.60	1.28	.96
TLV2262AIP	296-7444-5-ND	Dual Adv Rail-to-Rail Op Amp *NEW!*	8-Dip	1.60	1.28	.96
TLV2262AQD	296-7445-5-ND	Dual Adv Rail-to-Rail Op Amp *NEW!*	8-SOP	1.65	1.32	.99
TLV2262ID	296-7446-5-ND	Dual LP LV Rail-to-Rail Op Amp *NEW!*	8-SOP	1.53	1.22	.92
TLV2262IP	296-7447-5-ND	Dual LP LV Rail-to-Rail Op Amp *NEW!*	8-Dip	1.53	1.22	.92
TLV2262IPWR	296-7448-1-ND	Dual LP LV R/R Op Amp *NEW!*	8-TSSOP	1.53	1.22	.92
TLV2262IPWR	296-7448-2-ND	Dual LP LV R/R Op Amp *NEW!*	8-TSSOP	1586.00/2,000		
TLV2262QD	296-7449-5-ND	Dual LP LV Rail-to-Rail Op Amp *NEW!*	8-SOP	1.58	1.26	.95
TLV2264AID	296-7450-5-ND	Quad Adv Rail-to-Rail Op Amp *NEW!*	14-SOP	2.23	1.78	1.34
TLV2264AIN	296-7451-5-ND	Quad Adv Rail-to-Rail Op Amp *NEW!*	14-Dip	2.23	1.78	1.34
TLV2264AIPWR	296-7452-1-ND	Quad Adv R/R Op Amp *NEW!*	14-TSSOP	2.23	1.78	1.34
TLV2264AIPWR	296-7452-2-ND	Quad Adv R/R Op Amp *NEW!*	14-TSSOP	2314.00/2,000		
TLV2264ID	296-7453-5-ND	Quad LP LV R/R Op Amp *NEW!*	14-SOP	2.13	1.70	1.28
TLV2264IDR	296-7454-1-ND	Quad LP LV R/R Op Amp *NEW!*	14-SOP	2.13	1.70	1.28
TLV2264IDR	296-7454-2-ND	Quad LP LV R/R Op Amp *NEW!*	14-SOP	2720.00/2,500		
TLV2264IN	296-7455-5-ND	Quad LP LV R/R Op Amp *NEW!*	14-Dip	2.13	1.70	1.28
TLV2264IPWR	296-7456-1-ND	Quad LP LV R/R Op Amp *NEW!*	14-TSSOP	2.13	1.70	1.28
TLV2264IPWR	296-7456-2-ND	Quad LP LV R/R Op Amp *NEW!*	14-TSSOP	2210.00/2,000		
TLV2264QD	296-7457-5-ND	Quad LP LV R/R Op Amp *NEW!*	14-SOP	2.20	1.76	1.32
TLV2322ID	296-7458-5-ND	Dual LV Micropower Op Amp *NEW!*	8-SOP	1.63	1.30	.98
TLV2322IP	296-7459-5-ND	Dual LV Micropower Op Amp *NEW!*	8-Dip	1.63	1.30	.98
TLV2322IPWR	296-7460-1-ND	Dual LV Micropower Op Amp *NEW!*	8-TSSOP	1.63	1.30	.98
TLV2322IPWR	296-7460-2-ND	Dual LV Micropower Op Amp *NEW!*	8-TSSOP	1690.00/2,000		
TLV2324ID	296-7461-5-ND	Quad LV Micropower Op Amp *NEW!*	14-SOP	2.13	1.70	1.28
TLV2324IN	296-7462-5-ND	Quad LV Micropower Op Amp *NEW!*	14-Dip	2.13	1.70	1.28
TLV2324IPW	296-7463-5-ND	Quad LV Micropower Op Amp *NEW!*	14-TSSOP	2.13	1.70	1.28
TLV2324IPWR	296-7464-1-ND	Quad LV Micropower Op Amp *NEW!*	14-TSSOP	2.13	1.70	1.28
TLV2324IPWR	296-7464-2-ND	Quad LV Micropower Op Amp *NEW!*	14-TSSOP	2210.00/2,000		
TLV2332ID	296-7465-5-ND	Dual LP LV Op Amp *NEW!*	8-SOP	1.58	1.26	.95
TLV2332IP	296-7466-5-ND	Dual LP LV Op Amp *NEW!*	8-Dip	1.58	1.26	.95
TLV2332IPWR	296-7467-1-ND	Dual LP LV Op Amp *NEW!*	8-TSSOP	1.58	1.26	.95
TLV2332IPWR	296-7467-2-ND	Dual LP LV Op Amp *NEW!*	8-TSSOP	1638.00/2,000		
TLV2334ID	296-7468-5-ND	Quad LP LV Op Amp *NEW!*	14-SOP	2.23	1.78	1.34
TLV2334IN	296-7469-5-ND	Quad LP LV Op Amp *NEW!*	14-Dip	2.23	1.78	1.34
TLV2334IPWR	296-7470-1-ND	Quad LP LV Op Amp *NEW!*	14-TSSOP	2.23	1.78	1.34
TLV2334IPWR	296-7470-2-ND	Quad LP LV Op Amp *NEW!*	14-TSSOP	2314.00/2,000		
TLV2341ID	296-7471-5-ND	LV Programmable Op Amp *NEW!*	8-SOP	1.50	1.20	.90
TLV2341IP	296-7472-5-ND	LV Programmable Op Amp *NEW!*	8-Dip	1.50	1.20	.90
TLV2342ID	296-7473-5-ND	Dual LV High-Speed Op Amp *NEW!*	8-SOP	1.58	1.26	.95
TLV2342IP	296-7474-5-ND	Dual LV High-Speed Op Amp *NEW!*	8-Dip	1.58	1.26	.95
TLV2344ID	296-7475-5-ND	Quad LV High-Speed Op Amp *NEW!*	14-SOP	2.23	1.78	1.34
TLV2344IN	296-7476-5-ND	Quad LV High-Speed Op Amp *NEW!*	14-Dip	2.23	1.78	1.34
TLV2404CD	296-2427-5-ND	Quad, Rail-to-Rail Op Amp	14-SOP	2.43	1.95	1.52
TLV2452CD	296-2428-5-ND	Dual, Rail-to-Rail Op Amp	8-SOP	1.58	1.26	.95
TLV2453CD	296-2429-5-ND	Dual, Rail-to-Rail Op Amp	14-SOP	1.73	1.38	1.04
TLV2454CD	296-2430-5-ND	Quad, Rail-to-Rail Op Amp	14-SOP	2.05	1.64	1.23
TLV2455CD	296-2431-5-ND	Quad, Rail-to-Rail Op Amp	16-SOP	2.28	1.82	1.37
TLV2460AIDR	296-7477-1-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	8-SOP	1.33	1.06	.80
TLV2460AIDR	296-7477-2-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	8-SOP	1695.00/2,500		
TLV2460AIP	296-7478-5-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	8-Dip	1.33	1.06	.80
TLV2460CD	296-2432-5-ND	LP R-R In/Out Op Amp w/Shutdown	8-SOP	1.47	1.23	.98
TLV2460CDR	296-2432-2-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	8-SOP	1592.50/2,500		
TLV2460CDBVR	296-7479-1-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	SOT-23-6	1.47	1.23	.98
TLV2460CDBVR	296-7479-2-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	SOT-23-6	1911.00/3,000		
TLV2460CP	296-7480-5-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	8-Dip	1.47	1.23	.98
TLV2460IDBVR	296-7481-1-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	SOT-23-6	1.28	1.02	.77
TLV2460IDBVR	296-7481-2-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	SOT-23-6	1959.00/3,000		
TLV2460IDR	296-7482-1-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	8-SOP	1.28	1.02	.77
TLV2460IDR	296-7482-2-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	8-SOP	1632.50/2500		
TLV2460IP	296-7483-5-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	8-Dip	1.28	1.02	.77
TLV2461AIDR	296-7484-1-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	8-SOP	1.47	1.23	.98
TLV2461AIDR	296-7484-2-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	8-SOP	1592.50/2,500		
TLV2461AIP	296-7485-5-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	8-Dip	1.47	1.23	.98
TLV2461CD	296-7486-5-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	8-SOP	1.35	1.13	.90
TLV2461CDBVR	296-7487-1-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	SOT-23-5	1.35	1.13	.90
TLV2461CDBVR	296-7487-2-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	SOT-23-5	1755.00/3,000		
TLV2461CDBVT	296-2433-2-ND	Rail-to-Rail Operational Amp	SOT-23-5	168.75/250		
TLV2461CDR	296-7488-1-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	8-SOP	1.35	1.13	.90
TLV2461CDR	296-7488-2-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	8-SOP	1462.50/2,500		
TLV2461CP	296-7489-5-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	8-Dip	1.35	1.13	.90
TLV2461IDBVR	296-7490-1-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	SOT-23-5	1.41	1.18	.94
TLV2461IDBVR	296-7490-2-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	SOT-23-5	1833.00/3,000		
TLV2461IDR	296-7491-1-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	8-SOP	1.41	1.18	.94
TLV2461IDR	296-7491-2-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	8-SOP	1527.50/2,500		
TLV2461IP	296-7492-5-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	8-Dip	1.41	1.18	.94
TLV2462CD	296-2434-5-ND	Dual, Rail-to-Rail Op Amp	8-SOP	1.58	1.26	.95
TLV2463CD	296-2435-5-ND	Dual, Rail-to-Rail Op Amp	14-SOP	1.73	1.38	1.04
TLV2464CD	296-2436-5-ND	Quad, Rail-to-Rail Op Amp	14-SOP	2.05	1.64	1.23
TLV2465CD	296-2437-5-ND	Quad, Rail-to-Rail Op Amp	16-SOP	2.28	1.82	1.37
TLV2470AIDR	296-7493-1-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	8-SOP	1.33	1.06	.80
TLV2470AIDR	296-7493-2-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	8-SOP	1695.00/2,500		
TLV2470AIP	296-7494-5-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	8-Dip	1.33	1.06	.80
TLV2470CD	296-2438-5-ND	Rail-to-Rail Operational Amp	8-SOP	1.47	1.23	.98
TLV2470CDR	296-2438-2-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	8-SOP	1592.50/2,500		
TLV2470CDBVR	296-7495-1-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	SOT-23-5	1.47	1.23	.98
TLV2470CDBVR	296-7495-2-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	SOT-23-5	1911.00/3,000		

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TLV2470CP	296-7496-5-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	8-Dip	1.47	1.23	.98
TLV2470IDBVR	296-7497-1-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	SOT-23-5	1.28	1.02	.77
TLV2470IDBVR	296-7497-2-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	SOT-23-5	1959.00/3,000		
TLV2470IDR	296-7498-1-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	8-SOP	1.28	1.02	.77
TLV2470IDR	296-7498-2-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	8-SOP	1632.50/2,500		
TLV2470IP	296-7499-5-ND	LP Rail-to-Rail In/Out Op Amp with Shutdown *NEW!*	8-Dip	1.28	1.02	.77
TLV2471AIDR	296-7500-1-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	8-SOP	1.47	1.23	.98
TLV2471AIDR	296-7500-2-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	8-SOP	1592.50/2,500		
TLV2471AIP	296-7501-5-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	8-Dip	1.47	1.23	.98
TLV2471CD	296-2439-5-ND	LP Rail-to-Rail Operational Amp	8-SOP	1.35	1.13	.90
TLV2471CDR	296-2439-2-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	8-SOP	1462.50/2,500		
TLV2471CDBVR	296-7502-1-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	SOT-23-5	1.35	1.13	.90
TLV2471CDBVR	296-7502-2-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	SOT-23-5	1755.00/3,000		
TLV2471CP	296-7503-5-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	8-Dip	1.35	1.13	.90
TLV2471IDBVR	296-7504-1-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	SOT-23-5	1.41	1.18	.94
TLV2471IDBVR	296-7504-2-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	SOT-23-5	1833.00/3,000		
TLV2471IDR	296-7505-1-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	8-SOP	1.41	1.18	.94
TLV2471IDR	296-7505-2-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	8-SOP	1527.50/2,500		
TLV2471IP	296-7506-5-ND	LP Rail-to-Rail In/Out Op Amp *NEW!*	8-Dip	1.41	1.18	.94
TLV2472CD	296-2440-5-ND	Dual, Rail-to-Rail Operational Amp	8-SOP	1.58	1.26	.95
TLV2473CD	296-2441-5-ND	Dual, Rail-to-Rail Op Amp	14-SOP	1.73	1.38	1.04
TLV2474CD	296-2442-5-ND	Quad, Rail-to-Rail Op Amp	14-SOP	2.05	1.64	1.23
TLV2475CD	296-2443-5-ND	Quad, Rail-to-Rail Op Amp	16-SOP	2.28	1.82	1.37
TLV2773CD	296-2444-5-ND	Dual, Rail-to-Rail Op Amp	14-SOP	1.98	1.58	1.19
TLV2782CD	296-2445-5-ND	Low V., Dual, Rail-to-Rail Op Amp	8-SOP	1.73	1.38	1.04
TLV2783ID	296-2446-5-ND	Low V., Dual, Rail-to-Rail Op Amp	14-SOP	1.98	1.58	1.19

Audio Power Amps

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TPA005D02DCA	296-1937-5-ND	2W Stereo Power Amplifier, Upgrade for TPA005D12DCA	48-HTSSOP	5.64	4.52	3.81
TPA005D12DCA	296-2448-5-ND	2W Stereo Power Amplifier	48-TSSOP	5.56	4.45	3.76
TPA005D14DCA	296-2449-5-ND	2W Stereo Power Amplifier, Upgrade for TPA005D04DCA	48-TSSOP	6.06	4.85	4.10
TPA032D01DCA	296-2461-5-ND	10W Monaural Power Amp	48-HTSSOP	7.16	5.73	4.84
TPA032D02DCA	296-2462-5-ND	10W Class-D Stereo Audio Power Amp	48-HTSSOP	8.26	6.61	5.58
TPA032D02DCAR	296-2462-2-ND	10W Class-D Stereo Audio Power Amp *NEW!*	48-TSSOP	10326.00/2,000		
TPA032D03DCA	296-2463-5-ND	10W Monaural Power Amp	48-HTSSOP	7.84	6.28	5.30
TPA032D04DCA	296-2464-5-ND	10W Stereo Power Amplifier	48-HTSSOP	8.62	6.90	5.82
TPA102DGN	296-1941-5-ND	150mW Stereo Audio Power Amp	8-MSOP	1.73	1.38	1.04
TPA102DGNR	296-1941-2-ND	150mW Stereo Audio Pwr. Amp *NEW!*	8-MSOP	2207.50/2,500		
TPA112D	296-2465-5-ND	150mW Stereo Audio Power Amp	8-SOP	1.35	1.08	.81
TPA112DR	296-2465-2-ND	150mW Stereo Audio Pwr. Amp *NEW!*	8-SOP	1727.50/2,500		
TPA112DGN	296-1942-5-ND	150mW Stereo Audio Power Amp	8-MSOP	1.58	1.26	.95
TPA112DGNR	296-1942-2-ND	150mW Stereo Audio Pwr. Amp *NEW!*	8-MSOP	2015.00/2,500		
TPA122D	296-2466-5-ND	150mW Stereo Audio Power Amp	8-SOP	1.43	1.14	.86
TPA122DR	296-2466-2-ND	150mW Stereo Audio Power Amp *NEW!*	8-SOP	1825.00/2,500		
TPA122DGN	296-1943-5-ND	150mW Stereo Audio Power Amp	8-MSOP	1.65	1.32	.99
TPA122DGNR	296-1943-2-ND	150mW Stereo Audio Pwr. Amp *NEW!*	8-MSOP	2112.50/2,500		
TPA152D	296-1944-5-ND	75mW Single-Ended Audio Power Amp	8-SOP	1.58	1.26	.95
TPA152DR	296-1944-2-ND	75mW Single-End Audio Pwr. Amp *NEW!*	8-SOP	2015.00/2,500		
TPA301D	296-1945-5-ND	0.35W Mono Audio Power Amplifier	8-SOP	1.14	.95	.76
TPA301DR	296-1945-2-ND	0.35W Mono Audio Power Amp *NEW!*	8-SOP	1235.00/2,500		
TPA301DGN	296-1946-5-ND	0.35W Mono Audio Power Amplifier	8-MSOP	1.41	1.18	.94
TPA302D	296-7011-5-ND	0.3W Stereo Audio Power Amp *NEW!*	8-SOP	2.10	1.68	1.26
TPA311D	296-1947-5-ND	0.35W Mono Audio Power Amp	8-SOP	1.08	.90	.72
TPA311DR	296-1947-2-ND	0.35W Mono Audio Power Amp *NEW!*	8-SOP	1170.00/2,500		
TPA311DGN	296-1948-5-ND	0.35W Mono Audio Power Amplifier	8-MSOP	1.35	1.13	.90
TPA321D	296-7012-5-ND	350mW LV Audio Power Amp with Differential Inputs *NEW!*	8-SOP	1.08	.90	.72
TPA4860D	296-7013-5-ND	1W Mono Audio Power Amp *NEW!*	16-SOP	2.57	2.06	1.60
TPA4861D	296-7014-5-ND	1W Mono Audio Power Amp *NEW!*	8-SOP	2.57	2.06	1.60
TPA4861DR	296-7014-2-ND	1W Mono Audio Power Amp *NEW!*	8-SOP	3590.00/2,500		
TPA701D	296-1949-5-ND	700mW LV Audio Power Amplifier	8-SOP	1.20	1.00	.80
TPA701DR	296-1949-2-ND	700mW LV Audio Power Amp *NEW!*	8-SOP	1300.00/2,500		
TPA701DGN	296-7022-5-ND	700mW LV Audio Power Amp *NEW!*	8-MSOP	1.47	1.23	.98
TPA701DGNR	296-7022-2-ND	700mW LV Audio Power Amp *NEW!*	8-MSOP	1592.50/2,500		
TPA711D	296-1950-5-ND	700mW LV Audio Power Amp	8-SOP	1.20	1.00	.80
TPA711DR	296-1950-2-ND	700mW LV Audio Power Amp *NEW!*	8-SOP	1300.00/2,500		
TPA711DGNR	296-7023-1-ND	700mW LV Audio Power Amp *NEW!*	8-MSOP	1.47	1.23	.98
TPA711DGNR	296-7023-2-ND	700mW LV Audio Power Amp *NEW!*	8-MSOP	1592.50/2,500		
TPA721D	296-1951-5-ND	700mW LV Audio Power Amp	8-SOP	1.20	1.00	.80
TPA721DR	296-1951-2-ND	700mW LV Audio Power Amp *NEW!*	8-SOP	1300.00/2,500		
TPA721DGNR	296-7024-1-ND	700mW LV Audio Power Amp *NEW!*	8-MSOP	1.47	1.23	.98
TPA721DGNR	296-7024-2-ND	700mW LV Audio Power Amp *NEW!*	8-MSOP	1592.50/2,500		
TPA731D	296-7025-5-ND	700mW LV Audio Power Amp with Differential Inputs *NEW!*	8-SOP	1.20	1.00	.80
TPA731DGNR	296-7026-1-ND	700mW LV Audio Power Amp with Differential Inputs *NEW!*	8-MSOP	1.47	1.23	.98
TPA731DGNR	296-7026-2-ND	700mW LV Audio Power Amp with Differential Inputs *NEW!*	8-MSOP	678.08/1,040		
TPA741D	296-7027-5-ND	700mW LV Audio Power Amp with Differential Inputs *NEW!*	8-SOP	1.20	1.00	.80
TPA741DGNR	296-7028-1-ND	700mW LV Audio Power Amp with Differential Inputs *NEW!*	8-MSOP	1.47	1.23	.98
TPA741DGNR	296-7028-2-ND	700mW LV Audio Power Amp with Differential Inputs *NEW!*	8-MSOP	1592.50/2,500		
TPA0102PWP	296-1938-5-ND	1.5W Stereo Audio Power Amp	24-TSSOP	3.65	2.92	2.27
TPA0102PWPR	296-1938-2-ND	1.5W Stereo Audio Power Amp *NEW!*	24-TSSOP	4132.00/2,000		
TPA0103PWP	296-1939-5-ND	1.75W 3-Channel Stereo Audio Power Amp	24-TSSOP	3.65	2.92	2.27
TPA0103PWPR	296-1939-2-ND	1.75W 3-Channel Stereo Audio Power Amp *NEW!*	24-TSSOP	4132.00/2,000		
TPA0112PWP	296-2450-5-ND	2W Stereo Audio Power Amp with Internal Gain Settings	24-HTSSOP	2.75	2.20	1.71
TPA0112PWPR	296-2450-2-ND	2W Stereo Audio Power Amp with Internal Gain Settings *NEW!*	24-TSSOP	3112.00/2,000		
TPA0122PWP	296-2451-5-ND	2W Stereo Audio Power Amp with Internal Gain Settings	24-HTSSOP	2.75	2.20	1.71
TPA0122PWPR	296-2451-2-ND	2W Stereo Audio Power Amp with Internal Gain Settings *NEW!*	24-TSSOP	3112.00/2,000		
TPA0132PWP	296-2452-5-ND	2W Stereo Audio Power Amp with DC Volume Control	24-HTSSOP	4.55	3.64	2.83
TPA0132PWPR	296-2452-2-ND	2W Stereo Audio Power Amp with DC Volume Control *NEW!*	24-TSSOP	5152.00/2,000		
TPA0142PWP	296-2453-5-ND	2W Stereo Audio Power Amp with DC Volume Control	24-HTSSOP	4.55	3.64	2.83
TPA0142PWPR	296-2453-2-ND	2W Stereo Audio Power Amp with DC Volume Control *NEW!*	24-TSSOP	5152.00/2,000		
TPA0152PWP	296-2454-5-ND	2W Stereo Audio Power Amp with Digital Volume Control	24-HTSSOP	4.55	3.64	2.83
TPA0152PWPR	296-2454-2-ND	2W Stereo Audio Power Amp with Digital Volume Control *NEW!*	24-TSSOP	5152.00/2,000		
TPA0162PWP	296-2455-5-ND	2W Stereo Audio Power Amp with Digital Volume Control	24-HTSSOP	4.55	3.64	2.83
TPA0162PWPR	296-2455-2-ND	2W Stereo Audio Power Amp with Digital Volume Control *NEW!*	24-TSSOP	5152.00/2,000		
TPA0172PWP	296-7000-5-ND	2W Stereo Mono Audio Power Amp *NEW!*	24-TSSOP	5.00	4.00	3.11
TPA0202PWP	296-1940-5-ND	2W Stereo Audio Power Amp	24-TSSOP	3.89	3.12	2.43
TPA0202PWPR	296-1940-2-ND	2W Stereo Audio Power Amp *NEW!*	24-TSSOP	4412.00/2,000		
TPA0211DGN	296-2456-5-ND	2W Monaural Audio Power Amp	8-HTSSOP	1.38	1.10	.83
TPA0211DGNR	296-2456-2-ND	2W Mono Audio Power Amp *NEW!*	8-MSOP	1760.00/2,500		
TPA0212PWP	296-2457-5-ND	2W Stereo Audio Power Amp with 4 Select Gain Set/Mux Control	24-HTSSOP	2.75	2.20	1.71
TPA0212PWPR	296-2457-2-ND	2W Stereo Audio Power Amp with 4 Select Gain Set/Mux Control *NEW!*	24-TSSOP	3112.00/2,000		
TPA0213DGQR	296-7001-1-ND	2W Mono Audio Power Amp with Headphone Drive *NEW!*	10-MSOP	2.70	2.16	1.68
TPA0213DGQR	296-7001-2-ND	2W Mono Audio Power Amp with Headphone Drive *NEW!*	10-MSOP	3780.00/2,500		
TPA0222PWP	296-2458-5-ND	2W Stereo Audio Power Amp with 4 Select Gain Set/Mux Control	24-HTSSOP	2.75	2.20	1.71
TPA0222PWPR	296-2458-2-ND	2W Stereo Audio Power Amp with 4 Select Gain Set/Mux Control *NEW!*	24-TSSOP	3112.00/2,000		
TPA0223DGQR	296-7002-1-ND	2W Mono Audio Power Amp with Headphone Drive *NEW!*	10-MSOP	2.70	2.16	1.68
TPA0223DGQR	296-7002-2-ND	2W Mono Audio Power Amp with Headphone Drive *NEW!*	10-MSOP	3780.00/2,500		
TPA0232PWP	296-2459-5-ND	2W Stereo Power Amplifier	24-HTSSOP	4.55	3.64	2.83
TPA0233DGQR	296-7003-1-ND	2W Mono Audio Power Amp with Headphone Drive *NEW!*	10- MSOP	2.70	2.16	1.68
TPA0233DGQR	296-7003-2-ND	2W Mono Audio Power Amp with Headphone Drive *NEW!*	10- MSOP	3780.00/2,500		
TPA0242PWP	296-2460-5-ND	2W Stereo Power Amplifier	24-HTSSOP	4.55	3.64	2.83
TPA0243DGQR	296-7004-1-ND	2W Mono Audio Power Amp with Headphone Drive *NEW!*	10-MSOP	2.70	2.16	1.68
TPA0243DGQR	296-7004-2-ND	2W Mono Audio Power Amp with Headphone Drive *NEW!*	10-MSOP	3780.00/2,500		
TPA0252PWP	296-7005-5-ND	2W Stereo Audio Power Amp with Digital Vol. Control/Memory *NEW!*	24-TSSOP	4.55	3.64	2.83
TPA0253DGQR	296-7006-1-ND	1W Mono Audio Power Amp with Headphone Drive *NEW!*	10-MSOP	2.45	1.97	1.53
TPA0253DGQR	296-7006-2-ND	1W Mono Audio Power Amp with Headphone Drive *NEW!*	10-MSOP	3432.50/2,500		
TPA1517DWP	296-7007-5-ND	6W Stereo Audio Power Amp *NEW!*	20-HSOP	2.50	2.00	1.56
TPA1517DWPR	296-7007-2-ND	6W Stereo Audio Power Amp *NEW!*	20-HSOP	2830.00/2,000		
TPA1517NE	296-7008-5-ND	6W Stereo Audio Power Amp *NEW!*	20-Dip	2.08	1.66	1.25
TPA2000D1PW	296-7009-5-ND	2W Class-D Filterless Mono Audio Power Amp *NEW!*	16-TSSOP	2.28	1.82	1.37
TPA2000D2PWP	296-2467-5-ND	2W Class-D Filterless Audio Power Amp	24-HTSSOP	3.38	2.70	2.10
TPA2000D2PWPR	296-2467-2-ND	2W Class-D Filterless Audio Power Amp *NEW!*	24-TSSOP	3826.00/2,000		
TPA2001D1PW	296-7010-5-ND	1W Class-D Filterless Mono Audio Power Amp *NEW!*	16-TSSOP	1.55	1.24	.93
TPA2001D2PWP	296-2468-5-ND	1W Class-D Stereo Audio Pwr. Amp	24-HTSSOP	3.04	2.43	1.89
TPA2001D2PWPR	296-2468-2-ND	1W Class-D Stereo Audio Power Amp *NEW!*	24-TSSOP	3442.00/2,000		
TPA6010A4PWPR	296-7015-1-ND	2W Stereo Audio Power Amp w/Bass Boost/DC Volume Control *NEW!*	28-TSSOP	5.00	4.00	3.11
TPA6010A4PWPR	296-7015-2-ND	2W Stereo Audio Power Amp w/Bass Boost/DC Volume Control *NEW!*	28-TSSOP	5662.00/2,000		
TPA6100A2DGKR	296-7016-1-ND	50mW Ultra-LV Audio Power Amp *NEW!*	8-TSSOP	1.53	1.22	.92
TPA6100A2DGKR	296-7016-2-ND	50mW Ultra-LV Audio Power Amp *NEW!*	8-TSSOP	1952.50/2,500		
TPA6100A2DR	296-7017-1-ND	50mW Ultra-LV Audio Pwr. Amp *NEW!*	8-SOP	1.33	1.06	.80
TPA6100A2DR	296-7017-2-ND	50mW Ultra-LV Audio Pwr. Amp *NEW!*	8-SOP	1695.00/2,500		
TPA6101A2D	296-7018-5-ND	50mW Ultra-LV Audio Pwr. Amp *NEW!*	8-SOP	1.33	1.06	.80
TPA6101A2DGKR	296-7019-1-ND	50mW Ultra-LV Audio Power Amp *NEW!*	8-TSSOP	1.53	1.22	.92
TPA6101A2DGKR	296-7019-2-ND	50mW Ultra-LV Audio Power Amp *NEW!*	8-TSSOP	1952.50/2,500		
TPA6102A2D	296-7020-5-ND	50mW Ultra-LV Audio Power Amp *NEW!*	8-SOP	1.33	1.06	.80
TPA6102A2DGKR	296-7021-1-ND	50mW Ultra-LV Audio Power Amp *NEW!*	8-TSSOP	1.53	1.22	.92
TPA6102A2DGKR	296-7021-2-ND	50mW Ultra-LV Audio Power Amp *NEW!*	8-TSSOP	1952.50/2,500		

High Speed Op Amps

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
THS3001CD	296-1762-5-ND	High Speed Current Feedback Op Amp	8-SOP	5.06	4.05	3.42
THS3001ID	296-7507-5-ND	420MHz Current-Fdbk. Op Amp *NEW!*	8-SOP	5.24	4.20	3.54
THS4001CD	296-1763-5-ND	High Speed Low Power Op Amp	8-SOP	3.71	2.97	2.31
THS4001ID	296-1764-5-ND	High Speed Low Power Op Amp	8-SOP	3.89	3.12	2.43
THS4011CD	296-2404-5-ND	290MHz High Speed Amp	8-SOP	4.23	3.39	2.64
THS4011CDGNR	296-7508-1-ND	290MHz Low-Distortion V-Feedback Amp *NEW!*	8-MSOP	4.23	3.39	2.64
THS4011CDGNR	296-7508-2-ND	290MHz Low-Distortion V-Feedback Amp *NEW!*	8-MSOP	5922.50/2,500		
THS4011ID	296-7509-5-ND	290MHz Low-Distortion V-Feedback Op Amp *NEW!*	8-SOP	4.41	3.53	2.75

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
THS4011IDGNR	296-7510-1-ND	290MHz Low-Distortion V-Feedback Op Amp *NEW!*	8-MSOP	4.41	3.53	2.75
THS4011IDGNR	296-7510-2-ND	290MHz Low-Distortion V-Feedback Op Amp *NEW!*	8-MSOP	6175.00/2,500		
THS4012CD	296-7511-5-ND	Dual 290MHz Low-Distortion V-Feedback Op Amp *NEW!*	8-SOP	6.26	5.01	4.23
THS4012CDGN	296-10023-5-ND	Dual 290MHz Low-Distortion V-Feedback Op Amp *NEW!*	8-MSOP	6.26	5.01	4.23
THS4012CDGNR	296-10023-2-ND	Dual 290MHz Low-Distortion V-Feedback Op Amp *NEW!*	8-MSOP	9702.50/2,500		
THS4012ID	296-7513-5-ND	Dual 290MHz Low-Distortion V-Feedback Op Amp *NEW!*	8-SOP	6.42	5.14	4.34
THS4012IDGN	296-10025-5-ND	Dual 290MHz Low-Distortion V-Feedback Op Amp *NEW!*	8-MSOP	6.42	5.14	4.34
THS4012IDGNR	296-10025-2-ND	Dual 290MHz Low-Distortion V-Feedback Op Amp *NEW!*	8-MSOP	9950.00/2,500		
THS4021CD	296-2405-5-ND	350MHz High Speed Amp	8-SOP	4.03	3.23	2.51
THS4021CDGN	296-10026-5-ND	350MHz Ultra-Low Noise V-Feedback Op Amp *NEW!*	8-MSOP	4.03	3.23	2.51
THS4021CDGNR	296-10026-2-ND	350MHz Ultra-Low Noise V-Feedback Op Amp *NEW!*	8-MSOP	5637.50/2,500		
THS4021ID	296-7516-5-ND	350MHz Ultra-Low Noise V-Feedback Op Amp *NEW!*	8-SOP	4.23	3.39	2.64
THS4021IDGNR	296-7517-1-ND	350MHz Ultra-Low Noise V-Feedback Op Amp *NEW!*	8-MSOP	4.23	3.39	2.64
THS4021IDGNR	296-7517-2-ND	350MHz Ultra-Low Noise V-Feedback Op Amp *NEW!*	8-MSOP	5922.50/2,500		
THS4022CDGNR	296-7518-1-ND	Dual 350MHz Low-Noise V-Feedback Op Amp *NEW!*	8-MSOP	5.98	4.79	4.04
THS4022CDGNR	296-7518-2-ND	Dual 350MHz Low-Noise V-Feedback Op Amp *NEW!*	8-MSOP	9270.00/2,500		
THS4022ID	296-7519-5-ND	Dual 350MHz Low Noise V-Feedback Op Amp *NEW!*	8-SOP	6.14	4.92	4.15
THS4022IDGNR	296-7520-1-ND	Dual 350MHz Low-Noise V-Feedback Op Amp *NEW!*	8-MSOP	6.14	4.92	4.15
THS4022IDGNR	296-7520-2-ND	Dual 350MHz Low-Noise V-Feedback Op Amp *NEW!*	8-MSOP	9517.50/2,500		
THS4031CD	296-2406-5-ND	100MHz Low Noise High Speed Amp	8-SOP	3.76	3.01	2.34
THS4031CDGNR	296-7521-1-ND	100MHz Low Noise V-Feedback Op Amp *NEW!*	8-MSOP	3.76	3.01	2.34
THS4031CDGNR	296-7521-2-ND	100MHz Low Noise V-Feedback Op Amp *NEW!*	8-MSOP	5260.00/2,500		
THS4031ID	296-7522-5-ND	100MHz Low Noise V-Feedback Op Amp *NEW!*	8-SOP	3.94	3.15	2.45
THS4031IDGN	296-10030-5-ND	100MHz Low Noise V-Feedback Op Amp *NEW!*	8-MSOP	3.94	3.15	2.45
THS4031IDGNR	296-10030-2-ND	100MHz Low Noise V-Feedback Op Amp *NEW!*	8-MSOP	5512.50/2,500		
THS4032CD	296-7524-5-ND	Dual 100MHz Low Noise V-Feedback Op Amp *NEW!*	8-SOP	5.54	4.44	3.74
THS4032ID	296-7525-5-ND	Dual 100MHz Low Noise V-Feedback Op Amp *NEW!*	8-SOP	5.70	4.56	3.85
THS4032IDGNR	296-7526-1-ND	Dual 100MHz Low Noise V-Feedback Op Amp *NEW!*	8-MSOP	5.70	4.56	3.85
THS4032IDGNR	296-7526-2-ND	Dual 100MHz Low Noise V-Feedback Op Amp *NEW!*	8-MSOP	8835.00/2,500		
THS4041CD	296-2407-5-ND	165MHz Capacitive-Stable, Hi Spd. Amp	8-SOP	3.04	2.43	1.89
THS4041CDGNR	296-7527-1-ND	165MHz Capacitive-Stable V-Feedback Op Amp *NEW!*	8-MSOP	3.04	2.43	1.89
THS4041CDGNR	296-7527-2-ND	165MHz Capacitive-Stable V-Feedback Op Amp *NEW!*	8-MSOP	4252.50/2,500		
THS4041ID	296-7528-5-ND	165MHz Capacitive-Stable V-Feedback Op Amp *NEW!*	8-SOP	3.22	2.58	2.01
THS4041IDGN	296-10033-5-ND	165MHz Capacitive-Stable V-Feedback Op Amp *NEW!*	8-MSOP	3.22	2.58	2.01
THS4041IDGNR	296-10033-2-ND	165MHz Capacitive-Stable V-Feedback Op Amp *NEW!*	8-MSOP	4505.00/2,500		
THS4042CD	296-7530-5-ND	Dual 165MHz Capacitive-Stable V-Feedback Op Amp *NEW!*	8-SOP	5.34	4.28	3.61
THS4042CDGNR	296-7531-1-ND	Dual 165MHz Capacitive-Stable V-Feedback Op Amp *NEW!*	8-MSOP	5.34	4.28	3.61
THS4042CDGNR	296-7531-2-ND	Dual 165MHz Capacitive-Stable V-Feedback Op Amp *NEW!*	8-MSOP	8277.50/2,500		
THS4042ID	296-7532-5-ND	Dual 165MHz Capacitive-Stable V-Feedback Op Amp *NEW!*	8-SOP	5.50	4.40	3.72
THS4042IDGNR	296-7533-1-ND	Dual 165MHz Capacitive-Stable V-Feedback Op Amp *NEW!*	8-MSOP	5.50	4.40	3.72
THS4042IDGNR	296-7533-2-ND	Dual 165MHz Capacitive-Stable V-Feedback Op Amp *NEW!*	8-MSOP	8525.00/2,500		
THS4051CD	296-2408-5-ND	70MHz High Speed Amp	8-SOP	2.25	1.80	1.35
THS4051CDGNR	296-7534-1-ND	70MHz V-Feedback Op Amp *NEW!*	8-MSOP	2.25	1.80	1.35
THS4051CDGNR	296-7534-2-ND	70MHz V-Feedback Op Amp *NEW!*	8-MSOP	2880.00/2,500		
THS4051ID	296-7535-5-ND	70MHz V-Feedback Op Amp *NEW!*	8-SOP	2.45	1.96	1.47
THS4051IDGNR	296-7536-1-ND	70MHz V-Feedback Op Amp *NEW!*	8-MSOP	2.45	1.96	1.47
THS4051IDGNR	296-7536-2-ND	70MHz V-Feedback Op Amp *NEW!*	8-MSOP	3135.00/2,500		
THS4052CD	296-7537-5-ND	Dual 70MHz V-Fdbk. Op Amp *NEW!*	8-SOP	2.61	2.09	1.63
THS4052CDGNR	296-7538-1-ND	Dual 70MHz V-Fdbk. Op Amp *NEW!*	8-MSOP	2.61	2.09	1.63
THS4052CDGNR	296-7538-2-ND	Dual 70MHz V-Fdbk. Op Amp *NEW!*	8-MSOP	3655.00/2,500		
THS4052ID	296-7539-5-ND	Dual 70MHz V-Fdbk. Op Amp *NEW!*	8-SOP	2.79	2.24	1.74
THS4052IDGNR	296-7540-1-ND	Dual 70MHz V-Fdbk. Op Amp *NEW!*	8-MSOP	2.79	2.24	1.74
THS4052IDGNR	296-7540-2-ND	Dual 70MHz V-Fdbk. Op Amp *NEW!*	8-MSOP	3905.00/2,500		
THS4061CD	296-2409-5-ND	180MHz High Speed Amp	8-SOP	2.57	2.06	1.60
THS4061ID	296-7541-5-ND	180MHz V-Feedback Op Amp *NEW!*	8-SOP	2.75	2.20	1.71
THS4062CD	296-7542-5-ND	Dual 180MHz V-Fdbk. Op Amp *NEW!*	8-SOP	3.62	2.90	2.26
THS4062CDGN	296-7543-5-ND	Dual 180MHz V-Fdbk. Op Amp *NEW!*	8-MSOP	3.62	2.90	2.26
THS4062ID	296-7544-5-ND	Dual 180MHz V-Fdbk. Op Amp *NEW!*	8-SOP	3.80	3.05	2.37
THS4062IDGN	296-7545-5-ND	Dual 180MHz V-Fdbk. Op Amp *NEW!*	8-MSOP	3.80	3.05	2.37
THS4062IDGNR	296-7546-1-ND	Dual 180MHz V-Fdbk. Op Amp *NEW!*	8-MSOP	3.80	3.05	2.37
THS4062IDGNR	296-7546-2-ND	Dual 180MHz V-Fdbk. Op Amp *NEW!*	8-MSOP	5322.50/2,500		
THS4081CD	296-2410-5-ND	175MHz Low Power, High Speed Amp	8-SOP	3.29	2.63	2.05
THS4081CDGNR	296-7547-1-ND	175MHz LP V-Fdbk. Op Amp *NEW!*	8-MSOP	3.29	2.63	2.05
THS4081CDGNR	296-7547-2-ND	175MHz LP V-Fdbk. Op Amp *NEW!*	8-MSOP	4600.00/2,500		
THS4081ID	296-7548-5-ND	175MHz LP V-Fdbk. Op Amp *NEW!*	8-SOP	3.47	2.78	2.16
THS4081IDGN	296-10039-5-ND	175MHz LP V-Fdbk. Op Amp *NEW!*	8-MSOP	3.47	2.78	2.16
THS4081IDGNR	296-10039-2-ND	175MHz LP V-Fdbk. Op Amp *NEW!*	8-MSOP	4850.00/2,500		

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
THS4082CD	296-7550-5-ND	Dual 175MHz LP Voltage-Feedback Op Amp *NEW!*	8-SOP	5.49	4.40	3.42
THS4082CDGNR	296-7551-1-ND	Dual 175MHz LP Voltage-Feedback Op Amp *NEW!*	8-MSOP	5.49	4.40	3.42
THS4082CDGNR	296-7551-2-ND	Dual 175MHz LP Voltage-Feedback Op Amp *NEW!*	8-MSOP	7685.00/2,500		
THS4082ID	296-7552-5-ND	Dual 175MHz LP Voltage-Feedback Op Amp *NEW!*	8-SOP	5.04	4.04	3.41
THS4082IDGNR	296-7553-1-ND	Dual 175MHz LP Voltage-Feedback Op Amp *NEW!*	8-MSOP	5.04	4.04	3.41
THS4082IDGNR	296-7553-2-ND	Dual 175MHz LP Voltage-Feedback Op Amp *NEW!*	8-MSOP	7812.50/2,500		
THS4130ID	296-7554-5-ND	LN Diff. I/O Op Amp w/Shutdown *NEW!*	8-SOP	5.66	4.53	3.83
THS4140ID	296-7555-5-ND	Diff. I/O Op Amp w/Shutdown *NEW!*	8-SOP	5.50	4.40	3.72
THS4141ID	296-7556-5-ND	Diff. I/O Op Amp w/Shutdown *NEW!*	8-SOP	5.50	4.40	3.72
TLE2072CDR	296-1342-1-ND	Dual JFET-Input Operational Amplifier	8-SOP	1.83	1.46	1.10
TLE2082CP	296-1874-5-ND	Dual JFET-Input Operational Amplifier	8-Dip	1.48	1.18	.89
TLE2082IDR	296-1343-1-ND	Dual JFET-Input Operational Amplifier	8-SOP	1.65	1.32	.99
TLE2142AMD	296-1875-5-ND	Dual High Speed Precision Op Amp	8-SOP	2.63	2.11	1.64
TLV2462AIDR	296-7557-1-ND	Dual LP Rail-to-Rail I/O Op Amp *NEW!*	8-SOP	1.73	1.38	1.04
TLV2462AIDR	296-7557-2-ND	Dual LP Rail-to-Rail I/O Op Amp *NEW!*	8-SOP	2207.50/2,500		
TLV2462AIP	296-7558-5-ND	Dual LP Rail-to-Rail I/O Op Amp *NEW!*	8-Dip	1.73	1.38	1.04
TLV2462CDR	296-7559-1-ND	Dual LP Rail-to-Rail I/O Op Amp *NEW!*	8-SOP	1.58	1.26	.95
TLV2462CDR	296-7559-2-ND	Dual LP Rail-to-Rail I/O Op Amp *NEW!*	8-SOP	2015.00/2,500		
TLV2462CP	296-1892-5-ND	Dual Low Power Rail-to-Rail Op Amp	8-Dip	1.58	1.26	.95
TLV2462ID	296-7560-5-ND	Dual LP Rail-to-Rail I/O Op Amp *NEW!*	8-SOP	1.65	1.32	.99
TLV2462IDGKR	296-7561-1-ND	Dual LP R/R I/O Op Amp *NEW!*	8-TSSOP	1.65	1.32	.99
TLV2462IDGKR	296-7561-2-ND	Dual LP R/R I/O Op Amp *NEW!*	8-TSSOP	2112.50/2,500		
TLV2462IDR	296-7562-1-ND	Dual LP Rail-to-Rail I/O Op Amp *NEW!*	8-SOP	1.65	1.32	.99
TLV2462IDR	296-7562-2-ND	Dual LP Rail-to-Rail I/O Op Amp *NEW!*	8-SOP	2112.50/2,500		
TLV2462IP	296-1893-5-ND	Dual Low Power Rail-to-Rail Op Amp	8-Dip	1.65	1.32	.99
TLV2463AIDR	296-7563-1-ND	Dual LP R/R I/O Op Amp w/SD *NEW!*	14-SOP	1.90	1.52	1.14
TLV2463AIDR	296-7563-2-ND	Dual LP R/R I/O Op Amp w/SD *NEW!*	14-SOP	2432.50/2,500		
TLV2463AIN	296-7564-5-ND	Dual LP R/R I/O Op Amp w/SD *NEW!*	14-Dip	1.90	1.52	1.14
TLV2463CDGS	296-7565-5-ND	Dual LP R/R I/O Op Amp w/SD *NEW!*	10-SOP	1.73	1.38	1.04
TLV2463CDR	296-7566-1-ND	Dual LP R/R I/O Op Amp w/SD *NEW!*	14-SOP	1.73	1.38	1.04
TLV2463CDR	296-7566-2-ND	Dual LP R/R I/O Op Amp w/SD *NEW!*	14-SOP	2207.50/2,500		
TLV2463CN	296-7567-5-ND	Dual LP R/R I/O Op Amp w/SD *NEW!*	14-Dip	1.73	1.38	1.04
TLV2463ID	296-1894-5-ND	Dual Low Power Rail-to-Rail Op Amp	14-SOP	1.83	1.46	1.10
TLV2463IDGSR	296-7568-1-ND	Dual LP R/R I/O Op Amp w/SD *NEW!*	10-SOP	1.83	1.46	1.10
TLV2463IDGSR	296-7568-2-ND	Dual LP R/R I/O Op Amp w/SD *NEW!*	10-SOP	2335.00/2,500		
TLV2463IN	296-1895-5-ND	Dual Low Power Rail-to-Rail Op Amp	14-Dip	1.83	1.46	1.10
TLV2464CDR	296-7569-1-ND	Quad LP R/R I/O Op Amp *NEW!*	14-SOP	2.05	1.64	1.23
TLV2464CDR	296-7569-2-ND	Quad LP R/R I/O Op Amp *NEW!*	14-SOP	2625.00/2,500		
TLV2464CN	296-7570-5-ND	Quad LP R/R I/O Op Amp *NEW!*	14-Dip	2.05	1.64	1.23
TLV2464CPWR	296-7571-1-ND	Quad LP R/R I/O Op Amp *NEW!*	14-TSSOP	2.05	1.64	1.23
TLV2464CPWR	296-7571-2-ND	Quad LP R/R I/O Op Amp *NEW!*	14-TSSOP	2132.00/2,000		
TLV2464ID	296-10608-5-ND	Quad LP R/R I/O Op Amp *NEW!*	14-SOP	2.15	1.72	1.29
TLV2464IDR	296-10608-2-ND	Quad LP R/R I/O Op Amp *NEW!*	14-SOP	2752.50/2,500		
TLV2464IN	296-7573-5-ND	Quad LP R/R I/O Op Amp *NEW!*	14-Dip	2.15	1.72	1.29
TLV2464IPWR	296-7575-1-ND	Quad LP R/R I/O Op Amp *NEW!*	14-TSSOP	2.15	1.72	1.29
TLV2464IPWR	296-7575-2-ND	Quad LP R/R I/O Op Amp *NEW!*	14-TSSOP	2236.00/2,000		
TLV2465CDR	296-7576-1-ND	Quad LP R/R I/O Op Amp w/SD *NEW!*	16-SOP	2.28	1.82	1.37
TLV2465CDR	296-7576-2-ND	Quad LP R/R I/O Op Amp w/SD *NEW!*	16-SOP	2912.50/2,500		
TLV2465CN	296-7577-5-ND	Quad LP R/R I/O Op Amp w/SD *NEW!*	16-Dip	2.28	1.82	1.37
TLV2465CPWR	296-7578-1-ND	Quad LP Rail-to-Rail Op Amp w/Shutdown *NEW!*	16-TSSOP	2.28	1.82	1.37
TLV2465CPWR	296-7578-2-ND	Quad LP Rail-to-Rail Op Amp w/Shutdown *NEW!*	16-TSSOP	2366.00/2,000		
TLV2465ID	296-10609-5-ND	Quad LP R/R I/O Op Amp w/SD *NEW!*	16-SOP	2.38	1.90	1.43
TLV2465IDR	296-10609-2-ND	Quad LP R/R I/O Op Amp w/SD *NEW!*	16-SOP	3040.00/2,500		
TLV2465IN	296-7580-5-ND	Quad LP R/R I/O Op Amp w/SD *NEW!*	16-Dip	2.38	1.90	1.43
TLV2465IPWR	296-7581-1-ND	Quad LP Rail-to-Rail Op Amp w/Shutdown *NEW!*	16-TSSOP	2.38	1.90	1.43
TLV2465IPWR	296-7581-2-ND	Quad LP Rail-to-Rail Op Amp w/Shutdown *NEW!*	16-TSSOP	2470.00/2,000		
TLV2770AIDR	296-7582-1-ND	Single 2.7V R/R Op Amp w/SD *NEW!*	8-SOP	1.53	1.22	.92
TLV2770AIDR	296-7582-2-ND	Single 2.7V R/R Op Amp w/SD *NEW!*	8-SOP	1952.50/2,500		
TLV2770AIP	296-7583-5-ND	Single 2.7V R/R Op Amp w/SD *NEW!*	8-Dip	1.53	1.22	.92
TLV2770CD	296-1896-5-ND	Rail-to-Rail Operational Amplifier	8-SOP	1.38	1.10	.83
TLV2770CDR	296-1896-2-ND	Single 2.7V R/R Op Amp w/SD *NEW!*	8-SOP	1760.00/2,500		
TLV2770CDGKR	296-7584-1-ND	Single 2.7V Rail-to-Rail Op Amp with Shutdown *NEW!*	8-TSSOP	1.38	1.10	.83
TLV2770CDGKR	296-7584-2-ND	Single 2.7V Rail-to-Rail Op Amp with Shutdown *NEW!*	8-TSSOP	1760.00/2,500		
TLV2770CP	296-1897-5-ND	Rail-to-Rail Operational Amplifier	8-Dip	1.38	1.10	.83
TLV2770ID	296-1898-5-ND	Rail-to-Rail Operational Amplifier	8-SOP	1.45	1.16	.87
TLV2770IDR	296-1898-2-ND	Single 2.7V R/R I/O Op Amp w/SD *NEW!*	8-SOP	1855.00/2,500		
TLV2770IDGKR	296-7585-1-ND	Single 2.7V Rail-to-Rail Op Amp with Shutdown *NEW!*	8-TSSOP	1.45	1.16	.87
TLV2770IDGKR	296-7585-2-ND	Single 2.7V Rail-to-Rail Op Amp with Shutdown *NEW!*	8-TSSOP	1855.00/2,500		
TLV2770IP	296-1899-5-ND	Rail-to-Rail Operational Amplifier	8-Dip	1.45	1.16	.87
TLV2771AIDR	296-7586-1-ND	Single 2.7V Rail-to-Rail Op Amp *NEW!*	8-SOP	1.38	1.10	.83
TLV2771AIDR	296-7586-2-ND	Single 2.7V Rail-to-Rail Op Amp *NEW!*	8-SOP	1760.00/2,500		
TLV2771CD	296-1900-5-ND	Rail-to-Rail Operational Amplifier	8-SOP	1.25	1.00	.75
TLV2771CDR	296-1900-2-ND	Single 2.7V Rail-to-Rail Op Amp *NEW!*	8-SOP	1600.00/2,500		
TLV2771CDBVR	296-1346-1-ND	Rail-to-Rail Operational Amplifier	SOT-23-5	1.40	1.12	.84
TLV2771IDBVR	296-1347-1-ND	Rail-to-Rail Operational Amplifier	SOT-23-5	1.48	1.18	.89
TLV2772AID	296-7587-5-ND	Dual 2.7V Rail-to-Rail Op Amp *NEW!*	8-SOP	1.78	1.43	1.11
TLV2772AIDR	296-7587-2-ND	Dual 2.7V Rail-to-Rail Op Amp *NEW!*	8-SOP	2527.50/2,500		
TLV2772AIP	296-7588-5-ND	Dual 2.7V Rail-to-Rail Op Amp *NEW!*	8-Dip	1.98	1.58	1.19
TLV2772AMD	296-7589-5-ND	Dual 2.7V Rail-to-Rail Op Amp *NEW!*	8-SOP	2.45	1.97	1.53
TLV2772CD	296-10677-5-ND	Dual 2.7V Rail-to-Rail Op Amp *NEW!*	8-SOP	1.78	35.50	106.50
TLV2772CDR	296-10677-2-ND	Dual 2.7V Rail-to-Rail Op Amp *NEW!*	8-SOP	2272.50/2,500		
TLV2772CDGK	296-7591-5-ND	Dual 2.7V Rail-to-Rail Op Amp *NEW!*	8-TSSOP	1.78	1.42	1.07
TLV2772CP	296-7592-5-ND	Dual 2.7V Rail-to-Rail Op Amp *NEW!*	8-Dip	1.78	1.42	1.07
TLV2772IDR	296-1902-2-ND	Dual 2.7V Rail-to-Rail Op Amp *NEW!*	8-SOP	2400.00/2,500		
TLV2772ID	296-1902-5-ND	Dual Rail-to-Rail Operational Amplifier	8-SOP	1.88	1.50	1.13
TLV2772IDGKR	296-7593-1-ND	Dual 2.7V Rail-to-Rail Op Amp *NEW!*	8-TSSOP	1.88	1.50	1.13
TLV2772IDGKR	296-7593-2-ND	Dual 2.7V Rail-to-Rail Op Amp *NEW!*	8-TSSOP	2400.00/2,500		
TLV2772IP	296-1903-5-ND	Dual Rail-to-Rail Operational Amplifier	8-Dip	1.88	1.50	1.13
TLV2772MD	296-7594-5-ND	Dual 2.7V Rail-to-Rail Op Amp *NEW!*	8-SOP	2.34	1.88	1.46

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TEXAS INSTRUMENTS AMPLIFIERS *(Continued)*

T. I.	Digi-Key			Price Each★		
Part No.	Part No.	Description	Pkg.	1	25	100
TLV2773AIDR	296-7595-1-ND	Dual 2.7V R/R Op Amp w/SD *NEW!*	14-SOP	2.15	1.72	1.29
TLV2773AIDR	296-7595-2-ND	Dual 2.7V R/R Op Amp w/SD *NEW!*	14-SOP	2752.50/2,500		
TLV2773AIN	296-7596-5-ND	Dual 2.7V R/R Op Amp w/SD *NEW!*	14-Dip	2.15	1.72	1.29
TLV2773CDGS	296-7597-5-ND	Dual 2.7V R/R Op Amp w/SD *NEW!*	10-SOP	1.98	1.58	1.19
TLV2773CDR	296-7598-1-ND	Dual 2.7V R/R Op Amp w/SD *NEW!*	14-SOP	1.98	1.58	1.19
TLV2773CDR	296-7598-2-ND	Dual 2.7V R/R Op Amp w/SD *NEW!*	14-SOP	2527.50/2,500		
TLV2773IDGSR	296-7599-1-ND	Dual 2.7V R/R Op Amp w/SD *NEW!*	10-SOP	2.05	1.64	1.23
TLV2773IDGSR	296-7599-2-ND	Dual 2.7V R/R Op Amp w/SD *NEW!*	10-SOP	2625.00/2,500		
TLV2773IDR	296-7600-1-ND	Dual 2.7V R/R Op Amp w/SD *NEW!*	14-SOP	2.05	1.64	1.23
TLV2773IDR	296-7600-2-ND	Dual 2.7V R/R Op Amp w/SD *NEW!*	14-SOP	2625.00/2,500		
TLV2773IN	296-7601-5-ND	Dual 2.7V R/R Op Amp w/SD *NEW!*	14-Dip	2.05	1.64	1.23
TLV2774AIDR	296-7602-1-ND	Quad 2.7V Rail-to-Rail Op Amp *NEW!*	14-SOP	2.32	1.86	1.45
TLV2774AIDR	296-7602-2-ND	Quad 2.7V Rail-to-Rail Op Amp *NEW!*	14-SOP	3245.00/2,500		
TLV2774AIN	296-7603-5-ND	Quad 2.7V Rail-to-Rail Op Amp *NEW!*	14-Dip	2.32	1.86	1.45
TLV2774CD	296-1904-5-ND	Quad Rail-to-Rail Operational Amplifier	14-SOP	2.33	1.86	1.40
TLV2774CDR	296-1904-2-ND	Quad 2.7V Rail-to-Rail Op Amp *NEW!*	14-SOP	2975.00/2,500		
TLV2774CN	296-1905-5-ND	Quad Rail-to-Rail Operational Amplifier	14-Dip	2.33	1.86	1.40
TLV2774CPWR	296-7604-1-ND	Quad 2.7V R/R Op Amp *NEW!*	14-TSSOP	2.33	1.86	1.40
TLV2774CPWR	296-7604-2-ND	Quad 2.7V R/R Op Amp *NEW!*	14-TSSOP	2418.00/2,000		
TLV2774ID	296-1906-5-ND	Quad Rail-to-Rail Operational Amplifier	14-SOP	2.45	1.96	1.47
TLV2774IN	296-1907-5-ND	Quad Rail-to-Rail Operational Amplifier	14-Dip	2.45	1.96	1.47
TLV2775AIDR	296-7605-1-ND	Quad 2.7V R/R Op Amp w/SD *NEW!*	16-SOP	2.52	2.02	1.57
TLV2775AIDR	296-7605-2-ND	Quad 2.7V R/R Op Amp w/SD *NEW!*	16-SOP	3527.50/2,500		
TLV2775AIN	296-7606-5-ND	Quad 2.7V R/R Op Amp w/SD *NEW!*	16-Dip	2.52	2.02	1.57
TLV2775CD	296-1908-5-ND	Quad Rail-to-Rail Operational Amplifier	16-SOP	2.32	1.86	1.45
TLV2775CDR	296-1908-2-ND	Quad 2.7V R/R Op Amp w/SD *NEW!*	16-SOP	3245.00/2,500		
TLV2775CN	296-1909-5-ND	Quad Rail-to-Rail Operational Amplifier	16-Dip	2.32	1.86	1.45
TLV2775ID	296-1910-5-ND	Quad Rail-to-Rail Operational Amplifier	16-SOP	2.41	1.93	1.50
TLV2775IN	296-7607-5-ND	Quad 2.7V R/R Op Amp w/SD *NEW!*	14-Dip	2.41	1.93	1.50
TLV2780IDBVR	296-7608-1-ND	8MHz, 1.8V R/R Op Amp w/SD *NEW!*	SOT-23-6	1.40	1.12	.84
TLV2780IDBVR	296-7608-2-ND	8MHz, 1.8V R/R Op Amp w/SD *NEW!*	SOT-23-6	2151.00/3,000		
TLV2780IDR	296-7609-1-ND	8MHz, 1.8V R/R I/O Op Amp w/SD *NEW!*	8-SOP	1.40	1.12	.84
TLV2780IDR	296-7609-2-ND	8MHz, 1.8V R/R I/O Op Amp w/SD *NEW!*	8-SOP	1792.50/2,500		
TLV2781IDBVR	296-7610-1-ND	8MHz, 1.8V R/R I/O Op Amp *NEW!*	SOT-23-5	1.28	1.02	.77
TLV2781IDBVR	296-7610-2-ND	8MHz, 1.8V R/R I/O Op Amp *NEW!*	SOT-23-5	1959.00/3,000		
TLV2781IDR	296-7611-1-ND	8MHz, 1.8V R/R I/O Op Amp *NEW!*	8-SOP	1.28	1.02	.77
TLV2781IDR	296-7611-2-ND	8MHz, 1.8V R/R I/O Op Amp *NEW!*	8-SOP	1632.50/2,500		
TLV2782AID	296-7612-5-ND	Dual 8MHz, 1.8V R/R I/O Op Amp *NEW!*	8-SOP	1.90	1.52	1.14
TLV2782CDGKR	296-7613-1-ND	Dual 8MHz, 1.8V Rail-to-Rail I/O Op Amp *NEW!*	8-TSSOP	1.73	1.38	1.04
TLV2782CDGKR	296-7613-2-ND	Dual 8MHz, 1.8V Rail-to-Rail I/O Op Amp *NEW!*	8-TSSOP	2207.50/2,500		
TLV2782CDR	296-7614-1-ND	Dual 8MHz, 1.8V R/R I/O Op Amp *NEW!*	8-SOP	1.73	1.38	1.04
TLV2782CDR	296-7614-2-ND	Dual 8MHz, 1.8V R/R I/O Op Amp *NEW!*	8-SOP	2207.50/2,500		
TLV2782ID	296-11652-5-ND	Dual 8MHz, 1.8V R/R I/O Op Amp *NEW!*	8-SOP	1.80	1.44	1.08
TLV2782IDGKR	296-7615-1-ND	Dual 8MHz, 1.8V Rail-to-Rail I/O Op Amp *NEW!*	8-TSSOP	1.80	1.44	1.08
TLV2782IDGKR	296-7615-2-ND	Dual 8MHz, 1.8V Rail-to-Rail I/O Op Amp *NEW!*	8-TSSOP	2305.00/2,500		
TLV2782IP	296-7616-5-ND	Dual 8MHz, 1.8V R/R I/O Op Amp *NEW!*	8-Dip	1.80	1.44	1.08
		Performance Op Amps				
LT1013CP	296-1399-5-ND	Dual Precision Operational Amplifier	8-Dip	2.30	1.84	1.43
LT1013DD	296-1400-5-ND	Dual Precision Operational Amplifier	8-SOP	2.00	1.60	1.20
LT1013DIP	296-7044-5-ND	Dual Precision Op Amp *NEW!*	8-Dip	2.30	1.84	1.38
LT1013DP	296-7045-5-ND	Dual Precision Op Amp *NEW!*	8-Dip	2.00	1.60	1.20
LT1014DIDW	296-7046-5-ND	Quad Precision Op Amp *NEW!*	16-SOIC	5.45	4.36	3.39
LT1014DN	296-7047-5-ND	Quad Precision Op Amp *NEW!*	14-Dip	4.73	3.78	2.94
THS7001CPWP	296-2411-5-ND	70MHz, Programmable Gain Amplifier	20-TSSOP	5.98	4.79	4.04
THS7001IPWP	296-7048-5-ND	70MHz HS Programmable Gain Amp *NEW!*	20-TSSOP	5.98	4.79	4.04
THS7002CPWP	296-2412-5-ND	Dual 70MHz, Programmable Gain Amp	28-TSSOP	9.54	7.64	6.44
THS7002IPWP	296-7049-5-ND	Dual 70MHz HS Programmable Gain Amp *NEW!*	28-TSSOP	9.54	7.64	6.44
TLC2201ACD	296-7050-5-ND	LN Precision Operational Amplifier *NEW!*	8-SOP	3.56	2.85	2.22
TLC2201ACP	296-7051-5-ND	LN Precision Operational Amplifier *NEW!*	8-Dip	3.56	2.85	2.22
TLC2201AID	296-7052-5-ND	LN Precision Operational Amplifier *NEW!*	8-SOP	3.85	3.08	2.40
TLC2201AIP	296-7053-5-ND	LN Precision Op Amp *NEW!*	8-Dip	3.85	3.08	2.40
TLC2201AMD	296-7054-5-ND	LN Precision Op Amp *NEW!*	8-SOP	4.48	3.59	2.79
TLC2201CD	296-2425-5-ND	Low Noise Precision Op Amplifier	8-SOP	2.97	2.38	1.85
TLC2201IDR	296-7061-1-ND	LN Precision Rail-to-Rail Op Amp *NEW!*	8-SOP	3.26	2.61	2.03
TLC2201IDR	296-7061-2-ND	LN Precision Rail-to-Rail Op Amp *NEW!*	8-SOP	4567.50/2,500		
TLC2201IP	296-7062-5-ND	LN Precision Rail-to-Rail Op Amp *NEW!*	8-Dip	3.26	2.61	2.03
TLC2202ACD	296-7063-5-ND	Dual LN Precision Op Amp *NEW!*	14-SOP	5.06	4.05	3.15
TLC2202ACP	296-7064-5-ND	Dual LN Precision Op Amp *NEW!*	8-Dip	5.06	4.05	3.15
TLC2202AID	296-7065-5-ND	Dual LN Precision Op Amp *NEW!*	14-SOP	5.49	4.40	3.42
TLC2202AIP	296-7066-5-ND	Dual LN Precision Op Amp *NEW!*	8-Dip	5.49	4.40	3.42
TLC2202AMD	296-7067-5-ND	Dual LN Precision Op Amp *NEW!*	14-SOP	5.40	4.32	3.36
TLC2202BCD	296-7068-5-ND	Dual LN Precision Op Amp *NEW!*	14-SOP	5.44	4.36	3.68
TLC2202BCP	296-7069-5-ND	Dual LN Precision Op Amp *NEW!*	8-Dip	5.44	4.36	3.68
TLC2202BIP	296-7070-5-ND	Dual LN Precision Op Amp *NEW!*	8-Dip	5.82	4.66	3.93
TLC2202CD	296-1807-5-ND	Dual Low Noise Precision Op Amp	14-SOP	4.23	3.39	2.64
TLC2202IP	296-7073-5-ND	Dual LN Precision R/R Op Amp *NEW!*	8-Dip	4.64	3.71	2.89
TLC2252AID	296-7074-5-ND	Dual Rail-to-Rail Op Amp *NEW!*	8-SOP	1.53	1.22	.92
TLC2252AIP	296-7075-5-ND	Dual Rail-to-Rail Op Amp *NEW!*	8-Dip	1.53	1.22	.92
TLC2252AIPWR	296-7076-1-ND	Dual Rail-to-Rail Op Amp *NEW!*	8-TSSOP	1.53	1.22	.92
TLC2252AIPWR	296-7076-2-ND	Dual Rail-to-Rail Op Amp *NEW!*	8-TSSOP	1952.50/2,500		
TLC2252AQD	296-7077-5-ND	Dual Rail-to-Rail Op Amp *NEW!*	8-SOP	1.43	1.14	.86
TLC2252CD	296-7078-5-ND	Dual R/R Micropower Op Amp *NEW!*	8-SOP	1.41	1.18	.94
TLC2252CP	296-7079-5-ND	Dual R/R Micropower Op Amp *NEW!*	8-Dip	1.41	1.18	.94
TLC2252ID	296-7080-5-ND	Dual R/R Micropower Op Amp *NEW!*	8-SOP	1.28	1.02	.77
TLC2252IP	296-7081-5-ND	Dual R/R Micropower Op Amp *NEW!*	8-Dip	1.28	1.02	.77
TLC2252QD	296-7082-5-ND	Dual R/R Micropower Op Amp *NEW!*	8-SOP	1.38	1.10	.83
TLC2254AID	296-7083-5-ND	Quad Rail-to-Rail Op Amp *NEW!*	14-SOP	1.83	1.46	1.10
TLC2254AIN	296-7084-5-ND	Quad Rail-to-Rail Op Amp *NEW!*	14-Dip	1.83	1.46	1.10
TLC2254AIPWR	296-7085-1-ND	Quad Rail-to-Rail Op Amp *NEW!*	14-TSSOP	1.83	1.46	1.10
TLC2254AIPWR	296-7085-2-ND	Quad Rail-to-Rail Op Amp *NEW!*	14-TSSOP	1898.00/2,000		
TLC2254AQD	296-7086-5-ND	Quad Rail-to-Rail Op Amp *NEW!*	14-SOP	2.00	1.60	1.20
TLC2254CD	296-1300-5-ND	Quad R/R Micropower Op Amp *NEW!*	14-SOP	1.40	1.12	.84
TLC2254CDR	296-1300-1-ND	Quad Rail-to-Rail Micropower Op Amp	14-SOP	1.73	1.38	1.04
TLC2254CDR	296-1300-2-ND	Quad Rail-to-Rail Micropower Op Amp	14-SOP	1792.50/2,500		
TLC2254CN	296-7088-5-ND	Quad R/R Micropower Op Amp *NEW!*	14-Dip	1.40	1.12	.84
TLC2254CPWR	296-7089-1-ND	Quad R/R Micropower Op Amp *NEW!*	14-TSSOP	1.40	1.12	.84
TLC2254CPWR	296-7089-2-ND	Quad R/R Micropower Op Amp *NEW!*	14-TSSOP	1456.00/2,000		
TLC2254ID	296-1301-5-ND	Quad Low Power Operational Amplifier	14-SOP	1.55	1.24	.93
TLC2254IDR	296-1301-2-ND	Quad Low Power Operational Amplifier	14-SOP	1985.00/2,500		
TLC2254IN	296-7090-5-ND	Quad R/R Micropower Op Amp *NEW!*	14-Dip	1.55	1.24	.93
TLC2254QD	296-7091-5-ND	Quad R/R Micropower Op Amp *NEW!*	14-SOP	1.93	1.54	1.16
TLC2262AID	296-7092-5-ND	Dual Rail-to-Rail Op Amp *NEW!*	8-SOP	1.53	1.22	.92
TLC2262AIP	296-7093-5-ND	Dual Rail-to-Rail Op Amp *NEW!*	8-Dip	1.53	1.22	.92
TLC2262AQD	296-7094-5-ND	Dual Rail-to-Rail Op Amp *NEW!*	8-SOP	1.43	1.14	.86
TLC2262CD	296-1302-5-ND	Dual Rail-to-Rail Operational Amplifier	8-SOP	1.41	1.18	.94
TLC2262CDR	296-1302-2-ND	Dual Rail-to-Rail Operational Amplifier	8-SOP	1527.50/2,500		
TLC2262CP	296-7095-5-ND	Dual Rail-to-Rail Op Amp *NEW!*	8-Dip	1.41	1.18	.94
TLC2262CPWR	296-7096-1-ND	Dual Rail-to-Rail Op Amp *NEW!*	8-TSSOP	1.41	1.18	.94
TLC2262CPWR	296-7096-2-ND	Dual Rail-to-Rail Op Amp *NEW!*	8-TSSOP	1250.00/2,000		
TLC2262ID	296-7097-5-ND	Dual Rail-to-Rail Op Amp *NEW!*	8-SOP	1.28	1.02	.77
TLC2262IP	296-7098-5-ND	Dual Rail-to-Rail Op Amp *NEW!*	8-Dip	1.28	1.02	.77
TLC2262QD	296-7099-5-ND	Dual Rail-to-Rail Op Amp *NEW!*	8-SOP	1.38	1.10	.83
TLC2264AID	296-7100-5-ND	Quad Rail-to-Rail Op Amp *NEW!*	14-SOP	1.83	1.46	1.10
TLC2264AIN	296-7101-5-ND	Quad Rail-to-Rail Op Amp *NEW!*	14-Dip	1.83	1.46	1.10
TLC2264AQD	296-7102-5-ND	Quad Rail-to-Rail Op Amp *NEW!*	14-SOP	2.00	1.60	1.20
TLC2264CD	296-7103-5-ND	Quad Rail-to-Rail Op Amp *NEW!*	14-SOP	1.40	1.12	.84
TLC2264CN	296-7104-5-ND	Quad Rail-to-Rail Op Amp *NEW!*	14-Dip	1.40	1.12	.84
TLC2264CPWR	296-7105-1-ND	Quad Rail-to-Rail Op Amp *NEW!*	14-TSSOP	1.40	1.12	.84
TLC2264CPWR	296-7105-2-ND	Quad Rail-to-Rail Op Amp *NEW!*	14-TSSOP	1456.00/2,000		
TLC2264ID	296-7106-5-ND	Quad Rail-to-Rail Op Amp *NEW!*	14-SOP	1.55	1.24	.93
TLC2264IN	296-7107-5-ND	Quad Rail-to-Rail Op Amp *NEW!*	14-Dip	1.55	1.24	.93
TLC2264QD	296-7108-5-ND	Quad Rail-to-Rail Op Amp *NEW!*	14-SOP	1.93	1.54	1.16
TLC2272ACD	296-1303-5-ND	Dual Rail-to-Rail Operational Amplifier	8-SOP	1.40	1.12	.84
TLC2272ACDR	296-1303-2-ND	Dual Rail-to-Rail Operational Amplifier	8-SOP	1792.50/2,500		
TLC2272ACP	296-7109-5-ND	Dual Rail-to-Rail Op Amp *NEW!*	8-Dip	1.40	1.12	.84
TLC2272ACPWR	296-7110-1-ND	Dual Rail-to-Rail Op Amp *NEW!*	8-TSSOP	1.40	1.12	.84
TLC2272ACPWR	296-7110-2-ND	Dual Rail-to-Rail Op Amp *NEW!*	8-TSSOP	1456.00/2,000		
TLC2272AID	296-1304-5-ND	Rail-to-Rail Dual Op Amp *NEW!*	8-SOP	1.53	1.22	.92
TLC2272AIDR	296-1304-1-ND	Dual Rail-to-Rail Operational Amplifier	8-SOP	1.53	1.22	.92
TLC2272AIDR	296-1304-2-ND	Dual Rail-to-Rail Operational Amplifier	8-SOP	1952.50/2,500		
TLC2272AIP	296-7112-5-ND	Rail-to-Rail Dual Op Amp *NEW!*	8-Dip	1.53	1.22	.92
TLC2272AMD	296-7113-5-ND	Rail-to-Rail Dual Op Amp *NEW!*	8-SOP	1.73	1.38	1.04
TLC2272AQD	296-7114-5-ND	Rail-to-Rail Dual Op Amp *NEW!*	8-SOP	1.43	1.14	.86
TLC2272CD	296-1305-5-ND	Dual Rail-to-Rail Operational Amplifier	8-SOP	1.41	1.18	.94
TLC2272CDR	296-1305-2-ND	Dual Rail-to-Rail Operational Amplifier	8-SOP	1527.50/2,500		
TLC2272CP	296-1812-5-ND	Dual Rail-to-Rail Operational Amplifier	8-Dip	1.41	1.18	.94
TLC2272CPWR	296-7115-1-ND	Dual LN Rail-to-Rail Op Amp *NEW!*	8-TSSOP	1.41	1.18	.94
TLC2272CPWR	296-7115-2-ND	Dual LN Rail-to-Rail Op Amp *NEW!*	8-TSSOP	1250.00/2,000		
TLC2272ID	296-7116-5-ND	Dual LN Rail-to-Rail Op Amp *NEW!*	8-SOP	1.28	1.02	.77
TLC2272IP	296-7117-5-ND	Dual LN Rail-to-Rail Op Amp *NEW!*	8-Dip	1.28	1.02	.77
TLC2272IPWR	296-7118-1-ND	Dual LN Rail-to-Rail Op Amp *NEW!*	8-TSSOP	1.28	1.02	.77
TLC2272IPWR	296-7118-2-ND	Dual LN Rail-to-Rail Op Amp *NEW!*	8-TSSOP	1326.00/2,000		
TLC2272MD	296-7119-5-ND	Dual LN Rail-to-Rail Op Amp *NEW!*	8-SOP	1.58	1.26	.95
TLC2272QD	296-7120-5-ND	Dual LN Rail-to-Rail Op Amp *NEW!*	8-SOP	1.38	1.10	.83
TLC2274ACD	296-1813-5-ND	Quad LN Rail-to-Rail Op Amp	14-SOP	1.70	1.36	1.02
TLC2274ACDR	296-1813-2-ND	Quad LN Rail-to-Rail Op Amp *NEW!*	14-SOP	2175.00/2,500		
TLC2274ACN	296-7121-5-ND	Quad LN Rail-to-Rail Op Amp *NEW!*	14-Dip	1.70	1.36	1.02
TLC2274ACPWR	296-7122-1-ND	Quad LN Rail-to-Rail Op Amp *NEW!*	14-TSSOP	1.70	1.36	1.02
TLC2274ACPWR	296-7122-2-ND	Quad LN Rail-to-Rail Op Amp *NEW!*	14-TSSOP	1768.00/2,000		
TLC2274AID	296-1814-5-ND	Quad LN Rail-to-Rail Op Amp	14-SOP	1.83	1.46	1.10
TLC2274AIN	296-7123-5-ND	Quad LN Rail-to-Rail Op Amp *NEW!*	14-Dip	1.83	1.46	1.10
TLC2274AIPW	296-7124-5-ND	Quad LN Rail-to-Rail Op Amp *NEW!*	14-TSSOP	1.83	1.46	1.10
TLC2274AIPWR	296-7125-1-ND	Quad LN Rail-to-Rail Op Amp *NEW!*	14-TSSOP	1.83	1.46	1.10
TLC2274AIPWR	296-7125-2-ND	Quad LN Rail-to-Rail Op Amp *NEW!*	14-TSSOP	1898.00/2,000		
TLC2274AMD	296-7126-5-ND	Quad LN Rail-to-Rail Op Amp *NEW!*	14-SOP	2.32	1.86	1.45
TLC2274AQD	296-7127-5-ND	Quad LN Rail-to-Rail Op Amp *NEW!*	14-SOP	2.00	1.60	1.20
TLC2274CD	296-1306-5-ND	Quad LN Rail-to-Rail Op Amp *NEW!*	14-SOP	1.40	1.12	.84
TLC2274CDR	296-1306-1-ND	Quad LN Rail-to-Rail Op Amp	14-SOP	1.63	1.30	.98
TLC2274CDR	296-1306-2-ND	Quad LN Rail-to-Rail Op Amp	14-SOP	1792.50/2,500		
TLC2274CN	296-7129-5-ND	Quad LN Rail-to-Rail Op Amp *NEW!*	14-Dip	1.40	1.12	.84
TLC2274CPWR	296-7130-1-ND	Quad LN Rail-to-Rail Op Amp *NEW!*	14-TSSOP	1.40	1.12	.84
TLC2274CPWR	296-7130-2-ND	Quad LN Rail-to-Rail Op Amp *NEW!*	14-TSSOP	1456.00/2,000		
TLC2274ID	296-7131-5-ND	Quad LN Rail-to-Rail Op Amp *NEW!*	14-SOP	1.55	1.24	.93
TLC2274IN	296-7132-5-ND	Quad LN Rail-to-Rail Op Amp *NEW!*	14-Dip	1.55	1.24	.93
TLC2274IPWR	296-7133-1-ND	Quad LN Rail-to-Rail Op Amp *NEW!*	14-TSSOP	1.55	1.24	.93
TLC2274IPWR	296-7133-2-ND	Quad LN Rail-to-Rail Op Amp *NEW!*	14-TSSOP	1612.00/2,000		
TLC2274MD	296-7134-5-ND	Quad LN Rail-to-Rail Op Amp *NEW!*	14-SOP	2.38	1.90	1.43
TLC2274QD	296-7135-5-ND	Quad LN Rail-to-Rail Op Amp *NEW!*	14-SOP	1.93	1.54	1.16
TLC2652AIP	296-1818-5-ND	Chopper Operational Amplifier	8-Dip	4.50	3.60	2.80
TLC4501ACD	296-2426-5-ND	Precision, Rail-to-Rail Op Amp	8-SOP	2.79	2.24	1.74
TLE2022CD	296-1873-5-ND	Dual JFET-Input Operational Amplifier	8-SOP	1.35	1.08	.81
TLE2062CDR	296-1341-1-ND	Dual JFET-Input Operational Amplifier	8-SOP	1.28	1.02	.77
TLV2450CD	296-1884-5-ND	Low Power Rail-to-Rail Op Amp	8-SOP	1.47	1.23	.98
TLV2450CP	296-1885-5-ND	Low Power Rail-to-Rail Op Amp	8-Dip	1.47	1.23	.98
TLV2450ID	296-1886-5-ND	Low Power Rail-to-Rail Op Amp	8-SOP	1.28	1.02	.77
TLV2450IP	296-1887-5-ND	Low Power Rail-to-Rail Op Amp	8-Dip	1.28	1.02	.77
TLV2451CD	296-1888-5-ND	Low Power Rail-to-Rail Op Amp	8-SOP	1.35	1.13	.90
TLV2451CP	296-1889-5-ND	Low Power Rail-to-Rail Op Amp	8-Dip	1.35	1.13	.90
TLV2451ID	296-1890-5-ND	Low Power Rail-to-Rail Op Amp	8-SOP	1.35	1.13	.90
TLV2451IP	296-1891-5-ND	Low Power Rail-to-Rail Op Amp	8-Dip	1.41	1.18	.94
TLV4112CD	296-2447-5-ND	Dual High-Drive Op Amplifier	8-SOP	1.70	1.36	1.02
UC2838AQ	296-2470-5-ND	Magnetic Amp Controller	20-PLCC	9.66	7.73	6.53
UC3838ADW	296-2471-5-ND	Magnetic Amp Controller	16-SOP	5.36	4.29	3.62

TEXAS INSTRUMENTS COMPARATORS

T. I.	Digi-Key			Price Each★		
Part No.	Part No.	Description	Pkg.	1	25	100
		High Speed Comparators				
LM139DR	296-6614-1-ND	Quad GP Differential Comparator *NEW!*	14-SOP	1.20	1.00	.80
LM139DR	296-6614-2-ND	Quad GP Differential Comparator *NEW!*	14-SOP	1300.00/2,500		
LM193DR	296-6615-1-ND	Dual GP Differential Comparator *NEW!*	8-SOP	.84	.63	.48
LM193DR	296-6615-2-ND	Dual GP Differential Comparator *NEW!*	8-SOP	682.50/2,500		
LM211D	296-6616-5-ND	Single Strobed Differential Comp. *NEW!*	8-SOP	.80	.60	.45
LM211P	296-6617-5-ND	Single Strobed Differential Comp. *NEW!*	8-Dip	.80	.60	.45
LM239ADR	296-6618-1-ND	Quad GP Differential Comparator *NEW!*	14-SOP	1.68	1.34	1.01
LM239ADR	296-6618-2-ND	Quad GP Differential Comparator *NEW!*	14-SOP	2145.00/2,500		
LM239D	296-6620-5-ND	Quad GP Differential Comparator *NEW!*	14-SOP	.80	.60	.45
LM239N	296-6621-5-ND	Quad GP Differential Comparator *NEW!*	14-Dip	.80	.60	.45

(Continued)

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TEXAS INSTRUMENTS COMPARATORS *(Continued)*

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LM248D	296-6622-5-ND	Quad Op Amp *NEW!*	14-SOP	1.26	1.05	.84
LM248N	296-6623-5-ND	Quad Op Amp *NEW!*	14-Dip	1.26	1.05	.84
LM258D	296-6624-5-ND	Dual Op Amp *NEW!*	8-SOP	.80	.60	.45
LM258P	296-6625-5-ND	Dual Op Amp *NEW!*	8-Dip	.80	.60	.45
LM306P	296-1387-5-ND	Differential Comparator with Strobe	8-Dip	1.35	1.13	.90
LM311D	296-1388-5-ND	Differential Comparator with Strobe	8-SOP	.52	.39	.30
LM311P	296-1389-5-ND	Differential Comparator with Strobe	8-Dip	.52	.39	.30
TL712CD	296-6629-5-ND	Differential Comparator *NEW!*	8-SOP	1.25	1.00	.75
TL712CP	296-6630-5-ND	Differential Comparator *NEW!*	8-Dip	1.25	1.00	.75
TL714CD	296-6631-5-ND	High Speed Differential Comp. *NEW!*	8-SOP	2.81	2.25	1.75
TL714CP	296-6632-5-ND	High Speed Differential Comp. *NEW!*	8-Dip	2.81	2.25	1.75
TL3016CD	296-1793-5-ND	High Speed, Low Power Comparator	8-SOP	1.90	1.52	1.14
TL3016ID	296-1794-5-ND	High Speed, Low Power Comparator	8-SOP	2.08	1.66	1.25
TL3116CD	296-6626-5-ND	Ultra-Fast LP Precision Comp. *NEW!*	8-SOP	1.90	1.52	1.14
TL3116CPWR	296-6627-1-ND	Ultra-Fast LP Precision Comp. *NEW!*	8-TSSOP	1.90	1.52	1.14
TL3116CPWR	296-6627-2-ND	Ultra-Fast LP Precision Comp. *NEW!*	8-TSSOP	1976.00/2,000		
TL3116ID	296-6628-5-ND	Ultra-Fast LP Precision Comp. *NEW!*	8-SOP	2.08	1.66	1.25
Low Power Comparators						
LMV331IDBVR	296-6633-1-ND	Single GP LV Comparator *NEW!*	SOT-23-5	.96	.72	.54
LMV331IDBVR	296-6633-2-ND	Single GP LV Comparator *NEW!*	SOT-23-5	936.00/3,000		
LMV331IDCKR	296-6634-1-ND	Single GP LV Comparator *NEW!*	5-SOP	.75	.63	.50
LMV331IDCKR	296-6634-2-ND	Single GP LV Comparator *NEW!*	5-SOP	975.00/3,000		
LMV393IDR	296-6635-1-ND	Dual GP LV Comparator *NEW!*	8-SOP	.96	.72	.54
LMV393IDR	296-6635-2-ND	Dual GP LV Comparator *NEW!*	8-SOP	780.00/2,500		
LMV393IPWR	296-6636-1-ND	Dual GP LV Comparator *NEW!*	8-TSSOP	.96	.72	.54
LMV393IPWR	296-6636-2-ND	Dual GP LV Comparator *NEW!*	8-TSSOP	638.00/2,000		
TLC339IDR	296-1324-1-ND	Quad Comparator	14-SOP	1.38	1.15	.92
TLC3702CD	296-1325-5-ND	Dual Voltage Comparator	8-SOP	.87	.73	.58
TLC3702CDR	296-1325-2-ND	Dual Voltage Comparator	8-SOP	942.50/2,500		
TLC3702CP	296-1841-5-ND	Dual Voltage Comparator	8-Dip	.87	.73	.58
TLC3702ID	296-1326-5-ND	Dual Voltage Comparator	8-SOP	.96	.80	.64
TLC3702IDR	296-1326-2-ND	Dual Voltage Comparator	8-SOP	1040.00/2,500		
TLC3704ID	296-1843-5-ND	Quad Voltage Comparator	14-SOP	1.35	1.13	.90
TLC372CD	296-1327-5-ND	Dual Differential Comparator	8-SOP	.81	.68	.54
TLC372CDR	296-1327-2-ND	Dual Differential Comparator	8-SOP	877.50/2,500		
TLC372CP	296-1845-5-ND	Dual Differential Comparator	8-Dip	.81	.68	.54
TLC372IP	296-1846-5-ND	Dual Differential Comparator	8-Dip	.90	.75	.60
TLC374CD	296-1328-5-ND	Quad Differential Comparator	14-SOP	.99	.83	.66
TLC374CDR	296-1328-2-ND	Quad Differential Comparator	14-SOP	1072.50/2,500		
TLC393CD	296-1329-5-ND	Dual Voltage Comparator	8-SOP	.93	.78	.62
TLC393CDR	296-1329-2-ND	Dual Voltage Comparator	8-SOP	1007.50/2,500		
TLC393CP	296-1849-5-ND	Dual Voltage Comparator	8-Dip	.93	.78	.62
TLC393IDR	296-1330-1-ND	Dual Voltage Comparator	8-SOP	.99	.83	.66
Low Voltage Comparators						
TLC352CD	296-1839-5-ND	Dual Differential Comparator	8-SOP	.96	.80	.64
General Purpose Comparators						
LM339AD	296-6604-5-ND	Quad Diff. Comparator, A Grade *NEW!*	14-SOP	1.25	1.00	.75
LM339ADR	296-6604-2-ND	Quad Diff. Comparator, A Grade *NEW!*	14-SOP	1600.00/2,500		
LM339AN	296-6605-5-ND	Quad Diff. Comparator, A Grade *NEW!*	14-Dip	1.35	1.13	.90
LM339D	296-1013-5-ND	Quad Differential Comparator	14-SOP	.52	.39	.30
LM339DBR	296-6606-1-ND	Quad Differential Comparator *NEW!*	14-SSOP	.52	.39	.30
LM339DBR	296-6606-2-ND	Quad Differential Comparator *NEW!*	14-SSOP	346.00/2,000		
LM339DR	296-1013-2-ND	Quad Differential Comparator	14-SOP	422.50/2,500		
LM339N	296-1393-5-ND	Quad Differential Comparator	14-Dip	.52	.39	.30
LM339PWR	296-6607-1-ND	Quad Diff. Comp., A Grade *NEW!*	14-TSSOP	.52	.39	.30
LM339PWR	296-6607-2-ND	Quad Diff. Comp., A Grade *NEW!*	14-TSSOP	346.00/2,000		
LM393AD	296-6608-5-ND	Dual Diff. Comparator, A Grade *NEW!*	8-SOP	1.35	1.13	.90
LM393AP	296-6609-5-ND	Dual Diff. Comparator, A Grade *NEW!*	8-Dip	1.35	1.13	.90
LM393APWR	296-6610-1-ND	Dual Diff. Comparator, A Grade *NEW!*	8-TSSOP	1.35	1.13	.90
LM393APWR	296-6610-2-ND	Dual Diff. Comparator, A Grade *NEW!*	8-TSSOP	1198.00/2,000		
LM393D	296-1015-5-ND	Dual Differential Comparator	8-SOP	.52	.39	.30
LM393DR	296-1015-2-ND	Dual Differential Comparator	8-SOP	422.50/2,500		
LM393P	296-1398-5-ND	Dual Differential Comparator	8-Dip	.52	.39	.30
LM2901D	296-1385-5-ND	Quad Diff. Comparator, Ind. Temp.	14-SOP	.68	.51	.39
LM2901N	296-1386-5-ND	Quad Diff. Comparator, Ind. Temp.	14-Dip	.68	.51	.39
LM2901PWR	296-6597-1-ND	Quad Diff. Comp., Ind. Temp. *NEW!*	14-TSSOP	.68	.51	.39
LM2901PWR	296-6597-2-ND	Quad Diff. Comp., Ind. Temp. *NEW!*	14-TSSOP	452.00/2,000		
LM2902D	296-6598-5-ND	Quad Operational Amplifier *NEW!*	14-SOP	.68	.51	.39
LM2902N	296-6599-5-ND	Quad Operational Amplifier *NEW!*	14-Dip	.68	.51	.39
LM2902PWR	296-6600-1-ND	Quad Operational Amplifier *NEW!*	14-TSSOP	.68	.51	.39
LM2902PWR	296-6600-2-ND	Quad Operational Amplifier *NEW!*	14-TSSOP	452.00/2,000		
LM2903D	296-1012-5-ND	Dual Diff. Comparator, Ind. Temp. *NEW!*	8-SOP	.68	.51	.39
LM2903DR	296-1012-1-ND	Dual Diff. Comparator, Ind. Temp.	8-SOP	.68	.51	.39
LM2903DR	296-1012-2-ND	Dual Diff. Comparator, Ind. Temp.	8-SOP	552.50/2,500		
LM2903P	296-6601-5-ND	Dual Diff. Comparator, Ind. Temp. *NEW!*	8-Dip	.68	.51	.39
LM2903PWR	296-6602-1-ND	Dual Diff. Comp., Ind. Temp. *NEW!*	8-TSSOP	.68	.51	.39
LM2903PWR	296-6602-2-ND	Dual Diff. Comp., Ind. Temp. *NEW!*	8-TSSOP	452.00/2,000		
LM2903QD	296-6603-5-ND	Dual Diff. Comparator, Ind. Temp. *NEW!*	8-SOP	.76	.57	.43
LMV339IDR	296-6611-1-ND	Quad Low-Voltage Comparator *NEW!*	14-SOP	.84	.70	.56
LMV339IDR	296-6611-2-ND	Quad Low-Voltage Comparator *NEW!*	14-SOP	910.00/2,500		
LMV339IPWR	296-6612-1-ND	Quad Low-Voltage Comp. *NEW!*	14-TSSOP	.84	.70	.56
LMV339IPWR	296-6612-2-ND	Quad Low-Voltage Comp. *NEW!*	14-TSSOP	744.00/2,000		

TEXAS INSTRUMENTS DATA TRANSMISSION

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
RS422 / RS423 / RS485						
AM26C31CD	296-6781-5-ND	Quad Differential Line Driver *NEW!*	16-SOP	2.25	1.80	1.40
AM26C31CDBR	296-6782-1-ND	Quad Differential Line Driver *NEW!*	16-SOP	2.25	1.80	1.40
AM26C31CDBR	296-6782-2-ND	Quad Differential Line Driver *NEW!*	16-SOP	2550.00/2,000		
AM26C31CN	296-6783-5-ND	Quad Differential Line Driver *NEW!*	16-Dip	2.25	1.80	1.40
AM26C31ID	296-6784-5-ND	Quad Differential Line Driver *NEW!*	16-SOP	2.81	2.25	1.75
AM26C31IN	296-6785-5-ND	Quad Differential Line Driver *NEW!*	16-Dip	2.81	2.25	1.75
AM26C32CD	296-6786-5-ND	Quad Differential Line Driver *NEW!*	16-SOP	2.25	1.80	1.40
AM26C32CN	296-6787-5-ND	Quad Differential Line Driver *NEW!*	16-Dip	2.25	1.80	1.40
AM26C32ID	296-6788-5-ND	Quad Differential Line Driver *NEW!*	16-SOP	2.81	2.25	1.75
AM26C32IN	296-6789-5-ND	Quad Differential Line Driver *NEW!*	16-Dip	2.81	2.25	1.75
AM26LS31CD	296-1010-5-ND	Quad Differential Line Driver	16-SOP	.99	.83	.66
AM26LS31CDR	296-1010-2-ND	Quad Differential Line Driver	16-SOP	1072.50/2,500		
AM26LS31CN	296-1374-5-ND	Quad Differential Line Driver	16-Dip	.99	.83	.66
AM26LS32ACD	296-1011-5-ND	Quad Differential Line Receiver	16-SOP	.99	.83	.66
AM26LS32ACDR	296-1011-2-ND	Quad Differential Line Receiver	16-SOP	1072.50/2,500		
AM26LS32ACN	296-1376-5-ND	Quad Differential Line Receiver	16-Dip	.99	.83	.66
AM26LS32ACNSR	296-6790-1-ND	Quad Differential Line Driver *NEW!*	16-SOP	1.14	.95	.76
AM26LS32ACNSR	296-6790-2-ND	Quad Differential Line Driver *NEW!*	16-SOP	1010.00/2,000		
AM26LS33ACD	296-6791-5-ND	Quad Differential Line Receiver *NEW!*	16-SOP	1.25	1.00	.75
AM26LS33ACN	296-6792-5-ND	Quad Differential Line Receiver *NEW!*	16-Dip	1.25	1.00	.75
AM26LV31CD	296-6793-5-ND	Quad Differential Line Driver *NEW!*	16-SOP	1.63	1.30	.98
AM26LV32CD	296-6794-5-ND	Quad Differential Line Receiver *NEW!*	16-SOP	1.63	1.30	.98
AM26LV32CDR	296-6794-2-ND	Quad Differential Line Receiver *NEW!*	16-SOP	2080.00/2,500		
AM26LV32CNSR	296-6796-1-ND	Quad Differential Line Receiver *NEW!*	16-SOP	1.75	1.40	1.05
AM26LV32CNSR	296-6796-2-ND	Quad Differential Line Receiver *NEW!*	16-SOP	1820.00/2,000		
AM26S10CD	296-6797-5-ND	Quad Bus Transceiver *NEW!*	16-SOP	2.00	1.60	1.20
AM26S10CN	296-6798-5-ND	Quad Bus Transceiver *NEW!*	16-Dip	2.00	1.60	1.20
MC3487N	296-1408-5-ND	Quad Differential Line Driver	16-Dip	1.20	1.00	.80
SN65LBC031QD	296-2342-5-ND	High Speed CAN Transceiver	8-SOP	2.99	2.40	1.87
SN65LBC184P	296-2343-5-ND	Differential Transceiver w/TVS Protection	8-Dip	3.96	3.17	2.47
SN65176BP	296-1415-5-ND	Differential Bus Transceiver	8-Dip	3.15	2.52	1.96
SN75LBC031D	296-6864-5-ND	High Speed Transceiver *NEW!*	8-SOP	2.34	1.88	1.46
SN75LBC172DW	296-6865-5-ND	Quad LP Differential Line Driver *NEW!*	20-SOP	3.35	2.69	2.09
SN75LBC172N	296-6866-5-ND	Quad LP Differential Line Driver *NEW!*	20-Dip	3.35	2.69	2.09
SN75LBC173D	296-6867-5-ND	Quad Diff. Line Receiver *NEW!*	16-SOP	2.68	2.15	1.67
SN75LBC173N	296-6868-5-ND	Quad LP Diff. Line Receiver *NEW!*	16-Dip	2.68	2.15	1.67
SN75LBC174DW	296-6869-5-ND	Quad LP Differential Line Driver *NEW!*	20-SOP	3.29	2.63	2.05
SN75LBC174N	296-6870-5-ND	Quad LP Differential Line Driver *NEW!*	16-Dip	3.29	2.63	2.05
SN75LBC175D	296-6871-5-ND	Quad LP Diff. Line Receiver *NEW!*	16-SOP	2.32	1.86	1.45
SN75LBC175N	296-6872-5-ND	Quad LP Diff. Line Receiver *NEW!*	16-Dip	2.32	1.86	1.45
SN75LBC176AD	296-6873-5-ND	Quad LP Diff. Bus Transceiver *NEW!*	8-SOP	3.13	2.51	1.95
SN75LBC176AP	296-6874-5-ND	Differential Bus Transceiver *NEW!*	8-Dip	3.13	2.51	1.95
SN75LBC176D	296-1279-5-ND	Differential Bus Transceiver	8-SOP	2.13	1.70	1.28
SN75LBC176DR	296-1279-2-ND	Differential Bus Transceiver	8-SOP	2720.00/2,500		
SN75LBC176P	296-6875-5-ND	Differential Bus Transceiver *NEW!*	8-Dip	1.93	1.54	1.16
SN75LBC179AD	296-6876-5-ND	LP Diff. Line Driver/Receiver Prs. *NEW!*	8-SOP	3.13	2.51	1.95
SN75LBC179AP	296-6877-5-ND	LP Diff. Line Driver/Receiver Prs. *NEW!*	8-Dip	3.13	2.51	1.95
SN75LBC179D	296-6878-5-ND	LP Diff. Line Driver/Receiver Prs. *NEW!*	8-SOP	1.93	1.54	1.16
SN75LBC179P	296-6879-5-ND	LP Diff. Line Driver/Receiver Prs. *NEW!*	8-Dip	1.93	1.54	1.16
SN75LBC180AD	296-6880-5-ND	LP Diff. Line Driver/Receiver Prs. *NEW!*	14-SOP	3.29	2.63	2.05
SN75LBC180AN	296-6881-5-ND	LP Diff. Line Driver/Receiver Prs. *NEW!*	14-Dip	3.29	2.63	2.05
SN75LBC180D	296-6882-5-ND	LP Diff. Line Driver/Receiver Prs. *NEW!*	14-SOP	1.98	1.58	1.19
SN75LBC180N	296-6883-5-ND	LP Diff. Line Driver/Receiver Prs. *NEW!*	14-Dip	1.98	1.58	1.19
SN75LBC184D	296-2364-5-ND	Differential Transceiver w/TVS Protection	8-SOP	3.17	2.54	1.98
SN75LBC184P	296-6884-5-ND	Transient Volt Suppression Differential Transceiver *NEW!*	8-SOP	2.88	2.31	1.80
SN75LBC187DBR	296-6885-1-ND	Multichannel EIA-232 Driver/Rcvr *NEW!*	28-SOP	4.50	3.60	2.80
SN75LBC187DBR	296-6885-2-ND	Multichannel EIA-232 Driver/Rcvr *NEW!*	28-SOP	5100.00/2,000		
SN75LBC241DW	296-6886-5-ND	LP LinBiCMOS Multiple Drivers and Receivers *NEW!*	28-SOP	3.83	3.06	2.38
SN75LBC771DW	296-6887-5-ND	GeoPort™ Transceiver *NEW!*	20-SOP	2.03	1.62	1.22
SN75LBC775DW	296-6889-5-ND	Single-Chip AppleTalk/LocalTalk™ Transceiver *NEW!*	20-SOP	3.42	2.74	2.13
SN75LBC776DW	296-6890-5-ND	Single-Chip GeoPort™ Transceiver *NEW!*	20-SOP	3.76	3.01	2.34
SN75LBC777DW	296-6891-5-ND	Single-Chip Geoport/AppleTalk™ Transceiver *NEW!*	20-SOP	3.76	3.01	2.34
SN75LBC784DWR	296-6892-1-ND	Quad RS-423-B Driver/Receiver *NEW!*	28-SOP	4.68	3.75	2.92
SN75LBC784DWR	296-6892-2-ND	Quad RS-423-B Driver/Receiver *NEW!*	28-SOP	2652.00/1,000		
SN75LBC786DW	296-6893-5-ND	Quad RS-423-B Driver/Receiver with Loopback *NEW!*	28-SOP	9.74	7.80	6.58
SN75LBC968DL	296-6894-5-ND	9-Ch. Bus Transceiver with Active Termination *NEW!*	56-SOP	10.96	9.87	8.76
SN75LBC978DL	296-6895-5-ND	9-Ch. Differential Transceiver *NEW!*	56-SOP	15.80	14.75	13.69
SN75LBC978DLR	296-6895-2-ND	9-Ch. Differential Transceiver *NEW!*	56-SOP	13005.00/1,000		
SN75107AD	296-6799-5-ND	Dual Line Receiver *NEW!*	14-SOP	1.44	1.20	.96
SN75107AN	296-6800-5-ND	Dual Line Receiver *NEW!*	14-Dip	1.44	1.20	.96
SN75107BD	296-6802-5-ND	Dual Line Receiver *NEW!*	14-SOP	1.44	1.20	.96
SN75107BN	296-6803-5-ND	Dual Line Receiver *NEW!*	14-Dip	1.44	1.20	.96
SN75110AD	296-6804-5-ND	Dual Line Driver *NEW!*	14-SOP	1.44	1.20	.96
SN75110AN	296-6805-5-ND	Dual Line Driver *NEW!*	14-Dip	1.44	1.20	.96
SN75112D	296-6806-5-ND	Dual Line Driver *NEW!*	14-SOP	2.81	2.25	1.75
SN75112DR	296-6806-2-ND	Dual Line Driver *NEW!*	14-SOP	4000.00/2,500		
SN75112N	296-6807-5-ND	Dual Line Driver *NEW!*	14-Dip	2.81	2.25	1.75
SN75113N	296-6809-5-ND	Dual Differential Line Driver *NEW!*	16-Dip	2.81	2.25	1.75
SN75114N	296-6811-5-ND	Dual Differential Line Driver *NEW!*	16-Dip	2.25	1.80	1.40
SN75115D	296-6812-5-ND	Dual Differential Line Receiver *NEW!*	16-SOP	2.25	1.80	1.40
SN75115N	296-6813-5-ND	Dual Differential Line Receiver *NEW!*	16-Dip	2.25	1.80	1.40
SN75116N	296-6814-5-ND	Differential Line Transceiver *NEW!*	16-Dip	3.94	3.15	2.45
SN75117P	296-6820-5-ND	Differential Line Transceiver *NEW!*	8-Dip	3.94	3.15	2.45
SN75118N	296-6821-5-ND	Differential Line Transceiver *NEW!*	16-Dip	3.94	3.15	2.45
SN75119P	296-6822-5-ND	Differential Line Transceiver *NEW!*	8-Dip	3.94	3.15	2.45
SN75121N	296-6823-5-ND	Dual Line Drivers *NEW!*	16-Dip	2.25	1.80	1.40
SN75123N	296-6825-5-ND	Dual Line Drivers *NEW!*	16-Dip	2.25	1.80	1.40
SN75124N	296-6826-5-ND	Triple Line Receiver *NEW!*	16-Dip	2.25	1.80	1.40
SN75138D	296-6827-5-ND	Quad Bus Transceiver *NEW!*	16-SOP	2.48	1.98	1.54
SN75138N	296-6828-5-ND	Quad Bus Transceiver *NEW!*	16-Dip	2.48	1.98	1.54
SN75150D	296-6830-5-ND	Dual Line Driver *NEW!*	8-SOP	1.20	1.00	.80
SN75150P	296-6831-5-ND	Dual Line Driver *NEW!*	8-Dip	1.20	1.00	.80
SN75154D	296-6832-5-ND	Quad Differential Line Receiver *NEW!*	16-SOP	1.25	1.00	.75
SN75154N	296-6833-5-ND	Quad Differential Line Receiver *NEW!*	16-Dip	1.25	1.00	.75
SN75155D	296-6835-5-ND	Line Driver And Receiver *NEW!*	8-SOP	1.25	1.00	.75
SN75155P	296-6836-5-ND	Line Driver And Receiver *NEW!*	8-Dip	1.25	1.00	.75
SN75157D	296-6837-5-ND	Dual Differential Line Receiver *NEW!*	8-SOP	2.00	1.60	1.20
SN75157P	296-6838-5-ND	Dual Differential Line Receiver *NEW!*	8-Dip	2.00	1.60	1.20
SN75158D	296-6839-5-ND	Dual Differential Line Driver *NEW!*	8-SOP	4.50	3.60	2.80
SN75158P	296-6840-5-ND	Dual Differential Line Driver *NEW!*	8-Dip	4.50	3.60	2.80
SN75158PSR	296-6841-1-ND	Dual Differential Line Driver *NEW!*	8-Dip	4.61	3.69	2.87
SN75158PSR	296-6841-2-ND	Dual Differential Line Driver *NEW!*	8-Dip	5228.00/2,000		
SN75159D	296-6842-5-ND	Dual Differential Line Driver *NEW!*	14-SOP	4.50	3.60	2.80
SN75159N	296-6843-5-ND	Dual Differential Line Driver *NEW!*	14-Dip	4.50	3.60	2.80
SN75160BDW	296-6844-5-ND	Octal General Purpose Interface Bus Transceiver *NEW!*	20-SOP	5.40	4.32	3.65

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN75160BN	296-6845-5-ND	Octal General Purpose Interface Bus Transceiver *NEW!*	20-Dip	5.06	4.05	3.15
SN75161BDW	296-6846-5-ND	Octal General Purpose Interface Bus Transceiver *NEW!*	20-SOP	5.90	4.72	3.99
SN75161BN	296-6847-5-ND	Octal General Purpose Interface Bus Transceiver *NEW!*	20-Dip	5.06	4.05	3.15
SN75162BDW	296-6848-5-ND	Octal General Purpose Interface Bus Transceiver *NEW!*	24-SOP	4.95	3.96	3.08
SN75172DW	296-6849-5-ND	Quad Differential Line Driver *NEW!*	20-SOP	3.42	2.74	2.13
SN75172N	296-6850-5-ND	Quad Differential Line Driver *NEW!*	16-PDip	2.48	1.98	1.54
SN751730D	296-6851-5-ND	Triple Line Driver/Receiver *NEW!*	16-SOP	3.94	3.15	2.45
SN751730N	296-6852-5-ND	Triple Line Driver/Receiver *NEW!*	16-Dip	3.94	3.15	2.45
SN75173D	296-6853-5-ND	Quad Differential Line Receiver *NEW!*	16-SOP	2.86	2.29	1.78
SN75173N	296-6854-5-ND	Quad Differential Line Receiver *NEW!*	16-Dip	2.25	1.80	1.40
SN75174DWR	296-6855-1-ND	Quad Differential Line Driver *NEW!*	20-SOP	2.48	1.98	1.54
SN75174DWR	296-6855-2-ND	Quad Differential Line Driver *NEW!*	20-SOP	2806.00/2,000		
SN75174N	296-1735-5-ND	Quad Differential Line Driver	16-Dip	2.48	1.98	1.54
SN75175D	296-6856-5-ND	Quad Differential Line Receiver *NEW!*	16-SOP	2.86	2.29	1.78
SN75175N	296-1736-5-ND	Quad Differential Line Receiver	16-Dip	2.25	1.80	1.40
SN75176AD	296-6857-5-ND	Differential Bus Transceiver *NEW!*	8-SOP	1.38	1.10	.83
SN75176AP	296-1737-5-ND	Differential Bus Transceiver	8-Dip	1.38	1.10	.83
SN75176BD	296-1275-5-ND	Differential Bus Transceiver	8-SOP	1.25	1.00	.75
SN75176BDR	296-1275-2-ND	Differential Bus Transceiver	8-SOP	1600.00/2,500		
SN75176BP	296-1739-5-ND	Differential Bus Transceiver	8-Dip	1.25	1.00	.75
SN75178BP	296-6858-5-ND	Differential Bus Repeaters *NEW!*	8-Dip	2.25	1.80	1.35
SN75179BD	296-6860-5-ND	Differential Driver/Receiver Pair *NEW!*	8-SOP	2.25	1.80	1.35
SN75179BP	296-6861-5-ND	Differential Driver/Receiver Pair *NEW!*	8-Dip	2.25	1.80	1.35
SN75182N	296-6862-5-ND	Dual Differential Line Receiver *NEW!*	14-Dip	2.25	1.80	1.40
SN75183N	296-6863-5-ND	Quad Differential Line Driver *NEW!*	14-Dip	2.25	1.80	1.40
SN75976A2DGG	296-2363-5-ND	9-Channel, RS-485 Diff. Transceiver	56-TSSOP	17.70	16.52	15.34
SN751177N	296-6816-5-ND	Dual Differential Driver/Receiver *NEW!*	16-Dip	3.42	2.74	2.13
SN751177NSR	296-6817-1-ND	Dual Differential Driver/Receiver *NEW!*	16-SOP	3.53	2.83	2.20
SN751177NSR	296-6817-2-ND	Dual Differential Driver/Receiver *NEW!*	16-SOP	4004.00/2,000		
SN751178N	296-6818-5-ND	Dual Differential Driver/Receiver *NEW!*	16-Dip	3.42	2.74	2.13
SN751178NSR	296-6819-1-ND	Dual Differential Driver/Receiver *NEW!*	16-SOP	3.60	2.88	2.24
SN751178NSR	296-6819-2-ND	Dual Differential Driver/Receiver *NEW!*	16-SOP	4080.00/2,000		

RS232

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
GD75232DBR	296-6947-1-ND	Multiple RS-232 Driver/Receiver *NEW!*	20-SOP	.96	.80	.64
GD75232DBR	296-6947-2-ND	Multiple RS-232 Driver/Receiver *NEW!*	20-SOP	852.00/2,000		
GD75232DW	296-6948-5-ND	Multiple RS-232 Driver/Receiver *NEW!*	20-SOP	.90	.75	.60
GD75232DWR	296-6948-2-ND	Multiple RS-232 Driver/Receiver *NEW!*	20-SOP	852.00/2,000		
GD75232N	296-6949-5-ND	Multiple RS-232 Driver/Receiver *NEW!*	20-Dip	.90	.75	.60
GD75232PWR	296-6950-1-ND	Multiple RS-232 Driver/Receiver *NEW!*	20-SOP	.90	.75	.60
GD75232PWR	296-6950-2-ND	Multiple RS-232 Driver/Receiver *NEW!*	20-SOP	798.00/2,000		
GD75323DW	296-6951-5-ND	Multiple RS-232 Driver/Receiver *NEW!*	20-SOP	1.32	1.10	.88
LT1030CN	296-1401-5-ND	Quad Low Power Line Driver	14-Dip	2.25	1.80	1.40
MAX232D	296-6936-5-ND	Dual EIA-232 Driver/Receiver *NEW!*	16-SOP	1.50	1.20	.90
MAX232DW	296-6937-5-ND	Dual EIA-232 Driver/Receiver *NEW!*	16-SOP	1.75	1.40	1.05
MAX232ID	296-6938-5-ND	Dual EIA-232 Driver/Receiver *NEW!*	16-SOP	2.25	1.80	1.40
MAX232IDW	296-6939-5-ND	Dual EIA-232 Driver/Receiver *NEW!*	16-SOP	2.59	2.07	1.61
MAX232IN	296-6940-5-ND	Dual EIA-232 Driver/Receiver *NEW!*	16-SOP	2.25	1.80	1.40
MAX232N	296-1402-5-ND	Dual EIA-232 Driver/Receiver	16-Dip	2.25	1.80	1.40
MAX3243CDBR	296-6941-1-ND	Multiple RS-232 Driver/Receiver *NEW!*	28-SOP	2.70	2.16	1.68
MAX3243CDBR	296-6941-2-ND	Multiple RS-232 Driver/Receiver *NEW!*	28-SOP	3060.00/2,000		
MAX3243CDWR	296-6942-1-ND	Multiple RS-232 Driver/Receiver *NEW!*	28-SOP	2.70	2.16	1.68
MAX3243CDWR	296-6942-2-ND	Multiple RS-232 Driver/Receiver *NEW!*	28-SOP	1530.00/1,000		
MAX3243CPWR	296-6943-1-ND	Multiple RS-232 Driver/Receiver *NEW!*	28-SOP	2.70	2.16	1.68
MAX3243CPWR	296-6943-2-ND	Multiple RS-232 Driver/Receiver *NEW!*	28-SOP	3060.00/2,000		
MAX3243IDBR	296-6944-1-ND	Multiple RS-232 Driver/Receiver *NEW!*	28-SOP	3.60	2.88	2.24
MAX3243IDBR	296-6944-2-ND	Multiple RS-232 Driver/Receiver *NEW!*	28-SOP	4080.00/2,000		
MAX3243IDWR	296-6945-1-ND	Multiple RS-232 Driver/Receiver *NEW!*	28-SOP	3.60	2.88	2.24
MAX3243IDWR	296-6945-2-ND	Multiple RS-232 Driver/Receiver *NEW!*	28-SOP	2040.00/1,000		
MAX3243IPWR	296-6946-1-ND	Multiple RS-232 Driver/Receiver *NEW!*	28-SOP	3.60	2.88	2.24
MAX3243IPWR	296-6946-2-ND	Multiple RS-232 Driver/Receiver *NEW!*	28-SOP	4080.00/2,000		
MC1488N	296-1404-5-ND	Quad Line Driver	14-Dip	.72	.54	.41
MC1489N	296-1405-5-ND	Quad Line Receiver	14-Dip	.72	.54	.41
SN75C185DW	296-1753-5-ND	Low Power Multiple Driver/Receiver	20-SOP	2.81	2.25	1.75
SN75C188D	296-6965-5-ND	Quad Low Power Line Driver *NEW!*	14-SOP	1.25	1.00	.75
SN75C188DBR	296-6966-1-ND	Quad Low Power Line Driver *NEW!*	14-SOP	1.25	1.00	.75
SN75C188DBR	296-6966-2-ND	Quad Low Power Line Driver *NEW!*	14-SOP	1300.00/2,000		
SN75C188N	296-1754-5-ND	Quadruple Low Power Line Driver	14-Dip	1.25	1.00	.75
SN75C189AD	296-1755-5-ND	Quadruple Low Power Line Receiver	14-SOP	1.25	1.00	.75
SN75C189ADBR	296-6967-1-ND	Quad Low Power Line Receiver *NEW!*	14-SOP	1.25	1.00	.75
SN75C189ADBR	296-6967-2-ND	Quad Low Power Line Receiver *NEW!*	14-SOP	1300.00/2,000		
SN75C189AN	296-1756-5-ND	Quadruple Low Power Line Receiver	14-Dip	1.25	1.00	.75
SN75C189D	296-6968-5-ND	Quad Low Power Line Receiver *NEW!*	14-SOP	1.25	1.00	.75
SN75C189N	296-6969-5-ND	Quad Low Power Line Receiver *NEW!*	14-Dip	1.25	1.00	.75
SN75C198D	296-6970-5-ND	Quad Low Power Line Drivers *NEW!*	14-SOP	3.38	2.70	2.10
SN75C1154DW	296-6958-5-ND	Quad Low Power Driver/Rcvr. *NEW!*	20-SOP	1.70	1.36	1.02
SN75C1154N	296-6959-5-ND	Quad Low Power Driver/Rcvr. *NEW!*	20-Dip	1.70	1.36	1.02
SN75C1167DBR	296-6960-1-ND	Dual Differential Driver/Receiver *NEW!*	16-SOP	1.30	1.04	.78
SN75C1167DBR	296-6960-2-ND	Dual Differential Driver/Receiver *NEW!*	16-SOP	1352.00/2,000		
SN75C1167N	296-6961-5-ND	Dual Differential Driver/Receiver *NEW!*	16-Dip	2.13	1.70	1.28
SN75C1167NSR	296-6962-1-ND	Dual Differential Driver/Receiver *NEW!*	16-SOP	1.95	1.56	1.17
SN75C1167NSR	296-6962-2-ND	Dual Differential Driver/Receiver *NEW!*	16-SOP	2028.00/2,000		
SN75C1168N	296-6963-5-ND	Dual Differential DriverReceiver *NEW!*	16-Dip	2.13	1.70	1.28
SN75C1168NSR	296-6964-1-ND	Dual Differential Driver/Receiver *NEW!*	16-SOP	1.30	1.04	.78
SN75C1168NSR	296-6964-2-ND	Dual Differential Driver/Receiver *NEW!*	16-SOP	1352.00/2,000		
SN75C1406DW	296-1751-5-ND	Triple Low Power Driver/Receiver	16-SOP	1.50	1.20	.90
SN75C1406DWR	296-1751-2-ND	Triple Low Pwr. Driver/Receiver *NEW!*	16-SOP	1612.00/2,000		
SN75C1406N	296-1752-5-ND	Triple Low Power Driver/Receiver	16-Dip	1.50	1.20	.90
SN75LP196DBR	296-6974-1-ND	LP Multiple RS-232 Driver/Rcvr. *NEW!*	20-SOP	2.13	1.70	1.28
SN75LP196DBR	296-6974-2-ND	LP Multiple RS-232 Driver/Rcvr. *NEW!*	20-SOP	2210.00/2,000		
SN75LP196DWR	296-6975-1-ND	LP Multiple RS-232 Driver/Rcvr. *NEW!*	20-SOP	2.13	1.70	1.28
SN75LP196DWR	296-6975-2-ND	LP Multiple RS-232 Driver/Rcvr. *NEW!*	20-SOP	2210.00/2,000		
SN75LP1185DBR	296-6971-1-ND	LP Multiple RS-232 Driver/Rcvr. *NEW!*	20-SOP	2.13	1.70	1.28
SN75LP1185DBR	296-6971-2-ND	LP Multiple RS-232 Driver/Rcvr. *NEW!*	20-SOP	2210.00/2,000		
SN75LP1185DW	296-6972-5-ND	LP Multiple RS-232 Driver/Rcvr. *NEW!*	20-SOP	2.13	1.70	1.28
SN75LP1185DWR	296-6972-2-ND	LP Multiple RS-232 Driver/Rcvr.*NEW!*	20-SOP	2210.00/2,000		
SN75LPE185DBR	296-6976-1-ND	LP Multiple Driver/Receiver *NEW!*	24-SOP	2.25	1.80	1.35
SN75LPE185DBR	296-6976-2-ND	LP Multiple Driver/Receiver *NEW!*	24-SOP	2340.00/2,000		
SN75LPE185DW	296-1759-5-ND	Low Power Multiple Driver/Receiver	24-SOP	2.25	1.80	1.35
SN75LV4737ADBR	296-6977-1-ND	Multichannel RS-232 Line Driver/Receiver with Enable *NEW!*	28-SOP	4.16	3.33	2.59
SN75LV4737ADBR	296-6977-2-ND	Multichannel RS-232 Line Driver/Receiver with Enable *NEW!*	28-SOP	4718.00/2,000		
SN75185DW	296-1740-5-ND	Multiple RS-232 Driver/Receiver	20-SOP	1.05	.88	.70
SN75185DWR	296-1740-2-ND	Multiple RS-232 Driver/Receiver *NEW!*	20-SOP	984.00/2,000		
SN75185N	296-6953-5-ND	Multiple RS-232 Driver/Receiver *NEW!*	20-Dip	1.05	.88	.70
SN75186DW	296-6954-5-ND	Quad Driver/Rcvr. w/Loopback *NEW!*	24-SOP	3.60	2.88	2.24
SN75188D	296-1276-5-ND	Quad Line Driver	14-SOP	.72	.54	.41
SN75188DR	296-1276-2-ND	Quad Line Driver	14-SOP	585.00/2,500		
SN75188N	296-1742-5-ND	Quad Line Driver	14-Dip	.72	.54	.41
SN75189AD	296-1277-5-ND	Quad Line Receiver	14-SOP	.72	.54	.41
SN75189ADR	296-1277-2-ND	Quad Line Receiver	14-SOP	585.00/2,500		
SN75189AN	296-1744-5-ND	Quad Line Receiver	14-Dip	.72	.54	.41
SN75189D	296-1745-5-ND	Quad Line Receiver	14-SOP	.72	.54	.41
SN75189N	296-6955-5-ND	Quad Line Receiver *NEW!*	14-Dip	.72	.54	.41
SN75196DW	296-6956-5-ND	Multiple RS-232 Driver/Receiver *NEW!*	20-SOP	1.47	1.23	.98
SN75196N	296-6957-5-ND	Multiple RS-232 Driver/Receiver *NEW!*	20-Dip	1.47	1.23	.98

LVDM

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN65LVDM050D	296-1416-5-ND	Dual Differential Line Driver/Receiver	16-SOP	5.40	4.32	3.36
SN65LVDM051D	296-1417-5-ND	Dual Differential Line Driver/Receiver	16-SOP	5.40	4.32	3.36
SN65LVDM22D	296-1421-5-ND	Dual Multiplexor LVDS Repeater	16-SOP	5.36	4.29	3.34
SN65LVDM31D	296-6905-5-ND	High Spd. Differential Line Driver *NEW!*	16-SOP	9.94	7.96	6.71
SN65LVDM176D	296-1418-5-ND	High Speed Differential Line Transceiver	8-SOP	3.60	2.88	2.24
SN65LVDM176DGK	296-6903-5-ND	High Speed Differential Multipoint Transceiver *NEW!*	8-SOP	3.60	2.88	2.24
SN65LVDM179D	296-1419-5-ND	Hi Speed Differential Line Driver/Receiver	8-SOP	3.96	3.17	2.47
SN65LVDM179DGK	296-6904-5-ND	Hi Spd. Diff. Line Driver/Receivers *NEW!*	8-SOP	3.96	3.17	2.47
SN65LVDM180D	296-1420-5-ND	Hi Speed Differential Line Driver/Receiver	14-SOP	3.96	3.17	2.47
SN75LVDM976DGG	296-1760-5-ND	9-Channel Dual-Mode Transceiver	56-TSSOP	11.30	10.17	9.02
SN75LVDM976DL	296-6934-5-ND	9-Ch. Dual-Mode SCSI Transcvr. *NEW!*	56-SOP	11.30	10.17	9.02
SN75LVDM977DGG	296-2365-5-ND	9-Channel Dual-Mode Transceiver	56-TSSOP	11.30	10.17	9.02
SN75LVDM977DL	296-6935-5-ND	9-Ch. Dual-Mode Transceiver *NEW!*	56-SOP	11.30	10.17	9.02

LVDS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN65LVDS047D	296-6909-5-ND	LVDS Quad Diff. Line Driver *NEW!*	16-SOP	3.69	2.96	2.30
SN65LVDS047PW	296-6910-5-ND	LVDS Quad Diff. Line Driver *NEW!*	16-SOP	3.69	2.96	2.30
SN65LVDS048AD	296-6911-5-ND	High Differential Line Receivers *NEW!*	16-SOP	3.69	2.96	2.30
SN65LVDS048APW	296-6912-5-ND	High Differential Line Receivers *NEW!*	16-SOP	3.69	2.96	2.30
SN65LVDS050D	296-1422-5-ND	Hi Spd. Differential Line Driver/Receiver	16-SOP	4.50	3.60	2.80
SN65LVDS051D	296-1423-5-ND	Hi Spd. Differential Line Driver/Receiver	16-SOP	4.50	3.60	2.80
SN65LVDS1DBVR	296-6919-1-ND	High Speed Diff. Line Driver *NEW!*	5-SOP	1.58	1.26	.95
SN65LVDS1DBVR	296-6919-2-ND	High Speed Diff. Line Driver *NEW!*	5-SOP	2418.00/3,000		
SN65LVDS2DBVR	296-6920-1-ND	High Speed Diff. Line Receiver *NEW!*	5-SOP	1.58	1.26	.95
SN65LVDS2DBVR	296-6920-2-ND	High Speed Diff. Line Receiver *NEW!*	5-SOP	2418.00/3,000		
SN65LVDS22D	296-1426-5-ND	Dual Multiplexor LVDS Repeater	16-SOP	5.36	4.29	3.34
SN65LVDS31D	296-6922-5-ND	Quad High Speed Diff. Driver *NEW!*	16-SOP	4.41	3.53	2.75
SN65LVDS31NS	296-2350-5-ND	Quad High Speed Differential Driver	16-SOP	4.01	3.21	2.50
SN65LVDS32AD	296-2351-5-ND	Quad High Speed Differential Receiver	16-SOP	5.22	4.18	3.53
SN65LVDS32BDR	296-6923-1-ND	Quad LVDS Receiver *NEW!*	16-SOP	5.06	4.05	3.15
SN65LVDS32BDR	296-6923-2-ND	Quad LVDS Receiver *NEW!*	16-SOP	7087.50/2,500		
SN65LVDS32D	296-6924-5-ND	Quad High Speed Diff. Receiver *NEW!*	16-SOP	3.98	3.19	2.48
SN65LVDS104D	296-2344-5-ND	4-Port LVDS Repeater	16-SOP	4.50	3.60	2.80
SN65LVDS104PW	296-6915-5-ND	4-Port LVDS Repeater *NEW!*	16-SOP	4.50	3.60	2.80
SN65LVDS105D	296-2345-5-ND	4-Port TTL:LVDS Repeater	16-SOP	4.66	3.73	2.90
SN65LVDS105PW	296-6917-5-ND	4-Port LVTTL:LVDS Repeater *NEW!*	16-SOP	4.66	3.73	2.90
SN65LVDS108DBT	296-2346-5-ND	8-Port LVDS Repeater	38-SOP	8.80	7.04	5.94
SN65LVDS109DBT	296-2347-5-ND	Dual 1:4 LVDS Repeater	38-SOP	9.10	7.28	6.15
SN65LVDS116DGG	296-2348-5-ND	1:16 LVDS Repeater	64-SOP	9.06	8.16	7.24
SN65LVDS116DGGR	296-2348-2-ND	1:16 LVDS Repeater *NEW!*	64-SOP	13436.00/2,000		
SN65LVDS117DGG	296-2349-5-ND	Dual 8-Port LVDS Repeater	64-SOP	9.06	8.16	7.24
SN65LVDS117DGGR	296-2349-2-ND	Dual 8-Port LVDS Repeater *NEW!*	64-SOP	13436.00/2,000		
SN65LVDS179D	296-1424-5-ND	Hi Spd. Differential Line Driver/Receiver	8-SOP	2.99	2.40	1.87
SN65LVDS179DGK	296-6918-5-ND	Single HS Diff. Driver/Receiver *NEW!*	8-SOP	4.48	3.59	2.79
SN65LVDS180D	296-1425-5-ND	Hi Spd. Differential Line Driver/Receiver	14-SOP	2.99	2.40	1.87
SN65LVDS386DGG	296-2353-5-ND	16-Ch., High Speed Diff. Receiver	64-TSSOP	10.95	9.86	8.74
SN65LVDS386DGGR	296-2353-1-ND	16-Ch., High Spd Diff. Receiver *NEW!*	64-SOP	12.71	11.45	10.15
SN65LVDS386DGGR	296-2353-2-ND	16-Ch., High Spd. Diff. Receiver *NEW!*	64-SOP	18846.00/2,000		
SN65LVDS387DGG	296-2354-5-ND	16-Channel, High Speed Diff. Driver	64-TSSOP	10.95	9.86	8.74
SN65LVDS388ADBT	296-6926-5-ND	Octal LVDS Receiver *NEW!*	38-SOP	7.70	6.16	5.20
SN65LVDS388DBT	296-2355-5-ND	8-Channel, High Speed Diff. Receiver	38-TSSOP	7.70	6.16	5.20
SN65LVDS389DBT	296-2356-5-ND	8-Channel, High Speed Diff. Driver	38-TSSOP	6.64	5.32	4.49
SN65LVDS390D	296-6927-5-ND	High Speed Diff. Line Receiver *NEW!*	16-SOP	4.41	3.53	2.75
SN65LVDS390PW	296-6928-5-ND	High Speed Diff. Line Receiver *NEW!*	16-SOP	4.41	3.53	2.75
SN65LVDS391D	296-6929-5-ND	High Speed Differential Driver *NEW!*	16-SOP	4.41	3.53	2.75
SN65LVDS391PW	296-6930-5-ND	High Speed Differential Driver *NEW!*	16-SOP	4.41	3.53	2.75
SN65LVDS1050PW	296-6916-5-ND	HS Diff. Line Drivers/Receivers *NEW!*	16-SOP	4.68	3.75	2.92
SN65LVDS3486AD	296-2352-5-ND	Quad High Speed Differential Receiver	16-SOP	6.18	4.95	4.18
SN65LVDS3486BDR	296-6925-1-ND	Quad LVDS Receiver *NEW!*	16-SOP	5.06	4.05	3.15
SN65LVDS3486BDR	296-6925-2-ND	Quad LVDS Receiver *NEW!*	16-SOP	7087.50/2,500		
SN65LVDS3486D	296-1427-5-ND	High Speed Differential Line Receiver	16-SOP	3.78	3.03	2.36
SN65LVDS3487D	296-1428-5-ND	Quad High Speed Differential Line Driver	16-SOP	3.78	3.03	2.36
SN65LVDS9637AD	296-2357-5-ND	Dual High Speed Differential Receiver	8-SOP	8.98	7.19	6.07
SN65LVDS9637BDR	296-6931-1-ND	Dual LVDS Receiver *NEW!*	8-SOP	4.21	3.37	2.62
SN65LVDS9637BDR	296-6931-2-ND	Dual LVDS Receiver *NEW!*	8-SOP	5890.00/2,500		
SN65LVDS9637D	296-1432-5-ND	Dual High Speed Differential Receiver	8-SOP	4.41	3.53	2.75
SN65LVDS9637DGN	296-6932-5-ND	Dual High Speed Diff. Receiver *NEW!*	8-SOP	4.61	3.69	2.87
SN65LVDS9638D	296-1433-5-ND	Dual High Speed Differential Driver	8-SOP	3.33	2.67	2.08
SN65LVDS9638DGN	296-6933-5-ND	Dual High Speed Diff. Driver *NEW!*	8-SOP	3.85	3.08	2.40
SN75LVDS386DGG	296-2366-5-ND	16-Channel, High Speed Diff. Receiver	64-TSSOP	9.51	8.57	7.60
SN75LVDS387DGG	296-2367-5-ND	16-Channel, High Speed Diff. Driver	64-TSSOP	9.51	8.57	7.60
SN75LVDS388DBT	296-2368-5-ND	8-Channel, High Speed Diff. Receiver	38-TSSOP	6.70	5.36	4.53
SN75LVDS389DBT	296-2369-5-ND	8-Channel, High Speed Diff. Driver	38-TSSOP	5.76	4.61	3.89

LVDT

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN65LVDT2DBVR	296-6896-1-ND	High Speed Diff. Line Receiver *NEW!*	5-SOP	1.98	1.58	1.19
SN65LVDT2DBVR	296-6896-2-ND	High Speed Diff. Line Receiver *NEW!*	5-SOP	3033.00/3,000		
SN65LVDT32AD	296-2358-5-ND	Quad High Speed Differential Receiver	16-SOP	6.10	4.88	4.12
SN65LVDT32BDR	296-6897-1-ND	Quad LVDS Receiver *NEW!*	16-SOP	5.31	4.25	3.31
SN65LVDT32BDR	296-6897-2-ND	Quad LVDS Receiver *NEW!*	16-SOP	7435.00/2,500		
SN65LVDT386DGG	296-2360-5-ND	16-Chan., High Speed Diff. Receiver	64-TSSOP	11.41	10.28	9.12
SN65LVDT386DGGR	296-2360-2-ND	16-Ch., High Spd. Diff. Receiver *NEW!*	64-SOP	19884.00/2,000		
SN65LVDT388ADBT	296-6899-5-ND	Octal LVDS Receiver *NEW!*	38-SOP	8.10	6.48	5.47
SN65LVDT388DBT	296-2361-5-ND	8-Chan., High Speed, Diff. Receiver	38-TSSOP	8.10	6.48	5.47
SN65LVDT390D	296-6900-5-ND	High Speed Diff. Line Receivers *NEW!*	16-SOP	4.55	3.64	2.83

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TEXAS INSTRUMENTS DATA TRANSMISSION (Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
SN65LVDT390PW	296-6901-5-ND	High Speed Diff. Line Receivers *NEW!*	16-SOP	4.55	3.64	2.83
SN65LVDT3486AD	296-2359-5-ND	Quad High Speed Differential Receiver	16-SOP	6.32	5.06	4.27
SN65LVDT3486BDR	296-6898-1-ND	Quad LVDS Receiver *NEW!*	16-SOP	5.31	4.25	3.31
SN65LVDT3486BDR	296-6898-2-ND	Quad LVDS Receiver *NEW!*	16-SOP	7435.00/2,500		
SN65LVDT9637AD	296-2362-5-ND	Dual Differential Receiver	8-SOP	5.46	4.37	3.69
SN65LVDT9637BDR	296-6902-1-ND	Dual LVDS Receiver *NEW!*	8-SOP	4.59	3.68	2.86
SN65LVDT9637BDR	296-6902-2-ND	Dual LVDS Receiver *NEW!*	8-SOP	6425.00/2,500		
SN75LVDT386DGG	296-2370-5-ND	16-Chan., High Speed Diff. Receiver	64-TSSOP	10.43	9.39	8.33
SN75LVDT386DGGR	296-2370-2-ND	8-Ch., High Speed Diff. Receiver *NEW!*	64-SOP	17290.00/2,000		
SN75LVDT388DBT	296-2371-5-ND	8-Chan., High Speed Diff. Receiver	38-TSSOP	7.04	5.64	4.76

SCSI

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
SN75976A2DL	296-1278-5-ND	9-Channel Differential Transceiver	56-SSOP	17.70	16.52	15.34
SN75976A2DLR	296-1278-2-ND	9-Channel Differential Transceiver	56-SSOP	14573.00/1,000		

ADSL Drivers

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
THS6002CDWP	296-1765-5-ND	Dual Differential Line Driver/Receiver	20-HSOP	8.38	6.71	5.66
THS6002IDWP	296-1766-5-ND	Dual Differential Line Driver/Receiver	20-HSOP	8.38	6.71	5.66
THS6012CDWP	296-2372-5-ND	Dual Differential ADSL Driver	20-SOIC	7.00	5.60	4.73
THS6012IDWP	296-1767-5-ND	Dual Differential Line Driver	20-HSOP	7.00	5.60	4.73
THS6022CPWP	296-1768-5-ND	Dual Differential Line Driver	14-HTSSOP	5.22	4.18	3.25
THS6022IPWP	296-1769-5-ND	Dual Differential Line Driver	14-HTSSOP	5.22	4.18	3.25
THS6032CDWP	296-2373-5-ND	Low Power ADSL Line Driver	20-SOIC	7.18	5.75	4.85
THS6062CD	296-2374-5-ND	Dual ADSL Differential Receiver	8-SOP	4.05	3.24	2.52
THS6072CD	296-2375-5-ND	Low Power ADSL Diff. Receiver	8-SOP	4.05	3.24	2.52

TEXAS INSTRUMENTS POWER SUPPLY PRODUCTS

Battery Management

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
BQ2005PN	296-2217-5-ND	Dual Fast Charge Controller	20-SDip	5.15	4.13	3.21
BQ2010SN-D107	296-2218-5-ND	Battery Gas Gauge	16-SOIC	6.04	4.84	4.08
BQ2014SN-D120	296-2220-5-ND	Battery Gas Gauge	16-SOIC	6.04	4.84	4.08
BQ2018SN-E1	296-2221-5-ND	Battery Power Monitor	8-SOIC	3.31	2.65	2.06
BQ2018TS-E1	296-2222-5-ND	Battery Power Monitor	8-TSSOP	3.31	2.65	2.06
BQ2040SN-C408	296-2223-5-ND	Battery Gas Gauge	16-SOIC	6.04	4.84	4.08
BQ2050SN-D119	296-2225-5-ND	Lithium-Ion Power Gauge	16-SOIC	6.04	4.84	4.08
BQ2945SN-C409	296-2227-5-ND	Gas Gauge with SM BUS Interface	16-SOIC	6.04	4.84	4.08
UC2906DW	296-2228-5-ND	Lead-Acid Battery Charger	16-SOP	5.34	4.28	3.61
UC2909N	296-2229-5-ND	Lead-Acid Battery Charger	20-Dip	8.38	6.71	5.66
UC3906DW	296-2230-5-ND	Lead-Acid Battery Charger	16-SOP	5.34	4.28	3.61
UC3908T	296-2231-5-ND	Programmable Voltage Clamp	TO-220-5	4.93	3.95	3.07
UC3909N	296-2232-5-ND	Lead-Acid Battery Circuit	20-Dip	8.38	6.71	5.66
UCC3956N	296-2233-5-ND	Lithium-Ion Battery Circuit	20-Dip	3.58	2.87	2.23
UCC3957M-1	296-2234-5-ND	Lithium-Ion Protector Circuit	16-SSOP	3.56	2.85	2.22
UCC3957M-2	296-2235-5-ND	Lithium-Ion Protector Circuit	16-SSOP	3.56	2.85	2.22
UCC3957M-3	296-2236-5-ND	Lithium-Ion Protector Circuit	16-SSOP	3.56	2.85	2.22
UCC3957M-4	296-2237-5-ND	Lithium-Ion Protector Circuit	16-SSOP	3.56	2.85	2.22
UCC3958DP-1	296-2238-5-ND	Lithium-Ion Protector Circuit	16-SOP	6.04	4.84	4.08
UCC3958PWP-2	296-2243-5-ND	Lithium-Ion Protector Circuit	24-TSSOP	6.22	4.98	4.20
UCC3958PWP-3	296-2244-5-ND	Lithium-Ion Protector Circuit	24-TSSOP	6.22	4.98	4.20

DC-to-DC Converters

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
TPS5102IDBT	296-2260-5-ND	Dual DC/DC Controller	30-SSOP	5.86	4.69	3.96
TPS5103IDB	296-2261-5-ND	Multimode DC/DC Controller	20-SSOP	4.55	3.64	2.83
TPS5602IDBT	296-2262-5-ND	Dual DC/DC Controller	30-SSOP	6.16	4.93	4.16
TPS6734ID	296-3225-5-ND	12V 120mA Boost Converter *NEW!*	8-SOP	2.27	1.82	1.42
TPS6734IDR	296-3225-2-ND	12V 120mA Boost Converter *NEW!*	8-SOP	3182.50/2,500		
TPS6734IP	296-3226-5-ND	12V 120mA Boost Converter *NEW!*	8-Dip	2.27	1.82	1.42
TPS60100PWP	296-2263-5-ND	3.3V, 0.2A, DC/DC Converter	20-HTSSOP	4.79	3.84	2.99
TPS60101PWP	296-2264-5-ND	3.3V, 0.1A, DC/DC Converter	20-HTSSOP	3.87	3.10	2.41
TPS60110PWP	296-2265-5-ND	5V, 0.3A, DC/DC Converter	20-HTSSOP	4.79	3.84	2.99
TPS60111PWP	296-2266-5-ND	5V 0.15A, DC/DC Converter	20-HTSSOP	3.87	3.10	2.41
TPS60120PWP	296-2267-5-ND	3.3V, 0.2A, DC/DC Converter	20-HTSSOP	4.79	3.84	2.99
TPS60121PWP	296-2268-5-ND	3.3V, 0.2A, DC/DC Converter	20-HTSSOP	4.79	3.84	2.99
TPS60122PWP	296-2269-5-ND	3.3V, 0.1A, DC/DC Converter	20-HTSSOP	3.87	3.10	2.41
TPS60123PWP	296-2270-5-ND	3.3V, 0.1A, DC/DC Converter	20-HTSSOP	3.87	3.10	2.41
TPS60130PWP	296-2271-5-ND	5V, 0.3A, DC/DC Converter	20-HTSSOP	4.79	3.84	2.99
TPS60131PWP	296-2272-5-ND	5V, 0.3A, DC/DC Converter	20-HTSSOP	4.79	3.84	2.99
TPS60132PWP	296-2273-5-ND	5V, 0.15A, DC/DC Converter	20-HTSSOP	3.87	3.10	2.41
TPS60133PWP	296-2274-5-ND	5V, 0.15A, DC/DC Converter	20-HTSSOP	3.87	3.10	2.41
TPS60140PWP	296-2275-5-ND	5V, 0.1A, DC/DC Converter	20-HTSSOP	3.85	3.08	2.40
TPS60141PWP	296-2276-5-ND	5V, 0.1A, DC/DC Converter	20-HTSSOP	3.85	3.08	2.40
TPS61000DGS	296-3217-5-ND	Adj. 100mA Boost Converter *NEW!*	10-TSSOP	4.03	3.23	2.51
TPS61001DGS	296-3218-5-ND	1.5V 100mA Boost Converter *NEW!*	10-TSSOP	4.03	3.23	2.51
TPS61002DGS	296-3219-5-ND	1.8V 100mA Boost Converter *NEW!*	10-TSSOP	4.03	3.23	2.51
TPS61003DGS	296-3220-5-ND	2.5V 100mA Boost Converter *NEW!*	10-TSSOP	4.03	3.23	2.51
TPS61004DGS	296-3221-5-ND	2.8V 100mA Boost Converter *NEW!*	10-TSSOP	4.03	3.23	2.51
TPS61005DGS	296-3222-5-ND	3.0V 100mA Boost Converter *NEW!*	10-TSSOP	4.03	3.23	2.51
TPS61006DGS	296-3223-5-ND	3.3V 100mA Boost Converter *NEW!*	10-TSSOP	4.03	3.23	2.51
TPS61007DGS	296-3224-5-ND	Adj. 100mA Boost Converter *NEW!*	10-TSSOP	4.03	3.23	2.51
UCC3941D-3	296-2280-5-ND	1V to 3V Synchronous Boost Converter	8-SOP	5.09	4.07	3.17
UCC3941DTR-3	296-2280-2-ND	1V to 3V Synchronous Boost Converter	8-SOP	7120.00/2,500		
UCC3941D-5	296-2281-5-ND	1V to 5V Synchronous Boost Converter	8-SOP	5.09	4.07	3.17
UCC3941DTR-5	296-2281-2-ND	1V to 5V Synchronous Boost Converter	8-SOP	7120.00/2,500		
UCC3941D-ADJ	296-2282-5-ND	1V Adjustable Sync. Boost Converter	8-SOP	5.09	4.07	3.17
UCC3941N-3	296-3228-5-ND	3.3V Sync. Boost Converter *NEW!*	8-Dip	5.09	4.07	3.17
UCC3941N-5	296-3229-5-ND	5V Sync. Boost Converter *NEW!*	8-Dip	5.09	4.07	3.17
UCC3941N-ADJ	296-3230-5-ND	1V Adj. Sync. Boost Converter *NEW!*	8-Dip	5.09	4.07	3.17
UCC39411PW	296-3227-5-ND	1V Adj. Sync. Boost Converter *NEW!*	8-TSSOP	4.19	3.35	2.61
UCC39412D	296-2278-5-ND	Low Power Synchronous Boost Converter	8-SOP	4.68	3.75	2.92
UCC39413D	296-2279-5-ND	Low Power Synchronous Boost Converter	8-SOP	4.68	3.75	2.92

MOSFET Drivers

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
SN75372D	296-3360-5-ND	Dual MOSFET Driver *NEW!*	8-SOP	1.88	1.50	1.13
SN75372P	296-3361-5-ND	Dual MOSFET Driver *NEW!*	8-Dip	1.88	1.50	1.13
SN75374D	296-3362-5-ND	Quad MOSFET Driver *NEW!*	16-SOP	2.59	2.07	1.61
TPS2811D	296-2385-5-ND	Dual 2A Invert MOSFET Driver	8-SOP	1.70	1.36	1.02
TPS2811P	296-3363-5-ND	Dual 2A HS Invert MOSFET Driver *NEW!*	8-Dip	1.70	1.36	1.02
TPS2812D	296-3364-5-ND	Dual 2A HS Non-Invert FET Driver *NEW!*	8-SOP	1.70	1.36	1.02
TPS2812P	296-3365-5-ND	Dual 2A HS Non-Invert FET Driver *NEW!*	8-Dip	1.70	1.36	1.02
TPS2813D	296-1356-5-ND	Dual 2A High Speed Complementary MOSFET Driver *NEW!*	8-SOP	1.70	1.36	1.02
TPS2813DR	296-1356-1-ND	Dual 2A Complementary MOSFET Driver	8-SOP	1.28	1.02	.77
TPS2813DR	296-1356-2-ND	Dual 2A Complementary MOSFET Driver	8-SOP	2175.00/2,500		
TPS2813P	296-2386-5-ND	Dual 2A Complementary MOSFET Driver	8-Dip	1.70	1.36	1.02
TPS2813PWR	296-3367-1-ND	Dual 2A Complementary MOSFET Driver *NEW!*	8-TSSOP	1.70	1.36	1.02
TPS2813PWR	296-3367-2-ND	Dual 2A Complementary MOSFET Driver *NEW!*	8-TSSOP	1768.00/2,000		
TPS2814D	296-3368-5-ND	Dual 2A HS MOSFET Driver *NEW!*	8-SOP	1.70	1.36	1.02
TPS2814P	296-2387-5-ND	Dual 2A MOSFET Driver	8-Dip	1.70	1.36	1.02
TPS2814PWR	296-3369-1-ND	Dual 2A MOSFET Driver *NEW!*	8-TSSOP	1.70	1.36	1.02
TPS2814PWR	296-3369-2-ND	Dual 2A MOSFET Driver *NEW!*	8-TSSOP	1768.00/2,000		
TPS2815D	296-2388-5-ND	Dual 2A NAND MOSFET Driver	8-SOP	1.70	1.36	1.02
TPS2815P	296-3370-5-ND	Dual 2A HS NAND MOSFET Driver *NEW!*	8-Dip	1.70	1.36	1.02
TPS2816DBVR	296-3371-1-ND	2A HS Inverting MOSFET Dvr. *NEW!*	SOT-23-5	1.44	1.20	.96
TPS2816DBVR	296-3371-2-ND	2A HS Inverting MOSFET Dvr. *NEW!*	SOT-23-5	1872.00/3,000		
TPS2817DBVR	296-3372-1-ND	2A HS Non-Inverting MOSFET Driver *NEW!*	SOT-23-5	1.44	1.20	.96
TPS2817DBVR	296-3372-2-ND	2A HS Non-Inverting MOSFET Driver *NEW!*	SOT-23-5	1872.00/3,000		
TPS2818DBVR	296-3373-1-ND	2A HS Inverting MOSFET Dvr. *NEW!*	SOT-23-5	1.44	1.20	.96
TPS2818DBVR	296-3373-2-ND	2A HS Inverting MOSFET Dvr. *NEW!*	SOT-23-5	1872.00/3,000		
TPS2819DBVR	296-3374-1-ND	2A HS Non-Inverting MOSFET Driver *NEW!*	SOT-23-5	1.44	1.20	.96
TPS2819DBVR	296-3374-2-ND	2A HS Non-Inverting MOSFET Driver *NEW!*	SOT-23-5	1872.00/3,000		
TPS2828DBVR	296-1986-1-ND	2A High Spd. Inverting MOSFET Driver	SOT-23-5	1.05	.88	.70
TPS2828DBVR	296-1986-2-ND	2A High Spd. Inverting MOSFET Driver	SOT-23-5	1755.00/3,000		
TPS2828DBVT	296-2389-2-ND	2A High Spd. Inverting MOSFET Driver	SOT-23-5	168.75/250		
TPS2829DBVR	296-1987-1-ND	2A HS Non-Invert MOSFET Driver	SOT-23-5	1.05	.88	.70
TPS2829DBVR	296-1987-2-ND	2A HS Non-Invert MOSFET Driver	SOT-23-5	1755.00/3,000		
TPS2830D	296-2390-5-ND	Non-Invert Fast Sync BUCK FET Driver	14-SOP	2.25	1.80	1.40
TPS2830PWP	296-3376-5-ND	Non-Inverting Fast Sync BUCK MOSFET Driver *NEW!*	14-TSSOP	2.25	1.80	1.40
TPS2831D	296-2391-5-ND	Invert Fast Sync BUCK MOSFET Driver	14-SOP	2.25	1.80	1.40
TPS2831PWP	296-3377-5-ND	Invert Fast Sync BUCK MOSFET Driver *NEW!*	14-TSSOP	2.25	1.80	1.40
TPS2832D	296-2392-5-ND	Non-Invert Fast Sync BUCK FET Driver	8-SOP	2.38	1.90	1.43
TPS2833D	296-2393-5-ND	Invert Fast Sync BUCK MOSFET Driver	8-SOP	2.38	1.90	1.43
TPS2834D	296-2394-5-ND	Non-Invert Fast Sync BUCK FET Driver	14-SOP	2.25	1.80	1.40
TPS2834PWP	296-3378-5-ND	Non-Invert Fast Sync BUCK MOSFET Driver *NEW!*	14-TSSOP	2.25	1.80	1.40
TPS2835D	296-2395-5-ND	Invert Fast Sync BUCK MOSFET Driver	14-SOP	2.25	1.80	1.40
TPS2836D	296-2396-5-ND	Non-Invert Fast Sync BUCK FET Driver	8-SOP	2.38	1.90	1.43
TPS2837D	296-2397-5-ND	Invert Fast Sync BUCK MOSFET Driver	8-SOP	2.38	1.90	1.43
UC2709DW	296-2398-5-ND	Dual High Speed MOSFET Driver	16-SOP	6.84	5.48	4.62
UC2710N	296-2399-5-ND	High Current MOSFET Driver	8-Dip	7.20	5.76	4.86
UC3709DW	296-2400-5-ND	Dual High Speed MOSFET Driver	16-SOP	5.27	4.22	3.28
UC3710DW	296-2401-5-ND	High Current MOSFET Driver	16-SOP	5.16	4.13	3.49
UCC2837D	296-2403-5-ND	N-FET Linear Regulating Controller	8-SOP	4.73	3.78	2.94

Power Distribution Switches

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
TPS1100D	296-3379-5-ND	P-Ch. MOSFET, Rise Time 10nS *NEW!*	8-SOP	1.08	.90	.72
TPS1101D	296-3381-5-ND	P-Ch. MOSFET, Rise Time 5.5nS *NEW!*	8-SOP	1.33	1.06	.80
TPS1120D	296-1352-5-ND	Dual P-Channel MOSFET *NEW!*	8-SOP	1.25	1.00	.75
TPS1120DR	296-1352-1-ND	Dual P-Channel MOSFET	8-SOP	1.43	1.14	.86
TPS1120DR	296-1352-2-ND	Dual P-Channel MOSFET	8-SOP	1600.00/2,500		
TPS2010AD	296-2555-5-ND	0.4A, 2.7-5.5V High-Side MOSFET Switch	8-SOP	2.30	1.84	1.38
TPS2010APWP	296-3384-5-ND	0.4A, 2.7-5.5V High-Side MOSFET Switch *NEW!*	14-TSSOP	2.30	1.84	1.38
TPS2010PWR	296-3385-1-ND	0.4A, 2.7-5.5V High-Side MOSFET Switch *NEW!*	14-TSSOP	2.13	1.70	1.28
TPS2010PWR	296-3385-2-ND	0.4A, 2.7-5.5V High-Side MOSFET Switch *NEW!*	14-TSSOP	2210.00/2,000		
TPS2011AD	296-2556-5-ND	1.2A, 2.7-5.5V High-Side MOSFET Switch	8-SOP	2.30	1.84	1.38
TPS2011D	296-3386-5-ND	1.2A, 2.7-5.5V High-Side MOSFET Switch *NEW!*	8-SOP	2.13	1.70	1.28
TPS2012AD	296-2557-5-ND	2.0A, 2.7-5.5V High-Side MOSFET Switch	8-SOP	2.30	1.84	1.38
TPS2012D	296-1957-5-ND	2.0A, 2.7-5.5V High-Side MOSFET Switch	8-SOP	2.13	1.70	1.28
TPS2013AD	296-2558-5-ND	2.6A, 2.7-5.5V High-Side MOSFET Switch	8-SOP	2.30	1.84	1.38
TPS2013D	296-1353-5-ND	2.6A, 2.7-5.5V High-Side MOSFET Switch *NEW!*	8-SOP	2.13	1.70	1.28
TPS2013DR	296-1353-1-ND	2.6A, 2.7-5.5V High-Side MOSFET Switch	8-SOP	2.23	1.78	1.34
TPS2013DR	296-1353-2-ND	2.6A, 2.7-5.5V High-Side MOSFET Switch	8-SOP	2720.00/2,500		
TPS2013PWR	296-3388-1-ND	2.6A, 2.7-5.5V High-Side MOSFET Switch *NEW!*	14-TSSOP	2.13	1.70	1.28
TPS2013PWR	296-3388-2-ND	2.6A, 2.7-5.5V High-Side MOSFET Switch *NEW!*	14-TSSOP	2210.00/2,000		
TPS2014D	296-1354-5-ND	0.66A, 4-5.5V High-Side MOSFET Switch	8-SOP	3.78	3.03	2.36
TPS2014DR	296-1354-2-ND	0.66A, 4-5.5V High-Side MOSFET Switch	8-SOP	5292.50/2,500		
TPS2014P	296-3389-5-ND	0.66A, 4-5.5V High-Side MOSFET Switch *NEW!*	8-Dip	3.78	3.03	2.36
TPS2015D	296-1355-5-ND	1.1A, 4-5.5V High-Side MOSFET Switch	8-SOP	3.78	3.03	2.36
TPS2015DR	296-1355-1-ND	1.1A, 4-5.5V High-Side MOSFET Switch	8-SOP	3.74	2.99	2.33
TPS2015DR	296-1355-2-ND	1.1A, 4-5.5V High-Side MOSFET Switch	8-SOP	5292.50/2,500		
TPS2015P	296-3390-5-ND	1.1A, 4-5.5V High-Side MOSFET Switch *NEW!*	8-Dip	3.78	3.03	2.36
TPS2020D	296-2560-5-ND	0.22A, 2.7-5.5V Hot-Swap High-Side MOSFET	8-SOP	2.28	1.82	1.37
TPS2021D	296-2561-5-ND	0.66A, 2.7-5.5V Hot-Swap High-Side MOSFET	8-SOP	2.28	1.82	1.37
TPS2022D	296-2562-5-ND	1.1A, 2.7-5.5V Hot-Swap High-Side MOSFET	8-SOP	2.28	1.82	1.37
TPS2023D	296-2563-5-ND	1.65A, 2.7-5.5V Hot-Swap High-Side MOSFET	8-SOP	2.28	1.82	1.37
TPS2024D	296-2564-5-ND	2.2A, 2.7-5.5V Hot-Swap Hi-Side MOSFET	8-SOP	2.28	1.82	1.37
TPS2024DR	296-2564-2-ND	2.2A, 2.7-5.5V Hot-Swap High-Side MOSFET *NEW!*	8-SOP	2912.50/2,500		
TPS2030D	296-2565-5-ND	0.22A, 2.7-5.5V Hot-Swap High-Side MOSFET	8-SOP	2.28	1.82	1.37
TPS2030P	296-3392-5-ND	0.22A, 2.7-5.5V Hot-Swap High-Side MOSFET *NEW!*	8-Dip	2.28	1.82	1.37
TPS2031D	296-2566-5-ND	0.66A, 2.7-5.5V Hot-Swap High-Side MOSFET	8-SOP	2.28	1.82	1.37
TPS2032D	296-2567-5-ND	1.1A, 2.7-5.5V Hot-Swap High-Side MOSFET	8-SOP	2.28	1.82	1.37

Price Each★

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TPS2033D	296-2568-5-ND	1.65A, 2.7-5.5V Hot-Swap High-Side MOSFET	8-SOP	2.28	1.82	1.37
TPS2034D	296-2569-5-ND	2.2A, 2.7-5.5V Hot-Swap High-Side MOSFET	8-SOP	2.28	1.82	1.37
TPS2041AD	296-3393-5-ND	0.7A, 2.7-5.5V High-Side MOSFET Switch *NEW!*	8-SOP	1.48	1.18	.89
TPS2041D	296-3394-5-ND	0.7A, 2.7-5.5V High-Side MOSFET Switch *NEW!*	8-SOP	2.15	1.72	1.29
TPS2041P	296-2570-5-ND	0.7A, 2.7-5.5V High-Side MOSFET Switch	8-Dip	2.15	1.72	1.29
TPS2042AD	296-3395-5-ND	Dual (1in/2out), 0.7A, 2.7-5.5V High-Side MOSFET *NEW!*	8-SOP	1.88	1.50	1.13
TPS2042D	296-3396-5-ND	Dual (1in/2out), 0.7A, 2.7-5.5V High-Side MOSFET *NEW!*	8-SOP	2.45	1.96	1.47
TPS2042DR	296-3396-2-ND	Dual (1in/2out), 0.7A, 2.7-5.5V High-Side MOSFET *NEW!*	8-SOP	3135.00/2,500		
TPS2042P	296-2571-5-ND	Dual (1in/2out), 0.7A, 2.7-5.5V High-Side MOSFET	8-Dip	2.45	1.96	1.47
TPS2043AD	296-3397-5-ND	Triple (2in/3out), 0.7A, 2.7-5.5V High-Side MOSFET *NEW!*	8-SOP	2.48	1.98	1.54
TPS2043D	296-2572-5-ND	Triple (2in/3out), 0.7A, 2.7-5.5V High-Side MOSFET	16-SOP	2.99	2.40	1.87
TPS2043DR	296-2572-2-ND	Triple (2in/3out), 0.7A, 2.7-5.5V High-Side MOSFET *NEW!*	8-SOP	4190.00/2,500		
TPS2044AD	296-3399-5-ND	Quad (2in/4out), 0.7A, 2.7-5.5V High-Side MOSFET *NEW!*	8-SOP	3.17	2.54	1.98
TPS2044D	296-1959-5-ND	Quad (2in/4out), 0.7A, 2.7-5.5V High-Side MOSFET	16-SOP	3.78	3.03	2.36
TPS2045AD	296-3400-5-ND	0.345A, 2.7-5.5V Hi-Side MOSFET *NEW!*	8-SOP	1.45	1.16	.87
TPS2045D	296-2573-5-ND	0.345A, 2.7-5.5V High-Side MOSFET	8-SOP	2.15	1.72	1.29
TPS2045DR	296-2573-2-ND	0.345A, 2.7-5.5V Hi-Side MOSFET *NEW!*	8-SOP	2752.50/2,500		
TPS2045P	296-3402-5-ND	0.345A, 2.7-5.5V Hi-Side MOSFET *NEW!*	8-Dip	2.15	1.72	1.29
TPS2046AD	296-3403-5-ND	Dual (1in/2out), 0.345A, 2.7-5.5V High-Side MOSFET *NEW!*	8-SOP	1.88	1.50	1.13
TPS2046D	296-2574-5-ND	Dual (1in/2out), 0.345A, 2.7-5.5V High-Side MOSFET	8-SOP	2.45	1.96	1.47
TPS2046DR	296-2574-2-ND	Dual (1in/2out), 0.345A, 2.7-5.5V High-Side MOSFET *NEW!*	8-SOP	3135.00/2,500		
TPS2046P	296-3405-5-ND	Dual (1in/2out), 0.345A, 2.7-5.5V High-Side MOSFET *NEW!*	8-Dip	2.45	1.96	1.47
TPS2047AD	296-3406-5-ND	Triple (2in/3out), 0.345A,2.7-5.5V High-Side MOSFET *NEW!*	16-SOP	2.48	1.98	1.54
TPS2047D	296-2575-5-ND	Triple (2in/3out), 0.345A,2.7-5.5V High-Side MOSFET	16-SOP	2.99	2.40	1.87
TPS2047DR	296-2575-2-ND	Triple (2in/3out), 0.345A,2.7-5.5V High-Side MOSFET *NEW!*	16-SOP	4190.00/2,500		
TPS2048AD	296-3408-5-ND	Quad (2in/4out), 0.345A, 2.7-5.5V High-Side MOSFET *NEW!*	16-SOP	3.17	2.54	1.98
TPS2048DR	296-3409-1-ND	Quad (2in/4out), 0.345A, 2.7-5.5V High-Side MOSFET *NEW!*	16-SOP	3.78	3.03	2.36
TPS2048DR	296-3409-2-ND	Quad (2in/4out), 0.345A, 2.7-5.5V High-Side MOSFET *NEW!*	16-SOP	5292.50/2,500		
TPS2051AD	296-3410-5-ND	0.7A, 2.7-5.5V High-Side MOSFET Switch *NEW!*	8-SOP	1.45	1.16	.87
TPS2051D	296-2576-5-ND	0.7A, 2.7-5.5V High-Side MOSFET Switch	8-SOP	2.15	1.72	1.29
TPS2051P	296-3411-5-ND	0.7A, 2.7-5.5V High-Side MOSFET Switch *NEW!*	8-Dip	2.15	1.72	1.29
TPS2052AD	296-3412-5-ND	Dual (1in/2out), 0.7A, 2.7-5.5V High-Side MOSFET *NEW!*	8-SOP	1.88	1.50	1.13
TPS2052D	296-2577-5-ND	Dual (1in/2out), 0.7A, 2.7-5.5V High-Side MOSFET	8-SOP	2.45	1.96	1.47
TPS2052DR	296-2577-2-ND	Dual (1in/2out), 0.7A, 2.7-5.5V High-Side MOSFET *NEW!*	8-SOP	3135.00/2,500		
TPS2052P	296-3414-5-ND	Dual (1in/2out), 0.7A, 2.7-5.5V High-Side MOSFET *NEW!*	8-Dip	2.45	1.96	1.47
TPS2053AD	296-3415-5-ND	Triple (2in/3out), 0.7A, 2.7-5.5V High-Side MOSFET *NEW!*	16-SOP	2.48	1.98	1.54
TPS2053D	296-2578-5-ND	Triple (2in/3out), 0.7A, 2.7-5.5V High-Side MOSFET	16-SOP	2.99	2.40	1.87
TPS2053DR	296-2578-2-ND	Triple (2in/3out), 0.7A, 2.7-5.5V High-Side MOSFET *NEW!*	16-SOP	4190.00/2,500		
TPS2054AD	296-3417-5-ND	Quad (2in/4out), 0.7A, 2.7-5.5V High-Side MOSFET *NEW!*	16-SOP	3.17	2.54	1.98
TPS2054D	296-1960-5-ND	Quad (2in/4out), 0.7A, 2.7-5.5V High-Side MOSFET	16-SOP	3.78	3.03	2.36
TPS2055AD	296-3418-5-ND	0.345A, 2.7-5.5V Hi-Side MOSFET *NEW!*	8-SOP	1.45	1.16	.87
TPS2055D	296-2579-5-ND	0.345A, 2.7-5.5V High-Side MOSFET	8-SOP	2.15	1.72	1.29
TPS2055DR	296-2579-2-ND	0.345A, 2.7-5.5V Hi-Side MOSFET *NEW!*	8-SOP	2752.50/2,500		
TPS2055P	296-3420-5-ND	0.345A, 2.7-5.5V Hi-Side MOSFET *NEW!*	8-Dip	2.15	1.72	1.29
TPS2056AD	296-3421-5-ND	Dual (1in/2out), 0.345A, 2.7-5.5V High-Side MOSFET *NEW!*	8-SOP	1.88	1.50	1.13
TPS2056D	296-2580-5-ND	Dual (1in/2out), 0.345A, 2.7-5.5V High-Side MOSFET	8-SOP	2.45	1.96	1.47
TPS2056DR	296-2580-2-ND	Dual (1in/2out), 0.345A, 2.7-5.5V High-Side MOSFET *NEW!*	8-SOP	3135.00/2,500		
TPS2057AD	296-3423-5-ND	Triple (2in/3out), 0.345A, 2.7-5.5V High-Side MOSFET *NEW!*	8-SOP	2.48	1.98	1.54
TPS2057D	296-2581-5-ND	Triple (2in/3out), 0.345A, 2.7-5.5V High-Side MOSFET	16-SOP	2.99	2.40	1.87
TPS2057DR	296-2581-2-ND	Triple (2in/3out), 0.345A, 2.7-5.5V High-Side MOSFET *NEW!*	8-SOP	4190.00/2,500		
TPS2058AD	296-3425-5-ND	Quad (2in/4out), 0.345A, 2.7-5.5V High-Side MOSFET *NEW!*	8-SOP	3.17	2.54	1.98
TPS2058D	296-2582-5-ND	Quad (2in/4out), 0.345A, 2.7-5.5V High-Side MOSFET	16-SOP	3.78	3.03	2.36
TPS2058DR	296-2582-2-ND	Quad (2in/4out), 0.345A, 2.7-5.5V High-Side MOSFET *NEW!*	8-SOP	5292.50/2,500		
TPS2070DAP	296-3427-5-ND	Dual PCMCIA Power I/F Switch, Act. Low*NEW!*	32-TSSOP	5.92	4.74	4.00
TPS2071DAP	296-3428-5-ND	Dual PCMCIA Power I/F Switch, Act. High *NEW!*	32-TSSOP	5.92	4.74	4.00
TPS2074DB	296-3429-5-ND	USB Hub Pwr. Cont., Act. Low *NEW!*	24-SOP	5.38	4.31	3.35
TPS2075DB	296-3430-5-ND	USB Hub Pwr. Cont., Act. High *NEW!*	24-SOP	5.38	4.31	3.35
TPS2080D	296-3431-5-ND	Dual (2in/2out), 0.7A, 2.7-5.5V High-Side MOSFET, Act. High *NEW!*	8-SOP	2.52	2.02	1.57
TPS2081D	296-3432-5-ND	Dual (2in/2out), 0.7A, 2.7-5.5V High-Side MOSFET, Act. Low *NEW!*	8-SOP	2.52	2.02	1.57
TPS2082D	296-3433-5-ND	Dual (2in/2out), 0.7A, 2.7-5.5V High-Side MOSFET, Act. Low *NEW!*	8-SOP	2.52	2.02	1.57
TPS2085D	296-3434-5-ND	Quad (4in/4out), 0.7A, 2.7-5.5V High-Side MOSFET, Act. High *NEW!*	16-SOP	4.25	3.41	2.65
TPS2086D	296-3435-5-ND	Quad (4in/4out), 0.7A, 2.7-5.5V High-Side MOSFET, Act. Low *NEW!*	16-SOP	4.25	3.41	2.65
TPS2087D	296-3436-5-ND	Quad (4in/4out), 0.7A, 2.7-5.5V High-Side MOSFET, Act. Low *NEW!*	16-SOP	4.25	3.41	2.65
TPS2090D	296-3437-5-ND	Dual (2in/2out), 0.3A, 2.7-5.5V High-Side MOSFET, Act. High *NEW!*	8-SOP	2.52	2.02	1.57
TPS2091D	296-3438-5-ND	Dual (2in/2out), 0.3A, 2.7-5.5V High-Side MOSFET, Act. Low *NEW!*	8-SOP	2.52	2.02	1.57
TPS2092D	296-3439-5-ND	Dual (2in/2out), 0.3A, 2.7-5.5V High-Side MOSFET, Act. Low *NEW!*	8-SOP	2.52	2.02	1.57
TPS2095D	296-3440-5-ND	Quad (4in/4out), 0.3A, 2.7-5.5V High-Side MOSFET, Act. High *NEW!*	16-SOP	4.25	3.41	2.65
TPS2096D	296-3441-5-ND	Quad (4in/4out), 0.3A, 2.7-5.5V High-Side MOSFET, Act. Low *NEW!*	16-SOP	4.25	3.41	2.65
TPS2097D	296-3442-5-ND	Quad (4in/4out), 0.3A, 2.7-5.5V High-Side MOSFET, Act. Low *NEW!*	16-SOP	4.25	3.41	2.65
TPS2100D	296-2583-5-ND	VAUX Power Distribution Switch	8-SOP	1.43	1.14	.86
TPS2100DBVT	296-2584-2-ND	VAUX Power Distribution Switch	SOT-23-5	199.50/250		
TPS2101D	296-2585-5-ND	VAUX Power Distribution Switch	8-SOP	1.43	1.14	.86
TPS2101DBVT	296-2586-2-ND	VAUX Power Distribution Switch	SOT-23-5	199.50/250		
TPS2102D	296-2587-5-ND	VAUX Power Distribution Switch	8-SOP	1.63	1.30	.98
TPS2102DBVT	296-2588-2-ND	VAUX Power Distribution Switch	SOT-23-5	227.50/250		
TPS2103D	296-2589-5-ND	VAUX Power Distribution Switch	8-SOP	1.63	1.30	.98
TPS2103DBVT	296-2590-2-ND	VAUX Power Distribution Switch	SOT-23-5	227.50/250		
TPS2104D	296-2591-5-ND	VAUX Power Distribution Switch	8-SOP	1.93	1.54	1.16
TPS2104DBVT	296-3447-1-ND	VAUX Power Dist. Switch *NEW!*	SOT-23-5	1.93	1.54	1.16
TPS2104DBVT	296-3447-2-ND	VAUX Power Dist. Switch *NEW!*	SOT-23-5	269.50/250		
TPS2105D	296-2592-5-ND	VAUX Power Distribution Switch	8-SOP	1.93	1.54	1.16
TPS2105DBVT	296-3448-1-ND	VAUX Power Dist. Switch *NEW!*	SOT-23-5	1.93	1.54	1.16
TPS2105DBVT	296-3448-2-ND	VAUX Power Dist. Switch *NEW!*	SOT-23-5	269.50/250		
TPS2201IDBR	296-3449-1-ND	Dual PCMCIA Power Switch *NEW!*	30-SSOP	9.51	8.57	7.60
TPS2201IDBR	296-3449-2-ND	Dual PCMCIA Power Switch *NEW!*	30-SSOP	14104.00/2,000		
TPS2201IDFR	296-3450-1-ND	Dual PCMCIA Power Switch *NEW!*	30-SOP	9.51	8.57	7.60
TPS2201IDFR	296-3450-2-ND	Dual PCMCIA Power Switch *NEW!*	30-SOP	7052.00/1,000		
TPS2202AIDBR	296-3451-1-ND	Dual PCMCIA Power Switch *NEW!*	30-SSOP	9.51	8.57	7.60
TPS2202AIDBR	296-3451-2-ND	Dual PCMCIA Power Switch *NEW!*	30-SSOP	14104.00/2,000		
TPS2205IDAPR	296-3454-2-ND	Dual PCMCIA Pwr. I/F Switch *NEW!*	32-TSSOP	6826.00/2,000		
TPS2205IDBR	296-3455-1-ND	Dual PCMCIA Power I/F Switch *NEW!*	30-SOP	5.46	4.37	3.69
TPS2205IDBR	296-3455-2-ND	Dual PCMCIA Power I/F Switch *NEW!*	30-SOP	6826.00/2,000		
TPS2205IDFR	296-3456-1-ND	Dual PCMCIA Power I/F Switch *NEW!*	30-SOP	5.46	4.37	3.69
TPS2205IDFR	296-3456-2-ND	Dual PCMCIA Power I/F Switch *NEW!*	30-SOP	3413.00/1,000		
TPS2206IDAPR	296-3457-1-ND	Dual PCMCIA Power Switch *NEW!*	32-TSSOP	6.70	5.36	4.53
TPS2206IDAPR	296-3457-2-ND	Dual PCMCIA Power Switch *NEW!*	32-TSSOP	8376.00/2,000		
TPS2206IDBR	296-2246-2-ND	Dual PCMCIA Power Switch *NEW!*	30-SOP	8376.00/2,000		
TPS2211AIDB	296-3460-5-ND	PCMCIA Power Switch Parallel Interface *NEW!*	16-SOP	2.77	2.22	1.73
TPS2211IDBR	296-3461-2-ND	PCMCIA Power Switch Parallel Interface *NEW!*	16-SOP	4310.00/2,000		
TPS2216DAP	296-3462-5-ND	PCMCIA Power Switch Serial Interface *NEW!*	32-SOP	5.48	4.39	3.70

PWM Controllers

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
TL494CDR	296-1293-1-ND	PWM Controller	16-SOP	1.11	.93	.74
TL494CN	296-1799-5-ND	PWM Controller	16-Dip	1.05	.88	.70
TL5001CDR	296-1294-1-ND	PWM Controller	8-SOP	1.26	1.05	.84
TL2843D	296-1977-5-ND	Current-Mode PWM Controller	14-SOP	1.50	1.20	.90
TL2844DR	296-1367-1-ND	Current-Mode PWM Controller	14-SOP	1.60	1.28	.96
TL5001ACD	296-2472-5-ND	PWM Controller Circuit	8-SOP	1.29	1.08	.86
TLC2943IDB	296-2473-5-ND	Dual Phase Lock Loop	38-SSOP	4.07	3.26	2.54
TPS5100IPW	296-2474-5-ND	3-Channel PWM Controller	16-TSSOP	2.72	2.18	1.70
TPS56100PWP	296-2475-5-ND	DSP Power Supply Controller	28-HTSSOP	5.62	4.50	3.80
TPS56300PWP	296-2476-5-ND	DSP Supply Controller	28-HTSSOP	6.48	5.19	4.38
TPS56302PWP	296-2477-5-ND	Dual DSP Supply Controller	28-HTSSOP	6.48	5.19	4.38
TPS9104IPT	296-2478-ND	Cellular Subscriber Terminal Power Supply/Audio System	48-LQFP	6.96	5.57	4.70
UC2525BDW	296-2479-5-ND	Regulating PWM	16-SOP	5.40	4.32	3.36
UC2572D	296-2480-5-ND	Negative Output Flyback PWM	8-SOP	3.78	3.03	2.36
UC2637DW	296-2481-5-ND	DC Motor Switch-Mode Controller	20-SOP	5.84	4.68	3.95
UC2638DW	296-2482-5-ND	PWM Motor Controller	20-SOP	6.18	4.95	4.18
UC2702D	296-2483-5-ND	Quad PWM Relay Driver	16-SOP	3.02	2.42	1.88
UC2705D	296-2484-5-ND	High Speed Power Driver	8-SOP	5.04	4.04	3.41
UC2706DW	296-2485-5-ND	Dual Output Driver	16-SOP	5.04	4.04	3.41
UC2707DW	296-2486-5-ND	Dual Channel Power Driver	16-SOP	5.08	4.07	3.43
UC2708DW	296-2487-5-ND	Dual Non-Inverting Power Driver	16-SOP	6.84	5.48	4.62
UC2823ADW	296-2488-5-ND	High Speed PWM Controller	16-SOP	8.78	7.03	5.93
UC2823BDW	296-2489-5-ND	High Speed PWM Controller	16-SOP	8.78	7.03	5.93
UC2825ADW	296-2490-5-ND	High Speed PWM Controller	16-SOP	9.46	7.57	6.39
UC2825BDW	296-2491-5-ND	High Speed PWM Controller	16-SOP	9.46	7.57	6.39
UC2827DW-1	296-2492-5-ND	Current Fed PWM Controller	24-SOP	5.54	4.43	3.45
UC2827DW-2	296-2493-5-ND	Voltage Fed PWM Controller	24-SOP	5.54	4.43	3.45
UC2849DW	296-2494-5-ND	Secondary-Side Current-Mode Controller	24-SOP	7.92	6.34	5.35
UC2854ADW	296-2495-5-ND	Power Factor Pre-Regulator	16-SOP	6.16	4.93	4.16
UC2854BDW	296-2496-5-ND	Power Factor Pre-Regulator	16-SOP	6.16	4.93	4.16
UC2855ADW	296-2497-5-ND	Power Factor Pre-Regulator	20-SOP	8.76	7.89	7.00
UC2855BDW	296-2498-5-ND	Power Factor Pre-Regulator	20-SOP	8.76	7.89	7.00
UC2907DW	296-2499-5-ND	Load Share Controller	16-SOP	9.32	7.46	6.30
UC2908D	296-2500-5-ND	Programmable Voltage Clamp	8-SOP	4.55	3.64	2.83
UC2908TD	296-2501-5-ND	Programmable Voltage Clamp	TO-263-5	5.04	4.04	3.41
UC3525BDW	296-2503-5-ND	Regulating PWM	16-SOP	4.05	3.24	2.52
UC3527BN	296-2504-5-ND	Regulating PWM	16-Dip	4.55	3.64	2.83
UC3548N	296-2505-5-ND	Primary-Side PWM Controller	16-Dip	8.96	7.17	6.05
UC3572D	296-2506-5-ND	Negative Output Flyback PWM	8-SOP	2.70	2.16	1.68
UC3573D	296-2507-5-ND	BUCK PWM Voltage Supply Regulator	8-SOP	2.88	2.31	1.80
UC3637DW	296-2508-5-ND	DC Motor Drive Controller	20-SOP	5.16	4.13	3.49
UC3638DW	296-2509-5-ND	PWM Motor Controller	20-SOP	5.28	4.23	3.57
UC3702D	296-2510-5-ND	Quad PWM Relay Driver	16-SOP	2.72	2.18	1.70
UC3705D	296-2511-5-ND	High Speed Power Driver	8-SOP	4.14	3.32	2.58

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
UC3706DW	296-2512-5-ND	Dual Output Driver	16-SOP	4.16	3.33	2.59
UC3707DW	296-2513-5-ND	Dual Channel Power Driver	16-SOP	4.59	3.68	2.86
UC3708DW	296-2514-5-ND	Dual Non-Inverting Power Driver	16-SOP	5.00	4.00	3.38
UC3823ADW	296-2515-5-ND	High Speed PWM Controller	16-SOP	7.92	6.34	5.35
UC3823BDW	296-2516-5-ND	High Speed PWM Controller	16-SOP	9.48	7.59	6.40
UC3825ADW	296-2517-5-ND	High Speed PWM Controller	16-SOP	8.26	6.61	5.58
UC3825BDW	296-2518-5-ND	High Speed PWM Controller	16-SOP	8.26	6.61	5.58
UC3827DW-1	296-2519-5-ND	BUCK, Current Fed PWM Controller	24-SOP	9.12	7.30	6.16
UC3827DW-2	296-2520-5-ND	BUCK, Voltage Fed PWM Controller	24-SOP	9.12	7.30	6.16
UC3827N-1	296-2521-5-ND	BUCK, Current Fed PWM Controller	24-Dip	9.12	7.30	6.16
UC3827N-2	296-2522-5-ND	BUCK, Voltage Fed PWM Controller	24-Dip	9.12	7.30	6.16
UC3835N	296-2523-5-ND	High-Efficiency Regulator Controller	8-Dip	5.15	4.13	3.21
UC3836D	296-2524-5-ND	High-Efficiency Regulator Controller	8-SOP	5.22	4.18	3.53
UC3849DW	296-2525-5-ND	Secondary-Side Current-Mode Controller	24-SOP	6.16	4.93	4.16
UC3854ADW	296-2526-5-ND	Power Factor Pre-Regulator	16-SOP	4.82	3.86	3.00
UC3854BDW	296-2527-5-ND	Power Factor Pre-Regulator	16-SOP	4.84	3.87	3.01
UC3855ADW	296-2528-5-ND	Power Factor Pre-Regulator	20-SOP	8.94	7.16	6.04
UC3855BDW	296-2529-5-ND	Power Factor Pre-Regulator	20-SOP	8.94	7.16	6.04
UC3907DW	296-2530-5-ND	Load Share Controller	16-SOP	7.06	5.65	4.77
UC3908TD	296-2532-5-ND	Programmable Voltage Clamp	TO-263-5	4.93	3.95	3.07
UCC2807D-2	296-2533-5-ND	Programmable Duty Cycle PWM Controller	8-SOP	3.67	2.94	2.29
UCC2808D-1	296-2534-5-ND	Current-Mode PWM Controller	8-SOP	3.17	2.54	1.98
UCC2808D-2	296-2535-5-ND	Current-Mode PWM Controller	8-SOP	3.17	2.54	1.98
UCC2810DW	296-2536-5-ND	Dual-Channel Sync. Current-Mode PWM	16-SOP	5.50	4.40	3.72
UCC2895DW	296-2537-5-ND	Phase Shift PWM Controller	20-SOP	7.76	6.21	5.24
UCC29421N	296-2538-5-ND	Multi-Mode High-Freq. PWM Controller	16-Dip	5.08	4.07	3.43
UCC29422N	296-2539-5-ND	Multi-Mode High-Freq. PWM Controller	16-Dip	7.82	6.26	5.28
UCC3588D	296-2540-5-ND	5-Bit Programmable Power Supply Controller	20-SOP	3.60	2.88	2.24
UCC3807D-1	296-2541-5-ND	Programmable Duty Cycle PWM Controller	8-SOP	3.38	2.70	2.10
UCC3807D-2	296-2542-5-ND	Programmable Duty Cycle PWM Controller	8-SOP	3.38	2.70	2.10
UCC3807D-3	296-2543-5-ND	Programmable Duty Cycle PWM Controller	8-SOP	3.38	2.70	2.10
UCC3808D-1	296-2544-5-ND	Low Power Current-Mode Push/Pull PWM	8-SOP	2.88	2.31	1.80
UCC3808D-2	296-2545-5-ND	Low Power Current-Mode Push/Pull PWM	8-SOP	2.88	2.31	1.80
UCC3810DW	296-2546-5-ND	2-Channel Sync. Current-Mode PWM	16-SOP	5.14	4.12	3.47
UCC3817D	296-2547-5-ND	Power Factor Pre-Regulator	16-SOP	3.96	3.17	2.47
UCC3837D	296-2548-5-ND	N-FET Supply Controller	8-SOP	3.35	2.69	2.09
UCC3857DW	296-2549-5-ND	Isolated Boost PFC Controller	20-SOP	8.92	7.14	6.03
UCC3858DW	296-2550-5-ND	Power Factor Pre-Regulator	16-SOP	5.36	4.29	3.34
UCC3884D	296-2551-5-ND	Current-Mode PWM Controller	16-SOP	6.54	5.24	4.42
UCC3895DW	296-2552-5-ND	Phase Shift PWM Controller	20-SOP	6.48	5.19	4.38
UCC39421PW	296-2553-5-ND	Multimode High-Freq. PWM Controller	16-TSSOP	5.38	4.31	3.35
UCC39422PW	296-2554-5-ND	Multimode High-Freq. PWM Controller	20-TSSOP	5.32	4.26	3.60

Microprocessor Supervisory Circuit Drivers

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TL7702ACD	296-1295-5-ND	2.53V Supply Monitor *NEW!*	8-SOP	1.25	1.00	.75
TL7702ACDR	296-1295-1-ND	2.53V Supply Monitor	8-SOP	1.30	1.04	.78
TL7702ACDR	296-1295-2-ND	2.53V Supply Monitor	8-SOP	1665.00/2,500		
TL7702ACP	296-3232-5-ND	2.53V Supply Monitor *NEW!*	8-Dip	1.25	1.00	.75
TL7702AID	296-3233-5-ND	2.53V Supply Monitor *NEW!*	8-SOP	1.33	1.06	.80
TL7702AIP	296-3234-5-ND	2.53V Supply Monitor *NEW!*	8-Dip	1.33	1.06	.80
TL7702BCD	296-1296-5-ND	2.53V Supply Monitor *NEW!*	8-SOP	1.70	1.36	1.02
TL7702BCDR	296-1296-1-ND	2.53V Supply Monitor	8-SOP	1.75	1.40	1.05
TL7702BCDR	296-1296-2-ND	2.53V Supply Monitor	8-SOP	2240.00/2,500		
TL7702BCP	296-3236-5-ND	2.53V Supply Monitor *NEW!*	8-Dip	1.70	1.36	1.02
TL7702BID	296-3237-5-ND	2.53V Supply Monitor *NEW!*	8-SOP	1.78	1.42	1.07
TL7702BIP	296-3238-5-ND	2.53V Supply Monitor *NEW!*	8-Dip	1.78	1.42	1.07
TL7705ACD	296-1297-5-ND	4.55V Supply Monitor	8-SOP	1.25	1.00	.75
TL7705ACDR	296-1297-2-ND	4.55V Supply Monitor	8-SOP	1665.00/2,500		
TL7705ACP	296-1801-5-ND	4.55V Supply Monitor	8-Dip	1.25	1.00	.75
TL7705ACPSR	296-3239-1-ND	4.55V Supply Monitor *NEW!*	8-SOP	1.38	1.10	.83
TL7705ACPSR	296-3239-2-ND	4.55V Supply Monitor *NEW!*	8-SOP	1430.00/2,000		
TL7705AID	296-3240-5-ND	4.55V Supply Monitor *NEW!*	8-SOP	1.33	1.06	.80
TL7705AIP	296-3241-5-ND	4.55V Supply Monitor *NEW!*	8-Dip	1.33	1.06	.80
TL7705BCD	296-1298-5-ND	4.55V Supply Monitor	8-SOP	1.70	1.36	1.02
TL7705BCDR	296-1298-2-ND	4.55V Supply Monitor	8-SOP	2240.00/2,500		
TL7705BCP	296-3242-5-ND	4.55V Supply Monitor *NEW!*	8-Dip	1.70	1.36	1.02
TL7705BID	296-3243-5-ND	4.55V Supply Monitor *NEW!*	8-SOP	1.78	1.42	1.07
TL7705BIP	296-3244-5-ND	4.55V Supply Monitor *NEW!*	8-Dip	1.78	1.42	1.07
TL7705BQD	296-3245-5-ND	4.55V Supply Monitor *NEW!*	8-SOP	1.88	1.50	1.13
TL7709ACD	296-3247-5-ND	7.6V Supply Monitor *NEW!*	8-SOP	1.25	1.00	.75
TL7709ACP	296-3248-5-ND	7.6V Supply Monitor *NEW!*	8-Dip	1.25	1.00	.75
TL7712ACD	296-3249-5-ND	10.8V Supply Monitor *NEW!*	8-SOP	1.25	1.00	.75
TL7712ACP	296-3250-5-ND	10.8V Supply Monitor *NEW!*	8-Dip	1.25	1.00	.75
TL7715ACD	296-3251-5-ND	13.5V Supply Monitor *NEW!*	8-SOP	1.25	1.00	.75
TL7715ACP	296-3252-5-ND	13.5V Supply Monitor *NEW!*	8-Dip	1.25	1.00	.75
TL7726CD	296-3253-5-ND	Hex Clamping Circuit *NEW!*	8-SOP	1.75	1.40	1.05
TL7726CP	296-3254-5-ND	Hex Clamping Circuit *NEW!*	8-Dip	1.75	1.40	1.05
TL7726ID	296-3255-5-ND	Hex Clamping Circuit *NEW!*	8-SOP	2.20	1.76	1.32
TL7726IP	296-3256-5-ND	Hex Clamping Circuit *NEW!*	8-Dip	2.20	1.76	1.32
TL7757CD	296-3257-5-ND	4.55V Supply Monitor/V. Detector *NEW!*	8-SOP	1.38	1.10	.83
TL7757CLP	296-1992-ND	4.55V Supply Monitor & Voltage Detector	TO-92	1.25	1.00	.75
TL7757CLPR	296-1992-2-ND	4.55V Supply Monitor/V. Det. *NEW!*	TO-226AA	1352.00/2,000		
TL7757CPK	296-3259-5-ND	4.55V Supply Monitor/V. Detector *NEW!*	SOT-89	1.25	1.00	.75
TL7757ID	296-3260-5-ND	4.55V Supply Monitor/V. Detector *NEW!*	8-SOP	1.65	1.32	.99
TL7757ILP	296-3261-5-ND	4.55V Supply Monitor/V. Det. *NEW!*	TO-226AA	1.50	1.20	.90
TL7757IPK	296-3262-5-ND	4.55V Supply Monitor/V. Detector *NEW!*	SOT-89	1.63	1.30	.98
TL7759CD	296-3263-5-ND	4.55V Supply Monitor *NEW!*	8-SOP	1.25	1.00	.75
TL7759CP	296-3264-5-ND	4.55V Supply Monitor *NEW!*	8-Dip	1.25	1.00	.75
TL7759CPWR	296-1299-1-ND	4.55V Supply Monitor	8-TSSOP	1.25	1.00	.75
TL7759CPWR	296-1299-2-ND	4.55V Supply Monitor	8-TSSOP	1300.00/2,000		
TL7770-5CDW	296-3265-5-ND	4.55V Dual Supply Monitor *NEW!*	16-SOP	2.84	2.27	1.77
TL7770-5CN	296-3266-5-ND	4.55V Dual Supply Monitor *NEW!*	16-Dip	2.18	1.74	1.31
TL7770-5IDW	296-3267-5-ND	4.55V Dual Supply Monitor *NEW!*	16-SOP	3.29	2.63	2.05
TLC7701ID	296-3268-5-ND	1.1V Supply Monitor *NEW!*	8-SOP	1.38	1.15	.92
TLC7701IP	296-2608-5-ND	1.1V Supply Monitor	8-Dip	1.38	1.15	.92
TLC7701IPW	296-2609-5-ND	1.1V Supply Monitor	8-TSSOP	1.38	1.15	.92
TLC7701IPWR	296-2609-2-ND	1.1V Supply Monitor *NEW!*	8-TSSOP	1224.00/2,000		
TLC7701QD	296-3270-5-ND	1.1V Supply Monitor *NEW!*	8-SOP	1.43	1.14	.86
TLC7701QP	296-3271-5-ND	1.1V Supply Monitor *NEW!*	8-Dip	1.43	1.14	.86
TLC7703ID	296-3272-5-ND	2.63V Supply Monitor *NEW!*	8-SOP	1.45	1.16	.87
TLC7703IP	296-3273-5-ND	2.63V Supply Monitor *NEW!*	8-Dip	1.45	1.16	.87
TLC7703IPWR	296-3274-1-ND	2.63V Supply Monitor *NEW!*	8-TSSOP	1.45	1.16	.87
TLC7703IPWR	296-3274-2-ND	2.63V Supply Monitor *NEW!*	8-TSSOP	1508.00/2,000		
TLC7703QD	296-2610-5-ND	2.63V Supply Monitor	8-SOP	1.80	1.44	1.08
TLC7705ID	296-1872-5-ND	4.55V Supply Monitor	8-SOP	1.45	1.16	.87
TLC7705IP	296-3276-5-ND	4.55V Supply Monitor *NEW!*	8-Dip	1.45	1.16	.87
TLC7705IPWR	296-3277-1-ND	4.55V Supply Monitor *NEW!*	8-TSSOP	1.45	1.16	.87
TLC7705IPWR	296-3277-2-ND	4.55V Supply Monitor *NEW!*	8-TSSOP	1508.00/2,000		
TLC7705QD	296-3278-5-ND	4.55V Supply Monitor *NEW!*	8-SOP	1.80	1.44	1.08
TLC7725ID	296-3280-5-ND	2.25V Supply Monitor *NEW!*	8-SOP	1.60	1.28	.96
TLC7725QD	296-3281-5-ND	2.25V Supply Monitor *NEW!*	8-SOP	1.98	1.58	1.19
TLC7725QPWR	296-3283-1-ND	2.25V Supply Monitor *NEW!*	8-TSSOP	1.98	1.58	1.19
TLC7725QPWR	296-3283-2-ND	2.25V Supply Monitor *NEW!*	8-TSSOP	2054.00/2,000		
TLC7725IP	296-2611-5-ND	2.25V Supply Monitor	8-Dip	1.60	1.28	.96
TLC7733ID	296-2612-5-ND	2.93V Supply Monitor	8-SOP	1.60	1.28	.96
TLC7733IP	296-3284-5-ND	2.93V Supply Monitor *NEW!*	8-Dip	1.60	1.28	.96
TLC7733IPWR	296-3285-1-ND	2.93V Supply Monitor *NEW!*	8-TSSOP	1.60	1.28	.96
TLC7733IPWR	296-3285-2-ND	2.93V Supply Monitor *NEW!*	8-TSSOP	1664.00/2,000		
TLC7733QD	296-3286-5-ND	2.93V Supply Monitor *NEW!*	8-SOP	1.98	1.58	1.19
TLC7733QP	296-3287-5-ND	2.93V Supply Monitor *NEW!*	8-Dip	1.98	1.58	1.19
TLC7733QPWR	296-3288-1-ND	2.93V Supply Monitor *NEW!*	8-TSSOP	1.98	1.58	1.19
TLC7733QPWR	296-3288-2-ND	2.93V Supply Monitor *NEW!*	8-TSSOP	2054.00/2,000		
TPS3123G15DBVT	296-3289-1-ND	1.40V Supply Monitor *NEW!*	SOT-23-5	1.60	1.28	.96
TPS3123G15DBVT	296-3289-2-ND	1.40V Supply Monitor *NEW!*	SOT-23-5	224.00/250		
TPS3123J12DBVT	296-3290-1-ND	1.08V Supply Monitor *NEW!*	SOT-23-5	1.60	1.28	.96
TPS3123J12DBVT	296-3290-2-ND	1.08V Supply Monitor *NEW!*	SOT-23-5	224.00/250		
TPS3123J18DBVT	296-3291-1-ND	1.62V Supply Monitor *NEW!*	SOT-23-5	1.60	1.28	.96
TPS3123J18DBVT	296-3291-2-ND	1.62V Supply Monitor *NEW!*	SOT-23-5	224.00/250		
TPS3124G15DBVT	296-3292-1-ND	1.40V Supply Monitor *NEW!*	SOT-23-5	1.60	1.28	.96
TPS3124G15DBVT	296-3292-2-ND	1.40V Supply Monitor *NEW!*	SOT-23-5	224.00/250		
TPS3124J12DBVT	296-3293-1-ND	1.08V Supply Monitor *NEW!*	SOT-23-5	1.60	1.28	.96
TPS3124J12DBVT	296-3293-2-ND	1.08V Supply Monitor *NEW!*	SOT-23-5	224.00/250		
TPS3124J18DBVT	296-3294-1-ND	1.62V Supply Monitor *NEW!*	SOT-23-5	1.60	1.28	.96
TPS3124J18DBVT	296-3294-2-ND	1.62V Supply Monitor *NEW!*	SOT-23-5	224.00/250		
TPS3125D18DBVT	296-2634-2-ND	1.62V Supply Monitor	SOT-23-5	260.05/250		
TPS3125G15DBVT	296-2613-2-ND	1.4V Supply Monitor	SOT-23-5	206.50/250		
TPS3125J12DBVT	296-2614-2-ND	1.08V Supply Monitor	SOT-23-5	206.50/250		
TPS3125J18DBVT	296-2615-2-ND	1.62V Supply Monitor	SOT-23-5	206.50/250		
TPS3125L30DBVT	296-2616-2-ND	2.64V Supply Monitor	SOT-23-5	206.50/250		
TPS3305-18D	296-2617-5-ND	Dual 2.93/1.68 Volt Monitor	8-SOP	1.90	1.52	1.14
TPS3305-18DGNR	296-3299-1-ND	Dual 3.3/1.8 Volt Monitor *NEW!*	8-SOP	1.90	1.52	1.14
TPS3305-18DGNR	296-3299-2-ND	Dual 3.3/1.8 Volt Monitor *NEW!*	8-SOP	2432.50/2,500		
TPS3305-25D	296-2618-5-ND	Dual 2.93/2.25 Volt Monitor	8-SOP	1.90	1.52	1.14
TPS3305-25DGNR	296-3300-1-ND	Dual 3.3/2.5 Volt Monitor *NEW!*	8-SOP	1.90	1.52	1.14
TPS3305-25DGNR	296-3300-2-ND	Dual 3.3/2.5 Volt Monitor *NEW!*	8-SOP	2432.50/2,500		
TPS3305-33D	296-2619-5-ND	Dual 4.55/2.93 Volt Monitor	8-SOP	1.90	1.52	1.14
TPS3305-33DGNR	296-3301-1-ND	Dual 5/3.3 Volt Monitor *NEW!*	8-SOP	1.90	1.52	1.14
TPS3305-33DGNR	296-3301-2-ND	Dual 5/3.3 Volt Monitor *NEW!*	8-SOP	2432.50/2,500		
TPS3306-15D	296-3302-5-ND	Dual 3.3/1.5 Volt Monitor *NEW!*	8-SOP	2.05	1.64	1.23
TPS3306-15DGK	296-3303-5-ND	Dual 3.3/1.5 Volt Monitor *NEW!*	8-SOP	2.05	1.64	1.23
TPS3306-18D	296-3304-5-ND	Dual 3.3/1.8 Volt Monitor *NEW!*	8-SOP	2.05	1.64	1.23
TPS3306-18DGK	296-3305-5-ND	Dual 3.3/1.8 Volt Monitor *NEW!*	8-SOP	2.05	1.64	1.23
TPS3306-20D	296-3306-5-ND	Dual 3.3/2 Volt Monitor *NEW!*	8-SOP	2.05	1.64	1.23
TPS3306-20DGK	296-3307-5-ND	Dual 3.3/2 Volt Monitor *NEW!*	8-SOP	2.05	1.64	1.23
TPS3306-25D	296-3308-5-ND	Dual 3.3/2.5 Volt Monitor *NEW!*	8-SOP	2.05	1.64	1.23
TPS3306-25DGK	296-3309-5-ND	Dual 3.3/2.5 Volt Monitor *NEW!*	8-SOP	2.05	1.64	1.23
TPS3306-33D	296-3310-5-ND	Dual 5/3.3 Volt Monitor *NEW!*	8-SOP	2.05	1.64	1.23
TPS3306-33DGK	296-3311-5-ND	Dual 5/3.3 Volt Monitor *NEW!*	8-SOP	2.05	1.64	1.23
TPS3307-18D	296-2620-5-ND	Triple 2.93/1.68/1.25 Volt Monitor	8-SOP	2.05	1.64	1.23
TPS3307-18DGNR	296-3312-1-ND	Triple 3.3/1.8/Adj Volt Monitor *NEW!*	8-SOP	2.05	1.64	1.23
TPS3307-18DGNR	296-3312-2-ND	Triple 3.3/1.8/Adj Volt Monitor *NEW!*	8-SOP	2625.00/2,500		
TPS3307-25D	296-2621-5-ND	Triple 2.93/2.25/1.25 Volt Monitor	8-SOP	2.05	1.64	1.23
TPS3307-25DGNR	296-3313-1-ND	Triple 3.3/2.5/Adj Volt Monitor *NEW!*	8-SOP	2.05	1.64	1.23
TPS3307-25DGNR	296-3313-2-ND	Triple 3.3/2.5/Adj Volt Monitor *NEW!*	8-SOP	2625.00/2,500		
TPS3307-33D	296-3314-5-ND	Triple 5/3.3/Adj Volt Monitor *NEW!*	8-SOP	2.05	1.64	1.23
TPS3307-33DR	296-3314-2-ND	Triple 5/3.3/Adj Volt Monitor *NEW!*	8-SOP	2625.00/2,500		
TPS3307-33DGN	296-3315-5-ND	Triple 5/3.3/Adj Volt Monitor *NEW!*	8-SOP	2.05	1.64	1.23
TPS3307-33DGNR	296-3315-2-ND	Triple 5/3.3/Adj Volt Monitor *NEW!*	8-SOP	2625.00/2,500		
TPS3510DR	296-3317-1-ND	3.5V Power Supply Monitor *NEW!*	8-SOP	1.23	1.03	.82
TPS3510DR	296-3317-2-ND	3.5V Power Supply Monitor *NEW!*	8-SOP	1332.50/2,500		
TPS3510P	296-3318-5-ND	3.5V Power Supply Monitor *NEW!*	8-Dip	1.23	1.03	.82
TPS3705-30D	296-2622-5-ND	2.63V Supply Monitor	8-SOP	1.60	1.28	.96
TPS3705-30DGN	296-3316-5-ND	2.63V Supply Monitor *NEW!*	8-SOP	1.60	1.28	.96
TPS3705-33D	296-2623-5-ND	2.93V Supply Monitor	8-SOP	1.60	1.28	.96
TPS3705-33DGNR	296-3319-1-ND	2.93V Supply Monitor *NEW!*	8-SOP	1.60	1.28	.96
TPS3705-33DGNR	296-3319-2-ND	2.93V Supply Monitor *NEW!*	8-SOP	2047.50/2,500		
TPS3705-50D	296-2624-5-ND	4.55V Supply Monitor	8-SOP	1.60	1.28	.96
TPS3705-50DGNR	296-3320-1-ND	4.55V Supply Monitor *NEW!*	8-SOP	1.60	1.28	.96
TPS3705-50DGNR	296-3320-2-ND	4.55V Supply Monitor *NEW!*	8-SOP	2047.50/2,500		
TPS3707-25D	296-2625-5-ND	2.25V Supply Monitor	8-SOP	1.53	1.22	.92
TPS3707-25DGNR	296-3321-1-ND	2.25V Supply Monitor *NEW!*	8-SOP	1.53	1.22	.92
TPS3707-25DGNR	296-3321-2-ND	2.25V Supply Monitor *NEW!*	8-SOP	1952.50/2,500		
TPS3707-30D	296-2626-5-ND	2.63V Supply Monitor	8-SOP	1.53	1.22	.92
TPS3707-30DGN	296-3322-5-ND	2.63V Supply Monitor *NEW!*	8-SOP	1.53	1.22	.92
TPS3707-33D	296-2627-5-ND	2.93V Supply Monitor	8-SOP	1.53	1.22	.92
TPS3707-33DGN	296-3323-5-ND	2.93V Supply Monitor *NEW!*	8-SOP	1.53	1.22	.92
TPS3707-50D	296-2628-5-ND	4.55V Supply Monitor	8-SOP	1.53	1.22	.92
TPS3707-50DGNR	296-3324-1-ND	4.55V Supply Monitor *NEW!*	8-SOP	1.53	1.22	.92
TPS3707-50DGNR	296-3324-2-ND	4.55V Supply Monitor *NEW!*	8-SOP	1952.50/2,500		
TPS3801I50DCKR	296-3325-1-ND	4.55V Supply Monitor *NEW!*	SOT-323-5	1.20	1.00	.80
TPS3801I50DCKR	296-3325-2-ND	4.55V Supply Monitor *NEW!*	SOT-323-5	1560.00/3,000		
TPS3801J25DCKR	296-3326-1-ND	2.25V Supply Monitor *NEW!*	SOT-323-5	1.20	1.00	.80
TPS3801J25DCKR	296-3326-2-ND	2.25V Supply Monitor *NEW!*	SOT-323-5	1560.00/3,000		
TPS3801K33DCKR	296-3327-1-ND	2.93V Supply Monitor *NEW!*	SOT-323-5	1.20	1.00	.80
TPS3801K33DCKR	296-3327-2-ND	2.93V Supply Monitor *NEW!*	SOT-323-5	1560.00/3,000		
TPS3801L30DCKR	296-3328-1-ND	2.64V Supply Monitor *NEW!*	SOT-323-5	1.20	1.00	.80
TPS3801L30DCKR	296-3328-2-ND	2.64V Supply Monitor *NEW!*	SOT-323-5	1560.00/3,000		
TPS3809I50DBVT	296-2629-2-ND	4.55V Supply Monitor	SOT-23	116.25/250		
TPS3809J25DBVT	296-2630-2-ND	2.25V Supply Monitor	SOT-23	116.25/250		
TPS3809K33DBVT	296-2631-2-ND	2.93V Supply Monitor	SOT-23	116.25/250		
TPS3809L30DBVT	296-2632-2-ND	2.64V Supply Monitor	SOT-23	116.25/250		
TPS3820-33DBVT	296-2633-2-ND	2.93V Supply Monitor	SOT-23-5	178.50/250		
TPS3820-50DBVT	296-2635-2-ND	4.55V Supply Monitor	SOT-23-5	178.50/250		
TPS3823-25DBVR	296-3333-1-ND	2.25V Supply Monitor *NEW!*	SOT-23-5	1.28	1.02	.77

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TPS3823-25DBVR	296-3333-2-ND	2.25V Supply Monitor *NEW!*	SOT-23-5	1959.00/3,000		
TPS3823-30DBVR	296-3334-1-ND	2.63V Supply Monitor *NEW!*	SOT-23-5	1.28	1.02	.77
TPS3823-30DBVR	296-3334-2-ND	2.63V Supply Monitor *NEW!*	SOT-23-5	1959.00/3,000		
TPS3823-33DBVR	296-1357-1-ND	2.93V Supply Monitor	SOT-23-5	1.65	1.32	.99
TPS3823-33DBVR	296-1357-2-ND	2.93V Supply Monitor	SOT-23-5	1959.00/3,000		
TPS3823-50DBVR	296-3335-1-ND	4.55V Supply Monitor *NEW!*	SOT-23-5	1.28	1.02	.77
TPS3823-50DBVR	296-3335-2-ND	4.55V Supply Monitor *NEW!*	SOT-23-5	1959.00/3,000		
TPS3824-25DBVR	296-3336-1-ND	2.25V Supply Monitor *NEW!*	SOT-23-5	1.28	1.02	.77
TPS3824-25DBVR	296-3336-2-ND	2.25V Supply Monitor *NEW!*	SOT-23-5	1959.00/3,000		
TPS3824-30DBVR	296-3337-1-ND	2.63V Supply Monitor *NEW!*	SOT-23-5	1.28	1.02	.77
TPS3824-30DBVR	296-3337-2-ND	2.63V Supply Monitor *NEW!*	SOT-23-5	1959.00/3,000		
TPS3824-33DBVR	296-3338-1-ND	2.93V Supply Monitor *NEW!*	SOT-23-5	1.28	1.02	.77
TPS3824-33DBVR	296-3338-2-ND	2.93V Supply Monitor *NEW!*	SOT-23-5	1959.00/3,000		
TPS3824-50DBVR	296-1358-1-ND	4.55V Supply Monitor	SOT-23-5	1.65	1.32	.99
TPS3824-50DBVR	296-1358-2-ND	4.55V Supply Monitor	SOT-23-5	1959.00/3,000		
TPS3825-33DBVT	296-2636-2-ND	2.93V Supply Monitor	SOT-23-5	172.50/250		
TPS3825-50DBVT	296-2637-2-ND	4.55V Supply Monitor	SOT-23-5	172.50/250		
TPS3828-33DBVT	296-2638-2-ND	2.93V Supply Monitor	SOT-23-5	178.50/250		
TPS3828-50DBVT	296-2639-2-ND	4.55V Supply Monitor	SOT-23-5	178.50/250		
TPS3836E18DBVT	296-3339-1-ND	1.71V Low Current Monitor *NEW!*	SOT-23-5	1.88	1.50	1.13
TPS3836E18DBVT	296-3339-2-ND	1.71V Low Current Monitor *NEW!*	SOT-23-5	262.50/250		
TPS3836J25DBVT	296-3340-1-ND	2.25V Low Current Monitor *NEW!*	SOT-23-5	1.88	1.50	1.13
TPS3836J25DBVT	296-3340-2-ND	2.25V Low Current Monitor *NEW!*	SOT-23-5	262.50/250		
TPS3836K33DBVT	296-3341-1-ND	2.93V Low Current Monitor *NEW!*	SOT-23-5	1.88	1.50	1.13
TPS3836K33DBVT	296-3341-2-ND	2.93V Low Current Monitor *NEW!*	SOT-23-5	262.50/250		
TPS3836L30DBVT	296-3342-1-ND	2.64V Low Current Monitor *NEW!*	SOT-23-5	1.88	1.50	1.13
TPS3836L30DBVT	296-3342-2-ND	2.64V Low Current Monitor *NEW!*	SOT-23-5	262.50/250		
TPS3837E18DBVT	296-3343-1-ND	1.71V Low Current Monitor *NEW!*	SOT-23-5	1.88	1.50	1.13
TPS3837E18DBVT	296-3343-2-ND	1.71V Low Current Monitor *NEW!*	SOT-23-5	262.50/250		
TPS3837J25DBVT	296-3344-1-ND	2.25V Low Current Monitor *NEW!*	SOT-23-5	1.88	1.50	1.13
TPS3837J25DBVT	296-3344-2-ND	2.25V Low Current Monitor *NEW!*	SOT-23-5	262.50/250		
TPS3837K33DBVT	296-3345-1-ND	2.93V Low Current Monitor *NEW!*	SOT-23-5	1.88	1.50	1.13
TPS3837K33DBVT	296-3345-2-ND	2.93V Low Current Monitor *NEW!*	SOT-23-5	262.50/250		
TPS3837L30DBVT	296-3346-1-ND	2.64V Low Current Monitor *NEW!*	SOT-23-5	1.88	1.50	1.13
TPS3837L30DBVT	296-3346-2-ND	2.64V Low Current Monitor *NEW!*	SOT-23-5	262.50/250		
TPS3838E18DBVT	296-3347-1-ND	1.71V Low Current Monitor *NEW!*	SOT-23-5	1.88	1.50	1.13
TPS3838E18DBVT	296-3347-2-ND	1.71V Low Current Monitor *NEW!*	SOT-23-5	262.50/250		
TPS3838J25DBVT	296-3348-1-ND	2.25V Low Current Monitor *NEW!*	SOT-23-5	1.88	1.50	1.13
TPS3838J25DBVT	296-3348-2-ND	2.25V Low Current Monitor *NEW!*	SOT-23-5	262.50/250		
TPS3838K33DBVT	296-3349-1-ND	2.93V Low Current Monitor *NEW!*	SOT-23-5	1.88	1.50	1.13
TPS3838K33DBVT	296-3349-2-ND	2.93V Low Current Monitor *NEW!*	SOT-23-5	262.50/250		
TPS3838L30DBVT	296-3350-1-ND	2.64V Low Current Monitor *NEW!*	SOT-23-5	1.88	1.50	1.13
TPS3838L30DBVT	296-3350-2-ND	2.64V Low Current Monitor *NEW!*	SOT-23-5	262.50/250		
TPS5510D	296-3351-5-ND	3 Ch. 5/3.3/12V Power Supply Monitor *NEW!*	8-SOP	1.29	1.08	.86
UC2543DW	296-3355-5-ND	2.5V Power Supply Monitor *NEW!*	16-SOP	6.20	4.96	4.19
UC2543N	296-3356-5-ND	2.5V Power Supply Monitor *NEW!*	16-Dip	6.20	4.96	4.19
UC2903DW	296-2640-5-ND	Quad Voltage Supply Monitor	18-SOP	10.90	9.81	8.70
UC2904DW	296-2641-5-ND	Quad Voltage Supply Monitor	18-SOP	11.18	10.07	8.93
UC3543DW	296-3357-5-ND	2.5V Power Supply Monitor *NEW!*	16-SOP	3.08	2.47	1.92
UC3543N	296-3358-5-ND	2.5V Power Supply Monitor *NEW!*	16-Dip	3.08	2.47	1.92
UC3544N	296-3359-5-ND	2.5V Power Supply Monitor *NEW!*	18-Dip	2.88	2.31	1.80
UC3903DW	296-2642-5-ND	Quad Voltage Supply Monitor	18-SOP	8.94	7.16	6.04
UC3904DW	296-2643-5-ND	Quad Voltage Supply Monitor	18-SOP	8.12	6.50	5.49
UC3910D	296-2644-5-ND	4-Bit D/A Converter and Voltage Monitor	16-SOP	5.18	4.14	3.22
UCC2946D	296-2645-5-ND	Microprocessor Supervisor with Watch Dog Timer	8-SOP	5.22	4.18	3.53
UCC3946D	296-2646-5-ND	Microprocessor Supervisor with Watch Dog Timer	8-SOP	4.55	3.64	2.83

Voltage References

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TL431ACD	296-1286-5-ND	Adjustable Shunt Regulator	8-SOP	.80	.60	.45
TL431ACDR	296-1286-2-ND	Adjustable Shunt Regulator	8-SOP	650.00/2,500		
TL431ACLP	296-1287-ND	Adjustable Shunt Regulator	TO-92	.80	.60	.45
TL431ACLPR	296-1287-2-ND	Adjustable Shunt Regulator	TO-92	586.00/2,000		
TL431AID	296-1288-5-ND	Adjustable Shunt Regulator	8-SOP	.75	.63	.50
TL431AIDR	296-1288-2-ND	Adjustable Shunt Regulator	8-SOP	877.50/2,500		
TL431CD	296-1289-5-ND	Adjustable Shunt Regulator	8-SOP	.64	.48	.36
TL431CDR	296-1289-2-ND	Adjustable Shunt Regulator	8-SOP	585.00/2,500		
TL431CLP	296-1290-ND	Adjustable Shunt Regulator	TO-92	.72	.54	.41
TL431CLPR	296-1290-2-ND	Adjustable Shunt Regulator	TO-92	532.00/2,000		
TL431CP	296-1798-5-ND	Adjustable Shunt Regulator	8-Dip	.64	.48	.36
TL431CPK	296-1991-1-ND	Adjustable Shunt Regulator	3-Sip	.93	.78	.62
TL431IDR	296-1291-1-ND	Adjustable Shunt Regulator	8-SOP	.81	.68	.54
TL431ILP	296-1292-ND	Adjustable Shunt Regulator	TO-92	.75	.63	.50
TL431ILPR	296-1292-2-ND	Adjustable Shunt Regulator	TO-92	718.00/2,000		
TLV431ACDBVR	296-1348-1-ND	Low Voltage Adjustable Shunt Reg.	SOT-23-5	1.38	1.15	.92
TLV431AIDBVR	296-1984-1-ND	Low Voltage Adjustable Shunt Reg.	SOT-23-5	1.28	1.02	.77

Low Dropout Voltage Regulators

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TL750L05CD	296-8000-5-ND	5.0V, 150mA LDO Regulator *NEW!*	8-SOP	1.35	1.13	.90
TL750L05CKC	296-8001-5-ND	5.0V, 150mA LDO Regulator *NEW!*	TO-220AB	1.43	1.14	.86
TL750L05CLP	296-8002-5-ND	5.0V, 150mA LDO Regulator *NEW!*	TO-92	1.41	1.18	.94
TL750L05QD	296-8003-5-ND	5.0V, 150mA LDO Regulator *NEW!*	8-SOP	1.28	1.02	.77
TL750L08CD	296-8004-5-ND	8.0V, 150mA LDO Regulator *NEW!*	8-SOP	1.35	1.08	.81
TL750L08CLP	296-8005-5-ND	8.0V, 150mA LDO Regulator *NEW!*	TO-92	1.43	1.14	.86
TL750L10CD	296-8006-5-ND	10V, 150mA LDO Regulator *NEW!*	8-SOP	1.35	1.08	.81
TL750L10CLPR	296-8007-1-ND	10V, 150mA LDO Regulator *NEW!*	TO-92	1.43	1.14	.86
TL750L10CLPR	296-8007-2-ND	10V, 150mA LDO Regulator *NEW!*	TO-92	1482.00/2,000		
TL750L12CD	296-8008-5-ND	12V, 150mA LDO Regulator *NEW!*	8-SOP	1.35	1.08	.81
TL750L12CLP	296-8009-5-ND	12V, 150mA LDO Regulator *NEW!*	TO-92	1.43	1.14	.86
TL751L05CD	296-8011-5-ND	5.0V, 150mA LDO Regulator *NEW!*	8-SOP	1.75	1.40	1.05
TL751L10CD	296-8012-5-ND	10V, 150mA LDO Regulator *NEW!*	8-SOP	1.75	1.40	1.05
TL751L10CP	296-8013-5-ND	10V, 150mA LDO Regulator *NEW!*	8-PDip	1.58	1.26	.95
TL751L12CD	296-8014-5-ND	12V, 150mA LDO Regulator *NEW!*	8-SOP	1.75	1.40	1.05
TL7700CPSR	296-8015-1-ND	Supply-Voltage Supervisor *NEW!*	8-SOP	3.38	2.70	2.10
TL7700CPSR	296-8015-2-ND	Supply-Voltage Supervisor *NEW!*	8-SOP	3826.00/2,000		
TPS71H01QPWPR	296-8051-1-ND	Adj. 500mA LDO Regulator *NEW!*	20-HTSSOP	3.98	3.19	2.48
TPS71H01QPWPR	296-8051-2-ND	Adj. 500mA LDO Regulator *NEW!*	20-HTSSOP	4514.00/2,000		
TPS73HD301PWP	296-2666-5-ND	Dual Adjustable LDO Regulator	28-HTSSOP	5.06	4.05	3.42
TPS73HD318PWP	296-2667-5-ND	Dual 1.8/3.3V LDO Regulator	28-HTSSOP	5.06	4.05	3.42
TPS73HD318PWPR	296-2667-2-ND	Dual, 1.8V/3.3V 750mA LDO Regulator *NEW!*	28-HTSSOP	6326.00/2,000		
TPS73HD325PWPR	296-8071-1-ND	Dual, 2.5V/3.3V 750mA LDO Regulator *NEW!*	28-HTSSOP	5.06	4.05	3.42
TPS73HD325PWPR	296-8071-2-ND	Dual, 2.5V/3.3V 750mA LDO Regulator *NEW!*	28-HTSSOP	6326.00/2,000		
TPS767D301PWP	296-2740-5-ND	Dual Adj./3.3 LDO Regulator	28-HTSSOP	4.61	3.69	2.87
TPS767D318PWP	296-2741-5-ND	Dual 1.8/3.3V LDO Regulator	28-HTSSOP	4.61	3.69	2.87
TPS767D325PWP	296-2742-5-ND	Dual 2.5/3.3V LDO Regulator	28-HTSSOP	4.61	3.69	2.87
TPS7101QDR	296-1359-1-ND	Adj. 1.2V-9.75V 2A LDO Regulator	8-SOP	2.63	2.11	1.64
TPS7101QP	296-8041-5-ND	Adj. 1.2V-9.75V 2A LDO Reg. *NEW!*	8-PDip	2.43	1.95	1.52
TPS7101QPWR	296-8042-1-ND	Adj. 1.2V-9.75V 2A LDO Reg. *NEW!*	20-TSSOP	2.43	1.95	1.52
TPS7101QPWR	296-8042-2-ND	Adj. 1.2V-9.75V 2A LDO Reg. *NEW!*	20-TSSOP	2754.00/2,000		
TPS7133QD	296-2658-5-ND	3.3V, 500mA PMOS LDO Regulator	8-SOP	2.43	1.95	1.52
TPS7133QP	296-8046-5-ND	3.3V, 500mA PMOS LDO Reg. *NEW!*	8-PDip	2.43	1.95	1.52
TPS7133QPWR	296-8047-1-ND	3.3V, 500mA PMOS LDO Reg. *NEW!*	8-TSSOP	2.43	1.95	1.52
TPS7133QPWR	296-8047-2-ND	3.3V, 500mA PMOS LDO Reg. *NEW!*	8-TSSOP	2754.00/2,000		
TPS7148QD	296-1961-5-ND	4.8V, 500mA LDO Regulator	8-SOP	2.43	1.95	1.52
TPS7148QP	296-8048-5-ND	4.85V, 500mA LDO Regulator *NEW!*	8-PDip	2.43	1.95	1.52
TPS7150QD	296-8049-5-ND	5.0V, 500mA LDO Regulator *NEW!*	8-SOP	2.43	1.95	1.52
TPS7150QP	296-8050-5-ND	5.0V, 500mA LDO Regulator *NEW!*	8-PDip	2.43	1.95	1.52
TPS7201QD	296-1360-5-ND	Adj. 250mA LDO Regulator *NEW!*	8-SOP	1.41	1.18	.94
TPS7201QDR	296-1360-1-ND	Adj. 250mA LDO Regulator	8-SOP	1.95	1.56	1.17
TPS7201QDR	296-1360-2-ND	Adj. 250mA LDO Regulator	8-SOP	1527.50/2,500		
TPS7201QP	296-8052-5-ND	Adj. 250mA LDO Regulator *NEW!*	8-PDip	1.41	1.18	.94
TPS7201QPWR	296-8053-1-ND	Adj. 250mA LDO Regulator *NEW!*	8-TSSOP	1.41	1.18	.94
TPS7201QPWR	296-8053-2-ND	Adj. 250mA LDO Regulator *NEW!*	8-TSSOP	1250.00/2,000		
TPS7225QD	296-1962-5-ND	2.5V, 250mA LDO Regulator	8-SOP	1.41	1.18	.94
TPS7225QP	296-1963-5-ND	2.5V, 250mA LDO Regulator	8-Dip	1.41	1.18	.94
TPS7225QPWR	296-8054-1-ND	2.5V, 250mA LDO Regulator *NEW!*	8-TSSOP	1.41	1.18	.94
TPS7225QPWR	296-8054-2-ND	2.5V, 250mA LDO Regulator *NEW!*	8-TSSOP	1250.00/2,000		
TPS7230QD	296-1964-5-ND	3.0V, 250mA LDO Regulator	8-SOP	1.41	1.18	.94
TPS7230QP	296-1965-5-ND	3.0V, 250mA LDO Regulator	8-Dip	1.41	1.18	.94
TPS7230QPWR	296-8055-1-ND	3.0V, 250mA LDO Regulator *NEW!*	8-TSSOP	1.41	1.18	.94
TPS7230QPWR	296-8055-2-ND	3.0V, 250mA LDO Regulator *NEW!*	8-TSSOP	1250.00/2,000		
TPS7233QD	296-1966-5-ND	3.3V, 250mA LDO Regulator	8-SOP	1.41	1.18	.94
TPS7233QP	296-8056-5-ND	3.3V, 250mA LDO Regulator *NEW!*	8-PDip	1.41	1.18	.94
TPS7233QPWR	296-8057-1-ND	3.3V, 250mA LDO Regulator *NEW!*	8-TSSOP	1.41	1.18	.94
TPS7233QPWR	296-8057-2-ND	3.3V, 250mA LDO Regulator *NEW!*	8-TSSOP	1250.00/2,000		
TPS7248QD	296-8058-5-ND	4.85V, 250mA PMOS LDO Reg. *NEW!*	8-SOP	1.41	1.18	.94
TPS7248QP	296-2659-5-ND	4.85V, 250mA PMOS LDO Regulator	8-Dip	1.41	1.18	.94
TPS7250QD	296-1361-5-ND	5.0V, 250mA LDO Regulator *NEW!*	8-SOP	1.41	1.18	.94
TPS7250QDR	296-1361-1-ND	5.0V, 250mA LDO Regulator	8-SOP	1.95	1.56	1.17
TPS7250QDR	296-1361-2-ND	5.0V, 250mA LDO Regulator	8-SOP	1527.50/2,500		
TPS7250QP	296-8059-5-ND	5.0V, 250mA LDO Regulator *NEW!*	8-PDip	1.41	1.18	.94
TPS7250QPWR	296-8060-1-ND	5.0V, 250mA LDO Regulator *NEW!*	8-TSSOP	1.41	1.18	.94
TPS7250QPWR	296-8060-2-ND	5.0V, 250mA LDO Regulator *NEW!*	8-TSSOP	1250.00/2,000		
TPS7301QD	296-1362-5-ND	Adj. 500mA LDO Regulator *NEW!*	8-SOP	2.43	1.95	1.52
TPS7301QDR	296-1362-1-ND	Adj. 500mA LDO Regulator	8-SOP	3.22	2.58	2.01
TPS7301QDR	296-1362-2-ND	Adj. 500mA LDO Regulator	8-SOP	3402.50/2,500		
TPS7301QP	296-2660-5-ND	Adj. 500mA LDO Regulator	8-Dip	2.43	1.95	1.52
TPS7301QPW	296-8061-5-ND	Adj. 500mA LDO Regulator *NEW!*	20-TSSOP	2.43	1.95	1.52
TPS7325QD	296-2661-5-ND	2.5V, 500mA LDO Reg. w/Delayed Reset	8-SOP	2.43	1.95	1.52
TPS7325QP	296-8062-5-ND	2.5V, 500mA LDO Regulator with Delayed Reset *NEW!*	8-PDip	2.43	1.95	1.52
TPS7325QPWR	296-8063-1-ND	2.5V, 500mA LDO Regulator with Delayed Reset *NEW!*	20-TSSOP	2.43	1.95	1.52
TPS7325QPWR	296-8063-2-ND	2.5V, 500mA LDO Regulator with Delayed Reset *NEW!*	20-TSSOP	2754.00/2,000		
TPS7330QD	296-2662-5-ND	3.0V, 500mA LDO Reg. w/Delayed Reset	8-SOP	2.43	1.95	1.52
TPS7330QDR	296-2662-2-ND	3.0V, 500mA LDO Regulator with Delayed Reset *NEW!*	8-SOP	3402.50/2,500		
TPS7330QP	296-8064-5-ND	3.0V, 500mA LDO Regulator with Delayed Reset *NEW!*	8-PDip	2.43	1.95	1.52
TPS7330QPWR	296-8065-1-ND	3.0V, 500mA LDO Regulator with Delayed Reset *NEW!*	20-TSSOP	2.43	1.95	1.52
TPS7330QPWR	296-8065-2-ND	3.0V, 500mA LDO Regulator with Delayed Reset *NEW!*	20-TSSOP	2754.00/2,000		
TPS7333QD	296-8066-5-ND	3.3V, 500mA LDO Regulator with Delayed Reset *NEW!*	8-SOP	2.43	1.95	1.52
TPS7333QDR	296-8066-2-ND	3.3V, 500mA LDO Regulator with Delayed Reset *NEW!*	8-SOP	3402.50/2,500		
TPS7333QP	296-2663-5-ND	3.3V, 500mA LDO Reg. w/Delayed Reset	8-Dip	2.43	1.95	1.52
TPS7333QPWR	296-8067-1-ND	3.3V, 500mA LDO Regulator with Delayed Reset *NEW!*	20-TSSOP	2.43	1.95	1.52
TPS7333QPWR	296-8067-2-ND	3.3V, 500mA LDO Regulator with Delayed Reset *NEW!*	20-TSSOP	2754.00/2,000		
TPS7348QD	296-8068-5-ND	4.85V, 500mA LDO Regulator with Delayed Reset *NEW!*	8-SOP	2.43	1.95	1.52
TPS7348QDR	296-8068-2-ND	4.85V, 500mA LDO Regulator with Delayed Reset *NEW!*	8-SOP	3402.50/2,500		
TPS7348QP	296-2664-5-ND	4.85V, 500mA LDO Reg. w/Delayed Reset	8-Dip	2.43	1.95	1.52
TPS7350QD	296-8069-5-ND	5.0V, 500mA LDO Regulator with Delayed Reset *NEW!*	8-SOP	2.43	1.95	1.52
TPS7350QP	296-2665-5-ND	5.0V, 500mA LDO Reg. w/Delayed Reset	8-Dip	2.43	1.95	1.52
TPS7350QPWR	296-8070-1-ND	5.0V, 500mA LDO Regulator with Delayed Reset *NEW!*	20-TSSOP	2.43	1.95	1.52
TPS7350QPWR	296-8070-2-ND	5.0V, 500mA LDO Regulator with Delayed Reset *NEW!*	20-TSSOP	2754.00/2,000		
TPS7415D	296-2668-5-ND	1.5V, 200mA LDO Regulator	8-SOP	1.38	1.15	.92
TPS7418D	296-2669-5-ND	1.8V, 200mA LDO Regulator	8-SOP	1.38	1.15	.92
TPS7425D	296-2670-5-ND	2.5V, 200mA LDO Regulator	8-SOP	1.38	1.15	.92
TPS7430D	296-2671-5-ND	3.0V, 200mA LDO Regulator	8-SOP	1.38	1.15	.92
TPS7433D	296-2672-5-ND	3.3V, 200mA LDO Regulator	8-SOP	1.38	1.15	.92
TPS70102PWP	296-2652-5-ND	Dual, Adj., 500mA LDO Regulator	20-HTSSOP	4.25	3.41	2.65
TPS70145PWP	296-2653-5-ND	Dual, 3.3/1.2V 500mA LDO Reg.	20-HTSSOP	4.25	3.41	2.65
TPS70148PWP	296-2654-5-ND	Dual, 3.3/1.5V 500mA LDO Reg.	20-HTSSOP	4.25	3.41	2.65
TPS70151PWP	296-2655-5-ND	Dual, 3.3/1.8V 500mA LDO Reg.	20-HTSSOP	4.25	3.41	2.65
TPS70158PWP	296-2656-5-ND	Dual, 3.3/2.5V 500mA LDO Reg.	20-HTSSOP	4.25	3.41	2.65
TPS70202PWP	296-8016-5-ND	Dual, Adj., 500mA LDO Reg. *NEW!*	20-HTSSOP	4.25	3.41	2.65
TPS70245PWP	296-8017-5-ND	Dual, 3.3V/1.2V 500mA/250mA LDO Regulator *NEW!*	20-HTSSOP	4.25	3.41	2.65
TPS70248PWP	296-8018-5-ND	Dual, 3.3V/1.5V 500mA/250mA LDO Regulator *NEW!*	20-HTSSOP	4.25	3.41	2.65
TPS70251PWP	296-8019-5-ND	Dual, 3.3V/1.8V 500mA/250mA LDO Regulator *NEW!*	20-HTSSOP	4.25	3.41	2.65
TPS70258PWP	296-8020-5-ND	Dual, 3.3V/2.5V 500mA/250mA LDO Regulator *NEW!*	20-HTSSOP	4.25	3.41	2.65

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TPS70302PWP	296-8021-5-ND	Dual, Adj., 1A/2A LDO Reg. *NEW!*	24-HTSSOP	5.60	4.48	3.78
TPS70345PWP	296-8022-5-ND	Dual, 3.3V/1.2V 1A/2A LDO Regulator *NEW!*	24-HTSSOP	5.60	4.48	3.78
TPS70348PWP	296-8023-5-ND	Dual, 3.3V/1.5V 1A/2A LDO Regulator *NEW!*	20-HTSSOP	5.60	4.48	3.78
TPS70351PWP	296-8024-5-ND	Dual, 3.3V/1.8V 1A/2A LDO Regulator *NEW!*	24-HTSSOP	5.60	4.48	3.78
TPS70358PWP	296-8025-5-ND	Dual, 3.3V/2.5V 1A/2A LDO Regulator *NEW!*	24-HTSSOP	5.60	4.48	3.78
TPS70402PWP	296-8026-5-ND	Dual, Adj., 1A/2A LDO Reg. *NEW!*	24-HTSSOP	5.60	4.48	3.78
TPS70445PWP	296-8027-5-ND	Dual, 3.3V/1.2V 1A/2A LDO Regulator *NEW!*	24-HTSSOP	5.60	4.48	3.78
TPS70448PWP	296-8028-5-ND	Dual, 3.3V/1.5V 1A/2A LDO Regulator *NEW!*	24-HTSSOP	5.60	4.48	3.78
TPS70451PWP	296-8029-5-ND	Dual, 3.3V/1.8V 1A/2A LDO Regulator *NEW!*	24-HTSSOP	5.60	4.48	3.78
TPS70458PWP	296-8030-5-ND	Dual, 3.3V/2.5V 1A/2A LDO Regulator *NEW!*	24-HTSSOP	5.60	4.48	3.78
TPS70702PWP	296-8031-5-ND	Dual, Adj., 1A/2A LDO Reg. *NEW!*	20-HTSSOP	3.76	3.01	2.34
TPS70745PWP	296-8032-5-ND	Dual, 3.3V/1.2V 250mA/125mA LDO Regulator *NEW!*	20-HTSSOP	3.76	3.01	2.34
TPS70748PWP	296-8033-5-ND	Dual, 3.3V/1.5V 250mA/125mA LDO Regulator *NEW!*	20-HTSSOP	3.76	3.01	2.34
TPS70751PWP	296-8034-5-ND	Dual, 3.3V/1.8V 250mA/125mA LDO Regulator *NEW!*	20-HTSSOP	3.76	3.01	2.34
TPS70758PWP	296-8035-5-ND	Dual, 3.3V/2.5V 250mA/125mA LDO Regulator *NEW!*	20-HTSSOP	3.76	3.01	2.34
TPS70802PWP	296-8036-5-ND	Dual, Adj., 250mA/125mA LDO Regulator *NEW!*	20-HTSSOP	3.60	2.88	2.24
TPS70845PWP	296-8037-5-ND	Dual, 3.3V/1.2V 250mA/125mA LDO Regulator *NEW!*	20-HTSSOP	3.60	2.88	2.24
TPS70848PWP	296-8038-5-ND	Dual, 3.3V/1.5V 250mA/125mA LDO Regulator *NEW!*	20-HTSSOP	3.60	2.88	2.24
TPS70851PWP	296-8039-5-ND	Dual, 3.3V/1.8V 250mA/125mA LDO Regulator *NEW!*	20-HTSSOP	3.60	2.88	2.24
TPS70858PWP	296-8040-5-ND	Dual, 3.3V/2.5V 250mA/125mA LDO Regulator *NEW!*	20-HTSSOP	3.60	2.88	2.24
TPS71025D	296-8043-5-ND	2.5V, 500mA LDO Regulator *NEW!*	8-SOP	4.46	3.57	2.78
TPS71025DR	296-8043-2-ND	2.5V, 500mA LDO Regulator *NEW!*	8-SOP	6237.50/2,500		
TPS71025P	296-2657-5-ND	2.5V, 500mA LDO Regulator	8-Dip	4.46	3.57	2.78
TPS71025PWR	296-8045-1-ND	2.5V, 500mA LDO Regulator *NEW!*	20-TSSOP	4.46	3.57	2.78
TPS71025PWR	296-8045-2-ND	2.5V, 500mA LDO Regulator *NEW!*	20-TSSOP	5050.00/2,000		
TPS75101QPWP	296-2673-5-ND	Adjustable, 1.5A LDO Regulator	20-HTSSOP	3.51	2.81	2.19
TPS75115QPWP	296-2674-5-ND	1.5V, 1.5A LDO Regulator	20-HTSSOP	3.51	2.81	2.19
TPS75118QPWP	296-2675-5-ND	1.8V, 1.5A LDO Regulator	20-HTSSOP	3.51	2.81	2.19
TPS75125QPWP	296-2676-5-ND	2.5V, 1.5A LDO Regulator	20-HTSSOP	3.51	2.81	2.19
TPS75133QPWP	296-2677-5-ND	3.3V, 1.5A LDO Regulator	20-HTSSOP	3.51	2.81	2.19
TPS75201QPWP	296-2678-5-ND	Adjustable, 2A LDO Regulator	20-HTSSOP	3.69	2.96	2.30
TPS75215QPWP	296-2679-5-ND	1.5V, 2A LDO Regulator	20-HTSSOP	3.69	2.96	2.30
TPS75218QPWP	296-2680-5-ND	1.8V, 2A LDO Regulator	20-HTSSOP	3.69	2.96	2.30
TPS75225QPWP	296-2681-5-ND	2.5V, 2A LDO Regulator	20-HTSSOP	3.69	2.96	2.30
TPS75233QPWP	296-2682-5-ND	3.3V, 2A LDO Regulator	20-HTSSOP	3.69	2.96	2.30
TPS75301QPWP	296-2683-5-ND	Adjustable, 1.5A LDO Regulator	20-HTSSOP	3.51	2.81	2.19
TPS75315QPWP	296-2684-5-ND	1.5V, 1.5A LDO Regulator	20-HTSSOP	3.51	2.81	2.19
TPS75318QPWP	296-2685-5-ND	1.8V, 1.5A LDO Regulator	20-HTSSOP	3.51	2.81	2.19
TPS75325QPWP	296-2686-5-ND	2.5V, 1.5A LDO Regulator	20-HTSSOP	3.51	2.81	2.19
TPS75333QPWP	296-2687-5-ND	3.3V, 1.5A LDO Regulator	20-HTSSOP	3.51	2.81	2.19
TPS75401QPWP	296-2688-5-ND	Adjustable, 2A LDO Regulator	20-HTSSOP	3.69	2.96	2.30
TPS75415QPWP	296-2689-5-ND	1.5V, 2A LDO Regulator	20-HTSSOP	3.69	2.96	2.30
TPS75418QPWP	296-2690-5-ND	1.8V, 2A LDO Regulator	20-HTSSOP	3.69	2.96	2.30
TPS75425QPWP	296-2691-5-ND	2.5V, 2A LDO Regulator	20-HTSSOP	3.69	2.96	2.30
TPS75433QPWP	296-2692-5-ND	3.3V, 2A LDO Regulator	20-HTSSOP	3.69	2.96	2.30
TPS76030DBVR	296-1363-1-ND	3V LP 50mA LDO Regulator	SOT-23-5	1.11	.93	.74
TPS76032DBVR	296-8072-1-ND	3.2V, 50mA LDO Regulator *NEW!*	SOT-23-5	.84	.70	.56
TPS76032DBVR	296-8072-2-ND	3.2V, 50mA LDO Regulator *NEW!*	SOT-23-5	1092.00/3,000		
TPS76033DBVR	296-8073-1-ND	3.3V, 50mA LDO Regulator *NEW!*	SOT-23-5	.84	.70	.56
TPS76033DBVR	296-8073-2-ND	3.3V, 50mA LDO Regulator *NEW!*	SOT-23-5	1092.00/3,000		
TPS76038DBVR	296-8074-1-ND	3.8V, 50mA LDO Regulator *NEW!*	SOT-23-5	.84	.70	.56
TPS76038DBVR	296-8074-2-ND	3.8V, 50mA LDO Regulator *NEW!*	SOT-23-5	1092.00/3,000		
TPS76050DBVR	296-8075-1-ND	5.0V, 50mA LDO Regulator *NEW!*	SOT-23-5	.84	.70	.56
TPS76050DBVR	296-8075-2-ND	5.0V, 50mA LDO Regulator *NEW!*	SOT-23-5	1092.00/3,000		
TPS76130DBVT	296-2693-2-ND	3.0V, 100mA LDO Regulator	SOT-23-5	108.75/250		
TPS76132DBVT	296-2694-2-ND	3.2V, 100mA LDO Regulator	SOT-23-5	108.75/250		
TPS76133DBVT	296-2695-2-ND	3.3V, 100mA LDO Regulator	SOT-23-5	108.75/250		
TPS76138DBVT	296-2696-2-ND	3.8V, 100mA LDO Regulator	SOT-23-5	108.75/250		
TPS76150DBVT	296-2697-2-ND	5.0V, 100mA LDO Regulator	SOT-23-5	108.75/250		
TPS76301DBVT	296-2698-2-ND	Adjustable, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76316DBVT	296-2699-2-ND	1.6V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76318DBVT	296-2700-2-ND	1.8V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76325DBVT	296-2701-2-ND	2.5V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76327DBVT	296-2702-2-ND	2.7V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76328DBVT	296-2703-2-ND	2.8V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76330DBVT	296-2704-2-ND	3.0V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76333DBVT	296-2705-2-ND	3.3V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76338DBVT	296-2706-2-ND	3.8V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76350DBVT	296-2707-2-ND	5.0V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76425DBVT	296-2708-2-ND	2.5V, 150mA LDO Regulator	SOT-23-5	108.75/250		
TPS76427DBVT	296-2709-2-ND	2.7V, 150mA LDO Regulator	SOT-23-5	108.75/250		
TPS76428DBVT	296-2710-2-ND	2.8V, 150mA LDO Regulator	SOT-23-5	108.75/250		
TPS76430DBVT	296-2711-2-ND	3.0V, 150mA LDO Regulator	SOT-23-5	108.75/250		
TPS76433DBVT	296-2712-2-ND	3.3V, 150mA LDO Regulator	SOT-23-5	108.75/250		
TPS76501D	296-2713-5-ND	Adjustable, 150mA LDO Regulator	8-SOP	1.32	1.10	.88
TPS76515D	296-2714-5-ND	1.5V, 150mA LDO Regulator	8-SOP	1.32	1.10	.88
TPS76518D	296-2715-5-ND	1.8V, 150mA LDO Regulator	8-SOP	1.32	1.10	.88
TPS76525D	296-2716-5-ND	2.5V, 150mA LDO Regulator	8-SOP	1.32	1.10	.88
TPS76527D	296-2717-5-ND	2.7V, 150mA LDO Regulator	8-SOP	1.32	1.10	.88
TPS76528D	296-2718-5-ND	2.8V, 150mA LDO Regulator	8-SOP	1.32	1.10	.88
TPS76530D	296-2719-5-ND	3.0V, 150mA LDO Regulator	8-SOP	1.32	1.10	.88
TPS76533D	296-2720-5-ND	3.3V, 150mA LDO Regulator	8-SOP	1.32	1.10	.88
TPS76550D	296-2721-5-ND	5.0V, 150mA LDO Regulator	8-SOP	1.32	1.10	.88
TPS76601D	296-2722-5-ND	Adjustable, 250mA LDO Regulator	8-SOP	1.44	1.20	.96
TPS76615D	296-2723-5-ND	1.5V, 250mA LDO Regulator	8-SOP	1.44	1.20	.96
TPS76615DR	296-2723-2-ND	1.5V, 250mA LDO Regulator *NEW!*	8-SOP	1560.00/2,500		
TPS76618D	296-2724-5-ND	1.8V, 250mA LDO Regulator	8-SOP	1.44	1.20	.96
TPS76625D	296-2725-5-ND	2.5V, 250mA LDO Regulator	8-SOP	1.44	1.20	.96
TPS76627D	296-2726-5-ND	2.7V, 250mA LDO Regulator	8-SOP	1.44	1.20	.96
TPS76628D	296-2727-5-ND	2.8V, 250mA LDO Regulator	8-SOP	1.44	1.20	.96
TPS76630D	296-2728-5-ND	3.0V, 250mA LDO Regulator	8-SOP	1.44	1.20	.96
TPS76633D	296-2729-5-ND	3.3V, 250mA LDO Regulator	8-SOP	1.44	1.20	.96
TPS76650D	296-2730-5-ND	5.0V, 250mA LDO Regulator	8-SOP	1.44	1.20	.96
TPS76701QD	296-2731-5-ND	Adjustable,1A LDO Regulator	8-SOP	2.59	2.07	1.61
TPS76701QPWP	296-8076-5-ND	Adj., 1000mA LDO Regulator *NEW!*	20-HTSSOP	2.59	2.07	1.61
TPS76715QD	296-2732-5-ND	1.5V, 1A LDO Regulator	8-SOP	2.59	2.07	1.61
TPS76715QPWP	296-8077-5-ND	1.5V, 1000mA LDO Reg. *NEW!*	20-HTSSOP	2.59	2.07	1.61
TPS76718QD	296-2733-5-ND	1.8V, 1A LDO Regulator	8-SOP	2.59	2.07	1.61
TPS76718QPWP	296-8078-5-ND	1.8V, 1000mA LDO Reg. *NEW!*	20-HTSSOP	2.59	2.07	1.61
TPS76725QD	296-2734-5-ND	2.5V, 1A LDO Regulator	8-SOP	2.59	2.07	1.61
TPS76725QPWP	296-8079-5-ND	2.5V, 1000mA LDO Reg. *NEW!*	20-HTSSOP	2.59	2.07	1.61
TPS76727QD	296-2735-5-ND	2.7V, 1A LDO Regulator	8-SOP	2.59	2.07	1.61
TPS76727QPWP	296-8080-5-ND	2.7V, 1000mA LDO Reg. *NEW!*	20-HTSSOP	2.59	2.07	1.61
TPS76728QD	296-2736-5-ND	2.8V, 1A LDO Regulator	8-SOP	2.59	2.07	1.61
TPS76728QPWP	296-8081-5-ND	2.8V, 1000mA LDO Reg. *NEW!*	20-HTSSOP	2.59	2.07	1.61
TPS76730QD	296-2737-5-ND	3.0V, 1A LDO Regulator	8-SOP	2.59	2.07	1.61
TPS76730QPWP	296-8082-5-ND	3.0V, 1000mA LDO Reg. *NEW!*	20-HTSSOP	2.59	2.07	1.61
TPS76733QD	296-2738-5-ND	3.3V, 1A LDO Regulator	8-SOP	2.59	2.07	1.61
TPS76733QPWP	296-8083-5-ND	3.3V, 1000mA LDO Reg. *NEW!*	20-HTSSOP	2.59	2.07	1.61
TPS76750QD	296-2739-5-ND	5.0V, 1A LDO Regulator	8-SOP	2.59	2.07	1.61
TPS76750QPWP	296-8084-5-ND	5.0V, 1000mA LDO Reg. *NEW!*	20-HTSSOP	2.59	2.07	1.61
TPS76801QD	296-2743-5-ND	Adjustable, 1A LDO Regulator	8-SOP	2.59	2.07	1.61
TPS76801QPWP	296-8085-5-ND	Adj., 1000mA LDO Reg. *NEW!*	20-HTSSOP	2.59	2.07	1.61
TPS76815QD	296-2744-5-ND	1.5V, 1A LDO Regulator	8-SOP	2.59	2.07	1.61
TPS76815QPWP	296-8086-5-ND	1.5V, 1000mA LDO Reg. *NEW!*	20-HTSSOP	2.59	2.07	1.61
TPS76818QD	296-2745-5-ND	1.8V, 1A LDO Regulator	8-SOP	2.59	2.07	1.61
TPS76818QPWP	296-8087-5-ND	1.8V, 1000mA LDO Reg. *NEW!*	20-HTSSOP	2.59	2.07	1.61
TPS76825QD	296-2746-5-ND	2.5V, 1A LDO Regulator	8-SOP	2.59	2.07	1.61
TPS76825QPWP	296-8088-5-ND	2.5V, 1000mA LDO Reg. *NEW!*	20-HTSSOP	2.59	2.07	1.61
TPS76827QD	296-2747-5-ND	2.7V, 1A LDO Regulator	8-SOP	2.59	2.07	1.61
TPS76827QPWP	296-8089-5-ND	2.7V, 1000mA LDO Reg. *NEW!*	20-HTSSOP	2.59	2.07	1.61
TPS76828QD	296-2748-5-ND	2.8V, 1A LDO Regulator	8-SOP	2.59	2.07	1.61
TPS76828QPWP	296-8090-5-ND	2.8V, 1000mA LDO Reg. *NEW!*	20-HTSSOP	2.59	2.07	1.61
TPS76830QD	296-2749-5-ND	3.0V, 1A LDO Regulator	8-SOP	2.59	2.07	1.61
TPS76830QPWP	296-8091-5-ND	3.0V, 1000mA LDO Reg. *NEW!*	20-HTSSOP	2.59	2.07	1.61
TPS76833QD	296-2750-5-ND	3.3V, 1A LDO Regulator	8-SOP	2.59	2.07	1.61
TPS76833QPWP	296-8092-5-ND	3.3V, 1000mA LDO Reg. *NEW!*	20-HTSSOP	2.59	2.07	1.61
TPS76850QD	296-2751-5-ND	5.0V, 1A LDO Regulator	8-SOP	2.59	2.07	1.61
TPS76850QPWP	296-8093-5-ND	5.0V, 1000mA LDO Reg. *NEW!*	20-HTSSOP	2.59	2.07	1.61
TPS76901DBVT	296-2752-2-ND	Adjustable, 100mA LDO Regulator	SOT-23-5	120.00/250		
TPS76912DBVT	296-2753-2-ND	1.2V, 100mA LDO Regulator	SOT-23-5	120.00/250		
TPS76915DBVT	296-2754-2-ND	1.5V, 100mA LDO Regulator	SOT-23-5	120.00/250		
TPS76918DBVT	296-2755-2-ND	1.8V, 100mA LDO Regulator	SOT-23-5	120.00/250		
TPS76925DBVT	296-2756-2-ND	2.5V, 100mA LDO Regulator	SOT-23-5	120.00/250		
TPS76927DBVT	296-2757-2-ND	2.7V, 100mA LDO Regulator	SOT-23-5	120.00/250		
TPS76928DBVT	296-2758-2-ND	2.8V, 100mA LDO Regulator	SOT-23-5	120.00/250		
TPS76930DBVT	296-2759-2-ND	3.0V, 100mA LDO Regulator	SOT-23-5	120.00/250		
TPS76933DBVT	296-2760-2-ND	3.3V, 100mA LDO Regulator	SOT-23-5	185.50/250		
TPS76950DBVT	296-2761-2-ND	5.0V, 100mA LDO Regulator	SOT-23-5	120.00/250		
TPS77001DBVT	296-2762-2-ND	Adjustable, 50mA LDO Regulator	SOT-23-5	180.00/250		
TPS77012DBVT	296-2763-2-ND	1.2V, 50mA LDO Regulator	SOT-23-5	116.25/250		
TPS77015DBVT	296-2764-2-ND	1.5V, 50mA LDO Regulator	SOT-23-5	116.25/250		
TPS77018DBVT	296-2765-2-ND	1.8V, 50mA LDO Regulator	SOT-23-5	116.25/250		
TPS77025DBVT	296-2766-2-ND	2.5V, 50mA LDO Regulator	SOT-23-5	116.25/250		
TPS77027DBVT	296-2767-2-ND	2.7V, 50mA LDO Regulator	SOT-23-5	116.25/250		
TPS77028DBVT	296-2768-2-ND	2.8V, 50mA LDO Regulator	SOT-23-5	116.25/250		
TPS77030DBVT	296-2769-2-ND	3.0V, 50mA LDO Regulator	SOT-23-5	180.00/250		
TPS77033DBVT	296-2770-2-ND	3.3V, 50mA LDO Regulator	SOT-23-5	116.25/250		
TPS77050DBVT	296-2771-2-ND	5.0V, 50mA LDO Regulator	SOT-23-5	116.25/250		
TPS77101DGK	296-8094-5-ND	Adj., 150mA LDO Regulator *NEW!*	8-TSSOP	1.44	1.20	.96
TPS77115DGK	296-8095-5-ND	1.5V, 150mA LDO Regulator *NEW!*	8-TSSOP	1.44	1.20	.96
TPS77118DGK	296-8096-5-ND	1.8V, 150mA LDO Regulator *NEW!*	8-TSSOP	1.44	1.20	.96
TPS77127DGK	296-8097-5-ND	2.7V, 150mA LDO Regulator *NEW!*	8-TSSOP	1.44	1.20	.96
TPS77128DGK	296-8098-5-ND	2.8V, 150mA LDO Regulator *NEW!*	8-TSSOP	1.44	1.20	.96
TPS77133DGK	296-8099-5-ND	3.3V, 150mA LDO Regulator *NEW!*	8-TSSOP	1.44	1.20	.96
TPS77150DGK	296-8100-5-ND	5.0V, 150mA LDO Regulator *NEW!*	8-TSSOP	1.44	1.20	.96
TPS77201DGK	296-8101-5-ND	Adj., 150mA LDO Regulator *NEW!*	8-TSSOP	1.44	1.20	.96
TPS77215DGK	296-8102-5-ND	1.5V, 150mA LDO Regulator *NEW!*	8-TSSOP	1.44	1.20	.96
TPS77218DGK	296-8103-5-ND	1.8V, 150mA LDO Regulator *NEW!*	8-TSSOP	1.44	1.20	.96
TPS77227DGK	296-8104-5-ND	2.7V, 150mA LDO Regulator *NEW!*	8-TSSOP	1.44	1.20	.96
TPS77228DGK	296-8105-5-ND	2.8V, 150mA LDO Regulator *NEW!*	8-TSSOP	1.44	1.20	.96
TPS77233DGK	296-8106-5-ND	3.3V, 150mA LDO Regulator *NEW!*	8-TSSOP	1.44	1.20	.96
TPS77250DGK	296-8107-5-ND	5.0V, 150mA LDO Regulator *NEW!*	8-TSSOP	1.44	1.20	.96
TPS77301DGK	296-8108-5-ND	Adj., 250mA LDO Regulator *NEW!*	8-TSSOP	1.28	1.02	.77
TPS77315DGK	296-8109-5-ND	1.5V, 250mA LDO Regulator *NEW!*	8-TSSOP	1.28	1.02	.77
TPS77318DGK	296-8110-5-ND	1.8V, 250mA LDO Regulator *NEW!*	8-TSSOP	1.28	1.02	.77
TPS77327DGK	296-8111-5-ND	2.7V, 250mA LDO Regulator *NEW!*	8-TSSOP	1.28	1.02	.77
TPS77328DGK	296-8112-5-ND	2.8V, 250mA LDO Regulator *NEW!*	8-TSSOP	1.28	1.02	.77
TPS77333DGK	296-8113-5-ND	3.3V, 250mA LDO Regulator *NEW!*	8-TSSOP	1.28	1.02	.77
TPS77350DGK	296-8114-5-ND	5.0V, 250mA LDO Regulator *NEW!*	8-TSSOP	1.28	1.02	.77
TPS77401DGK	296-8115-5-ND	Adj., 250mA LDO Regulator *NEW!*	8-TSSOP	1.28	1.02	.77
TPS77415DGK	296-8116-5-ND	1.5V, 250mA LDO Regulator *NEW!*	8-TSSOP	1.28	1.02	.77
TPS77418DGK	296-8117-5-ND	1.8V, 250mA LDO Regulator *NEW!*	8-TSSOP	1.28	1.02	.77
TPS77427DGK	296-8118-5-ND	2.7V, 250mA LDO Regulator *NEW!*	8-TSSOP	1.28	1.02	.77
TPS77428DGK	296-8119-5-ND	2.8V, 250mA LDO Regulator *NEW!*	8-TSSOP	1.28	1.02	.77
TPS77433DGK	296-8120-5-ND	3.3V, 250mA LDO Regulator *NEW!*	8-TSSOP	1.28	1.02	.77
TPS77450DGK	296-8121-5-ND	5.0V, 250mA LDO Regulator *NEW!*	8-TSSOP	1.28	1.02	.77
TPS77501D	296-2772-5-ND	Adjustable, 500mA LDO Regulator	8-SOP	2.38	1.90	1.43
TPS77501PWP	296-8122-5-ND	Adj., 500mA LDO Regulator *NEW!*	20-TSSOP	2.38	1.90	1.43
TPS77515D	296-2773-5-ND	1.5V, 500mA LDO Regulator	8-SOP	2.38	1.90	1.43
TPS77515PWP	296-8123-5-ND	1.5V, 500mA LDO Regulator *NEW!*	20-TSSOP	2.38	1.90	1.43
TPS77518D	296-2774-5-ND	1.8V, 500mA LDO Regulator	8-SOP	2.38	1.90	1.43
TPS77518PWP	296-8124-5-ND	1.8V, 500mA LDO Regulator *NEW!*	20-TSSOP	2.38	1.90	1.43
TPS77525D	296-2775-5-ND	2.5V, 500mA LDO Regulator	8-SOP	2.38	1.90	1.43
TPS77525PWP	296-8125-5-ND	2.5V, 500mA LDO Regulator *NEW!*	20-TSSOP	2.38	1.90	1.43
TPS77533D	296-2776-5-ND	3.3V, 500mA LDO Regulator	8-SOP	2.38	1.90	1.43
TPS77533PWP	296-8126-5-ND	3.3V, 500mA LDO Regulator *NEW!*	20-TSSOP	2.38	1.90	1.43
TPS77601D	296-2777-5-ND	Adjustable, 500mA LDO Regulator	8-SOP	2.38	1.90	1.43
TPS77601PWP	296-8127-5-ND	Adj., 500mA LDO Regulator *NEW!*	20-TSSOP	2.38	1.90	1.43
TPS77615D	296-2778-5-ND	1.5V, 500mA LDO Regulator	8-SOP	2.38	1.90	1.43

(Continued)

TEXAS INSTRUMENTS POWER SUPPLY PRODUCTS *(Continued)*

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TPS77618D	296-2779-5-ND	1.8V, 500mA LDO Regulator	8-SOP	2.38	1.90	1.43
TPS77618PWP	296-8128-5-ND	1.8V, 500mA LDO Regulator *NEW!*	20-TSSOP	2.38	1.90	1.43
TPS77625D	296-2780-5-ND	2.5V, 500mA LDO Regulator	8-SOP	2.38	1.90	1.43
TPS77625PWP	296-8129-5-ND	2.5V, 500mA LDO Regulator *NEW!*	20-TSSOP	2.38	1.90	1.43
TPS77628D	296-2781-5-ND	2.8V, 500mA LDO Regulator	8-SOP	2.38	1.90	1.43
TPS77628PWP	296-8130-5-ND	2.8V, 500mA LDO Regulator *NEW!*	20-TSSOP	2.38	1.90	1.43
TPS77633D	296-2782-5-ND	3.3V, 500mA LDO Regulator	8-SOP	2.38	1.90	1.43
TPS77633PWP	296-8131-5-ND	3.3V, 500mA LDO Regulator *NEW!*	20-TSSOP	2.38	1.90	1.43
TPS77701D	296-2783-5-ND	Adjustable, 750mA LDO Regulator	8-SOP	2.32	1.86	1.45
TPS77701PWP	296-8132-5-ND	Adj., 750mA LDO Regulator *NEW!*	20-TSSOP	2.32	1.86	1.45
TPS77715D	296-2784-5-ND	1.5V, 750mA LDO Reg. with Reset Out	8-SOP	2.32	1.86	1.45
TPS77715PWP	296-8133-5-ND	1.5V, 750mA LDO Reg. with Reset Out *NEW!*	20-TSSOP	2.32	1.86	1.45
TPS77718D	296-2785-5-ND	1.8V, 750mA LDO Reg. with Reset Out	8-SOP	2.32	1.86	1.45
TPS77718PWP	296-8134-5-ND	1.8V, 750mA LDO Reg. with Reset Out *NEW!*	20-TSSOP	2.32	1.86	1.45
TPS77725D	296-2786-5-ND	2.5V, 750mA LDO Reg. with Reset Out	8-SOP	2.32	1.86	1.45
TPS77725PWP	296-8135-5-ND	2.5V, 750mA LDO Reg. with Reset Out *NEW!*	20-TSSOP	2.32	1.86	1.45
TPS77733D	296-2787-5-ND	3.3V, 750mA LDO Reg. with Reset Out	8-SOP	2.32	1.86	1.45
TPS77733PWP	296-8136-5-ND	3.3V, 750mA LDO Reg. with Reset Out *NEW!*	20-TSSOP	2.32	1.86	1.45
TPS77801D	296-2788-5-ND	Adjustable, 750mA LDO Regulator	8-SOP	2.32	1.86	1.45
TPS77801PWP	296-8137-5-ND	Adj., 750mA LDO Regulator *NEW!*	20-TSSOP	2.32	1.86	1.45
TPS77815D	296-2789-5-ND	1.5V, 750mA LDO Regulator	8-SOP	2.32	1.86	1.45
TPS77815PWP	296-8138-5-ND	1.5V, 750mA LDO Regulator *NEW!*	20-TSSOP	2.32	1.86	1.45
TPS77818D	296-2790-5-ND	1.8V, 750mA LDO Regulator	8-SOP	2.32	1.86	1.45
TPS77818PWP	296-8139-5-ND	1.8V, 750mA LDO Regulator *NEW!*	20-TSSOP	2.32	1.86	1.45
TPS77825D	296-2791-5-ND	2.5V, 750mA LDO Regulator	8-SOP	2.32	1.86	1.45
TPS77825PWP	296-8140-5-ND	2.5V, 750mA LDO Regulator *NEW!*	20-TSSOP	2.32	1.86	1.45
TPS77833D	296-2792-5-ND	3.3V, 750mA LDO Regulator	8-SOP	2.32	1.86	1.45
TPS77833PWP	296-8141-5-ND	3.3V, 750mA LDO Regulator *NEW!*	20-TSSOP	2.32	1.86	1.45
TPS77901DGK	296-8142-5-ND	Adj., 250mA LDO Regulator *NEW!*	8-TSSOP	1.28	1.02	.77
TPS77918DGK	296-8143-5-ND	1.8V, 250mA LDO Regulator *NEW!*	8-TSSOP	1.28	1.02	.77
TPS77925DGK	296-8144-5-ND	2.5V, 250mA LDO Regulator *NEW!*	8-TSSOP	1.28	1.02	.77
TPS77930DGK	296-8145-5-ND	3.0V, 250mA LDO Regulator *NEW!*	8-TSSOP	1.28	1.02	.77
TPS78915DBVR	296-8146-1-ND	1.5V, 100mA LDO Regulator *NEW!*	SOT-23-5	.93	.78	.62
TPS78915DBVR	296-8146-2-ND	1.5V, 100mA LDO Regulator *NEW!*	SOT-23-5	1209.00/3,000		
TPS78918DBVR	296-8147-1-ND	1.8V, 100mA LDO Regulator *NEW!*	SOT-23-5	.93	.78	.62
TPS78918DBVR	296-8147-2-ND	1.8V, 100mA LDO Regulator *NEW!*	SOT-23-5	1209.00/3,000		
TPS78925DBVR	296-8148-1-ND	2.5V, 100mA LDO Regulator *NEW!*	SOT-23-5	.93	.78	.62
TPS78925DBVR	296-8148-2-ND	2.5V, 100mA LDO Regulator *NEW!*	SOT-23-5	1209.00/3,000		
TPS78928DBVR	296-8149-1-ND	2.8V, 100mA LDO Regulator *NEW!*	SOT-23-5	.93	.78	.62
TPS78928DBVR	296-8149-2-ND	2.8V, 100mA LDO Regulator *NEW!*	SOT-23-5	1209.00/3,000		
TPS78930DBVR	296-8150-1-ND	3.0V, 100mA LDO Regulator *NEW!*	SOT-23-5	.93	.78	.62
TPS78930DBVR	296-8150-2-ND	3.0V, 100mA LDO Regulator *NEW!*	SOT-23-5	1209.00/3,000		
TPS79015DBVR	296-8151-1-ND	1.5V, 50mA LDO Regulator *NEW!*	SOT-23-5	.90	.75	.60
TPS79015DBVR	296-8151-2-ND	1.5V, 50mA LDO Regulator *NEW!*	SOT-23-5	1170.00/3,000		
TPS79018DBVR	296-8152-1-ND	1.8V, 50mA LDO Regulator *NEW!*	SOT-23-5	.90	.75	.60
TPS79018DBVR	296-8152-2-ND	1.8V, 50mA LDO Regulator *NEW!*	SOT-23-5	1170.00/3,000		
TPS79025DBVR	296-8153-1-ND	2.5V, 50mA LDO Regulator *NEW!*	SOT-23-5	.90	.75	.60
TPS79025DBVR	296-8153-2-ND	2.5V, 50mA LDO Regulator *NEW!*	SOT-23-5	1170.00/3,000		
TPS79028DBVR	296-8154-1-ND	2.8V, 50mA LDO Regulator *NEW!*	SOT-23-5	.90	.75	.60
TPS79028DBVR	296-8154-2-ND	2.8V, 50mA LDO Regulator *NEW!*	SOT-23-5	1170.00/3,000		
TPS79030DBVR	296-8155-1-ND	3.0V, 50mA LDO Regulator *NEW!*	SOT-23-5	.90	.75	.60
TPS79030DBVR	296-8155-2-ND	3.0V, 50mA LDO Regulator *NEW!*	SOT-23-5	1170.00/3,000		
UC2573D	296-2793-5-ND	BUCK Pulse PWM Voltage Regulator	8-SOP	3.78	3.03	2.36
UC282TD-1	296-2794-5-ND	1.5V Fast LDO Regulator	TO-263-5	7.48	5.99	5.05
UC282TD-3	296-2795-5-ND	2.5V Fast LDO Regulator	TO-263-5	7.48	5.99	5.05
UC282TD-ADJ	296-2796-5-ND	Adjustable Fast LDO Regulator	TO-263-5	7.48	5.99	5.05
UC285TD-ADJ	296-2800-5-ND	Adjustable 5A LDO Regulator	TO-262-5	9.38	7.51	6.34
UC382T-1	296-2801-5-ND	1.5V, Fast Transient Response LDO Regulator	TO-220-5	6.52	5.22	4.41
UC382T-2	296-2802-5-ND	2.1V, Fast Transient Response LDO Regulator	TO-220-5	6.52	5.22	4.41
UC382T-3	296-2803-5-ND	2.5V, Fast Transient Response LDO Regulator	TO-220-5	6.52	5.22	4.41
UC382T-ADJ	296-2804-5-ND	Adjustable Fast Transient Response LDO Regulator	TO-220-5	6.52	5.22	4.41
UC382TD-1	296-2805-5-ND	1.5V, Fast Transient Response LDO Regulator	TO-263-5	6.52	5.22	4.41
UC382TD-2	296-2806-5-ND	2.1V, Fast Transient Response LDO Regulator	TO-263-5	6.52	5.22	4.41
UC382TD-3	296-2807-5-ND	2.5V, Fast Transient Response LDO Regulator	TO-263-5	6.52	5.22	4.41
UC385T-1	296-2809-5-ND	1.5V, 5A LDO Regulator	TO-220-5	8.12	6.50	5.49
UC385T-2	296-2810-5-ND	2.1V, 5A LDO Regulator	TO-220-5	8.12	6.50	5.49
UC385T-3	296-2811-5-ND	2.5V, 5A LDO Regulator	TO-220-5	8.12	6.50	5.49
UC385T-ADJ	296-2812-5-ND	Adjustable, 5A LDO Regulator	TO-220-5	8.12	6.50	5.49
UC385TD-1	296-2813-5-ND	1.5V, 5A LDO Regulator	TO-263-5	8.12	6.50	5.49
UC385TD-2	296-2814-5-ND	2.1V, 5A LDO Regulator	TO-263-5	8.12	6.50	5.49
UC385TD-3	296-2815-5-ND	2.5V, 5A LDO Regulator	TO-263-5	8.12	6.50	5.49
UC385TD-ADJ	296-2816-5-ND	Adjustable, 5A LDO Regulator	TO-263-5	8.12	6.50	5.49
UC2834DW	296-2797-5-ND	High-Efficiency Linear Regulator	16-SOP	8.58	7.73	6.85
UC2835D	296-2798-5-ND	High-Efficiency Regulator Controller	8-SOP	6.44	5.16	4.35
UC2836D	296-2799-5-ND	High-Efficiency Regulator Controller	8-SOP	8.06	6.45	5.45
UC3834DW	296-2808-5-ND	High-Efficiency Linear Regulator	16-SOP	8.46	6.77	5.72
UCC281DP-5	296-2817-5-ND	5V, 1A LDO Regulator	8-SOP	5.70	4.56	3.85
UCC281DP-ADJ	296-2818-5-ND	Adjustable, 1A LDO Regulator	8-SOP	5.70	4.56	3.85
UCC381DP-3	296-2819-5-ND	3.3V, 1A LDO Regulator	8-SOP	4.39	3.51	2.73
UCC381DP-5	296-2820-5-ND	5.0V, 1A LDO Regulator	8-SOP	4.39	3.51	2.73
UCC381DP-ADJ	296-2821-5-ND	Adjustable, 1A LDO Regulator	8-SOP	4.39	3.51	2.73
UCC383T-3	296-8156-5-ND	Adj., 3A LDO Linear Reg. *NEW!*	TO-220	5.18	4.15	3.50
UCC383T-5	296-8157-5-ND	Adj., 3A LDO Linear Reg. *NEW!*	TO-220-5	5.18	4.15	3.50
UCC383T-ADJ	296-8158-5-ND	Adj., 3A LDO Linear Regulator *NEW!*	TO-220	5.60	4.48	3.78
UCC383TD-3	296-8159-5-ND	Adj., 3A LDO Linear Reg. *NEW!*	TO-263	5.18	4.15	3.50
UCC383TD-5	296-8160-5-ND	Adj., 3A LDO Linear Reg. *NEW!*	TO-263-5	5.18	4.15	3.50
UCC383TD-ADJ	296-8161-5-ND	Adj., 3A LDO Linear Regulator *NEW!*	TO-263-5	5.50	4.40	3.72
UCC384DP-12	296-8162-5-ND	–12V 0.5A LDO Linear Regulator *NEW!*	8-SOP	3.31	2.65	2.06
UCC384DP-5	296-8163-5-ND	–5V 0.5A LDO Linear Regulator *NEW!*	8-SOP	3.31	2.65	2.06
UCC384DP-ADJ	296-8164-5-ND	Neg Adj. 0.5A LDO Linear Reg. *NEW!*	8-SOP	3.31	2.65	2.06

Voltage Regulators

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MC79L05ACDR	296-1016-1-ND	5V Negative Voltage Regulator	8-SOP	.56	.42	.32
TL780-05CKC	296-1803-5-ND	5.0V Positive Voltage Regulator	TO-220AB	.81	.68	.54
UA7805CKC	296-1974-5-ND	5.0V, 1.5A Regulator	TO-220AB	.75	.63	.50
UA7810CKC	296-1975-5-ND	10V, 1.5A Regulator	TO-220AB	.75	.63	.50
UA78L05ACD	296-1364-5-ND	5.0V, 100mA Regulator	8-SOP	.56	.42	.32
UA78L05ACDR	296-1364-2-ND	5.0V, 100mA Regulator	8-SOP	520.00/2,500		
UA78L05ACLP	296-1365-ND	5.0V, 100mA Regulator	TO-92	.56	.42	.32
UA78L05ACLPR	296-1365-2-ND	5.0V, 100mA Regulator	TO-92	426.00/2,000		
UA78L10ACLP	296-1996-ND	10V, 100mA Regulator	TO-92	.56	.42	.32
UA78M06CKTPR	296-1366-1-ND	6.0V, 500mA Regulator	2-PFM	.87	.73	.58

Buck Regulators

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TPS5210DW	296-2021-5-ND	Buck Regulator Controller	28-SOP	5.50	4.40	3.72
TPS5615PWP	296-2022-5-ND	Buck Regulator Controller	28-TSSOP	5.62	4.50	3.80
TPS5618PWP	296-2023-5-ND	Buck Regulator Controller	28-TSSOP	5.62	4.50	3.80
TPS5625PWP	296-2024-5-ND	Buck Regulator Controller	28-TSSOP	5.62	4.50	3.80
TPS5633PWP	296-2025-5-ND	Buck Regulator Controller	28-TSSOP	5.62	4.50	3.80

TEXAS INSTRUMENTS DATA CONVERSION

Analog-to-Digital Converters

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
THS14F01IPFB	296-2843-ND	14 Bit, 1 MSPS 1-Ch. 3.3V DSP Comp with FIFO A/D *NEW!*	48-TQFP	16.24	14.63	12.97
THS14F03EVM	296-2844-ND	14 Bit, 3 MSPS 1-Ch. 3.3V DSP Comp with FIFO A/D *NEW!*	48-TQFP	126.23	117.81	109.40
THS14F03IPFB	296-2845-ND	14 Bit, 3 MSPS 1-Ch. 3.3V DSP Comp with FIFO A/D *NEW!*	48-TQFP	19.11	17.84	16.57
THS0842IPFB	296-2171-ND	8-Bit, 40 MSPS 2-Ch. 3.3V Parallel A/D	48-TQFP	6.78	5.43	4.58
THS1007IDA	296-2823-5-ND	10-Bit, 6 MSPS 4-Channel 5V Parallel A/D *NEW!*	32-TSSOP	11.58	10.43	9.25
THS1009IDA	296-2825-5-ND	10 Bit, 8 MSPS 2-Channel Parallel A/D *NEW!*	32-TSSOP	9.88	7.91	6.67
THS1030CDW	296-2173-5-ND	10 Bit, 30 MSPS 1-Chan. 2.7-5.5V A/D	28-SOIC	5.74	4.60	3.88
THS1030IDW	296-2826-5-ND	10 Bit, 30 MSPS 1-Channel 2.7-5.5V A/D *NEW!*	28-SOP	6.98	5.59	4.72
THS1030IPW	296-2827-5-ND	10 Bit, 30 MSPS 1-Channel 2.7-5.5V A/D *NEW!*	28-TSSOP	6.98	5.59	4.72
THS1031CDW	296-2174-5-ND	10 Bit, 30 MSPS 1-Chan. 2.7-5.5V A/D	28-SOIC	6.34	5.08	4.28
THS1031IDW	296-2828-5-ND	10 Bit, 30 MSPS 1-Channel 2.7-5.5V A/D *NEW!*	28-SOP	7.72	6.18	5.22
THS1031IPW	296-2829-5-ND	10 Bit, 30 MSPS 1-Channel 2.7-5.5V A/D *NEW!*	28-TSSOP	7.72	6.18	5.22
THS1050IPHP	296-2830-ND	10 Bit, 50 MSPS 1-Channel 5V IF Sampling A/D *NEW!*	48-HTQFP	9.98	7.99	6.74
THS1060CPHP	296-2175-ND	10 Bit, 60 MSPS 1-Channel 5V IF Sampling A/D	48-TQFP	8.58	6.87	5.80
THS1060EVM	296-2831-ND	10 Bit, 60 MSPS 1-Channel 5V IF Sampling A/D *NEW!*	48-TQFP	126.23	117.81	109.40
THS1060IPHP	296-2832-ND	10 Bit, 60 MSPS 1-Channel 5V IF Sampling A/D *NEW!*	48-HTQFP	9.98	7.99	6.74
THS1206CDA	296-2176-5-ND	12 Bit, 6 MSPS 4-Channel 3-5V IF Sampling A/D	32-TSSOP	16.38	15.29	14.20
THS1206IDA	296-2833-5-ND	12 Bit, 6 MSPS 4-Channel 3-5V IF Sampling A/D *NEW!*	32-TSSOP	19.50	18.20	16.90
THS1207IDA	296-2834-5-ND	12 Bit, 6 MSPS 4-Channel 5V IF Sampling A/D *NEW!*	32-TSSOP	17.97	16.78	15.58
THS1209IDA	296-2836-5-ND	12 Bit, 8 MSPS 2-Channel 8V IF Sampling A/D *NEW!*	32-TSSOP	14.88	13.40	11.88
THS1230IDW	296-2837-5-ND	12 Bit, 30 MSPS 3.3V 1-Ch. A/D *NEW!*	28-SOP	23.93	22.33	20.74
THS1230IPW	296-2838-5-ND	12 Bit, 30 MSPS 3.3V 1-Channel A/D *NEW!*	28-TSSOP	23.93	22.33	20.74
THS1240IPHP	296-2839-ND	12 Bit, 40 MSPS 5V IF Sampling A/D *NEW!*	48-HTQFP	25.41	23.72	22.03
THS1401CPFB	296-2177-ND	14 Bit, 1 MSPS 1-Ch. 3.3V w/Ref. A/D	48-TQFP	12.89	11.61	10.30
THS1401IPFB	296-2840-ND	14 Bit, 1 MSPS 1-Channel 3.3V with Reference A/D *NEW!*	48-TQFP	14.99	13.50	11.97
THS1403CPFB	296-2178-ND	14 Bit, 3 MSPS 1-Ch. 3.3V w/Ref. A/D	48-TQFP	15.50	14.47	13.43
THS1403IPFB	296-2841-ND	14 Bit, 3 MSPS 1-Channel 3.3V with Reference A/D *NEW!*	48-TQFP	18.00	16.80	15.60
THS1408CPFB	296-2179-ND	14 Bit, 8 MSPS 1-Ch. 3.3V w/Ref. A/D	48-TQFP	19.35	18.06	16.77
THS1408IPFB	296-2842-ND	14 Bit, 8 MSPS 1-Channel 3.3V with Reference A/D *NEW!*	48-TQFP	22.49	20.99	19.49
THS10064CDA	296-2172-5-ND	10-Bit, 6 MSPS 4-Ch. 3-5V Sampling A/D	38-SOP	11.15	10.04	8.90
THS10064IDA	296-2822-5-ND	10-Bit, 6 MSPS 4-Channel 3-5V Sampling A/D *NEW!*	32-TSSOP	13.24	11.93	10.58
THS10082IDA	296-2824-5-ND	10-Bit, 4 MSPS 2-Channel Parallel A/D *NEW!*	32-TSSOP	9.91	8.93	7.92
THS12082IDA	296-2835-5-ND	12 Bit, 8 MSPS 2-Channel 5V IF Sampling A/D *NEW!*	32-TSSOP	16.58	14.93	13.24
TLC0820ACDB	296-2846-5-ND	8 Bit, A/D Modified Flash Conv. *NEW!*	20-SSOP	3.74	2.99	2.33
TLC0820ACDBR	296-2846-2-ND	8 Bit, A/D Modified Flash Conv. *NEW!*	20-SSOP	4234.00/2,000		
TLC0820ACDW	296-2847-5-ND	8 Bit, A/D Modified Flash Conv. *NEW!*	20-SOP	3.74	2.99	2.33
TLC0820ACFN	296-2848-5-ND	8 Bit, A/D Modified Flash Conv. *NEW!*	20-PLCC	3.74	2.99	2.33
TLC0820ACN	296-2849-5-ND	8 Bit, A/D Modified Flash Conv. *NEW!*	20-Dip	3.74	2.99	2.33
TLC0820AIDW	296-2850-5-ND	8 Bit, A/D Modified Flash Conv. *NEW!*	20-SOP	4.03	3.23	2.51
TLC0820AIFN	296-2851-5-ND	8 Bit, A/D Modified Flash Conv. *NEW!*	20-PLCC	4.03	3.23	2.51
TLC0820AIN	296-2852-5-ND	8 Bit, A/D Modified Flash Conv. *NEW!*	20-Dip	4.03	3.23	2.51
TLC0831CD	296-2853-5-ND	8-Bit, 31 KSPS 1-Ch. 5V Serial A/D *NEW!*	8-SOP	2.77	2.22	1.73
TLC0831CP	296-2854-5-ND	8-Bit, 31 KSPS 1-Ch. 5V Serial A/D *NEW!*	8-Dip	2.77	2.22	1.73
TLC0831ID	296-2855-5-ND	8-Bit, 31 KSPS 1-Ch. 5V Serial A/D *NEW!*	8-SOP	2.97	2.38	1.85
TLC0831IP	296-2856-5-ND	8-Bit, 31 KSPS 1-Ch. 5V Serial A/D *NEW!*	8-Dip	2.97	2.38	1.85
TLC0832CD	296-2857-5-ND	8-Bit, 22 KSPS 2-Ch. 5V Serial A/D *NEW!*	8-SOP	2.77	2.22	1.73
TLC0832CP	296-2858-5-ND	8-Bit, 22 KSPS 2-Ch. 5V Serial A/D *NEW!*	8-Dip	2.77	2.22	1.73
TLC0832ID	296-2859-5-ND	8-Bit, 22 KSPS 2-Ch. 5V Serial A/D *NEW!*	8-SOP	2.97	2.38	1.85
TLC0832IP	296-2860-5-ND	8-Bit, 22 KSPS 2-Ch. 5V Serial A/D *NEW!*	8-Dip	2.97	2.38	1.85
TLC0834CD	296-2861-5-ND	8-Bit, 20 KSPS 4-Channel 5V Serial A/D *NEW!*	14-SOP	2.88	2.31	1.80
TLC0834CN	296-2862-5-ND	8-Bit, 20 KSPS 4-Ch. 5V Serial A/D *NEW!*	14-Dip	2.88	2.31	1.80
TLC0834ID	296-2863-5-ND	8-Bit, 20 KSPS 4-Channel 5V Serial A/D *NEW!*	14-SOP	3.08	2.47	1.92
TLC0834IN	296-2864-5-ND	8-Bit, 20 KSPS 4-Ch. 5V Serial A/D *NEW!*	14-Dip	3.08	2.47	1.92
TLC0838CDW	296-2865-5-ND	8-Bit, 20 KSPS 8-Channel 5V Serial A/D *NEW!*	20-SOP	2.88	2.31	1.80
TLC0838CN	296-2866-5-ND	8-Bit, 20 KSPS 8-Ch. 5V Serial A/D *NEW!*	20-Dip	2.88	2.31	1.80
TLC0838IDW	296-2867-5-ND	8-Bit, 20 KSPS 8-Channel 5V Serial A/D *NEW!*	20-SOP	3.08	2.47	1.92

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TLC0838IN	296-2868-5-ND	8-Bit, 20 KSPS 8-Ch. 5V Serial A/D *NEW!*	20-Dip	3.08	2.47	1.92
TLC0838IPW	296-2869-5-ND	8-Bit, 20 KSPS 8-Channel 5V Serial A/D *NEW!*	20-TSSOP	3.08	2.47	1.92
TLC254ACD	296-2902-5-ND	LINCMOS Quad Op Amp *NEW!*	14-SOP	3.13	2.51	1.95
TLC254ACN	296-2903-5-ND	LINCMOS Quad Op Amp *NEW!*	14-Dip	3.13	2.51	1.95
TLC254BCD	296-2904-5-ND	LINCMOS Quad Op Amp *NEW!*	14-SOP	3.29	2.63	2.05
TLC254BCN	296-2905-5-ND	LINCMOS Quad Op Amp *NEW!*	14-Dip	3.29	2.63	2.05
TLC254CD	296-2906-5-ND	LINCMOS Quad Op Amp *NEW!*	14-SOP	2.99	2.40	1.87
TLC254CN	296-2907-5-ND	LINCMOS Quad Op Amp *NEW!*	14-Dip	2.99	2.40	1.87
TLC254ID	296-2908-5-ND	LINCMOS Quad Op Amp *NEW!*	14-SOP	3.13	2.51	1.95
TLC540IDW	296-2919-5-ND	8-Bit, 75 KSPS 12-Channel 5V Serial A/D *NEW!*	20-SOP	3.65	2.92	2.27
TLC540IFN	296-2920-5-ND	8-Bit, 75 KSPS 12-Channel 5V Serial A/D *NEW!*	20-PLCC	3.65	2.92	2.27
TLC540IN	296-2921-5-ND	8-Bit, 75 KSPS 12-Channel 5V Serial A/D *NEW!*	20-Dip	3.65	2.92	2.27
TLC541IDW	296-2922-5-ND	8-Bit, 40 KSPS 11-Channel 5V Serial A/D *NEW!*	20-SOP	2.95	2.36	1.84
TLC541IFN	296-2923-5-ND	8-Bit, 40 KSPS 11-Channel 5V Serial A/D *NEW!*	20-PLCC	2.95	2.36	1.84
TLC541IFNR	296-1331-1-ND	8-Bit, 40 KSPS 11-Ch. 5V Serial A/D	20-PLCC	2.88	2.31	1.80
TLC541IFNR	296-1331-2-ND	8-Bit, 40 KSPS 11-Ch. 5V Serial A/D	20-PLCC	1543.00/1,000		
TLC541IN	296-1850-5-ND	8-Bit, 40 KSPS 11-Ch. 5V Serial A/D	20-Dip	2.72	2.18	1.70
TLC542CDW	296-1332-5-ND	8-Bit, 25 KSPS 11-Ch. 5V Serial A/D	20-SOP	2.81	2.25	1.75
TLC542CDWR	296-1332-2-ND	8-Bit, 25 KSPS 11-Ch. 5V Serial A/D	20-SOP	3188.00/2,000		
TLC542CN	296-2924-5-ND	8-Bit, 25 KSPS 11-Channel 5V Serial A/D *NEW!*	20-Dip	2.97	2.38	1.85
TLC542IDW	296-1333-5-ND	8-Bit, 25 KSPS 11-Channel 5V Serial A/D *NEW!*	20-SOP	3.20	2.56	1.99
TLC542IDWR	296-1333-1-ND	8-Bit, 25 KSPS 11-Ch. 5V Serial A/D	20-SOP	3.13	2.51	1.95
TLC542IDWR	296-1333-2-ND	8-Bit, 25 KSPS 11-Ch. 5V Serial A/D	20-SOP	3442.00/2,000		
TLC542IFN	296-1334-5-ND	8-Bit, 25 KSPS 11-Channel 5V Serial A/D *NEW!*	20-PLCC	3.20	2.56	1.99
TLC542IFNR	296-1334-1-ND	8-Bit, 25 KSPS 11-Ch. 5V Serial A/D	20-PLCC	3.13	2.51	1.95
TLC542IFNR	296-1334-2-ND	8-Bit, 25 KSPS 11-Ch. 5V Serial A/D	20-PLCC	1721.00/1,000		
TLC542IN	296-2927-5-ND	8-Bit, 25 KSPS 11-Channel 5V Serial A/D *NEW!*	20-Dip	3.20	2.56	1.99
TLC545CFN	296-2928-5-ND	8-Bit, 76 KSPS 19-Channel 5V Serial A/D *NEW!*	28-PLCC	5.46	4.37	3.69
TLC545CN	296-2929-5-ND	8-Bit, 76 KSPS 19-Channel 5V Serial A/D *NEW!*	28-Dip	5.46	4.37	3.69
TLC545IFN	296-2930-5-ND	8-Bit, 76 KSPS 19-Channel 5V Serial A/D *NEW!*	28-PLCC	5.88	4.71	3.97
TLC545IN	296-2931-5-ND	8-Bit, 76 KSPS 19-Channel 5V Serial A/D *NEW!*	28-Dip	5.88	4.71	3.97
TLC546IFN	296-2932-5-ND	8-Bit, 40 KSPS 19-Channel 5V Serial A/D *NEW!*	28-PLCC	5.88	4.71	3.97
TLC546IN	296-2933-5-ND	8-Bit, 40 KSPS 19-Channel 5V Serial A/D *NEW!*	28-Dip	5.88	4.71	3.97
TLC548CD	296-2934-5-ND	8-Bit, 45.5 KSPS 1-Channel 3-6V Serial A/D *NEW!*	8-SOP	2.36	1.89	1.47
TLC548CP	296-2935-5-ND	8-Bit, 45.5 KSPS 1-Channel 3-6V Serial A/D *NEW!*	8-Dip	2.36	1.89	1.47
TLC548ID	296-2936-5-ND	8-Bit, 45.5 KSPS 1-Channel 3-6V Serial A/D *NEW!*	8-SOP	2.54	2.04	1.59
TLC548IP	296-2937-5-ND	8-Bit, 45.5 KSPS 1-Channel 3-6V Serial A/D *NEW!*	8-Dip	2.54	2.04	1.59
TLC549CD	296-1335-5-ND	8-Bit, 40 KSPS 1-Ch. 3-6V Serial A/D	8-SOP	1.95	1.56	1.17
TLC549CDR	296-1335-2-ND	8-Bit, 40 KSPS 1-Ch. 3-6V Serial A/D	8-SOP	2495.00/2,500		
TLC549CP	296-1853-5-ND	8-Bit, 40 KSPS 1-Ch. 3-6V Serial A/D	8-Dip	1.95	1.56	1.17
TLC549ID	296-1854-5-ND	8-Bit, 40 KSPS 1-Ch. 3-6V Serial A/D	8-SOP	2.08	1.66	1.25
TLC549IP	296-1855-5-ND	8-Bit, 40 KSPS 1-Ch. 3-6V Serial A/D	8-Dip	2.08	1.66	1.25
TLC876CDBR	296-2940-1-ND	10-Bit, 20 MSPS 1-Channel 5.5V Parallel A/D *NEW!*	28-SSOP	5.58	4.47	3.48
TLC876CDBR	296-2940-2-ND	10-Bit, 20 MSPS 1-Channel 5.5V Parallel A/D *NEW!*	28-SSOP	6324.00/2,000		
TLC876CDW	296-2941-5-ND	10-Bit, 20 MSPS 1-Channel 5.5V Parallel A/D *NEW!*	28-SOP	5.58	4.47	3.48
TLC876CPW	296-2942-5-ND	10-Bit, 20 MSPS 1-Channel 5.5V Parallel A/D *NEW!*	28-TSSOP	5.58	4.47	3.48
TLC876IDW	296-2186-5-ND	10-Bit, 20 MSPS 1-Ch. 5.5V Parallel A/D	28-SOP	5.04	4.04	3.41
TLC876IPWR	296-2943-1-ND	10-Bit, 20 MSPS 1-Channel 5.5V Parallel A/D *NEW!*	28-TSSOP	5.32	4.26	3.60
TLC876IPWR	296-2943-2-ND	10-Bit, 20 MSPS 1-Channel 5.5V Parallel A/D *NEW!*	28-TSSOP	6650.00/2,000		
TLC1514ID	296-2180-5-ND	10-Bit, 400 KSPS 4-Ch. 5V Serial A/D	16-SOP	5.84	4.68	3.95
TLC1514IPW	296-2870-5-ND	10-Bit, 400 KSPS 4-Channel 5V Serial A/D *NEW!*	16-TSSOP	6.32	5.06	4.27
TLC1518IDW	296-2181-5-ND	10-Bit, 400 KSPS 8-Ch. 5V Serial A/D	20-SOP	6.00	4.80	4.05
TLC1518IPW	296-2871-5-ND	10-Bit, 400 KSPS 8-Channel 5V Serial A/D *NEW!*	20-TSSOP	6.50	5.20	4.39
TLC1541CDW	296-2872-5-ND	10-Bit, 32 KSPS 11-Channel 5V Serial A/D *NEW!*	20-SOP	5.60	4.48	3.78
TLC1541CFN	296-2873-5-ND	10-Bit, 32 KSPS 11-Channel 5V Serial A/D *NEW!*	20-PLCC	5.60	4.48	3.78
TLC1541CN	296-2874-5-ND	10-Bit, 32 KSPS 11-Channel 5V Serial A/D *NEW!*	20-Dip	5.60	4.48	3.78
TLC1541IDW	296-2875-5-ND	10-Bit, 32 KSPS 11-Channel 5V Serial A/D *NEW!*	20-SOP	6.02	4.82	4.07
TLC1541IN	296-2182-5-ND	10-Bit, 32 KSPS 11-Ch. 5V Serial A/D	20-Dip	5.58	4.47	3.77
TLC1541IFN	296-2876-5-ND	10-Bit, 32 KSPS 11-Channel 5V Serial A/D *NEW!*	20-PLCC	6.02	4.82	4.07
TLC1542CDW	296-2877-5-ND	10-Bit, 38 KSPS 11-Channel 5V Serial A/D *NEW!*	20-SOP	4.93	3.95	3.07
TLC1542CFN	296-2878-5-ND	10-Bit, 38 KSPS 11-Channel 5V Serial A/D *NEW!*	20-PLCC	4.93	3.95	3.07
TLC1542CN	296-2879-5-ND	10-Bit, 38 KSPS 11-Channel 5V Serial A/D *NEW!*	20-Dip	4.93	3.95	3.07
TLC1542IDW	296-2880-5-ND	10-Bit, 38 KSPS 11-Channel 5V Serial A/D *NEW!*	20-SOP	5.29	4.23	3.29
TLC1542IN	296-2881-5-ND	10-Bit, 38 KSPS 11-Channel 5V Serial A/D *NEW!*	20-Dip	5.29	4.23	3.29
TLC1542QFN	296-2882-5-ND	10-Bit, 38 KSPS 11-Channel 5V Serial A/D *NEW!*	20-PLCC	5.56	4.45	3.46
TLC1543CDB	296-2883-5-ND	10-Bit, 38 KSPS 11-Channel 5V Serial A/D *NEW!*	20-SSOP	3.87	3.10	2.41
TLC1543CDW	296-1804-5-ND	10-Bit, 38 KSPS 11-Ch. 5V Serial A/D	20-SSOP	3.67	2.94	2.29
TLC1543CDWR	296-1804-2-ND	10-Bit, 38 KSPS 11-Channel 5V Serial A/D *NEW!*	20-SOP	4386.00/2,000		
TLC1543CFN	296-1805-5-ND	10-Bit, 38 KSPS 11-Ch. 5V Serial A/D	20-PLCC	3.67	2.94	2.29
TLC1543CN	296-2885-5-ND	10-Bit, 38 KSPS 11-Channel 5V Serial A/D *NEW!*	20-Dip	3.87	3.10	2.41
TLC1543IDW	296-2886-5-ND	10-Bit, 38 KSPS 11-Channel 5V Serial A/D *NEW!*	20-SOP	4.16	3.33	2.59
TLC1543IFN	296-2887-5-ND	10-Bit, 38 KSPS 11-Channel 5V Serial A/D *NEW!*	20-PLCC	4.16	3.33	2.59
TLC1543IN	296-2888-5-ND	10-Bit, 38 KSPS 11-Channel 5V Serial A/D *NEW!*	20-Dip	4.16	3.33	2.59
TLC1543QDB	296-2889-5-ND	10-Bit, 38 KSPS 11-Channel 5V Serial A/D *NEW!*	20-SSOP	4.37	3.50	2.72
TLC1543QDW	296-2890-5-ND	10-Bit, 38 KSPS 11-Channel 5V Serial A/D *NEW!*	20-SOP	4.37	3.50	2.72
TLC1543QFN	296-2891-5-ND	10-Bit, 38 KSPS 11-Channel 5V Serial A/D *NEW!*	20-PLCC	4.37	3.50	2.72
TLC1549CD	296-2892-5-ND	10-Bit, 38 KSPS 1-Channel 5V Serial A/D *NEW!*	8-SOP	3.56	2.85	2.22
TLC1549CP	296-1806-5-ND	10-Bit, 38 KSPS 1-Ch. 5V Serial A/D	8-Dip	3.29	2.63	2.05
TLC1549ID	296-2893-5-ND	10-Bit, 38 KSPS 1-Channel 5V Serial A/D *NEW!*	8-SOP	3.83	3.06	2.38
TLC1549IP	296-2894-5-ND	10-Bit, 38 KSPS 1-Channel 5V Serial A/D *NEW!*	8-Dip	3.83	3.06	2.38
TLC1550IDW	296-2895-5-ND	10-Bit, 164 KSPS 10-Channel 5V Parallel Out A/D *NEW!*	24-SOP	6.84	5.48	4.62
TLC1551IDW	296-2896-5-ND	10-Bit, 164 KSPS 10-Channel 5V Parallel Out A/D *NEW!*	24-SOP	5.86	4.69	3.96
TLC2543CDB	296-2897-5-ND	12-Bit, 66 KSPS 11-Channel 5V Serial A/D *NEW!*	20-SSOP	7.78	6.23	5.26
TLC2543CDW	296-1307-5-ND	12-Bit, 66 KSPS 11-Ch. 5V Serial A/D	20-SOP	7.36	5.89	4.97
TLC2543CDWR	296-1307-2-ND	12-Bit, 66 KSPS 11-Ch. 5V Serial A/D	20-SOP	9200.00/2,000		
TLC2543CFN	296-2898-5-ND	12-Bit, 66 KSPS 11-Channel 5V Serial A/D *NEW!*	20-PLCC	7.78	6.23	5.26
TLC2543CN	296-1816-5-ND	12-Bit, 66 KSPS 11-Ch. 5V Serial A/D	20-Dip	7.36	5.89	4.97
TLC2543IDB	296-2899-5-ND	12-Bit, 66 KSPS 11-Channel 5V Serial A/D *NEW!*	20-SSOP	8.38	6.71	5.66
TLC2543IDW	296-2900-5-ND	12-Bit, 66 KSPS 11-Channel 5V Serial A/D *NEW!*	20-SOP	8.38	6.71	5.66
TLC2543IFN	296-2901-5-ND	12-Bit, 66 KSPS 11-Channel 5V Serial A/D *NEW!*	20-PLCC	8.38	6.71	5.66
TLC2543IN	296-1817-5-ND	12-Bit, 66 KSPS 11-Ch. 5V Serial A/D	20-Dip	7.92	6.34	5.35
TLC2551ID	296-2909-5-ND	12-Bit, 400 KSPS 1-Channel 5V Serial A/D *NEW!*	8-SOP	7.38	5.91	4.99
TLC2551IDGK	296-2910-5-ND	12-Bit, 400 KSPS 1-Channel 5V Serial A/D *NEW!*	8-TSSOP	7.38	5.91	4.99
TLC2552ID	296-2911-5-ND	12-Bit, 400 KSPS 2-Channel 5V Serial A/D *NEW!*	8-SOP	7.38	5.91	4.99
TLC2552IDGK	296-2912-5-ND	12-Bit, 400 KSPS 2-Channel 5V Serial A/D *NEW!*	8-TSSOP	7.38	5.91	4.99
TLC2554ID	296-2913-5-ND	12-Bit, 400 KSPS 4-Channel 5V Serial A/D *NEW!*	16-SOP	8.81	7.94	7.04
TLC2554IPW	296-2914-5-ND	12-Bit, 400 KSPS 4-Channel 5V Serial A/D *NEW!*	16-TSSOP	8.81	7.94	7.04
TLC2555ID	296-2915-5-ND	12-Bit, 400 KSPS 1-Channel 5V Serial A/D *NEW!*	8-SOP	7.38	5.91	4.99
TLC2555IDGK	296-2916-5-ND	12-Bit, 400 KSPS 1-Channel 5V Serial A/D *NEW!*	8-TSSOP	7.38	5.91	4.99
TLC2558IDW	296-2917-5-ND	12-Bit, 400 KSPS 8-Channel 5V Serial A/D *NEW!*	20-SOP	8.98	8.09	7.17
TLC2558IPW	296-2918-5-ND	12-Bit, 400 KSPS 8-Channel 5V Serial A/D *NEW!*	20-TSSOP	8.98	8.09	7.17
TLC5510AINS	296-2938-5-ND	8-Bit, 20 MSPS 1-Channel 5.0V High Speed Serial A/D *NEW!*	24-SOP	4.37	3.50	2.72
TLC5510INSR	296-2939-1-ND	8-Bit, 20 MSPS 1-Channel 5.0V High Speed Serial A/D *NEW!*	24-SOP	4.37	3.50	2.72
TLC5510INSR	296-2939-2-ND	8-Bit, 20 MSPS 1-Channel 5.0V High Speed Serial A/D *NEW!*	24-SOP	4948.00/2,000		
TLC5510IPW	296-2183-5-ND	8-Bit, 20 MSPS 1-Ch. 5.0V High Speed Serial A/D	24-TSSOP	4.14	3.32	2.58
TLC5540IPW	296-2184-5-ND	8-Bit, 40 MSPS 1-Ch. 5.0V High Speed Serial A/D	24-TSSOP	5.52	4.42	3.73
TLC7135CDW	296-2185-5-ND	4.5-Bit, .003 MSPS 1-Ch. +-5V A/D	28-SOP	3.74	2.99	2.33
TLV0831CD	296-2944-5-ND	8-Bit, 49 KSPS 1-Channel 3.3V Serial A/D *NEW!*	8-SOP	2.77	2.22	1.73
TLV0831CP	296-2187-5-ND	8-Bit, 49 KSPS 1-Ch. 3.3V Serial A/D	8-Dip	2.61	2.09	1.63
TLV0831ID	296-2945-5-ND	8-Bit, 49 KSPS 1-Channel 3.3V Serial A/D *NEW!*	8-SOP	2.97	2.38	1.85
TLV0831IP	296-2946-5-ND	8-Bit, 49 KSPS 1-Channel 3.3V Serial A/D *NEW!*	8-Dip	2.97	2.38	1.85
TLV0832CD	296-2947-5-ND	8-Bit, 44.7 KSPS 2-Channel 3.3V Serial A/D *NEW!*	8-SOP	2.77	2.22	1.73
TLV0832CP	296-2948-5-ND	8-Bit, 44.7 KSPS 2-Channel 3.3V Serial A/D *NEW!*	8-Dip	2.77	2.22	1.73
TLV0832ID	296-2188-5-ND	8-Bit, 44.7 KSPS 2-Ch. 3.3V Serial A/D	8-SOP	2.81	2.25	1.75
TLV0832IP	296-2949-5-ND	8-Bit, 44.7 KSPS 2-Channel 3.3V Serial A/D *NEW!*	8-Dip	2.97	2.38	1.85
TLV0834CD	296-2189-5-ND	8-Bit, 41 KSPS 4-Ch. 3.3V Serial A/D	14-SOP	2.72	2.18	1.70
TLV0834ID	296-2950-5-ND	8-Bit, 41 KSPS 4-Channel 3.3V Serial A/D *NEW!*	14-SOP	3.08	2.47	1.92
TLV0834IN	296-2951-5-ND	8-Bit, 41 KSPS 4-Channel 3.3V Serial A/D *NEW!*	14-Dip	3.08	2.47	1.92
TLV0838CDW	296-2952-5-ND	8-Bit, 37.9 KSPS 8-Channel 3.3V Serial A/D *NEW!*	20-SOP	2.88	2.31	1.80
TLV0838IDW	296-2190-5-ND	8-Bit, 37.9 KSPS 8-Ch. 3.3V Serial A/D	20-SOP	2.93	2.34	1.82
TLV0838IN	296-2953-5-ND	8-Bit, 37.9 KSPS 8-Channel 3.3V Serial A/D *NEW!*	20-Dip	3.08	2.47	1.92
TLV0838IPW	296-2954-5-ND	8-Bit, 37.9 KSPS 8-Channel 3.3V Serial A/D *NEW!*	20-TSSOP	3.08	2.47	1.92
TLV571IDW	296-2207-5-ND	8-Bit, 1.25 MSPS 1-Channel 2.7-5.5V Parallel A/D	24-SOP	4.25	3.41	2.65

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★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

T. I.	Digi-Key			Price Each★		
Part No.	**Part No.**	**Description**	**Pkg.**	**1**	**25**	**100**
TLV571IPW	296-2988-5-ND	8-Bit, 1.25 MSPS 1-Channel 2.7-5.5V Parallel A/D *NEW!*	24-TSSOP	4.61	3.69	2.87
TLV1504ID	296-2191-5-ND	10-Bit, 200 KSPS 4-Channel 2.7-5.5V Serial A/D	16-SOP	5.60	4.48	3.78
TLV1504IPW	296-2955-5-ND	10-Bit, 200 KSPS 4-Channel 2.7-5.5V Serial A/D *NEW!*	16-TSSOP	6.06	4.85	4.10
TLV1508IDW	296-2192-5-ND	10-Bit, 200 KSPS 4-Channel 2.7-5.5V Serial A/D	20-SOP	5.76	4.61	3.89
TLV1508IPW	296-2956-5-ND	10-Bit, 200 KSPS 4-Channel 2.7-5.5V Serial A/D *NEW!*	20-TSSOP	6.24	5.00	4.22
TLV1543CDB	296-2958-5-ND	10-Bit, 200 KSPS 11-Channel 3.3V Serial A/D *NEW!*	20-SOP	4.25	3.41	2.65
TLV1543CDW	296-1878-5-ND	10-Bit, 200 KSPS 11-Ch. 3.3V Serial A/D	20-SOP	4.05	3.24	2.52
TLV1543CN	296-2957-5-ND	10-Bit, 200 KSPS 11-Channel 3.3V Serial A/D *NEW!*	20-Dip	4.28	3.42	2.66
TLV1543IDB	296-2959-5-ND	10-Bit, 200 KSPS 11-Channel 3.3V Serial A/D *NEW!*	20-SSOP	4.59	3.68	2.86
TLV1544CD	296-2960-5-ND	10-Bit, 85 KSPS 4-Channel 2.7-5.5V Serial A/D *NEW!*	16-SOP	3.87	3.10	2.41
TLV1544CPW	296-2193-5-ND	10-Bit, 85 KSPS 4-Channel 2.7-5.5V Serial A/D	16-TSSOP	3.58	2.87	2.23
TLV1544ID	296-2961-5-ND	10-Bit, 85 KSPS 4-Channel 2.7-5.5V Serial A/D *NEW!*	16-SOP	4.16	3.33	2.59
TLV1548IDB	296-2962-5-ND	10-Bit, 85 KSPS 8-Channel 2.7-5.5V Serial A/D *NEW!*	20-SSOP	4.86	3.89	3.03
TLV1549CD	296-2963-5-ND	10-Bit, 38 KSPS, 1-Channel 3.3V Serial A/D *NEW!*	8-SOP	3.56	2.85	2.22
TLV1549CP	296-2964-5-ND	10-Bit, 38 KSPS, 1-Channel 3.3V Serial A/D *NEW!*	8-Dip	3.56	2.85	2.22
TLV1549ID	296-2194-5-ND	10-Bit, 38 KSPS, 1-Ch. 3.3V Serial A/D	8-SOP	3.53	2.83	2.20
TLV1549IP	296-2965-5-ND	10-Bit, 38 KSPS, 1-Channel 3.3V Serial A/D *NEW!*	8-Dip	3.83	3.06	2.38
TLV1562CDW	296-2195-5-ND	10-Bit, 2 MSPS 4-Channel 2.7-5.5V Parallel A/D	28-SOP	6.68	5.35	4.51
TLV1562CPW	296-2966-5-ND	10-Bit, 2 MSPS 4-Channel 2.7-5.5V Parallel A/D *NEW!*	28-TSSOP	7.24	5.80	4.89
TLV1562IDW	296-1879-5-ND	10-Bit, 2 MSPS 4-Ch. 2.7-5.5V Parallel A/D	28-SOP	7.20	5.76	4.86
TLV1562IPW	296-1880-5-ND	10-Bit, 2 MSPS 4-Ch. 2.7-5.5V Parallel A/D	28-TSSOP	7.20	5.76	4.86
TLV1570CDW	296-2196-5-ND	10-Bit, 1.25 MSPS 8-Ch. 2.7-5.5V Serial A/D	20-SOP	6.12	4.90	4.14
TLV1570CPW	296-2967-5-ND	10-Bit, 1.25 MSPS 8-Channel 2.7-5.5V Serial A/D *NEW!*	20-TSSOP	6.62	5.30	4.47
TLV1570IDW	296-1881-5-ND	10-Bit, 1.25 MSPS 8-Channel 2.7-5.5V Serial A/D	20-SOP	6.58	5.27	4.45
TLV1570IPW	296-1882-5-ND	10-Bit, 1.25 MSPS 8-Channel 2.7-5.5V Serial A/D	20-TSSOP	6.58	5.27	4.45
TLV1571CDW	296-2197-5-ND	10-Bit, 1.25 MSPS 1-Channel 2.7-5.5V Parallel A/D	24-SOP	5.92	4.74	4.00
TLV1571IDW	296-2968-5-ND	10-Bit, 1.25 MSPS 1-Channel 2.7-5.5V Parallel A/D *NEW!*	24-SOP	6.88	5.51	4.65
TLV1571IPW	296-2969-5-ND	10-Bit, 1.25 MSPS 1-Channel 2.7-5.5V Parallel A/D *NEW!*	24-TSSOP	6.88	5.51	4.65
TLV1572CD	296-2970-5-ND	10-Bit, 1.25 MSPS 1-Channel 2.7-5.5V Serial A/D *NEW!*	8-SOP	5.76	4.61	3.89
TLV1572ID	296-1883-5-ND	10-Bit, 1.25 MSPS 1-Channel 2.7-5.5V Serial A/D	8-SOP	5.72	4.58	3.87
TLV1578CDA	296-2198-5-ND	10-Bit, 1.25 MSPS 8-Channel 2.7-5.5V Parallel A/D	32-SOP	6.16	4.93	4.16
TLV1578IDA	296-2971-5-ND	10-Bit, 1.25 MSPS 8-Channel 2.7-5.5V Parallel A/D *NEW!*	32-TSSOP	7.16	5.73	4.84
TLV2541CDGK	296-2199-5-ND	12-Bit, 140/200 KSPS 2-Channel 2.7-5.5V Serial A/D.	8-TSSOP	6.20	4.96	4.19
TLV2541ID	296-2972-5-ND	12-Bit, 140/200 KSPS 2-Channel 2.7-5.5V Serial A/D *NEW!*	8-SOP	7.20	5.76	4.86
TLV2541IDGK	296-2973-5-ND	12-Bit, 140/200 KSPS Single-Channel 2.7-5.5V Serial A/D *NEW!*	8-TSSOP	7.20	5.76	4.86
TLV2542CDGK	296-2200-5-ND	12-Bit, 140/200 KSPS 2-Ch. 2.7-5.5V Serial A/D	8-TSSOP	6.20	4.96	4.19
TLV2542ID	296-2974-5-ND	12-Bit, 140/200 KSPS 2-Channel 2.7-5.5V Serial A/D *NEW!*	8-SOP	7.20	5.76	4.86
TLV2542IDGK	296-2975-5-ND	12-Bit, 140/200 KSPS 2-Channel 2.7-5.5V Serial A/D *NEW!*	8-TSSOP	7.20	5.76	4.86
TLV2543CDW	296-2977-5-ND	12-Bit, 66 KSPS 11-Channel 3.3V Serial A/D *NEW!*	20-SOP	7.76	6.21	5.24
TLV2543CN	296-2978-5-ND	12-Bit, 66 KSPS 11-Channel 3.3V Serial A/D *NEW!*	20-Dip	7.76	6.21	5.24
TLV2543IDB	296-2201-5-ND	12-Bit, 66 KSPS 11-Ch. 3.3V Serial A/D	20-SSOP	7.72	6.18	5.22
TLV2543IDW	296-2979-5-ND	12-Bit, 66 KSPS 11-Channel 3.3V Serial A/D *NEW!*	20-SOP	8.34	6.68	5.63
TLV2543IN	296-2980-5-ND	12-Bit, 66 KSPS 11-Channel 3.3V Serial A/D *NEW!*	20-Dip	8.34	6.68	5.63
TLV2544CD	296-2202-5-ND	12-Bit, 200 KSPS 4-Channel 2.7-5.5V Serial A/D	16-SOP	7.26	5.81	4.91
TLV2544ID	296-2981-5-ND	12-Bit, 200 KSPS 4-Channel 2.7-5.5V Serial A/D *NEW!*	16-SOP	8.44	6.76	5.70
TLV2544IPW	296-2982-5-ND	12-Bit, 200 KSPS 4-Channel Serial A/D *NEW!*	16-TSSOP	8.44	6.76	5.70
TLV2545CDGK	296-2203-5-ND	12-Bit, 140/200 KSPS 2-Channel 2.7-5.5V Serial A/D.	8-TSSOP	6.20	4.96	4.19
TLV2545ID	296-2984-5-ND	12-Bit, 140/200 KSPS 2-Channel 2.7-5.5V Serial A/D *NEW!*	8-SOP	7.20	5.76	4.86
TLV2545IDGK	296-2985-5-ND	12-Bit, 140/200 KSPS 2-Channel 2.7-5.5V Serial A/D *NEW!*	8-TSSOP	7.20	5.76	4.86
TLV2548CDW	296-2204-5-ND	12-Bit, 200 KSPS 8-Channel 2.7-5.5V Serial A/D	20-SOP	7.46	5.97	5.04
TLV2548IDW	296-2986-5-ND	12-Bit, 200 KSPS 8-Channel 2.7-5.5V Serial A/D *NEW!*	20-SOP	8.68	6.95	5.86
TLV2548IPW	296-2987-5-ND	12-Bit, 200 KSPS 8-Channel 2.7-5.5V Serial A/D *NEW!*	20-TSSOP	8.68	6.95	5.86
TLV5510INS	296-1911-5-ND	8-Bit, 10 MSPS 1-Ch. 2.7-3.6V HS A/D	24-SOP	3.71	2.97	2.31
TLV5510IPW	296-2205-5-ND	8-Bit, 10 MSPS 1-Ch. 2.7-3.6V HS A/D	24-TSSOP	3.71	2.97	2.31
TLV5535IPW	296-2206-5-ND	8-Bit, 35 MSPS 1-Ch. 3.3V LP A/D	28-TSSOP	5.26	4.21	3.56
TLV5580CDW	296-1912-5-ND	8-Bit, 80 MSPS 1-Ch. 3.3V LP A/D	28-SOP	7.80	6.24	5.27
TLV5580CPW	296-1913-5-ND	8-Bit, 80 MSPS 1-Ch. 3.3V LP A/D	28-TSSOP	7.80	6.24	5.27
TLV5580IDW	296-1914-5-ND	8-Bit, 80 MSPS 1-Ch. 3.3V LP A/D	28-SOP	8.40	6.72	5.67
TLV5580IPW	296-1915-5-ND	8-Bit, 80 MSPS 1-Ch. 3.3V LP A/D	28-TSSOP	8.40	6.72	5.67

Digital-to-Analog Converters

THS5641AIDW	296-2989-5-ND	8-Bit, 100 MSPS 3-5V Single DAC *NEW!*	28-SOP	5.56	4.45	3.76
THS5641AIPW	296-2990-5-ND	8-Bit, 100 MSPS 3-5V Single DAC *NEW!*	28-TSSOP	5.56	4.45	3.76
THS5641IDW	296-2286-5-ND	8-Bit, 100 MSPS 3-5V Single DAC	28-SOP	5.04	4.04	3.14
THS5651AIDW	296-2992-5-ND	10-Bit, 125 MSPS 3-5V Single DAC *NEW!*	20-SOP	9.20	7.36	6.21
THS5651AIPW	296-2287-5-ND	10-Bit, 125 MSPS 3-5V Single DAC.	28-TSSOP	8.72	6.98	5.89
THS5661AIDW	296-2995-5-ND	12-Bit, 125 MSPS 3-5V Single DAC *NEW!*	28-SOP	10.75	9.68	8.58
THS5661AIPW	296-2288-5-ND	12-Bit, 125 MSPS 3-5V Single DAC	28-TSSOP	10.18	9.17	8.13
THS5671AIDW	296-2998-5-ND	14-Bit, 125 MSPS 3-5V Single DAC *NEW!*	28-SOP	14.31	12.89	11.43
THS5671AIPW	296-2289-5-ND	14-Bit, 125 MSPS 3-5V Single DAC.	28-TSSOP	13.54	12.20	10.82
THS8133ACPHP	296-2290-ND	10-Bit, 80 MSPS 3-5V Triple Video DAC	48-TQFP	10.75	9.68	8.58
THS8133BCPHP	296-2999-ND	10-Bit, 80 MSPS 3-5V Triple Video DAC *NEW!*	48-HTQFP	13.41	12.08	10.71
THS8134ACPHP	296-2291-ND	8-Bit, 80 MSPS 3-5V Triple Video DAC	48-TQFP	9.86	7.89	6.66
THS8134BCPHP	296-3001-ND	8-Bit, 80 MSPS 3-5V Triple Video DAC *NEW!*	48-HTQFP	10.25	9.23	8.18
TLC320AD91CPT	296-1999-5-ND	Stereo Audio CODEC	48-LQFP	3.40	2.72	2.12
TLC5602CDW	296-3003-5-ND	8-Bit, 30 MSPS 5V Single Video DAC *NEW!*	20-SOP	2.86	2.29	1.78
TLC5615CD	296-3004-5-ND	10-Bit, 12.5µs 5V Sgl. Serial DAC *NEW!*	8-SOP	3.87	3.10	2.41
TLC5615CDGK	296-3005-5-ND	10-Bit, 12.5us 5V Single Serial DAC *NEW!*	8-TSSOP	3.87	3.10	2.41
TLC5615CP	296-3006-5-ND	10-Bit, 12.5µs 5V Sgl. Serial DAC *NEW!*	8-Dip	3.87	3.10	2.41
TLC5615ID	296-3007-5-ND	10-Bit, 12.5µs 5V Sgl. Serial DAC *NEW!*	8-SOP	4.16	3.33	2.59
TLC5615IP	296-2292-5-ND	10-Bit, 12.5µs 5V Single Serial DAC	8-Dip	3.94	3.15	2.45
TLC5617AID	296-2293-5-ND	Dual 10-Bit, Serial D/A Converter	8-SOP	5.44	4.36	3.68
TLC5618ACP	296-2294-5-ND	12-Bit, 2.5µs 5V Dual Serial DAC	8-Dip	6.30	5.04	4.26
TLC5618AIP	296-2295-5-ND	12-Bit, 2.5µs 5V Dual Serial DAC	8-Dip	6.78	5.43	4.58
TLC5618AQD	296-3011-5-ND	12-Bit, 2.5µs 5V Dual Serial DAC *NEW!*	8-SOP	8.82	7.06	5.96
TLC5620CD	296-1861-5-ND	8-Bit, 10µs 5V Quad Serial DAC	14-SOP	2.72	2.18	1.70
TLC5620CN	296-1862-5-ND	8-Bit, 10µs 5V Quad Serial DAC	14-Dip	2.72	2.18	1.70
TLC5620ID	296-1339-5-ND	8-Bit, 10µs 5V Quad Serial DAC	14-SOP	2.93	2.34	1.82
TLC5620IDR	296-1339-2-ND	8-Bit, 10µs 5V Quad Serial DAC	14-SOP	4095.00/2,500		
TLC5620IN	296-3012-5-ND	8-Bit, 10µs 5V Quad Serial DAC *NEW!*	14-Dip	3.15	2.52	1.96
TLC5628CDW	296-1864-5-ND	8-Bit, 10µs 5V Octal Serial DAC	16-SOP	4.43	3.55	2.76
TLC5628CN	296-1865-5-ND	8-Bit, 10µs 5V Octal Serial DAC	16-Dip	4.43	3.55	2.76
TLC5628IDW	296-3013-5-ND	8-Bit, 10µs 5V Octal Serial DAC *NEW!*	16-SOP	5.15	4.13	3.21
TLC5628IN	296-3014-5-ND	8-Bit, 10µs 5V Octal Serial DAC *NEW!*	16-Dip	5.15	4.13	3.21
TLC7225CDW	296-3015-5-ND	8-Bit, 5µs 5-15V Quad Parallel DAC *NEW!*	24-SOP	4.61	3.69	2.87
TLC7225IDW	296-3016-5-ND	8-Bit, 5µs 5-15V Quad Parallel DAC *NEW!*	24-SOP	4.95	3.96	3.08
TLC7226CDW	296-3017-5-ND	8-Bit, 5µs 15V Quad Parallel DAC *NEW!*	20-SOP	4.41	3.53	2.75
TLC7226CN	296-3018-5-ND	8-Bit, 5µs 15V Quad Parallel DAC *NEW!*	20-Dip	4.41	3.53	2.75
TLC7226IDW	296-3019-5-ND	8-Bit, 5µs 15V Quad Parallel DAC *NEW!*	20-SOP	4.75	3.80	2.96
TLC7226IN	296-2296-5-ND	8-Bit, 5µs 15V Quad Parallel DAC	20-Dip	4.50	3.60	2.80
TLC7524CD	296-1866-5-ND	8-Bit, 0.1µs 5-15V Single Parallel Mult. DAC	16-SOP	2.86	2.29	1.78
TLC7524CFN	296-1867-5-ND	8-Bit, 0.1µs 5-15V Single Parallel Mult. DAC	20-PLCC	2.86	2.29	1.78
TLC7524CN	296-1868-5-ND	8-Bit, 0.1µs 5-15V Single Parallel Mult. DAC	16-Dip	2.86	2.29	1.78
TLC7524CPW	296-3020-5-ND	8-Bit, 0.1µs 5-15V Single Parallel Mult. DAC *NEW!*	16-TSSOP	3.02	2.42	1.88
TLC7524EN	296-1869-5-ND	8-Bit, 0.1µs 5-15V Single Parallel Mult. DAC	16-Dip	3.29	2.63	2.05
TLC7524ID	296-3021-5-ND	8-Bit, 0.1µs 5-15V Single Parallel Mult. DAC *NEW!*	16-SOP	3.24	2.60	2.02
TLC7524IFN	296-3022-5-ND	8-Bit, 0.1µs 5-15V Single Parallel Mult. DAC *NEW!*	16-PLCC	3.24	2.60	2.02
TLC7524IN	296-3023-5-ND	8-Bit, 0.1µs 5-15V Single Parallel Mult. DAC *NEW!*	16-Dip	3.24	2.60	2.02
TLC7528CDW	296-1340-5-ND	8-Bit, 0.1µs 5-15V Dual Parallel Mult. DAC	20-SOP	2.99	2.40	1.87
TLC7528CDWR	296-1340-2-ND	8-Bit, 0.1µs 5-15V Dual Parallel Mult. DAC	20-SOP	3392.00/2,000		
TLC7528CFN	296-3024-5-ND	8-Bit, 0.1µs 5-15V Dual Parallel Mult. DAC *NEW!*	20-PLCC	3.17	2.54	1.98
TLC7528CN	296-1871-5-ND	8-Bit, 0.1µs 5-15V Dual Parallel Mult. DAC	20-Dip	2.99	2.40	1.87
TLC7528EDW	296-3025-5-ND	8-Bit, 0.1µs 5-15V Dual Parallel Mult. DAC *NEW!*	20-SOP	3.65	2.92	2.27
TLC7528EN	296-3026-5-ND	8-Bit, 0.1µs 5-15V Dual Parallel Mult. DAC *NEW!*	20-Dip	3.65	2.92	2.27
TLC7528IDW	296-3027-5-ND	8-Bit, 0.1µs 5-15V Dual Parallel Mult. DAC *NEW!*	20-SOP	3.40	2.72	2.12
TLC7528IFN	296-3028-5-ND	8-Bit, 0.1µs 5-15V Dual Parallel Mult. DAC *NEW!*	20-PLCC	3.40	2.72	2.12
TLC7528IN	296-3029-5-ND	8-Bit, 0.1µs 5-15V Dual Parallel Mult. DAC *NEW!*	20-Dip	3.40	2.72	2.12
TLC7528IPW	296-3030-5-ND	8-Bit, 0.1µs 5-15V Dual Parallel Mult. DAC *NEW!*	20-TSSOP	3.40	2.72	2.12
TLC7628CDW	296-3031-5-ND	8-Bit, 0.1µs 11-14V Dual Parallel Mult. DAC *NEW!*	20-SOP	3.40	2.72	2.12
TLC7628CN	296-3032-5-ND	8-Bit, 0.1µs 11-14V Dual Parallel Mult. DAC *NEW!*	20-Dip	2.86	2.29	1.78
TLV5604CD	296-2297-5-ND	10-Bit, 3µs 2.7-5.5V Quad Parallel DAC	16-SOP	8.14	6.52	5.50
TLV5604CPW	296-3033-5-ND	10-Bit, 3µs 2.7-5.5V Quad Parallel DAC *NEW!*	16-TSSOP	8.80	7.04	5.94
TLV5604ID	296-1916-5-ND	10-Bit, 3µs 2.7-5.5V Quad Parallel DAC	16-SOP	8.76	7.01	5.92
TLV5604IPW	296-1917-5-ND	10-Bit, 3µs 2.7-5.5V Quad Parallel DAC	16-TSSOP	8.76	7.01	5.92
TLV5606CD	296-2298-5-ND	10-Bit, 2 or 9µs 2.7-5.5V Single Serial DAC	8-SOP	3.38	2.70	2.10
TLV5606ID	296-3034-5-ND	10-Bit, 2 or 9µs 2.7-5.5V Single Serial DAC *NEW!*	8-SOP	3.94	3.15	2.45

(Continued)

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TEXAS INSTRUMENTS DATA CONVERSION *(Continued)*

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TLV5606IDGK	296-3035-5-ND	10-Bit, 2 or 9µs 2.7-5.5V Single Serial DAC *NEW!*	8-TSSOP	3.94	3.15	2.45
TLV5608IDW	296-3036-5-ND	10-Bit, 1/3µs 2.7-5.5V Octal Serial DAC *NEW!*	20-SOP	9.48	7.59	6.40
TLV5608IPW	296-3037-5-ND	10-Bit, 1/3µs 2.7-5.5V Octal Serial DAC *NEW!*	20-TSSOP	9.48	7.59	6.40
TLV5610IDW	296-3038-5-ND	12-Bit, 1/3µs 2.7-5.5V Octal Serial DAC *NEW!*	20-SOP	14.39	12.96	11.50
TLV5610IPW	296-3039-5-ND	12-Bit, 1/3µs 2.7-5.5V Octal Serial DAC *NEW!*	20-TSSOP	14.39	12.96	11.50
TLV5613CDW	296-2299-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC	20-SOP	6.08	4.87	4.11
TLV5613CPW	296-1918-5-ND	12-Bit, 1µs 2.7-5.5V Sgl. Parallel DAC	20-TSSOP	6.08	4.87	4.11
TLV5613IDW	296-1919-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC	20-SOP	6.54	5.24	4.42
TLV5613IPW	296-1920-5-ND	12-Bit, 1µs 2.7-5.5V Sgl. Parallel DAC	20-TSSOP	6.54	5.24	4.42
TLV5614CD	296-2300-5-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC	16-SOP	11.70	10.53	9.34
TLV5614CPW	296-3040-5-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC *NEW!*	16-TSSOP	12.64	11.39	10.10
TLV5614ID	296-1921-5-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC	16-SOP	12.58	11.33	10.05
TLV5614IPW	296-1922-5-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC	16-TSSOP	12.58	11.33	10.05
TLV5616CD	296-2301-5-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC	8-SOP	5.47	4.38	3.41
TLV5616CDR	296-2301-2-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC *NEW!*	8-SOP	8152.50/2,500		
TLV5616CP	296-3041-5-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC *NEW!*	8-Dip	5.26	4.21	3.56
TLV5616ID	296-1923-5-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC	8-SOP	5.22	4.18	3.53
TLV5616IDGK	296-3042-5-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC *NEW!*	8-TSSOP	5.90	4.72	3.99
TLV5616IDR	296-1923-2-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC *NEW!*	8-SOP	8742.00/2,500		
TLV5617ACD	296-2302-5-ND	10-Bit, 2.5µs 2.7-5.5V Dual Serial DAC	8-SOP	5.80	4.64	3.92
TLV5617AID	296-3043-5-ND	10-Bit, 2.5µs 2.7-5.5V Dual Serial DAC *NEW!*	8-SOP	6.72	5.38	4.54
TLV5618ACD	296-2303-5-ND	12-Bit, 2.5µs 2.7-5.5V Dual Serial DAC	8-SOP	7.24	5.80	4.89
TLV5618AID	296-3044-5-ND	12-Bit, 2.5µs 2.7-5.5V Dual Serial DAC *NEW!*	8-SOP	8.40	6.72	5.67
TLV5618AQD	296-2304-5-ND	12-Bit, 2.5µs 2.7-5.5V Dual Serial DAC	8-SOP	8.82	7.06	5.96
TLV5619CDW	296-1924-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC	20-SOP	6.08	4.87	4.11
TLV5619CPW	296-1925-5-ND	12-Bit, 1µs 2.7-5.5V Sgl. Parallel DAC	20-TSSOP	6.08	4.87	4.11
TLV5619IDW	296-3045-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC *NEW!*	20-SOP	7.06	5.65	4.77
TLV5619IPW	296-2305-5-ND	12-Bit, 1µs 2.7-5.5V Sgl. Parallel DAC	20-TSSOP	6.54	5.24	4.42
TLV5619QDW	296-3046-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC *NEW!*	20-SOP	7.42	5.94	5.01
TLV5620CD	296-3047-5-ND	8-Bit, 10µs 2.7-5.5V Quad Serial DAC *NEW!*	14-SOP	2.93	2.34	1.82
TLV5620CN	296-2306-5-ND	8-Bit, 10µs 2.7-5.5V Quad Serial DAC	14-Dip	2.72	2.18	1.70
TLV5620ID	296-3048-5-ND	8-Bit, 10µs 2.7-5.5V Quad Serial DAC *NEW!*	14-SOP	3.15	2.52	1.96
TLV5620IN	296-3049-5-ND	8-Bit, 10µs 2.7-5.5V Quad Serial DAC *NEW!*	14-Dip	3.15	2.52	1.96
TLV5621ED	296-3050-5-ND	8-Bit, 10µs 2.7-5.5V Quad Serial DAC *NEW!*	14-SOP	3.85	3.08	2.40
TLV5621ID	296-2307-5-ND	8-Bit, 10µs 2.7-5.5V Quad Serial DAC	14-SOP	3.33	2.67	2.08
TLV5623CD	296-2308-5-ND	8-Bit, 3µs 2.7-5.5V Single Serial DAC	8-SOP	2.45	1.96	1.47
TLV5623CDGK	296-3051-5-ND	8-Bit, 3µs 2.7-5.5V Single Serial DAC *NEW!*	8-TSSOP	2.39	1.91	1.49
TLV5623ID	296-3052-5-ND	8-Bit, 3µs 2.7-5.5V Sgl. Serial DAC *NEW!*	8-SOP	2.57	2.06	1.60
TLV5623IDGK	296-3053-5-ND	8-Bit, 3µs 2.7-5.5V Single Serial DAC *NEW!*	8-TSSOP	2.57	2.06	1.60
TLV5624CD	296-2309-5-ND	8-Bit, 1.0-3.5µs 2.7-5.5V Sgl. Serial DAC	8-SOP	3.15	2.52	1.96
TLV5624ID	296-3054-5-ND	8-Bit, 1.0-3.5µs 2.7-5.5V Single Serial DAC *NEW!*	8-SOP	3.65	2.92	2.27
TLV5624IDGK	296-3055-5-ND	8-Bit, 1.0-3.5µs 2.7-5.5V Single Serial DAC *NEW!*	8-TSSOP	3.65	2.92	2.27
TLV5625CD	296-2310-5-ND	8-Bit, 2.5 or 12µs 2.7-5.5V Dual Ser. DAC	8-SOP	3.33	2.67	2.08
TLV5625ID	296-3056-5-ND	8-Bit, 2.5 or 12µs 2.7-5.5V Dual Serial DAC *NEW!*	8-SOP	3.87	3.10	2.41
TLV5626CD	296-2311-5-ND	8-Bit, 1µs 2.7-5.5V Dual Serial DAC	8-SOP	4.25	3.41	2.65
TLV5626ID	296-3057-5-ND	8-Bit, 1µs 2.7-5.5V Dual Serial DAC *NEW!*	8-SOP	4.93	3.95	3.07
TLV5627CD	296-2312-5-ND	8-Bit, 3µs 2.7-5.5V Dual Serial DAC	16-SOP	5.15	4.13	3.21
TLV5627ID	296-3058-5-ND	8-Bit, 3µs 2.7-5.5V Dual Serial DAC *NEW!*	16-SOP	5.32	4.26	3.60
TLV5627IPW	296-3059-5-ND	8-Bit, 3µs 2.7-5.5V Dual Serial DAC *NEW!*	16-TSSOP	5.32	4.26	3.60
TLV5628CDW	296-3060-5-ND	8-Bit, 10µs 2.7-5.5V Octal Serial DAC *NEW!*	16-SOP	4.79	3.84	2.99
TLV5628CN	296-2313-5-ND	8-Bit, 10µs 2.7-5.5V Octal Serial DAC	16-Dip	4.43	3.55	2.76
TLV5628IDW	296-3061-5-ND	8-Bit, 10µs 2.7-5.5V Octal Serial DAC *NEW!*	16-SOP	5.15	4.13	3.21
TLV5628IN	296-3062-5-ND	8-Bit, 10µs 2.7-5.5V Octal Serial DAC *NEW!*	16-Dip	5.15	4.13	3.21
TLV5629IDW	296-3063-5-ND	8-Bit, 1/3µs 2.7-5.5V Octal Serial DAC *NEW!*	20-SOP	5.48	4.39	3.70
TLV5629IPW	296-3064-5-ND	8-Bit, 1/3µs 2.7-5.5V Octal Serial DAC *NEW!*	20-TSSOP	5.48	4.39	3.70
TLV5630IDW	296-3065-5-ND	12-Bit, 1/3µs 2.7-5.5V Octal Serial DAC *NEW!*	20-SOP	15.01	13.52	11.99
TLV5630IPW	296-3066-5-ND	12-Bit, 1/3µs 2.7-5.5V Octal Serial DAC *NEW!*	20-TSSOP	15.01	13.52	11.99
TLV5631IDW	296-3067-5-ND	10-Bit, 1/3µs 2.7-5.5V Octal Serial DAC *NEW!*	20-SOP	8.51	7.67	6.80
TLV5631IPW	296-3068-5-ND	10-Bit, 1/3µs 2.7-5.5V Octal Serial DAC *NEW!*	20-TSSOP	8.51	7.67	6.80
TLV5632IDW	296-3069-5-ND	8-Bit, 1/3µs 2.7-5.5V Octal Serial DAC *NEW!*	20-SOP	5.86	4.69	3.96
TLV5632IPW	296-3070-5-ND	8-Bit, 1/3µs 2.7-5.5V Octal Serial DAC *NEW!*	20-TSSOP	5.86	4.69	3.96
TLV5633CDW	296-2314-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC	20-SOP	7.58	6.07	5.12
TLV5633IDW	296-3071-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC *NEW!*	20-SOP	8.82	7.06	5.96
TLV5633IPW	296-3072-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC *NEW!*	20-TSSOP	8.82	7.06	5.96
TLV5636CD	296-2315-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC	8-SOP	6.50	5.20	4.39
TLV5636ID	296-3073-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC *NEW!*	8-SOP	7.56	6.05	5.11
TLV5636IDGK	296-3074-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC *NEW!*	8-TSSOP	7.82	6.26	5.28
TLV5637CD	296-2316-5-ND	10-Bit, 1 µs 2.7-5.5V Dual Serial DAC	8-SOP	7.70	6.16	5.20
TLV5637ID	296-3075-5-ND	10-Bit, 1 µs 2.7-5.5V Dual Serial DAC *NEW!*	8-SOP	8.94	7.16	6.04
TLV5638CD	296-2317-5-ND	12-Bit, 1 or 3.5µs 2.7-5.5V Dual Serial DAC	8-SOP	8.32	6.66	5.62
TLV5638ID	296-3076-5-ND	12-Bit, 1 or 3.5µs 2.7-5.5V Dual Serial DAC *NEW!*	8-SOP	9.66	7.73	6.53
TLV5638QD	296-3077-5-ND	12-Bit, 1 or 3.5µs 2.7-5.5V Dual Serial DAC *NEW!*	8-SOP	8.45	7.61	6.75
TLV5639CDW	296-2318-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel Serial DAC	20-SOP	7.58	6.07	5.12
TLV5639IDW	296-3078-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel Serial DAC *NEW!*	20-SOP	8.82	7.06	5.96
TLV5639IPW	296-3079-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel Serial DAC *NEW!*	20-TSSOP	8.82	7.06	5.96

TEXAS INSTRUMENTS DIGITAL SIGNAL PROCESSORS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TMS320C206PZ80	296-2001-5-ND	Fixed Point DSP	100-LQFP	14.54	13.10	11.62
TMS320C206PZA80	296-2002-5-ND	Fixed Point DSP	100-LQFP	15.99	14.40	12.77
TMS320C31PQL40	296-1926-5-ND	40MHz DSP	132-PQFP	40.08	37.41	34.74
TMS320C31PQL60	296-1927-5-ND	60MHz DSP	132-PQFP	48.48	45.25	42.02
TMS320C32PCM40	296-1928-5-ND	40MHz DSP	144-PQFP	14.59	13.14	11.66
TMS320F206PZ	296-2007-5-ND	CMOS DSP	100-TQFP	20.94	19.55	18.15
TMS320F206PZA	296-2008-5-ND	CMOS DSP	100-TQFP	23.04	21.51	19.97
TMS320F240PQ	296-2009-5-ND	CMOS DSP Controller	132-BQFP	21.12	19.72	18.31
TMS320F240PQA	296-2010-5-ND	CMOS DSP Controller	132-BQFP	21.12	19.72	18.31
TMS320F240PQS	296-2011-5-ND	CMOS DSP Controller	132-BQFP	23.24	21.69	20.14
TMS320LC206PZ80	296-2012-5-ND	CMOS DSP	100-TQFP	16.01	14.42	12.79
TMS320LC206PZA80	296-2013-5-ND	CMOS DSP	100-TQFP	15.86	14.80	13.75
TMS320LC541BPZ-66	296-1930-5-ND	Fixed Point DSP	100-TQFP	14.68	13.22	11.72
TMS320LC545APBK-50	296-2014-5-ND	Fixed Point DSP	128-TQFP	23.42	21.86	20.30
TMS320LC545APBK-66	296-2015-5-ND	Fixed Point DSP	128-TQFP	25.76	24.04	22.33
TMS320VC549GGU-100	296-2016-5-ND	Fixed Point DSP	144-BGA	31.97	29.84	27.71
TMS320VC549GGU-80	296-1933-5-ND	Fixed Point DSP	144-BGA	29.03	27.09	25.16
TMS320VC549PGE-100	296-1934-5-ND	Fixed Point DSP	144-TQFP	31.97	29.84	27.71
TMS320VC549PGE-80	296-1935-5-ND	Fixed Point DSP	144-TQFP	29.03	27.09	25.16

TEXAS INSTRUMENTS OTHER LINEAR PERIPHERAL DRIVERS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN75451BP	296-1746-5-ND	Dual Peripheral Driver	8-Dip	.80	.60	.45
SN75452BP	296-1747-5-ND	Dual Peripheral Driver	8-Dip	.80	.60	.45
SN75453BP	296-1748-5-ND	Dual Peripheral Driver	8-Dip	.80	.60	.45
SN75472P	296-1749-5-ND	Dual Peripheral Driver	8-Dip	1.25	1.00	.75
TLC5904PZP	296-2378-ND	Constant Current LED Driver	100-PQFP	7.06	5.65	4.77
TLC5905PAP	296-2379-ND	Constant Current LED Driver	64-PQFP	5.76	4.61	3.89
TLC5910PZP	296-2380-ND	Constant Current LED Driver	100-PQFP	9.30	8.37	7.43
TLC5911PZP	296-2381-ND	Constant Current LED Driver	100-PQFP	9.06	8.16	7.24
ULN2003AD	296-1368-5-ND	Darlington Transistor Array	16-SOP	.75	.63	.50
ULN2003ADR	296-1368-2-ND	Darlington Transistor Array	16-SOP	877.50/2,500		
ULN2003AN	296-1979-5-ND	Darlington Transistor Array	16-Dip	.75	.63	.50
ULN2004AN	296-1980-5-ND	Darlington Transistor Array	16-Dip	.75	.63	.50

TEXAS INSTRUMENTS TIMERS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
NE555DR	296-6501-1-ND	Precision Timer *NEW!*	8-SOP	.80	.60	.45
NE555DR	296-6501-2-ND	Precision Timer *NEW!*	8-SOP	650.00/2,500		
NE555P	296-1411-5-ND	Precision Timer	8-Dip	.80	.60	.45
NE555PSR	296-6502-1-ND	Precision Timer *NEW!*	8-SOP	1.35	1.13	.90
NE555PSR	296-6502-2-ND	Precision Timer *NEW!*	8-SOP	1198.00/2,000		
NE556D	296-6503-5-ND	Dual Precision Timer *NEW!*	14-SOP	.75	.63	.50
NE556N	296-6504-5-ND	Dual Precision Timer *NEW!*	14-Dip	.75	.63	.50
TLC555CD	296-1336-5-ND	CMOS Timer	8-SOP	.84	.63	.48
TLC555CDR	296-1336-2-ND	CMOS Timer	8-SOP	682.50/2,500		
TLC555CP	296-1857-5-ND	CMOS Timer	8-Dip	.84	.63	.48
TLC555IDR	296-1337-1-ND	CMOS Timer	8-SOP	.81	.68	.54
TLC555IP	296-1858-5-ND	CMOS Timer	8-Dip	.92	.69	.52
TLC556CDR	296-1338-1-ND	Dual CMOS Timer	14-SOP	1.17	.98	.78
TLC556CN	296-1859-5-ND	Dual CMOS Timer	14-Dip	1.02	.85	.68

TEXAS INSTRUMENTS PRECISION GROUND REFERENCE

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TLE2425CD	296-1344-5-ND	2.5V Precision Ground Reference	8-SOP	1.40	1.12	.84
TLE2425CDR	296-1344-2-ND	2.5V Precision Ground Reference	8-SOP	1792.00/2,500		
TLE2425CLP	296-1993-ND	2.5V Precision Ground Reference	TO-92	1.40	1.12	.84
TLE2425ID	296-6545-5-ND	2.5V Precision Ground Reference *NEW!*	8-SOP	1.40	1.12	.84
TLE2425ILP	296-6546-5-ND	2.5V Precision Ground Reference *NEW!*	TO-92	1.40	1.12	.84
TLE2426CD	296-6547-5-ND	1/2 Rail Virtual Ground Reference *NEW!*	8-SOP	1.47	1.23	.98
TLE2426CLP	296-1994-ND	1/2 Rail Virtual Ground Reference	TO-92	1.47	1.23	.98
TLE2426CLPR	296-1994-2-ND	1/2 Rail Virtual Ground Reference *NEW!*	TO-92	1304.00/2,000		
TLE2426CP	296-6548-5-ND	1/2 Rail Virtual Ground Reference *NEW!*	8-Dip	1.47	1.23	.98
TLE2426ID	296-1345-5-ND	1/2 Rail Virtual Ground Reference	8-SOP	1.47	1.23	.98
TLE2426IDR	296-1345-2-ND	1/2 Rail Virtual Ground Reference	8-SOP	1592.50/2,500		
TLE2426ILP	296-6549-5-ND	1/2 Rail Virtual Ground Reference *NEW!*	TO-3	1.33	1.06	.80
TLE2426IP	296-6550-5-ND	1/2 Rail Virtual Ground Reference *NEW!*	8-Dip	1.47	1.23	.98

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Texas Instruments
CCD

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TLC976CDGG	296-2000-5-ND	10-Bit CCD Signal Processor	56-TSSOP	6.38	5.11	4.31
TLV986CPFB	296-2258-ND	10-Bit CCD Signal Processor	48-TQFP	5.50	4.40	3.72
TLV987CPFB	296-2259-ND	10-Bit CCD Signal Processor	48-TQFP	8.35	7.52	6.67

Texas Instruments
RF PRODUCTS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TRF2020PW	296-1967-5-ND	1.2GHz RF Synthesizer	24-TSSOP	4.84	3.87	3.01
TRF2050PW	296-1968-5-ND	1.2GHz RF Synthesizer	20-TSSOP	5.08	4.07	3.43
TRF2052PW	296-1969-5-ND	2GHz Low Voltage Synthesizer	20-TSSOP	4.84	3.87	3.01

Texas Instruments
BUS SOLUTIONS

IEEE 1394

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TSB12C01AIPZ	296-1970-5-ND	Link-Layer Controller	100-TQFP	17.16	16.02	14.88
TSB12LV31IPZ	296-1971-5-ND	Link-Layer Controller	100-TQFP	12.10	10.89	9.66

Clock Drivers

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
CDC111FN	296-6675-5-ND	3.3V Clock Driver *NEW!*	28-PLCC	13.63	12.27	10.88
CDC203DWR	296-6676-2-ND	3.3V Clock Driver *NEW!*	20-SOIC	6376.00/2,000		
CDC204DW	296-6677-5-ND	6-Bit Inverter-Clock Driver *NEW!*	20-SOP	5.54	4.43	3.45
CDC204DWR	296-6677-2-ND	6-Bit Inverter-Clock Driver *NEW!*	20-SOIC	6298.00/2,000		
CDC208DW	296-6678-5-ND	Dual 1-to-4 Clock Driver *NEW!*	20-SOIC	5.20	4.16	3.51
CDC318ADL	296-1383-5-ND	1-18 Line Clock Driver	48-SSOP	3.67	2.94	2.29
CDC318ADLR	296-6691-1-ND	1-18 Clock Driver with I2C Control Interface *NEW!*	48-SSOP	3.71	2.97	2.31
CDC318ADLR	296-6691-2-ND	1-18 Clock Driver with I2C Control Interface *NEW!*	48-SSOP	2104.00/1,000		
CDC319DBR	296-6692-1-ND	1-10 Clock Driver *NEW!*	28-SSOP	3.94	3.15	2.45
CDC319DBR	296-6692-2-ND	1-10 Clock Driver *NEW!*	28-SSOP	4462.00/2,000		
CDC328AD	296-6693-5-ND	1-6 Clock Driver with Selectable Polarity *NEW!*	16-SOP	6.34	5.08	4.28
CDC328ADR	296-6693-1-ND	1-6 Clock Driver with Selectable Polarity *NEW!*	16-SOP	6.38	5.11	4.31
CDC328ADR	296-6693-2-ND	1-6 Clock Driver with Selectable Polarity *NEW!*	16-SOP	9890.00/2,500		
CDC328ADBR	296-6694-1-ND	1-6 Clock Driver with Selectable Polarity *NEW!*	16-SSOP	6.38	5.11	4.31
CDC328ADBR	296-6694-2-ND	1-6 Clock Driver with Selectable Polarity *NEW!*	16-SSOP	7976.00/2,000		
CDC329AD	296-6696-5-ND	1-6 Clock Driver with Selectable Polarity *NEW!*	16-SOP	6.34	5.08	4.28
CDC337DW	296-6697-5-ND	1-8 Clock Driver with Clear *NEW!*	20-SOIC	7.92	6.34	5.35
CDC339DBR	296-6698-1-ND	1-8 Clock Driver with Clear *NEW!*	20-SSOP	6.58	5.27	4.45
CDC339DBR	296-6698-2-ND	1-8 Clock Driver with Clear *NEW!*	20-SSOP	8226.00/2,000		
CDC339DW	296-6699-5-ND	1-8 Clock Driver with Clear *NEW!*	20-SOIC	6.54	5.24	4.42
CDC340DW	296-6700-5-ND	1-8 Clock Driver with Tight AC Specification *NEW!*	20-SOIC	6.68	5.35	4.51
CDC341DW	296-6701-5-ND	1-8 Clock Driver with Tight AC Specification *NEW!*	20-SOIC	8.48	6.79	5.73
CDC351DBR	296-6702-1-ND	3.3V Clock Driver *NEW!*	24-SSOP	8.85	7.97	7.07
CDC351DBR	296-6702-2-ND	3.3V Clock Driver *NEW!*	24-SSOP	13116.00/2,000		
CDC351DW	296-6703-5-ND	3.3V Clock Driver *NEW!*	24-SOIC	8.81	7.94	7.04
CDC391D	296-6704-5-ND	1-6 Clock Driver with Selectable Polarity *NEW!*	16-SOP	6.68	5.35	4.51
CDC509PWR	296-6705-1-ND	3.3V Clock Driver *NEW!*	24-TSSOP	4.46	3.57	2.78
CDC509PWR	296-6705-2-ND	3.3V Clock Driver *NEW!*	24-TSSOP	5050.00/2,000		
CDC516DGGR	296-6706-1-ND	3.3V Clock Driver *NEW!*	48-TSSOP	5.30	4.24	3.58
CDC516DGGR	296-6706-2-ND	3.3V Clock Driver *NEW!*	48-TSSOP	6626.00/2,000		
CDC536DBR	296-6707-1-ND	3.3V Clock Driver *NEW!*	28-SSOP	4.84	3.87	3.01
CDC536DBR	296-6707-2-ND	3.3V Clock Driver *NEW!*	28-SSOP	5482.00/2,000		
CDC582PAH	296-6708-5-ND	3.3V Clock Driver *NEW!*	52-QFP	9.70	7.76	6.55
CDC586PAH	296-6709-5-ND	Tri-State 3.3V Clock Driver *NEW!*	52-QFP	9.52	7.62	6.43
CDC857-2DGGR	296-6710-1-ND	2.5V PLL Clock Driver *NEW!*	48-TSSOP	9.83	8.85	7.85
CDC857-2DGGR	296-6710-2-ND	2.5V PLL Clock Driver *NEW!*	48-TSSOP	14574.00/2,000		
CDC857-3DGGR	296-6711-1-ND	3.3V PLL Clock Driver *NEW!*	48-TSSOP	8.83	7.95	7.05
CDC857-3DGGR	296-6711-2-ND	3.3V PLL Clock Driver *NEW!*	48-TSSOP	13092.00/2,000		
CDC924DL	296-6714-5-ND	133 MHz Clk. Synthesizer-Dvr. *NEW!*	56-SSOP	3.92	3.14	2.44
CDC925DL	296-6715-5-ND	133 MHz Clk. Synthesizer-Dvr. *NEW!*	56-SSOP	4.48	3.59	2.79
CDC2351DBR	296-6679-1-ND	3.3V Clock Driver *NEW!*	24-SSOP	8.83	7.95	7.05
CDC2351DBR	296-6679-2-ND	3.3V Clock Driver *NEW!*	24-SSOP	13092.00/2,000		
CDC2351DW	296-6680-5-ND	3.3V Clock Driver *NEW!*	24-SOIC	8.80	7.92	7.03
CDC2509APWR	296-6681-1-ND	Tri-State 3.3V PLL Clock Driver *NEW!*	24-TSSOP	9.20	7.36	6.21
CDC2509APWR	296-6681-2-ND	Tri-State 3.3V PLL Clock Driver *NEW!*	24-TSSOP	11500.00/2,000		
CDC2509BPWR	296-6682-1-ND	1-9 PLL Clock Driver *NEW!*	24-TSSOP	4.14	3.32	2.58
CDC2509BPWR	296-6682-2-ND	1-9 PLL Clock Driver *NEW!*	24-TSSOP	4692.00/2,000		
CDC2509CPWR	296-6683-1-ND	3.3V PLL Clock Driver *NEW!*	24-TSSOP	4.14	3.32	2.58
CDC2509CPWR	296-6683-2-ND	3.3V PLL Clock Driver *NEW!*	24-TSSOP	4692.00/2,000		
CDC2510APWR	296-6684-1-ND	3.3V PLL Clock Driver *NEW!*	24-TSSOP	9.20	7.36	6.21
CDC2510APWR	296-6684-2-ND	3.3V PLL Clock Driver *NEW!*	24-TSSOP	11500.00/2,000		
CDC2510BPWR	296-6685-1-ND	3.3V PLL Clock Driver *NEW!*	24-TSSOP	4.14	3.32	2.58
CDC2510BPWR	296-6685-2-ND	3.3V PLL Clock Driver *NEW!*	24-TSSOP	4692.00/2,000		
CDC2510CPWR	296-6686-1-ND	3.3V PLL Clock Driver *NEW!*	24-TSSOP	4.10	3.28	2.55
CDC2510CPWR	296-6686-2-ND	3.3V PLL Clock Driver *NEW!*	24-TSSOP	4642.00/2,000		
CDC2516DGGR	296-6687-1-ND	Tri-State 3.3V PLL Clock Driver *NEW!*	48-TSSOP	5.24	4.20	3.54
CDC2516DGGR	296-6687-2-ND	Tri-State 3.3V PLL Clock Driver *NEW!*	48-TSSOP	6550.00/2,000		
CDC2536DBR	296-6688-1-ND	3.3V Clock Driver *NEW!*	28-SSOP	4.10	3.28	2.55
CDC2536DBR	296-6688-2-ND	3.3V Clock Driver *NEW!*	28-SSOP	4642.00/2,000		
CDC2582PAH	296-6689-5-ND	3.3V Clock Driver *NEW!*	52-QFP	8.54	6.84	5.77
CDC2586PAH	296-6690-5-ND	Tri-State 3.3V Clock Driver *NEW!*	52-QFP	8.38	7.55	6.69
CDCF2510PWR	296-6718-1-ND	3.3V PLL Clock Driver *NEW!*	24-TSSOP	5.64	4.52	3.81
CDCF2510PWR	296-6718-2-ND	3.3V PLL Clock Driver *NEW!*	24-TSSOP	7050.00/2,000		
CDCR61APWR	296-6719-1-ND	Direct RAMBus Clock Generator *NEW!*	16-TSSOP	3.20	2.56	1.99
CDCR61APWR	296-6719-2-ND	Direct RAMBus Clock Generator *NEW!*	16-TSSOP	3622.00/2,000		
CDCR81DBQR	296-6720-1-ND	Direct RAMBUS Clock Generator *NEW!*	24-SOP	3.89	3.12	2.43
CDCR81DBQR	296-6720-2-ND	Direct RAMBUS Clock Generator *NEW!*	24-SOP	5450.00/2,500		
CDCV850DGGR	296-6721-1-ND	PLL Clock Driver *NEW!*	48-TSSOP	4.50	3.60	2.80
CDCV850DGGR	296-6721-2-ND	PLL Clock Driver *NEW!*	48-TSSOP	5100.00/2,000		
CDCV857DGGR	296-6722-1-ND	PLL Clock Driver *NEW!*	48-TSSOP	3.56	2.85	2.22
CDCV857DGGR	296-6722-2-ND	PLL Clock Driver *NEW!*	48-TSSOP	4030.00/2,000		
CDCVF2505D	296-6723-5-ND	PLL Clock Driver for Synch DRAM *NEW!*	8-SOP	2.05	1.64	1.23
CDCVF2509PWR	296-6724-1-ND	3.3V PLL Clock Driver *NEW!*	24-TSSOP	4.01	3.21	2.50
CDCVF2509PWR	296-6724-2-ND	3.3V PLL Clock Driver *NEW!*	24-TSSOP	4540.00/2,000		
CDCVF2510PWR	296-6725-1-ND	3.3V PLL Clock Driver *NEW!*	24-TSSOP	4.01	3.21	2.50
CDCVF2510PWR	296-6725-2-ND	3.3V PLL Clock Driver *NEW!*	24-TSSOP	4540.00/2,000		

FLATLINK™ / LVDS SERDES

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN65LVDS93DGG	296-1429-5-ND	LVDS SERDES Transmitter	56-TSSOP	6.16	4.93	4.16
SN65LVDS94DGG	296-1430-5-ND	LVDS SERDES Receiver	56-TSSOP	6.16	4.93	4.16
SN65LVDS95DGG	296-1431-5-ND	LVDS SERDES Transmitter	48-TSSOP	6.16	4.93	4.16
SN65LVDS96DGG	296-1434-5-ND	FLATLINK™ Receiver	48-TSSOP	6.16	4.93	4.16
SN75LVDS81DGGR	296-6665-1-ND	FLATLINK™ Transmitter *NEW!*	56-TSSOP	9.90	7.92	6.69
SN75LVDS81DGGR	296-6665-2-ND	FLATLINK™ Transmitter *NEW!*	56-TSSOP	12376.00/2,000		
SN75LVDS82DGGR	296-6666-1-ND	FLATLINK™ Receiver *NEW!*	56-TSSOP	9.30	7.44	6.28
SN75LVDS82DGGR	296-6666-2-ND	FLATLINK™ Receiver *NEW!*	56-TSSOP	11626.00/2,000		
SN75LVDS83DGG	296-6667-5-ND	FLATLINK™ Transmitter *NEW!*	56-TSSOP	7.28	5.83	4.92
SN75LVDS84ADGGR	296-6668-1-ND	FLATLINK™ Transmitter *NEW!*	48-TSSOP	7.24	5.80	4.89
SN75LVDS84ADGGR	296-6668-2-ND	FLATLINK™ Transmitter *NEW!*	48-TSSOP	9050.00/2,000		
SN75LVDS84DGGR	296-6669-1-ND	FLATLINK™ Transmitter *NEW!*	48-TSSOP	7.20	5.76	4.86
SN75LVDS84DGGR	296-6669-2-ND	FLATLINK™ Transmitter *NEW!*	48-TSSOP	9000.00/2,000		
SN75LVDS86ADGG	296-1998-5-ND	FLATLINK™ Receiver	48-TSSOP	7.10	5.68	4.80
SN75LVDS86ADGGR	296-6671-1-ND	FLATLINK™ Receiver *NEW!*	48-TSSOP	7.14	5.72	4.82
SN75LVDS86ADGGR	296-6671-2-ND	FLATLINK™ Receiver *NEW!*	48-TSSOP	8926.00/2,000		
SN75LVDS86DGG	296-6672-5-ND	FLATLINK™ Receiver *NEW!*	48-TSSOP	9.14	7.32	6.17
SN75LVDS88BPFD	296-6673-5-ND	TFT LCD-Panel Timing Controller with LVDS Interface *NEW!*	100-QFP	6.92	5.54	4.68
SN75LVDS88PFD	296-6674-5-ND	TFT LCD-Panel Timing Controller with LVDS Interface *NEW!*	100-QFP	6.92	5.54	4.68

PCI

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
PCI930PBK	296-1412-5-ND	3-to-1 Zoomed Video Switch	128-LQFP	6.32	5.06	4.27
PCI950PT	296-1413-5-ND	IRQSER Deserializer	48-LQFP	3.74	2.99	2.33
PCI1211GGU	296-6637-5-ND	HP PCI-PC Card Controller with Single PC Card Socket *NEW!*	144-BGA	11.35	10.22	9.06
PCI1211PGE	296-6638-5-ND	HP PCI-PC Card Controller with Single PC Card Socket *NEW!*	144-TQFP	11.35	10.22	9.06
PCI1225GHK	296-6640-5-ND	PCI-to-PC Card Controller *NEW!*	209-BGA	14.79	13.32	11.82
PCI1225PDV	296-6641-5-ND	PCI-to-PC Card Controller *NEW!*	208-TQFP	14.79	13.32	11.82
PCI1251BGFN	296-6642-5-ND	PCI-to-PCI Card Controller *NEW!*	256-BGA	21.33	19.91	18.49
PCI1251BGJG	296-6643-5-ND	PCI-to-PCI Card Controller *NEW!*	257-BGA	21.33	19.91	18.49
PCI1410AGGU	296-6644-5-ND	Single Slot CardBus Controller *NEW!*	144-BGA	12.30	11.07	9.82
PCI1410AGHK	296-6645-5-ND	Single Slot CardBus Controller *NEW!*	209-BGA	13.41	12.08	10.71
PCI1410APGE	296-6646-5-ND	Single Slot CardBus Controller *NEW!*	144-TQFP	12.30	11.07	9.82
PCI1410GGU	296-6647-5-ND	PC Card Controller *NEW!*	144-BGA	13.06	11.76	10.43
PCI1410PGE	296-6648-5-ND	PC Card Controller *NEW!*	144-TQFP	13.06	11.76	10.43
PCI1410RFP	296-6649-5-ND	PC Card Controller *NEW!*	144-QFP	13.06	11.76	10.43
PCI1420GHK	296-6650-5-ND	PC Card Controller *NEW!*	209-BGA	15.64	14.09	12.49
PCI1420PDV	296-6651-5-ND	PC Card Controller *NEW!*	208-TQFP	15.64	14.09	12.49
PCI1450GFN	296-6652-5-ND	PC Card Controller *NEW!*	256-BGA	21.33	19.91	18.49
PCI1450GJG	296-6653-5-ND	PC Card Controller *NEW!*	257-BGA	21.33	19.91	18.49
PCI1451AGJG	296-6654-5-ND	PC Card Controller *NEW!*	257-BGA	17.33	16.17	15.02
PCI2031PGF	296-6656-5-ND	32-Bit 33 MHz PCI-to-PCI Bridge, 6-Master *NEW!*	176-QFP	18.54	17.31	16.07
PCI4410AGHK	296-6657-5-ND	Integrated PC Card *NEW!*	209-BGA	20.84	19.45	18.06
PCI4410APDV	296-6658-5-ND	Integrated PC Card *NEW!*	208-TQFP	20.84	19.45	18.06
PCI4450GFN	296-6661-5-ND	Integrated PC Card *NEW!*	256-BGA	34.58	32.27	29.97
PCI4450GJG	296-6662-5-ND	Integrated PC Card *NEW!*	257-BGA	34.58	32.27	29.97
PCI4451GFN	296-6663-5-ND	Integrated PC Card *NEW!*	256-BGA	26.24	24.49	22.74
PCI4451GJG	296-6664-5-ND	Integrated PC Card *NEW!*	257-BGA	26.24	24.49	22.74

Texas Instruments
POWER CONTROL PRODUCTS

Power + Array

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TPIC1310KTR	296-2017-5-ND	Power DMOS Array	15-PFM	3.60	2.88	2.24
TPIC1310KTS	296-2018-5-ND	Power DMOS Array	15-PFM	3.60	2.88	2.24
TPIC44H01DA	296-1952-5-ND	4-Channel High-Side Driver	32-TSSOP	2.97	2.38	1.85

Power + Logic

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TPIC6A259DW	296-9004-5-ND	Power 8-Bit Addressable Latch *NEW!*	24-SOP	2.72	2.18	1.70
TPIC6A259NE	296-9005-5-ND	Power 8-Bit Addressable Latch *NEW!*	20-Dip	3.56	2.85	2.22
TPIC6A595DW	296-9006-5-ND	Power 8-Bit Shift Register *NEW!*	24-SOP	2.72	2.18	1.70
TPIC6A595NE	296-9007-5-ND	Power 8-Bit Shift Register *NEW!*	20-Dip	3.56	2.85	2.22
TPIC6A596DW	296-9008-5-ND	Power 8-Bit Shift Register *NEW!*	20-SOP	2.72	2.18	1.70
TPIC6A596NE	296-9009-5-ND	Power 8-Bit Shift Register *NEW!*	20-Dip	3.56	2.85	2.22
TPIC6B259DW	296-9010-5-ND	Power 8-Bit Addressable Latch *NEW!*	20-SOP	1.53	1.22	.92
TPIC6B259N	296-9011-5-ND	Power 8-Bit Addressable Latch *NEW!*	20-Dip	1.53	1.22	.92
TPIC6B273DW	296-1350-5-ND	Power Octal D-Type Switch *NEW!*	20-SOP	1.53	1.22	.92
TPIC6B273DWR	296-1350-1-ND	Power Octal D-Type Latch	20-SOP	1.53	1.22	.92
TPIC6B273N	296-9012-5-ND	Power Octal D-Type Latch *NEW!*	20-Dip	1.53	1.22	.92
TPIC6B595DW	296-1351-5-ND	Power 8-Bit Shift Register	20-SOP	1.32	1.10	.88
TPIC6B595DWR	296-1351-2-ND	Power 8-Bit Shift Register	20-SOP	1248.00/2,000		
TPIC6B595N	296-1956-5-ND	Power 8-Bit Shift Register	20-Dip	1.32	1.10	.88
TPIC6B596DW	296-9013-5-ND	Power 8-Bit Shift Register *NEW!*	20-SOP	1.32	1.10	.88
TPIC6C595D	296-2019-5-ND	Power 8-Bit Shift Register	16-SOP	1.11	.93	.74
TPIC6C595N	296-2020-5-ND	Power 8-Bit Shift Register	16-Dip	1.11	.93	.74
TPIC6C596D	296-9014-5-ND	Power 8-Bit Shift Register *NEW!*	16-SOP	1.11	.93	.74
TPIC6C596N	296-9015-5-ND	Power 8-Bit Shift Register *NEW!*	16-Dip	1.44	1.20	.96
TPIC6259DW	296-9000-5-ND	Power 8-Bit Addressable Latch *NEW!*	20-SOP	2.50	2.00	1.56
TPIC6259N	296-9001-5-ND	Power 8-Bit Addressable Latch *NEW!*	20-Dip	2.50	2.00	1.56
TPIC6273DW	296-9002-5-ND	Power Octal D-Type Latch *NEW!*	20-SOP	2.50	2.00	1.56
TPIC6273N	296-1953-5-ND	Power Octal D-Type Latch	20-Dip	2.50	2.00	1.56
TPIC6595DW	296-1349-5-ND	Power 8-Bit Shift Register *NEW!*	20-SOP	2.50	2.00	1.56
TPIC6595DWR	296-1349-1-ND	Power 8-Bit Shift Register	20-SOP	2.50	2.00	1.56
TPIC6595N	296-1954-5-ND	Power 8-Bit Shift Register	20-Dip	2.50	2.00	1.56
TPIC6596DW	296-9003-5-ND	Power 8-Bit Shift Register *NEW!*	20-SOP	2.84	2.27	1.77

CCFL Drivers

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
UCC2972N	296-2256-5-ND	CCFL Driver Controller	8-Dip	5.45	4.36	3.39
UCC3972N	296-6764-5-ND	BiCMOS CCFL Driver Controller *NEW!*	8-Dip	2.97	2.38	1.85
UCC3972PW	296-2257-5-ND	CCFL Driver Controller	8-TSSOP	2.97	2.38	1.85
UCC3973PW	296-6765-5-ND	BiCMOS CCFL Driver Controller *NEW!*	8-SOP	2.97	2.38	1.85

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TEXAS INSTRUMENTS POWER CONTROL PRODUCTS *(Continued)*

Hot-Swap

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TPS2300IPW	296-2319-5-ND	Dual Hot-Swap Power Controller	20-TSSOP	5.60	4.48	3.78
TPS2301IPW	296-2320-5-ND	Dual Hot-Swap Power Controller	20-TSSOP	5.60	4.48	3.78
TPS2310IPW	296-2321-5-ND	Dual Hot-Swap Power Controller	20-TSSOP	5.60	4.48	3.78
TPS2311IPW	296-2322-5-ND	Dual Hot-Swap Power Controller	20-TSSOP	5.60	4.48	3.78
TPS2320ID	296-6766-5-ND	Dual Hot-Swap Pwr. Controller *NEW!*	16-SOP	4.95	3.96	3.08
TPS2320IPW	296-2323-5-ND	Dual Hot-Swap Power Controller	16-TSSOP	4.95	3.96	3.08
TPS2321ID	296-6767-5-ND	Dual Hot-Swap Pwr. Controller *NEW!*	16-SOP	4.95	3.96	3.08
TPS2321IPW	296-2324-5-ND	Dual Hot-Swap Power Controller	16-TSSOP	4.95	3.96	3.08
TPS2330ID	296-6768-5-ND	Single Hot-Swap Pwr. Controller *NEW!*	14-SOP	3.60	2.88	2.24
TPS2330IPW	296-2325-5-ND	Hot-Swap Power Controller	14-TSSOP	3.60	2.88	2.24
TPS2331ID	296-6769-5-ND	Single Hot-Swap Pwr. Controller *NEW!*	14-SOP	3.60	2.88	2.24
TPS2331IPW	296-2326-5-ND	Hot-Swap Power Controller	14-TSSOP	3.60	2.88	2.24
UC2914N	296-2502-5-ND	5V to 35V Hot-Swap Power Manager	18-Dip	9.53	8.58	7.61
UC3914N	296-2327-5-ND	5V to 35V Hot-Swap Power Manager	18-Dip	7.12	5.70	4.81
UCC391PW	296-6778-5-ND	5-Bit Programmable Output Precision Voltage Reference *NEW!*	8-SOP	2.61	2.09	1.63
UCC2913D	296-2328-5-ND	Negative Volt. Hot-Swap Power Manager	8-SOP	2.75	2.20	1.71
UCC2915DP	296-2329-5-ND	15V Hot-Swap Programmable Power Manager	16-Dip	6.12	4.90	4.14
UCC2917D	296-2330-5-ND	Pos. Floating Hot-Swap Power Manager	16-SOP	3.33	2.67	2.08
UCC2919D	296-2331-5-ND	3V to 8V Hot-Swap Power Manager	16-SOP	4.34	3.48	2.71
UCC2921D	296-2332-5-ND	Latching Negative Floating Hot-Swap Power Manager	8-SOP	2.84	2.27	1.77
UCC3912DP	296-2333-5-ND	Programmable Hot-Swap Pwr. Manager	16-SOP	6.62	5.30	4.47
UCC3913D	296-2335-5-ND	Negative Volt. Hot-Swap Power Manager	8-SOP	2.95	2.36	1.84
UCC3913N	296-6770-5-ND	Neg. Volt. Hot-Swap Pwr. Manager *NEW!*	8-Dip	2.86	2.29	1.78
UCC3915DP	296-2336-5-ND	15V Program. Hot-Swap Power Manager	16-SOP	6.56	5.25	4.43
UCC3915N	296-6771-5-ND	7-15V Programmable Hot-Swap Power Manager *NEW!*	16-Dip	6.38	5.11	4.31
UCC3915PWP	296-6772-5-ND	7-15V Programmable Hot-Swap Power Manager *NEW!*	24-SOP	7.22	5.78	4.88
UCC39161DP	296-6773-5-ND	4-6V Low Current High-Side Power Manager *NEW!*	8-SOP	4.50	3.60	2.80
UCC3917D	296-2337-5-ND	Pos. Floating Hot-Swap Power Manager	16-SOP	3.60	2.88	2.24
UCC3917N	296-6774-5-ND	Positive Floating Hot-Swap Power Manager *NEW!*	16-Dip	3.47	2.78	2.16
UCC3918DP	296-2338-5-ND	Low On-Resistance Hot-Swap Power Manager	16-SOP	5.88	4.71	3.97
UCC3918N	296-6775-5-ND	Low On-Resistance Hot-Swap Power Manager *NEW!*	16-Dip	5.68	4.55	3.84
UCC3919D	296-2339-5-ND	3V to 8V Hot-Swap Power Manager	16-SOP	4.66	3.73	2.90
UCC3919PW	296-6777-5-ND	Single Hot-Swap Pwr. Controller *NEW!*	16-Dip	5.27	4.22	3.28
UCC3921D	296-2340-5-ND	Neg. Floating Hot-Swap Power Manager	8-SOP	3.08	2.47	1.92
UCC3921N	296-6779-5-ND	Negative Latchable Floating Hot-Swap Power Manager *NEW!*	8-Dip	2.86	2.29	1.78

Peripheral

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TPS2206IDB	296-2246-5-ND	Dual PCMCIA Power Switch	30-SSOP	3.08	2.47	1.92
TPS2212IDB	296-2247-5-ND	Single PCMCIA Power Switch	16-SSOP	3.08	2.47	1.92
TPS2214ADB	296-2248-5-ND	Dual PCMCIA Power Switch	24-SSOP	5.58	4.47	3.48
TPS2214DB	296-2249-5-ND	Dual PCMCIA Power Switch	24-SSOP	5.48	4.39	3.70
TPS2216ADAP	296-2250-5-ND	Dual PCMCIA Power Switch	32-HTSSOP	5.58	4.47	3.48
TPS2216ADB	296-2251-5-ND	Dual PCMCIA Power Switch	30-SSOP	5.58	4.47	3.48
TPS2216DB	296-2252-5-ND	Dual PCMCIA Power Switch	30-SSOP	5.48	4.39	3.70
UCC3916DP	296-2255-5-ND	SCSI Termpower Manager	8-SOP	4.73	3.78	2.94
UCC5510MWP	296-6730-5-ND	9-Line SCSI Multi Terminator *NEW!*	36-SOP	5.18	4.15	3.50
UCC5606DP	296-6731-5-ND	9-Line 3-5V SCSI SE Terminator *NEW!*	16-SOP	2.90	2.33	1.81
UCC5606PWP	296-6732-5-ND	9-Line 3-5V SCSI SE Terminator *NEW!*	16-SOP	2.90	2.33	1.81
UCC5610DWP	296-6733-5-ND	18-Line 3-5V SCSI SE Terminator *NEW!*	28-SOP	6.48	5.19	4.38
UCC5611DWP	296-6734-5-ND	18-Line 3-5V SCSI SE Terminator *NEW!*	28-SOP	6.48	5.19	4.38
UCC5614DP	296-6735-5-ND	9-Line 3-5V SCSI SE Terminator *NEW!*	16-SOP	2.61	2.09	1.63
UCC5614PWP	296-6736-5-ND	9-Line 3-5V SCSI SE Terminator *NEW!*	24-SOP	2.61	2.09	1.63
UCC5617DWP	296-6737-5-ND	18-Line 3-5V SCSI SE Terminator *NEW!*	28-SOP	3.58	2.87	2.23
UCC5618DWP	296-6738-5-ND	18-Line 3-5V SCSI SE Terminator *NEW!*	28-SOP	4.34	3.48	2.71
UCC5618QP	296-6739-5-ND	18-Line 3-5V SCSI SE Terminator *NEW!*	28-SOP	4.84	3.87	3.01
UCC5619MWP	296-6740-5-ND	27-Line 5V SE Terminator For Fast/Ultra SCSI *NEW!*	36-SOP	6.10	4.88	4.12
UCC5620FQP	296-6742-ND	27-Line 5V SE Terminator For Fast/Ultra SCSI *NEW!*	48-QFP	6.62	5.30	4.47
UCC5620MWP	296-6743-5-ND	27-Line 5V SE Terminator For Fast/Ultra SCSI *NEW!*	48-SOP	5.56	4.45	3.76
UCC5621MWP	296-6744-5-ND	27-Line 5V SE Terminator For Fast/Ultra SCSI *NEW!*	44-SOP	5.74	4.60	3.88
UCC5622FQP	296-6745-ND	27-Line 5V SE Terminator For Fast/Ultra SCSI *NEW!*	44-QFP	7.20	5.76	4.86
UCC5622MWP	296-6746-5-ND	27-Line 5V SE Terminator For Fast/Ultra SCSI *NEW!*	44-SOP	6.14	4.92	4.15
UCC5628FQP	296-6747-ND	14-Line 3-5V SCSI Multi Term. *NEW!*	48-QFP	7.30	5.84	4.93
UCC5629FQP	296-6748-ND	14-Line 3-5V SCSI Multi Term. *NEW!*	48-QFP	7.30	5.84	4.93
UCC5630AFQP	296-6749-ND	9-Line 3-5V SCSI Multi Term. *NEW!*	48-QFP	5.16	4.13	3.49
UCC5630AMWP	296-6750-5-ND	9-Line 3-5V SCSI Multi Term. *NEW!*	36-SOP	4.61	3.69	2.87
UCC5631AFQP	296-6751-ND	9-Line 3-5V SCSI Multi Term. *NEW!*	48-QFP	5.16	4.13	3.49
UCC5631AMWP	296-6752-5-ND	9-Line 3-5V SCSI Multi Term. *NEW!*	36-SOP	4.61	3.69	2.87
UCC5638FQP	296-6753-ND	15-Line 3-5V SCSI Multi Term. *NEW!*	48-QFP	9.58	7.67	6.47
UCC5639FQP	296-6754-ND	15-Line 3-5V SCSI Multi Term. *NEW!*	48-QFP	9.58	7.67	6.47
UCC5640PW24	296-6755-5-ND	9-Line 3-5V LVD SCSI Term. *NEW!*	24-SOP	5.22	4.18	3.25
UCC5640PW28	296-6756-5-ND	9-Line 3-5V LVD SCSI Term. *NEW!*	28-SOP	5.22	4.18	3.25
UCC5641PW24	296-6757-5-ND	9-Line 3-5V LVD SCSI Term. *NEW!*	24-SOP	7.76	6.21	5.24
UCC5641PW28	296-6758-5-ND	9-Line 3-5V LVD SCSI Term. *NEW!*	248-SOP	7.76	6.21	5.24
UCC5646PM	296-6759-ND	27-Line 3-5V LVD SCSI Term. *NEW!*	64-QFP	9.41	8.48	7.52
UCC5672MWP	296-6760-5-ND	9-Line 3-5V SCSI Multi Term. *NEW!*	36-SOP	5.36	4.29	3.62
UCC5672PWP	296-6761-5-ND	9-Line 3-5V SCSI Multi Term. *NEW!*	28-SOP	5.36	4.29	3.62
UCC5673MWP	296-6762-5-ND	9-Line 3-5V SCSI Multi Term. *NEW!*	36-SOP	6.52	5.22	4.41
UCC5673PWP	296-6763-5-ND	9-Line 3-5V SCSI Multi Term. *NEW!*	28-SOP	6.52	5.22	4.41

TEXAS INSTRUMENTS DATA COMMUNICATIONS

Central Office CODEC

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TCM29C13ADW	296-6559-5-ND	Combination CODEC/Filter *NEW!*	20-SOIC	2.57	2.06	1.60
TCM29C13AN	296-6560-5-ND	Combination CODEC/Filter *NEW!*	20-Dip	2.57	2.06	1.60
TCM29C13N	296-6561-5-ND	Combination CODEC/Filter *NEW!*	20-Dip	2.57	2.06	1.60
TCM29C14ADW	296-6562-5-ND	Combination CODEC/Filter *NEW!*	24-SOIC	2.57	2.06	1.60
TCM29C16ADW	296-6563-5-ND	Combination CODEC/Filter *NEW!*	16-SOIC	2.57	2.06	1.60
TCM29C16AN	296-6564-5-ND	Combination CODEC/Filter *NEW!*	16-Dip	2.57	2.06	1.60
TCM29C16DW	296-6565-5-ND	Combination CODEC/Filter *NEW!*	16-SOIC	2.57	2.06	1.60
TCM29C16N	296-6566-5-ND	Combination CODEC/Filter *NEW!*	16-Dip	2.57	2.06	1.60
TCM29C17ADW	296-6567-5-ND	Combination CODEC/Filter *NEW!*	16-SOIC	2.57	2.06	1.60
TCM29C17AN	296-6568-5-ND	Combination CODEC/Filter *NEW!*	16-Dip	2.57	2.06	1.60
TCM29C18DW	296-6569-5-ND	Combination CODEC/Filter, Analog Interface to DSP *NEW!*	16-SOIC	2.57	2.06	1.60
TCM29C18N	296-6570-5-ND	Combination CODEC/Filter, Analog Interface to DSP *NEW!*	16-Dip	2.57	2.06	1.60
TCM29C19N	296-6571-5-ND	Combination CODEC/Filter, Analog Interface to DSP *NEW!*	16-Dip	2.57	2.06	1.60
TCM29C23DW	296-6780-5-ND	Combination CODEC/Filter, Analog Interface to DSP *NEW!*	20-SOIC	2.57	2.06	1.60
TCM38C17IDL	296-1761-5-ND	4-Channel PCM Combo	48-SSOP	8.08	6.47	5.46
TCM129C13ADW	296-6551-5-ND	Combination CODEC/Filter *NEW!*	20-SOIC	2.90	2.33	1.81
TCM129C13AN	296-6552-5-ND	Combination CODEC/Filter *NEW!*	20-Dip	2.90	2.33	1.81
TCM129C13N	296-6553-5-ND	Combination CODEC/Filter *NEW!*	20-Dip	2.90	2.33	1.81
TCM129C16DW	296-6554-5-ND	Combination CODEC/Filter *NEW!*	20-SOIC	2.90	2.33	1.81
TCM129C16N	296-6555-5-ND	Combination CODEC/Filter *NEW!*	16-Dip	2.90	2.33	1.81
TCM129C18N	296-6556-5-ND	Combination CODEC/Filter, Analog Interface to DSP *NEW!*	16-Dip	2.90	2.33	1.81
TCM129C19N	296-6557-5-ND	Combination CODEC/Filter, Analog Interface to DSP *NEW!*	16-Dip	2.90	2.33	1.81
TCM129C23N	296-6558-5-ND	Combination CODEC/Filter, Analog Interface to DSP *NEW!*	20-Dip	2.90	2.33	1.81
TP3054BN	296-1936-5-ND	PCM CODEC and Filter	16-Dip	2.57	2.06	1.60

Client Modem CODEC

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TLC320AC01CPMR	296-1982-1-ND	Analog Interface	64-LQFP	6.50	5.20	4.39
TLC320AD50IDW	296-2376-5-ND	Analog Interface with Master/Slave Function	28-SOP	6.66	5.33	4.50
TLC320AD52CPT	296-2377-ND	Analog Interface with Master/Slave Function	48-PQFP	5.38	4.31	3.64

Ring Controllers

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
UCC2750DW	296-2602-5-ND	Source Ringer Controller	28-SOP	12.78	11.51	10.21
UCC2751D	296-2603-5-ND	Single Line Ring Generator Controller	16-SOP	6.54	5.24	4.42
UCC2752D	296-2604-5-ND	Resonant Ring Generator Controller	16-SOP	6.54	5.24	4.42
UCC3750DW	296-2605-5-ND	Source Ringer Controller	28-SOP	9.31	8.39	7.44
UCC3751D	296-2606-5-ND	Single Line Ring Generator Controller	16-SOP	5.24	4.20	3.54
UCC3752D	296-2607-5-ND	Resonant Ring Generator Controller	16-SOP	5.24	4.20	3.54

IRDA

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TIR1000IPWR	296-6574-1-ND	Standalone IrDA Encoder/Decoder *NEW!*	8-TSSOP	3.62	2.90	2.26
TIR1000IPWR	296-6574-2-ND	Standalone IrDA Encoder/Decoder *NEW!*	8-TSSOP	4106.00/2,000		
TIR1000PSR	296-6572-1-ND	Standalone IrDA Encoder/Decoder *NEW!*	8-SOP	2.66	2.13	1.66
TIR1000PSR	296-6572-2-ND	Standalone IrDA Encoder/Decoder *NEW!*	8-SOP	3010.00/2,000		
TIR1000PWR	296-6573-1-ND	Standalone IrDA Encoder/Decoder *NEW!*	8-TSSOP	2.70	2.16	1.68
TIR1000PWR	296-6573-2-ND	Standalone IrDA Encoder/Decoder *NEW!*	8-TSSOP	3060.00/2,000		
TIR2000PAG	296-1770-5-ND	High Speed Serial IR Controller	64-TQFP	9.96	7.97	6.73

UARTs

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TL16C550CIPT	296-1786-5-ND	Asynchronous Communication Element	48-LQFP	4.75	3.80	2.96
TL16C550CPTR	296-1787-1-ND	Asynchronous Communication Element	48-LQFP	3.76	3.01	2.34
TL16C552AFNR	296-1788-1-ND	Dual Asynchronous Communication	68-PLCC	7.14	5.72	4.82
TL16C554AFN	296-6587-5-ND	Quad UART with 16-Byte FIFO *NEW!*	68-PLCC	10.50	9.45	8.38
TL16C554APN	296-6588-5-ND	Quad UART with 16-Byte FIFO *NEW!*	80-PQFP	10.78	9.71	8.61
TL16C554FN	296-1790-5-ND	Asynchronous Communication Element	68-PLCC	10.65	9.59	8.50
TL16C554FNR	296-1790-2-ND	Asynchronous Communication Element	68-PLCC	2043.25/250		
TL16C554IFN	296-6589-5-ND	Quad UART with 16-Byte FIFO *NEW!*	68-PLCC	10.95	9.86	8.74
TL16C554PN	296-6590-5-ND	Quad UART with 16-Byte FIFO *NEW!*	80-PQFP	10.95	9.86	8.74
TL16C750FN	296-2647-5-ND	64-Byte FIFO UART	44-PLCC	6.66	5.33	4.50
TL16C750IPM	296-6591-5-ND	Single UART with 64-Byte FIFO, AFC, LP Modes *NEW!*	64-TQFP	6.66	5.33	4.50
TL16C750PM	296-6592-5-ND	Single UART with 64-Byte FIFO, AFC, LP Modes, Ind. Temp. *NEW!*	64-TQFP	6.66	5.33	4.50
TL16C752BPT	296-2648-ND	Dual 3.3V UART	48-PQFP	5.40	4.32	3.65
TL16C752PT	296-2649-ND	Dual 3.3V UART	48-PQFP	5.31	4.25	3.31
TL16C754BFN	296-2650-5-ND	Quad 64-Byte FIFO UART	68-PLCC	12.73	11.46	10.17
TL16C754BPN	296-6593-5-ND	Quad UART with 64-Byte FIFO *NEW!*	80-PQFP	12.73	11.46	10.17
TL16C754FN	296-1791-5-ND	Quad 64-Byte FIFO UART	68-PLCC	11.10	9.99	8.86
TL16C754PN	296-1792-5-ND	Quad 64-Byte FIFO UART	80-LQFP	11.10	9.99	8.86
TL16PC564BLVPZ	296-2651-ND	PCMCIA UART	100-TQFP	9.98	7.99	6.74
TL16PC564BPZ	296-6594-5-ND	Single UART with 64-Byte FIFO, PCMCIA Interface *NEW!*	100-TQFP	9.98	7.99	6.74
TL16PIR552PH	296-6595-5-ND	Dual UART with 16-Byte FIFO, Selectable IR and 1284 Modes *NEW!*	80-QFP	9.95	8.96	7.95

USB

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN65220DBVT	296-2341-2-ND	Single USB Port Transient Suppressor	SOT-23-6	123.75/250		
SN75240P	296-6596-5-ND	Dual USB Port with Transient Suppressor *NEW!*	8-Dip	.93	.78	.62
SN75240PWR	296-6596-1-ND	Dual USB Port with Transient Suppressor *NEW!*	8-TSSOP	.93	.78	.62
SN75240PWR	296-6596-2-ND	Dual USB Port with Transient Suppressor *NEW!*	8-TSSOP	824.00/2,000		
TUSB2040AN	296-1972-5-ND	Universal Serial Bus 4-Port HUB	28-Dip	5.52	4.42	3.73
TUSB2070PT	296-2027-5-ND	Universal Serial Bus 7-Port HUB	48-TQFP	5.76	4.61	3.89
TUSB2140BN	296-1973-5-ND	Universal Serial Bus 4-Port HUB	40-Dip	5.00	4.00	3.38

TEXAS INSTRUMENTS REALTIME CLOCKS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
BQ3285EP	296-2595-5-ND	RealTime Clock	24-Dip	6.20	4.96	4.19
BQ3285ES	296-2596-5-ND	RealTime Clock	24-SOIC	5.02	4.02	3.39
BQ3285ESS	296-2597-5-ND	RealTime Clock	24-SSOP	5.02	4.02	3.39
BQ3285LDSS	296-2599-5-ND	ACPI Compliant RealTime Clock	24-SSOP	4.16	3.33	2.59
BQ3285LFSS-A1	296-6518-5-ND	ACPI Compliant RTC with (240x8) NVSRAM *NEW!*	24-SOP	4.16	3.33	2.59
BQ3285LSS	296-2600-5-ND	RealTime Clock	24-SSOP	6.42	5.14	4.34
BQ3285P-SB2	296-2601-5-ND	RealTime Clock	24-SSOP	5.27	4.22	3.28
BQ3285S-SB2	296-6519-5-ND	RTC with (114x8) NVSRAM *NEW!*	24-SOP	5.27	4.22	3.28
BQ3287AMT-SB2	296-6520-5-ND	RTC Module w/(114x8) NVSRAM *NEW!*	T-MOD	6.44	5.16	4.35
BQ3287EAMT	296-6521-5-ND	RTC Module with (242x8) NVSRAM/Alarm Wake-up *NEW!*	T-MOD	6.44	5.16	4.35

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

TEXAS INSTRUMENTS REALTIME CLOCKS *(Continued)*

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
BQ3287EMT	296-6522-5-ND	RTC Module with (242x8) NVSRAM/Alarm Wake-up *NEW!*	T-MOD	6.44	5.16	4.35
BQ3287MT-I	296-6523-5-ND	RTC Module w/(114x8) NVSRAM *NEW!*	T-MOD	6.44	5.16	4.35
BQ3287MT-SB2	296-6524-5-ND	RTC Module w/(114x8) NVSRAM *NEW!*	T-MOD	6.44	5.16	4.35
BQ4285EP	296-6525-5-ND	RTC with (114x8) NVSRAM Alarm Wake-up *NEW!*	24-Dip	6.70	5.36	4.53
BQ4285LS	296-6526-5-ND	RTC with (114x8) NVSRAM Alarm Wake-up *NEW!*	24-SOP	4.75	3.80	2.96
BQ4285P-SB2	296-6527-5-ND	RTC with (114x8) NVSRAM/NVSRAM Control *NEW!*	24-Dip	4.75	3.80	2.96
BQ4285S-SB2	296-6528-5-ND	RTC with (114x8) NVSRAM/NVSRAM Control *NEW!*	24-SOP	4.75	3.80	2.96
BQ4287MT-SB2	296-6529-5-ND	RTC Module with (114x8) NVSRAM/NVSRAM Control *NEW!*	T-MOD	7.48	5.99	5.05
BQ4802LYDWR	296-6530-1-ND	Parallel 3V RTC with CPU Supervisor/ Ext. NVSRAM Control *NEW!*	28-SOIC	7.22	5.78	4.88
BQ4802LYDWR	296-6530-2-ND	Parallel 3V RTC with CPU Supervisor/ Ext. NVSRAM Control *NEW!*	28-SOIC	4512.50/1,000		
BQ4802YDW	296-6531-5-ND	Parallel 5V RTC with CPU Supervisor/ Ext. NVSRAM Control *NEW!*	28-SOIC	7.56	6.05	5.11
BQ4822YMA-70	296-6532-5-ND	RTC Module with (8Kx8) NVSRAM/Watchdog Timer *NEW!*	A-MOD	21.27	19.86	18.44
BQ4830YMA-85	296-6533-5-ND	RTC Module w/(32Kx8) NVSRAM *NEW!*	A-MOD	25.20	23.52	21.84
BQ4832YMA-85	296-6534-5-ND	RTC Module with (32Kx8) NVSRAM/Watchdog Timer *NEW!*	A-MOD	25.20	23.52	21.84
BQ4842YMA-85	296-6535-5-ND	RTC Module with (128Kx8) NVSRAM/Watchdog Timer *NEW!*	A-MOD	30.56	28.52	26.49
BQ4845P-A4	296-6536-5-ND	RTC with NVSRAM Control/ Watchdog Timer *NEW!*	28-Dip	6.70	5.36	4.53
BQ4845S-A4	296-6537-5-ND	RTC with NVSRAM Control/ Watchdog Timer *NEW!*	28-SOP	6.70	5.36	4.53
BQ4845S-A4N	296-6538-5-ND	RTC with NVSRAM Control/ Watchdog Timer *NEW!*	28-SOP	6.70	5.36	4.53
BQ4845YS-A4	296-6539-5-ND	RTC with NVSRAM Control/ Watchdog Timer *NEW!*	28-SOIC	6.70	5.36	4.53
BQ4845YS-A4N	296-6540-5-ND	RTC with NVSRAM Control/ Watchdog Timer *NEW!*	28-SOIC	6.70	5.36	4.53
BQ4847MT	296-6541-5-ND	RTC with NVSRAM Control/ Watchdog Timer *NEW!*	T-MOD	9.66	7.73	6.53
BQ4847YMT	296-6542-5-ND	RTC with NVSRAM Control/ Watchdog Timer *NEW!*	T-MOD	9.66	7.73	6.53
BQ4850YMA-85	296-6543-5-ND	RTC Module with (512Kx8) NVSRAM *NEW!*	A-MOD	53.55	49.98	46.41
BQ4852YMC-85	296-6544-5-ND	RTC Module with (512Kx8) NVSRAM/Watchdog Timer *NEW!*	C-MOD	64.52	60.22	55.92

TEXAS INSTRUMENTS SIGNAL CONTROLLERS

Audio Processors / CODECs

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TAS3001CPW	296-2208-5-ND	Stereo Digital Equalizer	28-SOP	3.35	2.69	2.09
TLC320AD535PM	296-2209-ND	Dual Voice/Data CODEC	64-PQFP	6.78	5.43	4.58
TLC320AD77CDB	296-2210-5-ND	24-Bit, Stereo CODEC	28-SSOP	5.10	4.08	3.45
TLV320AC36CDW	296-2211-5-ND	Voice Band Audio Processor	20-SOP	5.13	4.11	3.20
TLV320AC37CN	296-2212-5-ND	Voice Band Audio Processor	20-Dip	5.13	4.11	3.20
TLV320AC40CDW	296-2213-5-ND	Voice Band Audio Processor	20-SOP	5.13	4.11	3.20
TLV320AIC10CPFB	296-2214-ND	16-Bit, General Purp. DSP CODEC	48-TQFP	6.44	5.16	4.35
TLV320AIC11CPFB	296-2215-ND	16-Bit, Low Voltage DSP CODEC	48-TQFP	6.86	5.49	4.64
TLV320AIC27CPFB	296-2216-ND	18-Bit, Stereo CODEC	48-TQFP	6.46	5.17	4.37

MSP430 Microcontrollers

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MSP430F110IDW	296-6506-5-ND	16-Bit Ultra-LP with 1K Byte Flash, 128 Byte RAM, Comparator *NEW!*	20-SOIC	2.48	1.98	1.54
MSP430F112IDW	296-6509-5-ND	16-Bit Ultra-LP with 4K Byte Flash, 256 Byte RAM *NEW!*	20-SOIC	3.65	2.92	2.27
MSP430F1101IDW	296-6505-5-ND	16-Bit Ultra-LP with 1K Byte Flash, 128 Byte RAM, Comparator *NEW!*	20-SOIC	2.48	1.98	1.54
MSP430F1121IDW	296-6507-5-ND	16-Bit Ultra-LP with 4K Byte Flash, 256 Byte RAM, Comparator *NEW!*	20-SOIC	3.80	3.05	2.37
MSP430F1121IPW	296-6508-5-ND	16-Bit Ultra-LP with 4K Byte Flash, 256 Byte RAM, Comparator *NEW!*	20-TSSOP	3.65	2.92	2.27
MSP430P112IDW	296-6510-5-ND	16-Bit Ultra-LP with 4K Byte Flash, 256 Byte RAM *NEW!*	20-SOIC	4.88	3.91	3.04
MSP430P313IDL	296-6511-5-ND	16-Bit Ultra-LP with 8K Byte OTP, 256 Byte RAM, LCD Mux Drvr. *NEW!*	56-SSOP	9.60	7.68	6.48
MSP430P315IDL	296-2382-5-ND	Mixed Signal Microcontroller	56-SOP	8.26	6.61	5.58
MSP430P315SIDL	296-6512-5-ND	16-Bit Ultra-LP with 16K Byte OTP, 512 Byte RAM, LCD Mux Drvr. *NEW!*	48-SSOP	9.60	7.68	6.48
MSP430P325AIFN	296-6513-5-ND	16-Bit Ultra-LP w/16K Byte OTP, 512 Byte RAM, 14-Bit ADC, LCD Mux Driver *NEW!*	68-PLCC	10.65	9.59	8.50
MSP430P325AIPG	296-6514-ND	16-Bit Ultra-LP with 16K Byte OTP, 512 Byte RAM, 14-Bit ADC, LCD Mux Driver *NEW!*	64-QFP	10.46	9.42	8.36
MSP430P325AIPM	296-6515-ND	16-Bit Ultra-LP with 16K Byte OTP, 512 Byte RAM, 14-Bit ADC, LCD Mux Driver *NEW!*	64-TQFP	10.46	9.42	8.36
MSP430P325IFN	296-1409-5-ND	Mixed Signal Microcontroller	68-PLCC	9.16	8.25	7.32
MSP430P325IPG	296-2383-ND	Mixed Signal Microcontroller	64-PQFP	9.08	8.18	7.25
MSP430P325IPM	296-6516-ND	16-Bit Ultra-LP with 16K Byte OTP, 512 Byte RAM, 14-Bit ADC, LCD Mux Driver *NEW!*	64-TQFP	10.46	9.42	8.36
MSP430P337AIPJM	296-2384-ND	Mixed Signal Microcontroller	100-PQFP	10.05	9.05	8.02
MSP430P337IPJM	296-6517-ND	16-Bit Ultra-LP with 32K Byte OTP, 1K Byte RAM, USART, HW Multiplier, LCD Mux Driver *NEW!*	100-QFP	11.66	10.50	9.31

FAIRCHILD SEMICONDUCTOR 7400 SERIES TTL

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DM7400N-ND	Quad 2-Input NAND Gate	14-Dip	.88	.66	.50
DM7402N-ND	Quad 2-Input NOR Gate	14-Dip	.88	.66	.50
DM7403N-ND	Quad 2-Input NAND Gate with Open-Collect Outputs	14-Dip	.88	.66	.50
DM7404N-ND	Hex Inverter	14-Dip	.88	.66	.50
DM7405N-ND	Hex Inverter with Open-Collect Outputs	14-Dip	.88	.66	.50
DM7406M-ND	Hex Inverter with Open-Collect Outputs	SO-14	.48	.37	.28
DM7406N-ND	Hex Inverter with Open-Collect Outputs	14-Dip	.48	.37	.28
DM7407M-ND	Hex Buffer with Open-Collect Outputs	SO-14	.48	.37	.28
DM7407N-ND	Hex Buffer with Open-Collect Outputs	14-Dip	.48	.37	.28
DM7408N-ND	Quad 2-Input AND Gate	14-Dip	.88	.66	.50
DM7414N-ND	Hex Schmitt Trigger Inverter	14-Dip	.89	.75	.60
DM7416N-ND	Hex Inverter with Open-Collect Outputs	14-Dip	.88	.66	.50
DM7417N-ND	Hex Buffer with Open-Collect Outputs	14-Dip	.88	.66	.50
DM7438N-ND	Quad 2-Input NAND Buffer with Open-Collect Outputs	14-Dip	.88	.66	.50
DM7445N-ND	BCD-to-Decimal Decoder/Driver	16-Dip	1.49	1.24	.99
DM7446AN-ND	BCD-to-7 Segment Decoder/Driver	16-Dip	1.95	1.57	1.18
DM7447AN-ND	BCD-to-7 Segment Decoder/Driver	16-Dip	1.95	1.57	1.18
DM7473N-ND	Dual JK M/S Flip Flop	14-Dip	1.02	.86	.69
DM7474N-ND	Dual D-Type Positive-Edge-Triggered Flip Flop with Preset and Clear	14-Dip	.79	.66	.53
DM7476N-ND	Dual JK M/S Flip Flop	16-Dip	.96	.80	.64
DM7486N-ND	Quad 2-Input Exclusive OR Gate	14-Dip	.96	.80	.64
DM7490AN-ND	Decade Counter	14-Dip	2.35	1.89	1.47
DM9374N-ND	7-Segment Decoder/Driver	16-Dip	4.70	3.77	2.93
DM74123N-ND	Dual Monostable Multivibrator	16-Dip	1.32	1.06	.80
DM74125N-ND	Tri-State Quad Buffer	14-Dip	3.05	2.40	1.94
DM74145N-ND	BCD-to-Decimal Decoder/Driver	16-Dip	1.60	1.28	.96
DM74150N-ND	16-to-1 Multiplexer	24-Dip	2.33	1.87	1.45
DM74164N-ND	8-Bit Parallel Out Shift Register (8570N)	14-Dip	1.51	1.21	.91
DM74174N-ND	Hex D-Type Flip Flop	16-Dip	1.93	1.54	1.16
DM9368N-ND	7 Segment Decoder/Driver/Latch	16-Dip	4.70	3.77	2.93
DS75451N-ND	Dual Peripheral Driver	8-Dip	.95	.69	.50
DS75452N-ND	Dual Peripheral Driver	8-Dip	.95	.69	.50
DS75453N-ND	Dual Peripheral Driver	8-Dip	.95	.69	.50

FAIRCHILD SEMICONDUCTOR 74LS00 SERIES TTL

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DM74LS00M-ND	Quad 2-Input NAND Gate	SO-14	.55	.44	.33
DM74LS00N-ND	Quad 2-Input NAND Gate	14-Dip	.55	.44	.33
DM74LS02N-ND	Quad 2-Input NOR Gate	14-Dip	.55	.44	.33
DM74LS03N-ND	Quad 2-Input NAND Gate with Open-Collect Outputs	14-Dip	.55	.44	.33
DM74LS04M-ND	Hex Inverter	SO-14	.55	.44	.33
DM74LS04N-ND	Hex Inverter	14-Dip	.55	.44	.33
DM74LS05N-ND	Hex Inverter with Open-Collect Outputs	14-Dip	.55	.44	.33
DM74LS08M-ND	Quad 2-Input AND Gate	SO-14	.53	.40	.30
DM74LS08N-ND	Quad 2-Input AND Gate	14-Dip	.55	.44	.33
DM74LS09N-ND	Quad 2-Input AND Gate with Open-Collect Outputs	14-Dip	.53	.40	.30
DM74LS10N-ND	Triple 3-Input NAND Gate	14-Dip	.55	.44	.33
DM74LS11N-ND	Triple 3-Input AND Gate	14-Dip	.55	.44	.33
DM74ALS11AM-ND	Triple 3-Input AND Gate	SO-14	.50	.40	.30
DM74LS14M-ND	Hex Schmitt Trigger Inverter	SO-14	.48	.37	.28
DM74LS14N-ND	Hex Schmitt Trigger Inverter	14-Dip	.48	.37	.28
DM74LS20N-ND	Dual 4-Input NAND Gate	14-Dip	.55	.44	.33
DM74LS27N-ND	Triple 3-Input NOR Gate	14-Dip	.55	.44	.33
DM74LS30N-ND	8-Input NAND Gate	14-Dip	.55	.44	.33
DM74LS32M-ND	Quad 2-Input OR Gate	SO-14	.55	.44	.33
DM74LS32N-ND	Quad 2-Input OR Gate	14-Dip	.55	.44	.33
DM74LS38N-ND	Quad 2-Input NAND Buffer w/Open-Collect Outputs	14-Dip	.48	.37	.28
DM74LS73AN-ND	Dual JK M/S Flip Flop	14-Dip	.57	.43	.33
DM74LS74AM-ND	Dual D-Type Positive-Edge-Triggered Flip Flop with Preset and Reset	SO-14	.48	.37	.28
DM74LS74AN-ND	Dual D-Type Positive-Edge-Triggered Flip Flop with Preset and Reset	14-Dip	.48	.37	.28
DM74LS75N-ND	Quad Latch	16-Dip	.53	.40	.30
DM74LS83AN-ND	4-Bit Binary Full Adder	16-Dip	.53	.40	.30
DM74LS85N-ND	4-Bit Magnitude Comparator	16-Dip	.53	.40	.30
DM74LS86N-ND	Quad 2-Input Exclusive OR Gate	14-Dip	.53	.40	.30
DM74LS90N-ND	Decade Counter	14-Dip	.66	.50	.38
DM74LS109AN-ND	Dual JK Flip Flop	16-Dip	.53	.40	.30
DM74LS112AN-ND	Dual JK Flip Flop	16-Dip	.57	.43	.33
DM74LS123M-ND	Dual Monostable Multivibrator	SO-16	.57	.43	.33
DM74LS123N-ND	Dual Monostable Multivibrator	16-Dip	.57	.43	.33
DM74LS125AM-ND	Tri-State Quad Buffer	SO-14	.57	.43	.33
DM74LS125AN-ND	Tri-State Quad Buffer	14-Dip	.57	.43	.33
DM74LS126AN-ND	Tri-State Quad Buffer	14-Dip	.57	.43	.33
DM74LS132N-ND	Quad 2-Input NAND Schmitt Trigger	14-Dip	.57	.43	.33
DM74LS138M-ND	Expandable 3/8 Decoder	SO-16	.62	.47	.35
DM74LS138N-ND	Expandable 3/8 Decoder	16-Dip	.62	.47	.35
DM74LS139N-ND	Expandable 2/4 Decoder	16-Dip	.62	.47	.35
DM74LS151N-ND	8-Channel Multiplexer	16-Dip	.62	.47	.35
DM74LS153N-ND	Dual 4-to-1 Multiplexer	16-Dip	.66	.50	.38
DM74LS154N-ND	4-to-16 Decoder/Demultiplexer	24-Dip	4.21	3.37	2.62
DM74LS155N-ND	Dual 2-to-4 Decoder/Demultiplexer	16-Dip	.62	.47	.35
DM74LS156M-ND	Dual 2-to-4 Decoder/Demultiplexer	SO-16	.62	.47	.35
DM74LS156N-ND	Dual 2-to-4 Decoder/Demultiplexer	16-Dip	.62	.47	.35
DM74LS157N-ND	Quad 2-Input Multiplexer	16-Dip	.62	.47	.35
DM74LS161AM-ND	Presettable Binary Counter	SO-16	.62	.47	.35
DM74LS161AN-ND	Presettable Binary Counter	16-Dip	.62	.47	.35
DM74LS163AN-ND	4-Bit Binary Counter, Synchronous	16-Dip	.62	.47	.35
DM74LS164N-ND	8-Bit Parallel Out Shift Register	14-Dip	.62	.47	.35
DM74LS165N-ND	8-Bit Parallel In/Serial Out Shift Register	16-Dip	.62	.47	.35
DM74LS169N-ND	Up/Down Binary Counter	16-Dip	.62	.47	.35
DM74LS174M-ND	Hex D-Type Flip Flop	SO-16	.62	.47	.35
DM74LS174N-ND	Hex D-Type Flip Flop	16-Dip	.62	.47	.35
DM74LS175N-ND	Quad D-Type Flip Flop	16-Dip	.66	.50	.38
DM74LS191N-ND	Up/Down Binary Counter	16-Dip	.92	.70	.52
DM74LS221N-ND	Dual Monostable with Schmitt Trigger Input	16-Dip	.66	.50	.38
DM74LS240N-ND	Tri-State Octal Inverter Bus/Line Driver	20-Dip	.73	.55	.41

(Continued)

FAIRCHILD SEMICONDUCTOR

74LS00 SERIES *(Continued)*

Digi-Key			Price Each★		
Part No.	Description	Pkg.	1	25	100
DM74LS241N-ND	Tri-State Octal Line Driver	20-Dip	.73	.55	.41
DM74LS244N-ND	Tri-State Octal Line Driver	20-Dip	.73	.55	.41
DM74LS244WM-ND	Tri-State Octal Line Driver	SO-20	.73	.55	.41
DM74LS245N-ND	Tri-State Octal Bus Transceiver	20-Dip	.73	.55	.41
DM74LS245WM-ND	Tri-State Octal Bus Transceiver	SO-20	.73	.55	.41
DM74LS251N-ND	Tri-State 8-Input Multiplexer	16-Dip	.70	.53	.40
DM74LS253N-ND	Tri-State Dual 4-Input Multiplexer	16-Dip	.70	.53	.40
DM74LS259N-ND	8-Bit Addressable Latch	16-Dip	.70	.53	.40
DM74LS273N-ND	Octal D-Type Flip Flop with Reset	20-Dip	.73	.55	.41
DM74LS273WM-ND	Octal D-Type Flip Flop with Reset	SO-20	.73	.55	.41
DM74LS279N-ND	Quad SR Latch	16-Dip	.84	.63	.48
DM74LS283N-ND	4-Bit Binary Adder	16-Dip	.84	.63	.48
DM74LS365AN-ND	Tri-State Hex Buffer	16-Dip	.73	.55	.41
DM74LS367AN-ND	Tri-State Hex Buffer	16-Dip	.73	.55	.41
DM74LS373N-ND	Octal D-Type Latch	20-Dip	.73	.55	.41
DM74LS373WM-ND	Octal D-Type Latch	SO-20	.73	.55	.41
DM74LS374N-ND	Tri-State Octal D-Type Flip Flop	20-Dip	.73	.55	.41
DM74LS374WM-ND	Tri-State Octal D-Type Flip Flop	SO-20	.73	.55	.41
DM74LS377N-ND	8-Bit D-Type Flip Flop	20-Dip	.92	.70	.52
DM74LS393M-ND	Dual 4-Bit Binary Counter	SO-14	.84	.63	.48
DM74LS393N-ND	Dual 4-Bit Binary Counter	14-Dip	.84	.63	.48
DM74LS503N-ND	8-Bit Successive Approximation Register	16-Dip	7.11	5.69	4.80
DM74LS573N-ND	Octal D-Type Latch with Tri-State Outputs	20-Dip	2.37	1.90	1.42
DM74LS574N-ND	Octal D-Type Flip Flop with Tri-State Outputs	20-Dip	2.37	1.90	1.42
DM81LS95AN-ND	Tri-State Octal Buffer	20-Dip	3.71	2.97	2.31
DM81LS96AN-ND	Tri-State Octal Inverter	20-Dip	3.71	2.97	2.31
DM81LS97AN-ND	Tri-State Octal Buffer	20-Dip	3.71	2.97	2.31
DM96L02N-ND	Dual Retriggered Monostable Multivibrator	16-Dip	3.71	2.97	2.31

FAIRCHILD SEMICONDUCTOR

74S00 SERIES SCHOTTKY TTL

Digi-Key			Price Each★		
Part No.	Description	Pkg.	1	25	100
DM74S00N-ND	Quad 2-Input NAND Gate	14-Dip	.79	.60	.45
DM74S04N-ND	Hex Inverter	14-Dip	.79	.60	.45
DM74S05N-ND	Hex Inverter with Open-Collect Outputs	14-Dip	.79	.60	.45
DM74S08N-ND	Quad 2-Input AND Gate	14-Dip	.79	.60	.45
DM74S10N-ND	Triple 3-Input NAND Gate	14-Dip	.66	.50	.38
DM74S30N-ND	8-Input NAND Gate	14-Dip	.66	.50	.38
DM74S32N-ND	Quad 2-Input OR Gate	14-Dip	.79	.60	.45
DM74S51N-ND	Dual 2-Input AND-OR-INV Gate	14-Dip	.75	.57	.43
DM74S64N-ND	AND-OR-INV Gate	14-Dip	1.17	.96	.81
DM74S74N-ND	Dual D-Type Positive-Edge-Triggered Flip Flop with Preset and Clear	14-Dip	.88	.66	.50
DM74S133N-ND	13 Input NAND Gate	16-Dip	.83	.69	.55
DM74S138N-ND	Expandable 3/8 Decoder	16-Dip	.99	.83	.66
DM74S140N-ND	Dual 50 Ohm Line Driver	14-Dip	.99	.83	.66
DM74S153N-ND	Dual 4-Input Multiplexer	16-Dip	.94	.78	.63
DM74S157N-ND	Quad 2-Input Multiplexer	16-Dip	.94	.78	.63
DM74S158N-ND	Quad 2-Input Multiplexer, Inverting	16-Dip	1.17	.96	.81
DM74S175N-ND	Quad D-Type Flip Flop	16-Dip	.99	.83	.66
DM74S182N-ND	Look-Ahead Carry Generators	16-Dip	2.46	1.97	1.53
DM74S244N-ND	Tri-State Octal Line Driver	20-Dip	1.79	1.43	1.08
DM74S253N-ND	Tri-State Dual 4-Input Multiplexer (74S153N)	16-Dip	1.17	.96	.81
DM74S283N-ND	4-Bit Binary Adder	16-Dip	3.96	3.17	2.47
DM74S941N-ND	Tri-State Octal Buffer	20-Dip	3.64	2.94	2.38
DM96S02N-ND	Dual Retriggerable Monostable Multivibrator	16-Dip	5.57	4.46	3.47

FAIRCHILD SEMICONDUCTOR

74ALS SERIES

Digi-Key			Price Each★		
Part No.	Description	Pkg.	1	25	100
DM74ALS00AM-ND	Quad 2-Input NAND Gate	SO-14	.50	.40	.30
DM74ALS00AN-ND	Quad 2-Input NAND Gate	14-Dip	.50	.40	.30
DM74ALS04BM-ND	Hex Inverter	SO-14	.50	.40	.30
DM74ALS04BN-ND	Hex Inverter	14-Dip	.50	.40	.30
DM74ALS05AN-ND	Hex Inverter with Open-Collect Outputs	14-Dip	.50	.40	.30
DM74ALS08N-ND	Quad 2-Input AND Gate	14-Dip	.50	.40	.30
DM74ALS10AM-ND	Triple 3-Input NAND Gate	SO-14	.47	.38	.29
DM74ALS10AN-ND	Triple 3-Input NAND Gate	14-Dip	.47	.38	.29
DM74ALS11AM-ND	Triple 3-Input AND Gate	SO-14	.50	.40	.30
DM74ALS11AN-ND	Triple 3-Input AND Gate	14-Dip	.47	.38	.29
DM74ALS14M-ND	Hex Schmitt Trigger Inverter	SO-14	2.01	1.61	1.21
DM74ALS14N-ND	Hex Schmitt Trigger Inverter	14-Dip	2.01	1.61	1.21
DM74ALS20AN-ND	Dual 4-Input NAND Gate	14-Dip	.47	.38	.29
DM74ALS30AN-ND	8-Input NAND Gate	14-Dip	.47	.38	.29
DM74ALS32M-ND	Quad 2-Input OR Gate	SO-14	.50	.40	.30
DM74ALS32N-ND	Quad 2-Input OR Gate	14-Dip	.50	.40	.30
DM74ALS74AM-ND	Dual D-Type Positive-Edge-Triggered Flip Flop with Preset and Clear	SO-14	.55	.44	.33
DM74ALS74AN-ND	Dual D-Type Positive-Edge-Triggered Flip Flop with Preset and Clear	14-Dip	.55	.44	.33
DM74ALS125M-ND	Tri-State Quad Buffer	SO-14	1.51	1.21	.91
DM74ALS125N-ND	Tri-State Quad Buffer	14-Dip	1.51	1.21	.91
DM74ALS133M-ND	13-Input NAND Gate	SO-16	.62	.47	.35
DM74ALS138M-ND	Expandable 3/8 Decoder	SO-16	.62	.47	.35
DM74ALS138N-ND	Expandable 3/8 Decoder	16-Dip	.62	.47	.35
DM74ALS161BN-ND	Presettable Binary Counter	16-Dip	.62	.47	.35
DM74ALS163BN-ND	4-Bit Binary Counter Synchronous	16-Dip	.75	.57	.43
DM74ALS174N-ND	Hex D-Type Flip Flop	16-Dip	.71	.54	.40
DM74ALS241AN-ND	Tri-State Octal Line Driver	20-Dip	.73	.55	.41
DM74ALS244AN-ND	Tri-State Octal Line Driver	20-Dip	.73	.55	.41
DM74ALS244AWM-ND	Tri-State Octal Line Driver	SO-20	.73	.55	.41
DM74ALS245AN-ND	Tri-State Octal Bus Transceiver	20-Dip	.73	.55	.41
DM74ALS245AWM-ND	Tri-State Octal Bus Transceiver	SO-20	.73	.55	.41
DM74ALS253N-ND	Tri-State Dual 4-Input Multiplexer	16-Dip	.66	.50	.38
DM74ALS257M-ND	Tri-State Quad 2/1 Multiplexer	SO-16	.62	.47	.35
DM74ALS258N-ND	Tri-State Quad 2/1 Multiplexer	16-Dip	1.01	.84	.71
DM74ALS273N-ND	Octal D-Type Flip Flop with Reset	20-Dip	.73	.55	.41
DM74ALS373N-ND	Octal D-Type Latch	20-Dip	.73	.55	.41
DM74ALS373WM-ND	Octal D-Type Latch	SO-20	.73	.55	.41
DM74ALS374N-ND	Tri-State Octal D-Type Flip Flop	20-Dip	.73	.55	.41

Digi-Key			Price Each★		
Part No.	Description	Pkg.	1	25	100
DM74ALS520N-ND	8-Bit Identity Comparator	20-Dip	1.16	.97	.77
DM74ALS520WM-ND	8-Bit Identity Comparator	SO-20	1.16	.97	.77
DM74ALS521N-ND	8-Bit Identity Comparator	20-Dip	1.16	.97	.77
DM74ALS521WM-ND	8-Bit Identity Comparator	SO-20	1.16	.97	.77
DM74ALS540AN-ND	Octal Inverting Buffer and Line Driver	20-Dip	.94	.79	.63
DM74ALS541N-ND	Octal Buffer/Line Driver with Tri-State Outputs	20-Dip	.94	.79	.63
DM74ALS541WM-ND	Octal Buffer/Line Driver with Tri-State Outputs	SO-20	.94	.79	.63
DM74ALS563AWM-ND	Octal D-Type Latch	SO-20	1.06	.88	.71
DM74ALS574AN-ND	Octal D-Type Flip Flop	20-Dip	.79	.60	.45
DM74ALS574AWM-ND	Octal D-Type Flip Flop	SO-20	.79	.60	.45
DM74ALS580AN-ND	Octal D-Type Transparent Latch	20-Dip	2.48	1.95	1.58
DM74ALS640AN-ND	Inverting Octal Bus Transceiver	20-Dip	1.09	.91	.73
DM74ALS640AWM-ND	Inverting Octal Bus Transceiver	SO-20	1.09	.91	.73
DM74ALS645AN-ND	Tri-State Octal Bus Transceiver	20-Dip	.86	.72	.58
DM74ALS645AWM-ND	Tri-State Octal Bus Transceiver	SO-20	.86	.72	.58
DM74ALS646NT-ND	Tri-State Octal Bus Transceiver	24-Dip .3”	2.42	1.94	1.46
DM74ALS646WM-ND	Tri-State Octal Bus Transceiver	SO-24	2.42	1.94	1.46
DM74ALS648NT-ND	Octal Bus Transceiver	24-Dip .3”	5.59	4.52	3.66
DM74ALS652WM-ND	Octal Bus Transceiver	SO-24	2.42	1.94	1.46
DM74ALS1000AN-ND	Quad 2-Input NAND Driver	14-Dip	2.38	1.88	1.52
DM74ALS5245N-ND	Octal Bus Transceiver with Schmitt Trigger	20-Dip	1.69	1.36	1.02
DM74ALS5245WM-ND	Octal Bus Transceiver with Schmitt Trigger	SO-20	1.69	1.36	1.02

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74AS SERIES

Digi-Key			Price Each★		
Part No.	Description	Pkg.	1	25	100
DM74AS00M-ND	Quad 2-Input NAND Gate	SO-14	.70	.53	.40
DM74AS00N-ND	Quad 2-Input NAND Gate	14-Dip	.70	.53	.40
DM74AS02N-ND	Quad 2-Input NOR Gate	14-Dip	.92	.76	.64
DM74AS04M-ND	Hex Inverter	SO-14	.70	.53	.40
DM74AS04N-ND	Hex Inverter	14-Dip	.70	.53	.40
DM74AS08M-ND	Quad 2-Input AND Gate	SO-14	.66	.50	.38
DM74AS08N-ND	Quad 2-Input AND Gate	14-Dip	.66	.50	.38
DM74AS10M-ND	Triple 3-Input NAND Gate	SO-14	.66	.50	.38
DM74AS10N-ND	Triple 3-Input NAND Gate	14-Dip	.66	.50	.38
DM74AS20N-ND	Dual 4-Input NAND Gate	14-Dip	.92	.76	.64
DM74AS27N-ND	Triple 3-Input NOR Gate	14-Dip	.83	.69	.58
DM74AS30N-ND	8-Input NAND Gate	14-Dip	.75	.57	.43
DM74AS74N-ND	Dual D-Type Positive-Edge-Triggered Flip Flop with Preset and Clear	14-Dip	.84	.63	.48
DM74AS158N-ND	Quad 2-Input Multiplexer, Inverting	16-Dip	1.56	1.28	1.08
DM74AS245WM-ND	Tri-State Octal Bus Transceiver	SO-20	1.79	1.43	1.08
DM74AS257N-ND	Tri-State Quad 2/1 Multiplexer	16-Dip	1.25	1.04	.84
DM74AS258M-ND	Tri-State Quad 2/1 Multiplexer	SO-16	1.25	1.04	.84
DM74AS258N-ND	Tri-State Quad 2/1 Multiplexer	16-Dip	1.56	1.28	1.08
DM74AS280N-ND	9-Bit Parity Generator	14-Dip	1.76	1.44	1.22
DM74AS286M-ND	9-Bit Parity Generator/Checker	SO-14	1.40	1.17	.94
DM74AS286N-ND	9-Bit Parity Generator/Checker	14-Dip	1.40	1.17	.94
DM74AS373N-ND	Octal D-Type Latch	20-Dip	1.56	1.25	.94
DM74AS373WM-ND	Octal D-Type Latch	SO-20	1.56	1.25	.94
DM74AS374N-ND	Octal D-Type Flip Flop with Tri-State Outputs	20-Dip	1.79	1.43	1.08
DM74AS374WM-ND	Tri-State Octal D-Type Flip Flop	SO-20	1.56	1.25	.94
DM74AS573WM-ND	Octal D-Type Latch with Tri-State Outputs	SO-20	1.87	1.50	1.13
DM74AS640N-ND	Inverting Octal Bus Transceiver	20-Dip	2.39	1.92	1.44
DM74AS645N-ND	Octal Tri-State Bus Transceiver	20-Dip	3.12	2.52	2.04
DM74AS646WM-ND	Octal Tri-State Bus Transceiver	SO-24	5.07	4.06	3.16
DM74AS648NT-ND	Octal Bus Transceiver	24-Dip .3”	5.33	4.31	3.49
DM74AS804BN-ND	Hex 2-Input NAND Driver	20-Dip	2.42	1.94	1.46
DM74AS1000AM-ND	Quad 2-Input NAND Driver	SO-14	1.25	1.04	.84
DM74AS1000AN-ND	Quad 2-Input NAND Driver	14-Dip	1.25	1.04	.84
DM74AS1032AN-ND	Quad 2-Input OR Driver	14-Dip	1.25	1.04	.84
DM74AS1034AM-ND	Hex Non-Inverting Driver	SO-14	1.32	1.10	.88
DM74AS1804N-ND	Hex 2-Input NAND Line Driver	20-Dip	2.60	2.08	1.62

FAIRCHILD SEMICONDUCTOR

74LCX SERIES

Digi-Key			Price Each★		
Part No.	Description	Pkg.	1	25	100
74LCX16244MEA-ND	16-Bit Buffer/Line Driver	48-SSOP	1.65	1.32	.99
74LCX16244MTD-ND	16-Bit Buffer/Line Driver	48-TSSOP	1.38	1.10	.83
74LCX16245MEA-ND	16-Bit Bidirectional Transceiver	48-SSOP	1.65	1.32	.99
74LCX16245MTD-ND	16-Bit Bidirectional Transceiver	48-TSSOP	1.38	1.10	.83
74LCX16373MEA-ND	16-Bit Transparent Latch with Tri-State Outputs	48-SSOP	1.65	1.32	.99
74LCX574WM-ND	Octal D-Type Flip Flop	SO-20	.79	.60	.45
74LCX646WM-ND	Tri-State Octal Bus Transceiver	SO-24	2.01	1.61	1.21

FAIRCHILD SEMICONDUCTOR

74LVQ SERIES

Digi-Key			Price Each★		
Part No.	Description	Pkg.	1	25	100
74LVQ00SC-ND	Low Voltage Quad 2-Input NAND Gate	SO-14	.97	.73	.55
74LVQ02SC-ND	Low Voltage Quad 2-Input NOR Gate	SO-14	.97	.73	.55
74LVQ04SC-ND	Low Voltage Hex Inverter	SO-14	.97	.73	.55
74LVQ08SC-ND	Low Voltage Quad 2-Input AND Gate	SO-14	.97	.73	.55
74LVQ14SC-ND	Low Voltage Hex Schmitt Trigger	SO-14	.97	.73	.55
74LVQ32SC-ND	Low Voltage Quad 2-Input OR Gate	SO-14	.97	.73	.55
74LVQ74SC-ND	Low Voltage Dual D-Type Positive-Edge-Trigger Flip Flop with Preset and Clear	SO-14	.89	.75	.60
74LVQ86SC-ND	Low Voltage Quad 2-Input Exclusive OR Gate	SO-14	1.06	.88	.71
74LVQ138SC-ND	Low Voltage Expandable 3/8 Decoder	SO-16	1.25	1.05	.84
74LVQ151SC-ND	Low Voltage 8-Input Multiplexer	SO-16	1.25	1.05	.84
74LVQ174SC-ND	Low Voltage Hex D-Type Flip Flop with Master Reset	SO-16	1.25	1.05	.84
74LVQ240QSC-ND	Tri-State Octal Inverter Bus/Line Driver	20-SSOP	2.31	1.82	1.47
74LVQ241SC-ND	Tri-State Low Voltage Octal Bus/Line Driver	SO-20	1.51	1.21	.91
74LVQ244SC-ND	Tri-State Low Voltage Octal Bus/Line Driver	SO-20	1.51	1.21	.91
74LVQ245SC-ND	Low Voltage Tri-State Octal Bidirectional Transceiver	SO-20	1.51	1.21	.91
74LVQ273SC-ND	Low Voltage Octal D-Type Flip Flop	SO-20	1.51	1.21	.91
74LVQ373SC-ND	Low Voltage Tri-State Octal D-Type Latch	SO-20	1.51	1.21	.91
74LVQ374SC-ND	Low Voltage Tri-State Octal D-Type Flip Flop	SO-20	1.51	1.21	.91
74LVQ573SC-ND	Low Voltage Tri-State Octal D-Type Latch	SO-20	1.51	1.21	.91

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74LVX SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
74LVX125M-ND	Quad Buffer with Tri-State Outputs	SO-14	.48	.37	.28
74LVX174M-ND	Hex D-Type Flip Flop with Master Reset	SO-16	.75	.57	.43
74LVX240M-ND	Tri-State Octal Line Bus/Line Driver	SO-20	.66	.50	.38
74LVX244M-ND	3V CMOS Octal Tri-State Buffer	SO-20	.66	.50	.38
74LVX245M-ND	Low Voltage Octal Bidirectional Transceiver	SO-20	.66	.50	.38
74LVX273M-ND	Octal D-Type Flip Flop	SO-20	.66	.50	.38
74LVX373M-ND	Tri-State Octal D-Type Latch	SO-20	.66	.50	.38
74LVX573M-ND	Tri-State Octal D-Type Latch	SO-20	.79	.60	.45
74LVX74M-ND	Dual D-Type Positive-Edge-Triggered Flip Flop	SO-14	.52	.42	.32
74LVX86M-ND	Quad 2-Input Exclusive OR Gate	SO-14	.52	.42	.32

74C00 SERIES CMOS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MM74C00N-ND	Quad 2-Input NAND Gate	14-Dip	1.49	1.20	.90
MM74C02N-ND	Quad 2-Input NOR Gate	14-Dip	1.49	1.20	.90
MM74C04N-ND	Hex Inverter (4069)	14-Dip	1.49	1.20	.90
MM74C08N-ND	Quad 2-Input AND Gate	14-Dip	1.49	1.20	.90
MM74C14M-ND	Hex Schmitt Trigger Inverter	SO-14	.83	.69	.55
MM74C14N-ND	Hex Schmitt Trigger Inverter (40106B)	14-Dip	.83	.69	.55
MM74C32N-ND	Quad 2-Input OR Gate	14-Dip	1.49	1.19	.90
MM74C42N-ND	BCD-to-Decimal Decoder	16-Dip	3.29	2.64	2.05
MM74C48N-ND	BCD-to-7 Segment Decoder	16-Dip	2.97	2.38	1.85
MM74C73N-ND	Dual JK Flip Flop with Clear	14-Dip	2.20	1.76	1.32
MM74C74M-ND	Dual D-Type Flip Flop	SO-14	2.09	1.67	1.26
MM74C74N-ND	Dual D-Type Flip Flop	14-Dip	2.09	1.67	1.26
MM74C76N-ND	Dual JK Flip Flop with Clear and Preset	16-Dip	2.20	1.76	1.32
MM74C85N-ND	4-Bit Magnitude Comparator	16-Dip	4.21	3.37	2.62
MM74C89N-ND	64-Bit (16x4) RAM Tri-State	16-Dip	4.83	3.87	3.01
MM74C90N-ND	Decade Counter	14-Dip	2.43	1.95	1.51
MM74C93N-ND	4-Bit Binary Counter	14-Dip	2.97	2.38	1.85
MM74C150N-ND	16-to-1 Multiplexer	24-Dip	5.57	4.46	3.47
MM74C154N-ND	4-to-16 Decoder/Demultiplexer	24-Dip	5.85	4.69	3.96
MM74C157N-ND	Quad 2-Input Multiplexer	16-Dip	4.41	3.53	2.75
MM74C164N-ND	8-Bit Parallel Out Shift Register	14-Dip	3.09	2.48	1.93
MM74C165N-ND	8-Bit Parallel-Load Shift Register	16-Dip	2.43	1.95	1.51
MM74C193N-ND	Up/Down Binary Counter (40193B)	16-Dip	1.82	1.46	1.09
MM74C221N-ND	Dual Monostable with Schmitt Trigger	16-Dip	4.53	3.63	2.82
MM74C240N-ND	Tri-State Octal Buffer	20-Dip	4.38	3.51	2.73
MM74C244N-ND	Tri-State Octal Buffer	20-Dip	4.38	3.51	2.73
MM74C373N-ND	Tri-State Octal Flow-Through Latch	20-Dip	4.28	3.43	2.67
MM74C374N-ND	Tri-State Octal D-Type Flip Flop	20-Dip	4.28	3.43	2.67
MM74C901N-ND	Hex Inverting TTL Buffer	14-Dip	2.34	1.87	1.41
MM74C902N-ND	Hex TTL Buffer	14-Dip	2.55	2.04	1.59
MM74C906M-ND	Hex Open Drain Buffer	SO-14	2.37	1.90	1.42
MM74C906N-ND	Open Drain Buffer (Active Pull Down)	14-Dip	2.37	1.90	1.42
MM74C907N-ND	Open Drain Buffer (Active Pull High)	14-Dip	2.34	1.87	1.41
MM74C908N-ND	Dual CMOS 30 Volt Driver	8-Dip	3.22	2.58	2.01
MM74C911N-ND	Display Controller	28-Dip	12.19	10.98	9.73
MM74C912N-ND	Display Controller	28-Dip	12.19	10.98	9.73
MM74C914N-ND	Hex Schmitt Trigger with Ext. Input Volt.	14-Dip	3.47	2.78	2.16
MM74C922N-ND	16-Key Encoder	18-Dip	6.82	5.46	4.61
MM74C923N-ND	20-Key Encoder	20-Dip	6.82	5.46	4.61
MM74C925N-ND	4-Digit Counter with 7-Segment Output Driver	16-Dip	9.55	7.64	6.45
MM74C926N-ND	4-Digit Counter with 7-Segment Output Driver	18-Dip	9.71	8.75	7.76
MM74C928N-ND	4-Digit Counter with 7-Segment Output Driver	18-Dip	9.02	7.22	6.09
MM88C30N-ND	CMOS Dual Line Driver	14-Dip	5.50	4.40	3.72

74HC00 SERIES CMOS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MM74HC00M-ND	Quad 2-Input NAND Gate	SO-14	.44	.36	.27
MM74HC00N-ND	Quad 2-Input NAND Gate	14-Dip	.44	.36	.27
MM74HC02M-ND	Quad 2-Input NOR Gate	SO-14	.44	.36	.27
MM74HC02N-ND	Quad 2-Input NOR Gate	14-Dip	.44	.36	.27
MM74HC04M-ND	Hex Inverter	SO-14	.44	.36	.27
MM74HC04N-ND	Hex Inverter	14-Dip	.44	.36	.27
MM74HC08M-ND	Quad 2-Input AND Gate	SO-14	.44	.36	.27
MM74HC08N-ND	Quad 2-Input AND Gate	14-Dip	.44	.36	.27
MM74HC14M-ND	Hex Schmitt Trigger Inverter	SO-14	.50	.40	.30
MM74HC14N-ND	Hex Schmitt Trigger Inverter	14-Dip	.50	.40	.30
MM74HC32M-ND	Quad 2-Input OR Gate	SO-14	.44	.36	.27
MM74HC32N-ND	Quad 2-Input OR Gate	14-Dip	.44	.36	.27
MM74HC74AM-ND	Dual D-Type Flip Flop with Preset and Clear	SO-14	.50	.40	.30
MM74HC74AN-ND	Dual D-Type Flip Flop with Preset and Clear	14-Dip	.50	.40	.30
MM74HC86N-ND	Quad 2-Input Exclusive OR Gate	14-Dip	.50	.40	.30
MM74HC123AM-ND	Dual Monostable Multivibrator	SO-16	.48	.37	.28
MM74HC123AN-ND	Dual Monostable Multivibrator	16-Dip	.48	.37	.28
MM74HC125N-ND	Tri-State Quad Buffer	14-Dip	.48	.37	.28
MM74HC126M-ND	Tri-State Quad Buffer	SO-14	.48	.37	.28
MM74HC126N-ND	Tri-State Quad Buffer	14-Dip	.48	.37	.28
MM74HC132M-ND	Quad 2-Input NAND Schmitt Trigger	SO-14	.48	.37	.28
MM74HC132N-ND	Quad 2-Input NAND Schmitt Trigger	14-Dip	.48	.37	.28
MM74HC138M-ND	3-to-8 Line Decoder	SO-16	.53	.40	.30
MM74HC138N-ND	3-to-8 Line Decoder	16-Dip	.53	.40	.30
MM74HC139M-ND	Dual 2-to-4 Line Decoder	SO-16	.53	.40	.30
MM74HC139N-ND	Dual 2-to-4 Line Decoder	16-Dip	.53	.40	.30
MM74HC151N-ND	8-Channel Multiplexer	16-Dip	.53	.40	.30
MM74HC154N-ND	4-to-16 Line Decoder (.3" Lead Spacing)	24-Dip	1.32	1.10	.88
MM74HC154WM-ND	4-to-16 Line Decoder	SO-24	1.32	1.10	.88
MM74HC157N-ND	Quad 2-Input Multiplexer	16-Dip	.53	.40	.30
MM74HC161M-ND	Sync. Binary Counter with Asynchronous Clear	SO-16	.57	.43	.33
MM74HC161N-ND	Sync. Binary Counter with Asynchronous Clear	16-Dip	.57	.43	.33
MM74HC163N-ND	Sync. Binary Counter with Synchronous Clear	16-Dip	.57	.43	.33
MM74HC164N-ND	8-Bit Serial-In Parallel-Out Shift Register	14-Dip	.57	.43	.33
MM74HC165M-ND	8-Bit Parallel-In Serial-Out Shift Register	SO-16	.57	.43	.33
MM74HC165N-ND	8-Bit Parallel-In Serial-Out Shift Register	16-Dip	.57	.43	.33
MM74HC174M-ND	Hex D-Type Flip Flop with Clear	SO-16	.57	.43	.33
MM74HC174N-ND	Hex D-Type Flip Flop with Clear	16-Dip	.57	.43	.33
MM74HC175N-ND	Quad D-Type Flip Flop with Clear	16-Dip	.57	.43	.33
MM74HC221AM-ND	Dual Non-Retriggered Monostable Multivibrator	SO-16	.75	.57	.43
MM74HC221AN-ND	Dual Non-Retriggered Monostable Multivibrator	16-Dip	.75	.57	.43
MM74HC240N-ND	Tri-State Octal Inverter Bus/Line Driver	20-Dip	.62	.47	.35
MM74HC244N-ND	Tri-State Octal Line Driver	20-Dip	.62	.47	.35
MM74HC244WM-ND	Tri-State Octal Line Driver	SO-20	.62	.47	.35
MM74HC245AN-ND	Tri-State Octal Bus Transceiver	20-Dip	.62	.47	.35
MM74HC245AWM-ND	Tri-State Octal Bus Transceiver	SO-20	.62	.47	.35
MM74HC251N-ND	8-Channel Tri-State Multiplexer	16-Dip	.53	.40	.30
MM74HC259M-ND	8-Bit Addressable Latch/3-to-8 Line Decoder	SO-16	.53	.40	.30
MM74HC259N-ND	8-Bit Addressable Latch/3-to-8 Line Decoder	16-Dip	.53	.40	.30
MM74HC373N-ND	Tri-State Octal D-Type Latch	20-Dip	.62	.47	.35
MM74HC373WM-ND	Tri-State Octal D-Type Latch	SO-20	.62	.47	.35
MM74HC374N-ND	Tri-State Octal D-Type Flip Flop	20-Dip	.62	.47	.35
MM74HC374WM-ND	Tri-State Octal D-Type Flip Flop	SO-20	.62	.47	.35
MM74HC393M-ND	Dual 4-Bit Binary Counter	SO-14	.70	.53	.40
MM74HC393N-ND	Dual 4-Bit Binary Counter	14-Dip	.70	.53	.40
MM74HC423AN-ND	Dual Monostable Multivibrator	16-Dip	.79	.60	.45
MM74HC540N-ND	Octal Inverting Buffer and Line Driver	20-Dip	.73	.55	.41
MM74HC541N-ND	Tri-State Octal Buffer/Line Driver	20-Dip	.73	.55	.41
MM74HC573N-ND	Tri-State Octal D-Type Latch	20-Dip	.66	.50	.38
MM74HC573WM-ND	Tri-State Octal D-Type Latch	SO-20	.66	.50	.38
MM74HC574N-ND	Tri-State Octal D-Type Flip Flop	20-Dip	.66	.50	.38
MM74HC574WM-ND	Tri-State Octal D-Type Flip Flop	SO-20	.66	.50	.38
MM74HC595M-ND	8-Bit Shift Register with Output Latches	SO-16	.62	.47	.35
MM74HC595N-ND	8-Bit Shift Register with Output Latches	16-Dip	.62	.47	.35
MM74HC597N-ND	8-Bit Shift Register	16-Dip	.62	.47	.35
MM74HC688N-ND	8-Bit Magnitude Comparator (Equality Detector)	20-Dip	.79	.60	.45
MM74HC4020N-ND	14 Stage Binary Counter	16-Dip	.62	.47	.35
MM74HC4040M-ND	12 Stage Binary Counter	SO-16	.62	.47	.35
MM74HC4040N-ND	12 Stage Binary Counter	16-Dip	.62	.47	.35
MM74HC4046M-ND	CMOS Phase Lock Loop	SO-16	.62	.47	.35
MM74HC4046N-ND	CMOS Phase Lock Loop	16-Dip	.62	.47	.35
MM74HC4049N-ND	Hex Inverting Logic Level Down Converter	16-Dip	.62	.47	.35
MM74HC4051M-ND	8-Channel Analog Multiplexer	SO-16	.62	.47	.35
MM74HC4051N-ND	8-Channel Analog Multiplexer	16-Dip	.62	.47	.35
MM74HC4051WM-ND	8-Channel Analog Multiplexer	SO-16	.62	.47	.35
MM74HC4052N-ND	Dual 4-Channel Analog Multiplexer	16-Dip	.62	.47	.35
MM74HC4053M-ND	Triple 2-Channel Analog Multiplexer	SO-16	.62	.47	.35
MM74HC4053N-ND	Triple 2-Channel Analog Multiplexer	16-Dip	.62	.47	.35
MM74HC4053WM-ND	Triple 2-Channel Analog Multiplexer	SO-16	.62	.47	.35
MM74HC4060N-ND	14 Stage Binary Counter	16-Dip	.62	.47	.35
MM74HC4066N-ND	Quad Analog Switch	14-Dip	.62	.47	.35
MM74HC4316N-ND	Quad Analog Switch	16-Dip	.62	.47	.35
MM74HC4316WM-ND	Quad Analog Switch	SO-16	.62	.47	.35
MM74HC4514N-ND	4-to-16 Line Decoder with Latch (.3" Lead Spacing)	24-Dip	1.25	1.05	.84
MM74HC4538N-ND	Dual Retriggered Monostable Multivibrator	16-Dip	.66	.50	.38

74HCT00 SERIES CMOS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MM74HCT04N-ND	Hex Inverter	14-Dip	.44	.36	.27
MM74HCT74N-ND	Dual D-Type Flip Flop with Preset and Clear	14-Dip	.50	.40	.30
MM74HCT244N-ND	Tri-State Octal Buffer	20-Dip	.62	.47	.35
MM74HCT244WM-ND	Tri-State Octal Buffer	SO-20	.62	.47	.35
MM74HCT245N-ND	Tri-State Octal Bus Transceiver	20-Dip	.62	.47	.35
MM74HCT245WM-ND	Tri-State Octal Bus Transceiver	SO-20	.62	.47	.35
MM74HCT273N-ND	Octal D-Type Flip Flop with Clear	20-Dip	.62	.47	.35
MM74HCT373N-ND	Tri-State Octal D-Type Latch	20-Dip	.62	.47	.35
MM74HCT373WM-ND	Tri-State Octal D-Type Latch	SO-20	.62	.47	.35
MM74HCT374N-ND	Tri-State Octal D-Type Flip Flop	20-Dip	.62	.47	.35
MM74HCT541N-ND	Tri-State Octal Buffer	20-Dip	.73	.55	.41

74VHC SERIES CMOS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
74VHC00M-ND	Quad 2-Input NAND Gate	SO-14	.44	.36	.27
74VHC02M-ND	Quad 2-Input NOR Gate	SO-14	.44	.36	.27
74VHC04M-ND	Hex Inverter	SO-14	.44	.36	.27
74VHC08M-ND	Quad 2-Input AND Gate	SO-14	.44	.36	.27
74VHC14M-ND	Hex Schmitt Trigger Inverter	SO-14	.55	.44	.33
74VHC74M-ND	Dual D-Type Flip Flop	SO-14	.50	.40	.30
74VHC86M-ND	Quad 2-Input Exclusive OR Gate	SO-14	.50	.40	.30
74VHC123AM-ND	Dual Monostable Multivibrator	SO-16	.48	.37	.28
74VHC138M-ND	Expandable 3/8 Decoder	SO-16	.53	.40	.30
74VHC139M-ND	Dual 2-to-4 Decoder/Demultiplexer	SO-16	.53	.40	.30
74VHC139MTC-ND	Dual 2-to-4 Decoder/Demultiplexer	16-TSSOP	.53	.40	.30
74VHC157M-ND	Quad 2-Input Multiplexer	SO-16	.57	.43	.33
74VHC157MTC-ND	Quad 2-Input Multiplexer	16-TSSOP	.57	.43	.33
74VHC240M-ND	Tri-State Octal Inverter Bus/Line Driver	SO-20	.62	.47	.35
74VHC240MTC-ND	Tri-State Octal Inverter Bus/Line Driver	20-TSSOP	.62	.47	.35
74VHC244M-ND	Tri-State Octal Non-Inverting Buffer/Line Driver	SO-20	.62	.47	.35
74VHC245M-ND	Tri-State Octal Bidirectional Transceiver	SO-20	.62	.47	.35
74VHC373M-ND	Tri-State Octal D-Type Latch	SO-20	.62	.47	.35
74VHC374M-ND	Tri-State Octal D-Type Flip Flop	SO-20	.62	.47	.35
74VHC374MTC-ND	Tri-State Octal D-Type Flip Flop	20-TSSOP	.62	.47	.35
74VHC393M-ND	Dual 4-Bit Binary Counter	SO-14	.70	.53	.40
74VHC393MTC-ND	Dual 4-Bit Binary Counter	14-SSOP	.70	.53	.40
74VHC573M-ND	Tri-State Octal D-Type Latch	SO-20	.75	.57	.43
74VHC574M-ND	Tri-State Octal D-Type Flip Flop	SO-20	.75	.57	.43
74VHC595M-ND	8-Bit Shift Register with Output Latches	SO-16	.75	.57	.43
74VHC4046N-ND	CMOS Phase Lock Loop	16-Dip	.83	.69	.55

74ABT SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
74ABT241CMSA-ND	Tri-State Octal Line Driver	20-SSOP	.83	.69	.55
74ABT244CSC-ND	Tri-State Octal Line Driver	SO-20	.97	.73	.55
74ABT245CSC-ND	Tri-State Octal Bus Transceiver	SO-20	.97	.73	.55
74ABT273CMSA-ND	Octal D-Type Flip Flop	20-SSOP	.83	.69	.55
74ABT273CSC-ND	Octal D-Type Flip Flop	SO-20	.97	.73	.55

(Continued)

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FAIRCHILD SEMICONDUCTOR 74ABT SERIES *(Continued)*

Digi-Key			Price Each★		
Part No.	Description	Pkg.	1	25	100
74ABT377CSC-ND	Octal D-Type Flip Flop with Clock Enable	SO-20	.97	.73	.55
74ABT16373CSSC-ND	16-Bit D-Type Latch with Tri-State Outputs	48-SSOP	1.65	1.32	.99
74ABT16374CSSC-ND	16-Bit D-Type Flip Flop with Tri-State Outputs	48-SSOP	1.65	1.32	.99
74ABT16501CSSC-ND	18-Bit Univ. Bus Transceiver w/Tri-State Outputs	56-SSOP	3.53	2.83	2.20
74ABT2244CMSA-ND	Octal Buffer Line Driver with Series Resistor Included	20-SSOP	.92	.77	.62
74ABT2244CSC-ND	Octal Buffer Line Driver with Series Resistor Included	SO-20	.83	.69	.55

FAIRCHILD SEMICONDUCTOR FACT™ ADVANCED CMOS TECHNOLOGY 74AC

These are high speed CMOS devices with CMOS input switching levels and buffered CMOS outputs.

Digi-Key			Price Each★		
Part No.	Description	Pkg.	1	25	100
74AC00PC-ND	Quad 2-Input NAND Gate	14-Dip	.44	.36	.27
74AC00SC-ND	Quad 2-Input NAND Gate	SO-14	.44	.36	.27
74AC02PC-ND	Quad 2-Input NOR Gate	14-Dip	.44	.36	.27
74AC02SC-ND	Quad 2-Input NOR Gate	SO-14	.44	.36	.27
74AC04PC-ND	Hex Inverter	14-Dip	.44	.36	.27
74AC04SC-ND	Hex Inverter	SO-14	.44	.36	.27
74AC08PC-ND	Quad 2-Input AND Gate	14-Dip	.44	.36	.27
74AC08SC-ND	Quad 2-Input AND Gate	SO-14	.44	.36	.27
74AC10PC-ND	Triple 3-Input NAND Gate	14-Dip	.44	.36	.27
74AC10SC-ND	Triple 3-Input NAND Gate	SO-14	.44	.36	.27
74AC11PC-ND	Triple 3-Input AND Gate	14-Dip	.44	.36	.27
74AC11SC-ND	Triple 3-Input AND Gate	SO-14	.44	.36	.27
74AC14PC-ND	Hex Schmitt Trigger Inverter	14-Dip	.50	.40	.30
74AC14SC-ND	Hex Schmitt Trigger Inverter	SO-14	.50	.40	.30
74AC20PC-ND	Dual 4-Input NAND Gate	14-Dip	.44	.36	.27
74AC32PC-ND	Quad 2-Input OR Gate	14-Dip	.44	.36	.27
74AC32SC-ND	Quad 2-Input OR Gate	SO-14	.44	.36	.27
74AC74PC-ND	Dual D-Type Flip Flop with Set and Reset	14-Dip	.50	.40	.30
74AC74SC-ND	Dual D-Type Flip Flop with Set and Reset	SO-14	.50	.40	.30
74AC86PC-ND	Quad 2-Input Exclusive OR Gate	14-Dip	.50	.40	.30
74AC86SC-ND	Quad 2-Input Exclusive OR Gate	SO-14	.50	.40	.30
74AC109PC-ND	Dual JK Positive-Edge-Triggered Flip Flop	16-Dip	.57	.43	.33
74AC109SC-ND	Dual JK Positive-Edge-Triggered Flip Flop	SO-16	.57	.43	.33
74AC125PC-ND	Tri-State Quad Buffer	14-Dip	.53	.40	.30
74AC125SC-ND	Tri-State Quad Buffer	SO-14	.53	.40	.30
74AC138PC-ND	1-of-8 Decoder/Demultiplexer	16-Dip	.57	.43	.33
74AC138SC-ND	1-of-8 Decoder/Demultiplexer	SO-16	.57	.43	.33
74AC139PC-ND	Dual 1-of-4 Decoder/Demultiplexer	16-Dip	.57	.43	.33
74AC139SC-ND	Dual 1-of-4 Decoder/Demultiplexer	SO-16	.57	.43	.33
74AC151PC-ND	8-Input Fact Multiplexer	16-Dip	.57	.43	.33
74AC151SC-ND	8-Input Fact Multiplexer	SO-16	.57	.43	.33
74AC153PC-ND	Dual 4-Input Multiplexer	16-Dip	.57	.43	.33
74AC153SC-ND	Dual 4-Input Multiplexer	SO-16	.57	.43	.33
74AC157PC-ND	Quad 2-Input Multiplexer	16-Dip	.57	.43	.33
74AC157SC-ND	Quad 2-Input Multiplexer	SO-16	.57	.43	.33
74AC161PC-ND	Synchronous Presettable 4-Bit Binary Counter	16-Dip	.62	.47	.35
74AC161SC-ND	Synchronous Presettable 4-Bit Binary Counter	SO-16	.62	.47	.35
74AC163PC-ND	4-Bit Binary Counter Synchronous Receiver	16-Dip	.62	.47	.35
74AC163SC-ND	4-Bit Binary Counter Synchronous Receiver	SO-16	.62	.47	.35
74AC169PC-ND	4-Bit Binary Counter	16-Dip	.79	.66	.53
74AC174PC-ND	Hex D-Type Flip Flop	16-Dip	.62	.47	.35
74AC174SC-ND	Hex D-Type Flip Flop	SO-16	.62	.47	.35
74AC175SC-ND	Quad D-Type Flip Flop	SO-16	.62	.47	.35
74AC191PC-ND	4-Bit Up/Down Counter	16-Dip	1.42	1.19	.95
74AC191SC-ND	4-Bit Up/Down Counter	SO-16	1.42	1.19	.95
74AC240PC-ND	Octal Buffer/Line Driver	20-Dip	.70	.53	.40
74AC240SC-ND	Octal Buffer/Line Driver	SO-20	.70	.53	.40
74AC244PC-ND	Octal Buffer/Line Driver	20-Dip	.70	.53	.40
74AC244SC-ND	Octal Buffer/Line Driver	SO-20	.70	.53	.40
74AC245PC-ND	Octal Bidirectional Transceiver	20-Dip	.70	.53	.40
74AC245SC-ND	Octal Bidirectional Transceiver	SO-20	.70	.53	.40
74AC257PC-ND	Quad 2-Input Multiplexer	16-Dip	.62	.47	.35
74AC257SC-ND	Quad 2-Input Multiplexer	SO-16	.62	.47	.35
74AC541SC-ND	Octal Buffer/Line Driver	SO-20	.88	.66	.50
74AC273PC-ND	Octal D-Type Flip Flop with Reset	20-Dip	.70	.53	.40
74AC273SC-ND	Octal D-Type Flip Flop with Reset	SO-20	.70	.53	.40
74AC299PC-ND	Octal Shift/Storage	20-Dip	1.38	1.10	.83
74AC299SC-ND	Octal Shift/Storage	SO-20	1.38	1.10	.83
74AC373PC-ND	Octal D-Type Latch	20-Dip	.70	.53	.40
74AC373SC-ND	Octal D-Type Latch	SO-20	.70	.53	.40
74AC374PC-ND	Tri-State Octal D-Type Flip Flop	20-Dip	.70	.53	.40
74AC374SC-ND	Tri-State Octal D-Type Flip Flop	SO-20	.70	.53	.40
74AC377PC-ND	Tri-State Octal D-Type Flip Flop	20-Dip	.88	.66	.50
74AC521PC-ND	8-Bit Comparator	20-Dip	.88	.66	.50
74AC521SC-ND	8-Bit Comparator	SO-20	.88	.66	.50
74AC540SC-ND	Octal Buffer/Line Driver with Tri-State Output	SO-20	.88	.66	.50
74AC541PC-ND	Octal Buffer/Line Driver with Tri-State Output	20-Dip	.88	.66	.50
74AC574PC-ND	Octal D-Type Flip Flop with Tri-State Output	20-Dip	.88	.66	.50
74AC574SC-ND	Octal D-Type Flip Flop with Tri-State Output	SO-20	.88	.66	.50
74AC646SC-ND	Octal Transceiver/Register	SO-24	2.85	2.28	1.78
74AC646SPC-ND	Octal Transceiver/Register	24-Dip	2.85	2.28	1.78
74AC821SC-ND	10-Bit D-Type Flip Flop	SO-24	2.43	1.95	1.51
74AC821SPC-ND	10-Bit D-Type Flip Flop	24-Dip	2.43	1.95	1.51

FAIRCHILD SEMICONDUCTOR 74ACQ SERIES

Digi-Key			Price Each★		
Part No.	Description	Pkg.	1	25	100
74ACQ240PC-ND	Octal Inverting Buffer/Line Driver	20-Dip	1.73	1.39	1.04
74ACQ241PC-ND	Tri-State Octal Buffer/Line Driver	20-Dip	1.73	1.39	1.04
74ACQ244SC-ND	Octal Buffer/Line Driver	SO-20	1.73	1.39	1.04
74ACQ245PC-ND	Octal Transceiver	20-Dip	1.73	1.39	1.04
74ACQ245SC-ND	Octal Transceiver	SO-20	1.73	1.39	1.04
74ACQ373PC-ND	Octal D-Type Latch	20-Dip	1.73	1.39	1.04
74ACQ373SC-ND	Octal D-Type Latch	SO-20	1.73	1.39	1.04
74ACQ374PC-ND	Octal D-Type Flip Flop	20-Dip	1.73	1.39	1.04
74ACQ374SC-ND	Octal D-Type Flip Flop	SO-20	1.73	1.39	1.04
74ACQ544SC-ND	Tri-State Octal Inverting Registered Transceiver	SO-20	5.49	4.44	3.59
74ACQ564PC-ND	Tri-State Octal Inverting D-Type Flip Flop	20-Dip	3.12	2.52	2.04
74ACQ573PC-ND	Tri-State Octal Latch	20-Dip	1.73	1.39	1.04
74ACQ573SC-ND	Tri-State Octal Latch	SO-20	1.73	1.39	1.04
74ACQ574PC-ND	Tri-State Octal D-Type Flip Flop	20-Dip	1.73	1.39	1.04
74ACQ574SC-ND	Tri-State Octal D-Type Flip Flop	SO-20	1.73	1.39	1.04
74ACQ646SC-ND	Tri-State Octal Transceiver Register	SO-24	6.75	5.40	4.65

FAIRCHILD SEMICONDUCTOR 74ACT SERIES

Digi-Key			Price Each★		
Part No.	Description	Pkg.	1	25	100
74ACT00SC-ND	Quad 2-Input NAND Gate	SO-14	.44	.36	.27
74ACT00PC-ND	Quad 2-Input NAND Gate	14-Dip	.44	.36	.27
74ACT02PC-ND	Quad 2-Input NOR Gate	14-Dip	.44	.36	.27
74ACT02SC-ND	Quad 2-Input NOR Gate	SO-14	.44	.36	.27
74ACT04PC-ND	Hex Inverter	14-Dip	.44	.36	.27
74ACT04SC-ND	Hex Inverter	SO-14	.44	.36	.27
74ACT08PC-ND	Quad 2-Input AND Gate	14-Dip	.44	.36	.27
74ACT08SC-ND	Quad 2-Input AND Gate	SO-14	.44	.36	.27
74ACT10PC-ND	Triple 3-Input NAND Gate	14-Dip	.44	.36	.27
74ACT10SC-ND	Triple 3-Input NAND Gate	SO-14	.44	.36	.27
74ACT32PC-ND	Quad 2-Input OR Gate	14-Dip	.44	.36	.27
74ACT32SC-ND	Quad 2-Input OR Gate	SO-14	.44	.36	.27
74ACT74PC-ND	Dual D-Type Positive-Edge-Trigger Flip Flop	14-Dip	.50	.40	.30
74ACT74SC-ND	Dual D-Type Positive-Edge-Trigger Flip Flop	SO-14	.50	.40	.30
74ACT109SC-ND	Dual JK Flip Flop	SO-16	.57	.43	.33
74ACT125PC-ND	Tri-State Quad Buffer	14-Dip	.57	.43	.33
74ACT125SC-ND	Tri-State Quad Buffer	SO-14	.57	.43	.33
74ACT138PC-ND	1-of-8 Decoder/Demultiplexer	16-Dip	.57	.43	.33
74ACT138SC-ND	1-of-8 Decoder/Demultiplexer	SO-16	.57	.43	.33
74ACT139PC-ND	Dual 1-of-4 Decoder	16-Dip	.57	.43	.33
74ACT139SC-ND	Dual 1-of-4 Decoder	SO-16	.57	.43	.33
74ACT151PC-ND	8-Input Multiplexer	16-Dip	.57	.43	.33
74ACT157PC-ND	Quad 2-Input Multiplexer	16-Dip	.57	.43	.33
74ACT157SC-ND	Quad 2-Input Multiplexer	SO-16	.57	.43	.33
74ACT158PC-ND	Quad 2-Input Multiplexer, Inverting	16-Dip	1.10	.92	.77
74ACT158SC-ND	Quad 2-Input Multiplexer, Inverting	SO-16	.57	.43	.33
74ACT161SC-ND	Synchronous Presettable Binary Counter	SO-16	.62	.47	.35
74ACT163PC-ND	4-Bit Binary Counter Synchronous Receiver	16-Dip	.62	.47	.35
74ACT174PC-ND	Hex D-Type Flip Flop with Master Reset	16-Dip	.62	.47	.35
74ACT174SC-ND	Hex D-Type Flip Flop with Master Reset	SO-16	.62	.47	.35
74ACT175SC-ND	Quad D-Type Flip Flop	SO-16	.62	.47	.35
74ACT240PC-ND	Tri-State Octal Buffer/Line Driver	20-Dip	.70	.53	.40
74ACT240SC-ND	Tri-State Octal Buffer/Line Driver	SO-20	.70	.53	.40
74ACT244PC-ND	Octal Buffer/Line Driver	20-Dip	.70	.53	.40
74ACT244SC-ND	Octal Buffer/Line Driver	SO-20	.70	.53	.40
74ACT245PC-ND	Octal Bidirectional Transceiver	20-Dip	.70	.53	.40
74ACT245SC-ND	Octal Bidirectional Transceiver	SO-20	.70	.53	.40
74ACT251PC-ND	8-Bit Multiplexer	16-Dip	.62	.47	.35
74ACT251SC-ND	8-Bit Multiplexer	SO-16	.62	.47	.35
74ACT253PC-ND	Dual 4-Input Multiplexer	16-Dip	.57	.43	.33
74ACT253SC-ND	Dual 4-Input Multiplexer	SO-16	.57	.43	.33
74ACT257PC-ND	Quad 2-Input Multiplexer	16-Dip	.57	.43	.33
74ACT257SC-ND	Quad 2-Input Multiplexer	SO-16	.57	.43	.33
74ACT258PC-ND	Quad 2-Input Multiplexer	16-Dip	.98	.80	.68
74ACT258SC-ND	Quad 2-Input Multiplexer	SO-16	.84	.63	.48
74ACT299PC-ND	Tri-State 8-Bit Universal Shift Register	20-Dip	1.38	1.10	.83
74ACT299SC-ND	Tri-State 8-Bit Universal Shift Register	SO-20	1.38	1.10	.83
74ACT373PC-ND	Octal Transparent Latch	20-Dip	.70	.53	.40
74ACT373SC-ND	Octal Transparent Latch	SO-20	.70	.53	.40
74ACT374PC-ND	Octal D-Type Flip Flop	20-Dip	.70	.53	.40
74ACT374SC-ND	Octal D-Type Flip Flop	SO-20	.70	.53	.40
74ACT377PC-ND	Octal D-Type Flip Flop with Clock Enable	20-Dip	.83	.69	.55
74ACT399SC-ND	Quad 2-Port Register	SO-16	2.77	2.19	1.77
74ACT520PC-ND	Comparator with Resistor	20-Dip	.88	.66	.50
74ACT520SC-ND	Comparator with Resistor	SO-20	.88	.66	.50
74ACT521PC-ND	8-Bit Comparator	20-Dip	.88	.66	.50
74ACT521SC-ND	8-Bit Comparator	SO-20	.88	.66	.50
74ACT534PC-ND	Octal D-Type Flip Flop	20-Dip	1.16	.97	.77
74ACT573PC-ND	Tri-State Octal D-Type Latch	20-Dip	.79	.60	.45
74ACT573SC-ND	Tri-State Octal D-Type Latch	SO-20	.79	.60	.45
74ACT574PC-ND	Tri-State Octal D-Type Flip Flop	20-Dip	.79	.60	.45
74ACT574SC-ND	Tri-State Octal D-Type Flip Flop	SO-20	.79	.60	.45
74ACT715PC-ND	Video Synchronous Generator	20-Dip	8.25	6.60	5.57
74ACT715SC-ND	Video Synchronous Generator	SO-20	8.25	6.60	5.57
74ACT818SPC-ND	Diagnostic/Pipline Register	24-Dip	5.10	4.08	3.18
74ACT821SPC-ND	Tri-State 10-Bit D-Type Flip Flop	24-Dip	2.38	1.91	1.48
74ACT823SC-ND	9-Bit D-Type Flip Flop	SO-24	3.02	2.42	1.88
74ACT823SPC-ND	9-Bit D-Type Flip Flop	24-Dip	3.02	2.42	1.88
74ACT825SC-ND	8-Bit D-Type Flip Flop	SO-24	3.02	2.42	1.88
74ACT825SPC-ND	8-Bit D-Type Flip Flop	24-Dip	3.02	2.42	1.88
74ACT841SPC-ND	10-Bit Transparent Latch	24-Dip	3.02	2.42	1.88
74ACT841SC-ND	10-Bit Transparent Latch	SO-24	3.02	2.42	1.88
74ACT843SC-ND	9-Bit Transparent Latch	SO-24	3.02	2.42	1.88
74ACT899QC-ND	9-Bit Bidirectional Latch	28-PLCC	7.90	6.32	5.45
74ACT1284MSA-ND	IEEE 1284 Transceiver	20 SSOP	1.19	.99	.80
74ACT2708PC-ND	64x9 First-In First-Out Memory	28-Dip	14.90	13.42	11.90

FAIRCHILD SEMICONDUCTOR NM95HS HIGH SECURITY SERIES

Digi-Key			Price Each★		
Part No.	Description	Pkg.	1	25	100
NM95HS01EM-ND	Rolling Code Generator High Temp (RC OSC)	SO-14	3.12	2.52	2.04
NM95HS01EM8-ND	Rolling Code Generator High Temp (RC OSC)	SO-8	3.12	2.52	2.04
NM95HS01EN-ND	Rolling Code Generator High Temp (RC OSC)	8-Dip	3.12	2.52	2.04
NM95HS01EN14-ND	Rolling Code Generator High Temp (RC OSC)	14-Dip	3.12	2.52	2.04
NM95HS01M8-ND	Rolling Code Generator (RC OSC)	SO-8	2.86	2.31	1.87
NM95HS01N-ND	Rolling Code Generator (RC OSC)	8-Dip	2.86	2.31	1.87
NM95HS01N14-ND	Rolling Code Generator (RC OSC)	14-Dip	2.86	2.31	1.87
NM95HS02EM-ND	Rolling Code Generator High Temp (XTAL OSC)	SO-14	3.12	2.52	2.04
NM95HS02EM8-ND	Rolling Code Generator High Temp (XTAL OSC)	SO-8	3.12	2.52	2.04
NM95HS02EN-ND	Rolling Code Generator High Temp (XTAL OSC)	8-Dip	3.12	2.52	2.04
NM95HS02EN14-ND	Rolling Code Generator High Temp (XTAL OSC)	14-Dip	3.12	2.52	2.04
NM95HS02M8-ND	Rolling Code Generator High Temp (XTAL OSC)	SO-8	2.86	2.31	1.87
NM95HS02N-ND	Rolling Code Generator (XTAL OSC)	8-Dip	2.86	2.31	1.87
NM95HS02N14-ND	Rolling Code Generator (XTAL OSC)	14-Dip	2.86	2.31	1.87

★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

FAIRCHILD SEMICONDUCTOR

74ACTQ SERIES

Digi-Key			Price Each★		
Part No.	Description	Pkg.	1	25	100
74ACTQ00PC-ND	Quad 2-Input NAND Gate, Quiet Series	14-Dip	.92	.77	.62
74ACTQ00SC-ND	Quad 2-Input NAND Gate, Quiet Series	SO-14	.92	.77	.62
74ACTQ04PC-ND	Hex Inverter, Quiet Series	14-Dip	.92	.77	.62
74ACTQ04SC-ND	Hex Inverter, Quiet Series	SO-14	.92	.77	.62
74ACTQ08SC-ND	Quad 2-Input AND Gate, Quiet Series	SO-14	.92	.77	.62
74ACTQ10PC-ND	Triple 3-Input NAND Gate, Quiet Series	14-Dip	1.09	.90	.76
74ACTQ10SC-ND	Triple 3-Input NAND Gate, Quiet Series	SO-14	.92	.77	.62
74ACTQ14PC-ND	Hex Schmitt Trigger Inverting, Quiet Series	14-Dip	.92	.77	.62
74ACTQ14SC-ND	Hex Schmitt Trigger Inverting, Quiet Series	SO-14	.92	.77	.62
74ACTQ74SC-ND	Dual D-Type Positive-Edge-Triggered Flip Flop	SO-14	.92	.77	.62
74ACTQ240PC-ND	Octal Buffer/Line, Quiet Series	20-Dip	1.73	1.39	1.04
74ACTQ240SC-ND	Octal Buffer/Line, Quiet Series	SO-20	1.73	1.39	1.04
74ACTQ244PC-ND	Octal Buffer/Line Driver, Quiet Series	20-Dip	1.73	1.39	1.04
74ACTQ244SC-ND	Octal Buffer/Line Driver, Quiet Series	SO-20	1.73	1.39	1.04
74ACTQ245PC-ND	Octal Bidirectional Transceiver, Quiet Series	20-Dip	1.73	1.39	1.04
74ACTQ245SC-ND	Octal Bidirectional Transceiver, Quiet Series	SO-20	1.73	1.39	1.04
74ACTQ273PC-ND	Octal D-Type Flip Flop	20-Dip	1.73	1.39	1.04
74ACTQ273SC-ND	Octal D-Type Flip Flop	SO-20	1.73	1.39	1.04
74ACTQ373PC-ND	Tri-State Octal Transparent Latch	20-Dip	1.73	1.39	1.04
74ACTQ541SC-ND	Octal Buffer/Line Driver	SO-20	1.73	1.39	1.04
74ACTQ16244SSC-ND	16-Bit Buffer/Line Driver	48-SSOP	3.71	2.97	2.31
74ACTQ16374SSC-ND	16-Bit D-Type Flip Flop	48-SSOP	3.71	2.97	2.31

FAIRCHILD SEMICONDUCTOR

74F – FAST™ ADVANCED SCHOTTKY TTL LOGIC

Digi-Key			Price Each★		
Part No.	Description	Pkg.	1	25	100
74F00PC-ND	Quad 2-Input NAND Gate	14-Dip	.44	.36	.27
74F00SC-ND	Quad 2-Input NAND Gate	SO-14	.44	.36	.27
74F02PC-ND	Quad 2-Input NOR Gate	14-Dip	.44	.36	.27
74F04PC-ND	Hex Inverter	14-Dip	.44	.36	.27
74F04SC-ND	Hex Inverter	SO-14	.44	.36	.27
74F08PC-ND	Quad 2-Input AND Gate	14-Dip	.44	.36	.27
74F08SC-ND	Quad 2-Input AND Gate	SO-14	.44	.36	.27
74F10PC-ND	Triple 3-Input NAND Gate	14-Dip	.44	.36	.27
74F11PC-ND	Triple 3-Input AND Gate	14-Dip	.44	.36	.27
74F14PC-ND	Hex Schmitt Trigger Inverter	14-Dip	.50	.40	.30
74F20PC-ND	Dual 4-Input NAND Gate	14-Dip	.44	.36	.27
74F30PC-ND	8-Input NAND Gate	8-Dip	.51	.39	.29
74F32PC-ND	Quad 2-Input OR Gate	14-Dip	.44	.36	.27
74F32SC-ND	Quad 2 Input OR Gate	SO-14	.44	.36	.27
74F37PC-ND	Quad 2-Input Positive NAND Buffer	14-Dip	.50	.40	.30
74F38PC-ND	Quad 2-Input NAND Buffer w/Open-Collect Output	14-Dip	.50	.40	.30
74F74PC-ND	Dual D-Type Positive-Edge-Triggered Flip Flop	14-Dip	.50	.40	.30
74F74SC-ND	Dual D-Type Positive-Edge-Triggered Flip Flop	SO-14	.50	.40	.30
74F86SC-ND	Quad 2-Input Exclusive OR Gate	SO-14	.50	.40	.30
74F109PC-ND	Dual JK Positive-Edge-Triggered Flip Flop	16-Dip	.53	.40	.30
74F112PC-ND	Dual JK Negative-Edge-Triggered Flip Flop	16-Dip	.48	.37	.28
74F113PC-ND	Dual JK Negative-Edge-Triggered Flip Flop	14-Dip	.48	.37	.28
74F114PC-ND	Dual JK Negative-Edge-Triggered Flip Flop	14-Dip	.53	.40	.30
74F125PC-ND	Tri-State Quad Buffer	14-Dip	.58	.47	.35
74F125SC-ND	Tri-State Quad Buffer	SO-14	.58	.47	.35
74F138PC-ND	1-of-8 Decoder/Demultiplexer	16-Dip	.53	.40	.30
74F138SC-ND	1-of-8 Decoder/Demultiplexer	SO-16	.53	.40	.30
74F148PC-ND	8-Line To 3-Line Priority Encoder	16-Dip	.53	.40	.30
74F151APC-ND	8-Input Multiplexer	16-Dip	.53	.40	.30
74F157ASC-ND	Quad 2-Input Multiplexer	SO-16	.53	.40	.30
74F161APC-ND	Synchronous Presettable 4-Bit Binary Counter	16-Dip	.57	.43	.33
74F162APC-ND	Synchronous Presettable BCD Decade Counter	16-Dip	.57	.43	.33
74F163APC-ND	Synchronous Presettable 4-Bit Binary Counter	16-Dip	.57	.43	.33
74F169PC-ND	Up/Down Binary Counter	16-Dip	.99	.83	.66
74F175PC-ND	Quad D-Type Flip Flop	16-Dip	.53	.40	.30
74F175SC-ND	Quad D-Type Flip Flop	SO-16	.53	.40	.30
74F181PC-ND	4-Bit Arithmetic Logic Unit	24-Dip	2.55	2.04	1.59
74F182PC-ND	Carry Lookahead Generator	16-Dip	1.75	1.40	1.05
74F189SC-ND	64-Bit Random Access Memory	SO-16	5.93	4.79	3.88
74F190PC-ND	Up/Down Decade Counter	16-Dip	1.38	1.10	.83
74F191PC-ND	Up/Down Binary Counter	16-Dip	1.38	1.10	.83
74F191SC-ND	Up/Down Binary Counter	SO-16	1.38	1.10	.83
74F193PC-ND	Up/Down Binary Counter	16-Dip	1.49	1.24	.99
74F194PC-ND	4-Bit Bidirectional Universal Shift Register	16-Dip	.89	.75	.60
74F240PC-ND	Tri-State Octal Inverter Bus/Line Driver	20-Dip	.62	.47	.35
74F240SC-ND	Tri-State Octal Inverter Bus/Line Driver	SO-20	.62	.47	.35
74F241PC-ND	Tri-State Octal Line Driver	20-Dip	.62	.47	.35
74F244PC-ND	Tri-State Octal Line Driver	20-Dip	.62	.47	.35
74F244SC-ND	Tri-State Octal Line Driver	SO-20	.62	.47	.35
74F245PC-ND	Tri-State Octal Bus Transceiver	20-Dip	.62	.47	.35
74F245SC-ND	Tri-State Octal Bus Transceiver	SO-20	.62	.47	.35
74F245SCX-ND	Tri-State Octal Bus Transceiver	SO-20	324.00/1,000		
74F258APC-ND	Tri-State Quad 2/1 Multiplexer	16-Dip	.57	.43	.33
74F269SC-ND	8-Bit Up/Down Counter	SO-24	1.82	1.46	1.09
74F269SPC-ND	8-Bit Up/Down Counter	24-Dip	1.82	1.46	1.09
74F273PC-ND	Octal D-Type Flip Flop	20-Dip	.62	.47	.35
74F280PC-ND	9-Bit Parity Generator	14-Dip	.68	.51	.39
74F299PC-ND	8-Input Universal Shift/Store Register	20-Dip	.86	.72	.58
74F350PC-ND	4-Bit Shifter	16-Dip	1.65	1.30	1.05
74F352PC-ND	Dual 4-Input Multiplexer	16-Dip	1.13	.93	.79
74F353PC-ND	Dual 4-Input Multiplexer	16-Dip	1.13	.93	.79
74F366PC-ND	Hex Inverter with Common Enable	16-Dip	.75	.57	.43
74F368PC-ND	Hex Inverter, 4-Bit Plus 2-Bit	16-Dip	.75	.57	.43
74F373PC-ND	Octal Transparent Latch	20-Dip	.62	.47	.35
74F373SC-ND	Octal Transparent Latch	SO-20	.62	.47	.35
74F374PC-ND	Octal D-Type Flip Flop	20-Dip	.62	.47	.35
74F374SC-ND	Octal D-Type Flip Flop	SO-20	.62	.47	.35
74F381PC-ND	4-Bit Arithmetic Logic Unit	16-Dip	1.27	1.02	.77
74F398PC-ND	Quad 2-Port Register	20-Dip	1.83	1.51	1.27
74F401PC-ND	Cyclic Redundancy Generator/Checker	14-Dip	5.72	4.58	3.87
74F402PC-ND	Serial Data Polynomial Generator/Checker	16-Dip	5.65	4.52	3.90
74F521PC-ND	8-Bit Identity Comparator	20-Dip	.79	.60	.45
74F534PC-ND	Octal D-Type Flip Flop	20-Dip	.97	.73	.55
74F540PC-ND	Tri-State Octal Buffer/Line Driver	20-Dip	.76	.64	.51
74F540SC-ND	Tri-State Octal Buffer/Line Driver	SO-20	.76	.64	.51
74F541PC-ND	Octal Buffer/Line Driver	20-Dip	.76	.64	.51
74F541SC-ND	Octal Buffer/Line Driver	SO-20	.76	.64	.51
74F543PC-ND	Octal Registered Transceiver	24-Dip	1.32	1.10	.88
74F543SC-ND	Octal Registered Transceiver	SO-24	1.32	1.10	.88
74F545PC-ND	Octal Bidirectional Transceiver	20-Dip	2.35	1.89	1.47
74F552QC-ND	Octal Bidirectional Transceiver	28-PLCC	8.57	6.86	5.91
74F569PC-ND	4-Bit Binary Counter	20-Dip	1.16	.97	.77
74F569SC-ND	4-Bit Binary Counter	SO-20	1.21	1.01	.81
74F573PC-ND	Octal D-Type Latch	20-Dip	.70	.53	.40
74F573SC-ND	Octal D-Type Latch	SO-20	.70	.53	.40
74F574PC-ND	Octal D-Type Flip Flop	20-Dip	.70	.53	.40
74F574SC-ND	Octal D-Type Flip Flop	SO-20	.70	.53	.40
74F579PC-ND	8-Bit Bidirectional Counter	20-Dip	2.15	1.72	1.29
74F588PC-ND	GPIB Compatible Octal Transceiver	20-Dip	7.40	5.93	5.10
74F620PC-ND	Inverting Octal Transceiver	20-Dip	1.30	1.04	.78
74F623PC-ND	Inverting Octal Transceiver	20-Dip	.86	.72	.58
74F646BSC-ND	Octal Bus Transceiver	SO-24	5.63	4.50	3.88
74F646BSPC-ND	Octal Bus Transceiver	24-Dip	2.25	1.81	1.36
74F646SPC-ND	Octal Bus Transceiver	24-Dip	2.15	1.72	1.29
74F652SC-ND	Octal Bus Transceiver/Register	SO-24	1.79	1.43	1.08
74F652SPC-ND	Octal Bus Transceiver/Register	24-Dip	1.79	1.43	1.08
74F657SC-ND	Octal Transceiver with Parity	SO-24	2.86	2.31	1.87
74F657SPC-ND	Octal Transceiver with Parity	24-Dip	1.80	1.45	1.09
74F673ASC-ND	16-Bit Shift Register-2	SO-24	8.92	8.04	7.13
74F675APC-ND	16-Bit Serial In, Serial/Parallel-Out Shift Register	24-Dip	8.93	7.15	6.03
74F675ASPC-ND	16-Bit Serial In, Serial/Parallel-Out Shift Register	24-Dip	8.93	7.15	6.03
74F676PC-ND	16-Bit Serial/Parallel-In, Serial-Out Shift Register	24-Dip	4.41	3.53	2.75
74F676SPC-ND	16-Bit Shift Register	24-Dip	4.41	3.53	2.75
74F779PC-ND	8-Bit Bidirectional Counter	16-Dip	1.22	1.02	.82
74F779SC-ND	8-Bit Bidirectional Counter	SO-16	1.22	1.02	.82
74F794PC-ND	Read Back Register	20-Dip	1.76	1.41	1.06
74F821SPC-ND	10-Bit D-Type Flip Flop	24-Dip	1.49	1.24	.99
74F823SC-ND	9-Bit D-Type Flip Flop	SO-24	1.27	1.02	.77
74F823SPC-ND	9-Bit D-Type Flip Flop	24-Dip	1.49	1.24	.99
74F825SC-ND	8-Bit D-Type Flip Flop	SO-24	1.49	1.24	.99
74F825SPC-ND	8-Bit D-Type Flip Flop	24-Dip	1.49	1.24	.99
74F827SC-ND	10-Bit Buffer/Line Driver	SO-24	1.49	1.24	.99
74F843SPC-ND	9-Bit Transparent Latch	24-Dip	1.59	1.28	.96
74F899QC-ND	9-Bit Latch Transceiver with Parity Gen/Chk.	28-PLCC	9.59	7.67	6.61
74F2244PC-ND	Octal Buffer with 25Ω Series Resistor Outputs	20-Dip	.95	.80	.64
74F2244SC-ND	Octal Buffer with 25Ω Series Resistor Outputs	SO-20	.95	.80	.64

FAIRCHILD SEMICONDUCTOR

4000 SERIES CMOS

Digi-Key			Price Each★		
Part No.	Description	Pkg.	1	25	100
CD4001BCM-ND	Quad 2-Input NOR Gate	SO-14	.47	.38	.29
CD4001BCN-ND	Quad 2-Input NOR Gate	14-Dip	.47	.38	.29
CD4007CM-ND	Dual Complementary Pair Plus Invert	SO-14	.47	.38	.29
CD4007CN-ND	Dual Complementary Pair Plus Invert	14-Dip	.47	.38	.29
CD4010CN-ND	Hex Buffer	16-Dip	.50	.40	.30
CD4011BCM-ND	Quad 2-Input NAND Gate	SO-14	.47	.38	.29
CD4011BCN-ND	Quad 2-Input NAND Gate	14-Dip	.47	.38	.29
CD4013BCM-ND	Dual D-Type Flip Flop	SO-14	.47	.38	.29
CD4013BCN-ND	Dual D-Type Flip Flop	14-Dip	.47	.38	.29
CD4014BCN-ND	8-Bit Shift Register	16-Dip	.59	.45	.34
CD4015BCN-ND	Dual 4-Bit Shift Register	16-Dip	.59	.45	.34
CD4016BCM-ND	Quad Bilateral Switch	SO-14	.47	.38	.29
CD4016BCN-ND	Quad Bilateral Switch	14-Dip	.47	.38	.29
CD4017BCM-ND	Decade Counter/Divider	SO-16	.59	.45	.34
CD4017BCN-ND	Decade Counter/Divider	16-Dip	.59	.45	.34
CD4019BCN-ND	Quad AND/OR Select Gate	16-Dip	.55	.42	.31
CD4020BCM-ND	14-Bit Binary Counter	SO-16	.66	.50	.38
CD4020BCN-ND	14-Bit Binary Counter	16-Dip	.66	.50	.38
CD4021BCM-ND	8-Bit Shift Register	SO-16	.57	.43	.33
CD4021BCN-ND	8-Bit Shift Register	16-Dip	.57	.43	.33
CD4022BCN-ND	Divide-By-8 Counter/Decoder	16-Dip	.57	.43	.33
CD4023BCN-ND	Triple 3-Input NAND Gate	14-Dip	.47	.38	.29
CD4024BCN-ND	7-Bit Binary Counter	14-Dip	.57	.43	.33
CD4027BCN-ND	Dual JK M/S Flip Flop	16-Dip	.55	.44	.33
CD4028BCN-ND	BCD-to-Decimal Decoder	16-Dip	.55	.44	.33
CD4029BCN-ND	Preset. Up/Down BCD Binary Counter	16-Dip	.55	.44	.33
CD4030CN-ND	Quad Exclusive OR Gate	14-Dip	.55	.44	.33
CD4040BCM-ND	12-Bit Binary Ripple Counter	SO-16	.59	.45	.34
CD4040BCN-ND	12-Bit Binary Ripple Counter	16-Dip	.59	.45	.34
CD4043BCN-ND	Quad NOR R/S Latch	16-Dip	.59	.45	.34
CD4046BCM-ND	Micropower Phase Lock Loop	SO-16	.66	.50	.38
CD4046BCN-ND	Micropower Phase Lock Loop	16-Dip	.66	.50	.38
CD4047BCM-ND	Monostable Multivibrator	SO-14	.59	.45	.34
CD4047BCN-ND	Monostable Multivibrator	14-Dip	.59	.45	.34
CD4048BCN-ND	Expandable 8-Input Gate	16-Dip	2.27	1.80	1.45
CD4049UBCM-ND	Hex Inverting Buffer	SO-16	.48	.37	.28
CD4050BCN-ND	Hex Buffer	16-Dip	.48	.37	.28
CD4051BCM-ND	8-Channel Analog Mux/Demux	SO-16	.57	.43	.33
CD4051BCN-ND	8-Channel Analog Mux/Demux	16-Dip	.57	.43	.33
CD4052BCM-ND	4-Channel Analog Mux/Demux	SO-16	.57	.43	.33
CD4052BCN-ND	4-Channel Analog Mux/Demux	16-Dip	.57	.43	.33
CD4053BCM-ND	Triple 2-Channel Analog Mux/Demux	SO-16	.57	.43	.33
CD4053BCN-ND	Triple 2-Channel Analog Mux/Demux	16-Dip	.57	.43	.33
CD4060BCM-ND	14-Bit Binary Counter/Oscillator	SO-16	.62	.47	.35
CD4060BCN-ND	14-Bit Binary Counter/Oscillator	16-Dip	.62	.47	.35
CD4066BCM-ND	Quad Bilateral Switch	SO-14	.47	.38	.29
CD4066BCN-ND	Quad Bilateral Switch	14-Dip	.47	.38	.29
CD4069UBCM-ND	Inverter Circuits	SO-14	.47	.38	.29
CD4070BCM-ND	Quad Exclusive OR Gate	SO-14	.47	.38	.29
CD4070BCN-ND	Quad Exclusive OR Gate (4070B)	14-Dip	.47	.38	.29
CD4071BCN-ND	Quad 2-Input OR Gate	14-Dip	.47	.38	.29
CD4081BCN-ND	Quad 2-Input AND Gate	14-Dip	.47	.38	.29
CD4093BCM-ND	Quad 2-Input NAND Schmitt Trigger	SO-14	.47	.38	.29
CD4093BCN-ND	Quad 2-Input NAND Schmitt Trigger	14-Dip	.47	.38	.29
CD4094BCN-ND	8-Bit Shift Register with Latch	16-Dip	.57	.43	.33
CD4099BCN-ND	8-Bit Addressable Latch	16-Dip	.70	.53	.40
CD4503BCN-ND	Tri-State Hex Buffer	16-Dip	.70	.53	.40
CD4511BCN-ND	BCD-to-7 Segment Latch/Decoder/Driver	16-Dip	.70	.53	.40
CD4514BCN-ND	4-Bit Latch/4-to-16 Line Decoder	24-Dip	1.06	.88	.71
CD4528BCN-ND	Dual Monostable Multivibrator	16-Dip	.70	.53	.40

(Continued)

★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

FAIRCHILD SEMICONDUCTOR — 4000 SERIES CMOS *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
CD4538BCN-ND	Monostable Multivibrator	16-Dip	.70	.53	.40
CD4541BCN-ND	Programmable Timer	14-Dip	.57	.43	.33
CD4724BCN-ND	8-Bit Addressable Latch	16-Dip	.88	.66	.50
CD40106BCN-ND	Hex Schmitt Trigger	14-Dip	.48	.37	.28
CD40174BCN-ND	Hex D-Type Flip Flop	16-Dip	.59	.45	.34
CD40175BCN-ND	Quad D-Type Flip Flop	16-Dip	.59	.45	.34
CD40192BCN-ND	Up/Down Decade Counter	16-Dip	.90	.68	.51
CD40193BCN-ND	Binary Up/Down Counter	16-Dip	.90	.68	.51

FAIRCHILD SEMICONDUCTOR — SPECIALIZED ICs

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
29F52SPC-ND	8-Bit Regulator Transceiver	24-Dip	3.59	2.88	2.24

FAIRCHILD SEMICONDUCTOR — TinyLogic™

TinyLogic™ gives design engineers the ability to implement design changes or modify standard VLSI circuits without having to redesign complex silicon subcomponents or printed circuit board layouts. TinyLogic™ is primarily intended for use in space-constrained systems such as portable CD players, disk drives, cellular phones, pagers, radios, PCM-CIA cards and portable computers.

TinyLogic can facilitate efficient system designs in any application. Placement of single and dual gate logic functions exactly where needed simplifies signal routing while minimizing propagation delays and noise generation. Fairchild's TinyLogic™ family consists of a broad spectrum of high speed, low power, and CMOS single gate logic functions.

Products in the TinyLogic™, 7SZ parts (UHS Series) are the fastest logic devices on the market, operating in a Vcc voltage range of 1.8V to 5.5V.

In addition, with input overvoltage tolerance, the devices are capable of interfacing with 5V components while operating at 3V. 7S parts (HS Series devices) are intended for use with 5V applications, but will operate in a voltage range of 2V to 6V.

Series	Specified Power Supply	Compatibility Input VIL/VIH	Compatibility Output VOL/VOH	Drive IOL/IOH	Supply Current ICC	Speed TPD
7Sxx (HS)	2V - 6V	CMOS	TTL, CMOS	2.6mA/–2.6mA	10µA	21 ns
7SZxx (UHS)	1.8V - 5.5V	CMOS	TTL, CMOS	32mA/–32mA	20µA	4.5 ns

TinyLogic™ 7Sxx (HS Series)

Features	Benefits
CMOS (HS)	Compatible with HC
Low Quiescent Power: Icc < 1 µA @ 6V Vcc	Low power supply drain-beneficial for portables
High Noise immunity-Like HCMOS and VHC	Logic Level Integrity

TinyLogic™ 7SZxx (UHS Series)

Features	Benefits
Low Voltage 1.8V-5.5V operation; 5V tolerant inputs	Battery powered applications (optimized for 3.3V). Interfaces to both 3V & 5V Components
Propagation delay typical 4nS (3.3V)	New high speed designs. Seamless revisions to existing designs.

HS Series

Surface Mount Product in Cut Tape

Digi-Key Part No.	Description	Pkg.	Cut Tape Price Each★ 1	25	100
NC7S00M5CT-ND	Single 2-Input NAND Gate	SOT-23-5	1.16	.87	.73
NC7S02M5CT-ND	Single 2-Input NOR Gate	SOT-23-5	1.16	.87	.73
NC7S04M5CT-ND	Single Inverter	SOT-23-5	1.16	.87	.73
NC7S08M5CT-ND	Single 2-Input AND Gate	SOT-23-5	1.16	.87	.73
NC7S14M5CT-ND	Schmitt Input Inverter	SOT-23-5	1.20	.90	.75
NC7S32M5CT-ND	Single 2-Input OR Gate	SOT-23-5	1.16	.87	.73
NC7S86M5CT-ND	Single 2-Input Exclusive OR Gate	SOT-23-5	1.16	.87	.73

Surface Mount Product on Tape & Reel

Digi-Key Part No.	Description	Pkg.	Tape & Reel Pricing★ 250
NC7S00M5TR-ND	Single 2-Input NAND Gate	SOT-23-5	108.75
NC7S02M5TR-ND	Single 2-Input NOR Gate	SOT-23-5	108.75
NC7S04M5TR-ND	Single Inverter	SOT-23-5	108.75
NC7S08M5TR-ND	Single 2-Input AND Gate	SOT-23-5	108.75
NC7S14M5TR-ND	Schmitt Input Inverter	SOT-23-5	112.50
NC7S32M5TR-ND	Single 2-Input OR Gate	SOT-23-5	108.75
NC7S86M5TR-ND	Single 2-Input Exclusive OR Gate	SOT-23-5	108.75

UHS Series

Surface Mount Product in Cut Tape

Digi-Key Part No.	Description	Pkg.	Cut Tape Price Each★ 1	25	100
NC7SZ00M5CT-ND	Single 2-Input NAND Gate	SOT-23-5	1.16	.87	.73
NC7SZ02M5CT-ND	Single 2-Input NOR Gate	SOT-23-5	1.16	.87	.73
NC7SZ04M5CT-ND	Single Inverter	SOT-23-5	1.16	.87	.73
NC7SZ05M5CT-ND	Single Inverter Open Drain	SOT-23-5	1.16	.87	.73
NC7SZ08M5CT-ND	Single 2-Input AND Gate	SOT-23-5	1.16	.87	.73
NC7SZ125M5CT-ND	Single Tri-State Buffer OE=Low	SOT-23-5	1.16	.87	.73
NC7SZ126M5CT-ND	Single Tri-State Buffer OE=High	SOT-23-5	1.16	.87	.73
NC7SZ14M5CT-ND	Schmitt Input Inverter	SOT-23-5	1.16	.87	.73
NC7SZ32M5CT-ND	Single 2-Input OR Gate	SOT-23-5	1.16	.87	.73
NC7SZ384M5CT-ND	Single Bus Switch	SOT-23-5	1.28	.96	.80
NC7SZ38M5CT-ND	Single 2-Input NAND Gate (Open Drain Output)	SOT-23-5	1.16	.87	.73
NC7SZ66M5CT-ND	Single Digital Switch	SOT-23-5	1.28	.96	.80
NC7SZ86M5CT-ND	Single 2-Input Exclusive OR Gate	SOT-23-5	1.16	.87	.73

Surface Mount Product on Tape & Reel

Digi-Key Part No.	Description	Pkg.	Tape & Reel Pricing★ 250
NC7SZ00M5TR-ND	Single 2-Input NAND Gate	SOT-23-5	108.75
NC7SZ02M5TR-ND	Single 2-Input NOR Gate	SOT-23-5	108.75
NC7SZ04M5TR-ND	Single Inverter	SOT-23-5	108.75
NC7SZ05M5TR-ND	Single Inverter Open Drain	SOT-23-5	108.75
NC7SZ08M5TR-ND	Single 2-Input AND Gate	SOT-23-5	108.75
NC7SZ125M5TR-ND	Single Tri-State Buffer OE=Low	SOT-23-5	108.75
NC7SZ126M5TR-ND	Single Tri-State Buffer OE=High	SOT-23-5	108.75
NC7SZ14M5TR-ND	Schmitt Input Inverter	SOT-23-5	108.75
NC7SZ32M5TR-ND	Single 2-Input OR Gate	SOT-23-5	108.75
NC7SZ384M5TR-ND	Single Bus Switch	SOT-23-5	119.63
NC7SZ38M5TR-ND	Single 2-Input NAND Gate (Open Drain Output)	SOT-23-5	108.75
NC7SZ66M5TR-ND	Single Digital Switch	SOT-23-5	119.63
NC7SZ86M5TR-ND	Single 2-Input Exclusive OR Gate	SOT-23-5	108.75

PERICOM — 74ALVCH LOGIC (ADVANCED LOW VOLTAGE CMOS w/HOLD)

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
PI74ALVCH16244A-ND	16-Bit Buffer/Line Driver	48-TSSOP	2.40	1.92	1.60
PI74ALVCH16245A-ND	16-Bit Bidirectional Bus Transceiver	48-TSSOP	2.40	1.92	1.60
PI74ALVCH16374A-ND	16-Bit Edge Triggered D-Type Flip Flop	48-TSSOP	2.40	1.92	1.60
PI74ALVCH16501A-ND	16-Bit Universal Transceiver	56-TSSOP	3.70	2.96	2.46
PI74ALVCH16646A-ND	16-Bit Bus Transceiver and Register	56-TSSOP	3.90	3.12	2.59
PI74ALVCH16652A-ND	16-Bit Bus Transceiver and Register	56-TSSOP	3.90	3.12	2.59
PI74ALVCH16721A-ND	20-Bit Flip Flop	56-TSSOP	3.50	2.80	2.33
PI74ALVCH16823A-ND	18-Bit Bus Interface Flip Flop	56-TSSOP	3.50	2.80	2.33

PERICOM — DOUBLE DENSITY 2.5 VOLT ALVTC LOGIC WITH TOLERANT I/O & BUS HOLD

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
PI74ALVTC16244A-ND	16-Bit Buffer/Line Driver	48-TSSOP	4.12	3.23	2.58
PI74ALVTC16245A-ND	16-Bit Bidirectional Transceiver	48-TSSOP	4.12	3.23	2.58
PI74ALVTC16373A-ND	16-Bit Transparent D-Type Latch	48-TSSOP	4.12	3.23	2.58
PI74ALVTC16374A-ND	16-Bit D-Type Flip-Flop	48-TSSOP	4.12	3.23	2.58

PERICOM — DOUBLE DENSITY VCX LOGIC WITH TOLERANT I/O & BUS HOLD

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
PI74VCX16244A-ND	16-Bit Buffer/Line Driver	48-TSSOP	3.92	3.08	2.45
PI74VCX16245A-ND	16-Bit Bidirectional Transceiver	48-TSSOP	3.92	3.08	2.45
PI74VCX16373A-ND	16-Bit Transparent D-Type Latch	48-TSSOP	3.92	3.08	2.45
PI74VCX16374A-ND	16-Bit D-Type Flip-Flop	48-TSSOP	3.92	3.08	2.45

PERICOM — LAN / ANALOG SWITCH PRODUCTS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
PI5A100W-ND	Quad SPDT Analog Switch	16-SOIC	2.55	2.19	1.96
PI5A317AP-ND	Single SPST Analog Switch	8-Dip	.92	.80	.71
PI5A319AP-ND	Single SPDT Analog Switch	8-Dip	1.44	1.24	1.11
PI5A319AW-ND	Single SPDT Analog Switch	8-SOIC	1.44	1.24	1.11
PI5A383AP-ND	Dual Analog Switch	16-Dip	1.85	1.59	1.43
PI5A391AP-ND	Quad SPST Analog Switch	16-Dip	1.85	1.59	1.43
PI5L100Q-ND	Quad 2-1 Multiplexer/Demultiplexer LAN Switch	16-QSOP	2.48	2.24	2.03
PI5L200Q-ND	Quad SPDT LAN Switch	16-QSOP	2.73	2.13	1.74
PI5A126W-ND	Dual SPST, 7 Volt N.O. Analog Switch	8-SOIC	.98	.89	.80
PI5A127W-ND	Dual SPST, 7 Volt N.C. Analog Switch	8-SOIC	.98	.89	.80
PS301CPA-ND	SPST, 17 Volt N.O. Analog Switch	8-Dip	1.34	1.09	.91
PS301CUA-ND	SPST, 17 Volt N.O. Analog Switch	8-MSOP	1.38	1.12	.94
PS303CPA-ND	SPDT, 17 Volt Analog Switch	8-Dip	1.34	1.09	.91
PS303ESA-ND	SPDT, 17 Volt Analog Switch	8-SOIC	1.42	1.16	.97
PS320ESA-ND	Dual SPST, 17 Volt N.O. Analog Switch	8-SOIC	1.19	1.02	.92
PS321CPA-ND	Dual SPST, 17 Volt Analog Switch	8-Dip	1.16	.99	.89
PS322ESA-ND	Dual SPST, 17 Volt N.O./N.C. Analog Switch	8-SOIC	1.19	1.02	.92
PS323CPA-ND	Dual SPST, 17 Volt N.O. Analog Switch	8-Dip	1.16	.99	.89
PS323ESA-ND	Dual SPST, 17 Volt N.O. Analog Switch	8-SOIC	1.19	1.02	.92
PS324ESA-ND	Dual SPST, 17 Volt N.C. Analog Switch	8-SOIC	1.19	1.02	.92
PS383EPE-ND	Dual SPDT, 17 Volt Analog Switch	16-Dip	3.32	2.85	2.55
PS383ESE-ND	Dual SPDT, 17 Volt Analog Switch	16-SOIC	3.32	2.85	2.55
PS385ESE-ND	Dual DPST, 17 Volt Analog Switch	16-SOIC	3.32	2.85	2.55
PS391EPE-ND	Quad SPST, 17 Volt N.C. Analog Switch	16-Dip	2.48	2.13	1.91
PS391ESE-ND	Quad SPST, 17 Volt N.C. Analog Switch	16-SOIC	2.48	2.13	1.91
PS392CPE-ND	Quad SPST, 17 Volt N.O. Analog Switch	16-Dip	2.43	2.09	1.87
PS392CSE-ND	Quad SPST, 17 Volt N.O. Analog Switch	16-SOIC	2.43	2.09	1.87
PS392EPE-ND	Quad SPST, 17 Volt N.O. Analog Switch	16-Dip	2.48	2.13	1.91
PS392ESE-ND	Quad SPST, 17 Volt N.O. Analog Switch	16-SOIC	2.48	2.13	1.91
PS393EPE-ND	Quad SPST, 17 Volt (2)N.O., (2)N.C. Analog Switch	16-Dip	2.48	2.13	1.91
PS393ESE-ND	Quad SPST, 17 V. (2)N.O., (2)N.C. Analog Switch	16-SOIC	2.48	2.13	1.91
PS4066ACSD-ND	Quad SPST, 17 Volt N.O. Analog Switch	14-SOIC	2.43	2.09	1.87
PS4066AEEE-ND	Quad SPST, 17 Volt N.O. Analog Switch	16-QSOP	2.51	2.15	1.93
PS4066AESD-ND	Quad SPST, 17 Volt N.O. Analog Switch	14-SOIC	2.48	2.13	1.91

PERICOM — FCT LOGIC STANDARD 5 VOLT

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
PI74FCT132ATW-ND	Quad 2-Input NAND Schmitt	14-SOIC	1.78	1.68	1.62
PI74FCT240ATQ-ND	Inverting Octal Buffer/Line Driver	20-QSOP	.87	.79	.72
PI74FCT240ATS-ND	Inverting Octal Buffer/Line Driver	20-SOIC	.87	.79	.72
PI74FCT244ATQ-ND	Octal Buffer/Line Driver	20-QSOP	.87	.79	.72
PI74FCT244ATS-ND	Octal Buffer/Line Driver	20-SOIC	.87	.79	.72
PI74FCT245ATQ-ND	Octal Bidirectional Transceiver	20-QSOP	.87	.79	.72
PI74FCT245ATS-ND	Octal Bidirectional Transceiver	20-SOIC	.87	.79	.72
PI74FCT253ATQ-ND	Dual 4-Input Multiplexer	16-QSOP	1.37	1.25	1.14
PI74FCT257ATS-ND	Quad 2-Input Multiplexer	16-SOIC	1.11	1.01	.92
PI74FCT273ATQ-ND	Octal D-Type Flip Flop with Reset	20-QSOP	.87	.79	.72
PI74FCT273ATS-ND	Octal D-Type Flip Flop with Reset	20-SOIC	.87	.79	.72
PI74FCT373ATQ-ND	Octal Transparent Latch	20-QSOP	.87	.79	.72
PI74FCT373ATS-ND	Octal Transparent Latch	20-SOIC	.87	.79	.72
PI74FCT374ATQ-ND	Octal D-Type Register, Tri-State	20-QSOP	.87	.79	.72
PI74FCT374ATS-ND	Octal D-Type Register, Tri-State	20-SOIC	.87	.79	.72
PI74FCT377ATS-ND	Octal D-Type Flip Flop with Clock Enable	20-SOIC	1.48	1.35	1.23
PI74FCT541ATQ-ND	Non-Invert Octal Buffer/Line Driver	20-QSOP	1.11	1.01	.92
PI74FCT541ATS-ND	Non-Invert Octal Buffer/Line Driver	20-SOIC	1.11	1.01	.92
PI74FCT543ATS-ND	Non-Invert Octal Latched Transceiver	24-SOIC	1.45	1.32	1.20
PI74FCT573ATQ-ND	Octal Transparent Latch with Tri-State	20-QSOP	.87	.79	.72
PI74FCT573ATS-ND	Octal Transparent Latch with Tri-State	20-SOIC	.87	.79	.72
PI74FCT574ATQ-ND	Octal D-Type Register, Tri-State	20-QSOP	.87	.79	.72
PI74FCT574ATS-ND	Octal D-Type Register, Tri-State	20-SOIC	.87	.79	.72
PI74FCT652ATS-ND	Inverting Octal Registered Transceiver	24-SOIC	1.45	1.32	1.20
PI74FCT821ATQ-ND	10-Bit Register, Tri-State	24-QSOP	1.15	1.04	.95
PI74FCT823ATS-ND	9-Bit Register with Clear and Tri-State	24-SOIC	1.15	1.04	.95
PI74FCT827ATS-ND	10-Bit Buffer	24-SOIC	1.15	1.04	.95

PERICOM 74RCT – STANDARD 5 VOLT FCT WITH 25 OHM SERIES OUTPUT RESISTOR

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI74FCT2157ATQ-ND	Quad 2-Input Multiplexer	16-QSOP	1.11	1.01	.92
PI74FCT2241ATQ-ND	Inverting Octal Buffer/Line Driver	20-QSOP	.87	.79	.72
PI74FCT2244ATQ-ND	Octal Buffer/Line Driver	20-QSOP	.87	.79	.72
PI74FCT2244ATS-ND	Octal Buffer/Line Driver	20-SOIC	.87	.79	.72
PI74FCT2245ATQ-ND	Octal Bidirectional Transceiver	20-QSOP	.87	.79	.72
PI74FCT2245ATS-ND	Octal Bidirectional Transceiver	20-SOIC	.87	.79	.72
PI74FCT2273ATQ-ND	Octal D-Type Flip Flop	20-QSOP	.87	.79	.72
PI74FCT2374ATQ-ND	Octal D-Type Register	20-QSOP	.87	.79	.72
PI74FCT2541ATQ-ND	Non-Invert Octal Latched Transceiver	20-QSOP	1.11	1.01	.92
PI74FCT2573ATQ-ND	Octal Transparent Latch	20-QSOP	.87	.79	.72
PI74FCT2827ATQ-ND	10-Bit Buffer	24-QSOP	1.15	1.04	.95

PERICOM 74FCT – DOUBLE DENSITY STANDARD 5 VOLT FCT LOGIC

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI74FCT16240ATV-ND	16-Bit Buffer/Line Driver	48-SSOP	1.69	1.54	1.40
PI74FCT16245ATA-ND	16-Bit Bidirectional Transceiver	48-TSSOP	1.69	1.54	1.40
PI74FCT16245ATV-ND	16-Bit Bidirectional Transceiver	48-SSOP	1.69	1.54	1.40
PI74FCT16373ATA-ND	16-Bit Transparent Latch	48-TSSOP	1.69	1.54	1.40
PI74FCT16373ATV-ND	16-Bit Transparent Latch	48-SSOP	1.69	1.54	1.40
PI74FCT16374ATA-ND	16-Bit Register	48-TSSOP	1.69	1.54	1.40
PI74FCT16374ATV-ND	16-Bit Register	48-SSOP	1.69	1.54	1.40
PI74FCT16646ATA-ND	16-Bit Registered Transceiver	56-TSSOP	2.02	1.84	1.67

PERICOM 74FCT – DOUBLE DENSITY 3.3 VOLT FCT LOGIC

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI74FCT163244AA-ND	16-Bit Buffer/Line Driver	48-TSSOP	1.69	1.54	1.40
PI74FCT163244AV-ND	16-Bit Buffer/Line Driver	48-SSOP	1.69	1.54	1.40

PERICOM 74FCT – DOUBLE DENSITY STANDARD 5V LOGIC WITH BALANCED OUTPUT DRIVE

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI74FCT162244ATA-ND	16-Bit Buffer/Line Driver	48-TSSOP	1.69	1.54	1.40
PI74FCT162244ATV-ND	16-Bit Buffer/Line Driver	48-SSOP	1.69	1.54	1.40
PI74FCT162245ATA-ND	16-Bit Bidirectional Transceiver	48-TSSOP	1.69	1.54	1.40
PI74FCT162245ATV-ND	16-Bit Bidirectional Transceiver	48-SSOP	1.69	1.54	1.40
PI74FCT162374ATA-ND	16-Bit Register	48-TSSOP	1.69	1.54	1.40
PI74FCT162374ATV-ND	16-Bit Register	48-SSOP	1.69	1.54	1.40
PI74FCT162541ATV-ND	16-Bit Buffer/Line Driver	48-SSOP	2.18	1.98	1.80
PI74FCT162543ATV-ND	16-Bit Latched Transceiver	56-SSOP	2.02	1.84	1.67
PI74FCT162823ATA-ND	18-Bit Register	56-TSSOP	2.02	1.84	1.67
PI74FCT162827ATA-ND	20-Bit Buffer	56-TSSOP	2.02	1.84	1.67

PERICOM 74LPT – STANDARD 3.3 VOLT LOGIC WITH 5 VOLT TOLERANT I/O

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI74LPT244AQ-ND	Octal Buffer/Line Driver	20-QSOP	.92	.85	.83
PI74LPT244AS-ND	Octal Buffer/Line Driver	20-SOIC	.92	.85	.83
PI74LPT245AQ-ND	Octal Bidirectional Transceiver	20-QSOP	.92	.85	.83
PI74LPT245AS-ND	Octal Bidirectional Transceiver	20-SOIC	.92	.85	.83
PI74LPT373AQ-ND	Octal Transparent Latch	20-QSOP	.92	.85	.83
PI74LPT373AS-ND	Octal Transparent Latch	20-SOIC	.92	.85	.83
PI74LPT541AQ-ND	Non-Inverting Octal Buffer/Line Driver	20-QSOP	.92	.85	.83
PI74LPT541AS-ND	Non-Inverting Octal Buffer/Line Driver	20-SOIC	.92	.85	.83
PI74LPT573AQ-ND	Octal Transparent Latch with Tri-State	20-QSOP	.92	.85	.83
PI74LPT573AS-ND	Octal Transparent Latch with Tri-State	20-SOIC	.92	.85	.83

PERICOM 74LPT – DOUBLE DENSITY 3.3 VOLT LOGIC WITH 5 VOLT TOLERANT I/O

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI74LPT16240AA-ND	16-Bit Buffer/Line Driver	48-TSSOP	1.39	1.30	1.26
PI74LPT16244AA-ND	16-Bit Buffer/Line Driver	48-TSSOP	1.39	1.30	1.26
PI74LPT16244AV-ND	16-Bit Buffer/Line Driver	48-SSOP	1.39	1.30	1.26
PI74LPT16245AA-ND	16-Bit Bidirectional Transceiver	48-TSSOP	1.39	1.30	1.26
PI74LPT16245AV-ND	16-Bit Bidirectional Transceiver	48-SSOP	1.39	1.30	1.26
PI74LPT16373AA-ND	16-Bit Transparent Latch	48-TSSOP	1.39	1.30	1.26
PI74LPT16374AA-ND	16-Bit Octal Register	48-TSSOP	1.39	1.30	1.26
PI74LPT16827AA-ND	20-Bit Buffer	56-TSSOP	2.17	1.98	1.81

PERICOM 3.3 VOLT BUS SWITCH PRODUCTS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI3B16210A-ND	20-Bit Bus Switch	48-TSSOP	2.82	2.26	1.98
PI3B16211A-ND	24-Bit Bus Switch	56-TSSOP	2.82	2.57	2.35
PI3B16212A-ND	24-Bit Bus Exchange	56-TSSOP	2.82	2.57	2.35
PI3B16213A-ND	24-Bit Bus Exchange (with Extra Selection)	56-TSSOP	2.82	2.57	2.35
PI3B16215A-ND	20-Bit Bus Switch (w/Pre-Charged O/P)	48-TSSOP	2.82	2.57	2.35
PI3B16224B-ND	12-24-Bit Mux/Demux Bus Switch	40-BQSOP	2.53	2.31	2.10
PI3B16232A-ND	Synchronous 16-32 Bit Mux/Demux Bus Switch	56-TSSOP	2.82	2.57	2.35
PI3B16233A-ND	16-32-Bit FET Mux/Demux Bus Switch	56-TSSOP	2.82	2.57	2.35
PI3B16244A-ND	Hot Insertion, 16-Bit, 2-Port Bus Switch	48-TSSOP	2.82	2.57	2.35
PI3B16245A-ND	Hot Insertion, 16-Bit, 2-Port Bus Switch	48-BQSOP	2.82	2.57	2.35
PI3B16248B-ND	24-48-Bit Multiplexer/Demultiplexer Bus Switch	80-QSOP	4.64	4.23	3.86
PI3B3251Q-ND	8-1 Mux/Demux Hot Insertion Bus Switch	16-QSOP	1.39	1.22	1.12
PI3B3253Q-ND	Dual 4-1 Mux/Demux Hot Insertion Bus Switch	16-QSOP	1.39	1.22	1.12
PI3B3257Q-ND	Quad 2-1 Mux/Demux Hot Insertion Bus Switch	16-QSOP	1.39	1.22	1.12
PI3B33X257B-ND	12-24 Multiplexer/Demultiplexer Bus Switch	48-BQSOP	3.33	3.04	2.77
PI3B3863Q-ND	10-Bit Hot Insertion Bus Switch for DDR	24-QSOP	1.39	1.22	1.12
PI3C3125Q-ND	Hot Insertion, 4-Bit, 2-Port, Bus Switch with Individual Enables	16-QSOP	1.28	1.00	.82
PI3C3126Q-ND	Hot Insertion, 4-Bit, 2-Port, Bus Switch with Individual Enables	16-QSOP	1.28	1.00	.82
PI3C3244Q-ND	Hot Insertion, 8-Bit, 2-Port Bus Switch	20-QSOP	1.37	1.07	.87
PI3C3245Q-ND	Hot Insertion, 8-Bit, 2-Port Bus Switch	20-QSOP	1.37	1.07	.87
PI3C3384Q-ND	3.3V High Bandwidth, Hot Insertion, 10-Bit, 2-Port Bus Switch	24-QSOP	1.37	1.07	.87
PI3C3861Q-ND	3.3V High Bandwidth, Hot Insertion, 10-Bit, 2-Port Bus Switch	24-QSOP	1.37	1.07	.87

PERICOM 5 VOLT BUS SWITCH PRODUCTS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI5C32X245B-ND	16-Bit Bus Switch	40-BQSOP	2.38	1.86	1.52
PI5C34X245B-ND	32-Bit Bus Switch	80-BQSOP	3.05	2.76	2.50
PI5C34X383B-ND	32-Bit, 2-Port Bus Switch	80-BQSOP	3.05	2.76	2.50
PI5C3125Q-ND	Quad Bus Switch with Individual Enable	16-QSOP	.84	.74	.68
PI5C3244Q-ND	8-Bit, 2-Port Bus Switch (FCT244 Pinout)	20-QSOP	.85	.75	.69
PI5C3244S-ND	8-Bit, 2-Port Bus Switch (FCT244 Pinout)	20-SOIC	.85	.75	.69
PI5C3245Q-ND	8-Bit, 2-Port Bus Switch (FCT245 Pinout)	20-QSOP	.85	.75	.69
PI5C3245S-ND	8-Bit, 2-Port Bus Switch (FCT245 Pinout)	20-SOIC	.85	.75	.69
PI5C3251Q-ND	8:1 Mux/Demux Bus Switch	16-QSOP	.85	.75	.69
PI5C3253Q-ND	Dual 4:1 Mux/Demux Bus Switch	16-QSOP	.85	.77	.70
PI5C3257Q-ND	Quad 2:1 Mux/Demux Bus Switch	16-QSOP	.85	.77	.70
PI5C3257S-ND	Quad 2:1 Mux/Demux Bus Switch	16-SOIC	.85	.77	.70
PI5C3383Q-ND	5-Bit, 4-Port Swabble Bus Switch	24-QSOP	.85	.77	.70
PI5C3384Q-ND	10-Bit, 2-Port Bus Switch	24-QSOP	.85	.77	.70
PI5C3384S-ND	10-Bit, 2-Port Bus Switch	24-SOIC	.85	.77	.70
PI5C3861Q-ND	10-Bit, 2-Port Bus Switch	24-QSOP	.86	.67	.59
PI5C6800CL-ND	10-Bit PCI Hot-Plug Bus Switch with -1.2 Undershoot Protection	24-TSSOP	1.57	1.23	1.07
PI5C6800L-ND	10-Bit PCI Hot-Plug Bus Switch	24-TSSOP	1.40	1.10	.96
PI5C6801CL-ND	10-Bit PCI Hot-Plug Bus Switch with -1.2 Undershoot Protection	24-TSSOP	1.57	1.23	1.07
PI5C16211A-ND	24-Bit Bus Switch	56-TSSOP	1.98	1.79	1.62
PI5C16212A-ND	24-Bit Bus Switch	56-TSSOP	1.98	1.79	1.62
PI5C16212V-ND	25-Bit Bus Switch	56-SSOP	1.98	1.79	1.62
PI5C16215CA-ND	20-Bit Bus Switch with Charge Pump	48-TSSOP	2.89	2.61	2.36
PI5C16245A-ND	16-Bit, 4-Port Bus Switch (FCT16245 pinout)	48-TSSOP	1.90	1.71	1.55
PI5C16861B-ND	20-Bit, Flow Through Pinout Bus Switch	48-BQSOP	1.90	1.71	1.55
PI5C16861CA-ND	20-Bit Flow Through Pinout Bus Switch with Undershoot Protection	48-TSSOP	2.39	2.16	1.96
PI5C32160CA-ND	32-16 Multiplexer/Demultiplexer Bus Switch	56-TSSOP	4.00	3.68	3.35
PI5C32861Q-ND	10-Bit, 2-Port Bus Switch	24-QSOP	.85	.67	.59

PERICOM VIDEO SWITCH PRODUCTS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI5V330Q-ND	Quad 2-1 Multiplexer Video Switch	16-QSOP	2.48	2.24	2.03
PI5V331Q-ND	Dual 4-Channel Video Multiplexer/Demultiplexer	16-QSOP	2.48	2.24	2.03
PI5V332Q-ND	Quad Video Switch	16-QSOP	2.48	2.24	2.03

PERICOM CLOCK DISTRIBUTION PRODUCTS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI49FCT3805AQ-ND	Non-Inverting Clock Driver	20-QSOP	4.18	3.80	3.33
PI49FCT3805AS-ND	Non-Inverting Clock Driver	20-SOIC	4.18	3.80	3.33
PI49FCT3807AQ-ND	10-Output Non-Inverting Clock Driver	20-QSOP	4.18	3.80	3.33
PI49FCT3807AS-ND	10-Output Non-Inverting Clock Driver	20-SOIC	4.18	3.80	3.33
PI49FCT804ATS-ND	Non-Inverting Clock Driver	16-SOIC	4.96	4.51	3.95
PI49FCT805ATQ-ND	Non-Inverting Clock Driver	20-QSOP	4.18	3.80	3.33
PI49FCT805ATS-ND	Non-Inverting Clock Driver	20-SOIC	4.18	3.80	3.33
PI49FCT807ATS-ND	10-Output Non-Inverting Clock Driver	20-SOIC	4.18	3.80	3.33
9270B-ND	Data Book		9.90	—	—
9269B-ND	Data Book on CD-ROM		9.90	—	—

TOSHIBA 74AC SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
TC74AC00FN-ND	Quad 2-Input NAND Gate	14-SOIC	.40	.30	.23
TC74AC00FNTR-ND	Quad 2-Input NAND Gate	14-SOIC	325.00/2,500		
TC74AC00P-ND	Quad 2-Input NAND Gate	14-Dip	.40	.30	.23
TC74AC02FNTR-ND	Quad 2-Input NOR Gate	14-SOIC	325.00/2,500		
TC74AC02P-ND	Quad 2-Input NOR Gate	14-Dip	.40	.30	.23
TC74AC04FN-ND	Hex Inverter	14-SOIC	.48	.36	.27
TC74AC04FNTR-ND	Hex Inverter	14-SOIC	325.00/2,500		
TC74AC08FN-ND	Quad 2-Input AND Gate	14-SOIC	.48	.36	.27
TC74AC08FNTR-ND	Quad 2-Input AND Gate	14-SOIC	325.00/2,500		
TC74AC14FN-ND	Hex Schmitt Trigger Inverter	14-SOIC	.48	.36	.27
TC74AC32FN-ND	Quad 2-Input OR Gate	14-SOIC	.48	.36	.27
TC74AC32FNTR-ND	Quad 2-Input OR Gate	14-SOIC	325.00/2,500		
TC74AC74FN-ND	Dual D-Type Flip Flop with Preset and Clear	14-SOIC	.44	.33	.25
TC74AC74FNTR-ND	Dual D-Type Flip Flop with Preset and Clear	14-SOIC	357.50/2,500		
TC74AC74P-ND	Dual D-Type Flip-Flop with Preset and Clear	14-Dip	.68	.51	.39
TC74AC86FN-ND	Quad Exclusive OR Gate	14-SOIC	.44	.33	.25
TC74AC125FN-ND	Quad Bus Buffer, Tri-State	14-SOIC	.64	.48	.36
TC74AC125FNTR-ND	Quad Bus Buffer, Tri-State	14-SOIC	520.00/2,500		
TC74AC138FN-ND	3-to-8 Line Decoder	16-SOIC	.60	.45	.34
TC74AC138FNTR-ND	3-to-8 Line Decoder	16-SOIC	487.50/2,500		
TC74AC138P-ND	3-to-8 Line Decoder	16-Dip	.60	.45	.34
TC74AC157FN-ND	Quad 2-Channel Multiplexer	16-SOIC	.84	.63	.48
TC74AC244P-ND	Octal Bus Buffer, Tri-State	20-Dip	.57	.48	.38
TC74AC245FWTR-ND	Octal Bus Transceiver, Tri-State	20-SOIC	252.70/1,000		
TC74AC245P-ND	Octal Bus Transceiver, Tri-State	20-Dip	.57	.48	.38
TC74AC373P-ND	Octal D-Type Latch, Tri-State	20-Dip	.87	.73	.58
TC74AC573FW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.93	.78	.62

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TOSHIBA 74ACT SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC74ACT00FN-ND	Quad 2-Input NAND Gate	14-SOIC	.44	.33	.25
TC74ACT00FNTR-ND	Quad 2-Input NAND Gate	14-SOIC	357.50/2,500		
TC74ACT00P-ND	Quad 2-Input NAND Gate	14-Dip	.44	.33	.25
TC74ACT02FN-ND	Quad 2-Input NOR Gate	14-SOIC	.48	.36	.27
TC74ACT02FNTR-ND	Quad 2-Input NOR Gate	14-SOIC	357.50/2,500		
TC74ACT04FN-ND	Hex Inverter	14-SOIC	.48	.36	.27
TC74ACT04FNTR-ND	Hex Inverter	14-SOIC	357.50/2,500		
TC74ACT08FN-ND	Quad 2-Input AND Gate	14-SOIC	.40	.30	.23
TC74ACT14FN-ND	Hex Schmitt Trigger Inverter	14-SOIC	.56	.42	.32
TC74ACT14FNTR-ND	Hex Schmitt Trigger Inverter	14-SOIC	487.50/2,500		
TC74ACT32FN-ND	Quad 2-Input OR Gate	14-SOIC	.44	.33	.25
TC74ACT32FNTR-ND	Quad 2-Input OR Gate	14-SOIC	357.50/2,500		
TC74ACT74FN-ND	Dual D-Type Flip Flop with Preset and Clear	14-SOIC	.44	.33	.25
TC74ACT74FNTR-ND	Dual D-Type Flip Flop with Preset and Clear	14-SOIC	357.50/2500		
TC74ACT138FN-ND	3-to-8 Line Decoder	16-SOIC	.60	.45	.34
TC74ACT138FNTR-ND	3-to-8 Line Decoder	16-SOIC	487.50/2,500		
TC74ACT138P-ND	3-to-8 Line Decoder	16-Dip	.60	.45	.34
TC74ACT139FN-ND	Dual 2-to-4 Line Decoder	16-SOIC	.84	.63	.48
TC74ACT157FN-ND	Quad 2-Channel Multiplexer	16-SOIC	.84	.63	.48
TC74ACT244FW-ND	Octal Bus Buffer, Tri-State	20-SOIC	.57	.48	.38
TC74ACT244FWTR-ND	Octal Bus Buffer, Tri-State	20-SOIC	252.70/1,000		
TC74ACT244P-ND	Octal Bus Buffer, Tri-State	20-Dip	.57	.48	.38
TC74ACT245FW-ND	Octal Bus Transceiver, Tri-State	20-SOIC	.57	.48	.38
TC74ACT245P-ND	Octal Bus Transceiver, Tri-State	20-Dip	.57	.48	.38
TC74ACT257FN-ND	Quad 2-Channel Multiplexer	16-SOIC	.72	.60	.48
TC74ACT257FNTR-ND	Quad 2-Channel Multiplexer	16-SOIC	780.00/2,500		
TC74ACT273FW-ND	Octal D-Type Flip Flop with Clear	20-SOIC	.87	.73	.58
TC74ACT373FW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.57	.48	.38
TC74ACT374FW-ND	Octal D-Type Flip Flop	20-SOIC	.57	.48	.38
TC74ACT541FW-ND	Octal Bus Buffer, Tri-State	20-SOIC	.75	.63	.50
TC74ACT541P-ND	Octal Bus Buffer, Tri-State	20-Dip	1.45	1.16	.87
TC74ACT573FW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.60	.50	.40
TC74ACT574FW-ND	Octal D-Type Flip Flop, Tri-State	20-SOIC	.63	.53	.42

TOSHIBA 74HC SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC74HC00AFN-ND	Quad 2-Input NAND Gate	14-SOIC	.40	.32	.24
TC74HC00AFNTR-ND	Quad 2-Input NAND Gate	14-SOIC	239.63/2,500		
TC74HC00AP-ND	Quad 2-Input NAND Gate	14-Dip	.40	.32	.24
TC74HC02AFN-ND	Quad 2-Input NOR Gate	14-SOIC	.40	.32	.24
TC74HC02AFNTR-ND	Quad 2-Input NOR Gate	14-SOIC	270.00/2,500		
TC74HC02AP-ND	Quad 2-Input NOR Gate	14-Dip	.40	.32	.24
TC74HC03AP-ND	Quad 2-Input NAND Gate with Open Drain	14-Dip	.60	.48	.36
TC74HC04AFN-ND	Hex Inverter	14-SOIC	.40	.32	.24
TC74HC04AFNTR-ND	Hex Inverter	14-SOIC	270.00/2,500		
TC74HC04AP-ND	Hex Inverter	14-Dip	.40	.32	.24
TC74HC05AP-ND	Hex Inverter with Open Drain	14-Dip	.64	.48	.36
TC74HC08AFN-ND	Quad 2-Input AND Gate	14-SOIC	.40	.32	.24
TC74HC08AFNTR-ND	Quad 2-Input AND Gate	14-SOIC	239.63/2,500		
TC74HC08AP-ND	Quad 2-Input AND Gate	14-Dip	.40	.32	.24
TC74HC10AP-ND	Triple 3-Input NAND Gate	14-Dip	.60	.48	.36
TC74HC14AFN-ND	Hex Schmitt Trigger Inverter	14-SOIC	.40	.32	.24
TC74HC14AFNTR-ND	Hex Schmitt Trigger Inverter	14-SOIC	270.00/2,500		
TC74HC14AP-ND	Hex Schmitt Trigger Inverter	14-Dip	.40	.32	.24
TC74HC32AFN-ND	Quad 2-Input OR Gate	14-SOIC	.40	.32	.24
TC74HC32AFNTR-ND	Quad 2-Input OR Gate	14-SOIC	239.63/2,500		
TC74HC32AP-ND	Quad 2-Input OR Gate	14-Dip	.40	.32	.24
TC74HC74AFN-ND	Dual D-Type Flip Flop with Preset and Clear	14-SOIC	.40	.32	.24
TC74HC74AFNTR-ND	Dual D-Type Flip Flop with Preset and Clear	14-SOIC	270.00/2,500		
TC74HC74AP-ND	Dual D-Type Flip Flop with Preset and Clear	14-Dip	.40	.32	.24
TC74HC86AP-ND	Quad Exclusive OR Gate	14-Dip	.48	.36	.27
TC74HC123AP-ND	Dual Monostable Multivibrator	16-Dip	.60	.45	.34
TC74HC125AFN-ND	Quad Bus Buffer, Tri-State	14-SOIC	.44	.33	.25
TC74HC125AFNTR-ND	Quad Bus Buffer, Tri-State	14-SOIC	357.50/2,500		
TC74HC125AP-ND	Quad Bus Buffer, Tri-State	14-Dip	.44	.33	.25
TC74HC132AFN-ND	Quad 2-Input Schmitt NAND Gate	14-SOIC	.56	.42	.32
TC74HC132AP-ND	Quad 2-Input Schmitt NAND Gate	14-Dip	.60	.45	.34
TC74HC138AFN-ND	3-to-8 Line Decoder	16-SOIC	.44	.33	.25
TC74HC138AFNTR-ND	3-to-8 Line Decoder	16-SOIC	325.00/2,500		
TC74HC138AP-ND	3-to-8 Line Decoder	16-Dip	.44	.33	.25
TC74HC139AFN-ND	Dual 2-to-4 Line Decoder	16-SOIC	.44	.33	.25
TC74HC139AFNTR-ND	Dual 2-to-4 Line Decoder	16-SOIC	357.50/2,500		
TC74HC139AP-ND	Dual 2-to-4 Line Decoder	16-Dip	.44	.33	.25
TC74HC157AP-ND	Quad 2-Channel Multiplexer	16-Dip	.60	.45	.34
TC74HC173AP-ND	Quad D-Type Register, Tri-State	16-Dip	.64	.48	.36
TC74HC175AFN-ND	Quad D-Type Flip Flop with Clear	16-SOIC	.52	.39	.30
TC74HC175AP-ND	Quad D-Type Flip Flop with Clear	16-Dip	.64	.48	.36
TC74HC244AFW-ND	Octal Bus Buffer, Tri-State	20-SOIC	.64	.48	.36
TC74HC244AFWTR-ND	Octal Bus Buffer, Tri-State	20-SOIC	199.50/1,000		
TC74HC244AP-ND	Octal Bus Buffer, Tri-State	20-Dip	.64	.48	.36
TC74HC245AFWTR-ND	Octal Bus Transceiver, Tri-State	20-SOIC	199.50/1,000		
TC74HC245AP-ND	Octal Bus Transceiver, Tri-State	20-Dip	.64	.48	.36
TC74HC259AP-ND	8-Bit Addressable Latch	16-Dip	.76	.57	.43
TC74HC273AFW-ND	Octal D-Type Flip Flop with Clear	20-SOIC	.68	.51	.39
TC74HC273AFWTR-ND	Octal D-Type Flip Flop with Clear	20-SOIC	239.40/1,000		
TC74HC273AP-ND	Octal D-Type Flip Flop with Clear	20-Dip	.68	.51	.39
TC74HC367AP-ND	Hex Bus Buffer, Tri-State	16-Dip	.64	.48	.36
TC74HC373AFW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.64	.48	.36
TC74HC373AFWTR-ND	Octal D-Type Latch, Tri-State	20-SOIC	212.80/1,000		
TC74HC373AP-ND	Octal D-Type Latch, Tri-State	20-Dip	.64	.48	.36
TC74HC374AFW-ND	Octal D-Type Flip Flop	20-SOIC	.64	.48	.36
TC74HC374AFWTR-ND	Octal D-Type Flip Flop	20-SOIC	199.50/1,000		
TC74HC374AP-ND	Octal D-Type Flip Flop	20-Dip	.64	.48	.36
TC74HC541AP-ND	Octal Bus Buffer, Tri-State	20-Dip	.76	.57	.43
TC74HC573AFW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.64	.48	.36
TC74HC573AFWTR-ND	Octal D-Type Latch, Tri-State	20-SOIC	212.80/1,000		
TC74HC573AP-ND	Octal D-Type Latch, Tri-State	20-Dip	.64	.48	.36
TC74HC574AP-ND	Octal D-Type Flip Flop, Tri-State	20-Dip	.64	.48	.36
TC74HC592AP-ND	8-Bit Register/Binary Counter	16-Dip	.93	.78	.62
TC74HC595AFN-ND	8-Bit Shift Register/Latch, Tri-State	16-SOIC	.48	.40	.32
TC74HC595AFNTR-ND	8-Bit Shift Register/Latch, Tri-State	16-SOIC	487.50/2,500		
TC74HC595AP-ND	8-Bit Shift Register/Latch, Tri-State	16-Dip	.48	.40	.32
TC74HC4040AFN-ND	12-Stage Binary Counter	16-SOIC	.56	.42	.32
TC74HC4040AP-ND	12-Stage Binary Counter	16-Dip	.60	.45	.34
TC74HC4051AP-ND	8-Channel Analog Multiplexer	16-Dip	.76	.57	.43
TC74HC4052AP-ND	Dual 4-Channel Analog Multiplexer	16-Dip	.76	.57	.43
TC74HC4053AFN-ND	Triple 2-Channel Analog Multiplexer	16-SOIC	.68	.51	.39
TC74HC4053AFNTR-ND	Triple 2-Channel Analog Multiplexer	16-SOIC	520.00/2,500		
TC74HC4053AP-ND	Triple 2-Channel Analog Multiplexer	16-Dip	.72	.54	.41
TC74HC4066AFN-ND	Quad Bilateral Switch	14-SOIC	.64	.48	.36
TC74HC4066AP-ND	Quad Bilateral Switch	14-Dip	.68	.51	.39

TOSHIBA 74LCX SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC74LCX00FN-ND	Quad 2-Input NAND Gate	14-SOIC	.54	.45	.36
TC74LCX02FN-ND	Quad 2-Input NOR Gate	14-SOIC	.54	.45	.36
TC74LCX04FN-ND	Hex Inverter	14-SOIC	.54	.45	.36
TC74LCX08FN-ND	Quad 2-Input AND Gate	14-SOIC	.54	.45	.36
TC74LCX14FN-ND	Hex Schmitt Trigger Inverter	14-SOIC	.54	.45	.36
TC74LCX32FN-ND	Quad 2-Input OR Gate	14-SOIC	.54	.45	.36
TC74LCX74FN-ND	Dual D-Type Flip Flop with Preset and Clear	14-SOIC	.54	.45	.36
TC74LCX125FN-ND	Quad Bus Buffer, Tri-State	14-SOIC	.60	.50	.40
TC74LCX138FN-ND	3-to-8 Line Decoder	16-SOIC	.60	.50	.40
TC74LCX240FW-ND	Octal Inverting Bus Buffer, Tri-State	20-SOIC	.68	.54	.41
TC74LCX244FW-ND	Octal Bus Buffer, Tri-State	20-SOIC	.68	.54	.41
TC74LCX245FW-ND	Octal Bus Transceiver, Tri-State	20-SOIC	.68	.54	.41
TC74LCX257FN-ND	Quad 2-Channel Multiplexer	16-SOIC	1.41	1.18	.94
TC74LCX373FW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.68	.54	.41
TC74LCX374FW-ND	Octal D-Type Flip Flop	20-SOIC	.68	.54	.41
TC74LCX573FW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.73	.58	.44
TC74LCX574FW-ND	Octal D-Type Flip-Flop, Tri-State	20-SOIC	.73	.58	.44
TC74LCX16240AFTTR-ND	Inverting 16-Bit Bus Buffer, Tri-State	48-TSSOP	892.50/1,000		
TC74LCX16244AFTTR-ND	16-Bit Bus Buffer, Tri-State	48-TSSOP	892.50/1,000		
TC74LCX16245AFTTR-ND	16-Bit Bus Transceiver, Tri-State	48-TSSOP	892.50/1,000		
TC74LCX16373AFTTR-ND	16-Bit D-Type Latch, Tri-State	48-TSSOP	892.50/1,000		
TC74LCX16374AFTTR-ND	16-Bit D-Type Flip Flop, Tri-State	48-TSSOP	892.50/1,000		

TOSHIBA 74LVX SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC74LVX00FN-ND	Quad 2-Input NAND Gate	14-SOIC	.52	.39	.30
TC74LVX00FTTR-ND	Quad 2-Input NAND Gate	14-TSSOP	425.60/2,000		
TC74LVX02FN-ND	Quad 2-Input NOR Gate	14-SOIC	.52	.39	.30
TC74LVX02FTTR-ND	Quad 2-Input NOR Gate	14-TSSOP	425.60/2,000		
TC74LVX04FN-ND	Hex Inverter	14-TSOIC	.48	.36	.27
TC74LVX04FTTR-ND	Hex Inverter	14-TSSOP	425.60/2,000		
TC74LVX08FN-ND	Quad 2-Input AND Gate	14-SOIC	.52	.39	.30
TC74LVX08FTTR-ND	Quad 2-Input AND Gate	14-TSSOP	425.60/2,000		
TC74LVX14FN-ND	Hex Schmitt Trigger Inverter	14-SOIC	.60	.45	.34
TC74LVX14FTTR-ND	Hex Schmitt Trigger Inverter	14-TSSOP	505.40/2,000		
TC74LVX32FN-ND	Quad 2-Input OR Gate	14-SOIC	.52	.39	.30
TC74LVX32FTTR-ND	Quad 2-Input OR Gate	14-TSSOP	425.60/2,000		
TC74LVX74FN-ND	Dual D-Type Flip Flop with Preset and Clear	14-SOIC	.64	.48	.36
TC74LVX74FTTR-ND	Dual D-Type Flip Flop with Preset and Clear	14-TSSOP	532.00/2,000		
TC74LVX86FN-ND	Quad Exclusive OR Gate	14-SOIC	.52	.39	.30
TC74LVX86FTTR-ND	Quad Exclusive OR Gate	14-TSSOP	478.80/2,000		
TC74LVX125FN-ND	Quad Bus Buffer, Tri-State	14-SOIC	.68	.51	.39
TC74LVX125FTTR-ND	Quad Bus Buffer, Tri-State	14-TSSOP	558.60/2,000		
TC74LVX138FN-ND	3-to-8 Line Decoder	16-SOIC	.68	.51	.39
TC74LVX138FTTR-ND	3-to-8 Line Decoder	16-TSSOP	558.60/2,000		
TC74LVX157FN-ND	Quad 2-Channel Multiplexer	16-SOIC	.64	.48	.36
TC74LVX157FTTR-ND	Quad 2-Channel Multiplexer	16-TSSOP	585.20/2,000		
TC74LVX174FN-ND	Hex D-Type Flip Flop with Clear	16-SOIC	.84	.63	.48
TC74LVX174FTTR-ND	Hex D-Type Flip Flop with Clear	16-TSSOP	691.60/2,000		
TC74LVX240FTTR-ND	Octal Inverting Bus Buffer, Tri-State	20-TSSOP	771.40/2,000		
TC74LVX240FW-ND	Octal Inverting Bus Buffer, Tri-State	20-SOIC	.92	.69	.52
TC74LVX244FTTR-ND	Octal Bus Buffer, Tri-State	20-TSSOP	771.40/2,000		
TC74LVX244FW-ND	Octal Bus Buffer, Tri-State	20-SOIC	.92	.69	.52
TC74LVX245FTTR-ND	Octal Bus Transceiver, Tri-State	20-TSSOP	824.60/2,000		
TC74LVX245FW-ND	Octal Bus Transceiver, Tri-State	20-SOIC	.75	.63	.50
TC74LVX273FTTR-ND	Octal D-Type Flip Flop with Clear	20-TSSOP	771.40/2,000		
TC74LVX273FW-ND	Octal D-Type Flip Flop with Clear	20-SOIC	.88	.66	.50
TC74LVX373FTTR-ND	Octal D-Type Latch, Tri-State	20-TSSOP	771.40/2,000		
TC74LVX373FW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.92	.69	.52
TC74LVX374FTTR-ND	Octal D-Type Flip Flop	20-TSSOP	771.40/2,000		
TC74LVX374FW-ND	Octal D-Type Flip Flop	20-SOIC	.92	.69	.52
TC74LVX573FTTR-ND	Octal D-Type Latch, Tri-State	20-TSSOP	931.00/2,000		
TC74LVX573FW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.84	.70	.56
TC74LVX4245FSTR-ND	Dual Supply Octal Bus Transceiver	24-SSOP	2550.00/2,000		

TOSHIBA 74VHC SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC74VHC00FN-ND	Quad 2-Input NAND Gate	14-SOIC	.50	.40	.30
TC74VHC00FNTR-ND	Quad 2-Input NAND Gate	14-SOIC	303.75/2,500		
TC74VHC00FTTR-ND	Quad 2-Input NAND Gate	14-TSSOP	319.20/2,000		
TC74VHC02FN-ND	Quad 2-Input NOR Gate	14-SOIC	.50	.40	.30
TC74VHC02FNTR-ND	Quad 2-Input NOR Gate	14-SOIC	303.75/2,500		
TC74VHC02FTTR-ND	Quad 2-Input NOR Gate	14-TSSOP	266.00/2,000		
TC74VHC04FN-ND	Hex Inverter	14-SOIC	.50	.40	.30
TC74VHC04FNTR-ND	Hex Inverter	14-SOIC	371.25/2,500		
TC74VHC04FTTR-ND	Hex Inverter	14-TSSOP	266.00/2,000		
TC74VHC08FN-ND	Quad 2-Input AND Gate	14-SOIC	.50	.40	.30
TC74VHC08FNTR-ND	Quad 2-Input AND Gate	14-SOIC	371.25/2,500		
TC74VHC08FTTR-ND	Quad 2-Input AND Gate	14-TSSOP	266.00/2,000		
TC74VHC10FN-ND	Triple 3-Input NAND Gate	14-SOIC	.50	.40	.30
TC74VHC10FNTR-ND	Triple 3-Input NAND Gate	14-SOIC	371.25/2,500		
TC74VHC10FTTR-ND	Triple 3-Input NAND Gate	14-TSSOP	319.20/2,000		

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TOSHIBA 74VHC SERIES *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC74VHC11FTTR-ND	Triple 3-Input AND Gate	14-TSSOP	425.60/2,000		
TC74VHC14FN-ND	Hex Schmitt Trigger Inverter	14-SOIC	.55	.44	.33
TC74VHC14FNTR-ND	Hex Schmitt Trigger Inverter	14-SOIC	357.50/2,500		
TC74VHC14FTTR-ND	Hex Schmitt Trigger Inverter	14-TSSOP	292.60/2,000		
TC74VHC20FN-ND	Dual 4-Input NAND Gate	14-SOIC	.48	.36	.27
TC74VHC20FTTR-ND	Dual 4-Input NAND Gate	14-TSSOP	425.60/2,000		
TC74VHC21FN-ND	Dual 4-Input AND Gate	14-SOIC	.52	.39	.30
TC74VHC21FTTR-ND	Dual 4-Input AND Gate	14-TSSOP	425.60/2,000		
TC74VHC32FN-ND	Quad 2-Input OR Gate	14-SOIC	.50	.40	.30
TC74VHC32FNTR-ND	Quad 2-Input OR Gate	14-SOIC	371.25/2,500		
TC74VHC32FTTR-ND	Quad 2-Input OR Gate	14-TSSOP	266.00/2,000		
TC74VHC74FN-ND	Dual D-Type Flip Flop with Preset and Clear	14-SOIC	.55	.44	.33
TC74VHC74FNTR-ND	Dual D-Type Flip Flop with Preset and Clear	14-SOIC	390.00/2,500		
TC74VHC74FTTR-ND	Dual D-Type Flip Flop with Preset and Clear	14-TSSOP	292.60/2,000		
TC74VHC86FN-ND	Quad Exclusive OR Gate	14-SOIC	.55	.44	.33
TC74VHC86FNTR-ND	Quad Exclusive OR Gate	14-SOIC	390.00/2,500		
TC74VHC86FTTR-ND	Quad Exclusive OR Gate	14-TSSOP	319.20/2,000		
TC74VHC125FN-ND	Quad Bus Buffer, Tri-State	14-SOIC	.64	.48	.36
TC74VHC125FNTR-ND	Quad Bus Buffer, Tri-State	14-SOIC	422.50/2,500		
TC74VHC125FTTR-ND	Quad Bus Buffer, Tri-State	14-TSSOP	558.60/2,000		
TC74VHC126FTTR-ND	Quad Bus Buffer, Tri-State	14-TSSOP	558.60/2,000		
TC74VHC138FN-ND	3-to-8 Line Decoder	16-SOIC	.56	.42	.32
TC74VHC138FNTR-ND	3-to-8 Line Decoder	16-SOIC	487.50/2,500		
TC74VHC138FTTR-ND	3-to-8 Line Decoder	16-TSSOP	399.00/2,000		
TC74VHC139FN-ND	Dual 2-to-4 Line Decoder	16-SOIC	.60	.45	.34
TC74VHC139FTTR-ND	Dual 2-to-4 Line Decoder	16-TSSOP	532.00/2,000		
TC74VHC153FTTR-ND	Dual 4-Channel Multiplexer	16-TSSOP	638.40/2,000		
TC74VHC157FN-ND	Quad 2-Channel Multiplexer	16-SOIC	.68	.51	.39
TC74VHC157FNTR-ND	Quad 2-Channel Multiplexer	16-SOIC	585.00/2,500		
TC74VHC157FTTR-ND	Quad 2-Channel Multiplexer	16-TSSOP	585.20/2,000		
TC74VHC164FN-ND	8-Bit SIPO Shift Register	14-SOIC	.68	.51	.39
TC74VHC164FTTR-ND	8-Bit SIPO Shift Register	14-TSSOP	452.20/2,000		
TC74VHC165FN-ND	8-Bit PISO Shift Register	16-SOIC	.51	.43	.34
TC74VHC165FTTR-ND	8-Bit PISO Shift Register	16-TSSOP	452.20/2,000		
TC74VHC174FN-ND	Hex D-Type Flip Flop with Clear	16-SOIC	.64	.48	.36
TC74VHC174FTTR-ND	Hex D-Type Flip Flop with Clear	16-TSSOP	425.60/2,000		
TC74VHC175FN-ND	Quad D-Type Flip Flop with Clear	16-SOIC	.64	.48	.36
TC74VHC175FTTR-ND	Quad D-Type Flip Flop with Clear	16-TSSOP	425.60/2,000		
TC74VHC238FN-ND	3-to-8 Line Decoder	16-SOIC	.92	.69	.52
TC74VHC238FTTR-ND	3-to-8 Line Decoder	16-TSSOP	771.40/2,000		
TC74VHC240FTTR-ND	Octal Inverting Bus Buffer, Tri-State	20-TSSOP	558.60/2,000		
TC74VHC240FW-ND	Octal Inverting Bus Buffer, Tri-State	20-SOIC	.72	.54	.41
TC74VHC244FTTR-ND	Octal Bus Buffer, Tri-State	20-TSSOP	558.60/2,000		
TC74VHC244FW-ND	Octal Bus Buffer, Tri-State	20-SOIC	.72	.54	.41
TC74VHC245FTTR-ND	Octal Bus Transceiver, Tri-State	20-TSSOP	558.60/2,000		
TC74VHC245FW-ND	Octal Bus Transceiver, Tri-State	20-SOIC	.72	.54	.41
TC74VHC245FWTR-ND	Octal Bus Transceiver, Tri-State	20-SOIC	226.10/1,000		
TC74VHC273FTTR-ND	Octal D-Type Flip Flop with Clear	20-TSSOP	558.60/2,000		
TC74VHC273FW-ND	Octal D-Type Flip Flop with Clear	20-SOIC	.72	.54	.41
TC74VHC273FWTR-ND	Octal D-Type Flip Flop with Clear	20-SOIC	252.70/1,000		
TC74VHC299FTTR-ND	8-Bit PIPO Shift Register	20-TSSOP	1690.00/2,000		
TC74VHC299FW-ND	8-Bit PIPO Shift Register	20-SOIC	1.33	1.06	.80
TC74VHC367FN-ND	Hex Bus Buffer, Tri-State	16-SOIC	.72	.54	.41
TC74VHC367FNTR-ND	Hex Bus Buffer, Tri-State	16-SOIC	617.50/2,500		
TC74VHC367FTTR-ND	Hex Bus Buffer, Tri-State	16-TSSOP	611.80/2,000		
TC74VHC373FTTR-ND	Octal D-Type Latch, Tri-State	20-TSSOP	558.60/2,000		
TC74VHC373FW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.72	.54	.41
TC74VHC373FWTR-ND	Octal D-Type Latch, Tri-State	20-SOIC	252.70/1,000		
TC74VHC374FTTR-ND	Octal D-Type Flip Flop	20-TSSOP	558.60/2,000		
TC74VHC374FW-ND	Octal D-Type Flip Flop	20-SOIC	.72	.54	.41
TC74VHC374FWTR-ND	Octal D-Type Flip Flop	20-SOIC	252.70/1,000		
TC74VHC393FN-ND	Dual Binary Counter	14-SOIC	.92	.69	.52
TC74VHC393FTTR-ND	Dual Binary Counter	14-TSSOP	798.00/2,000		
TC74VHC540FTTR-ND	Inverting Octal Bus Buffer, Tri-State	20-TSSOP	532.00/2,000		
TC74VHC540FW-ND	Inverting Octal Bus Buffer, Tri-State	20-SOIC	.68	.51	.39
TC74VHC541FTTR-ND	Octal Bus Buffer, Tri-State	20-TSSOP	532.00/2,000		
TC74VHC541FW-ND	Octal Bus Buffer, Tri-State	20-SOIC	.68	.51	.39
TC74VHC541FWTR-ND	Octal Bus Buffer, Tri-State	20-SOIC	226.10/1,000		
TC74VHC573FTTR-ND	Octal D-Type Latch, Tri-State	20-TSSOP	532.00/2,000		
TC74VHC573FW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.68	.51	.39
TC74VHC573FWTR-ND	Octal D-Type Latch, Tri-State	20-SOIC	226.10/1,000		
TC74VHC574FTTR-ND	Octal D-Type Flip Flop, Tri-State	20-TSSOP	532.00/2,000		
TC74VHC574FW-ND	Octal D-Type Flip Flop, Tri-State	20-SOIC	.68	.51	.39
TC74VHC574FWTR-ND	Octal D-Type Flip Flop, Tri-State	20-SOIC	226.10/1,000		
TC74VHC595FN-ND	8-Bit Shift Register/Latch, Tri-State	16-SOIC	1.05	.88	.70
TC74VHC595FTTR-ND	8-Bit Shift Register/Latch, Tri-State	16-TSSOP	1143.80/2,000		
TC74VHC4040FN-ND	12-Stage Binary Counter	16-SOIC	.64	.48	.36
TC74VHC4040FTTR-ND	12-Stage Binary Counter	16-TSSOP	558.60/2,000		

TOSHIBA LMOS SERIES

Surface Mount Product in Cut-Tape

Digi-Key Part No.	Description	Pkg.	Cut Tape Price Each★ 1	25	100
TC4S66FCT-ND	Single Analog Switch (4066B)	SMV-5	.68	.51	.39
TC4S584FCT-ND	Single Schmitt Trigger (4584B)	SMV-5	.48	.36	.27
TC7S00FCT-ND	Single NAND Gate (74HC00)	SMV-5	.40	.30	.23
TC7S02FCT-ND	Single NOR Gate (74HC02)	SMV-5	.40	.30	.23
TC7S04FTCT-ND	Single Inverter (74HC04)	SMV-5	.40	.30	.23
TC7S08FCT-ND	Single AND Gate (74HC08)	SMV-5	.40	.30	.23
TC7S32FCT-ND	Single OR Gate (74HC32)	SMV-5	.40	.30	.23
TC7SH00FCT-ND	Single VHS NAND Gate	SMV-5	.80	.60	.45
TC7SH02FCT-ND	Single TTL NOR Gate	SMV-5	.48	.36	.27
TC7SH04FCT-ND	Single VHS Inverter	SMV-5	.48	.36	.27
TC7SH08FCT-ND	Single VHS AND Gate	SMV-5	.48	.36	.27
TC7SH32FCT-ND	Single VHS OR Gate	SMV-5	.48	.36	.27
TC7SH86FCT-ND	Single VHS Exclusive OR Gate	SMV-5	.36	.30	.24
TC7SH86FUTCT-ND	Single VHS Exclusive OR Gate	USV-5	.39	.33	.26
TC7SHU04FCT-ND	Single Unbuffered VHS Inverter	SMV-5	.48	.36	.27
TC7SL00FUTCT-ND	Single 1 Volt NAND Gate	USV-5	.98	.74	.56
TC7SL02FUTCT-ND	Single 1 Volt NOR Gate	USV-5	.98	.74	.56
TC7SL04FUTCT-ND	Single 1 Volt Inverter	USV-5	.98	.74	.56
TC7SL08FUTCT-ND	Single 1 Volt AND Gate	USV-5	.98	.74	.56
TC7SL32FUTCT-ND	Single 1 Volt OR Gate	USV-5	.98	.74	.56
TC7SLU04FUTCT-ND	Single 1 Volt Unbuffered Inverter	USV-5	.98	.74	.56
TC7ST00FCT-ND	Single TTL NAND Gate	SMV-5	.75	.63	.50
TC7ST00FUTCT-ND	Single TTL NAND Gate	USV-5	.83	.69	.55
TC7ST02FCT-ND	Single TTL NOR Gate	SMV-5	.75	.63	.50
TC7ST02FUTCT-ND	Single TTL NOR Gate	USV-5	.83	.69	.55
TC7ST04FCT-ND	Single TTL Inverter Gate	SMV-5	.75	.63	.50
TC7ST04FUTCT-ND	Single TTL Inverter Gate	USV-5	.83	.69	.55
TC7ST08FCT-ND	Single TTL AND Gate	SMV-5	.75	.63	.50
TC7ST08FUTCT-ND	Single TTL AND Gate	USV-5	.83	.69	.55
TC7ST32FCT-ND	Single TTL OR Gate	SMV-5	.75	.63	.50
TC7ST32FUTCT-ND	Single TTL OR Gate	USV-5	.83	.69	.55
TC7SU04FCT-ND	Single Inverter (74HCU04)	SMV-5	.44	.33	.25
TC7W00FCT-ND	Dual NAND Gate (74HC00)	FM8	.74	.56	.42
TC7W02FCT-ND	Dual NOR Gate (74HC02)	FM8	.74	.56	.42
TC7W04FCT-ND	Triple Inverter (74HC04)	FM8	.74	.56	.42
TC7W08FCT-ND	Dual AND Gate (74HC08)	FM8	.74	.56	.42
TC7W32FCT-ND	Dual OR Gate (74HC32)	FM8	.74	.56	.42
TC7WU04FCT-ND	Triple Inverter (74HCU04)	FM8	.74	.56	.42

Surface Mount Product on Tape and Reel

Digi-Key Part No.	Description	Pkg.	Tape & Reel Pricing★ 3,000
TC4S66FTR-ND	Single Analog Switch (4066B)	SMV-5	221.00/M
TC4S584FTR-ND	Single Schmitt Trigger (4584B)	SMV-5	156.00/M
TC7S00FTR-ND	Single NAND Gate (74HC00)	SMV-5	130.00/M
TC7S02FTR-ND	Single NOR Gate (74HC02)	SMV-5	130.00/M
TC7S04FTTR-ND	Single Inverter (74HC04)	SMV-5	130.00/M
TC7S08FTR-ND	Single AND Gate (74HC08)	SMV-5	130.00/M
TC7S32FTR-ND	Single OR Gate (74HC32)	SMV-5	130.00/M
TC7SH00FTR-ND	Single VHS NAND Gate	SMV-5	260.00/M
TC7SH02FTR-ND	Single TTL NOR Gate	SMV-5	156.00/M
TC7SH04FTR-ND	Single VHS Inverter	SMV-5	156.00/M
TC7SH08FTR-ND	Single VHS AND Gate	SMV-5	156.00/M
TC7SH32FTR-ND	Single VHS OR Gate	SMV-5	156.00/M
TC7SH86FTR-ND	Single VHS Exclusive OR Gate	SMV-5	156.00/M
TC7SH86FUTTR-ND	Single VHS Exclusive OR Gate	USV-5	169.00/M
TC7SHU04FTR-ND	Single Unbuffered VHS Inverter	SMV-5	156.00/M
TC7SL00FUTTR-ND	Single 1 Volt NAND Gate	USV-5	318.50/M
TC7SL02FUTTR-ND	Single 1 Volt NOR Gate	USV-5	318.50/M
TC7SL04FUTTR-ND	Single 1 Volt Inverter	USV-5	318.50/M
TC7SL08FUTTR-ND	Single 1 Volt AND Gate	USV-5	318.50/M
TC7SL32FUTTR-ND	Single 1 Volt OR Gate	USV-5	318.50/M
TC7SLU04FUTTR-ND	Single 1 Volt Unbuffered Inverter	USV-5	318.50/M
TC7ST00FTR-ND	Single TTL NAND Gate	SMV-5	325.00/M
TC7ST00FUTTR-ND	Single TTL NAND Gate	USV-5	357.50/M
TC7ST02FTR-ND	Single TTL NOR Gate	SMV-5	325.00/M
TC7ST02FUTTR-ND	Single TTL NOR Gate	USV-5	357.50/M
TC7ST04FTR-ND	Single TTL Inverter Gate	SMV-5	325.00/M
TC7ST04FUTTR-ND	Single TTL Inverter Gate	USV-5	357.50/M
TC7ST08FTR-ND	Single TTL AND Gate	SMV-5	325.00/M
TC7ST08FUTTR-ND	Single TTL AND Gate	USV-5	357.50/M
TC7ST32FTR-ND	Single TTL OR Gate	SMV-5	325.00/M
TC7ST32FUTTR-ND	Single TTL OR Gate	USV-5	357.50/M
TC7SU04FTR-ND	Single Inverter (74HCU04)	SMV-5	143.00/M
TC7W00FTR-ND	Dual NAND Gate (74HC00)	FM8	246.05†
TC7W02FTR-ND	Dual NOR Gate (74HC02)	FM8	246.05†
TC7W04FTR-ND	Triple Inverter (74HC04)	FM8	246.05†
TC7W08FTR-ND	Dual AND Gate (74HC08)	FM8	246.05†
TC7W32FTR-ND	Dual OR Gate (74HC32)	FM8	246.05†
TC7WU04FTR-ND	Triple Inverter (74HCU04)	FM8	246.05†

† Tape and Reel pricing is priced at 1,000.

National Semiconductor™ LINEAR SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
CGS74LCT2524M-ND	1-to-4 Minimum Skew (300ps) 3V Clock Driver	SO-8	2.79	2.07	1.53
CGS74LCT2524MXTR-ND	1-to-4 Minimum Skew (300ps) 3V Clock Driver	SO-8	2812.50/2,500		
CLC006AJE-ND	Serial Digital Cable Driver with Adj. Outputs	SO-8	8.99	7.11	5.70
CLC007AJE-ND	Serial Digital Cable Driver	SO-8	7.98	6.31	5.06
CLC014AJE-ND	Adaptive Cable Equalizer for High-Speed Recovery	SO-14	17.15	14.70	13.04
CLC016ACQ-ND	Data Retiming PLL with Automatic Rate Selection	28-PLCC	24.90	23.24	21.58
CLC016AJQ-ND	Data Retiming PLL with Automatic Rate Selection	28-PLCC	27.75	25.90	24.05
CLC018AJVJQ-ND	8 x 8 Digital Cross Point Switch	68-PQFP	24.30	22.68	21.06
CLC021VGZ-5.0-ND	SMPTE 259M Digital Video Serializer with EDH Generation/Insertion	44-PQFP	39.30	36.68	34.06
CLC114AJE-ND	Quad Low Power Video Buffer	SO-14	10.59	9.08	8.05
CLC114AJP-ND	Quad Low Power Video Buffer	14-Dip	10.59	9.08	8.05
CLC400AJE-ND	Fast Settling Wideband Monolithic Op Amp	SO-8	6.83	5.40	4.33
CLC400AJP-ND	Fast Settling Wideband Monolithic Op Amp	8-Dip	6.83	5.40	4.33
CLC404AJE-ND	Wideband High Slew Rate, Monolithic Op Amp	SO-8	5.38	4.09	3.12
CLC404AJM5CT-ND	Op Amp Wideband High Slew Rate	SOT-23-5	6.20	4.72	3.60
CLC404AJM5TR-ND	Op Amp Wideband High Slew Rate	SOT-23-5	824.60/250		
CLC404AJP-ND	Wideband High Slew Rate, Monolithic Op Amp	8-Dip	5.38	4.09	3.12
CLC405AJE-ND	Low Cost, Low Power, 110MHz Op Amp with Disable	SO-8	3.68	2.80	2.14
CLC409AJE-TR13TR-ND	Amp Very Wideband Low Distortion	SO-8	8448.50/2,500		
CLC405AJP-ND	Low Cost, Low Power, 110MHz Op Amp with Disable	8-Dip	3.68	2.80	2.14
CLC406AJE-ND	Wideband, Low Power Monolithic Op Amp	SO-8	5.78	4.39	3.35
CLC409AJE-ND	Very Wideband, Low Distortion Monolithic Op Amp	SO-8	5.82	4.60	3.69
CLC409AJM5CT-ND	Amp Very Wideband Low Distortion	SOT-23-5	5.82	4.60	3.69
CLC409AJM5TR-ND	Amp Very Wideband Low Distortion	SOT-23-5	3434.80/1,000		
CLC409AJP-ND	Very Wideband, Low Distortion Monolithic Op Amp	8-Dip	5.82	4.60	3.69
CLC411AJE-ND	High-Speed Video Op Amp with Disable	SO-8	6.32	5.00	4.01
CLC411AJP-ND	High-Speed Video Op Amp with Disable	8-Dip	6.32	5.00	4.01
CLC414AJE-ND	Quad Low Power Monolithic Op Amp	SO-14	10.40	8.22	6.59
CLC414AJP-ND	Quad Low Power Monolithic Op Amp	14-Dip	10.40	8.22	6.59
CLC420AJE-ND	High-Speed Voltage Feedback Op Amp	SO-8	5.88	4.47	3.41
CLC420AJP-ND	High-Speed Voltage Feedback Op Amp	8-Dip	5.88	4.47	3.41
CLC425AJE-ND	Ultra Low Noise Wideband Op Amp	SO-8	6.43	5.08	4.07
CLC425AJE-TR13TR-ND	Ultra Low Noise Wideband Op Amp	SO-8	9333.00/2,500		
CLC425AJP-ND	Ultra Low Noise Wideband Op Amp	8-Dip	6.43	5.08	4.07

(Continued)

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
CLC426AJE-ND	Wideband, Low Noise Volt Feedback Op Amp	SO-8	6.49	5.13	4.11
CLC426AJP-ND	Wideband, Low Noise Voltage Feedback Op Amp	8-Dip	6.49	5.13	4.11
CLC428AJE-ND	Dual Wideband, Low Noise Voltage Feedback Op Amp	SO-8	8.51	6.73	5.39
CLC428AJP-ND	Dual Wideband, Low Noise Voltage Feedback Op Amp	8-Dip	8.51	6.73	5.39
CLC430AJE-ND	General Purpose 100MHz Op Amp	SO-8	3.28	2.49	1.90
CLC430AJE-TR13TR-ND	General Purpose 100MHz Op Amp with Disable	SO-8	4093.75/2,500		
CLC430AJP-ND	General Purpose 100MHz Op Amp	8-Dip	3.28	2.49	1.90
CLC432AJE-ND	Dual Wideband Monolithic Op Amp	SO-8	5.45	4.15	3.17
CLC432AJP-ND	Dual Wideband Monolithic Op Amp	8-Dip	5.45	4.15	3.17
CLC440AJE-ND	High-Speed, Low Power Voltage Feedback Op Amp	SO-8	8.15	6.45	5.17
CLC440AJP-ND	High-Speed, Low Power Voltage Feedback Op Amp	8-Dip	8.15	6.45	5.17
CLC449AJE-ND	1.2GHz Ultra Wideband Monolithic Op Amp	SO-8	6.43	5.08	4.07
CLC449AJP-ND	1.2GHz Ultra Wideband Monolithic Op Amp	8-Dip	6.43	5.08	4.07
CLC450AJE-ND	Single Supply Low Power Hi-Current Feedback Op Amp	SO-8	2.85	2.17	1.66
CLC450AJM5-ND	Single Supply Low Pwr. High Current Feedback Op Amp	SOT-23-5	2.85	2.17	1.66
CLC450AJP-ND	Single Supply Low Power Hi-Current Feedback Op Amp	8-Dip	2.85	2.17	1.66
CLC452AJE-ND	Single Supply Low Power Hi-Current Feedback Op Amp	SO-8	2.95	2.25	1.72
CLC452AJM5-ND	Single Supply Low Pwr. High Current Feedback Op Amp	SOT-23-5	2.95	2.25	1.72
CLC502AJE-ND	Clamping, Low Gain Op Amp with Fast 14-Bit Settling	SO-8	5.69	4.50	3.61
CLC505AJE-ND	High-Speed, Programmable Supply Current Monolithic Op Amp	SO-8	5.52	4.37	3.50
CLC520AJE-ND	Amp with Voltage Controlled Gain, AGC+Amp	SO-14	9.93	7.86	6.30
CLC520AJP-ND	Amp with Voltage Controlled Gain, AGC+Amp	14-Dip	9.93	7.86	6.30
CLC522AJE-ND	Wideband Variable Gain Amplifier	SO-14	8.15	6.45	5.17
CLC522AJP-ND	Wideband Variable Gain Amplifier	14-Dip	8.15	6.45	5.17
CLC532AJE-ND	High-Speed 2:1 Analog Multiplexer	SO-14	4.90	3.73	2.85
CLC532AJP-ND	High-Speed 2:1 Analog Multiplexer	14-Dip	4.90	3.73	2.85
CLC5523IM-ND	Low Power Variable Gain Amplifier	SO-8	7.79	6.16	4.94
CLC5523IN-ND	Low Power Variable Gain Amplifier	8-Dip	7.79	6.16	4.94
CLC952ACMSA-ND	12-Bit, 41MSPS Monolithic A/D Converter	28-SSOP	36.15	33.74	31.33
DP83223V-ND	Twister Hi-Speed Networking Transceiver Device	28-PLCC	14.18	12.15	10.78
LF156H-ND	Mono JFET In Op Amp	TO-99	4.95	3.77	2.88
LF256H-ND	Wideband JFET Op Amp	TO-99	4.45	3.39	2.59
LF298M-ND	Monolithic Sample and Hold Circuit	SO-14	5.50	4.35	3.49
LF347BN-ND	Quad Bi-FET Op Amp	14-Dip	2.67	1.98	1.47
LF347M-ND	Quad Bi-FET Op Amp	SO-14	1.55	1.15	.85
LF347MXTR-ND	Quad Bi-FET Op Amp	SO-14	1562.50/2,500		
LF347NNS-ND	Quad Bi-FET Op Amp	14-Dip	1.55	1.15	.85
LF353M-ND	Wideband Dual JFET Op Amp	SO-8	.68	.49	.36
LF353MXTR-ND	Wideband Dual JFET Op Amp	SO-8	498.75/2,500		
LF353N-ND	Wideband Dual JFET Input Op Amp	8-Dip	.68	.49	.36
LF356H-ND	Monolithic JFET Input Op Amp	TO-99	2.86	2.13	1.58
LF356M-ND	Monolithic JFET Input Op Amp	SO-8	1.24	.91	.66
LF356N-ND	Monolithic JFET Input Op Amp	8-Dip	1.24	.91	.66
LF398AN-ND	Monolithic Sample and Hold Circuit	8-Dip	3.78	2.87	2.19
LF398H-ND	Monolithic Sample and Hold Circuit	TO-99	3.80	2.89	2.21
LF398M-ND	Monolithic Sample and Hold Circuit	SO-14	2.95	2.19	1.62
LF398N-ND	Monolithic Sample and Hold Circuit	8-Dip	2.95	2.19	1.62
LF411ACH-ND	Low Offset Low Drift JFET Input Op Amp	HO8B	7.67	6.06	4.86
LF411ACN-ND	Low Offset Low Drift JFET Input Op Amp	8-Dip	4.75	3.61	2.76
LF411CN-ND	Low Offset Low Drift JFET Input Op Amp	8-Dip	1.80	1.32	.96
LF412ACN-ND	Low Offset Low Drift JFET Dual Op Amp	8-Dip	5.57	4.40	3.53
LF412CN-ND	Low Offset Low Drift JFET Dual Op Amp	8-Dip	1.65	1.21	.88
LF412MH-ND	Low Offset Low Drift JFET Dual Op Amp	MOD TO-99	7.77	6.15	4.93
LF442ACN-ND	Dual Low Power JFET Op Amp	8-Dip	5.57	4.40	3.53
LF442AMH-ND	Dual Low Power JFET Op Amp	8PIN MC	15.90	14.84	13.78
LF442CN-ND	Dual Low Power JFET Op Amp	8-Dip	1.61	1.19	.86
LF444ACN-ND	Quad Low Power JFET Op Amp	14-Dip	4.38	3.33	2.54
LF444CM-ND	Quad Low Power JFET Op Amp	SO-14	1.86	1.38	1.02
LF444CN-ND	Quad Low Power JFET Op Amp	14-Dip	1.86	1.38	1.02
LM10CH-ND	Op Amp and Voltage Reference	H08A	5.95	4.53	3.46
LM10CLN-ND	Op Amp and Voltage Reference	8-Dip	2.75	2.09	1.60
LM10CN-ND	Op Amp and Voltage Reference	8-Dip	3.50	2.66	2.03
LM10CWM-ND	Op Amp and Voltage Reference	SO-14	3.50	2.66	2.03
LM12CLK-ND	80W Power Op Amp 4-Pin	TO-3	17.85	16.66	15.47
LM12H458CIV-ND	12-Bit + Sign DAS with Self-Calibration	44-PQFP	21.45	20.02	18.59
LM12H458CIVF-ND	12-Bit + Sign Data Acquisition System with Self-Calibration	44-PQFP	21.45	20.02	18.59
LM12L458CIV-ND	12-Bit + Sign Data Acquisition System with Self-Calibration	44-PQFP	21.45	20.02	18.59
LM20BIM7CT-ND	Micro SMD Temperature Sensor, ±25°C	SC-70-5	1.24	.91	.66
LM20BIM7TR-ND	Micro SMD Temperature Sensor, ±25°C	SC-70-5	429.00/1,000		
LM20CIM7CT-ND	Micro SMD Temperature Sensor, ±5°C	SC-70-5	1.09	.80	.58
LM20CIM7TR-ND	Micro SMD Temperature Sensor, ±5°C	SC-70-5	377.00/1,000		
LM20SIBPCT-ND	Micro SMD Temperature Sensor	4-MicroSMD	1.09	.80	.58
LM20SIBPTR-ND	Micro SMD Temperature Sensor	4-MicroSMD	108.75/250		
LM34AH-ND	Precision F. Temperature Sensor, -50°F to +300°F	TO-46	15.58	13.35	11.84
LM34CAH-ND	Precision F. Temperature Sensor, -40°F to +230°F	TO-46	10.94	9.38	8.32
LM34CAZ-ND	Precision F. Temperature Sensor, -40°F to +230°F	TO-92	6.64	5.25	4.21
LM34CH-ND	Precision F. Temperature Sensor, -40°F to +230°F	TO-46	8.93	7.65	6.79
LM34CZ-ND	Precision F. Temperature Sensor, -40°F to +230°F	TO-92	6.03	4.58	3.50
LM34DM-ND	Precision F. Temperature Sensor, +32°F to +212°F	SO-8	1.89	1.41	1.04
LM35DT-ND	Precision Celsius Temperature Sensor	TO-220	2.82	2.10	1.55
LM34DZ-ND	Precision F. Temperature Sensor, +32°F to +212°F	TO-92	2.33	1.73	1.28
LM35AH-ND	Precision Celsius Temperature Sensor, -55°C to +150°C	TO-46	17.47	14.97	13.28
LM35CAH-ND	Precision Celsius Temperature Sensor, -40°C to +110°C	TO-46	9.98	8.55	7.59
LM35CAZ-ND	Precision Celsius Temperature Sensor, -40°C to +110°C	TO-92	5.69	4.50	3.61
LM35CH-ND	Precision Celsius Temperature Sensor, -40°CF to +110°C	TO-46	8.93	7.65	6.79
LM35CZ-ND	Precision Celsius Temperature Sensor, -40°C to +110°C	TO-92	5.88	4.47	3.41
LM35DH-ND	Precision Celsius Temperature Sensor, 0°C to +100°C	TO-46	3.00	2.28	1.74
LM35DM-ND	Precision Celsius Temperature Sensor, 0°C to +100°C	SO-8	2.05	1.52	1.13
LM35DMXTR-ND	Precision Celsius Temperature Sensor, 0°C to +100°C	SO-8	2062.50/2,500		
LM35DZ-ND	Precision Celsius Temperature Sensor, 0°C to +100°C	TO-92	1.98	1.48	1.09
LM45BIM3CT-ND	Precision Celsius Temperature Sensor	SOT-23	1.71	1.27	.94
LM45BIM3TR-ND	Precision Celsius Temperature Sensor	SOT-23	704.00/1,000		
LM45CIM3CT-ND	Precision Celsius Temperature Sensor	SOT-23	1.09	.80	.58
LM45CIM3TR-ND	Precision Celsius Temperature Sensor	SOT-23	377.00/1,000		
LM50BIM3CT-ND	Single Supply Centigrade Temperature Sensor	SOT-23	1.61	1.20	.89
LM50BIM3TR-ND	Single Supply Centigrade Temperature Sensor	SOT-23	665.60/1,000		
LM50CIM3CT-ND	Single Supply Centigrade Temperature Sensor	SOT-23	1.09	.80	.58
LM50CIM3TR-ND	Single Supply Centigrade Temperature Sensor	SOT-23	377.00/1,000		
LM56BIM-ND	Dual Output Low Power Thermostat	SO-8	2.51	1.87	1.38
LM56BIMMCT-ND	Dual Output Low Power Thermostat	8-MSOP	2.95	2.19	1.62
LM56BIMMTR-ND	Dual Output Low Power Thermostat	8-MSOP	1216.00/1,000		
LM56CIM-ND	Dual Output Low Power Thermostat	SO-8	1.89	1.41	1.04
LM56CIMMCT-ND	Dual Output Low Power Thermostat	8-MSOP	2.23	1.66	1.23
LM56CIMMTR-ND	Dual Output Low Power Thermostat	8-MSOP	921.60/1,000		
LM60BIM3CT-ND	2.7V Temperature Sensor	SOT-23	1.43	1.05	.76
LM60BIM3TR-ND	2.7V Temperature Sensor	SOT-23	494.00/1,000		
LM60CIM3CT-ND	2.7V Temperature Sensor	SOT-23	1.01	.75	.54
LM60CIM3TR-ND	2.7V Temperature Sensor	SOT-23	351.00/1,000		
LM61BIM3CT-ND	2.7V Temperature Sensor	SOT-23	1.43	1.05	.76
LM61BIM3TR-ND	2.7V Temperature Sensor	SOT-23	494.00/1,000		
LM61CIM3CT-ND	2.7V Temperature Sensor, +30°C to +100°C	SOT-23	1.01	.75	.54
LM61CIM3TR-ND	2.7V Temperature Sensor, +30°C to +100°C	SOT-23	351.00/1,000		
LM62BIM3CT-ND	2.7V Temperature Sensor, 0°C to 100°C	SOT-23	1.43	1.05	.76
LM62BIM3TR-ND	2.7V Temperature Sensor, 0°C to 100°C	SOT-23	494.00/1,000		
LM62CIM3CT-ND	2.7V Temperature Sensor, 0°C to 100°C	SOT-23	1.01	.75	.54
LM62CIM3TR-ND	2.7V Temperature Sensor	SOT-23	351.00/1,000		
LM70CIMM-3CT-ND	10-Bit Plus Sign Digital Temperature Sensor	8-MSOP	1.86	1.38	1.02
LM70CIMM-3TR-ND	10-Bit Plus Sign Digital Temperature Sensor	8-MSOP	768.00/1,000		
LM70CIMM-5CT-ND	SPI/MICROWIRE10-Bit plus Digital Temp. Sensor	8-MSOP	1.86	1.38	1.02
LM70CIMM-5TR-ND	SPI/MICROWIRE10-Bit plus Digital Temp. Sensor	8-MSOP	768.00/1,000		
LM70CIMMX-3CT-ND	10-Bit plus Sign Digital Temperature Sensor	8-MSOP	1.86	1.38	1.02
LM70CIMMX-3TR-ND	10-Bit plus Sign Digital Temperature Sensor	8-MSOP	2625.00/3,500		
LM74CIBP-3CT-ND	3V 12-Bit Digital Temperature Sensor	5-MicroSMD	2.51	1.87	1.38
LM74CIBP-3TR-ND	3V 12-Bit Digital Temperature Sensor	5-MicroSMD	1036.80/1,000		
LM74CIBP-5CT-ND	5V 12-Bit Digital Temperature Sensor	5-MicroSMD	2.51	1.87	1.38
LM74CIBP-5TR-ND	5V 12-Bit Digital Temperature Sensor	5-MicroSMD	1036.80/1,000		
LM74CIM-3-ND	3V 12-Bit Digital Temperature Sensor	SO-8	2.08	1.55	1.14
LM74CIM-5-ND	5V 12-Bit Digital Temperature Sensor	SO-8	2.08	1.55	1.14
LM75CIM-3-ND	3V Digital Temperature Sensor	SO-8	2.67	1.98	1.47
LM75CIM-5-ND	5V Digital Temperature Sensor and Thermal Watchdog with Two-Wire Interface	SO-8	2.67	1.98	1.47
LM75CIMX-5TR-ND	5V Digital Temperature Sensor and Thermal Watchdog with Two-Wire Interface	SO-8	2687.50/2,500		
LM75CIMM-3CT-ND	3.3V Digital Temperature Sensor and Thermal Watchdog with Two-Wire Interface	8-MSOP	2.67	1.98	1.47
LM75CIMM-3TR-ND	3.3V Digital Temperature Sensor and Thermal Watchdog with Two-Wire Interface	8-MSOP	1100.80/1,000		
LM75CIMM-5CT-ND	5V Digital Temperature Sensor and Thermal Watchdog with Two-Wire Interface	8-MSOP	2.67	1.98	1.47
LM75CIMM-5TR-ND	5V Digital Temperature Sensor and Thermal Watchdog with Two-Wire Interface	8-MSOP	1100.80/1,000		
LM76CHM-5-ND	5V Digital Temperature Sensor and Thermal Window Comparator with Two-Wire Interface	SO-8	2.85	2.17	1.66
LM76CNM-3-ND	3V Digital Temperature Sensor and Thermal Window Comparator with Two-Wire Interface	SO-8	2.85	2.17	1.66
LM77CIM-3-ND	3V Digital Temperature Sensor and Thermal Window Comparator with Two-Wire Interface	SO-8	2.36	1.75	1.30
LM77CIM-5-ND	5V Digital Temperature Sensor and Thermal Window Comparator with Two-Wire Interface	SO-8	2.36	1.75	1.30
LM78L05ACM-ND	5V 100mA Positive Regulator	SO-8	.49	.38	.27
LM78L05ACMX-ND	5V 100mA Positive Regulator	SO-8	318.75/2,500		
LM78L05ACZ-ND	5V 100mA Positive Regulator	TO-92	.50	.39	.28
LM78L05IBPCT-ND	3-Terminal Positive Regulator	8-MicroSMD	.63	.46	.33
LM78L05IBPTR-ND	3-Terminal Positive Regulator	8-MicroSMD	59.50/250		
LM78L09ACZ-ND	9V 100mA Positive Regulator	TO-92	.50	.39	.28
LM78L12ACM-ND	12V 100mA Positive Regulator	SO-8	.50	.39	.28
LM78L12ACMXTR-ND	12V 100mA Positive Regulator	SO-8	327.25/2,500		
LM78L12ACZ-ND	12V 0.1 Amp Voltage Regulator	TO-92	.50	.39	.28
LM78L15ACM-ND	15V 100mA Positive Regulator	SO-8	.50	.39	.28
LM78L15ACMXTR-ND	15V 100mA Positive Regulator	SO-8	327.25/2,500		
LM78L15ACZ-ND	15V 0.1 Amp Positive Regulator	TO-92	.50	.39	.28
LM78L62ACZ-ND	6.2V 100mA Positive Regulator	TO-92	1.09	.80	.58
LM78M05CT-ND	5V, 500mA Positive Regulator	TO-220	.72	.52	.38
LM78M05CDT-ND	3-Terminal Positive Regulator	TO-252-3	.81	.59	.43
LM78M12CH-ND	12V 500mA Positive Regulator	TO-39	2.67	1.98	1.47
LM78M12CT-ND	12V Positive Regulator	TO-220	.94	.69	.50
LM78M15CT-ND	15V Positive Regulator	TO-220	.72	.52	.38
LM78M15CH-ND	15V 500mA Positive Regulator	TO-39	2.67	1.98	1.47
LM78S40CN-ND	Universal Switching Regulator Subsystem	16-Dip	2.11	1.57	1.16
LM78S40N-ND	Universal Switching Regulator Subsystem, Ind. Temp	16-Dip	2.29	1.71	1.26
LM79L05ACM-ND	5V 100mA Negative Regulator	SO-8	.50	.39	.28
LM79L05ACMXTR-ND	5V 100mA Negative Regulator	SO-8	327.25/2,500		
LM79L12ACM-ND	12V 100mA Negative Regulator	SO-8	.50	.39	.28
LM79L12ACMXTR-ND	12V 100mA Negative Regulator	SO-8	327.25/2,500		
LM79M05CT-ND	5V 500mA Negative Voltage Regulator	TO-220	.77	.56	.40
LM79M12CT-ND	12V 500mA Negative Voltage Regulator	TO-220	.77	.56	.40
LM79M15CT-ND	15V 500mA Negative Voltage Regulator	TO-220	.94	.69	.50
LM80CIMT-3-ND	Serial Interface ACPI-Compatible Microprocessor System Hardware Monitor, 2.8V-5.75V	24-TSSOP	5.80	4.59	3.68
LM80CIMT-5-ND	Serial Interface ACPI-Compatible Microprocessor System Hardware Monitor	24-TSSOP	5.80	4.59	3.68
LM81CIMT-3-ND	Serial Interface ACPI-Compatible Microprocessor System Hardware Monitor, 2.8V-5.75V	24-TSSOP	4.40	3.35	2.56
LM82CIMQA-ND	Triple-Diode Input and Local Digital Temp. Sensor with Two-Wire Interface	16-SSOP	4.28	3.25	2.48
LM83CIMQA-ND	Triple-Diode Input and Local Digital Temp. Sensor with Two-Wire Interface	16-SSOP	5.95	4.53	3.46
LM84CIMQA-ND	Triple-Diode Input and Local Digital Temp. Sensor with Two-Wire Interface	16-SSOP	3.58	2.72	2.08
LM87CIMT-ND	Serial Interface System Hardware Monitor with Remote Diode Temp. Sensing	24-TSSOP	5.48	4.17	3.18
LM92CIM-ND	Temp. Sensor and Thermal Window Comparator with Two-Wire Interface	SO-8	4.05	3.08	2.35
LM108AH-ND	Precision Op Amp	TO-99	5.54	4.39	3.52
LM111H-ND	Voltage Comparator	TO-99	3.63	2.76	2.11
LM111J-8-ND	Voltage Comparator	8-CDip	4.63	3.52	2.69
LM113H-ND	Reference Diode	TO-46	8.59	6.79	5.44
LM117H-ND	500mA Positive Adjustable Voltage Regulator	TO-39	6.83	5.40	4.33
LM117K STEEL-ND	Positive Adjustable Voltage Regulator	TO-3	7.35	5.81	4.66
LM120H-5.0-ND	1.5A, 3-Terminal Negative Voltage Regulator	TO-39	9.24	7.31	5.86
LM124AJ-ND	Low Power Quad Op Amp	14-CDip	6.09	4.82	3.86
LM124J-ND	Low Power Quad Op Amp	14-CDip	2.65	2.02	1.54
LM135AH-ND	Precision Temperature Sensor	TO-46	15.02	12.87	11.42
LM135H-ND	Precision Temperature Sensor	TO-46	8.32	6.58	5.27
LM136AH-2.5-ND	2.5V Reference Diode	TO-46	9.63	8.25	7.32
LM136H-2.5-ND	2.5V Reference Diode	TO-46	8.32	6.58	5.27
LM136H-5.0-ND	5V Reference Diode	TO-46	10.08	7.97	6.39
LM137H-ND	.5A 3-Terminal Negative Voltage Regulator	TO-39	11.55	9.90	8.78

(Continued)

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Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LM139J-ND	Low Power Low Offset Quad Comp.	14-CDip	2.79	2.07	1.53
LM140K-5.0-ND	.5V Ser. 3-Terminal Positive Regulator	TO-3	6.24	4.94	3.96
LM140K-12-ND	12V, 1.5A Positive Voltage Regulator	TO-3	6.24	4.94	3.96
LM140LAH-5.0-ND	5V, Ser., 3-Terminal Positive Regulator	TO-39	5.80	4.41	3.37
LM140LAH-12-ND	12V, 100mA Positive Voltage Regulator	TO-39	5.80	4.41	3.37
LM148J-ND	Quad 741 Op Amp	14-CDip	2.98	2.27	1.73
LM150K STEEL-ND	3A Positive Adjustable Voltage Regulator	TO-3	13.07	11.21	9.94
LM158AH-ND	Low Power Dual Op Amp	TO-99	6.30	4.98	3.99
LM158H-ND	Low Power Dual Op Amp	TO-99	3.93	2.99	2.28
LM185BH-ND	Adjustable Micropower Voltage Reference	TO-46	12.78	10.95	9.71
LM185H-2.5-ND	Micropower Voltage Reference Diode	TO-46	10.29	8.14	6.52
LM193H-ND	Low Power Offset Voltage Dual Comparator	TO-99	4.50	3.42	2.61
LM219J-ND	High Speed Dual Comparator	14-CDip	6.09	4.82	3.86
LM224J-ND	Low Power Quad Op Amp	14-CDip	1.64	1.22	.91
LM231AN-ND	Precision Voltage-to-Frequency Converter	8-Dip	6.97	5.52	4.42
LM231N-ND	Precision Voltage-to-Frequency Converter	8-Dip	5.82	4.60	3.69
LM234Z-3-ND	Adjustable Current Source/Temperature Sensor	TO-92	3.05	2.32	1.77
LM234Z-6-ND	Adjustable Current Source/Temperature Sensor	TO-92	1.95	1.45	1.08
LM235AH-ND	Precision Temperature Sensor	TO-46	9.98	8.55	7.59
LM235H-ND	Precision Temperature Sensor	TO-46	6.07	4.80	3.85
LM236AH-2.5-ND	2.5V (1%) Voltage Reference	TO-46	6.66	5.27	4.22
LM236AH-5.0-ND	5V Reference Diode	TO-46	5.78	4.57	3.66
LM236H-2.5-ND	2.5V Reference Diode	TO-46	4.50	3.42	2.61
LM239J-ND	High Performance Quad Comparator	14-CDip	2.17	1.61	1.19
LM285BXZ-ND	Adjustable Micropower Voltage Reference	TO-92	3.63	2.76	2.11
LM285BYM-ND	Adjustable Micropower Voltage Reference	SO-8	2.70	2.06	1.57
LM285BYZ-ND	Micropower Adjustable Voltage Reference	TO-92	2.70	2.06	1.57
LM285BYZ-1.2-ND	1.2V Micropower Voltage Reference	TO-92	2.70	2.06	1.57
LM285BYZ-2.5-ND	2.5V Reference Diode	TO-92	2.70	2.06	1.57
LM285M-ND	Micropower Adjustable Voltage Reference	SO-8	1.61	1.19	.86
LM285MXTR-ND	Micropower Adjustable Voltage Reference	SO-8	1370.63/2,500		
LM285M-1.2-ND	1.2V Reference Diode	SO-8	1.61	1.19	.86
LM285M-2.5-ND	Micropower Voltage Reference Diode	SO-8	1.61	1.19	.86
LM285MX-2.5TR-ND	Micropower Voltage Reference Diode	SO-8	1370.63/2,500		
LM285Z-ND	Adjustable Micropower Voltage Reference	TO-92	1.61	1.19	.86
LM285Z-1.2-ND	Micropower Voltage Reference Diode	TO-92	1.61	1.19	.86
LM285Z-2.5-ND	2.5V Reference Diode	TO-92	1.61	1.19	.86
LM301AH-ND	General Purpose Op Amp	TO-99	2.95	2.19	1.62
LM301AN-ND	General Purpose Op Amp	8-Dip	1.20	.88	.64
LM308AH-ND	General Purpose Op Amp	TO-99	2.79	2.07	1.53
LM308H-ND	Super Gain Op Amp	TO-99	2.65	2.02	1.54
LM309H-ND	5V Voltage Regulator	TO-39	3.88	2.95	2.25
LM309K STEEL-ND	+5V 1.5A Voltage Regulator	TO-3	4.78	3.63	2.77
LM311H-ND	Voltage Comparator	TO-99	2.50	1.90	1.45
LM311M-ND	Voltage Comparator	SO-8	.55	.40	.29
LM311MXTR-ND	Voltage Comparator	SO-8	350.00/2,500		
LM311N-ND	High Performance Voltage Comparator	8-Dip	.58	.42	.31
LM313H-ND	Precision Reference, 2-Pin	TO-18	5.54	4.39	3.52
LM317AEMPCT-ND	3-Terminal Adjustable Regulator	SOT-223-4	1.76	1.30	.94
LM317AEMPTR-ND	3-Terminal Adjustable Regulator	SOT-223-4	611.00/1,000		
LM317AH-ND	500mA Positive Adjustable Voltage Regulator	TO-39	4.13	3.14	2.40
LM317AT-ND	1.5A Positive Adjustable Voltage Regulator	TO-220	2.02	1.50	1.11
LM317EMPCT-ND	1A Positive Adjustable Voltage Regulator	SOT-223	1.13	.83	.60
LM317EMPTR-ND	1A Positive Adjustable Voltage Regulator	SOT-223	390.00/1,000		
LM317H-ND	500mA Positive Adjustable Voltage Regulator	TO-39	2.80	2.13	1.63
LM317HVH-ND	High Voltage 500mA, Adjustable Voltage Regulator	TO-39	7.08	5.60	4.49
LM317HVK STEEL-ND	High Voltage 1.5A, Adjustable Voltage Regulator	TO-3	6.30	4.98	3.99
LM317HVT-ND	High Voltage 1.5A, Adjustable Voltage Regulator	TO-220	2.79	2.07	1.53
LM317K STEEL-ND	1.5A Positive Adjustable Voltage Regulator	TO-3	3.63	2.76	2.11
LM317LM-ND	100mA Positive Adjustable Voltage Regulator	SO-8	.55	.40	.29
LM317LMXTR-ND	100mA Positive Adjustable Voltage Regulator	SO-8	350.00/2,500		
LM317LZ-ND	100mA Positive Adjustable Voltage Regulator	TO-92	.50	.36	.27
LM317MDT-ND	3-Terminal Adjustable Regulator	TO-252	.81	.59	.43
LM317S-ND	3-Terminal Adjustable Regulator	TO-263	1.35	.99	.72
LM317SXTR-ND	3-Terminal Adjustable Regulator	TO-263	239.40/500		
LM317T-ND	1.5A Positive Adjustable Voltage Regulator	TO-220	.63	.46	.33
LM318H-ND	High Slew Rate Op Amp	TO-99	3.38	2.57	1.96
LM318M-ND	High Slew Rate Op Amp	SO-8	1.69	1.24	.90
LM318N-ND	High Slew Rate Op Amp	8-Dip	1.80	1.32	.96
LM319AM-ND	High Speed Dual Comparator	SO-14	2.02	1.50	1.11
LM319H-ND	High Speed Dual Comparator	TO-100	2.98	2.27	1.73
LM319M-ND	High Speed Dual Comparator	SO-14	1.50	1.10	.80
LM319MXTR-ND	High Speed Dual Comparator	SO-14	1275.00/2,500		
LM319N-ND	High Speed Dual Comparator	14-Dip	1.50	1.10	.80
LM320H-5.0-ND	.5A 3-Terminal Negative Voltage Regulator	TO-39	5.50	4.18	3.19
LM320K-15-ND	–15V, 1.5A Voltage Regulator	TO-3	6.38	5.05	4.05
LM320LZ-5.0-ND	5V, 0.1A Negative Voltage Regulator	TO-92	.50	.39	.28
LM320LZ-12-ND	12V, 0.1A Negative Voltage Regulator	TO-92	.50	.39	.28
LM320LZ-15-ND	15V, 0.1A Negative Voltage Regulator	TO-92	.50	.39	.28
LM320T-5.0-ND	5V, 1.5A 3-Terminal Negative Regulator	TO-220	1.92	1.43	1.06
LM320T-12-ND	12V, 1.5A 3-Terminal Negative Voltage Regulator	TO-220	1.92	1.43	1.06
LM320T-15-ND	15V, 1.5A 3-Terminal Negative Voltage Regulator	TO-220	1.92	1.43	1.06
LM323AK STEEL-ND	5V 3A Positive Voltage Regulator	TO-3	5.78	4.39	3.35
LM323K STEEL-ND	5V 3A Positive Voltage Regulator	TO-3	3.30	2.51	1.92
LM324AM-ND	Low Power Quad Op Amp	SO-14	.61	.44	.32
LM324AMXTR-ND	Low Power Quad Op Amp	SO-14	385.00/2,500		
LM324AN-ND	Low Power Quad Op Amp	14-Dip	.54	.39	.29
LM324M-ND	Low Power Quad Op Amp	SO-14	.42	.33	.24
LM324MX-ND	Low Power Quad Op Amp	SO-14	276.25/2,500		
LM324NNS-ND	Low Power Quad Op Amp	14-Dip	.46	.35	.26
LM325H-ND	+15V, –15V, Dual Track Regulator	TO-100	9.45	7.47	5.99
LM329AH-ND	Precision Zener 10ppm/°C	TO-46	6.38	5.05	4.05
LM329BZNS-ND	Precision Reference	TO-92	2.50	1.90	1.45
LM329CZ-ND	Precision Reference	TO-92	2.33	1.73	1.28
LM329DZ-ND	6.9V Precision Zener 100ppm/°C	TO-92	1.13	.83	.60
LM330T-5.0-ND	3-Terminal Positive Regulator	TO-220	1.69	1.24	.90
LM331AN-ND	Precision Voltage-to-Frequency Converter	8-Dip	6.38	5.05	4.05
LM331N-ND	Precision Voltage-to-Frequency Converter	8-Dip	3.20	2.44	1.86
LM333K STEEL-ND	3A Negative Adjustable Voltage Regulator	TO-3	10.14	8.02	6.43
LM334H-ND	3-Terminal Adjustable Current Source	TO-46	2.98	2.27	1.73
LM334M-ND	3-Terminal Adjustable Current Source	SO-8	1.55	1.15	.85
LM334MXTR-ND	3-Terminal Adjustable Current Source	SO-8	1562.50/2,500		
LM334SM-ND	3-Terminal Adjustable Current Source	SO-8	2.65	2.02	1.54
LM334ZNS-ND	3-Terminal Adjustable Current Source	TO-92	1.71	1.27	.94
LM335AH-ND	Precision Temperature Sensor	TO-46	6.09	4.82	3.86
LM335AM-ND	Precision Temperature Sensor	SO-8	2.75	2.09	1.60
LM335AZ-ND	Precision Temperature Sensor	TO-92	2.82	2.10	1.55
LM335H-ND	Precision Temperature Sensor	TO-46	2.75	2.09	1.60
LM335M-ND	Precision Temperature Sensor	SO-8	2.17	1.61	1.19
LM335Z-ND	Voltage Mode Temperature Sensor	TO-92	2.17	1.61	1.19
LM336BM-2.5-ND	2.5V, Reference Diode	SO-8	2.05	1.52	1.13
LM336BM-5.0-ND	5V, Reference Diode	SO-8	2.05	1.52	1.13
LM336BZ-2.5-ND	2.5V, Reference Diode	TO-92	2.29	1.71	1.26
LM336BZ-5.0-ND	5V, Reference Diode	TO-92	2.29	1.71	1.26
LM336M-2.5-ND	2.5V, Reference Diode	SO-8	.94	.69	.50
LM336MX-2.5TR-ND	2.5V, Reference Diode	SO-8	796.88/2,500		
LM336M-5.0-ND	5.0V, Reference Diode	SO-8	.94	.69	.50
LM336Z-2.5NS-ND	2.5V, Reference Diode	TO-92	.94	.69	.50
LM336Z-5.0-ND	5.0V, Reference Diode	TO-92	.94	.69	.50
LM337H-ND	500mA Negative Adjustable Voltage Regulator	TO-39	3.30	2.51	1.92
LM337HVH-ND	500mA Negative Adjustable Regulator (High Volt)	TO-39	8.42	6.66	5.34
LM337HVK STEEL-ND	1.5A Negative Adjustable Regulator (High Volt)	TO-3	9.61	8.24	7.31
LM337IMPCT-ND	1A Negative Adjustable Voltage Regulator	SOT-223	1.35	.99	.72
LM337IMPTR-ND	1A Negative Adjustable Voltage Regulator	SOT-223	468.00/1,000		
LM337K STEEL-ND	1.5A Negative Adjustable Voltage Regulator	TO-3	4.63	3.52	2.69
LM337LM-ND	100mA Negative Adjustable Voltage Regulator	SO-8	1.50	1.10	.80
LM337LMXTR-ND	100mA Negative Adjustable Voltage Regulator	SO-8	1275.00/2,500		
LM337LZ-ND	100mA Negative Adjustable Voltage Regulator	TO-92	1.50	1.10	.80
LM337T-ND	1.5A Negative Adjustable Voltage Regulator	TO-220	1.08	.78	.57
LM338K STEEL-ND	5A Adjustable Positive Regulator	TO-3	4.78	3.63	2.77
LM338T-ND	5A Adjustable Positive Regulator	TO-220	2.76	2.05	1.52
LM339AMXTR-ND	Low Power Low Offset Voltage Quad Comparator	SO-14	385.00/2,500		
LM339ANNS-ND	Low Power Low Offset Voltage Quad Comparator	14-Dip	.54	.39	.29
LM339AM-ND	Low Power Low Offset Voltage Quad Comparator	SO-14	.61	.44	.32
LM339M-ND	Low Power Low Offset Voltage Quad Comparator	SO-14	.42	.33	.24
LM339MX-ND	Low Power Voltage Quad Comparator	SO-14	276.25/2,500		
LM339NNS-ND	High Performance Quad Comparator	14-Dip	.46	.35	.26
LM340AT-5.0-ND	5V, 1.0 Amp Positive Voltage Regulator	TO-220	1.67	1.25	.92
LM340K-5.0-ND	5V, 1.0 Amp Positive Voltage Regulator	TO-3	5.38	4.09	3.12
LM340K-12-ND	12V, 1.0 Amp Positive Voltage Regulator	TO-3	5.38	4.09	3.12
LM340K-15-ND	15V, 1.0 Amp Positive Voltage Regulator	TO-3	5.38	4.09	3.12
LM340LAH-5.0-ND	5V, 100mA Positive Voltage Regulator	TO-39	2.75	2.09	1.60
LM340LAH-12-ND	12V, 100mA Positive Voltage Regulator	TO-39	3.07	2.28	1.69
LM340LAZ-5.0-ND	5V, 100mA Positive Voltage Regulator	TO-92	1.16	.86	.62
LM340LAZ-12-ND	12V, 100mA Positive Voltage Regulator	TO-92	1.16	.86	.62
LM340MP-5.0CT-ND	5V, 1A Voltage Regulator	SOT-223	1.01	.75	.54
LM340MP-5.0TR-ND	5V, 1A Voltage Regulator	SOT-223	351.00/1,000		
LM340S-5.0-ND	5V, Series 3-Terminal Positive Regulator	TO-263	1.76	1.30	.94
LM340SX-5.0TR-ND	5V, Series 3-Terminal Positive Regulator	TO-263	325.00/500		
LM340S-12-ND	12V, Series 3-Terminal Positive Regulator	TO-263	1.76	1.30	.94
LM340T-5.0-ND	5V, 1.0A Positive Voltage Regulator (7805)	TO-220	.59	.43	.31
LM340T-12-ND	12V, 1.0A Positive Voltage Regulator (7812)	TO-220	.59	.43	.31
LM340T-15-ND	15V, 1.0A Positive Voltage Regulator (7815)	TO-220	.59	.43	.31
LM341T-5.0-ND	5V, 500mA Voltage Regulator	TO-220	.72	.52	.38
LM341T-15-ND	15V, 500mA Voltage Regulator	TO-220	.72	.52	.38
LM346M-ND	Programmable Quad Op Amp	SO-16	1.86	1.38	1.02
LM348M-ND	Quad 741 Operational Amp	SO-14	.90	.65	.47
LM348N-ND	Quad 741 Operational Amp	14-Dip	.90	.65	.47
LM350AT-ND	3A, 3-Terminal Positive Adjustable Voltage Regulator	TO-220	4.00	3.04	2.32
LM350K STEEL-ND	3A, 3-Terminal Positive Adjustable Voltage Regulator	TO-3	4.93	3.75	2.86
LM350T-ND	3A, 3-Terminal Positive Adjustable Voltage Regulator	TO-220	2.29	1.71	1.26
LM358AM-ND	Low Power Dual Op Amp	SO-8	.61	.44	.32
LM358AMXTR-ND	Low Power Dual Op Amp	SO-8	385.00/2,500		
LM358AN-ND	Low Power Dual Op Amp (Elect. Improv.)	8-Dip	.54	.39	.29
LM358BPCT-ND	Low Power Dual Op Amp	8-MicroSMD	.63	.46	.33
LM358BPTR-ND	Low Power Dual Op Amp	8-MicroSMD	59.50/250		
LM358M-ND	Low Power Dual Op Amp	SO-8	.42	.33	.24
LM358MX-ND	Low Power Dual Op Amp	SO-8	276.25/2,500		
LM358N-ND	Low Power Dual Op Amp	8-Dip	.46	.35	.26
LM359M-ND	Dual, Hi Speed Programmable Current Mode (Norton) Amp	SO-14	2.75	2.09	1.60
LM359N-ND	High Speed Norton Op Amp	14-Dip	2.75	2.09	1.60
LM360H-ND	High Speed Differential Comparator	TO-99	4.30	3.27	2.50
LM360M-ND	High Speed Differential Comparator	SO-8	4.25	3.23	2.47
LM360N-ND	High Speed Differential Comparator	8-Dip	4.25	3.23	2.47
LM361M-ND	High Speed Differential Comparator	SO-14	3.25	2.47	1.89
LM361N-ND	High Speed Differential Comparator	14-Dip	3.25	2.47	1.89
LM380N-ND	2.5 Watt Audio Power Amplifier	14-Dip	1.69	1.24	.90
LM380N-8-ND	2.5 Watt Audio Amplifier	8-Dip	1.50	1.10	.80
LM384N-ND	5 Watt Audio Amplifier	14-Dip	1.71	1.27	.94
LM385BM-ND	Adj. Micropower Voltage Reference	SO-8	1.67	1.25	.92
LM385BM-1.2-ND	1.2V, Reference Diode 150ppm/°C	SO-8	1.67	1.25	.92
LM385BMX-1.2TR-ND	1.2V, Reference Diode 150ppm/°C	SO-8	1687.50/2,500		
LM385BM-2.5-ND	2.5V, Reference Diode 150ppm/°C	SO-8	1.67	1.25	.92
LM385BMX-2.5TR-ND	2.5V, Reference Diode 150ppm/°C	SO-8	1687.50/2,500		
LM385BXM-2.5-ND	2.5V, Micropower Voltage Reference Diode	SO-8	2.70	2.06	1.57
LM385BXZ-ND	Adjustable Micropower Voltage Reference Diode	TO-92	2.70	2.06	1.57
LM385BXZ-2.5-ND	2.5V, Reference Diode 30ppm/°C	TO-92	2.70	2.06	1.57
LM385BYM-1.2-ND	1.2V, Micropower Voltage Reference Diode	SO-8	2.51	1.87	1.38
LM385BYZ-1.2-ND	1.2V, Precision Voltage Reference 50ppm/°C	TO-92	2.51	1.87	1.38
LM385BYZ-2.5-ND	2.5V, Precision Voltage Reference 50ppm/°C	TO-92	2.51	1.87	1.38
LM385BYZ-ND	Adjustable Reference Diode	TO-92	2.51	1.87	1.38
LM385BZ-ND	Adjustable Micropower Voltage Reference Diode	TO-92	1.67	1.25	.92
LM385BZ-1.2NS-ND	Micropower Voltage Reference Diode	TO-92	1.67	1.25	.92
LM385BZ-2.5-ND	2.5V, Voltage Reference Diode	TO-92	1.67	1.25	.92
LM385M-ND	Adjustable Voltage Reference Diode	SO-8	1.43	1.05	.76
LM385MXTR-ND	Adjustable Voltage Reference Diode	SO-8	1115.63/2,500		
LM385M-1.2-ND	1.2V, Voltage Reference Diode	SO-8	.77	.56	.40
LM385MX-1.2TR-ND	1.2V, Voltage Reference Diode	SO-8	565.25/2,500		
LM385M-2.5-ND	2.5V, Voltage Reference Diode 150ppm/°C	SO-8	.77	.56	.40
LM385MX-2.5TR-ND	2.5V, Voltage Reference Diode 150ppm/°C	SO-8	565.25/2,500		
LM385M3-2.5CT-ND	2.5V, Micropower Voltage Reference Diode	SOT-23	1.31	.97	.70
LM385M3-2.5TR-ND	2.5V, Micropower Voltage Reference Diode	SOT-23	455.00/1,000		
LM385M3X-2.5CT-ND	2.5V, Voltage Reference Diode	SOT-23	1.31	.97	.70
LM385M3X-2.5TR-ND	2.5V, Voltage Reference Diode	SOT-23	1338.75/3,000		
LM385Z-ND	Adjustable Voltage Reference Diode	TO-92	1.24	.91	.66
LM385Z-1.2NS-ND	1.2V, Voltage Reference Diode	TO-92	.72	.52	.38
LM385Z-2.5NS-ND	2.5V, Voltage Reference Diode	TO-92	.72	.52	.38
LM386M-1-ND	Low Voltage Audio Power Amp	SO-8	.55	.40	.29
LM386MM-1CT-ND	Low Voltage Audio Amp	8-MSOP	.81	.59	.43
LM386MM-1TR-ND	Low Voltage Audio Amp	8-MSOP	252.00/1,000		

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Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LM386N-1-ND	Low Voltage Audio Power Amp, Vs=6V	8-Dip	.58	.42	.31
LM386N-3-ND	Low Voltage Audio Power Amp, Vs=9V	8-Dip	.95	.69	.50
LM386N-4-ND	Low Voltage Audio Power Amp, Vs=16V	8-Dip	.94	.69	.50
LM392M-ND	Single Op Amp and Comparator	SO-8	1.69	1.24	.90
LM392MXTR-ND	Single Op Amp and Comparator	SO-8	1434.38/2,500		
LM392N-ND	Op Amp and Comparator	8-Dip	1.69	1.24	.90
LM393M-ND	Low Power Low Offset Voltage Dual Comparator	SO-8	.42	.33	.24
LM393MXTR-ND	Low Power Low Offset Voltage Dual Comparator	SO-8	276.25/2,500		
LM393N-ND	Dual Comparator	8-Dip	.46	.35	.26
LM394CH-ND	Super Matched NPN Pairs	TO-5	5.28	4.01	3.06
LM395T-ND	Ultra Reliable High Gain Power Transistor	TO-220	3.38	2.57	1.96
LM399H-ND	Precision Reference	TO-46	4.50	3.42	2.61
LM431ACM-ND	Adjustable Precision Zener Shunt Regulator	SO-8	.49	.38	.27
LM431ACMXTR-ND	Adjustable Precision Zener Shunt Regulator	SO-8	318.75/2,500		
LM431ACM3XCT-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	.54	.39	.29
LM431ACM3XTR-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	478.80/3,000		
LM431ACZ-ND	Adjustable Precision Zener Shunt Regulator	TO-92	.49	.38	.27
LM431AIBPCT-ND	Adjustable Precision Zener Shunt Regulator	4-MicroSMD	.59	.43	.31
LM431AIBPTR-ND	Adjustable Precision Zener Shunt Regulator	4-MicroSMD	55.25/250		
LM431AIM3CT-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	.77	.56	.40
LM431AIM3TR-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	238.00/1,000		
LM431AIMXCT-ND	Adjustable Precision Zener Shunt Regulator	SO-8	.55	.40	.29
LM431AIMXTR-ND	Adjustable Precision Zener Shunt Regulator	SO-8	350.00/2,500		
LM431AIZ-ND	Adjustable Precision Zener Shunt Regulator, Ind. Temp	TO-92	.55	.40	.29
LM431BCM-ND	Adjustable Precision Zener Shunt Regulator	SOT-8	.77	.56	.40
LM431BCM3CT-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	.77	.56	.40
LM431BCM3TR-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	238.00/1,000		
LM431BCZ-ND	Adjustable Precision Zener Shunt Regulator	TO-92	.77	.56	.40
LM431BIM-ND	Adjustable Precision Zener Shunt Regulator	SO-8	1.01	.75	.54
LM431BIM3CT-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	1.01	.75	.54
LM431BIM3TR-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	351.00/1,000		
LM431BIZ-ND	Adjustable Precision Zener Shunt Regulator	TO-92	1.01	.75	.54
LM431CCM3CT-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	1.50	1.10	.80
LM431CCM3TR-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	520.00/1,000		
LM431CCZ-ND	Adjustable Precision Zener Shunt Regulator	TO-92	1.50	1.10	.80
LM431CIM-ND	Adjustable Precision Zener Shunt Regulator	SO-8	1.73	1.27	.92
LM431CIM3CT-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	1.73	1.27	.92
LM431CIM3TR-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	598.00/1,000		
LM431CIZ-ND	Adjustable Precision Zener Shunt Regulator	TO-92	1.73	1.27	.92
LM555CM-ND	Timer	SO-8	.44	.32	.24
LM555CMXTR-ND	Timer	SO-8	280.00/2,500		
LM555CMMCT-ND	Timer	8-MSOP	1.46	1.08	.78
LM555CMMTR-ND	Timer	8-MSOP	507.00/1,000		
LM555CN-ND	Timer	8-Dip	.47	.34	.25
LM556CM-ND	Dual Timer	SO-14	.90	.65	.47
LM556CMXTR-ND	Dual Timer	SO-14	665.00/2,500		
LM556CN-ND	Timer	14-Dip	.90	.65	.47
LM565CN-ND	Phase Lock Loop	14-Dip	1.77	1.32	.97
LM567CM-ND	Tone Decoder Phase Lock Loop	SO-8	.90	.65	.47
LM567CMXTR-ND	Tone Decoder Phase Lock Loop	SO-8	665.00/2,500		
LM567CN-ND	Tone Decoder Phase Lock Loop	8-Dip	.90	.65	.47
LM611CM-ND	Op Amp and Adjustable Reference	SO-14	2.02	1.50	1.11
LM611IM-ND	Op Amp and Adjustable Reference	SO-14	2.20	1.64	1.21
LM613IWM-ND	Dual Op Amp, Dual Comparator and Adjustable Reference	SO-16	2.58	1.96	1.50
LM614CWM-ND	Quad Op Amp with Adjustable Reference	SO-16	2.85	2.12	1.57
LM628N-6-ND	Precision Motion Controller, 6MHz	28-Dip	27.75	25.90	24.05
LM628N-8-ND	Precision Motion Controller, 8MHz	28-Dip	39.15	36.54	33.93
LM629M-6-ND	Precision Motion Controller, 6MHz	SO-24	27.75	25.90	24.05
LM629M-8-ND	Precision Motion Controller, 8MHz	SO-24	39.15	36.54	33.93
LM629N-6-ND	Precision Motion Controller, 6MHz	28-Dip	27.75	25.90	24.05
LM629N-8-ND	8-Bit PWM Motion Controller	28-Dip	39.15	36.54	33.93
LM675T-ND	Power Operational Amplifier	5-Pin TO-220	5.68	4.32	3.30
LM709CH-ND	General Purpose Op Amp	TO-99	3.13	2.38	1.82
LM709H-ND	General Purpose Op Amp	TO-99	3.63	2.76	2.11
LM723CH-ND	150mA Positive Adjustable Voltage Regulator	TO-99	2.25	1.67	1.24
LM723CN-ND	Precision Voltage Regulator	14-Dip	.98	.72	.52
LM723H-ND	2V-37V, Adjustable Voltage Regulator	TO-100	4.20	3.20	2.44
LM725CH-ND	Instrumentation Op Amp	TO-99	4.23	3.22	2.46
LM725CN-ND	Instrumentation Op Amp	8-Dip	2.63	2.00	1.53
LM741CH-ND	18V, High Performance Op Amp	TO-99	3.02	2.25	1.66
LM741CN-ND	18V, High Performance Op Amp	8-Dip	.44	.32	.24
LM741H-ND	High Performance Op Amp High Temp	TO-99	3.03	2.30	1.76
LM747H-ND	Dual High Performance Op Amp Low Offset	TO-100	3.48	2.65	2.02
LM809M3-2.63CT-ND	3-Pin Microprocessor Reset Circuits, 2.63V	SOT-23	1.09	.80	.58
LM809M3-2.63TR-ND	3-Pin Microprocessor Reset Circuits, 2.63V	SOT-23	377.00/1,000		
LM809M3-2.93CT-ND	3-Pin Microprocessor Reset Circuits, 2.93V	SOT-23	1.09	.80	.58
LM809M3-2.93TR-ND	3-Pin Microprocessor Reset Circuits, 2.93V	SOT-23	377.00/1,000		
LM809M3-3.08CT-ND	3-Pin Microprocessor Reset Circuits, 3.08V	SOT-23	1.09	.80	.58
LM809M3-3.08TR-ND	3-Pin Microprocessor Reset Circuits, 3.08V	SOT-23	377.00/1,000		
LM809M3-4.00CT-ND	3-Pin Microprocessor Reset Circuits, 4.00V	SOT-23	1.09	.80	.58
LM809M3-4.00TR-ND	3-Pin Microprocessor Reset Circuits, 4.00V	SOT-23	377.00/1,000		
LM809M3-4.38CT-ND	3-Pin Microprocessor Reset Circuits, 4.38V	SOT-23	1.09	.80	.58
LM809M3-4.38TR-ND	3-Pin Microprocessor Reset Circuits, 4.38V	SOT-23	377.00/1,000		
LM809M3-4.63CT-ND	3-Pin Microprocessor Reset Circuits, 4.63V	SOT-23	1.09	.80	.58
LM809M3-4.63TR-ND	3-Pin Microprocessor Reset Circuits, 4.63V	SOT-23	377.00/1,000		
LM810M3-2.63CT-ND	3-Pin Microprocessor Reset Circuits, 2.63V	SOT-23	1.09	.80	.58
LM810M3-2.63TR-ND	3-Pin Microprocessor Reset Circuits, 2.63V	SOT-23	377.00/1,000		
LM810M3-2.93CT-ND	3-Pin Microprocessor Reset Circuits, 2.93V	SOT-23	1.09	.80	.58
LM810M3-2.93TR-ND	3-Pin Microprocessor Reset Circuits, 2.93V	SOT-23	377.00/1,000		
LM810M3-3.08CT-ND	3-Pin Microprocessor Reset Circuits, 3.08V	SOT-23	1.09	.80	.58
LM810M3-3.08TR-ND	3-Pin Microprocessor Reset Circuits, 3.08V	SOT-23	377.00/1,000		
LM810M3-4.00CT-ND	3-Pin Microprocessor Reset Circuits, 4.00V	SOT-23	1.09	.80	.58
LM810M3-4.00TR-ND	3-Pin Microprocessor Reset Circuits, 4.00V	SOT-23	377.00/1,000		
LM810M3-4.38CT-ND	3-Pin Microprocessor Reset Circuits, 4.38V	SOT-23	1.09	.80	.58
LM810M3-4.38TR-ND	3-Pin Microprocessor Reset Circuits, 4.38V	SOT-23	377.00/1,000		
LM810M3-4.63CT-ND	3-Pin Microprocessor Reset Circuits, 4.63V	SOT-23	1.09	.80	.58
LM810M3-4.63TR-ND	3-Pin Microprocessor Reset Circuits, 4.63V	SOT-23	377.00/1,000		
LM828M5CT-ND	Switched Capacitor Voltage Converter	SOT-23-5	1.35	.99	.72
LM828M5TR-ND	Switched Capacitor Voltage Converter	SOT-23-5	468.00/1,000		
LM833M-ND	Dual Audio Op Amp	SO-8	.98	.72	.52
LM833MXTR-ND	Dual Audio Op Amp	SO-8	828.75/2,500		
LM833MMCT-ND	Dual Audio Op Amp	8-MSOP	1.13	.83	.60
LM833MMTR-ND	Dual Audio Op Amp	8-MSOP	390.00/1,000		
LM833N-ND	Dual Audio Op Amp	8-Dip	1.09	.80	.58
LM837M-ND	Low Noise Quad Op Amp	SO-14	1.55	1.15	.85

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LM837MXTR-ND	Low Noise Quad Op Amp	SO-14	1562.50/2,500		
LM837N-ND	Low Noise Quad Op Amp	14-Dip	1.55	1.15	.85
LM1036M-ND	Tone/Volume/Balance Circuit	SO-20	2.82	2.10	1.55
LM1036N-ND	Dual DC Oper. Tone/Volume/Balance Circuit	20-Dip	2.82	2.10	1.55
LM1084IS-ADJ-ND	Adjustable Voltage 5A Low Dropout Positive Regulator	TO-263	2.79	2.07	1.53
LM1084IS-3.3-ND	3.3V, 5A LDO Positive Regulator	TO-263	2.79	2.07	1.53
LM1084IS-5.0-ND	5V, 5A LDO Positive Regulator	TO-263	2.79	2.07	1.53
LM1084IS-12-ND	12V, 5A LDO Positive Regulator	TO-263	2.79	2.07	1.53
LM1084IT-ADJ-ND	Adjustable Voltage 5A LDO Positive Regulator	TO-220	2.79	2.07	1.53
LM1084IT-3.3-ND	3.3V, 5A LDO Positive Regulator	TO-220	2.79	2.07	1.53
LM1084IT-5.0-ND	5V, 5A LDO Positive Regulator	TO-220	2.79	2.07	1.53
LM1084IT-12-ND	12V, 5A LDO Positive Regulator	TO-220	2.79	2.07	1.53
LM1085IS-ADJ-ND	Adjustable Voltage 5A Low Dropout Positive Regulator	TO-263	2.08	1.55	1.14
LM1085IS-3.3-ND	3.3V, 5A LDO Positive Regulator	TO-263	2.08	1.55	1.14
LM1085IS-5.0-ND	5V, 5A LDO Positive Regulator	TO-263	2.08	1.55	1.14
LM1085IS-12-ND	12V, 5A LDO Positive Regulator	TO-263	2.08	1.55	1.14
LM1085IT-ADJ-ND	Adjustable Voltage 5A LDO Positive Regulator	TO-220	2.08	1.55	1.14
LM1085IT-3.3-ND	3.3V, 5A LDO Positive Regulator	TO-220	2.08	1.55	1.14
LM1085IT-5.0-ND	5V, 5A LDO Positive Regulator	TO-220	2.08	1.55	1.14
LM1085IT-12-ND	12V, 5A LDO Positive Regulator	TO-220	2.08	1.55	1.14
LM1086CS-ADJ-ND	Adjustable Voltage 1.5A LDO Positive Regulator	TO-263	1.69	1.24	.90
LM1086CS-2.85-ND	2.85V, 1.5A LDO Positive Regulator	TO-263	1.69	1.24	.90
LM1086CS-3.3-ND	3.3V, 1.5A LDO Positive Regulator	TO-263	1.69	1.24	.90
LM1086CS-5.0-ND	5V, 1.5A LDO Positive Regulator	TO-263	1.69	1.24	.90
LM1086CT-ADJ-ND	Adjustable Voltage 1.5A LDO Positive Regulator	TO-220	1.69	1.24	.90
LM1086CT-2.85-ND	2.85V, 1.5A LDO Positive Regulator	TO-220	1.69	1.24	.90
LM1086CT-3.3-ND	3.3V, 1.5A LDO Positive Regulator	TO-220	1.69	1.24	.90
LM1086CT-5.0-ND	5V, 1.5A LDO Positive Regulator	TO-220	1.69	1.24	.90
LM1086IS-ADJ-ND	Adjustable Voltage 1.5A LDO Positive Regulator	TO-263	1.55	1.15	.85
LM1086IS-2.85-ND	2.85V, 1.5A LDO Positive Regulator	TO-263	1.55	1.15	.85
LM1086IS-3.3-ND	3.3V, 1.5A LDO Positive Regulator	TO-263	1.55	1.15	.85
LM1086IS-5.0-ND	5V, 1.5A LDO Positive Regulator	TO-263	1.55	1.15	.85
LM1086IT-ADJ-ND	Adjustable Voltage 1.5A LDO Positive Regulator	TO-220	1.55	1.15	.85
LM1086IT-2.85-ND	2.85V, 1.5A LDO Positive Regulator	TO-220	1.55	1.15	.85
LM1086IT-3.3-ND	3.3V, 1.5A LDO Positive Regulator	TO-220	1.55	1.15	.85
LM1086IT-5.0-ND	5V, 1.5A LDO Positive Regulator	TO-220	1.55	1.15	.85
LM1117DT-ADJ-ND	Adjustable Voltage 800mA LDO Linear Regulator	TO-252	1.28	.94	.68
LM1117DT-2.85-ND	2.85V, 800mA LDO Linear Regulator	TO-252	1.28	.94	.68
LM1117DT-3.3-ND	3.3V, 800mA LDO Linear Regulator	TO-252	1.28	.94	.68
LM1117DT-5.0-ND	5V, 800mA LDO Linear Regulator	TO-252	1.28	.94	.68
LM1117MP-ADJCT-ND	Adjustable Voltage 800mA LDO Linear Regulator	TO-223-4	.98	.72	.52
LM1117MP-ADJTR-ND	Adjustable Voltage 800mA LDO Linear Regulator	TO-223-4	338.00/1,000		
LM1117MP-1.8CT-ND	1.8V, 800mA LDO Linear Regulator	TO-223-4	.98	.72	.52
LM1117MP-1.8TR-ND	1.8V, 800mA LDO Linear Regulator	TO-223-4	338.00/1,000		
LM1117MP-2.85CT-ND	2.85V, 800mA LDO Linear Regulator	TO-223-4	.98	.72	.52
LM1117MP-2.85TR-ND	2.85V, 800mA LDO Linear Regulator	TO-223-4	338.00/1,000		
LM1117MP-3.3CT-ND	3.3V, 800mA Low Dropout Regulator	SOT-223	.98	.72	.52
LM1117MP-3.3TR-ND	3.3V, 800mA Low Dropout Regulator	SOT-223	338.00/1,000		
LM1117MP-5.0CT-ND	5V, 800mA LDO Linear Regulator	TO-223-4	.98	.72	.52
LM1117MP-5.0TR-ND	5V, 800mA LDO Linear Regulator	TO-223-4	338.00/1,000		
LM1117T-ADJ-ND	Adjustable Voltage 800mA LDO Linear Regulator	TO-220	1.58	1.16	.84
LM1117T-2.85-ND	2.85V, 800mA LDO Linear Regulator	TO-220	1.58	1.16	.84
LM1117T-3.3-ND	3.3V, 800mA LDO Linear Regulator	TO-220	1.58	1.16	.84
LM1117T-5.0-ND	5V, 800mA LDO Linear Regulator	TO-220	1.58	1.16	.84
LM1204V-ND	150MHz RGB Video Amp System	44-PLCC	7.46	5.90	4.73
LM1279AN-ND	110MHz RGB Video Amp System with OSD	20-Dip	2.05	1.52	1.13
LM1281N-ND	85MHz RGB Video Amp System with OSD	28-Dip	2.63	2.00	1.53
LM1282N-ND	110MHz RGB Video Amp System with OSD	28-Dip	2.63	2.00	1.53
LM1283N-ND	140MHz RGB Video Amp System with OSD	28-Dip	3.00	2.28	1.74
LM1458M-ND	Dual Op Amp	SO-8	.44	.32	.24
LM1458MXTR-ND	Dual Op Amp	SO-8	280.00/2,500		
LM1458N-ND	Dual Op Amp	8-Dip	.47	.34	.25
LM1815N-ND	Adaptive Variable Reluctance Sensor Amplifier	14-Dip	3.75	2.85	2.18
LM1875T-ND	20W Audio Power Amp	5 Pin TO-220	2.63	2.00	1.53
LM1876TF-ND	Dual 20W Audio Power Amp with Mute/Standby	TO-220	5.43	4.13	3.15
LM1877M-9-ND	Dual Audio Power Amplifier	SO-14	1.55	1.15	.85
LM1877N-9-ND	Dual Audio Power Amplifier	14-Dip	1.55	1.15	.85
LM1877N-9A-ND	Dual Audio Power Amplifier	14-Dip	1.67	1.25	.92
LM1881M-ND	Video Synch. Separator	SO-8	3.10	2.36	1.80
LM1881MXTR-ND	Video Synch. Separator	SO-8	3968.75/2,500		
LM1881N-ND	Video Synch. Separator	8-Dip	3.10	2.36	1.80
LM1894M-ND	Dynamic Noise Reduction System	SO-14	2.33	1.73	1.28
LM1894N-ND	Dynamic Noise Reduction System *NEW!*	14-Dip	3.08	2.34	1.79
LM1971M-ND	Digitally Controlled 62dB Audio Attenuator with Mute	SO-8	2.78	2.11	1.61
LM1971N-ND	Digitally Controlled 62dB Audio Attenuator with Mute	8-Dip	2.78	2.11	1.61
LM1972M-ND	2-Channel 78dB Audio Attenuator with Mute	SO-20	4.55	3.46	2.64
LM1972N-ND	2-Channel 78dB Audio Attenuator with Mute *NEW!*	20-Dip	4.55	3.46	2.64
LM1973M-ND	MicroPot™ 3-Channel 76dB Audio Attenuator with Mute	SO-20	2368.80/1,000		
LM1973N-ND	MicroPot™ 3-Channel Audio Attenuator with Mute	20-Dip	4.70	3.58	2.73
LM2202M-ND	230MHz Video Amp System	SO-20	8.51	6.73	5.39
LM2202N-ND	230MHz Video Amp System	20-Dip	8.51	6.73	5.39
LM2402T-ND	Monolithic Triple 3nS CRT Driver	TO-220-11	7.25	5.73	4.59
LM2403T-ND	Triple 80MHz CRT Driver	TO-220	7.10	5.62	4.50
LM2405T-ND	Monolithic Triple 7nS CRT Driver	TO-220-11	5.75	4.37	3.34
LM2407T-ND	Triple 50MHz CRT Driver	TO-220	4.70	3.58	2.73
LM2409T-ND	Monolithic Triple 9.5nS CRT Driver	TO-220-11	3.40	2.59	1.98
LM2412T-ND	Monolithic Triple 2.8nS CRT Driver	TO-220-11	8.67	6.86	5.50
LM2413T-ND	Monolithic Triple 4nS CRT Driver	TO-220-11	6.07	4.80	3.85
LM2415T-ND	Monolithic Triple 5.5nS CRT Driver	TO-220-11	4.45	3.39	2.59
LM2435T-ND	Monolithic Triple 5.5nS CRT Driver	TO-220-9	4.90	3.73	2.85
LM2437T-ND	Monolithic Triple 7.5nS CRT Driver	TO-220-9	4.55	3.46	2.64
LM2438T-ND	Monolithic Triple 13nS CRT Driver	TO-220-9	2.68	2.04	1.56
LM2439T-ND	Monolithic Triple 9.5nS CRT Driver	TO-220-9	3.00	2.28	1.74
LM2453TA-ND	Monolithic Triple 6nS CRT Driver with Intergrated Clamp and G1 Blanking	TO-220-15	6.20	4.72	3.60
LM2524DN-ND	Regulator Pulse Width Module (PWM)	16-Dip	1.55	1.15	.85
LM2574HVM-ADJ-ND	Simple Switcher 0.5A Step Down Voltage Regulator	SO-14	3.88	2.95	2.25
LM2574HVM-3.3-ND	3.3V, Simple Switcher 0.5A Step Down Volt. Regulator	SO-14	3.88	2.95	2.25
LM2574HVM-5.0-ND	5V, 500mA Step Down Switch Regulator	SO-14	3.88	2.95	2.25
LM2574HVM-12-ND	12V, Simple Switcher 0.5A Step Down Volt. Regulator	SO-14	3.88	2.95	2.25

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Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LM2574HVN-ADJ-ND	Adjustable Voltage 500mA Step Down Switch Regulator	8-Dip	3.88	2.95	2.25
LM2574HVN-3.3-ND	3.3V, Simple Switcher 0.5A Step Down Volt. Regulator	8-Dip	3.88	2.95	2.25
LM2574HVN-5.0-ND	5V, 500mA Step Down Switch Regulator	8-Dip	3.88	2.95	2.25
LM2574HVN-12-ND	12V, 500mA Step Down Switch Regulator	8-Dip	3.88	2.95	2.25
LM2574M-3.3-ND	3.3V, 500mA Step Down Switch Regulator	SO-14	1.86	1.38	1.02
LM2574M-5.0-ND	5V, 500mA Step Down Switch Regulator	SO-14	1.86	1.38	1.02
LM2574MX-5.0TR-ND	5V, 500mA Step Down Switch Regulator	SO-14	768.00/1,000		
LM2574M-12-ND	12V, 500mA Step Down Switch Regulator	SO-14	1.86	1.38	1.02
LM2574MX-ADJTR-ND	Adjustable 500mA Step Down Switch Regulator	SO-14	768.00/1,000		
LM2574N-ADJ-ND	Adjustable 500mA Step Down Switch Regulator	8-Dip	1.98	1.48	1.09
LM2574N-5.0-ND	5V, 500mA Step Down Switch Regulator	8-Dip	1.98	1.48	1.09
LM2574N-12-ND	12V, 500mA Step Down Switch Regulator	8-Dip	1.98	1.48	1.09
LM2574N-15-ND	15V, 500mA Step Down Switch Regulator	8-Dip	1.98	1.48	1.09
LM2575HVM-ADJ-ND	Adjustable 1A Step Down Switch Regulator	SO-24	4.35	3.31	2.53
LM2575HVM-12-ND	12V, Simple Switcher 1A Step Down Volt. Regulator	SO-24	4.35	3.31	2.53
LM2575HVM-15-ND	15V, Simple Switcher 1A Step Down Volt. Regulator	SO-24	4.35	3.31	2.53
LM2575HVN-5.0-ND	5V, 1A Step Down Switch Regulator	16-Dip	4.35	3.31	2.53
LM2575HVS-ADJ-ND	Adj. V, Simple Switcher 1A Step Down Volt. Regulator	TO-263-5	4.35	3.31	2.53
LM2575HVS-3.3-ND	3.3V, Simple Switcher 1A Step Down Volt. Regulator	TO-263-5	4.35	3.31	2.53
LM2575HVS-5.0-ND	5V, Simple Switcher 1A Step Down Volt. Regulator	TO-263-5	4.35	3.31	2.53
LM2575HVS-12-ND	12V, Simple Switcher 1A Step Down Volt. Regulator	TO-263-5	4.35	3.31	2.53
LM2575HVS-15-ND	15V, Simple Switcher 1A Step Down Volt. Regulator	TO-263-5	4.35	3.31	2.53
LM2575HVT-ADJ-ND	Adjustable 1A Step Down Switch Regulator	TO-220	4.35	3.31	2.53
LM2575HVT-3.3-ND	3.3V, Simple Switcher 1A Step Down Volt. Regulator	TO-220-5	4.35	3.31	2.53
LM2575HVT-5.0-ND	5V, 1A Step Down Switch Regulator, High Volt.	TO-220	4.35	3.31	2.53
LM2575HVT-12-ND	12V, 1A Step Down Switch Regulator	TO-220	4.35	3.31	2.53
LM2575HVT-15-ND	15V, 1A Step Down Switch Regulator	TO-220	4.35	3.31	2.53
LM2575M-3.3-ND	3.3V, Simple Switcher 1A Step Down Volt. Regulator	SO-24	2.51	1.87	1.38
LM2575M-5.0-ND	5V, 1A Step Down Switch Regulator	SO-24	2.51	1.87	1.38
LM2575M-12-ND	12V, Simple Switcher 1A Step Down Volt. Regulator	SO-24	2.51	1.87	1.38
LM2575M-15-ND	15V, Simple Switcher 1A Step Down Volt. Regulator	SO-24	2.51	1.87	1.38
LM2575N-ADJ-ND	Adjustable 1A Step Down Switch Regulator	16-Dip	2.51	1.87	1.38
LM2575N-5.0-ND	5V, 1A Step Down Switch Regulator	16-Dip	2.51	1.87	1.38
LM2575N-12-ND	12V, 1A Step Down Switch Regulator	16-Dip	2.51	1.87	1.38
LM2575S-ADJ-ND	Adj. V, Simple Switcher 1A Step Down V. Regulator	TO-263-5	3.04	2.26	1.67
LM2575S-3.3-ND	3.3V, Simple Switcher 1A Step Down V. Regulator	TO-263-5	3.04	2.26	1.67
LM2575S-5.0-ND	5V, Simple Switcher 1A Step Down Volt. Regulator	TO-263-5	3.04	2.26	1.67
LM2575S-12-ND	12V, Simple Switcher 1A Step Down Volt. Regulator	TO-263-5	3.04	2.26	1.67
LM2575T-ADJ-ND	Adjustable 1A Step Down Switch Regulator	TO-220	2.51	1.87	1.38
LM2575T-3.3-ND	3.3V, 1A Step Down Switch Regulator	TO-220	2.51	1.87	1.38
LM2575T-5.0-ND	5V, 1A Step Down Switch Regulator	TO-220	2.51	1.87	1.38
LM2575T-12-ND	12V, 1A Step Down Switch Regulator	TO-220	2.51	1.87	1.38
LM2575T-15-ND	15V, 1A Step Down Switch Regulator	TO-220	2.51	1.87	1.38
LM2576HVS-ADJ-ND	Adjustable 3A Step Down Switch Regulator	TO-263	6.15	4.68	3.57
LM2576HVS-3.3-ND	3.3V, Simple Switcher 3A Step Down Volt. Regulator	TO-263-5	6.15	4.68	3.57
LM2576HVS-5.0-ND	5V, Simple Switcher 3A Step Down Volt. Regulator	TO-263-5	6.15	4.68	3.57
LM2576HVT-ADJ-ND	Adjustable 3A Step Down Switch Regulator	TO-220-5	6.15	4.68	3.57
LM2576HVT-3.3-ND	3.3V, Simple Switcher 3A Step Down Volt. Regulator	TO-220-5	6.15	4.68	3.57
LM2576HVT-5.0-ND	5V, 3A Step Down Regulator (High Volt.)	TO-220	6.15	4.68	3.57
LM2576HVT-12-ND	12V, 3A Step Down Regulator (High Volt.)	TO-220	6.15	4.68	3.57
LM2576HVT-15-ND	15V, 3A Step Down Regulator (High Volt.)	TO-220	6.15	4.68	3.57
LM2576S-ADJ-ND	Adj. Simple Switcher 3A Step Down V. Regulator	TO-263-5	3.08	2.34	1.79
LM2576S-3.3-ND	3.3V, Simple Switcher 3A Step Down V. Regulator	TO-263-5	3.08	2.34	1.79
LM2576S-5.0-ND	5V, Simple Switcher 3A Step Down V. Regulator	TO-263-5	3.08	2.34	1.79
LM2576S-12-ND	12V, Simple Switcher 3A Step Down V. Regulator	TO-263-5	3.08	2.34	1.79
LM2576S-15-ND	15V, Simple Switcher 3A Step Down V. Regulator	TO-263-5	3.08	2.34	1.79
LM2576T-ADJ-ND	Adjustable 3A Step Down Voltage Regulator	TO-220-5	2.80	2.13	1.63
LM2576T-3.3-ND	3.3V, Simple Switcher 3A Step Down Volt. Regulator	TO-220-5	2.80	2.13	1.63
LM2576T-5.0-ND	5V, 3A Step Down Switch Regulator	TO-220	2.80	2.13	1.63
LM2576T-12-ND	12V, 3A Step Down Simple Switch Regulator	TO-220	2.80	2.13	1.63
LM2576T-15-ND	15V, Simple Switcher 3A Step Down V. Regulator	TO-220-5	2.80	2.13	1.63
LM2577M-ADJ-ND	Adjustable 3A Step Up Switch Regulator	SO-24	5.31	4.20	3.37
LM2577M-15-ND	15V, Simple Switcher Step Up Voltage Regulator	SO-24	5.31	4.20	3.37
LM2577N-ADJ-ND	Adjustable 3A Step Up Switch Regulator	16-Dip	5.31	4.20	3.37
LM2577N-12-ND	12V, 3A Step Up Switch Regulator	16-Dip	5.31	4.20	3.37
LM2577N-15-ND	15V, 3A Step Up Switch Regulator	16-Dip	5.31	4.20	3.37
LM2577S-ADJ-ND	Adj. Simple Switcher Step Up Voltage Regulator	TO-263-5	5.42	4.29	3.44
LM2577S-12-ND	12V Simple Switcher Step Up Voltage Regulator	TO-263-5	5.42	4.29	3.44
LM2577S-15-ND	15V Simple Switcher Step Up Voltage Regulator	TO-263-5	5.42	4.29	3.44
LM2577T-ADJ-ND	Adjustable 3A Step Up Switch Voltage Regulator	TO-220-5	5.42	4.29	3.44
LM2577T-12-ND	12V 3A Step Up Switch Regulator	TO-220	5.42	4.29	3.44
LM2577T-15-ND	15V 3A Step Up Switch Regulator	TO-220	5.42	4.29	3.44
LM2578AM-ND	750mA Switching Regulator	SO-8	2.75	2.09	1.60
LM2578AN-ND	750mA Switching Regulator	8-Dip	2.75	2.09	1.60
LM2585S-ADJ-ND	Adj. Simple Switcher 3A Flyback Regulator	TO-263-5	6.32	5.00	4.01
LM2585S-3.3-ND	3.3V Simple Switcher 3A Flyback Regulator	TO-263-5	6.32	5.00	4.01
LM2585S-5.0-ND	5V Simple Switcher 3A Flyback Regulator	TO-263-5	6.32	5.00	4.01
LM2585S-12-ND	12V Simple Switcher 3A Flyback Regulator	TO-263-5	6.32	5.00	4.01
LM2585T-ADJ-ND	Simple Switcher, 3A, Flyback Voltage Regulator	TO-220-5	6.32	5.00	4.01
LM2585T-3.3-ND	3.3V Simple Switcher 3A Flyback Regulator	TO-220-5	6.32	5.00	4.01
LM2585T-12-ND	12V Simple Switcher 3A Flyback Regulator	TO-220-5	6.32	5.00	4.01
LM2586S-ADJ-ND	Adj. Simple Switcher 3A Flyback Reg. with Shutdown	TO-263-7	6.53	5.17	4.14
LM2586S-3.3-ND	3.3V Simple Switcher 3A Flyback Reg. with Shutdown	TO-263-7	6.53	5.17	4.14
LM2586S-5.0-ND	5V Simple Switcher 3A Flyback Reg. with Shutdown	TO-263-7	6.53	5.17	4.14
LM2586S-12-ND	12V Simple Switcher 3A Flyback Reg. with Shutdown	TO-263-7	6.53	5.17	4.14
LM2586T-ADJ-ND	Adj. Simple Switcher 3A Flyback Reg. with Shutdown	TO-220-7	6.53	5.17	4.14
LM2586T-3.3-ND	3.3V Simple Switcher 3A Flyback Reg. with Shutdown	TO-220-7	6.53	5.17	4.14
LM2586T-5.0-ND	5.0V Simple Switcher 3A Flyback Reg. with Shutdown	TO-220-7	6.53	5.17	4.14
LM2587S-ADJ-ND	Adj. Simple Switcher 5A Flyback Regulator	TO-263-5	8.32	6.58	5.27
LM2587S-3.3-ND	3.3V Simple Switcher 5A Flyback Regulator	TO-263-5	8.32	6.58	5.27
LM2587S-5.0-ND	5V Simple Switcher 5A Flyback Regulator	TO-263-5	8.32	6.58	5.27
LM2587T-ADJ-ND	Adj. Simple Switcher 5A Flyback Regulator	TO-220-5	8.32	6.58	5.27
LM2587T-3.3-ND	3.3V Simple Switcher 5A Flyback Regulator	TO-220-5	8.32	6.58	5.27
LM2587T-5.0-ND	5V Simple Switcher 5A Flyback Regulator	TO-220-5	8.32	6.58	5.27
LM2587T-12-ND	12V Simple Switcher 5A Flyback Regulator	TO-220-5	8.32	6.58	5.27
LM2588S-ADJ-ND	Adjustable Volt. 5A Simple Switcher, Flyback Regulator	TO-263	8.53	6.74	5.40
LM2588S-12-ND	12V 5A Simple Switcher Flyback Regulator	TO-263	8.53	6.74	5.40
LM2588T-ADJ-ND	Adjustable Volt. 5A Simple Switcher Flyback Regulator	TO-220	8.53	6.74	5.40
LM2588T-5.0-ND	5V 5A Switcher Flyback Regulator	TO-220	8.53	6.74	5.40
LM2594HVM-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	SO-8	4.63	3.52	2.69
LM2594HVM-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	SO-8	4.63	3.52	2.69
LM2594HVM-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	SO-8	4.63	3.52	2.69
LM2594HVM-12-ND	12V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	SO-8	4.63	3.52	2.69
LM2594HVN-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	4.63	3.52	2.69
LM2594HVN-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	4.63	3.52	2.69
LM2594HVN-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	4.63	3.52	2.69
LM2594HVN-12-ND	12V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	4.63	3.52	2.69
LM2594M-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	SO-8	3.05	2.32	1.77
LM2594M-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	SO-8	3.05	2.32	1.77
LM2594M-5.0-ND	Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	SO-8	3.05	2.32	1.77
LM2594M-12-ND	12V, Simple Switcher Power Converter, 150kHz, Step Down Voltage Regulator	SO-8	3.05	2.32	1.77
LM2594MX-5.0TR-ND	5V, Simple Switcher Power Converter, 150kHz, 0.5A Step Down Voltage Regulator	SO-8	3812.50/2,500		
LM2594N-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	3.05	2.32	1.77
LM2594N-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	3.05	2.32	1.77
LM2594N-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	3.05	2.32	1.77
LM2594N-12-ND	12V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	3.05	2.32	1.77
LM2595S-ADJ-ND	Adj., Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	TO-263-5	3.85	2.93	2.24
LM2595S-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-263-5	3.85	2.93	2.24
LM2595S-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-263-5	3.85	2.93	2.24
LM2595S-12-ND	12V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-263-5	3.85	2.93	2.24
LM2595T-ADJ-ND	Adj. Power Converter, 150KHz, 1A, Step Down Volt. Reg.	TO-220	3.85	2.93	2.24
LM2595T-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-220-5	3.85	2.93	2.24
LM2595T-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-220-5	3.85	2.93	2.24
LM2595T-12-ND	12V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-220-5	3.85	2.93	2.24
LM2596S-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-263-5	4.30	3.27	2.50
LM2596S-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-263-5	4.30	3.27	2.50
LM2596S-5.0-ND	5V, Power Converter 150kHz 3A Step Down V Regulator	TO-263	4.30	3.27	2.50
LM2596S-12-ND	12V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-263-5	4.30	3.27	2.50
LM2596SX-5.0TR-ND	5V, Power Converter 150kHz 3A Step Down V Regulator	TO-263	1096.50/500		
LM2596T-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-220-5	4.30	3.27	2.50
LM2596T-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-220-5	4.30	3.27	2.50
LM2596T-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-220-5	4.30	3.27	2.50
LM2596T-12-ND	12V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-220-5	4.30	3.27	2.50
LM2597HVM-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	SO-8	4.75	3.61	2.76
LM2597HVM-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	SO-8	4.75	3.61	2.76
LM2597HVM-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	SO-8	4.75	3.61	2.76
LM2597HVM-12-ND	12V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	SO-8	4.75	3.61	2.76
LM2597HVN-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	4.75	3.61	2.76
LM2597HVN-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	4.75	3.61	2.76
LM2597HVN-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	4.75	3.61	2.76
LM2597HVN-12-ND	12V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	4.75	3.61	2.76
LM2597M-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	SO-8	3.78	2.87	2.19
LM2597M-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	SO-8	3.78	2.87	2.19
LM2597M-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	SO-8	3.78	2.87	2.19
LM2597M-12-ND	12V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	SO-8	3.78	2.87	2.19
LM2597N-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	3.78	2.87	2.19
LM2597N-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	3.78	2.87	2.19
LM2597N-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	3.78	2.87	2.19
LM2597N-12-ND	12V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	3.78	2.87	2.19
LM2598S-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-263-7	4.45	3.39	2.59
LM2598S-5.0-ND	5V, Pwr. Converter, 150KHz, 1A, Step Down V Regulator	TO-263	4.45	3.39	2.59
LM2598S-12-ND	12V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-263-7	4.45	3.39	2.59
LM2598T-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-220-7	4.45	3.39	2.59
LM2598T-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-220-7	4.45	3.39	2.59

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Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LM2598T-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-220-7	4.45	3.39	2.59
LM2598T-12-ND	12V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-220-7	4.45	3.39	2.59
LM2599S-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-263-7	5.13	3.90	2.98
LM2599S-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-263-7	5.13	3.90	2.98
LM2599S-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-263-7	5.13	3.90	2.98
LM2599S-12-ND	12V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-263-7	5.13	3.90	2.98
LM2599T-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-220-7	5.13	3.90	2.98
LM2599T-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-220-7	5.13	3.90	2.98
LM2599T-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-220-7	5.13	3.90	2.98
LM2599T-12-ND	12V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-220-7	5.13	3.90	2.98
LM2621MMCT-ND	Low Input Step Up DC-DC Converter	SO-8	4.25	3.23	2.47
LM2621MMTR-ND	Low Input Step Up DC-DC Converter	SO-8	2142.00/1,000		
LM2622MM-ADJCT-ND	600kHz/1.3MHz Step-up PWM DC/DC Converter	8-MSOP	4.63	3.52	2.69
LM2622MM-ADJTR-ND	600kHz/1.3MHz Step-up PWM DC/DC Converter	8-MSOP	2331.00/1,000		
LM2635M-ND	5-Bit Programmable Synch. Buck Reg. Controller	SO-20	3.85	2.93	2.24
LM2635MXTR-ND	5-Bit Programmable Synch. Buck Reg. Controller	SO-20	1940.40/1,000		
LM2636M-ND	5-Bit Program Synch. Buck Reg Controller	SO-20	3.80	2.89	2.21
LM2636MTC-ND	5-Bit Program Synch. Buck Reg Controller	20-TSSOP	3.80	2.89	2.21
LM2637M-ND	Motherboard Power Supply Solution	SO-24	5.00	3.80	2.90
LM2638M-ND	Motherboard Power Supply Solution	SO-24	5.00	3.80	2.90
LM2639M-ND	5-Bit Program, Hi Freq. Multiphase PWM Controller	SO-24	5.69	4.50	3.61
LM2640MTC-ADJ-ND	Dual Adj. Step Down Switching Power Supply Controller, Switch. Freq. 200KHz	28-TSSOP	6.99	5.53	4.43
LM2641MTC-ADJ-ND	Dual Adj. Step Down Switching Power Supply Controller, Switch. Freq. 300KHz	28-TSSOP	6.99	5.53	4.43
LM2650M-ADJ-ND	Synchronous Step Down DC/DC Converter	SO-24	6.99	5.53	4.43
LM2651MTC-ADJ-ND	Adj. 1.5A, High Efficiency Synch. Switching Reg.	16-TSSOP	5.88	4.65	3.73
LM2651MTC-1.8-ND	1.8V, 1.5A, High Efficiency Synch. Switching Reg.	16-TSSOP	5.88	4.65	3.73
LM2651MTC-2.5-ND	2.5V, 1.5A, High Efficiency Synch. Switching Reg.	16-TSSOP	5.88	4.65	3.73
LM2651MTC-3.3-ND	3.3V, 1.5A, High Efficiency Synch. Switching Reg.	16-TSSOP	5.88	4.65	3.73
LM2653MTC-ADJ-ND	Adj. 1.5A, High Efficiency Synch. Switching Reg.	16-TSSOP	6.28	4.97	3.98
LM2655MTC-ADJ-ND	Adj. 2.5A, High Efficiency Synch. Switching Reg.	16-TSSOP	6.28	4.97	3.98
LM2655MTC-3.3-ND	3.3V, 2.5A, High Efficiency Synch. Switching Reg.	16-TSSOP	6.28	4.97	3.98
LM2660M-ND	100mA, Switched Capacitor Converter	SO-8	2.33	1.73	1.28
LM2660MMCT-ND	100mA, Switched Capacitor Converter	8-MSOP	2.33	1.73	1.28
LM2660MMTR-ND	100mA, Switched Capacitor Converter	8-MSOP	960.00/1,000		
LM2661M-ND	100mA, Switched Capacitor Converter with Shutdown	SO-8	2.42	1.80	1.33
LM2661MMCT-ND	100mA, Switched Capacitor Converter with Shutdown	8-MSOP	2.42	1.80	1.33
LM2661MMTR-ND	100mA, Switched Capacitor Converter with Shutdown	8-MSOP	998.40/1,000		
LM2662M-ND	Switched Capacitor Voltage Converter	SO-8	3.13	2.38	1.82
LM2663M-ND	Switched Capacitor Voltage Converter	SO-8	3.13	2.38	1.82
LM2664M6CT-ND	Switched Capacitor Voltage Converter, 91% Eff.	SOT-23-6	1.84	1.35	.98
LM2664M6TR-ND	Switched Capacitor Voltage Converter, 91% Eff.	SOT-23-6	637.00/1,000		
LM2665M6CT-ND	Switched Capacitor Voltage Converter, 90% Eff.	SOT-23-6	1.84	1.35	.98
LM2665M6TR-ND	Switched Capacitor Voltage Converter, 90% Eff.	SOT-23-6	637.00/1,000		
LM2670S-ADJ-ND	Adj. Simple Switcher High Efficiency 3A Step Down Regulator with Synch.	TO-263-7	6.11	4.84	3.88
LM2670S-3.3-ND	3.3V, Simple Switcher High Efficiency 3A Step Down V Regulator with Synch.	TO-263-7	6.11	4.84	3.88
LM2670S-5.0-ND	5V, Simple Switcher High Efficiency 3A Step Down V Regulator with Synch.	TO-263-7	6.11	4.84	3.88
LM2670S-12-ND	12V, Simple Switcher High Efficiency 3A Step Down V Regulator with Synch.	TO-263-7	6.11	4.84	3.88
LM2670T-ADJ-ND	Adj. Simple Switcher High Efficiency 3A Step Down Regulator with Synch.	TO-220-7	6.11	4.84	3.88
LM2670T-3.3-ND	3.3V, Simple Switcher High Efficiency 3A Step Down Regulator with Synch.	TO-220-7	6.11	4.84	3.88
LM2670T-5.0-ND	5V, Simple Switcher High Efficiency 3A Step Down Regulator with Synch.	TO-220-7	6.11	4.84	3.88
LM2670T-12-ND	12V, Simple Switcher High Efficiency 3A Step Down Regulator with Synch.	TO-220-7	6.11	4.84	3.88
LM2671M-ADJ-ND	Adj. Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	SO-8	4.00	3.04	2.32
LM2671M-3.3-ND	3.3V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	SO-8	4.00	3.04	2.32
LM2671M-5.0-ND	5V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	SO-8	4.00	3.04	2.32
LM2671M-12-ND	12V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	SO-8	4.00	3.04	2.32
LM2671N-ADJ-ND	Adj. Simple Switcher Power Converter High Effieciency 500mA Step Down Voltage Regulator	8-Dip	4.00	3.04	2.32
LM2671N-3.3-ND	3.3V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	8-Dip	4.00	3.04	2.32
LM2671N-5.0-ND	5V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	8-Dip	4.00	3.04	2.32
LM2671N-12-ND	12V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	8-Dip	4.00	3.04	2.32
LM2672M-ADJ-ND	Adj. Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	SO-8	6.00	4.56	3.48
LM2672M-3.3-ND	3.3V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	SO-8	6.00	4.56	3.48
LM2672M-5.0-ND	5V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	SO-8	6.00	4.56	3.48
LM2672M-12-ND	12V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	SO-8	6.00	4.56	3.48
LM2672N-ADJ-ND	Adj. Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-Dip	6.00	4.56	3.48
LM2672N-3.3-ND	3.3V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-Dip	6.00	4.56	3.48
LM2672N-5.0-ND	5V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-Dip	6.00	4.56	3.48
LM2672N-12-ND	12V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-Dip	6.00	4.56	3.48
LM2673S-ADJ-ND	Adj. Simple Switcher 3A Step Down Voltage Regulator with Adj. Current Limit	TO-263-7	6.11	4.84	3.88
LM2673S-3.3-ND	3.3V, Simple Switcher 3A Step Down Voltage Regulator with Adj. Current Limit	TO-263-7	6.11	4.84	3.88
LM2673S-5.0-ND	5V, Simple Switcher 3A Step Down Voltage Regulator with Adj. Current Limit	TO-263-7	6.11	4.84	3.88
LM2673S-12-ND	12V, Simple Switcher 3A Step Down Voltage Regulator with Adj. Current Limit	TO-263-7	6.11	4.84	3.88
LM2673T-ADJ-ND	Adj. Simple Switcher 3A Step Down Voltage Regulator with Adj. Current Limit	TO-220-7	6.11	4.84	3.88
LM2673T-3.3-ND	3.3V, Simple Switcher 3A Step Down Voltage Regulator with Adj. Current Limit	TO-220-7	6.11	4.84	3.88
LM2673T-5.0-ND	5V, Simple Switcher 3A Step Down Voltage Regulator with Adj. Current Limit	TO-220-7	6.11	4.84	3.88
LM2673T-12-ND	12V, Simple Switcher 3A Step Down Voltage Regulator with Adj. Current Limit	TO-220-7	6.11	4.84	3.88
LM2674M-ADJ-ND	Adj. Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	SO-8	3.30	2.51	1.92
LM2674M-5.0-ND	5V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	SO-8	3.30	2.51	1.92
LM2674M-12-ND	12V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	SO-8	3.30	2.51	1.92
LM2674N-ADJ-ND	Adj. Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	8-Dip	3.30	2.51	1.92
LM2674N-3.3-ND	3.3V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	8-Dip	3.30	2.51	1.92
LM2674N-5.0-ND	5V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	8-Dip	3.30	2.51	1.92
LM2674N-12-ND	12V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	8-Dip	3.30	2.51	1.92
LM2675M-ADJ-ND	Adj. Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	SO-8	5.45	4.15	3.17
LM2675M-3.3-ND	3.3V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	SO-8	5.45	4.15	3.17
LM2675M-12-ND	12V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	SO-8	5.45	4.15	3.17
LM2675N-ADJ-ND	Adj. Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-Dip	5.35	4.07	3.11
LM2675N-3.3-ND	3.3V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-Dip	5.35	4.07	3.11
LM2675N-5.0-ND	5V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-Dip	5.35	4.07	3.11
LM2675N-12-ND	12V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-Dip	5.35	4.07	3.11
LM2676S-ADJ-ND	Adj. Simple Switcher High Efficiency 3A Step Down Voltage Regulator	TO-263-7	5.57	4.40	3.53
LM2676S-3.3-ND	3.3V, Simple Switcher High Efficiency 3A Step Down Voltage Regulator	TO-263-7	5.57	4.40	3.53
LM2676S-5.0-ND	5V, Simple Switcher High Efficiency 3A Step Down Voltage Regulator	TO-263-7	5.57	4.40	3.53
LM2676S-12-ND	12V, Simple Switcher High Efficiency 3A Step Down Voltage Regulator	TO-263-7	5.57	4.40	3.53
LM2676T-ADJ-ND	Adj. Simple Switcher High Efficiency 3A Step Down Voltage Regulator	TO-220-7	5.57	4.40	3.53
LM2676T-3.3-ND	3.3V, Simple Switcher High Efficiency 3A Step Down Voltage Regulator	TO-220-7	5.57	4.40	3.53
LM2676T-5.0-ND	5V, Simple Switcher High Efficiency 3A Step Down Voltage Regulator	TO-220-7	5.57	4.40	3.53
LM2676T-12-ND	12V, Simple Switcher High Efficiency 3A Step Down Voltage Regulator	TO-220-7	5.57	4.40	3.53
LM2677S-ADJ-ND	Adj. Simple Switcher High Efficiency 5A Step Down Voltage Regulator with Synch.	TO-263-7	7.37	5.83	4.67
LM2677S-3.3-ND	3.3V, Simple Switcher High Efficiency 5A Step Down Voltage Regulator with Synch.	TO-263-7	7.37	5.83	4.67
LM2677S-5.0-ND	5V, Simple Switcher High Efficiency 5A Step Down Voltage Regulator with Synch.	TO-263-7	7.37	5.83	4.67
LM2677S-12-ND	12V, Simple Switcher High Efficiency 5A Step Down Voltage Regulator with Synch.	TO-263-7	7.37	5.83	4.67
LM2677T-ADJ-ND	Adj. Simple Switcher High Efficiency 5A Step Down Voltage Regulator with Synch.	TO-220-7	7.37	5.83	4.67
LM2677T-3.3-ND	3.3V, Simple Switcher High Efficiency 5A Step Down Voltage Regulator with Synch.	TO-220-7	7.37	5.83	4.67
LM2677T-5.0-ND	5V, Simple Switcher High Efficiency 5A Step Down Voltage Regulator with Synch.	TO-220-7	7.37	5.83	4.67
LM2677T-12-ND	12V, Simple Switcher High Efficiency 5A Step-Dow Voltage Regulator with Synch.	TO-220-7	7.37	5.83	4.67
LM2678S-ADJ-ND	Adj. Simple Switcher High Efficiency 5A Step Down Voltage Regulator	TO-263-7	6.97	5.52	4.42
LM2678S-5.0-ND	5V, Simple Switcher High Efficiency 5A Step Down Voltage Regulator	TO-263-7	6.97	5.52	4.42
LM2678S-12-ND	12V, Simple Switcher High Efficiency 5A Step Down Voltage Regulator	TO-263-7	6.97	5.52	4.42
LM2678T-ADJ-ND	Adj. Simple Switcher High Efficiency 5A Step Down Voltage Regulator	TO-220-7	6.97	5.52	4.42
LM2678T-3.3-ND	3.3V, Simple Switcher High Efficiency 5A Step Down Voltage Regulator	TO-220-7	6.97	5.52	4.42
LM2678T-5.0-ND	5V, Simple Switcher High Efficiency 5A Step Down Voltage Regulator	TO-220-7	6.97	5.52	4.42
LM2679S-ADJ-ND	Adj. Simple Switcher High Efficiency 5A Step Down Regulator with Adj. Current Limit	TO-263-7	7.37	5.83	4.67
LM2679S-3.3-ND	3.3V, Simple Switcher High Efficiency 5A Step Down Regulator with Adj. Current Limit	TO-263-7	7.37	5.83	4.67
LM2679S-5.0-ND	5V, Simple Switcher High Efficiency 5A Step Down Regulator with Adj. Current Limit	TO-263-7	7.37	5.83	4.67
LM2679S-12-ND	12V, Simple Switcher High Efficiency 5A Step Down Regulator with Adj. Current Limit	TO-263-7	7.37	5.83	4.67
LM2679T-ADJ-ND	Adj. Simple Switcher High Efficiency 5A Step Down Regulator with Adj. Current Limit	TO-220-7	7.37	5.83	4.67
LM2679T-3.3-ND	3.3V, Simple Switcher High Efficiency 5A Step Down Regulator with Adj. Current Limit	TO-220-7	7.37	5.83	4.67

(Continued)

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Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LM2679T-5.0-ND	5V, Simple Switcher High Efficiency 5A Step Down Regulator with Adj. Current Limit	TO-220-7	7.37	5.83	4.67
LM2679T-12-ND	12V, Simple Switcher High Efficiency 5A Step Down Regulator with Adj. Current Limit	TO-220-7	7.37	5.83	4.67
LM2681M6CT-ND	Switched Capacitor Volt Converter	SOT-23-6	1.71	1.27	.94
LM2681M6TR-ND	Switched Capacitor Volt Converter	SOT-23-6	704.00/1,000		
LM2682M-ND	Switched Capacitor Volt Doubling Inverter	SO-8	2.48	1.84	1.36
LM2682MMCT-ND	Switched Capacitor Volt Doubling Inverter	8-MSOP	2.48	1.84	1.36
LM2682MMTR-ND	Switched Capacitor Volt Doubling Inverter	8-MSOP	1024.00/1,000		
LM2685MTC-ND	Dual Output Regulated Switched Capacitor V. Conv.	14-TSSOP	2.58	1.96	1.50
LM2686MTC-ND	Regulated Switched Capacitor Volt Converter	14-TSSOP	2.88	2.14	1.59
LM2687MMCT-ND	Low Noise Regulated Switched Capacitor V. Conv.	8-MSOP	2.36	1.75	1.30
LM2687MMTR-ND	Low Noise Regulated Switched Capacitor V. Conv.	8-MSOP	972.80/1,000		
LM2765M6CT-ND	Switched Capacitor Volt Converter	SOT-23-6	1.73	1.27	.92
LM2765M6TR-ND	Switched Capacitor Volt Converter	SOT-23-6	598.00/1,000		
LM2767M5CT-ND	Switched Capacitor Volt Converter	SOT-23-6	1.61	1.19	.86
LM2767M5TR-ND	Switched Capacitor Volt Converter	SOT-23-6	559.00/1,000		
LM2825HN-ADJ-ND	Adj. Integrated Power Supply 1A DC/DC Converter	24-Dip	15.00	14.00	13.00
LM2825N-ADJ-ND	Adj. DC/DC Converter	24-Dip	15.00	14.00	13.00
LM2825N-3.3-ND	3.3V, Integrated Power Supply 1A DC/DC Converter	24-Dip	15.00	14.00	13.00
LM2825N-5.0-ND	5V, Integrated Power Supply 1A DC/DC Converter *NEW!*	24-Dip	15.00	14.00	13.00
LM2825N-12-ND	12V, Integrated Power Supply 1A DC/DC Converter	24-Dip	15.00	14.00	13.00
LM2876T-ND	High Performance 40W Audio Pwr Amp with Mute	TO-220-11	4.30	3.27	2.50
LM2876TF-ND	High-Performance 40W Audio Power Amp with Mute	TF11B	4.75	3.61	2.76
LM2901M-ND	Quad Voltage Comparator	SO-14	.47	.37	.27
LM2901MXTR-ND	Quad Voltage Comparator	SO-14	310.25/2,500		
LM2901NNS-ND	Quad Voltage Comparator	14-Dip	.49	.38	.27
LM2902M-ND	Low Power Quad Op Amp	SO-14	.47	.37	.27
LM2902MXTR-ND	Low Power Quad Op Amp	SO-14	310.25/2,500		
LM2902NNS-ND	Low Power Quad Op Amp	14-Dip	.49	.38	.27
LM2903M-ND	Dual Comparator	SO-8	.47	.37	.27
LM2903MXTR-ND	Dual Comparator	SO-8	310.25/2,500		
LM2903N-ND	Dual Comparator	8-Dip	.49	.38	.27
LM2904M-ND	Low Power Dual Op Amp	SO-8	.47	.37	.27
LM2904N-ND	Dual Op Amp	8-Dip	.49	.38	.27
LM2907N-ND	Frequency-to-Voltage Converter	14-Dip	2.02	1.50	1.11
LM2907N-8-ND	Frequency-to-Voltage Converter	8-Dip	2.02	1.50	1.11
LM2917M-ND	Frequency-to-Voltage Converter	SO-14	2.26	1.68	1.25
LM2917N-ND	Frequency-to-Voltage Converter	14-Dip	2.51	1.87	1.38
LM2917N-8-ND	Frequency-to-Voltage Converter	8-Dip	2.51	1.87	1.38
LM2930S-5.0-ND	5V, 3-Terminal Positive Regulator	TO-263	1.74	1.29	.96
LM2930S-8.0-ND	8V, 3-Terminal Positive Regulator	TO-263	1.74	1.29	.96
LM2930T-5.0-ND	5V, 150mA Positive Regulator	TO-220	1.61	1.19	.86
LM2930T-8.0-ND	8V, 150mA Positive Regulator	TO-220	1.61	1.19	.86
LM2931AM-5.0-ND	5V, Low Dropout Regulator	SO-8	1.09	.80	.58
LM2931AMX-5.0TR-ND	5V, Low Dropout Regulator	SO-8	924.38/2,500		
LM2931AS-5.0-ND	5V, Series Low Dropout Regulator	TO-263	1.80	1.32	.96
LM2931AT-5.0-ND	5V, Low Dropout Regulator	TO-220	1.69	1.24	.90
LM2931AZ-5.0-ND	5V, Low Dropout Regulator	TO-92	.94	.69	.50
LM2931CM-ND	Series Low Dropout Regulator	SO-8	1.09	.80	.58
LM2931CMXTR-ND	Series Low Dropout Regulator	SO-8	924.38/2,500		
LM2931CS-ND	Series Low Dropout Regulator	TO-263-5	1.65	1.21	.88
LM2931CT-ND	Low Dropout (0.6V) Pos Adjustable Regulator	TO-220-5	1.46	1.08	.78
LM2931M-5.0-ND	5V, Low Dropout (0.6V) Regulator	SO-8	1.08	.78	.57
LM2931MX-5.0TR-ND	5V, Low Dropout (0.6V) Regulator	SO-8	798.00/2,500		
LM2931S-5.0-ND	5V, Series Low Dropout Regulator	TO-263	1.65	1.21	.88
LM2931T-5.0-ND	5V, 100µA Low Dropout (0.6V) Regulator	TO-220	1.50	1.10	.80
LM2931Z-5.0-ND	5V, 100µA Low Dropout (0.6V) Regulator	TO-92	.86	.62	.45
LM2936M-5.0-ND	5V, Ultra Low Current Regulator	SO-8	2.20	1.64	1.21
LM2936MX-5.0TR-ND	5V, Ultra Low Current Regulator	SO-8	2312.50/2,500		
LM2936Z-5.0-ND	5V, Ultra Low Current Regulator	TO-92	2.54	1.89	1.40
LM2937ES-2.5-ND	2.5V, 500mA Low Dropout Regulator	TO-263	2.05	1.52	1.13
LM2937ES-3.3-ND	3.3V, 500mA Low Dropout Regulator	TO-263	2.05	1.52	1.13
LM2937ES-5.0-ND	5V, 500mA Low Dropout Regulator	TO-263	2.05	1.52	1.13
LM2937ES-8.0-ND	8V, 500mA Low Dropout Regulator	TO-263	2.05	1.52	1.13
LM2937ES-10-ND	10V, 500mA Low Dropout Regulator	TO-263	2.05	1.52	1.13
LM2937ES-12-ND	12V, 500mA Low Dropout Regulator	TO-263	2.05	1.52	1.13
LM2937ES-15-ND	15V, 500mA Low Dropout Regulator	TO-263	2.05	1.52	1.13
LM2937ESX-5.0TR-ND	5V, 500mA Low Dropout Regulator	TO-263	429.00/500		
LM2937ET-2.5-ND	2.5V, 500mA Low Dropout Regulator	TO-220	1.80	1.34	.99
LM2937ET-3.3-ND	3.3V, 500mA Low Dropout Regulator	TO-220	1.80	1.34	.99
LM2937ET-5.0-ND	5V, 500mA High Temp Regulator	TO-220	1.80	1.34	.99
LM2937ET-8.0-ND	8V, 500mA High Temp Voltage Regulator	TO-220	1.80	1.34	.99
LM2937ET-10-ND	10V, 500mA High Temp Voltage Regulator	TO-220	1.80	1.34	.99
LM2937ET-12-ND	12V, 500mA High Temp Voltage Regulator	TO-220	1.80	1.34	.99
LM2937IMP-2.5CT-ND	2.5V, 500mA Low Dropout Regulator	SOT-223-4	1.80	1.34	.99
LM2937IMP-2.5TR-ND	2.5V, 500mA Low Dropout Regulator	SOT-223-4	742.40/1,000		
LM2937IMP-3.3CT-ND	3.3V, 500mA Low Dropout Regulator	SOT-223	1.80	1.34	.99
LM2937IMP-3.3TR-ND	3.3V, 500mA Low Dropout Regulator	SOT-223	742.40/1,000		
LM2937IMP-5.0CT-ND	5V, 400mA Low Dropout Regulator	SOT-223	1.80	1.34	.99
LM2937IMP-5.0TR-ND	5V, 400mA Low Dropout Regulator	SOT-223	742.40/1,000		
LM2937IMP-8.0CT-ND	8V, 500mA Low Dropout Regulator	SOT-223-4	1.80	1.34	.99
LM2937IMP-8.0TR-ND	8V, 500mA Low Dropout Regulator	SOT-223-4	742.40/1,000		
LM2937IMP-10CT-ND	10V, 500mA Low Dropout Regulator	SOT-223-4	1.80	1.34	.99
LM2937IMP-10TR-ND	10V, 500mA Low Dropout Regulator	SOT-223-4	742.40/1,000		
LM2937IMP-12CT-ND	12V, 500mA Low Dropout Regulator	SOT-223-4	1.80	1.34	.99
LM2937IMP-12TR-ND	12V, 500mA Low Dropout Regulator	SOT-223-4	742.40/1,000		
LM2937IMP-15CT-ND	15V, 500mA Low Dropout Regulator	SOT-223-4	1.80	1.34	.99
LM2937IMP-15TR-ND	15V, 500mA Low Dropout Regulator	SOT-223-4	742.40/1,000		
LM2940CS-5.0-ND	5V, 1A Low Dropout Voltage Regulator	TO-263	1.80	1.32	.96
LM2940CS-9.0-ND	9V, 1A Low Dropout Regulator	TO-263	1.80	1.32	.96
LM2940CS-12-ND	12V, 1A Low Dropout Regulator	TO-263	1.80	1.32	.96
LM2940CS-15-ND	15V, 1A Low Dropout Regulator	TO-263	1.80	1.32	.96
LM2940CSX-5.0TR-ND	5V, 1A Low Dropout Voltage Regulator	TO-263	319.20/500		
LM2940CT-5.0-ND	5V, 1A Low Dropout Voltage Regulator	TO-220	1.80	1.32	.96
LM2940CT-9.0-ND	9V, 1A Low Dropout Regulator	TO-220	1.80	1.32	.96
LM2940CT-12-ND	12V, 1A Low Dropout Voltage Regulator	TO-220	1.80	1.32	.96
LM2940CT-15-ND	15V, 1A Low Dropout Voltage Regulator	TO-220	1.80	1.32	.96
LM2940IMP-5.0CT-ND	5V, 1A Low Dropout Regulator	SOT-223	2.08	1.55	1.14
LM2940IMP-5.0TR-ND	5V, 1A Low Dropout Regulator	SOT-223	857.60/1,000		
LM2940IMP-8.0CT-ND	8V, 1A Low Dropout Regulator	SOT-223-4	2.08	1.55	1.14
LM2940IMP-8.0TR-ND	8V, 1A Low Dropout Regulator	SOT-223-4	857.60/1,000		
LM2940IMP-9.0CT-ND	9V, 1A Low Dropout Regulator	SOT-223-4	2.08	1.55	1.14
LM2940IMP-9.0TR-ND	9V, 1A Low Dropout Regulator	SOT-223-4	857.60/1,000		
LM2940IMP-10CT-ND	10V, 1A Low Dropout Regulator	SOT-223-4	2.08	1.55	1.14
LM2940IMP-10TR-ND	10V, 1A Low Dropout Regulator	SOT-223-4	857.60/1,000		
LM2940IMP-12CT-ND	12V, 1A Low Dropout Regulator	SOT-223-4	2.08	1.55	1.14
LM2940IMP-12TR-ND	12V, 1A Low Dropout Regulator	SOT-223-4	857.60/1,000		
LM2940IMP-15CT-ND	15V, 1A Low Dropout Regulator	SOT-223-4	2.08	1.55	1.14
LM2940IMP-15TR-ND	15V, 1A Low Dropout Regulator	SOT-223-4	857.60/1,000		
LM2940S-5.0-ND	5V, 1A Low Dropout Voltage Regulator	TO-263	1.71	1.27	.94
LM2940S-8.0-ND	8V, 1A Low Dropout Regulator	TO-263	1.71	1.27	.94
LM2940S-9.0-ND	9V, 1A Low Dropout Regulator	TO-263	1.71	1.27	.94
LM2940S-10-ND	10V, 1A Low Dropout Regulator	TO-263	1.71	1.27	.94
LM2940S-12-ND	12V, 1A Low Dropout Regulator	TO-263	1.71	1.27	.94
LM2940SX-5.0TR-ND	5V, 1A Low Dropout Voltage Regulator	TO-263	357.50/500		
LM2940T-5.0-ND	5V, 1A Low Dropout Voltage Regulator	TO-220	1.71	1.27	.94
LM2940T-8.0-ND	8V, 1A Low Dropout Voltage Regulator	TO-220	1.71	1.27	.94
LM2940T-9.0-ND	9V, 1A Low Dropout Voltage Regulator	TO-220	1.71	1.27	.94
LM2940T-10.0-ND	10V, 1A Low Dropout Voltage Regulator	TO-220	1.71	1.27	.94
LM2940T-12.0-ND	12V, 1A Low Dropout Voltage Regulator	TO-220	1.71	1.27	.94
LM2941CS-ND	Adjustable 1A Low Dropout Voltage Regulator	TO-263	2.11	1.57	1.16
LM2941CSXTR-ND	Adjustable 1A Low Dropout Voltage Regulator	TO-263	442.00/500		
LM2941CT-ND	Adjustable 1A Low Dropout Voltage Regulator	TO-220	2.11	1.57	1.16
LM2941SXTR-ND	Adjustable 1A Low Dropout Voltage Regulator	TO-263	494.00/500		
LM2941T-ND	Adjustable 1A Low Dropout Voltage Regulator	TO-220	2.36	1.75	1.30
LM2990S-5.0-ND	5V, Negative Low Dropout Regulator	TO-263	2.65	2.02	1.54
LM2990S-12-ND	12V, Negative Low Dropout Regulator	TO-263	2.65	2.02	1.54
LM2990S-15-ND	15V, Negative Low Dropout Regulator	TO-263	2.65	2.02	1.54
LM2990T-5.0-ND	5V, Negative Low Dropout Voltage Regulator	TO-220	3.01	2.24	1.65
LM2990T-5.2-ND	5.2V, Negative Low Dropout Voltage Regulator	TO-220	3.01	2.24	1.65
LM2990T-12-ND	12V, Negative Low Dropout Voltage Regulator	TO-220	3.01	2.24	1.65
LM2990T-15-ND	15V, Negative Low Dropout Voltage Regulator	TO-220	3.01	2.24	1.65
LM2991T-ND	1A Neg. Adjustable Low Dropout Voltage Regulator	TO-220	3.01	2.24	1.65
LM3302N-ND	Quad Comparator	14-Dip	.99	.72	.52
LM3350MMCT-ND	Switched Capacitor Voltage Converter, 90% Eff.	8-MSOP	2.60	1.94	1.43
LM3350MMTR-ND	Switched Capacitor Voltage Converter, 90% Eff.	8-MSOP	1075.20/1,000		
LM3351MMCT-ND	Switched Capacitor Voltage Converter, 95% Eff.	8-MSOP	2.60	1.94	1.43
LM3351MMTR-ND	Switched Capacitor Voltage Converter, 95% Eff.	8-MSOP	1075.20/1,000		
LM3352MTC-2.5-ND	2.5V, Regulated 200mA Buck-Boost Switched Capacitor DC/DC Converter	16-TSSOP	4.33	3.29	2.51
LM3352MTC-3.0-ND	3V, Regulated 200mA Buck-Boost Switched Capacitor DC/DC Converter	16-TSSOP	4.33	3.29	2.51
LM3352MTC-3.3-ND	3.3V, Regulated 200mA Buck-Boost Switched Capacitor DC/DC Converter	16-TSSOP	4.33	3.29	2.51
LM3411AM5-3.3CT-ND	3.3V, Precision Secondary Reg/Driver	SOT-23-5	1.80	1.34	.99
LM3411AM5-3.3TR-ND	3.3V, Precision Secondary Reg/Driver	SOT-23-5	742.40/1,000		
LM3411AM5-5.0CT-ND	5V, Precision Secondary Reg/Driver	SOT-23-5	1.80	1.34	.99
LM3411AM5-5.0TR-ND	5V, Precision Secondary Reg/Driver	SOT-23-5	742.40/1,000		
LM3411M5-3.3CT-ND	3.3V, Precision Secondary Reg/Driver	SOT-23-5	1.61	1.19	.86
LM3411M5-3.3TR-ND	3.3V, Precision Secondary Reg/Driver	SOT-23-5	559.00/1,000		
LM3411M5-5.0CT-ND	5V, Precision Secondary Reg/Driver	SOT-23-5	1.61	1.19	.86
LM3411M5-5.0TR-ND	5V, Precision Secondary Reg/Driver	SOT-23-5	559.00/1,000		
LM3420AM5-8.2CT-ND	8.2V, Lithium-Ion Battery Charge Controller	SOT-23-5	2.50	1.90	1.45
LM3420AM5-8.2TR-ND	8.2V, Lithium-Ion Battery Charge Controller	SOT-23-5	1260.00/1,000		
LM3420AM5-8.4CT-ND	8.4V, Lithium-Ion Battery Charge Controller	SOT-23-5	2.50	1.90	1.45
LM3420AM5-8.4TR-ND	8.4V, Lithium-Ion Battery Charge Controller	SOT-23-5	1260.00/1,000		
LM3420AM5-16.8CT-ND	16.8V, Lithium-Ion Battery Charge Controller	SOT-23-5	2.50	1.90	1.45
LM3420AM5-16.8TR-ND	16.8V, Lithium-Ion Battery Charge Controller	SOT-23-5	1260.00/1,000		
LM3420M5-16.8CT-ND	16.8V, Lithium-Ion Battery Charge Controller	SOT-23-5	2.67	1.98	1.47
LM3420M5-16.8TR-ND	16.8V, Lithium-Ion Battery Charge Controller	SOT-23-5	1100.80/1,000		
LM3420M5-8.2CT-ND	8.2V, Lithium-Ion Battery Charge Controller	SOT-23-5	2.67	1.98	1.47
LM3420M5-8.2TR-ND	8.2V, Lithium-Ion Battery Charge Controller	SOT-23-5	1100.80/1,000		
LM3460M5-1.2CT-ND	1.2V, Precision Controller for GTLp and GTL Bus Termination	SOT-23-5	2.45	1.82	1.35
LM3460M5-1.2TR-ND	1.2V, Precision Controller for GTLp and GTL Bus Termination	SOT-23-5	1011.20/1,000		
LM3460M5-1.5CT-ND	1.5V, Precision Controller for GTLp and GTL Bus Termination	SOT-23-5	2.45	1.82	1.35
LM3460M5-1.5TR-ND	1.5V, Precision Controller for GTLp and GTL Bus Termination	SOT-23-5	1011.20/1,000		
LM3478MMCT-ND	High Efficiency Low-Side N-Channel Controller for Switching Regulator	8-MSOP	3.93	2.99	2.28
LM3478MMTR-ND	High Efficiency Low-Side N-Channel Controller for Switching Regulator	8-MSOP	1978.20/1,000		
LM3480IM3X-12CT-ND	12V, 100mA Low Dropout Voltage Regulator	SOT-23	1.09	.80	.58
LM3480IM3X-12TR-ND	12V, 100mA Low Dropout Voltage Regulator	SOT-23	1109.25/3,000		
LM3480IM3-15CT-ND	15V, 100mA Low Dropout Voltage Regulator	SOT-23	1.09	.80	.58
LM3480IM3-15TR-ND	15V, 100mA Low Dropout Voltage Regulator	SOT-23	377.00/1,000		
LM3480IM3-3.3CT-ND	3.3V, 100mA Low Dropout VoltageRegulator	SOT-23	1.09	.80	.58
LM3480IM3-3.3TR-ND	3.3V, 100mA Low Dropout Voltage Regulator	SOT-23	377.00/1,000		
LM3480IM3-5.0CT-ND	5.0V, 100mA Low Dropout Voltage Regulator	SOT-23	1.09	.80	.58
LM3480IM3-5.0TR-ND	5.0V, 100mA Low Dropout Voltage Regulator	SOT-23	377.00/1,000		
LM3490IM5-3.3CT-ND	3.3V, 100mA Quasi LDO Linear Voltage Regulator with Logic-Controlled ON/OFF	SOT-23-5	1.28	.94	.68
LM3490IM5-3.3TR-ND	3.3V, 100mA Quasi LDO Linear Voltage Regulator with Logic-Controlled ON/OFF	SOT-23-5	442.00/1,000		
LM3490IM5-5.0CT-ND	5V, 100mA Quasi LDO Linear Voltage Regulator with Logic-Controlled ON/OFF	SOT-23-5	1.28	.94	.68
LM3490IM5-5.0TR-ND	5V, 100mA Quasi LDO Linear Voltage Regulator with Logic-Controlled ON/OFF	SOT-23-5	442.00/1,000		
LM3490IM5-12CT-ND	12V, 100mA Quasi LDO Linear Voltage Regulator with Logic-Controlled ON/OFF	SOT-23-5	1.28	.94	.68
LM3490IM5-12TR-ND	12V, 100mA Quasi LDO Linear Voltage Regulator with Logic-Controlled ON/OFF	SOT-23-5	442.00/1,000		
LM3490IM5-15CT-ND	15V, 100mA Quasi LDO Linear Voltage Regulator with Logic-Controlled ON/OFF	SOT-23-5	1.28	.94	.68
LM3490IM5-15TR-ND	15V, 100mA Quasi LDO Linear Voltage Regulator with Logic-Controlled ON/OFF	SOT-23-5	442.00/1,000		
LM3524DM-ND	Regulating Pulse Width Modulator	SO-16	1.46	1.08	.78
LM3524DN-ND	Regulating Pulse Width Modulator	16-Dip	1.46	1.08	.78
LM3525M-H-ND	Single Port USB Power Switch and Over-Current Protection	SO-8	1.92	1.43	1.06
LM3525M-L-ND	Single Port USB Power Switch and Over-Current Protection	SO-8	1.92	1.43	1.06
LM3526M-H-ND	Dual Port USB Power Switch and Over-Current Protection	SO-8	2.17	1.61	1.19
LM3526M-L-ND	Dual Port USB Power Switch and Over-Current Protection	SO-8	2.17	1.61	1.19
LM3578AM-ND	Switching Regulator	SO-8	1.92	1.43	1.06
LM3578AMXTR-ND	Switching Regulator	SO-8	1937.50/2,500		
LM3578AN-ND	Switching Regulator	8-Dip	1.92	1.43	1.06
LM3620M5-4CT-ND	4V, Lithium-Ion Battery Charger Controller	SOT-23-5	2.20	1.64	1.21
LM3620M5-4TR-ND	4V, Lithium-Ion Battery Charger Controller	SOT-23-5	908.80/1,000		

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Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LM3620M5-8CT-ND	8V, Lithium-Ion Battery Charger Controller	SOT-23-5	2.20	1.64	1.21
LM3620M5-8TR-ND	8V, Lithium-Ion Battery Charger Controller	SOT-23-5	908.80/1,000		
LM3621M-ND	Single Cell Lithium-Ion Battery Charger Controller	SO-16	3.73	2.84	2.17
LM3622AM-4.1-ND	4.1V, Lithium-Ion Battery Charger Controller	SO-8	2.98	2.27	1.73
LM3622AM-4.2-ND	4.2V, Lithium-Ion Battery Charger Controller	SO-8	2.98	2.27	1.73
LM3622AM-8.2-ND	8.2V, Lithium-Ion Battery Charger Controller	SO-8	2.98	2.27	1.73
LM3622AM-8.4-ND	8.4V, Lithium-Ion Battery Charger Controller	SO-8	2.98	2.27	1.73
LM3622M-4.1-ND	4.1V, Lithium-Ion Battery Charger Controller	SO-8	2.79	2.07	1.53
LM3622M-4.2-ND	4.2V, Lithium-Ion Battery Charger Controller	SO-8	2.79	2.07	1.53
LM3622M-8.2-ND	8.2V, Lithium-Ion Battery Charger Controller	SO-8	2.79	2.07	1.53
LM3622M-8.4-ND	8.4V, Lithium-Ion Battery Charger Controller	SO-8	2.79	2.07	1.53
LM3647IM-ND	Universal Battery Charger For Li-Ion, Ni-MH, and Ni-Cd Batteries	20-SOIC	5.67	4.49	3.60
LM3647-EVAL-ND	Evaluation Board for LM3647	EVAL BOARD	75.00	70.00	65.00
LM3812M-1.0-ND	Precision Current Gauge IC with Ultra Low Loss Sense Element and PWM Output	SO-8	3.58	2.72	2.08
LM3812M-7.0-ND	Precision Current Gauge IC with Ultra Low Loss Sense Element and PWM Output	SO-8	3.58	2.72	2.08
LM3813M-1.0-ND	Precision Current Gauge IC with Ultra Low Loss Sense Element and PWM Output	SO-8	3.58	2.72	2.08
LM3813M-7.0-ND	Precision Current Gauge IC with Ultra Low Loss Sense Element and PWM Output	SO-8	3.58	2.72	2.08
LM3814M-1.0-ND	Fast Current Gauge IC with Ultra Low Loss Sense Element and PWM Output	SO-8	3.58	2.72	2.08
LM3814M-7.0-ND	Fast Current Gauge IC with Ultra Low Loss Sense Element and PWM Output	SO-8	3.58	2.72	2.08
LM3815M-1.0-ND	Fast Current Gauge IC with Ultra Low Loss Sense Element and PWM Output	SO-8	3.58	2.72	2.08
LM3815M-7.0-ND	Fast Current Gauge IC with Ultra Low Loss Sense Element and PWM Output	SO-8	3.58	2.72	2.08
LM3822MM-1.0CT-ND	Precision Current Gauge IC with Internal Zero Ohm Sense Element and PWM Output	8-MSOP	2.85	2.17	1.66
LM3822MM-1.0TR-ND	Precision Current Gauge IC with Internal Zero Ohm Sense Element and PWM Output	8-MSOP	1436.40/1,000		
LM3822MM-2.0CT-ND	Precision Current Gauge IC with Internal Zero Ohm Sense Element and PWM Output	8-MSOP	2.85	2.17	1.66
LM3822MM-2.0TR-ND	Precision Current Gauge IC with Internal Zero Ohm Sense Element and PWM Output	8-MSOP	1436.40/1,000		
LM3824MM-1.0CT-ND	Precision Current Gauge IC with Internal Zero Ohm Sense Element and PWM Output	8-MSOP	2.85	2.17	1.66
LM3824MM-1.0TR-ND	Precision Current Gauge IC with Internal Zero Ohm Sense Element and PWM Output	8-MSOP	1436.40/1,000		
LM3824MM-2.0CT-ND	Precision Current Gauge IC with Internal Zero Ohm Sense Element and PWM Output	8-MSOP	2.85	2.17	1.66
LM3824MM-2.0TR-ND	Precision Current Gauge IC with Internal Zero Ohm Sense Element and PWM Output	8-MSOP	1436.40/1,000		
LM3875T-ND	High Power 40W Audio Power Amp	TO-220-11	5.70	4.34	3.31
LM3875TF-ND	High Power 40W Audio Power Amp *NEW!*	TO-220	5.81	4.34	3.31
LM3876T-ND	High Power 40W Audio Power Amp with Mute	TO-220-11	5.23	3.98	3.04
LM3876TF-ND	High Performance 56W Audio Pwr Amp with Mute	TO-220-11	5.35	4.07	3.11
LM3886T-ND	60W Audio Amp with Mute	TO-220-11	5.23	3.98	3.04
LM3886TF-ND	68W Audio Amp with Mute *NEW!*	TO-220-11	5.35	4.07	3.11
LM3914N-1-ND	Dot/Bar Display Driver	18-Dip	2.91	2.17	1.60
LM3914V-ND	Dot/Bar Graph Display Driver	20-PLCC	3.13	2.38	1.82
LM3915N-1-ND	Dot/Bar Display Driver	18-Dip	2.91	2.17	1.60
LM3916N-1-ND	Dot/Bar Display Driver	18-Dip	2.98	2.21	1.64
LM3940IMP-3.3CT-ND	1A Low Dropout Regulator for 5V to 3.3V Conversion	SOT-223	2.11	1.57	1.16
LM3940IMP-3.3TR-ND	1A Low Dropout Regulator for 5V to 3.3V Conversion	SOT-223	870.40/1,000		
LM3940IS-3.3-ND	1A Low Dropout Regulator for 5V to 3.3V Conversion	TO-263	2.51	1.87	1.38
LM3940ISX-3.3TR-ND	1A Low Dropout Regulator for 5V to 3.3V Conversion	TO-263	526.50/500		
LM3940IT-3.3-ND	1A Low Dropout Regulator for 5V to 3.3V Conversion	TO-220	2.51	1.87	1.38
LM4040AIM3-2.5CT-ND	2.5V, Voltage Reference ±.1%	SOT-23	3.07	2.28	1.69
LM4040AIM3-2.5TR-ND	2.5V, Voltage Reference ±.1%	SOT-23	1267.20/1,000		
LM4040AIM3-4.1CT-ND	4.1V, Precision Micropower Shunt V. Reference	SOT-23	3.07	2.28	1.69
LM4040AIM3-4.1TR-ND	4.1V, Precision Micropower Shunt V. Reference	SOT-23	1267.20/1,000		
LM4040AIM3-5.0CT-ND	5V, Voltage Reference ±.1%	SOT-23	3.07	2.28	1.69
LM4040AIM3-5.0TR-ND	5V, Voltage Reference ±.1%	SOT-23	1267.20/1,000		
LM4040AIM3-8.2CT-ND	8.2V, Precision Micropower Shunt V. Reference	SOT-23	3.07	2.28	1.69
LM4040AIM3-8.2TR-ND	8.2V, Precision Micropower Shunt V. Reference	SOT-23	1267.20/1,000		
LM4040AIM3-10.0CT-ND	10V, Voltage Reference ±.1%	SOT-23	3.07	2.28	1.69
LM4040AIM3-10.0TR-ND	10V, Voltage Reference ±.1%	SOT-23	1267.20/1,000		
LM4040AIM3X-10CT-ND	10V, Voltage Reference ±.1%	SOT-23	3.07	2.28	1.69
LM4040AIM3X-10TR-ND	10V, Voltage Reference ±.1%	SOT-23	3712.50/3,000		
LM4040AIZ-2.5-ND	2.5V, Voltage Reference ±.1%	TO-92	3.07	2.28	1.69
LM4040AIZ-4.1-ND	4.1V, Voltage Reference ±.1%	TO-92	3.07	2.28	1.69
LM4040AIZ-5.0-ND	5V, Voltage Reference ±.1%	TO-92	3.07	2.28	1.69
LM4040AIZ-10.0-ND	10V, Voltage Reference ±.1%	TO-92	3.07	2.28	1.69
LM4040BIM3-2.5CT-ND	2.5V, Voltage Reference ±.2%	SOT-23	2.05	1.52	1.13
LM4040BIM3-2.5TR-ND	2.5V, Voltage Reference ±.2%	SOT-230	844.80/1,000		
LM4040BIM3-4.1CT-ND	4.1V, Voltage Reference ±.2%	SOT-23	2.05	1.52	1.13
LM4040BIM3-4.1TR-ND	4.1V, Voltage Reference ±.2%	SOT-23	844.80/1,000		
LM4040BIM3-5.0CT-ND	5V, Voltage Reference ±.2%	SOT-23	2.05	1.52	1.13
LM4040BIM3-5.0TR-ND	5V, Voltage Reference ±.2%	SOT-23	844.80/1,000		
LM4040BIM3-8.2CT-ND	8.2V, Precision Micropower Shunt Voltage Reference	SOT-23	2.05	1.52	1.13
LM4040BIM3-8.2TR-ND	8.2V, Precision Micropower Shunt Voltage Reference	SOT-23	844.80/1,000		
LM4040BIM3-10.0CT-ND	10V, Voltage Reference ±.2%	SOT-23	2.05	1.52	1.13
LM4040BIM3-10.0TR-ND	10V, Voltage Reference ±.2%	SOT-23	844.80/1,000		
LM4040BIZ-2.5-ND	2.5V, Voltage Reference ±.2%	TO-92	2.05	1.52	1.13
LM4040BIZ-4.1-ND	4.1V, Precision Micropower Shunt Voltage Reference	TO-92	2.05	1.52	1.13
LM4040BIZ-5.0-ND	5V, Precision Micropower Shunt Voltage Reference	TO-92	2.05	1.52	1.13
LM4040CIM3-2.5CT-ND	2.5V, Voltage Reference ±.5%	SOT-23	1.84	1.35	.98
LM4040CIM3-2.5TR-ND	2.5V, Voltage Reference ±.5%	SOT-23	637.00/1,000		
LM4040CIM3-4.1CT-ND	4.1V, Voltage Reference ±.5%	SOT-23	1.84	1.35	.98
LM4040CIM3-4.1TR-ND	4.1V, Voltage Reference ±.5%	SOT-23	637.00/1,000		
LM4040CIM3-5.0CT-ND	5V, Voltage Reference ±.5%	SOT-23	1.84	1.35	.98
LM4040CIM3-5.0TR-ND	5V, Voltage Reference ±.5%	SOT-23	637.00/1,000		
LM4040CIM3-8.2CT-ND	8.2V, Voltage Reference ±.5%	SOT-23	1.84	1.35	.98
LM4040CIM3-8.2TR-ND	8.2V, Voltage Reference ±.5%	SOT-23	637.00/1,000		
LM4040CIM3-10.0CT-ND	10V, Precision Micropower Shunt Volt. Reference	SOT-23	1.84	1.35	.98
LM4040CIM3-10.0TR-ND	10V, Precision Micropower Shunt Volt. Reference	SOT-23	637.00/1,000		
LM4040CIM3X-10CT-ND	10V, Voltage Reference ±.5%	SOT-23	1.84	1.35	.98
LM4040CIM3X-10TR-ND	10V, Voltage Reference ±.5%	SOT-23	1874.25/3,000		
LM4040CIZ-2.5-ND	2.5V, Voltage Reference ±.5%	TO-92	1.84	1.35	.98
LM4040CIZ-4.1-ND	4.1V, Voltage Reference ±.5%	TO-92	1.84	1.35	.98
LM4040CIZ-5.0-ND	5V, Voltage Reference ±.5%	TO-92	1.84	1.35	.98
LM4040CIZ-8.2-ND	8.2V, Voltage Reference ±.5%	TO-92	1.84	1.35	.98
LM4040CIZ-10.0-ND	10V, Voltage Reference ±.5%	TO-92	1.84	1.35	.98
LM4040DEM3-2.5CT-ND	2.5V, Voltage Reference	SOT-23	1.65	1.21	.88
LM4040DEM3-2.5TR-ND	2.5V, Voltage Reference	SOT-23	572.00/1,000		
LM4040DEM3-5.0CT-ND	5V, Voltage Reference ±1%	SOT-23	1.65	1.21	.88
LM4040DEM3-5.0TR-ND	5V, Voltage Reference ±1%	SOT-23	572.00/1,000		
LM4040DIM3-2.5CT-ND	2.5V, Voltage Reference ±1%	SOT-23	1.31	.97	.70
LM4040DIM3-2.5TR-ND	2.5V, Voltage Reference ±1%	SOT-23	455.00/1,000		
LM4040DIM3-4.1CT-ND	4.1V, Voltage Reference ±1%	SOT-23	1.31	.97	.70
LM4040DIM3-4.1TR-ND	4.1V, Voltage Reference ±1%	SOT-23	455.00/1,000		
LM4040DIM3-5.0CT-ND	5V, Voltage Reference ±1%	SOT-23	1.31	.97	.70
LM4040DIM3-5.0TR-ND	5V, Voltage Reference ±1%	SOT-23	455.00/1,000		
LM4040DIM3-10.0CT-ND	10V, Voltage Reference ±1%	SOT-23	1.31	.97	.70
LM4040DIM3-10.0TR-ND	10V, Voltage Reference ±1%	SOT-23	455.00/1,000		
LM4040DIM3X-10CT-ND	10V, Voltage Reference ±1%	SOT-23	1.31	.97	.70
LM4040DIM3X-10TR-ND	10V, Voltage Reference ±1%	SOT-23	1338.75/3,000		
LM4040DIZ-2.5-ND	2.5V, Voltage Reference ±1%	TO-92	1.31	.97	.70
LM4040DIZ-4.1-ND	4.1V, Voltage Reference ±1%	TO-92	1.31	.97	.70
LM4040DIZ-5.0-ND	5V, Voltage Reference ±1%	TO-92	1.31	.97	.70
LM4040DIZ-8.2-ND	8.2V, Voltage Reference ±1%	TO-92	1.31	.97	.70
LM4040DIZ-10.0-ND	10V, Voltage Reference ±1%	TO-92	1.31	.97	.70
LM4040EEM3-2.5CT-ND	2.5V, Voltage Reference ±2%	SOT-23	1.28	.94	.68
LM4040EEM3-2.5TR-ND	2.5V, Voltage Reference ±2%	SOT-23	442.00/1,000		
LM4040EIM3-2.5CT-ND	2.5V, Voltage Reference ±2%	SOT-23	.98	.72	.52
LM4040EIM3-2.5TR-ND	2.5V, Voltage Reference ±2%	SOT-23	338.00/1,000		
LM4040EIZ-2.5-ND	2.5V, Voltage Reference ±2%	TO-92	.98	.72	.52
LM4041AIM3-1.2CT-ND	1.2V, Voltage Reference ±.1%	SOT-23	3.07	2.28	1.69
LM4041AIM3-1.2TR-ND	1.2V, Voltage Reference ±.1%	SOT-23	1267.20/1,000		
LM4041AIZ-1.2-ND	1.2V, Voltage Reference	TO-92	3.07	2.28	1.69
LM4041BIZ-1.2-ND	1.2V, Voltage Reference	TO-92	2.05	1.52	1.13
LM4041BIM3-1.2CT-ND	1.2V, Voltage Reference ±.2%	SOT-23	2.05	1.52	1.13
LM4041BIM3-1.2TR-ND	1.2V, Voltage Reference ±.2%	SOT-23	844.80/1,000		
LM4041CEM3-ADJCT-ND	Adj. Voltage Reference	SOT-23	1.71	1.27	.94
LM4041CEM3-ADJTR-ND	Adj. Voltage Reference	SOT-23	704.00/1,000		
LM4041CEM3-1.2CT-ND	1.2V, Voltage Reference	SOT-23	1.71	1.27	.94
LM4041CEM3-1.2TR-ND	1.2V, Voltage Reference	SOT-23	704.00/1,000		
LM4041CIM3-1.2CT-ND	1.2V, Voltage Reference ±.5%	SOT-23	1.84	1.35	.98
LM4041CIM3-1.2TR-ND	1.2V, Voltage Reference ±.5%	SOT-23	637.00/1,000		
LM4041CIM3-ADJCT-ND	Adj. Voltage Reference ±.5%	SOT-23	1.84	1.35	.98
LM4041CIM3-ADJTR-ND	Adj. Voltage Reference ±.5%	SOT-23	637.00/1,000		
LM4041CIZ-1.2-ND	1.2V, Voltage Reference ±.5%	TO-92	1.84	1.35	.98
LM4041CIZ-ADJ-ND	Adj. Voltage Reference ±.5%	TO-92	1.84	1.35	.98
LM4041DEM3-ADJCT-ND	Adj. Precision Micropower Shunt Volt. Reference	SOT-23	1.65	1.21	.88
LM4041DEM3-ADJTR-ND	Adj. Precision Micropower Shunt Volt. Reference	SOT-23	572.00/1,000		
LM4041DEM3-1.2CT-ND	1.2V, Precision Micropower Shunt Volt. Reference	SOT-23	1.65	1.21	.88
LM4041DEM3-1.2TR-ND	1.2V, Precision Micropower Shunt Volt. Reference	SOT-23	572.00/1,000		
LM4041DIM3-1.2CT-ND	1.2V, Voltage Reference ±1.0%	SOT-23	1.31	.97	.70
LM4041DIM3-1.2TR-ND	1.2V, Voltage Reference ±1.0%	SOT-23	455.00/1,000		
LM4041DIM3-ADJCT-ND	Adj. Voltage Reference ±1.0%	SOT-23	1.31	.97	.70
LM4041DIM3-ADJTR-ND	Adj. Voltage Reference ±1.0%	SOT-23	455.00/1,000		
LM4041DIZ-ADJ-ND	Adj. Voltage Reference	TO-92	1.31	.97	.70
LM4041DIZ-1.2-ND	1.2V, Voltage Reference	TO-92	1.31	.97	.70
LM4041EEM3-1.2CT-ND	1.2V, Voltage Reference	SOT-23	1.28	.94	.68
LM4041EEM3-1.2TR-ND	1.2V, Voltage Reference	SOT-23	442.00/1,000		
LM4041EIM3-1.2CT-ND	1.2V, Voltage Reference ±2%	SOT-23	.98	.72	.52
LM4041EIM3-1.2TR-ND	1.2V, Voltage Reference ±2%	SOT-23	338.00/1,000		
LM4041EIZ-1.2-ND	1.2V, Voltage Reference	TO-92	.98	.72	.52
LM4050AIM3-2.5CT-ND	2.5V, Voltage Reference	SOT-23	2.98	2.27	1.73
LM4050AIM3-2.5TR-ND	2.5V, Voltage Reference	SOT-23	1499.40/1,000		
LM4050AIM3-4.1CT-ND	4.1V, Voltage Reference	SOT-23	2.98	2.27	1.73
LM4050AIM3-4.1TR-ND	4.1V, Voltage Reference	SOT-23	1499.40/1,000		
LM4050AIM3-5.0CT-ND	5V, Voltage Reference	SOT-23	2.98	2.27	1.73
LM4050AIM3-5.0TR-ND	5V, Voltage Reference	SOT-23	1499.40/1,000		
LM4050AIM3-8.2CT-ND	8.2V, Voltage Reference	SOT-23	2.98	2.27	1.73
LM4050AIM3-8.2TR-ND	8.2V, Voltage Reference	SOT-23	1499.40/1,000		
LM4050AIM3-10CT-ND	10V, Voltage Reference	SOT-23	2.98	2.27	1.73
LM4050AIM3-10TR-ND	10V, Voltage Reference	SOT-23	1499.40/1,000		
LM4050BIM3-2.5CT-ND	2.5V, Voltage Reference	SOT-23	2.42	1.80	1.33
LM4050BIM3-2.5TR-ND	2.5V, Voltage Reference	SOT-23	998.40/1,000		
LM4050BIM3-4.1CT-ND	4.1V, Voltage Reference	SOT-23	2.42	1.80	1.33
LM4050BIM3-4.1TR-ND	4.1V, Voltage Reference	SOT-23	998.40/1,000		
LM4050BIM3-5.0CT-ND	5V, Voltage Reference	SOT-23	2.42	1.80	1.33
LM4050BIM3-5.0TR-ND	5V, Voltage Reference	SOT-23	998.40/1,000		
LM4050BIM3-8.2CT-ND	8.2V, Voltage Reference	SOT-23	2.42	1.80	1.33
LM4050BIM3-8.2TR-ND	8.2V, Voltage Reference	SOT-23	998.40/1,000		
LM4050BIM3-10CT-ND	10V, Voltage Reference	SOT-23	2.42	1.80	1.33
LM4050BIM3-10TR-ND	10V, Voltage Reference	SOT-23	998.40/1,000		
LM4050CEM3-2.5CT-ND	2.5V, Voltage Reference	SOT-23	2.67	1.98	1.47
LM4050CEM3-2.5TR-ND	2.5V, Voltage Reference	SOT-23	1100.80/1,000		
LM4050CIM3-2.5CT-ND	2.5V, Voltage Reference	SOT-23	2.14	1.59	1.18
LM4050CIM3-2.5TR-ND	2.5V, Voltage Reference	SOT-23	883.20/1,000		
LM4050CIM3-4.1CT-ND	4.1V, Voltage Reference	SOT-23	2.14	1.59	1.18
LM4050CIM3-4.1TR-ND	4.1V, Voltage Reference	SOT-23	883.20/1,000		
LM4050CIM3-5.0CT-ND	5V, Voltage Reference	SOT-23	2.14	1.59	1.18
LM4050CIM3-5.0TR-ND	5V, Voltage Reference	SOT-23	883.20/1,000		
LM4050CIM3-8.2CT-ND	8.2V, Voltage Reference	SOT-23	2.14	1.59	1.18
LM4050CIM3-8.2TR-ND	8.2V, Voltage Reference	SOT-23	883.20/1,000		
LM4050CIM3-10CT-ND	10V, Voltage Reference	SOT-23	2.14	1.59	1.18
LM4050CIM3-10TR-ND	10V, Voltage Reference	SOT-23	883.20/1,000		
LM4051AIM3-ADJCT-ND	Adj. Voltage Reference	SOT-23	2.98	2.27	1.73
LM4051AIM3-ADJTR-ND	Adj. Voltage Reference	SOT-23	1499.40/1,000		
LM4051AIM3-1.2CT-ND	1.2V, Voltage Reference	SOT-23	2.98	2.27	1.73
LM4051AIM3-1.2TR-ND	1.2V, Voltage Reference	SOT-23	1499.40/1,000		
LM4051BIM3-ADJCT-ND	Adj. Voltage Reference	SOT-23	2.36	1.75	1.30
LM4051BIM3-ADJTR-ND	Adj. Voltage Reference	SOT-23	972.80/1,000		
LM4051BIM3-1.2CT-ND	1.2V, Voltage Reference	SOT-23	2.36	1.75	1.30
LM4051BIM3-1.2TR-ND	1.2V, Voltage Reference	SOT-23	972.80/1,000		
LM4051CIM3-ADJCT-ND	Adj. Voltage Reference	SOT-23	2.14	1.59	1.18
LM4051CIM3-ADJTR-ND	Adj. Voltage Reference	SOT-23	883.20/1,000		
LM4051CIM3-1.2CT-ND	1.2V, Voltage Reference	SOT-23	2.14	1.59	1.18
LM4051CIM3-1.2TR-ND	1.2V, Voltage Reference	SOT-23	883.20/1,000		

(Continued)

LINEAR SERIES *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LM4120AIM5-1.8CT-ND	1.8V, Precision Micropower LDO Reference	SOT-23-5	2.95	2.19	1.62
LM4120AIM5-1.8TR-ND	1.8V, Precision Micropower LDO Reference	SOT-23-5	1216.00/1,000		
LM4120AIM5-2.0CT-ND	2V, Precision Micropower LDO Reference	SOT-23-5	2.95	2.19	1.62
LM4120AIM5-2.0TR-ND	2V, Precision Micropower LDO Reference	SOT-23-5	1216.00/1,000		
LM4120AIM5-2.5CT-ND	2.5V, Precision Micropower LDO Reference	SOT-23-5	2.95	2.19	1.62
LM4120AIM5-2.5TR-ND	2.5V, Precision Micropower LDO Reference	SOT-23-5	1216.00/1,000		
LM4120AIM5-3.0CT-ND	3V, Precision Micropower LDO Reference	SOT-23-5	2.95	2.19	1.62
LM4120AIM5-3.0TR-ND	3V, Precision Micropower LDO Reference	SOT-23-5	1216.00/1,000		
LM4120AIM5-3.3CT-ND	3.3V, Precision Micropower LDO Reference	SOT-23-5	2.95	2.19	1.62
LM4120AIM5-3.3TR-ND	3.3V, Precision Micropower LDO Reference	SOT-23-5	1216.00/1,000		
LM4120AIM5-4.1CT-ND	4.1V, Precision Micropower LDO Reference	SOT-23-5	2.95	2.19	1.62
LM4120AIM5-4.1TR-ND	4.1V, Precision Micropower LDO Reference	SOT-23-5	1216.00/1,000		
LM4120AIM5-5.0CT-ND	5V, Precision Micropower LDO Reference	SOT-23-5	2.95	2.19	1.62
LM4120AIM5-5.0TR-ND	5V, Precision Micropower LDO Reference	SOT-23-5	1216.00/1,000		
LM4120IM5-1.8CT-ND	1.8V, Precision Micropower LDO Reference	SOT-23-5	2.51	1.87	1.38
LM4120IM5-1.8TR-ND	1.8V, Precision Micropower LDO Reference	SOT-23-5	1036.80/1,000		
LM4120IM5-2.0CT-ND	2V, Precision Micropower LDO Reference	SOT-23-5	2.51	1.87	1.38
LM4120IM5-2.0TR-ND	2V, Precision Micropower LDO Reference	SOT-23-5	1036.80/1,000		
LM4120IM5-2.5CT-ND	2.5V, Precision Micropower LDO Reference	SOT-23-5	2.51	1.87	1.38
LM4120IM5-2.5TR-ND	2.5V, Precision Micropower LDO Reference	SOT-23-5	1036.80/1,000		
LM4120IM5-3.0CT-ND	3V, Precision Micropower LDO Reference	SOT-23-5	2.51	1.87	1.38
LM4120IM5-3.0TR-ND	3V, Precision Micropower LDO Reference	SOT-23-5	1036.80/1,000		
LM4120IM5-3.3CT-ND	3.3V, Precision Micropower LDO Reference	SOT-23-5	2.51	1.87	1.38
LM4120IM5-3.3TR-ND	3.3V, Precision Micropower LDO Reference	SOT-23-5	1036.80/1,000		
LM4120IM5-4.1CT-ND	4.1V, Precision Micropower LDO Reference	SOT-23-5	2.51	1.87	1.38
LM4120IM5-4.1TR-ND	4.1V, Precision Micropower LDO Reference	SOT-23-5	1036.80/1,000		
LM4120IM5-5.0CT-ND	5V, Precision Micropower LDO Reference	SOT-23-5	2.51	1.87	1.38
LM4120IM5-5.0TR-ND	5V, Precision Micropower LDO Reference	SOT-23-5	1036.80/1,000		
LM4121AIM5-ADJCT-ND	Adj. Precision Micropower LDO Volt. Reference	SOT-23-5	2.95	2.19	1.62
LM4121AIM5-ADJTR-ND	Adj. Precision Micropower LDO Volt. Reference	SOT-23-5	1216.00/1,000		
LM4121AIM5-1.2CT-ND	1.2V, Precision Micropower LDO Volt. Reference	SOT-23-5	2.95	2.19	1.62
LM4121AIM5-1.2TR-ND	1.2V, Precision Micropower LDO Volt. Reference	SOT-23-5	1216.00/1,000		
LM4121IM5-ADJCT-ND	Adj. Precision Micropower LDO Volt. Reference	SOT-23-5	2.51	1.87	1.38
LM4121IM5-ADJTR-ND	Adj. Precision Micropower LDO Volt. Reference	SOT-23-5	1036.80/1,000		
LM4121IM5-1.2CT-ND	1.2V, Precision Micropower LDO Volt. Reference	SOT-23-5	2.51	1.87	1.38
LM4121IM5-1.2TR-ND	1.2V, Precision Micropower LDO Volt. Reference	SOT-23-5	1036.80/1,000		
LM4130AIM5-2.0CT-ND	2V, Precision Micropower LDO Volt. Reference	SOT-23-5	6.99	5.53	4.43
LM4130AIM5-2.0TR-ND	2V, Precision Micropower LDO Volt. Reference	SOT-23-5	4129.20/1,000		
LM4130AIM5-2.5CT-ND	2.5V, Precision Micropower LDO Volt. Reference	SOT-23-5	6.99	5.53	4.43
LM4130AIM5-2.5TR-ND	2.5V, Precision Micropower LDO Volt. Reference	SOT-23-5	4129.20/1,000		
LM4130AIM5-4.1CT-ND	4.1V, Precision Micropower LDO Volt. Reference	SOT-23-5	6.99	5.53	4.43
LM4130AIM5-4.1TR-ND	4.1V, Precision Micropower LDO Volt. Reference	SOT-23-5	4129.20/1,000		
LM4130BIM5-2.0CT-ND	2V, Precision Micropower LDO Volt. Reference	SOT-23-5	5.70	4.34	3.31
LM4130BIM5-2.0TR-ND	2V, Precision Micropower LDO Volt. Reference	SOT-23-5	2872.80/1,000		
LM4130BIM5-2.5CT-ND	2.5V, Precision Micropower LDO Volt. Reference	SOT-23-5	5.70	4.34	3.31
LM4130BIM5-2.5TR-ND	2.5V, Precision Micropower LDO Volt. Reference	SOT-23-5	2872.80/1,000		
LM4130BIM5-4.1CT-ND	4.1V, Precision Micropower LDO Volt. Reference	SOT-23-5	5.70	4.34	3.31
LM4130BIM5-4.1TR-ND	4.1V, Precision Micropower LDO Volt. Reference	SOT-23-5	2872.80/1,000		
LM4130CIM5-2.0CT-ND	2V, Precision Micropower LDO Volt. Reference	SOT-23-5	4.75	3.61	2.76
LM4130CIM5-2.0TR-ND	2V, Precision Micropower LDO Volt. Reference	SOT-23-5	2394.00/1,000		
LM4130CIM5-2.5CT-ND	2.5V, Precision Micropower LDO Volt. Reference	SOT-23-5	4.75	3.61	2.76
LM4130CIM5-2.5TR-ND	2.5V, Precision Micropower LDO Volt. Reference	SOT-23-5	2394.00/1,000		
LM4130CIM5-4.1CT-ND	4.1V, Precision Micropower LDO Volt. Reference	SOT-23-5	4.75	3.61	2.76
LM4130CIM5-4.1TR-ND	4.1V, Precision Micropower LDO Volt. Reference	SOT-23-5	2394.00/1,000		
LM4130DIM5-2.0CT-ND	2V, Precision Micropower LDO Volt. Reference	SOT-23-5	3.60	2.74	2.09
LM4130DIM5-2.0TR-ND	2V, Precision Micropower LDO Volt. Reference	SOT-23-5	1814.40/1,000		
LM4130DIM5-2.5CT-ND	2.5V, Precision Micropower LDO Volt. Reference	SOT-23-5	3.60	2.74	2.09
LM4130DIM5-2.5TR-ND	2.5V, Precision Micropower LDO Volt. Reference	SOT-23-5	1814.40/1,000		
LM4130DIM5-4.1CT-ND	4.1V, Precision Micropower LDO Volt. Reference	SOT-23-5	3.60	2.74	2.09
LM4130DIM5-4.1TR-ND	4.1V, Precision Micropower LDO Volt. Reference	SOT-23-5	1814.40/1,000		
LM4130EIM5-2.0CT-ND	2V, Precision Micropower LDO Volt. Reference	SOT-23-5	3.20	2.44	1.86
LM4130EIM5-2.0TR-ND	2V, Precision Micropower LDO Volt. Reference	SOT-23-5	1612.80/1,000		
LM4130EIM5-2.5CT-ND	2.5V, Precision Micropower LDO Volt. Reference	SOT-23-5	3.20	2.44	1.86
LM4130EIM5-2.5TR-ND	2.5V, Precision Micropower LDO Volt. Reference	SOT-23-5	1612.80/1,000		
LM4130EIM5-4.1CT-ND	4.1V, Precision Micropower LDO Volt. Reference	SOT-23-5	3.20	2.44	1.86
LM4130EIM5-4.1TR-ND	4.1V, Precision Micropower LDO Volt. Reference	SOT-23-5	1612.80/1,000		
LM4140BCM-1.0-ND	1V, Precision Micropower LDO Volt. Reference	SO-8	5.69	4.50	3.61
LM4140BCM-1.2-ND	1.2V, Precision Micropower LDO Volt. Reference	SO-8	5.69	4.50	3.61
LM4140BCM-2.0-ND	2V, Precision Micropower LDO Volt. Reference	SO-8	5.69	4.50	3.61
LM4140BCM-2.5-ND	2.5V, Precision Micropower LDO Volt. Reference	SO-8	5.69	4.50	3.61
LM4140BCM-4.1-ND	4.1V, Precision Micropower LDO Volt. Reference	SO-8	5.69	4.50	3.61
LM4140CCM-1.0-ND	1V, Precision Micropower LDO Volt. Reference	SO-8	5.70	4.34	3.31
LM4140CCM-1.2-ND	1.2V, Precision Micropower LDO Voltage Reference	SO-8	5.70	4.34	3.31
LM4140CCM-2.0-ND	2V, Precision Micropower LDO Voltage Reference	SO-8	5.70	4.34	3.31
LM4140CCM-2.5-ND	Precision Micropower LDO Voltage Reference	SO-8	5.70	4.34	3.31
LM4140CCM-4.1-ND	Precision Micropower LDO Voltage Reference	SO-8	5.70	4.34	3.31
LM4250CM-ND	Programmable Op Amp	SO-8	1.77	1.32	.97
LM4250CMXTR-ND	Programmable Op Amp	SO-8	1781.25/2,500		
LM4250CN-ND	Programmable Op Amp	8-Dip	1.77	1.32	.97
LM4431M3-2.5CT-ND	Precision Voltage Micropower Shunt Voltage Reference	SOT-23	1.13	.83	.60
LM4431M3-2.5TR-ND	Precision Voltage Micropower Shunt Voltage Reference	SOT-23	390.00/1,000		
LM4651N-ND	170W Class D Audio Power Amp Solution	28-Dip	6.49	5.13	4.11
LM4652TA-ND	170W Class D Audio Power Amp Solution	TO-220-15	5.48	4.34	3.48
LM4652TF-ND	170W Class D Audio Power Amp Solution	TO-220-15	5.48	4.34	3.48
LM4663MT-ND	2W Stereo Class D Audio Power Amp with Stereo Headphones Amp	24-TSSOP	5.58	4.24	3.24
LM4700T-ND	30W Audio Pwr Amp with Mute & Standby Modes	TO-220-11	4.28	3.25	2.48
LM4700TF-ND	Overture 30W Audio Power Amp with Mute/Standby	TO-220	4.40	3.35	2.56
LM4701T-ND	30W Audio Pwr Amp with Mute & Standby Modes	TO-220-9	2.78	2.11	1.61
LM4752T-ND	2 x 10 Watt Stereo Audio Amp	TO-220	2.63	2.00	1.53
LM4753T-ND	Dual 10W Audio Power Amp with Mute, Standby, and Volume Control	TO-220-15	4.60	3.50	2.67
LM4755T-ND	2 x 10 Watt Stereo Audio Amp with Mute	TO-220	2.73	2.08	1.59
LM4765T-ND	30W Audio Power Amp with Mute & Standby Modes	TO-220-15	4.75	3.61	2.76
LM4766T-ND	Dual 40W Audio Power Amp with Mute	TO-220-15	5.00	3.80	2.90
LM4766TF-ND	Dual 30 Watt Audio Power Amp with Mute *NEW!*	TO-220-15	5.00	3.80	2.90
LM4808M-ND	Dual 105mW Headphone Amp	SO-8	.68	.49	.36
LM4808MMCT-ND	Dual 105mW Headphone Amp	8-MSOP	.68	.49	.36
LM4808MMTR-ND	Dual 105mW Headphone Amp	8-MSOP	210.00/1,000		
LM4830M-ND	Two-Way Audio Amp. System with Volume Control	SO-24	4.53	3.44	2.63
LM4830N-ND	Two-Way Audio Amp. System with Volume Control	24-Dip	4.53	3.44	2.63
LM4831VF-ND	Multimedia Computer Audio Chip	44-LQFP	7.48	5.91	4.74

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LM4832M-ND	Digital Controlled Tone and Volume Circuit with Stereo Audio Power Amp	SO-28	5.96	4.72	3.78
LM4832N-ND	Digital Controlled Tone and Volume Circuit with Stereo Audio Power Amp	28-Dip	5.96	4.72	3.78
LM4834MS-ND	1.75W Audio Power Amp with DC Volume Control and Microphone Preamp	28-SSOP	5.35	4.07	3.11
LM4835MT-ND	Stereo 2W Audio Power Amp with DC Volume Control and Selectable Gain	28-TSSOP	5.35	4.07	3.11
LM4835MTE-ND	Stereo 2W Audio Power Amp with DC Volume Control and Selectable Gain	28-TSSOP	5.70	4.34	3.31
LM4836MT-ND	Stereo 2W Audio Power Amp with DC Volume Control and Selectable Gain	28-TSSOP	5.50	4.18	3.19
LM4836MTE-ND	Stereo 2W Audio Power Amp with DC Volume Control and Selectable Gain	28-TSSOP	5.88	4.47	3.41
LM4860M-ND	Series 1W Audio Power Amp with Shutdown Mode	SO-16	1.74	1.29	.96
LM4861M-ND	1.1W Audio Power Amp with Shutdown Mode	SO-8	1.74	1.29	.96
LM4861MXTR-ND	1.1W Audio Power Amp with Shutdown Mode	SO-8	1750.00/2,500		
LM4862M-ND	675mW Audio Power Amp with Shutdown Mode	SO-8	1.64	1.22	.91
LM4863M-ND	Dual 2.2W Audio Amp Plus Headphone Function	SO-16	3.20	2.44	1.86
LM4863MT-ND	Dual 2.2W Audio Amp + Headphone Function	20-TSSOP	3.15	2.40	1.83
LM4863MTE-ND	Dual 2.2W Audio Amp + Headphone Function	20-TSSOP	3.60	2.74	2.09
LM4863N-ND	Dual 2.2W Audio Amp Plus Headphone Function	16-Dip	3.58	2.72	2.08
LM4864M-ND	300mW Audio Power Amp with Shutdown Mode	SO-8	1.58	1.18	.87
LM4864MMCT-ND	300mW Audio Power Amp with Shutdown Mode	8-MSOP	1.67	1.25	.92
LM4864MMTR-ND	300mW Audio Power Amp with Shutdown Mode	8-MSOP	691.20/1,000		
LM4864MMXTR-ND	300mW Audio Power Amp withShutdown Mode	8-MSOP	2362.50/3,500		
LM4864N-ND	300mW Audio Power Amp with Shutdown Mode	8-Dip	1.58	1.18	.87
LM4865IBPCT-ND	750mW Audio Power Amp with DC Volume Control and Headphone Switch	8-MicroSMD	1.98	1.48	1.09
LM4865IBPTR-ND	750mW Audio Power Amp with DC Volume Control and Headphone Switch	8-MicroSMD	216.00/250		
LM4865M-ND	750mW Audio Power Amp with DC Volume Control and Headphone Switch	SO-8	1.80	1.34	.99
LM4865MMCT-ND	750mW Audio Power Amp with DC Volume Control and Headphone Switch	8-MSOP	1.80	1.34	.99
LM4865MMTR-ND	750mW Audio Power Amp with DC Volume Control and Headphone Switch	8-MSOP	742.40/1,000		
LM4870M-ND	1.1W Audio Power Amp with Shutdown Mode	SO-16	1.83	1.36	1.01
LM4871M-ND	3W Audio Power Amp with Shutdown Mode	SO-8	1.74	1.29	.96
LM4871N-ND	3W Audio Power Amp with Shutdown Mode	8-Dip	1.77	1.32	.97
LM4872IBPCT-ND	1W Audio Power Amp in Micro SMD Pkg	8-MicroSMD	1.92	1.43	1.06
LM4872IBPTR-ND	1W Audio Power Amp in Micro SMD Pkg	8-MicroSMD	209.25/250		
LM4873MT-ND	Dual 2.1W Audio Amp + Stereo Headphone Function	20-TSSOP	3.28	2.49	1.90
LM4873MTE-ND	Dual 2.1W Audio Amp + Stereo Headphone Function	20-TSSOP	3.60	2.74	2.09
LM4873MTE-1-ND	Dual 2.1W Audio Amp + Stereo Headphone Function	28-TSSOP	5.35	4.07	3.11
LM4876M-ND	1.1W Audio Power Amp with Logic Low Shutdown	SO-8	1.71	1.27	.94
LM4876MMCT-ND	1.1W Audio Power Amp with Logic Low Shutdown	10-MSOP	1.77	1.32	.97
LM4876MMTR-ND	1.1W Audio Power Amp with Logic Low Shutdown	10-MSOP	729.60/1,000		
LM4877IBPCT-ND	1W Audio Power Amp with Logic Low Shutdown	8-MicroSMD	2.08	1.55	1.14
LM4877IBPTR-ND	1W Audio Power Amp with Logic Low Shutdown	8-MicroSMD	226.13/250		
LM4880M-ND	Dual 250mW Audio Power Amp with Shutdown Mode	SO-8	2.17	1.61	1.19
LM4880N-ND	Dual 250mW Audio Power Amp with Shutdown Mode	8-Dip	2.23	1.66	1.23
LM4881M-ND	Dual 200mW Headphone Amp with Shutdown Mode	SO-8	1.98	1.48	1.09
LM4881MMTR-ND	Dual 200mW Headphone Amp with Shutdown Mode	8-MSOP	857.60/1,000		
LM4881N-ND	Dual 200mW Headphone Amp with Shutdown Mode	8-Dip	1.98	1.48	1.09
LM4882M-ND	Dual 250mW Audio Power Amp with Shutdown Mode	SO-8	1.61	1.19	.86
LM4882MMCT-ND	Dual 250mW Audio Power Amp with Shutdown Mode	8-MSOP	1.61	1.19	.86
LM4882MMTR-ND	Dual 250mW Audio Power Amp with Shutdown Mode	8-MSOP	559.00/1,000		
LM4890IBPCT-ND	1 Watt Audio Power Amp	8-MicroSMD	2.17	1.61	1.19
LM4890IBPTR-ND	1 Watt Audio Power Amp	8-MicroSMD	236.25/250		
LM4890M-ND	1 Watt Audio Power Amp	SO-8	2.36	1.75	1.30
LM4890MMCT-ND	1 Watt Audio Power Amp	8-MSOP	2.36	1.75	1.30
LM4890MMTR-ND	1 Watt Audio Power Amp	8-MSOP	972.80/1,000		
LM4890MXTR-ND	1 Watt Audio Power Amp	SO-8	2375.00/2,500		
LM6132AIM-ND	Dual High Speed/Low Power 7MHz, Rail-to-Rail Op Amp	SO-8	3.95	3.01	2.30
LM6132AIN-ND	Dual High Speed/Low Power 7MHz, Rail-to-Rail Op Amp	8-Dip	3.95	3.01	2.30
LM6132BIM-ND	Dual High Speed/Low Power 7MHz, Rail-to-Rail Op Amp	SO-8	3.13	2.38	1.82
LM6132BIN-ND	Dual High Speed/Low Power 7MHz, Rail-to-Rail Op Amp	8-Dip	3.13	2.38	1.82
LM6134AIM-ND	Quad High Speed/Low Power 7MHz, Rail-to-Rail Op Amp	SO-14	4.25	3.23	2.47
LM6134AIN-ND	Quad High Speed/Low Power 7MHz, Rail-to-Rail Op Amp	14-Dip	4.25	3.23	2.47
LM6134BIM-ND	Quad Low Power 10MHz, R-R, I/O, Op Amp.	SO-14	3.45	2.63	2.01
LM6134BIMXTR-ND	Quad Low Power 10MHz, R-R, I/O, Op Amp.	SO-14	4312.50/2,500		
LM6134BIN-ND	Quad High Speed/Low Power, 7MHz, Rail-to-Rail Op Amp	14-Dip	3.45	2.63	2.01
LM6144BIM-ND	Op Amp and Adjustable Reference	SO-14	5.59	4.42	3.54
LM6152ACM-ND	Dual High Speed 75MHz, R-R, I/O, Op Amp, Vos = 4mV	SO-8	5.58	4.24	3.24
LM6152BCN-ND	Dual High Speed 75MHz, R-R, I/O, Op Amp, Vos = 7mV	8-Dip	5.25	3.75	2.25
LM6154BCM-ND	Quad High Speed 75MHz, R-R, I/O, Op Amp, Vos = 7mV	SO-14	5.84	4.62	3.70
LM6171AIM-ND	Voltage Feedback Low Distortion, Low Power Op Amp	SO-8	3.55	2.70	2.06
LM6171BIM-ND	Voltage Feedback Low Distortion, Low Power Op Amp	SO-8	3.08	2.34	1.79
LM6171BIN-ND	Voltage Feedback Low Distortion, Low Power Op Amp	8-Dip	3.08	2.34	1.79
LM6172IM-ND	Dual High Speed Low Power, Low Distortion, Voltage Feedback Op Amp.	SO-8	3.80	2.89	2.21
LM6172IMXCT-ND	Dual High Speed Low Power, Low Distortion, Voltage Feedback Op Amp.	SO-8	3.80	2.89	2.21
LM6172IMXTR-ND	Dual High Speed Low Power, Low Distortion, Voltage Feedback Op Amp.	SO-8	4750.00/2,500		
LM6172IN-ND	Dual High Speed Low Power, Low Distortion, Voltage Feedback Op Amp.	8-Dip	3.80	2.89	2.21
LM6181IM-8-ND	100mA, 100MHz Current Feedback Amp	SO-8	3.55	2.70	2.06
LM6181IN-ND	Current Feedback Amp, 100MHz	8-Dip	3.55	2.70	2.06
LM6182AIM-ND	100mA, 100MHz Current Feedback Amp	SO-16	6.17	4.89	3.92
LM6182AIN-ND	100mA, 100MHz Current Feedback Amp	8-Dip	6.17	4.89	3.92
LM6182IM-ND	Current Feedback Amp, 100mA Opt, 100MHz Dual	SO-16	5.93	4.51	3.44
LM6182IN-ND	Current Feedback Amp, 100mA Opt, 100MHz Dual	8-Dip	5.93	4.51	3.44
LM6218AN-ND	Fast Settling Dual Op Amp	8-Dip	8.19	6.48	5.19
LM6218WM-ND	Fast Settling Dual Op Amp	SO-14	6.68	5.28	4.23
LM6221N-ND	High Speed Buffer, Ind. Temp.	8-Dip	7.14	5.65	4.53
LM6261M-ND	High Speed Op Amp, 50MHz, Ind. Temp.	SO-8	4.75	3.61	2.76
LM6261N-ND	High Speed Op Amp, 50MHz, Ind. Temp.	8-Dip	4.75	3.61	2.76
LM6321M-ND	High Speed Buffer	SO-14	5.28	4.01	3.06
LM6321N-ND	High Speed Buffer	8-Dip	5.28	4.01	3.06
LM6361M-ND	High Speed Op Amp, 50MHz	SO-8	2.98	2.21	1.64
LM6361MXTR-ND	High Speed Op Amp, 50MHz	SO-8	3000.00/2,500		
LM6361N-ND	High Speed Op Amp, 50MHz	8-Dip	2.98	2.21	1.64

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LM6364M-ND	High Speed Op Amp, 175MHz	SO-8	2.98	2.27	1.73
LM6364N-ND	High Speed Op Amp, 175MHz	8-Dip	2.98	2.27	1.73
LM6365M-ND	High Speed Op Amp, 725MHz	SO-8	3.13	2.38	1.82
LM6365N-ND	High Speed Op Amp, 725MHz	8-Dip	3.13	2.38	1.82
LM6511IM-ND	180nS 3V, Comparator	SO-8	3.04	2.26	1.67
LM7121IM-ND	235MHz Tiny Low Power Voltage Feedback Amp	SO-8	2.85	2.12	1.57
LM7121IM5CT-ND	235MHz Tiny Low Power Voltage Feedback Amp	SOT-23-5	2.91	2.17	1.60
LM7121IM5TR-ND	235MHz Tiny Low Power Voltage Feedback Amp	SOT-23-5	1203.20/1,000		
LM7131ACM-ND	Tiny High Speed Single Supply Op Amp	SO-8	2.70	2.06	1.57
LM7131ACM5XCT-ND	Tiny High Speed Single Supply Op Amp	SOT-23-5	2.70	2.06	1.57
LM7131ACM5XTR-ND	Tiny High Speed Single Supply Op Amp	SOT-23-5	4050.00/3,000		
LM7131BCM-ND	Tiny High Speed Single Supply Op Amp	SO-8	2.73	2.03	1.50
LM7131BCM5CT-ND	Tiny High Speed Single Supply Op Amp	SOT-23-5	2.73	2.03	1.50
LM7131BCM5TR-ND	Tiny High Speed Single Supply Op Amp	SOT-23-5	1126.40/1,000		
LM7171AIM-ND	Very High Speed High Output Volt. Feedback Amp, A Grade	SO-8	3.45	2.63	2.01
LM7171AIN-ND	Very High Speed High Output Volt. Feedback Amp, A Grade	8-Dip	3.45	2.63	2.01
LM7171AIWM-ND	Very HS Output Current, Volt. Feedback Amp, A Grade	SO-16	3.45	2.63	2.01
LM7171BIM-ND	Very High Speed High Output Voltage Feedback Amp	SO-8	2.80	2.13	1.63
LM7171BIMXTR-ND	Very High Speed High Output Voltage Feedback Amp	SO-8	3500.00/2,500		
LM7171BIN-ND	Very High Speed High Output Voltage Feedback Amp	8-Dip	2.80	2.13	1.63
LM7301IM-ND	Low Power 4MHz GBW, R-R, I/O Op Amp in TinyPak	SO-8	2.29	1.71	1.26
LM7301IM5CT-ND	Low Power, 4MHz GBW Rail-to-Rail, I/O Op Amp	SOT23-5	2.29	1.71	1.26
LM7301IM5TR-ND	Low Power, 4MHz GBW Rail-to-Rail, I/O Op Amp	SOT23-5	947.20/1,000		
LM7808CT-ND	8V, 1.0A Positive Voltage Regulator	TO-220	.68	.49	.36
LM7905CT-ND	5V, 1.5A Negative Voltage Regulator	TO-220	.68	.49	.36
LM7912CT-ND	12V, 1.5A Negative Voltage Regulator	TO-220	.68	.49	.36
LM7915CT-ND	15V, 1.5A Negative Voltage Regulator	TO-220	.68	.49	.36
LM8261M5CT-ND	R-R, In/Out, High Op Current and Unlimited Cap Load Op Amp	SOT-23-5	2.95	2.19	1.62
LM8261M5TR-ND	R-R, In/Out, High Op Current and Unlimited Cap Load Op Amp	SOT-23-5	1216.00/1,000		
LM9040M-ND	Dual Lambda Sensor Interface Amplifier *NEW!*	SO-14	6.32	5.00	4.01
LM9044V-ND	Lambda Sensor Interface Amplifier *NEW!*	20-PLCC	3.25	2.47	1.89
LM9822CCWM-ND	3-Channel, 42-Bit, Color Scanner Analog Front End	SO-28	9.35	7.39	5.92
LM9830VJD-ND	36-Bit, Color Document Scanner	100-TQFP	13.30	11.40	10.11
LM12454CIV-ND	12-Bit, and Sign Data Acquisition System with Self-Calibration	44-PLCC	20.55	19.18	17.81
LM12458CIV-ND	12-Bit, and Sign Data Acquisition	44-PLCC	20.55	19.18	17.81
LM12458CIVF-ND	12-Bit, and Sign Data Acquisition System with Self-Calibration	44-PQFP	21.75	20.30	18.85
LM13700N-ND	Dual Operational Transconductance Amp	16-Dip	1.71	1.27	.94
LM98501CCVBH-ND	10-Bit, 27MSPS Camera Signal Processor	48-LQFP	8.32	6.58	5.27
LMC555CBPCT-ND	CMOS Timer	8-MicroSMD	1.01	.75	.54
LMC555CBPTR-ND	CMOS Timer	8-MicroSMD	101.25/250		
LMC555CM-ND	CMOS Timer	SO-8	.54	.39	.29
LMC555CMXTR-ND	CMOS Timer	SO-8	399.00/2,500		
LMC555CMMCT-ND	CMOS Timer, In Small Package	8-MSOP	1.64	1.22	.91
LMC555CMMTR-ND	CMOS Timer, In Small Package	8-MSOP	678.40/1,000		
LMC555CN-ND	CMOS Timer	8-Dip	.56	.41	.30
LMC567CM-ND	CMOS Tone Decoder Phase Lock Loop	SO-8	1.95	1.45	1.08
LMC567CMXTR-ND	CMOS Tone Decoder Phase Lock Loop	SO-8	1968.75/2,500		
LMC567CN-ND	CMOS Tone Decoder Phase Lock Loop	8-Dip	1.95	1.45	1.08
LMC568CN-ND	CMOS Low Power Phase Lock Loop	8-Dip	2.17	1.61	1.19
LMC660AIM-ND	Quad CMOS Op Amp, Industrial Temperature	SO-14	2.42	1.80	1.33
LMC660AIMXTR-ND	Quad CMOS Op Amp, Industrial Temperature	SO-14	2437.50/2,500		
LMC660AIN-ND	Quad CMOS Op Amp, Industrial Temperature	14-Dip	2.57	1.91	1.42
LMC660CM-ND	Quad CMOS Op Amp	SO-14	1.67	1.25	.92
LMC660CMXTR-ND	Quad CMOS Op Amp	SO-14	1687.50/2,500		
LMC660CN-ND	Quad CMOS Op Amp	14-Dip	1.83	1.36	1.01
LMC662AIM-ND	Dual CMOS Op Amp, Industrial Temperature	SO-8	2.54	1.89	1.40
LMC662AIMXTR-ND	Dual CMOS Op Amp, Industrial Temperature	SO-8	2562.50/2,500		
LMC662AIN-ND	Dual CMOS Op Amp	8-Dip	2.76	2.05	1.52
LMC662CM-ND	Dual CMOS Op Amp	SO-8	1.83	1.36	1.01
LMC662CMXTR-ND	Dual CMOS Op Amp	SO-8	1843.75/2,500		
LMC662CN-ND	Dual CMOS Op Amp	8-Dip	2.02	1.50	1.11
LMC1982CIN-ND	Digitally-Controlled Stereo Tone and Volume Circuit with Two Selectable Stereo Inputs *NEW!*	28-Dip	5.63	4.45	3.57
LMC1982CIV-ND	Digital-Controlled Stereo Tone and Volume Circuit with Two Selectable Stereo Inputs	28-PLCC	5.63	4.45	3.57
LMC1983CIN-ND	Digitally-Controlled Stereo Tone and Volume Circuit with Three Selectable Stereo Inputs *NEW!*	28-Dip	5.63	4.45	3.57
LMC1983CIV-ND	Digital-Controlled Stereo Tone and Volume Circuit with Three Selectable Stereo Inputs	28-PLCC	5.63	4.45	3.57
LMC2001ACM5CT-ND	High Precision, 6MHz Rail-to-Rail Output Op Amp	SOT-23-5	2.50	1.90	1.45
LMC2001ACM5TR-ND	High Precision, 6MHz, Rail-to-Rail Output Op Amp	SOT-23-5	1260.00/1,000		
LMC6001AIN-ND	Ultra Ultra-Low Input Current Amp	8-Dip	12.25	10.50	9.31
LMC6001BIN-ND	Ultra Ultra-Low Input Current Amp	8-Dip	8.93	7.06	5.66
LMC6001CIN-ND	Ultra Ultra-Low Input Current Amp	8-Dip	3.28	2.49	1.90
LMC6024IM-ND	Micropower Quad CMOS Op Amp	SO-14	1.83	1.36	1.01
LMC6032IM-ND	Dual CMOS Op Amp, Industrial Temperature	SO-8	1.13	.83	.60
LMC6032IN-ND	Dual CMOS Op Amp, Industrial Temperature	8-Dip	1.16	.86	.62
LMC6034IM-ND	Quad CMOS Op Amp	SO-14	1.13	.83	.60
LMC6035IBPCT-ND	Low Power 2.7V, Single Supply CMOS Op Amp	8-MicroSMD	1.80	1.32	.96
LMC6035IBPTR-ND	Low Power 2.7V, Single Supply CMOS Op Amp	8-MicroSMD	180.00/250		
LMC6035IBPXCT-ND	Low Power 2.7V, Single Supply CMOS Op Amp	8-MicroSMD	1.80	1.32	.96
LMC6035IBPXTR-ND	Low Power 2.7V, Single Supply CMOS Op Amp	8-MicroSMD	1836.00/3,000		
LMC6035IM-ND	Low Power 2.7V, Single Supply CMOS Op Amp	SO-8	1.80	1.32	.96
LMC6035IMXTR-ND	Low Power 2.7V, Single Supply CMOS Op Amp	SO-8	1530.00/2,500		
LMC6035IMMCT-ND	Low Power 2.7V, Single Supply CMOS Op Amp	8-MSOP	2.08	1.55	1.14
LMC6035IMMTR-ND	Low Power 2.7V, Single Supply CMOS Op Amp	8-MSOP	857.60/1,000		
LMC6035IMMXCT-ND	Low Power 2.7V, Single Supply CMOS Op Amp	8-MSOP	2.08	1.55	1.14
LMC6035IMMXTR-ND	Low Power 2.7V, Single Supply CMOS Op Amp	8-MSOP	2931.25/3,500		
LMC6036IM-ND	Low Power 2.7V, Single Supply CMOS Op Amp	SO-14	2.11	1.57	1.16
LMC6036IMXTR-ND	Low Power 2.7V, Single Supply CMOS Op Amp	SO-14	2125.00/2,500		
LMC6041AIM-ND	Single CMOS Micropower Op Amp	SO-8	2.57	1.91	1.42
LMC6041AIN-ND	Single CMOS Micropower Op Amp	8-Dip	2.76	2.05	1.52
LMC6041IM-ND	Single CMOS Micropower Op Amp	SO-8	2.05	1.52	1.13
LMC6041IN-ND	Single CMOS Micropower Op Amp	SO-8	2.11	1.57	1.16
LMC6042AIM-ND	Dual CMOS Micropower Op Amp	SO-8	2.73	2.08	1.59
LMC6042AIN-ND	Dual CMOS Micropower Op Amp	8-Dip	2.80	2.13	1.63
LMC6042IM-ND	Dual CMOS Micropower Op Amp	SO-8	2.57	1.91	1.42
LMC6042IN-ND	Dual CMOS Micropower Op Amp	8-Dip	2.64	1.96	1.45
LMC6044AIM-ND	Quad CMOS Micropower Op Amp	SO-14	3.25	2.47	1.89
LMC6044AIN-ND	Quad CMOS Micropower Op Amp	Dip-14	3.33	2.53	1.93
LMC6044IM-ND	Quad CMOS Micropower Op Amp	SO-14	2.58	1.96	1.50
LMC6044IN-ND	Quad CMOS Micropower Op Amp	Dip-14	2.58	1.96	1.50
LMC6061AIM-ND	Precision Single CMOS Micropower Op Amp	SO-8	2.11	1.57	1.16
LMC6061IM-ND	Precision Single CMOS Micropower Op Amp	SO-8	1.84	1.35	.98
LMC6062AIM-ND	Precision Dual CMOS Micropower Op Amp	SO-8	3.10	2.36	1.80
LMC6062AIN-ND	Precision Dual CMOS Micropower Op Amp	8-Dip	3.25	2.47	1.89
LMC6062IM-ND	Precision Dual CMOS Micropower Op Amp	SO-8	2.67	1.98	1.47
LMC6062IN-ND	Precision Dual CMOS Micropower Op Amp	8-Dip	2.88	2.14	1.59
LMC6064AIM-ND	Precision Quad CMOS Micropower Op Amp	SO-14	6.05	4.60	3.51
LMC6064AIN-ND	Precision Quad CMOS Micropower Op Amp	14-Dip	6.18	4.70	3.59
LMC6064IM-ND	Precision Quad CMOS Micropower Op Amp	SO-14	3.78	2.87	2.19
LMC6064IN-ND	Precision Quad CMOS Micropower Op Amp	14-Dip	3.95	3.01	2.30
LMC6081AIM-ND	Precision Single CMOS Op Amp	SO-8	4.23	3.22	2.46
LMC6081AIN-ND	Precision Single CMOS Op Amp	8-Dip	4.23	3.22	2.46
LMC6081IM-ND	Precision Single CMOS Micropower Op Amp	SO-8	2.63	2.00	1.53
LMC6081IN-ND	Precision Single CMOS Op Amp	8-Dip	2.63	2.00	1.53
LMC6082AIM-ND	Precision Dual CMOS Op Amp	SO-8	5.93	4.51	3.44
LMC6082AIN-ND	Precision Dual CMOS Op Amp	8-Dip	5.93	4.51	3.44
LMC6082IM-ND	Precision Dual CMOS Op Amp	SO-8	2.60	1.98	1.51
LMC6082IN-ND	Precision Dual CMOS Op Amp	8-Dip	2.60	1.98	1.51
LMC6084AIM-ND	Precision Dual CMOS Micropower Op Amp	SO-14	7.48	5.91	4.74
LMC6084AIN-ND	Precision Dual Op Amp	14-Dip	7.48	5.91	4.74
LMC6084IN-ND	Precision Dual Op Amp	14-Dip	3.68	2.80	2.14
LMC6442AIM-ND	Dual Micropower R/R, Output Single Supply Op Amp	SO-8	3.10	2.36	1.80
LMC6442AIMMCT-ND	Dual Micropower R/R, Output Single Supply Op Amp	8-MSOP	3.10	2.36	1.80
LMC6442AIMMTR-ND	Dual Micropower R/R, Output Single Supply Op Amp	8-MSOP	1562.40/1,000		
LMC6442AIN-ND	Dual Micropower R/R, Output Single Supply Op Amp	8-Dip	3.10	2.36	1.80
LMC6442IM-ND	Dual Micropower R/R, Output Single Supply Op Amp	SO-8	2.83	2.15	1.64
LMC6442IMMCT-ND	Dual Micropower R/R, Output Single Supply Op Amp	8-MSOP	2.83	2.15	1.64
LMC6442IMMTR-ND	Dual Micropower R/R, Output Single Supply Op Amp	8-MSOP	1423.80/1,000		
LMC6442IN-ND	Dual Micropower R/R, Output Single Supply Op Amp	8-Dip	2.83	2.15	1.64
LMC6462AIM-ND	Dual CMOS Micropower, R/R, Input/Output Op Amp	SO-8	3.03	2.30	1.76
LMC6462AIN-ND	Dual CMOS Micropower, R/R, Input/Output Op Amp	8-Dip	3.10	2.36	1.80
LMC6462BIM-ND	Dual CMOS Micropower, R/R, Input/Output Op Amp	SO-8	2.98	2.21	1.64
LMC6462BIN-ND	Dual CMOS Micropower, R/R, Input/Output Op Amp	8-Dip	2.58	1.96	1.50
LMC6464AIM-ND	Quad CMOS Micropower, Rail-to-Rail, I/O Op Amp	SO-14	4.80	3.65	2.79
LMC6464AIN-ND	Quad CMOS Micropower, Rail-to-Rail, I/O Op Amp	14-Dip	4.88	3.71	2.83
LMC6464BIM-ND	Quad CMOS Micropower, Rail-to-Rail, I/O Op Amp	SO-14	4.10	3.12	2.38
LMC6464BIN-ND	Quad CMOS Micropower, Rail-to-Rail, I/O Op Amp	14-Dip	4.28	3.25	2.48
LMC6482AIM-ND	Dual CMOS Rail-to-Rail, Input/Output Op Amp	SO-8	2.64	1.96	1.45
LMC6482AIN-ND	Dual CMOS Rail-to-Rail, Input/Output Op Amp	8-Dip	2.64	1.96	1.45
LMC6482IM-ND	Dual CMOS Rail-to-Rail, Input/Output Op Amp	SO-8	2.11	1.57	1.16
LMC6482IMMCT-ND	Dual CMOS R/R, Input and Output Op Amp	8-MSOP	2.64	1.96	1.45
LMC6482IMMTR-ND	Dual CMOS R/R, Input and Output Op Amp	8-MSOP	1088.00/1,000		
LMC6482IN-ND	Dual CMOS R/R, Input and Output Op Amp	8-Dip	2.33	1.73	1.28
LMC6484AIM-ND	Quad CMOS Rail-to-Rail, Input/Output Op Amp	SO-14	4.48	3.41	2.60
LMC6484AIMXTR-ND	Quad CMOS Micropower, Rail-to-Rail, I/O Op Amp	SO-14	5593.75/2,500		
LMC6484AIN-ND	Quad CMOS Rail-to-Rail, Input/Output Op Amp	14-Dip	5.15	3.92	2.99
LMC6484IM-ND	Quad CMOS Rail-to-Rail, Input/Output Op Amp	SO-14	3.33	2.53	1.93
LMC6484IMXTR-ND	Quad CMOS Rail-to-Rail, Input/Output Op Amp	SO-14	4156.25/2,500		
LMC6484IN-ND	Quad CMOS Rail-to-Rail, Input/Output Op Amp	14-Dip	3.75	2.85	2.18
LMC6492AEM-ND	Dual CMOS Rail-to-Rail, Input/Output Op Amp	SO-8	2.68	2.04	1.56
LMC6492AEN-ND	Dual CMOS Rail-to-Rail, Input/Output Op Amp	8-Dip	3.85	2.75	1.47
LMC6492BEM-ND	Dual CMOS Rail-to-Rail, Input/Output Op Amp	SO-8	2.64	1.96	1.45
LMC6494AEM-ND	Quad CMOS Rail-to-Rail, Input/Output Op Amp	SO-14	5.75	4.55	3.65
LMC6494AEN-ND	Quad CMOS Rail-to-Rail, Input/Output Op Amp	14-Dip	9.59	6.85	3.65
LMC6494BEM-ND	Quad CMOS Rail-to-Rail, Input/Output Op Amp	SO-14	3.78	2.87	2.19
LMC6584AIM-ND	Quad CMOS Rail-to-Rail, Input/Output Op Amp	SO-14	6.79	4.85	2.59
LMC6762AIM-ND	CMOS Micropower Rail-to-Rail Comparator	SO-8	3.00	2.28	1.74
LMC6762AIN-ND	CMOS Micropower Rail-to-Rail Comparator	8-Dip	4.20	3.00	1.60
LMC6762BIM-ND	CMOS Micropower Rail-to-Rail Comparator	SO-8	2.50	1.90	1.45
LMC6762BIMXTR-ND	CMOS Micropower Rail-to-Rail Comparator	SO-8	3125.00/2,500		
LMC6762BIN-ND	CMOS Micropower Rail-to-Rail Comparator	8-Dip	3.50	2.50	1.33
LMC6772AIM-ND	CMOS Micropower Rail-to-Rail Comp. with Open Drain	SO-8	3.00	2.28	1.74
LMC6772AIN-ND	CMOS Micropower Rail-to-Rail Comp. with Open Drain	8-Dip	3.00	2.28	1.74
LMC6772BIM-ND	CMOS Micropower Rail-to-Rail Comp. with Open Drain	SO-8	2.50	1.90	1.45
LMC6772BIN-ND	CMOS Micropower Rail-to-Rail Comp. with Open Drain	8-Dip	2.50	1.90	1.45
LMC6953CM-ND	PCI Local Bus Power Supervisor	SO-8	3.53	2.68	2.05
LMC7111AIN-ND	Tiny CMOS Op Amp with Rail-to-Rail, Input/Output	8-Dip	1.69	1.24	.90
LMC7111BIN-ND	Tiny CMOS Op Amp with Rail-to-Rail, Input/Output	8-Dip	1.65	1.21	.88
LMC7211AIM-ND	Tiny CMOS Comparator with Rail-to-Rail Input	SO-8	1.77	1.32	.97
LMC7211AIM5CT-ND	Tiny CMOS Comparator with Rail-to-Rail Input	SOT-23-5	1.77	1.32	1.32
LMC7211AIM5TR-ND	Tiny CMOS Comparator with Rail-to-Rail Input	SOT-23-5	729.60/1,000		
LMC7211BIM-ND	Tiny CMOS Comparator with Rail-to-Rail Input	SO-8	1.80	1.32	.96
LMC7211BIM5CT-ND	Tiny CMOS Comparator with Rail-to-Rail Input	SOT-23-5	1.80	1.32	.96
LMC7211BIM5TR-ND	Tiny CMOS Comparator with Rail-to-Rail Input	SOT-23-5	624.00/1,000		
LMC7215IM-ND	Micropower Rail-to-Rail CMOS Comparator with Open-Drain/Push-Pull Output	SO-8	1.92	1.43	1.06
LMC7215IMXTR-ND	Micropower Rail-to-Rail CMOS Comparator with Open-Drain/Push-Pull Output	SO-8	1937.50/2,500		
LMC7215IM5CT-ND	Micropower Rail-to Rail CMOS Comparator with Push-Pull/Open-Drain Outputs	SOT-23-5	1.92	1.43	1.06
LMC7215IM5TR-ND	Micropower Rail-to Rail CMOS Comparator with Push-Pull/Open-Drain Outputs	SOT-23-5	793.60/1,000		
LMC7221AIM-ND	Tiny CMOS Comp. with Rail-to-Rail Input & Open Drain	SO-8	2.08	1.55	1.14
LMC7221BIM-ND	Tiny CMOS Comp. with Rail-to-Rail Input & Open Drain	SO-8	1.58	1.13	.60
LMC7221BIM5CT-ND	Tiny CMOS Comp. with Rail-to-Rail I/O Drain Output	SOT-23-5	1.61	1.20	.89
LMC7221BIM5TR-ND	Tiny CMOS Comp. with Rail-to-Rail I/O Drain Output	SOT-23-5	665.60/1,000		
LMC7225IM5CT-ND	Micropower CMOS Comparator with Rail-to-Rail, Open-Drain/Push-Pull Output	SOT-23-5	1.92	1.43	1.06
LMC7225IM5TR-ND	Micropower CMOS Comparator with Rail-to-Rail, Open-Drain/Push-Pull Output	SOT-23-5	793.60/1,000		
LMC7660IM-ND	Switched Capacitor Voltage Converter	SO-8	1.28	.94	.68
LMC7660IN-ND	Switched Capacitor Voltage Converter	8-Dip	1.28	.94	.68
LMC8101BPCT-ND	R/R, Input and Output, 2.7V, Op Amp	8-MicroSMD	1.54	1.13	.82
LMC8101BPTR-ND	Rail-to-Rail, Input and Output, 2.7V, Op Amp	8-MicroSMD	153.75/250		
LMC8101MMCT-ND	Rail-to-Rail, Input and Output, 2.7V, Op Amp	8-MicroSMD	1.54	1.13	.82
LMC8101MMTR-ND	Rail-to-Rail, Input and Output, 2.7V, Op Amp	8-MicroSMD	533.00/1,000		
LMD18200T-ND	55V, 3Amp, H Bridge	TO-220	12.08	10.35	9.18
LMD18201T-ND	55V, 3Amp, H Bridge	TO-220	12.08	10.35	9.18

(Continued)

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Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
LMD18245T-ND	55V 3A DMOS H Bridge Motor Driver *NEW!*	TO-220	13.04	11.18	9.91
LMD18400N-ND	60V 3A DMOS Quad High Side Driver *NEW!*	20-Dip	10.40	8.22	6.59
LMF100CCN-ND	Dual Switched Capacitor Filter	20-Dip	5.60	4.26	3.25
LMF100CIWM-ND	High Performance Dual Switched Capacitor Filter	SO-20	5.58	4.24	3.24
LMS1585ACS-ADJ-ND	Adj. 5A Low Dropout Fast Response Regulator	TO-263	1.83	1.36	1.01
LMS1585ACS-3.3-ND	3.3V, 5A LDO Fast Response Regulator	TO-263	1.83	1.36	1.01
LMS1585ACT-ADJ-ND	Adjustable 5A Low Dropout Fast Response Regulator	TO-220	1.83	1.36	1.01
LMS1585ACT-3.3-ND	3.3V, 5A LDO Fast Response Regulator	TO-220	1.83	1.36	1.01
LMS1585AIS-ADJ-ND	Adj. 5A LDO Fast Response Regulator, Ind. Temp.	TO-263	2.17	1.61	1.19
LMS1585AIS-3.3-ND	3.3V, 5A LDO Fast Response Regulator, Ind. Temp.	TO-263	2.17	1.61	1.19
LMS1585AIT-ADJ-ND	Adj. 5A LDO Fast Response Regulator, Ind. Temp.	TO-220	2.17	1.61	1.19
LMS1585AIT-3.3-ND	3.3V, 5A LDO Fast Response Regulator, Ind. Temp.	TO-220	2.17	1.61	1.19
LMS1587CS-ADJ-ND	Adj. 3A LDO Fast Response Regulator	TO-263	1.84	1.35	.98
LMS1587CS-1.5-ND	1.5V, 3A LDO Fast Response Regulator	TO-263	1.84	1.35	.98
LMS1587CT-ADJ-ND	Adj. 3A LDO Fast Response Regulator	TO-220	1.84	1.35	.98
LMS1587CT-3.3-ND	3.3V, 3A LDO Fast Response Regulator	TO-220	1.84	1.35	.98
LMS1587IS-ADJ-ND	Adj. 3A LDO Fast Response Regulator, Ind. Temp.	TO-263	1.83	1.36	1.01
LMS1587IS-3.3-ND	3.3V, 3A LDO Fast Response Regulator, Ind. Temp.	TO-263	1.83	1.36	1.01
LMS1587IT-ADJ-ND	Adj. 3A LDO Fast Response Regulator, Ind. Temp.	TO-220	1.83	1.36	1.01
LMS1587IT-3.3-ND	3.3V, 3A LDO Fast Response Regulator, Ind. Temp.	TO-220	1.83	1.36	1.01
LMV101M5CT-ND	Fixed-Gain Amp, 1 Gain	SOT-23-5	1.13	.83	.60
LMV101M5TR-ND	Fixed-Gain Amp, 1 Gain	SOT-23-5	390.00/1,000		
LMV101M7CT-ND	Fixed-Gain Amp, 1 Gain	SC-70-5	1.13	.83	.60
LMV101M7TR-ND	Fixed-Gain Amp, 1 Gain	SC-70-5	390.00/1,000		
LMV102M5CT-ND	Fixed-Gain Amp, 2 Gain	SOT-23-5	1.13	.83	.60
LMV102M5TR-ND	Fixed-Gain Amp, 2 Gain	SOT-23-5	390.00/1,000		
LMV102M7CT-ND	Fixed-Gain Amp, 2 Gain	SC-70-5	1.13	.83	.60
LMV102M7TR-ND	Fixed-Gain Amp, 2 Gain	SC-70-5	390.00/1,000		
LMV105M5CT-ND	Fixed-Gain Amp, 5 Gain	SOT-23-5	1.13	.83	.60
LMV105M5TR-ND	Fixed-Gain Amp, 5 Gain	SOT-23-5	390.00/1,000		
LMV105M7CT-ND	Fixed-Gain Amp, 5 Gain	SC-70-5	1.13	.83	.60
LMV105M7TR-ND	Fixed-Gain Amp, 5 Gain	SC-70-5	390.00/1,000		
LMV110M5CT-ND	Fixed-Gain Amp, 10 Gain	SOT-23-5	1.13	.83	.60
LMV110M5TR-ND	Fixed-Gain Amp, 10 Gain	SOT-23-5	390.00/1,000		
LMV110M7CT-ND	Fixed-Gain Amp, 10 Gain	SC-70-5	1.13	.83	.60
LMV110M7TR-ND	Fixed-Gain Amp, 10 Gain	SC-70-5	390.00/1,000		
LMV111M5CT-ND	Op Amp with Bias Network	SOT-23-5	1.13	.83	.60
LMV111M5TR-ND	Op Amp with Bias Network	SOT-23-5	390.00/1,000		
LMV111M7CT-ND	Op Amp with Bias Network	SC-70-5	1.13	.83	.60
LMV111M7TR-ND	Op Amp with Bias Network	SC-70-5	390.00/1,000		
LMV321M5CT-ND	Op Amp Low Voltage	SOT-23-5	.94	.69	.50
LMV321M5TR-ND	Op Amp Low Voltage	SOT-23-5	325.00/1,000		
LMV321M7CT-ND	Op Amp Low Voltage (2/3 the size of SOT-23)	SC-70-5	.98	.72	.52
LMV321M7TR-ND	Op Amp Low Voltage (2/3 the size of SOT-23)	SC-70-5	338.00/1,000		
LMV324M-ND	Low Power Quad Op Amp Low Voltage	SO-14	1.05	.77	.56
LMV324MXTR-ND	Low Power Quad Op Amp Low Voltage	SO-14	892.50/2,500		
LMV324MT-ND	Low Power Quad Op Amp Low Voltage	14-TSSOP	1.09	.80	.58
LMV331M5CT-ND	Single General Purpose, Low Volt, TinyPack Comp.	SOT-23-5	.94	.69	.50
LMV331M5TR-ND	Single General Purpose, Low Volt, TinyPack Comp.	SOT-23-5	325.00/1,000		
LMV331M5XCT-ND	General Purpose Low Volt. TintPack Comparator	SOT-23-5	.94	.69	.50
LMV331M5XTR-ND	General Purpose Low Volt. TintPack Comparator	SOT-23-5	956.25/3,000		
LMV331M7TR-ND	General Purpose Low Volt. TintPack Comparator	SC-70-5	338.00/1,000		
LMV331M7XCT-ND	General Purpose Low Volt. TintPack Comparator	SC-70-5	.98	.72	.52
LMV331M7XTR-ND	General Purpose Low Volt. TintPack Comparator	SC-70-5	994.50/3,000		
LMV339M-ND	Quad General Purpose, Low Volt, TinyPack Comp.	SO-14	364.00/1,000		
LMV339MT-ND	Quad General Purp., Low Volt, TinyPack Comp.	14-TSSOP	1.09	.80	.58
LMV358M-ND	Low Power Dual Op Amp, Low Voltage	SO-8	.94	.69	.50
LMV358MXTR-ND	Low Power Dual Op Amp, Low Voltage	SO-8	796.88/2,500		
LMV358MMCT-ND	Low Power Dual Op Amp, Low Voltage	8-MSOP	.98	.72	.52
LMV358MMTR-ND	Low Power Dual Op Amp, Low Voltage	8-MSOP	338.00/1,000		
LMV393M-ND	Dual General Purpose, Low Volt, TinyPack Comp.	SO-8	.94	.69	.50
LMV393MMXCT-ND	Dual General Purpose Low Volt, TinyPack Comp.	8-MSOP	.98	.72	.52
LMV393MMXTR-ND	General Purpose Low Volt. TintPack Comparator	8-MSOP	1160.25/3,500		
LMV431ACM5CT-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	SOT-23-5	.90	.65	.47
LMV431ACM5TR-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	SOT-23-5	280.00/1,000		
LMV431ACZ-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	TO-92	.90	.65	.47
LMV431AIM5CT-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	SOT-23-5	1.08	.78	.57
LMV431AIM5TR-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	SOT-23-5	336.00/1,000		
LMV431AIZ-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	TO-92	.98	.72	.52
LMV431CM5CT-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	SOT-23-5	.81	.59	.43
LMV431CM5TR-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	SOT-23-5	252.00/1,000		
LMV431CZ-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	TO-92	.81	.59	.43
LMV431IM5CT-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	SOT-23-5	.90	.65	.47
LMV431IM5TR-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	SOT-23-5	85.00/250		
LMV431IZ-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	TO-92	.90	.65	.47
LMV710M5CT-ND	Low Power, R/R, I/O Op Amp with High Output Current Drive and Shutdown Option	SOT-23-5	1.64	1.22	.91
LMV710M5TR-ND	Low Power, R/R, I/O Op Amp with High Output Current Drive and Shutdown Option	SOT-23-5	678.40/1,000		
LMV711M6CT-ND	Low Power, R/R, I/O Op Amp with High Output Current Drive and Shutdown Option	SOT-23-6	1.77	1.32	.97
LMV711M6TR-ND	Low Power, R/R, I/O Op Amp with High Output Current Drive and Shutdown Option	SOT-23-6	729.60/1,000		
LMV721M5CT-ND	Low Noise, Low Volt, 10MHz, Low Power Op Amp	SOT-23-5	1.74	1.29	.96
LMV721M5TR-ND	Low Noise, Low Volt, 10MHz, Low Power Op Amp	SOT-23-5	716.80/1,000		
LMV721M7CT-ND	Low Noise, Low Volt, 10MHz, Low Power Op Amp	SC-70-5	1.74	1.29	.96
LMV721M7TR-ND	Low Noise, Low Volt, 10MHz, Low Power Op Amp	SC-70-5	716.80/1,000		
LMV722M-ND	10MHz Low Noise, Low Voltage, Low Pwr Op Amp *NEW!*	SO-8	2.23	1.66	1.23
LMV722MMCT-ND	10MHz Low Noise, Low Voltage, Low Power Op Amp	8-MSOP	2.23	1.66	1.23
LMV722MMTR-ND	10MHz Low Noise, Low Voltage, Low Power Op Amp	8-MSOP	921.60/1,000		
LMV751M5CT-ND	Low Noise, Low Vos, Single Op Amp	SOT-23-5	1.92	1.43	1.06
LMV751M5TR-ND	Low Noise, Low Vos, Single Op Amp	SOT-23-5	793.60/1,000		
LMV821M5CT-ND	Low Voltage, Low Power, Rail-to-Rail Output Op Amp	SOT-23-5	1.31	.97	.70
LMV821M5TR-ND	Low Voltage, 5MHz, Low Power, R-R Output Op Amp	SOT-23-5	455.00/1,000		
LMV821M7CT-ND	Low Voltage, 5MHz, Low Power, R-R Output Op Amp	SC-70-5	1.35	.99	.72
LMV821M7TR-ND	Low Voltage, 5MHz, Low Power, R-R Output Op Amp	SC-70-5	468.00/1,000		
LMV822M-ND	Low Voltage, 5MHz, Low Power, R-R Output Op Amp	SO-8	1.58	1.16	.84
LMV822MMCT-ND	Dual Low Volt, 5MHz, Low Power, R/R Output Op Amp	8-MSOP	1.61	1.19	.86
LMV822MMTR-ND	Dual Low Volt, 5MHz, Low Power, R/R, Output Op Amp	8-MSOP	559.00/1,000		
LMV822MXCT-ND	Low Volt, 5MHz, Low Power, R/R, Output Op Amp	SO-8	1.58	1.16	.84
LMV822MXTR-ND	Low Volt, 5MHz, Low Power, R/R, Output Op Amp	SO-8	1338.75/2,500		

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
LMV822MMXTR-ND	Low Volt, 5MHz, Low Power, R/R, Output Op Amp	8-MSOP	1918.88/3,500		
LMV824M-ND	Quad Low Volt, 5MHz, Low Power, R/R, Output Op Amp	SO-14	1.84	1.35	.98
LMV824MT-ND	Quad Low Volt, 5MHz, Low Pwr, R/R, Output Op Amp	14-TSSOP	1.84	1.35	.98
LMV921M5CT-ND	Single 1.8V, 1MHz, Low Power, R/R, In/Out Op Amp	SOT-23-5	1.58	1.16	.84
LMV921M5TR-ND	Single 1.8V, 1MHz, Low Power, R/R, In/Out Op Amp	SOT-23-5	546.00/1,000		
LMV921M7CT-ND	Single 1.8V, 1MHz, Low Power, R/R, In/Out Op Amp	SC-70-5	1.58	1.16	.84
LMV921M7TR-ND	Single 1.8V, 1MHz, Low Power, R/R, In/Out Op Amp	SC-70-5	546.00/1,000		
LMV922M-ND	Dual 1.8V, 1MHz, Low Power, R/R, Input/Output Op Amp	SO-8	1.55	1.15	.85
LMV922MMCT-ND	Dual 1.8V, 1MHz, Low Power, R/R, In/Out Op Amp	8-MSOP	1.55	1.15	.85
LMV922MMTR-ND	Dual 1.8V, 1MHz, Low Power, R/R, In/Out Op Amp	8-MSOP	640.00/1,000		
LMV924M-ND	Quad 1.8V, 1 MHz, Low Power, R/R, In/Out Op Amp	SO-14	1.86	1.38	1.02
LMV924MT-ND	Quad 1.8V, 1 MHz, Low Power, R/R, In/Out Op Amp	14-TSSOP	1.86	1.38	1.02
LMV7219M5CT-ND	7nS, 2.7V to 5V Comparator with R/R, Output	SOT-23-5	2.63	2.00	1.53
LMV7219M5TR-ND	7nS, 2.7V to 5V Comparator with R/R, Output	SOT-23-5	1323.00/1,000		
LMV7219M7CT-ND	7nS, 2.7V to 5V Comparator with R/R, Output	SC-70-5	2.63	2.00	1.53
LMV7219M7TR-ND	7nS, 2.7V to 5V Comparator with R/R, Output	SC-70-5	1323.00/1,000		
LMX1501AM-ND	1.1GHz Freq. Synthesizer for Personal Communications	SO-16	5.23	3.98	3.04
LMX1511TM-ND	1.1GHz Freq. Synthesizer for RF Personal Comm.	20-TSSOP	5.23	3.98	3.04
LMX1600TM-ND	Dual Low Cost Frequency Synthesizer	16-TSSOP	3.18	2.42	1.85
LMX1601TM-ND	Platinum Low Cost Dual Frequency Synthesizer	16-TSSOP	2.85	2.17	1.66
LMX1601TMXTR-ND	Platinum Low Cost Dual Frequency Synthesizer	16-TSSOP	3656.25/2,500		
LMX2301TM-ND	160MHz Frequency Synthesizer for RF Personal Communications	20-TSSOP	5.70	4.34	3.31
LMX2305TM-ND	160MHz Frequency Synthesizer for RF Personal Communications	20-TSSOP	5.83	4.43	3.38
LMX2306TM-ND	550MHz Low Power Frequency Synthesizer for RF Personal Communications	16-TSSOP	3.50	2.66	2.03
LMX2315TM-ND	1.2GHz Low Power Frequency Synthesizer for RF Personal Communications	20-TSSOP	6.15	4.68	3.57
LMX2316TM-ND	1.2GHz Low Power Frequency Synthesizer for RF Personal Communications	16-TSSOP	3.83	2.91	2.22
LMX2324TM-ND	2.0GHz Frequency Synthesizer for RF Personal Communications	16-TSSOP	3.18	2.42	1.85
LMX2325TM-ND	2.5GHz Frequency Synthesizer for RF Communications	20-TSSOP	5.90	4.67	3.74
LMX2326TM-ND	2.8GHz, Platinum Frequency Synthesizer For Personal Communications *NEW!*	16-TSSOP	4.20	3.20	2.44
LMX2330ATM-ND	2.5GHz Dual Freq. Synthesizer for RF Communications	20-TSSOP	6.28	4.97	3.98
LMX2330LTM-ND	Low Power Dual Frequency Synthesizer for RF Personal Communications	20-TSSOP	5.63	4.28	3.27
LMX2331ATM-ND	Dual Frequency Synthesizer for RF Personal Communications	20-TSSOP	4.85	3.69	2.82
LMX2331LTM-ND	Low Power Dual Frequency Synthesizer for RF Personal Communications	20-TSSOP	4.25	3.23	2.47
LMX2332ATM-ND	1.2GHz Dual Freq. Synthesizer for RF Communications	20-TSSOP	4.70	3.58	2.73
LMX2332LTM-ND	Low Power Dual Frequency Synthesizer for RF Personal Communications	20-TSSOP	3.83	2.91	2.22
LMX2335LM-ND	Low Power Dual Frequency Synthesizer for RF Personal Communications	SO-16	4.40	3.35	2.56
LMX2335LTM-ND	Low Power Dual Frequency Synthesizer for RF Personal Communications	26-TSSOP	4.58	3.48	2.66
LMX2335TM-ND	Low Power Dual Frequency Synthesizer for RF Personal Communications	16-TSSOP	6.15	4.68	3.57
LMX2335LTMXTR-ND	1.1GHz Dual Freq. Synthesizer for RF Communications	16-TSSOP	5812.50/2,500		
LMX2335M-ND	1.1GHz Dual Freq. Synthesizer for RF Communications	SO-16	5.93	4.51	3.44
LMX2336LTM-ND	Low Power Dual Frequency Synthesizer for RF Personal Communications	20-TSSOP	5.63	4.28	3.27
LMX2336TM-ND	2.0GHz Dual Freq. Synthesizer for RF Communications	20-TSSOP	6.09	4.82	3.86
LMX2337M-ND	Dual Freq. Synthesizer for RF Personal Communications	SO-16	5.35	4.07	3.11
LMX2337TM-ND	Dual Frequency Synthesizer for RF Personal Communications	16-TSSOP	5.48	4.17	3.18
LMX2350TM-ND	Fractional N RF/ Integer N IF Dual Low Power Frequency Synthesizer	24-TSSOP	6.10	4.64	3.54
LMX2352TM-ND	Dual Low Power Frequency Synthesizer	24-TSSOP	5.53	4.20	3.21
LMX2352TMXCT-ND	Dual Low Power Frequency Synthesizer	24-TSSOP	5.60	4.26	3.25
LMX2352TMXTR-ND	Dual Low Power Frequency Synthesizer	24-TSSOP	7000.00/2,500		
LMX2372TM-ND	Dual Frequency Synthesizer for RF Personal Communications	20-TSSOP	2116.80/1,000		
LMX3161VBH-ND	Single Chip Radio Transceiver	48-LQFP	1698.63/250		
LMX3162VBH-ND	Single Chip Radio Transceiver	48-LQFP	1698.63/250		
LP324M-ND	Low Power Quad Op Amp	SO-14	1.43	1.05	.76
LP324MXTR-ND	Low Power Quad Op Amp	SO-14	1211.25/2,500		
LP324N-ND	Micropower Quad Op Amp	14-Dip	1.43	1.05	.76
LP339M-ND	Ultra-Low Power Quad Comparator	SO-14	1.31	.97	.70
LP339MXTR-ND	Ultra-Low Power Quad Comparator	SO-14	1115.63/2,500		
LP339N-ND	Ultra-Low Power Quad Comparator	14-Dip	1.31	.97	.70
LP395Z-ND	Ultra Reliable Power Transistor	TO-92	1.43	1.05	.76
LP2902M-ND	Micropower Quad Operational Amplifier	SO-14	1.74	1.29	.96
LP2902MXTR-ND	Micropower Quad Operational Amplifier	SO-14	1750.00/2,500		
LP2902N-ND	Micropower Quad Operational Amplifier	14-Dip	1.74	1.29	.96
LP2950ACZ-3.0-ND	3V, Series Adjustable Micropower Voltage Regulator	TO-92	1.50	1.10	.80
LP2950ACZ-3.3-ND	3.3V, Series Adjustable Micropower Voltage Regulator	TO-92	1.50	1.10	.80
LP2950ACZ-5.0-ND	5V, Micropower Voltage Regulator	TO-92	1.50	1.10	.80
LP2950CZ-3.0-ND	3V, Series Adjustable Micropower Voltage Regulator	TO-92	1.20	.88	.64
LP2950CZ-3.3-ND	3.3V, Adj. Micropower Voltage Regulator	TO-92	1.20	.88	.64
LP2950CZ-5.0-ND	5V, Micropower Voltage Regulator	TO-92	1.20	.88	.64
LP2951ACM-ND	1.24-29V, Adjustable Voltage Regulator	SO-8	1.69	1.24	.90
LP2951ACMXTR-ND	1.24-29V, Adjustable Voltage Regulator	SO-8	1434.38/2,500		
LP2951ACM-3.0-ND	3V, Series Adj. Micropower Voltage Regulator	SO-8	1.69	1.24	.90
LP2951ACM-3.3-ND	3.3V, Series Adj. Micropower Voltage Regulator	SO-8	1.69	1.24	.90
LP2951ACMM-3.0CT-ND	3V, Series Adj. Micropower Voltage Regulator	8-MSOP	1.69	1.24	.90
LP2951ACMM-3.0TR-ND	3V, Series Adj. Micropower Voltage Regulator	8-MSOP	585.00/1,000		
LP2951ACMM-3.3CT-ND	3.3V, Series Adj. Micropower Voltage Regulator	8-MSOP	1.69	1.24	.90
LP2951ACMM-3.3TR-ND	3.3V, Series Adj. Micropower Voltage Regulator	8-MSOP	585.00/1,000		
LP2951ACMMCT-ND	Series Adj. Micropower Voltage Regulator	8-MSOP	1.69	1.24	.90
LP2951ACMMTR-ND	Series Adj. Micropower Voltage Regulator	8-MSOP	585.00/1,000		
LP2951ACN-ND	1.24-29V, Adjustable Micropower Voltage Regulator	8-Dip	1.69	1.24	.90
LP2951ACN-3.3-ND	3.3V, Series Adj. Micropower Voltage Regulator	8-Dip	1.69	1.24	.90
LP2951CM-ND	1.24-29V, Adjustable Micropower Voltage Regulator	SO-8	1.39	1.02	.74
LP2951CMXTR-ND	1.24-29V, Adjustable Micropower Voltage Regulator	SO-8	1179.38/2,500		
LP2951CM-3.0-ND	3V, Series Adj. Micropower Voltage Regulator	SO-8	1.39	1.02	.74
LP2951CM-3.3-ND	3.3V, Series Adj. Micropower Voltage Regulator	SO-8	1.39	1.02	.74
LP2951CMM-3.0CT-ND	3V, Series Adj. Micropower Voltage Regulator	8-MSOP	1.39	1.02	.74

(Continued)

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Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
LP2951CMM-3.0TR-ND	3V, Series Adj. Micropower Voltage Regulator	8-MSOP	481.00/1,000		
LP2951CMM-3.3CT-ND	3.3V, Series Adj. Micropower Voltage Regulator	8-MSOP	1.39	1.02	.74
LP2951CMM-3.3TR-ND	3.3V, Series Adj. Micropower Voltage Regulator	8-MSOP	481.00/1,000		
LP2951CMMCT-ND	Series Adj. Micropower Voltage Regulator	8-MSOP	1.39	1.02	.74
LP2951CMMTR-ND	Series Adj. Micropower Voltage Regulator	8-MSOP	481.00/1,000		
LP2951CN-ND	Adjustable Micropower Voltage Regulator	8-Dip	1.39	1.02	.74
LP2951CN-3.0-ND	3V, Series Adj. Micropower Voltage Regulator	8-Dip	1.39	1.02	.74
LP2951CN-3.3-ND	3.3V, Series Adj. Micropower Voltage Regulator	8-Dip	1.39	1.02	.74
LP2952AIM-3.3-ND	3.3V, Adj. LDO Voltage Regulator	SO-16	3.50	2.66	2.03
LP2952AIM-ND	Adj. LDO Voltage Regulator	SO-16	3.50	2.66	2.03
LP2952AIN-3.3-ND	3.3V, Adj. LDO Voltage Regulator	14-Dip	3.50	2.66	2.03
LP2952IM-ND	250mA Low Power Adjustable Voltage Regulator	SO-16	2.57	1.91	1.42
LP2952IM-3.3-ND	3.3V, Adj. LDO Voltage Regulator	SO-16	2.57	1.91	1.42
LP2952IN-3.3-ND	3.3V, Adj. LDO Voltage Regulator	14-Dip	2.57	1.91	1.42
LP2953AIM-ND	250mA Low Power Adj. Voltage Reg (Elect. Improved)	SO-16	4.23	3.22	2.46
LP2953AIM-3.3-ND	3.3V, Adj. LDO Voltage Regulator	SO-16	4.23	3.22	2.46
LP2953IM-ND	250mA Low Power Adjustable Voltage Regulator	SO-16	3.01	2.24	1.65
LP2953IM-3.3-ND	3.3V, Adj. LDO Voltage Regulator	SO-16	3.01	2.24	1.65
LP2953IN-ND	250mA Low Power Adjustable Voltage Regulator	16-Dip	3.01	2.24	1.65
LP2954AIS-ND	Adj. Micropower LDO Voltage Regulator	TO-263	4.30	3.27	2.50
LP2954AIT-ND	5V, Micropower Low Dropout Voltage Regulator	TO-220	4.30	3.27	2.50
LP2954IS-ND	5A Micropower LDO Voltage Regulator	TO-263	3.98	3.03	2.31
LP2954IT-ND	5V, Low Power Voltage Regulator	TO-220	3.98	3.03	2.31
LP2956AIM-ND	Dual Micropower LDO Voltage Regulator	SO-16	4.30	3.27	2.50
LP2956AIN-ND	Dual Micropower LDO Voltage Regulator	16-Dip	4.45	3.39	2.59
LP2956IM-ND	Dual Micropower LDO Voltage Regulator	SO-16	3.08	2.34	1.79
LP2957AIS-ND	5V, LDO Reg for Micropower Application	TO-263-5	3.83	2.91	2.22
LP2957AIT-ND	5A LDO Reg for Micropower Application	TO-220-5	3.83	2.91	2.22
LP2957IS-ND	5A LDO Reg for Micropower Application	TO-263-5	3.03	2.30	1.76
LP2960IM-5.0-ND	5.0V, .5A Micropower LDO Regulator, 160ppm	SO-16	2.70	2.06	1.57
LP2960IN-5.0-ND	5.0V, .5A Micropower LDO Regulator, 160ppm	16-Dip	2.85	2.17	1.66
LP2966IMM-1818CT-ND	Dual 150mA Ultra LDO Regulator, 1.8V/3.8V	8-MSOP	2.33	1.73	1.28
LP2966IMM-1818TR-ND	Dual 150mA Ultra LDO Regulator, 1.8V/3.8V	8-MSOP	960.00/1,000		
LP2966IMM-1833CT-ND	Dual 150mA Ultra LDO Regulator, 1.8V/3.3V	8-MSOP	2.33	1.73	1.28
LP2966IMM-1833TR-ND	Dual 150mA Ultra LDO Regulator, 1.8V/3.3V	8-MSOP	960.00/1,000		
LP2966IMM-2525CT-ND	Dual 150mA Ultra LDO Regulator, 2.5V/2.5V	8-MSOP	2.33	1.73	1.28
LP2966IMM-2525TR-ND	Dual 150mA Ultra LDO Regulator, 2.5V/2.5V	8-MSOP	960.00/1,000		
LP2966IMM-2828CT-ND	Dual 150mA Ultra LDO Regulator, 2.8V/2.8V	8-MSOP	2.33	1.73	1.28
LP2966IMM-2828TR-ND	Dual 150mA Ultra LDO Regulator, 2.8V/2.8V	8-MSOP	960.00/1,000		
LP2966IMM-3030CT-ND	Dual 150mA Ultra LDO Regulator, 3V/3V	8-MSOP	2.33	1.73	1.28
LP2966IMM-3030TR-ND	Dual 150mA Ultra LDO Regulator, 3V/3V	8-MSOP	960.00/1,000		
LP2966IMM-3333CT-ND	Dual 150mA Ultra LDO Regulator, 3.3V/3.3V	8-MSOP	2.33	1.73	1.28
LP2966IMM-3333TR-ND	Dual 150mA Ultra LDO Regulator, 3.3V/3.3V	8-MSOP	960.00/1,000		
LP2966IMM-3336CT-ND	Dual 150mA Ultra LDO Regulator, 3.3V/3.6V	8-MSOP	2.33	1.73	1.28
LP2966IMM-3336TR-ND	Dual 150mA Ultra LDO Regulator, 3.3V/3.6V	8-MSOP	960.00/1,000		
LP2966IMM-3636CT-ND	Dual 150mA Ultra LDO Regulator, 3.6V/3.6V	8-MSOP	2.33	1.73	1.28
LP2966IMM-3636TR-ND	Dual 150mA Ultra LDO Regulator, 3.6V/3.6V	8-MSOP	960.00/1,000		
LP2966IMM-5050CT-ND	Dual 150mA Ultra LDO Regulator, 5V/5V	8-MSOP	2.33	1.73	1.28
LP2966IMM-5050TR-ND	Dual 150mA Ultra LDO Regulator, 5V/5V	8-MSOP	960.00/1,000		
LP2975AIMM-12CT-ND	12V, MOSFET LDO Driver/Controller	8-MSOP	2.45	1.82	1.35
LP2975AIMM-12TR-ND	12V, MOSFET LDO Driver/Controller	8-MSOP	1011.20/1,000		
LP2975AIMM-3.3CT-ND	3.3V, MOSFET LDO Driver/Controller	8-MSOP	2.45	1.82	1.35
LP2975AIMM-3.3TR-ND	3.3V, MOSFET LDO Driver/Controller	8-MSOP	1011.20/1,000		
LP2975AIMM-5.0CT-ND	5V, MOSFET LDO Driver/Controller	8-MSOP	2.45	1.82	1.35
LP2975AIMM-5.0TR-ND	5V, MOSFET LDO Driver/Controller	8-MSOP	1011.20/1,000		
LP2975IMM-12CT-ND	12V, MOSFET LDO Driver/Controller	8-MSOP	2.20	1.64	1.21
LP2975IMM-12TR-ND	12V, MOSFET LDO Driver/Controller	8-MSOP	908.80/1,000		
LP2975IMM-3.3CT-ND	3.3V, MOSFET LDO Driver/Controller	8-MSOP	2.20	1.64	1.21
LP2975IMM-3.3TR-ND	3.3V, MOSFET LDO Driver/Controller	8-MSOP	908.80/1,000		
LP2975IMM-5.0CT-ND	5V, MOSFET LDO Driver/Controller	8-MSOP	2.20	1.64	1.21
LP2975IMM-5.0TR-ND	5V, MOSFET LDO Driver/Controller	8-MSOP	908.80/1,000		
LP2980AIBP-3.3CT-ND	3.3V, Micropower 50mA Ultra LDO Regulator	5-MicroSMD	1.58	1.16	.84
LP2980AIBP-3.3TR-ND	3.3V, Micropower 50mA Ultra LDO Regulator	5-MicroSMD	157.50/250		
LP2980AIBP-5.0CT-ND	5V, Micropower 50mA Ultra LDO Regulator	5-MicroSMD	1.58	1.16	.84
LP2980AIBP-5.0TR-ND	5V, Micropower 50mA Ultra LDO Regulator	5-MicroSMD	157.50/250		
LP2980AIM5-1.8CT-ND	1.8V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	1.20	.88	.64
LP2980AIM5-1.8TR-ND	1.8V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	416.00/1,000		
LP2980AIM5-2.5CT-ND	2.5V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	1.20	.88	.64
LP2980AIM5-2.5TR-ND	2.5V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	416.00/1,000		
LP2980AIM5-3.0CT-ND	3V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	1.20	.88	.64
LP2980AIM5-3.0TR-ND	3V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	416.00/1,000		
LP2980AIM5-3.3CT-ND	3.3V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	1.20	.88	.64
LP2980AIM5-3.3TR-ND	3.3V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	416.00/1,000		
LP2980AIM5-5.0CT-ND	5V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	1.20	.88	.64
LP2980AIM5-5.0TR-ND	5V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	416.00/1,000		
LP2980IBP-3.3CT-ND	3.3V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	1.50	1.10	.80
LP2980IBP-3.3TR-ND	3.3V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	150.00/250		
LP2980IBP-5.0CT-ND	5V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	1.50	1.10	.80
LP2980IBP-5.0TR-ND	5V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	150.00/250		
LP2980IM5-1.8CT-ND	1.8V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	1.16	.86	.62
LP2980IM5-1.8TR-ND	1.8V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	403.00/1,000		
LP2980IM5-2.5CT-ND	2.5V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	1.16	.86	.62
LP2980IM5-2.5TR-ND	2.5V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	403.00/1,000		
LP2980IM5-3.0CT-ND	3V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	1.16	.86	.62
LP2980IM5-3.0TR-ND	3V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	403.00/1,000		
LP2980IM5-3.3CT-ND	3.3V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	1.16	.86	.62
LP2980IM5-3.3TR-ND	3.3V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	403.00/1,000		
LP2980IM5-5.0CT-ND	5V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	1.16	.86	.62
LP2980IM5-5.0TR-ND	5V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	403.00/1,000		
LP2981AIBP-2.5CT-ND	2.5V, Micropower 100mA Ultra LDO Reg., A Grade	5-MicroSMD	1.76	1.30	.94
LP2981AIBP-2.5TR-ND	2.5V, Micropower 100mA Ultra LDO Reg., A Grade	5-MicroSMD	176.25/250		
LP2981AIBP-3.2CT-ND	3.2V, Micropower 100mA Ultra LDO Reg., A Grade	5-MicroSMD	1.76	1.30	.94
LP2981AIBP-3.2TR-ND	3.2V, Micropower 100mA Ultra LDO Reg., A Grade	5-MicroSMD	176.25/250		
LP2981AIBP-3.3CT-ND	3.3V, Micropower 100mA Ultra LDO Reg., A Grade	5-MicroSMD	1.76	1.30	.94
LP2981AIBP-3.3TR-ND	3.3V, Micropower 100mA Ultra LDO Reg., A Grader.	5-MicroSMD	176.25/250		
LP2981AIM5-2.5CT-ND	2.5V, Micropower 100mA Ultra LDO Reg., A Grade	SOT-23-5	1.58	1.16	.84
LP2981AIM5-2.5TR-ND	2.5V, Micropower 100mA Ultra LDO Reg., A Grade	SOT-23-5	546.00/1,000		
LP2981AIM5-3.0CT-ND	3V, Micropower 100mA Ultra LDO Regulator, A Grade	SOT-23-5	1.58	1.16	.84
LP2981AIM5-3.0TR-ND	3V, Micropower 100mA Ultra LDO Regulator, A Grade	SOT-23-5	546.00/1,000		
LP2981AIM5-3.3CT-ND	3.3V, Micropower 100mA Ultra LDO Reg., A Grade	SOT-23-5	1.58	1.16	.84
LP2981AIM5-3.3TR-ND	3.3V, Micropower 100mA Ultra LDO Reg., A Grade	SOT-23-5	546.00/1,000		
LP2981AIM5-5.0CT-ND	5V, Micropower 100mA Ultra LDO Regulator, A Grade	SOT-23-5	1.58	1.16	.84
LP2981AIM5-5.0TR-ND	5V, Micropower 100mA Ultra LDO Regulator, A Grade	SOT-23-5	546.00/1,000		
LP2981IBP-2.5CT-ND	2.5V, Micropower 100mA Ultra LDO Regulator	5-MicroSMD	1.69	1.24	.90
LP2981IBP-2.5TR-ND	2.5V, Micropower 100mA Ultra LDO Regulator	5-MicroSMD	168.75/250		
LP2981IBP-3.2CT-ND	3.2V, Micropower 100mA Ultra LDO Regulator	5-MicroSMD	1.69	1.24	.90
LP2981IBP-3.2TR-ND	3.2V, Micropower 100mA Ultra LDO Regulator	5-MicroSMD	168.75/250		
LP2981IBP-3.3CT-ND	3.3V, Micropower 100mA Ultra LDO Regulator	5-MicroSMD	1.69	1.24	.90
LP2981IBP-3.3TR-ND	3.3V, Micropower 100mA Ultra LDO Regulator	5-MicroSMD	168.75/250		
LP2981IM5-2.5CT-ND	2.5V, Micropower 100mA Ultra LDO Regulator	SOT-23-5	1.50	1.10	.80
LP2981IM5-2.5TR-ND	2.5V, Micropower 100mA Ultra LDO Regulator	SOT-23-5	520.00/1,000		
LP2981IM5-3.0CT-ND	3V, Micropower 100mA Ultra LDO Regulator	SOT-23-5	1.50	1.10	.80
LP2981IM5-3.0TR-ND	3V, Micropower 100mA Ultra LDO Regulator	SOT-23-5	520.00/1,000		
LP2981IM5-5.0CT-ND	5V, Micropower 100mA Ultra LDO Regulator	SOT-23-5	1.50	1.10	.80
LP2981IM5-5.0TR-ND	5V, Micropower 100mA Ultra LDO Regulator	SOT-23-5	520.00/1,000		
LP2982AIBP-2.8CT-ND	2.8V, Micropower 50mA Ultra LDO Reg., A Grade	5-MicroSMD	1.65	1.21	.88
LP2982AIBP-2.8TR-ND	2.8V, Micropower 50mA Ultra LDO Reg., A Grade	5-MicroSMD	572.00/1,000		
LP2982AIBP-3.0CT-ND	3V, Micropower 50mA Ultra LDO Reg., A Grade	5-MicroSMD	1.65	1.21	.88
LP2982AIBP-3.0TR-ND	3V, Micropower 50mA Ultra LDO Reg., A Grade	5-MicroSMD	572.00/1,000		
LP2982AIM5-2.5CT-ND	2.5V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	1.46	1.08	.78
LP2982AIM5-2.5TR-ND	2.5V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	507.00/1,000		
LP2982AIM5-3.0CT-ND	3V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	1.46	1.08	.78
LP2982AIM5-3.0TR-ND	3V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	507.00/1,000		
LP2982AIM5-3.3CT-ND	3.3V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	1.46	1.08	.78
LP2982AIM5-3.3TR-ND	3.3V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	507.00/1,000		
LP2982AIM5-5.0CT-ND	5V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	1.46	1.08	.78
LP2982AIM5-5.0TR-ND	5V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	507.00/1,000		
LP2982IBP-2.8CT-ND	2.8V, Micropower 50mA Ultra LDO Regulator	5-MicroSMD	1.58	1.16	.84
LP2982IBP-2.8TR-ND	2.8V, Micropower 50mA Ultra LDO Regulator	5-MicroSMD	157.50/250		
LP2982IBP-3.0CT-ND	3V, Micropower 50mA Ultra LDO Regulator	5-MicroSMD	1.58	1.16	.84
LP2982IBP-3.0TR-ND	3V, Micropower 50mA Ultra LDO Regulator	5-MicroSMD	157.50/250		
LP2982IM5-2.5CT-ND	2.5V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	1.39	1.02	.74
LP2982IM5-2.5TR-ND	2.5V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	481.00/1,000		
LP2982IM5-3.0CT-ND	3V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	1.39	1.02	.74
LP2982IM5-3.0TR-ND	3V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	481.00/1,000		
LP2982IM5-3.3CT-ND	3.3V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	1.39	1.02	.74
LP2982IM5-3.3TR-ND	3.3V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	481.00/1,000		
LP2982IM5-5.0CT-ND	5V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	1.39	1.02	.74
LP2982IM5-5.0TR-ND	5V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	481.00/1,000		
LP2985AIBP-2.5CT-ND	2.5V, Micropwr. 150mA LN Ultra LDO Reg, A Grade	5-MicroSMD	1.69	1.24	.90
LP2985AIBP-2.5TR-ND	2.5V, Micropwr. 150mA LN Ultra LDO Reg, A Grade	5-MicroSMD	168.75/250		
LP2985AIBP-2.8CT-ND	2.8V, Micropwr. 150mA LN Ultra LDO Reg, A Grade	5-MicroSMD	1.69	1.24	.90
LP2985AIBP-2.8TR-ND	2.8V, Micropwr. 150mA LN Ultra LDO Reg, A Grade	5-MicroSMD	168.75/250		
LP2985AIBP-3.0CT-ND	3V, Micropower 150mA LN Ultra LDO Reg, A Grade	5-MicroSMD	1.69	1.24	.90
LP2985AIBP-3.0TR-ND	3V, Micropower 150mA LN Ultra LDO Reg, A Grade	5-MicroSMD	168.75/250		
LP2985AIBP-3.3CT-ND	3.3V, Micropwr. 150mA LN Ultra LDO Reg, A Grade	5-MicroSMD	1.69	1.24	.90
LP2985AIBP-3.3TR-ND	3.3V, Micropwr. 150mA LN Ultra LDO Reg, A Grade	5-MicroSMD	168.75/250		
LP2985AIM5-2.5CT-ND	2.5V, Micropower 150mA LN Ultra LDO Reg, A Grade.	SOT-23-5	1.50	1.10	.80
LP2985AIM5-2.5TR-ND	2.5V, Micropower 150mA LN Ultra LDO Reg, A Grade.	SOT-23-5	520.00/1,000		
LP2985AIM5-2.9CT-ND	2.9V, Micropower 150mA LN Ultra LDO Reg, A Grade.	SOT-23-5	1.50	1.10	.80
LP2985AIM5-2.9TR-ND	2.9V, Micropower 150mA LN Ultra LDO Reg, A Grade.	SOT-23-5	520.00/1,000		
LP2985AIM5-3.0CT-ND	3V, Micropower 150mA LN Ultra LDO Reg, A Grade.	SOT-23-5	1.50	1.10	.80
LP2985AIM5-3.0TR-ND	3V, Micropower 150mA LN Ultra LDO Reg, A Grade.	SOT-23-5	520.00/1,000		
LP2985AIM5-3.3CT-ND	3.3V, Micropower 150mA LN Ultra LDO Reg, A Grade.	SOT-23-5	1.50	1.10	.80
LP2985AIM5-3.3TR-ND	3.3V, Micropower 150mA LN Ultra LDO Reg, A Grade.	SOT-23-5	520.00/1,000		
LP2985AIM5-5.0CT-ND	5V, Micropower 150mA LN Ultra LDO Reg, A Grade.	SOT-23-5	1.50	1.10	.80
LP2985AIM5-5.0TR-ND	5V, Micropower 150mA LN Ultra LDO Reg, A Grade.	SOT-23-5	520.00/1,000		
LP2985IBP-2.5CT-ND	2.5V, Micropower 150mA Low Noise Ultra LDO Reg	5-MicroSMD	1.65	1.21	.88
LP2985IBP-2.5TR-ND	2.5V, Micropower 150mA Low Noise Ultra LDO Reg	5-MicroSMD	165.00/250		
LP2985IBP-2.8CT-ND	2.8V, Micropower 150mA Low Noise Ultra LDO Reg	5-MicroSMD	1.65	1.21	.88
LP2985IBP-2.8TR-ND	2.8V, Micropower 150mA Low Noise Ultra LDO Reg	5-MicroSMD	165.00/250		
LP2985IBP-3.0CT-ND	3V, Micropower 150mA Low Noise Ultra LDO Reg.	5-MicroSMD	1.65	1.21	.88
LP2985IBP-3.0TR-ND	3V, Micropower 150mA Low Noise Ultra LDO Reg.	5-MicroSMD	165.00/250		
LP2985IBP-3.3CT-ND	3.3V, Micropower 150mA Low Noise Ultra LDO Reg	5-MicroSMD	1.65	1.21	.88
LP2985IBP-3.3TR-ND	3.3V, Micropower 150mA Low Noise Ultra LDO Reg	5-MicroSMD	165.00/250		
LP2985IM5-2.5CT-ND	2.5V, Micropower 150mA Low Noise Ultra LDO Reg.	SOT-23-5	1.46	1.08	.78
LP2985IM5-2.5TR-ND	2.5V, Micropower 150mA Low Noise Ultra LDO Reg.	SOT-23-5	507.00/1,000		
LP2985IM5-2.8CT-ND	2.8V, Micropower 150mA Low Noise Ultra LDO Reg.	SOT-23-5	1.46	1.08	.78
LP2985IM5-2.8TR-ND	2.8V, Micropower 150mA Low Noise Ultra LDO Reg.	SOT-23-5	507.00/1,000		
LP2985IM5-2.9CT-ND	2.9V, Micropower 150mA Low Noise Ultra LDO Reg.	SOT-23-5	1.46	1.08	.78
LP2985IM5-2.9TR-ND	2.9V, Micropower 150mA Low Noise Ultra LDO Reg.	SOT-23-5	507.00/1,000		
LP2985IM5-3.0CT-ND	3V, Micropower 150mA Low Noise Ultra LDO Reg.	SOT-23-5	1.46	1.08	.78
LP2985IM5-3.0TR-ND	3V, Micropower 150mA Low Noise Ultra LDO Reg.	SOT-23-5	507.00/1,000		
LP2985IM5-3.3CT-ND	3.3V, Micropower 150mA Low-Noise Ultra LDO Reg	SOT-23-5	1.46	1.08	.78
LP2985IM5-3.3TR-ND	3.3V, Micropower 150mA Low-Noise Ultra LDO Reg	SOT-23-5	507.00/1,000		
LP2985IM5-5.0CT-ND	5V, Micropower 150mA Low-Noise Ultra LDO Reg	SOT-23-5	1.46	1.08	.78
LP2985IM5-5.0TR-ND	5V, Micropower 150mA Low-Noise Ultra LDO Reg	SOT-23-5	507.00/1,000		
LP2986AIM-3.0-ND	3V, Micropwr 200mA Ultra LDO Fixed or Adj. Volt. Reg .5%	SO-8	2.36	1.75	1.30
LP2986AIM-3.3-ND	3.3V, Micropwr 200mA Ultra LDO Fixed or Adj. V. Reg .5%	SO-8	2.36	1.75	1.30
LP2986AIM-5.0-ND	5V, Micropwr 200mA Ultra LDO Fixed or Adj. V. Reg .5%	SO-8	2.36	1.75	1.30
LP2986AIMM-3.0CT-ND	3V, Micropwr 200mA Ultra LDO Fixed or Adj. V. Reg .5%	8-MSOP	2.60	1.94	1.43
LP2986AIMM-3.0TR-ND	3V, Micropwr 200mA Ultra LDO Fixed or Adj. V. Reg .5%	8-MSOP	1075.20/1,000		
LP2986AIMM-3.3CT-ND	3.3V, Micropwr 200mA Ultra LDO Fix or Adj. V. Reg .5%	8-MSOP	2.60	1.94	1.43
LP2986AIMM-3.3TR-ND	3.3V, Micropwr 200mA Ultra LDO Fix or Adj. V. Reg .5%	8-MSOP	1075.20/1,000		
LP2986AIMM-5.0CT-ND	5V, Micropwr 200mA Ultra LDO Fixed or Adj. V. Reg .5%	8-MSOP	2.60	1.94	1.43
LP2986AIMM-5.0TR-ND	5V, Micropwr 200mA Ultra LDO Fixed or Adj. V. Reg .5%	8-MSOP	1075.20/1,000		
LP2986IM-3.0-ND	3V, Micropower 200mA Ultra LDO Regulator, 1%	SO-8	2.20	1.64	1.21
LP2986IM-3.3-ND	3.3V, Micropower 200mA Ultra LDO Regulator, 1%	SO-8	2.20	1.64	1.21
LP2986IM-5.0-ND	5V, Micropower 200mA Ultra LDO Regulator, 1%	SO-8	2.20	1.64	1.21
LP2986IMM-3.0CT-ND	3V, Micropwr 200mA Ultra LDO Fixed or Adj. V. Reg, 1%	8-MSOP	2.45	1.82	1.35
LP2986IMM-3.0TR-ND	3V, Micropwr 200mA Ultra LDO Fixed or Adj. V. Reg, 1%	8-MSOP	1011.20/1,000		
LP2986IMM-3.3CT-ND	3.3V, Micropwr 200mA Ultra LDO Fix or Adj. V. Reg, 1%	8-MSOP	2.45	1.82	1.35
LP2986IMM-3.3TR-ND	3.3V, Micropwr 200mA Ultra LDO Fix or Adj. V. Reg, 1%	8-MSOP	1011.20/1,000		
LP2986IMM-5.0CT-ND	5V, Micropwr 200mA Ultra LDO Fixed or Adj. V. Reg, 1%	8-MSOP	2.45	1.82	1.35
LP2986IMM-5.0TR-ND	5V, Micropwr 200mA Ultra LDO Fixed or Adj. V. Reg, 1%	8-MSOP	1011.20/1,000		
LP2987AIM-3.0-ND	3V, Micropower 200mA Ultra LDO Voltage Regulator with Program Power-On Reset Delay, .5%	SO-8	2.36	1.75	1.30
LP2987AIM-3.3-ND	3.3V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	SO-8	2.36	1.75	1.30
LP2987AIMM-3.0TR-ND	3V, Micropower 200mA Ultra LDO Voltage Regulator with Program Power-On Reset Delay, .5%	8-MSOP	1075.20/1,000		
LP2987AIMM-3.3CT-ND	3.3V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	8-MSOP	2.60	1.94	1.43
LP2987AIMM-3.3TR-ND	3.3V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	8-MSOP	283.50/250		
LP2987AIM-5.0-ND	5.0V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	SO-8	2.36	1.75	1.30
LP2987AIMM-5.0CT-ND	5.0V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	8-MSOP	2.60	1.94	1.43
LP2987AIMM-5.0TR-ND	5.0V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	8-MSOP	1075.20/1,000		

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LP2987IM-3.0-ND	3V, Micropower 200mA Ultra LDO Voltage Regulator with Program Power-On Reset Delay, 1%	SO-8	2.20	1.64	1.21
LP2987IM-3.3-ND	3.3V, Micropower 200mA Ultra LDO Reg., 1% Accuracy	SO-8	2.20	1.64	1.21
LP2987IM-5.0-ND	5.0V, Micropower 200mA Ultra LDO Reg., 1% Accuracy	SO-8	2.20	1.64	1.21
LP2987IMM-3.0CT-ND	3V, Micropower 200mA Ultra LDO Voltage Regulator with Program Power-On Reset Delay, 1%	8-MSOP	2.45	1.82	1.35
LP2987IMM-3.0TR-ND	3V, Micropower 200mA Ultra LDO Voltage Regulator with Program Power-On Reset Delay, 1%	8-MSOP	1011.20/1,000		
LP2987IMM-3.3CT-ND	3.3V, Micropower 200mA Ultra LDO Reg., 1% Accuracy	8-MSOP	2.45	1.82	1.35
LP2987IMM-3.3TR-ND	3.3V, Micropower 200mA Ultra LDO Reg., 1% Accuracy	8-MSOP	266.63/250		
LP2987IMM-5.0CT-ND	5.0V, Micropower 200mA Ultra LDO Reg., 1% Accuracy	8-MSOP	2.45	1.82	1.35
LP2987IMM-5.0TR-ND	5.0V, Micropower 200mA Ultra LDO Reg., 1% Accuracy	8-MSOP	266.63/250		
LP2988AIM-2.5-ND	2.5V, Micropower 200mA Ultra LDO Voltage Regulator with Program Power-On Reset Delay, .5%	SO-8	2.45	1.82	1.35
LP2988AIM-3.0-ND	3V, Micropower 200mA Ultra LDO Voltage Regulator with Program Power-On Reset Delay, .5%	SO-8	2.45	1.82	1.35
LP2988AIM-5.0-ND	5.0V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	SO-8	2.45	1.82	1.35
LP2988AIM-3.3-ND	3.3V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	SO-8	2.45	1.82	1.35
LP2988AIMM-2.5CT-ND	2.5V, Micropower 200mA Ultra LDO Regulator with Program Power-On Reset Delay, .5%	8-MSOP	2.64	1.96	1.45
LP2988AIMM-2.5TR-ND	2.5V, Micropower 200mA Ultra LDO Regulator with Program Power-On Reset Delay, .5%	8-MSOP	1088.00/1,000		
LP2988AIMM-3.0CT-ND	3V, Micropower 200mA Ultra LDO Regulator with Program Power-On Reset Delay, .5%	8-MSOP	2.64	1.96	1.45
LP2988AIMM-3.0TR-ND	3V, Micropower 200mA Ultra LDO Regulator with Program Power-On Reset Delay, .5%	8-MSOP	1088.00/1,000		
LP2988AIMM-3.3CT-ND	3.3V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	8-MSOP	2.64	1.96	1.45
LP2988AIMM-3.3TR-ND	3.3V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	8-MSOP	1088.00/1,000		
LP2988AIMM-5.0CT-ND	5.0V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	8-MSOP	2.64	1.96	1.45
LP2988AIMM-5.0TR-ND	5.0V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	8-MSOP	286.88/250		
LP2988IM-2.5-ND	2.5V, Micropower 200mA Ultra LDO Regulator with Program Power-On Reset Delay, 1% Accuracy	SO-8	2.39	1.78	1.31
LP2988IM-3.0-ND	3V, Micropower 200mA Ultra LDO Regulator with Program Power-On Reset Delay, 1% Accuracy	SO-8	2.39	1.78	1.31
LP2988IM-3.3-ND	3.3V, 200mA Micropower Ultra LDO Reg., 1% Accuracy	SO-8	2.39	1.78	1.31
LP2988IM-5.0-ND	5.0V, Micropower 200mA Ultra LDO Low Noise Regulator 1% Accuracy	SO-8	2.39	1.78	1.31
LP2988IMM-2.5CT-ND	2.5V, Micropower 200mA Ultra LDO Reg with Program Power-On Reset Delay	8-MSOP	2.54	1.89	1.40
LP2988IMM-2.5TR-ND	2.5V, Micropower 200mA Ultra LDO Reg with Program Power-On Reset Delay	8-MSOP	1049.60/1,000		
LP2988IMM-3.0CT-ND	3V, Micropower 200mA Ultra Low LDO Reg with Program Power-On Reset Delay	8-MSOP	2.54	1.89	1.40
LP2988IMM-3.0TR-ND	3V, Micropower 200mA Ultra Low LDO Reg with Program Power-On Reset Delay	8-MSOP	1049.60/1,000		
LP2988IMM-3.3CT-ND	3.3V, 200mA Micropower Ultra LDO Low Noise Regulator 1% Accuracy	8-MSOP	2.54	1.89	1.40
LP2988IMM-3.3TR-ND	3.3V, 200mA Micropower Ultra LDO Low Noise Regulator 1% Accuracy	8-MSOP	276.75/250		
LP2988IMM-5.0CT-ND	5.0V, 200mA Micropower Ultra LDO Low Noise Regulator 1% Accuracy	8-MSOP	2.54	1.89	1.40
LP2988IMM-5.0TR-ND	5.0V, 200mA Micropower Ultra LDO Low Noise Regulator 1% Accuracy	8-MSOP	276.75/250		
LP2989AIM-1.8-ND	1.8V, Micropower 500mA Low Noise LDO Regulator for Applications with Output Volts	SO-8	2.82	2.10	1.55
LP2989AIM-2.5-ND	2.5V, Micropower 500mA Low Noise LDO Regulator for Applications with Output Volts	SO-8	2.82	2.10	1.55
LP2989AIM-3.3-ND	3.3V, Micropower 500mA Low Noise LDO Regulator for Applications with Output Volts	SO-8	2.82	2.10	1.55
LP2989IM-1.8-ND	1.8V, Micropower 500mA Low Noise LDO Regulator for Applications with Output Volts	SO-8	2.67	1.98	1.47
LP2989IM-2.5-ND	2.5V, Micropower 500mA Low Noise LDO Regulator for Applications with Output Volts	SO-8	2.67	1.98	1.47
LP2989IM-3.3-ND	3.3V, Micropower 500mA Low Noise LDO Regulator for Applications with Output Volts	SO-8	2.67	1.98	1.47
LP3470IM5-2.63CT-ND	2.63V, Tiny Power-On Reset Circuit, Ind. Temp.	SOT-23-5	1.71	1.27	.94
LP3470IM5-2.63TR-ND	2.63V, Tiny Power-On Reset Circuit, Ind. Temp.	SOT-23-5	704.00/1,000		
LP3470IM5-2.93CT-ND	2.93V, Tiny Power-On Reset Circuit, Ind. Temp.	SOT-23-5	1.71	1.27	.94
LP3470IM5-2.93TR-ND	2.93V, Tiny Power-On Reset Circuit, Ind. Temp.	SOT-23-5	704.00/1,000		
LP3470IM5-3.08CT-ND	3.08V, Tiny Power-On Reset Circuit, Ind. Temp.	SOT-23-5	1.71	1.27	.94
LP3470IM5-3.08TR-ND	3.08V, Tiny Power-On Reset Circuit, Ind. Temp.	SOT-23-5	704.00/1,000		
LP3470IM5-4.00CT-ND	4V, Tiny Power-On Reset Circuit, Ind. Temp	SOT-23-5	1.71	1.27	.94
LP3470IM5-4.00TR-ND	4V, Tiny Power-On Reset Circuit, Ind. Temp	SOT-23-5	704.00/1,000		
LP3470IM5-4.38CT-ND	4.38V, Tiny Power-On Reset Circuit, Ind. Temp.	SOT-23-5	1.71	1.27	.94
LP3470IM5-4.38TR-ND	4.38V, Tiny Power-On Reset Circuit, Ind. Temp.	SOT-23-5	704.00/1,000		
LP3470IM5-4.63CT-ND	4.63V, Tiny Power-On Reset Circuit, Ind. Temp.	SOT-23-5	1.71	1.27	.94
LP3470IM5-4.63TR-ND	4.63V, Tiny Power-On Reset Circuit, Ind. Temp.	SOT-23-5	704.00/1,000		
LP3470M5-2.63CT-ND	2.63V, Tiny Power-On Reset Circuit	SOT-23-5	1.55	1.15	.85
LP3470M5-2.63TR-ND	2.63V, Tiny Power-On Reset Circuit	SOT-23-5	640.00/1,000		
LP3470M5-2.93CT-ND	2.93V, Tiny Power-On Reset Circuit	SOT-23-5	1.55	1.15	.85
LP3470M5-2.93TR-ND	2.93V, Tiny Power-On Reset Circuit	SOT-23-5	640.00/1,000		
LP3470M5-3.08CT-ND	3.08V, Tiny Power-On Reset Circuit	SOT-23-5	1.55	1.15	.85
LP3470M5-3.08TR-ND	3.08V, Tiny Power-On Reset Circuit	SOT-23-5	640.00/1,000		
LP3470M5-4.00CT-ND	5V, Voltage Monitor with Reset	SOT-23-5	1.55	1.15	.85
LP3470M5-4.00TR-ND	5V, Voltage Monitor with Reset	SOT-23-5	640.00/1,000		
LP3470M5-4.38CT-ND	4.38V, Tiny Power-On Reset Circuit	SOT-23-5	1.55	1.15	.85
LP3470M5-4.38TR-ND	4.38V, Tiny Power-On Reset Circuit	SOT-23-5	640.00/1,000		
LP3470M5-4.63CT-ND	4.63V, Tiny Power-On Reset Circuit	SOT-23-5	1.55	1.15	.85
LP3470M5-4.63TR-ND	4.63V, Tiny Power-On Reset Circuit	SOT-23-5	640.00/1,000		
LP3961EMP-1.8CT-ND	1.8V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	2.98	2.21	1.64
LP3961EMP-1.8TR-ND	1.8V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	1228.80/1,000		
LP3961EMP-2.5CT-ND	2.5V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	2.98	2.21	1.64
LP3961EMP-2.5TR-ND	2.5V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	1228.80/1,000		
LP3961EMP-3.3CT-ND	3.3V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	2.98	2.21	1.64
LP3961EMP-3.3TR-ND	3.3V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	1228.80/1,000		
LP3961EMP-5.0CT-ND	5V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	2.98	2.21	1.64
LP3961EMP-5.0TR-ND	5V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	1228.80/1,000		
LP3961ES-1.8-ND	1.8V, 800mA Fast Ultra LDO Linear Regulator	SOT-263-5	2.73	2.08	1.59
LP3961ES-2.5-ND	2.5V, 800mA Fast Ultra LDO Linear Regulator	SOT-263-5	2.73	2.08	1.59
LP3961ES-3.3-ND	3.3V, 800mA Fast Ultra LDO Linear Regulator	SOT-263-5	2.73	2.08	1.59
LP3961ES-5.0-ND	5V, 800mA Fast Ultra LDO Linear Regulator	SOT-263-5	2.73	2.08	1.59
LP3961ET-1.8-ND	1.8V, 800mA Fast Ultra LDO Linear Regulator	TO-220-5	2.73	2.08	1.59
LP3961ET-2.5-ND	2.5V, 800mA Fast Ultra LDO Linear Regulator	TO-220-5	2.73	2.08	1.59
LP3961ET-3.3-ND	3.3V, 800mA Fast Ultra LDO Linear Regulator	TO-220-5	2.73	2.08	1.59
LP3961ET-5.0-ND	5V, 800mA Fast Ultra LDO Linear Regulator	TO-220-5	2.73	2.08	1.59
LP3962EMP-1.8CT-ND	1.8V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	2.88	2.19	1.67
LP3962EMP-1.8TR-ND	1.8V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	1449.00/1,000		
LP3962EMP-2.5CT-ND	2.5V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	2.88	2.19	1.67
LP3962EMP-2.5TR-ND	2.5V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	1449.00/1,000		
LP3962EMP-3.3CT-ND	3.3V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	2.88	2.19	1.67
LP3962EMP-3.3TR-ND	3.3V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	1449.00/1,000		
LP3962EMP-5.0CT-ND	5V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	2.88	2.19	1.67
LP3962EMP-5.0TR-ND	5V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	1449.00/1,000		
LP3962ES-1.8-ND	1.8V, 1.5A Fast Ultra LDO Linear Regulator	TO-263-5	3.25	2.47	1.89
LP3962ES-2.5-ND	2.5V, 1.5A Fast Ultra LDO Linear Regulator	TO-263-5	3.25	2.47	1.89
LP3962ES-3.3-ND	3.3V, 1.5A Fast Ultra LDO Linear Regulator	TO-263-5	3.25	2.47	1.89
LP3962ES-5.0-ND	5V, 1.5A Fast Ultra LDO Linear Regulator	TO-263-5	3.25	2.47	1.89
LP3962ET-1.8-ND	1.8V, 1.5A Fast Ultra LDO Linear Regulator	TO-220-5	3.25	2.47	1.89
LP3962ET-2.5-ND	2.5V, 1.5A Fast Ultra LDO Linear Regulator	TO-220-5	3.25	2.47	1.89
LP3962ET-3.3-ND	3.3V, 1.5A Fast Ultra LDO Linear Regulator	TO-220-5	3.25	2.47	1.89
LP3962ET-5.0-ND	5V, 1.5A Fast Ultra LDO Linear Regulator	TO-220-5	3.25	2.47	1.89
LP3963ES-1.8-ND	1.8V, 3A Fast Ultra LDO Linear Regulator	TO-263-5	4.13	3.14	2.40
LP3963ES-2.5-ND	2.5V, 3A Fast Ultra LDO Linear Regulator	TO-263-5	4.13	3.14	2.40
LP3963ES-3.3-ND	3.3V, 3A Fast Ultra LDO Linear Regulator	TO-263-5	4.13	3.14	2.40
LP3963ES-5.0-ND	5V, 3A Fast Ultra LDO Linear Regulator	TO-263-5	4.13	3.14	2.40
LP3963ET-1.8-ND	1.8V, 3A Fast Ultra LDO Linear Regulator	TO-220-5	4.13	3.14	2.40
LP3963ET-2.5-ND	2.5V, 3A Fast Ultra LDO Linear Regulator	TO-220-5	4.13	3.14	2.40
LP3963ET-3.3-ND	3.3V, 3A Fast Ultra LDO Linear Regulator	TO-220-5	4.13	3.14	2.40
LP3963ET-5.0-ND	5V, 3A Fast Ultra LDO Linear Regulator	TO-220-5	4.13	3.14	2.40
LP3964EMP-1.8CT-ND	1.8V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	2.98	2.21	1.64
LP3964EMP-1.8TR-ND	1.8V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	1228.80/1,000		
LP3964EMP-2.5CT-ND	2.5V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	2.98	2.21	1.64
LP3964EMP-2.5TR-ND	2.5V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	1228.80/1,000		
LP3964EMP-3.3CT-ND	3.3V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	2.98	2.21	1.64
LP3964EMP-3.3TR-ND	3.3V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	1228.80/1,000		
LP3964EMP-5.0CT-ND	5V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	2.98	2.21	1.64
LP3964EMP-5.0TR-ND	5V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	1228.80/1,000		
LP3964EMP-ADJCT-ND	Adj., 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	2.98	2.21	1.64
LP3964EMP-ADJTR-ND	Adj., 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	1228.80/1,000		
LP3964ES-1.8-ND	1.8V, 800mA Fast Ultra LDO Linear Regulator	TO-263-5	2.73	2.08	1.59
LP3964ES-2.5-ND	2.5V, 800mA Fast Ultra LDO Linear Regulator	TO-263-5	2.73	2.08	1.59
LP3964ES-3.3-ND	3.3V, 800mA Fast Ultra LDO Linear Regulator	TO-263-5	2.73	2.08	1.59
LP3964ES-5.0-ND	5V, 800mA Fast Ultra LDO Linear Regulator	TO-263-5	2.73	2.08	1.59
LP3964ES-ADJ-ND	Adj., 800mA Fast Ultra LDO Linear Regulator	TO-263-5	2.73	2.08	1.59
LP3964ET-1.8-ND	1.8V, 800mA Fast Ultra LDO Linear Regulator	TO-220-5	2.73	2.08	1.59
LP3964ET-2.5-ND	2.5V, 800mA Fast Ultra LDO Linear Regulator	TO-220-5	2.73	2.08	1.59
LP3964ET-3.3-ND	3.3V, 800mA Fast Ultra LDO Linear Regulator	TO-220-5	2.73	2.08	1.59
LP3964ET-5.0-ND	5V, 800mA Fast Ultra LDO Linear Regulator	TO-220-5	2.73	2.08	1.59
LP3964ET-ADJ-ND	Adj., 800mA Fast Ultra LDO Linear Regulator	TO-220-5	2.73	2.08	1.59
LP3965EMP-ADJCT-ND	Adj., 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	2.88	2.19	1.67
LP3965EMP-ADJTR-ND	Adj., 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	1449.00/1,000		
LP3965EMP-1.8CT-ND	1.8V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	2.88	2.19	1.67
LP3965EMP-1.8TR-ND	1.8V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	1449.00/1,000		
LP3965EMP-2.5CT-ND	2.5V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	2.88	2.19	1.67
LP3965EMP-2.5TR-ND	2.5V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	1449.00/1,000		
LP3965EMP-3.3CT-ND	3.3V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	2.88	2.19	1.67
LP3965EMP-3.3TR-ND	3.3V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	1449.00/1,000		
LP3965EMP-5.0CT-ND	5V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	2.88	2.19	1.67
LP3965EMP-5.0TR-ND	5V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	1449.00/1,000		
LP3965ES-1.8-ND	1.8V, 1.5A Fast Ultra LDO Linear Regulator	TO-263-5	3.25	2.47	1.89
LP3965ES-2.5-ND	2.5V, 1.5A Fast Ultra LDO Linear Regulator	TO-263-5	3.25	2.47	1.89
LP3965ES-3.3-ND	3.3V, 1.5A Fast Ultra LDO Linear Regulator	TO-263-5	3.25	2.47	1.89
LP3965ES-5.0-ND	5V, 1.5A Fast Ultra LDO Linear Regulator	TO-263-5	3.25	2.47	1.89
LP3965ES-ADJ-ND	Adj., 1.5A Fast Ultra LDO Linear Regulator	TO-263-5	3.25	2.47	1.89
LP3965ET-ADJ-ND	Adj., 1.5A Fast Ultra LDO Linear Regulator	TO-220-5	3.25	2.47	1.89
LP3965ET-1.8-ND	1.8V, 1.5A Fast Ultra LDO Linear Regulator	TO-220-5	3.25	2.47	1.89
LP3965ET-2.5-ND	2.5V, 1.5A Fast Ultra LDO Linear Regulator	TO-220-5	3.25	2.47	1.89
LP3965ET-3.3-ND	3.3V, 1.5A Fast Ultra LDO Linear Regulator	TO-220-5	3.25	2.47	1.89
LP3965ET-5.0-ND	5V, 1.5A Fast Ultra LDO Linear Regulator	TO-220-5	3.25	2.47	1.89
LP3966ES-ADJ-ND	Adj., 3A Fast Ultra LDO Linear Regulator	TO-263-5	4.13	3.14	2.40
LP3966ES-1.8-ND	1.8V, 3A Fast Ultra LDO Linear Regulator	TO-263-5	4.13	3.14	2.40
LP3966ES-2.5-ND	2.5V, 3A Fast Ultra LDO Linear Regulator	TO-263-5	4.13	3.14	2.40
LP3966ES-3.3-ND	3.3V, 3A Fast Ultra LDO Linear Regulator	TO-263-5	4.13	3.14	2.40
LP3966ES-5.0-ND	5V, 3A Fast Ultra LDO Linear Regulator	TO-263-5	4.13	3.14	2.40
LP3966ET-ADJ-ND	Adj., 3A Fast Ultra LDO Linear Regulator	TO-220-5	4.13	3.14	2.40
LP3966ET-1.8-ND	1.8V, 3A Fast Ultra LDO Linear Regulator	TO-220-5	4.13	3.14	2.40
LP3966ET-2.5-ND	2.5V, 3A Fast Ultra LDO Linear Regulator	TO-220-5	4.13	3.14	2.40
LP3966ET-3.3-ND	3.3V, 3A Fast Ultra LDO Linear Regulator	TO-220-5	4.13	3.14	2.40
LP3966ET-5.0-ND	5V, 3A Fast Ultra LDO Linear Regulator	TO-220-5	4.13	3.14	2.40
LPC660AIM-ND	Low Power Quad CMOS Op Amp, A Grade	SO-14	3.13	2.38	1.82
LPC660IM-ND	Low Power Quad CMOS Op Amp	SO-14	2.53	1.92	1.47
LPC661IM-ND	Low Power Quad CMOS Op Amp	SO-8	1.84	1.35	.98
LPC662AIM-ND	Low Power Dual CMOS Op Amp, A Grade	SO-8	3.04	2.26	1.67
LPC662IM-ND	Low Power Quad CMOS Op Amp	SO-8	2.08	1.55	1.14
LPV321M5CT-ND	Single General Purpose Low Volt, Low Power, R/R Output Op Amp	SOT-23-5	1.13	.83	.60
LPV321M5TR-ND	Single General Purpose Low Volt, Low Power, R/R Output Op Amp	SOT-23-5	390.00/1,000		
LPV321M7CT-ND	Single General Purpose Low Volt, Low Power, R/R Output Op Amp	SC-70-5	1.13	.83	.60
LPV321M7TR-ND	Single General Purpose Low Volt, Low Power, R/R Output Op Amp	SC-70-5	390.00/1,000		
LPV324M-ND	Quad General Purpose Low Volt, Low Power, R/R Output Op Amp	SO-14	1.28	.94	.68
LPV324MT-ND	Quad General Purpose Low Volt, Low Power, R/R Output Op Amp	14-TSSOP	1.28	.94	.68
LPV358M-ND	Dual General Purpose Low Volt, Low Power, R/R Output Op Amp	SO-8	1.16	.86	.62
LPV358MMCT-ND	Dual General Purpose Low Volt, Low Power, R/R Output Op Amp	8-MSOP	1.16	.86	.62
LPV358MMTR-ND	Dual General Purpose Low Volt, Low Power, R/R Output Op Amp	8-MSOP	403.00/1,000		
MAX660M-ND	Switch Capacitor Volt Converter	SO-8	2.17	1.61	1.19
MF10ACN-ND	General Purpose Dual Active Filter, A Grade	20-Dip	4.00	3.04	2.32
MF10CCN-ND	General Purpose Dual Active Filter	20-Dip	3.40	2.59	1.98
MF10CCWM-ND	Universal Monolithic Dual Switched Capacitor Filter	SO-20	3.40	2.59	1.98
MM5452V-ND	Liquid Crystal Display Driver, 32 Segments *NEW!*	44-PLCC	4.88	3.71	2.83
MM5483N-ND	Liquid Crystal Display Driver, 31 Segments *NEW!*	40-Dip	4.65	3.35	2.70

(Continued)

National Semiconductor LINEAR SERIES *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MM58274CN-ND	MPU 24-Hour RealTime Clock	16-Dip	9.36	8.03	7.12
MM145453V-ND	Liquid Crystal Display Driver, 33 Segments *NEW!*	44-PLCC	4.75	3.61	2.76
TL082CM-ND	Wide Bandwidth Dual JFET Input Op Amp	SO-8	.63	.46	.33
TL082CMXTR-ND	Wide Bandwidth Dual JFET Input Op Amp	SO-8	465.50/2,500		
TL082CPNS-ND	Bi-FET Dual Op Amp	8-Dip	.63	.46	.33
9241B-ND	1995 Application Specific Analog Products Contains data on: Audio, Automotive, Video, Special Function		16.00	—	—
9242B-ND	1995 Data Acquisition Data Book Contains data on: D/A and A/D Converters • Active Filters • Voltage References • Temperature Sensors • Sample and Hold • Analog Switches-Multiplexers		18.00	—	—
9243B-ND	1995 Operational Amplifiers Data Book Contains data on: • Buffers • Voltage Comparators • Instrumentation Amps • Op Amps • Surface Mount • Appendixes/Physical Dimensions		17.00	—	—
9244B-ND	1995 Power ICs Data Book Contains data on: • Linear • Motion Control • Low Dropout and Switching Voltage Regulators • Peripheral Drivers • High Current Switches • Surface Mount • Appendixes/Physical Dimensions		12.00	—	—

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VOLTAGE REGULATORS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LM78L18ACZMS-ND	Positive 18 Volt Regulator 100mA	TO-92	.36	.27	.15
LM7824CTMS-ND	Positive 24 Volt Regulator 1 Amp	TO-220	.80	.60	.34
LM78L24ACZMS-ND	Positive 24 Volt Regulator 100mA	TO-92	.36	.27	.15
LM7918CTMS-ND	Negative 18 Volt Regulator 1 Amp	TO-220	.64	.48	.27
LM79L18ACZMS-ND	Negative 18 Volt Regulator 100mA	TO-92	.36	.27	.15
LM7924CTMS-ND	Negative 24 Volt Regulator 1 Amp	TO-220	.64	.48	.27
LM79L24ACZMS-ND	Negative 24 Volt Regulator 100mA	TO-92	.36	.27	.15

National Semiconductor TELECOMMUNICATIONS ICs

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TP3054N-ND	Enhanced Serial Interface CODEC Filter	16-Dip	2.78	2.11	1.61
TP3054WM-ND	Enhanced Serial Interface CODEC Filter	SO-16	2.78	2.11	1.61
TP3410J304-ND	ISDN Basic Access Echo-Cancelling 2B1Q U Transceiver *NEW!*	28-Dip	24.00	22.40	20.80
TP3420AV308-ND	ISDN S/T Interface Device	20-PLCC	14.18	12.15	10.78

Burr-Brown Products from Texas Instruments ANALOG-TO-DIGITAL CONVERTERS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
ADS574JP-ND	12-Bit, 40KHz Sampling CMOS A/D Converter	28-Dip	18.00	16.80	15.60
ADS574KP-ND	12-Bit, 40KHz Sampling CMOS A/D Converter	28-Dip	21.12	19.72	18.31
ADS774JP-ND	12-Bit, 125KHz Sampling CMOS A/D Converter	28-Dip	18.66	17.42	16.18
ADS774JU-ND	12-Bit, 125KHz Sampling CMOS A/D Converter	28-Dip	18.66	17.42	16.18
ADS774KE-ND	12-Bit, 125KHz Sampling CMOS A/D Converter	28-Dip	30.54	28.51	26.47
ADS774KP-ND	12-Bit, 125KHz Sampling CMOS A/D Converter	28-Dip	29.12	27.18	25.24
ADS774KU-ND	12-Bit, 125KHz Sampling CMOS A/D Converter	28-SOIC	30.57	28.54	26.50
ADS800E-ND	12-Bit, 40MHz Sampling A/D Converter	28-SSOP	34.80	32.48	30.16
ADS800U-ND	12-Bit, 40MHz Sampling A/D Converter	28-SOIC	36.54	34.11	31.67
ADS801E-ND	12-Bit, 25MHz Sampling A/D Converter	28-SSOP	25.89	24.17	22.44
ADS801U-ND	12-Bit, 25MHz Sampling A/D Converter	28-SOIC	25.89	24.17	22.44
ADS802E-ND	12-Bit, 10MHz Sampling A/D Converter	28-SSOP	15.44	14.41	13.38
ADS802U-ND	12-Bit, 10MHz Sampling A/D Converter	28-SOIC	15.44	14.41	13.38
ADS803E-ND	12-Bit, 5MHz Sampling A/D Converter	28-SSOP	9.73	8.76	7.77
ADS803U-ND	12-Bit, 5MHz Sampling A/D Converter	28-SOIC	9.73	8.76	7.77
ADS804E-ND	12-Bit, 10MHz Sampling A/D Converter	28-SSOP	13.93	12.54	11.12
ADS804U-ND	12-Bit, 10MHz Sampling A/D Converter	28-SOIC	13.93	12.54	11.12
ADS805E-ND	12-Bit, 20MHz Sampling A/D Converter	28-SSOP	19.34	18.05	16.76
ADS805U-ND	12-Bit, 20MHz Sampling A/D Converter	28-SOIC	19.34	18.05	16.76
ADS807E-ND	12-Bit, 53MHz A/D Converter	28-SSOP	22.62	21.12	19.61
ADS820E-ND	10-Bit, 20MHz Sampling A/D Converter	28-SSOP	8.90	8.01	7.11
ADS820U-ND	10-Bit, 10MHz Sampling A/D Converter	28-SOIC	8.90	8.01	7.11
ADS821E-ND	10-Bit, 40MHz Sampling A/D Converter	28-SSOP	15.44	14.41	13.38
ADS821U-ND	10-Bit, 40MHz Sampling A/D Converter	28-SOIC	15.44	14.41	13.38
ADS822E-ND	10-Bit, 40MHz Sampling A/D Converter	28-SSOP	8.24	6.60	5.57
ADS823E-ND	10-Bit, 60MHz Sampling A/D Converter	28-SSOP	11.06	9.96	8.84
ADS824E-ND	10-Bit, 70MHz Sampling A/D Converter	28-SSOP	12.31	11.09	9.83
ADS825E-ND	10-Bit, 40MHz A/D Converter	28-SSOP	8.24	6.60	5.57
ADS826E-ND	10-Bit, 60MHz A/D Converter	28-SSOP	11.06	9.96	8.84
ADS828E-ND	10-Bit, 75MHz A/D Converter	28-SSOP	13.64	12.29	10.90
ADS830E-ND	8-Bit, 60MHz A/D Converter	20-QSOP	4.82	3.86	3.00
ADS830ETR-ND	8-Bit, 60MHz A/D Converter	20-QSOP	6885.00/2,500		
ADS831E-ND	8-Bit, 80MHz A/D Converter	20-QSOP	5.58	4.47	3.48
ADS831ETR-ND	8-Bit, 80MHz A/D Converter	20-QSOP	7750.00/2,500		
ADS850YCT-ND	14-Bit, 10msps Self-calibrating A/D Converter	48-TQFP	53.20	45.60	41.80
ADS850YTR-ND	14-Bit, 10msps Self-calibrating A/D Converter	48-TQFP	5087.25/250		
ADS900E-ND	10-Bit, 20MHz +3V, Supply A/D Converter with Internal Ref	28-SSOP	5.45	4.36	3.39
ADS901E-ND	10-Bit, 20MHz +3V, Supply A/D Converter	28-SSOP	5.24	4.20	3.27
ADS902E-ND	10-Bit, 30MHz A/D Converter	28-SSOP	6.96	5.57	4.70
ADS930E-ND	8-Bit, 30MHz Sampling A/D Converter with Internal Ref	28-SSOP	4.46	3.57	2.78
ADS931E-ND	8-Bit, 30MHz Sampling A/D Converter	28-SSOP	4.25	3.41	2.65
ADS1201U-ND	High Dynamic Range Modulator	16-SOIC	9.22	7.38	6.23
ADS1210P-ND	24-Bit, Delta-Sigma A/D Converter	18-Dip	12.79	11.52	10.22
ADS1210U-ND	24-Bit, Delta-Sigma A/D Converter	18-SOIC	12.79	11.52	10.22
ADS1211E-ND	24-Bit, Delta-Sigma A/D Converter w/ 4-Channel Input Mux	28-SSOP	14.03	12.63	11.20
ADS1211P-ND	24-Bit, Delta-Sigma A/D Converter w/ 4-Channel Input Mux	24-Dip	13.68	12.32	10.92
ADS1211U-ND	24-Bit, Delta-Sigma A/D Converter w/ 4-Channel Input Mux	24-SOIC	13.68	12.32	10.92
ADS1212P-ND	22-Bit, Delta-Sigma A/D Converter	18-Dip	9.66	8.70	7.72
ADS1212U-ND	22-Bit, Delta-Sigma A/D Converter	18-SOIC	9.66	8.70	7.72
ADS1213E-ND	22-Bit, Delta-Sigma A/D Converter w/ 4-Channel Input Mux	28-SSOP	11.33	10.20	9.05
ADS1213P-ND	22-Bit, Delta-Sigma A/D Converter w/ 4-Channel Input Mux	24-Dip	10.86	9.78	8.68
ADS1213U-ND	22-Bit, Delta-Sigma A/D Converter w/ 4-Channel Input Mux	24-SOIC	11.36	10.23	9.08
ADS1250U-ND	20-Bit, 25KHz A/D, DSP Interface	16-SOIC	9.16	8.25	7.32
ADS1252U-ND	24-Bit, 40KHz A/D Converter	SO-8	8.82	7.06	5.96
ADS1286P-ND	12-Bit, Micropower Sampling A/D Converter	8-Dip	5.72	4.58	3.87
ADS1286PA-ND	12-Bit, 200KHz Unipol A/D Converter	8-Dip	6.42	5.14	4.34
ADS1286U-ND	12-Bit, Micropower Sampling A/D Converter	8-SOIC	5.36	4.29	3.34
ADS1286UA-ND	12-Bit, 200KHz Unipol A/D Converter	8-SOIC	5.34	4.28	3.61
ADS7800JP-ND	12-Bit, 3µS Sampling A/D Converter	24-Dip	31.62	29.52	27.41
ADS7800JU-ND	12-Bit, 3µS Sampling A/D Converter	24-SOIC	33.90	31.64	29.38
ADS7800KP-ND	12-Bit, 3µS Sampling A/D Converter	24-Dip	39.51	36.88	34.25
ADS7800KU-ND	12-Bit, 3µS Sampling A/D Converter	24-SOIC	41.39	38.63	35.87
ADS7804P-ND	12-Bit, 10µS Sampling CMOS A/D Converter	28-Dip	15.84	14.79	13.73
ADS7804PB-ND	12-Bit, 10µS Sampling CMOS A/D Converter	28-Dip	20.58	19.21	17.84
ADS7804U-ND	12-Bit, 10µS Sampling CMOS A/D Converter	28-SOIC	15.84	14.79	13.73
ADS7804UB-ND	12-Bit, 10µS Sampling CMOS A/D Converter	28-SOIC	21.56	20.12	18.69
ADS7805P-ND	16-Bit, 10µs Sampling CMOS A/D Converter	28-Dip .3	24.60	22.96	21.32
ADS7805PB-ND	16-Bit, 10µS Sampling CMOS A/D Converter	28-Dip	32.94	30.75	28.55
ADS7805U-ND	16-Bit, 10µs Sampling CMOS A/D Converter	28-SOIC	24.60	22.96	21.32
ADS7805UB-ND	16-Bit, 10µS Sampling CMOS A/D Converter	28-SOIC	32.94	30.75	28.55
ADS7806P-ND	Low Power 12-Bit Sampling CMOS A/D Converter	28-Dip	15.14	13.64	12.09
ADS7806U-ND	Low Power 12-Bit Sampling CMOS A/D Converter	28-SOIC	15.91	14.33	12.71
ADS7807P-ND	Low Power 16-Bit Sampling CMOS A/D Converter	28-Dip .3	30.90	28.84	26.78
ADS7807PB-ND	Low Power 16-Bit Sampling CMOS A/D Converter	28-Dip	37.53	35.03	32.53
ADS7807U-ND	Low Power 16-Bit Sampling CMOS A/D Converter	28-SOIC	30.90	28.84	26.78
ADS7807UB-ND	Low Power 16-Bit Sampling CMOS A/D Converter	28-SOIC	37.53	35.03	32.53
ADS7808U-ND	12-Bit, 10µS Sampling CMOS A/D Converter	20-SOIC	13.93	12.54	11.12
ADS7808UB-ND	12-Bit, 10µS Sampling CMOS A/D Converter	20-SOIC	16.31	15.22	14.14
ADS7809U-ND	16-Bit, 10µS Sampling CMOS A/D Converter	20-SOIC	24.60	22.96	21.32
ADS7809UB-ND	16-Bit, 10µs Serial CMOS Sampling A/D Converter	20-SOIC	32.94	30.75	28.55
ADS7811U-ND	16-Bit, 250kHz Sampling A/D Converter	28-SOIC	40.80	38.08	35.36
ADS7812P-ND	Low Power, Serial 12-Bit Sampling A/D Converter	16-Dip	14.79	13.32	11.82
ADS7812U-ND	Low Power, Serial 12-Bit Sampling A/D Converter	16-SOIC	14.79	13.32	11.82
ADS7813P-ND	Low Power, Serial 16-Bit Sampling A/D Converter	16-Dip	24.00	22.40	20.80
ADS7813U-ND	Low Power, Serial 16-Bit Sampling A/D Converter	16-SOIC	24.00	22.40	20.80
ADS7815U-ND	16-Bit, 250kHz Sampling CMOS A/D Converter	28-SOIC	24.00	22.40	20.80
ADS7816ECT-ND	12-Bit, High Speed Micropower Sampling A/D Converter	8-MSOP	4.76	3.57	2.38
ADS7816ETR-ND	12-Bit, High Speed Micropower Sampling A/D Converter	8-MSOP	525.25/250		
ADS7816EBCT-ND	12-Bit, 200KHz Micropower Sampling A/D Converter	8-MSOP	4.66	3.99	3.66
ADS7816EBTR-ND	12-Bit, High Speed Micropower Sampling A/D Converter	8-MSOP	588.50/250		
ADS7816ECCT-ND	12-Bit, 200KHz Micropower Sampling A/D Converter	8-MSOP	5.25	4.50	4.13
ADS7816ECTR-ND	12-Bit, High Speed Micropower Sampling A/D Converter	8-MSOP	658.25/250		
ADS7816P-ND	12-Bit, High-Speed Micropower Sampling A/D Converter	8-Dip	3.51	2.81	2.19
ADS7816PB-ND	12-Bit, High Speed Micropower Sampling A/D Converter	8-Dip	3.94	3.15	2.45
ADS7816PC-ND	12-Bit, High Speed Micropower Sampling A/D Converter	8-Dip	4.43	3.55	2.76
ADS7816U-ND	12-Bit, High-Speed Micropower Sampling A/D Converter	8-SOIC	3.51	2.81	2.19
ADS7816UB-ND	12-Bit, High Speed Micropower Sampling A/D Converter	8-SOIC	3.94	3.15	2.45
ADS7816UC-ND	12-Bit, High Speed Micropower Sampling A/D Converter	8-SOIC	4.43	3.55	2.76
ADS7817ECT-ND	12-Bit, Differential Input Micropower, Sampling A/D Conv.	8-MSOP	4.76	3.57	2.38
ADS7817ETR-ND	12-Bit, Differential Input Micropower, Sampling A/D Conv.	8-MSOP	525.25/250		
ADS7817EBCT-ND	12-Bit, 200KHz Differential Micropower Sampling A/D Conv.	8-MSOP	4.66	3.99	3.66
ADS7817EBTR-ND	12-Bit, Differential Input Micropower Sampling A/D Conv	8-MSOP	588.50/250		
ADS7817ECCT-ND	12-Bit, 200KHz Differential Micropower Sampling A/D Conv.	8-MSOP	5.25	4.50	4.13
ADS7817ECTR-ND	12-Bit, Differential Input Micropower Sampling A/D Conv	8-MSOP	658.25/250		
ADS7817P-ND	12-Bit, Differential Input Micropower, Sampling A/D Conv.	8-Dip	6.04	5.25	4.57
ADS7817U-ND	12-Bit, Differential Input Micropower, Sampling A/D Conv	8-SOIC	3.51	2.81	2.19
ADS7817UB-ND	12-Bit Differential Input Micropower Sampling A/D Conv	8-SOIC	3.94	3.15	2.45
ADS7817UC-ND	12-Bit Differential Input Micropower Sampling A/D Conv	8-SOIC	4.43	3.55	2.76
ADS7818ECT-ND	12-Bit, 500KHz A/D Converter (±2 LSB)	8-MSOP	7.36	5.52	3.68
ADS7818ETR-ND	12-Bit, 500KHz A/D Converter (±2 LSB)	8-MSOP	698.25/250		
ADS7818EBCT-ND	12-Bit, 500KHz A/D Converter (±1 LSB)	8-MSOP	8.68	6.51	4.34
ADS7818EBTR-ND	12-Bit, 500KHz A/D Converter (±1 LSB)	8-MSOP	821.25/250		
ADS7818P-ND	12-Bit, 500KHz A/D Converter (±2 LSB)	8-Dip	4.68	3.75	2.92
ADS7818PB-ND	12-Bit, 500KHz A/D Converter (±1 LSB)	8-Dip	5.54	4.43	3.45
ADS7820P-ND	12-Bit, 10µs Sampling CMOS A/D Converter	28-Dip .3	15.66	13.62	11.84
ADS7820U-ND	12-Bit, 10µs Sampling CMOS A/D Converter	28-SOIC	13.66	12.30	10.91
ADS7821P-ND	16-Bit, 10µs Sampling CMOS A/D Converter	28-Dip .3	25.05	23.38	21.71
ADS7821U-ND	16-Bit, 10µs Sampling CMOS A/D Converter	28-SOIC	25.05	23.38	21.71
ADS7821UB-ND	16-Bit, 10µS Sampling CMOS A/D Converter	28-SOIC	32.67	30.50	28.32
ADS7822ECT-ND	12-Bit, 2.7V, Micropower Sampling A/D Converter	8-MSOP	3.56	2.67	1.78
ADS7822ETR-ND	12-Bit, 2.7V, Micropower Sampling A/D Converter	8-MSOP	392.25/250		
ADS7822EBCT-ND	12-Bit, 2.7V, Micropower Sampling A/D Converter	8-MSOP	3.29	2.82	2.59
ADS7822EBTR-ND	12-Bit, 2.7V, Micropower Sampling A/D Converter	8-MSOP	415.75/250		
ADS7822ECCT-ND	12-Bit, 2.7V, Micropower Sampling A/D Converter	8-MSOP	3.68	3.15	2.89
ADS7822ECTR-ND	12-Bit, 2.7V, Micropower Sampling A/D Converter	8-MSOP	458.75/250		
ADS7822P-ND	12-Bit, 2.7V, Micropower Sampling A/D Converter	8-Dip	2.61	2.09	1.63
ADS7822U-ND	12-Bit, 2.7V, Micropower Sampling A/D Converter	8-SOIC	2.61	2.09	1.63
ADS7822UB-ND	12-Bit, 2.7V, Micropower Sampling A/D Converter	8-SOIC	2.77	2.22	1.73
ADS7822UC-ND	12-Bit, 2.7V, Micropower Sampling A/D Converter	8-SOIC	3.08	2.47	1.92
ADS7824P-ND	12-Bit, 4-Channel Sampling CMOS A/D Converter	28-Dip .3	16.39	14.76	13.09
ADS7824PB-ND	12-Bit, 4-Channel Sampling CMOS A/D Converter	28-Dip	16.98	15.85	14.72
ADS7824U-ND	12-Bit, 4-Channel Sampling CMOS A/D Converter	28-SOIC	16.39	14.76	13.09
ADS7824UB-ND	12-Bit, 4-Channel Sampling CMOS A/D Converter	28-SOIC	16.98	15.85	14.72
ADS7825P-ND	16-Bit, 4-Channel Sampling CMOS A/D Converter	28-Dip .3	34.16	31.88	29.61
ADS7825U-ND	16-Bit, 4-Channel Sampling CMOS A/D Converter	28-SOIC	34.16	31.88	29.61
ADS7825UB-ND	16-Bit, 4-Channel Sampling CMOS A/D Converter	28-SOIC	40.02	37.36	34.69
ADS7832BN-ND	12-Bit, 4-Channel Auto-calibrating A/D Converter	28-LCC	19.20	17.92	16.64
ADS7832BP-ND	12-Bit, 4-Channel Auto-calibrating A/D Converter	28-Dip	19.20	17.92	16.64
ADS7834EBCT-ND	12-Bit 500KHz Low Power Sampling A/D Converter	8-MSOP	7.60	6.51	5.97
ADS7834EBTR-ND	12-Bit, High Speed Low Power Sampling A/D Converter	8-MSOP	821.25/250		
ADS7835ECT-ND	12-Bit, 500KHz Bipolar Sampling A/D ±2LSB	8-MSOP	7.32	6.27	5.75
ADS7835ETR-ND	12-Bit, 500KHz Bipolar Sampling A/D ±2LSB	8-MSOP	791.25/250		
ADS7835EBCT-ND	12-Bit, 500KHz Bipolar Sampling A/D ±1LSB	8-MSOP	8.65	7.41	6.80
ADS7835EBTR-ND	12-Bit, 500KHz Bipolar Sampling A/D ±1LSB	8-MSOP	916.50/250		
ADS7841E-ND	12-Bit, 4-Channel Serial Output A/D Converter	16-SSOP	4.50	3.60	2.80
ADS7841EB-ND	12-Bit, 4-Channel Serial Output Sampling A/D Converter	16-SSOP	5.31	4.25	3.31
ADS7841P-ND	12-Bit, 4-Channel Serial Output A/D Converter	16-Dip	4.50	3.60	2.80
ADS7841PB-ND	12-Bit, 4-Channel Serial Output Sampling A/D Converter	16-Dip	5.31	4.25	3.31
ADS7842E-ND	12-Bit, 4-Channel Parallel Output A/D ±2LSB	28-SSOP	5.31	4.25	3.31
ADS7842EB-ND	12-Bit, 4-Channel Parallel Output A/D ±1LSB	28-SSOP	5.56	4.45	3.76
ADS7843E-ND	4-Wire Touch Screen Controller	16-SSOP	3.87	3.10	2.41
ADS7844E-ND	12-Bit, 8-Channel Serial Output ±2LSB	20-QSOP	5.22	4.18	3.25
ADS7844ETR-ND	12-Bit, 8-Channel Serial Output ±2LSB	20-QSOP	7370.00/2,500		
ADS7844EB-ND	12-Bit, 8-Channel Serial Output ±1LSB	20-QSOP	5.48	4.39	3.70
ADS7844EBTR-ND	12-Bit, 8-Channel Serial Output ±1LSB	20-QSOP	8525.00/2,500		
ADS7844N-ND	12-Bit, 8-Channel 200KHz A/D Converter	20-SSOP	5.22	4.18	3.25
ADS7844NB-ND	12-Bit, 8-Channel 200KHz A/D Converter	20-SSOP	5.48	4.39	3.70
ADS7845E-ND	5-Wire Touch Screen Controller	16-SSOP	6.64	5.32	4.49
ADS7846E-ND	4-Wire Touch Screen Controller	16-SSOP	4.16	3.33	2.59
ADS7846N-ND	4-Wire Touch Screen Controller	16-SSOP	4.16	3.33	2.59

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Burr-Brown Products from Texas Instruments

A/D CONVERTERS *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
ADS7852YCT-ND	8 Channel, 12-Bit, Parallel Output A/D ±2LSB	32-TQFP	8.65	7.41	6.80
ADS7852YTR-ND	8 Channel, 12-Bit, Parallel Output A/D ±2LSB	32-TQFP	916.50/250		
ADS7852YBCT-ND	8 Channel, 12-Bit, Parallel Output A/D ±1LSB	32-TQFP	10.22	8.76	8.03
ADS7852YBTR-ND	8 Channel, 12-Bit, Parallel Output A/D ±1LSB	32-TQFP	1085.50/250		
ADS7861E-ND	Dual 12-Bit, 500kHz Simult. Sampling Serial A/D ±2LSB	24-SSOP	6.36	5.09	4.30
ADS7861EB-ND	Dual 12-Bit, 500kHz Simult. Sampling Serial A/D ±1LSB	24-SSOP	7.52	6.02	5.08
ADS7862YCT-ND	Dual 12-Bit, 500kHz Simult. Sampling Parallel A/D ±2LSB	32-TQFP	16.59	14.22	13.04
ADS7862YTR-ND	Dual 12-Bit, 500kHz Simult. Sampling Parallel A/D ±2LSB	32-TQFP	1540.50/250		
ADS7862YBCT-ND	Dual 12-Bit, 500kHz Simult. Sampling Parallel A/D ±1LSB	32-TQFP	19.57	16.77	15.38
ADS7862YBTR-ND	Dual 12-Bit, 500kHz Simult. Sampling Parallel A/D ±1LSB	32-TQFP	1781.75/250		
ADS7864YCT-ND	12-Bit, 500kHz, 6-Channel A/D	48-TQFP	18.90	16.20	14.85
ADS7864YTR-ND	12-Bit, 500kHz, 6-Channel A/D	48-TQFP	1807.25/250		
ADS7864YBCT-ND	12-Bit, 500kHz, 6-Channel A/D	48-TQFP	21.84	18.72	17.16
ADS7864YBTR-ND	12-Bit, 500kHz, 6-Channel A/D	48-TQFP	2087.75/250		
ADS7870EA-ND	12-Bit, Data Acquisition System	28-SSOP	6.56	5.25	4.43
ADS8320ECT-ND	16-Bit, 2.7V to 5V Micropower Serial A/D ±2LSB	8-MSOP	17.96	15.39	14.11
ADS8320ETR-ND	16-Bit, 2.7V to 5V Micropower Serial A/D ±2LSB	8-MSOP	1673.50/250		
ADS8320EBCT-ND	16-Bit, 2.7V to 5V Micropower Serial A/D ±1LSB	8-MSOP	20.09	17.22	15.79
ADS8320EBTR-ND	16-Bit, 2.7V to 5V Micropower Serial A/D ±1LSB	8-MSOP	1874.25/250		
ADS8321ECT-ND	16-Bit, 100kHz Bipolar A/D	8-MSOP	17.96	15.39	14.11
ADS8321ETR-ND	16-Bit, 100kHz Bipolar A/D	8-MSOP	1673.50/250		
ADS8321EBCT-ND	16-Bit, 100kHz Bipolar A/D	8-MSOP	20.09	17.22	15.79
ADS8321EBTR-ND	16-Bit, 100kHz Bipolar A/D	8-MSOP	1874.25/250		
ADS8341E-ND	16-Bit, 4-Channel, Serial A/D	16-SSOP	9.80	8.82	7.83
ADS8341EB-ND	16-Bit, 4-Channel, Serial A/D	16-SSOP	11.33	10.20	9.05
ADS8344E-ND	16-Bit, 8-Chan. Serial Output Sampling A/D Converter	16-SSOP	10.50	9.45	8.38
ADS8344EB-ND	16-Bit, 8-Chan. Serial Output Sampling A/D Converter	16-SSOP	12.59	11.34	10.06
ADS8344N-ND	16-Bit, 8-Chan. Serial Output Sampling A/D Converter	16-SSOP	10.50	9.45	8.38
ADS8344NB-ND	16-Bit, 8-Chan. Serial Output Sampling A/D Converter	16-SSOP	12.59	11.34	10.06
AFE1144E-ND	HDSL/MDSL Analog Front End	28-SSOP	13.19	11.88	10.54
DDC101U-ND	20-Bit, A/D Converter	24-SOIC	23.93	22.33	20.74
DDC112U-ND	20-Bit, Dual-Input A/D for Photosensors	28-SOIC	16.09	14.49	12.85
DDC112UK-ND	20-Bit, 2-Channel I-Input A/D Converter	28-SOIC	18.47	17.24	16.01
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments

AUDIO ANALOG-TO-DIGITAL CONVERTERS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
PCM78P-ND	16-Bit, Audio A/D Converter, -82dB THD	28-Dip	40.59	37.89	35.18
PCM1750U-ND	Dual 18-Bit Audio D/A Converter	28-SOIC	29.60	27.63	25.65
PCM1760P-ND	Dual 20-Bit, A/D Converter	28-Dip	23.72	22.14	20.56
DF1760P-ND	Digital Filter for PCM1760	28-Dip	18.26	17.04	15.83
PCM1760U-ND	Dual 20-Bit, A/D Converter	28-SOIC	23.72	22.14	20.56
DF1760U-ND	Digital Filter for PCM1760	28-SOIC	18.26	17.04	15.83
PCM1800E-ND	Single-Ended 20-Bit, Stereo A/D	24-SSOP	5.20	4.16	3.51
PCM1801U-ND	Stereo Audio A/D Converter	14-SOIC	4.46	3.57	2.78
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments

DSP COMPATIBLE ANALOG-TO-DIGITAL CONVERTERS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DSP101JP-ND	DSP-Compatible Sampling A/D Converter, -86dB THD	28-Dip	44.31	41.36	38.41
DSP101KP-ND	DSP-Compatible Sampling A/D Converter, -89dB THD	28-Dip	73.31	68.42	63.54
DSP102JP-ND	Dual DSP-Compatible Sampling A/D Converter, -86dB TH	28-Dip	58.29	54.41	50.52
DSP102KP-ND	Dual DSP-Compatible Sampling A/D Converter, -89dB TH	28-Dip	100.77	94.06	87.34
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments

DIGITAL-TO-ANALOG CONVERTERS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DAC712P-ND	16-Bit, D/A Converter with 16-Bit Bus Interface	28-Dip .3	16.49	14.85	13.17
DAC712PB-ND	16-Bit, D/A Converter (16-Bit Bus Interface)	28-Dip	17.66	16.48	15.31
DAC712U-ND	16-Bit, D/A Converter (16-Bit Bus Interface)	28-SOIC	16.49	14.85	13.17
DAC714P-ND	16-Bit, D/A Converter (Serial Data Interface)	16-Dip	16.49	14.85	13.17
DAC714U-ND	16-Bit, D/A Converter (Serial Data Interface)	16-SOIC	16.49	14.85	13.17
DAC715P-ND	16-Bit, D/A Converter (16-Bit Bus Interface)	28-Dip	16.49	14.85	13.17
DAC715U-ND	16-Bit, D/A Converter (16-Bit Bus Interface)	28-SOIC	16.49	14.85	13.17
DAC715UB-ND	16-Bit, D/A Converter (16-Bit Bus Interface)	28-SOIC	17.66	16.48	15.31
DAC716P-ND	16-Bit, D/A Converter	16-Dip	16.49	14.85	13.17
DAC716PB-ND	16-Bit, D/A Converter	16-Dip	17.66	16.48	15.31
DAC716PK-ND	16-Bit, D/A Converter	16-Dip	15.89	14.83	13.77
DAC716U-ND	16-Bit, D/A Converter	16-SOIC	16.49	14.85	13.17
DAC716UB-ND	16-Bit, D/A Converter	16-SOIC	17.66	16.48	15.31
DAC716UK-ND	16-Bit, D/A Converter	16-SOIC	15.89	14.83	13.77
DAC725JP-ND	Dual 16-Bit, D/A Converter	28-Dip	49.46	46.16	42.87
DAC725KP-ND	Dual 16-Bit, D/A Converter	28-Dip	59.45	55.49	51.52
DAC811JU-ND	Microprocessor-Compatible 12-Bit, D/A Converter	28-SOIC	14.38	12.95	11.48
DAC813AU-ND	Microprocessor-Compatible 12-Bit, D/A Converter	28-SOIC	16.01	14.94	13.88
DAC813JP-ND	Microprocessor-Compatible 12-Bit, D/A Converter	28-Dip	15.86	14.28	12.67
DAC813JU-ND	Microprocessor-Compatible 12-Bit, D/A Converter	28-SOIC	14.43	12.99	11.52
DAC900E-ND	10-Bit, 165 MSPS D/A Converter	28-TSSOP	8.24	6.60	5.57
DAC900U-ND	10-Bit, 165 MSPS Current Output D/A Converter	28-SOIC	8.24	6.60	5.57
DAC902E-ND	12-Bit, 165 MSPS D/A Converter	28-TSSOP	10.33	9.30	8.25
DAC902U-ND	12-Bit, 165 MSPS Current Output D/A Converter	28-SOIC	10.33	9.30	8.25
DAC904E-ND	14-Bit, 165 MSPS D/A Converter	28-TSSOP	13.26	11.94	10.59
DAC904U-ND	14-Bit, 165 MSPS Current Output D/A Converter	28-SOIC	13.26	11.94	10.59
DAC908E-ND	8-Bit, 165 MSPS D/A Converter	28-TSSOP	5.04	4.04	3.41
DAC908U-ND	8-Bit, 165 MSPS Current Output D/A Converter	28-SOIC	5.04	4.04	3.41
DAC1220E-ND	20-Bit, Monotonic, Low-Power, Delta-Sigma D/A Converter	16-SSOP	8.33	7.50	6.65
DAC1221E-ND	16-Bit, D/A Converter	16-SSOP	7.92	6.34	5.35
DAC4813AP-ND	Quad 12-Bit, D/A Converter (12-Bit Interface)	28-Dip	41.40	38.64	35.88
DAC4815AP-ND	Quad 12-Bit, D/A Converter, ±1LSB (8-Bit Interface)	28-Dip	34.49	32.19	29.89
DAC7512ECT-ND	12-Bit, Serial Input, Low Power Rail-to-Rail D/A Converter	8-MSOP	3.92	3.36	3.08
DAC7512ETR-ND	12-Bit, Serial Input, Low Power Rail-to-Rail D/A Converter	8-MSOP	372.50/250		
DAC7512NCT-ND	12-Bit, Serial Input, Low Power Rail-to-Rail D/A Converter	SOT-23-6	3.78	3.24	2.97
DAC7512NTR-ND	12-Bit, Serial Input, Low Power Rail-to-Rail D/A Converter	SOT-23-6	359.00/250		
DAC7513ECT-ND	12-Bit, Serial Input, Low Power Rail-to-Rail D/A Converter	8-MSOP	3.92	3.36	3.08
DAC7513ETR-ND	12-Bit, Serial Input, Low Power Rail-to-Rail D/A Converter	8-MSOP	372.50/250		
DAC7513NCT-ND	12-Bit, Serial Input, Low Power Rail-to-Rail D/A Converter	SOT-23-8	3.78	3.24	2.97
DAC7513NTR-ND	12-Bit, Serial Input, Low Power Rail-to-Rail D/A Converter	SOT-23-8	359.00/250		
DAC7541AJP-ND	Quad 12-Bit, CMOS D/A Converter	18-Dip	9.26	8.34	7.40
DAC7541AJU-ND	Quad 12-Bit, CMOS D/A Converter	18-SOIC	9.26	8.34	7.40
DAC7541AKP-ND	Quad 12-Bit, CMOS D/A Converter	18-Dip	10.55	9.50	8.42
DAC7541AKU-ND	Quad 12-Bit, CMOS D/A Converter	18-SOIC	10.55	9.50	8.42
DAC7545GLU-ND	12-Bit, CMOS Multiplying D/A Converter (Microprocessor Compatible)	20-SOIC	15.74	14.69	13.64
DAC7545JU-ND	12-Bit, CMOS Multiplying D/A Converter (Microprocessor Compatible)	20-SOIC	8.95	8.06	7.15
DAC7611P-ND	12-Bit, Serial General Purpose D/A Converter	8-Dip	4.25	3.41	2.65
DAC7611PB-ND	12-Bit, Serial General Purpose D/A Converter	8-Dip	5.02	4.02	3.13
DAC7611U-ND	12-Bit, Serial General Purpose D/A Converter	8-SOIC	4.25	3.41	2.65
DAC7611UB-ND	12-Bit, Serial General Purpose D/A Converter	8-SOIC	5.02	4.02	3.13
DAC7612U-ND	12-Bit, Single/Serial General Purpose D/A Converter	8-SOIC	4.48	3.59	2.79
DAC7612UB-ND	12-Bit, Single/Serial General Purpose D/A Converter	8-SOIC	5.29	4.23	3.29
DAC7613E-ND	12-Bit, Voltage Output Monotonic Parallel D/A ±2LSB	24-SSOP	3.78	3.03	2.36
DAC7613EB-ND	12-Bit, Voltage Output Monotonic Parallel D/A ±1LSB	24-SSOP	4.46	3.57	2.78
DAC7614E-ND	Quad Serial-Input 12-Bit D/A Converter	20-QSOP	8.40	7.56	6.71
DAC7614EB-ND	Quad Serial-Input 12-Bit D/A Converter	20-QSOP	8.98	8.09	7.17
DAC7614P-ND	Quad Serial-Input 12-Bit D/A Converter, ±2 LSB	16-Dip	12.20	10.98	9.74
DAC7614PB-ND	Quad Serial-Input 12-Bit D/A Converter, ±1 LSB	16-Dip	13.19	11.88	10.54
DAC7614U-ND	Quad Serial-Input 12-Bit D/A Converter, ±2 LSB	16-SOIC	12.88	11.60	10.29
DAC7614UB-ND	Quad Serial-Input 12-Bit D/A Converter, ±1 LSB	16-SOIC	13.79	12.42	11.02
DAC7615E-ND	Quad Serial-Input 12-Bit D/A Converter	20-QSOP	8.40	7.56	6.71
DAC7615P-ND	Quad Serial-Input 12-Bit, General Purpose D/A, ±2 LSB	16-Dip	12.20	10.98	9.74
DAC7615PB-ND	Quad Serial-Input 12-Bit, General Purpose D/A, ±1 LSB	16-Dip	13.19	11.88	10.54
DAC7615U-ND	Quad Serial-Input 12-Bit, General Purpose D/A, ±2 LSB	16-SOIC	12.88	11.60	10.29
DAC7615UB-ND	Quad Serial-Input 12-Bit, General Purpose D/A, ±1 LSB	16-SOIC	13.79	12.42	11.02
DAC7621E-ND	12-Bit, Parallel Input D/A Converter, ±2LSB	20-SSOP	4.59	3.68	2.86
DAC7621EB-ND	12-Bit, Parallel Input D/A Converter, ±1LSB	20-SSOP	5.42	4.34	3.38
DAC7624P-ND	12-Bit, Quad D/A Converter, ±2LSB, Mid-Scale Reset	28-Dip	12.20	10.98	9.74
DAC7624PB-ND	12-Bit, Quad D/A Converter, ±1LSB, Mid-Scale Reset	28-Dip	13.19	11.88	10.54
DAC7624U-ND	12-Bit, Quad D/A Converter, ±2LSB, Mid-Scale Reset	28-SOIC	12.88	11.60	10.29
DAC7624UB-ND	12-Bit, Quad D/A Converter, ±1LSB, Mid-Scale Reset	28-SOIC	13.79	12.42	11.02
DAC7625P-ND	12-Bit, Quad D/A Converter, ±2LSB, Zero-Scale Reset	28-Dip	12.20	10.98	9.74
DAC7625PB-ND	12-Bit, Quad D/A Converter, ±1LSB, Zero-Scale Reset	28-Dip	13.19	11.88	10.54
DAC7625U-ND	12-Bit, Quad D/A Converter, ±2LSB, Zero-Scale Reset	28-SOIC	12.88	11.60	10.29
DAC7625UB-ND	12-Bit, Quad D/A Converter, ±1LSB, Zero-Scale Reset	28-SOIC	13.79	12.42	11.02
DAC7631E-ND	16-Bit, Low Power (2.5mW) D/A Converter	20-SSOP	8.80	7.04	5.94
DAC7631EB-ND	16-Bit, Low Power (2.5mW) D/A Converter	20-SSOP	8.66	7.80	6.92
DAC7634E-ND	16-Bit, Quad D/A Converter	48-SSOP	22.50	21.00	19.50
DAC7634EB-ND	16-Bit, Quad D/A Converter	48-SSOP	26.16	24.42	22.68
DAC7641YBCT-ND	16-Bit, 5V, D/A Converter	32-TQFP	19.32	16.56	15.18
DAC7641YBTR-ND	16-Bit, 5V, D/A Converter	32-TQFP	1759.50/250		
DAC7641YCT-ND	16-Bit, 5V, D/A Converter	32-TQFP	16.38	14.04	12.87
DAC7641YTR-ND	16-Bit, 5V, D/A Converter	32-TQFP	1521.00/250		
DAC7644E-ND	16-Bit, Quad/Parallel ±5V, D/A Converter	48-SSOP	22.50	21.00	19.50
DAC7644EB-ND	16-Bit, Quad/Parallel ±5V, D/A Converter	48-SSOP	26.16	24.42	22.68
DAC7714U-ND	12-Bit, Quad, Voltage Output, Serial D/A Converter	16-SOIC	14.33	12.90	11.44
DAC7714UB-ND	12-Bit, Quad, Voltage Output, Serial D/A Converter	16-SOIC	15.73	14.16	12.56
DAC7715U-ND	12-Bit, Quad, Voltage Output, Serial D/A Converter	16-SOIC	14.33	12.90	11.44
DAC7715UB-ND	12-Bit, Quad, Voltage Output, Serial D/A Converter	16-SOIC	15.73	14.16	12.56
DAC7744E-ND	Quad Parallel 16-Bit D/A Converter	48-SSOP	35.49	33.13	30.76
DAC7744EB-ND	Quad Parallel 16-Bit D/A Converter	48-SSOP	39.75	37.10	34.45
DAC7744EC-ND	Quad Parallel 16-Bit D/A Converter	48-SSOP	47.01	43.88	40.75
DAC7734E-ND	Quad Serial 16-Bit, Voltage Output D/A Converter	48-SSOP	35.49	33.13	30.76
DAC7734EB-ND	Quad Serial 16-Bit, Voltage Output D/A Converter	48-SSOP	39.75	37.10	34.45
DAC7734EC-ND	Quad Serial 16-Bit, Voltage Output D/A Converter	48-SSOP	47.01	43.88	40.75
DAC7724N-ND	12-Bit, Quad Parallel D/A Converter	SO-28	16.29	14.67	13.01
DAC7724NB-ND	12-Bit, Quad Parallel D/A Converter	28-PLCC	15.83	14.77	13.72
DAC7724U-ND	12-Bit, Quad Parallel D/A Converter	SO-28	15.66	14.10	12.51
DAC7724UB-ND	12-Bit, Quad Parallel D/A Converter	SO-28	15.23	14.21	13.20
DAC7725N-ND	12-Bit, Quad Parallel D/A Converter	28-PLCC	16.29	14.67	13.01
DAC7725NB-ND	12-Bit, Quad Parallel D/A Converter	28-PLCC	15.83	14.77	13.72
DAC7725UB-ND	12-Bit, Quad Parallel D/A Converter	SO-28	15.23	14.21	13.20
DAC7801KP-ND	Dual 12-Bit Monolithic D/A Converter	24-Dip	16.91	15.78	14.66
DAC7801LP-ND	Dual 12-Bit Monolithic D/A Converter	24-Dip	20.69	19.31	17.93
DAC7802KP-ND	Dual 12-Bit Monolithic D/A Converter	24-Dip	15.68	14.12	12.52
DAC7802LP-ND	Dual 12-Bit Monolithic D/A Converter	24-Dip	23.91	22.32	20.73
DAC8043UC-ND	Serial-Input 12-Bit D/A Converter	8-SOIC	12.93	11.64	10.33
DAC8043U-ND	Serial- Input 12-Bit D/A Converter	8-SOIC	9.93	8.94	7.93
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments

AUDIO DIRECT STREAM DIGITAL DIGITAL-TO-ANALOG CONVERTERS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DSD1700E-ND	Dual Differential 5V, D/A Converter	14-Dip	14.59	13.14	11.66
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments

AUDIO DIGITAL-TO-ANALOG CONVERTERS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
PCM56P-ND	Serial Input 16-Bit, Monolithic D/A Converter, -80dB	16-Dip	9.88	7.91	6.67
PCM56U-ND	16-Bit, Audio D/A Converter	16-SOIC	8.18	6.55	5.53
PCM63P-K-ND	20-Bit, Monolithic Audio D/A, Dual DAC per Channel	28-Dip	27.66	25.82	23.98
PCM1600Y-ND	24-Bit, 96kHz 6-Channel D/A Converter	48-LQFP	9.46	8.52	7.56
PCM1601Y-ND	24-Bit, 96kHz 6-Channel D/A Converter	48-MQFP	9.46	8.52	7.56
PCM1604Y-ND	24-Bit, 192KHz 6-Channel D/A Converter	48-LQFP	10.20	9.18	8.14
PCM1605Y-ND	24-Bit, 192KHz 6-Channel D/A Converter	48-MQFP	10.20	9.18	8.14
PCM1700P-K-ND	Dual 18-Bit, Monolithic Audio D/A Converter, -92dB THD	28-Dip	25.10	22.10	19.45
PCM1702P-ND	BiCMOS Advanced Sign Magnitude 20-Bit D/A -88dB THD	16-Dip	15.36	14.34	13.32
PCM1702P-J-ND	20-Bit, CMOS Advanced Signa Magnitude Audio D/A	16-Dip	17.67	16.50	15.32
PCM1702P-K-ND	20-Bit, CMOS Advanced Signa Magnitude Audio D/A	16-Dip	23.93	22.33	20.74
PCM1702U-K-ND	BiCMOS Advanced Sign Magnitude 20-Bit, D/A -96dB THD	20-SOP	23.93	22.33	20.74
PCM1704U-ND	24-Bit, 96kHz Audio DAC, 0.0030%THD	20-SOIC	16.89	15.77	14.64
PCM1704U-J-ND	24-Bit, 96kHz Audio DAC, 0.0025%THD	20-SOIC	20.33	18.97	17.62
PCM1704U-K-ND	24-Bit, 96kHz Audio DAC, 0.0015%THD	20-SOIC	29.91	27.92	25.93

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Burr-Brown Products from Texas Instruments AUDIO D/A CONVERTERS *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DF1704E-ND	Stereo, 24-Bit, Digital Interpolation Filter for PCM1704	28-SSOP	14.59	13.14	11.66
PCM1716E-ND	24-Bit, Stereo 96kHz Sampling D/A Converter	28-SSOP	5.20	4.16	3.51
PCM1717E-ND	Stereo Audio D/A Converter	20-SSOP	5.54	4.44	3.74
PCM1718E-ND	Stereo Audio D/A Converter, -90dB THD	20-SSOP	5.54	4.44	3.74
PCM1719E-ND	Stereo Audio D/A Converter, -88dB THD	28-SSOP	7.30	5.84	4.93
PCM1720E-ND	Stereo Audio D/A Converter MPEG2/AC-3 Compatible	20-SSOP	4.46	3.57	2.78
PCM1723E-ND	Stereo D/A Converter with Programmable PLL	24-SSOP	7.30	5.84	4.93
PCM1725U-ND	16-Bit, Stereo 96kHz Sampling D/A Converter	14-SOIC	3.87	3.10	2.41
PCM1727E-ND	Stereo D/A Converter with Programmable Dual PLL	24-SSOP	8.72	6.98	5.89
PCM1728E-ND	24-Bit, 96kHz Stereo Audio DAC	28-SSOP	5.20	4.16	3.51
PCM1733U-ND	18-Bit, Low Cost Stereo D/A Converter	14-SOIC	3.87	3.10	2.41
PCM1737E-ND	192kHz Stereo Audio D/A Converter	28-SSOP	6.08	4.87	4.11
PCM1739E-ND	192kHz Stereo Audio D/A Converter	28-SSOP	6.08	4.87	4.11
PCM1740E-ND	PLL D/A Converter with VCXO	24-SSOP	8.72	6.98	5.89
PCM1744U-ND	24-Bit, Low Cost Stereo D/A Converter	14-SOIC	3.87	3.10	2.41
PCM1748E-ND	24-Bit, Stereo Audio D/A Converter	16-SSOP	4.86	3.89	3.03
PCM1748ETR-ND	24-Bit, Stereo Audio D/A Converter	16-SSOP	5534.00/2,000		
PCM1748KE-ND	24-Bit, Stereo Audio D/A Converter	16-SSOP	5.20	4.16	3.51
PCM1748KETR-ND	24-Bit, Stereo Audio D/A Converter	16-SSOP	6526.00/2,000		
PCM1760U-L-ND	Dual 20-Bit, Audio D/A Converter	28-SOIC	18.98	17.71	16.45
PCM2702E-ND	16-Bit, Stereo Audio D/A Converter	28-SSOP	9.60	7.68	6.48
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments DC-TO-DC CONVERTERS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
	1 Watt				
DCP010505BP-ND	Isolated DC/DC Converter, 5V In, 5V Out	14-Dip	8.42	6.74	5.69
DCP010505BP-U-ND	Isolated DC/DC Converter, 5V In, 5V Out	14-GullWing	8.42	6.74	5.69
DCP010505DBP-ND	Isolated DC/DC Converter, 5V In, Dual ±5V Out	14-Dip	9.26	7.41	6.26
DCP010505DBP-U-ND	Isolated DC/DC Converter, 5V In, Dual ±5V Out	14-GullWing	9.26	7.41	6.26
DCP010512BP-ND	Isolated DC-DC Converter, 5V In, 12V Out	14-Dip	8.42	6.74	5.69
DCP010512BP-U-ND	Isolated DC/DC Converter, 5V In, 12V Out	14-GullWing	8.42	6.74	5.69
DCP010512DBP-ND	Isolated DC/DC Converter, 5V In, Dual 12V Out	14-Dip	9.26	7.41	6.26
DCP010512DBP-U-ND	Isolated DC/DC Converter, 5V In, Dual 12V Out	14-GullWing	9.26	7.41	6.26
DCP010515BP-ND	Isolated DC-DC Converter, 5V In, 15V Out	14-Dip	8.42	6.74	5.69
DCP010515BP-U-ND	Isolated DC/DC Converter, 5V In, 15V Out	14-GullWing	8.42	6.74	5.69
DCP010515DBP-ND	Isolated DC/DC Converter, 5V In, Dual 15V Out	14-Dip	9.26	7.41	6.26
DCP010515DBP-U-ND	Isolated DC/DC Converter, 5V In, Dual 15V Out	14-GullWing	8.42	6.74	5.69
DCP010515P-ND	Mini., 1W, Isolated DC-DC Converter, 5V In/15V Out	14-Dip	9.19	7.10	5.50
DCP011512DBP-ND	Isolated DC/DC Converter, 15V In, Dual ±12V Out	14-Dip	9.26	7.41	6.26
DCP011512DBP-U-ND	Isolated DC/DC Converter, 15V In, Dual ±12V Out	14-GullWing	9.26	7.41	6.26
DCP011515DBP-ND	Isolated DC/DC Converter, 15V In, Dual ±15V Out	14-Dip	9.26	7.41	6.26
DCP011515DBP-U-ND	Isolated DC/DC Converter, 15V In, Dual ±15V Out	14-GullWing	9.26	7.41	6.26
DCP012405BP-ND	Isolated DC/DC Converter, 24V In, 5V Out	14-Dip	8.42	6.74	5.69
DCP012405BP-U-ND	Isolated DC/DC Converter, 24V In, 5V Out	14-GullWing	8.42	6.74	5.69
DCP012415DBP-ND	Isolated DC/DC Converter, 24V In, Dual ±15V Out	14-Dip	9.26	7.41	6.26
DCP012415DBP-U-ND	Isolated DC/DC Converter, 24V In, Dual ±15V Out	14-GullWing	9.26	7.41	6.26
DCR010503P-ND	Isolated DC/DC Converter, 5V to 3V	18-Dip	9.40	7.52	6.35
DCR010505P-ND	Isolated DC/DC Converter, 5V to 5V	18-Dip	9.40	7.52	6.35
DCR011203P-ND	DC/DC Converter, 12V to 3V	18-Dip	9.40	7.52	6.35
DCR011205P-ND	DC/DC Converter, 12V to 5V	18-Dip	9.40	7.52	6.35
DCV010505P-ND	Mini, Isolated DC/DC Converter, 5V In, 5V Out	14-Dip	11.20	10.08	8.94
DCV010505P-U-ND	Mini, Isolated DC/DC Converter, 5V In, 5V Out	14-GullWing	11.20	10.08	8.94
DCV010512DP-ND	Mini, Isolated DC/DC Converter, 5V In, Dual 12V Out	14-Dip	11.90	10.71	9.50
DCV010512DP-U-ND	Mini, Isolated DC/DC Converter, 5V In, Dual 12V Out	14-GullWing	11.90	10.71	9.50
DCV010512P-ND	Mini, Isolated DC/DC Converter, 5V In, 12V Out	14-Dip	11.20	10.08	8.94
DCV010512P-U-ND	Mini, Isolated DC/DC Converter, 5V In, 12V Out	14-GullWing	11.20	10.08	8.94
DCV010515DP-ND	Mini, Isolated DC/DC Converter, 5V In, Dual 15V Out	14-Dip	11.90	10.71	9.50
DCV010515DP-U-ND	Mini, Isolated DC/DC Converter, 5V In, Dual 15V Out	14-GullWing	11.90	10.71	9.50
DCV010515P-ND	Mini, Isolated DC/DC Converter, 5V In, 15V Out	14-Dip	11.20	10.08	8.94
DCV010515P-U-ND	Mini, Isolated DC/DC Converter, 5V In, 15V Out	14-GullWing	11.20	10.08	8.94
DCV011512DP-ND	Mini, Isolated DC/DC Converter, 15V In, Dual 12V Out	14-Dip	11.90	10.71	9.50
DCV011512DP-U-ND	Mini, Isolated DC/DC Converter, 15V In, Dual 12V Out	14-GullWing	11.90	10.71	9.50
DCV011512DP-UTR-ND	Mini, Isolated DC/DC Converter, 15V In, Dual 12V Out	14-GullWing	6335.00/700		
DCV011515DP-ND	Mini, Isolated DC/DC Converter, 15V In, Dual 15V Out	14-Dip	11.90	10.71	9.50
DCV011515DP-U-ND	Mini, Isolated DC/DC Converter, 15V In, Dual 15V Out	14-GullWing	11.90	10.71	9.50
DCV011515DP-UTR-ND	Mini, Isolated DC/DC Converter, 15V In, Dual 15V Out	14-GullWing	6335.00/700		
DCV012405P-ND	Mini, Isolated DC/DC Converter, 24V In, 5V Out	14-Dip	11.20	10.08	8.94
DCV012405P-U-ND	Mini, Isolated DC/DC Converter, 24V In, 5V Out	14-GullWing	11.20	10.08	8.94
DCV012405P-UTR-ND	Mini, Isolated DC/DC Converter, 24V In, 5V Out	14-GullWing	5967.50/700		
DCV012415DP-ND	Mini, Isolated DC/DC Converter, 24V In, Dual 15V Out	14-Dip	11.90	10.71	9.50
DCV012415DP-U-ND	Mini, Isolated DC/DC Converter, 24V In, Dual 15V Out	14-GullWing	11.90	10.71	9.50
DCV012415DP-UTR-ND	Mini, Isolated DC/DC Converter, 24V In, Dual 15V Out	14-GullWing	6335.00/700		
	2 Watt				
DCP020503P-ND	2 Watt DC/DC Converter, 5V In, 3V Out	14-Dip	9.10	8.19	7.27
DCP020503U-ND	2 Watt DC/DC Converter, 5V In, 3V Out	28-SOIC	9.23	8.31	7.37
DCP020505P-ND	2 Watt DC/DC Converter, 5V In, 5V Out	14-Dip	9.10	8.19	7.27
DCP020505U-ND	2 Watt DC/DC Converter, 5V In, 5V Out	28-SOIC	9.23	8.31	7.37
DCP020507P-ND	2 Watt DC/DC Converter, 5V In, 7V Out	14-Dip	9.10	8.19	7.27
DCP020507U-ND	2 Watt DC/DC Converter, 5V In, 7V Out	28-SOIC	9.23	8.31	7.37
DCP020509P-ND	2 Watt DC/DC Converter, 5V In, 9V Out	14-Dip	9.10	8.19	7.27
DCP020509U-ND	2 Watt DC/DC Converter, 5V In, 9V Out	28-SOIC	9.23	8.31	7.37
DCP020515DP-ND	2 Watt DC/DC Converter, 5V In, ±15V Out	14-Dip	9.10	8.19	7.27
DCP020515DU-ND	2 Watt DC/DC Converter, 5V In, ±15V Out	28-SOIC	9.23	8.31	7.37
DCP021205P-ND	2 Watt DC/DC Converter, 12V In, 5V Out	14-Dip	9.10	8.19	7.27
DCP021205U-ND	2 Watt DC/DC Converter, 12V In, 5V Out	28-SOIC	9.23	8.31	7.37
DCP021212DP-ND	2 Watt DC/DC Converter, 12V In, ±12V Out	14-Dip	9.10	8.19	7.27
DCP021212P-ND	2 Watt DC/DC Converter, 12V In, 12V Out	14-Dip	9.10	8.19	7.27
DCP021515P-ND	2 Watt DC/DC Converter, 15V In, 15V Out	14-Dip	9.10	8.19	7.27
DCP022405DP-ND	2 Watt DC/DC Converter, 24V In, ±5V Out	14-Dip	9.10	8.19	7.27
DCP022405P-ND	2 Watt DC/DC Converter, 24V In, 5V Out	14-Dip	9.10	8.19	7.27
DCP022415DP-ND	2 Watt DC/DC Converter, 24V In, ±15V Out	14-Dip	9.10	8.19	7.27
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments AMPLIFIERS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LOG100JP-ND	Precision Logarithmic and Log Ratio Amplifier	14-Dip	103.32	96.44	89.55
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments AUDIO CODECs

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
PCM3000E-ND	Stereo Audio CODEC 18-Bits, 3-Wire Interface	28-SSOP	8.72	6.98	5.89
PCM3001E-ND	Stereo Audio CODEC 18-Bits, Pin Programmable	28-SSOP	8.72	6.98	5.89
PCM3002E-ND	20-Bit, Stereo CODEC, Software Control	24-SSOP	8.72	6.98	5.89
PCM3003E-ND	20-Bit, Stereo CODEC, Hardware Control	24-SSOP	8.72	6.98	5.89
PCM3006T-ND	16-Bit, Stereo CODEC, Single-Ended I/O	24-TSSOP	8.72	6.98	5.89
PCM3500E-ND	Voice/Modem CODEC	24-SSOP	6.08	4.87	4.11
PCM3501E-ND	Voice/Modem CODEC	24-SSOP	6.08	4.87	4.11
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments OP AMPS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
OPA27GP-ND	Compensated, Ultra-Low Noise, Precision Op Amp	8-Dip	2.33	1.86	1.40
OPA27GU-ND	Compensated, Ultra-Low Noise, Precision Op Amp	8-SOIC	2.33	1.86	1.40
OPA37GP-ND	Uncompensated, Ultra-Low Noise, Precision Op Amp	8-Dip	2.38	1.90	1.43
OPA37GU-ND	Uncompensated, Ultra-Low Noise, Prec. Op Amp	8-SOIC	2.38	1.90	1.43
OPA111AM-ND	Low Noise, Precision Op Amp (500µV out)	TO-99	11.93	10.74	9.53
OPA111BM-ND	Low Noise, Precision Op Amp (250µV out)	TO-99	22.97	21.44	19.91
OPA121KU-ND	Low Cost, Precision DiFET Operational Amplifier	8-SOIC	7.64	6.12	5.16
OPA124U-ND	Low Noise, Precision DiFET Operational Amplifier	8-SOIC	5.96	4.77	4.03
OPA124UA-ND	Low Noise Precision DeFET Operational Amplifier	8-SOIC	7.04	5.64	4.76
OPA128JM-ND	DiFET Electrometer-Grade Operational Amplifier	TO-99-8	15.87	14.82	13.76
OPA128KM-ND	DiFET Electrometer-Grade Operational Amplifier	TO-99-8	21.62	20.18	18.74
OPA128SM-ND	DiFET Electrometer-Grade Operational Amplifier	TO-99-8	54.87	51.22	47.56
OPA129U-ND	Ultra-Low Bias Current DiFET Operational Amplifier	8-SOIC	5.04	4.04	3.41
OPA129UB-ND	Ultra-Low Bias Current DiFET Operational Amplifier	8-SOIC	8.56	6.85	5.78
OPA130UA-ND	Low Power, Precision, FET-Input Operational Amplifier	8-SOIC	2.57	2.06	1.60
OPA131U-ND	General Purpose Input Operational Amplifier	8-SOIC	3.87	3.10	2.41
OPA131UA-ND	General Purpose Input Operational Amplifier	8-SOIC	2.30	1.84	1.38
OPA131UJ-ND	General Purpose FET-Input Operational Amplifier	8-SOIC	1.55	1.24	.93
OPA132U-ND	High-Speed FET-Input Operational Amplifier	8-SOIC	5.27	4.22	3.28
OPA132UA-ND	High Speed FET Input Operational Amplifier	8-SOIC	2.63	2.11	1.64
OPA134PA-ND	High Performance Audio Operational Amplifier	8-Dip	1.93	1.54	1.16
OPA134UA-ND	High Performance Audio Operational Amplifier	8-SOIC	1.93	1.54	1.16
OPA137NCT-ND	Low Cost FET-Input Operational Amplifier	SOT-23-5	2.66	2.28	2.09
OPA137NTR-ND	Low Cost FET-Input Operational Amplifier	SOT-23-5	287.00/250		
OPA137NACT-ND	Low Cost FET-Input Operational Amplifier	SOT-23-5	1.72	1.47	1.35
OPA137NATR-ND	Low Cost FET-Input Operational Amplifier	SOT-23-5	185.50/250		
OPA137P-ND	Low Cost FET-Input Operational Amplifier	8-Dip	1.93	1.54	1.16
OPA137PA-ND	Low Cost FET-Input Operational Amplifier	8-Dip	1.44	1.20	.96
OPA137U-ND	Low Cost FET Input Operational Amplifier	8-SOIC	1.93	1.54	1.16
OPA137UA-ND	Low Cost FET-Input Operational Amplifier	8-SOIC	1.44	1.20	.96
OPA177FP-ND	Precision Operational Amplifier	8-Dip	5.31	4.25	3.31
OPA177GP-ND	Precision Operational Amplifier	8-Dip	1.80	1.44	1.08
OPA177GS-ND	Precision Operational Amplifier	8-SOIC	1.80	1.44	1.08
OPA227P-ND	High Precision, Low Noise Operational Amplifier	8-Dip	4.37	3.50	2.72
OPA227PA-ND	High Precision, Low Noise Operational Amplifier	8-Dip	2.20	1.76	1.32
OPA227U-ND	High Precision, Low Noise Operational Amplifier	8-SOIC	4.37	3.50	2.72
OPA227UA-ND	High Precision, Low Noise Operational Amplifier	8-SOIC	2.20	1.76	1.32
OPA228P-ND	Low Noise Precision Operational Amplifier	8-Dip	4.37	3.50	2.72
OPA228PA-ND	Low Noise Precision Operational Amplifier	8-Dip	2.20	1.76	1.32
OPA228U-ND	Low Noise Precision Operational Amplifier	8-SOIC	4.37	3.50	2.72
OPA228UA-ND	Low Noise Precision Operational Amplifier	8-SOIC	2.20	1.76	1.32
OPA234ECT-ND	Single-Supply Operational Amplifier	8-MSOP	4.84	3.63	2.42
OPA234ETR-ND	Single-Supply Operational Amplifier	8-MSOP	428.93/250		
OPA234EACT-ND	Low Power Single Supply Operational Amplifier	8-MSOP	3.12	2.67	2.45
OPA234EATR-ND	Low Power Single Supply Operational Amplifier	8-MSOP	332.50/250		
OPA234P-ND	Single-Supply Operational Amplifier	8-Dip	2.09	1.82	1.59
OPA234PA-ND	Single-Supply Operational Amplifier	8-Dip	1.50	1.30	1.13
OPA234U-ND	Single-Supply Operational Amplifier	8-SOIC	2.72	2.18	1.70
OPA234UA-ND	Single-Supply Operational Amplifier	8-SOIC	2.15	1.72	1.29
OPA237NACT-ND	Single-Supply Operational Amplifier	SOT-23-5	1.84	1.38	.92
OPA237NATR-ND	Single-Supply Operational Amplifier	SOT-23-5	183.75/250		
OPA237UA-ND	Single-Supply Operational Amplifier	8-SOIC	1.32	1.10	.88
OPA241PA-ND	Single-Supply, Micropower, Low Voltage Op Amp	8-Dip	2.33	1.86	1.40
OPA241UA-ND	Single-Supply, Micropower, Low Voltage Op Amp	8-SOIC	2.33	1.86	1.40
OPA244NACT-ND	Single-Supply, Micropower Operational Amplifier	SOT-23-5	1.54	1.32	1.21
OPA244NATR-ND	Single-Supply, Micropower Operational Amplifier	SOT-23-5	156.00/250		
OPA244PA-ND	Single-Supply, Micropower Operational Amplifier	8-Dip	1.29	1.08	.86
OPA244UA-ND	Single-Supply, Micropower Operational Amplifier	8-SOIC	1.29	1.08	.86
OPA251PA-ND	Single-Supply, Micropower Operational Amplifier	8-Dip	2.33	1.86	1.40
OPA251UA-ND	Single-Supply, Micropower Operational Amplifier	8-SOIC	2.33	1.86	1.40
OPA277P-ND	High Precision Operational Amplifier	8-Dip	3.92	3.14	2.44
OPA277PA-ND	High Precision Operational Amplifier	8-Dip	1.98	1.58	1.19
OPA277U-ND	High Precision Operational Amplifier	8-SOIC	3.92	3.14	2.44
OPA277UA-ND	High Precision Operational Amplifier	8-SOIC	1.98	1.58	1.19
OPA336P-ND	Single-Supply, Micropower Operational Amplifierp	8-Dip	2.03	1.62	1.22
OPA336U-ND	Single-Supply, Micropower Operational Amplifier	8-SOIC	1.98	1.58	1.19
OPA336NCT-ND	Single-Supply, Micropower Operational Amplifier	SOT-23-5	2.94	2.52	2.31
OPA336NTR-ND	Single-Supply, Micropower Operational Amplifier	SOT-23-5	315.00/250		
OPA336NACT-ND	Single Supply Micropower Operational Amp	SOT-23-5	2.10	1.80	1.65
OPA336NATR-ND	Micropower Operational Amplifier	SOT-23-5	220.50/250		
OPA336UA-ND	Micropower Operational Amplifier	8-SOIC	1.33	1.06	.80
OPA337EACT-ND	Single Supply CMOS Operational Amp	8-MSOP	1.40	1.20	1.10
OPA337EATR-ND	Single Supply CMOS Operational Amp	8-MSOP	157.50/250		
OPA337NACT-ND	Single Supply CMOS Operational Amp	SOT-23-5	1.26	1.08	.99
OPA337NATR-ND	Single Supply CMOS Operational Amplifier	SOT-23-5	146.25/250		
OPA337PA-ND	Rail-to-Rail CMOS Operational Amplifier	8-Dip	1.05	.88	.70
OPA337UACT-ND	Single-Supply CMOS Operational Amplifier	8-SOIC	1.33	1.14	1.05
OPA337UA-ND	Rail-to-Rail CMOS Operational Amplifier	8-SOIC	1.17	.98	.78
OPA337UATR-ND	Single-Supply CMOS Operational Amplifier	8-SOIC	1332.50/2,500		
OPA338NACT-ND	Decompensated Single-Supply CMOS Op Amplifier	SOT-23-5	1.26	1.08	.99
OPA338NATR-ND	Decompensated Single-Supply CMOS Op Amplifier	SOT-23-5	146.25/250		
OPA338UA-ND	Decompensated Single-Supply CMOS Op Amplifier	8-SOIC	1.17	.98	.78
OPA340NACT-ND	Single-Supply, Rail-to-Rail Operational Amplifier	SOT-23-5	2.28	1.95	1.79
OPA340NATR-ND	Single-Supply, Rail-to-Rail Operational Amplifier	SOT-23-5	241.50/250		
OPA340UA-ND	Single-Supply, Rail-to-Rail Operational Amplifier	8-SOIC	1.45	1.16	.87
OPA342NACT-ND	Low Cost Micropower Rail-to-Rail Op Amplifier	SOT-23-5	1.96	1.68	1.54
OPA342NATR-ND	Low Cost Micropower Rail-to-Rail Op Amplifier	SOT-23-5	210.00/250		
OPA342UA-ND	Low Cost Micropower Rail-to-Rail Op Amplifier	8-SOIC	1.28	1.02	.77
OPA343NACT-ND	Single Supply Operational Amplifier	SOT-23-5	1.65	1.41	1.30
OPA343NATR-ND	Single Supply Operational Amplifier	SOT-23-5	206.50/250		

(Continued)

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Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
OPA343UA-ND	Single Supply Operational Amplifier	8-SOIC	1.25	1.00	.75
OPA344NACT-ND	Single Supply Operational Amp	SOT-23-5	2.21	1.89	1.74
OPA344NATR-ND	Single Supply Operational Amp	SOT-23-5	238.00/250		
OPA344PA-ND	Single Supply Operational Amp	8-Dip	1.48	1.18	.89
OPA344UA-ND	Single Supply Operational Amp	SO-8-50	1.48	1.18	.89
OPA345NACT-ND	Single Supply Operational Amp	SOT-23-5	2.21	1.89	1.74
OPA345NATR-ND	Single Supply Operational Amp	SOT-23-5	238.00/250		
OPA345UA-ND	Single Supply Operational Amp	SO-8-50	1.48	1.18	.89
OPA347NACT-ND	Rail-to-Rail Operational Amp	SOT-23-5	1.44	1.23	1.13
OPA347NATR-ND	Rail-to-Rail Operational Amp	SOT-23-5	165.00/250		
OPA347PA-ND	Rail-to-Rail Operational Amp	8-Dip	1.23	1.03	.82
OPA347UA-ND	Rail-to-Rail Operational Amp	SO-8-50	1.23	1.03	.82
OPA347UATR-ND	Rail-to-Rail Operational Amp	SO-8-50	1332.50/2,500		
OPA349NACT-ND	Rail-to-Rail Operational Amp	SOT-23-5	1.79	1.53	1.41
OPA349NATR-ND	Rail-to-Rail Operational Amp	SOT-23-5	192.50/250		
OPA349UA-ND	Rail-to-Rail Operational Amp	SO-8	1.28	1.02	.77
OPA350EACT-ND	High-Speed, Single-Supply CMOS Op Amp (35MHz)	8-MSOP	3.78	3.24	2.97
OPA350EATR-ND	High-Speed, Single-Supply CMOS Op Amp (35MHz)	8-MSOP	385.75/250		
OPA350PA-ND	High-Speed, Single-Supply CMOS Op Amp (35MHz)	8-Dip	2.41	1.93	1.50
OPA350UA-ND	High-Speed, Single-Supply CMOS Op Amp (35MHz)	8-SOIC	2.41	1.93	1.50
OPA353NACT-ND	High Speed, Single-Supply R/R CMOS Op Amp	SOT-23-5	3.05	2.61	2.40
OPA353NATR-ND	High Speed, CMOS Operational Amplifier	SOT-23-5	325.50/250		
OPA353UA-ND	High-Speed, Single-Supply, R/R CMOS Op Amp (35MHz)	8-SOIC	2.13	1.70	1.28
OPA404KP-ND	Quad High Speed, Precision DiFET Op Amp	14-Dip	10.08	9.08	8.05
OPA404KU-ND	Quad High Speed, Precision DiFET Op Amp	16-SOIC	9.46	8.52	7.56
OPA445AU-ND	High Voltage Operational Amplifier	8-SOIC	4.61	3.69	2.87
OPA452FA-ND	80V 50mA Operational Amplifier	7-DDPAK	4.48	3.59	2.79
OPA452TA-1-ND	80V 50mA Operational Amplifier	TO-220-7-ZIP	4.48	3.59	2.79
OPA452TA-ND	80V 50mA Operational Amplifier	TO-220-7	4.48	3.59	2.79
OPA453FA-ND	80V 50mA Operational Amplifier	7-DDPAK	4.48	3.59	2.79
OPA453TA-1-ND	80V 50mA Operational Amplifier	TO-220-7-ZIP	4.48	3.59	2.79
OPA453TA-ND	80V 50mA Operational Amplifier	TO-220-7	4.48	3.59	2.79
OPA501AM-ND	High Voltage High Current Operational Amplifier	TO-3-8	59.21	55.26	51.32
OPA544F-ND	High Voltage High Current Operational Amplifier	5-DDPAK	8.80	7.92	7.03
OPA602AP-ND	High-Speed, Precision DiFET Operational Amplifier	8-Dip	5.70	4.56	3.85
OPA602AU-ND	High-Speed, Precision DiFET Op Amplifier	8-SOIC	6.24	5.00	4.22
OPA602BP-ND	High Speed, Precision DiFET Operational Amplifier	8-Dip	9.16	7.33	6.19
OPA603AP-ND	High-Speed, Current-Feedback Operational Amplifier	8-Dip	7.44	5.96	5.03
OPA603AU-ND	High Speed, Current-Feedback Operational Amplifier	16-SOIC	7.44	5.96	5.03
OPA604AP-ND	FET-Input, Low Distortion Operational Amplifier	8-Dip	1.98	1.58	1.19
OPA604AU-ND	Quad General Purpose FET Input Operational Amp	8-SOIC	1.98	1.58	1.19
OPA606KP-ND	Wide Bandwidth DiFET Operational Amplifier	8-Dip	5.60	4.49	3.49
OPA620KP-ND	Wideband, Precision Operational Amplifier	8-Dip	9.60	8.64	7.67
OPA620KU-ND	Wideband, Precision Operational Amplifier	8-SOIC	9.60	8.64	7.67
OPA621KU-ND	Wideband, Precision Operational Amplifier	8-SOIC	9.60	8.64	7.67
OPA627AP-ND	Precision High-Speed DiFET Operational Amplifier	8-Dip	13.33	12.00	10.64
OPA627AU-ND	High Speed, Precision Operational Amplifier	8-SOIC	15.36	13.83	12.27
OPA627BP-ND	Precision High-Speed DiFET Operational Amplifier	8-Dip	20.07	18.74	17.40
OPA627AM-ND	High-Speed Precision Op Amp	TO-99-8	16.34	14.72	13.05
OPA631NCT-ND	Low Power Single Supply Op Amplifier	SOT-23-5	3.68	3.15	2.89
OPA631NTR-ND	Low Power Single Supply Op Amplifier	SOT-23-5	349.25/250		
OPA631U-ND	Low Power Single Supply Op Amplifier	8-SOIC	2.32	1.86	1.45
OPA632NCT-ND	Low Power Rail-to-Rail Op Amplifier with Disable	SOT-23-6	3.68	3.15	2.89
OPA632NTR-ND	Low Power Rail-to-Rail Op Amplifier with Disable	SOT-23-6	349.25/250		
OPA632U-ND	Low Power Rail-to-Rail Op Amplifier with Disable	8-SOIC	2.32	1.86	1.45
OPA634NCT-ND	Wideband, Single Supply Op Amplifier	SOT-23-5	4.24	3.63	3.33
OPA634NTR-ND	Wideband, Single Supply Op Amplifier	SOT-23-5	402.25/250		
OPA634U-ND	Wideband, Single Supply Op Amplifier	8-SOIC	2.68	2.15	1.67
OPA635NCT-ND	Wideband, Rail-to-Rail Op Amplifier with Disable	SOT-23-6	4.24	3.63	3.33
OPA635NTR-ND	Wideband, Rail-to-Rail Op Amplifier with Disable	SOT-23-6	402.25/250		
OPA635U-ND	Wideband, Rail-to-Rail Op Amplifier with Disable	8-SOIC	2.68	2.15	1.67
OPA637AP-ND	Precision High-Speed DiFET Operational Amplifier	8-Dip	13.33	12.00	10.64
OPA637AU-ND	Precision High Speed Operational Amplifier	8-SOIC	15.36	13.83	12.27
OPA637BP-ND	Precision High-Speed DiFET Operational Amplifier	8-Dip	20.07	18.74	17.40
OPA640U-ND	Wideband, Voltage Feedback Op Amplifier	8-SOIC	8.83	7.95	7.05
OPA640UB-ND	High Speed Operational Amplifier	8-SOIC	11.36	10.23	9.08
OPA642NCT-ND	Wideband, Low Distortion, Low Gain Op Amplifier	SOT-23-5	10.57	9.06	8.31
OPA642NTR-ND	Wideband, Low Distortion, Low Gain Op Amplifier	SOT-23-5	981.50/250		
OPA642NBCT-ND	Wideband, Voltage Feedback Operational Amplifier	SOT-23-5	14.98	12.84	11.77
OPA642NBTR-ND	Wideband, Voltage Feedback Operational Amplifier	SOT-23-5	1387.75/250		
OPA642P-ND	Wideband, Low Distortion Op Amp -95dBc @ 5MHz	8-Dip	6.00	4.80	4.05
OPA642PB-ND	Wideband, Low Distortion Operational Amplifier	8-Dip	8.52	6.82	5.76
OPA642U-ND	Wideband, Low Distortion Op Amp -95dBc @ 5MHz	8-SOIC	6.00	4.80	4.05
OPA642UB-ND	Wideband, Low Distortion Operational Amplifier	8-SOIC	8.52	6.82	5.76
OPA643NCT-ND	Wideband, Low Distortion, High Gain Op Amplifier	SOT-23-5	11.20	9.60	8.80
OPA643NTR-ND	Wideband, Low Distortion, High Gain Op Amplifier	SOT-23-5	981.50/250		
OPA643NBCT-ND	Wideband, Low Distortion High Gain Op Amp	SOT-23-5	15.33	13.14	12.05
OPA643NBTR-ND	Wideband, Low Distortion High Gain Op Amplifier	SOT-23-5	1387.75/250		
OPA643U-ND	Wideband, Low Distortion Op Amp -90dBc @ 5MHz	8-SOIC	6.00	4.80	4.05
OPA643UB-ND	Wideband, Low Distortion High Gain Op Amplifier	8-SOIC	8.52	6.82	5.76
OPA650NCT-ND	Wideband, Low Pwr, V-Feedback Op Amp Unity Gain Stable	SOT-23-5	3.15	2.63	2.10
OPA650NTR-ND	Wideband, Low Pwr, V-Feedback Op Amp Unity Gain Stable	SOT-23-5	349.25/250		
OPA650P-ND	Wideband, Low Power, Voltage Feedback Op Amp	8-Dip	3.28	2.87	2.49
OPA650U-ND	Wideband, Low Power, Voltage Feedback Op Amp	8-SOIC	2.32	1.86	1.45
OPA651NCT-ND	Wideband, Low Power, Voltage Feedback Op Amp -Gain +2 Optimized	SOT-23-5	4.74	3.95	3.16
OPA651U-ND	Wideband, Low Power, V-Feedback Op Amp -Gain +2 Optimized	8-SOIC	3.51	2.81	2.19
OPA655P-ND	Wideband, FET-Input Operational Amplifier	8-Dip	12.78	11.51	10.21
OPA655U-ND	Wideband, FET-Input Operational Amplifier	8-SOIC	12.78	11.51	10.21
OPA658NCT-ND	Wideband, Low Power, Current-Feedback Op Amplifier	SOT-23-5	3.63	3.03	2.42
OPA658NTR-ND	Wideband, Low Power, Current-Feedback Op Amplifier	SOT-23-5	402.25/250		
OPA658P-ND	Wideband, Low Power, Current-Feedback Op Amp	8-Dip	3.51	2.81	2.19
OPA658U-ND	Wideband, Low Power, Current-Feedback Op Amp	8-SOIC	2.68	2.15	1.67
OPA658UB-ND	Wideband, Low Power Current-Feedback Op Amplifier	8-SOIC	4.23	3.39	2.64
OPA660AP-ND	Wide Bandwidth Transconductance Op Amp and Buffer	8-Dip	8.78	7.03	5.93
OPA660AU-ND	Wide Bandwidth Transconductance Op Amp and Buffer	8-SOIC	7.60	6.08	5.13
OPA671AP-ND	Wide Bandwidth Fast Setting DiFET Operational Amplifier	8-Dip	7.00	5.60	4.73
OPA678AU-ND	Wideband, Switched-Input Operational Amplifier	16-SOIC	9.52	7.62	6.43
OPA680NCT-ND	Wideband, Operational Amplifier with Disable	SOT-23-6	5.08	4.35	3.99
OPA680NTR-ND	Wideband, V-Feedback Operational Amplifier with Disable	SOT-23-6	482.25/250		
OPA680P-ND	Wideband, V-Feedback Operational Amplifier with Disable	8-Dip	3.87	3.10	2.41
OPA680U-ND	Wideband, V-Feedback Operational Amplifier with Disable	8-SOIC	3.22	2.58	2.01
OPA681NCT-ND	Wideband, I-Feedback Operational Amp w/Disable	SOT-23-6	5.08	4.35	3.99
OPA681NTR-ND	Wideband, I-Feedback Operational Amp w/Disable	SOT-23-6	482.25/250		
OPA681P-ND	Wideband, C-Feedback Operational Amplifier with Disable	8-Dip	3.87	3.10	2.41
OPA681U-ND	Wideband, I-Feedback Operational Amplifier with Disable	8-SOIC	3.22	2.58	2.01
OPA682P-ND	Wideband, C-Feedback Operational Amplifier with Disable	8-Dip	3.94	3.15	2.45
OPA682NCT-ND	Wideband, Fixed Gain Buffer Amplifier w/Disable	SOT-23-6	5.15	4.41	4.05
OPA682NTR-ND	Wideband, Fixed Gain Buffer Amplifier w/Disable	SOT-23-6	488.75/250		
OPA682U-ND	Wideband, Fixed Gain Buffer Amplifier with Disable	8-SOIC	3.29	2.63	2.05
OPA685NCT-ND	Ultra High-Speed Operational Amplifier	SOT-23-6	5.36	4.59	4.21
OPA685NTR-ND	Ultra High-Speed Operational Amplifier	SOT-23-6	508.75/250		
OPA685U-ND	Ultra High-Speed Operational Amplifier	8-SOIC	3.40	2.72	2.12
OPA686NCT-ND	Wideband, Low Noise, V-Feedback Operational Amplifier	SOT-23-5	8.16	6.99	6.41
OPA686NTR-ND	Wideband, Low Noise, V-Feedback Operational Amplifier	SOT-23-5	774.75/250		
OPA686U-ND	Wideband, Low Noise, V-Feedback Operational Amplifier	8-SOIC	5.20	4.16	3.24
OPA687NCT-ND	Low Noise High GBP V-Feedback Operational Amplifier	SOT-23-6	9.84	8.43	7.73
OPA687NTR-ND	Low Noise High GBP V-Feedback Operational Amplifier	SOT-23-6	913.25/250		
OPA687U-ND	Wideband, Ultra-Low Noise Voltage Feedback Op Amplifier	8-SOIC	5.58	4.47	3.77
OPA688P-ND	Wideband, Voltage Limiting Operational Amp	8-Dip	5.20	4.16	3.24
OPA688U-ND	Wideband, Voltage Limiting Amplifier	8-SOIC	4.77	3.82	2.97
OPA689P-ND	Wideband, High Gain Voltage Limiting Amplifier	8-Dip	5.20	4.16	3.51
OPA1013CN8-ND	Precision Single-Supply, Dual Operational Amplifier	8-Dip	4.55	3.64	2.83
OPA1013DN8-ND	Precision Single-Supply, Dual Operational Amplifier	8-Dip	3.67	2.94	2.29
OPA2107AU-ND	Dual, DiFET Operational Amplifier	8-SOIC	10.75	9.68	8.58
OPA2130PA-ND	Dual, Low Power, Precision, FET-Input Operational Amp	8-Dip	4.25	3.41	2.65
OPA2130UA-ND	Dual, Low Power, Precision, FET-Input Operational Amp	8-SOIC	4.16	3.33	2.59
OPA2131UA-ND	Dual, General Purpose, FET-Input Operational Amplifier	8-SOIC	3.33	2.67	2.08
OPA2131UJ-ND	Dual, General Purpose, FET-Input Operational Amplifier	8-SOIC	2.52	2.02	1.57
OPA2132P-ND	Dual, High-Speed, FET-Input Operational Amplifier	8-Dip	8.36	6.69	5.65
OPA2132PA-ND	High Speed, FET Input Operational Amplifier	8-Dip	4.48	3.59	2.79
OPA2132U-ND	High Speed, FET Input Operational Amplifier	8-SOIC	8.36	6.69	5.65
OPA2132UA-ND	High Speed, FET Input Operational Amplifier	8-SOIC	4.48	3.59	2.79
OPA2134PA-ND	Dual, High Performance Audio Operational Amplifier	8-Dip	2.40	1.92	1.44
OPA2134UA-ND	Dual, High Performance Audio Operational Amplifier	8-SOIC	2.40	1.92	1.44
OPA2137ECT-ND	Dual, Low Cost FET-Input Operational Amplifier	8-MSOP	2.91	2.49	2.29
OPA2137ETR-ND	Dual, Low Cost FET-Input Operational Amplifier	8-MSOP	311.50/250		
OPA2137EACT-ND	Dual, Low Cost FET-Input Operational Amplifier	8-MSOP	2.00	1.71	1.57
OPA2137EATR-ND	Dual, Low Cost FET-Input Operational Amplifier	8-MSOP	213.50/250		
OPA2137P-ND	Dual, Low Cost FET-Input Operational Amplifier	8-Dip	2.13	1.70	1.28
OPA2137PA-ND	Dual, Low Cost FET-Input Operational Amplifier	8-Dip	1.40	1.12	.84
OPA2137U-ND	Dual, Low Cost FET-Input Operational Amplifier	8-SOIC	2.13	1.70	1.28
OPA2137UA-ND	Dual, Low Cost FET-Input Operational Amplifier	8-SOIC	1.40	1.12	.84
OPA2227P-ND	Dual, High Precision Operational Amplifier	8-Dip	6.58	5.27	4.45
OPA2227PA-ND	Dual, High Precision Operational Amplifier	8-Dip	3.38	2.70	2.10
OPA2227U-ND	Dual, High Precision Operational Amplifier	8-SOIC	6.58	5.27	4.45
OPA2227UA-ND	Dual, High Precision Operational Amplifier	8-SOIC	3.38	2.70	2.10
OPA2228P-ND	Dual, High Precision Operational Amplifier	8-Dip	6.58	5.27	4.45
OPA2228PA-ND	Dual, High Precision Operational Amplifier	8-Dip	3.38	2.70	2.10
OPA2228U-ND	Dual, High Precision Operational Amplifier	8-SOIC	6.58	5.27	4.45
OPA2228UA-ND	Dual, High Precision Operational Amplifier	8-SOIC	3.38	2.70	2.10
OPA2234P-ND	Dual, Low Power, Precision, Single-Supply Op Amp	8-Dip	3.29	2.86	2.49
OPA2234PA-ND	Dual, Low Power, Precision, Single-Supply Op Amp	8-Dip	2.70	2.34	2.04
OPA2234U-ND	Dual, Low Power, Precision, Single-Supply Op Amplifier	8-SOIC	4.25	3.41	2.65
OPA2234UA-ND	Dual, Low Power, Precision, Single-Supply Op Amplifier	8-SOIC	3.49	2.79	2.17
OPA2237EACT-ND	Dual, Single-Supply Operational Amplifier	8-MSOP	3.08	2.31	1.54
OPA2237EATR-ND	Dual, Single-Supply Operational Amplifier	8-MSOP	290.50/250		
OPA2237UA-ND	Dual, Single-Supply Operational Amplifier	8-SOIC	1.88	1.50	1.13
OPA2241PA-ND	Dual, Single-Supply Micropower Operational Amplifier	8-Dip	3.56	2.85	2.22
OPA2241UA-ND	Dual, Single-Supply Micropower Operational Amplifier	8-SOIC	3.56	2.85	2.22
OPA2244EACT-ND	Single Supply Operational Amplifier	8-MSOP	2.52	2.16	1.98
OPA2244EATR-ND	Single Supply Operational Amplifier	8-MSOP	269.50/250		
OPA2244PA-ND	Single-Supply Operational Amplifier	8-Dip	1.78	1.42	1.07
OPA2244UA-ND	Single-Supply Operational Amplifier	8-SOIC	1.78	1.42	1.07
OPA2251PA-ND	Dual, Single-Supply Micropower Operational Amplifier	8-Dip	3.56	2.85	2.22
OPA2251UA-ND	Dual, Single-Supply Micropower Operational Amplifier	8-SOIC	3.56	2.85	2.22
OPA2277P-ND	Dual, High Precision Operational Amplifier	8-Dip	5.94	4.76	4.01
OPA2277PA-ND	Dual, High Precision Operational Amplifier	8-Dip	3.04	2.43	1.89
OPA2277U-ND	Dual, High Precision Operational Amplifier	8-SOIC	5.94	4.76	4.01
OPA2277UA-ND	Dual, High Precision Operational Amplifier	8-SOIC	3.04	2.43	1.89
OPA2336ECT-ND	Dual, Micropower Operational Amp	8-MSOP	4.90	4.20	3.85
OPA2336ETR-ND	Dual, Micropower Operational Amplifier	8-MSOP	502.00/250		
OPA2336EACT-ND	Micropower Operational Amplifier	8-MSOP	3.40	2.91	2.67
OPA2336EATR-ND	Dual, Micropower Operational Amplifier	8-MSOP	342.50/250		
OPA2336P-ND	Dual, Single-Supply, Micropower Operational Amplifier	8-Dip	3.06	2.45	1.91
OPA2336PA-ND	Dual, Micropower Operational Amplifier	8-Dip	2.20	1.76	1.32
OPA2336U-ND	Dual, Single-Supply, Micropower Operational Amplifier	8-SOIC	3.06	2.45	1.91
OPA2336UA-ND	Dual, Micropower Operational Amplifier	8-SOIC	2.20	1.76	1.32
OPA2337EACT-ND	Dual, Single-Supply, MicroSize Operational Amplifier	SOT-23-8	1.65	1.41	1.30
OPA2337EATR-ND	Dual, Single-Supply, MicroSize Operational Amplifier	SOT-23-8	175.00/250		
OPA2337PA-ND	Dual, Single-Supply, CMOS Operational Amplifier	8-Dip	1.25	1.00	.75
OPA2337UA-ND	Dual, Single-Supply, CMOS Operational Amplifier	8-SOIC	1.25	1.00	.75
OPA2338EACT-ND	Dual, OPA338 Operational Amplifier	SOT-23-8	1.65	1.41	1.30
OPA2338EATR-ND	Dual, OPA338 Operational Amplifier	SOT-23-8	175.00/250		
OPA2338UA-ND	Dual, OPA338 Operational Amplifier	8-SOIC	1.25	1.00	.75
OPA2340EACT-ND	Dual, Single-Supply, Rail-to-Rail Operational Amplifier	8-MSOP	3.68	3.15	2.89
OPA2340EATR-ND	Dual, Single-Supply, Rail-to-Rail Operational Amplifier	8-MSOP	372.50/250		
OPA2340PA-ND	Dual, Single-Supply, Rail-to-Rail Operational Amplifier	8-Dip	2.43	1.94	1.46
OPA2340UA-ND	Dual, Single-Supply, Rail-to-Rail Operational Amplifier	8-SOIC	2.43	1.94	1.46
OPA2342EACT-ND	Dual, Micropower Rail-to-Rail Operational Amplifier	8-MSOP	3.08	2.64	2.42
OPA2342EATR-ND	Dual, Micropower Rail-to-Rail Operational Amplifier	8-MSOP	329.00/250		
OPA2342UA-ND	Dual, Micropower Rail-to-Rail Operational Amplifier	8-SOIC	2.03	1.62	1.22
OPA2343EACT-ND	Rail-to-Rail Operational Amp	8-MSOP	2.73	2.34	2.15
OPA2343EATR-ND	Rail-to-Rail Operational Amplifier	8-MSOP	294.00/250		
OPA2343UA-ND	Rail-to-Rail Operational Amplifier	8-SOIC	1.88	1.50	1.13
OPA2344EACT-ND	Rail-to-Rail Operational Amp	8-MSOP	3.61	3.09	2.84
OPA2344EATR-ND	Rail-to-Rail Operational Amp	8-MSOP	365.75/250		
OPA2344PA-ND	Rail-to-Rail Operational Amp	8-Dip	2.43	1.94	1.46
OPA2344UA-ND	Rail-to-Rail Operational Amp	SO-8-50	2.43	1.94	1.46
OPA2345EACT-ND	Rail-to-Rail Operational Amp	8-MSOP	3.61	3.09	2.84
OPA2345EATR-ND	Rail-to-Rail Operational Amp	8-MSOP	365.75/250		
OPA2345UA-ND	Rail-to-Rail Operational Amp	SO-8-50	2.43	1.94	1.46
OPA2347EACT-ND	Rail-to-Rail Operational Amp	SOT-23-8	1.89	1.62	1.49
OPA2347EATR-ND	Rail-to-Rail Operational Amp	SOT-23-8	203.00/250		
OPA2347UA-ND	Rail-to-Rail Operational Amp	SO-8	1.35	1.08	.81
OPA2347UATR-ND	Rail-to-Rail Operational Amp	SO-8	1727.50/2,500		
OPA2349EACT-ND	Micropower Operational Amplifier	SOT-23-8	1.23	1.08	.93
OPA2349EATR-ND	Micropower Operational Amplifier	SOT-23-8	262.50/250		
OPA2349UA-ND	Micropower Operational Amplifier	S0-8	1.75	1.40	1.05
OPA2350EACT-ND	Dual, High-Speed CMOS Operational Amplifier (35MHz)	8-MSOP	6.27	5.37	4.93

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

Burr-Brown Products from Texas Instruments OP AMPS *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
OPA2350EATR-ND	Dual, High-Speed CMOS Operational Amplifier (35MHz)	8-MSOP	638.40/250		
OPA2350PA-ND	Dual, High-Speed CMOS Operational Amplifier (35MHz)	8-Dip	4.03	3.23	2.51
OPA2350UA-ND	Dual, High-Speed CMOS Operational Amplifier (35MHz)	8-SOIC	4.03	3.23	2.51
OPA2353EACT-ND	Low Cost, Dual, High-Speed CMOS Op Amp (35MHz)	8-MSOP	3.47	2.78	2.16
OPA2353EATR-ND	Low Cost, Dual, High-Speed CMOS Op Amp (35MHz)	8-MSOP	475.50/250		
OPA2353UA-ND	Low Cost, Dual, High-Speed CMOS Op Amp (35MHz)	8-SOIC	3.17	2.54	1.98
OPA2604AP-ND	Dual, FET-Input, Low Distortion Operational Amplifier	8-Dip	3.24	2.60	2.02
OPA2604AU-ND	Dual, FET-Input, Low Distortion Operational Amplifier	8-SOIC	3.24	2.60	2.02
OPA2607H-ND	Dual, High Output, Current Feedback Op Amplifier	8-SOIC	5.26	4.21	3.56
OPA2607U-ND	Dual, High Output, Current Feedback Op Amplifier	8-SOIC	5.02	4.02	3.39
OPA2631U-ND	Low Power Single Supply Operational Amplifier	8-SOIC	3.76	3.01	2.34
OPA2634U-ND	Wideband, Single Supply Operational Amplifier	8-SOIC	4.48	3.59	2.79
OPA2650ECT-ND	Dual, Wideband, LP, Voltage Feedback Operational Amp	8-MSOP	5.81	4.98	4.57
OPA2650ETR-ND	Dual, Wideband, LP, Voltage Feedback Operational Amp	8-MSOP	570.00/250		
OPA2650P-ND	Dual, Wideband, LP, Voltage Feedback Operational Amp	8-Dip	5.48	4.39	3.70
OPA2650U-ND	Dual, Wideband, LP, Voltage Feedback Operational Amp	8-SOIC	3.51	2.81	2.19
OPA2652ECT-ND	Dual, Voltage Feedback Operational Amplifier	SOT-23-8	3.61	3.09	2.84
OPA2652ETR-ND	Dual, Voltage Feedback Operational Amplifier	SOT-23-8	379.00/250		
OPA2652U-ND	Dual, Voltage Feedback Operational Amplifier	8-SOIC	2.36	1.89	1.47
OPA2658ECT-ND	Dual, Wideband, Low Power Current Feedback Op Amp	8-MSOP	7.11	6.09	5.59
OPA2658P-ND	Dual, Wideband, LP, Current Feedback Operational Amp	8-Dip	5.48	4.39	3.70
OPA2658U-ND	Dual, Wideband, LP, Current Feedback Operational Amp	8-SOIC	4.30	3.44	2.68
OPA2662AU-ND	Wide Bandwidth, Dual Power Op Transconductance	16-SOIC	7.16	5.73	4.84
OPA2677T-ND	Dual, High Output Operational Amplifier	16-SOIC	5.13	4.11	3.20
OPA2677U-ND	Dual, High Output Operational Amplifier	SO-8	4.55	3.64	2.83
OPA2680N-ND	Dual, Wideband Voltage-Feedback Op Amplifier	14-SOIC	5.38	4.31	3.35
OPA2680U-ND	Dual, Wideband, Current Feedback Op Amp with Disable	8-SOIC	5.20	4.16	3.24
OPA2681N-ND	Dual, Wideband Voltage-Feedback Op Amplifier	14-SOIC	5.38	4.31	3.35
OPA2681U-ND	Dual, Wideband, Current Feedback Op Amp with Disable	8-SOIC	5.20	4.16	3.24
OPA2682N-ND	Dual, Wideband, Fixed Gain Op Amp with Disable	14-SOIC	5.47	4.38	3.41
OPA2682U-ND	Dual, Wideband, Fixed Gain Op Amp with Disable	8-SOIC	5.29	4.23	3.29
OPA2686U-ND	Low Noise Voltage-Feedback Operational Amplifier	8-SOIC	7.34	5.88	4.96
OPA3680ECT-ND	Triple, Wideband, Voltage Feedback Op Amp with Disable	16-SSOP	10.61	9.09	8.34
OPA3680ETR-ND	Triple, Wideband, Voltage Feedback Op Amp with Disable	16-SSOP	984.75/250		
OPA3680U-ND	Triple, Wideband, Voltage Feedback Op Amp with Disable	16-SOIC	6.06	4.85	4.10
OPA3681ECT-ND	Triple, Wideband Current Feedback Operational Amp	16-SSOP	12.12	9.09	6.06
OPA3681ETR-ND	Triple, Wideband Current Feedback Operational Amp	16-SSOP	984.75/250		
OPA3681U-ND	Triple, Wideband Current Feedback Op Amp with Disable	16-SOIC	6.04	4.84	4.08
OPA3682ECT-ND	Triple, Wideband Fixed Gain Operational Amplifier	16-SSOP	10.78	9.24	8.47
OPA3682ETR-ND	Triple, Wideband Fixed Gain Operational Amplifier	16-SSOP	1001.00/250		
OPA3682U-ND	Triple, Wideband Fixed Gain Buffer Amp w/Disable	16-SOIC	6.32	5.06	4.27
OPA4130UA-ND	Quad, Low Power, Precision, FET-Input Operational Amp	14-SOIC	5.68	4.55	3.84
OPA4131NA-ND	Quad, General Purpose FET Input Op Amp	14-SOIC	5.98	4.79	4.04
OPA4131NJ-ND	Quad, General Purpose, FET-Input Operational Amp	14-SOIC	5.04	4.04	3.41
OPA4131PA-ND	Quad, General Purpose FET Input Op Amplifier	14-Dip	5.98	4.79	4.04
OPA4131PJ-ND	Quad, General Purpose, FET-Input Operational Amplifier	14-Dip	5.04	4.04	3.41
OPA4131UA-ND	Quad, General Purpose FET Input Op Amplifier	16-SOIC	5.98	4.79	4.04
OPA4132UA-ND	Quad, High-Speed, FET-Input Operational Amplifier	14-SOIC	7.50	6.00	5.07
OPA4134UA-ND	Quad, High Performance Operational Amplifier	14-SOIC	3.38	2.70	2.10
OPA4137P-ND	Quad, FET-Input Operational Amplifier	14-Dip	2.68	2.15	1.67
OPA4137PA-ND	Quad, FET-Input Operational Amplifier	14-Dip	2.20	1.76	1.32
OPA4137U-ND	Quad, FET-Input Operational Amplifier	14-SOIC	2.68	2.15	1.67
OPA4137UA-ND	Quad, FET-Input Operational Amplifier	14-SOIC	2.20	1.76	1.32
OPA4227PA-ND	Quad, High Precision Operational Amplifier	14-Dip	6.68	5.35	4.51
OPA4227UA-ND	Quad, High Precision Operational Amplifier	14-SOIC	6.68	5.35	4.51
OPA4228PA-ND	Quad, High Precision Operational Amplifier	14-Dip	6.68	5.35	4.51
OPA4228UA-ND	Quad, High Precision Operational Amplifier	14-SOIC	6.68	5.35	4.51
OPA4241PA-ND	Quad, Single-Supply Micropower Operational Amplifier	14-Dip	6.90	5.52	4.66
OPA4241UA-ND	Quad, Single-Supply Micropower Operational Amplifier	14-SOIC	6.90	5.52	4.66
OPA4243EACT-ND	Quad, Single Supply Operational Amplifier	14-TSSOP	4.87	4.17	3.83
OPA4243EATR-ND	Quad, Single Supply Operational Amplifier	14-TSSOP	498.75/250		
OPA4244EACT-ND	Single-Supply Micropower Operational Amplifier	14-TSSOP	6.16	5.28	4.84
OPA4244EATR-ND	Single-Supply Micropower Operational Amplifier	14-TSSOP	628.50/250		
OPA4251PA-ND	Quad, Single-Supply Micropower Operational Amplifier	14-Dip	6.90	5.52	4.66
OPA4251UA-ND	Quad, Single-Supply Micropower Operational Amplifier	14-SOIC	6.90	5.52	4.66
OPA4277PA-ND	Quad, High Precision Operational Amplifier	14-Dip	6.34	5.08	4.28
OPA4277UA-ND	Quad, High Precision Operational Amplifier	14-SOIC	6.34	5.08	4.28
OPA4234PA-ND	Quad, Low Power, Precision, Single-Supply Op Amp	14-Dip	4.93	4.29	3.73
OPA4234U-ND	Quad, LP, Precision, Single-Supply Operational Amplifier	14-SOIC	6.52	5.22	4.41
OPA4234UA-ND	Quad, LP, Precision, Single-Supply Operational Amplifier	14-SOIC	5.68	4.55	3.84
OPA4237UACT-ND	Quad, Single-Supply Operational Amplifier	16-SOIC	6.76	5.07	3.38
OPA4336EACT-ND	Quad, Single-Supply, Micropower Operational Amplifier	16-SSOP	5.95	5.10	4.68
OPA4336EATR-ND	Quad, Single-Supply, Micropower Operational Amplifier	16-SSOP	605.25/250		
OPA4340EACT-ND	Quad, Single-Supply, Rail-to-Rail Operational Amplifier	16-SSOP	6.51	5.58	5.12
OPA4340EATR-ND	Quad, Single-Supply, Rail-to-Rail Operational Amplifier	16-SSOP	661.75/250		
OPA4340UA-ND	Quad, Single-Supply, Rail-to-Rail Operational Amplifier	14-SOIC	4.14	3.32	2.58
OPA4342EACT-ND	Quad, Micropower Rail-to-Rail Operational Amplifier	14-TSSOP	4.62	3.96	3.63
OPA4342EATR-ND	Quad, Micropower Rail-to-Rail Operational Amplifier	14-TSSOP	468.75/250		
OPA4342PA-ND	Quad, Micropower Rail-to-Rail Operational Amplifier	14-Dip	3.13	2.51	1.95
OPA4342UA-ND	Quad, Micropower Rail-to-Rail Operational Amplifier	14-SOIC	3.13	2.51	1.95
OPA4343EACT-ND	Quad, Single-Supply Operational Amplifier	16-SSOP	4.62	3.96	3.63
OPA4343EATR-ND	Quad, Single-Supply Operational Amplifier	16-SSOP	468.75/250		
OPA4343NACT-ND	Quad, Single-Supply Operational Amplifier	14-TSSOP	4.62	3.96	3.63
OPA4343NATR-ND	Quad, Single-Supply Operational Amplifier	14-TSSOP	468.75/250		
OPA4344EACT-ND	Quad, Single-Supply Operational Amplifier	14-TSSOP	5.74	4.92	4.51
OPA4344EATR-ND	Quad, Single-Supply Operational Amplifier	14-TSSOP	585.25/250		
OPA4344PA-ND	Quad, Single-Supply Operational Amplifier	SO-14	3.67	2.94	2.29
OPA4344UA-ND	Quad, Single-Supply Operational Amplifier	SO-14	3.67	2.94	2.29
OPA4345EACT-ND	Quad, Single-Supply Operational Amplifier	14-TSSOP	5.74	4.92	4.51
OPA4345EATR-ND	Quad, Single-Supply Operational Amplifier	14-TSSOP	585.25/250		
OPA4345UA-ND	Quad, Single-Supply Operational Amplifier	SO-14	3.67	2.94	2.29
OPA4347EACT-ND	Quad, Rail-to-Rail Operational Amplifier	14-TSSOP	3.12	2.67	2.45
OPA4347EATR-ND	Quad, Rail-to-Rail Operational Amplifier	14-TSSOP	332.50/250		
OPA4347UA-ND	Quad, Rail-to-Rail Operational Amplifier	SO-14	2.28	1.82	1.37
OPA4347UATR-ND	Quad, Rail-to-Rail Operational Amplifier	SO-14	2945.00/2,500		
OPA4350EACT-ND	High-Speed CMOS Operational Amplifier (35MHz)	16-SSOP	11.52	9.87	9.05
OPA4350EATR-ND	High-Speed CMOS Operational Amplifier (35MHz)	16-SSOP	1147.25/250		
OPA4350UA-ND	High-Speed CMOS Operational Amplifier (35MHz)	14-SOIC	6.80	5.44	4.59
OPA4353EACT-ND	Low Cost, High-Speed CMOS Operational Amplifier	16-SSOP	9.17	7.86	7.21
OPA4353EATR-ND	Low Cost, High-Speed CMOS Operational Amplifier	16-SSOP	913.25/250		
OPA4353UA-ND	Low Cost, High-Speed CMOS Operational Amplifier	14-SOIC	5.36	4.29	3.62
OPA4650P-ND	Quad, Wideband, LP Voltage Feedback Operational Amplifier	14-Dip	8.78	7.03	5.93
OPA4650U-ND	Quad, Wideband, LP Voltage Feedback Operational Amplifier	14-SOIC	7.98	6.39	5.39
OPA4658P-ND	Quad, Wideband, LP Current Feedback Operational Amplifier	14-Dip	9.68	7.75	6.54
OPA4658U-ND	Quad, Wideband, LP Current Feedback Operational Amplifier	14-SOIC	7.98	6.39	5.39

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PGA103U-ND	Programmable Gain Amplifier	8-SOIC	6.40	5.12	4.32
PGA202KP-ND	Digitally Controlled Programmable-Gain Operational Amplifier	14-Dip	10.20	9.18	8.14
PGA203KP-ND	Digitally Controlled Programmable-Gain Operational Amplifier	14-Dip	10.20	9.18	8.14
VCA610U-ND	Wideband Voltage Controlled Amplifier	8-SOIC	15.36	13.83	12.27
VCA610UA-ND	Wideband Voltage Controlled Amplifier	8-SOIC	22.05	20.58	19.11
VCA2612YCT-ND	Dual Low Noise Variable Gain Amplifier	48-TQFP	32.90	28.20	25.85
VCA2612YTR-ND	Dual Low Noise Variable Gain Amplifier	48-TQFP	2996.25/250		
VCA2613YCT-ND	Dual Low Noise Variable Gain Amplifier	48-TQFP	41.13	35.25	32.32
VCA2613YTR-ND	Dual Low Noise Variable Gain Amplifier	48-TQFP	2996.25/250		
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments POWER OPERATIONAL AMPLIFIERS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
OPA445AP-ND	High Voltage Operational Amplifier	8-Dip	7.12	5.70	4.81
OPA512BM-ND	Very-High Current, High Power Operational Amplifier	TO-3-8	73.85	68.93	64.00
OPA541AM-ND	High Power Monolithic Operational Amplifier	TO-3-8	30.30	28.28	26.26
OPA541AP-ND	High Power Monolithic Operational Amplifier	11-PWR-ZIP	14.58	13.13	11.64
OPA544T-ND	High Voltage, High Current Operational Amplifier	TO-220-5	8.80	7.92	7.03
OPA547F-ND	High-Voltage, 60V, High-Current (.5A) Op Amp	DDPAK-7	6.54	5.24	4.42
OPA547T-ND	High-Voltage, 60V, High-Current (.5A) Op Amp	TO-220-7	6.54	5.24	4.42
OPA548F-ND	High-Voltage, 60V, High-Current (3A) Op Amp	DDPAK-7	8.72	6.98	5.89
OPA548T-ND	High-Voltage, 60V, High-Current (3A) Op Amp	TO-220-7	8.72	6.98	5.89
OPA549T-ND	High Voltage, High-Current Operational Amplifier	11-ZIP	14.43	12.99	11.52
OPA551FA-ND	High Current/Power 60V, 200mA Operational Amplifier	7-DDPAK	4.25	3.41	2.65
OPA551PA-ND	High Current/Power 60V, 200mA Operational Amplifier	8-Dip	3.11	2.49	1.94
OPA551UA-ND	High Current/Power 60V, 200mA Operational Amplifier	8-SOIC	3.11	2.49	1.94
OPA552FA-ND	High Current/Power 60V, 200mA Operational Amplifier	7-DDPAK	4.25	3.41	2.65
OPA552PA-ND	High Current/Power 60V, 200mA Operational Amplifier	8-Dip	3.11	2.49	1.94
OPA552UA-ND	High Current/Power 60V, 200mA Operational Amplifier	8-SOIC	3.11	2.49	1.94
OPA2541AM-ND	Dual, High Power Op Amp, 5A Output Current	TO-3	46.71	43.60	40.49
OPA2541BM-ND	Dual, High Power Op Amp, 5A Output Current	TO-3	48.87	45.62	42.36
OPA2544T-ND	Dual, High-Voltage, High-Current Operational Amplifier	11-ZIP	15.04	13.55	12.01
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments INSTRUMENTATION AMPLIFIERS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
INA101HP-ND	Very High Accuracy Instrumentation Amplifier	14-Dip	10.90	9.81	8.70
INA101KU-ND	Very High Accuracy Instrumentation Amplifier	16-SOIC	10.91	9.83	8.72
INA103KP-ND	Low Noise, Low Distortion Instrumentation Amplifier	16-Dip	7.92	6.34	5.35
INA103KU-ND	Low Noise, Low Distortion Instrumentation Amplifier	16-SOIC	7.92	6.34	5.35
INA106U-ND	Precision Fixed-Gain Differential Amplifier	8-SOIC	7.84	6.28	5.30
INA110KP-ND	Fast-Settling, FET-Input Instrumentation Amplifier	16-Dip	9.68	8.72	7.73
INA110KU-ND	Fast-Settling, FET-Input Instrumentation Amplifier	16-SOIC	9.68	8.72	7.73
INA111AP-ND	High Speed FET-Input Instrumentation Amplifier	8-Dip	6.88	5.51	4.65
INA111AU-ND	High Speed FET-Input Instrumentation Amplifier	16-SOIC	6.88	5.51	4.65
INA111BP-ND	High Speed FET-Input Instrumentation Amplifier	8-Dip	9.23	8.31	7.37
INA111BU-ND	High Speed FET-Input Instrumentation Amplifier	16-SOIC	9.23	8.31	7.37
INA114AP-ND	Precision Instrumentation Amplifier	8-Dip	6.24	5.00	4.22
INA114AU-ND	Precision Instrumentation Amplifier	16-SOIC	6.88	5.51	4.65
INA114BP-ND	Precision Instrumentation Amplifier	8-Dip	9.42	7.54	6.36
INA114BU-ND	Precision Instrumentation Amplifier	16-SOIC	9.42	7.54	6.36
INA115AU-ND	Precision Instrumentation Amplifier	16-SOIC	6.96	5.57	4.70
INA115BU-ND	Precision Instrumentation Amplifier	16-SOIC	8.50	7.65	6.79
INA116PA-ND	Ultra Low Input Bias Current Instrumentation Amplifier	16-Dip	6.48	5.19	4.38
INA116UA-ND	Ultra Low Input Bias Current Instrumentation Amplifier	16-SOIC	6.48	5.19	4.38
INA118P-ND	Precision Low Power Instrumentation Amplifier	8-Dip	6.12	4.90	4.14
INA118PB-ND	Precision Low Power Instrumentation Amplifier	8-Dip	9.50	7.60	6.42
INA118U-ND	Precision Low Power Instrumentation Amplifier	8-SOIC	6.12	4.90	4.14
INA118UB-ND	Precision Low Power Instrumentation Amplifier	8-SOIC	9.50	7.60	6.42
INA121P-ND	Low Power FET Instrumentation Amplifier	8-Dip	5.80	4.64	3.92
INA121PA-ND	Low Power FET Instrumentation Amplifier	8-Dip	4.66	3.73	2.90
INA121U-ND	Low Power FET Instrumentation Amplifier	8-SOIC	5.80	4.64	3.92
INA121UA-ND	Low Power FET Instrumentation Amplifier	8-SOIC	4.66	3.73	2.90
INA121UATR-ND	Low Power FET Instrumentation Amplifier	8-SOIC	6582.50/2,500		
INA121UTR-ND	Low Power FET Instrumentation Amplifier	8-SOIC	9052.50/2,500		
INA122P-ND	Single-Supply, Micropower Instrumentation Amplifier	8-Dip	5.04	4.04	3.14
INA122PA-ND	Single Supply, Micropower Instrumentation Amplifier	8-Dip	3.87	3.10	2.41
INA122U-ND	Single-Supply, Micropower Instrumentation Amplifier	8-SOIC	5.04	4.04	3.14
INA122UA-ND	Single Supply, Micropower Instrumentation Amplifier	8-SOIC	3.87	3.10	2.41
INA125P-ND	Instrumentation Amplifier with Precision Voltage Reference	16-Dip	4.88	3.91	3.04
INA125PA-ND	Precision Voltage Instrumentation Amplifier	16-Dip	3.87	3.10	2.41
INA125U-ND	Instrumentation Amp with Precision Voltage Reference	16-SOIC	4.88	3.91	3.04
INA125UA-ND	Precision Voltage Instrumentation Amplifier	16-SOIC	3.87	3.10	2.41
INA126ECT-ND	Micropower Instrumentation Amplifier	8-MSOP	6.44	5.52	5.06
INA126ETR-ND	Micropower Instrumentation Amplifier	8-MSOP	651.75/250		
INA126EACT-ND	Micropower Instrumentation Amplifier	8-MSOP	4.69	4.02	3.69
INA126EATR-ND	Micropower Instrumentation Amplifier	8-MSOP	475.50/250		
INA126P-ND	Micropower Instrumentation Amplifier	8-Dip	2.57	2.06	1.60
INA126PA-ND	Micropower Instrumentation Amplifier	8-Dip	2.18	1.74	1.31
INA126U-ND	Micropower Instrumentation Amplifier	8-SOIC	2.57	2.06	1.60
INA126UA-ND	Micropower Instrumentation Amplifier	8-SOIC	2.18	1.74	1.31
INA128P-ND	Precision Low Power Instrumentation Amplifier	8-Dip	9.42	7.54	6.36
INA128PA-ND	Low Power Instrumentation Amplifier	8-Dip	5.82	4.66	3.93
INA128U-ND	Precision Low Power Instrumentation Amplifier	8-SOIC	9.42	7.54	6.36
INA128UA-ND	Low Power Instrumentation Amplifier	8-SOIC	5.82	4.66	3.93
INA129P-ND	Precision Low Power Instrumentation Amplifier	8-Dip	9.42	7.54	6.36
INA129PA-ND	Low Power Instrumentation Amplifier	8-Dip	5.82	4.66	3.93
INA129U-ND	Precision Low Power Instrumentation Amplifier	8-SOIC	9.42	7.54	6.36
INA129UA-ND	Low Power Instrumentation Amplifier	8-SOIC	5.82	4.66	3.93
INA131AP-ND	Precision, Gain=100, Instrumentation Amplifier	8-Dip	5.96	4.77	4.03
INA131BP-ND	Precision, Gain=100 Instrumentation Amplifier	8-Dip	8.98	7.19	6.07
INA132UA-ND	Single Supply Instrumentation Amplifier	8-SOIC	2.18	1.74	1.31
INA133UA-ND	High Speed Precision Difference Amplifiers	8-SOIC	1.98	1.58	1.19
INA133U-ND	High Speed Precision Difference Amplifiers	8-SOIC	2.34	1.88	1.46
INA137PA-ND	Audio Differential Line Receiver	8-Dip	2.18	1.74	1.31
INA137UA-ND	Audio Differential Line Receiver	8-SOIC	2.18	1.74	1.31

(Continued)

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Burr-Brown Products from Texas Instruments

INSTRUMENTATION AMPS *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
INA138NACT-ND	Current Shunt Monitor	SOT-23-5	2.63	2.25	2.07
INA138NATR-ND	Current Shunt Monitor	SOT-23-5	266.00/250		
INA141P-ND	Precision Low Power, Gain=10,100 Instrumentation Amp.	8-Dip	8.51	7.30	6.04
INA141U-ND	Precision Low Power, Gain=10,100 Instrum. Amp	8-SOIC	8.98	7.19	6.07
INA141UA-ND	Precision Low Power, Gain=10,100 Instrum. Amp	8-SOIC	5.56	4.45	3.76
INA143U-ND	High Speed Differential Gain=10 Instrumentation Amp	8-SOIC	2.34	1.88	1.46
INA143UA-ND	High Speed Differential Gain=10 Instrumentation Amp	8-SOIC	1.98	1.58	1.19
INA145UA-ND	Programmable Difference Amplifier	8-SOIC	2.52	2.02	1.57
INA148UA-ND	Common-Mode Instrumentation Amplifier	8-SOIC	3.51	2.81	2.19
INA155U-ND	Rail-to-Rail CMOS Instrumentation Amplifier	8-SOIC	2.43	1.95	1.52
INA155UA-ND	Rail-to-Rail CMOS Instrumentation Amplifier	8-SOIC	2.00	1.60	1.20
INA156EACT-ND	CMOS Instrumentation Amplifier	8-MSOP	2.45	2.10	1.93
INA156EATR-ND	CMOS Instrumentation Amplifier	8-MSOP	252.00/250		
INA163UA-ND	Low-Noise, Low Distortion Instrumentation Amp.	SO-14-50	3.87	3.10	2.41
INA163UATR-ND	Low-Noise, Low Distortion Instrumentation Amp.	SO-14-50	5450.00/2,500		
INA166UA-ND	Low-Noise Instrumentation Amp	8-SOIC	8.96	7.17	6.05
INA166UATR-ND	Low-Noise Instrumentation Amp	8-SOIC	13950.00/2,500		
INA168NACT-ND	High-Side Current Shunt Monitor	SOT-23-5	3.33	2.85	2.62
INA168NATR-ND	High-Side Current Shunt Monitor	SOT-23-5	336.00/250		
INA321EACT-ND	Micropower CMOS Rail-to-Rail Instrumentation Amp	14-TSSOP	3.15	2.70	2.48
INA321EATR-ND	Micropower CMOS Rail-to-Rail Instrumentation Amp	14-TSSOP	308.00/250		
INA321ECT-ND	Micropower CMOS Rail-to-Rail Instrumentation Amp	8-MSOP	4.03	3.45	3.17
INA321ETR-ND	Micropower CMOS Rail-to-Rail Instrumentation Amp	8-MSOP	385.75/250		
INA322EACT-ND	Micropower CMOS Rail-to-Rail Instrumentation Amp	14-TSSOP	2.63	2.25	2.07
INA322EATR-ND	Micropower CMOS Rail-to-Rail Instrumentation Amp	14-TSSOP	266.00/250		
INA2126EACT-ND	Dual, Micropower Instrumentation Amplifier	16-SSOP	9.00	7.71	7.07
INA2126EATR-ND	Dual, Micropower Instrumentation Amplifier	16-SSOP	812.50/250		
INA2126ECT-ND	Dual, Micropower Instrumentation Amplifier	16-SSOP	9.00	7.71	7.07
INA2126ETR-ND	Dual, Micropower Instrumentation Amplifier	16-SSOP	1124.50/250		
INA2126P-ND	Dual, Micropower Instrumentation Amplifier	16-Dip	4.23	3.39	2.64
INA2126PA-ND	Dual, Micropower Instrumentation Amplifier	16-Dip	3.24	2.60	2.02
INA2126U-ND	Dual, Micropower Instrumentation Amplifier	16-SOIC	4.23	3.39	2.64
INA2126UA-ND	Dual, Micropower Instrumentation Amplifier	16-SOIC	3.24	2.60	2.02
INA2128U-ND	Dual, Low Power Instrumentation Amplifier	16-SOIC	13.13	11.82	10.49
INA2128UA-ND	Dual, Low Power Instrumentation Amplifier	16-SOIC	9.60	7.68	6.48
INA2134PA-ND	Dual, Audio Differential Line Receiver	14-Dip	3.24	2.60	2.02
INA2134UA-ND	Dual, Audio Differential Line Receiver	14-SOIC	3.24	2.60	2.02
INA2137PA-ND	Dual, Audio Differential Line Receiver	14-Dip	3.24	2.60	2.02
INA2137UA-ND	Dual, Audio Differential Line Receiver	14-SOIC	3.24	2.60	2.02
INA2141P-ND	Dual, Low Power, Gain=10,100 Instrumentation Amplifier	16-Dip	15.54	13.04	10.87
INA2141U-ND	Dual, Gain=10,100 Instrumentation Amplifier	16-SOIC	13.78	12.41	11.00
INA2141UA-ND	Dual, Gain=10,100 Instrumentation Amplifier	16-SOIC	8.40	7.56	6.71
INA2143U-ND	Dual, High Speed Precision Gain=10 Difference Amp	14-SOIC	5.44	4.36	3.68
INA2143UA-ND	Dual, High Speed Precision Gain=10 Difference Amp	14-SOIC	4.41	3.53	2.75
INA2321EACT-ND	Micropower CMOS Rail-to-Rail Instrumentation Amp	14-TSSOP	5.78	4.95	4.54
INA2321EATR-ND	Micropower CMOS Rail-to-Rail Instrumentation Amp	14-TSSOP	545.25/250		
INA2322EACT-ND	Micropower CMOS Rail-to-Rail Instrumentation Amp	14-TSSOP	4.90	4.20	3.85
INA2322EATR-ND	Micropower CMOS Rail-to-Rail Instrumentation Amp	14-TSSOP	465.50/250		
PGA204AP-ND	Programmable Gain Instrumentation Amplifier	16-Dip	9.31	8.39	7.44
PGA204AU-ND	Programmable Gain Instrumentation Amplifier	16-SOIC	9.31	8.39	7.44
PGA204BP-ND	Programmable Gain Instrumentation Amplifier	16-Dip	12.94	11.66	10.34
PGA204BU-ND	Programmable Gain Instrumentation Amplifier	16-SOIC	12.94	11.66	10.34
PGA205AP-ND	Programmable Gain Instrumentation Amplifier	16-Dip	9.31	8.39	7.44
PGA205AU-ND	Programmable Gain Instrumentation Amplifier	16-SOIC(.3")	9.31	8.39	7.44
PGA205BP-ND	Programmable Gain Instrumentation Amplifier	16-Dip	12.94	11.66	10.34
PGA205BU-ND	Programmable Gain Instrumentation Amplifier	16-SOIC	12.94	11.66	10.34
PGA206UA-ND	High Speed Programmable Gain Instrumentation Amplifier	16-SOIC	13.84	12.47	11.06
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments

SAMPLE AND HOLD AMPLIFIERS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
SHC605AU-ND	High-Speed Operational Track-And-Hold Amplifier	16-SOIC	28.56	26.66	24.76
SHC615AU-ND	Wide Bandwidth DC Restoration Circuit	14-SOIC	9.52	7.62	6.43
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments

HIGH-SPEED BUFFERS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
BUF600AP-ND	High-Speed Buffer-Amplifier	8-Dip	3.95	3.45	2.99
BUF600AU-ND	High-Speed Buffer-Amplifier	8-SOIC	4.91	3.93	3.06
BUF601AU-ND	High-Speed Buffer-Amplifier	8-SOIC	6.04	4.84	4.08
BUF634F-ND	250ma High-Speed Buffer	5-DDPAK	6.20	4.96	4.19
BUF634P-ND	High-Speed Buffer, 250mA Output	8-Dip	5.24	4.20	3.27
BUF634T-ND	High-Speed Buffer, 250mA Output	T0-220-5	6.20	4.96	4.19
BUF634U-ND	250ma High-Speed Buffer	8-SOIC	5.24	4.20	3.27
OPA633KP-ND	High-Speed Buffer-Amplifier	8-Dip	8.14	6.52	5.50
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments

DIFFERENTIAL/DIFFERENCE AMPLIFIERS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
INA105BM-ND	Precision Unity Gain Differential Amplifier	TO-99	11.20	10.08	8.94
INA105KP-ND	Precision Unity Gain Differential Amplifier	8-Dip	6.48	5.19	4.38
INA105KU-ND	Precision Unity Gain Differential Amplifier	8-SOIC	6.48	5.19	4.38
INA106KP-ND	Precision Gain=10, Differential Amplifier	8-Dip	7.84	6.28	5.30
INA117KU-ND	High Common-Mode Voltage, Differential Amplifier	8-SOIC	5.36	4.29	3.34
INA117P-ND	High Common-Mode Voltage, Differential Amplifier	8-Dip	5.36	4.29	3.34
INA132P-ND	Low Power, Single-Supply Differential Amplifier	8-Dip	2.99	2.73	2.26
INA132U-ND	Low Power, Single-Supply Differential Amplifier	8-SOIC	2.57	2.06	1.60
INA134PA-ND	Audio Differential Line Receiver	8-Dip	2.18	1.74	1.31
INA134UA-ND	Audio Differential Line Receiver	8-SOIC	2.18	1.74	1.31
INA146UA-ND	High-Voltage Differential Amplifier	8-SOIC	2.88	2.31	1.80
INA154U-ND	High-Speed Precision G=1 Differential Amplifier	8-SOIC	2.34	1.88	1.46
INA154UA-ND	High-Speed Precision G=1 Differential Amplifier	8-SOIC	1.98	1.58	1.19
INA157U-ND	High-Speed Precision G=1/2 or G=2 Differential Amplifier	8-SOIC	2.34	1.88	1.46
INA157UA-ND	High-Speed Precision G=1/2 or G=2 Differential Amplifier	8-SOIC	1.98	1.58	1.19
INA2132U-ND	Dual, Low-Power, Single-Supply Difference Amplifier	14-SOIC	5.58	4.47	3.77
INA2132UA-ND	Dual, Low-Power, Single-Supply Difference Amplifier	14-SOIC	4.52	3.62	2.82
INA2133U-ND	Dual, High-Speed, Differential Amplifier	14-SOIC	5.44	4.36	3.68
INA2133UA-ND	Dual, High-Speed, Differential Amplifier	14-SOIC	4.41	3.53	2.75
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments

ISOLATION AMPLIFIERS/COUPLERS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
ISO122JP-ND	Lowest Cost Precision Isolation Amplifier	16-Dip	13.69	12.33	10.94
ISO122JU-ND	Lowest Cost Precision Isolation Amplifier	28-SOIC	12.94	11.66	10.34
ISO122P-ND	Lowest Cost Precision Isolation Amplifier	16-Dip	16.11	14.51	12.87
ISO122U-ND	Lowest Cost Precision Isolation Amplifier	28-SOIC	14.69	13.23	11.74
ISO124P-ND	Low-Cost Precision Isolation Amplifier	16-Dip	9.50	8.55	7.59
ISO124U-ND	Low-Cost Precision Isolation Amplifier	28-SOIC	9.50	8.55	7.59
ISO150AP-ND	Dual, Isolated, Bi-Directional Digital Coupler	24-Dip .3	10.33	9.30	8.25
ISO150AU-ND	Dual, Isolated, Bi-Directional Digital Coupler	28-SOIC	10.63	9.57	8.49
ISO422P-ND	Differential Bus Transceiver	24-Dip	9.60	7.68	6.48
ISO422P-U-ND	Differential Bus Transceiver	24-GullWing	9.60	7.68	6.48
ISO485P-ND	Differential Bus Transceiver	24-Dip	10.78	9.71	8.61
ISO508P-ND	Uni-Directional Isolated Digital Coupler	24-Dip	10.91	9.83	8.72
ISO508P-U-ND	Uni-Directional Isolated Digital Coupler	24-GullWing	10.91	9.83	8.72
ISO518P-U-ND	Uni-Directional Isolated Digital Coupler	24-GullWing	11.53	10.38	9.21
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments

INTEGRATORS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
ACF2101BU-ND	Low Noise, Dual, Switched Integrator	24-SOIC	18.42	17.20	15.97
IVC102U-ND	Precision Switched Integrator Transimpedance Amplifier	14-SOIC	6.98	5.59	4.72
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments

OPTICAL SENSORS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
OPT101P-ND	Monolithic Photodiode Transimpedance Amplifier	8-Dip	4.82	3.86	3.00
OPT301M-ND	Integrated Photodiode and Amplifier	TO-99-8	14.83	13.35	11.84
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments

CCD SIGNAL PROCESSOR FOR DIGITAL CAMERAS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
VSP2000Y-ND	CCD Signal Processor for Digital Cameras	48-LQFP	8.46	7.62	6.76
VSP2101Y-ND	10-Bit, 27MHz, Digital Camera CCD Signal Processor	48-LQFP	8.43	7.59	6.73
VSP2210Y-ND	10-Bit, 20MHz, Digital Camera CCD Signal Processor	48-LQFP	11.73	10.56	9.37
VSP2212Y-ND	12-Bit, 20MHz, Digital Camera CCD Signal Processor	48-LQFP	14.66	13.20	11.71
VSP2260Y-ND	10-Bit, 27MHz, Digital Camera CCD Signal Processor	48-LQFP	11.58	10.43	9.25
VSP2260YTR-ND	10-Bit, 27MHz, Digital Camera CCD Signal Processor	48-LQFP	17216.00/2,000		
VSP2262Y-ND	12-Bit, 20MHz, Digital Camera CCD Signal Processor	48-LQFP	14.51	13.07	11.59
VSP2262YTR-ND	12-Bit, 20MHz, Digital Camera CCD Signal Processor	48-LQFP	21564.00/2,000		
VSP3000Y-ND	12-Bit, 6MHz CCD/CIS Signal Processor	48-LQFP	8.43	7.59	6.73
VSP3010Y-ND	12-Bit CCD/CIS Controller	48-LQFP	8.43	7.59	6.73
VSP3100Y-ND	14-Bit, 10MHz CCD/CIS Signal Processor	48-LQFP	8.80	7.04	5.94
VSP3200Y-ND	14-Bit, CCD/CIS Processor	48-LQFP	8.80	7.92	7.03
VSP3200YTR-ND	14-Bit, CCD/CIS Processor	48-LQFP	13092.00/2,000		
VSP3210Y-ND	14-Bit, CCD/CIS Processor	48-LQFP	8.80	7.92	7.03
VSP3210YTR-ND	14-Bit, CCD/CIS Processor	48-LQFP	13092.00/2,000		
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments

UNIVERSAL ACTIVE FILTERS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
UAF42AP-ND	Universal Active Filter, -108db THD	14-Dip	9.66	8.70	7.72
UAF42AU-ND	Universal Active Filter	16-SOIC	9.66	8.70	7.72
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments

VOLTAGE-TO-FREQUENCY CONVERTERS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
VFC32KP-ND	Voltage-to-Frequency and Frequency-to-Voltage Converter	14-Dip	9.22	7.38	6.23
VFC32KU-ND	Voltage-to-Frequency and Frequency-to-Voltage Converter	14-SOIC	9.21	8.30	7.36
VFC110AP-ND	High Frequency Voltage-to-Frequency Converter	14-Dip	16.61	14.96	13.27
VFC320BG-ND	Voltage-to-Frequency and Frequency-to-Voltage Converter	14-CDip	21.04	15.84	13.19
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments

DIFFERENTIAL LINE DRIVER AMPS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
DRV101F-ND	PWM Solenoid / Valve Driver	7-DDPAK	5.90	4.72	3.99
DRV101T-ND	PWM Solenoid / Valve Driver	7-TO-220	5.90	4.72	3.99
DRV102F-ND	PWM Solenoid / Valve Driver	7-lead DDPAK	5.90	4.72	3.99
DRV102T-ND	PWM Solenoid / Valve Driver	TO-220-7	5.90	4.72	3.99
DRV1100P-ND	High Power Differential Driver Amplifier	8-Dip	5.31	4.25	3.31
DRV1100U-ND	High Power Differential Driver Amplifier	8-SOIC	5.31	4.25	3.31
DRV1101U-ND	High Power Differential Line Driver	8-SOIC	5.31	4.25	3.31
DRV1101UTR-ND	High Power Differential Line Driver	8-SOIC	7750.00/2,500		
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

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Burr-Brown Products from Texas Instruments

AUDIO DIFFERENTIAL LINE DRIVER AMPS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
DRV134PA-ND	Audio Balanced Line Driver with Differential Output	8-Dip	3.56	2.85	2.22
DRV134UA-ND	Audio Balanced Line Driver with Differential Output	16-SOL	3.56	2.85	2.22
DRV135UA-ND	Audio Balanced Line Driver with Differential Output	8-SOIC	3.56	2.85	2.22
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments

ANALOG PHASE LOCKED LOOP (PLL)

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PLL1700E-ND	Audio System Multi-Clock Generator (PLL)	20-SSOP	3.87	3.10	2.41
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments

TRANSMITTERS/ RECEIVERS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
RCV420JP-ND	1-20mA Precision Current Loop Receiver	16-Dip	5.62	4.50	3.80
RCV420KP-ND	4-20mA Precision Current Loop Receiver	16-Dip	9.50	7.60	6.42
XTR101AP-ND	Precision, Low Drift, 4-20mA Two-Wire Transmitter	14-Dip	10.15	9.14	8.10
XTR101AU-ND	Precision, Low Drift, 4-20mA Two-Wire Transmitter	16-SOIC	10.91	9.83	8.72
XTR105P-ND	4-20mA Current Transmitter w/ Sensor Excitation/Linearization	14-Dip	8.62	6.90	5.82
XTR105PA-ND	4-20mA Current Transmitter with Sensor Excitation and Linearization	14-Dip	6.16	4.93	4.16
XTR105U-ND	4-20mA Current Transmitter with Sensor Excitation and Linearization	14-SOIC	8.62	6.90	5.82
XTR105UA-ND	4-20mA Current Transmitter with Sensor Excitation and Linearization	14-SOIC	6.16	4.93	4.16
XTR106P-ND	4-20mA Current Transmitter	14-Dip	8.62	6.90	5.82
XTR106PA-ND	4-20mA Current Transmitter	14-Dip	6.16	4.93	4.16
XTR106U-ND	4-20mA Current Transmitter	14-SOIC	8.62	6.90	5.82
XTR106UA-ND	4-20mA Current Transmitter	14-SOIC	6.16	4.93	4.16
XTR110KP-ND	Precision, Voltage-to-Current Converter/Transmitter	16-Dip	8.88	8.00	7.09
XTR110KU-ND	Precision, Voltage-to-Current Converter/Transmitter	16-SOIC	8.88	8.00	7.09
XTR112U-ND	4-20mA Current Transmitter with Sensor Excitation	14-SOIC	8.62	6.90	5.82
XTR112UA-ND	4-20mA Current Transmitter with Sensor Excitation	14-SOIC	6.16	4.93	4.16
XTR114U-ND	4-20mA Current Transmitter with Sensor Excitation	14-SOIC	8.62	6.90	5.82
XTR114UA-ND	4-20mA Current Transmitter with Sensor Excitation	14-SOIC	6.16	4.93	4.16
XTR115U-ND	4-20mA Current Transmitter	SO-8-50	2.40	1.92	1.44
XTR115UA-ND	4-20mA Current Transmitter	8-SOIC	1.90	1.52	1.14
XTR116U-ND	4-20mA Current Transmitter	SO-8-50	2.40	1.92	1.44
XTR116UA-ND	4-20mA Current Transmitter	8-SOIC	1.90	1.52	1.14
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments

ANALOG MULTIPLEXERS/ MULTIPLIERS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
MPC506AP-ND	Single Ended 16-Channel/Differential 8-Channel CMOS	28-Dip	8.52	6.82	5.76
MPC506AU-ND	Single Ended 16-Channel/Differential 8-Channel CMOS	28-SOIC	8.52	6.82	5.76
MPC507AP-ND	Single Ended 16-Channel/Differential 8-Channel CMOS	28-Dip	8.52	6.82	5.76
MPC507AU-ND	Single Ended 16-Channel/Differential 8-Channel CMOS	28-SOIC	8.52	6.82	5.76
MPC508AP-ND	8-Channel/4-Channel CMOS Analog Multiplexer	16-Dip	4.73	3.78	2.94
MPC508AU-ND	Single Ended 16-Channel/Differential 8-Channel CMOS	16-SOIC	4.73	3.78	2.94
MPC509AP-ND	Single Ended 8-Channel/Differential 4-Channel CMOS	16-Dip	4.73	3.78	2.94
MPC509AU-ND	Single Ended 8-Channel/Differential 4-Channel. CMOS	16-SOIC	5.18	4.14	3.22
MPY534KD-ND	Precision Analog Multiplier	14-CDip	49.88	42.74	31.98
MPY634KP-ND	Wide Bandwidth Precision Analog Multiplier	14-Dip	15.44	13.91	12.33
MPY634KU-ND	Wide-Bandwidth Precision Analog Multiplier	16-SOIC	16.80	15.68	14.56
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments

VIDEO MULTIPLEXERS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
MPC100AP-ND	250MHz Bandwidth 4 x 1 Video Multiplexer	14-Dip	8.46	6.77	5.72
MPC100AU-ND	250MHz Bandwidth 4 x 1 Video Multiplexer	14-SOIC	8.46	6.77	5.72
MPC102AU-ND	Wide-Bandwidth Dual 2 x 1 Video Multiplexer	14-SOIC	7.66	6.13	5.18
MPC104AP-ND	Wide-Bandwidth 2 x 1 Video Multiplexer	8-Dip	5.02	4.02	3.13
MPC104AU-ND	Wide-Bandwidth 2 x 1 Video Multiplexer	8-SOIC	3.15	2.52	1.96
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments

VOLTAGE REFERENCES

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
REF02AP-ND	+5V Precision Voltage Reference	8-Dip	2.95	2.36	1.84
REF02AU-ND	+5V Voltage Reference	8-SOIC	2.97	2.38	1.85
REF02BU-ND	+5V Voltage Reference	8-SOIC	4.05	3.24	2.52
REF102AP-ND	+10V Precision Voltage Reference	8-Dip	4.05	3.24	2.52
REF102AU-ND	+10V Precision Voltage Reference	8-SOIC	5.28	4.23	3.57
REF102BP-ND	10V Precision Voltage Reference	8-Dip	6.56	5.25	4.43
REF200AU-ND	Dual Current Source/Current Sink	8-SOIC	4.75	3.80	2.96
REF1004C-1.2-ND	1.2V Micropower Voltage Reference	8-SOIC	2.30	1.84	1.43
REF1004C-2.5-ND	2.5V Micropower Voltage Reference	8-SOIC	2.45	1.96	1.47
REF1004I-1.2-ND	1.2V Micropower Voltage Reference	8-SOIC	4.21	3.37	2.62
REF1004I-2.5-ND	2.5V Micropower Voltage Reference	8-SOIC	4.10	3.28	2.55
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

Burr-Brown Products from Texas Instruments

VOLTAGE REGULATORS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
REG101NA-2.5CT-ND	2.5 Volt CMOS 100mA LDO Regulator	SOT-23-5	1.68	1.44	1.32
REG101NA-2.5TR-ND	2.5 Volt CMOS 100mA LDO Regulator	SOT-23-5	176.25/250		
REG101NA-2.8CT-ND	2.8 Volt CMOS 100mA LDO Regulator	SOT-23-5	1.68	1.44	1.32
REG101NA-2.8TR-ND	2.8 Volt CMOS 100mA LDO Regulator	SOT-23-5	176.25/250		
REG101NA-2.85CT-ND	2.85 Volt CMOS 100mA LDO Regulator	SOT-23-5	1.68	1.44	1.32
REG101NA-2.85TR-ND	2.85 Volt CMOS 100mA LDO Regulator	SOT-23-5	176.25/250		
REG101NA-3CT-ND	3 Volt CMOS 100mA LDO Regulator	SOT-23-5	1.68	1.44	1.32
REG101NA-3TR-ND	3 Volt CMOS 100mA LDO Regulator	SOT-23-5	176.25/250		
REG101NA-3.3CT-ND	3.3 Volt CMOS 100mA LDO Regulator	SOT-23-5	1.68	1.44	1.32
REG101NA-3.3TR-ND	3.3 Volt CMOS 100mA LDO Regulator	SOT-23-5	176.25/250		
REG101NA-5CT-ND	5 Volt CMOS 100mA LDO Regulator	SOT-23-5	1.68	1.44	1.32
REG101NA-5TR-ND	5 Volt CMOS 100mA LDO Regulator	SOT-23-5	176.25/250		
REG101UA-2.5-ND	2.5Volt CMOS 100mA LDO Regulator	SO-8-50	1.25	1.00	.75
REG101UA-2.5TR-ND	2.5Volt CMOS 100mA LDO Regulator	SO-8-50	1632.50/2,500		
REG101UA-2.8-ND	2.8Volt CMOS 100mA LDO Regulator	SO-8-50	1.25	1.00	.75
REG101UA-2.8TR-ND	2.8 Volt CMOS 100mA LDO Regulator	SO-8-50	1632.50/2,500		
REG101UA-2.85-ND	2.85 Volt CMOS 100mA LDO Regulator	SO-8-50	1.25	1.00	.75
REG101UA-3-ND	3 Volt CMOS 100mA LDO Regulator	SO-8-50	1.25	1.00	.75
REG101UA-3TR-ND	3 Volt CMOS 100mA LDO Regulator	SO-8-50	1632.50/2,500		
REG101UA-5-ND	5 Volt CMOS 100mA LDO Regulator	SO-8-50	1.25	1.00	.75
REG101UA-5TR-ND	5 Volt CMOS 100mA LDO Regulator	SO-8-50	1632.50/250		
REG102NA-2.5CT-ND	2.5 Volt CMOS 250mA LDO Regulator	SOT-23-5	2.17	1.86	1.71
REG102NA-2.5TR-ND	2.5 Volt CMOS 250mA LDO Regulator	SOT-23-5	210.00/250		
REG102NA-2.85CT-ND	2.85 Volt CMOS 250mA LDO Regulator	SOT-23-5	2.17	1.86	1.71
REG102NA-2.85TR-ND	2.85 Volt CMOS 250mA LDO Regulator	SOT-23-5	210.00/250		
REG102NA-3CT-ND	3 Volt CMOS 250mA LDO Regulator	SOT-23-5	2.17	1.86	1.71
REG102NA-3TR-ND	3 Volt CMOS 250mA LDO Regulator	SOT-23-5	210.00/250		
REG102NA-3.3CT-ND	3.3 Volt CMOS 250mA LDO Regulator	SOT-23-5	2.17	1.86	1.71
REG102NA-3.3TR-ND	3.3 Volt CMOS 250mA LDO Regulator	SOT-23-5	210.00/250		
REG102NA-5CT-ND	5 Volt CMOS 250mA LDO Regulator	SOT-23-5	2.17	1.86	1.71
REG102NA-5TR-ND	5 Volt CMOS 250mA LDO Regulator	SOT-23-5	210.00/250		
REG103FA-2.5-ND	2.5 Volt Low Dropout Regulator	DDPAK-5	3.29	2.63	2.05
REG103FA-2.7-ND	2.7 Volt Low Dropout Regulator	DDPAK-5	3.29	2.63	2.05
REG103FA-3-ND	3 Volt Low Dropout Regulator	DDPAK-5	3.29	2.63	2.05
REG103FA-3.3-ND	3.3 Volt Low Dropout Regulator	DDPAK-5	3.29	2.63	2.05
REG103FA-5-ND	5 Volt Low Dropout Regulator	DDPAK-5	3.29	2.63	2.05
REG103FA-A-ND	Adjustable Low Dropout Regulator	DDPAK-5	3.29	2.63	2.05
REG103GA-A-ND	CMOS 500mA LDO Regulator	SOT-223-5	2.50	2.00	1.56
REG103GA-2.5-ND	2.5 Volt CMOS 500mA LDO Regulator	SOT-223-5	2.50	2.00	1.56
REG103GA-2.7-ND	2.7 Volt CMOS 500mA LDO Regulator	SOT-223-5	2.50	2.00	1.56
REG103GA-3-ND	3 Volt Low Dropout Regulator	SOT-223-5	2.50	2.00	1.56
REG103GA-3.3-ND	3.3 Volt CMOS 500mA LDO Regulator	SOT-223-5	2.50	2.00	1.56
REG103GA-5-ND	5 Volt CMOS 500mA LDO Regulator	SOT-223-5	2.50	2.00	1.56
REG103UA-2.5-ND	2.5 Volt CMOS 500mA LDO Regulator	SOT-223-5	2.32	1.86	1.45
REG103UA-2.7-ND	2.7 Volt CMOS 500mA LDO Regulator	SO-8	2.32	1.86	1.45
REG103UA-3-ND	3 Volt Low Dropout Regulator	SO-8	2.32	1.86	1.45
REG103UA-3.3-ND	3.3 Volt DMOS LDO Regulator	8-SOIC	2.32	1.86	1.45
REG103UA-5-ND	5.0 Volt DMOS LDO Regulator	8-SOIC	2.32	1.86	1.45
REG103UA-A-ND	Adjustable DMOS LDO Regulator	8-SOIC	2.32	1.86	1.45
REG104FA-2.5-ND	2.5 Volt CMOS 1A LDO Regulator	5-DDPAK	3.40	2.72	2.12
REG104FA-2.5TR-ND	2.5 Volt CMOS 1A LDO Regulator	5-DDPAK	994.50/500		
REG104FA-3-ND	3 Volt CMOS 1A LDO Regulator	5-DDPAK	3.40	2.72	2.12
REG104FA-3TR-ND	3 Volt CMOS 1A LDO Regulator	5-DDPAK	994.50/500		
REG104FA-3.3-ND	3.3 Volt CMOS 1A LDO Regulator	5-DDPAK	3.40	2.72	2.12
REG104FA-3.3TR-ND	3.3 Volt CMOS 1A LDO Regulator	5-DDPAK	994.50/500		
REG104FA-5-ND	5 Volt CMOS 1A LDO Regulator	5-DDPAK	3.40	2.72	2.12
REG104FA-5TR-ND	5 Volt CMOS 1A LDO Regulator	5-DDPAK	994.50/500		
REG104GA-2.5-ND	2.5 Volt CMOS 1A LDO Regulator	SOT-223-5	2.86	2.29	1.78
REG104GA-2.5TR-ND	2.5 Volt CMOS 1A LDO Regulator	SOT-223-5	4062.50/2,500		
REG104GA-3-ND	3 Volt CMOS 1A LDO Regulator	SOT-223-5	2.86	2.29	1.78
REG104GA-3TR-ND	3 Volt CMOS 1A LDO Regulator	SOT-223-5	4062.50/2,500		
REG104GA-3.3-ND	3.3 Volt CMOS 1A LDO Regulator	SOT-223-5	2.86	2.29	1.78
REG104GA-3.3TR-ND	3.3 Volt CMOS 1A LDO Regulator	SOT-223-5	4062.50/2,500		
REG104GA-5-ND	5 Volt CMOS 1A LDO Regulator	SOT-223-5	2.86	2.29	1.78
REG104GA-5TR-ND	5 Volt CMOS 1A LDO Regulator	SOT-223-5	4062.50/2,500		
REG1117-ND	Adjustable Low Dropout Positive Regulator	SOT-223	2.48	1.98	1.54
REG1117-2.85-ND	2.85 Volt Low Dropout Positive Regulator	SOT-223	2.48	1.98	1.54
REG1117-3.3-ND	3.30 Volt Low Dropout Positive Regulator	SOT-223	2.48	1.98	1.54
REG1117-5-ND	5.00 Volt Low Dropout Positive Regulator	SOT-223	2.48	1.98	1.54
REG1117A-ND	1A Adjustable Low Dropout Positive Regulator	SOT-223	2.48	1.98	1.54
REG1117A-1.8-ND	1.8 Volt 1 Amp LDO Regulator	SOT-223-4	2.48	1.98	1.54
REG1117A-2.5-ND	2.5 Volt 1 Amp LDO Regulator	SOT-223-4	2.48	1.98	1.54
REG1117F-3.3-ND	3.3 Volt 0.8 Amp LDO Regulator	3-Lead DDPAK	2.93	2.34	1.82
REG1117FA-ND	Adjustable 1 Amp LDO Regulator	3-Lead DDPAK	2.93	2.34	1.82
REG1117FA-1.8-ND	1.8 Volt 1 Amp LDO Regulator	3-Lead DDPAK	2.93	2.34	1.82
REG1117FA-2.5-ND	2.5 Volt 1 Amp LDO Regulator	3-Lead DDPAK	2.93	2.34	1.82
REG1117FA-5.0-ND	5.0 Volt 1 Amp LDO Regulator	3-Lead DDPAK	2.93	2.34	1.82
REG1118-2.85-ND	2.85 Volt Low Dropout Reg. with Source/Sink Capability	SOT-223	2.50	2.00	1.56
LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

MICROCHIP

OP AMPS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
MCP601-I/P-ND	Single Op Amp CMOS, 2.7V-5.5V Single Supply	8-Dip	.68	.42	.38
MCP601-I/SN-ND	Single Op Amp CMOS, 2.7V-5.5V Single Supply	8-SOIC	.68	.42	.38
MCP602-I/P-ND	Dual Op Amp CMOS, 2.7V-5.5V Single Supply	8-Dip	.88	.55	.49
MCP602-I/SN-ND	Dual Op Amp CMOS, 2.7V-5.5V Single Supply	8-SOIC	.88	.55	.49
MCP603-I/P-ND	Single Op Amp CMOS, 2.7V-5.5V Single Supply with CS	8-Dip	.70	.44	.40
MCP603-I/SN-ND	Single Op Amp CMOS, 2.7V-5.5V Single Supply with CS	8-SOIC	.70	.44	.40
MCP604-I/P-ND	Quad Op Amp CMOS, 2.7V-5.5V Single Supply	14-Dip	1.60	1.01	.91
MCP604-I/SL-ND	Quad Op Amp CMOS, 2.7V-5.5V Single Supply	14-SOIC	1.60	1.01	.91
MCP606-I/P-ND	Single Op Amp CMOS, 2.5V-5.5V Single Supply	8-Dip	1.00	.63	.57
MCP606-I/SN-ND	Single Op Amp CMOS, 2.5V-5.5V Single Supply	8-SOIC	1.00	.63	.57
MCP607-I/P-ND	Dual Op Amp CMOS, 2.5V-5.5V Single Supply	8-Dip	1.33	.84	.76
MCP607-I/SN-ND	Dual Op Amp CMOS, 2.5V-5.5V Single Supply	8-SOIC	1.33	.84	.76
MCP608-I/P-ND	Single Op Amp CMOS, 2.5V-5.5V Single Supply with CS	8-Dip	1.08	.67	.61
MCP608-I/SN-ND	Single Op Amp CMOS, 2.5V-5.5V Single Supply with CS	8-SOIC	1.08	.67	.61
MCP609-I/P-ND	Quad Op Amp CMOS, 2.5V-5.5V Single Supply	14-Dip	2.00	1.26	1.14
MCP609-I/SL-ND	Quad Op Amp CMOS, 2.5V-5.5V Single Supply	14-SOIC	2.00	1.26	1.14

MICROCHIP

DIGITAL POTENTIOMETERS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
MCP41010-I/P-ND	10kΩ Single Channel Digital Potentiometer	8-Dip	2.10	1.59	1.27
MCP41010-I/SN-ND	10kΩ Single Channel Digital Potentiometer	8-SOIC	2.10	1.59	1.27
MCP41050-I/P-ND	50kΩ Single Channel Digital Potentiometer	8-Dip	2.10	1.59	1.27
MCP41050-I/SN-ND	50kΩ Single Channel Digital Potentiometer	8-SOIC	2.10	1.59	1.27
MCP41100-I/P-ND	100kΩ Single Channel Digital Potentiometer	8-Dip	2.10	1.59	1.27

(Continued)

MICROCHIP DIGITAL POTENTIOMETERS *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MCP41100-I/SN-ND	100kΩ Single Channel Digital Potentiometer	8-SOIC	2.10	1.59	1.27
MCP42010-I/P-ND	10kΩ Dual Channel Digital Potentiometer	14-Dip	3.08	2.33	1.86
MCP42010-I/SL-ND	10kΩ Dual Channel Digital Potentiometer	14-SOIC	3.08	2.33	1.86
MCP42010-I/ST-ND	10kΩ Dual Channel Digital Potentiometer	14-TSSOP	3.08	2.33	1.86
MCP42050-I/P-ND	50kΩ Dual Channel Digital Potentiometer	14-Dip	3.08	2.33	1.86
MCP42050-I/SL-ND	50kΩ Dual Channel Digital Potentiometer	14-SOIC	3.08	2.33	1.86
MCP42050-I/ST-ND	50kΩ Dual Channel Digital Potentiometer	14-TSSOP	3.08	2.33	1.86
MCP42100-I/P-ND	100kΩ Dual Channel Digital Potentiometer	14-Dip	3.08	2.33	1.86
MCP42100-I/SL-ND	100kΩ Dual Channel Digital Potentiometer	14-SOIC	3.08	2.33	1.86
MCP42100-I/ST-ND	100kΩ Dual Channel Digital Potentiometer	14-TSSOP	3.08	2.33	1.86

MICROCHIP A/D CONVERTERS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MCP3201-CI/P-ND	2.7V Single 12-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB	8-Dip	4.33	4.24	2.97
MCP3201-CI/SN-ND	2.7V Single 12-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB	8-SOIC	4.33	4.24	2.97
MCP3202-CI/P-ND	2.7V 2-Ch., 12-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB	8-Dip	4.75	4.66	3.26
MCP3202-CI/SN-ND	2.7V 2-Ch., 12-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB	8-SOIC	4.75	4.66	3.26
MCP3204-CI/P-ND	2.7V 4-Ch., 12-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB	14-Dip	5.23	5.12	3.58
MCP3204-CI/SL-ND	2.7V 4-Ch., 12-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB	14-SOIC	5.23	5.12	3.58
MCP3208-CI/P-ND	2.7V 8-Ch., 12-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB	16-Dip	5.75	5.64	3.95
MCP3208-CI/SL-ND	2.7V 8-Ch., 12-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB	16-SOIC	5.75	5.64	3.95

LINEAR TECHNOLOGY LINEAR SERIES

Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★ 1	25	100
LM385BZ-2.5LT-ND	—	Precision Volt Reference, 2.5V, 1.5%	TO-92	3.50	2.32	1.75
LT311AN8-ND	—	Voltage Converter *NEW!*	8-Dip	2.38	1.58	1.25
LT317AT-ND	—	Adjustable Voltage Regulator *NEW!*	TO-220	3.75	2.50	2.15
LT318AN8-ND	—	High Speed Operational Amplifier *NEW!*	8-Dip	3.38	2.25	1.95
LT323AT-ND	—	5V 3A Voltage Regulator *NEW!*	TO-220	4.00	2.67	2.50
LT337AT-ND	—	Neg. Adj. Voltage Regulator *NEW!*	TO-220	3.75	2.50	2.15
LT1001ACN8-ND	9175B	Precision Op Amp *NEW!*	8-Dip	5.88	3.92	3.40
LT1001CN8-ND	9175B	Precision Op Amp	8-Dip	2.88	2.10	1.90
LT1001CS8-ND	9175B	Precision Op Amp	SO-8	3.63	2.42	2.15
LT1002CN-ND	9175B	Dual Precision Op Amp *NEW!*	14-Dip	5.25	3.50	2.95
LT1004CS8-1.2-ND	9175B	Micropower 1.2 Volt Reference	SO-8	2.88	1.92	1.65
LT1004CS8-2.5-ND	9175B	Micropower 2.5 Volt Reference	SO-8	2.88	1.92	1.65
LT1004CZ-1.2-ND	9175B	Micropower 1.2 Volt Reference	TO-92	2.38	1.58	1.35
LT1004CZ-2.5-ND	9175B	Micropower 2.5 Volt Reference	TO-92	2.38	1.58	1.35
LT1004IS8-1.2-ND	9175B	Micropower 1.2 Volt Reference	SO-8	5.63	3.75	3.20
LT1004IS8-2.5-ND	9175B	Micropower 2.5 Volt Reference	SO-8	5.63	3.75	3.20
LT1004IZ-2.5-ND	—	Micropower 2.5 Volt Reference *NEW!*	TO-92	5.00	3.33	2.85
LT1006CN8-ND	9175B	5V Precision Op Amp	8-Dip	2.88	1.92	1.60
LT1006S8-ND	9175B	5V Precision Op Amp	SO-8	3.50	2.33	1.95
LT1007ACN8-ND	—	Low Noise High-Speed, Prec. Op Amp	8-Dip	8.75	5.83	5.00
LT1007CN8-ND	9175B	Low Noise High-Speed, Prec. Op Amp	8-Dip	3.63	2.42	1.95
LT1007CS8-ND	9176B	Low Noise High-Speed, Prec. Op Amp	SO-8	4.13	2.75	2.15
LT1007IS8-ND	—	Low Noise Op Amp Ind. Temp. *NEW!*	SO-8	5.63	3.75	3.10
LT1008CN8-ND	9175B	Low Noise Op Amp with Micro Volt Offset	8-Dip	5.50	3.67	3.10
LT1009CMS8-ND	—	2.5V Reference Shunt Regulator	8-MSOP	3.75	2.49	2.00
LT1009CMS8TR-ND	—	2.5V Reference Shunt Regulator	8-MSOP	4775.00/2,500		
LT1009CZ-ND	9175B	Volt Reference 2.5V, 0.2% Tolerance	TO-92	2.38	1.58	1.35
LT1009IS8-ND	—	Volt Reference 2.5V, 0.2% Tolerance *NEW!*	SO-8	4.50	3.00	2.55
LT1009IZ-ND	—	Volt Reference 2.5V, 0.2% Tolerance *NEW!*	TO-92	4.13	2.75	2.35
LT1009S8-ND	9175B	2.5 Volt Reference	SO-8	3.13	2.08	1.85
LT1010CN8-ND	9175B	Fast 150mA Power Buffer	8-Dip	4.38	2.92	2.50
LT1010CT-ND	9175B	High Speed 150mA Power Buffer *NEW!*	TO-39-4	5.00	3.33	2.85
LT1011ACN8-ND	9175B	Precision Voltage Comparator	8-Dip	5.25	3.50	2.85
LT1011AIS8-ND	—	2.5V Precision Voltage Comparator *NEW!*	SO-8	5.75	3.82	3.15
LT1011CN8-ND	9175B	Precision Voltage Comparator	8-Dip	2.38	1.58	1.40
LT1011CS8-ND	9175B	Precision Voltage Comparator	SO-8	3.00	2.00	1.70
LT1012ACN8-ND	9175B	Precision Voltage Comparator Low Noise Op Amp *NEW!*	SO-8	7.13	4.75	3.95
LT1012CN8-ND	9175B	Precision Voltage Comparator Low Noise Op Amp	8-Dip	5.00	3.33	2.75
LT1012S8-ND	9175B	Precision Voltage Comparator Low Noise Op Amp	SO-8	6.00	4.00	3.45
LT1013ACN8-ND	9176B	Dual Precision Op Amp	8-Dip	7.13	4.75	3.95
LT1013CN8-ND	9176B	Dual Precision Op Amp, Vos=300µV	8-Dip	4.25	2.83	2.40
LT1013DN8-ND	9176B	Dual Precision Op Amp, Vos=800µV	8-Dip	3.50	2.33	1.95
LT1013DS8-ND	9176B	Dual Precision Op Amp, Vos=800µV	SO-8	4.00	2.67	2.30
LT1014ACN-ND	9176B	Quad Precision Op Amp	14-Dip	12.75	8.50	7.10
LT1014CN-ND	9176B	Quad Precision Op Amp, Vos=300µV	14-Dip	9.38	6.25	5.35
LT1014DNLT-ND	9176B	Quad Precision Op Amp, Vos=800µV	14-Dip	6.25	4.17	3.60
LT1014DSW-ND	9176B	Quad Precision Op Amp	SOL-16	7.38	4.92	4.15
LT1016CN8-ND	9175B	High-Speed Comparator	8-Dip	5.50	3.67	2.95
LT1016CS8-ND	9175B	High-Speed Comparator	SO-8	6.13	4.08	3.20
LT1017CN8-ND	9210B	Micropower Dual Comp. 30µA Supply Current	8-Dip	3.63	2.42	2.10
LT1017CS8-ND	9210B	Micropower Dual Comp. 30µA Supply Current	SO-8	4.00	2.67	2.30
LT1017IS8-ND	9210B	Micropower Dual Comparator 30µA Supply Current *NEW!*	SO-8	4.88	3.25	2.75
LT1018CN8-ND	9210B	High-Speed Micropower Dual Comparator 110µA Supply Current	8-Dip	3.38	2.25	1.95
LT1018CS8-ND	9210B	High-Speed Micropower Dual Comparator 110µA Supply Current	SO-8	3.75	2.50	2.20
LT1019ACN8-2.5-ND	9175B	Precision 2.5V Bandgap Ref. (Elect. Improved)	8-Dip	11.25	7.50	6.50
LT1019ACN8-4.5-ND	9175B	Precision 4.5V Bandgap Reference (Elect. Improved) *NEW!*	8-Dip	11.25	7.50	6.50
LT1019ACN8-5-ND	9175B	Precision 5V Bandgap Ref. (Elect. Improved)	8-Dip	11.25	7.50	6.50
LT1019ACN8-10-ND	9175B	Precision 10V Bandgap Ref. (Elect. Improved)	8-Dip	11.25	7.50	6.50
LT1019ACS8-2.5-ND	—	Precision 2.5V Reference (Elect. Improved)	SO-8	10.88	7.50	6.50
LT1019ACS8-5-ND	—	Precision 5V Reference (Elect. Improved)	SO-8	10.88	7.50	6.50
LT1019CN8-2.5-ND	9175B	Precision 2.5V Bandgap Reference	8-Dip	6.88	4.58	3.90
LT1019CN8-5-ND	9175B	Precision 5V Bandgap Reference	8-Dip	6.88	4.58	3.90
LT1019CN8-10-ND	9175B	Precision 10V Bandgap Reference	8-Dip	6.88	4.58	3.90
LT1019CS8-2.5-ND	9175B	Precision 2.5V Bandgap Reference	SO-8	8.38	5.58	4.85
LT1019CS8-4.5-ND	—	Precision 4.5V Bandgap Reference *NEW!*	SO-8	8.38	5.58	4.85
LT1019CS8-5-ND	9175B	Precision 5V Bandgap Reference	SO-8	8.38	5.58	4.85
LT1019CS8-10-ND	9175B	Precision 10V Bandgap Reference	SO-8	8.38	5.58	4.85
LT1019IN8-2.5-ND	—	Precision 2.5V Bandgap Reference *NEW!*	8-Dip	8.63	5.75	4.95
LT1020CN-ND	9175B	Micropower Voltage Reg. and Comparator	14-Dip	6.88	4.58	3.90
LT1020CSW-ND	9175B	Micropower Voltage Reg. and Comparator	SOL-16	7.50	5.00	4.25
LT1021BCN8-5-ND	9175B	Precision 5V Reference, TC 5ppm/°C	8-Dip	9.63	6.42	5.50
LT1021BCN8-7-ND	9175B	Precision 7V Reference, TC 5ppm/°C *NEW!*	8-Dip	9.63	6.42	5.50
LT1021BCN8-10-ND	9175B	Precision 10V Reference, TC 5ppm/°C	8-Dip	9.63	6.42	5.50
LT1021CCH-5-ND	9175B	Precision 5V Reference, 0.05% Tolerance *NEW!*	TO-5-8	9.38	6.25	5.35
LT1021CCN8-5-ND	9175B	Precision 5V Reference, 0.05% Tolerance	8-Dip	6.38	4.25	3.65
LT1021CCN8-10-ND	9175B	Precision 10V Reference, 0.05% Tolerance	8-Dip	6.38	4.25	3.65
LT1021CIN8-5-ND	—	Precision 5V Reference, 0.05% Tolerance *NEW!*	8-Dip	8.63	5.75	4.85
LT1021DCN8-5-ND	9175B	Precision 5V Reference TC 20ppm/°C	8-Dip	4.75	3.17	2.75
LT1021DCN8-10-ND	9175B	Precision 10V Reference TC 20ppm/°C	8-Dip	4.75	3.17	2.75
LT1021DCS8-5-ND	9175B	Precision 5V Reference	SO-8	5.88	3.92	3.35
LT1021DCS8-10-ND	9175B	Precision 10V Reference	SO-8	5.88	3.92	3.35
LT1021DMH-5-ND	9175B	Precision 5V Reference, 20ppm/°C *NEW!*	TO-5-8	11.13	7.39	5.57
LT1022CN8-ND	9175B	High Speed Precision JFET Op Amp *NEW!*	8-Dip	5.00	3.33	2.95
LT1025ACN8-ND	9175B	Thermocouple Cold Junction Compensator	8-Dip	8.63	5.75	4.75
LT1025CN8-ND	9175B	Thermocouple Cold Junction Compensator	8-Dip	4.63	3.08	2.65
LT1026CN8-ND	9175B	Switch Capacitor Voltage Doubler/Inverter	8-Dip	3.75	2.50	2.10
LT1026CS8-ND	9175B	Switch Capacitor Voltage Doubler/Inverter	SO-8	4.25	2.83	2.30
LT1026IS8-ND	—	Switch Capacitor Voltage Doubler/Inverter	SO-8	5.38	3.60	3.10
LT1027BCN8-5-ND	9176B	+5V Reference, 2ppm/°C	8-Dip	9.25	6.17	4.95
LT1027CCN8-5-ND	9176B	+5V Reference, 3ppm/°C	8-Dip	8.38	5.58	4.50
LT1027CCS8-5-ND	—	+5V Reference, 3ppm/°C	SO-8	9.50	6.31	4.75
LT1027DCN8-5-ND	9176B	+5V Reference, 5ppm/°C	8-Dip	7.38	4.92	3.95
LT1027ECN8-5-ND	9176B	+5V Reference, 7.5ppm/°C	8-Dip	6.88	4.58	3.65
LT1027ECS8-5-ND	9176B	+5V Reference, 7.5ppm/°C	SO-8	4.63	3.10	2.40
LT1028ACN8-ND	9210B	Ultra Low Noise Op Amp	8-Dip	13.13	8.75	7.55
LT1028CN8-ND	9210B	Ultra Low Noise Op Amp	8-Dip	8.63	5.75	4.95
LT1028CS8-ND	9210B	Ultra Low Noise Op Amp	SO-8	8.63	5.75	4.95
LT1029ACZ-ND	9175B	5V Precision Bandgap Reference	TO-92	4.50	3.00	2.60
LT1029CZ-ND	9175B	5V Precision Bandgap Reference	TO-92	2.75	1.83	1.60
LT1030CNLT-ND	9175B	Quad Low Power Line Driver	14-Dip	3.13	2.08	1.65
LT1031BCH-ND	9175B	Precision 10V Reference 5ppm/°C *NEW!*	TO-5	13.50	9.00	7.70
LT1031DCH-ND	9175B	Precision 10V Reference 25ppm/°C *NEW!*	TO-5	6.25	4.15	3.55
LT1032CN-ND	9175B	Quad Low Power Line Driver	14-Dip	4.50	3.00	2.55
LT1032CSW-ND	9175B	Quad Low Power Line Driver	SO-16	4.63	3.08	2.60
LT1033CT-ND	9175B	Adj. Voltage Regulator 3A 1% Tolerance *NEW!*	TO-220	5.25	3.50	2.95
LT1034CS8-1.2-ND	9210B	1.2V Reference, Max TC = 40 ppm/°C	SO-8	4.50	3.00	2.40
LT1034CS8-2.5-ND	9210B	2.5V Reference, Max TC = 40 ppm/°C	SO-8	4.50	3.00	2.40
LT1034BCZ-1.2-ND	9210B	1.2V Reference, Max TC = 20 ppm/°C	TO-92	5.00	3.33	2.85
LT1034BCZ-2.5-ND	9210B	2.5V Reference, Max TC = 20 ppm/°C	TO-92	5.00	3.33	2.85
LT1034CZ-1.2-ND	9210B	1.2V Reference, Max TC = 40 ppm/°C	TO-92	3.75	2.50	2.15
LT1034CZ-2.5-ND	9210B	2.5V Reference, Max TC = 40 ppm/°C	TO-92	3.75	2.50	2.15
LT1034IS8-1.2-ND	—	1.2V Reference, 40ppm/°C Max TC	SO-8	6.25	4.17	3.35
LT1034IS8-2.5-ND	9210B	2.5V Reference, Max TC = 40 ppm/°C	SO-8	6.25	4.17	3.35
LT1037ACN8-ND	9175B	Low Noise High-Speed Op Amp	8-Dip	8.75	5.83	5.00
LT1037CN8-ND	9175B	Low Noise High-Speed Op Amp	8-Dip	3.63	2.42	1.95
LT1037CS8-ND	9176B	Low Noise High-Speed Op Amp	SO-8	4.13	2.75	2.15
LT1038CK-ND	9175B	Adj. Positive Volt Reg, 1% Tolerance, 10A	TO-3	17.88	11.90	10.20
LT1039ACN-ND	—	15kV Triple RS232 Driver/Receiver with Shutdown	18-Dip	5.00	3.35	2.85
LT1039ACSW-ND	—	15kV Triple RS232 Driver/Receiver with Shutdown	SO-18	5.88	3.91	3.35
LT1039CN-ND	9175B	Triple RS232 Driver/Receiver	18-Dip	4.38	2.92	2.45
LT1039CN16-ND	—	15kV Triple RS232 Driver/Receiver *NEW!*	16-Dip	3.75	2.75	2.10
LT1039CSW-ND	9175B	Triple RS232 Driver/Receiver	SO-18	5.25	3.50	2.90
LT1054CN8-ND	9210B	100mA Switching Cap Volt Converter	8-Dip	4.88	3.25	2.80
LT1054CSW-ND	—	100mA Switching Cap Volt Converter *NEW!*	SO-16	6.00	4.00	3.25
LT1054CS8-ND	9210B	100mA Switching Cap Volt Converter	SO-8	6.00	3.99	3.00
LT1054IN8-ND	9210B	100mA Switching Cap Volt Conv., Ind. Temp. *NEW!*	8-Dip	7.13	4.75	3.95
LT1054ISW-ND	—	100mA Switching Cap Volt Conv., Ind. Temp. *NEW!*	SO-16	8.63	5.75	4.85
LT1054IS8-ND	—	100mA Switching Cap Volt Conv., Ind. Temp. *NEW!*	SO-8	8.63	5.75	4.65
LT1054LCS8-ND	—	100mA Switching Cap Volt Converter	SO-8	4.25	2.83	2.15
LT1055CN8-ND	9175B	Precision JFET Op Amp	8-Dip	3.38	2.25	1.95
LT1056CN8-ND	9175B	Precision High-Speed JFET Op Amp	8-Dip	3.38	2.25	1.95
LT1056S8-ND	9175B	Precision High-Speed JFET Op Amp	SO-8	4.00	2.67	2.50
LT1057ACN8-ND	9175B	Dual Precision JFET Op Amp, 450µV	8-Dip	8.75	5.83	4.95
LT1057CN8-ND	9176B	Dual Precision JFET Op Amp, 600µV	8-Dip	4.50	3.00	2.55
LT1057S8-ND	9176B	Dual Precision JFET Op Amp	SO-8	4.75	3.17	2.95
LT1058ACN-ND	9175B	Quad Precision JFET Op Amp	14-Dip	16.50	11.00	9.55
LT1058CN-ND	9175B	Quad Precision JFET Op Amp	14-Dip	7.63	5.08	4.35
LT1058ISW-ND	9175B	Quad Precision JFET Op Amp *NEW!*	16-Dip	17.88	11.92	10.30
LT1058SW-ND	9175B	Quad Precision JFET Op Amp	SOL-16	8.88	5.92	5.00
LT1070CT-ND	9175B	5A Power Switching Regulator	TO-220-5	10.63	7.08	5.65
LT1070HVCT-ND	9175B	High Voltage 5A Power Switching Regulator	TO-220-5	13.75	9.17	7.35
LT1071CT-ND	9175B	2.5A Power Switching Regulator	TO-220-5	8.63	5.75	4.75
LT1071HVCT-ND	9175B	High Voltage 2.5A Power Switching Regulator	TO-220-5	11.25	7.50	6.20
LT1072CN8-ND	9210B	1.25A Power Switching Regulator	8-Dip	4.38	2.92	2.45
LT1072CS8-ND	9210B	1.25A Power Switching Regulator	SO-8	5.38	3.58	3.00
LT1072CT-ND	9210B	1.25A Power Switching Regulator	TO-220-5	5.63	3.75	2.95
LT1072HVCT-ND	9210B	High Voltage 1.25A Power Switching Regulator	TO-220-5	7.38	4.92	3.85
LT1072IN8-ND	—	1.25A Power Switching Regulator *NEW!*	8-Dip	6.13	4.08	3.45
LT1073CN8-ND	9176B	DC to DC Converter, Adjustable Output	8-Dip	5.50	3.67	3.15
LT1073CN8-5-ND	9176B	DC to DC Converter, 5V	8-Dip	5.50	3.67	3.15
LT1073CN8-12-ND	9176B	DC to DC Converter, 12V	8-Dip	5.50	3.67	3.15
LT1073CS8-ND	9176B	DC to DC Converter, Adjustable Output	SO-8	6.38	4.25	3.60
LT1073CS8-5-ND	9176B	DC to DC Converter, 5V	SO-8	6.38	4.25	3.60
LT1073CS8-12-ND	9176B	DC to DC Converter, 12V	SO-8	6.38	4.25	3.60
LT1074CT-ND	9210B	5A Step Down Switching Regulator	TO-220-5	9.25	6.17	5.25
LT1074CT7-ND	9210B	5A Step Down Switching Regulator *NEW!*	TO-220-7	10.75	7.17	6.10
LT1074HVCT-ND	9210B	High Volt 5A Step Down Switching Regulator	TO-220-5	13.88	9.25	7.90
LT1074HVCT7-ND	9210B	5A Step Down Switching Regulator *NEW!*	TO-220-7	15.38	10.25	8.75
LT1074HVIT-ND	9210B	High Volt 5A Step Down Switching Reg., Ind. Temp.	TO-220-5	18.75	12.50	10.65
LT1074HVIT7-ND	9210B	5A Step Down Switching Regulator, Ind. Temp *NEW!*	TO-220-7	20.25	13.50	11.20
LT1074IT-ND	9210B	5A Step Down Switching Regulator, Ind. Temp.	TO-220-5	12.50	8.33	7.10
LT1074IT7-ND	9210B	5A Step Down Switching Reg., Ind. Temp *NEW!*	TO-220-7	13.75	9.15	7.65
LT1076CQ-ND	9210B	2A Step Down Switching Regulator	5-DD	7.50	5.00	4.00
LT1076CQ-5-ND	9176B	2A Step Down 5V Switching Regulator	5-DD	7.50	5.00	4.00
LT1076CR-ND	9210B	2A Step-Down Switching Regulator	7-DD	8.13	5.42	4.35
LT1076CR-5-ND	9176B	2A Step-Down Switching Regulator, 5V	7-DD	8.13	5.42	4.35
LT1076CT-ND	9210B	2A Step Down Switching Regulator	TO-220-5	6.50	4.33	3.50
LT1076CT-5-ND	9176B	2A Step Down Switching Regulator, 5V	TO-220-5	6.50	4.33	3.50
LT1076CT7-ND	9210B	2A Step Down Switching Regulator *NEW!*	TO-220-7	7.50	5.00	4.00
LT1076HVCR-ND	9210B	2A Step Down Switching Regulator *NEW!*	7-DD	14.13	9.42	7.65

(Continued)

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Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★		
				1	25	100
LT1076HVCT-ND	9210B	2A Step Down Switching Regulator *NEW!*	TO-220-5	11.38	7.58	6.05
LT1076HVCT-5-ND	9210B	2A Step Down 5V Switching Regulator, 5V *NEW!*	TO-220-5	11.38	7.58	6.05
LT1076HVIT-ND	9210B	2A Step Down Switching Regulator *NEW!*	TO-220-5	13.38	8.92	7.65
LT1076IT-ND	9210B	2A Step Down Switching Regulator *NEW!*	TO-220-5	8.88	5.92	5.05
LT1077ACN8-ND	9176B	Micropower Precision Op Amp	8-Dip	5.63	3.75	3.20
LT1077CN8-ND	9176B	Micropower Precision Op Amp	8-Dip	3.13	2.08	1.65
LT1077IS8-ND	9176B	Micropower Precision Op Amp	SO-8	4.38	2.91	2.40
LT1077S8-ND	9176B	Micropower Precision Op Amp	SO-8	3.63	2.42	2.05
LT1078ACN8-ND	9176B	Micropower Precision Dual Op Amp	8-Dip	9.00	6.00	5.15
LT1078CN8-ND	9176B	Micropower Dual Op Amp	8-Dip	5.00	3.33	2.80
LT1078IN8-ND	9176B	Precision Op Amp *NEW!*	8-Dip	6.50	4.33	3.75
LT1078IS8-ND	9176B	Precision Op Amp *NEW!*	SO-8	8.38	5.60	4.85
LT1078S8-ND	9176B	Micropower Precision Dual Op Amp	SO-8	6.50	4.35	3.65
LT1079ACN-ND	9176B	Micropower Precision Quad Op Amp	14-Dip	11.25	7.50	6.50
LT1079CN-ND	9176B	Micropower Precision Quad Op Amp	14-Dip	6.25	4.17	3.50
LT1079IN-ND	9176B	Micropower Precision Quad Op Amp, Ind Temp.	14-Dip	7.75	5.17	4.45
LT1079ISW-ND	9176B	Micropower Precision Quad Op Amp, Ind Temp.	SOL-16	10.13	6.75	5.70
LT1079SW-ND	9176B	Micropower Precision Quad Op Amp	SOL-16	8.13	5.42	4.55
LT1080CN-ND	9175B	5V, RS232 Driver/Receiver with Shutdown	18-Dip	5.63	3.75	3.15
LT1081CN-ND	9175B	5V Powered RS232 Driver/Receiver	16-Dip	4.75	3.17	2.65
LT1081CSW-ND	9175B	5V Powered RS232 Driver/Receiver	SOL-16	6.00	4.00	3.35
LT1082CN8-ND	9210B	1A High Voltage Switching Regulator	8-Dip	8.13	5.42	4.60
LT1082CT-ND	9210B	1A High Voltage Switching Regulator	TO-220-5	9.38	6.25	5.35
LT1082IQ-ND	9210B	1A High Voltage Switching Regulator *NEW!*	5-DD	11.63	7.75	6.65
LT1082IT-ND	9210B	1A High Voltage Switching Regulator *NEW!*	TO-220-5	10.88	7.25	6.20
LT1083CP-ND	9210B	Adjustable 7.5A Low Dropout Voltage Regulator	TO-3P	13.25	8.83	7.70
LT1083CP-5-ND	9210B	5V, 7.5A Low Dropout Regulator	TO-3P	13.25	8.83	7.70
LT1083CP-12-ND	9210B	12V, 7.5A Low Dropout Regulator	TO-3P	13.25	8.83	7.70
LT1084CP-ND	9210B	Adjustable 5A Low Dropout Voltage Regulator	TO-247	8.88	5.90	5.00
LT1084CP-5-ND	9210B	5V 5A Low Dropout Regulator	TO-3P	8.88	5.90	5.00
LT1084CP-12-ND	9210B	12V 5A Low Dropout Regulator	TO-3P	7.63	5.90	5.00
LT1084CT-ND	9210B	Adjustable 5A Low Dropout Regulator	TO-220	7.75	5.20	4.45
LT1084CT-3.3-ND	9210B	3.3V 5A Low Dropout Voltage Regulator	TO-220	7.75	5.20	4.45
LT1084CT-5-ND	9210B	5V, 5A Low Dropout Regulator	TO-220	7.75	5.20	4.45
LT1084CT-12-ND	9210B	12V 5A Low Dropout Regulator	TO-220	7.75	5.20	4.45
LT1084IT-ND	9210B	Adjust. 5A Low Dropout Voltage Regulator, Ind. Temp.	TO-220	10.00	6.65	5.70
LT1085CM-ND	9210B	Adjust. 3A Low Dropout Voltage Regulator	3-DD	7.13	4.75	4.00
LT1085CM-3.3-ND	9210B	3.3V 3A Low Dropout Voltage Regulator	3-DD	7.13	4.75	4.00
LT1085CM-3.6-ND	9210B	3.6V 3A Low Dropout Voltage Regulator *NEW!*	3-DD	7.13	4.75	4.00
LT1085CT-ND	9210B	Adj. 3A Low Dropout Positive Volt Regulator	TO-220	6.50	4.35	3.70
LT1085CT-3.3-ND	9210B	3.3V 3A Low Dropout Voltage Regulator	TO-220	6.50	4.35	3.70
LT1085CT-3.6-ND	9210B	3.6V 3A Low Dropout Voltage Regulator	TO-220	6.50	4.35	3.70
LT1085CT-5-ND	9210B	5V 3A Low Dropout Voltage Regulator	TO-220	6.50	4.35	3.70
LT1085CT-12-ND	9210B	12V 3A Low Dropout Voltage Regulator	TO-220	6.50	4.35	3.70
LT1085IM-3.6-ND	—	3.6V 3A Low Dropout Voltage Regulator	3-DD	10.25	6.81	5.13
LT1086CM-ND	9210B	Adj. 1.5A Low Dropout Pos Voltage Regulator	3-DD	4.00	2.66	2.30
LT1086CM-3.3-ND	9210B	3.3V, 1.5A Low Dropout Positive Voltage Regulator	3-DD	4.00	2.66	2.30
LT1086CT-ND	9210B	Adj. 1.5A Low Dropout Positive Voltage Regulator	TO-220	3.75	2.50	2.15
LT1086CT-2.85-ND	9210B	2.85V 1.5A Low Dropout Voltage Regulator	TO-220	3.75	2.50	2.15
LT1086CT-3.3-ND	9210B	3.3V 1.5A Low Dropout Regulator	T0-220	3.75	2.50	2.15
LT1086CT-3.6-ND	9210B	3.6V 1.5A Low Dropout Regulator	T0-220	3.75	2.50	2.15
LT1086CT-5-ND	9210B	5V 1.5A Low Dropout Voltage Regulator	TO-220	3.75	2.50	2.15
LT1086CT-12-ND	9210B	12V 1.5A Low Dropout Voltage Regulator	TO-220	3.75	2.50	2.15
LT1086IM-ND	9210B	Adj. 1.5A Low Dropout Positive Voltage Regulator	3-DD	4.63	3.08	2.55
LT1087CT-ND	—	Adjustable 5A Low Dropout Voltage Reg. *NEW!*	TO-220-5	7.75	5.17	4.45
LT1088CD-ND	—	Wideband RMS-DC Converter *NEW!*	14-CDip	25.00	16.60	12.50
LT1097CN8-ND	9176B	Low Cost, Low Noise Precision Op Amp	8-Dip	3.13	2.08	1.80
LT1097S8-ND	9176B	Low Cost, Low Noise Precision Op Amp	SO-8	3.38	2.25	1.95
LT1101ACN8-ND	9176B	Precision Micropower Instrumentation Amp	8-Dip	12.25	8.17	6.95
LT1101AIN8-ND	9176B	Prec. Micropower Instr. Amp, Ind. Temp. *NEW!*	8-Dip	15.25	10.17	8.70
LT1101CN8-ND	9176B	Precision Micropower Instrumentation Amp	8-Dip	8.75	5.83	4.95
LT1101IN8-ND	9176B	Prec. Micropower Instr. Amp, Ind. Temp. *NEW!*	8-Dip	10.88	7.25	6.25
LT1101SW-ND	9176B	Precision Micropower Instrumentation Amp	SOL-16	10.50	7.00	5.95
LT1102ACN8-ND	9176B	Precision Micropower Instrumentation Amp JFET Input	8-Dip	12.25	8.17	6.95
LT1102CN8-ND	9176B	Precision Micropower Instrumentation Amp JFET Input	8-Dip	8.75	5.83	4.95
LT1105CN-ND	9210B	Offline Switching Regulator	14-Dip	7.63	5.08	4.05
LT1105CN8-ND	9210B	Offline Switching Regulator	8-Dip	7.13	4.75	3.75
LT1107CS8-ND	—	DC/DC Converter Adjustable *NEW!*	SO-8	4.38	2.91	2.40
LT1107CS8-5-ND	—	5V Out DC/DC Converter *NEW!*	SO-8	5.13	3.42	2.90
LT1107IS8-ND	—	DC/DC Converter Adjustable, Ind. Temp. *NEW!*	SO-8	5.38	3.60	3.10
LT1108CS8-ND	—	Micropower 5V DC/DC Converter *NEW!*	SO-8	5.13	3.42	2.90
LT1108CS8-5-ND	9210B	Micropower 5V DC/DC Converter	SO-8	5.13	3.42	2.90
LT1109ACN8-12-ND	9210B	Micropower Switching Regulator +12V Out	8-Dip	4.38	2.92	2.45
LT1109ACS8-12-ND	9210B	Micropower Switching Regulator +12V Out	SO-8	4.38	2.92	2.45
LT1109CS8-ND	9210B	Adjustable Micropower Switching Regulator	SO-8	4.38	2.92	2.45
LT1109CS8-12-ND	9210B	Micropower Switching Regulator +12V Out	SO-8	4.38	2.92	2.45
LT1110CN8-12-ND	9176B	Micropower Switching Regulator +12V Out	8-Dip	5.50	3.67	3.15
LT1110CS8-ND	9176B	Micropower Switching Regulator Adj. Out	SO-8	6.38	4.25	3.60
LT1110CS8-5-ND	9176B	Micropower Switching Regulator +5V Out	SO-8	6.38	4.25	3.60
LT1111CN8-ND	9210B	Micropower Switching Regulator Adj. Out	8-Dip	4.25	2.83	2.40
LT1111CN8-5-ND	9210B	Micropower Switching Regulator +5V Out	8-Dip	4.25	2.83	2.40
LT1111CN8-12-ND	9210B	Micropower Switching Regulator +12V Out	8-Dip	4.25	2.83	2.40
LT1111CS8-ND	9210B	Micropower Switching Regulator Adj. Out	SO-8	4.88	3.25	2.80
LT1111CS8-5-ND	9210B	Micropower Switching Regulator +5V Out	SO-8	4.88	3.25	2.80
LT1111CS8-12-ND	9120B	Micropower Switching Regulator +12V *NEW!*	SO-8	4.88	3.25	2.80
LT1111IS8-ND	9120B	Micropower Switching Regulator Adj. Out *NEW!*	SO-8	6.38	4.25	3.60
LT1112ACN8-ND	9210B	Dual Precision Op Amp	8-Dip	6.25	4.17	3.50
LT1112CN8-ND	9210B	Dual Precision Op Amp	8-Dip	4.38	2.92	2.45
LT1112S8-ND	9210B	Dual Precision Op Amp	SO-8	4.88	3.25	2.65
LT1113CN8-ND	9210B	Dual Low Noise Precision JFET Input Op Amp	8-Dip	6.00	4.00	3.25
LT1113CS8-ND	9210B	Dual Low Noise Precision JFET Input Op Amp	SO-8	6.50	4.33	3.55
LT1114ACN-ND	9210B	Quad Precision Op Amp	14-Dip	12.13	8.08	6.50
LT1114CN-ND	9210B	Quad Precision Op Amp	14-Dip	8.50	5.67	4.50
LT1114S-ND	9210B	Quad Precision Op Amp	SO-16	8.88	5.92	4.75
LT1115CN8-ND	9176B	Ultra Low Noise Audio Op Amp	8-Dip	5.63	3.74	2.95
LT1116CN8-ND	9176B	High-Speed Ground Sense Comparator	8-Dip	6.00	4.00	3.50
LT1116CS8-ND	9176B	High-Speed Ground Sense Comparator	SO-8	6.63	4.42	3.75
LT1117CM-5-ND	9210B	800mA Low Dropout Positive Regulator	3-DD	3.88	2.58	2.20
LT1117CST-ND	9210B	Adjustable Low Dropout Regulator	SOT-223	3.63	2.42	1.95
LT1117CST-2.85-ND	9210B	+2.85V SCSI Terminator	SOT-223	3.63	2.42	1.95
LT1117CST-3.3-ND	9210B	+3.3V Low Dropout Regulator	SOT-223	3.63	2.42	1.95
LT1117CST-5-ND	9210B	+5V Low Dropout Regulator	SOT-223	3.63	2.42	1.95
LT1118CS8-ND	—	800mA Low Dropout Pos Reg. with 400mA Isink	SO-8	5.00	3.45	2.95
LT1118CS8-2.5-ND	—	2.5V 800mA Low Dropout Positive Regulator with 400mA Isink *NEW!*	SO-8	5.00	3.45	2.95
LT1118CS8-2.85-ND	9257B	2.85V 800mA LDO Pos Regulator with 400mA Isink	SO-8	4.63	3.20	2.75
LT1118CST-2.5-ND	9257B	2.5V 800mA LDO Pos Reg. w/ 400mA Isink	SOT-223	4.75	3.16	2.65
LT1118CST-2.85-ND	9257B	2.85V 800mA LDO Pos Reg. w/ 400mA Isink	SOT-223	4.38	2.91	2.40
LT1118CST-5-ND	9257B	5V 800mA LDO Pos Reg. with 400mA Isink	SOT-223	4.75	3.16	2.65
LT1120ACN8-ND	9210B	2.5V Micropower Regulator & Comp. with Shutdown	8-Dip	4.75	3.17	2.60
LT1120ACS8-ND	9210B	2.5V Micropower Regulator & Comp. with Shutdown	SO-8	5.50	3.67	3.15
LT1120AIS8-ND	—	Micropower Volt Reg. & Comp. with Shutdown *NEW!*	SO-8	7.13	4.75	4.05
LT1120CN8-ND	9210B	Micropower Volt Reg. & Comp. with Shutdown	8-Dip	4.38	2.92	2.40
LT1120CS8-ND	9210B	Micropower Volt Reg. & Comp. with Shutdown	SO-8	5.13	3.42	2.80
LT1120IN8-ND	—	Micropower Volt Reg. & Comp. with Shutdown *NEW!*	8-Dip	5.50	3.67	3.15
LT1121ACS8-ND	9120B	Adjustable Low Dropout Micropower Regulator *NEW!*	SO-8	3.75	2.50	2.00
LT1121ACS8-5-ND	9210B	Micropower Low Dropout Regulator with Shutdown	SO-8	3.75	2.50	2.00
LT1121AHVCS8-ND	—	Micropower Low Dropout Reg. with Shutdown *NEW!*	SO-8	4.50	2.99	2.40
LT1121AHVIS8-ND	—	Micropower LDO Reg. w/Shutdown, Ind. Temp. *NEW!*	SO-8	5.25	3.49	2.81
LT1121AIS8-ND	9120B	Adjustable Low Dropout Micropower Regulator *NEW!*	SO-8	4.38	2.92	2.35
LT1121AIS8-5-ND	9120B	5V Adj. Low Dropout Micropower Regulator *NEW!*	SO-8	4.38	2.92	2.35
LT1121CN8-ND	9210B	Adjustable Low Dropout Micropower Regulator	8-Dip	2.75	1.83	1.55
LT1121CN8-3.3-ND	9210B	3.3V Low Dropout Micropower Regulator	8-Dip	2.75	1.83	1.55
LT1121CN8-5-ND	9210B	5 Volt Low Dropout Micropower Regulator	8-Dip	2.75	1.83	1.55
LT1121CS8-ND	9210B	Adjustable Low Dropout Micropower Regulator	SO-8	3.00	2.00	1.70
LT1121CS8-3.3-ND	9210B	3.3V Low Dropout Micropower Regulator	SO-8	3.00	2.00	1.70
LT1121CS8-5-ND	9210B	5V Low Dropout Micropower Regulator	SO-8	3.00	2.00	1.70
LT1121CST-3.3-ND	9210B	3.3V Low Dropout Micropower Regulator	SOT-223	3.25	2.17	1.75
LT1121CST-5-ND	9210B	5V Low Dropout Micropower Regulator	SOT-223	3.25	2.17	1.75
LT1121CZ-3.3-ND	9210B	3.3V Low Dropout Micropower Regulator	TO-92	2.38	1.58	1.35
LT1121CZ-5-ND	9210B	5V Low Dropout Micropower Regulator	TO-92	2.38	1.58	1.35
LT1121IST-3.3-ND	9120B	3.3V Adj. Low Dropout Micropower Reg. *NEW!*	SOT-223	3.88	2.58	2.10
LT1121IST-5-ND	9120B	5V Adj. Low Dropout Micropower Regulator *NEW!*	SOT-223	3.88	2.58	2.10
LT1121IS8-ND	9120B	Adjustable Low Dropout Micropower Regulator *NEW!*	SO-8	3.63	2.42	2.05
LT1121IS8-3.3-ND	9120B	3.3V Adj. Low Dropout Micropower Regulator *NEW!*	SO-8	3.63	2.42	2.05
LT1121IS8-5-ND	9120B	5V Adj. Low Dropout Micropower Regulator *NEW!*	SO-8	3.63	2.42	2.05
LT1121IZ-5-ND	9210B	5V Low Dropout Micropower Regulator	TO-92	2.88	1.92	1.60
LT1122CCN8-ND	9120B	Fast Settling JFET Input Op Amp *NEW!*	8-Dip	5.25	3.50	2.95
LT1122CS8-ND	9210B	Fast Settling JFET Input Op Amp	SO-8	5.75	3.83	3.25
LT1122DCN8-ND	9210B	Fast Settling JFET Input Op Amp	8-Dip	4.50	3.00	2.50
LT1122DS8-ND	9210B	Fast Settling JFET Input Op Amp	SO-8	4.88	3.25	2.70
LT1124CN8-ND	9176B	Dual Low Noise High Gain Op Amp	8-Dip	6.38	4.25	3.65
LT1124CS8-ND	9176B	Dual Low Noise High Gain Op Amp	SO-8	6.75	4.50	3.85
LT1125ACN-ND	9176B	Quad Low Noise High Gain Op Amp *NEW!*	8-Dip	13.25	8.83	7.50
LT1125CN-ND	9176B	Quad Low Noise High Gain Op Amp	14-Dip	10.50	7.00	5.95
LT1125CSW-ND	9176B	Quad Low Noise High Gain Op Amp	SOL-16	11.50	7.67	6.50
LT1126CN8-ND	9176B	Dual Low Noise High Slew Rate Op Amp	8-Dip	6.38	4.25	3.65
LT1126CS8-ND	9176B	Dual Low Noise High Slew Rate Op Amp	SO-8	6.75	4.50	3.85
LT1127CN-ND	9176B	Quad Low Noise High Slew Rate Op Amp	14-Dip	10.50	7.00	5.95
LT1127CSW-ND	9176B	Quad Low Noise High Slew Rate Op Amp	SOL-16	11.50	7.67	6.50
LT1128ACN8-ND	9120B	Ultra Low Noise Unity Gain Op Amp *NEW!*	8-Dip	13.13	8.75	7.55
LT1128CN8-ND	9210B	Ultra Low Noise Unity Gain Op Amp	8-Dip	8.63	5.75	4.95
LT1128CS8-ND	9210B	Ultra Low Noise Unity Gain Op Amp	SO-8	8.63	5.75	4.95
LT1129CQ-ND	9210B	700mA Micropower LDO Voltage Regulator	5-DD	4.63	3.08	2.55
LT1129CQ-3.3-ND	9210B	3.3V 700mA Micropower LDO Voltage Regulator	5-DD	4.63	3.08	2.55
LT1129CQ-5-ND	9210B	5V 700mA Micropower LDO Regulator	5-DD	4.63	3.08	2.55
LT1129CS8-ND	9210B	Adj. 700mA Low Power LDO Voltage Regulator	SO-8	4.75	3.17	2.55
LT1129CS8-3.3-ND	9210B	3.3V 700mA Low Power LDO Voltage Regulator	SO-8	4.75	3.17	2.55
LT1129CS8-5-ND	9210B	5V 700mA Low Power LDO Voltage Regulator	SO-8	4.75	3.17	2.55
LT1129CST-3.3-ND	9210B	3.3V 700mA Micropower LDO Voltage Reg.	SOT-223	4.25	2.83	2.35
LT1129CST-5-ND	9210B	5V 700mA Micropower LDO Voltage Regulator	SOT-223	4.25	2.83	2.35
LT1129CT-ND	9210B	700mA Micropower LDO Voltage Regulator	TO-220-5	4.00	2.67	2.25
LT1129CT-3.3-ND	9210B	3.3V 700mA Micropower LDO Voltage Regulator	TO-220-5	4.00	2.67	2.25
LT1129CT-5-ND	9210B	5V 700mA Micropower LDO Voltage Regulator	TO-220-5	4.00	2.67	2.25
LT1129IQ-ND	9120B	Adj. 700mA Micropower LDO Voltage Regulator *NEW!*	5-DD	5.50	3.67	3.05
LT1129IQ-5-ND	9120B	5V 700mA Micropower LDO Voltage Regulator *NEW!*	5-DD	5.50	3.67	3.05
LT1129IST-3.3-ND	9120B	3.3V 700mA Micropower LDO Voltage Reg. *NEW!*	SOT-223	4.75	3.17	2.70
LT1129IST-5-ND	9120B	5V 700mA Micropower LDO Voltage Reg. *NEW!*	SOT-223	4.75	3.17	2.70
LT1129IS8-ND	9120B	Adj. 700mA Micropower LDO Voltage Regulator *NEW!*	SO-8	5.63	3.75	3.05
LT1129IS8-3.3-ND	9120B	3.3V 700mA Micropower LDO Voltage Regulator *NEW!*	SO-8	5.63	3.75	3.05
LT1129IS8-5-ND	9120B	5V 700mA Micropower LDO Voltage Regulator *NEW!*	SO-8	5.63	3.75	3.05
LT1130ACN-ND	9210B	5V RS232 5 Drivers/5 Receivers w/ Charge and Pump	28-Dip	7.25	4.83	4.00
LT1130ACSW-ND	9210B	5V RS232 5 Drivers/5 Receivers	SO-28	7.63	5.10	4.25
LT1131ACNW-ND	—	5V RS232 5 Drivers/4 Receivers w/Shutdown *NEW!*	28-Dip	7.25	4.83	4.00
LT1131ACSW-ND	9210B	5V RS232 5 Drivers/4 Receivers with Shutdown	SO-28	7.63	5.08	4.25
LT1131CNW-ND	9175B	5V RS232 5 Drivers/4 Receivers with Shutdown	24-Dip	8.13	6.00	4.60
LT1132ACN-ND	9210B	5V RS232 5 Drivers/3 Receivers	24-Dip	7.25	4.83	4.00
LT1132ACSW-ND	9210B	5V RS232 5 Drivers/3 Receivers	SO-24	7.63	5.08	4.25
LT1132AISW-ND	—	5V RS232 5 Drivers/3 Receivers	SO-24	9.13	6.06	5.20
LT1133ACN-ND	9210B	5V RS232 3 Drivers/5 Receivers	24-Dip	7.25	4.83	4.00
LT1133ACSW-ND	9210B	5V RS232 3 Drivers/5 Receivers	SO-24	7.63	5.08	4.25
LT1133AISW-ND	—	5V RS232 3 Drivers/5 Receivers	SO-24	9.13	6.06	5.20
LT1134ACN-ND	9210B	5V RS232 4 Drivers/4 Receivers	24-Dip	7.00	4.67	3.75
LT1134ACSW-ND	9210B	5V RS232 4 Drivers/4 Receivers	SO-24	7.00	4.67	3.75
LT1134AIN-ND	9120B	5V RS232 4 Drivers/4 Receivers w/Shutdown *NEW!*	24-Dip	9.00	6.00	5.00
LT1134AISW-ND	—	5V RS232 4 Drivers/4 Receivers w/Shutdown *NEW!*	SO-24	9.00	6.00	5.00
LT1135ACN-ND	9210B	5V RS232 5 Drivers/3 Receivers	20-Dip	5.88	3.92	3.25
LT1135ACSW-ND	9210B	5V RS232 5 Drivers/3 Receivers	SO-20	6.25	4.17	3.45
LT1136ACNW-ND	9210B	5V RS232 4 Drivers/5 Receiver with Shutdown	28-Dip	7.25	4.83	4.00
LT1136ACSW-ND	9210B	5V RS232 4 Drivers/5 Receiver with Shutdown	SO-28	7.63	5.08	4.25
LT1137ACG-ND	9120B	5V RS232 3 Drivers/5 Receivers with Shutdown *NEW!*	28-SSOP	7.75	5.17	4.15
LT1137ACNW-ND	9210B	5V RS232 3 Drivers/5 Receiver with Shutdown	28-Dip	7.00	4.65	3.75
LT1137ACSW-ND	9210B	5V RS232 3 Drivers/5 Receiver with Shutdown	SO-28	7.00	4.67	3.75
LT1137AIG-ND	—	5V RS232 3 Drivers/5 Receivers with Shutdown, Ind. Temp. *NEW!*	28-SSOP	8.88	5.90	4.85
LT1137AINW-ND	—	5V RS232 3 Drivers/5 Receivers w/Shutdown *NEW!*	28-Dip	8.38	5.58	4.50
LT1137AISW-ND	—	5V RS232 3 Drivers/5 Receivers w/Shutdown *NEW!*	SO-28	8.38	5.58	4.50
LT1138ACNW-ND	9210B	5V RS232 5 Drivers/3 Receiver with Shutdown	28-Dip	7.25	4.83	4.00
LT1139ACSW-ND	9210B	5V or 12V Supply RS232 4 Drivers/ 4 Receivers with Shutdown	SO-24	7.63	5.08	4.25

(Continued)

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Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★ 1	25	100
LT1140ACN-ND	9210B	RS232 5 Drivers/3 Receivers with Shutdown	24-Dip	5.88	3.92	3.25
LT1141ACN-ND	9210B	RS232 3 Drivers/5 Receivers with Shutdown	24-Dip	5.88	3.92	3.25
LT1141ACSW-ND	9210B	RS232 3 Drivers/5 Receivers with Shutdown	SO-24	6.25	4.17	3.45
LT1158CN-ND	9176B	Half Bridge N-Channel Power MOSFET Driver	16-Dip	5.88	3.92	3.50
LT1158CSW-ND	9176B	Half Bridge N-Channel Power MOSFET Driver	SOL-16	6.25	4.17	3.75
LT1158ISW-ND	—	Halfbridge N-Channel Power MOSFET Driver *NEW!*	SO-28	7.25	4.83	4.30
LT1160CN-ND	9285B	Half Bridge N-Channel Power MOSFET Driver	14-Dip	5.25	3.50	3.00
LT1160CS-ND	9285B	Half Bridge N-Channel Power MOSFET Driver	SO-14	5.63	3.75	3.20
LT1161CN-ND	9210B	Quad High Voltage High Side N-Chan. MOSFET Driver	20-Dip	6.00	4.00	3.30
LT1161CSW-ND	9210B	Quad High Voltage High Side N-Chan. MOSFET Driver	SO-20	6.50	4.32	3.60
LT1161IN-ND	9120B	Quad High Voltage High Side N-Chan. MOSFET Driver *NEW!*	20-Dip	6.75	4.50	3.70
LT1161ISW-ND	—	Quad High Voltage High Side N-Chan. MOSFET Driver *NEW!*	SO-20	7.25	4.82	4.05
LT1167ACN8-ND	—	Programmable Precision Instrumentation Amp.	8-Dip	11.13	7.39	5.75
LT1167ACS8-ND	—	Programmable Instrumentation Amplifier	SO-8	11.13	7.39	5.75
LT1167AIS8-ND	—	Programmable Precision Instrumentation Amp *NEW!*	SO-8	12.75	8.47	6.65
LT1167CN8-ND	—	Programmable Precision Instrumentation Amp.	8-Dip	6.38	4.24	3.30
LT1167CS8-ND	—	Instrumentation Amplifier	SO-8	6.38	4.24	3.30
LT1167IS8-ND	—	Programmable Precision Instrumentation Amp *NEW!*	SO-8	7.38	4.90	3.85
LT1169CN8-ND	9210B	Dual Low Noise JFet Op Amp	8-Dip	7.25	4.83	3.95
LT1169CS8-ND	—	Dual Low Noise JFET Op Amp *NEW!*	SO-8	7.75	5.15	4.25
LT1170CQ-ND	9210B	5A Power Switching Regulator, 100KHz	5-DD	11.38	7.58	6.05
LT1170CT-ND	9210B	5A Power Switching Regulator, 100KHz	TO-220-5	10.63	7.08	5.65
LT1170HVCQ-ND	—	5A High Efficiency Switching Regulator, 100KHz, High Voltage (60V)	5-DD	14.38	9.55	8.25
LT1170HVCQTR-ND	—	5A High Efficiency Switching Regulator, 100KHz, High Voltage (60V)	5-DD	5715.00/750		
LT1170HVCT-ND	9210B	High Volt 5A Power Switch Regulator, 100KHz	TO-220-5	13.75	9.17	7.35
LT1170IQ-ND	—	5A Power Switching Regulator, 100KHz *NEW!*	5-DD	14.25	9.50	8.50
LT1171CQ-ND	9210B	3A Power Switching Regulator, 100KHz	5-DD	9.38	6.25	5.20
LT1171CT-ND	9210B	3A Power Switching Regulator, 100KHz	TO-220-5	8.63	5.75	4.75
LT1171HVCQ-ND	—	2.5Amp High Efficiency Switching Regulator	5-DD	11.75	7.81	6.70
LT1171HVCT-ND	9210B	High Volt 2.5A Power Switching Regulator, 100KHz	TO-220-5	11.25	7.50	6.20
LT1171IQ-ND	—	2.5A Power Switching Regulator, 100KHz *NEW!*	5-DD	10.25	6.81	5.45
LT1172CN8-ND	9210B	1.25A Power Switching Regulator, 100KHz	8-Dip	4.38	2.92	2.45
LT1172CQ-ND	9210B	1.25A Power Switching Regulator, 100KHz	5-DD	6.38	4.25	3.55
LT1172CS8-ND	9210B	1.25A Power Switching Regulator, 100KHz	SO-8	5.38	3.58	3.00
LT1172CT-ND	9210B	1.25A Power Switching Regulator, 100KHz	TO-220-5	5.63	3.75	2.95
LT1172HVCT-ND	9210B	High Volt 1.25A Power Switching Regulator, 100KHz.	TO-220-5	7.38	4.92	3.85
LT1172IN8-ND	9120B	1.25A Power Switching Regulator, 100KHz *NEW!*	8-Dip	6.13	4.08	3.45
LT1172IS8-ND	9120B	1.25A Power Switching Regulator, 100KHz *NEW!*	SO-8	7.00	4.67	3.90
LT1173CN8-ND	9176B	Micropower Switching Regulator, Adj. Out	8-Dip	4.25	2.83	2.40
LT1173CN8-5-ND	9176B	Micropower Switching Regulator +5V Out	8-Dip	4.25	2.83	2.40
LT1173CN8-12-ND	9176B	Micropower Switching Regulator +12V Out	8-Dip	4.25	2.83	2.40
LT1173CS8-ND	9176B	Micropower Switching Regulator Adj. Out	SO-8	4.88	3.25	2.80
LT1173CS8-5-ND	9176B	Micropower Switching Regulator +5V Out	SO-8	4.88	3.25	2.80
LT1173CS8-12-ND	9176B	Micropower Switching Regulator 12V Out *NEW!*	SO-8	4.88	3.25	2.80
LT1175CN8-ND	9257B	5V 500mA Negative Low Dropout Regulator *NEW!*	8-Dip	4.63	3.10	2.55
LT1175CN8-5-ND	9257B	5V, 500mA Neg Low Dropout Regulator	8-Dip	4.63	3.10	2.55
LT1175CQ-ND	9257B	5V 500mA Negative Low Dropout Regulator *NEW!*	5-DD	5.88	3.91	3.25
LT1175CQ-5-ND	9257B	5V 500mA Negative Low Dropout Regulator *NEW!*	5-DD	5.88	3.91	3.25
LT1175CST-5-ND	—	5V 500mA Negative Low Dropout Regulator *NEW!*	SOT-223	4.88	3.25	2.80
LT1175CS8-ND	9257B	5V 500mA Negative Low Dropout Regulator *NEW!*	SO-8	5.38	3.60	3.00
LT1175CS8-5-ND	9257B	5V, 500mA Neg Low Dropout Regulator	SO-8	5.38	3.60	3.00
LT1175CT-ND	9257B	Adjustable 500mA Negative LDO Regulator *NEW!*	TO-220-5	5.63	3.75	3.15
LT1175CT-5-ND	9257B	5V, 500mA Neg Low Dropout Regulator.	TO-220-5	5.63	3.75	3.15
LT1175IN8-ND	—	Adjustable 500mA Negative LDO Regulator *NEW!*	8-Dip	6.00	4.00	3.35
LT1175IQ-ND	—	Adjustable 500mA Negative LDO Regulator *NEW!*	5-DD	7.50	5.00	4.30
LT1175IQ-5-ND	—	5V 500mA Negative Low Dropout Regulator *NEW!*	5-DD	7.50	5.00	4.30
LT1175IST-5-ND	—	5V 500mA Negative Low Dropout Regulator *NEW!*	SOT-223	5.38	3.60	3.10
LT1175IS8-ND	—	Adjustable 500mA Negative LDO Regulator *NEW!*	SO-8	7.00	4.65	3.90
LT1175IS8-5-ND	—	5V 500mA Negative Low Dropout Regulator *NEW!*	SO-8	7.00	4.65	3.90
LT1176CN8-ND	9210B	Adjustable 1A Step Down Switching Regulator	8-Dip	5.63	3.75	3.20
LT1176CN8-5-ND	9210B	5V 1A Step Down Switching Regulator	8-Dip	5.63	3.75	3.20
LT1176CSW-ND	9210B	Adjustable 1A Step Down Switching Regulator	SO-20	8.13	5.42	4.35
LT1176CSW-5-ND	9210B	5V 1A Step Down Switching Regulator	SO-20	8.13	5.42	4.35
LT1178ACN8-ND	9176B	Ultra Low Power Precision Dual Op Amp	8-Dip	10.00	6.67	5.60
LT1178CN8-ND	9176B	Ultra Low Power Precision Dual Op Amp	8-Dip	5.50	3.67	3.00
LT1178IN8-ND	—	Ultra LP Prec. Dual Op Amp, Ind. Temp. *NEW!*	8-Dip	6.88	4.58	3.95
LT1178S8-ND	9210B	Ultra Low Power Precision Dual Op Amp	SO-8	7.00	4.65	3.85
LT1179ACN-ND	9176B	Low Power Precision Quad Op Amp.	14-Dip	12.38	8.25	6.90
LT1179CN-ND	9176B	Low Power Precision Quad Op Amp.	14-Dip	6.88	4.58	3.90
LT1179IN-ND	9176B	Ultra Low Power Precision Quad Op Amp *NEW!*	14-Dip	8.50	5.67	4.85
LT1179SW-ND	9176B	Low Power Precision Quad Op Amp.	SOL-16	8.75	5.83	5.00
LT1180ACN-ND	9210B	Low Power 5V RS232 Dual Driver/Receiver	18-Dip	4.63	3.08	2.45
LT1180ACSW-ND	9210B	Low Power 5V RS232 Dual Driver/Receiver	SO-18	5.13	3.42	2.70
LT1181ACN-ND	9175B	Low Power 5V RS232 Dual Driver/Receiver	16-Dip	4.63	3.08	2.45
LT1181ACSW-ND	9210B	Low Power 5V RS232 Dual Driver/Receiver	SOL-16	5.13	3.42	2.70
LT1181ACSWTR-ND	—	Low Power 5V RS232 Dual Driver/Receiver *NEW!*	SO-16	6.75	4.49	3.38
LT1182CS-ND	9285B	CCFL/LCD Contrast Regulator	SO-16	9.38	6.25	5.35
LT1183CS-ND	9285B	CCFL/LCD Contrast Regulator	SO-16	9.38	6.25	5.35
LT1184CS-ND	9257B	CCFL Switching Regulator	SO-16	6.63	4.40	3.80
LT1184FCS-ND	9257B	CCFL Switching Regulator (Floating)	SO-16	7.88	5.25	4.50
LT1185CT-ND	9176B	3A Adjustable Low Dropout Voltage Regulator	TO-220-5	6.50	4.33	3.70
LT1185IT-ND	—	3A Adj. Low Dropout Voltage Regulator *NEW!*	TO-220-5	8.75	5.83	4.90
LT1186FCS-ND	—	CCFL Controlled Switching Regulator *NEW!*	SO-16	9.75	6.50	5.60
LT1187CN8-ND	9210B	Low Power Video Difference Amp	8-Dip	5.50	3.67	2.95
LT1187CS8-ND	9210B	Low Power Video Difference Amp.	SO-8	6.13	4.08	3.45
LT1188CT-ND	9176B	1.5A High Side Switch.	TO-220-5	7.50	5.00	4.25
LT1191CN8-ND	9176B	Ultra High-Speed Op Amp	8-Dip	3.25	2.17	1.73
LT1191CS8-ND	9176B	Ultra High-Speed Op Amp.	SO-8	3.75	2.50	1.95
LT1193CN8-ND	9176B	Adjustable Gain Video Difference Amp.	8-Dip	5.50	3.67	2.95
LT1193CS8-ND	9176B	Adjustable Gain Video Difference Amp *NEW!*	SO-8	6.13	4.08	3.45
LT1195CN8-ND	9210B	Low Power High-Speed Op Amp.	8-Dip	3.25	2.17	1.73
LT1203CN8-ND	9210B	150MHz Video Multiplexer	8-Dip	3.13	2.08	1.57
LT1203CS8-ND	9210B	150MHz Video Multiplexer	SO-8	3.38	2.25	1.69
LT1204CN-ND	9210B	4 Input Video Multiplexer with Current Feedback	16-Dip	9.00	6.00	4.95
LT1204CSW-ND	9210B	4 Input Video Multiplexer with Current Feedback	SOL-16	9.75	6.50	5.40
LT1205CS-ND	9210B	Dual 150MHz Video Multiplexer	SO-16	5.38	3.57	2.70
LT1206CN8-ND	9210B	250mA Out, 60MHz Current Feedback Amp *NEW!*	8-Dip	6.25	4.17	3.45
LT1206CR-ND	9210B	250mA Out, 60MHz Current Feedback Amp *NEW!*	7-DD	8.13	5.42	4.45
LT1206CS8-ND	9210B	250mA Out, 60MHz Current Feedback Amp.	SO-8	7.25	4.83	3.95
LT1206CT7-ND	—	250mA Out, 60MHz Current Feedback Amp *NEW!*	TO-220-7	8.13	5.42	4.45
LT1207CS-ND	—	Dual 250mA Out 60MHz Current Feedback Amp *NEW!*	SO-16	12.88	8.60	7.15
LT1208CN8-ND	9210B	High-Speed Dual Op Amp.	8-Dip	7.75	5.17	4.45
LT1208CS8-ND	9210B	High-Speed Dual Op Amp	SO-8	8.75	5.83	5.00
LT1209CN-ND	9210B	High-Speed Quad Op Amp.	14-Dip	12.13	8.08	6.90
LT1209CS-ND	9210B	High-Speed Quad Op Amp	SO-16	13.00	8.67	7.45
LT1211CN8-ND	9210B	14MHz Single Supply Dual Precision Op Amp	8-Dip	6.13	4.07	3.07
LT1211CS8-ND	9210B	14MHz Single Supply Dual Precision Op Amp	SO-8	6.63	4.40	3.32
LT1211IS8-ND	—	14MHz Single Supply Dual Prec. Op Amp, Ind. Temp. *NEW!*	SO-8	7.50	4.98	3.75
LT1212CN-ND	9210B	14MHz Single Supply Quad Precision Op Amp	14-Dip	11.00	7.31	5.50
LT1212CS-ND	9210B	14MHz Single Supply Quad Precision Op Amp	SO-16	11.88	7.89	5.94
LT1212IS-ND	—	14MHz Single Supply Quad Prec. Op Amp, Ind. Temp. *NEW!*	SO-16	13.25	8.80	6.63
LT1213CN8-ND	9210B	28MHz Single Supply Dual Precision Op Amp	8-Dip	6.13	4.07	3.07
LT1213CS8-ND	9210B	28MHz Single Supply Dual Precision Op Amp	SO-8	6.63	4.40	3.32
LT1214CN-ND	9210B	28MHz Single Supply Quad Precision Op Amp	14-Dip	11.00	7.31	5.50
LT1214CS-ND	9210B	28MHz Single Supply Quad Precision Op Amp	SO-16	11.88	7.89	5.94
LT1215CN8-ND	9210B	23MHz Single Supply Dual Precision Op Amp	8-Dip	6.13	4.07	3.07
LT1215CS8-ND	9210B	23MHz Single Supply Dual Precision Op Amp	SO-8	6.63	4.40	3.32
LT1216CN-ND	9210B	23MHz Single Supply Quad Precision Op Amp	14-Dip	11.00	7.31	5.50
LT1216CS-ND	9210B	23MHz Single Supply Quad Precision Op Amp	SO-16	11.88	7.89	5.94
LT1218CN8-ND	—	Precision Op Amp Rail-to-Rail I/O	8-Dip	9.63	6.40	4.95
LT1218CS8-ND	—	Precision Op Amp Rail-to-Rail I/O.	SO-8	10.00	6.64	5.15
LT1218LCN8-ND	—	Precision Op Amp 3V Supply Rail-to-Rail Input.	8-Dip	5.88	3.91	3.15
LT1218LCS8-ND	—	Precision Op Amp 3V Supply Rail-to-Rail Input	SO-8	6.13	4.07	3.30
LT1219CS8-ND	—	Single Prec Rail-to-Rail I/O C-Load	SO-8	10.00	6.64	5.15
LT1220CN8-ND	9176B	Very High-Speed Op Amp.	8-Dip	6.25	4.17	3.50
LT1220CS8-ND	9176B	Very High-Speed Op Amp	SO-8	6.88	4.58	3.75
LT1221CN8-ND	9176B	Very High-Speed Op Amp.	8-Dip	6.25	4.17	3.35
LT1221CS8-ND	9176B	Very High-Speed Op Amp	SO-8	6.88	4.57	3.50
LT1222CN8-ND	—	Low Noise Very High-Speed Op Amp *NEW!*	8-Dip	6.25	4.17	3.50
LT1222CS8-ND	—	Low Noise Very High-Speed Op Amp	SO-8	6.88	4.58	3.75
LT1223CN8-ND	9176B	100MHz Current Feedback Op Amp.	8-Dip	5.38	3.58	2.85
LT1223CS8-ND	9176B	100MHz Current Feedback Op Amp	SO-8	6.13	4.08	3.40
LT1224CN8-ND	9176B	400V/µs High-Speed Op Amp.	8-Dip	5.38	3.58	2.85
LT1224CS8-ND	9176B	400V/µs High-Speed Op Amp	SO-8	6.13	4.07	3.30
LT1226CN8-ND	9176B	Very High-Speed Low Noise Op Amp	8-Dip	5.38	3.58	2.85
LT1226CS8-ND	9176B	Very High-Speed Low Noise Op Amp	SO-8	6.13	4.08	3.40
LT1227CN8-ND	9210B	140MHz High-Speed Current Feedback Op Amp	8-Dip	4.63	3.08	2.45
LT1227CS8-ND	9210B	140MHz High-Speed Current Feedback Op Amp	SO-8	5.38	3.58	2.85
LT1228CN8-ND	9176B	100MHz Current Feedback Amp with DC Gain	8-Dip	6.88	4.58	3.95
LT1228CS8-ND	9176B	100MHz Current Feedback Amp with DC Gain	SO-8	7.75	5.17	4.30
LT1229CN8-ND	9176B	Dual Current Feedback Op Amp.	8-Dip	6.88	4.58	3.95
LT1229CS8-ND	9176B	Dual Current Feedback Op Amp	SO-8	7.75	5.17	4.30
LT1230CS-ND	9176B	Quad Current Feedback Op Amp	SO-14	13.75	9.13	7.50
LT1236ACN8-5-ND	9257B	5V Precision Reference	8-Dip	7.75	5.15	4.00
LT1236ACN8-10-ND	9257B	10V Precision Reference 5ppm/°C.	8-Dip	6.13	4.07	3.20
LT1236ACS8-5-ND	9257B	5V Precision Reference	SO-8	7.75	5.15	4.00
LT1236ACS8-10-ND	9257B	10V Precision Reference 5ppm/°C	SO-8	6.38	4.24	3.30
LT1236AIS8-5-ND	9275B	5V Precision Reference 5ppm/°C *NEW!*	SO-8	10.25	6.81	5.32
LT1236BCN8-5-ND	9257B	5V Precision Reference	8-Dip	4.50	2.99	2.30
LT1236BCN8-10-ND	9257B	10V Precision Reference 10ppm/°C	8-Dip	4.88	3.24	2.55
LT1236BCS8-5-ND	9257B	5V Precision Reference	SO-8	4.50	2.99	2.30
LT1236BCS8-10-ND	9275B	10V Precision Reference 10ppm/°C *NEW!*	SO-8	4.88	3.24	2.55
LT1236BIS8-5-ND	9275B	5V Precision Reference 10ppm/°C *NEW!*	SO-8	5.13	3.41	2.65
LT1236CCN8-5-ND	9257B	5V Precision Reference	8-Dip	4.00	2.66	2.05
LT1236CCN8-10-ND	9257B	10V Precision Reference 15ppm/°C	8-Dip	4.50	2.99	2.35
LT1236CCS8-5-ND	9257B	5V Precision Reference	SO-8	4.00	2.66	2.05
LT1237CG-ND	—	5V RS232 Transceiver with 1 Receiver Active with Shutdown *NEW!*	28-SSOP	8.13	5.42	4.25
LT1237CNW-ND	9210B	5V RS232 Transceiver with 1 Rec. Active w/Shutdown	28-Dip	7.38	4.92	3.95
LT1237CSW-ND	9210B	5V RS232 Transceiver with 1 Rec. Active w/Shutdown	SO-28	7.38	4.92	3.95
LT1241CN8-ND	9176B	High Speed Current Mode PWM	8-Dip	3.50	2.33	2.10
LT1241CS8-ND	9176B	High Speed Current Mode PWM	SO-8	3.88	2.58	2.30
LT1242CN8-ND	9176B	High Speed Current Mode PWM	8-Dip	3.50	2.33	2.10
LT1242CS8-ND	9176B	High Speed Current Mode PWM	SO-8	3.88	2.58	2.30
LT1243CN8-ND	9176B	High Speed Current Mode PWM	8-Dip	3.50	2.33	2.10
LT1243CS8-ND	9176B	High Speed Current Mode PWM	SO-8	3.88	2.58	2.30
LT1243IN8-ND	—	High Speed Current Mode PWM, Ind. Temp. *NEW!*	8-Dip	3.88	2.58	2.30
LT1244CN8-ND	9176B	High Speed Current Mode PWM	8-Dip	3.50	2.33	2.10
LT1244CS8-ND	9176B	High Speed Current Mode PWM	SO-8	3.88	2.58	2.30
LT1245CN8-ND	9176B	High Speed Current Mode PWM	8-Dip	3.50	2.33	2.10
LT1245CS8-ND	9176B	High Speed Current Mode PWM	SO-8	3.88	2.58	2.30
LT1245IN8-ND	—	High Speed Current Mode PWM, Ind. Temp. *NEW!*	8-Dip	3.88	2.58	2.30
LT1246CN8-ND	9257B	1MHz Current Mode PWM	8-Dip	4.00	2.67	2.25
LT1248CN-ND	9210B	Power Factor Correction Controller.	16-Dip	6.88	4.58	3.65
LT1248CS-ND	9210B	Power Factor Correction Controller	SO-16	7.38	4.92	3.90
LT1248IS-ND	9210B	Power Factor Correction Controller, Ind. Temp. *NEW!*	SO-16	8.63	5.75	4.65
LT1249CN8-ND	9210B	8-Pin Power Factor Correction Controller.	8-Dip	6.25	4.17	3.30
LT1249CS8-ND	9210B	8-Pin Power Factor Correction Controller	SO-8	6.75	4.50	3.55
LT1249IN8-ND	9210B	8-Pin Power Factor Correction Controller *NEW!*	8-Dip	7.13	4.75	3.75
LT1249IS8-ND	9210B	8-Pin Power Factor Correction Cont., Ind. Temp. *NEW!*	SO-8	7.75	5.17	4.15
LT1251CN-ND	9210B	40MHz Video Fader	14-Dip	11.00	7.33	6.00
LT1252CN8-ND	9210B	Low Cost Video Amplifier	8-Dip	3.25	2.17	1.75
LT1252CS8-ND	9210B	Low Cost Video Amplifier	SO-8	3.50	2.33	1.85
LT1253CN8-ND	9210B	Low Cost Dual Video Amplifier	8-Dip	4.50	3.00	2.49
LT1253CS8-ND	9210B	Low Cost Dual Video Amplifier	SO-8	4.88	3.25	2.60
LT1254CN-ND	9210B	Low Cost Quad Video Amplifier	14-Dip	8.13	5.42	4.49
LT1254CS-ND	9210B	Low Cost Quad Video Amplifier	SO-14	8.63	5.75	4.80
LT1256CN-ND	9210B	40MHz DC Gain Controller Amplifier	14-Dip	11.00	7.33	6.00
LT1256CS-ND	9210B	40MHz DC Gain Controller Amplifier	SO-14	11.63	7.75	6.30
LT1259CN-ND	9210B	Dual Current Feedback Amp with Shutdown	14-Dip	4.63	3.08	2.55
LT1259CS-ND	9210B	Dual Current Feedback Amp with Shutdown	SO-14	4.75	3.16	2.65
LT1260CN-ND	9210B	Triple Current Feedback Amp with Shutdown	16-Dip	4.88	3.24	2.70
LT1260CS-ND	9210B	Triple Current Feedback Amp with Shutdown	SO-16	5.13	3.41	2.85
LT1268BCQ-ND	9210B	7.5A 150KHz Switching Regulator *NEW!*	5-DD	12.75	8.50	7.25

(Continued)

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Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★ 1	25	100
LT1268CT-ND	9210B	7.5 Amp 150KHz Switching Regulator	TO-5	11.38	7.58	6.50
LT1269CT-ND	9210B	4 Amp Power Switching Regulator	TO-220-5	8.88	5.92	4.90
LT1270ACT-ND	9210B	10 Amp Power Switching Regulator	TO-220-5	15.75	10.50	8.90
LT1270CT-ND	9210B	8 Amp Power Switching Regulator	TO-220-5	10.63	7.08	5.65
LT1271CQ-ND	9210B	4 Amp Power Switching Regulator	5-DD	9.38	6.25	5.20
LT1271CT-ND	9210B	4 Amp Power Switching Regulator *NEW!*	TO-220-5	8.63	5.75	4.75
LT1280ACN-ND	9210B	Low Power Dual 5V RS232 Dx/Rx 10kV w/Shutdown	18-Dip	5.00	3.33	2.65
LT1280ACSW-ND	9210B	Low Power Dual 5V RS232 Dx/Rx 10kV w/Shutdown	SO-18	5.50	3.67	2.90
LT1281ACN-ND	9210B	Low Power Dual 5V RS232 Dx/Rx 10kV	16-Dip	5.00	3.33	2.65
LT1281ACSW-ND	9210B	Low Power Dual 5V RS232 Dx/Rx 10kV	SOL-16	5.50	3.67	2.90
LT1300CN8-ND	9210B	3.3V/5V Micropower DC/DC Boost Converter	8-Dip	5.00	3.33	2.60
LT1300CS8-ND	9210B	3.3V/5V Micropower DC/DC Boost Converter	SO-8	5.00	3.33	2.60
LT1301CN8-ND	9210B	5V/12V Micropower DC/DC Boost Converter	8-Dip	4.75	3.17	2.50
LT1301CS8-ND	9210B	5V/12V Micropower DC/DC Boost Converter	SO-8	4.75	3.17	2.50
LT1302CN8-5-ND	9257B	5V Micropower High Output DC/DC Converter	8-Dip	6.13	4.08	3.35
LT1302CS8-ND	9257B	Micropower High Output Current DC/DC Converter	SO-8	6.38	4.25	3.50
LT1302CS8-5-ND	9257B	5V Micropower High Output DC/DC Converter	SO-8	6.38	4.25	3.50
LT1303CN8-ND	9257B	Micropower DC/DC Converter	8-Dip	4.75	3.16	2.50
LT1303CN8-5-ND	9257B	5V Micropower DC/DC Converter	8-Dip	4.75	3.16	2.50
LT1303CS8-ND	9257B	Micropower DC/DC Converter	SO-8	4.75	3.16	2.50
LT1303CS8-5-ND	9257B	5V Micropower DC/DC Converter	SO-8	4.75	3.16	2.50
LT1303IS8-ND	—	Adjustable DC/DC Converter *NEW!*	SO-8	6.38	4.25	3.40
LT1304CS8-ND	9285B	Low Power DC/DC Converter with Low Battery Detector Active in Shutdown	SO-8	4.75	3.16	2.50
LT1304CS8-5-ND	9285B	Low Power DC/DC Converter with Low Battery Detector Active in Shutdown	SO-8	4.75	3.16	2.50
LT1305CS8-ND	9257B	Micropower High Power DC/DC Converter with Low Battery Detector	SO-8	6.38	4.25	3.65
LT1307BCS8-ND	9285B	Single Cell Micropower 600KHz PWM DC/DC Converter	SO-8	4.13	2.75	2.20
LT1307CS8-ND	9285B	Single Cell Micropower 600KHz PWM DC/DC Converter	SO-8	4.13	2.75	2.20
LT1308ACS8-ND	—	High Current, Very Low Power Single Cell 600KHz DC/DC Converter	SO-8	6.50	4.32	3.50
LT1308BCS8-ND	—	High Current, Low Power Single Cell 600KHz DC/DC Converter	SO-8	6.50	4.32	3.50
LT1308CS8-ND	—	High Current, Low Power Single Cell 600KHz DC/DC Converter *NEW!*	SO-8	6.88	4.57	3.65
LT1312CS8-ND	9257B	Single PCMCIA VPP Driver/Regulator	SO-8	3.75	2.50	2.15
LT1316CMS8-ND	—	Micropower DC to DC Converter	8-MSOP	5.38	3.57	2.95
LT1316CS8-ND	—	Micropower DC to DC Converter	SO-8	4.75	3.16	2.50
LT1316IS8-ND	—	Micropower DC to DC Converter	SO-8	5.50	3.66	2.90
LT1317BCMS8-ND	—	Micropower 600KHz PWM DC/DC Converter	8-MSOP	4.88	3.24	2.55
LT1317BCS8-ND	—	Micropower 600KHz PWM DC/DC Converter	SO-8	4.38	2.91	2.30
LT1317BIS8-ND	—	Micropower 600KHz PWM DC/DC Converter	SO-8	5.63	3.74	3.00
LT1317CMS8-ND	—	Micropower 600KHz PWM DC/DC Converter	8-MSOP	4.88	3.24	2.55
LT1317CS8-ND	—	Micropower 600KHz PWM DC/DC Converter	SO-8	4.38	2.91	2.30
LT1319CS-ND	9257B	Infrared Receiver Building Block	SO-16	7.25	4.83	3.95
LT1328CMS8-ND	—	4MBPS Infrared Receiver	8-MSOP	5.88	3.91	2.94
LT1330CNW-ND	9210B	5V RS232 Transceiver w/3V Logic Interface	28-Dip	7.38	4.92	3.95
LT1330CSW-ND	9210B	5V RS232 Transceiver w/3V Logic Interface	SO-28	7.38	4.92	3.95
LT1331CNW-ND	9210B	5V/3V RS232 Xcvr. w/1 Receiver Active in Shutdown	28-Dip	7.38	4.92	3.95
LT1331CG-ND	9210B	5V/3V RS232 Transceiver with 1 Receiver Active in Shutdown *NEW!*	28-SSOP	8.13	5.42	4.25
LT1331CSW-ND	9210B	5V/3V RS232 Xcvr. w/1 Receiver Active in Shutdown	SO-28	7.38	4.92	3.95
LT1336CN-ND	—	Halfbridge N-Channel Power MOSFET with Boost Regulator *NEW!*	16-Dip	5.63	3.75	3.20
LT1336CS-ND	—	Halfbridge N-Channel Power MOSFET with Boost Regulator *NEW!*	SO-16	6.00	4.00	3.40
LT1339CN-ND	9294B	High Power Synch. DC/DC Controller	20-Dip	9.13	6.10	5.20
LT1339CSW-ND	9294B	High Power Synch. DC/DC Controller	SO-20	9.38	6.25	5.35
LT1339IN-ND	9294B	High Power Synch. DC/DC Controller	20-Dip	11.00	7.35	6.30
LT1339ISW-ND	9294B	High Power Synch. DC/DC Controller	SO-20	11.25	7.50	6.45
LT1341CG-ND	9210B	5V RS232 3 Driver/5 Receiver with 1 Receiver Active in Shutdown	28-SSOP	8.13	5.42	4.25
LT1341CNW-ND	9210B	5V RS232 3 Driver/5 Receiver with 1 Receiver Active in Shutdown	28-Dip	7.38	4.92	3.95
LT1341CSW-ND	9210B	5V RS232 3 Driver/5 Receiver with 1 Receiver Active in Shutdown	SO-28	7.38	4.92	3.95
LT1342CG-ND	9210B	RS232 3 Driver/5 Receiver with 3V Logic	28-SSOP	7.75	5.17	4.20
LT1351CMS8-ND	9285B	250µA, 3MHz, 200V/µSec Op Amp	8-MSOP	5.13	3.41	2.80
LT1351CS8-ND	9285B	Low Power 250µA, 3MHz, 200V/µSec Op Amp *NEW!*	SO-8	4.75	3.15	2.60
LT1352CS8-ND	—	Dual-Quad, Very Low Power, 250µA, 3MHz, 200V/µSec Op Amp *NEW!*	SO-8	7.63	5.10	4.25
LT1353CS-ND	—	Dual-Quad, Very Low Power, 250µA, 3MHz, 200V/µSec Op Amp *NEW!*	SO-14	12.63	8.40	6.95
LT1354CN8-ND	9210B	1mA, 12MHz 400V/µSec Op Amp	8-Dip	4.25	2.83	2.35
LT1354CS8-ND	9210B	1mA, 12MHz 400V/µSec Op Amp	SO-8	4.75	3.17	2.60
LT1355CN8-ND	9210B	Dual Low Power 12MHz 400V/µSec Op Amp	8-Dip	7.00	4.67	3.95
LT1355CS8-ND	9210B	Dual Low Power 12MHz 400V/µSec Op Amp	SO-8	7.63	5.10	4.25
LT1356CN-ND	9210B	Quad Low Power 12MHz 400V/µSec Op Amp	14-Dip	11.75	7.83	6.70
LT1356CS-ND	9210B	Quad Low Power 12MHz 400V/µSec Op Amp	SO-16	12.63	8.40	6.95
LT1357CN8-ND	9210B	2mA, 25MHz 600V/µSec Op Amp	8-Dip	4.63	3.08	2.55
LT1357CS8-ND	9210B	2mA, 25MHz 600V/µSec Op Amp	SO-8	5.13	3.42	2.80
LT1358CN8-ND	9210B	Dual 2mA, 25MHz 600V/µSec Op Amp	8-Dip	7.25	4.83	4.10
LT1358CS8-ND	9210B	Dual 2mA, 25MHz 600V/µSec Op Amp	SO-8	8.25	5.50	4.40
LT1359CN-ND	9210B	Quad 2mA, 25MHz 600V/µSec Op Amp	14-Dip	12.00	8.00	6.80
LT1359CS-ND	9210B	Quad 2mA, 25MHz 600V/µSec Op Amp	SO-16	12.88	8.55	7.05
LT1360CN8-ND	9210B	Low Power 50MHz 800V/µSec Op Amp	8-Dip	4.13	2.75	2.25
LT1360CS8-ND	9210B	Low Power 50MHz 800V/µSec Op Amp	SO-8	4.63	3.08	2.50
LT1361CN8-ND	9210B	50MHz Dual Op Amp	8-Dip	6.38	4.25	3.50
LT1361CS8-ND	9210B	50MHz Dual Op Amp	SO-8	6.75	4.50	3.65
LT1362CN-ND	9210B	Quad 50MHz Op Amp	14-Dip	11.25	7.50	6.15
LT1362CS-ND	9210B	Quad 50MHz Op Amp	SO-16	11.75	7.83	6.45
LT1363CN8-ND	9210B	70MHz 1000V/µSec Op Amp	8-Dip	4.50	3.00	2.45
LT1363CS8-ND	9210B	6mA, 70MHz 1000V/µSec Op Amp	SO-8	5.00	3.33	2.70
LT1364CN8-ND	9210B	70MHz Dual Op Amp	8-Dip	6.88	4.58	3.80
LT1364CS8-ND	9210B	70MHz Dual Op Amp	SO-8	7.25	4.83	3.95
LT1365CN-ND	9210B	70MHz Quad Op Amp	14-Dip	12.13	8.08	6.65
LT1365CS-ND	9210B	70MHz Quad Op Amp	SO-16	12.63	8.42	6.95
LT1366CN8-ND	9257B	Dual Precision Rail-to-Rail I/O Op Amp	8-Dip	6.50	4.33	3.60
LT1366CS8-ND	9257B	Dual Precision Rail-to-Rail I/O Op Amp	SO-8	6.75	4.50	3.75
LT1367CS-ND	9257B	Quad Precision Rail-to-Rail I/O Op Amp	SO-14	11.50	7.65	6.35
LT1368CN8-ND	9257B	Rail-to-Rail Op Amp	8-Dip	6.50	4.32	3.60
LT1368CS8-ND	9257B	Rail-to-Rail Op Amp	SO-8	6.75	4.50	3.75
LT1369CS-ND	—	Quad Precision Rail-to-Rail I/O Op Amp	SO-14	11.50	7.65	6.35
LT1370CT7-ND	—	500KHz, 6A Switching Regulator *NEW!*	TO-220-7	11.63	7.72	6.25
LT1370HVCR-ND	—	500KHz, 6A Switching Regulator *NEW!*	7-DD	13.50	8.97	7.25
LT1370HVCT7-ND	—	500KHz, 6A Switching Regulator *NEW!*	TO-220-7	13.25	8.80	7.10
LT1370HVIR-ND	—	500KHz, 6A Switching Regulator, Ind. Temp. *NEW!*	7-DD	16.13	10.71	8.65
LT1370IR-ND	—	500KHz, 6A Switching Regulator, Ind. Temp. *NEW!*	7-DD	14.25	9.47	7.65
LT1371CR-ND	—	500KHz, 3A Step Up Switching Regulator *NEW!*	7-DD	9.63	6.40	5.50
LT1371CSW-ND	—	500KHz, 3A Step Up Switching Regulator *NEW!*	SO-20	10.63	7.10	6.10
LT1371HVCR-ND	—	500KHz, 3A Step Up Switching Regulator *NEW!*	7-DD	10.25	6.85	5.85
LT1371IR-ND	—	500KHz, 3A Step Up Switching Regulator *NEW!*	7-DD	11.50	7.64	6.55
LT1372CN8-ND	9257B	500KHz, 1.5A, Step Up Switching Regulator	8-Dip	6.50	4.32	3.70
LT1372CS8-ND	9257B	500KHz, 1.5A, Step Up Switch Regulator	SO-8	6.75	4.50	3.85
LT1372HVCS8-ND	—	500KHz, 1.5A Step Up Switching Regulator *NEW!*	SO-8	7.38	4.90	4.20
LT1372IS8-ND	—	500KHz, 1.5A Step Up Switch. Reg., Ind. Temp. *NEW!*	SO-8	8.13	5.40	4.65
LT1373CN8-ND	9257B	250KHz Switching Regulator	8-Dip	6.50	4.32	3.70
LT1373CS8-ND	9257B	250KHz Switching Regulator	SO-8	6.75	4.50	3.85
LT1373HVCS8-ND	—	250KHz, 1.5A Step Up Switching Regulator *NEW!*	SO-8	7.38	4.90	4.20
LT1373IS8-ND	—	250KHz, 1.5A Step Up Switch. Reg., Ind. Temp. *NEW!*	SO-8	8.13	5.40	4.65
LT1374CR-ND	—	Adj. 500KHz, 4.5A, Step Down Switching Regulator	7-DD	10.00	6.64	5.00
LT1374CR-5-ND	—	5V, 500KHz, 4.5A, Step Down Switching Regulator	7-DD	10.00	6.64	5.00
LT1374CS8-ND	—	Adj. 500KHz, 4.5A, Step Down Switching Regulator	SO-8	9.38	6.23	4.70
LT1374CS8-5-ND	—	5V, 500KHz, 4.5A, Step Down Switching Regulator	SO-8	9.38	6.23	4.70
LT1374CS8-5SYNC-ND	—	5V, Synchronous, Version of LT1374	SO-8	9.38	6.23	4.70
LT1374CS8-SYNC-ND	—	4.5A, 500KHz, Step Down Switching Regulator	SO-8	9.38	6.23	4.70
LT1374CT7-ND	—	Adj. 500KHz, 4.5A, Step Down Switching Regulator	TO-220-7	9.75	6.48	4.90
LT1374CT7-5-ND	—	5V, 500KHz, 4.5A, Step Down Switching Regulator	TO-220-7	9.75	6.48	4.90
LT1374HVCS8-ND	—	500KHz, 4.5A, Step Down Switching Regulator 32V In	SO-8	10.38	6.89	5.20
LT1374IR-ND	—	Adj. 500KHz, 4.5A Step Down Switching Reg. *NEW!*	7-DD	11.50	7.64	5.75
LT1374IR-5-ND	—	5V 500KHz, 4.5A Step Down Switching Reg. *NEW!*	7-DD	11.50	7.64	5.75
LT1374IS8-5SYNC-ND	—	500KHz, 4.5A, Step Down Switching Reg., Ind. Temp	SO-8	10.75	7.14	5.40
LT1374IT7-5-ND	—	5V 500KHz, 4.5A Step Down Switching Reg. *NEW!*	TO-220-7	11.25	7.47	5.65
LT1375CS8-ND	9257B	500KHz, 1.5A, Step Down Switching Regulator	SO-8	6.50	4.32	3.40
LT1375CS8-5-ND	9257B	5V 500KHz, 1.5A Step Down Switching Reg. *NEW!*	SO-8	6.75	4.49	3.85
LT1375IS8-ND	9257B	5V 500KHz, 1.5A Step Down Switch. Reg., Ind. Temp. *NEW!*	SO-8	7.75	5.15	4.10
LT1376CN8-ND	9257B	500KHz, 1.5A, Step Down Switching Regulator	8-Dip	6.50	4.35	3.70
LT1376CN8-5-ND	9257B	5V, 500KHz, 1.5A, Step Down Switching Regulator	8-Dip	6.50	4.35	3.70
LT1376CS-ND	9257B	500KHz, 1.5A, Step Down Switching Regulator	SO-16	7.38	4.90	3.90
LT1376CS8-ND	9257B	500KHz, 1.5A, Step Down Switching Regulator	SO-8	6.50	4.32	3.40
LT1376CS8-5-ND	9257B	5V, 500KHz, 1.5A, Step Down Switching Regulator	SO-8	6.75	4.50	3.85
LT1376HVCS8-ND	—	500KHz, 1.5A, Step Down Switching Regulator *NEW!*	SO-8	7.13	4.74	3.75
LT1376HVIS-ND	—	500KHz, 1.5A, Step Down Switching Regulator *NEW!*	SO-8	9.50	6.31	5.00
LT1376IS-ND	9257B	500KHz, 1.5A, Step Down Switching Reg., Ind. Temp.	SO-16	8.63	5.73	4.55
LT1376IS8-ND	9257B	500KHz, 1.5A, Step Down Switching Regulator *NEW!*	SO-8	7.75	5.15	4.10
LT1376IS8-5-ND	9257B	5V, 500KHz, 1.5A, Step Down Switching Reg. *NEW!*	SO-8	8.13	5.40	4.65
LT1377CS8-ND	—	1MHz Switching Regulator *NEW!*	SO-8	7.88	5.25	4.50
LT1377IS8-ND	—	1MHz Switching Regulator, Ind. Temp. *NEW!*	SO-8	9.50	6.35	5.40
LT1381CS-ND	9210B	RS232 2 Drivers/2 Receivers	SO-16	3.50	2.33	2.00
LT1389ACS8-1.25-ND	—	Nanopower Precision Shunt 1.25V Voltage Reference	SO-8	11.13	7.39	5.57
LT1389BCS8-1.25-ND	—	Nanopower Precision Shunt 1.25V Voltage Reference	SO-8	6.50	4.32	3.25
LT1389BCS8-2.5-ND	—	Nanopower Precision Shunt 2.5V Voltage Reference	SO-8	6.50	4.32	3.25
LT1389BCS8-4.096-ND	—	800nA Precision Shunt 4.096V Volt. Reference	SO-8	6.50	4.32	3.25
LT1389BCS8-5-ND	—	800nA Precision Shunt 5V Voltage Reference	SO-8	6.50	4.32	3.25
LT1394CS8-ND	—	7nS, Low Power Comparator *NEW!*	SO-8	5.13	3.41	2.65
LT1394IS8-ND	—	7nS, Low Power Comparator, Ind. Temp.	SO-8	5.75	3.82	2.90
LT1395CS5-ND	—	400MHz, CFA Single with Shutdown Amp	SOT-23-5	2.75	1.83	1.40
LT1395CS6-ND	—	400MHz, CFA Single with Shutdown Amp	SOT-23-6	2.75	1.83	1.40
LT1398CS-ND	—	300MHz, CFA, Triple with Shutdown Amp	SO-16	4.63	3.08	2.32
LT1399CS-ND	—	300MHz, CFA, Dual with Shutdown Amp	SO-16	5.00	3.32	2.50
LT1399HVCS-ND	—	Triple Current Feedback Amp 300MHz, with Shutdown	SO-16	6.25	4.15	3.25
LT1413CN8-ND	9210B	Dual +5V Supply Precision Op Amp	8-Dip	3.75	2.50	2.05
LT1413S8-ND	9210B	Dual +5V Supply Precision Op Amp	SO-8	4.00	2.67	2.30
LT1424CN8-9-ND	—	Isolated Flyback Switch Reg with 9V Out	8-Dip	5.88	3.91	3.10
LT1424CS8-9-ND	—	Isolated Flyback Switch Reg with 9V Out	SO-8	6.13	4.07	3.25
LT1424IN8-9-ND	—	Isolated Flyback Switch Reg w/9V Out, Ind. Temp	8-Dip	7.38	4.90	4.30
LT1424IS8-5-ND	—	Isolated Flyback Switch Regulator with 5V Out *NEW!*	SO-8	7.63	5.07	4.45
LT1424IS8-9-ND	—	Isolated Flyback Switch Reg w/9V Out, Ind. Temp	SO-8	7.63	5.07	4.45
LT1425CS-ND	—	Isolated Flyback DC/DC Converter	SO-16	5.88	3.91	3.10
LT1425IS-ND	—	Isolated Flyback DC/DC Converter, Ind. Temp. *NEW!*	SO-16	7.38	4.90	4.20
LT1431CN8-ND	9176B	Programmable Reference	8-Dip	2.25	1.50	1.25
LT1431CS8-ND	9176B	Programmable Reference	SO-8	3.13	2.08	1.80
LT1431IN8-ND	9176B	Programmable Reference *NEW!*	8-Dip	2.88	1.92	1.60
LT1431IZ-ND	9176B	Programmable Reference *NEW!*	TO-92	2.13	1.42	1.22
LT1457CN8-ND	9210B	Dual Precision JFET Input Op Amp	8-Dip	4.50	3.00	2.40
LT1457S8-ND	9210B	Dual Precision JFET Input Op Amp	SO-8	4.75	3.17	2.55
LT1460ACN8-2.5-ND	—	Micropower Precision Series Reference, 2.5V	8-Dip	6.00	3.99	3.30
LT1460ACN8-5-ND	—	Micropower Precision Series Reference, 5V	8-Dip	6.00	3.99	3.30
LT1460ACN8-10-ND	—	Micropower Precision Series Reference, 10V	8-Dip	5.50	3.66	2.85
LT1460ACS8-2.5-ND	—	Micropower Precision Series Reference, 2.5V	SO-8	6.25	4.15	3.45
LT1460ACS8-5-ND	—	Micropower Precision Series Reference, 5V	SO-8	6.25	4.15	3.45
LT1460ACS8-10-ND	—	10V Micropower Precision Series Bandgap Ref. *NEW!*	SO-8	6.25	4.15	3.25
LT1460BIN8-5-ND	9294B	5V, Micropower Precision Series Bandgap Ref.	8-Dip	9.00	5.98	4.95
LT1460BIS8-2.5-ND	9294B	2.5V Micropower Precision Series Bandgap Ref. *NEW!*	SO-8	9.13	6.06	5.05
LT1460BIS8-5-ND	9294B	5V, Micropower Precision Series Bandgap Ref.	SO-8	9.13	6.06	5.05
LT1460CCMS8-2.5-ND	9294B	2.5V, Micropower Precision Series Bandgap Ref.	8-MSOP	6.50	4.32	3.60
LT1460CCMS8-5-ND	9294B	5V, Micropower Precision Series Bandgap Ref.	8-MSOP	6.50	4.32	3.60
LT1460DCN8-2.5-ND	9294B	2.5V Micropower Precision Series Bandgap Ref. *NEW!*	8-Dip	3.75	2.49	2.10
LT1460DCN8-5-ND	9294B	5V, Micropower Precision Series Bandgap Ref.	8-Dip	3.75	2.49	2.10
LT1460DCS8-2.5-ND	9294B	2.5V, Micropower Precision Series Bandgap Ref.	SO-8	4.00	2.66	2.20
LT1460DCS8-5-ND	9294B	5V, Micropower Precision Series Bandgap Ref.	SO-8	4.00	2.66	2.20
LT1460DCS8-10-ND	9294B	10V, Micropower Precision Series Bandgap Ref.	SO-8	4.00	2.66	2.20
LT1460EIN8-2.5-ND	9294B	2.5V Micropower Precision Series Bandgap Ref. *NEW!*	8-Dip	4.25	2.83	2.35
LT1460EIN8-5-ND	9294B	5V, Micropower Precision Series Bandgap Ref.	8-Dip	4.25	2.83	2.30
LT1460EIS8-2.5-ND	9294B	2.5V Micropower Precision Series Bandgap Ref. *NEW!*	SO-8	4.50	2.99	2.50
LT1460EIS8-5-ND	9294B	5V, Micropower Precision Series Bandgap Ref.	SO-8	4.38	2.91	2.40
LT1460EIS8-10-ND	9294B	10V Micropower Precision Series Bandgap Ref. *NEW!*	SO-8	4.38	2.91	2.40
LT1460FCMS8-5-ND	9294B	5V, Micropower Precision Series Bandgap Ref.	8-MSOP	4.25	2.83	2.30
LT1460FCMS8-10-ND	9294B	10V Micropower Precision Series Bandgap Ref. *NEW!*	SO-8	4.25	2.83	2.35
LT1460GCZ-2.5-ND	9294B	2.5V, Micropower Precision Series Bandgap Ref.	TO-92	3.00	2.00	1.65
LT1460GCZ-5-ND	9294B	5V, Micropower Precision Series Bandgap Ref.	TO-92	3.00	2.00	1.65
LT1460GIZ-5-ND	9294B	5V, Micropower Precision Series Bandgap Ref.	TO-92	3.25	2.16	1.75

(Continued)

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Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★		
				1	25	100
LT1460LHS8-2.5-ND	—	2.5V, Precision Series Ref with Extended Temp	SO-8	5.00	3.32	2.85
LT1460LHS8-5-ND	—	5V, Precision Series Ref with Extended Temp	SO-8	4.88	3.24	2.75
LT1460MHS8-2.5-ND	—	2.5V, Precision Series Ref with Extended Temp	SO-8	4.75	3.16	2.40
LT1460MHS8-5-ND	—	5V, Precision Series Ref with Extended Temp	SO-8	4.63	3.08	2.32
LT1462ACN8-ND	9285B	Micropower Dual Op Amp JFET Input	8-Dip	8.75	5.81	4.80
LT1462ACS8-ND	9285B	Micropower Dual Op Amp JFET Input	SO-8	9.00	5.98	4.95
LT1464ACS8-ND	9285B	Micropower 1MHz, Dual Op Amp JFET Input	SO-8	9.00	5.98	4.95
LT1464CS8-ND	9285B	200µa Dual Op Amp JFET Input *NEW!*	SO-8	5.00	3.32	2.75
LT1465CS-ND	—	200µa Quad JFET Op Amp *NEW!*	SO-14	8.50	5.65	4.75
LT1466LCN8-ND	—	Precision Rail-to-Rail I/O Op Amp	8-Dip	8.13	5.40	4.35
LT1466LCS8-ND	—	Precision Rail-to-Rail I/O Op Amp	SO-8	8.25	5.50	4.40
LT1468CN8-ND	—	70MHz, 22v/µs 16-Bit Accurate Op Amp	8-Dip	6.25	4.15	3.13
LT1468CS8-ND	—	70MHz, 22v/µs 16-Bit Accurate Op Amp	SO-8	6.25	4.15	3.13
LT1468IS8-ND	—	70MHz 22µs 16-Bit Accurate Op Amp *NEW!*	SO-8	7.50	4.98	3.75
LT1490CMS8-ND	—	Dual Micropower Rail-to-Rail I/O Op Amp	8-MSOP	4.50	3.00	2.40
LT1490CN8-ND	9285B	Dual Micropower Rail-to-Rail I/O Op Amp *NEW!*	8-Dip	3.75	2.50	2.05
LT1490CS8-ND	9285B	Dual Micropower Rail-to-Rail I/O Op Amp	SO-8	3.88	2.60	2.15
LT1490IN8-ND	—	Dual Micropower Rail-to-Rail I/O Op Amp *NEW!*	8-Dip	4.50	2.99	2.45
LT1490IS8-ND	—	Dual Micropower Rail-to-Rail I/O Op Amp *NEW!*	SO-8	4.63	3.08	2.60
LT1491CN-ND	—	Dual Micropower Rail-to-Rail I/O Op Amp *NEW!*	14-Dip	6.25	4.15	3.50
LT1491IS-ND	—	Dual Micropower Rail-to-Rail I/O Op Amp *NEW!*	SO-14	7.75	5.15	4.25
LT1492CN8-ND	—	5MHz, 3V/µs Dual Single Supply Op Amp.	8-Dip	7.38	4.90	3.69
LT1492CS8-ND	—	5MHz, 3V/µs Dual Single Supply Op Amp	SO-8	7.50	4.98	3.75
LT1493CS-ND	—	5MHz, 3V/µs Quad Single Supply Op Amp *NEW!*	SO-16	13.50	8.97	6.65
LT1494CMS8-ND	—	Single Rail-to-Rail Op Amp *NEW!*	8-MSOP	3.63	2.41	1.90
LT1494CN8-ND	—	Single Rail-to-Rail Op Amp *NEW!*	8-Dip	3.38	2.25	1.80
LT1494CS8-ND	—	Single Rail-to-Rail Op Amp *NEW!*	SO-8	3.38	2.25	1.80
LT1494HS8-ND	—	Single Rail-to-Rail Op Amp *NEW!*	SO-8	4.13	2.74	2.20
LT1494IMS8-ND	—	Single Rail-to-Rail Op Amp, Ind. Temp. *NEW!*	8-MSOP	4.13	2.74	2.20
LT1494IN8-ND	—	Single Rail-to-Rail Op Amp, Ind. Temp. *NEW!*	8-Dip	3.88	2.58	2.10
LT1494IS8-ND	—	Single Rail-to-Rail Op Amp, Ind. Temp. *NEW!*	SO-8	3.88	2.58	2.10
LT1495CN8-ND	—	Precision Dual Rail-to-Rail I/O Op Amp	8-Dip	5.13	4.05	3.45
LT1495CS8-ND	—	Precision Dual Rail-to-Rail I/O Op Amp	SO-8	5.38	3.57	3.10
LT1495IN8-ND	—	Precision Dual Rail-to-Rail I/O Op Amp	8-Dip	6.00	4.50	3.95
LT1495IS8-ND	—	Precision Dual Rail-to-Rail I/O Op Amp	SO-8	6.25	4.55	4.00
LT1496CN-ND	—	Precision Quad Rail-to-Rail I/O Op Amp	14-Dip	6.75	5.90	5.35
LT1496CS-ND	—	Precision Quad Rail-to-Rail I/O Op Amp	SO-14	7.00	5.95	5.40
LT1496IN-ND	—	Precision Quad Rail-to-Rail I/O Op Amp	14-Dip	8.00	6.80	6.15
LT1496IS-ND	—	Precision Quad Rail-to-Rail I/O Op Amp	SO-14	8.25	6.85	6.20
LT1497CS-ND	—	Dual 125mA, 50MHz, Current Feedback Amp	SO-16	7.88	5.23	4.20
LT1497CS8-ND	—	Dual 125mA, 50MHz, Current Feedback Amp	SO-8	6.25	4.15	3.45
LT1498CN8-ND	—	10MHz, 5V/µS Dual Rail-to-Rail Op Amp	8-Dip	6.50	4.32	3.25
LT1498CS8-ND	—	10MHz, 5V/µS Dual Rail-to-Rail Op Amp	SO-8	6.75	4.49	3.38
LT1499CS-ND	—	10MHz, 5V/µS Quad Rail-to-Rail Op Amp	SO-14	12.25	8.14	6.13
LT1500CS-ND	9285B	Adaptive Frequency Current Mode Switching Reg.	SO-14	5.00	3.35	2.85
LT1505CG-ND	—	Synchronous Battery Charger	28-SSOP	9.88	6.56	5.15
LT1505CG-1-ND	—	Constant-Current/Volt High Effic. Battery Charger	28-SSOP	9.38	6.23	4.90
LT1506CR-SYNC-ND	—	500KHz 4.5A Step Down Switching Regulator *NEW!*	7-DD	10.00	6.64	5.00
LT1506CR-3.3-ND	—	500KHz 4.5A 3.3V Step Down Switching Reg. *NEW!*	7-DD	10.00	6.64	5.00
LT1506CS8-ND	—	500KHz 4.5A Step Down Switching Regulator *NEW!*	SO-8	9.38	6.23	4.70
LT1506CS8-3.3-ND	—	500KHz 4.5A 3.3V Step Down Switching Reg. *NEW!*	SO-8	9.38	6.23	4.70
LT1506IR-ND	—	500KHz 4.5A Step Down Switching Regulator *NEW!*	7-DD	11.50	7.64	5.75
LT1506IR-3.3-ND	—	500KHz 4.5A 3.3VStep Down Switching Reg. *NEW!*	7-DD	11.50	7.64	5.75
LT1506IS8-ND	—	500KHz 4.5A Step Down Switching Regulator *NEW!*	SO-8	10.75	7.14	5.40
LT1506IS8-3.3-ND	—	500KHz 4.5A 3.3VStep Down Switching Reg. *NEW!*	SO-8	10.75	7.14	5.40
LT1507CS8-ND	9285B	500KHz, Monolithic Buck Mode Switch Reg.	SO-8	6.75	4.50	3.85
LT1507CS8-3.3-ND	—	500KHz 3.3V Monolithic Buck Mode Switch. Reg. *NEW!*	SO-8	6.75	4.50	3.85
LT1508CSW-ND	9294B	PWM/PFC/Volt Mode Combined Controller	SO-20	7.88	5.25	4.50
LT1508ISW-ND	9294B	PWM/PFC/Volt Mode Combined Controller, Ind. Temp.	SO-20	8.75	5.85	5.00
LT1510-5CGN-ND	—	500KHz, 1.5A Constant Voltage/Constant Current Battery Charger	16-SSOP	8.13	5.40	4.35
LT1510CGN-ND	9285B	Constant Voltage/Constant Current Battery Charger	16-SSOP	8.13	5.40	4.35
LT1510CN-ND	9285B	Constant Voltage/Constant Current Battery Charger	16-Dip	7.50	4.98	4.00
LT1510CS-ND	—	200KHz, 1.5A Constant Voltage/Constant Current Battery Charger	SO-16	7.88	5.23	4.20
LT1510CS8-ND	9285B	Constant Voltage/Constant Current Battery Charger	SO-8	6.00	3.99	3.20
LT1510IS-ND	—	200KHz, 1.5A Constant Voltage/Constant Current Battery Charger *NEW!*	SO-16	9.00	5.98	4.80
LT1510IS8-ND	—	200KHz, 1.5A, Constant Voltage/Constant Current Battery Charger, Ind. Temp.	SO-8	6.88	4.57	3.65
LT1511CSW-ND	—	3A Constant Current/Constant Voltage Battery Charger *NEW!*	SO-16	13.00	8.64	6.95
LT1511ISW-ND	—	3A Constant Current/Constant Voltage Battery Charger, Ind. Temp. *NEW!*	SO-16	15.00	10.00	8.60
LT1512CGN-ND	—	Constant Current Battery Charger	16-SSOP	8.00	5.32	4.60
LT1512CN8-ND	—	Constant Current/Constant Volt Battery Charger *NEW!*	8-Dip	6.75	4.50	3.85
LT1512CS8-ND	—	Constant Current/Constant Volt Battery Charger *NEW!*	SO-8	7.00	4.65	4.00
LT1513-2CR-ND	—	SEPIC Constant/Programmable Current/Constant Voltage Battery Charger *NEW!*	7-DD	9.13	6.06	4.70
LT1513-2CT7-ND	—	SEPIC Constant/Programmable Current/Constant Voltage Battery Charger *NEW!*	TO-220-7	8.75	5.81	4.55
LT1513CR-ND	—	SEPIC Constant/Programmable Current/Constant Voltage Battery Charger *NEW!*	7-DD	9.13	6.06	4.70
LT1513IR-ND	—	SEPIC Constant/Programmable Current/Constant Voltage Battery Charger, Ind. Temp. *NEW!*	7-DD	10.00	6.64	5.20
LT1521CMS8-ND	—	Low Dropout Voltage Regulator	8-MSOP	4.63	3.08	2.35
LT1521CMS8-3.3-ND	—	3.3V, 300mA Low Dropout Voltage Regulator *NEW!*	SO-8	4.63	3.08	2.35
LT1521CS8-ND	9257B	300mA, Low Dropout Voltage Regulator	SO-8	4.13	2.75	2.50
LT1521CS8-3-ND	9257B	+3V, 300mA, Low Dropout Micropower Volt Reg	SO-8	4.13	2.75	2.50
LT1521CS8-3.3-ND	9257B	+3.3V, 300mA, Low Dropout Micropower Volt Reg	SO-8	4.13	2.75	2.50
LT1521CS8-5-ND	9257B	+5V, 300mA, Low Dropout Micropower Volt Reg	SO-8	4.13	2.75	2.50
LT1521CST-3-ND	9257B	+3V, 300mA, Low Dropout Micropower Volt Reg	SOT-223	3.88	2.58	2.00
LT1521CST-3.3-ND	9257B	+3.3V, 300mA, Low Dropout Micropower Volt Reg.	SOT-223	3.88	2.58	2.00
LT1521CST-5-ND	9257B	+5V, 300mA, Low Dropout Micropower Volt Reg	SOT-223	3.88	2.58	2.00
LT1521IS8-5-ND	—	5V, 300mA Low Dropout Voltage Regulator *NEW!*	SO-8	5.00	3.35	2.85
LT1521IST-3.3-ND	—	3.3V 300mA Low Dropout Voltage Regulator *NEW!*	SOT-223	4.75	3.16	2.70
LT1521IST-5-ND	—	5V, 300mA Low Dropout Voltage Regulator *NEW!*	SOT-223	4.75	3.16	2.70
LT1528CQ-ND	—	3A Ultra Low Dropout MPU Regulator *NEW!*	5-DD	7.13	4.75	4.10
LT1528CT-ND	9257B	3A Ultra Low Dropout Micropower Volt Regulator	TO-220-5	6.50	4.35	3.75
LT1529CQ-ND	—	3A LDO Micropower Volt Reg. w/Shutdown *NEW!*	5-DD	7.13	4.74	3.57
LT1529CQ-3.3-ND	—	3.3V, 3A LDO Micropower Volt Regulator with Shutdown *NEW!*	5-DD	7.13	4.74	3.57
LT1529CQ-5-ND	—	5V, 3A LDO Micropower Volt Reg. w/Shutdown *NEW!*	5-DD	7.13	4.74	3.57

Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★		
				1	25	100
LT1529CT-ND	9257B	3A Low Dropout Micropower Volt Reg w/Shutdown	TO-220-5	6.50	4.32	3.25
LT1529CT-3.3-ND	—	3.3V, 3A Low Dropout Micropower Volt Regulator with Shutdown *NEW!*	TO-220-5	6.50	4.32	3.25
LT1529CT-5-ND	9257B	+5V, 3A, Low Dropout Micropower Volt Regulator	TO-220-5	6.50	4.32	3.25
LT1533CS-ND	—	1A, Ultra Low Noise Switching Regulator	SO-16	9.25	6.15	4.85
LT1533IS-ND	—	1A, Ultra Low Noise Switching Regulator *NEW!*	SO-16	11.50	7.65	6.55
LT1534CS-ND	—	2A, Ultra Low Noise Switching Regulator *NEW!*	SO-16	8.25	5.48	4.25
LT1534IS-ND	—	2A, Ultra Low Noise Switching Regulator	SO-16	9.50	6.31	4.80
LT1537CG-ND	—	Low Power 3 Drivers/5 Receivers RS232 Transceiver with Small Capacitors *NEW!*	28-SSOP	6.00	4.00	3.40
LT1573CS8-ND	—	Low Dropout Regulator Driver	SO-8	3.75	2.49	1.88
LT1573CS8-2.5-ND	—	2.5V, Low Dropout Regulator Driver	SO-8	3.75	2.49	1.88
LT1573CS8-2.8-ND	—	2.8V, Low Dropout Regulator Driver	SO-8	3.75	2.49	1.88
LT1573CS8-3.3-ND	—	3.3V, Low Dropout Regulator Driver	SO-8	3.75	2.49	1.88
LT1575CN8-ND	—	Adjustable Precision Linear Reg Controller	8-Dip	4.75	3.16	2.70
LT1575CN8-3.3-ND	—	3.3V, Precision Linear Reg Controller	8-Dip	4.75	3.16	2.70
LT1575CS8-ND	—	Ultrafast Transient Response Low Dropout Reg. *NEW!*	SO-8	4.75	3.16	2.70
LT1575CS8-2.8-ND	—	2.8V, Precision Linear Reg Controller	SO-8	4.75	3.16	2.70
LT1575CS8-3.3-ND	—	3.3V, Precision Linear Reg Controller	SO-8	4.75	3.16	2.70
LT1575CS8-5-ND	—	5V, Precision Linear Reg Controller	SO-8	4.75	3.16	2.70
LT1576CS8-ND	—	1.5A, 200KHz, Step Down Switching Regulator	SO-8	5.75	3.82	2.95
LT1576CS8-SYNC-ND	—	1.5A, 200KHz, Step Down Switching Reg Sync Input	SO-8	5.75	3.82	2.95
LT1576IS8-SYNC-ND	—	1.5A, 200KHz, Step Down Switch. Reg Sync Input *NEW!*	SO-8	6.63	4.40	3.35
LT1579CGN-ND	—	Adj. 300mA, Dual Input Smart LDO Regulator	16-SSOP	8.25	5.48	4.70
LT1579CGN-3-ND	—	3V, 300mA, Dual Input Smart LDO Regulator.	16-SSOP	8.25	5.48	4.70
LT1579CGN-3.3-ND	—	3.3V, 300mA, Dual Input Smart LDO Regulator.	16-SSOP	8.25	5.48	4.70
LT1579CGN-5-ND	—	5V, 300mA, Dual Input Smart LDO Regulator.	16-SSOP	8.25	5.48	4.70
LT1579CS-ND	—	Adj. 300mA, Dual Input Smart LDO Regulator	SO-16	7.50	4.98	4.30
LT1579CS-3-ND	—	3V, 300mA, Dual Input Smart LDO Regulator	SO-16	7.50	4.98	4.30
LT1579CS-3.3-ND	—	3.3V, 300mA, Dual Input Smart LDO Regulator	SO-16	7.50	4.98	4.30
LT1579CS-5-ND	—	5V, 300mA, Dual Input Smart LDO Regulator	SO-16	7.50	4.98	4.30
LT1579CS8-ND	—	Adj. 300mA, Dual Input Smart LDO Regulator	SO-8	6.75	4.49	3.85
LT1579CS8-3-ND	—	3V, 300mA, Dual Input Smart LDO Regulator	SO-8	6.75	4.49	3.85
LT1579CS8-3.3-ND	—	3.3V, 300mA, Dual Input Smart LDO Regulator	SO-8	6.75	4.49	3.85
LT1579CS8-5-ND	—	5V, 300mA, Dual Input Smart LDO Regulator	SO-8	6.75	4.49	3.85
LT1579IGN-ND	—	Adjustable 300mA, Dual Input Smart LDO Reg.	16-SSOP	10.00	6.64	5.70
LT1580CQ-ND	—	7A, Low Dropout, High Speed Voltage Regulator	5-DD	11.50	7.64	5.75
LT1580CR-2.5-ND	—	7A, Low Dropout, High Speed Voltage Regulator	7-DD	11.88	7.89	5.94
LT1580CT-ND	9285B	7A, Low Dropout, High Speed Voltage Regulator.	TO-220-5	11.25	7.47	5.63
LT1580CT7-2.5-ND	—	7A, 2.5V Very Low Dropout Regulator *NEW!*	TO-220-7	11.63	7.72	5.82
LT1580IQ-ND	—	7A, Very Low Dropout Regulator *NEW!*	5-DD	13.75	9.13	6.88
LT1580IR-2.5-ND	—	7A, 2.5V Very LDO Regulator, Ind. Temp. *NEW!*	7-DD	8.25	7.45	6.85
LT1581CT7-ND	—	Adjustable 10A, Very Low Dropout Regulator	TO-220-7	13.13	8.75	7.50
LT1581CT7-2.5-ND	—	2.5V, 10A, Very Low Dropout Regulator.	TO-220-7	13.13	8.75	7.50
LT1584CT-ND	9257B	Adjustable 7A, Low Dropout, High Speed Linear Reg.	TO-220	10.63	7.08	6.05
LT1584CT-3.3-ND	9257B	3.3V, 7A, Low Dropout, High-Speed Linear Reg.	TO-220	10.63	7.08	6.05
LT1584CT-3.38-ND	9257B	3.38V, 7A, Low Dropout, High-Speed Reg. *NEW!*	TO-220	10.63	7.08	6.05
LT1585ACM-1.5-ND	—	1.5V, Low Dropout Regulator *NEW!*	3-DD	8.13	5.40	4.65
LT1585ACT-1.5-ND	—	1.5V, Low Dropout, High-Speed Regulator *NEW!*	TO-220	7.50	5.00	4.25
LT1585CM-ND	9210B	Adjustable 4A, Low Dropout, High-Speed Linear Reg.	3-DD	7.75	5.15	4.30
LT1585CM-3.3-ND	9210B	3.3V, 4A, Low Dropout, High-Speed Linear Regulator	3-DD	7.75	5.15	4.30
LT1585CM-3.6-ND	9210B	3.6V, 4A, Low Dropout, High-Speed Linear Regulator	3-DD	7.75	5.15	4.30
LT1585CT-3.38-ND	9210B	3.38V, 4A, Low Dropout, High-Speed Reg. *NEW!*	TO-220	7.13	4.75	4.00
LT1584IT-3.3-ND	—	3.3V, 7A, LDO, Fast Response, Positive Fixed Reg.	TO-220	12.75	8.47	7.40
LT1585CT-ND	9210B	Adj. 4A, Low Dropout, High-Speed Linear Reg.	TO-220	7.13	4.75	4.00
LT1585CT-3.3-ND	9210B	3.3V, 4A, Low Dropout, High-Speed Linear Reg.	TO-220	7.13	4.75	4.00
LT1585CT-3.6-ND	9210B	3.6V, 4A, Low Dropout, High-Speed Linear Reg.	TO-220	7.13	4.75	4.00
LT1587CM-ND	9257B	3A, Low Dropout, Fast Response, Pos. Adjustable Reg	3-DD	6.50	4.35	3.70
LT1587CM-1.5-ND	—	1.5V, Low Dropout Regulator *NEW!*	3-DD	6.50	4.35	3.70
LT1587CT-ND	9257B	Adj. 3A, Low Dropout, High-Speed Linear Regulator	TO-220	5.88	3.92	3.35
LT1587CT-3.3-ND	9257B	3.3V, 3A, Low Dropout, High Speed Linear Regulator	TO-220	5.88	3.92	3.35
LT1610CMS8-ND	—	1 Cell Converter w/Boost, 1.7MHz	8-MSOP	4.13	2.74	2.10
LT1610CS8-ND	—	1 Cell Converter w/Boost, 1.7MHz.	SO-8	3.50	2.33	1.75
LT1610IS8-ND	—	1.7MHz, 1-Cell Micropower Boost Converter.	SO-8	4.25	2.83	2.25
LT1611CS5-ND	—	1.4MHz, Inverting Switching Regulator.	SOT-23	4.00	2.66	2.15
LT1613CS5-ND	—	1.4MHz Single Cell DC/DC Controller *NEW!*	SOT-23-5	3.50	2.33	1.75
LT1614CMS8-ND	—	600KHz Inverting Switching Regulator *NEW!*	SO-8	5.50	3.66	2.80
LT1614CS8-ND	—	600KHz Inverting Switching Regulator *NEW!*	SO-8	5.00	3.32	2.55
LT1615ES5-ND	—	Micropower Step-Up DC/DC Converter.	SOT-23-5	3.50	2.33	1.75
LT1618EMS-ND	—	1.4MHz Step-up DC/DC Converter *NEW!*	10-MSOP	5.75	3.82	2.88
LT1619EMS8-ND	—	1.9V-18V, 2-Cell Current Mode PWM Cont.	8-MSOP	4.50	2.99	2.25
LT1619EMS8TR-ND	—	1.9V-18V, 2-Cell Current Mode PWM Cont.	8-MSOP	5550.00/2,500		
LT1619ES8-ND	—	1.9V-18V, 2-Cell Current Mode PWM Cont.	SO-8	4.25	2.83	2.15
LT1619ES8TR-ND	—	1.9V-18V, 2-Cell Current Mode PWM Cont.	SO-8	5250.00/2,500		
LT1620CGN-ND	—	Rail-to-Rail Current Sense Amp	16-SSOP	4.00	2.66	2.30
LT1620CS8-ND	—	Rail-to-Rail Current Sense Amp	SO-8	3.38	2.25	1.95
LT1620IS8-ND	—	Rail-to-Rail Current Sense Amp, Ind. Temp. *NEW!*	SO-8	3.88	2.58	2.05
LT1621CGN-ND	9294B	Dual Rail-to-Rail Current Sense Amp	16-SSOP	6.13	4.10	3.50
LT1621IGN-ND	9294B	Dual Rail-to-Rail Current Sense Amp, Ind. Temp.	16-SSOP	7.00	4.65	3.95
LT1630CN8-ND	—	30MHz, 10V/ms, Dual Rail-to-Rail I/O Op Amp.	8-Dip	6.50	4.32	3.25
LT1630CS8-ND	—	30MHz, 10V/ms, Dual Rail-to-Rail I/O Op Amp	SO-8	6.75	4.49	3.38
LT1631CS-ND	—	30MHz, 10V/ms, Quad Rail-to-Rail I/O Op Amp	SO-14	12.25	8.14	6.13
LT1632CN8-ND	—	45MHz, 45V/ms, Dual Rail-to-Rail I/O Op Amp.	8-Dip	6.63	4.40	3.32
LT1632CS8-ND	—	45MHz, 45V/ms, Dual Rail-to-Rail I/O Op Amp	SO-8	6.88	4.57	3.44
LT1633CS-ND	—	45MHz, 45V/ms, Quad Rail-to-Rail I/O Op Amp	SO-14	12.38	8.22	6.19
LT1634ACS8-1.25-ND	9294B	1.25V, Micropower Shunt Voltage Reference	SO-8	9.38	6.23	4.70
LT1634ACS8-2.5-ND	9294B	2.5V, Micropower Shunt Voltage Reference.	SO-8	9.38	6.23	4.70
LT1634ACS8-4.096-ND	9294B	4.096V, Micropower Shunt Voltage Reference	SO-8	9.38	6.23	4.70
LT1634ACS8-5-ND	9294B	5V, Micropower Precision Shunt Voltage Reference	SO-8	9.38	6.23	4.70
LT1634AIS8-1.25-ND	—	1.25V, Micropower Shunt Voltage Reference *NEW!*	SO-8	10.38	6.89	5.20
LT1634AIS8-4.096-ND	—	4.096V, Micropower Shunt Voltage Reference *NEW!*	SO-8	10.38	6.89	5.20
LT1634BCMS8-1.25-ND	9294B	1.25V, Micropower Shunt Voltage Reference *NEW!*	8-MSOP	4.88	3.24	2.70
LT1634BCS8-1.25-ND	9294B	1.25V, Micropower Precision Shunt Voltage Reference	SO-8	4.38	2.91	2.40
LT1634BCS8-2.5-ND	9294B	2.5V, Micropower Precision Shunt Voltage Reference	SO-8	4.38	2.91	2.40
LT1634BCS8-4.096-ND	—	4.096V, Micropower Shunt Voltage Reference *NEW!*	SO-8	4.38	2.91	2.40
LT1634BIS8-1.25-ND	9294B	1.25V, Micropower Shunt Voltage Reference *NEW!*	SO-8	5.63	3.74	2.95
LT1634BIS8-2.5-ND	9294B	2.5V, Micropower Shunt Voltage Reference *NEW!*	SO-8	5.63	3.74	2.95
LT1634CCZ-4.096-ND	—	4.096V, Micropower Shunt Voltage Reference *NEW!*	TO-92	3.88	2.58	2.15
LT1635CN8-ND	9294B	Micropower Rail-to-Rail Op Amp and Reference	8-Dip	3.50	2.33	1.85
LT1635CS8-ND	9294B	Micropower Rail-to-Rail Op Amp and Reference	SO-8	3.88	2.58	2.05

(Continued)

Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★		
				1	25	100
LT1636CMS8-ND	9294B	Single Micropower Rail-to-Rail I/O Op Amp	8-MSOP	3.50	2.33	1.90
LT1636CN8-ND	9294B	Single Micropower Rail-to-Rail I/O Op Amp	8-Dip	2.88	1.91	1.50
LT1636CS8-ND	—	Single Micropower Rail-to-Rail I/O Op Amp	SO-8	3.00	2.00	1.55
LT1636HS8-ND	—	50µA Micropower Rail-to-Rail Op Amp *NEW!*	SO-8	3.75	2.49	1.90
LT1636IS8-ND	—	Single Micropower Rail-to-Rail I/O Op Amp *NEW!*	SO-8	3.50	2.33	1.80
LT1637CN8-ND	—	1.1MHz, .4V/µs Over-The-Top (operates with inputs above V+) Micropower Rail/Rail In/Out Op Amp	8-Dip	2.88	1.91	1.50
LT1637CS8-ND	—	1.1MHz, .4V/µs Over-The-Top (operates with inputs above V+) Micropower Rail/Rail In/Out Op Amp	SO-8	3.00	2.00	1.55
LT1637HS8-ND	—	250µA Micropower Rail-to-Rail I/O Op Amp *NEW!*	SO-8	3.50	2.33	1.85
LT1638CMS8-ND	—	1MHz, Dual Rail-to-Rail Op Amp *NEW!*	8-MSOP	4.50	3.00	2.40
LT1638CN8-ND	—	1MHz, Dual Rail-to-Rail Op Amp *NEW!*	8-Dip	3.75	2.50	2.05
LT1638CS8-ND	—	1MHz, Dual Rail-to-Rail Op Amp *NEW!*	SO-8	3.88	2.60	2.15
LT1638HS8-ND	—	Micropower Dual Rail-to-Rail I/O Op Amp *NEW!*	SO-8	4.88	3.24	2.70
LT1638IS8-ND	—	1MHz, Dual Rail-to-Rail Op Amp, Ind. Temp. *NEW!*	SO-8	4.63	3.08	2.60
LT1639HS-ND	—	Micropower Quad Rail-to-Rail I/O Op Amp *NEW!*	SO-8	8.00	5.32	4.35
LT1639IS-ND	—	1MHz, Quad Rail-to-Rail Op Amp, Ind. Temp. *NEW!*	SO-8	7.75	5.15	3.88
LT1640HIS8-ND	—	Neg. Volt. Hot Swap Cont. 48V App., Ind. Temp. *NEW!*	SO-8	4.50	2.99	2.35
LT1640LCN8-ND	—	Negative Voltage Hot Swap Controller 48V App *NEW!*	8-Dip	3.88	2.58	2.05
LT1640LCS8-ND	—	Negative Voltage Hot Swap Controller 48V App *NEW!*	SO-8	4.00	2.66	2.10
LT1640LIS8-ND	—	Neg. Volt. Hot Swap Cont. 48V App., Ind. Temp. *NEW!*	SO-8	4.50	2.99	2.35
LT1671CS8-ND	—	60nS Low Power Ground-Sensing Comparator *NEW!*	SO-8	3.50	2.33	1.80
LT1672CMS8-ND	—	Single Rail-to-Rail I/O Op Amp *NEW!*	8-MSOP	3.63	2.41	1.90
LT1672CN8-ND	—	Single Rail-to-Rail I/O Op Amp *NEW!*	8-Dip	3.38	2.25	1.80
LT1672CS8-ND	—	Single Rail-to-Rail I/O Op Amp *NEW!*	SO-8	3.38	2.25	1.80
LT1672IMS8-ND	—	Single Rail-to-Rail I/O Op Amp, Ind. Temp. *NEW!*	8-MSOP	4.13	2.74	2.20
LT1672IN8-ND	—	Single Rail-to-Rail I/O Op Amp, Ind. Temp. *NEW!*	8-Dip	3.88	2.58	2.10
LT1672IS8-ND	—	Single Rail-to-Rail I/O Op Amp *NEW!*	SO-8	3.88	2.58	2.10
LT1673CN8-ND	—	Dual Rail-to-Rail I/O Op Amp *NEW!*	8-Dip	5.13	3.41	3.00
LT1673CS8-ND	—	Dual Rail-to-Rail I/O Op Amp *NEW!*	SO-8	5.38	3.57	3.10
LT1673IN8-ND	—	Dual Rail-to-Rail I/O Op Amp, Ind. Temp. *NEW!*	8-Dip	6.00	3.99	3.45
LT1673IS8-ND	—	Dual Rail-to-Rail I/O Op Amp, Ind. Temp. *NEW!*	SO-8	6.25	4.15	3.55
LT1674CN-ND	—	Quad Rail-to-Rail I/O Op Amp *NEW!*	148-Dip	6.75	4.49	3.95
LT1674CS-ND	—	Quad Rail-to-Rail I/O Op Amp *NEW!*	SO-14	7.00	4.65	4.10
LT1674IN-ND	—	Quad Rail-to-Rail I/O Op Amp, Ind. Temp. *NEW!*	14-Dip	8.00	5.32	4.60
LT1674IS-ND	—	Quad Rail-to-Rail I/O Op Amp, Ind. Temp. *NEW!*	SO-14	8.25	5.48	4.70
LT1675CGN-ND	—	Multiplexer 2/1 RGB	16-SSOP	6.75	4.49	3.55
LT1675CMS8-1-ND	—	Multiplexer 2:1 RGB High-Speed	8-MSOP	3.63	2.55	2.30
LT1675CS8-1-ND	—	Multiplexer 2:1 RGB High-Speed	SO-8	4.13	2.74	2.07
LT1676CS8-ND	—	Wide Input Range Step Down Switching Reg. *NEW!*	SO-8	5.38	3.57	2.85
LT1676IS8-ND	—	Wide Input Range Step Down Switch. Reg., Ind Temp. *NEW!*	SO-8	6.25	4.15	3.35
LT1680CN-ND	—	High Power DC/DC Step Up Controller	16-Dip	8.00	5.32	4.25
LT1680CSW-ND	9294B	High Power DC/DC Step Up Controller	SO-16	8.38	5.57	4.45
LT1680IN-ND	9294B	High Power DC/DC Step Up Controller	16-Dip	9.63	6.40	5.15
LT1680ISW-ND	9294B	High Power DC/DC Step Up Controller	SO-16	10.00	6.64	5.35
LT1711CMS8-ND	—	4.5nS Rail-to-Rail Comparator *NEW!*	8-MSOP	4.38	2.91	2.50
LT1711IMS8-ND	—	4.5nS Rail-to-Rail Comparator, Ind. Temp. *NEW!*	8-MSOP	4.75	3.16	2.65
LT1714CGN-ND	—	Low Power 3V/5V, Dual 7nS, R-R Comparator	16-SSOP	6.63	4.40	3.32
LT1714IGN-ND	—	Low Power 3V/5V Dual 7nS, R-R Comparator	16-SSOP	7.13	4.74	3.57
LT1719CS6-ND	—	3V/5V Rail-to-Rail Comparator *NEW!*	SOT-23-6	2.88	1.91	1.55
LT1719IS6-ND	—	3V/5V Rail-to-Rail Comparator, Ind. Temp. *NEW!*	SOT-23-6	3.25	2.16	1.70
LT1720CMS8-ND	—	3V/5V Dual High Speed Comparator	8-MSOP	6.50	4.32	3.45
LT1720CS8-ND	—	3V/5V Dual 4.5nS, Single Supply Comp. w/R-R Out	SO-8	6.00	3.99	3.00
LT1720IS8-ND	—	3V/5V Dual High Speed Comparator *NEW!*	SO-8	7.00	4.65	3.50
LT1721CGN-ND	—	2.7V/6V Quad High Speed Comparator	16-SSOP	9.38	6.23	5.00
LT1721CS-ND	—	2.7V/6V Quad High Speed Comparator	SO-16	9.00	5.98	4.80
LT1725IGN-ND	—	General Purpose Isolated Flyback Controller *NEW!*	16-SSOP	4.00	3.20	2.80
LT1725IS-ND	—	General Purpose Isolated Flyback Controller *NEW!*	SO-16	7.00	4.65	3.50
LT1737IGN-ND	—	High Power Isolated Flyback Controller *NEW!*	16-SSOP	5.13	4.14	3.57
LT1737IS-ND	—	High Power Isolated Flyback Controller *NEW!*	SO-16	7.00	4.65	3.50
LT1761ES5-BYP-ND	—	100mA Low Noise LDO Micropower Reg. *NEW!*	SOT-23-5	1.93	1.28	.97
LT1761ES5-1.8-ND	—	1.8V, 100mA, Low Noise LDO Micropower Reg.	SOT-23-5	1.93	1.28	.97
LT1761ES5-2.5-ND	—	2.5V, 100mA, Low Noise LDO Micropower Reg.	SOT-23-5	1.93	1.28	.97
LT1762EMS8-ND	—	150mA, Low Noise LDO Micropower Regulator	8-MSOP	2.38	1.58	1.19
LT1763CS8-ND	—	500mA, Low Noise LDO Micropower Regulator	SO-8	4.13	2.74	2.07
LT1766EGN-ND	—	1.5A 200KHz High Voltage Switching Reg. *NEW!*	16-SSOP	7.38	4.90	3.72
LT1766IGN-ND	—	1.5A 200KHz High Voltage Switching Reg. *NEW!*	16-SSOP	9.00	5.98	4.44
LT1769CGN-ND	—	Constant-Current/Constant-Volt 2A Battery Charger	28-SSOP	10.13	6.73	5.10
LT1776CN8-ND	—	Step Down Switching Regulator, High Efficiency, Wide Input Range	8-Dip	5.00	3.32	2.65
LT1776CS8-ND	—	Step Down Switching Regulator, High Efficiency, Wide Input Range	SO-8	5.25	3.49	2.75
LT1776IN8-ND	—	Step Down Switching Regulator, High Efficiency, Wide Input Range *NEW!*	8-Dip	5.75	3.82	3.10
LT1776IS8-ND	—	Step Down Switching Regulator High Efficiency, Wide Input Range *NEW!*	SO-8	3.15	3.99	3.15
LT1780CN-ND	—	Low Pwr 5V, RS232 Dual Driver/Receiver 15KV ESD	18-Dip	5.25	3.49	2.95
LT1780CSW-ND	—	Low Pwr 5V, RS232 Dual Driver/Receiver 15KV ESD	SO-18	5.75	3.82	3.25
LT1781CN-ND	—	Low Pwr 5V, RS232 Dual Driver/Receiver 15KV ESD	16-Dip	5.25	3.49	2.95
LT1781CS-ND	—	Low Pwr 5V, RS232 Dual Driver/Receiver 15KV ESD	SO-16	5.63	3.74	3.15
LT1781CSW-ND	—	Low Pwr 5V, RS232 Dual Driver/Receiver 15KV ESD	SO-16	5.75	3.82	3.25
LT1781IS-ND	—	Low Power, 5V, RS232 Dual Driver/Receiver *NEW!*	SO-16	7.00	4.65	3.73
LT1782IS5-ND	—	Micropower Rail-to-Rail I/O Op Amp *NEW!*	SOT-23-5	2.83	1.88	1.40
LT1782IS6-ND	—	Micropower Rail-to-Rail I/O Op Amp *NEW!*	SOT-23-6	3.23	2.15	1.60
LT1783IS5-ND	—	1.25MHz Micropower Rail-to-Rail Op Amp *NEW!*	SOT-23-5	2.83	1.88	1.40
LT1783IS6-ND	—	1.25MHz Micropower Rail-to-Rail Op Amp *NEW!*	SOT-23-6	3.23	2.15	1.60
LT1784CS5-ND	—	Low Power 2.5MHz, Rail-to-Rail I/O Op Amp	SOT-23-5	2.08	1.38	1.17
LT1784CS6-ND	—	Low Power 2.5MHz, Rail-to-Rail I/O Op Amp	SOT-23-6	2.25	1.50	1.26
LT1785AIN8-ND	—	60V, Fault Prot. RS485/RS422 Transceiver *NEW!*	8-Dip	5.63	3.75	3.00
LT1785AIS8-ND	—	60V, Fault Prot. RS485/RS422 Transceiver *NEW!*	SO-8	5.75	3.85	3.10
LT1785CN8-ND	—	60V, Fault Prot. RS485/RS422 Transceiver, Half Dup.	8-Dip	4.00	2.66	2.10
LT1785CS8-ND	—	60V, Fault Prot. RS485/RS422 Transceiver, Half Dup	SO-8	4.13	2.74	2.15
LT1785IN8-ND	—	60V, Fault Prot RS485/RS422 Transceiver, Half Dup. *NEW!*	8-Dip	4.63	3.08	2.40
LT1785IS8-ND	—	60V, Fault Prot RS485/RS422 Transceiver, Half Dup. *NEW!*	SO-8	4.75	3.16	2.45
LT1786FCS-ND	—	SMBus Programmable CCFL Switching Regulator	SO-16	9.00	5.98	4.50
LT1787HS8-ND	—	Precision Current Sense Op Amp *NEW!*	SO-8	5.63	3.74	2.90
LT1787HVHS8-ND	—	High Voltage Precision Current Sense Op Amp *NEW!*	SO-8	7.50	4.98	3.80
LT1791AIS-ND	—	60V, Fault Prot. RS485/RS422 Transceiver *NEW!*	SO-14	6.38	4.25	3.40
LT1791CN-ND	—	60V, Fault Prot. RS485/RS422 Transceiver, Full Dup.	14-Dip	4.38	2.91	2.30

Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★		
				1	25	100
LT1791CS-ND	—	60V, Fault Prot. RS485/RS422 Transceiver, Full Dup	SO-14	4.50	2.99	2.35
LT1791IS-ND	—	60V, Fault Prot. RS485/RS422 Xcvr, Half Dup. *NEW!*	SO-8	5.13	3.41	2.65
LT1792CN8-ND	—	Low Noise, Precision JFET Input Op Amp	8-Dip	4.75	3.16	2.45
LT1792CS8-ND	—	Low Noise, Precision JFET Input Op Amp	SO-8	4.75	3.16	2.45
LT1793CN8-ND	—	Low Noise Picoampere Bias Current JFET Input Op Amp	8-Dip	4.75	3.16	2.45
LT1793CS8-ND	—	Low Noise Picoampere Bias Current JFET Input Op Amp	SO-8	4.75	3.16	2.45
LT1794CSW-ND	—	500mA 200MHz Op Amp *NEW!*	20-TSSOP	10.25	6.81	5.45
LT1794IFE-ND	—	500mA 200MHz Op Amp, Ind. Temp. *NEW!*	20-TSSOP	12.50	8.30	6.70
LT1794ISW-ND	—	500mA 200MHz Op Amp, Ind. Temp. *NEW!*	SO-20	12.13	8.06	6.50
LT1795CSW-ND	—	Dual 500mA, 50MHz, Current Feedback Amplifier	SO-20	11.00	7.31	5.69
LT1806CS6-ND	—	325MHz Single/Dual Rail-to-Rail Op Amp *NEW!*	SOT-23-6	4.38	2.91	2.20
LT1806CS8-ND	—	Low Noise, 325MHz, 140V/µS, R-R I/O Op Amp	SO-8	4.38	2.91	2.20
LT1806CS8TR-ND	—	Low Noise, 325MHz, 140V/µS, R-R I/O Op Amp	SO-8	5400.00/2,500		
LT1806IS6-ND	—	325MHz Single/Dual Rail-to-Rail Op Amp *NEW!*	SOT-23-6	4.75	3.16	2.40
LT1806IS8-ND	—	Low Noise, 325MHz, 140V/µS, Rail-to-Rail I/O Op Amp, Ind. Temp.	SO-8	4.75	3.16	2.40
LT1806IS8TR-ND	—	Low Noise, 325MHz, 140V/µS, Rail-to-Rail I/O Op Amp, Ind. Temp.	SO-8	5850.00/2,500		
LT1809CS6-ND	—	180MHz Single/Dual Rail-to-Rail Op Amp *NEW!*	SOT-23-6	3.75	2.49	1.90
LT1809IS6-ND	—	180MHz Single/Dual Rail-to-Rail Op Amp, Ind. Temp. *NEW!*	SOT-23-6	4.13	2.74	2.10
LT1812CS5-ND	—	3.6mA, 100MHz, 750V, Low Power Op Amp	SOT-23-5	2.38	1.58	1.35
LT1812CS6-ND	—	3.6mA, 100MHz, 750V, Low Power Op Amp	SOT-23-5	2.88	1.91	1.65
LT1813CS8-ND	—	Dual 3mA, 100MHz, 750V/µS Op Amp	SO-8	4.13	2.74	2.30
LT1813HVCS8-ND	—	Dual 3mA, 100MHz, 750V/µS Op Amp, Hi Volt (13.5V)	SO-8	4.50	2.99	2.30
LT1813HVDS8-ND	—	Dual 3mA, 100MHz, 750V/µS Op Amp, Hi Volt (13.5V)	SO-8	4.13	2.74	2.10
LT1813HVIS8-ND	—	Dual 3mA, 100MHz, 750V/µS Op Amp, Hi Volt (13.5V)	SO-8	5.50	3.66	2.80
LT1815CS5-ND	—	220MHz 6.5mA Op Amp *NEW!*	SOT-23-5	3.63	2.41	2.15
LT1815CS6-ND	—	220MHz 6.5mA Op Amp, Prog. Curr. *NEW!*	SOT-23-6	4.25	2.83	2.50
LT1815CS8-ND	—	220MHz 6.5mA Op Amp *NEW!*	SO-8	3.75	2.49	2.30
LT1815IS5-ND	—	220MHz 6.5mA Op Amp, Ind. Temp. *NEW!*	SOT-23-5	4.38	2.91	2.60
LT1815IS6-ND	—	220MHz 6.5mA Op Amp, Prog. Curr., Ind. Temp. *NEW!*	SOT-23-6	5.00	3.32	3.00
LT1815IS8-ND	—	220MHz 6.5mA Op Amp, Ind. Temp. *NEW!*	SO-8	4.50	2.99	2.70
LT1880CS5-ND	—	Picoamp-In Rail-to-Rail Op Amp *NEW!*	SOT-23-5	3.63	2.41	2.10
LT1880IS5-ND	—	Picoamp-In R/R Op Amp, Ind. Temp. *NEW!*	SOT-23-5	4.38	2.91	2.45
LT1920CN8-ND	—	Single Resistor Gain Programmable, Precision Instrumentation Amplifier	8-Dip	6.25	4.15	3.25
LT1920CS8-ND	—	Single Resistor Gain Programmable, Precision Instrumentation Amplifier	SO-8	6.25	4.15	3.25
LT1930AES5-ND	—	2.2MHz, Step Up DC/DC Converter *NEW!*	SOT-23-5	4.00	2.66	2.00
LT1930ES5-ND	—	1.2MHz, Boost DC/DC Converter	SOT-23-5	4.00	2.66	2.00
LT1930ES5TR-ND	—	1.2MHz, Boost DC/DC Converter	SOT-23-5	4920.00/2,500		
LT1931AES5-ND	—	2.2MHz, Inverting DC/DC Converter *NEW!*	SOT-23-5	4.25	2.83	2.15
LT1931ES5-ND	—	1.2MHz, Inverting DC/DC Converter	SOT-23-5	4.25	2.83	2.15
LT1931ES5TR-ND	—	1.2MHz, Inverting DC/DC Converter	SOT-23-5	5220.00/2,500		
LT1949-1EMS8-ND	—	1.1MHz, 1A Switch PWM DC/DC Converter	8-MSOP	4.50	2.99	2.25
LT1949EMS8-ND	—	600KHz, 1A Switch PWM DC/DC Converter	8-MSOP	4.50	2.99	2.45
LT1962EMS8-ND	—	300mA, Low Noise Micropower LDO Reg.	8-MSOP	3.50	2.33	1.80
LT1962EMS8TR-ND	—	300mA, Low Noise Micropower LDO Reg.	8-MSOP	4350.00/2,500		
LT1962EMS8-2.5-ND	—	300mA, Low Noise Micropower LDO Reg. 2.5V	8-MSOP	3.50	2.33	1.80
LT1962EMS8-2.5TR-ND	—	300mA, Low Noise Micropower LDO Reg. 2.5V	8-MSOP	4350.00/2,500		
LT1962EMS8-3-ND	—	300mA, Low Noise Micropower LDO Reg. 3V	8-MSOP	3.50	2.33	1.80
LT1962EMS8-3TR-ND	—	300mA, Low Noise Micropower LDO Reg. 3V	8-MSOP	4350.00/2,500		
LT1962EMS8-3.3-ND	—	300mA, Low Noise Micropower LDO Reg. 3.3V	8-MSOP	3.50	2.33	1.80
LT1962EMS8-3.3TR-ND	—	300mA, Low Noise Micropower LDO Reg. 3.3V	8-MSOP	4350.00/2,500		
LT1962EMS8-5-ND	—	300mA, Low Noise Micropower LDO Reg. 5V	8-MSOP	3.50	2.33	1.80
LT1962EMS8-5TR-ND	—	300mA, Low Noise Micropower LDO Reg. 5V	8-MSOP	4350.00/2,500		
LT2078AIS8-ND	—	Dual Micropower Op Amp Ind. Temp.	SO-8	11.63	7.72	6.40
LT2078CS8-ND	—	Dual Micropower Op Amp	SO-8	6.50	4.35	3.65
LT2078IS8-ND	—	Dual Micropower Op Amp Ind. Temp.	SO-8	8.38	5.60	4.85
LT2079AIS-ND	—	Quad Micropower Op Amp Ind. Temp	SO-14	19.75	13.12	10.95
LT2079CS-ND	—	Quad Micropower Op Amp	SO-14	11.13	7.39	6.15
LT2079IS-ND	—	Quad Micropower Op Amp Ind. Temp.	SO-14	14.25	9.47	7.90
LT2178AIS8-ND	—	Dual Micropower Op Amp Ind. Temp.	SO-8	12.25	8.14	6.80
LT2178CS8-ND	—	Dual Micropower Op Amp	SO-8	7.00	4.65	3.85
LT2178IS8-ND	—	Dual Micropower Op Amp Ind. Temp.	SO-8	9.00	5.98	4.95
LT2179ACS-ND	—	Ultra Low Power Precision Quad Op Amp	SO-14	18.00	11.96	9.95
LTC485CN8-ND	9176B	Low Power RS485 TX/RX.	8-Dip	2.50	1.66	1.35
LTC485CS8-ND	9176B	Low Power RS485 TX/RX	SO-8	3.13	2.10	1.70
LTC486CN-ND	9176B	Low Power Quad RS485 Driver	16-Dip	6.50	4.35	3.70
LTC486CSW-ND	9176B	Low Power Quad RS485 Driver.	SOL-16	7.50	5.00	4.25
LTC487CN-ND	9176B	Low Power Quad RS485 Driver	16-Dip	6.50	4.35	3.70
LTC487CSW-ND	9176B	Low Power Quad RS485 Driver.	SOL-16	7.50	5.00	4.25
LTC488CN-ND	9210B	Low Power Quad RS485 Receiver	16-Dip	6.50	4.33	3.70
LTC488CSW-ND	9210B	Low Power Quad RS485 Receiver	SOL-16	7.50	5.00	4.25
LTC489CN-ND	9210B	Low Power Quad RS485 Receiver	16-Dip	6.50	4.33	3.70
LTC489CSW-ND	9210B	Low Power Quad RS485 Receiver	SOL-16	7.50	5.00	4.25
LTC490CN8-ND	9176B	Low Power RS485 TX/RX.	8-Dip	4.38	2.92	2.50
LTC490CS8-ND	9176B	Low Power RS485 TX/RX	SO-8	5.38	3.58	3.05
LTC491CN-ND	9176B	Low Power RS485 TX/RX	14-Dip	4.88	3.25	2.80
LTC491CS-ND	9176B	Low Power RS485 TX/RX.	SO-14	5.88	3.92	3.25
LTC660CN8-ND	9257B	100mA, Switched Capacitor Converter	8-Dip	5.00	3.33	2.85
LTC660CS8-ND	9257B	100mA, Switched Capacitor Converter	SO-8	5.50	3.67	3.14
LTC690CN8-ND	9176B	MPU Supervisor Reset Circuit and WDT	8-Dip	6.25	4.17	3.50
LTC690CS8-ND	9176B	MPU Supervisor Reset Circuit and WDT	SO-8	6.88	4.58	3.75
LTC691CN-ND	9176B	MPU Supervisor Reset Circuit & WDT w/RAM Protect	16-Dip	6.88	4.58	3.80
LTC691CSW-ND	9176B	MPU Supervisor Reset Circuit & WDT w/RAM Protect	SOL-16	7.50	5.00	4.15
LTC692CN8-ND	9210B	MPU Reset Circuit and WDT	8-Dip	6.25	4.17	3.50
LTC692CS8-ND	9210B	MPU Reset Circuit and WDT	SO-8	6.88	4.58	3.75
LTC693CSW-ND	9210B	MPU Reset Circuit and WDT with RAM Protect	SOL-16	7.50	5.00	4.15
LTC694CN8-ND	9176B	MPU Supervisor Reset Circuit and WDT	8-Dip	6.25	4.17	3.50
LTC694CS8-ND	9210B	MPU Supervisor Reset Circuit and WDT	SO-8	6.88	4.58	3.75
LTC694CS8-3.3-ND	9210B	3.3V Supervisor Reset Circuit and WDT	SO-8	7.50	5.00	4.20
LTC695CN-ND	9176B	MPU Supervisor Reset Circuit & WDT w/RAM Protect	16-Dip	6.88	4.58	3.80
LTC695CN-3.3-ND	9210B	3.3V MPU Supervisor Reset Circuit and WDT with RAM Protect	16-Dip	7.38	4.92	4.15
LTC695CSW-ND	9176B	MPU Supervisor Reset Circuit & WDT w/RAM Protect	SOL-16	7.50	5.00	4.15
LTC695CSW-3.3-ND	9210B	3.3V MPU Supervisor Reset Circuit and WDT with RAM Protect	SOL-16	8.13	5.42	4.55
LTC699CN8-ND	9176B	MPU Supervisor Reset Circuit and WDT	8-Dip	4.63	3.08	2.47
LTC699CS8-ND	9176B	MPU Supervisor Reset Circuit and WDT	SO-8	5.00	3.33	2.67

(Continued)

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Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★ 1	25	100
LTC1040CN-ND	9175B	Dual Micropower Comparator	18-Dip	3.88	2.58	2.20
LTC1040CSW-ND	9175B	Dual Micropower Comparator	SO-18	4.63	3.08	2.85
LTC1041CN8-ND	9175B	Bang-Bang Controller	8-Dip	3.38	2.25	1.90
LTC1042CN8-ND	9175B	Window Comparator	8-Dip	3.38	2.25	1.90
LTC1043CN-ND	9175B	Dual Precision Instr. Switch Capacitor Building Block	18-Dip	5.13	3.42	2.95
LTC1043CSW-ND	—	Dual Precision Instr. Switch Capacitor Building Block	SO-18	5.63	3.75	3.10
LTC1044CN8-ND	9175B	Switch Cap Voltage Converter	8-Dip	3.13	2.08	1.75
LTC1044CS8-ND	9175B	Switch Cap Voltage Converter	SO-8	4.13	2.75	2.35
LTC1045CN-ND	9175B	Programmable µP Hex Translator/Receiver/Driver	20-Dip	5.25	3.50	2.95
LTC1045CSW-ND	—	Programmable Micropower Hex Translator/Receiver/Driver *NEW!*	SO-20	8.25	5.50	4.75
LTC1046CN8-ND	9176B	50mA, Monolithic CMOS Switched Volt Converter	8-Dip	4.00	2.70	2.25
LTC1046CS8-ND	9176B	50mA, Monolithic CMOS Switched Volt Converter	SO-8	5.25	3.50	3.00
LTC1046IS8-ND	—	50mA, Monolithic CMOS Switched Volt Conv. *NEW!*	SO-8	6.50	4.33	3.70
LTC1047CN8-ND	9176B	Dual Ultra Low Power Chopper Stabilized Op Amp	8-Dip	9.00	6.00	5.10
LTC1047CSW-ND	9176B	Dual Ultra Low Power Chopper Stabilized Op Amp	SOL-16	10.25	6.85	5.45
LTC1049CN8-ND	9176B	Ultra Low Power Chop Stabilized Op Amp	8-Dip	4.00	2.70	2.25
LTC1049CS8-ND	9176B	Ultra Low Power Chopper Stabilized Op Amp	SO-8	5.00	3.35	2.80
LTC1050ACN8-ND	—	Precision Chopper Stabilized Op Amp w/Internal Caps	8-Dip	6.88	4.60	3.95
LTC1050CN8-ND	9175B	Chopper Stabilized Op Amp with Internal Caps	8-Dip	4.00	2.70	2.25
LTC1050CS8-ND	9175B	Chopper Stabilized Op Amp with Internal Caps	SO-8	5.00	3.35	2.80
LTC1051CN8-ND	9176B	Dual Chopper Stabilized Op Amp	8-Dip	7.50	5.00	4.25
LTC1051CSW-ND	9176B	Dual Chopper Stabilized Op Amp	SOL-16	9.00	6.00	4.95
LTC1052CN-ND	9175B	Low Noise Chopper Stabilized Op Amp	14-Dip	8.13	5.42	4.65
LTC1052CN8-ND	9175B	Low Noise Chopper Stabilized Op Amp	8-Dip	7.50	5.00	4.30
LTC1053CN-ND	9176B	Quad Chopper Stabilized Op Amp	14-Dip	13.50	9.00	7.80
LTC1053CSW-ND	9176B	Quad Chopper Stabilized Op Amp	SO-18	16.13	10.75	8.85
LTC1059CN-ND	9175B	Switch Capacitor Filter	14-Dip	5.63	3.75	3.25
LTC1059CS-ND	9175B	Switch Capacitor Filter	SO-14	6.25	4.20	3.40
LTC1060ACN-ND	9175B	Universal Dual Filter Building Block *NEW!*	20-Dip	13.75	9.20	8.00
LTC1060CN-ND	9175B	Universal Dual Filter Building Block	20-Dip	6.88	4.60	3.90
LTC1060CSW-ND	9175B	Universal Dual Filter Building Block	SO-20	7.50	5.00	4.25
LTC1061ACN-ND	9175B	Triple Switch Capacitor Filter	20-Dip	25.00	16.65	14.50
LTC1061CN-ND	9175B	Triple Switch Capacitor Filter	20-Dip	13.75	9.15	7.60
LTC1062CN8-ND	9210B	5th Order Lowpass Filter	8-Dip	6.13	4.10	3.30
LTC1062CSW-ND	9210B	5th Order Lowpass Filter	SOL-16	6.25	4.20	3.55
LTC1063CN8-ND	9210B	Clock Tunable Lowpass Butterworth Filter	8-Dip	10.00	6.70	5.75
LTC1063CSW-ND	9210B	Clock Tunable Lowpass Butterworth Filter	SOL-16	10.75	7.20	6.15
LTC1064-1CN-ND	9175B	8th Order Clock Tunable Lowpass Sweep. Elliptic Filter	14-Dip	22.50	15.00	12.90
LTC1064-2CN-ND	9176B	8th Order High Frequency Butterworth Filter	14-Dip	20.00	13.35	11.25
LTC1064-2CSW-ND	9176B	8th Order High Frequency Butterworth Lowpass Filter	SO-16	27.50	18.35	15.50
LTC1064-3CN-ND	9176B	8th Order High Freq. Linear Phase LP Filter	14-Dip	17.50	11.70	9.95
LTC1064-3CSW-ND	9176B	100KHz, Clock Sweepable Linear Phase Filter	SO-16	20.00	13.35	11.30
LTC1064-4CN-ND	9176B	8th Order Clock Sweepable Cauer Filter	14-Dip	25.00	16.70	14.20
LTC1064-4CSW-ND	9176B	8th Order Clock Sweepable Cauer LP Filter	SO-16	31.25	20.85	17.65
LTC1064-7CN-ND	9210B	100KHz, Phase Corrected Lowpass Filter	14-Dip	20.00	13.35	11.25
LTC1064-7CSW-ND	9210B	8th Order Lowpass Filter	SO-16	27.50	18.35	15.50
LTC1064CN-ND	9175B	Quad 140KHz, Switched Capacitor Filter	24-Dip	15.00	10.00	8.40
LTC1064CSW-ND	9175B	Quad 80KHz, Sweepable Capacitor Filter	SO-24	18.00	12.00	9.55
LTC1065CN8-ND	9210B	Low Offset Clock Sweep. Bessel Filter	8-Dip	10.00	6.70	5.75
LTC1065CSW-ND	9210B	Low Offset Clock Sweep Bessel Filter	SOL-16	10.75	7.15	6.15
LTC1066-1CSW-ND	9210B	8th Order LP 14-Bit DC Accurate Filter	SOL-16	32.50	21.65	17.50
LTC1067-50CS-ND	—	R2R Very Low Noise Universal Dual Filter Bldg. Block	SO-16	6.88	4.57	3.60
LTC1067CS-ND	—	R2R Very Low Noise Universal Dual Filter Bldg. Block	SO-16	6.88	4.57	3.60
LTC1068-200CG-ND	—	Quad Universal Filter Building Block	28-SSOP	12.38	8.22	6.60
LTC1068-200IG-ND	—	Quad Universal Filter Building Block, Ind. Temp	28-SSOP	13.50	8.97	7.15
LTC1068-25CG-ND	—	Quad Universal Filter Building Block	28-SSOP	12.38	8.22	6.60
LTC1068-25IG-ND	—	Quad Universal Filter Building Block, Ind. Temp	28-SSOP	13.50	8.97	7.15
LTC1068-50CG-ND	—	Quad Universal Filter Building Block	28-SSOP	12.38	8.22	6.60
LTC1068-50IG-ND	—	Quad Universal Filter Building Block, Ind. Temp	28-SSOP	13.50	8.97	7.15
LTC1068CG-ND	9294B	Quad Universal Filter Building Block	28-SSOP	12.38	8.22	6.60
LTC1068CN-ND	9294B	Quad Universal Filter Building Block	24-Dip	12.00	7.97	6.40
LTC1068IG-ND	9294B	Quad Universal Filter Building Block, Ind. Temp	28-SSOP	13.50	8.97	7.15
LTC1068IN-ND	9294B	Quad Universal Filter Building Block, Ind. Temp	24-Dip	13.13	8.72	6.95
LTC1069-1IS8-ND	—	Low Power 8th Order Progressive Elliptic, Lowpass Filter *NEW!*	SO-8	10.25	6.81	5.45
LTC1069-6CS8-ND	—	Low Power Single Supply Elliptic Lowpass Filter *NEW!*	SO-8	9.38	6.25	5.00
LTC1069-7CS8-ND	—	Linear Phase 8th Order Lowpass Filter	SO-8	9.38	6.23	5.00
LTC1090ACN-ND	—	Single Chip 8-Channel 10-Bit Data Acquisition System *NEW!*	20-Dip	25.75	17.15	15.80
LTC1090CN-ND	—	Single Chip 8-Channel 10-Bit Data Acquisition System *NEW!*	20-Dip	17.50	11.65	9.90
LTC1091CN8-ND	—	Single Chip 2-Channel 10-Bit Data Acquisition System, Supply Current, 15mA Typ. *NEW!*	8-Dip	17.50	11.70	9.90
LTC1092CN8-ND	—	Single Chip 2-Channel 10-Bit Data Acquisition System, Supply Current, 1mA Typ. *NEW!*	8-Dip	17.50	11.65	9.90
LTC1093CN-ND	—	Single Chip 6-Channel 10-Bit Data Acquisition System *NEW!*	16-Dip	17.50	11.65	9.90
LTC1094CN-ND	—	Single Chip 8-Channel 10-Bit Data Acquisition System, Serial I/O *NEW!*	20-Dip	17.50	11.65	9.90
LTC1096ACS8-ND	9210B	Micropower Sampling 8-Bit Serial I/O A/D Conv. *NEW!*	SO-8	6.75	4.50	3.60
LTC1096CS8-ND	9210B	8-Bit, Micropower, Sampling Serial, ADC	SO-8	5.50	3.70	2.90
LTC1096LIS8-ND	—	Micropower Sampling 8-Bit Serial I/O A/D Conv. *NEW!*	SO-8	6.38	4.25	3.45
LTC1098CN8-ND	9210B	8-Bit, Micropower, Sampling 2-Ch. Mux ADC	8-Dip	5.50	3.70	2.90
LTC1098CS8-ND	9210B	8-Bit, Micropower, Sampling, 2-Ch. Mux ADC	SO-8	5.50	3.70	2.90
LTC1099CN-ND	9175B	8-Bit, High Speed ADC with Sample and Hold	20-Dip	14.88	9.90	8.25
LTC1099CSW-ND	9175B	8-Bit, High Speed ADC with Sample and Hold	SO-20	19.38	12.90	10.70
LTC1100CN8-ND	9176B	Precision Ultra Low Drift Instrumentation Amp	8-Dip	11.25	7.50	6.45
LTC1100CSW-ND	9176B	Precision Ultra Low Drift Instrumentation Amp	SO-16	13.13	8.75	7.40
LTC1142CG-ND	9210B	Dual Step Down Switching Regulator	28-SS0P	11.25	7.50	6.00
LTC1143LCS-ND	9294B	Dual High Eff. Step Down Switching Reg. Controller	SO-16	8.25	5.48	4.60
LTC1143LCS-ADJ-ND	9294B	Dual High Eff. Step Down Switching Reg. Controller	SO-16	8.25	5.48	4.40
LTC1144CN8-ND	9210B	Switched Capacitor Wide Input Range Voltage Converter with Shutdown	8-Dip	4.50	3.00	2.50
LTC1144CS8-ND	9210B	Switched Capacitor Wide Input Range Voltage Converter with Shutdown	SO-8	4.63	3.10	2.55
LTC1144IS8-ND	9210B	Switched Capacitor Wide Input Range Voltage Converter with Shutdown *NEW!*	SO-8	5.38	3.57	2.95
LTC1147CN8-5-ND	9210B	5V, High Efficiency Step Down Regulator	8-Dip	5.13	3.41	2.65
LTC1147CS8-3.3-ND	9210B	3.3V, High Efficiency Step Down Regulator	SO-8	5.38	3.57	2.80
LTC1147CS8-5-ND	9210B	5V High Efficiency Step Down Regulator	SO-8	5.38	3.57	2.80
LTC1147LCS8-ND	—	Adj. Low Volt High Effic Step Down Regulator	SO-8	6.00	3.99	3.15
LTC1147LIS8-ND	—	High Eff. Step Down Switch Regulator Controller	SO-8	6.63	4.40	3.40
LTC1148CN-ND	9210B	High Eff. Sync Step Down Switching Regulator	14-Dip	7.88	5.25	4.50
LTC1148CS-ND	9210B	High Eff. Sync Step Down Switching Regulator	SO-14	8.13	5.40	4.60
LTC1148CS-3.3-ND	9210B	3.3V, High Efficiency Sync Step Down Switching Reg	SO-14	8.13	5.40	4.60
LTC1148CS-5-ND	9210B	5V, High Efficiency Sync Step Down Switching Reg	SO-14	8.13	5.40	4.60
LTC1148HVCS-ND	9210B	High Efficiency Step Down Switching Regulator	SO-14	8.50	5.65	4.80
LTC1148HVCS-5-ND	9210B	5V, High Efficiency Step Down Switching Reg. *NEW!*	SO-14	8.50	5.65	4.80
LTC1148LCS-3.3-ND	9210B	3.3V, LV, High Effic. Syn. Step Down Switching Reg	SO-14	8.75	5.85	4.90
LTC1149CN-ND	9210B	High Efficiency Sync Step Down Switching Reg	16-Dip	9.63	6.40	5.50
LTC1149CN-5-ND	9210B	5V, High Efficiency Sync Step Down Switch Reg	16-Dip	9.63	6.40	5.50
LTC1149CS-ND	9210B	High Efficiency Sync Step Down Switching Reg	SO-16	10.00	6.64	5.00
LTC1149CS-3.3-ND	9210B	3.3V, High Effic. Sync Step Down Switching Reg	SO-16	10.00	6.64	5.00
LTC1150CN8-ND	9176B	High Voltage Stabilizer Op Amp with Int. Caps	8-Dip	6.88	4.60	3.85
LTC1150CS8-ND	9176B	High Voltage Stabilizer Op Amp with Int. Caps	SO-8	8.13	5.40	4.55
LTC1151CN8-ND	9210B	Dual ±15V, Zero-Drift Op Amp	8-Dip	10.75	7.15	5.95
LTC1151CSW-ND	9210B	Dual ±15V, Zero-Drift Op Amp	SOL-16	12.50	8.35	6.95
LTC1152CN8-ND	9257B	Rail-to-Rail I/O Zero Drift Op Amp	8-Dip	6.00	4.00	3.25
LTC1152CS8-ND	9257B	Rail-to-Rail I/O Zero Drift Op Amp	SO-8	6.50	4.35	3.50
LTC1152IS8-ND	9275B	Rail-to-Rail Input/Output Zero-Drift Op Amp, Ind. Temp. *NEW!*	SO-8	7.25	4.82	3.95
LTC1153CN8-ND	9210B	Auto-Reset Electronic Circuit Breaker	8-Dip	3.75	2.50	2.10
LTC1153CS8-ND	9210B	Auto-Reset Electronic Circuit Breaker	SO-8	4.00	2.65	2.25
LTC1153IS8-ND	9210B	Auto-Reset Electronic Circuit Breaker *NEW!*	SO-8	4.88	3.24	2.75
LTC1154CN8-ND	9210B	Single Highside MOSFET Switch Driver	8-Dip	3.25	2.16	1.85
LTC1154CS8-ND	9210B	Single Highside MOSFET Switch Driver	SO-8	3.50	2.35	2.00
LTC1155CN8-ND	9176B	Dual Highside Switch Driver	8-Dip	5.25	3.50	3.00
LTC1155CS8-ND	9176B	Dual Highside Switch Driver	SO-8	5.63	3.75	3.20
LTC1156CSW-ND	9176B	Quad Highside Switch Driver	SOL-16	9.38	6.25	5.35
LTC1156CN-ND	9176B	Quad Highside Switch Driver	16-Dip	8.75	5.81	4.95
LTC1157CS8-ND	9210B	Dual 3.3V, Highside Switch Driver	SO-8	4.75	3.16	2.65
LTC1159CS-ND	9257B	High Efficiency Sync. Step Down Switch Regulator	SO-16	9.00	6.00	4.90
LTC1159CS-3.3-ND	9257B	3.3V, High Effic. Sync. Step Down Switch Regulator	SO-16	9.00	6.00	4.90
LTC1163CS8-ND	9210B	Triple Highside Switch Driver	SO-8	5.25	3.50	2.90
LTC1164-5CN-ND	9210B	Low Power Clock Sweepable Butterworth Filter	14-Dip	20.00	13.35	11.25
LTC1164-5CSW-ND	9210B	Low Power Clock Sweepable Butterworth Filter	SO-16	27.50	18.35	15.50
LTC1164-6CN-ND	9210B	Low Power 8th Order Elliptic Low Pass Filter	14-Dip	22.50	15.00	12.90
LTC1164-7CN-ND	9210B	Low Power Clock Sweepable Linear Phase	14-Dip	20.00	13.35	11.25
LTC1164-7CSW-ND	9210B	Low Power Clock Sweepable Linear Phase Filter	SO-16	27.50	18.35	15.50
LTC1164-8CN-ND	9257B	Ultra Selective Elliptic Band Pass Filter	14-Dip	30.00	20.00	17.25
LTC1164-8CSW-ND	9257B	Ultra Selective Elliptic Band Pass Filter	SO-14	32.50	21.65	18.50
LTC1164CN-ND	9176B	Quad 20KHz, Low Power Switching Cap Filter	24-Dip	15.00	10.00	8.40
LTC1164CSW-ND	9176B	Quad 20KHz, Low Power Switch Cap Filter	SO-24	18.00	12.00	9.55
LTC1165CS8-ND	9210B	Triple HIgh Side Switch Driver	SO-8	5.25	3.50	2.90
LTC1174CN8-ND	9210B	Adj. Micropower Step Down DC/DC Converter	8-Dip	6.50	4.35	3.60
LTC1174CN8-5-ND	9210B	5V, Micropower Step Down DC/DC Converter	8-Dip	6.50	4.35	3.60
LTC1174CS8-ND	9210B	Adj. Micropower Step Down DC/DC Converter	SO-8	6.88	4.60	3.80
LTC1174CS8-3.3-ND	9210B	Adj. Micropower Step Down DC/DC Converter	SO-8	6.88	4.60	3.80
LTC1174CS8-5-ND	9210B	Adj. Micropower Step Down DC/DC Converter	SO-8	6.88	4.60	3.80
LTC1174HVCN8-ND	9210B	4-18V, Micropower DC/DC Converter	8-Dip	7.50	5.00	4.10
LTC1174HVCS8-ND	9210B	4-18V, Micropower DC/DC Converter	SO-8	7.88	5.25	4.25
LTC1174HVCS8-3.3-ND	9210B	3.3V High Efficiency Step Down/Inverting DC/DC Converter *NEW!*	SO-8	7.88	5.25	4.25
LTC1174HVCS8-5-ND	9210B	5V High Efficiency Step Down/Inverting DC/DC Converter *NEW!*	SO-8	7.88	5.25	4.25
LTC1174IN8-ND	9210B	High Efficiency Step Down/Inverting DC/DC Converter, Ind. Temp. *NEW!*	8-Dip	7.50	5.00	4.00
LTC1177CSW-5-ND	—	5V Isolated MOSFET Drivers *NEW!*	SO-28	7.63	5.10	4.35
LTC1196-1ACS8-ND	9210B	8-Bit, 600ns, 1MHz, Sampling ADC	SO-8	7.63	5.10	4.35
LTC1196-2ACS8-ND	9210B	8-Bit, 710ns, 800KHz, Sampling ADC	SO-8	5.50	3.70	3.15
LTC1196-2BCS8-ND	9210B	8-Bit, 710ns, 800KHz, Sampling ADC	SO-8	4.38	2.91	2.50
LTC1197CS8-ND	9294B	10-Bit, 500KSPS, Diff. Input ADC	SO-8	4.88	3.24	2.60
LTC1197IS8-ND	9294B	10-Bit, 500KSPS, Diff. Input ADC	SO-8	5.25	3.49	2.80
LTC1197LCMS8-ND	9294B	3V, 10-Bit 250KSPS ADC in MSOP with Shutdown	8-MSOP	5.50	3.66	2.95
LTC1197LCS8-ND	9294B	3V, 10-Bit, 500KSPS ADC with Shutdown	SO-8	4.88	3.24	2.60
LTC1197LIS8-ND	9294B	3V, 10-Bit, 250KSPS, Diff. Input, ADC	SO-8	5.25	3.49	2.80
LTC1198-2BCS8-ND	9210B	2-Ch, 8-Bit, 710nS, 600KHz, Sampling ADC	SO-8	5.25	3.50	3.00
LTC1199CMS8-ND	—	10-Bit, 450KSPS ADC with Shutdown *NEW!*	8-MSOP	5.50	4.10	3.65
LTC1199CS8-ND	9294B	10-Bit, 500KSPS ADC with Shutdown	SO-8	4.88	3.24	2.60
LTC1199IMS8-ND	—	10-Bit, 450KSPS ADC with Shutdown *NEW!*	8-MSOP	6.13	4.50	3.15
LTC1199IS8-ND	9294B	10-Bit, 450KSPS, 2-Channel Input ADC	SO-8	5.25	3.49	2.80
LTC1199LIMS8-ND	—	10-Bit, 450KSPS ADC with Shutdown *NEW!*	8-MSOP	6.13	4.50	3.15
LTC1199LIS8-ND	9294B	3V, 10-Bit, 210KSPS, 2-Channel Input, ADC	SO-8	5.25	3.49	2.80
LTC1232CS8-ND	9176B	Microprocessor Supervisory Circuit	SO-8	3.63	2.41	1.95
LTC1235CN-ND	9176B	Microprocessor Supervisor Circuit with Battery Backup and WDT	16-Dip	6.88	4.60	3.80
LTC1235CSW-ND	9176B	Microprocessor Supervisor Circuit with Battery Backup and WDT	SOL-16	7.50	5.00	4.15
LTC1250CN8-ND	9210B	Very Low Noise Zero-Drift Bridge Amp	8-Dip	5.50	3.70	2.90
LTC1250CS8-ND	9210B	Very Low Noise Zero-Drift Bridge Amp	SO-8	6.25	4.20	3.30
LTC1255CN8-ND	9210B	Dual 24V High Side MOSFET Switch Driver	8-Dip	5.25	3.50	3.00
LTC1255CS8-ND	9210B	Dual 24V High Side MOSFET Switch Driver	SO-8	5.63	3.75	3.20
LTC1255IS8-ND	9210B	Dual 24V High Side MOSFET Driver *NEW!*	SO-8	7.38	4.90	4.15
LTC1257CN8-ND	9210B	Complete Single Supply 12-Bit Volt Output DAC	8-Dip	8.38	5.60	4.45
LTC1257CS8-ND	9210B	Complete Single Supply 12-Bit Volt Output DAC	SO-8	8.88	5.90	4.75
LTC1257IN8-ND	9210B	Complete Single Supply 12-Bit Volt Output DAC *NEW!*	8-Dip	9.25	6.15	4.90
LTC1257IS8-ND	9210B	Complete Single Supply 12-Bit Volt Output DAC *NEW!*	SO-8	9.75	6.50	5.20
LTC1258CMS8-ND	—	Low Power Low Dropout Bandgap Reference	8-MSOP	5.13	3.41	2.57
LTC1258CS8-2.5-ND	—	2.5V, Micropower Low Dropout Series Reference	SO-8	4.13	2.74	2.30
LTC1258CS8-ND	—	Micropower Low Dropout Series Bandgap Reference	SO-8	4.13	2.74	2.30
LTC1258CS8-3-ND	—	3V, Micropower Low Dropout Bandgap Reference	SO-8	4.13	2.74	2.30
LTC1258CS8-4.1-ND	—	4.1V, Micropower Low Dropout Bandgap Reference	SO-8	4.13	2.74	2.30
LTC1258CS8-5-ND	—	5V, Micropower Low Dropout Bandgap Reference	SO-8	4.13	2.74	2.30
LTC1261CS-ND	—	Switched Capacitor Regulated Voltage Inverter *NEW!*	SO-14	4.50	3.00	2.60
LTC1261CS8-4-ND	—	4V, Switched Capacitor Regulated Volt Inverter *NEW!*	SO-8	3.75	2.49	1.90
LTC1261LCMS8-ND	—	Switched Cap Regulated Volt Inverter	8-MSOP	4.00	2.66	2.00
LTC1261LCS8-ND	—	Switched Cap Regulated Volt Inverter	SO-8	3.63	2.41	1.82
LTC1262CN8-ND	9210B	12V, Flash Memory Programming Supply	8-Dip	4.50	3.00	2.45
LTC1262CS8-ND	9257B	12V, Flash Memory Programming Supply	SO-8	4.63	3.08	2.32
LTC1262IS8-ND	—	12V, Flash Memory Programming Supply	SO-8	5.75	3.82	2.88
LTC1263CS8-ND	—	12V, 60mA Flash Memory Programming Supply *NEW!*	SO-8	7.00	4.65	3.50
LTC1264-7CN-ND	9210B	250KHz, Phase Corrected Lowpass Filter	14-Dip	25.00	16.65	14.20
LTC1264-7CSW-ND	9210B	250KHz, Phase Corrected Lowpass Filter	SO-16	31.25	20.85	17.65

(Continued)

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Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★ 1	25	100
LTC1264CN-ND	9210B	High Speed Universal Filter	24-Dip	17.50	11.70	9.80
LTC1264CSW-ND	9210B	High Speed Universal Filter	SO-24	20.50	13.70	10.90
LTC1265CS-ND	9257B	High Efficiency Adj. 1A Step Down DC/DC Converter	SO-14	6.88	4.60	3.95
LTC1266ACS-ND	9257B	Synch. Switching Reg. Controller 1% Reference	SO-16	9.13	6.06	5.20
LTC1266AIS-ND	—	Synch. Reg. Controller for N/P Chan. MOSFETs	SO-16	10.25	6.81	5.75
LTC1266CS-ND	9257B	Synch. Switching Regulator Controller	SO-16	7.50	4.98	4.05
LTC1266CS-3.3-ND	9275B	Dual Synch. Regulator Controller MOSFET *NEW!*	SO-16	7.50	4.98	4.05
LTC1266IS-ND	—	Synch. Reg. Controller for N/P Chan. MOSFETs	SO-16	8.50	5.65	4.45
LTC1266IS-3.3-ND	—	Synch. Reg. Controller for N/P Chan. MOSFETs	SO-16	8.50	5.65	4.45
LTC1266IS-5-ND	—	Synch. Reg. Controller for N/P Chan. MOSFETs	SO-16	8.50	5.65	4.45
LTC1272-3ACSW-ND	—	12-Bit, 3µS 250KHz Sampling A/D Converter *NEW!*	SO-24	35.00	23.35	18.76
LTC1272-3CCN-ND	9176B	12-Bit, 3µS, High Speed Sampling ADC	24-Dip	20.63	13.75	11.05
LTC1272-3CCSW-ND	9176B	12-Bit, 3µS, High Speed Sampling ADC	SO-24	22.75	15.15	12.15
LTC1272-8CCN-ND	9176B	12-Bit, 8µS, High Speed Sampling ADC	24-Dip	15.00	10.00	8.00
LTC1273BCN-ND	9210B	12-Bit, 2.7µS, High Speed Sampling ADC	24-Dip	23.50	15.65	12.55
LTC1273BCSW-ND	9210B	12-Bit, 2.7µS, High Speed Sampling ADC	SO-24	25.88	17.25	13.80
LTC1274CSW-ND	9285B	12-Bit, 10mW, 100KSPS ADC	SO-24	14.88	9.90	8.25
LTC1275BCN-ND	9210B	12-Bit, 3µS High Speed Sampling ADC	24-Dip	22.00	14.65	11.75
LTC1275BCSW-ND	9210B	12-Bit, 3µS, High Speed Sampling ADC	SO-24	24.25	16.15	12.95
LTC1276BCN-ND	9210B	12-Bit, 2.7µS High Speed Sampling ADC	24-Dip	22.00	14.65	11.75
LTC1276BCSW-ND	9210B	12-Bit, 2.7µS, High Speed Sampling ADC	SO-24	24.25	16.15	12.95
LTC1277CSW-ND	9285B	12-Bit, 10mW, 100KSPS ADC	SO-24	15.63	10.40	8.70
LTC1278-4CN-ND	—	12-Bit, 2.5µs, ADC with Shutdown	24-Dip	24.00	16.00	12.85
LTC1278-4ISW-ND	9210B	12-Bit, ADC with Shutdown, Ind. Temp	SO-24	27.50	18.35	14.70
LTC1278-5CSW-ND	9210B	12-Bit, 2.5µs, ADC with Shutdown	SO-24	25.63	17.10	14.65
LTC1278-5ISW-ND	9210B	12-Bit, ADC with Shutdown, Ind. Temp	SO-24	29.38	19.60	15.70
LTC1279CG-ND	—	12-Bit, 1.4µs, High Speed Sampling ADC	24-SSOP	25.88	17.19	14.20
LTC1279CSW-ND	9257B	12-Bit, 2.5µS, High Speed Sampling ADC	SO-24	25.50	16.94	13.95
LTC1282BCSW-ND	9210B	3V, 12-Bit, Parallel I/O, Sampling ADC	SO-24	28.13	18.75	14.75
LTC1283CN-ND	9210B	3V, 10-Bit, 8-Channel Mux S/H Full Duplex I/O ADC	20-Dip	20.13	13.40	11.40
LTC1285CN8-ND	—	3V, 12-Bit, Micropower Sampling A/D Converter *NEW!*	8-Dip	11.88	7.90	6.50
LTC1285CS8-ND	—	3V, 12-Bit, Micropower Sampling A/D Converter *NEW!*	SO-8	12.50	8.35	6.95
LTC1286CN8-ND	9210B	12-Bit, Micropower ADC	8-Dip	9.88	6.60	5.25
LTC1286CS8-ND	9210B	12-Bit, Micropower ADC	SO-8	10.63	7.10	5.65
LTC1286IN8-ND	9210B	12-Bit, Micropower ADC	8-Dip	12.38	8.25	6.55
LTC1288CN8-ND	9257B	3V, 12-Bit, Micropower Sampling ADC Serial I/O	8-Dip	11.88	7.90	6.50
LTC1288CS8-ND	9257B	3V, 12-Bit, Micropower Sampling ADC Serial I/O	SO-8	12.50	8.35	6.95
LTC1289CCSW-ND	9176B	3V, 12-Bit, ADC 8-Channel Mux, S/H Full Duplex I/O	SO-20	41.38	27.60	22.06
LTC1290BCSW-ND	—	12-Bit Serial I/O ADC with 8-Channel Mux *NEW!*	SO-20	45.00	30.00	23.96
LTC1290CCN-ND	9176B	12-Bit, Serial I/O ADC with 8-Channel Mux	20-Dip	30.00	20.00	15.95
LTC1290CCSW-ND	9176B	12-Bit, Serial I/O ADC with 8-Channel Mux	SO-20	36.00	24.00	19.15
LTC1290CIN-ND	9176B	12-Bit, Serial I/O ADC with 8-Channel Mux, Ind. Temp.	20-Dip	42.38	28.25	23.35
LTC1290CISW-ND	9176B	12-Bit, Serial I/O ADC with 8-Channel Mux, Ind. Temp.	SO-20	42.38	28.25	23.35
LTC1290DCN-ND	9176B	12-Bit, Serial I/O ADC with 8-Channel Mux	20-Dip	12.50	8.35	6.70
LTC1290DCSW-ND	9176B	12-Bit, Serial I/O ADC with 8-Channel Mux	SO-20	21.75	14.50	11.35
LTC1291CCN8-ND	9210B	12-Bit, Serial I/O 2-Channel Input ADC	8-Dip	28.13	18.75	15.00
LTC1291DCN8-ND	9210B	12-Bit, Serial I/O 2-Channel Input ADC	8-Dip	18.13	12.10	9.50
LTC1292CCN8-ND	9210B	12-Bit, Serial I/O Differential Input ADC	8-Dip	28.13	18.75	15.00
LTC1292DCN8-ND	9210B	12-Bit, Serial I/O Differential Input ADC	8-Dip	18.13	12.10	9.50
LTC1293BCSW-ND	—	12-Bit, Single Chip Data Acquisition System *NEW!*	SO-16	45.00	30.00	23.96
LTC1293CCN-ND	9176B	12-Bit, Single Chip Data Acquisition System	16-Dip	30.00	20.00	15.95
LTC1293DCN-ND	9176B	12-Bit, Single Chip Data Acquisition System	16-Dip	18.13	12.10	9.50
LTC1293DCSW-ND	—	12-Bit, Single Chip Data Acquisition System *NEW!*	SO-20	21.75	14.50	11.35
LTC1294BCSW-ND	—	12-Bit, Serial I/O ADC with 8-Channel Mux *NEW!*	SO-20	45.00	30.00	23.96
LTC1294CCN-ND	9176B	12-Bit, Serial I/O ADC with 8-Channel Mux	20-Dip	28.13	18.75	15.00
LTC1294CCSW-ND	—	12-Bit, Serial I/O ADC with 8-Channel Mux *NEW!*	SO-20	36.00	24.00	19.15
LTC1294DCN-ND	9176B	12-Bit, Serial I/O ADC with 8-Channel Mux	20-Dip	18.13	12.10	9.50
LTC1294DCSW-ND	—	12-Bit, Serial I/O ADC with 8-Channel Mux *NEW!*	SO-20	21.75	14.50	11.35
LTC1296BCN-ND	9176B	12-Bit, Serial I/O ADC w/8-Channel Mux w/Shutdown.	20-Dip	24.38	16.25	13.00
LTC1296BCSW-ND	9176B	12-Bit, Serial I/O ADC w/8-Channel Mux w/Shutdown	SO-20	25.00	16.65	13.35
LTC1296CCN-ND	9176B	12-Bit, Serial I/O ADC with 8-Channel Mux	20-Dip	17.38	11.60	9.25
LTC1296CCSW-ND	9176B	12-Bit, Serial I/O ADC w/8-Channel Mux w/Shutdown	SO-20	17.88	11.90	9.50
LTC1296DCN-ND	9176B	12-Bit, Serial I/O ADC w/8-Channel Mux w/Shutdown	20-Dip	15.88	10.60	8.45
LTC1296DCSW-ND	9176B	12-Bit, Serial I/O ADC w/8-Channel Mux w/Shutdown	SO-20	16.25	10.85	8.65
LTC1297DCN8-ND	9210B	12-Bit, Serial ADC with Auto Shutdown	8-Dip	21.75	14.50	11.40
LTC1298CN8-ND	9210B	12-Bit, Serial A/D Converter, 2-Channel	8-Dip	9.88	6.60	5.25
LTC1298CS8-ND	9210B	12-Bit, Serial A/D Converter, 2-Channel	SO-8	10.63	7.10	5.65
LTC1298IN8-ND	9210B	12-Bit, Serial A/D Converter, 2-Channel, Ind. Temp.	8-Dip	12.38	8.25	6.55
LTC1298IS8-ND	9210B	12-Bit, Serial A/D Conv., 2-Channel, Ind. Temp. *NEW!*	SO-8	13.25	8.85	7.05
LTC1314CS-ND	9257B	Single and Dual PCMCIA Switch Matrices	SO-14	4.38	2.95	2.35
LTC1315CG-ND	9175B	Single and Dual PCMCIA Switch Matrices	SSOP-24	6.25	4.15	3.35
LTC1318CSW-ND	9257B	Single 5V Power RS232/RS422 Transceiver	SO-24	9.13	6.10	4.90
LTC1320CSW-ND	9210B	Line Transceiver for “APPLETALK®”	SOL-16	6.88	4.60	3.90
LTC1321CN-ND	9210B	Low Power RS485/RS232 Driver/Receiver	24-Dip	8.75	5.85	4.65
LTC1321CSW-ND	9210B	Low Power RS485/RS232 Driver/Receiver	SO-24	8.75	5.85	4.65
LTC1321ISW-ND	—	LP RS485/RS232 Driver/Receiver, Ind. Temp. *NEW!*	SO-24	10.50	7.00	5.60
LTC1322CN-ND	9210B	Low Power RS485/RS232 Driver/Receiver	24-Dip	10.00	6.65	5.35
LTC1322CSW-ND	9210B	Low Power RS485/RS232 Driver/Receiver	SO-24	10.00	6.65	5.35
LTC1325CSW-ND	9257B	Battery Management Circuit	SOL-16	13.75	9.15	7.35
LTC1326CMS8-ND	—	Micropower Precision Triple Supply Monitor	8-MSOP	4.63	3.08	2.45
LTC1326CMS8-2.5-ND	9294B	Micropower Precision Triple Supply Monitor	8-MSOP	4.63	3.08	2.45
LTC1326CS8-ND	9294B	Micropower Precision Triple Supply Monitor	SO-8	4.38	2.91	2.35
LTC1326CS8-2.5-ND	9294B	2.5V, Micropower Precision Triple Supply Monitor	SO-8	4.38	2.91	2.35
LTC1327CG-ND	9210B	3V, Low Power Transceiver EIA562 3 Driver/5 Rec.	28 SSOP	9.50	6.35	5.00
LTC1327CNW-ND	9210B	3V, Low Power Transceiver EIA562 3 Driver/5 Rec.	28-Dip	8.75	5.85	4.70
LTC1327CSW-ND	9210B	3V, Low Power Transceiver EIA562 3 Driver/5 Rec.	SO-28	8.75	5.85	4.70
LTC1329CS8-10-ND	—	8-Bit, Current Output DAC	SO-8	4.75	3.16	2.65
LTC1329CS8-50-ND	—	8-Bit, Current Output DAC	SO-8	4.75	3.16	2.65
LTC1329IS8-50-ND	9294B	8-Bit, Current Output DAC	SO-8	5.88	3.91	3.25
LTC1334CG-ND	—	+5V, RS232/485 Multiprotocol Inter Receiver	28-SSOP	13.00	8.64	7.45
LTC1334CNW-ND	—	+5V, RS232/RS485 Multiprotocol Inter Rec. *NEW!*	28-Dip	12.25	8.15	7.00
LTC1334CSW-ND	—	+5V, RS232/RS485 Multiprotocol Inter Rec. *NEW!*	SO-28	12.25	8.15	7.00
LTC1334ISW-ND	—	+5V, RS232/RS485 Multiprotocol Inter Rec., Ind. Temp. *NEW!*	SO-28	14.25	9.50	8.15
LTC1337CG-ND	9210B	5V, Low Power RS232 3 Driver/5 Rec. Transceiver	28-SSOP	9.50	6.35	5.00
LTC1337CNW-ND	9210B	5V, Low Power RS232 3 Driver/5 Rec. Transceiver	28-Dip	8.75	5.85	4.70
LTC1337CSW-ND	9210B	5V, Low Power RS232 3 Driver/5 Rec. Transceiver	SO-28	8.75	5.85	4.70
LTC1338CG-ND	9210B	5V, Low Power RS232 5 Driver/3 Receiver	28-SSOP	10.13	6.75	5.65
LTC1338CSW-ND	9210B	5V, Low Power RS232 5 Driver/3 Receiver	SOL-16	9.38	6.25	5.25
LTC1340CMS8-ND	9294B	Low Noise Varactor Driver	8-MSOP	6.00	4.00	3.40
LTC1340CS8-ND	9294B	Low Noise Varactor Driver	SO-8	5.50	3.66	3.15
LTC1343CGW-ND	9294B	Software Selectable Multiprotocol Receiver	44-SSOP	23.50	15.65	13.40
LTC1343IGW-ND	9294B	Software Selectable Multiprotocol Receiver	44-SSOP	27.00	17.93	14.40
LTC1344ACG-ND	—	Multiprotocol Terminator	24-SSOP	13.63	9.05	6.82
LTC1344CG-ND	9294B	Multiprotocol Terminator	24-SSOP	13.63	9.05	6.82
LTC1344IG-ND	9294B	Multiprotocol Terminator	24-SSOP	15.63	10.38	8.35
LTC1345CNW-ND	9257B	Single Supply V.35 Diff. Transceiver with Shutdown	28-Dip	13.88	9.25	7.40
LTC1345CSW-ND	9257B	Single Supply V.35 Diff. Transceiver with Shutdown	SO-28	14.38	9.60	7.65
LTC1346ACSW-ND	9285B	10 MBPS DCE/DTE V.35 Transceiver	SO-24	12.38	8.25	7.10
LTC1347CNW-ND	9210B	5V, RS232 Micropower 3 Drivers/5 Receivers	28-Dip	8.75	5.85	4.70
LTC1348CG-ND	9257B	3.3V, True RS232 3 Drivers/5 Receivers *NEW!*	28-SSOP	8.75	5.85	4.80
LTC1348CSW-ND	9257B	3.3V, True RS232 3 Drivers/5 Receivers	SO-28	8.13	5.45	4.50
LTC1348IG-ND	9257B	3.3V, True RS232 3 Drivers/5 Rec., Ind. Temp	28-SSOP	10.13	6.75	5.80
LTC1348ISW-ND	9257B	3.3V, True RS232 3 Drivers/5 Rec., Ind. Temp	SO-28	9.38	6.25	5.35
LTC1349CN-ND	9210B	5V, LP RS232 3 Driver/5 Rec. & Active Shutdown	28-Dip	8.75	5.85	4.70
LTC1349CSW-ND	9210B	5V, LP RS232 3 Driver/5 Rec. & Active Shutdown	SO-28	8.75	5.85	4.70
LTC1349ISW-ND	—	5V, Low Power RS232 3 Drivers/5 Receivers and Active Shutdown, Ind. Temp. *NEW!*	SO-28	9.63	6.40	5.20
LTC1350CG-ND	9210B	3V, LP EIA562 3 Driver/5 Rec. w/2 Receivers Active	28 SSOP	9.50	6.35	5.00
LTC1350IG-ND	9210B	3V, Low Power EIA562 3 Drivers/5 Receivers with 2 Receivers Active, Ind. Temp. *NEW!*	28-SSOP	10.38	6.90	5.50
LTC1380CGN-ND	—	SMBus 8-Channel Single-Ended Mux	16-SSOP	6.50	4.32	3.35
LTC1380CS-ND	—	SMBus 8-Channel Single-Ended Mux	SO-16	6.13	4.07	3.07
LTC1380IGN-ND	—	SMBus 8-Channel Single-Ended Mux	16-SSOP	7.50	4.98	3.85
LTC1380IS-ND	—	SMBus 8-Channel Single-Ended Mux	SO-16	6.88	4.57	3.55
LTC1382CN-ND	9210B	5V, RS232 Micropower 2 Drivers/2 Receivers	18-Dip	6.50	4.35	3.40
LTC1382CSW-ND	9210B	5V, RS232 Micropower 2 Drivers/2 Receivers	SO-18	6.50	4.35	3.40
LTC1383CN-ND	9210B	5V, RS232 Micropower 2 Drivers/2 Receivers	16-Dip	5.63	3.75	3.00
LTC1383CS-ND	9210B	5V, RS232 Micropower 2 Drivers/2 Receivers	SOL-16	5.63	3.75	3.00
LTC1383IS-ND	9210B	5V, RS232 Micropower 2 Drivers/2 Receivers *NEW!*	SO-16	6.50	4.32	3.70
LTC1384CN-ND	9210B	5V, RS232 Micropower 2 Drivers/2 Receivers with 2 Receiver Active	18-Dip	6.50	4.35	3.40
LTC1384CSW-ND	9210B	5V, RS232 Micropower 2 Drivers/2 Receivers with 2 Receiver Active	SO-18	6.50	4.35	3.40
LTC1385CG-ND	9210B	3.3V, Low Power EIA/TIA 562 Transceiver	20-SSOP	7.25	4.85	3.85
LTC1385CN-ND	9210B	3.3V, Low Power EIA/TIA 562 Transceiver	18-Dip	6.50	4.35	3.40
LTC1385CSW-ND	9210B	3.3V, Low Power EIA/TIA 562 Transceiver	SO-18	6.50	4.35	3.40
LTC1386CS-ND	9210B	3.3V, RS232 Low Power Driver/Receiver	SO-16	5.63	3.75	3.00
LTC1387CG-ND	—	+5V, RS232/RS485 Transceiver	20-SSOP	9.13	6.10	5.20
LTC1387CSW-ND	—	+5V, RS232/RS485 Transceiver	SO-20	8.50	5.65	4.85
LTC1387IG-ND	—	+5V, RS232/RS485 Transceiver, Ind. Temp.	20-SSOP	10.50	7.00	6.00
LTC1387ISW-ND	—	+5V, RS232/RS485 Transceiver, Ind. Temp.	SO-20	9.75	6.50	5.60
LTC1390CN-ND	9257B	8-to-1 Serial Multiplexer	16-Dip	4.38	2.91	2.35
LTC1390CS-ND	9257B	8-to-1 Serial Multiplexer	SO-16	4.63	3.10	2.45
LTC1391CS-ND	—	8-Channel Analog Multiplexer with Cascadable Serial Interface *NEW!*	SO-16	4.63	3.10	2.45
LTC1392CN8-ND	9257B	Micropower Data Acquisition System	8-Dip	7.50	5.00	4.10
LTC1392CS8-ND	9257B	Micropower Data Acquisition System	SO-8	7.63	5.10	4.20
LTC1392IN8-ND	9257B	Micropower Data Acquisition System	8-Dip	8.88	5.90	4.85
LTC1400CS8-ND	—	400 KSPS 12-Bit ADC with Shutdown *NEW!*	SO-8	10.00	6.64	5.25
LTC1400IS8-ND	—	400 KSPS 12-Bit ADC w/Shutdown, Ind. Temp. *NEW!*	SO-8	11.13	7.39	5.85
LTC1401CS8-ND	—	3V 200 KSPS 12-Bit ADC, Ind. Temp. *NEW!*	SO-8	6.50	4.32	3.40
LTC1404CS8-ND	—	5V, 12-Bit, 600 KSPS A/D Converter, Ind. Temp	SO-8	10.50	6.98	5.50
LTC1404IS8-ND	—	5V, 12-Bit, 600 KSPS A/D Converter, Ind. Temp	SO-8	11.50	7.64	6.05
LTC1406CGN-ND	—	8-Bit, 20 MSPS A/D Converter	24-SSOP	6.50	4.32	3.40
LTC1406IGN-ND	—	8-Bit, 20 MSPS A/D Converter	24-SSOP	7.00	4.65	3.70
LTC1410CG-ND	9285B	12-Bit, 1.25 MSPS A/D Converter with Shutdown	28-SSOP	22.25	14.78	11.15
LTC1410CSW-ND	9285B	12-Bit, 1.25 MSPS A/D Conv. w/Shutdown, Ind. Temp.	SO-28	21.25	14.11	10.65
LTC1412CG-ND	—	12-Bit, 3 MSPS A/D Converter	28-SSOP	21.38	14.20	10.69
LTC1412IG-ND	—	12-Bit 3 MSPS A/D Converter, Ind. Temp. *NEW!*	28-SSOP	23.38	15.53	11.69
LTC1414CGN-ND	—	14-Bit, 2.2 MSPS A/D Converter	28-SSOP	34.00	23.90	21.46
LTC1414IGN-ND	—	14-Bit, 2.2 MSPS Sampling A/D Converter	28-SSOP	38.25	28.65	25.65
LTC1415CG-ND	9285B	12-Bit, Single 5V, 1.25 MSPS, ADC with Shutdown	28-SSOP	22.25	14.78	11.15
LTC1415CSW-ND	9285B	12-Bit, Single 5V, 1.25 MSPS, ADC with Shutdown	SO-28	21.25	14.11	10.65
LTC1415IG-ND	9285B	12-Bit, Single 5V, 1.25 MSPS, ADC with Shutdown, Ind. Temp.	28-SSOP	24.25	16.11	12.15
LTC1415ISW-ND	9285B	12-Bit, Single 5V, 1.25 MSPS, ADC with Shutdown	SO-28	23.25	15.44	11.65
LTC1416CG-ND	—	14-Bit, 400 KSPS Parallel ADC *NEW!*	28-SSOP	14.75	9.80	7.40
LTC1416IG-ND	—	14-Bit, 400 KSPS Parallel ADC, Ind. Temp. *NEW!*	28-SSOP	15.75	10.46	7.88
LTC1417ACGN-ND	—	14-Bit, 400 KSPS Serial ADC	16-SSOP	20.00	13.28	10.00
LTC1417CGN-ND	—	14-Bit, 400 KSPS Serial ADC	16-SSOP	16.25	10.79	8.15
LTC1418ACG-ND	—	14-Bit, 200 KSPS ADC, Serial/Parallel I/O	28-SSOP	22.25	14.78	11.15
LTC1418ACN-ND	—	14-Bit, 200 KSPS ADCs, Serial/Parallel I/O	28-Dip	21.75	14.45	10.90
LTC1418AIG-ND	—	14-Bit, 200 KSPS ADC, Serial/Parallel I/O, Ind. Temp.	28-SSOP	23.88	15.86	11.95
LTC1418AIN-ND	—	14-Bit, 200 KSPS ADC, Serial/Parallel I/O, Ind. Temp	28-Dip	23.38	15.53	11.70
LTC1418CG-ND	—	14-Bit, 200 KSPS ADC, Serial/Parallel I/O, Ind. Temp.	28-SSOP	17.25	11.46	8.65
LTC1418CN-ND	—	14-Bit, 200 KSPS ADC, Serial/Parallel I/O	28-Dip	16.75	11.13	8.40
LTC1418IG-ND	—	14-Bit, 200 KSPS ADC, Serial/Parallel I/O, Ind. Temp.	28-SSOP	18.88	12.54	9.45
LTC1418IN-ND	—	14-Bit, 200 KSPS ADC, Serial/Parallel I/O, Ind. Temp.	28-Dip	18.38	12.21	9.20
LTC1419ACG-ND	—	14-Bit, 800 KSPS Parallel ADC	28-SSOP	54.38	36.11	27.20
LTC1419ACSW-ND	—	14-Bit, 800 KSPS Parallel ADC	SO-28	53.50	35.53	26.75
LTC1419AIG-ND	—	14-Bit 800 KSPS Parallel ADC, Ind. Temp. *NEW!*	28-SSOP	62.50	41.50	31.25
LTC1419CG-ND	—	14-Bit, 800 KSPS Parallel ADC	28-SSOP	32.50	21.58	16.25
LTC1419CSW-ND	—	14-Bit, 800 KSPS Parallel ADC	SO-28	24.51	21.42	16.13
LTC1419IG-ND	—	14-Bit, 800 KSPS Parallel ADC, Ind. Temp.	28-SSOP	36.25	24.07	18.15
LTC1421CG-ND	—	Hot Swap Controller *NEW!*	24-SSOP	10.38	6.90	5.90
LTC1421CG-2.5-ND	—	Hot Swap Controller, 2.5V	24-SSOP	10.38	6.90	5.90
LTC1421CSW-ND	—	Hot Swap Controller *NEW!*	SO-24	9.63	6.40	5.50
LTC1421CSW-2.5-ND	—	Hot Swap Controller, 2.5V	SO-24	9.63	6.40	5.50
LTC1422CN8-ND	9294B	8-Pin Hot Swap Controller	8-Dip	5.13	3.41	2.65
LTC1422CS8-ND	—	8-Pin Hot Swap Controller	SO-8	5.25	3.50	2.95
LTC1422IN8-ND	9294B	8-Pin Hot Swap Controller	8-Dip	5.88	3.91	3.05
LTC1422IS8-ND	—	8-Pin Hot Swap Controller	SO-8	6.00	4.00	3.40
LTC1426CMS8-ND	—	Micropower Dual 6-Bit, PWM DAC	8-MSOP	6.75	4.49	4.05
LTC1426CS8-ND	—	Micropower Dual 6-Bit, PWM DAC	SO-8	6.25	4.15	3.85
LTC1427CS8-50-ND	9294B	SMBus 10-Bit, Output DAC	SO-8	6.13	4.07	3.20
LTC1430ACGN-ND	—	Step Down Switching Regulator Controller	16-SSOP	7.75	5.15	3.90
LTC1430ACS-ND	—	Step Down Switching Regulator Controller	SO-16	7.13	4.74	3.60
LTC1430ACS8-ND	—	Step Down Switching Regulator Controller	SO-8	6.25	4.15	3.15

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★		
				1	25	100
LTC1430CS-ND	9257B	Step Down Switching Regulator Controller	SO-16	7.13	4.74	3.60
LTC1430IS-ND	9294B	Step Down Switching Regulator Controller	SO-16	8.88	5.90	4.45
LTC1433CGN-ND	9285B	450mA Low Noise Current Mode Step Down DC/DC	16-SSOP	7.38	4.90	3.95
LTC1435ACS-ND	—	High Efficiency Low Noise Synchronous Step Down Switch Regulator *NEW!*	SO-16	8.38	5.57	4.80
LTC1435AIS-ND	—	High Efficiency Low Noise Synchronous Step Down Switch Regulator, Ind. Temp. *NEW!*	SO-16	10.50	6.98	6.00
LTC1435CG-ND	—	High Efficiency Low Noise Synchronous Step Down Switch Regulator *NEW!*	16-SSOP	9.00	5.98	4.50
LTC1435CS-ND	9285B	High Effic. Low Noise Synch. Step Down Switch Reg	SO-16	8.38	5.57	4.80
LTC1435IS-ND	—	High Efficiency Low Noise Synchronous Step Down Switch Regulator, Ind. Temp. *NEW!*	SO-16	10.50	6.98	5.25
LTC1436ACGN-PLL-ND	—	High Efficiency Low Noise Synchronous Step Down Switch Regulator *NEW!*	24-SSOP	10.00	6.64	5.70
LTC1436AIGN-PLL-ND	—	High Efficiency Low Noise Synchronous Step Down Switch Regulator, Ind. Temp. *NEW!*	24-SSOP	12.50	8.30	6.65
LTC1438CG-ADJ-ND	9285B	Dual Synch. Step Down Switching Regulator	28-SSOP	14.00	9.30	7.50
LTC1438IG-ND	—	Dual Synch. Step Down Switch. Reg., Ind. Temp. *NEW!*	28-SSOP	16.88	11.21	9.65
LTC1438IG-ADJ-ND	9285B	Dual Synch. Step Down Switching Reg. Ind. Temp.	28-SSOP	16.88	11.21	9.00
LTC1439CG-ND	—	Dual Const Freq Synch. Switching Reg. Control	36 SSOP	15.38	10.21	8.75
LTC1440CMS8-ND	—	Ultra Low Power Single Comparator w/ Reference	8-MSOP	3.13	2.15	1.70
LTC1440CN8-ND	9285B	Ultra Low Power Single Comparator w/ Reference	8-Dip	2.75	1.85	1.50
LTC1440CS8-ND	9285B	Ultra Low Power Single Comparator w/ Reference	SO-8	2.75	1.85	1.50
LTC1440IN8-ND	9285B	Ultra Low Power Single Comparator w/Ref., Ind. Temp.	8-Dip	3.25	2.20	1.75
LTC1440IS8-ND	9285B	Ultra Low Power Single Comparator w/Ref., Ind. Temp.	SO-8	3.25	2.20	1.75
LTC1441CS8-ND	—	Micropower Dual Comparator	SO-8	3.38	2.25	1.85
LTC1441IS8-ND	9285B	Low Power Dual Comparator w/Ref., Ind. Temp	SO-8	4.00	2.66	2.20
LTC1442CN8-ND	—	Ultra Low Power Dual Comp. with Reference	8-Dip	4.13	2.74	2.25
LTC1442CS8-ND	9285B	Ultra Low Power Dual Comp. with Reference	SO-8	4.13	2.74	2.25
LTC1442IN8-ND	9285B	Low Power Dual Comp. with Reference, Ind. Temp.	8-Dip	4.88	3.24	2.70
LTC1442IS8-ND	9285B	Low Power Dual Comp. with Reference, Ind. Temp	SO-8	4.88	3.24	2.70
LTC1443CS-ND	9275B	Ultra LP Quad Comp. w/1% 1.182V, Ind. Temp. *NEW!*	SO-8	4.75	3.16	2.50
LTC1443IN-ND	9285B	Ultra LP Quad Comp. with1% 1.182V, Ind. Temp.	16-Dip	5.50	3.66	3.05
LTC1443IS-ND	9285B	Ultra LP Quad Comp. with 1% 1.182V, Ind. Temp.	SO-16	5.50	3.66	3.05
LTC1444CN-ND	—	Micropower Quad Comp. 1% 1.182V, Ref Open Drain	16-Dip	4.75	3.16	2.50
LTC1444CS-ND	—	Micropower Quad Comp. 1% 1.182V, Ref Open Drain.	SO-16	4.75	3.16	2.50
LTC1444IN-ND	9285B	Ultra LP Quad Comp. with 1% 1.182V, Ind. Temp.	16-Dip	5.50	3.66	3.05
LTC1444IS-ND	9285B	Ultra LP Quad Comp. with 1% 1.182V, Ind. Temp.	SO-16	5.50	3.66	3.05
LTC1445IN-ND	9285B	Ultra Low Power Quad Comp. w/Ref 1%, Ind. Temp.	16-Dip	5.50	3.66	3.05
LTC1445IS-ND	9285B	Ultra Low Power Quad Comp. w/Ref 1%, Ind. Temp.	SO-16	5.50	3.66	3.05
LTC1446CN8-ND	—	Dual 12-Bit Rail-to-Rail Micropower DAC *NEW!*	8-Dip	12.00	8.00	6.55
LTC1446CS8-ND	—	Dual 12-Bit Rail-to-Rail Micropower DAC *NEW!*	SO-8	12.13	8.10	6.65
LTC1446IN8-ND	—	Dual 12-Bit R/R Micropower DAC, Ind. Temp. *NEW!*	8-Dip	13.50	9.00	7.40
LTC1446IS8-ND	—	Dual 12-Bit R/R Micropower DAC, Ind. Temp. *NEW!*	SO-8	13.63	9.10	7.45
LTC1446LCS8-ND	—	Dual 12-Bit Rail-to-Rail Micropower DAC *NEW!*	SO-8	13.38	8.90	7.65
LTC1446LIS8-ND	—	Dual 12-Bit R/R Micropower DAC, Ind. Temp. *NEW!*	SO-8	15.00	10.00	8.60
LTC1448CN8-ND	—	12-Bit, Voltage Output Dual DAC	8-Dip	12.00	8.00	6.55
LTC1448CS8-ND	—	12-Bit, Voltage Output Dual DAC	SO-8	12.13	8.10	6.65
LTC1448IN8-ND	—	12-Bit, Voltage Output Dual DAC	8-Dip	13.50	9.00	7.40
LTC1448IS8-ND	—	12-Bit, Voltage Output Dual DAC	SO-8	13.63	9.10	7.45
LTC1450CG-ND	—	12-Bit, 4.5V-5.5V, R/R Micropower DAC *NEW!*	24-SSOP	10.63	7.10	6.10
LTC1450LCG-ND	—	12-Bit, 2.7V-5.5V, R/R Micropower DAC *NEW!*	24-SSOP	11.25	7.50	6.20
LTC1451CN8-ND	9257B	12-Bit, Voltage Output DAC with Vref	8-Dip	8.63	5.75	4.93
LTC1451CS8-ND	9257B	12-Bit, Voltage Output DAC with Vref	SO-8	9.13	6.08	5.21
LTC1451IN8-ND	9257B	12-Bit, Vout DAC with Vref High Temp	8-Dip	9.38	6.25	5.36
LTC1451IS8-ND	9257B	12-Bit, Vout DAC with Vref High Temp	SO-8	9.88	6.58	5.64
LTC1452CN8-ND	9257B	12-Bit, Multiplying, Voltage Output DAC	8-Dip	7.63	5.07	4.35
LTC1452CS8-ND	9257B	12-Bit, Multiplying, Voltage Output DAC	SO-8	8.13	5.40	4.65
LTC1452IS8-ND	9257B	12-Bit, Multiplying, Voltage Out DAC, High Temp.	SO-8	8.88	5.90	5.10
LTC1453CN8-ND	9257B	12-Bit, Complete, Voltage Output DAC	8-Dip	8.38	5.60	4.80
LTC1453CS8-ND	9257B	12-Bit, Complete, Voltage Output DAC	SO-8	8.88	5.90	5.10
LTC1453IN8-ND	9257B	12-Bit, Complete, Voltage Output DAC	8-Dip	9.13	6.06	5.20
LTC1453IS8-ND	9257B	12-Bit, Complete, Voltage Output DAC	SO-8	9.63	6.40	5.50
LTC1454CN-ND	—	Dual 12-Bit, Vout DAC 3V Supply *NEW!*	16-Dip	12.38	8.25	7.10
LTC1454CS-ND	—	Dual 12-Bit, Vout DAC 3V Supply *NEW!*	SO-16	12.50	8.35	7.15
LTC1454LCN-ND	—	Dual 12-Bit, Vout DAC, 3V Supply	16-Dip	13.63	9.10	7.80
LTC1454LCS-ND	—	Dual 12-Bit, Vout DAC, 3V Supply	SO-16	13.75	9.15	7.85
LTC1454IS-ND	—	Dual 12-Bit, Vout DAC 3V Supply, Ind. Temp. *NEW!*	SO-16	14.00	9.35	8.00
LTC1456CN8-ND	—	Single 12-Bit, Vout DAC with Clear	8-Dip	8.63	5.75	4.90
LTC1456CS8-ND	—	Single 12-Bit, Vout DAC with Clear	SO-8	9.13	6.10	5.20
LTC1458CG-ND	9285B	Quad 12-Bit, Low Power Single 5V, Vout DAC *NEW!*	28-SSOP	24.38	16.25	13.20
LTC1458CSW-ND	9285B	Quad 12-Bit, Low Power Single 5V, Vout DAC *NEW!*	SO-28	22.88	15.25	12.35
LTC1458IG-ND	—	Quad 12-Bit, LP, Single 5V, Vout DAC, Ind. Temp.	28-SSOP	28.75	19.09	15.35
LTC1458ISW-ND	—	Quad 12-Bit, LP, Single 5V, Vout DAC, Ind. Temp.	SO-28	27.00	17.93	14.40
LTC1458LCG-ND	—	Quad 12-Bit, Low Power, Single 3V, Vout DAC	28-SSOP	26.88	17.90	15.35
LTC1458LCSW-ND	9285B	Quad 12-Bit, Rail-to-Rail Micropower DAC, 3V	SO-28	25.25	16.85	14.40
LTC1458LIG-ND	—	LP, Single 3V, Quad 12-Bit, Vout DAC, Ind. Temp.	28-SSOP	31.63	21.00	16.86
LTC1470CS8-ND	9257B	Single PCMCIA Protected Vcc Switch	SO-8	4.50	3.00	2.60
LTC1471CS-ND	9257B	Dual PCMCIA Protected Vcc Switch	SO-16	7.50	5.00	4.29
LTC1472CS-ND	9257B	Single PCMCIA Protected Vpp/Vcc Switch	SO-16	6.25	4.15	3.55
LTC1473CGN-ND	—	Dual Power Path Switch Driver, .150 Wide Body	16-SSOP	7.13	4.74	3.80
LTC1473LCGN-ND	—	Low Volt Dual Power Path Switcher	16-SSOP	7.13	4.74	3.80
LTC1474CS8-ND	—	Low Quiescent Current High Efficiency Step Down DC/DC Converter	SO-8	6.88	4.57	3.65
LTC1474CMS8-ND	—	Low Quiescent Current High Efficiency Adjustable Step Down Converter	8-MSOP	7.50	4.98	4.00
LTC1474CMS8-3.3-ND	—	3.3V, Low Quiescent Current High Efficiency Step Down DC/DC Converter	8-MSOP	7.50	4.98	4.00
LTC1474CMS8-5-ND	—	5V, Low Quiescent Current High Efficiency Step Down DC/DC Converter	8-MSOP	7.50	4.98	4.00
LTC1474CS8-3.3-ND	—	3.3V, Low Quiescent Current High Efficiency Step Down DC/DC Converter	SO-8	6.88	4.57	3.65
LTC1474CS8-5-ND	—	5V, Low Quiescent Current High Efficiency Step Down DC/DC Converter	SO-8	6.88	4.57	3.65
LTC1474IS8-ND	—	Low Quiescent Current High Efficiency Step Down DC/DC Converter	SO-8	8.25	5.48	4.40
LTC1474IS8-3.3-ND	—	3.3V, Low Quiescent Current High Efficiency Step Down DC/DC Converter	SO-8	8.25	5.48	4.40
LTC1474IS8-5-ND	—	5V, Low Quiescent Current High Efficiency Step Down DC/DC Converter	SO-8	8.25	5.48	4.40
LTC1475CMS8-ND	—	Adj Low Quiescent I, High Efficiency Step Down DC/DC Converter	8-MSOP	7.75	5.15	4.15
LTC1475CS8-5-ND	—	5V, Low Quiescent I, High Efficiency Step Down DC/DC Converter	SO-8	7.13	4.74	3.80
LTC1475IS8-ND	—	Adj Low Quiescent I, High Efficiency Step Down DC/DC Converter	SO-8	8.50	5.65	4.85
LTC1477CS8-ND	9285B	Protected High-Side Switch	SO-8	6.25	4.15	3.50
LTC1478CS-ND	9285B	Dual Protected High-Side Switch	SO-16	10.00	6.65	5.55
LTC1479IG-ND	—	Dual Battery Power Path ContInd. Temp	36-SSOP	17.25	11.46	8.63
LTC1480CN8-ND	9257B	3.3V, RS485 Half-Duplex with Shutdown	8-Dip	4.75	3.16	2.65
LTC1480CS8-ND	9257B	3.3V, RS485 Half-Duplex with Shutdown	SO-8	5.13	3.41	2.75
LTC1480IS8-ND	9257B	3.3V, RS485 Half-Duplex with Shutdown, Ind. Temp. *NEW!*	SO-8	6.63	4.40	3.55
LTC1481CN8-ND	9257B	Ultra Low Power 1/2 Duplex RS485 Transceiver	8-Dip	2.75	1.85	1.45
LTC1481CS8-ND	9257B	Ultra Low Power 1/2 Duplex RS485 Transceiver	SO-8	3.38	2.25	1.80
LTC1481IS8-ND	9257B	Ultra Low Power 1/2 Duplex RS485 Transceiver, Ind. Temp. *NEW!*	SO-8	4.38	2.91	2.40
LTC1482CMS8-ND	—	Low Power EIA485 Transceiver with Carrier Detect and Receiver Fail Safe	8-MSOP	4.88	3.25	2.55
LTC1482CN8-ND	—	Low Power EIA485 Transceiver with Carrier Detect and Receiver Fail Safe.	8-Dip	4.00	2.65	2.10
LTC1482CS8-ND	—	Low Power EIA485 Transceiver with Carrier Detect and Receiver Fail Safe	SO-8	4.13	2.75	2.15
LTC1483CN8-ND	9257B	Ultra Low Power Low EMI RS485 Transceiver	8-Dip	2.75	1.85	1.45
LTC1483CS8-ND	9257B	Ultra Low Power Low EMI RS485 Transceiver	SO-8	3.38	2.25	1.80
LTC1483IS8-ND	9257B	Ultra LP 1/2 Duplex RS485 Xcvr., Ind. Temp. *NEW!*	SO-8	4.38	2.91	2.40
LTC1484CMS8-ND	—	Low Power EIA485 Transceiver w/Receiver Fail Safe	8-MSOP	4.25	2.85	2.20
LTC1484CN8-ND	—	Low Power EIA485 Transceiver w/Receiver Fail Safe	8-Dip	3.38	2.25	1.75
LTC1484CS8-ND	—	Low Power EIA485 Transceiver w/Receiver Fail Safe	SO-8	3.50	2.35	1.80
LTC1484IS8-ND	—	Low Power RS485 Transceiver with Receiver Fail Safe, Ind. Temp. *NEW!*	SO-8	4.63	3.10	2.45
LTC1485CN8-ND	9210B	Differential Bus Transceiver	8-Dip	3.00	2.00	1.70
LTC1485CS8-ND	9210B	Differential Bus Transceiver	SO-8	3.38	2.25	1.90
LTC1487CN8-ND	9257B	Low EMI 1/2 Duplex RS485 Transceiver w/High Imped.	8-Dip	2.75	1.85	1.45
LTC1487CS8-ND	9257B	Low EMI 1/2 Duplex RS485 Transceiver w/High Imped.	SO-8	3.38	2.25	1.80
LTC1502CMS8-3.3-ND	—	3.3V, Single Cell Reg Chg Pump DC/DC Converter	8-MSOP	4.13	2.74	2.07
LTC1502CS8-3.3-ND	—	3.3V, Single Cell Reg Chg Pump DC/DC Converter	SO-8	3.75	2.49	1.90
LTC1503CMS8-2-ND	—	High Effic. Inductorless Step-Down DC/DC Conv, 2V	8-MSOP	4.00	2.66	2.00
LTC1503CS8-1.8-ND	—	High Effic. Inductorless Step-Down DC/DC Conv, 1.8V	SO-8	3.63	2.41	1.82
LTC1503CS8-2-ND	—	High Effic. Inductorless Step-Down DC/DC Conv, 2V	SO-8	3.63	2.41	1.82
LTC1504ACS8-3.3-ND	—	Low Voltage Step-Down Synchronous Switcher	SO-8	5.13	3.41	2.57
LTC1504ACS8-ND	—	Low Voltage Step-Down Synchronous Switcher	SO-8	5.13	3.41	2.57
LTC1504CS8-ND	—	Adj. Low Volt Step-Down Synchronous Switch Reg.	SO-8	5.13	3.41	2.57
LTC1504CS8-3.3-ND	—	3.3V, Low Volt Step-Down Synchronous Switch Reg.	SO-8	5.13	3.41	2.57
LTC1514CS8-3.3-ND	—	3.3V, Step-Up/Step-Down Switch Cap DC/DC Conv.	SO-8	6.50	4.35	3.70
LTC1514CS8-5-ND	—	5V, Step-Up/Step-Down Switch Cap DC/DC Conv.	SO-8	6.50	4.35	3.70
LTC1514IS8-3.3-ND	9294B	3.3V, Step-Up/Step-Down Switch Cap DC/DC Conv.	SO-8	7.88	5.25	4.50
LTC1514IS8-5-ND	9294B	5V, Step-Up/Step-Down Switch Cap DC/DC Conv.	SO-8	7.88	5.25	4.50
LTC1515CS8-3.3/5-ND	—	3.3–5V, Step-Up/Step-Down Switch Cap DC/DC w/POR	SO-8	6.50	4.35	3.70
LTC1515CS8-3/5-ND	—	3–5V, Step-Up/Step-Down Switch Cap DC/DC w/POR	SO-8	6.50	4.35	3.70
LTC1515IS8-ND	9294B	Step-Up/Step-Down Switch Cap DC/DC with POR	SO-8	7.88	5.25	4.50
LTC1515IS8-3.3/5-ND	9294B	Step-Up/Step-Down Switch Cap DC/DC with POR	SO-8	7.88	5.25	4.50
LTC1515IS8-3/5-ND	9294B	Step-Up/Step-Down Switch Cap DC/DC with POR	SO-8	7.88	5.25	4.50
LTC1516CS8-ND	9285B	Micropower Regulator 5V, Charge Pump DC/DC Conv.	SO-8	6.25	4.15	3.55
LTC1517CS5-3.3-ND	—	Micropower Reg. 3.3V Charge Pump *NEW!*	SOT-23-5	3.75	2.50	2.15
LTC1517CS5-5-ND	—	Micropower Reg. 5V Charge Pump DC/DC Conv.	SOT-23-5	3.75	2.50	2.15
LTC1517ES5-3.3-ND	—	Micropower Regulator 3.3V Charge Pump *NEW!*	SOT-23-5	4.00	2.66	2.10
LTC1517ES5-5-ND	—	Micropower Regulator 5V Charge Pump *NEW!*	SOT-23-5	4.00	2.66	2.10
LTC1518CS-ND	—	52Mbit/s Precision Quad RS485 Receiver	SO-16	10.13	6.73	5.80
LTC1518IS-ND	—	Hi-Speed Precision RS485 Quad Line Receiver, Ind. Temp. *NEW!*	SO-16	11.63	7.75	6.20
LTC1519CS-ND	—	52MBPS Precision Quad RS485 Receiver	SO-16	10.13	6.75	5.80
LTC1519IS-ND	—	52MBPS Prec. Quad RS485 Rcvr., Ind. Temp. *NEW!*	SO-16	11.63	7.75	6.20
LTC1522CMS8-ND	—	Micropower Reg 5V, Charge Pump DC/DC Conv.	8-MSOP	3.75	2.50	2.15
LTC1522CS8-ND	—	Micropower Reg 5V, Charge Pump DC/DC Conv.	SO-8	3.25	2.16	1.85
LTC1530CS8-ND	—	Sync. Controller with Current Limit Switch Regulator	SO-8	6.25	4.15	3.15
LTC1530CS8-3.3-ND	—	Sync. Controller with Current Limit Switch Reg. *NEW!*	SO-8	6.25	4.15	3.15
LTC1530IS8-ND	—	Sync. Controller w/Current Limit Switch Reg., Ind. Temp.	SO-8	6.88	4.57	3.50
LTC1531CSW-ND	—	Self-Powered Isolated Comparator	SO-28	9.38	6.23	4.69
LTC1536CMS8-ND	—	Micropower PCI-Compliant Triple Supply Monitor	8-MSOP	5.88	3.91	3.35
LTC1536CS8-ND	—	Micropower PCI-Compliant Triple Supply Monitor	SO-8	5.00	3.35	2.85
LTC1540CMS8-ND	—	Nanopower Comparator with Reference	8-MSOP	3.38	2.25	1.85
LTC1540CS8-ND	9294B	Nanopower Comparator with Reference.	SO-8	3.00	2.00	1.65
LTC1540IS8-ND	9294B	Nanopower Comparator with Reference.	SO-8	3.50	2.33	1.90
LTC1542CMS8-ND	—	Micropower Op Amp andComparator	8-MSOP	4.38	2.91	2.30
LTC1542CS8-ND	—	Micropower Op Amp and Comparator.	SO-8	3.75	2.49	1.95
LTC1543CG-ND	—	Software Select Multiprotocol Transceiver	28-SSOP	14.88	9.88	7.45
LTC1544CG-ND	—	Software Select Multiprotocol Transceiver	28-SSOP	12.25	8.14	6.15
LTC1545CG-ND	—	Multiprotocol Interface	36-SSOP	14.38	9.55	7.20
LTC1550CGN-ND	—	Low Noise, Switch Capacitor-Regulated Volt Inverter, .150 Wide Body	16-SSOP	5.25	3.49	2.80
LTC1550LCGN-ND	—	Switched Cap Regulated Volt Inverter Act. High	16-SSOP	4.00	2.66	2.00
LTC1550LCMS8-ND	—	Switched Cap Regulated Volt Inverter Act. High	8-MSOP	4.00	2.66	2.00
LTC1550LCS8-ND	—	Switched Cap Regulated Volt Inverter Act. High.	SO-8	3.63	2.41	1.82
LTC1551CS8-4.1-ND	—	4.1V Switched Cap Reg. Volt Inverter Act. High *NEW!*	SO-8	4.25	2.85	2.40
LTC1551LCMS8-ND	—	Switched Cap Regulated Volt Inverter Act. Low	8-MSOP	4.00	2.66	2.00
LTC1551LCS8-ND	—	Switched Cap Regulated Volt Inverter Act. Low	SO-8	3.63	2.41	1.82
LTC1553CG-ND	—	5-Bit, DAC Prog Synchronous DC/DC Controller	20 SSOP	8.38	5.57	4.19
LTC1555CGN-ND	9294B	SIM Power Supply and Level Translator	16-SSOP	5.38	3.60	3.10
LTC1555IGN-ND	9294B	SIM Power Supply and Level Translator	16-SSOP	6.50	4.32	3.70
LTC1556CGN-ND	9294B	SIM Power Supply & Level Translator w/LDO Reg.	20-SSOP	6.25	4.15	3.60
LTC1556IGN-ND	9294B	SIM Power Supply & Level Translator w/LDO Reg.	20-SSOP	7.75	5.15	4.45
LTC1558CGN-3.3-ND	—	3.3V, Backup Battery Controller with Programmable Output	16-SSOP	5.25	3.49	2.80
LTC1558CGN-5-ND	—	5V, Backup Battery Controller with Programmable Output	16-SSOP	5.25	3.49	2.80
LTC1558CS-3.3-ND	—	3.3V, Backup Battery Controller with Programmable Output	SO-16	5.00	3.32	2.65
LTC1558CS-5-ND	—	5V, Backup Battery Controller with Programmable Output	SO-16	5.00	3.32	2.65

(Continued)

Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★		
				1	25	100
LTC1558CS8-3.3-ND	—	3.3V, Backup Battery Controller with Programmable Output	SO-8	4.75	3.16	2.55
LTC1558CS8-5-ND	—	5V, Backup Battery Controller w/Program. Output	SO-8	4.75	3.16	2.55
LTC1559CGN-3.3-ND	—	3.3V, Backup Battery Controller for DC/DC Output	16-SSOP	5.25	3.49	2.80
LTC1559CGN-5-ND	—	5V, Backup Battery Controller for DC/DC Output	16-SSOP	5.25	3.49	2.80
LTC1559CS8-3.3-ND	—	3.3V, Backup Battery Controller for DC/DC Output	SO-8	4.75	3.16	2.55
LTC1559CS8-5-ND	—	5V, Backup Battery Controller for DC/DC Output	SO-8	4.75	3.16	2.55
LTC1560-1CS8-ND	—	Continuous Time Low Noise Low Pass Elliptic Filter	SO-8	9.13	6.06	4.85
LTC1560-1IS8-ND		1MHz, 500KHz, Continuous Time Low Noise Low Pass Elliptic Filter	SO-8	10.25	6.81	5.45
LTC1562ACG-ND	—	Active RC Quad Universal Filter 103dB S/N	20-SSOP	25.00	16.60	12.50
LTC1562CG-ND	—	Active RC Quad Universal Filter *NEW!*	20-SSOP	19.13	12.70	9.30
LTC1562CG-2-ND	—	2V, Active RC Quad Universal Filter 99dB S/N	20-SSOP	19.13	12.70	9.57
LTC1565-31CS8-ND	—	650KHz, Continuous Time Linear Phase Low Pass Filter	SO-8	8.00	5.32	4.00
LTC1565-31CS8TR-ND	—	650KHz, Continuous Time Linear Phase Low Pass Filter	SO-8	9750.00/2,500		
LTC1565-31IS8-ND	—	650KHz, Continuous Time Linear Phase Low Pass Filter, Ind. Temp.	SO-8	9.25	6.15	4.63
LTC1565-31IS8TR-ND	—	650KHz, Continuous Time Linear Phase Low Pass Filter, Ind. Temp.	SO-8	11250.00/2,500		
LTC1569CS8-6-ND	—	10th Order Linear Phase Low Pass Filter *NEW!*	SO-8	11.50	7.64	6.30
LTC1569CS8-7-ND	—	10th Order Linear Phase Low Pass Filter	SO-8	12.25	8.14	6.30
LTC1574CS-ND	9257B	Adjustable CMOS Step Down, DC/DC Converter	SO-16	8.50	5.65	4.85
LTC1574CS-5-ND	9257B	5V, CMOS Step Down, DC/DC Converter	SO-16	8.50	5.65	4.85
LTC1590CN-ND	—	Dual 12-Bit, Current Output DAC	16-Dip	12.13	8.06	6.65
LTC1590CS-ND	—	Dual 12-Bit, Current Output DAC	SO-16	12.38	8.22	6.80
LTC1590IS-ND	—	Dual 12-Bit, Current Output DAC *NEW!*	SO-16	13.63	9.05	7.50
LTC1591CG-ND	—	14-Bit, Parallel Multiplying DAC *NEW!*	28-SSOP	20.00	13.28	10.00
LTC1591IG-ND	—	14-Bit, Parallel Multiplying DAC, Ind. Temp. *NEW!*	28-SSOP	23.75	15.77	11.90
LTC1594CS-ND	9285B	4-Channel 5V, Micropower Sampling 12-Bit, Serial	SO-16	11.25	7.47	6.00
LTC1594IS-ND	9285B	4-Channel 5V, Micropower Sampling 12-Bit, Serial, Ind. Temp.	SO-16	13.00	8.64	6.95
LTC1594LCS-ND	9285B	4-Channel 3V, Micropower Sampling, 12-Bit, Serial	SO-16	11.25	7.47	6.00
LTC1594LIS-ND	9285B	4-Channel 3V, Micropower Sampling 12-Bit, Serial, Ind. Temp.	SO-16	13.00	8.64	6.95
LTC1595ACN8-ND	—	16-Bit, Serial Multiplying DAC	8-Dip	48.13	31.96	24.71
LTC1595ACS8-ND	—	16-Bit, Serial Multiplying DAC	SO-8	48.75	32.37	25.65
LTC1595AIN8-ND	—	16-Bit, Serial Multiplying DAC, Ind. Temp.	8-Dip	57.75	38.35	29.65
LTC1595AIS8-ND	—	16-Bit, Serial Multiplying DAC, Ind. Temp.	SO-8	58.50	38.85	30.00
LTC1595BCN8-ND	9294B	16-Bit, Serial Multiplying DAC *NEW!*	16-Dip	28.50	18.93	15.20
LTC1595BCS8-ND	9294B	16-Bit, Serial Multiplying DAC	SO-8	29.13	19.34	15.55
LTC1595BIS8-ND	9294B	16-Bit, Serial Multiplying DAC, Ind. Temp. *NEW!*	SO-8	35.00	23.24	18.65
LTC1595CCN8-ND	—	16-Bit, Serial Multiplying DAC	8-Dip	24.38	16.19	13.00
LTC1595CCS8-ND	—	16-Bit, Serial Multiplying DAC	SO-8	25.00	16.60	13.35
LTC1595CIS8-ND	—	16-Bit, Serial Multiplying DAC, Ind. Temp.	SO-8	30.00	19.92	16.00
LTC1596ACN-ND	—	16-Bit, Serial Multiplying DAC	16-Dip	50.38	33.45	25.85
LTC1596ACSW-ND	—	16-Bit, Serial Multiplying DAC	SO-16	51.00	33.87	26.15
LTC1596AISW-ND	—	16-Bit, Serial Multiplying DAC, Ind. Temp.	SO-16	61.25	40.67	31.40
LTC1596BCSW-ND	—	16-Bit, Serial Multiplying DAC	SO-16	30.63	20.34	16.35
LTC1596CCN-ND	—	16-Bit, Serial Multiplying DAC	16-Dip	25.63	17.02	13.65
LTC1597ACG-ND	—	Multiplying DAC 16-Bit, Parallel w/4 Quad Resistors	28-SSOP	55.63	36.94	27.80
LTC1597ACN-ND	—	16-Bit, Parallel Input, Current Output DAC, Zero Scale	28-Dip	55.00	36.52	28.60
LTC1597BCG-ND	—	Multiplying DAC 16-Bit, Parallel w/4 Quad Resistors	28-SSOP	34.50	22.91	17.25
LTC1597BCN-ND	—	16-Bit, Parallel Input, Current Output DAC, Zero Scale	28-Dip	33.88	22.50	16.95
LTC1597-1ACG-ND	—	Multiplying DAC 16-Bit, Parallel w/4 Quad Resistors	28-SSOP	55.63	36.94	27.80
LTC1597-1ACN-ND	—	16-Bit, Parallel Input, Current Output DAC, Midscale	28-Dip	55.00	36.52	28.60
LTC1597-1BCG-ND	—	Multiplying DAC 16-Bit, Parallel w/4 Quad Resistors	28-SSOP	34.50	22.91	17.25
LTC1597-1BCN-ND	—	16-Bit, Parallel Input, Current Output DAC, Midscale	28-Dip	33.88	22.50	16.95
LTC1598CG-ND	9285B	12-Bit, Serial, 8-Channel 5V, Micropower Sampling A/D Converter	24-SSOP	11.50	7.64	6.20
LTC1598IG-ND	9285B	12-Bit, Serial, 8-Channel 5V, Micropower Sampling A/D Converter, Ind. Temp.	24-SSOP	13.25	8.80	7.10
LTC1598LCG-ND	—	12-Bit, Serial, 8-Channel 5V, Micropower Sampling A/D Converter	24-SSOP	11.63	7.75	6.45
LTC1599ACG-ND	—	16-Bit Byte Wide Low Glitch Multiplying DAC with 4 Quadrant Resistors	24-SSOP	55.63	36.94	28.90
LTC1604ACG-ND	—	16-Bit, 333KSPS Sampling A/D Converter with Shutdown *NEW!*	36-SSOP	58.75	39.01	29.38
LTC1604AIG-ND	—	16-Bit, 333KSPS Sampling A/D Converter with Shutdown, Ind. Temp. *NEW!*	36-SSOP	63.13	41.92	31.57
LTC1604CG-ND	—	16-Bit, 333KSPS Sampling A/D Converter with Shutdown *NEW!*	36-SSOP	44.50	29.55	22.25
LTC1604IG-ND	—	16-Bit, 333KSPS Sampling A/D Converter with Shutdown, Ind. Temp. *NEW!*	36-SSOP	47.88	31.79	23.94
LTC1605ACG-ND	—	16-Bit, 100KSPS Sampling A/D Converter	28-SSOP	49.63	32.96	24.85
LTC1605ACSW-ND	—	16-Bit, 100KSPS Sampling A/D Converter	SO-16	48.88	32.46	24.45
LTC1605AIG-ND	—	16-Bit, 100KSPS Parallel A/D Converter, Ind. Temp.	28-SSOP	51.00	33.87	25.50
LTC1605AIN-ND	—	16-Bit, 100KSPS Sampling ADC, Ind. Temp. *NEW!*	28-Dip	51.00	33.87	25.50
LTC1605AISW-ND	—	16-Bit, 100KSPS Parallel A/D Converter, Ind. Temp.	SO-28	51.00	33.87	25.50
LTC1605CN-ND	—	16-Bit, 100KSPS Sampling A/D Converter	28-Dip	36.13	23.99	18.07
LTC1605CSW-ND	—	16-Bit, 100KSPS Sampling A/D Converter	SO-16	36.13	23.99	18.07
LTC1605IG-ND	—	16-Bit, 100KSPS Parallel A/D Converter, Ind. Temp.	28-SSOP	39.50	26.23	20.00
LTC1605IN-ND	—	16-Bit, 100KSPS Parallel A/D Converter, Ind. Temp.	28-Dip	38.25	25.40	19.15
LTC1605ISW-ND	—	16-Bit, 100KSPS Parallel A/D Converter, Ind. Temp.	SO-28	38.25	25.40	19.15
LTC1605-1CG-ND	—	16-Bit, 100KSPS A/D Converter, 0V, to 4V, Input	28-SSOP	36.88	24.49	18.71
LTC1605-2CG-ND	—	16-Bit, 100KSPS A/D Converter, ±4V, Input	28-SSOP	36.88	24.49	18.71
LTC1608ACG-ND	—	High Speed 16-Bit, 500KSPS A/D Converter with Shutdown	36-SSOP	49.13	32.62	25.20
LTC1608CG-ND	—	High Speed 16-Bit, 500KSPS A/D Converter with Shutdown	36-SSOP	35.00	23.24	17.50
LTC1609CSW-ND	—	16-Bit, 200KSPS Sampling ADC, 20 Lead *NEW!*	28-SSOP	31.75	21.09	15.88
LTC1609IG-ND	—	16-Bit, 200KSPS Sampling ADC, 28 Lead, Ind. Temp. *NEW!*	28-SSOP	35.00	23.24	17.50
LTC1622CMS8-ND	—	Low Volt Step Down 3A Controller	8-MSOP	4.38	2.91	2.19
LTC1622CS8-ND	—	Low Volt Step Down 3A Controller	SO-8	3.88	2.58	1.94
LTC1624CS8-ND	—	High Efficient N-Channel Switching Reg. Controller	SO-8	7.13	4.74	3.75
LTC1624IS8-ND	9294B	High Efficient N-Channel Switching Reg. Controller	SO-8	8.88	5.90	4.80
LTC1625CS-ND	—	No Rsense Current Synch. Step Down Switching Regulator *NEW!*	SO-16	9.13	6.06	4.85
LTC1625IGN-ND	—	No Rsense Current Synch. Step Down Switching Regulator, Ind. Temp. *NEW!*	16-SSOP	11.75	7.81	6.25

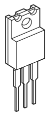
Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★		
				1	25	100
LTC1625IS-ND	—	No Rsense Current Synch. Step Down Switching Regulator, Ind. Temp. *NEW!*	SO-16	11.00	7.31	5.85
LTC1627CS8-ND	—	Step Down Switching Regulator	SO-8	4.38	2.91	2.19
LTC1627IS8-ND	—	Step Down Switching Regulator, Ind. Temp. *NEW!*	SO-8	6.50	4.32	3.25
LTC1628CG-ND	—	2-Phase High Efficiency Synchronous Step-Down Switching Regulator	28-SSOP	9.13	6.06	4.75
LTC1628CG-SYNC-ND	—	2-Phase Synch Step-Down Switching Reg.	28-SSOP	9.50	6.31	4.90
LTC1629IG-ND	—	Poly Phase High Efficiency Synchronous Step-Down Switching Regulator	28-SSOP	14.25	9.47	7.53
LTC1642CGN-ND	—	Hot Swap Controller	16-SSOP	7.25	4.82	3.70
LTC1643HCGN-ND	—	PCI Bus Hot Swap Controller	16-SSOP	8.75	5.81	4.55
LTC1643LCGN-ND	—	PCI Bus Hot Swap Controller	16-SSOP	8.75	5.81	4.55
LTC1646CGN-ND	—	PCI Dual Hot Swap Controller, 0°C-+70°C *NEW!*	16-SSOP	7.00	4.65	3.75
LTC1646IGN-ND	—	PCI Dual Hot Swap Cont., –45°C-+85°C *NEW!*	16-SSOP	8.00	5.35	4.25
LTC1649CS-ND	—	3.3V, Input High Current Step Down Switching Regulator Controller	SO-16	8.38	5.57	4.20
LTC1650ACN-ND	—	16-Bit, Vout DAC Improved	16-Dip	31.88	21.17	17.00
LTC1650ACS-ND	—	16-Bit, Voltage Out DAC *NEW!*	SO-16	32.50	21.58	17.10
LTC1650AIS-ND	—	16-Bit, Voltage Out DAC, Ind. Temp. *NEW!*	SO-16	36.88	24.49	19.40
LTC1650CN-ND	—	16-Bit, Vout DAC	16-Dip	23.88	15.86	11.95
LTC1650CS-ND	—	16-Bit, Voltage Out DAC *NEW!*	SO-16	24.50	16.27	12.25
LTC1650IS-ND	—	16-Bit, Voltage Out DAC, Ind. Temp. *NEW!*	SO-16	27.75	18.43	13.90
LTC1654CGN-ND	—	Dual 14-Bit, Rail-to-Rail D/A Converter	16-SSOP	19.00	12.62	9.50
LTC1654IGN-ND	—	Dual 14-Bit, Rail-to-Rail D/A Converter	16-SSOP	21.88	14.53	10.90
LTC1655CN8-ND	—	16-Bit, Micropower D/A Converter	8-Dip	16.88	11.21	8.45
LTC1655CS8-ND	—	16-Bit, Micropower D/A Converter	SO-8	16.88	11.21	8.45
LTC1655IS8-ND	—	16-Bit, Micropower DAC, Ind. Temp. *NEW!*	SO-8	18.50	12.29	9.25
LTC1658CMS8-ND	—	14-Bit, Rail-to-Rail Micropower D/A Converter	8-MSOP	10.88	7.23	5.45
LTC1658CN8-ND	—	14-Bit, Rail-to-Rail Micropower D/A Converter	8-Dip	10.25	6.81	5.15
LTC1658CS8-ND	—	14-Bit, Rail-to-Rail Micropower D/A Converter	SO-8	10.25	6.81	5.15
LTC1658IMS8-ND	—	14-Bit, R-R Micropower DAC, Ind. Temp. *NEW!*	8-MSOP	13.00	8.64	6.50
LTC1659CS8-ND	—	12-Bit, Voltage Out DAC *NEW!*	SO-8	8.38	5.57	4.65
LTC1659IS8-ND	—	12-Bit, Voltage Out DAC, Ind. Temp. *NEW!*	SO-8	9.13	6.06	5.10
LTC1660CGN-ND	—	Octal 10-Bit, Voltage Output D/A Converter	16-SSOP	12.38	8.22	6.20
LTC1660CN-ND	—	Octal 10-Bit, Voltage Output D/A Converter	16-Dip	11.38	7.56	5.70
LTC1660IGN-ND	—	Octal 10-Bit, Voltage Output D/A Converter	16-SSOP	13.88	9.22	6.95
LTC1660IN-ND	—	Octal 10-Bit, Voltage Output D/A Converter	16-Dip	12.88	8.55	6.44
LTC1661CMS8-ND	—	10-Bit, Micropower Dual D/A Converter	8-MSOP	3.38	2.25	1.75
LTC1661CN8-ND	—	10-Bit, Micropower Dual D/A Converter	8-Dip	3.38	2.25	1.75
LTC1663CS5-1-ND	—	10-Bit, Rail-to-Rail Micropower D/A Converter with 2 Wire Interface	SOT-23-5	3.50	2.33	1.80
LTC1663CS5-1TR-ND	—	10-Bit, Rail-to-Rail Micropower D/A Converter with 2 Wire Interface	SOT-23-5	4600.00/2,500		
LTC1663CS5-2-ND	—	10-Bit, Rail-to-Rail Micropower D/A Converter with 2 Wire Interface	SOT-23-5	3.50	2.33	1.80
LTC1663CS5-2TR-ND	—	10-Bit, Rail-to-Rail Micropower D/A Converter with 2 Wire Interface	SOT-23-5	4600.00/2,500		
LTC1665CGN-ND	—	Micropower Octal 8-Bit DAC *NEW!*	16-SSOP	6.38	4.24	3.20
LTC1682CS8-ND	—	Doubler Charge Pumps with Low Noise Linear Regulator *NEW!*	SO-8	3.50	2.33	1.80
LTC1682CS8-5-ND	—	5V, Doubler Charge Pumps with Low Noise Linear Regulator *NEW!*	SO-8	3.50	2.33	1.80
LTC1685CS8-ND	—	52MBPS Fail Safe RS485 Transceiver	SO-8	5.63	3.74	3.15
LTC1685IS8-ND	—	52MBPS Prec. Delay RS485 Fail Safe Transceiver	SO-8	6.50	4.32	3.40
LTC1686CS8-ND	—	52MBPS Fail Safe RS485 Driver/Receiver	SO-8	8.38	5.57	4.50
LTC1686IS8-ND	—	52MBPS Prec. Delay RS485 Fail Safe Transceiver	SO-8	9.63	6.40	5.00
LTC1687CS-ND	—	High Speed Prec. Delay RS485 Fail Safe Transceiver	SO-14	8.38	5.57	4.50
LTC1687IS-ND	—	52MBPS Prec. Delay RS485 Fail Safe Transceiver	SO-14	9.63	6.40	5.00
LTC1688CS-ND	—	100MBPS RS485 Hot Swap Quad Driver *NEW!*	SO-16	10.13	6.73	5.25
LTC1688IS-ND	—	100MBPS RS485 Hot Swap Quad Driver, 0°-+70°, Ind. Temp. *NEW!*	SO-16	11.63	7.75	6.20
LTC1689CS-ND	—	100MBPS RS485 Hot Swap Quad Driver *NEW!*	SO-16	10.13	6.73	5.25
LTC1689IS-ND	—	100MBPS RS485 Hot Swap Quad Driver, –45°-+85°C, Ind. Temp. *NEW!*	SO-16	11.38	7.75	6.20
LTC1690CS8-ND	—	Differential Driver/Receiver with Fail Safe Receiver Output *NEW!*	SO-8	3.50	2.35	1.80
LTC1693-1IS8-ND	—	High Speed Single/Dual MOSFET Drivers, Ind. Temp.	SO-8	4.00	2.66	2.00
LTC1693-1CS8-ND	—	HS Single/Dual N-Channel MOSFET Driver *NEW!*	SO-8	3.50	2.33	1.75
LTC1693-2IS8-ND	—	High Speed Single/Dual MOSFET Drivers, Ind. Temp.	SO-8	4.00	2.66	2.00
LTC1693-5CMS8-ND	—	High Speed Single N-Chan. MOSFET Driver *NEW!*	8-MSOP	3.63	2.41	1.82
LTC1694CS5-ND	—	Accelerator SMBus	SOT-23	2.63	1.75	1.32
LTC1700EMS-ND	—	Synchronous Step-Up DC/DC Controller *NEW!*	10-MSOP	5.50	3.66	2.75
LTC1701BES5-ND	—	1MHz Step-Down DC/DC Converter *NEW!*	SOT-23-5	3.75	2.49	2.15
LTC1702CGN-ND	—	Dual 550KHz, Synchronous 2 Phase Switching Regulator Controller	24-SSOP	9.88	6.56	5.45
LTC1705EGN-ND	—	5-Bit, Low Dropout Switching Regulator *NEW!*	28-SSOP	11.25	7.47	5.63
LTC1709EG-7-ND	—	2-Phase 5-Bit, VID Current Mode Synchronous Step-Down Switching Regulator	36-SSOP	9.75	6.48	5.10
LTC1710CMS8-ND	—	Dual SMBus High Side Switcher	8-MSOP	6.38	4.24	3.20
LTC1710CS8-ND	—	Dual SMBus Controlled High Side Switcher	SO-8	5.88	3.91	2.95
LTC1710IS8-ND	—	Dual SMBus Controlled High Side Switcher	SO-8	7.00	4.65	3.50
LTC1730EGN-4-ND	—	Lithium-Ion Battery Pulse Charger, 4V *NEW!*	16-SSOP	4.38	2.91	2.19
LTC1730ES8-4.2-ND	—	Lithium-Ion Battery Pulse Charger, 4.2V *NEW!*	SO-8	3.88	2.58	1.94
LTC1731ES8-8.4-ND	—	Lithium-Ion Linear Battery Charger Controller *NEW!*	SO-8	3.25	2.16	1.65
LTC1734ES6-4.1-ND	—	Lithium-Ion Linear Battery Charger Controller *NEW!*	SOT-23	2.75	1.83	1.38
LTC1734ES6-4.2-ND	—	Lithium-Ion Linear Battery Charger Controller *NEW!*	SOT-23	2.75	1.83	1.38
LTC1735CGN-ND	—	High Efficiency Synch Step-Down Switching Reg.	16-SSOP	6.63	4.40	3.40
LTC1735CGN-1-ND	—	High Efficiency Synch Step-Down Switching Reg.	16-SSOP	6.88	4.57	3.44
LTC1735CS-ND	—	High Efficiency Synch Step-Down Switching Reg.	SO-16	6.38	4.24	3.25
LTC1735IGN-ND	—	High Efficiency Synchronous Step Down Switching Regulator, Ind. Temp. *NEW!*	16-SSOP	9.00	5.98	4.53
LTC1753CG-ND	—	5-Bit, Programmable Synchronous Switching Regulator Pentium II Controller	20-SSOP	6.50	4.32	3.25
LTC1751EMS8-3.3-ND	—	Micropower Charge Pump Regulator	8-MSOP	4.63	3.08	2.59
LTC1751EMS8-5-ND	—	Micropower Charge Pump Regulator	8-MSOP	4.63	3.08	2.59
LTC1751EMS8-ND	—	Micropower Charge Pump Regulator	8-MSOP	4.63	3.08	2.59
LTC1753CSW-ND	—	5-Bit, Programmable Synchronous Switching Regulator Pentium II Controller	SO-20	6.00	3.99	3.00
LTC1758-1EMS8-ND	—	250kHz Single Band RF Controller *NEW!*	8-MSOP	3.38	2.25	1.73
LTC1758-2EMS-ND	—	250kHz Dual Band RF Controller *NEW!*	10-MSOP	3.50	2.33	1.79
LTC1759CG-ND	—	Smart Battery Charger	36-SSOP	11.50	7.64	5.75
LTC1772ES6-ND	—	Low Volt Step Down 2.5V/9.8V, Controller	SOT-23-6	3.88	2.58	2.00
LTC1778EGN-ND	—	Synchronous Step-Down Controller *NEW!*	16-SSOP	5.75	3.82	2.88

(Continued)

LINEAR TECHNOLOGY — LINEAR SERIES *(Continued)*

Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★ 1	25	100
LTC1779ES6-ND	—	250mA Step-Down DC/DC Converter *NEW!*	SOT-23	3.75	2.49	1.94
LTC1799CS5-ND	—	1KHz - 30MHz Resistor Set *NEW!*	SOT-23-5	3.25	2.55	1.95
LTC1799IS5-ND	—	1KHz - 30MHz Resistor Set, Ind. Temp. *NEW!*	SOT-23-5	3.63	3.45	2.70
LTC1821ACGW-ND	—	16-Bit, 4-Quad Resistor Set *NEW!*	36-SSOP	87.13	58.10	46.46
LTC1821-1ACGW-ND	—	16-Bit, Parallel Voltage-Out DAC with 4-Quad Resistors *NEW!*	36-SSOP	87.13	58.10	46.46
LTC1821-1AIGW-ND	—	16-Bit, Parallel Voltage-Out DAC with 4-Quad Resistors, Ind. Temp. *NEW!*	36-SSOP	95.63	63.75	51.00
LTC1821-1BCGW-ND	—	16-Bit, Parallel Voltage-Out DAC with 4-Quad Resistors *NEW!*	36-SSOP	63.63	42.40	33.95
LTC1821-1BIGW-ND	—	16-Bit, Parallel Voltage-Out DAC with 4-Quad Resistors, Ind. Temp. *NEW!*	36-SSOP	70.00	46.65	37.35
LTC1821AIGW-ND	—	16-Bit, Parallel Voltage-Out DAC with 4-Quad Resistors, Ind. Temp. *NEW!*	36-SSOP	95.63	63.75	51.00
LTC1821BCGW-ND	—	16-Bit, Parallel Voltage-Out DAC with 4-Quad Resistors *NEW!*	36-SSOP	63.63	42.40	33.95
LTC1821BIGW-ND	—	16-Bit, Parallel Voltage-Out DAC with 4-Quad Resistors, Ind. Temp. *NEW!*	36-SSOP	70.00	46.65	37.35
LTC1841CS8-ND	—	Ultralow Power Dual Comparator with Reference	SO-8	2.50	1.66	1.25
LTC1842CS8-ND	—	Ultralow Power Dual Comparator with Reference	SO-8	2.88	1.91	1.50
LTC1843CS8-ND	—	Ultralow Power Dual Comparator with Reference	SO-8	2.88	1.91	1.50
LTC1872ES6-ND	—	Constant Frequency Current Mode Step-Up DC/DC Controller	SOT-23-6	3.75	2.49	2.00
LTC1872ES6TR-ND	—	Constant Frequency Current Mode Step-Up DC/DC Controller	SOT-23-6	4775.00/2,500		
LTC1874EGN-ND	—	Dual Constant Frequency Current Mode Step-Down DC/DC Controller	16-SSOP	6.75	4.49	3.45
LTC1878EMS8-ND	—	High Efficiency Monolithic Synch. Step-Down Reg.	8-MSOP	5.50	3.66	2.80
LTC1878EMS8TR-ND	—	High Efficiency Monolithic Synch. Step-Down Reg.	8-MSOP	6750.00/2,500		
LTC1957-1EMS8-ND	—	Single-Band RF Power Controllers w/40dB *NEW!*	8-MSOP	3.38	2.25	1.73
LTC1957-2EMS-ND	—	Dual-Band RF Power Controllers w/40dB *NEW!*	10-MSOP	3.50	2.33	1.79
LTC1982ES6-ND	—	Dual Micropower High Side Switch Converter	SOT-23-6	3.00	2.00	1.53
LTC2050HVCS5-ND	—	Zero Drift Op Amp, High Voltage, 12V	SOT-23-5	3.00	2.00	1.55
LTC2050HVCS6-ND	—	Zero Drift Op Amp, High Voltage, 12V	SOT-23-6	3.25	2.16	1.65
LTC2050HVCS8-ND	—	Zero Drift Op Amp, High Voltage, 12V	SO-8	3.00	2.00	1.55
LTC2050HVCS8TR-ND	—	Zero Drift Op Amp, High Voltage, 12V	SO-8	3775.00/2,500		
LTC2050HVIS8-ND	—	Zero Drift Op Amp, High Voltage, 12V, Ind. Temp.	SO-8	3.25	2.16	1.70
LTC2050HVIS8TR-ND	—	Zero Drift Op Amp, High Voltage, 12V, Ind. Temp.	SO-8	4050.00/2,500		
LTC2050IS8-ND	—	Zero Drift Op Amp, Ind. Temp.	SO-8	2.63	1.75	1.50
LTC2050IS8TR-ND	—	Zero Drift Op Amp, Ind. Temp.	SO-8	3400.00/2,500		
LTC2052CGN-ND	—	Ultralow Quad Zero Drift Op Amp	16-SSOP	8.38	5.57	4.20
LTC2052CGNTR-ND	—	Quad Zero Drift Op Amp	16-SSOP	10200.00/2,500		
LTC2052CS-ND	—	Ultralow Quad Zero Drift Op Amp	SO-14	7.75	5.15	3.90
LTC2052CSTR-ND	—	Quad Zero Drift Op Amp	SO-14	9450.00/2,500		
LTC2052HVCGN-ND	—	Ultralow Quad Zero Drift Op Amp	16-SSOP	10.50	6.98	5.25
LTC2052HVCGNTR-ND	—	Quad Zero Drift Op Amp, High Voltage, 12V,	16-SSOP	12750.00/2,500		
LTC2052HVCS-ND	—	Ultralow Quad Zero Drift Op Amp	SO-14	9.63	6.40	4.82
LTC2052HVCSTR-ND	—	Quad Zero Drift Op Amp, High Voltage, 12V,	SO-14	11700.00/2,500		
LTC2052HVIGNTR-ND	—	Quad Zero Drift Op Amp, High Volt., 12V, Ind. Temp.	16-SSOP	13500.00/2,500		
LTC2052HVISTR-ND	—	Quad Zero Drift Op Amp, High Volt., 12V. Ind. Temp.	SO-14	12750.00/2,500		
LTC2052IGNTR-ND	—	Quad Zero Drift Op Amp, Ind. Temp.	16-SSOP	10950.00/2,500		
LTC2052ISTR-ND	—	Quad Zero Drift Op Amp, Ind. Temp.	SO-14	10200.00/2,500		
LTC2400CS8-ND	—	24-Bit, Micropower ADC *NEW!*	SO-8	15.00	9.96	7.50
LTC2400IS8-ND	—	24-Bit, Micropower ADC, Ind. Temp.	SO-8	15.13	10.05	7.57
LTC2408CG-ND	—	8-Channel 24-Bit, Micropower ADC	28-SSOP	18.88	12.54	9.44
LTC2411CMS-ND	—	24-Bit, No Latency Delta SIGMA ADC with Differential Input	10-MSOP	16.38	10.88	8.20
LTC2411CMSTR-ND	—	24-Bit, No Latency Delta SIGMA ADC with Differential Input	10-MSOP	19800.00/2,500		
LTC2411IMS-ND	—	24-Bit, No Latency Delta SIGMA ADC with Differential Input, Ind. Temp.	10-MSOP	17.88	11.87	8.95
LTC2411IMSTR-ND	—	24-Bit, No Latency Delta SIGMA ADC with Differential Input, Ind. Temp.	10-MSOP	21600.00/2,500		
LTC2413CGN-ND	—	24 Bit, Micropower ADC Converter	16-SSOP	17.63	11.75	8.82
LTC2413IGN-ND	—	24 Bit, Micropower ADC Converter, Ind. Temp	16-SSOP	19.38	15.25	9.70
LTC2415CGN-ND	—	24-Bit, ADC with Differential Input and Ref., Ind. Temp. *NEW!*	16-SSOP	17.63	11.75	8.82
LTC2415IGN-ND	—	24-Bit, ADC w/Differential Input and Ref. *NEW!*	16-SSOP	19.38	15.25	9.70
LTC3401EMS-ND	—	1A 3MHz, Micropower Synch Boost Converter	10-MSOP	5.50	3.66	2.75
LTC3401EMSTR-ND	—	1A 3MHz, Micropower Synch Boost Converter	10-MSOP	6750.00/2,500		
LTC3404EMS8-ND	—	1.4MHz, Monolithic Synch Step-Down Regulator	8-MSOP	5.75	3.82	3.00
LTC3716EG-ND	—	5-Bit, 2-Phase Step-Down Switching Reg. *NEW!*	36-SSOP	8.90	5.91	4.45
LTC7541ABN-ND	9285B	12-Bit, Parallel Input D/A Converter	18-Dip	11.25	7.50	6.25
LTC7541ABSW-ND	9285B	12-Bit, Parallel Input D/A Converter	SO-18	11.25	7.50	6.25
LTC7541AJN-ND	9285B	12-Bit, Parallel Multiplying DAC	18-Dip	6.63	4.42	3.65
LTC7541AKN-ND	9285B	12-Bit, Parallel Multiplying DAC	18-Dip	9.00	6.00	4.95
LTC7543GKN-ND	9285B	12-Bit, Serial Multiplying DAC	16-Dip	13.13	8.75	7.25
LTC7543KN-ND	9285B	12-Bit, Serial Multiplying DAC	16-Dip	12.63	8.40	7.00
LTC7545AKSW-ND	—	12-Bit, Serial Multiplying DAC *NEW!*	SO-20	7.13	4.75	4.10
LTC8043EN8-ND	9285B	12-Bit, Serial Multiplying DAC	8-Dip	9.13	6.10	5.00
LTC8043ES8-ND	9285B	12-Bit, Serial Multiplying DAC	SO-8	9.13	6.10	5.00
LTC8043FN8-ND	9285B	12-Bit, Serial Multiplying DAC	8-Dip	8.75	5.85	4.80
LTC8043FS8-ND	9285B	12-Bit, Serial Multiplying DAC	SO-8	8.75	5.85	4.80
LTC8143EN-ND	9285B	12-Bit, Serial Multiplying DAC	16-Dip	13.13	8.75	7.25
LTC8143ESW-ND	9285B	12-Bit, Serial Multiplying DAC	SO-16	13.13	8.75	7.25
LTK001ACN8-ND	9175B	Thermocouple Compen. IC and Amp (.5°C Error)	8-Dip	18.88	12.60	10.85
LTK001CN8-ND	9175B	Thermocouple Compen. IC and Amp (2°C Error)	8-Dip	9.88	6.60	5.75
LTKA00CN8-ND	9175B	Thermocouple Amplifier ("0" Polarity)	8-Dip	5.63	3.75	3.15
LTKA01CN8-ND	9175B	Thermocouple Amplifier ("1" Polarity)	8-Dip	5.63	3.75	3.15
9177B-ND		1990 Linear Technology Applications Handbook, Volume I		19.95	—	—
9175B-ND		1990 Linear Technology Databook, Volume I		9.95	—	—
9176B-ND		1992 Linear Technology Databook, Volume II		9.95	—	—
9258B-ND		1993 Linear Technology Applications Handbook, Volume II		19.95	—	—
9210B-ND		1994 Linear Technology Databook, Volume III		9.95	—	—
9257B-ND		1995 Linear Technology Data Book, Volume IV		10.00	—	—
9285B-ND		1996 Linear Technology Databook, Volume V		10.00	—	—
9286B-ND		1997 Linear Technology Applications Handbook		20.00	—	—
9294B-ND		1997 Linear Technology Databook, Volume VI		12.50	—	—
LTDS-ND		Linear View CD ROM, Contains Data Sheets & Applications Info.		3.00	—	—

JRC / NJR Corporation — VOLTAGE REGULATORS



TO-220F Full Molded Three Terminal Voltage Regulator

Full Molded Package, TO-220F was developed for high and medium power 3 pin linear voltage regulators. It is interchangeable with conventional TO-220, with the difference of radiation fin encapsulated completely by resin, offering the following benefits: • Ease of electrical isolation from nearby devices • Allowing higher density PCB layout • Increased humidity resistance compared to TO-220. • Enhanced manufacturability due to built-in electrical insulation from heat sink. *TO-220F has tinned leads for improved solderability.*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
NJM78L02A-ND	2.6V, 100mA, Pos. Voltage Regulator	TO-92	.39	.33	.26
NJM78L05A-ND	5V, 100mA, Pos. Voltage Regulator	TO-92	.39	.33	.26
NJM78L06A-ND	6V, 100mA, Pos. Voltage Regulator	TO-92	.36	.30	.24
NJM78L08A-ND	8V, 100mA, Pos. Voltage Regulator	TO-92	.36	.30	.24
NJM78L09A-ND	9V, 100mA, Pos. Voltage Regulator	TO-92	.36	.30	.24
NJM78L12A-ND	12V, 100mA, Pos. Voltage Regulator	TO-92	.48	.40	.32
NJM78L15A-ND	15V, 100mA, Pos. Voltage Regulator	TO-92	.36	.30	.24
NJM78L18A-ND	18V, 100mA, Pos. Voltage Regulator	TO-92	.48	.40	.32
NJM78L20A-ND	20V, 100mA, Pos. Voltage Regulator	TO-92	.39	.33	.26
NJM78L24A-ND	24V, 100mA, Pos. Voltage Regulator	TO-92	.39	.33	.26
NJM78L02UA-ND	2.6V, 100mA, Pos. Voltage Regulator	SOT-89	.48	.40	.32
NJM78L05UA-ND	5V, 100mA, Pos. Voltage Regulator	SOT-89	.48	.40	.32
NJM78L06UA-ND	6V, 100mA, Pos. Voltage Regulator	SOT-89	.63	.53	.42
NJM78L08UA-ND	8V, 100mA, Pos. Voltage Regulator	SOT-89	.63	.53	.42
NJM78L09UA-ND	9V, 100mA, Pos. Voltage Regulator	SOT-89	.63	.53	.42
NJM78L12UA-ND	12V, 100mA, Pos. Voltage Regulator	SOT-89	.63	.53	.42
NJM78L15UA-ND	15V, 100mA, Pos. Voltage Regulator	SOT-89	.48	.40	.32
NJM78L18UA-ND	18V, 100mA, Pos. Voltage Regulator	SOT-89	.63	.53	.42
NJM78L20UA-ND	20V, 100mA, Pos. Voltage Regulator	SOT-89	.63	.53	.42
NJM78L24UA-ND	24V, 100mA, Pos. Voltage Regulator	SOT-89	.48	.40	.32
NJM78M05FA-ND	5V, 500mA, Pos. Voltage Regulator with Isolated Tab	TO-220F	.57	.48	.38
NJM78M06FA-ND	6V, 500mA, Pos. Voltage Regulator with Isolated Tab	TO-220F	.57	.48	.38
NJM78M08FA-ND	8V, 500mA, Pos. Voltage Regulator with Isolated Tab	TO-220F	.57	.48	.38
NJM78M09FA-ND	9V, 500mA, Pos. Voltage Regulator with Isolated Tab	TO-220F	.57	.48	.38
NJM78M12FA-ND	12V, 500mA, Pos. Voltage Regulator with Isolated Tab	TO-220F	.57	.48	.38
NJM78M15FA-ND	15V, 500mA, Pos. Voltage Regulator with Isolated Tab	TO-220F	.57	.48	.38
NJM78M18FA-ND	18V, 500mA, Pos. Voltage Regulator with Isolated Tab	TO-220F	.57	.48	.38
NJM78M20FA-ND	20V, 500mA, Pos. Voltage Regulator with Isolated Tab	TO-220F	.57	.48	.38
NJM78M24FA-ND	24V, 500mA, Pos. Voltage Regulator with Isolated Tab	TO-220F	.57	.48	.38
NJM7805FA-ND	5V, 1 Amp Pos. Voltage Regulator with Isolated Tab	TO-220F	.63	.53	.42
NJM7806FA-ND	6V, 1 Amp Pos. Voltage Regulator with Isolated Tab	TO-220F	.63	.53	.42
NJM7808FA-ND	8V, 1 Amp Pos. Voltage Regulator with Isolated Tab	TO-220F	.63	.53	.42
NJM7809FA-ND	9V, 1 Amp Pos. Voltage Regulator with Isolated Tab	TO-220F	.63	.53	.42
NJM7812FA-ND	12V, 1 Amp Pos. Voltage Regulator with Isolated Tab	TO-220F	.63	.53	.42
NJM7815FA-ND	15V, 1 Amp Pos. Voltage Regulator with Isolated Tab	TO-220F	.63	.53	.42
NJM7818FA-ND	18V, 1 Amp Pos. Voltage Regulator with Isolated Tab	TO-220F	.63	.53	.42
NJM7820FA-ND	20V, 1 Amp Pos. Voltage Regulator with Isolated Tab	TO-220F	.63	.53	.42
NJM7824FA-ND	24V, 1 Amp Pos. Voltage Regulator with Isolated Tab	TO-220F	.63	.53	.42
NJM79L05A-ND	5V, 100mA, Neg. Voltage Regulator	TO-92	.48	.40	.32
NJM79L06A-ND	6V, 100mA, Neg. Voltage Regulator	TO-92	.48	.40	.32
NJM79L08A-ND	8V, 100mA, Neg. Voltage Regulator	TO-92	.48	.40	.32
NJM79L09A-ND	9V, 100mA, Neg. Voltage Regulator	TO-92	.66	.55	.44
NJM79L12A-ND	12V, 100mA, Neg. Voltage Regulator	TO-92	.66	.55	.44
NJM79L15A-ND	15V, 100mA, Neg. Voltage Regulator	TO-92	.36	.30	.24
NJM79L18A-ND	18V, 100mA, Neg. Voltage Regulator	TO-92	.48	.40	.32
NJM79L24A-ND	24V, 100mA, Neg. Voltage Regulator	TO-92	.48	.40	.32
NJM79L05UA-ND	5V, 100mA, Neg. Voltage Regulator	SOT-89	.69	.58	.46
NJM79L06UA-ND	6V, 100mA, Neg. Voltage Regulator	SOT-89	.81	.68	.54
NJM79L08UA-ND	8V, 100mA, Neg. Voltage Regulator	SOT-89	.69	.58	.46
NJM79L09UA-ND	9V, 100mA, Neg. Voltage Regulator	SOT-89	.81	.68	.54
NJM79L12UA-ND	12V, 100mA, Neg. Voltage Regulator	SOT-89	.81	.68	.54
NJM79L15UA-ND	15V, 100mA, Neg. Voltage Regulator	SOT-89	.48	.40	.32
NJM79L18UA-ND	18V, 100mA, Neg. Voltage Regulator	SOT-89	.81	.68	.54
NJM79L24UA-ND	24V, 100mA, Neg. Voltage Regulator	SOT-89	.69	.58	.46
NJM79M05FA-ND	5V, 500mA, Neg. Voltage Regulator with Isolated Tab	TO-220F	.81	.68	.54
NJM79M06FA-ND	6V, 500mA, Neg. Voltage Regulator with Isolated Tab	TO-220F	.69	.58	.46
NJM79M08FA-ND	8V, 500mA, Neg. Voltage Regulator with Isolated Tab	TO-220F	.69	.58	.46
NJM79M09FA-ND	9V, 500mA, Neg. Voltage Regulator with Isolated Tab	TO-220F	.69	.58	.46
NJM79M12FA-ND	12V, 500mA, Neg. Voltage Regulator with Isolated Tab	TO-220F	.69	.58	.46
NJM79M15FA-ND	15V, 500mA, Neg. Voltage Regulator with Isolated Tab	TO-220F	.69	.58	.46
NJM79M18FA-ND	18V, 500mA, Neg. Voltage Regulator with Isolated Tab	TO-220F	.69	.58	.46
NJM79M24FA-ND	24V, 500mA, Neg. Voltage Regulator with Isolated Tab	TO-220F	.69	.58	.46
NJM7905FA-ND	5V, 1A, Neg. Voltage Regulator with Isolated Tab	TO-220F	.87	.73	.58
NJM7906FA-ND	6V, 1A, Neg. Voltage Regulator with Isolated Tab	TO-220F	.87	.73	.58
NJM7908FA-ND	8V, 1A, Neg. Voltage Regulator with Isolated Tab	TO-220F	.87	.73	.58
NJM7909FA-ND	9V, 1A, Neg. Voltage Regulator with Isolated Tab	TO-220F	.87	.73	.58
NJM7912FA-ND	12V, 1A, Neg. Voltage Regulator with Isolated Tab	TO-220F	.87	.73	.58
NJM7915FA-ND	15V, 1A, Neg. Voltage Regulator with Isolated Tab	TO-220F	.87	.73	.58
NJM7918FA-ND	18V, 1A, Neg. Voltage Regulator with Isolated Tab	TO-220F	.87	.73	.58
NJM7924FA-ND	24V, 1A, Neg. Voltage Regulator with Isolated Tab	TO-220F	.87	.73	.58
NJM317F-ND	Adjustable 1.5A, Voltage Regulator with Isolated Tab	TO-220F	1.05	.88	.70
NJM431D-ND	Adjustable Precision Shunt Regulator	8-Dip	.63	.53	.42
NJM431E-ND	Adjustable Precision Shunt Regulator	SO-8	.51	.43	.34
NJM431L-ND	Adjustable Precision Shunt Regulator	TO-92	.48	.40	.32
NJM2352D-ND	Low Power Switching Regulator with Low Battery Detect.	8-Dip	.81	.68	.54
NJM2355D-ND	Dual Output High Voltage Switching Regulator	18-Dip	4.14	3.45	2.76
NJM2360D-ND	DC/DC Converter Control IC	8-Dip	1.02	.85	.68

JRC / NJR Corporation — SPECIALIZED ICs

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
NJM2211D-ND	FSK Demodulator/Tone Decoder	14-Dip	1.23	1.03	.82
NJM2211M-ND	FSK Demodulator/Tone Decoder	SO-14	1.92	1.60	1.28
NJM4151D-ND	Voltage-to-Frequency/Frequency-to-Voltage Converter	8-Dip	2.40	2.00	1.60
NJU3712D-ND	8-Bit, 25mA, Serial to Parallel Output Expander	16-Dip	1.89	1.58	1.26
NJU3712M-ND	8-Bit, 25mA, Serial to Parallel Output Expander	SO-16	1.80	1.50	1.20
NJU3716L-ND	16-Bit, 25mA, Serial to Parallel Output Expander	24-SDip	2.88	2.40	1.92
NJU3716M-ND	16-Bit, 25mA, Serial to Parallel Output Expander	SO-24	2.49	2.08	1.66
NJU3718L-ND	20-Bit, 25mA, Serial to Parallel Output Expander	28-SDip	2.73	2.28	1.82
NJU3718G-ND	20-Bit, 25mA, Serial to Parallel Output Expander	SO-28	2.58	2.15	1.72

(Continued)

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JRC / NJR Corporation SPECIALIZED ICs *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
NJU6355ED-ND	Serial I/O Real Time Clock This serial I/O Real Time Clock is suitable for a 4-Bit microprocessor. It contains a counter, shift register, voltage regulator, voltage detector and interface controller. It requires a 32.768KHz crystal and 4 pins of microprocessor which can receive the data at any time when the microprocessor requires. The operating voltage is as wide as 2.4V, to 5.0V.	8-Dip	1.80	1.50	1.20
NJU7660D-ND	DC/DC Voltage Converter	8-Dip	.81	.68	.54
NJU7662D-ND	DC/DC Voltage Converter	8-Dip	1.53	1.28	1.02
NJU9201BD-ND	3-1/2 Digit DVM For LCD Displays	40-Dip	5.16	4.30	3.44
NJU9201BM-ND	3-1/2 Digit DVM For LCD Displays	SO-42	9.12	7.60	6.08
NJU9202BD-ND	3-1/2 Digit DVM for LED Displays	40-Dip	5.16	4.30	3.44
NJU9202BM-ND	3-1/2 Digit DVM for LED Displays	SO-42	10.17	8.48	6.78
NJU9203BD-ND	3-1/2 Digit DVM for LCD Displays with Display Hold	40-Dip	5.25	4.38	3.50
NJU9203BM-ND	3-1/2 Digit DVM for LCD Displays with Display Hold	SO-42	9.96	8.30	6.64
NJU9204BD-ND	3-1/2 Digit DVM for LED Displays with Display Hold	40-Dip	5.10	4.25	3.40
NJU9204BM-ND	3-1/2 Digit DVM for LED Displays with Display Hold	SO-42	9.96	8.30	6.64

National Semiconductor™ MICROPROCESSOR CHIPS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
DP8310N-ND	Octal Latched Peripheral Driver	20-Dip	6.09	4.82	3.86
DP8311N-ND	Octal Latched Peripheral Driver	20-Dip	6.24	4.94	3.96

National Semiconductor™ UARTs

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PC16550DN-ND	UART	40-Dip	6.20	4.72	3.60
PC16550DV-ND	UART	44-PLCC	6.20	4.72	3.60
PC16552DV-ND	Dual UART	44-PLCC	8.23	6.51	5.22
PC16552DVXTR-ND	Dual UART	44-PLCC	2450.00/500		

National Semiconductor™ A/D & D/A CONVERTERS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
	A/D Converters				
ADC12H030CIWM-ND	12-Bit, A/D Converter, Config.	SO-16	7.58	6.00	4.81
ADC12H034CIWM-ND	12-Bit, A/D Converter, 4-Channel	SO-24	7.58	6.00	4.81
ADC12H038CIWM-ND	12-Bit, A/D Converter, 8-Channel	SO-28	7.79	6.16	4.94
ADC12L034CIWM-ND	12-Bit, A/D Converter, 4-Channel	SO-24	7.18	5.68	4.55
ADC12L038CIWM-ND	12-Bit, A/D Converter, 8-Channel	SO-24	7.39	5.85	4.69
ADC0801LCN-ND	8-Bit, µP Compatible A/D Converters, 1/4 LSB	20-Dip	10.14	8.02	6.43
ADC0802LCN-ND	8-Bit, µP Compatible A/D Converters, 1/2 LSB	20-Dip	5.84	4.62	3.70
ADC0802LCWM-ND	8-Bit, Compatible A/D Converter, 1/2 LSB	SO-20	5.50	4.35	3.49
ADC0803LCN-ND	8-Bit, A/D Converter, 1/2 LSB	20-Dip	5.15	3.92	2.99
ADC0804LCJ-ND	8-Bit, A/D Converter, 1 LSB	20-CDip	6.15	4.68	3.57
ADC0804LCN-ND	8-Bit, A/D Converter, 1 LSB	20-Dip	2.93	2.23	1.70
ADC0804LCWM-ND	8-Bit, A/D Converter, 1 LSB	SO-20	2.78	2.11	1.61
ADC0805LCN-ND	8-Bit, A/D Converter, 1 LSB	20-Dip	4.38	3.33	2.54
ADC0808CCN-ND	8-Bit, µP Compatible A/D Conv. with 8-Ch. Mux., 1/2 LSB.	28-Dip	5.58	4.24	3.24
ADC0808CCV-ND	8-Bit, A/D Converter with 8-Channel Multiplexer, 1/2 LSB	28-PLCC	5.29	4.19	3.36
ADC0809CCN-ND	8-Bit, A/D Converter with 8-Channel Multiplexer, 1 LSB.	28-Dip	4.93	3.75	2.86
ADC0809CCV-ND	8-Bit, A/D Converter with 8-Channel Multiplexer, 1 LSB	28-PLCC	5.55	4.22	3.22
ADC0816CCN-ND	8-Bit, A/D Converter with 16-Channel Multiplexer, 1/2 LSB	40-Dip	11.46	9.83	—
ADC0817CCN-ND	8-Bit, A/D Converter with 16-Channel Multiplexer, 1/2 LSB.	40-Dip	7.98	6.31	—
ADC0820BCN-ND	8-Bit, High Speed MPU Comp. A/D, 1/2 LSB	20-Dip	5.50	4.35	3.49
ADC0820BCWM-ND	8-Bit, A/D Converter, 1/2 LSB	SO-20	5.25	4.15	3.33
ADC0820CCN-ND	8-Bit, High Speed MPU Comp. A/D, 1 LSB	20-Dip	3.48	2.65	2.02
ADC0820CCWM-ND	8-Bit, High Speed A/D Converter, 1 LSB	SO-20	3.30	2.51	1.92
ADC0831CCN-ND	8-Bit, Serial I/O A/D Converter with Multiplex Options	8-Dip	2.65	2.02	1.54
ADC0831CCWM-ND	8-Bit, Serial I/O A/D Converter with Multiplex Options	SO-14	2.53	1.92	1.47
ADC0832CCWM-ND	8-Bit, Serial I/O A/D Converter with Multiplex Options, 2-Ch.	SO-14	2.83	2.15	1.64
ADC0832CIWM-ND	8-Bit, Serial I/O A/D Conv. with Mux. Options, 2-Ch.	SO-14	3.23	2.46	1.88
ADC0834BCN-ND	8-Bit, Serial I/O A/D Converter with Multiplex Options, 4-Ch.	14-Dip	3.85	2.93	2.24
ADC0834CCWM-ND	8-Bit, Serial I/O A/D Converter with Multiplex Options, 4-Ch.	SO-14	3.45	2.63	2.01
ADC0838CCN-ND	8-Bit, Serial I/O A/D Converter with Multiplex Options, 8-Ch.	20-Dip	3.35	2.55	1.95
ADC0838CCV-ND	8-Bit, Serial I/O A/D Converter with Multiplex Options, 8-Ch.	20-PLCC	3.78	2.87	2.19
ADC0838CCWM-ND	8-Bit, Serial I/O A/D Converter with Multiplex Options, 8-Ch.	SO-20	3.15	2.40	1.83
ADC0844CCJ-ND	8-Bit, A/D Converter, MPU Compatible 4-Channel	20-CDip	9.85	7.79	—
ADC0844CCN-ND	8-Bit, A/D Converter, MPU Compatible 4-Channel	20-Dip	4.40	3.35	—
ADC0848BCV-ND	8-Bit, µP Compatible A/D Conv. with Mux. Options, 1/2 LSB.	28-PLCC	7.94	6.28	—
ADC0848BCN-ND	8-Bit, µP Compatible A/D Conv. with Mux. Options, 1/2 LSB	24-Dip	5.29	4.19	—
ADC0848CCN-ND	8-Bit, µP Compatible A/D Conv. with Mux. Options, 1 LSB	24-Dip	4.83	3.67	—
ADC0848CCV-ND	8-Bit, µP Compatible A/D Conv. with Mux. Options, 1 LSB.	28-PLCC	5.38	4.09	—
ADC1001CCJ-ND	10-Bit, A/D Conv., Microprocessor Compatible, Ind. Temp.	20-CDip	24.00	22.40	—
ADC1001CCJ-1-ND	10-Bit, A/D Converter, Microprocessor Compatible	20-CDip	17.19	14.73	—
ADC1005BCJ-1-ND	10-Bit, A/D 1/2 LSB	20-CDip	15.15	14.14	—
ADC1005CCJ-1-ND	10-Bit, A/D 1 LSB	20-CDip	13.42	11.51	—
ADC1061CIN-ND	10-Bit, High Speed µP Compat A/D Converter with Track	20-Dip	5.88	4.47	3.41
ADC1241CIJ-ND	12-Bit, A/D with Sample and Hold Sign	28-CDip	12.51	10.73	9.51
ADC1251CIJ-ND	12-Bit, Self-Calibrating Plus Sign µP Compatible A/D.	24-CDip	14.79	12.68	11.24
ADC08031CIWM-ND	8-Bit, High Speed A/D Converter	SO-14	2.58	1.96	1.50
ADC08032CIWM-ND	8-Bit, A/D + t/h 2-Channel.	SO-14	2.78	2.11	1.61
ADC08038CIWM-ND	8-Bit, Serial A/D 8-Channel	SO-20	3.58	2.72	2.08
ADC08062CIWM-ND	A/D Converter	SO-20	5.71	4.52	3.62
ADC08100CIMTC-ND	8-Bit, A/D Converter, 100MSPS, 1.3mW	24-TSSOP	10.48	8.29	6.64
ADC08100EVAL-ND	Evaluation Board for ADC08100, 8-Bit	EVAL BOARD	189.00	176.40	163.80
ADC08131CIWM-ND	8-Bit, High Speed A/D Converter	SO-14	4.18	3.18	2.43
ADC08134CIWM-ND	8-Bit, High Speed Serial In/Out A/D Converter w/ Mux Option	SO-14	4.50	3.42	2.61
ADC08351CIMTC-ND	8-Bit, A/D Converter	20-TSSOP	5.08	3.86	2.95
ADC08831IM-ND	8-Bit, Serial I/O A/D Converter, 1 Input.	SO-8	2.79	2.07	1.53
ADC08831IMMCT-ND	8-Bit, Serial I/O A/D Converter, 1 Input	8-MSOP	2.79	2.07	1.53
ADC08831IMMTR-ND	8-Bit, Serial I/O A/D Converter, 1 Input	8-MSOP	1152.00/1,000		
ADC08831IN-ND	8-Bit, Serial I/O A/D Converter, 1 Input	8-Dip	2.79	2.07	1.53
ADC08831IWM-ND	8-Bit, Serial I/O A/D Converter, 1 Input.	SO-8	2.79	2.07	1.53
ADC08832IM-ND	8-Bit, Serial I/O A/D Converter, 2 Input.	SO-8	2.79	2.07	1.53

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
ADC08832IMMCT-ND	8-Bit, Serial I/O A/D Converter, 2 Input	8-MSOP	2.79	2.07	1.53
ADC08832IMMTR-ND	8-Bit, Serial I/O A/D Converter, 2 Input	8-MSOP	1152.00/1,000		
ADC08832IN-ND	8-Bit, Serial I/O A/D Converter, 2 Input	8-Dip	2.79	2.07	1.53
ADC08832IWM-ND	8-Bit, Serial I/O A/D Converter	SO-8	2.79	2.07	1.53
ADC10030CIVT-ND	10-Bit, A/D Converter.	32-LQFP	8.55	6.76	5.42
ADC10062CIWM-ND	10-Bit, A/D Converter	SO-24	5.46	4.32	3.46
ADC10158CIN-ND	10-Bit, Plus Sign 4µS ADC with 4 or 8-Chan. Mux, Track	28-Dip	5.54	4.39	3.52
ADC10158CIWM-ND	10-Bit, Plus Sign 4µS ADC with 4 or 8-Chan. Mux, Track.	SO-28	5.54	4.39	3.52
ADC10221CIVT-ND	10-Bit, A/D Converter.	32-LQFP	5.99	4.74	3.80
ADC10321CIVT-ND	10-Bit, A/D Converter.	32-LQFP	6.59	5.22	4.18
ADC10461CIWM-ND	10-Bit, A/D Converter	SO-20	6.20	4.72	3.60
ADC10464CIWM-ND	10-Bit, 600nS A/D Converter with Input Mux	SO-28	5.71	4.52	3.62
ADC10662CIWM-ND	10-Bit, 360nS A/D Converter with Input Mux	SO-24	5.40	4.27	—
ADC10664CIWM-ND	10-Bit, 360nS A/D Converter with Input Mux	SO-28	5.40	4.27	—
ADC10731CIWM-ND	10-Bit, Serial I/O A/D Converter.	SO-16	4.40	3.35	2.56
ADC10738CIWM-ND	10-Bit, Serial I/O A/D Converter.	SO-24	4.40	3.35	2.56
ADC1175-50CIJM-ND	8-Bit, A/D Converter	SOP-24	5.48	4.34	3.48
ADC1175-50CIMT-ND	8-Bit, A/D Converter	24-SSOP	5.48	4.34	3.48
ADC12032CIWM-ND	12-Bit, A/D Converter	SO-20	6.99	5.53	4.43
ADC12034CIN-ND	12-Bit, A/D Converter.	24-Dip	9.19	7.88	6.99
ADC12038CIWM-ND	12-Bit, A/D Converter	SO-28	7.29	5.77	4.62
ADC12062CIV-ND	12-Bit, 1MHz 75mW ADC with Input Mux and S&H.	44-PLCC	9.53	7.54	—
ADC12130CIN-ND	12-Bit, Self-calibrating A/D Plus Sign Serial I/O	16-Dip	7.18	5.68	—
ADC12138CIN-ND	12-Bit, Self-calibrating A/D Plus Sign Serial I/O	28-Dip	7.39	5.85	—
ADC12138CIWM-ND	12-Bit, Self-calibrating A/D Plus Sign Serial I/O	SO-28	7.39	5.85	—
ADC12441CIJ-ND	12-Bit, Dynam Tested Self-calibrating Plus Sign A/D Conv.	28-CDip	11.90	10.20	9.05
ADC12451CIJ-ND	12-Bit, Dynam Tested Self-calibrating Plus Sign A/D Conv.	24-CDip	14.79	12.68	11.24
ADCV0831M6CT-ND	8-Bit, Serial I/O A/D Converter.	SOT-23-6	2.90	2.21	1.69
ADCV0831M6TR-ND	8-Bit, Serial I/O A/D Converter.	SOT-23-6	1461.60/1,000		
	D/A Converters				
DAC0800LCM-ND	8-Bit, D/A Converter	SO-16	1.86	1.38	1.02
DAC0800LCMXTR-ND	8-Bit, D/A Converter	SO-16	1875.00/2,500		
DAC0800LCN-ND	8-Bit, D/A Converter 0.19% Linearity.	16-Dip	1.86	1.38	1.02
DAC0802LCM-ND	8-Bit, D/A Converter	SO-16	2.79	2.07	—
DAC0802LCN-ND	8-Bit, D/A Converter	16-Dip	2.79	2.07	1.53
DAC0808LCM-ND	8-Bit, D/A Converter	SO-16	2.11	1.57	1.16
DAC0808LCN-ND	8-Bit, D/A Converter 0.19% Linearity.	16-Dip	2.11	1.57	1.16
DAC0830LCN-ND	8-Bit, µP Compatible Double Buffered D/A Converter	20-Dip	6.18	4.70	—
DAC0832LCN-ND	8-Bit, µP Compatible D/A Converter 0.20% Linearity.	20-Dip	2.98	2.27	—
DAC0832LCWM-ND	8-Bit, µP Compatible D/A Converter	SO-20	2.88	2.19	—

MICROCHIP CMOS LCD DRIVERS

The AY0438 is a CMOS LSI circuit that drives a liquid crystal display, usually under microprocessor control. The part acts as a smart peripheral that drives up to 32 LCD segments. It needs only three control lines due to its serial input construction. It latches the data to be displayed and relieves the microprocessor from the task of generating the required waveforms. • Drives up to 32 LCD segments of arbitrary configuration • CMOS, NMOS and TTL compatible inputs • Cascadable • On-chip oscillator • Requires only three control lines • Can be used to drive relays, solenoids, print head drives, etc.

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
AY0438/L-ND	32-Segment CMOS LCD Driver.	44-PLCC	5.48	4.72	3.93
AY0438/P-ND	32-Segment CMOS LCD Driver.	40-Dip	4.00	3.33	2.78
AY0438-I/L-ND	32-Segment CMOS LCD Driver, Industrial Temp.	44-PLCC	5.75	4.96	4.13
AY0438-I/P-ND	32-Segment CMOS LCD Driver, Industrial Temp.	40-Dip	4.20	3.50	2.92

EPSON ELECTRONICS AMERICA, INC. REAL TIME CLOCK MODULES

Digi-Key Part No.	Description
SE3231-ND SE3232-ND SE3241-ND SE3242-ND	**Features:** • The built-in quartz crystal makes board design easy • Direct bus-compatibility (120 nSec access time) • Interrupt masking • 30 seconds error adjustment function. 18 pin dual in line plastic package (RTC-72421). • 24 pin SOP plastic package (RTC-72423). • Capable of withstanding reflow temps. of 260°C or 20 seconds (RTC-72423) **Specifications: Power Supply** VDD: In operating temp.: 4.5 ~ 5.5V. **Data-Holding** VDH: In operating temp.: 2.0 ~ 5.5V. **Op. Temp.:** tOPR: –40°C ~ +85°C. **Freq. Tolerance:** 72421A: ±10; 72421B: ±50; 72423A: ±20; 72423B: ±50.
SE3245CT-ND SE3245TR-ND	**Features:** • Built-in crystal allows adjustment-free efficient operation • Automatic leap year correction • Output selectable between 32.768Khz/1 Hz • **Operating Voltage Range:** 2.5V, to 5.5V, • **Supply Voltage Detection Voltage:** 1.7V, ±0.3V. • **Frequency Tolerance:** 5 ±23ppm • **Package:** 14-SOP.

Frequency Tolerance	Package	Digi-Key Part No.	Price Each★				Digi-Key Part No.	T & R Pricing★ 1,000	Epson Part No.
			1	10	50	100			
±10 ppm	18-Dip	SE3231-ND	7.62	6.35	4.51	4.06	—	—	RTC-72421A
±50 ppm	18-Dip	SE3232-ND	7.05	5.88	4.18	3.76	—	—	RTC-72421B
±20 ppm	24-SOP	SE3241-ND	8.55	7.13	5.07	4.56	—	—	RTC-72423A
±50 ppm	24-SOP	SE3242-ND	7.50	6.25	4.44	4.00	—	—	RTC-72423B
5 ±23 ppm	14-SOP	SE3245CT-ND	4.32	3.60	2.88	2.56	SE3245TR-ND	2090.00	RTC-4543SA:A2

National Semiconductor™ INTERFACE CHIPS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
DP8390DN-ND	Serial Network Interface Controller *NEW!*	48-Dip	13.65	11.70	10.38
DP8392CN-ND	Coax Transceiver Interface	16-Dip	5.61	4.44	3.56
DP8392CV-ND	Coax Transceiver Interface	28-PLCC	5.61	4.44	3.56
DP83902AVLJ-ND	Serial Network Interface Controller Twisted Pair	100-PQFP	15.40	13.20	11.71
DP8573AN-ND	RealTime Clock.	24-Dip	12.16	10.43	9.25
DS14C88M-ND	Quad CMOS Line Driver	SO-14	.94	.69	.50
DS14C88MXTR-ND	Quad CMOS Line Driver	SO-14	796.88/2,500		
DS14C88N-ND	Quad CMOS Line Driver	14-Dip	.94	.69	.50
DS14C89AM-ND	Quad CMOS Line Receiver.	SO-14	.94	.69	.50
DS14C89AMXTR-ND	Quad CMOS Line Reciever.	SO-14	796.88/2,500		
DS14C89AN-ND	Quad CMOS Line Receiver	14-Dip	.94	.69	.50
DS14C232CM-ND	Low Power +5V, Power TIA/EIA-232 Dual Driver/Receiver	SO-16	1.55	1.15	.85
DS14C232CMXTR-ND	Low Power +5V, Power TIA/EIA-232 Dual Driver/Receiver	SO-16	1562.50/2,500		
DS14C232CN-ND	EIA232 Dual Driver/Receiver Low Power	16-Dip	1.55	1.15	.85
DS14C232TM-ND	EIA232 Dual Driver/Receiver Low Power.	SO-16	1.71	1.27	.94
DS14C238WM-ND	Single Supply TIA/EIA-232 4x4 Driver/Receiver	SO-16	3.93	2.99	2.28
DS14C238WMXTR-ND	Single Supply TIA/EIA-232 4x4 Driver/Receiver	SO-16	1978.20/1,000		
DS14C241WM-ND	Single Supply TIA/EIA-232 4x5 Driver/Receiver	SO-28	5.25	4.15	3.33
DS14C335MSA-ND	3.3V, Supply TIA/EIA-232 3x5 Driver/Receiver	28-SSOP	5.75	4.37	3.34
DS14C535MSA-ND	5V, Supply EIA/TIA-232 3x5 Driver/Receiver	28-SSOP	5.75	4.37	3.34

(Continued)

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DS26C31TM-ND	CMOS Quad Tri-State Differential Line Driver	SO-16	1.61	1.19	.86
DS26C31TMXTR-ND	CMOS Quad Tri-State Differential Line Driver	SO-16	1370.63/2,500		
DS26C31TN-ND	CMOS Quad RS422 Line Driver	16-Dip	1.61	1.19	.86
DS26C32ATM-ND	CMOS Quad RS422 Receiver	SO-16	1.61	1.19	.86
DS26C32ATMXTR-ND	CMOS Quad RS422 Reciever	SO-16	1370.63/2,500		
DS26C32ATN-ND	Quad Differential Line Receiver	16-Dip	1.61	1.19	.86
DS26LS31CM-ND	Quad High Speed Differential Line Driver	SO-16	1.04	.75	.55
DS26LS31CMXTR-ND	Quad High Speed Differential Line Driver	SO-16	764.75/2,500		
DS26LS31CN-ND	Quad High Speed Differential	16-Dip	1.04	.75	.55
DS26LS32ACM-ND	Quad Differential Line Receiver	S0-16	1.04	.75	.55
DS26LS32ACMXTR-ND	Quad Differential Line Reciever	SO-16	764.75/2,500		
DS26LS32ACN-ND	Quad Differential Line Receiver	16-Dip	1.04	.75	.55
DS26LS32CM-ND	Quad Differential Line Driver	SO-16	1.04	.75	.55
DS26LS32CN-ND	Quad Differential Line Receiver	16-Dip	1.04	.75	.55
DS26LV31TM-ND	3V, Enhanced Quad CMOS Differential Line Driver	SO-16	2.57	1.91	1.42
DS26LV32ATM-ND	3V, Enhanced Quad CMOS Differential Line Receiver	SO-16	2.57	1.91	1.42
DS34C86TM-ND	Quad CMOS Differential Line Receiver	SO-16	2.20	1.64	1.21
DS34C86TMXTR-ND	Quad CMOS Differential Line Receiver	SO-16	2218.75/2,500		
DS34C86TN-ND	Quad CMOS Differential Line Receiver	16-Dip	2.20	1.64	1.21
DS34C87TM-ND	CMOS Quad Tri-State Differential Line Driver	SO-16	2.20	1.64	1.21
DS34C87TMXTR-ND	CMOS Quad Tri-State Differential Line Driver	SO-16	2218.75/2,500		
DS34C87TN-ND	CMOS Quad Tri-State Differential Line Driver	16-Dip	2.20	1.64	1.21
DS34LV86TM-ND	3V, Enhanced Quad CMOS Differential Line Receiver	SO-16	2.85	2.12	1.57
DS34LV87TM-ND	Enhanced Quad CMOS Differential Line Driver	SO-16	2.85	2.12	1.57
DS36C200M-ND	Dual High Speed Bi-Directional Diff. Transceiver	SO-14	2.75	2.09	1.60
DS36C278M-ND	Low Power Multipoint EIA-RS-485 Transceiver	SO-8	2.58	1.96	1.50
DS36C278N-ND	Low Power Multipoint EIA-RS-485 Transceiver	8-Dip	2.58	1.96	1.50
DS36C278TM-ND	Multipoint EIA Low Power Transceiver	SO-8	2.58	1.96	1.50
DS36C279M-ND	Low Power EIA-RS-485 Transceiver with Sleep Mode	SO-8	2.58	1.96	1.50
DS36C280M-ND	Slew Rate Controlled CMOS EIA-RS-485 Transceiver	SO-8	2.58	1.96	1.50
DS36F95J-ND	High Speed Multipoint RS485/422 Transceiver	8-Dip	13.74	11.78	10.45
DS36F95M-ND	High Speed Multipoint RS485/422 Transceiver	SO-8	3.58	2.72	2.08
DS38C86AVB-ND	9-Bit, Latch Transceiver	48-PQFP	13.65	11.70	10.38
DS88C20N-ND	Dual CMOS Compatible Differential Receiver	14-Dip	5.45	4.15	3.17
DS89C21TM-ND	Differential CMOS Line Driver/Receiver Pair	SO-8	2.90	2.21	1.69
DS89C386TMEA-ND	12 Channel CMOS Differential Line Receiver	48-SSOP	8.48	6.71	5.38
DS89C387TMEA-ND	12 Channel CMOS Differential Line Driver	48-SSOP	8.48	6.71	5.38
DS90C031BTM-ND	LVDS Quad CMOS Differential Line Driver	SO-16	5.03	3.82	2.92
DS90C031BTWM-ND	LVDS Quad CMOS Differential Line Driver	SO-16	5.03	3.82	2.92
DS90C031TM-ND	LVDS Quad CMOS Differential Line Driver *NEW!*	SO-16	5.03	3.82	2.92
DS90C031TMXTR-ND	LVDS Quad CMOS Differential Line Driver	SO-16	6281.25/2,500		
DS90C032BTM-ND	LVDS Quad CMOS Differential Line Receiver	SO-16	5.03	3.82	2.92
DS90C032TM-ND	LVDS Quad CMOS Differential Line Receiver	SO-16	5.03	3.82	2.92
DS90C032TMXTR-ND	LVDS Quad CMOS Differential Line Receiver	SO-16	6281.25/2,500		
DS90C363AMTD-ND	LVDS 3.3V, FPD (Flat Panel Display) Link-65MHz 18-Bit, Program Transmitter	48-TSSOP	6.99	5.53	4.43
DS90C363MTD-ND	LVDS 3.3V, FPD Link 18-Bit, Transmitter, 65MHz	48-TSSOP	6.99	5.53	4.43
DS90C365MTD-ND	LVDS 3.3V, FPD Link-85MHz 18-Bit, Program Xmitter	48-TSSOP	6.99	5.53	4.43
DS90C383AMTD-ND	LVDS 3.3V, FPD Link-65MHz 24-Bit, Program Xmitter	56-TSSOP	6.99	5.53	4.43
DS90C383MTD-ND	LVDS 3.3V, FPD Link 24-Bit, Transmitter	56-TSSOP	6.99	5.53	4.43
DS90C385MTD-ND	LVDS 3.3V, FPD Link-85MHz 24-Bit, Program Xmitter	56-TSSOP	6.99	5.53	4.43
DS90C387VJD-ND	LVDS Dual Pixel Display Interface (LDI)-SVGA-OXGA	100-TQFP	9.15	7.85	6.96
DS90C401M-ND	LVDS Dual Low Volt Differential Signaling Driver	SO-8	2.85	2.17	1.66
DS90C402M-ND	LVDS Dual Low Volt Differential Signaling Receiver	SO-8	2.85	2.17	1.66
DS90CF363AMTD-ND	LVDS 3.3V, FPD Link-65MHz 18-Bit, Program Xmitter	48-TSSOP	6.99	5.53	4.43
DS90CF363MTD-ND	LVDS 3.3V, FPD Link 18-Bit, Transmitter	48-TSSOP	6.99	5.53	4.43
DS90CF364MTD-ND	LVDS 3.3V, FPD Link 18-Bit, Receiver	48-TSSOP	6.99	5.53	4.43
DS90CF364AMTD-ND	LVDS 3.3V, FPD Link-65MHz, 18-Bit, Receiver	48-TSSOP	6.99	5.53	4.43
DS90CF366MTD-ND	LVDS 3.3V, FPD Link-85MHz, 18-Bit, Receiver	48-TSSOP	6.99	5.53	4.43
DS90CF383AMTD-ND	LVDS 3.3V, FPD Link-65MHz, 24-Bit, Receiver	56-TSSOP	6.99	5.53	4.43
DS90CF384AMTD-ND	LVDS 3.3V, FPD Link-65MHz, 24-Bit, Receiver	56-TSSOP	6.99	5.53	4.43
DS90CF384ASLC-ND	LVDS 3.3V, FPD Link-65MHz, 24-Bit, Receiver	64-FBGA	7.98	6.31	5.06
DS90CF383MTD-ND	LVDS 3.3V, FPD Link 24-Bit, Receiver	56-TSSOP	6.99	5.53	4.43
DS90CF384MTD-ND	LVDS 3.3V, FPD Link 24-Bit, Receiver	56-TSSOP	6.99	5.53	4.43
DS90CF384SLC-ND	LVDS 3.3V, FPD Link-65MHz, 24-Bit, Receiver	64-FBGA	7.98	6.31	5.06
DS90CF386MTD-ND	LVDS 3.3V, FPD Link-85MHz 24-Bit, Receiver	56-TSSOP	6.99	5.53	4.43
DS90CF386SLC-ND	LVDS 3.3V, FPD Link-85MHz 24-Bit, Receiver	64-FBGA	7.98	6.31	5.06
DS90CF388VJD-ND	LVDS Dual Pixel Display Interface (LDI)-SVGA/QXGA	100-TQFP	9.15	7.85	6.96
DS90CF561MTD-ND	LVDS 18-Bit, Color, FPD Link	48-TSSOP	7.98	6.31	5.06
DS90CF562MTD-ND	LVDS 18-Bit, Color, FPD Link	48-TSSOP	7.98	6.31	5.06
DS90CF563MTD-ND	LVDS 5V, FPD Link 18-Bit, Transmitter	48-TSSOP	7.98	6.31	5.06
DS90CF564MTD-ND	LVDS 5V, FPD Link 18-Bit, Receiver	48-TSSOP	7.98	6.31	5.06
DS90CF581MTD-ND	LVDS 24-Bit, Color FPD Transmitter	56-TSSOP	8.75	7.50	6.65
DS90CF583MTD-ND	LVDS 5V, FPD Link 24-Bit, Transmitter	56-TSSOP	7.98	6.31	5.06
DS90CF584MTD-ND	LVDS 5V, FPD Link 24-Bit, Receiver	56-TSSOP	7.98	6.31	5.06
DS90CP22M-8-ND	2x2 800 MBPS LVDS CrossSwitch	SO-16	8.99	7.11	5.70
DS90CR211MTD-ND	21-Bit, Channel Link, Transmitter, 40MHz	48-TSSOP	10.27	8.12	6.51
DS90CR212MTD-ND	21-Bit, Channel Link, Receiver, 40MHz	48-TSSOP	10.27	8.12	6.51
DS90CR213MTD-ND	21-Bit, Channel Link-66MHz, Transmitter	48-TSSOP	10.06	8.63	7.65
DS90CR214MTD-ND	21-Bit, Channel Link-66MHz, Receiver	48-TSSOP	10.06	8.63	7.65
DS90CR215MTD-ND	LVDS 3.3V, Rising Edge Data Strobe 21-Bit, Channel Link-66MHz, Transmitter	48-TSSOP	7.39	5.85	4.69
DS90CR216AMTD-ND	LVDS 3.3V, Rising Edge Data Strobe 21-Bit, Channel Link-66MHz, Receiver	48-TSSOP	7.39	5.85	4.69
DS90CR216MTD-ND	LVDS 3.3V, Rising Edge Data Strobe 21-Bit, Channel Link-66MHz	48-TSSOP	7.39	5.85	4.69
DS90CR217MTD-ND	LVDS 3.3V, Rising Edge Data Strobe 21-Bit, Channel Link-85MHz	48-TSSOP	10.06	8.63	7.65
DS90CR218AMTD-ND	LVDS 3.3V, Rising Edge Data Strobe 21-Bit, Channel Link-85MHz	48-TSSOP	10.06	8.63	7.65
DS90CR218MTD-ND	LVDS 3.3V, Rising Edge Data Strobe 21-Bit, Channel Link-75MHz	48-TSSOP	10.06	8.63	7.65
DS90CR281MTD-ND	28-Bit, Channel Link, Transmitter	56-TSSOP	9.63	8.25	7.32
DS90CR282MTD-ND	28-Bit, Channel Link, Receiver	56-TSSOP	9.63	8.25	7.32
DS90CR283MTD-ND	28-Bit, Channel Link-66MHz, Transmitter	56-TSSOP	11.11	9.53	8.45
DS90CR284MTD-ND	28-Bit, Channel Link-66MHz, Receiver	56-TSSOP	11.11	9.53	8.45
DS90CR285MTD-ND	LVDS 3.3V, Rising Edge Data Strobe 28-Bit, Channel Link-66MHz	56-TSSOP	7.39	5.85	4.69
DS90CR286AMTD-ND	3.3V, Data Strobe LVDS Receiver 28-Bit Channel Link-66MHz	56-TSSOP	7.39	5.85	4.69
DS90CR286ASLC-ND	LVDS 3.3V, Data Strobe Receiver 28-Bit Channel Link-66MHz	64-FBGA	7.39	5.85	4.69
DS90CR286MTD-ND	LVDS 3.3V, Data Strobe 28-Bit, Channel Link-66MHz	56-TSSOP	7.39	5.85	4.69
DS90CR287MTD-ND	LVDS 3.3V, Rising Edge Data Strobe 28-Bit Channel Link-85MHz	56-TSSOP	11.81	10.13	8.98
DS90CR288AMTD-ND	LVDS 3.3V, Rising Edge Data Strobe 28-Bit Channel Link-85MHz	56-TSSOP	11.81	10.13	8.98
DS90CR288ASLC-ND	LVDS 3.3V, Rising Edge Data Strobe 28-Bit Channel Link-85MHz	64-FBGA	11.81	10.13	8.98
DS90CR288MTD-ND	LVDS 3.3V, Rising Edge Data Strobe 28-Bit Channel-75MHz	56-TSSOP	11.90	10.20	9.05
DS90CR561MTD-ND	LVDS 18-Bit, FPD Link	48-TSSOP	9.89	8.48	7.52
DS90CR562MTD-ND	LVDS 18-Bit, FPD Link	48-TSSOP	9.89	8.48	7.52
DS90CR581MTD-ND	LVDS Transmitter 24-Bit, FPD Link	56-TSSOP	9.09	7.19	5.76
DS90CR584MTD-ND	LVDS 5V, FPD Link 24-Bit, Receiver	56-TSSOP	15.75	13.65	8.72
DS90LV017ATM-ND	LVDS Single High Speed Differential Driver	SO-8	2.29	1.71	1.26
DS90LV017M-ND	LVDS Single High Speed Differential Driver	SO-8	2.29	1.71	1.26
DS90LV018ATM-ND	LVDS 3V, Single CMOS Differential Line Receiver	SO-8	2.29	1.71	1.26
DS90LV019TM-ND	LVDS 3.3V, or 5V, Driver/Receiver	SO-14	4.15	3.16	2.41
DS90LV027ATM-ND	LVDS Dual High Speed Differential Driver	SO-8	4.15	3.16	2.41
DS90LV027M-ND	LVDS Dual High Speed Differential Driver	SO-8	3.28	2.49	1.90
DS90LV028ATM-ND	LVDS 3V, Dual CMOS Differential Line Receiver	SO-8	2.90	2.21	1.69
DS90LV031ATM-ND	LVDS 3V, Quad CMOS Differential Line Driver	SO-16	5.03	3.82	2.92
DS90LV031ATMTC-ND	LVDS 3V, Quad CMOS Differential Line Driver	16-TSSOP	5.03	3.82	2.92
DS90LV031ATMXTR-ND	LVDS 3V, Quad CMOS Differential Line Driver	SO-16	6375.00/2,500		
DS90LV031BTM-ND	LVDS 3V, Quad CMOS Differential Line Driver	SO-16	5.03	3.82	2.92
DS90LV032ATM-ND	LVDS 3V, Quad CMOS Differential Line Receiver	SO-16	5.03	3.82	2.92
DS90LV032ATMTC-ND	LVDS 3V, Quad CMOS Differential Line Receiver	16-TSSOP	5.03	3.82	2.92
DS90LV047ATM-ND	LVDS 3V, Quad CMOS Differential Line Driver	SO-16	4.88	3.71	2.83
DS90LV047ATMTC-ND	LVDS 3V, Quad CMOS Differential Line Driver	16-TSSOP	4.88	3.71	2.83
DS90LV048ATM-ND	LVDS 3V, Quad CMOS Differential Line Receiver	SO-16	4.88	3.71	2.83
DS90LV048ATMTC-ND	LVDS 3V, Quad CMOS Differential Line Receiver	16-TSSOP	4.88	3.71	2.83
DS92CK16TMTC-ND	BLVDS 3V, 1 to 6 Clock Buffer/Bus Transceiver	24-TSSOP	9.98	7.89	6.32
DS92LV010ATM-ND	Bus LVDS 3.3/5.0V, Single Transceiver	SO-8	5.95	4.53	3.46
DS92LV090ATVEH-ND	LVDS 9 Channel Transceiver	64-LQFP	11.31	9.69	8.60
DS92LV1021TMSA-ND	16MHz-40MHz 10-Bit, Serializer	28-SSOP	11.55	9.90	8.78
DS92LV1023TMSA-ND	40MHz-66MHz 10-Bit, Serializer	28-SSOP	12.72	10.91	9.67
DS92LV1210TMSA-ND	16MHz-40MHz 10-Bit, Deserializer	28-SSOP	14.18	12.15	10.78
DS92LV1212AMSA-ND	Bus LVDS 16MHz-40MHz 10-Bit, Random Lock Deserializer with Embedded Clock Recovery	28-SSOP	11.55	9.90	8.78
BLVDS04-ND	Evaluation Board for DS92LV1023/1224	EVAL BOARD	222.00	207.20	192.40
DS92LV1224TMSA-ND	40MHz-66MHz, 10-Bit, Deserializer	28-SSOP	12.72	10.91	9.67
DS92LV222ATM-ND	Bus LVDS Two Channel Multiplexer Repeater	SO-16	6.78	5.37	4.30
DS96F174CJ-ND	RS485/422 Quad Driver	16-CDip	5.40	4.27	3.42
DS96F175CJ-ND	RS422/485 Quad Line Driver	16-CDip	5.40	4.27	3.42
DS481N-ND	Low Power Multipoint RS485/RS422 Txcvr w/Sleep Mode	8-Dip	3.12	1.74	1.39
DS485M-ND	Low Power Multipoint RS485/RS442 Transceiver	SO-8	2.39	1.78	1.31
DS485N-ND	Low Power Multipoint RS485/RS422 Transceiver	8-Dip	2.39	1.78	1.31
DS485TM-ND	Low Power Multipoint RS485/RS442 Transceiver	SO-8	2.39	1.78	1.31
DS485TN-ND	Low Power Multipoint RS485/RS442 Transceiver	8-Dip	2.39	1.78	1.31
DS0026CN-ND	Dual MOS Clock Driver	8-Dip	3.00	2.28	1.74
DS1487N-ND	Low Power Multipoint RS485 1/4 Unit Load Transceiver	8-Dip	2.98	2.21	1.64
DS1488M-ND	Quad Line Driver	SO-14	.55	.40	.29
DS1488MXTR-ND	Quad Line Driver	SO-14	350.00/2,500		
DS1488N-ND	Quad Line Driver	14-Dip	.55	.40	.29
DS1489AM-ND	Quad Line Receiver	SO-14	.55	.40	.29
DS1489AMXTR-ND	Quad Line Reciever	SO-14	350.00/2,500		
DS1489AN-ND	Quad Line Receiver	14-Dip	.55	.40	.29
DS1489M-ND	Quad Line Receiver	SO-14	.55	.40	.29
DS1489N-ND	Quad Line Receiver	14-Dip	.55	.40	.29
DS1692J-ND	RS422/423 Line Driver	16-CDip	16.80	12.00	6.70
DS2003CM-ND	High Current/High V. Darlington Driver w/Internal Resistor	SO-16	.95	.69	.50
DS2003CMXTR-ND	High Current/High V. Darlington Driver w/Internal Resistor	SO-16	798.00/2,500		
DS2003CN-ND	High Current/High V. Darlington Driver w/Internal Resistor	16-Dip	.94	.69	.50
DS3486M-ND	RS422/423 Quad Line Receiver	SO-16	.98	.72	.52
DS3486N-ND	RS422/423 Quad Line Receiver	16-Dip	.98	.72	.52
DS3487M-ND	Quad Differential Line Driver	SO-16	.98	.72	.52
DS3487N-ND	Quad Differential Line Driver	16-Dip	.98	.72	.52
DS3650N-ND	Quad Differential Line Receiver	16-Dip	2.57	1.91	1.42
DS3658N-ND	Quad High Low Current Peripheral Driver	16-Dip	5.78	4.39	—
DS3662WM-ND	Quad High Speed Trapezoidal Bus Transceiver	SO-16	5.38	4.09	3.12
DS3668N-ND	Quad Fault Protect Peripheral Driver	16-Dip	6.93	5.48	—
DS3691M-ND	RS422/423 Line Driver	SO-16	2.39	1.78	1.31
DS3691N-ND	RS422/423 Line Driver	16-Dip	2.39	1.78	1.31
DS3695AM-ND	Multipoint RS485/RS422 Transceiver/Repeater	SO-8	2.70	2.01	1.48
DS3695AMXTR-ND	Multipoint RS485/RS422 Transceiver/Repeater	SO-8	2718.75/2,500		
DS3695ATM-ND	Multipoint RS485/422 Transceiver/Repeater	SO-8	2.70	2.01	1.48
DS3695N-ND	Multipoint RS485/422 Transceiver/Repeater	8-Dip	1.92	1.43	1.06
DS3695TN-ND	Multipoint RS485/422 Transceiver/Repeater	8-Dip	1.92	1.43	1.06
DS3696N-ND	Multipoint RS485/422 Transceiver/Repeater	8-Dip	2.58	1.96	1.50
DS3697N-ND	Multipoint RS485/422 Transceiver/Repeater	8-Dip	3.95	3.01	2.30
DS36950V-ND	RS485 Quad Differential Receiver	20-PLCC	9.03	7.74	—
DS36954V-ND	Quad Differential Bus Transceiver	20-PLCC	9.87	7.81	6.26
DS3862N-ND	Octal High Speed Trapezoidal Transceiver	20-Dip	8.72	6.89	5.52
DS3896M-ND	BTL Trapezoidal Transceiver	SO-20	8.40	6.64	5.32
DS3897M-ND	BTL Trapeziodal Transceiver	SO-20	7.88	6.23	4.99
DS8832N-ND	Dual Tri-State Line Driver	16-Dip	2.73	2.03	1.50
DS8838M-ND	Quad Unified Bus Transceiver	SO-18	3.07	2.28	1.69
DS8838N-ND	Quad Unified Bus Transceiver	16-Dip	2.64	1.96	1.45
DS8921AM-ND	Differential Line Driver/Receiver Pair	SO-8	1.77	1.32	.97
DS8921AN-ND	Differential Line Driver/Receiver Pair	8-Dip	1.77	1.32	.97
DS8921ATM-ND	Differential Line Driver/Receiver Pair	SO-8	1.92	1.43	1.06
DS8921M-ND	Differential Line Driver/Receiver Pair	SO-8	1.61	1.20	.89
DS8921N-ND	Differential Line Driver/Receiver Pair	8-Dip	1.61	1.20	.89
DS8922AM-ND	RS422 Dual Driver/Receiver Pair	SO-16	1.92	1.43	1.06
DS8922AN-ND	RS422 Dual Driver/Receiver Pair	16-Dip	1.92	1.43	1.06
DS8922M-ND	RS422 Dual Driver/Receiver Pair	SO-16	1.61	1.20	.89
DS8922N-ND	RS422 Dual Driver/Receiver Pair	16-Dip	1.61	1.20	.89
DS8923AM-ND	RS422 Dual Differential Line Driver/Receiver	SO-16	1.92	1.43	1.06
DS8923AMXTR-ND	RS422 Dual Differential Line Driver/Receiver	SO-16	1937.50/2,500		
DS8923AN-ND	RS422 Dual Differential Line Driver/Receiver	16-Dip	1.92	1.43	1.06
DS8925M-ND	Local Talk Dual Driver/Triple Receiver	SO-16	2.68	2.04	1.56
DS9637ACM-ND	RS423 Dual Receiver	SO-8	1.69	1.24	.90
DS9637ACN-ND	RS423 Dual Receiver	8-Dip	1.69	1.24	.90
DS9638CM-ND	RS-422 Dual High Speed Differential Line Driver	SO-8	1.69	1.24	.90

(Continued)

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National Semiconductor

INTERFACE CHIPS *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DS9638CN-ND	RS422 Dual High Speed Differential Driver	8-Dip	1.92	1.43	1.06
DS14185WM-ND	EIA/TIA-232 3 Driver x 5 Receiver	SO-20	1.28	.94	.68
DS14196WM-ND	EIA/TIA-232 5 Driver x 3 Receiver	SO-20	1.28	.94	.68
DS36276M-ND	Failsafe Multipoint Transceiver	SO-8	2.78	2.11	1.61
DS36277TM-ND	Dominant Mode Multipoint Transceiver	SO-8	3.07	2.28	1.69
DS36277TMXTR-ND	Dominant Mode Multipoint Transceiver	SO-8	3093.75/2,500		
DS36277TN-ND	Dominant Mode Multipoint Transceiver	8-Dip	3.07	2.28	1.69
DS36954M-ND	Quad Differential Bus Transceiver	SO-20	10.23	8.09	6.48
DS75107BN-ND	Dual Line Receiver	14-Dip	1.04	.75	.55
DS75110AM-ND	Dual Line Driver	SO-14	.98	.72	.52
DS75150M-ND	Dual Line Driver	SO-8	1.24	.91	.66
DS75154M-ND	Quad Line Receiver	SO-16	1.24	.91	.66
DS75160AN-ND	IEEE 488 GPIR Transceiver	20-Dip	2.78	2.11	1.61
DS75176BM-ND	Multipoint RS485/422 Transceiver	SO-8	1.01	.74	.53
DS75176BMXTR-ND	Multipoint RS485/422 Transceiver	SO-8	748.13/2,500		
DS75176BN-ND	Multipoint RS485/422 Transceiver	8-Dip	1.01	.74	.53
DS75176BTM-ND	Multipoint RS485 Transceiver	SO-8	1.54	1.13	.82
DS75176BTN-ND	Multipoint RS485 Transceiver	8-Dip	1.54	1.13	.82
DS75451N-ND	Dual Peripheral Driver	8-Dip	.95	.69	.50
DS75451M-ND	Dual Peripheral Driver	SO-8	.95	.69	.50
DS75452M-ND	Dual Peripheral Driver	SO-8	.95	.69	.50
DS75453M-ND	Dual Peripheral Driver	SO-8	.95	.69	.50
DS96172CN-ND	RS422/485 Quad Line Driver	16-Dip	2.82	2.10	1.55
DS96173CN-ND	EIA422/485 Quad Receiver	16-Dip	2.90	2.21	1.69
DS96174CN-ND	RS485/422 Quad Differential Driver	16-Dip	3.10	2.36	1.80
DS96175CN-ND	RS485/422 Quad Differential Receiver	16-Dip	3.10	2.36	1.80
DS96176CN-ND	RS485 Transceiver	8-Dip	3.03	2.30	1.76
DS96177CN-ND	RS485/422 Differential Bus Repeater	8-Dip	2.91	2.17	1.60
DSV14196TWM-ND	3-3V, Supply EIA/TIA-232 5 Driver x3 Receiver	SO-20	2.42	1.80	1.33
DSV14196WM-ND	3-3V, Supply EIA/TIA-232 5 Driver x3 Receiver	SO-20	1.86	1.38	1.02

intersil

SPECIALIZED INTEGRATED CIRCUITS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
ICL7104-14CPL-ND	14 Bit, Binary A/D Converter	40-Dip	52.73	47.46	34.80
ICL7139CPL-ND	3-3/4 Digit Auto. Range DMM	40-Dip	16.10	14.49	10.63

Data Conversion Circuits – A/D and D/A

Digi-Key Part No.	Description	Pkg.	1	25	100
CA3306CE-ND	6-Bit, "Flash" A/D Converter	18-Dip	9.43	8.24	5.66
CA3310E-ND	10-Bit, Successive Approx. A/D Converter	24-Dip	12.79	11.16	7.68
CA3338AE-ND	8-Bit, "Flash" D/A Converter	16-Dip	20.08	17.52	12.05

5 Volt Logic System Operational Amplifiers

Digi-Key Part No.	Description	Pkg.	1	25	100
CA5422E-ND	Dual Low Voltage Op Amp	14-Dip	3.30	2.88	1.98

Special Functions

Digi-Key Part No.	Description	Pkg.	1	25	100
CA3227E-ND	High Frequency NPN Transistor Arrays	16-Dip	4.26	3.72	2.56

International IOR Rectifier

CONTROL / POWER INTEGRATED CIRCUITS

Driver ICs

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
IR51H224-ND	Self-Oscillating Half-Bridge Driver	9-Sip	4.38	3.50	2.70
IR51HD224-ND	Self-Oscillating Half-Bridge Driver	9-Sip	4.48	3.58	2.76
IR51H310-ND	Self-Oscillating Half-Bridge Driver	9-Sip	4.13	3.30	2.54
IR51H420-ND	Self-Oscillating Half-Bridge Driver	9-Sip	4.88	3.90	3.00
IR51HD420-ND	Self-Oscillating Half-Bridge Driver	9-Sip	4.98	3.98	3.06
IR53HD420-ND	Self-Oscillating Half-Bridge Driver	9-Sip	4.98	3.98	3.06
IR1110-ND	Soft Start Control	64-MQFP	50.00	40.00	24.00
IR2101-ND	High and Low Side Driver	8-Dip	2.68	1.94	1.85
IR2101S-ND	High and Low Side Driver	8-SOIC	3.33	2.66	2.05
IR2102-ND	High and Low MOS Driver	8-Dip	3.00	2.40	1.85
IR2102S-ND	High and Low MOS Driver	8-SOIC	3.33	2.66	2.05
IR2103-ND	High and Low Side Driver	8-Dip	3.00	2.40	1.85
IR2103S-ND	High and Low MOS Driver	8-SOIC	3.33	2.66	2.05
IR2104-ND	High and Low Side Driver	8-Dip	2.68	1.94	1.85
IR2104S-ND	High and Low Side Driver	8-SOIC	3.33	2.66	2.05
IR2104STR-ND	High and Low Side Driver	8-SOIC	4657.50/2,500		
IR2106-ND	High and Low Side Driver	8-Dip	2.95	2.14	2.03
IR2106S-ND	High and Low Side Driver	8-SOIC	3.63	2.90	2.23
IR2107S-ND	High and Low Side Driver	8-SOIC	3.63	2.90	2.23
IR2108-ND	High and Low Side Driver	8-Dip	2.95	2.14	2.03
IR2108S-ND	High and Low Side Driver	8-SOIC	3.38	2.70	2.08
IR2109-ND	Half-Bridge Driver	8-Dip	3.30	2.64	2.03
IR2109S-ND	Half-Bridge Driver	8-SOIC	3.63	2.90	2.23
IR2109STR-ND	Half-Bridge Driver	8-SOIC	5062.50/2,500		
IR2110-ND	High and Low Side Driver	14-Dip	4.36	3.15	3.00
IR2110-1-ND	High and Low Side Driver	14-Dip	5.98	4.78	3.68
IR2110S-ND	High and Low Side Driver	16-SOIC	5.25	4.20	3.23
IR2110STR-ND	High and Low Side Driver	16-SOIC	2903.00/1,000		
IR2111-ND	Half-Bridge Driver	8-Dip	2.82	2.03	1.94
IR2111S-ND	Half-Bridge Driver	8-SOIC	3.53	2.82	2.17
IR2111STR-ND	Half-Bridge Driver	8-SOIC	4927.50/2.500		
IR2112-ND	High and Low Side Driver	14-Dip	2.95	2.13	2.03
IR2112S-ND	High and Low Side Driver	16-SOIC	3.78	3.02	2.32
IR2112STR-ND	High and Low Side Driver	16-SOIC	2174.00/1,000		
IR2113-ND	High and Low Side Driver	14-Dip	4.92	3.55	3.38
IR2113S-ND	High and Low Side Driver	16-SOIC	5.78	4.62	3.55
IR2117-ND	Single-Channel Driver	8-Dip	2.50	1.81	1.72
IR2117S-ND	Single-Channel Driver	8-SOIC	3.13	2.50	1.92
IR2117STR-ND	Single-Channel Driver	8-SOIC	4387.50/2,500		
IR2118-ND	High Side Driver	8-Dip	2.80	2.24	1.72
IR2118S-ND	High Side Driver	8-SOIC	3.13	2.50	1.92
IR2121-ND	Current Limiting Low Side Driver	8-Dip	5.88	4.70	3.62
IR2122-ND	High Side Driver	8-Dip	4.75	3.80	2.93
IR2125-ND	Current Limiting Single-Channel Driver	8-Dip	5.25	3.80	3.62
IR2125S-ND	Current Limiting Single-Channel Driver	16-SOIC	6.00	4.80	3.70
IR2127-ND	Current Sensing Single-Channel Driver	8-Dip	3.80	2.74	2.62
IR2127S-ND	Current Sensing Single-Channel Driver	8-SOIC	4.75	3.80	2.93
IR2127STR-ND	Current Sensing Single-Channel Driver	8-SOIC	6582.50/2,500		
IR2128-ND	High Side Driver	8-Dip	4.25	3.40	2.62
IR2128S-ND	High Side Driver	8-SOIC	4.75	3.80	2.93
IR2130-ND	3-Phase Bridge Driver	28-Dip	11.93	8.60	8.22
IR2130J-ND	3-Phase Bridge Driver	44-PLCC	14.25	11.40	8.78
IR2130S-ND	3-Phase Bridge Driver	28-SOIC	14.25	11.40	8.78
IR2131-ND	Triple High and Low Side Driver	28-Dip	13.35	10.68	8.22
IR2131J-ND	Triple High and Low Side Driver	44-PLCC	14.25	11.40	8.78
IR2131S-ND	Triple High and Low Side Driver	28-SOIC	14.25	11.40	8.78
IR2132-ND	3-Phase Bridge Driver	28-Dip	13.35	10.68	8.22
IR2132J-ND	3-Phase Bridge Driver	44-PLCC	14.25	11.40	8.78
IR2132S-ND	3-Phase Bridge Driver	28-SOIC	14.25	11.40	8.78
IR2133-ND	3-Phase Bridge Driver	28-Dip	14.25	11.40	8.78
IR2133J-ND	3-Phase Bridge Driver	44-PLCC	13.18	9.53	9.09
IR2133S-ND	3-Phase Bridge Driver	28-SOIC	14.25	11.40	8.78
IR2135-ND	3-Phase Bridge Driver	28-Dip	14.25	11.40	8.78
IR2135J-ND	3-Phase Bridge Driver	44-PLCC	14.75	11.80	9.09
IR2135S-ND	3-Phase Bridge Driver	28-SOIC	14.25	11.40	8.78
IR2136-ND	3-Phase Bridge Driver	28-Dip	7.60	5.49	5.24
IR2136J-ND	3-Phase Bridge Driver	44-PLCC	8.75	7.00	5.39
IR2136S-ND	3-Phase Bridge Driver	28-SOIC	8.50	6.80	5.24
IR2137J-ND	3-Phase Bridge Driver	64-PLCC	18.00	14.40	11.09
IR2137Q-ND	3-Phase Bridge Driver	64-MQFP	19.25	15.40	11.86
IR2151-ND	Half-Bridge Driver	8-Dip	3.00	2.40	1.85
IR2151S-ND	Half-Bridge Driver	8-SOIC	3.33	2.66	2.05
IR2151STR-ND	Half-Bridge Driver	8-SOIC	4657.50/2,500		
IR2153-ND	Self-Oscillating Half-Bridge Driver	8-Dip	2.79	2.02	1.93
IR2153S-ND	Half-Bridge Driver	8-SOIC	3.33	2.66	2.05
IR2153STR-ND	Half-Bridge Driver	8-SOIC	4657.50/2,500		
IR2155-ND	Half-Bridge Driver	8-Dip	3.93	3.14	2.42
IR2159-ND	Half-Bridge Driver	16-Dip	12.63	10.10	7.78
IR2159S-ND	Half-Bridge Driver	16-SOIC	12.75	10.20	7.85
IR2213-ND	High and Low Side Driver	14-Dip	8.75	7.00	5.39
IR2213S-ND	High and Low Side Driver	16-SOIC	9.00	7.20	5.54
IR2233-ND	3-Phase Bridge Driver	28-Dip	37.50	30.00	23.10
IR2233J-ND	3-Phase Bridge Driver	44-PLCC	33.52	24.23	23.10
IR2233S-ND	3-Phase Bridge Driver	28-SOIC	37.50	30.00	23.10
IR2235-ND	3-Phase Bridge Driver	28-Dip	37.50	30.00	23.10
IR2235J-ND	3-Phase Bridge Driver	44-PLCC	37.50	30.00	23.10
IR2235S-ND	3-Phase Bridge Driver	28-SOIC	37.50	30.00	23.10
IR6210-ND	High Side Driver	TO-220-5	4.98	3.98	3.06
IR6210S-ND	High Side Driver	TO-220-5	5.23	4.18	3.22
IR6216-ND	High Side Driver	TO-220-5	4.98	3.98	3.06
IR6220S-ND	High Side Driver	TO-220-5	5.75	4.60	3.54
IR6220STRL-ND	High Side Driver	TO-220-5	2538.40/800		
IR21064-ND	High and Low Side Driver	14-Dip	3.38	2.70	2.08
IR21064S-ND	High and Low Side Driver	14-SOIC	3.43	2.74	2.11
IR21074-ND	High and Low Side Driver	14-Dip	3.45	2.76	2.13
IR21074S-ND	High and Low Side Driver	14-SOIC	3.43	2.74	2.11
IR21084-ND	High and Low Side Driver	14-Dip	3.38	2.70	2.08
IR21084S-ND	High and Low Side Driver	14-SOIC	3.43	2.74	2.11
IR21094-ND	Half-Bridge Driver	14-Dip	3.45	2.76	2.13
IR21094S-ND	Half-Bridge Driver	14-SOIC	3.43	2.74	2.11
IR21362-ND	3-Phase Bridge Driver	28-Dip	8.50	6.80	5.24
IR21362J-ND	3-Phase Bridge Driver	44-PLCC	8.75	7.00	5.39
IR21362S-ND	3-Phase Bridge Driver	28-SOIC	8.50	6.80	5.24
IR21531-ND	Half-Bridge Driver	8-Dip	3.13	2.50	1.93
IR21531S-ND	Half-Bridge Driver	8-SOIC	3.18	2.54	1.96
IR21571-ND	Ballast Control	16-Dip	4.50	3.60	2.77
IR21571S-ND	Ballast Control	16-SOIC	4.75	3.80	2.93
IRSF3011-ND	Low Side Driver	TO-220AB	4.38	3.50	2.70
IRSF3011L-ND	Low Side Driver	SOT-223	3.50	2.80	2.16
IRSF3021-ND	Low Side Driver	TO-220AB	4.13	3.30	2.54
IRSF3031-ND	Low Side Driver	TO-220AB	4.13	3.30	2.54

Switching ICs

Digi-Key Part No.	Description	Pkg.	1	25	100
IPS021-ND	Fully Protected Power MOSFET Switch	TO-220AB	2.20	1.76	1.27
IPS021L-ND	Fully Protected Power MOSFET Switch	SOT-223	1.43	1.20	.92
IPS021S-ND	Fully Protected Power MOSFET Switch	SMD-220	2.40	1.92	1.38
IPS022G-ND	Dual Fully Protected Power MOSFET Switch	8-SOIC	2.93	2.34	1.68
IPS022GTR-ND	Dual Fully Protected Power MOSFET Switch	8-SOIC	4050.00/2,500		
IPS031-ND	Fully Protected Power MOSFET Switch	TO-220	3.04	2.55	1.96
IPS041L-ND	Fully Protected Power MOSFET Switch	SOT-223	1.28	1.02	.74
IPS042G-ND	Dual Fully Protected Power MOSFET Switch	8-SOIC	2.55	2.04	1.47
IPS511-ND	Fully Protected High-Side Power MOSFET Switch	TO-220-5	3.00	2.40	1.73
IPS511G-ND	Fully Protected High-Side Power MOSFET Switch	8-SOIC	2.15	1.80	1.38
IPS511GTR-ND	Fully Protected High-Side Power MOSFET Switch	8-SOIC	3342.50/2,500		
IPS511S-ND	Fully Protected High-Side Power MOSFET Switch	SMD-220-5	3.20	2.56	1.84
IPS521-ND	Fully Protected High-Side Power MOSFET Switch	TO-220	3.75	3.15	2.42
IPS0151-ND	Fully Protected Power MOSFET Switch	TO-220AB	4.20	3.36	2.42
IPS5451-ND	Fully Protected High-Side Power MOSFET Switch	TO-220-5	5.00	4.00	2.88

International IOR Rectifier

NEW! LDO REGULATORS/ SWITCHING CONTROLLERS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
IRU431-L3TR-ND	Adjustable Low Voltage Precision Shunt LDO Reg. *NEW!*	SOT-23-3	771.00/3,000		
IRU431-L5TR-ND	Adjustable Low Voltage Precision Shunt LDO Reg. *NEW!*	SOT-23-5	771.00/3,000		
IRU1010-CD-ND	1.0 Amp, Adjustable LDO Regulator *NEW!*	D-PAK	.78	.69	.62
IRU1010-CP-ND	1.0 Amp, Adjustable LDO Regulator *NEW!*	2-Pin Power Flex	.68	.61	.51
IRU1010-CS-ND	1.0 Amp, Adjustable LDO Regulator *NEW!*	8-SOIC	.63	.56	.50
IRU1010-CY-ND	1.0 Amp, Adjustable LDO Regulator *NEW!*	SOT-223	.63	.56	.50
IRU1010-18CD-ND	1.8 Volt, 1.0 Amp LDO Regulator *NEW!*	D-PAK	.78	.69	.60
IRU1010-18CP-ND	1.8 Volt, 1.0 Amp LDO Regulator *NEW!*	2-Pin Power Flex	.68	.61	.51
IRU1010-18CS-ND	1.8 Volt, 1.0 Amp LDO Regulator *NEW!*	8-SOIC	.63	.56	.48
IRU1010-18CY-ND	1.8 Volt, 1.0 Amp LDO Regulator *NEW!*	SOT-223	.63	.56	.48
IRU1010-25CD-ND	2.5 Volt, 1.0 Amp LDO Regulator *NEW!*	D-PAK	.78	.69	.60
IRU1010-25CP-ND	2.5 Volt, 1.0 Amp LDO Regulator *NEW!*	2-Pin Power Flex	.68	.61	.51
IRU1010-25CS-ND	2.5 Volt, 1.0 Amp LDO Regulator *NEW!*	8-SOIC	.63	.56	.48
IRU1010-25CY-ND	2.5 Volt, 1.0 Amp LDO Regulator *NEW!*	SOT-223	.63	.56	.48
IRU1010-33CD-ND	3.3 Volt, 1.0 Amp LDO Regulator *NEW!*	D-PAK	.78	.69	.60
IRU1010-33CP-ND	3.3 Volt, 1.0 Amp LDO Regulator *NEW!*	2-Pin Power Flex	.68	.61	.51
IRU1010-33CS-ND	3.3 Volt, 1.0 Amp LDO Regulator *NEW!*	8-SOIC	.63	.56	.48
IRU1010-33CY-ND	3.3 Volt, 1.0 Amp LDO Regulator *NEW!*	SOT-223	.63	.56	.48
IRU1015-CD-ND	1.5 Amp, Adjustable LDO Regulator *NEW!*	D-PAK	.88	.78	.67
IRU1015-CM-ND	1.5 Amp, Adjustable LDO Regulator *NEW!*	TO-263-3	1.05	.94	.84

(Continued)

★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

International IOR Rectifier — *NEW!* LDO REGULATORS/SWITCHING CONTROLLERS *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
IRU1015-CT-ND	1.5 Amp, Adjustable LDO Regulator *NEW!*	TO-220	.88	.78	.67
IRU1015-33CD-ND	3.3 Volt, 1.5 Amp LDO Regulator *NEW!*	D-PAK	.88	.78	.67
IRU1015-33CM-ND	3.3 Volt, 1.5 Amp LDO Regulator *NEW!*	TO-263-3	1.05	.94	.81
IRU1015-33CP-ND	3.3 Volt, 1.5 Amp LDO Regulator *NEW!*	Ultra Thin-PAK	.88	.78	.67
IRU1015-33CT-ND	3.3 Volt, 1.5 Amp LDO Regulator *NEW!*	TO-220	.88	.78	.67
IRU1030-CD-ND	3.0 Amp, Adjustable Regulator *NEW!*	D-PAK	1.00	.89	.76
IRU1030-CM-ND	3.0 Amp, Adjustable Regulator *NEW!*	TO-263-3	1.11	1.10	.89
IRU1030-CT-ND	3.0 Amp, Adjustable Regulator *NEW!*	TO-220	1.11	1.10	.89
IRU1030-33CD-ND	3.3 Volt, 3.0 Amp LDO Regulator *NEW!*	D-PAK	1.00	.89	.80
IRU1030-33CM-ND	3.3 Volt, 3.0 Amp LDO Regulator *NEW!*	TO-263-3	1.11	1.10	.89
IRU1030-33CP-ND	3.3 Volt, 3.0 Amp LDO Regulator *NEW!*	2-Pin Power Flex	.93	.83	.72
IRU1030-33CT-ND	3.3 Volt, 3.0 Amp LDO Regulator *NEW!*	TO-220	1.10	.98	.85
IRU1050-CD-ND	5.0 Amp, Adjustable Regulator *NEW!*	D-PAK	1.00	.89	.80
IRU1050-CM-ND	5.0 Amp, Adjustable Regulator *NEW!*	TO-263-3	1.16	1.15	.93
IRU1050-CP-ND	5.0 Amp, Adjustable Regulator *NEW!*	2-Pin Power Flex	1.00	.89	.80
IRU1050-CT-ND	5.0 Amp, Adjustable Regulator *NEW!*	TO-220	1.16	1.04	.93
IRU1050-33CD-ND	3.3 Volt, 5.0 Amp Low Dropout Regulator *NEW!*	D-PAK	1.00	.89	.76
IRU1050-33CM-ND	3.3 Volt, 5.0 Amp Low Dropout Regulator *NEW!*	TO-263-3	1.15	1.03	.88
IRU1050-33CP-ND	3.3 Volt, 5.0 Amp Low Dropout Regulator *NEW!*	2-Pin Power Flex	1.00	.89	.76
IRU1050-33CT-ND	3.3 Volt, 5.0 Amp Low Dropout Regulator *NEW!*	TO-220	1.15	1.03	.88
IRU1075-CM-ND	7.5 Amp, Adjustable Regulator *NEW!*	TO-263-3	2.55	2.30	2.05
IRU1075-CP-ND	7.5 Amp, Adjustable Regulator *NEW!*	3-Pin Power Flex	2.13	1.92	1.71
IRU1075-CT-ND	7.5 Amp, Adjustable Regulator *NEW!*	TO-220	2.55	2.30	2.05
IRU1150-CM-ND	4.0 Amp, Adjustable Very LDO Regulator *NEW!*	TO-263-5	1.48	1.32	1.18
IRU1150-CPTR-ND	4.0 Amp, Adjustable Very LDO Regulator *NEW!*	5-Pin Power Flex	546.75/750		
IRU1150-CSTR-ND	4.0 Amp, Adjustable Very Low Dropout Regulator *NEW!*	8-SOIC	1653.75/2,500		
IRU1160-CM-ND	6.0 Amp, Adjustable Regulator *NEW!*	TO-263-5	2.28	2.03	1.82
IRU1160-CPTR-ND	6.0 Amp, Adjustable Regulator *NEW!*	5-Pin Power Flex	780.00/750		
IRU1175-CM-ND	7.5 Amp, Adjustable Regulator *NEW!*	TO-263-5	2.55	2.27	2.05
IRU1175-CPTR-ND	7.5 Amp, Adjustable Regulator *NEW!*	5-Pin Power Flex	830.25/750		
IRU1175-CSTR-ND	7.5 Amp, Adjustable Regulator *NEW!*	8-SOIC	719.25/750		
IRU1176-CM-ND	7.5 Amp, Adjustable Ultra Low Dropout Regulator *NEW!*	TO-263-5	3.13	2.79	2.50
IRU1176-CPTR-ND	7.5 Amp, Adjustable Ultra LDO Regulator *NEW!*	5-Pin Power Flex	3201.00/3,000		
IRU1205-CLTR-ND	0.3 Amp, Adjustable Very Low Dropout Regulator *NEW!*	SOT-23-5	1377.00/3,000		
IRU1205-25CLTR-ND	2.5 Volt, 0.3 Amp Very Low Dropout Regulator *NEW!*	SOT-23-5	1377.00/3,000		
IRU1205-30CLTR-ND	3.0 Volt, 0.3 Amp Very Low Dropout Regulator *NEW!*	SOT-23-5	1377.00/3,000		
IRU1205-33CLTR-ND	3.3 Volt, 0.3 Amp Very Low Dropout Regulator *NEW!*	SOT-23-5	1377.00/3,000		
IRU1205-36CLTR-ND	3.6 Volt, 0.3 Amp Very Low Dropout Regulator *NEW!*	SOT-23-5	1377.00/3,000		
IRU1206-18CD-ND	1.8 Volt, 1.0 Amp Very Low Dropout Regulator *NEW!*	D-PAK	1.30	1.16	.96
IRU1206-18CY-ND	1.8 Volt, 1.0 Amp Very Low Dropout Regulator *NEW!*	SOT-223	1.30	1.16	.96
IRU1206-25CD-ND	2.5 Volt, 1.0 Amp Very Low Dropout Regulator *NEW!*	D-PAK	1.30	1.16	.96
IRU1206-25CY-ND	2.5 Volt, 1.0 Amp Very Low Dropout Regulator *NEW!*	SOT-223	1.30	1.16	.96
IRU1206-33CD-ND	3.3 Volt, 1.0 Amp Very Low Dropout Regulator *NEW!*	D-PAK	1.30	1.16	.96
IRU1206-33CY-ND	3.3 Volt, 1.0 Amp Very Low Dropout Regulator *NEW!*	SOT-223	1.30	1.16	.96
IRU1207-18CS-ND	1.8 Volt, 1.0 Amp Very Low Dropout Regulator *NEW!*	8-SOIC	1.30	1.16	.96
IRU1207-25CS-ND	2.5 Volt, 1.0 Amp Very Low Dropout Regulator *NEW!*	8-SOIC	1.30	1.16	.96
IRU1207-33CS-ND	3.3 Volt, 1.0 Amp Very Low Dropout Regulator *NEW!*	8-SOIC	1.30	1.16	.96
IRU1208-CS-ND	1.0 Amp Adjustable Very Low Dropout Regulator *NEW!*	8-SOIC	1.20	1.07	.88
IRU1209-CS-ND	1.0 Amp Adjustable Very Low Dropout Regulator *NEW!*	8-SOIC	1.20	1.07	.88
IRU1260-CM-ND	Dual Adjustable 6 Amp/1 Amp LDO Regulator *NEW!*	TO-263-7	2.73	2.43	2.02
IRU1260-CPTR-ND	Dual Adjustable 6 Amp/1 Amp LDO Reg. *NEW!*	7-Pin Power Flex	2592.00/2,000		
IRU1261-CM-ND	Dual Low Dropout Regulator 1.5 Volt/6 Amp and 2.5 Volt/1 Amp *NEW!*	TO-263-5	2.73	2.43	2.02
IRU1261-CPTR-ND	Dual Low Dropout Regulator 1.5 Volt/6 Amp and 2.5 Volt/1 Amp *NEW!*	Ultra Thin-PAK-5	2592.00/2,000		
IRU3004-CW-ND	5-Bit Programmable Synch. Buck Controller with Dual LDO Controller *NEW!*	20-SOIC(W)	3.25	2.90	2.41
IRU3007-CW-ND	5-Bit Programmable Synch. Buck Controller with Dual LDO Controller *NEW!*	28-SOIC(W)	4.60	4.10	3.41
IRU3010-CW-ND	5-Bit Programmable Synch. Buck Controller *NEW!*	20-SOIC(W)	3.25	2.90	2.41
IRU3011-CW-ND	5-Bit Programmable Synch. Buck Controller *NEW!*	20-SOIC(W)	3.25	2.90	2.41
IRU3012-CW-ND	5-Bit Programmable Synch. Buck Controller *NEW!*	20-SOIC(W)	3.25	2.90	2.41
IRU3018-CW-ND	5-Bit Programmable Synch. Buck Controller with Dual LDO Controller *NEW!*	24-SOIC(W)	4.33	3.85	3.21
IRU3021M-CW-ND	5-Bit Programmable Synch. Buck Controller with Triple LDO Controller *NEW!*	28-SOIC(W)	3.08	2.74	2.28
IRU3027-CW-ND	5-Bit Programmable Synch. Buck Controller with Triple LDO Controller *NEW!*	28-SOIC(W)	3.08	2.74	2.28
IRU3033-CS-ND	Pulse Width Modulation Switcher & Linear Controller *NEW!*	8-SOIC	1.55	1.38	1.15
IRU3034-CS-ND	PWM Switcher/Controller w/Short Circuit Protection *NEW!*	8-SOIC	1.55	1.38	1.15

TOSHIBA — 4-CHANNEL DARLINGTON SINK DRIVERS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TD62064AF-ND	TTL, 5V, CMOS Input - 1.5A @ 50V, Vce Output	HSOP-16	1.40	1.12	.84
TD62064AP-ND	TTL, 5V, CMOS Input - 1.5A @ 50V, Vce Output	16-Dip	1.20	1.00	.80
TD62064BF-ND	TTL, 5V, CMOS Input - 1.5A @ 80V, Vce Output	HSOP-16	1.40	1.12	.84
TD62064BP-1-ND	TTL, 5V, CMOS Input - 1.5A @ 80V, Vce Output	16-Dip	1.20	1.00	.80

TOSHIBA — 7-CHANNEL DARLINGTON SINK DRIVERS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TD62001AF-ND	General Purpose Input - 0.5A @ 50V, Vce Output	SOP-16	.72	.54	.41
TD62001AP-ND	General Purpose Input - 0.5A @ 50V, Vce Output	16-Dip	.64	.48	.36
TD62002AF-ND	14-25V, PMOS Input - 0.5A @ 50V, Vce Output	SOP-16	.72	.54	.41
TD62002AP-ND	14-25V, PMOS Input - 0.5A @ 50V, Vce Output	16-Dip	.64	.48	.36
TD62003AF-ND	TTL, 5V, CMOS Input - 0.5A @ 50V, Vce Output	SOP-16	.64	.48	.36
TD62003AP-ND	TTL, 5V, CMOS Input - 0.5A @ 50V, Vce Output	16-Dip	.56	.42	.32
TD62004AF-ND	6-15V, PMOS Input - 0.5A @ 50V, Vce Output	SOP-16	.64	.48	.36
TD62004AP-ND	6-15V, PMOS Input - 0.5A @ 50V, Vce Output	16-Dip	.56	.42	.32

TOSHIBA — 8-CHANNEL DARLINGTON SINK DRIVERS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TD62081AF-ND	General Purpose Input, 0.5A @ 50V, Vce Output	SOP-18	.88	.66	.50
TD62081AP-ND	General Purpose Input, 0.5A @ 50V, Vce Output	18-Dip	.76	.57	.43
TD62082AF-ND	14-25V, PMOS Input, 0.5A @ 50V, Vce Output	SOP-18	.88	.66	.50
TD62082AP-ND	14-25V, PMOS Input, 0.5A @ 50V, Vce Output	18-Dip	.76	.57	.43
TD62083AF-ND	TTL, 5V, CMOS Input, 0.5A @ 50V, Vce Output	SOP-18	.84	.63	.48
TD62083AFN-ND	TTL, 5V, CMOS Input, 0.5A @ 50V, Vce Output	SSOP-18	.87	.73	.58
TD62083AP-ND	TTL, 5V, CMOS Input, 0.5A @ 50V, Vce Output	18-Dip	.72	.54	.41
TD62084AF-ND	6-15V, PMOS Input, 0.5A @ 50V, Vce Output	SOP-18	.84	.63	.48
TD62084AFN-ND	6-15V, PMOS Input, 0.5A @ 50V, Vce Output	SSOP-18	.90	.75	.60
TD62084AP-ND	6-15V, PMOS Input, 0.5A @ 50V, Vce Output	18-Dip	.76	.57	.43

TOSHIBA — 8-CHANNEL DARLINGTON SOURCE DRIVERS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TD62783AF-ND	TTL, 5V, CMOS Input - 0.5A @ 50V, Vce Output	SOP-18	1.43	1.14	.86
TD62783AFN-ND	TTL, 5V, CMOS Input - 0.5A @ 50V, Vce Output	SSOP-18	1.75	1.40	1.05
TD62783AP-ND	TTL, 5V, CMOS Input - 0.5A @ 50V, Vce Output	18-Dip	1.23	.98	.74
TD62784AF-ND	6-15V, PMOS, CMOS Input, 0.5A @ 50V, Vce Output	SOP-18	1.43	1.14	.86
TD62784AFN-ND	6-15V, PMOS, CMOS Input, 0.5A @ 50V, Vce Output	SSOP-18	1.75	1.40	1.05
TD62784AP-ND	6-15V, PMOS, CMOS Input, 0.5A @ 50V, Vce Output	18-Dip	1.23	.98	.74

MICROCHIP — THERMAL MANAGEMENT

Voltage Output Temperature Sensors

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC1023VOA	158-1013-ND	Temp. Sensor -40°C to 100°C (.25V, @ 25°C)	8-SOIC	1.35	1.17	1.05
TC1023VUA	158-1011-ND	Temp. Sensor -40°C to 100°C (.25V, @ 25°C)	8-MSOP	1.42	1.23	1.11

Surface Mount Product in Cut Tape

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Cut Tape Price Each★ 1	25	100
TC02VNB713	158-2001-1-ND	Temp. Sensor -20°C to 125°C (.75V, @ 25°C)	SOT-23	1.35	1.17	1.05
TC1133VNB713	158-2004-1-ND	Temp. Sensor -20°C to 100°C (.25V, @ 25°C)	SOT-23	1.24	1.08	.97

Logic Output Temperature Sensors

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC620CCPA	158-1124-ND	Solid State Temp. Sensor (Non-Inverting)	8-Dip	4.05	3.51	3.15

Serial Temperature Sensors

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TCN75-3.3MUA	158-1003-ND	3.3V, 2-Wire Serial Temp. Sensor	8-MSOP	2.93	2.54	2.28
TCN75-5.0MOA	158-1010-ND	5.0V, 2-Wire Serial Temp. Sensor	8-SOIC	2.81	2.44	2.19
TCN75-5.0MUA	158-1005-ND	5.0V, 2-Wire Serial Temp. Sensor	8-MSOP	2.93	2.54	2.28

DC Brushless Motor Monitors

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC642VPA	158-1032-ND	PWM Fan Speed Controller w/Fault Detection	8-Dip	3.71	3.22	2.89

MICROCHIP — MIXED SIGNAL

System A/D Converters

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC500ACOE	158-1023-ND	Prec. Analog Front End, 17-Bit, Resolution	16-SOIC	9.65	8.37	7.51
TC7109ACPL	158-1130-ND	12-Bit, µP-Compatible A/D Converter	40-Dip	7.31	6.34	5.69

Display A/D Converters

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC7106ACPL	158-1126-ND	3-1/2 Digit A/D Converter for LCDs	40-Dip	4.12	3.57	3.21
TC7106CPL	158-1127-ND	3-1/2 Digit A/D Converter for LCDs	40-Dip	4.12	3.57	3.21
TC7107ACPL	158-1128-ND	3-1/2 Digit A/D Converter for LEDs, Electronically Improved	40-Dip	4.16	3.61	3.24
TC7107CPL	158-1129-ND	3-1/2 Digit A/D Converter for LEDs	40-Dip	4.01	3.48	3.12
TC7116ACPL	158-1131-ND	3-1/2 Digit A/D Converter with Hold (LCD)	40-Dip	5.60	4.86	4.36
TC7117ACPL	158-1132-ND	3-1/2 Digit A/D Converter with Hold (LED)	40-Dip	5.85	5.07	4.55
TC7117CPL	158-1057-ND	3-1/2 Digit LED A/D Converter with Hold	40-Dip	4.05	3.51	3.15
TC7135CPI	158-1133-ND	4-1/2 Digit A/D Converter	28-Dip	6.55	5.68	5.10

Chopper-Stabilized Operational Amplifiers

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC7650CPA	158-1135-ND	Chopper-Stabilized Operational Amplifier	8-Dip	2.90	2.52	2.26
TC7652CPA	158-1136-ND	Low Noise, Chopper-Stabilized Op Amp.	8-Dip	3.94	3.42	3.07
TC913BCPA	158-1020-ND	Dual Auto-Zeroed Op Amp	8-Dip	4.19	3.63	3.26

Voltage to Frequency & Frequency to Voltage Converters

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC9400CPD	158-1140-ND	Voltage to Frequency/Frequency to Voltage Converter, .05% Lin.	14-Dip	6.19	5.37	4.82
TC9402CPD	158-1142-ND	Voltage to Frequency/Frequency to Voltage Converter, .25% Lin.	14-Dip	2.93	2.54	2.28
TC9421CPD	158-1149-ND	High V. Auto Zero Chopper-Stabilized Op Amp	14-Dip	6.64	5.76	5.17

MICROCHIP — POWER MANAGEMENT

Charge Pump DC-to-DC Converters

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC962CPA	158-1143-ND	High Current DC/DC Converter, 80mA	8-Dip	4.05	3.51	3.15
TC1121COA	158-1071-ND	2.4V-5.5V, 100mA, DC/DC Converter with Shutdown	8-SOIC	1.78	1.55	1.39
TC1121CPA	158-1070-ND	2.4V-5.5V, 100mA, DC/DC Conv. w/Shutdown	8-Dip	1.82	1.58	1.42
TC1121EPA	158-1063-ND	2.4V-5.5V, 100mA, DC/DC Conv. w/Shutdown	8-Dip	1.94	1.68	1.51
TC7660COA	158-1069-ND	1.5V-10V, DC/DC Voltage Converter	8-SOIC	1.69	1.47	1.32
TC7660CPA	158-1137-ND	1.5V-10V, DC/DC Voltage Converter	8-Dip	1.58	1.37	1.23
TC7660SCOA	158-1067-ND	1.5V-12V, Super DC/DC Voltage Converter	8-SOIC	1.67	1.45	1.30
TC7662ACPA	158-1138-ND	3.0V-18V, DC/DC Converter	8-Dip	2.25	1.95	1.75
TC7662BCOA	158-1066-ND	1.5V-15V, DC/DC Voltage Converter	8-SOIC	1.40	1.21	1.09
TC7662BEOA	158-1060-ND	1.5V-15V, DC/DC Voltage Converter	8-SOIC	1.89	1.64	1.47

★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

MICROCHIP POWER MANAGEMENT *(Continued)*

Surface Mount Product in Cut Tape

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Cut Tape Price Each★		
				1	25	100
TC151B3027EOA713	158-2078-1-ND	3V, Step Up/Down DC/DC PWM Converter	SO-8	4.57	3.96	3.56
TC151B3329EOA713	158-2071-1-ND	3.3V, Step Up/Down DC/DC PWM Converter	SO-8	4.57	3.96	3.56
TC151B5045EOA713	158-2062-1-ND	5V, Step Up/Down DC/DC PWM Converter	SO-8	4.57	3.96	3.56
TC161B3027EOA713	158-2061-1-ND	3V, Step Up/Down DC/DC Converter	SO-8	4.57	3.96	3.56
TC161B3329EOA713	158-2060-1-ND	3.3V, Step Up/Down DC/DC Converter	SO-8	4.57	3.96	3.56
TC173B3000EMT713	158-2057-1-ND	3V, PWM Step Up Switching Regulator	SOT-89-5	3.29	2.85	2.56
TC173B5000EMT713	158-2056-1-ND	5V, PWM Step Up Switching Regulator	SOT-89-5	3.29	2.85	2.56
TC183B3000EMT	158-2055-1-ND	3V, PFM Step Up Switching Regulator	SOT-89-5	3.29	2.85	2.56
TCM829ECT713	158-2032-1-ND	1.5V-5.5V, Switched Cap Volt Converter	SOT-23-5	1.19	1.04	.93

Surface Mount Product on Tape & Reel

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Tape & Reel Pricing★ 3,000
TCM829ECT713	158-2032-2-ND	1.5V-5.5V, Switched Cap Volt Converter	SOT-23-5	689.00/M

Power MOSFET Drivers

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TC426CPA	158-1050-ND	1.5A High Speed Inverting Dual MOSFET Driver	8-Dip	1.69	1.47	1.32
TC427COA	158-1056-ND	1.5A High Speed Dual MOSFET Driver	8-SOIC	2.25	1.95	1.75
TC427CPA	158-1055-ND	1.5A High Speed Dual MOSFET Driver	8-Dip	1.69	1.47	1.32
TC428CPA	158-1051-ND	1.5A High Speed Complementary Dual MOSFET Driver	8-Dip	1.69	1.47	1.32
TC429CPA	158-1105-ND	Fast CMOS Power MOSFET Driver	8-Dip	2.70	2.34	2.10
TC1426COA	158-1048-ND	1.2A Inverting Dual MOSFET Driver	8-SOIC	1.58	1.37	1.23
TC1426CPA	158-1044-ND	1.2A Inverting Dual MOSFET Driver	8-Dip	1.46	1.27	1.14
TC1427COA	158-1045-ND	1.2A Non-Inverting Dual MOSFET Driver	8-SOIC	1.58	1.37	1.23
TC1427CPA	158-1046-ND	1.2A Non-Inverting Dual MOSFET Driver	8-Dip	1.46	1.27	1.14
TC1428COA	158-1047-ND	1.2A Complementary Dual MOSFET Driver	8-SOIC	1.58	1.37	1.23
TC4420COA	158-1053-ND	6A High Speed Single Output MOSFET Driver	8-SOIC	3.04	2.64	2.37
TC4420CPA	158-1043-ND	6A High Speed Single Output MOSFET Driver	8-Dip	2.48	2.15	1.93
TC4420EPA	158-1037-ND	6A High Speed Single Output MOSFET Driver	8-Dip	3.26	2.83	2.54
TC4421CPA	158-1107-ND	9A Peak FET Driver with Inverted Output	8-Dip	5.06	4.39	3.94
TC4422CPA	158-1108-ND	9A Peak FET Driver with Non-Inverted Output	8-Dip	5.06	4.39	3.94
TC4423CPA	158-1039-ND	3A High-Speed Inverting Dual MOSFET Driver	8-Dip	4.05	3.51	3.15
TC4424CPA	158-1038-ND	3A Hi-Speed Non-Inverting Dual MOSFET Driver	8-Dip	4.05	3.51	3.15
TC4426COA	158-1033-ND	1.5A Hi-Speed Inverting Dual MOSFET Driver	8-SOIC	2.25	1.95	1.75
TC4426CPA	158-1109-ND	1.5A Peak Dual FET Driver w/Inverted Output	8-Dip	1.73	1.51	1.35
TC4427COA	158-1036-ND	1.5A High-Speed Non-Inverting Dual MOSFET Driver	8-SOIC	2.25	1.95	1.75
TC4427CPA	158-1110-ND	1.5A Peak Dual FET Driver with Non-Inverting Output	8-Dip	1.73	1.51	1.35
TC4427EPA	158-1025-ND	1.5A High-Speed Non-Inverting Dual MOSFET Driver	8-Dip	2.03	1.76	1.58
TC4428COA	158-1029-ND	1.5A High Speed Complementary Dual MOSFET Driver	8-SOIC	2.25	1.95	1.75
TC4428CPA	158-1111-ND	1.5A Peak Dual FET Driver with Complementary Output	8-Dip	1.73	1.51	1.35
TC4428EOA	158-1026-ND	1.5A High Speed Complementary Dual MOSFET Driver	8-SOIC	2.86	2.48	2.23
TC4429CPA	158-1027-ND	6A High Speed Invert MOSFET Driver	8-Dip	2.63	2.29	2.05
TC4467CPD	158-1118-ND	Quad CMOS Logic Driver, NAND Gate, Sourced & Sinked Output	14-Dip	4.16	3.61	3.24
TC4468CPD	158-1119-ND	Quad CMOS Logic Driver, AND Gate, Sourced & Sinked Output	14-Dip	4.16	3.61	3.24
TC4469CPD	158-1120-ND	Quad CMOS Logic Driver, AND/Inverter Gate, Sourced & Sinked Output	14-Dip	4.16	3.61	3.24
TC4489CPD	158-1123-ND	Quad CMOS Logic Driver, AND/Inverter Gate, Sourced Output	14-Dip	4.16	3.61	3.24

Pulse Width Modulators

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
TC38C47CPE	158-1098-ND	PWM CMOS Current Mode, Inverting	16-Dip	5.40	4.68	4.20

Voltage Regulators

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
TC46LR3003EZB	158-1082-ND	3V, 35mA, LDO Volt. Regulator	TO-92	1.10	.96	.86

Surface Mount Product in Cut Tape

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Cut Tape Price Each★		
				1	25	100
TC46LR3003ECT713	158-2064-1-ND	3V, 35mA, LDO Volt. Reg.	SOT-23-5	1.40	1.21	1.09
TC46LR3303ECT713	158-2073-1-ND	3.3V, 35mA, LDO Volt. Reg.	SOT-23-5	1.40	1.21	1.09
TC47BR3003ECT713	158-2072-1-ND	3V, Volt. Reg. Controller	SOT-23-5	1.08	.94	.84
TC47BR3303ECT713	158-2067-1-ND	3.3V, Volt. Reg. Controller	SOT-23-5	1.08	.94	.84
TC47BR5003ECT	158-2050-1-ND	5V, Volt. Reg. Controller	SOT-23-5	1.08	.94	.84
TC55RP3002ECB713	158-2043-1-ND	3V, 250mA max., LDO Volt. Reg.	SOT-23	.90	.78	.70
TC55RP3302ECB713	158-2044-1-ND	3.3V, 250mA max., LDO Volt. Reg.	SOT-23	.90	.78	.70
TC55RP3302EMB713	158-2041-1-ND	3.3V, 250mA max., LDO Volt. Reg.	SOT-89	.90	.78	.70
TC55RP5002ECB713	158-2039-1-ND	5V, 250mA, max., LDO Volt. Reg.	SOT-23	.90	.78	.70
TC55RP5002EMB713	158-2040-1-ND	5V, 250mA, max., LDO Volt. Reg.	SOT-89	.90	.78	.70
TC1015-2.5VCT713	158-2005-1-ND	2.5V, LDO Reg. with Shutdown	SOT-23A-5	1.08	.94	.84
TC1015-2.7VCT713	158-2006-1-ND	2.7V, LDO Reg. with Shutdown	SOT-23A-5	1.08	.94	.84
TC1015-3.0VCT713	158-2007-1-ND	3.0V, LDO Reg. with Shutdown	SOT-23A-5	1.08	.94	.84
TC1015-5.0VCT713	158-2009-1-ND	5.0V, LDO Reg. with Shutdown	SOT-23A-5	1.08	.94	.84
TC1055-2.5VCT713	158-2010-1-ND	2.5V, LDO Reg. w/SD & Error Output	SOT-23A-5	1.08	.94	.84
TC1055-2.7VCT713	158-2011-1-ND	2.7V, LDO Reg. w/SD & Error Output	SOT-23A-5	1.08	.94	.84
TC1055-3.0VCT713	158-2012-1-ND	3.0V, LDO Reg. w/SD & Error Output	SOT-23A-5	1.08	.94	.84
TC1055-3.3VCT713	158-2013-1-ND	3.3V, LDO Reg. w/SD & Error Output	SOT-23A-5	1.08	.94	.84
TC1055-5.0VCT713	158-2014-1-ND	5.0V, LDO Reg. w/SD & Error Output	SOT-23A-5	1.08	.94	.84
TC1071VCT713	158-2015-1-ND	Adj. LDO Reg. with Shutdown	SOT-23A-5	1.08	.94	.84
TC1073-2.5VCH713	158-2016-1-ND	2.5V, LDO Reg. w/SD, Error and Bypass	SOT-23A-6	1.13	.98	.88
TC1073-2.7VCH713	158-2017-1-ND	2.7V, LDO Reg. w/SD, Error and Bypass	SOT-23A-6	1.13	.98	.88
TC1073-3.0VCH713	158-2018-1-ND	3.0V, LDO Reg. w/SD, Error and Bypass	SOT-23A-6	1.13	.98	.88
TC1073-3.3VCH713	158-2019-1-ND	3.3V, LDO Reg. w/SD, Error and Bypass	SOT-23A-6	1.13	.98	.88
TC1073-5.0VCH713	158-2020-1-ND	5.0V, LDO Reg. w/SD, Error and Bypass	SOT-23A-6	1.13	.98	.88

Surface Mount Product on Tape & Reel

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Tape & Reel Pricing★ 3,000
TC55RP3002ECB713	158-2043-2-ND	3V, 250mA max., Low Dropout Volt. Reg.	SOT-23	520.00/M
TC55RP3302ECB713	158-2044-2-ND	3V, 250mA max., Low Dropout Volt. Reg.	SOT-23	520.00/M
TC55RP3302EMB713	158-2041-2-ND	3V, 250mA max., Low Dropout Volt. Reg.	SOT-89	520.00†
TC55RP5002ECB713	158-2039-2-ND	3V, 250mA max., Low Dropout Volt. Reg.	SOT-23	520.00/M
TC55RP5002EMB713	158-2040-2-ND	3V, 250mA max., Low Dropout Volt. Reg.	SOT-89	520.00†
TC1015-2.5VCT713	158-2005-2-ND	2.5V, LDO Reg. with Shutdown	SOT-23A-5	624.00/M
TC1015-3.0VCT713	158-2007-2-ND	3.0V, LDO Reg. with Shutdown	SOT-23A-5	624.00/M
TC1055-2.5VCT713	158-2010-2-ND	2.5V, LDO Reg. w/SD & Error Output	SOT-23A-5	624.00/M
TC1055-2.7VCT713	158-2011-2-ND	2.7V, LDO Reg. w/SD & Error Output	SOT-23A-5	624.00/M
TC1055-3.0VCT713	158-2012-2-ND	3.0V, LDO Reg. w/SD & Error Output	SOT-23A-5	624.00/M
TC1055-3.3VCT713	158-2013-2-ND	3.3V, LDO Reg. w/SD & Error Output	SOT-23A-5	624.00/M
TC1055-5.0VCT713	158-2014-2-ND	5.0V, LDO Reg. w/SD & Error Output	SOT-23A-5	624.00/M
TC1071VCT713	158-2015-2-ND	Adj. LDO Reg. with Shutdown	SOT-23A-5	624.00/M
TC1073-2.5VCH713	158-2016-2-ND	2.5V, LDO Reg. w/SD, Error and Bypass	SOT-23A-6	650.00/M
TC1073-3.0VCH713	158-2018-2-ND	3.0V, LDO Reg. w/SD, Error and Bypass	SOT-23A-6	650.00/M
TC1073-3.3VCH713	158-2019-2-ND	3.3V, LDO Reg. w/SD, Error and Bypass	SOT-23A-6	650.00/M
TC1073-5.0VCH713	158-2020-2-ND	5.0V, LDO Reg. w/SD, Error and Bypass	SOT-23A-6	650.00/M

† Tape and Reel pricing is priced per 1,000

MICROCHIP SYSTEM MANAGEMENT

CPU / System Supervisors

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TC1232COA	158-1041-ND	4.5-4.75V, Adj Microprocessor Monitor	8-SOIC	1.94	1.68	1.51
TC1232CPA	158-1042-ND	4.5-4.75V, Adj Microprocessor Monitor	8-Dip	1.87	1.62	1.46

Surface Mount Product in Cut Tape

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Cut Tape Price Each★		
				1	25	100
TCM809LENB713	158-2021-1-ND	4.63V, µP Reset Monitor, Active Low Output	SOT-23	1.01	.88	.79
TCM809MENB713	158-2022-1-ND	4.38V, µP Reset Monitor, Active Low Output	SOT-23	1.01	.88	.79
TCM809RENB713	158-2023-1-ND	2.63V, µP Reset Monitor, Active Low Output	SOT-23	1.01	.88	.79
TCM810LENB713	158-2026-1-ND	4.63V, µP Reset Monitor, Active High Output	SOT-23	1.01	.88	.79
TCM810MENB713	158-2027-1-ND	4.38V, µP Reset Monitor, Active High Output	SOT-23	1.01	.88	.79
TCM810RENB713	158-2028-1-ND	2.63V, µP Reset Monitor, Active High Output	SOT-23	1.01	.88	.79
TCM810SENB713	158-2029-1-ND	2.93V, µP Reset Monitor, Active High Output	SOT-23	1.01	.88	.79
TCM810TENB713	158-2030-1-ND	3.08V, µP Reset Monitor, Active High Output	SOT-23	1.01	.88	.79

Surface Mount Product on Tape & Reel

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Tape & Reel Pricing★ 3,000
TCM809LENB713	158-2021-2-ND	4.63V, µP Reset Monitor, Active Low Output	SOT-23	585.00/M
TCM809MENB713	158-2022-2-ND	4.38V, µP Reset Monitor, Active Low Output	SOT-23	585.00/M
TCM809RENB713	158-2023-2-ND	2.63V, µP Reset Monitor, Active Low Output	SOT-23	585.00/M
TCM810LENB713	158-2026-2-ND	4.63V, µP Reset Monitor, Active Low Output	SOT-23	585.00/M
TCM810MENB713	158-2027-2-ND	4.38V, µP Reset Monitor, Active High Output	SOT-23	585.00/M
TCM810RENB713	158-2028-2-ND	2.63V, µP Reset Monitor, Active High Output	SOT-23	585.00/M
TCM810SENB713	158-2029-2-ND	2.93V, µP Reset Monitor, Active High Output	SOT-23	585.00/M
TCM810TENB713	158-2030-2-ND	3.08V, µP Reset Monitor, Active High Output	SOT-23	585.00/M

Voltage Detectors

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TC44VC2703EZB	158-1084-ND	2.7V, Voltage Detector CMOS Output	TO-92	1.19	1.04	.93

Surface Mount Product in Cut Tape

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Cut Tape Price Each★		
				1	25	100
TC54VC2702ECB713	158-2070-1-ND	2.7V, Voltage Detector CMOS Output	SOT-23	.77	.67	.60
TC54VC2902ECB713	158-2069-1-ND	2.9V, Voltage Detector CMOS Output	SOT-23	.77	.67	.60
TC54VC4302ECB713	158-2068-1-ND	4.3V, Voltage Detector CMOS Output	SOT-23	.77	.67	.60
TC54VC4302EMB713	158-2049-1-ND	4.3V, Voltage Detector CMOS Output	SOT-89	.77	.67	.60
TC54VC4502ECB713	158-2066-1-ND	4.5V, Voltage Detector CMOS Output	SOT-23	.77	.67	.60
TC54VC4502EMB713	158-2034-1-ND	4.5V, Voltage Detector CMOS Output	SOT-89	.77	.67	.60
TC54VN2702ECB713	158-2035-1-ND	2.7V, Voltage Detector N-Chan, Open Drain	SOT-23	.77	.67	.60
TC54VN2902ECB713	158-2036-1-ND	2.9V, Voltage Detector N-Chan, Open Drain	SOT-23	.77	.67	.60
TC54VN2902EMB713	158-2048-1-ND	2.9V, Voltage Detector N-Chan, Open Drain	SOT-89	.77	.67	.60
TC54VN4302ECB713	158-2033-1-ND	4.3V, Voltage Detector N-Chan, Open Drain	SOT-23	.77	.67	.60
TC54VN4502ECB713	158-2038-1-ND	4.5V, Voltage Detector N-Chan, Open Drain	SOT-23	.77	.67	.60
TC54VN4502EMB713	158-2037-1-ND	4.5V, Voltage Detector N-Chan, Open Drain	SOT-89	.77	.67	.60

Surface Mount Product on Tape & Reel

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Tape & Reel Pricing★ 3,000
TC54VC2702ECB713	158-2070-2-ND	2.7V, Voltage Detector CMOS Output	SOT-23	442.00/M
TC54VC2902ECB713	158-2069-2-ND	2.9V, Voltage Detector CMOS Output	SOT-23	442.00/M
TC54VC4302ECB713	158-2068-2-ND	4.3V, Voltage Detector CMOS Output	SOT-23	442.00/M
TC54VC4302EMB713	158-2049-2-ND	4.3V, Voltage Detector CMOS Output	SOT-89	442.00†
TC54VC4502ECB713	158-2066-2-ND	4.5V, Voltage Detector CMOS Output	SOT-23	442.00/M
TC54VN2702ECB713	158-2035-2-ND	2.7V, Voltage Detector N-Chan, Open Drain	SOT-23	442.00/M
TC54VN2902ECB713	158-2036-2-ND	2.9V, Voltage Detector N-Chan, Open Drain	SOT-23	442.00/M
TC54VN4302ECB713	158-2033-2-ND	4.3V, Voltage Detector N-Chan, Open Drain	SOT-23	442.00/M
TC54VN4502ECB713	158-2038-2-ND	4.5V, Voltage Detector N-Chan, Open Drain	SOT-23	442.00/M
TC54VN4502EMB713	158-2037-2-ND	1.5V, Voltage Detector N-Chan, Open Drain	SOT-89	442.00†

† Tape and Reel pricing is priced per 1,000.

MICROCHIP INTERFACE

Data Communications

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TC232COE	158-1049-ND	Dual RS232 Transceiver/Receiver	(wide) 16-SOIC	2.81	2.44	2.19
TC232CPE	158-1144-ND	+5V, Powered, Dual RS232 Trans./Receiver	16-Dip	2.25	1.95	1.75

Digi-Key			Price Each★		
Part No.	Description	Pkg.	1	25	100
DG201ACJ-ND	Quad SPST CMOS Normally Closed Analog Switch	16-Dip	4.85	3.66	2.62
DG211CJ-ND	Quad SPST CMOS Normally Closed Analog Switch	16-Dip	3.45	2.60	1.85
DG211CSE-ND	Quad SPST CMOS Normally Closed Analog Switch	SO-16	2.76	2.08	1.61
DG212CJ-ND	Quad SPST CMOS Normally Open Analog Switch	16-Dip	3.45	2.60	1.85
DG418DY-ND	Precision CMOS Analog Switch	SO-8	3.26	2.46	1.75
DG508ACJ-ND	Monolithic CMOS Analog 1-to-8 Multiplexer	16-Dip	5.70	4.30	3.06
DG509ACJ-ND	Monolithic CMOS Analog 2-to-8 Multiplexer	16-Dip	5.70	4.30	3.06
HI3-0201-5-ND	Quad SPST CMOS Analog Switch	16-Dip	4.98	3.76	2.50
HI3-0201HS-5-ND	High Speed Quad SPST CMOS Analog Switch	16-Dip	5.57	4.20	2.81
HI6-0201-5-ND	Quad SPST CMOS Analog Switch	SO-16	5.67	4.28	2.85
HI6-0201HS-5-ND	High Speed Quad SPST CMOS Analog Switch	SO-16	7.87	5.94	3.96
ICL7109CPL-ND	12-Bit ADC with Tri-State Binary Outputs	40-Dip	13.04	9.84	8.95
ICL7126CPL-ND	Low Power 3-1/2 Digit ADC with Direct Drive (LCD)	40-Dip	10.73	8.10	5.40
ICL7129ACPL-2-ND	4-1/2 Digit ADC Multiplexer Driver	40-Dip	15.53	11.72	7.81
ICL7660CSA-ND	CMOS Switch Capacitor Voltage Converter	SO-8	2.86	2.16	1.54
ICL7665ACPA-ND	Under/Over Volt Detector	8-Dip	4.93	3.72	2.66
ICL7665ACSA-ND	Under/Over Volt Detector	SO-8	5.43	4.10	2.93
ICM7218AIPI-ND	8-Digit Multiplexer LED Decoder/Driver	28-Dip	9.96	7.52	5.09
ICM7250IPE-ND	Programmable RC Timer	16-Dip	4.77	3.60	2.40
ICM7250IWE-ND	Programmable RC Timer	SO-16	5.25	3.96	2.64
ICMAX7555IPA-ND	CMOS General Purpose Timer	8-Dip	2.49	1.88	1.25
MAX038CPP-ND	IC 20MHz Function Generator	20-Dip	21.44	16.18	10.37
MAX110ACPE-ND	2-Channel ±14-Bit Serial ADC	16-Dip	15.18	11.46	7.34
MAX110ACWE-ND	2-Channel ±14-Bit Serial ADC	SO-16	15.18	11.46	7.34
MAX110BCPE-ND	2-Channel ±14-Bit Serial ADC	16-Dip	11.66	8.80	5.65
MAX110BCWE-ND	2-Channel ±14-Bit Serial ADC	SO-16	11.66	8.80	5.65
MAX117CPI-ND	3V 8-Channel 8-Bit Parallel Output ADC	28-Dip	9.17	6.92	4.44
MAX118CPI-ND	5V 8-Channel 8-Bit Parallel Output ADC	28-Dip	8.80	6.64	4.25
MAX120CNG-ND	500 KSPS, 12-Bit ADC with Track/Hold and Ref.	24-Dip	36.76	27.74	17.78
MAX120CWG-ND	12-Bit ADC with Track/Hold and Reference	SO-24	36.76	27.74	17.78
MAX121CPE-ND	308 KSPS A/D Conv w/DSP 78dB Interface and Serial A/D	16-Dip	29.18	22.02	14.12
MAX121CWE-ND	308 KSPS A/D Conv w/DSP 78dB Interface and Serial A/D	SO-16	29.18	22.02	14.12
MAX132CNG-ND	ADC with Serial Interface	24-Dip	18.36	13.86	8.89
MAX132CWG-ND	ADC with Serial Interface	SO-24	18.36	13.86	8.89
MAX133CQH-ND	3-3/4 Digit DMM Circuit	44-PLCC	24.65	18.60	11.92
MAX135CPI-ND	15-Bit Low Power ADC with Parallel Interface	28-Dip	18.36	13.86	8.89
MAX135CWI-ND	15-Bit Low Power ADC with Parallel Interface	SO-28	18.36	13.86	8.89
MAX138CPL-ND	3-1/2 Digit ADC with Bandgap Ref. and Chrg. Pump Volt Converter and LCD Driver	40-Dip	17.78	13.42	8.60
MAX139CPL-2-ND	3-1/2 Digit ADC with Bandgap Ref. and Chrg. Pump Volt Converter and LED Driver	40-Dip	15.71	11.86	7.61
MAX147BCAP-ND	2.7V Low Power 12-Bit 8-Channel Serial ADC	20-SSOP	15.37	11.60	7.44
MAX147BCPP-ND	2.7V Low Power 12-Bit 8-Channel Serial ADC	20-Dip	15.37	11.60	7.44
MAX148BCAP-ND	2.7V Low Power 10-Bit 8-Channel Serial ADC	20-SSOP	8.03	6.06	3.88
MAX148BCPP-ND	2.7V Low Power 10-Bit 8-Channel Serial ADC	20-Dip	8.03	6.06	3.88
MAX150BCPP-ND	CMOS 8-Bit ADC with VREF Track and Hold	20-Dip	20.56	15.52	9.95
MAX152CWP-ND	3V 8-Bit ADC 1µA Power Down	SO-20	9.99	7.54	4.83
MAX153CPP-ND	1MSPS, µP-Compatible, 8-Bit ADC with Power Down	20-Dip	15.24	11.50	7.37
MAX154ACNG-ND	4-Channel ADC with Track and Hold	24-Dip	29.87	22.54	14.46
MAX154ACWG-ND	4-Channel ADC with Track and Hold	SO-24	29.87	22.54	14.46
MAX154BCNG-ND	4-Channel ADC with Track and Hold	24-Dip	21.60	16.30	10.45
MAX154BCWG-ND	4-Channel ADC with Track and Hold	SO-24	21.60	16.30	10.45
MAX156ACWI-ND	High Speed 8-Bit ADC with 4-Channel Multiplexer	SO-28	20.75	15.66	10.03
MAX156BCNG-ND	High-Speed 8-Bit ADC with 4-Channel Multiplexer	24-Dip	17.28	13.04	8.36
MAX158ACPI-ND	8-Channel ADC with Track and Hold	28-Dip	30.90	23.32	14.95
MAX158ACWI-ND	8-Channel ADC with Track and Hold	SO-28	30.90	23.32	14.95
MAX158BCPI-ND	8-Channel ADC with Track and Hold	28-Dip	22.63	17.08	10.95
MAX158BCWI-ND	8-Channel ADC with Track and Hold	SO-28	22.63	17.08	10.95
MAX160CPN-ND	CMOS µP Compatible 4µS 8-Bit A/D Converter	18-Dip	18.60	14.04	9.00
MAX160CWN-ND	CMOS uP Compatible 4µS 8-Bit A/D Converter	SO-18	18.60	14.04	9.00
MAX162BCNG-ND	Complete High Speed CMOS 12-Bit ADC	24-Dip	53.66	40.50	27.00
MAX165ACPN-ND	CMOS µP Compatible 5µS 8-Bit ADC	18-Dip	12.19	9.20	5.90
MAX165ACWN-ND	CMOS µP Compatible 5µS 8-Bit ADC	SO-18	12.19	9.20	5.90
MAX165BCPN-ND	CMOS µP Compatible, 5µS 8-Bit ADC with T/H and Reference	18-Dip	9.38	7.08	4.54
MAX165BCWN-ND	CMOS µP Compatible 5µS 8-Bit ADC	SO-18	9.38	7.08	4.54
MAX166BCPP-ND	Differential Input, 5µS, 8-Bit ADC with T/H and Reference	20-Dip	9.99	7.54	4.83
MAX172BCNG-ND	Complete 10µS CMOS 12-Bit ADC	24-Dip	24.80	18.72	12.00
MAX174CCPI-ND	12-Bit ADC with Reference	28-Dip	65.22	49.22	35.17
MAX176BCPA-ND	Serial Output, 12-Bit 250 KSPS ADC	8-Dip	30.32	22.88	14.67
MAX178ACWG-ND	Calibrated 12-Bit A/D Converter with T/H and Reference	SO-24	39.62	29.90	19.95
MAX178BCWG-ND	Calibrated 12-Bit A/D Converter with T/H and Reference	SO-24	35.64	26.90	17.94
MAX180ACQH-ND	8-Channel 12-Bit Data Acquisition System	44-PLCC	50.75	38.30	24.57
MAX180BCPL-ND	8-Channel 12-Bit Data Acquisition System	40-Dip	44.89	33.88	21.72
MAX180BCQH-ND	8-Channel 12-Bit Data Acquisition System	44-PLCC	44.89	33.88	21.72
MAX181CCPL-ND	6-Channel 12-Bit Data Acquisition System	40-Dip	39.03	29.46	18.89
MAX181CCQH-D-ND	6-Channel 12-Bit Data Acquisition System	44-PLCC	39.03	29.46	18.89
MAX182BCPI-ND	4-Channel 12-Bit ADC with Track and Hold	28-Dip	41.02	30.96	20.67
MAX186BCPP-ND	Low Power 8-Channel Serial 12-Bit ADC with Reference	20-Dip	29.87	22.54	14.46
MAX186BCWP-ND	Low Power 8-Channel Serial 12-Bit ADC with Reference	SO-20	29.87	22.54	14.46
MAX186DCPP-ND	Low-Power 8-Channel Serial 12-Bit ADC with V Reference	20-Dip	19.69	14.86	9.52
MAX186DCWP-ND	Low Power 8-Channel Serial 12-Bit ADC with Reference	SO-20	19.69	14.86	9.52
MAX187BCPA-ND	Low Power 12-Bit Serial ADC with Track and Hold	8-Dip	18.15	13.70	8.78
MAX187BCWE-ND	Low Power 12-Bit Serial ADC w/Track and Hold	SO-16	18.15	13.70	8.78
MAX188BCPP-ND	Low Power 8-Channel Serial 12-Bit ADC with Reference	20-Dip	27.30	20.60	13.20
MAX188BCWP-ND	Low Power 8-Channel Serial 12-Bit ADC with Reference	SO-20	27.30	20.60	13.20
MAX188DCPP-ND	Low Power 8-Ch. Serial 12-Bit ADC, External Ref. Required	20-Dip	18.58	14.02	8.99
MAX188DCWP-ND	Low Power 8-Channel Serial 12-Bit ADC with Reference	SO-20	18.58	14.02	8.99
MAX189CCPA-ND	5V Low Power 12-Bit Serial A/D Converter	8-Dip	15.29	11.54	7.39
MAX189CCWE-ND	5V Low Power 12-Bit Serial A/D Converter	SO-16	15.29	11.54	7.39
MAX191BCNG-ND	Low-Power, Single-Supply 12-Bit ADC with Power Down and Serial/Parallel Outputs	24-Dip	22.05	16.64	10.67
MAX191BCWG-ND	Low-Power, Single-Supply 12-Bit ADC with Power Down and Serial/Parallel Outputs	SO-24	22.05	16.64	10.67
MAX192BCAP-ND	Low Power 8-Channel 10-Bit ADC	20-SSOP	15.56	11.74	7.53
MAX192BCPP-ND	Low Power 8-Channel 10-Bit ADC	20-Dip	14.15	10.68	6.84
MAX192BCWP-ND	Low Power 8-Channel 10-Bit ADC	SO-20	14.15	10.68	6.84
MAX194BCPE-ND	14-Bit 85KSPS ADC with 10µA Shutdown	16-Dip	33.66	25.40	16.28
MAX194BCWE-ND	14-Bit 85KSPS ADC with 10µA Shutdown	SO-16	33.66	25.40	16.28
MAX195BCPE-ND	16-Bit 100KSPS ADC with 10µA Shutdown	16-Dip	62.01	46.80	30.00
MAX195BCWE-ND	16-Bit 100KSPS ADC with 10µA Shutdown	SO-16	62.01	46.80	30.00
MAX196BCAI-ND	6-Channel Multi Range 12-Bit ADC Parallel Interface	28-SSOP	25.94	19.58	12.56
MAX196BCNI-ND	6-Channel Multi Range 12-Bit ADC Parallel Interface	28-Dip	24.96	18.84	12.07
MAX197BCAI-ND	6-Channel Multi Range 12-Bit ADC Parallel Interface	28-SSOP	25.94	19.58	12.56
MAX197BCNI-ND	8-Channel Multi Range 12-Bit ADC Parallel Interface	28-Dip	24.96	18.84	12.07
MAX200CPP-ND	+5V Powered, Five RS232 Trans. with Power Shutdown and .1µF External Capacitors	20-Dip	7.55	5.70	3.65
MAX201CPD-ND	+5V/+9V to +13.2V, Dual RS232 Transceiver with .1µF External Capacitors	14-Dip	3.31	2.50	1.60
MAX201CWE-ND	+5V/+9V to +13.2V, Dual RS232 Transceiver with .1µF External Capacitors	SO-16	3.31	2.50	1.60
MAX202CPE-ND	+5V Dual RS232 Transceiver with .1µF External Caps	16-Dip	3.31	2.50	1.60
MAX202CSE-ND	+5V Dual RS232 Transceiver with .1µF External Caps	SO-16	3.31	2.50	1.60
MAX203CPP-ND	Complete, +5V Powered, Dual RS232 Transceiver	20-Dip	7.45	5.62	3.60
MAX203CWP-ND	+5V Powered, Dual RS232 Transceiver	SO-20	7.45	5.62	3.60
MAX204CPE-ND	+5V Quad RS232 Transceiver with .1µF External Capacitors	16-Dip	5.88	4.44	2.85
MAX205CPG-ND	Complete, +5V Pwrd, 5-Channel RS232 Transceiver	24-Dip	16.38	12.36	7.92
MAX206CNG-ND	5V RS232 Transceiver w/ .1µF Ext Caps, 4 Drivers/3 Receivers	24-Dip	7.55	5.70	3.65
MAX206CWG-ND	5V RS232 Transceiver w/ .1µF Ext Caps, 4 Drivers/3 Receivers	SO-24	7.55	5.70	3.65
MAX207CNG-ND	5V RS232 Transceiver w/ .1µF Ext Caps, 5 Drivers/3 Receivers	24-Dip	7.55	5.70	3.65
MAX207CWG-ND	5V RS232 Transceiver w/ .1µF Ext Caps, 5 Drivers/3 Receivers	SO-24	7.55	5.70	3.65
MAX208CNG-ND	5V RS232 Transceiver w/ .1µF Ext Caps, 4 Drivers/4 Receivers	24-Dip	7.55	5.70	3.65
MAX208CWG-ND	5V RS232 Transceiver w/ .1µF Ext Caps, 4 Drivers/4 Receivers	SO-24	7.55	5.70	3.65
MAX209CNG-ND	+5V and +12V Pwrd., 3 RS232 Transmitters and 5 RS232 Receivers with Receiver Enable and .1µF Ext. Caps.	24-Dip	7.55	5.70	3.65
MAX209CWG-ND	+5V and +12V Pwrd, 3 RS232 Transmitters and 5 RS232 Receivers with Receiver Enable and .1µF Ext. Caps.	SO-24	7.55	5.70	3.65
MAX211CAI-ND	+5V Powered, 4 RS232 Transmitters and 5 RS232 Receivers with .1µF Ext. Caps.	28-SSOP	7.95	6.00	3.85
MAX211CWI-ND	+5V Powered, 4 RS232 Transmitters and 5 RS232 Receivers with .1µF Ext. Caps.	SO-28	7.55	5.70	3.65
MAX211ECAI-ND	+5V Powered, 4 RS232 Transmitters and 5 RS232 Receivers with .1µF Ext. Caps., 15Kv ESD	28-SSOP	9.17	6.92	4.43
MAX213CWI-ND	+5V Powered, 4 RS232 Transmitters and 5 RS232 Receivers (2 active in shutdown) with 0.1µF Ext. Caps.	SO-28	7.55	5.70	3.65
MAX214CPI-ND	Programmable DTE/DCE, 5V RS232 Transceiver	28-Dip	9.06	6.84	4.39
MAX214CWI-ND	Programmable DTE/DCE, 5V RS232 Transceiver	SO-28	9.06	6.84	4.39
MAX218CPP-ND	1.8V - 4.25V Powered True RS232 Dual Transceiver	20-Dip	4.35	3.28	2.10
MAX218CWP-ND	1.8V - 4.25V Powered True RS232 Dual Transceiver	SO-20	4.35	3.28	2.10
MAX222CPN-ND	5V High Speed RS232 Driver Receiver with Shutdown	18-Dip	4.88	3.68	2.45
MAX222CWN-ND	5V High Speed RS232 Driver Receiver with Shutdown	SO-18	4.88	3.68	2.45
MAX222EWN-ND	5V High Speed RS232 Driver Receiver with Shutdown	SO-18	5.83	4.40	2.93
MAX223CWI-ND	+5V Powered, 4 RS232 Transmitters and 5 RS232 Receivers (2 active in shutdown)	SO-28	7.55	5.70	3.65
MAX230CPP-ND	+5V Powered, 5 RS232 Transmitters with Power Shutdown	20-Dip	7.55	5.70	3.65
MAX230CWP-ND	+5V Powered, 5 RS232 Transmitters with Shutdown	SO-20	7.55	5.70	3.65
MAX231CPD-ND	+5V and +12V Pwrd., Dual RS232 Transmitters and Receivers	14-Dip	3.31	2.50	1.60
MAX231EPD-ND	+5V and +12V Pwrd., Dual RS232 Transmitters and Receivers	14-Dip	3.98	3.00	1.92
MAX232ACPE-ND	+5V Pwrd., High-Speed Dual RS232 Transmitters & Receivers	16-Dip	4.88	3.68	2.45
MAX232ACSE-ND	+5V Pwrd., High-Speed Dual RS232 Transmitters & Receivers	SO-16	4.88	3.68	2.45
MAX232ACWE-ND	+5V Pwrd., High-Speed Dual RS232 Transmitters & Receivers	SO-16	4.88	3.68	2.45
MAX232AEWE-ND	+5V Pwrd., High Speed Dual RS232 Transmitters & Receivers	SO-16	5.83	4.40	2.93
MAX232CPE-ND	+5V Powered, Dual RS232 Transmitters & Receivers	16-Dip	3.31	2.50	1.60
MAX232CWE-ND	+5V Powered, Dual RS232 Transmitters & Receivers	SO-16	3.31	2.50	1.60
MAX232EPE-ND	+5V Pwrd., Dual RS232 Transmitters & Receivers	16-Dip	3.98	3.00	1.92
MAX232EWE-ND	+5V Pwrd., Dual RS232 Transmitters & Receivers	SO-16	3.98	3.00	1.92
MAX233ACPP-ND	+5V Pwrd., Dual RS232 No Ext Components Transmitters/Rec	20-Dip	10.76	8.12	5.20
MAX233ACWP-ND	+5V Pwrd., Dual RS232 No Ext Components Transmitters/Rec	SO-20	10.76	8.12	5.20
MAX233CPP-ND	+5V Pwrd., Dual RS232 No Ext Components Transmitters/Rec	20-Dip	7.45	5.62	3.60
MAX233EPP-ND	+5V Pwrd., Dual RS232 No Ext Components Transmitters/Rec	20-Dip	8.93	6.74	4.32
MAX234CPE-ND	+5V Powered Quad RS232,Transmitters	16-Dip	5.88	4.44	2.85
MAX234CWE-ND	+5V Powered Quad RS232 Transmitters	SO-16	5.88	4.44	2.85
MAX235CPG-ND	+5V Powered, 5 RS232 No Ext. Comp. Transmitters and Receivers with Power Shutdown and Tri-State	24-Dip	16.38	12.36	7.92
MAX236CNG-ND	+5V Powered, 4 RS232 Transmitters and 3 RS232 Receivers with Power Shutdown and Tri-State	24-Dip	7.55	5.70	3.65
MAX236CWG-ND	+5V Powered, 4 RS232 Xmitters and 3 RS232 Receivers with Power Shutdown and Tri-State	SO-24	7.55	5.70	3.65
MAX237CNG-ND	+5V Powered, 5 RS232 Transmitters, 3 RS232 Receivers	24-Dip	7.55	5.70	3.65
MAX237CWG-ND	5V Powered, 5 RS232 Transmitters, 3 RS232 Receivers	SO-24	7.55	5.70	3.65
MAX238CNG-ND	+5V Powered, Quad RS232 Transmitters and Receivers	24-Dip	7.55	5.70	3.65
MAX238CWG-ND	+5V Powered, Quad RS232 Transmitters and Receivers	SO-24	7.55	5.70	3.65
MAX239CNG-ND	+5V and +12V P Powered, 3 RS232 Transmitters and 5N RS232 Receivers w/Receiver Enable	24-Dip	7.55	5.70	3.65
MAX240CMH-ND	+5V P Powered, 5 RS232 Transmitters and Receivers with Power Shutdown and Tri-State	44-Plastic FP	12.40	9.36	6.00
MAX241CWI-ND	+5V P Powered, 4 RS232 Transmitters, 5 Receivers with Power Shutdown and Receiver 3-State Enable	SO-28	12.40	9.36	6.00
MAX242CPN-ND	High Speed 5V Dual RS232 Driver/Receiver	18-Dip	4.88	3.68	2.45
MAX242CWN-ND	High Speed 5V Dual RS232 Driver/Receiver	SO-18	4.88	3.68	2.45
MAX243CPE-ND	5V Powered Dual RS232 Driver/Receiver	16-Dip	4.88	3.68	2.45
MAX243CSE-ND	5V Powered Dual RS232 Driver/Receiver	SO-16	4.88	3.68	2.45
MAX248CQH-ND	5V, Multi-Channel RS232 Driver/Receiver	44-PLCC	17.89	13.50	9.00
MAX249CQH-ND	5V, Multi-Channel RS232 Driver/Receiver	44-PLCC	17.89	13.50	9.00
MAX274ACWI-ND	8th-Order, Analog Filter	SO-28	12.51	9.44	6.05
MAX261BCNG-ND	µP Programmable Universal Switched Cap Filter	24-Dip	15.82	11.94	7.65
MAX261BCWG-ND	µP Programmable Universal Switched Cap Filter	SO-24	15.82	11.94	7.65
MAX274BCNG-ND	8th-Order Analog Filter	24-Dip	11.37	8.58	5.50
MAX274BCWI-ND	8th-Order Analog Filter	SO-28	11.37	8.58	5.50
MAX275BCPP-ND	4th-Order Analog Filter	20-Dip	7.10	5.36	3.43
MAX275BCWP-ND	4th-Order Analog Filter	SO-20	7.10	5.36	3.43
MAX280CPA-ND	5th-Order Zero-Error, Butterworth Switched Cap LP Filter	8-Dip	9.59	7.24	4.64
MAX280CWE-ND	5th Order Zero-Error, Butterworth Switched Cap LP Filter	SO-16	9.59	7.24	4.64
MAX281ACPA-ND	5th-Order, Zero Error, Bessel Switched Cap LP Filter	8-Dip	11.69	8.82	5.66
MAX281ACWE-ND	5th-Order, Zero Error, Bessel Switched Cap LP Filter	SO-16	11.69	8.82	5.66
MAX281BCPA-ND	5th-Order, Zero Error, Bessel Switched Cap LP Filter	8-Dip	9.59	7.24	4.64
MAX301CPE-ND	Prec. Dual Low On Resistance Matched CMOS Switch (SPST)	16-Dip	3.79	2.86	2.04
MAX301CSE-ND	Prec. Dual Low On Resistance Matched CMOS Switch (SPST)	SO-16	4.56	3.44	2.45
MAX303CPE-ND	Prec. Dual Low On Resistance Matched CMOS Switch (SPDT)	16-Dip	7.92	5.98	4.28
MAX303CSE-ND	Prec. Dual Low On Resistance Matched CMOS Switch (SPDT)	SO-16	9.51	7.18	5.13
MAX305CPE-ND	Precision Dual, Matched CMOS Switches (DPST, NO)	16-Dip	7.92	5.98	4.28
MAX305CSE-ND	Precision Dual, Matched CMOS Switches (DPST, NO)	SO-16	9.51	7.18	5.13
MAX306CPI-ND	Precision 16-Channel High Perform CMOS Analog Mux	28-Dip	9.51	7.18	5.12
MAX306CWI-ND	Precision 16-Channel High Perform CMOS Analog Mux	SO-28	13.09	9.88	7.06

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Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
MAX307CPI-ND	Precision Dual 8-Chan. High Performance CMOS Analog Mux	28-Dip	9.51	7.18	5.12
MAX307CWI-ND	Precision Dual 8-Chan. High Performance CMOS Analog Mux	SO-28	13.09	9.88	7.06
MAX308CPE-ND	Precision 8-Channel High Performance CMOS Analog Mux	16-Dip	6.15	4.64	3.32
MAX308CSE-ND	Precision 8-Channel High Performance CMOS Analog Mux	SO-16	7.37	5.56	3.98
MAX309CPE-ND	Precision Dual 4-Chan. High Performance CMOS Analog Mux	16-Dip	6.15	4.64	3.32
MAX309CSE-ND	Precision Dual 4-Chan. High Performance CMOS Analog Mux	SO-16	7.37	5.56	3.98
MAX311CWN-ND	RF/Video Differential 4-Channel Mux/Demux	SO-18	18.66	14.08	9.39
MAX317CPA-ND	Precision SPST Normally Closed CMOS Analog Switch	8-Dip	2.62	1.98	1.42
MAX317CSA-ND	Precision SPST Normally Closed CMOS Analog Switch	SO-8	3.07	2.32	1.66
MAX318CPA-ND	Precision SPST Normally Open Analog Switch	8-Dip	2.62	1.98	1.42
MAX318CSA-ND	Precision SPST Normally Open Analog Switch	SO-8	3.07	2.32	1.66
MAX319CPA-ND	Precision SPDT CMOS Analog Switch	8-Dip	3.55	2.68	1.91
MAX319CSA-ND	Precision SPDT CMOS Analog Switch	SO-8	3.90	2.94	2.10
MAX323CPA-ND	Precision, Single Supply, SPST Analog Switch	8-Dip	2.97	2.24	1.43
MAX323CSA-ND	Precision, Single Supply, SPST Analog Switch	SO-8	3.26	2.46	1.57
MAX326CPE-ND	Quad SPST, Ultra-Low Leakage, CMOS Analog Switch	16-Dip	7.69	5.80	3.86
MAX326CSE-ND	Quad SPST, Ultra-Low Leakage, CMOS Analog Switch	SO-16	8.43	6.36	4.24
MAX328CPE-ND	8-Channel, Ultra-Low Leakage Monolithic CMOS Multiplexer	16-Dip	9.99	7.54	5.02
MAX328CWE-ND	8-Channel, Ultra-Low Leakage Monolithic CMOS Multiplexer	SO-16	10.97	8.28	5.52
MAX329CPE-ND	Differential 4-Chan., Ultra-Low Leakage Monolithic CMOS Mux	16-Dip	9.99	7.54	5.02
MAX329CWE-ND	Differential 4-Chan., Ultra-Low Leakage Monolithic CMOS Mux	SO-16	10.97	8.28	5.52
MAX333CPP-ND	Quad SPDT CMOS Analog Switch	20-Dip	7.21	5.44	3.63
MAX333CWP-ND	Quad SPDT CMOS Analog Switch	SO-20	9.30	7.02	4.68
MAX335CNG-ND	Serial, Controlled, 8-Channel SPST Switch	24-Dip	6.52	4.92	3.15
MAX335CWG-ND	Serial, Controlled, 8-Channel SPST Switch	SO-24	7.16	5.40	3.47
MAX351CPE-ND	Precision Quad SPST Analog Switch Normally Closed	16-Dip	5.43	4.10	2.93
MAX351CSE-ND	Precision Quad SPST Analog Switch Normally Closed	SO-16	7.05	5.32	3.80
MAX352CPE-ND	Precision Quad SPST Analog Switch Normally Open	16-Dip	5.43	4.10	2.93
MAX352CSE-ND	Precision Quad SPST Analog Switch Normally Open	SO-16	7.05	5.32	3.80
MAX353CPE-ND	Precision Quad SPST Analog Switch 2 N/C & 2 N/O	16-Dip	5.43	4.10	2.93
MAX353CSE-ND	Precision Quad SPST Analog Switch 2 N/C & 2 N/O	SO-16	7.05	5.32	3.80
MAX354CPE-ND	Single 8-Channel Fault Protected Analog Mux	16-Dip	9.94	7.50	4.81
MAX354CWE-ND	Single 8-Channel Fault Protected Analog Mux	SO-16	9.94	7.50	4.81
MAX355CPE-ND	Dual 4-Channel Fault Protected Analog Mux	16-Dip	9.94	7.50	4.81
MAX355CWE-ND	Dual 4-Channel Fault Protected Analog Mux	SO-16	9.94	7.50	4.81
MAX358CPE-ND	Fault Protected 8-Channel Multiplexer	16-Dip	9.94	7.50	4.81
MAX358CWE-ND	Fault Protected 8-Channel Multiplexer	SO-16	9.94	7.50	4.81
MAX359CPE-ND	Fault Protected Differential 4-Channel Multiplexer	16-Dip	9.94	7.50	4.81
MAX359CWE-ND	Fault Protected Differential 4-Channel Multiplexer	SO-16	9.94	7.50	4.81
MAX361CSE-ND	Precision Quad SPST Analog Switch N/C 3Ω Tolerance	SO-16	5.75	4.34	3.11
MAX362CPE-ND	Precision Quad SPST Analog Switch N/O 3Ω Tolerance	16-Dip	4.80	3.62	2.58
MAX362CSE-ND	Precision Quad SPST Analog Switch N/O 3Ω Tolerance	SO-16	5.75	4.34	3.11
MAX364CPE-ND	Precision Quad SPST Analog Switch N/C 2Ω Tolerance	16-Dip	2.81	2.12	1.52
MAX364CSE-ND	Precision Quad SPST Analog Switch N/C 2Ω Tolerance	SO-16	2.81	2.12	1.52
MAX365CPE-ND	Precision Quad SPST Analog Switch N/O 2Ω Tolerance	16-Dip	2.81	2.12	1.52
MAX365CSE-ND	Precision Quad SPST Analog Switch N/O 2Ω Tolerance	SO-16	2.81	2.12	1.52
MAX366CSA-ND	3-Signal Line Circuit Protectors	SO-8	3.58	2.70	1.73
MAX367CWN-ND	8-Signal Line Circuit Protectors	SO-18	6.15	4.64	2.97
MAX368CPN-ND	Fault Protected 8-Channel Latched Multiplexer	18-Dip	12.59	9.50	6.09
MAX368CWN-ND	Fault Protected 8-Channel Latched Multiplexer	SO-18	14.47	10.92	7.00
MAX378CPE-ND	High Voltage, Fault Protected Analog Multiplexer	16-Dip	14.58	11.00	7.05
MAX378CWG-ND	High Voltage, Fault Protected Analog Multiplexer	SO-24	14.58	11.00	7.05
MAX382CPN-ND	Low Voltage 8-Channel Mux with Latchable Inputs	18-Dip	8.35	6.30	4.50
MAX382CWN-ND	Low Voltage 8-Channel Mux with Latchable Inputs	SO-18	10.02	7.56	5.40
MAX384CPN-ND	Low Voltage Dual 4-Channel Mux with Latchable Inputs	18-Dip	8.35	6.30	4.50
MAX385CPE-ND	Precision Low Voltage Analog Switch	16-Dip	7.92	5.98	4.28
MAX388CPN-ND	8-Channel, High Volt, Fault-Protected Multiplexer	18-Dip	15.90	12.00	7.69
MAX389CPN-ND	Differential 4-Chan., High Volt., Fault Protected Multiplexer	18-Dip	15.90	12.00	7.69
MAX394CPP-ND	Low Voltage Quad SPDT, CMOS Analog Switch	20-Dip	8.00	6.04	4.03
MAX394CWP-ND	Low Voltage Quad SPDT CMOS Analog Switch	SO-20	10.34	7.80	5.20
MAX407CPA-ND	1.2µA Max., Dual, Single Supply Op Amp.	8-Dip	6.94	5.24	3.50
MAX407CSA-ND	1.2 µA Max, Dual Single Supply Op Amp.	SO-8	6.94	5.24	3.50
MAX409BCPA-ND	1.2µA Single Supply Op Amp	8-Dip	4.48	3.38	2.17
MAX409BCSA-ND	1.2µA Single Supply Op Amp	SO-8	4.48	3.38	2.17
MAX410CPA-ND	28MHz Low-Noise Low Voltage Precision Op Amp	8-Dip	5.33	4.02	2.58
MAX410CSA-ND	28MHz Low Noise Low Voltage Precision Op Amp.	SO-8	5.33	4.02	2.58
MAX414CPD-ND	Low Noise Quad Op Amp	14-Dip	11.37	8.58	5.50
MAX414CSD-ND	Low Noise Quad Op Amp	SO-14	11.37	8.58	5.50
MAX417CPA-ND	1.2µA Dual Single Supply Op Amp.	8-Dip	6.84	5.16	3.31
MAX417CSA-ND	1.2µA Dual Single Supply Op Amp	SO-8	6.84	5.16	3.31
MAX418CPD-ND	1.2µA Quad Single Supply Op Amp.	14-Dip	9.14	6.90	4.42
MAX418CSD-ND	1.2µA Quad Single Supply Op Amp	SO-14	9.14	6.90	4.42
MAX420CPA-ND	15V Chopper Stabilized Op Amp	8-Dip	8.24	6.22	4.01
MAX427CPA-ND	Ultra Low Noise Precision Op Amp	8-Dip	4.03	3.04	1.95
MAX427CSA-ND	Ultra Low Noise Precision Op Amp.	SO-8	5.06	3.82	2.45
MAX435CPD-ND	250MHz, Differential Out, Wideband Transconductance Amp	14-Dip	6.25	4.72	3.02
MAX435CSD-ND	250MHz, Differential Out, Wideband Transconductance Amp	SO-14	6.25	4.72	3.02
MAX436CPD-ND	Wideband Transconductance Amplifier	14-Dip	6.25	4.72	3.02
MAX436CSD-ND	Wideband Transconductance Amplifier	SO-14	6.25	4.72	3.02
MAX437CPA-ND	Ultra-Low Noise Precision Op Amp	8-Dip	4.03	3.04	1.95
MAX437CSA-ND	Ultra Low Noise Precision Op Amp.	SO-8	5.06	3.82	2.45
MAX442CPA-ND	140MHz, 2-Channel Video Multiplexer/Amp.	8-Dip	10.23	7.72	4.95
MAX442CSA-ND	140MHz, 2 Channel Video Multiplexer/Amp	SO-8	10.23	7.72	4.95
MAX452CPA-ND	50MHz CMOS Video Amplifier	8-Dip	5.96	4.50	3.00
MAX453CPA-ND	2-Channel 50MHz Video Multiplexer/Amp.	8-Dip	8.32	6.28	4.19
MAX454CPD-ND	4-Channel 50MHz Video Multiplexer Amplifier	14-Dip	11.10	8.38	5.59
MAX454CSD-ND	4-Channel 50MHz Video Multiplier Amplifier.	SO-14	12.22	9.22	6.15
MAX455CPP-ND	8-Channel 50MHz Video Multiplexer/Amp.	20-Dip	18.50	13.96	9.31
MAX455CWP-ND	8-Channel 50MHz Video Multiplexer/Amp.	SO-20	20.35	15.36	10.24
MAX456CPL-ND	8x8 Crosspoint Video Switch	40-Dip	45.90	34.64	22.21
MAX473CPA-ND	Single Supply 10MHz Op Amp	8-Dip	3.29	2.48	1.59
MAX473CSA-ND	Single Supply 10MHz Op Amp	SO-8	3.29	2.48	1.59
MAX474CPA-ND	Single Supply 10MHz Dual Op Amp	8-Dip	5.11	3.86	2.47
MAX474CSA-ND	Single Supply 10MHz Dual Op Amp	SO-8	5.11	3.86	2.47
MAX475CPD-ND	Single Supply 10MHz Quad Op Amp	14-Dip	8.19	6.18	3.96
MAX475CSD-ND	Single Supply 10MHz Quad Op Amp	SO-14	8.19	6.18	3.96
MAX479CPD-ND	17µA Max Quad Single Supply Precision Op Amp	14-Dip	7.23	5.46	3.50
MAX479CSD-ND	17µA Max Quad Single Supply Precision Op Amp	SO-14	7.23	5.46	3.50
MAX481CPA-ND	RS485 Transceiver w/Low I Shutdown Slew-Rate Ltd, 500µA	8-Dip	2.76	2.08	1.33
MAX483CPA-ND	RS485 Transceiver w/Low I Shutdown Slew-Rate Ltd, 350µA	8-Dip	2.76	2.08	1.33
MAX485CPA-ND	RS485 Low Power Transceiver	8-Dip	2.76	2.08	1.33
MAX485CSA-ND	RS485 Low Power Transceiver.	SO-8	2.76	2.08	1.33
MAX487CPA-ND	RS485/RS422 Transceiver with Low Power Shutdown	8-Dip	2.81	2.12	1.36
MAX487CSA-ND	RS485/RS422 Transceiver with Low Power Shutdown	SO-8	2.81	2.12	1.36
MAX488CPA-ND	RS485/RS422 Transceiver with Low Power Low Slew	8-Dip	2.81	2.12	1.36
MAX488CSA-ND	RS485/RS422 Transceiver with Low Power Low Slew	SO-8	2.81	2.12	1.36
MAX489CPD-ND	RS485/RS422 Transceiver with Drive Enable	14-Dip	2.81	2.12	1.36
MAX489CSD-ND	RS485/RS422 Transceiver with Drive Enable	SO-14	2.81	2.12	1.36
MAX489EPD-ND	RS485/RS422 Transceiver with Drive Enable	14-Dip	3.52	2.66	1.70
MAX490CPA-ND	RS485/RS422 Transceiver with Full Duplex	8-Dip	2.81	2.12	1.36
MAX490CSA-ND	RS485/RS422 Transceiver with Full Duplex	SO-8	2.81	2.12	1.36
MAX491CPD-ND	RS485 Transceiver Tri-State Control	14-Dip	2.81	2.12	1.36
MAX492CPA-ND	Single Supply Dual Op Amp	8-Dip	5.11	3.86	2.47
MAX492CSA-ND	Single Supply Dual Op Amp	SO-8	5.11	3.86	2.47
MAX494CPD-ND	Single Supply Quad Op Amp	14-Dip	8.19	6.18	3.96
MAX494CSD-ND	Single Supply Quad Op Amp	SO-14	8.19	6.18	3.96
MAX495CPA-ND	Single Supply Op Amp	8-Dip	3.29	2.48	1.59
MAX495CSA-ND	Single Supply Op Amp	SO-8	3.29	2.48	1.59
MAX500BCPE-ND	Quad Serial Input 8-Bit D/A Converter	16-Dip	12.40	9.36	6.00
MAX500BCWE-ND	Quad Serial Input 8-Bit D/A Converter	SO-16	12.40	9.36	6.00
MAX501BCNG-ND	12-Bit Multiplexer DAC (8+4) Voltage Output	24-Dip	12.99	9.80	6.28
MAX502BCNG-ND	Parallel Voltage Output 12-Bit Multiplexer DAC	24-Dip	12.99	9.80	6.28
MAX502BCWG-ND	Parallel Voltage Output 12-Bit Multiplexer DAC	SO-24	12.99	9.80	6.28
MAX503CNG-ND	5V Low Power Parallel Input Voltage Output 10-Bit DAC	24-Dip	7.63	5.76	3.69
MAX503CWG-ND	5V Low Power Parallel Input Voltage Output 10-Bit DAC	SO-24	7.63	5.76	3.69
MAX504CPD-ND	5V Low Power Voltage Output Serial 10-Bit DAC	14-Dip	7.23	5.46	3.50
MAX504CSD-ND	5V Low Power Voltage Output Serial 10-Bit DAC	SO-14	7.23	5.46	3.50
MAX505ACWG-ND	CMOS, +5V, Quad, 8-Bit D/A Converter w/Rail-to-Rail Outputs and 4 Separate Reference Inputs	SO-24	21.28	16.06	10.30
MAX505BCNG-ND	CMOS, +5V, Quad, 8-Bit D/A Converter with Rail-to-Rail Outputs and 4 Separate Reference Inputs	24-Dip	16.38	12.36	7.92
MAX506BCPP-ND	CMOS, +5V, Quad, 8-Bit D/A Converter with Rail-to-Rail Outputs and 1 Reference Input	20-Dip	14.36	10.84	6.95
MAX506BCWP-ND	CMOS, +5V, Quad, 8-Bit D/A Converter with Rail-to-Rail Outputs and 1 Reference Input	SO-20	14.36	10.84	6.95
MAX507BCNG-ND	Parallel Volt Output, 12-Bit DAC with Internal Reference	24-Dip	18.31	13.82	8.87
MAX507BCWG-ND	Parallel Volt Output, 12-Bit DAC with Internal Reference	SO-24	18.31	13.82	8.87
MAX508BCPP-ND	12-Bit DAC with Internal Reference, (8+4) Volt Output	20-Dip	18.31	13.82	8.87
MAX508BCWP-ND	12 Bit DAC with Internal Reference, (8+4) Volt Output.	SO-20	18.31	13.82	8.87
MAX509BCPP-ND	Quad Serial Input 8-Bit D/A Converter	20-Dip	12.56	9.48	6.08
MAX509BCWP-ND	Quad Serial Input 8-Bit D/A Converter	SO-20	12.56	9.48	6.08
MAX510ACPE-ND	Quad Serial Input 8-Bit D/A Converter	16-Dip	14.63	11.04	7.08
MAX510BCPE-ND	Quad Serial Input 8-Bit D/A Converter	16-Dip	12.19	9.20	5.90
MAX510BCWE-ND	Quad Serial Input 8-Bit D/A Converter	SO-16	12.19	9.20	5.90
MAX512CPD-ND	8-Bit Voltage Out D/A Converter	14-Dip	6.92	5.22	3.35
MAX512CSD-ND	8-Bit Voltage Out D/A Converter	SO-14	6.92	5.22	3.35
MAX513CPD-ND	8-Bit Voltage Out D/A Converter	14-Dip	6.92	5.22	3.35
MAX513CSD-ND	8-Bit Voltage Out D/A Converter	SO-14	6.92	5.22	3.35
MAX514BCNG-ND	Quad CMOS 12-Bit Serial Input Mult. D/A Converter	24-Dip	32.73	24.70	15.83
MAX514BCWI-ND	Quad CMOS 12-Bit Serial Input Mult. D/A Converter.	SO-28	32.73	24.70	15.83
MAX517BCPA-ND	Single 8-Bit Rail-to-Rail DAC with 2-Wire Serial Interface	8-Dip	5.17	3.90	2.50
MAX517BCSA-ND	Single 8-Bit Rail-to-Rail DAC with 2-Wire Serial Interface.	SO-8	5.17	3.90	2.50
MAX518BCPA-ND	Dual 8-Bit Rail-to-Rail DAC with 2-Wire Serial Interface	8-Dip	5.54	4.18	2.68
MAX518BCSA-ND	Dual 8-Bit Rail-to-Rail DAC with 2-Wire Serial Interface	SO-8	5.54	4.18	2.68
MAX520BCPE-ND	Quad 8-Bit DAC w/2-Wire Interface Serial Unbuffered Output	16-Dip	8.51	6.42	4.12
MAX520BCWE-ND	Quad 8-Bit DAC w/2-Wire Interface Serial Unbuffered Output	SO-16	8.51	6.42	4.12
MAX521BCPP-ND	Octal 8-Bit Rail-to-Rail DAC w/2-Wire Serial Interface.	20-Dip	12.03	9.08	5.82
MAX522CPA-ND	Dual 8-Bit Voltage Out Serial D/A Converter	8-Dip	5.54	4.18	2.68
MAX522CSA-ND	Dual 8-Bit Voltage Out Serial D/A Converter.	SO-8	5.54	4.18	2.68
MAX525BCAP-ND	5V Quad 12-Bit VOUT Serial D/A Converter	20-SSOP	30.87	23.30	14.94
MAX525BCPP-ND	5V Quad 12-Bit VOUT Serial D/A Converter	20-Dip	30.87	23.30	14.94
MAX526DCNG-ND	Quad 12-Bit Voltage Output D/A Converter, .3”	24-Dip	44.65	33.70	21.60
MAX526DCWG-ND	Quad 12-Bit Voltage Output D/A Converter	SO-24	44.65	33.70	21.60
MAX527DCNG-ND	Calibrated Quad 12-Bit Voltage Output D/A Converter, .3”	24-Dip	38.03	28.70	18.40
MAX527DCWG-ND	Calibrated Quad 12-Bit Voltage Output D/A Converter	SO-24	38.03	28.70	18.40
MAX528CPP-ND	Octal 8-Bit Serial D/A Converter w/Output Buffer	20-Dip	15.50	11.70	7.50
MAX529CPP-ND	±5V Octal 8-Bit Serial DAC with Output Buffer.	20-Dip	12.48	9.42	6.28
MAX529CWG-ND	±5V Octal 8-Bit Serial DAC with Output Buffer	SO-24	12.48	9.42	6.28
MAX530BCNG-ND	5V Low Power Voltage Out 12-Bit D/A Converter.	24-Dip	13.09	9.88	6.34
MAX530BCWG-ND	5V Low Power Voltage Out 12-Bit D/A Converter	SO-24	13.09	9.88	6.34
MAX531BCPD-ND	5V Voltage Out 12-Bit Serial D/A Converter	14-Dip	13.09	9.88	6.34
MAX531BCSD-ND	5V Voltage Out 12-Bit Serial D/A Converter	SO-14	13.09	9.88	6.34
MAX532BCPE-ND	Dual, Serial Input, Voltage Output, 12-Bit Multiplying DAC	16-Dip	20.30	15.32	9.83
MAX532BCWE-ND	Dual Serial Input Volt Output 12-Bit Multiplying DAC	SO-16	20.30	15.32	9.83
MAX533BCEE-ND	2.7V Low Power Quad Serial Voltage Out 8-Bit DAC.	16-QSOP	7.23	5.46	3.50
MAX533BCPE-ND	2.7V Low Power Quad Serial Voltage Out 8-Bit DAC	16-Dip	7.23	5.46	3.50
MAX534BCEE-ND	5V Low Power Quad Serial Voltage Out 8-Bit DAC.	16-QSOP	7.23	5.46	3.50
MAX534BCPE-ND	5V Low Power Quad Serial Voltage Out 8-Bit DAC	16-Dip	7.23	5.46	3.50
MAX535BCPA-ND	5V 13-Bit Voltage Out Serial D/A Converter.	8-Dip	12.80	9.66	6.19
MAX535BCUA-ND	5V 13-Bit Voltage Out Serial D/A Converter	8-µMAX	12.80	9.66	6.19
MAX536BCPE-ND	Quad 12-Bit Voltage Out Serial D/A Converter.	16-Dip	41.21	31.10	19.95
MAX536BCWE-ND	Quad 12-Bit Voltage Out Serial D/A Converter	SO-16	41.21	31.10	19.95
MAX538BCPA-ND	Low Power 5V 12-Bit Serial D/A Converter	8-Dip	11.66	8.80	5.64
MAX538BCSA-ND	Low Power 5V 12-Bit Serial D/A Converter.	SO-8	11.66	8.80	5.64
MAX539BCPA-ND	Low Power 5V 12-Bit Serial D/A Converter	8-Dip	11.66	8.80	5.64
MAX539BCSA-ND	Low Power 5V 12-Bit Serial D/A Converter.	SO-8	11.66	8.80	5.64
MAX541CCPA-ND	5V 16-Bit Serial Voltage Out D/A Converter.	8-Dip	25.71	19.40	12.44
MAX541CCSA-ND	5V 16-Bit Serial Voltage Out D/A Converter	SO-8	25.71	19.40	12.44
MAX543BCPA-ND	CMOS 12-Bit Serial Multiplying D/A Converter	8-Dip	17.57	13.26	8.50
MAX543BCSA-ND	CMOS 12-Bit Serial Multiplying D/A Converter.	SO-8	14.07	10.62	6.81
MAX544BCPA-ND	5V 14-Bit Serial Voltage Out D/A Converter.	Dip-8	20.41	15.40	9.88
MAX544BCSA-ND	5V 14-Bit Serial Voltage Out D/A Converter	SO-8	20.41	15.40	9.88
MAX547ACMH-ND	Octal 13-Bit Voltage Out DAC/Parallel Interface	44-PQFP	87.08	65.72	42.14
MAX547ACQH-ND	Octal 13-Bit Voltage Out DAC/Parallel Interface	44-PLCC	85.38	64.44	41.30
MAX547BCQH-ND	Octal 13-Bit Voltage Out DAC/Parallel Interface	44-PLCC	71.15	53.70	34.43
MAX548ACPA-ND	2.5V – 5.5V Dual 8-Bit Voltage Out D/A Converter.	8-Dip	4.27	3.22	2.06
MAX548ACUA-ND	2.5V – 5.5V Dual 8-Bit Voltage Out D/A Converter	8-µMAX	4.48	3.38	2.16
MAX560CWI-ND	+3.3V-Pwrd. RS232 4 Driver/5 Receiver with Receivers Active in Shutdown	SO-28	7.55	5.70	3.65
MAX613CSD-ND	Dual PCMCIA Analog Power Controller	SO-14	4.19	3.16	2.02
MAX630CSA-ND	CMOS Step Up Switching Regulator	SO-8	7.29	5.50	3.52
MAX631ACPA-ND	+5V/Adjustable Output CMOS Step-Up Switching Regulator.	8-Dip	6.31	4.76	3.05
MAX631ACSA-ND	+5V/Adjustable Output CMOS Step-Up Switching Regulator	SO-8	6.52	4.92	3.15
MAX632ACPA-ND	+12V/Adjustable Output CMOS Step-Up Switching Regulator	8-Dip	6.31	4.76	3.05
MAX632ACSA-ND	+12V/Adjustable Output CMOS Step-Up Switching Regulator	SO-8	6.52	4.92	3.15
MAX634CPA-ND	CMOS Micropower Inverting Switching Regulator.	8-Dip	5.99	4.52	2.90

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MAX634CSA-ND	CMOS Micropower Inverting Switching Regulator	SO-8	6.60	4.98	3.19
MAX635ACPA-ND	-5V/Adjustable Output CMOS Inverting Switching Regulator	8-Dip	6.31	4.76	3.05
MAX635ACSA-ND	5V/Adj Output CMOS Inverting Switching Regulator	SO-8	6.52	4.92	3.15
MAX636ACPA-ND	-12V/Adjustable Output CMOS Inverting Switching Regulator	8-Dip	6.31	4.76	3.05
MAX636ACSA-ND	-12V/Adjustable Output CMOS Inverting Switching Regulator	SO-8	6.52	4.92	3.15
MAX637ACPA-ND	-15V/Adjustable Output CMOS Inverting Switching Regulator	8-Dip	6.31	4.76	3.05
MAX637ACSA-ND	-15V/Adjustable Output CMOS Inverting Switching Regulator	SO-8	6.52	4.92	3.15
MAX638ACPA-ND	5V Adjustable Output CMOS Step Down Switching Regulator	8-Dip	6.31	4.76	3.05
MAX638ACSA-ND	5V Adjustable Output CMOS Step Down Switching Regulator	SO-8	6.52	4.92	3.15
MAX660CPA-ND	100mA CMOS Monolithic Voltage Converter	8-Dip	6.94	5.24	3.50
MAX660CSA-ND	100mA CMOS Monolithic Voltage Converter	SO-8	7.29	5.50	3.68
MAX662ACPA-ND	12V Supply for Flash Memory	8-Dip	4.80	3.62	2.32
MAX662ACSA-ND	12V Supply for Flash Memory	SO-8	4.90	3.70	2.37
MAX663CPA-ND	CMOS +5V/Adjustable Micropower Positive Voltage Regulator	8-Dip	4.21	3.18	2.03
MAX663CSA-ND	CMOS +5V/Adjustable Micropower Positive Voltage Regulator	SO-8	4.64	3.50	2.24
MAX665CPA-ND	CMOS +8V/Switched-Capacitor Voltage Converter	8-Dip	9.12	6.88	4.41
MAX666CPA-ND	CMOS +5V/Adjustable Volt Reg with Low Battery Detector	8-Dip	4.88	3.68	2.36
MAX666CSA-ND	CMOS +5V/Adjustable Volt Reg with Low Battery Detector	SO-8	5.35	4.04	2.59
MAX666ESA-ND	CMOS +5V/Adjustable Volt Reg with Low Battery Detector	SO-8	8.32	6.28	4.02
MAX667CPA-ND	+5V/Programmable Low Dropout Voltage Regulator	8-Dip	5.49	4.14	2.76
MAX667CSA-ND	+5V/Programmable Low Dropout Voltage Regulator	SO-8	5.72	4.32	2.88
MAX667ESA-ND	+5V/Programmable Low Dropout Voltage Regulator	SO-8	7.39	5.58	3.72
MAX680CPA-ND	+5V to ±10V Voltage Converter	8-Dip	4.11	3.10	1.99
MAX680CSA-ND	+5V to ±10V Voltage Converter	SO-8	4.51	3.40	2.18
MAX687CSA-ND	3.3V High Accuracy Low Dropout Reg with Auto Shutdown	SO-8	3.98	3.00	1.92
MAX688CPA-ND	3.3V High Accuracy Low Dropout Regulator	8-Dip	3.98	3.00	1.92
MAX688CSA-ND	3.3V High Accuracy Low Dropout Regulator	SO-8	3.98	3.00	1.92
MAX690ACPA-ND	Microprocessor WDT Reset Circuit	8-Dip	6.94	5.24	3.36
MAX690ACSA-ND	Microprocessor WDT Reset Circuit	SO-8	7.29	5.50	3.53
MAX690CPA-ND	Microprocessor WDT Reset Circuit	8-Dip	7.23	5.46	3.50
MAX690EPA-ND	Microprocessor WDT Reset Circuit	8-Dip	10.49	7.92	5.08
MAX691ACPE-ND	Microprocessor WDT Battery Switchover/Reset Gen., 200ns	16-Dip	7.84	5.92	3.80
MAX691CPE-ND	Microprocessor WDT Battery Switchover/Reset Gen., 200ns	16-Dip	7.84	5.92	3.80
MAX691CWE-ND	Microprocessor WDT Battery Switchover/Reset Gen., 200ns	SO-16	8.64	6.52	4.18
MAX691EWE-ND	Microprocessor WDT Battery Switchover/Reset Gen. ,200ns	SO-16	12.53	9.46	6.06
MAX692ACPA-ND	Microprocessor Supervisory Circuit	8-Dip	6.94	5.24	3.36
MAX692CPA-ND	Microprocessor Supervisory Circuit	8-Dip	7.23	5.46	3.50
MAX693ACPE-ND	Microprocessor Supervisory Circuit	16-Dip	7.84	5.92	3.80
MAX693CPE-ND	Microprocessor Supervisory Circuit	16-Dip	7.84	5.92	3.80
MAX693CWE-ND	Microprocessor Supervisory Circuit	SO-16	8.64	6.52	4.18
MAX694CPA-ND	Microprocessor WDT/Battery Switchover/ Reset Gen., Min. Reset Pulse Width, 140ms	8-Dip	7.23	5.46	3.50
MAX695CPE-ND	Microprocessor WDT/Battery Switchover/Reset Gen	16-Dip	7.84	5.92	3.80
MAX695CWE-ND	Microprocessor WDT/Battery Switchover/Reset Gen.	SO-16	8.64	6.52	4.18
MAX696CPE-ND	Microprocessor Supervise Circuit with Battery Switchover	16-Dip	7.84	5.92	3.78
MAX699CPA-ND	Low Cost Power-On Reset and WDT Controller	8-Dip	4.93	3.72	2.38
MAX699CWE-ND	Low Cost Power-On Reset and WDT Controller	SO-16	5.33	4.02	2.58
MAX700CSA-ND	Adjustable-Threshold Power-Supply Monitor with Reset	SO-8	4.58	3.46	2.31
MAX701CPA-ND	Power Supply Monitor with Reset	8-Dip	4.16	3.14	2.09
MAX701CSA-ND	Power Supply Monitor with Reset	SO-8	4.16	3.14	2.09
MAX701ESA-ND	Power Supply Monitor with Reset	SO-8	5.41	4.08	2.72
MAX703CPA-ND	Low Cost, Microprocessor Supervisory Circuit with Battery Backup, 4.65V Reset	8-Dip	6.10	4.60	2.95
MAX703CSA-ND	Low Cost, Microprocessor Supervisory Circuit with Battery Backup, 4.65V Reset	SO-8	6.10	4.60	2.95
MAX704CPA-ND	Low Cost, µP Supervisory Circuit w/Battery Backup, 4.4V Reset	8-Dip	6.10	4.60	2.95
MAX704CSA-ND	Low Cost, µP Supervisory Circuit w/Battery Backup, 4.4V Reset	SO-8	6.10	4.60	2.95
MAX705CPA-ND	Low Cost, µP Supervisory Circuit with Battery Backup, WDT Output, 4.65V Reset	8-Dip	5.46	4.12	2.64
MAX705CSA-ND	Low Cost, Microprocessor Supervisory Circuit with Battery Backup, WDT Output, 4.65V Reset	SO-8	5.46	4.12	2.64
MAX706CPA-ND	Microprocessor Supervisor Circuit	8-Dip	5.46	4.12	2.64
MAX706CSA-ND	Microprocessor Supervisory Circuit	SO-8	5.46	4.12	2.64
MAX706SCPA-ND	Microprocessor Supervisor Circuit	8-Dip	5.91	4.46	2.86
MAX706SCSA-ND	Microprocessor Supervisor Circuit	SO-8	5.91	4.46	2.86
MAX706PCSA-ND	Microprocessor Supervisory Circuit	SO-8	5.91	4.46	2.86
MAX707CPA-ND	Low-Cost, Microprocessor Supervisory Circuit, Active-High Reset, 4.65V Reset	8-Dip	4.90	3.70	2.37
MAX707CSA-ND	Low-Cost, Microprocessor Supervisory Circuit, Active-High Reset, 4.65V Reset	SO-8	4.90	3.70	2.37
MAX708CPA-ND	Low-Cost, Microprocessor Supervisory Circuit, Active-High Reset, 4.4V Reset	8-Dip	4.90	3.70	2.37
MAX708CSA-ND	Low-Cost, Microprocessor Supervisory Circuit, Active-High Reset, 4.4V Reset	SO-8	4.90	3.70	2.37
MAX709RCSA-ND	Power Supply Monitor, 2.63V Reset	SO-8	2.65	2.00	1.28
MAX709TCPA-ND	Power Supply Monitor, 3.08V Reset	8-Dip	2.65	2.00	1.28
MAX709MCPA-ND	Power Supply Monitor, 4.40V Reset	8-Dip	2.65	2.00	1.28
MAX709LCPA-ND	Power Supply Monitor, 4.65V Reset	8-Dip	2.65	2.00	1.28
MAX709LCSA-ND	Power Supply Monitor, 4.65V Reset	SO-8	2.65	2.00	1.28
MAX712CPE-ND	Battery Fast-Charge Controller for NIMH Battery	16-Dip	7.08	5.34	3.42
MAX712CSE-ND	Battery Fast Charger Controller for NIMH Battery	SO-16	7.42	5.60	3.59
MAX713CPE-ND	3-Out Battery Fast Charge Controller for NiCad/NIMH Battery	16-Dip	7.08	5.34	3.42
MAX713CSE-ND	3-Out Battery Fast Charge Controller for NiCad/NIMH Battery	SO-16	7.42	5.60	3.59
MAX714CPE-ND	3-Output Battery Management Supply	16-Dip	8.14	6.14	3.93
MAX714CWE-ND	3-Output Battery Management Supply	SO-16	8.51	6.42	4.12
MAX718CSE-ND	+3.3V/5V Dual Output DC-DC Conv. with Back-Up Switcher	SO-16	11.32	8.54	5.48
MAX719CSE-ND	+3.0V/5V Dual Output DC-DC Conv. with Back-Up Switcher	SO-16	11.32	8.54	5.48
MAX722CSE-ND	+3.3V LCD Power Supply Regulator	SO-16	10.60	8.00	5.13
MAX724CCK-ND	5A, Step Down, PWM, Switch Mode DC-DC Reg.	5 Pin TO-220	9.65	7.28	5.20
MAX731CPA-ND	5V Current Mode DC/DC Converter	8-Dip	5.88	4.44	2.84
MAX731CWE-ND	5V Current Mode DC/DC Converter	SO-16	6.15	4.64	2.98
MAX732CPA-ND	+12V Step Up Current Mode PWM Reg .for Flash Memory	8-Dip	5.99	4.52	2.90
MAX732CWE-ND	+12V Step Up Current Mode PWM Reg. for Flash Memory	SO-16	6.28	4.74	3.04
MAX734CPA-ND	+12V, 120mA Supply for Flash Memory	8-Dip	5.01	3.78	2.42
MAX734CSA-ND	+12V, 120mA Supply for Flash Memory	SO-8	5.09	3.84	2.46
MAX741UCPP-ND	Pin-Programmed, Low-Voltage, Current Mode SMPS Controller, Step Up	20-Dip	8.16	6.16	3.95
MAX749CPA-ND	Digitally Adjustable LCD Bias Supply	8-Dip	5.96	4.50	2.88
MAX749CSA-ND	Digitally Adjustable LCD Bias Supply	SO-8	6.20	4.68	3.00
MAX750ACSA-ND	Adjustable Step Down Current Mode PWM Regulator	SO-8	5.11	3.86	2.47
MAX751CPA-ND	+5V Step Up Current Mode PWM DC-DC Converter	8-Dip	5.06	3.82	2.45
MAX752CPA-ND	Adjustable Step Up Current Mode PWM Regulator	8-Dip	6.76	5.10	3.27
MAX755CPA-ND	Adj., Neg. Output, Inverting, Current Mode PWM Regulator	8-Dip	4.85	3.66	2.35
MAX756CPA-ND	High Efficiency Step Up DC/DC Converter	8-Dip	4.40	3.32	2.13
MAX756CSA-ND	High Efficiency Step Up DC/DC Converter	SO-8	4.93	3.72	2.38
MAX758ACPA-ND	Adjustable Step Down Current Mode PWM Regulator	8-Dip	5.88	4.44	2.84
MAX759CWE-ND	Adjustable Inverting Current Mode PWM	SO-16	6.52	4.92	3.15
MAX759CPD-ND	Adjustable Inverting Current Mode PWM	14-Dip	6.23	4.70	3.00
MAX761CPA-ND	12V Adj High Efficiency Step Up DC/DC Converter	8-Dip	4.98	3.76	2.41
MAX761CSA-ND	12V Adj High Efficiency Step Up DC/DC Converter	SO-8	5.49	4.14	2.65
MAX765CPA-ND	–12V DC/DC Inverter	8-Dip	5.49	4.14	2.65
MAX766CPA-ND	–15V DC/DC Inverter	8-Dip	5.49	4.14	2.65
MAX791CPE-ND	High Perform Microprocessor Supervisory Circuit	16-Dip	8.48	6.40	4.10
MAX791CSE-ND	High Perform Microprocessor Supervisory Circuit	SO-16	8.90	6.72	4.31
MAX792MCPE-ND	Power Supply Monitor 4.37V	16-Dip	7.71	5.82	3.73
MAX792LCPE-ND	Power Supply Monitor 4.62V	16-Dip	7.71	5.82	3.73
MAX792LCSE-ND	Power Supply Monitor 4.62V	SO-16	8.08	6.10	3.92
MAX797CSE-ND	Step Down, PWM Controller with Synchronous Rectifier for CPU with Low Noise	SO-16	8.64	6.52	4.18
MAX800LCPE-ND	µP Supervisory Circuit w/4.65V Reset, Chip Enable, Watchdog	16-Dip	8.51	6.42	4.12
MAX800MCPE-ND	Microprocessor Supervisory Circuit with 4.4V Reset, Chip Enable, Watchdog	16-Dip	8.51	6.42	4.12
MAX813LCPA-ND	Low Cost Microprocessor Supervisor Circuit	8-Dip	3.47	2.62	1.79
MAX813LCSA-ND	Low Cost Microprocessor Supervisor Circuit	SO-8	3.47	2.62	1.79
MAX872CPA-ND	10µA, Low Dropout, +2.5V Precision Volt Ref	8-Dip	4.66	3.52	2.25
MAX874CPA-ND	10µA, Low Dropout, +4.096V Precision Volt Ref	8-Dip	4.66	3.52	2.25
MAX876BCPA-ND	Low-Power, Low-Drift, +10V Precision Volt Ref	8-Dip	6.78	5.12	3.28
MAX882ESA-ND	5V/3.3V Adjustable Low Dropout Linear Reg.	SO-8	4.80	3.62	2.32
MAX901BCSE-ND	Quad High Speed Low Power, Voltage Comp	SO-16	11.37	8.58	5.50
MAX902CSD-ND	Dual High Speed Low Power, Voltage Comp.	SO-14	9.41	7.10	4.55
MAX907CPA-ND	Dual High Speed Ultra Low Power, Single +5V, TTL Comp	8-Dip	3.92	2.96	1.90
MAX907CSA-ND	Dual High Speed Ultra Low Power, Single +5V, TTL Comp	SO-8	3.92	2.96	1.90
MAX908CPD-ND	Quad, High Speed, Ultra L.P., Single +5V, TTL Comp	14-Dip	6.81	5.14	3.30
MAX921CSA-ND	Low Power Comparator with Reference	SO-8	3.63	2.74	1.75
MAX921ESA-ND	Low Power Comparator with Reference	SO-8	4.24	3.20	2.05
MAX922CSA-ND	Dual Ultra Low Power, Single Supply Comparator	SO-8	3.45	2.60	1.67
MAX923CSA-ND	Dual Ultra Low Power, Single Supply Comparator with 1% Precision with Reference	SO-8	4.48	3.38	2.17
MAX924CSE-ND	Quad Ultra Low Power, Single Supply Comparator with 1% Precision with Reference	SO-16	5.17	3.90	2.50
MAX931CPA-ND	Ultra Low Power Comparator	8-Dip	2.25	1.70	1.09
MAX932CSA-ND	Dual Ultra Low Power, Single Supply Comparator with 2% Precision with Reference	SO-8	2.89	2.18	1.40
MAX934CSE-ND	Quad Ultra Low Power Single Supply Comparator with 2% Precision with Reference	SO-16	2.99	2.26	1.45
MAX941CSA-ND	Single, 3V/5V, Single Supply, 75nS, R-R Input Comparator	SO-8	3.15	2.38	1.53
MAX942CSA-ND	Dual, 3V/5V, Single Supply, 75nS, R-R Input Comparator	SO-8	3.39	2.56	1.64
MAX944CSD-ND	Quad, 3V/5V, Single Supply, 75nS, R-R Input Comparator	SO-14	5.64	4.26	2.73
MAX971CSA-ND	Single, Ultra Low Power, Open-Output Comparator with 1% Accuracy	SO-8	3.63	2.74	1.75
MAX975ESA-ND	+3V/+5V Dual Speed Comparator with Auto Standby	SO-8	4.74	3.58	2.29
MAX975EUA-ND	+3V/+5V Dual Speed Comparator with Auto Standby	8-µMAX	4.74	3.58	2.29
MAX977EEE-ND	Dual, +3V/+5V Dual Speed Comparator with Auto Standby	16-QSOP	8.51	6.42	4.12
MAX977ESD-ND	Dual, +3V/+5V Dual Speed Comparator with Auto Standby	SO-14	8.51	6.42	4.12
MAX1044CPA-ND	CMOS Switchcap Voltage Converter	8-Dip	2.68	2.02	1.35
MAX1110CAP-ND	2.7V 8-Bit 8-Channel Serial ADC with Reference	20-SSOP	4.93	3.72	2.39
MAX1110CPP-ND	2.7V 8-Bit 8-Channel Serial ADC with Reference	20-Dip	4.93	3.72	2.39
MAX1202BCAP-ND	5V 12-Bit 8-Channel Serial ADC w/3V Digital Interface	20-SSOP	16.80	12.68	8.13
MAX1202BCPP-ND	5V 12-Bit 8-Channel Serial ADC with 3V Digital Interface	20-Dip	16.80	12.68	8.13
MAX1204BCAP-ND	5V 10-Bit 8-Channel Serial ADC with 3V Digital Interface	20-SSOP	10.97	8.28	5.31
MAX1204BCPP-ND	5V 10-Bit 8-Channel Serial ADC w/3V Digital Interface	20-Dip	10.97	8.28	5.31
MAX1232CPA-ND	Microprocessor Monitor	8-Dip	3.52	2.66	1.82
MAX1232CSA-ND	Microprocessor Monitor	SO-8	3.52	2.66	1.82
MAX1232EPA-ND	Microprocessor Monitor High Temperature	8-Dip	4.40	3.32	2.28
MAX1232ESA-ND	Microprocessor Monitor High Temperature	SO-8	4.58	3.46	2.37
MAX1241BCPA-ND	2.7V Low Power 12-Bit Single Channel Serial ADC	8-Dip	10.76	8.12	5.20
MAX1241BCSA-ND	2.7V Low Power 12-Bit Single Channel Serial ADC	SO-8	10.76	8.12	5.20
MAX1243BCPA-ND	2.7V Low Power 10-Bit Single Channel Serial ADC	8-Dip	6.49	4.90	3.14
MAX1243BCSA-ND	2.7V Low Power 10-Bit Single Channel Serial ADC	SO-8	6.49	4.90	3.14
MAX1245BCAP-ND	2.375V Low Power 12-Bit 8-Channel Serial ADC	20-SSOP	16.14	12.18	7.81
MAX1245BCPP-ND	2.375V Low Power 12-Bit 8-Channel Serial ADC	20-Dip	16.14	12.18	7.81
MAX1247BCEE-ND	2.7V Low Power 12-Bit 4-Channel Serial ADC	16-QSOP	15.00	11.32	7.25
MAX1247BCPE-ND	2.7V Low Power 12-Bit 4-Channel Serial ADC	8-Dip	15.00	11.32	7.25
MAX1249BCEE-ND	2.7V Low Power 10-Bit 4-Channel Serial ADC	16-QSOP	10.20	7.70	4.94
MAX1249BCPE-ND	2.7V Low Power 10-Bit 4-Channel Serial ADC	16-Dip	10.20	7.70	4.94
MAX1480BCPI-ND	Isolated RS485/RS422 Data Interface	28-Dip	22.95	17.32	10.82
MAX1480BEPI-ND	Isolated RS485/RS422 Data Interface	28-Dip	29.81	22.50	14.07
MAX1482CPD-ND	Full Duplex, Slew Rate Ltd, L.P. RS485 Transceiver	14-Dip	2.81	2.12	1.36
MAX1487CPA-ND	2.5 MBPS RS485/RS422 Transceiver	8-Dip	2.81	2.12	1.36
MAX1487CSA-ND	2.5 MBPS RS485/RS422 Transceiver	SO-8	2.81	2.12	1.36
MAX1771CPA-ND	12V Adj Output Step Up DC/DC Converter 90% Efficient	8-Dip	4.08	3.08	1.97
MAX3490CSA-ND	3.3V Powered RS485/422 Transceiver	SO-8	3.82	2.88	1.84
MAX4121CSA-ND	330MHz Multiplexer/Crosspoint Building Block IC	SO-8	4.82	3.64	2.33
MAX4123ESA-ND	Single, 5MHz, Single Supply Op Amp with Shutdown	SO-8	2.39	1.80	1.15
MAX4125ESA-ND	Single, 10 V/µs, Single Supply Op Amp with Shutdown	SO-8	2.39	1.80	1.15
MAX4126ESA-ND	Dual, 5MHz, Single Supply Op Amp	SO-8	3.42	2.58	1.65
MAX4127ESD-ND	Dual, 5MHz, Single Supply Op Amp with Shutdown	SO-14	4.05	3.06	1.96
MAX4128ESA-ND	Dual, 10 V/µs, Single Supply Op Amp	SO-8	3.42	2.58	1.65
MAX4129ESD-ND	Quad, 5MHz, Single Supply Op Amp	SO-14	5.83	4.40	2.82
MAX4131ESA-ND	Single, 10MHz, Single Supply Op Amp with Shutdown	SO-8	2.39	1.80	1.15
MAX4132ESA-ND	Dual, 10MHz, Single Supply Op Amp	SO-8	3.42	2.58	1.65
MAX4133ESD-ND	Dual, 10MHz, Single Supply Op Amp with Shutdown	SO-14	4.05	3.06	1.96
MAX4134ESD-ND	Quad, 10MHz, Single Supply Op Amp	SO-14	5.83	4.40	2.82

(Continued)

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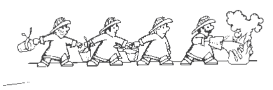
MAXIM SPECIALIZED INTEGRATED CIRCUITS *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MAX4172ESA-ND	High-Side Current Sense Amplifier	SO-8	3.52	2.66	1.71
MAX4172EUA-ND	High-Side Current Sense Amplifier	8-µMAX	3.52	2.66	1.71
MAX4220EEE-ND	High-Speed Single Supply Rail-to-Rail Triple Op Amp	16-QSOP	9.62	7.26	4.65
MAX4220ESD-ND	High-Speed Single Supply Rail-to-Rail Quad Op Amp	SO-16	9.62	7.26	4.65
MAX4420CPA-ND	High-Speed 6A MOSFET Driver, Non-Inverting	8-Dip	3.39	2.56	1.83
MAX4429CPA-ND	High-Speed 6A MOSFET Driver, Inverting	8-Dip	3.39	2.56	1.83
MAX5250BCAP-ND	5V 10-Bit Quad VOUT Serial DAC	20-SSOP	12.80	9.66	6.19
MAX5250BCPP-ND	5V 10-Bit Quad VOUT Serial DAC	20-Dip	12.80	9.66	6.19
MAX5251BCAP-ND	3V 10-Bit Quad VOUT Serial DAC	20-SSOP	12.80	9.66	6.19
MAX5251BCPP-ND	3V 10-Bit Quad VOUT Serial DAC	20-Dip	12.80	9.66	6.19
MAX5253BCAP-ND	3V 12-Bit Quad VOUT Serial DAC	20-SSOP	29.34	22.14	14.19
MAX5253BCPP-ND	3V 12-Bit Quad VOUT Serial DAC	20-Dip	29.34	22.14	14.19
MAX5351BCPA-ND	3.3V 13-Bit VOUT Serial DAC	8-Dip	14.20	10.72	6.88
MAX5351BCUA-ND	3.3V 13-Bit VOUT Serial DAC	8-µMAX	14.20	10.72	6.88
MAX5352BCPA-ND	5V 12-Bit VOUT Serial DAC	8-Dip	10.87	8.20	5.25
MAX5352BCUA-ND	5V 12-Bit VOUT Serial DAC	8-µMAX	10.87	8.20	5.25
MAX5353BCPA-ND	3.3V 12-Bit VOUT Serial DAC	8-Dip	10.87	8.20	5.25
MAX5353BCUA-ND	3.3V 12-Bit VOUT Serial DAC	8-µMAX	10.87	8.20	5.25
MAX5354CPA-ND	5V 10-Bit VOUT Serial DAC	8-Dip	6.97	5.26	3.38
MAX5354CUA-ND	5V 10-Bit VOUT Serial DAC	8-µMAX	6.97	5.26	3.38
MAX5355CPA-ND	3.3V 10-Bit VOUT Serial DAC	8-Dip	7.50	5.66	3.63
MAX5355CUA-ND	3.3V 10-Bit VOUT Serial DAC	8-µMAX	7.50	5.66	3.63
MAX6120ESA-ND	Low-Cost, Micropower, 1.2V Prec, 3-Terminal Volt Reference	SO-8	2.31	1.74	1.12
MAX6225AEPA-ND	Low-Drift, Low-Noise, 2.5V Precision Voltage Reference	8-Dip	12.56	9.48	6.08
MAX6225AESA-ND	Low-Drift, Low-Noise, 2.5V Precision Voltage Reference	SO-8	12.56	9.48	6.08
MAX6225BEPA-ND	Low-Drift, Low-Noise, 2.5V Precision Voltage Reference	8-Dip	5.78	4.36	2.80
MAX6225BESA-ND	Low-Drift, Low-Noise, 2.5V Precision Voltage Reference	SO-8	5.78	4.36	2.80
MAX6241AEPA-ND	Low-Drift, Low-Noise, 4.096V Precision Voltage Reference	8-Dip	12.56	9.48	6.08
MAX6241AESA-ND	Low-Drift, Low-Noise, 4.096V Precision Voltage Reference	SO-8	12.56	9.48	6.08
MAX6241BEPA-ND	Low-Drift, Low-Noise, 4.096V Precision Voltage Reference	8-Dip	5.78	4.36	2.80
MAX6241BESA-ND	Low-Drift, Low-Noise, 4.096V Precision Voltage Reference	SO-8	5.78	4.36	2.80
MAX6250AEPA-ND	Low-Drift, Low-Noise, 5.0V Precision Voltage Reference	8-Dip	12.56	9.48	6.08
MAX6250AESA-ND	Low-Drift, Low-Noise, 5.0V Precision Voltage Reference	SO-8	12.56	9.48	6.08
MAX6250BEPA-ND	Low-Drift, Low-Noise, 5.0V Precision Voltage Reference	8-Dip	5.78	4.36	2.80
MAX6250BESA-ND	Low-Drift, Low-Noise, 5.0V Precision Voltage Reference	SO-8	5.78	4.36	2.80
MAX7219CNG-ND	Serial Input 8-Digit LED Driver Multiplexed	24-Dip	9.33	7.04	4.69
MAX7219CWG-ND	Serial Input 8-Digit LED Driver Multiplexed	SO-24	9.33	7.04	4.69
MAX7645BCPP-ND	CMOS 12-Bit Buffered Multiplying DAC	20-Dip	14.47	10.92	7.00
MAX8211CPA-ND	Programmable Voltage Detector, Non-Inverting	8-Dip	3.15	2.38	1.53
MAX8211CSA-ND	Programmable Voltage Detector, Non-Inverting	SO-8	3.21	2.42	1.55
MAX8211ESA-ND	Programmable Voltage Detector, Non-Inverting	SO-8	4.85	3.66	2.35
MAX8212CPA-ND	Programmable Voltage Detector, Inverting	8-Dip	3.05	2.30	1.53
MAX8212CSA-ND	Programmable Voltage Detector, Inverting	SO-8	2.68	2.02	1.34
MAX8213ACPE-ND	Five Universal Voltage Monitors with Open-Drain Outputs	16-Dip	6.63	5.00	3.20
MAX8214ACPE-ND	Five Universal Voltage Monitors with Active Pull-Ups	16-Dip	6.63	5.00	3.20
MX574AJN-ND	Industry-Standard, Complete 12-Bit ADC	28-Dip	31.72	23.94	17.10
MX7226KN-ND	CMOS, Quad, 8-Bit DAC with Voltage Output Amp	20-Dip	27.37	20.66	14.75
MX7524JN-ND	CMOS 8-Bit Buffer DAC	16-Dip	5.86	4.42	3.15
MX7528JCWP-ND	CMOS Dual DAC 8-Bit Buffered	SO-20	8.80	6.64	4.74
MX7533JCWE-ND	CMOS 10-Bit D/A Converter	SO-16	6.60	4.98	3.55
MXD1210CPA-ND	Nonvolatile RAM Controller	8-Dip	5.57	4.20	2.80
MXD1210CSA-ND	Nonvolatile RAM Controller	SO-8	5.83	4.40	2.94
OP07EP-ND	Low Offset Voltage Op Amp	8-Dip	4.64	3.50	2.50

ZETEX *NEW!* SPECIALIZED INTEGRATED CIRCUITS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
ZXF103Q16CT-ND	High Frequency Filter Variable Q *NEW!*	QSOP-16	5.25	4.50	4.13
ZXF103Q16TR-ND	High Frequency Filter Variable Q *NEW!*	QSOP-16	1575.00/500		
ZXF150W20CT-ND	Lo Pass Filter 2 Twin 6 Pole *NEW!*	SO-20	10.50	9.00	8.25
ZXF150W20TR-ND	Lo Pass Filter 2 Twin 6 Pole *NEW!*	SO-20	5100.00/1,000		
ZXCD1000EQ16CT-ND	Audio Amplifier IC Controller *NEW!*	eQSOP-16	4.06	3.48	3.19
ZXCD1000EQ16TR-ND	Audio Amplifier IC Controller *NEW!*	eQSOP-16	1218.00/500		
ZXCM209JFCT-ND	CMOS Microprocessor Reset Low Output *NEW!*	SOT-23	.74	.63	.58
ZXCM209JFTR-ND	CMOS Microprocessor Reset Low Output *NEW!*	SOT-23	945.00/3,000		
ZXCM209LFCT-ND	CMOS Microprocessor Reset Low Output *NEW!*	SOT-23	.74	.63	.58
ZXCM209LFTR-ND	CMOS Microprocessor Reset Low Output *NEW!*	SOT-23	945.00/3,000		
ZXCM209MFCT-ND	CMOS Microprocessor Reset Low Output *NEW!*	SOT-23	.74	.63	.58
ZXCM209MFTR-ND	CMOS Microprocessor Reset Low Output *NEW!*	SOT-23	945.00/3,000		
ZXCM209RFCT-ND	CMOS Microprocessor Reset Low Output *NEW!*	SOT-23	.74	.63	.58
ZXCM209RFTR-ND	CMOS Microprocessor Reset Low Output *NEW!*	SOT-23	945.00/3,000		
ZXCM209SFCT-ND	CMOS Microprocessor Reset Low Output *NEW!*	SOT-23	.74	.63	.58
ZXCM209SFTR-ND	CMOS Microprocessor Reset Low Output *NEW!*	SOT-23	945.00/3,000		
ZXCM209TFCT-ND	CMOS Microprocessor Reset Low Output *NEW!*	SOT-23	.74	.63	.58
ZXCM209TFTR-ND	CMOS Microprocessor Reset Low Output *NEW!*	SOT-23	945.00/3,000		
ZXCM210LFCT-ND	CMOS Microprocessor Reset High Output *NEW!*	SOT-23	.74	.63	.58
ZXCM210LFTR-ND	CMOS Microprocessor Reset High Output *NEW!*	SOT-23	945.00/3,000		
ZXCT1009FCT-ND	Current Monitor *NEW!*	SOT-23	1.23	1.05	.97
ZXCT1009FTR-ND	Current Monitor *NEW!*	SOT-23	1575.00/3,000		
ZXFV201N14CT-ND	Video Amplifier Quad High Speed *NEW!*	SO-14	4.20	3.60	3.30
ZXFV201N14TR-ND	Video Amplifier Quad High Speed *NEW!*	SO-14	1260.00/500		
ZXFV202E5CT-ND	Video Amplifier Single High Speed *NEW!*	SOT 23-5	1.75	1.50	1.38
ZXFV202E5TR-ND	Video Amplifier Single High Speed *NEW!*	SOT 23-5	2250.00/3,000		
ZXSC100-EVAL-ND	Evaluation Board for ZXSC100 *NEW!*	—	150.00	—	—
ZXSC100N8CT-ND	Boost Converter 1 Cell *NEW!*	SO-8	1.75	1.50	1.38
ZXSC100N8TR-ND	Boost Converter 1 Cell *NEW!*	SO-8	525.00/500		
ZXSC100X8CT-ND	Boost Converter 1 Cell *NEW!*	MSOP-8	1.75	1.50	1.38
ZXSC100X8TR-ND	Boost Converter 1 Cell *NEW!*	MSOP-8	525.00/500		
ZXSC300E5CT-ND	Boost Converter 1 Cell LED *NEW!*	SOT-23-5	1.05	.90	.83
ZXSC300E5TR-ND	Boost Converter 1 Cell LED *NEW!*	SOT-23-5	315.00/500		
ZXFBF04N14CT-ND	4 Channel Buffer *NEW!*	SO-14N	3.15	2.70	2.48
ZXFBF04N14TR-ND	4 Channel Buffer *NEW!*	SO-14N	945.00/500		
ZXFBF05N14CT-ND	4 Channel High Capacitance Buffer *NEW!*	SO-14N	3.15	2.70	2.48
ZXFBF05N14TR-ND	4 Channel High Capacitance Buffer *NEW!*	SO-14N	945.00/500		
ZXFBF08W20CT-ND	8 Channel Buffer *NEW!*	SO-20W	5.08	4.35	3.99
ZXFBF08W20TR-ND	8 Channel Buffer *NEW!*	SO-20W	2465.00/1,000		

Panasonic BUCKET BRIGADE DEVICES



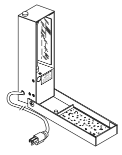
A P-channel silicon gate MOS LSI consists of a number of bucket brigade stages fabricated on a single chip. Each stage consists of a capacitor that stores the electrical charge and a tetrode transistor for switching purposes. Electrical charges corresponding to analog signals are transferred from one stage to another by a two phase clock drive. Thus the electric signals flow undirectionally from the input to the output with a time delay which can be controlled by the clock frequency. The Bucket Brigade Device has found a variety of applications in audio equipment as a useful equipment as a useful variable or fixed delay line. The device can obtain chorus and tremolo effects in electronic musical instruments as well as reverberation effects in audio equipment, which completely replaces conventional mechanical systems.

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MN3003-ND	Dual 64-Stage BBD for Low Voltage Operation	14-Dip	9.18	7.35	6.20
MN3011-ND	3328-Stage Multi-Tap BBD for Audio Delay Signals	12-Dip	25.17	23.49	21.82
MN3209-ND	256-Stage Low Volt Op, Low Noise BBD	8-Dip	5.49	4.40	3.42
9102B-ND	Data Book		3.50	—	—

MING Microsystems RF TRANSMITTER & RECEIVER BOARDS

Digi-Key Part No.	Description	Price Each★ 1	25	100
TX-01-ND	Encoder Motherboard utilizing the HT-12E Encoder IC; 2.7" x 1.75" (68.58mm x 44.45mm). Designed for use with either the TX-66 or TX-99V3 transmitters. Operating Voltage: 12 VDC	16.72	14.93	10.15
RE-01-ND	Decoder Motherboard utilizing the HT-12D Decoder IC; 3.2" x 2.4" (81.28mm x 60.96mm). Designed for use with either the RE-66 or RE-99V3 Receivers. Operating Voltage: 12 VDC	25.12	22.43	15.25
TX-66-ND	Serial Data Input 310 MHz SAW AM Transmitter Board. .75" x 1.75" (19.05mm x 44.45mm). Operating Voltage: 5VDC	18.40	16.43	11.17
RE-66-ND	Serial Data Output 310 MHz LC AM Receiver Board. 1.188" x 2.375" (30.18mm x 60.33mm). Operating Voltage: 5VDC	16.72	14.93	10.15
TX-99V3-ND	Serial Data Input 300MHz LC AM Transmitter Daughterboard. 1.8" x 0.8" (45.72mm x 20.32mm) Op. Voltage: 5 VDC. Data Rate: 1200 BPS	10.00	8.93	6.07
RE-99V3-ND	Serial Data Output 300MHz AM Receiver Daughterboard. 2.4" x 1.2" (60.96mm x 30.48mm) Op. Voltage: 5 VDC. Data Rate: 1200 BPS	16.72	14.93	10.15
TX-99K2-ND	Two Button, Key Chain Housed 300 MHz RF Transmitter Board with HT-12E Encoder. 2" x 2" (50.80mm x 50.80mm). Operates on one 12V (23A) Battery (Not included)	28.48	25.43	17.29

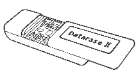
Jelight Company, Inc. CHIPhERASER®



• Operating intensity is at least 25% greater than competitive systems for increased throughput • Excellent uniformity ensures fast and complete erasure • Quick load/unload trays for EPROMs • All metal housing • Heavy duty construction for ruggedness • Units may be stacked to save space • Safety interlock to prevent accidental UV exposure • Deep drawer for processing loaded PC boards

JEL10-ND (Holds 12 ICs)	$110.00
JEL20-ND (Holds 20 ICs, with 60 min. Dial Timer)	$175.00

WALLING CO. UV ERASER



Holds 4 chips, molded plastic case, shirt pocket size. Erases most EPROMs/EPLDs in three minutes. Handles all sizes up to four at a time. Regulated lamp output for uniform erase time. Runs off of wall transformer (Included).

ER2-ND	$39.95
ER3-ND	$49.95

Same as ER2-ND, but with 2-8 minute timer and time-out beeper.

MEMORY

FLASH MEMORY

Toshiba

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC58V64AFT-ND	64Meg 3V NAND (8M x 8)	44-TSOP	15.75	14.70	13.65
TC58128FT-ND	128Meg 3V NAND (16M x 8)	48-TSOP	26.35	23.80	22.10
TC58256FT-ND	256Meg 3V NAND (32M x 8)	48-TSOP	51.00	47.60	44.20
TC58FVT160FT-85-ND	16Meg 3V CMOS (2M x 8 / 1M x 16) Top Boot Block	48-TSOP	14.16	12.75	11.31

Solid State Floppy Disk Cards

Toshiba

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC5832DC-CT0501-ND	32M-Bit (4M x 8) 5V NAND Smart Media	—	16.88	15.75	14.63
TC58V64DC-CT0501-ND	64M-Bit (8M x 8) 3V NAND Smart Media	—	18.00	16.80	15.60
TC58V128DC-CT0501-ND	128M-Bit (16M x 8) 3V NAND Smart Media	—	58.50	54.60	50.70
TC58256DC-CT0501-ND	256M-Bit (32M x 8) 3V NAND Smart Media	—	54.00	50.40	46.80

SRAM

Toshiba

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC551001CF-70L-ND	1Meg SRAM (128K x 8)	32-SOP	6.50	5.20	4.39
TC554001AF-70L-ND	4Meg SRAM (512K x 8)	32-SOP	12.75	11.90	11.05
TC554001AFT-70L-ND	4Meg SRAM (512K x 8)	32-TSOP	12.75	11.90	11.05

(Continued)

MEMORY *(Continued)*

DRAM Controllers

National Semiconductor

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DP8422AV-25-ND	4Meg DRAM Programmer Controller	84-PLCC	27.60	25.76	23.92

EPROMS OTP (One Time Programmable)

Fairchild Semiconductor

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
NMC87C257V150-ND	256K (32Kx8) CMOS Eprom with OTP adr Latch	32-PLCC	7.88	6.30	5.43
NMC87C257V200-ND	256K (32Kx8) CMOS Eprom with OTP adr Latch	32-PLCC	7.88	6.30	5.43
NM27LV512T250-ND	512K (64Kx8) CMOS Low Voltage OTP 250ns	32-TSOP	10.35	8.28	7.13
NM27C010T90-ND	1Meg (128Kx8) CMOS Eprom 90ns OTP	32-TSOP	7.43	5.94	5.12
NM27LV010T250-ND	1Meg (128Kx8) Low Voltage Eprom 250ns OTP	32-TSOP	9.98	8.40	7.62

Extended Temperature EPROMS OTP (-40° to +85°C)

Fairchild Semiconductor

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
NMC87C257VE150-ND	256K (32Kx8) CMOS Eprom with adr Latch	32-PLCC	8.66	6.93	5.97
NMC87C257VE200-ND	256K (32Kx8) CMOS Eprom with adr Latch	32-PLCC	8.66	6.93	5.97

Serial EEPROMS

Microchip Technology

2 Wire Interface

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
24LC00/P-ND	16x8 CMOS Serial EEprom 2.5V	8-Dip	.32	.31	.26
24LC00/SN-ND	16x8 CMOS Serial EEprom 2.5V	SO-8	.32	.31	.26
24C00/P-ND	16x8 CMOS Serial EEprom 5V	8-Dip	.32	.31	.26
24LC01B/P-ND	1K (128x8) CMOS Serial EEprom 2.5V	8-Dip	.37	.34	.28
24LC01B-I/P-ND	1K (128x8) CMOS Serial EEprom, Ind Temp 2.5V	8-Dip	.37	.34	.28
24LC01B/SN-ND	1K (128x8) CMOS Serial EEprom 2.5V	SO-8	.37	.34	.28
24LC01B-I/SN-ND	1K (128x8) CMOS Serial EEprom, Ind Temp 2.5V	SO-8	.37	.34	.28
24C01C/P-ND	1K (128x8) CMOS Serial EEprom 5V (fast byte write)	8-Dip	.52	.49	.41
24C01C/SN-ND	1K (128x8) CMOS Serial EEprom 5V (fast byte write)	SO-8	.52	.49	.41
24LC02B/P-ND	2K (256x8) CMOS Serial EEprom 2.5V	8-Dip	.39	.36	.30
24LC02B/SN-ND	2K (256x8) CMOS Serial EEprom 2.5V	SO-8	.39	.36	.30
24C02C/P-ND	2K (256x8) CMOS Serial EEprom 5V (fast byte write)	8-Dip	.56	.52	.43
24C02C/SN-ND	2K (256x8) CMOS Serial EEprom 5V (fast byte write)	SO-8	.56	.52	.43
24LC04B/P-ND	4K (512x8) CMOS Serial EEprom 2.5V	8-Dip	.47	.45	.37
24LC04B/SN-ND	4K (512x8) CMOS Serial EEprom 2.5V	SO-8	.47	.45	.37
24LC04B-I/SN-ND	4K (512x8) CMOS Serial EEprom, Ind Temp 2.5V	SO-8	.47	.45	.37
24LC08B/P-ND	8K (1Kx8) CMOS Serial EEprom 2.5V	8-Dip	.54	.49	.41
24LC08B/SN-ND	8K (1Kx8) CMOS Serial EEprom 2.5V	SO-8	.54	.49	.41
24LC16B/P-ND	16K (2Kx8) CMOS Serial EEprom 2.5V	8 Dip	.60	.56	.47
24LC16B-I/P-ND	16K (2Kx8) CMOS Serial EEprom, Ind Temp 2.5V	8-Dip	.60	.56	.47
24LC16B/SN-ND	16K (2Kx8) CMOS Serial EEprom 2.5V	SO-8	.60	.56	.47
24LC16B-I/SN-ND	16K (2Kx8) CMOS Serial EEprom, Ind Temp 2.5V	SO-8	.60	.56	.47
24LC32A/P-ND	32K (4Kx8) CMOS Serial EEprom 2.5V	8-Dip	.90	.84	.70
24LC32A/SN-ND	32K (4Kx8) CMOS Serial EEprom 2.5V	SO-8	.90	.84	.70
24AA65/P-ND	64K (8Kx8) Smart CMOS Serial EEprom 1.8V	8-Dip	1.16	.78	.65
24AA65/SM-ND	64K (8Kx8) Smart CMOS Serial EEprom 1.8V	SO-8	1.20	.81	.67
24LC64-I/P-ND	64K (8Kx8) CMOS Serial EEprom, Ind Temp 2.5V	8-Dip	1.16	.78	.65
24LC64-I/SN-ND	64K (8Kx8) CMOS Serial EEprom, Ind. Temp 2.5V	SO-8	1.16	.78	.65
24LC65/P-ND	64K (8Kx8) Smart CMOS Serial EEprom 2.5V	8-Dip	1.87	1.75	1.46
24LC65-I/P-ND	64K (8Kx8) Smart CMOS Serial EEprom, Ind Temp 2.5V	8-Dip	1.89	1.79	1.49
24LC65/SM-ND	64K (8Kx8) Smart CMOS Serial EEprom 2.5V	SO-8	1.94	1.79	1.49
24LC65-I/SM-ND	64K (8Kx8) Smart CMOS Serial EEprom, Ind Temp 2.5V	SO-8	1.94	1.84	1.53
24C65/P-ND	64K (8Kx8) Smart CMOS Serial EEprom 5V	8-Dip	1.87	1.75	1.46
24C65/SM-ND	64K (8Kx8) Smart CMOS Serial EEprom 5V	SO-8	1.94	1.79	1.49
24LC128-I/P-ND	128K (16Kx8) CMOS Serial EEprom, Ind. Temp. 2.5V	8-Dip	1.44	1.34	1.12
24LC128-I/SN-ND	128K (16Kx8) CMOS Serial EEprom, Ind. Temp. 2.5V	SO-8	1.44	1.34	1.12
24LC256-I/P-ND	256K (32Kx8) CMOS Serial EEprom, Ind. Temp. 2.5V	8-Dip	1.94	1.79	1.49
24LC256-I/SM-ND	256K (32Kx8) CMOS Serial EEprom, Ind. Temp. 2.5V	SO-8	1.98	1.84	1.53
24LC21/P-ND	1K Dual Mode DDC™/DDC2™ for Monitors	8-Dip	.56	.54	.45
24LC21/SN-ND	1K Dual Mode DDC™/DDC2™ for Monitors	SO-8	.56	.54	.45

SPI Serial EEPROMS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
25AA080/P-ND	8K (1Kx8) CMOS Serial EEprom 1.8V	8-Dip	.92	.90	.75
25AA080/SN-ND	8K (1Kx8) CMOS Serial EEprom 1.8V	SO-8	.92	.90	.75
25AA320-I/SN-ND	32K (4Kx8) CMOS Serial EEprom Ind. Temp. 1.8V *NEW!*	SO-8	1.01	.94	.78
25LC040/P-ND	4K (512x8) CMOS Serial EEprom 2.5V	8-Dip	.77	.72	.60
25LC040/SN-ND	4K (512x8) CMOS Serial EEprom 2.5V	SO-8	.77	.72	.60
25LC080/P-ND	8K (1Kx8) CMOS Serial EEprom 2.5V	8-Dip	.92	.90	.75
25LC080/SN-ND	8K (1Kx8) CMOS Serial EEprom 2.5V	SO-8	.92	.90	.75
25LC160/P-ND	16K (2Kx8) CMOS Serial EEprom 2.5V	8-Dip	.99	.94	.78
25LC160/SN-ND	16K (2Kx8) CMOS Serial EEprom 2.5V	SO-8	.99	.94	.78
25LC320/P-ND	32K (4Kx8) CMOS Serial EEprom 2.5V	8-Dip	.99	.94	.78
25LC320/SN-ND	32K (4Kx8) CMOS Serial EEprom 2.5V	SO-8	.99	.94	.78
25C040/SN-ND	4K (512x8) CMOS Serial EEprom 5V	SO-8	.77	.72	.60
25C080/P-ND	8K (1Kx8) CMOS Serial EEprom 5V	8-Dip	.92	.90	.75
25C080/SN-ND	8K (1Kx8) CMOS Serial EEprom 5V	SO-8	.92	.90	.75
25C080-I/SN-ND	8K (1Kx8) CMOS Serial EEprom, Ind Temp 5V	SO-8	.92	.90	.75
25C160/P-ND	16K (2Kx8) CMOS Serial EEprom 5V	8-Dip	.99	.94	.78
25C160/SN-ND	16K (2Kx8) CMOS Serial EEprom 5V	SO-8	.99	.94	.78
25C160-I/P-ND	16K (2Kx8) CMOS Serial EEprom, Ind Temp 5V	8-Dip	.99	.94	.78
25C320/P-ND	32K (4Kx8) CMOS Serial EEprom 5V	8-Dip	.99	.94	.78
25C320/SN-ND	32K (4Kx8) CMOS Serial EEprom 5V	SO-8	.99	.94	.78
25LC640-I/P-ND	64K (8Kx8) CMOS SPI Serial EEprom, Ind Temp 2.5V	8-Dip	1.01	.94	.78
25LC640-I/SN-ND	64K (8Kx8) CMOS SPI Serial EEprom, Ind. Temp 2.5V	SO-8	1.01	.94	.78

3 Wire Interface

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
93AA46/P-ND	1K (128x8 or 64x16) CMOS Serial EEprom 1.8V	8-Dip	.54	.52	.43
93AA46/SN-ND	1K (128x8 or 64x16) CMOS Serial EEprom 1.8V	SO-8	.54	.52	.43
93AA46-I/SN-ND	1K (128x8 or 64x16) CMOS Serial EEprom, Ind. Temp 1.8V *NEW!*	SO-8	.54	.52	.43
93AA56/SN-ND	2K (256x8 or 128x16) CMOS Serial EEprom 1.8V	SO-8	.65	.60	.50
93AA66/P-ND	4K (512x8 or 256x16) CMOS Serial EEprom 1.8V	8-Dip	.65	.60	.50
93AA66/SN-ND	4K (512x8 or 256x16) CMOS Serial EEprom 1.8V	SO-8	.65	.60	.50
93LC56/P-ND	2K (256x8 or 128x16) CMOS Serial EEprom 2.5V	8-Dip	.65	.60	.50
93LC56/SN-ND	2K (256x8 or 128x16) CMOS Serial EEprom 2.5V	SO-8	.65	.60	.50
93LC66/P-ND	4K (512x8 or 256x16) CMOS Serial EEprom 2.5V	8-Dip	.65	.60	.50
93LC66/SN-ND	4K (512x8 or 256x16) CMOS Serial EEprom 2.5V	SO-8	.65	.60	.50
93LC46A/P-ND	1K (128x8) CMOS Serial EEprom 2.5V	8-Dip	.41	.38	.32
93LC46A/SN-ND	1K (128x8) CMOS Serial EEprom 2.5V	SO-8	.41	.38	.32
93LC46A-I/P-ND	1K (128x8) CMOS Serial EEprom, Ind. Temp 2.5V	8-Dip	.41	.38	.32
93LC46A-I/SN-ND	1K (128x8) CMOS Serial EEprom, Ind. Temp 2.5V	SO-8	.41	.38	.32
93LC46B/P-ND	1K (64x16) CMOS Serial EEprom 2.5V	8-Dip	.41	.37	.31
93LC46B/SN-ND	1K (64x16) CMOS Serial EEprom 2.5V	SO-8	.41	.37	.31
93LC46B-I/SN-ND	1K (64x16) CMOS Serial EEprom, Ind. Temp 2.5V	SO-8	.41	.37	.31
93LC56A/P-ND	2K (256x8) CMOS Serial EEprom 2.5V	8-Dip	.45	.43	.35
93LC56A/SN-ND	2K (256x8) CMOS Serial EEprom 2.5V	SO-8	.45	.42	.35
93LC56B/P-ND	2K (128x16) CMOS Serial EEprom 2.5V	8-Dip	.45	.43	.35
93LC56B/SN-ND	2K (128x16) CMOS Serial EEprom 2.5V	SO-8	.45	.43	.35
93LC56B-I/SN-ND	2K (128x16) CMOS Serial EEprom, Ind Temp 2.5V	SO-8	.45	.43	.35
93LC66A/P-ND	4K (512x8) CMOS Serial EEprom 2.5V	8-Dip	.54	.49	.41
93LC66A/SN-ND	4K (512x8) CMOS Serial EEprom 2.5V	SO-8	.47	.45	.37
93LC66A-I/P-ND	4K (512x8) CMOS Serial EEprom, Ind Temp 2.5V	8-Dip	.54	.49	.41
93LC66A-I/SN-ND	4K (512x8) CMOS Serial EEprom, Ind Temp 2.5V	SO-8	.54	.49	.41
93LC66B/P-ND	4K (256x16) CMOS Serial EEprom 2.5V	8-Dip	.54	.49	.41
93LC66B/SN-ND	4K (256x16) CMOS Serial EEprom 2.5V	SO-8	.54	.49	.41

Fairchild Semiconductor

2 Wire Interface

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
NM24C08M-ND	8K-Bit CMOS Serial EEprom	SO-14	1.68	1.34	1.01

3 Wire Interface

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
NM93C13M8-ND	256-Bit CMOS Serial EEprom	SO-8	.98	.80	.68
NM93C13N-ND	256-Bit CMOS Serial EEprom	8-Dip	.98	.80	.68
NM93C14N-ND	1K-Bit CMOS Serial EEprom	8-Dip	1.05	.88	.70
NM93C56M-ND	2K-Bit CMOS Serial EEprom	SO-14	1.63	1.30	.98
NM93CS06LN-ND	256-Bit CMOS Serial EEprom 2.5V with Security	8-Dip	1.52	1.25	1.06
NM93CS06M-ND	256-Bit CMOS Serial EEprom with Security	SO-14	1.13	.93	.79
NM93CS06N-ND	256-Bit CMOS Serial EEprom with Security	8-Dip	1.13	.93	.79
NM95C12N-ND	1K-Bit CMOS Serial EEprom	14-Dip	1.75	1.40	1.05

High Temperature Serial EEPROMS

Fairchild Semiconductor

3 Wire Interface

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
NM93C56EM-ND	2K-Bit CMOS Serial EEprom	SO-14	1.63	1.30	.98

ATMEL *NEW!* SERIAL EEPROMs

NEW! 2-Wire Serial Interface EEPROMs *NEW!*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AT24C01-10PC-ND	1K (128x8) Serial EEPROM, Non-Cascadable, 5V	8-Dip	.59	.36	.30
AT24C01-10PC-2.7-ND	1K (128x8) Serial EEPROM, Non-Cascadable, 2.7V	8-Dip	.59	.36	.30
AT24C01-10PI-ND	1K (128x8) Serial EEPROM, Non-Cascadable, 5V	8-Dip	.65	.40	.34
AT24C01-10PI-2.7-ND	1K (128x8) Serial EEPROM, Non-Cascadable, 2.7V	8-Dip	.65	.40	.34
AT24C01-10SC-ND	1K (128x8) Serial EEPROM, Non-Cascadable, 5V	SO-8	.62	.38	.32
AT24C01-10SC-2.7-ND	1K (128x8) Serial EEPROM, Non-Cascadable, 2.7V	SO-8	.62	.38	.32
AT24C01-10SI-ND	1K (128x8) Serial EEPROM, Non-Cascadable, 5V	SO-8	.65	.36	.34
AT24C01-10SI-2.7-ND	1K (128x8) Serial EEPROM, Non-Cascadable, 2.7V	SO-8	.65	.36	.34
AT24C01A-10PC-ND	1K (128x8) Serial EEPROM, Full HW Data Write Protect, 5V	8-Dip	.59	.36	.30
AT24C01A-10PC-2.7-ND	1K (128x8) Ser. EEPROM, Full HW Data Write Protect, 2.7V	8-Dip	.59	.36	.30
AT24C01A-10PI-ND	1K (128x8) Serial EEPROM, Full HW Data Write Protect, 5V	8-Dip	.65	.40	.34
AT24C01A-10PI-2.7-ND	1K (128x8) Ser. EEPROM, Full HW Data Write Protect, 2.7V	8-Dip	.65	.40	.34
AT24C01A-10SC-ND	1K (128x8) Serial EEPROM, Full HW Data Write Protect, 5V	SO-8	.62	.38	.32
AT24C01A-10SC-2.7-ND	1K (128x8) Ser. EEPROM, Full HW Data Write Protect, 2.7V	SO-8	.62	.38	.32
AT24C01A-10SI-ND	1K (128x8) Serial EEPROM, Full HW Data Write Protect, 5V	SO-8	.65	.36	.34
AT24C01A-10SI-2.7-ND	1K (128x8) Ser. EEPROM, Full HW Data Write Protect, 2.7V	SO-8	.65	.36	.34
AT24C02-10PC-ND	2K (256x8) Serial EEPROM, Full HW Data Write Protect, 5V	8-Dip	.72	.40	.37
AT24C02-10PC-2.7-ND	2K (256x8) Ser. EEPROM, Full HW Data Write Protect, 2.7V	8-Dip	.72	.40	.37
AT24C02-10PI-ND	2K (256x8) Serial EEPROM, Full HW Data Write Protect, 5V	8-Dip	.78	.44	.40
AT24C02-10PI-2.7-ND	2K (256x8) Ser. EEPROM, Full HW Data Write Protect, 2.7V	8-Dip	.78	.44	.40
AT24C02N-10SC-ND	2K (256x8) Serial EEPROM, Full HW Data Write Protect, 5V	SO-8	.72	.40	.37
AT24C02N-10SC-2.7-ND	2K (256x8) Ser. EEPROM, Full HW Data Write Protect, 2.7V	SO-8	.72	.40	.37
AT24C02N-10SI-ND	2K (256x8) Serial EEPROM, Full HW Data Write Protect, 5V	SO-8	.78	.44	.40
AT24C02N-10SI-2.7-ND	2K (256x8) Ser. EEPROM, Full HW Data Write Protect, 2.7V	SO-8	.78	.44	.40
AT24C04-10PC-ND	4K (512x8) Serial EEPROM, Full HW Data Write Protect, 5V	8-Dip	.81	.45	.42
AT24C04-10PC-2.7-ND	4K (512x8) Ser. EEPROM, Full HW Data Write Protect, 2.7V	8-Dip	.81	.45	.42
AT24C04-10PI-ND	4K (512x8) Serial EEPROM, Full HW Data Write Protect, 5V	8-Dip	.91	.51	.47
AT24C04-10PI-2.7-ND	4K (512x8) Ser. EEPROM, Full HW Data Write Protect, 2.7V	8-Dip	.91	.51	.47
AT24C04N-10SC-ND	4K (512x8) Serial EEPROM, Full HW Data Write Protect, 5V	SO-8	.81	.45	.42
AT24C04N-10SC-2.7-ND	4K (512x8) Ser. EEPROM, Full HW Data Write Protect, 2.7V	SO-8	.81	.45	.42
AT24C04N-10SI-ND	4K (512x8) Serial EEPROM, Full HW Data Write Protect, 5V	SO-8	.91	.51	.47
AT24C04N-10SI-2.7-ND	4K (512x8) Ser. EEPROM, Full HW Data Write Protect, 2.7V	SO-8	.91	.51	.47
AT24C08-10PC-ND	8K (1Kx8) Serial EEPROM, 5V	8-Dip	1.14	.63	.59
AT24C08-10PC-2.7-ND	8K (1Kx8) Serial EEPROM, 2.7V	8-Dip	1.14	.63	.59
AT24C08-10PI-ND	8K (1Kx8) Serial EEPROM, 5V	8-Dip	1.27	.71	.65
AT24C08-10PI-2.7-ND	8K (1Kx8) Serial EEPROM, 2.7V	8-Dip	1.27	.71	.65
AT24C08N-10SC-ND	8K (1Kx8) Serial EEPROM, 5V	SO-8	1.14	.63	.59
AT24C08N-10SC-2.7-ND	8K (1Kx8) Serial EEPROM, 2.7V	SO-8	1.14	.63	.59
AT24C08N-10SI-ND	8K (1Kx8) Serial EEPROM, 5V	SO-8	1.27	.71	.65
AT24C08N-10SI-2.7-ND	8K (1Kx8) Serial EEPROM, 2.7V	SO-8	1.27	.71	.65
AT24C16-10PC-ND	16K (2Kx8) Ser. EEPROM, Half HW Data Write Protect, 5V	8-Dip	1.46	.75	.60
AT24C16-10PC-2.7-ND	16K (2Kx8) Ser. EEPROM, Half HW Data Write Protect, 2.7V	8-Dip	1.46	.75	.60
AT24C16-10PI-ND	16K (2Kx8) Ser. EEPROM, Half HW Data Write Protect, 5V	8-Dip	1.63	.83	.67
AT24C16N-10SC-ND	16K (2Kx8) Ser. EEPROM, Half HW Data Write Protect, 5V	SO-8	1.46	.75	.60
AT24C16N-10SC-2.7-ND	16K (2Kx8) Ser. EEPROM, Half HW Data Write Protect, 2.7V	SO-8	1.46	.75	.60

(Continued)

ATMEL *NEW!* SERIAL EEPROMs *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AT24C16N-10SI-ND	16K (2Kx8) Ser. EEPROM, Half HW Data Write Protect, 5V	SO-8	1.63	.83	.67
AT24C16N-10SI-2.7-ND	16K (2Kx8) Ser. EEPROM, Half HW Data Write Protect, 2.7V	SO-8	1.63	.83	.67
AT24C21-10PC-2.5-ND	1K (128x8) SEEPROM, DDC1™/DDC2™ for Monitors, 2.5V	8-Dip	1.14	.63	.59
AT24C21-10PI-2.5-ND	1K (128x8) SEEPROM, DDC1™/DDC2™ for Monitors, 2.5V	8-Dip	1.27	.71	.65
AT24C21-10SC-2.5-ND	1K (128x8) SEEPROM, DDC1™/DDC2™ for Monitors, 2.5V	SO-8	1.14	.63	.59
AT24C21-10SI-2.5-ND	1K (128x8) SEEPROM, DDC1™/DDC2™ for Monitors, 2.5V	SO-8	1.27	.71	.65
AT24C32-10PC-ND	32K (4Kx8) Serial EEPROM, Cascadable, 5V	8-Dip	2.32	1.38	1.25
AT24C32-10PC-2.7-ND	32K (4Kx8) Serial EEPROM, Cascadable, 2.7V	8-Dip	2.44	1.45	1.31
AT24C32-10PI-ND	32K (4Kx8) Serial EEPROM, Cascadable, 5V	8-Dip	2.55	1.52	1.37
AT24C32-10PI-2.7-ND	32K (4Kx8) Serial EEPROM, Cascadable, 2.7V	8-Dip	2.66	1.58	1.43
AT24C32N-10SC-ND	32K (4Kx8) Serial EEPROM, Cascadable, 5V	SO-8	2.27	1.35	1.22
AT24C32N-10SC-2.7-ND	32K (4Kx8) Serial EEPROM, Cascadable, 2.7V	SO-8	2.38	1.42	1.28
AT24C32N-10SI-ND	32K (4Kx8) Serial EEPROM, Cascadable, 5V	SO-8	2.49	1.48	1.34
AT24C32N-10SI-2.7-ND	32K (4Kx8) Serial EEPROM, Cascadable, 2.7V	SO-8	2.60	1.55	1.40
AT24C32W-10SC-ND	32K (4Kx8) Serial EEPROM, Cascadable, 5V	SO-8*	2.32	1.38	1.25
AT24C32W-10SC-2.7-ND	32K (4Kx8) Serial EEPROM, Cascadable, 2.7V	SO-8*	2.44	1.45	1.31
AT24C32W-10SI-ND	32K (4Kx8) Serial EEPROM, Cascadable, 5V	SO-8*	2.55	1.52	1.37
AT24C32W-10SI-2.7-ND	32K (4Kx8) Serial EEPROM, Cascadable, 2.7V	SO-8*	2.66	1.58	1.43
AT24C64-10PC-ND	64K (8Kx8) Serial EEPROM, Cascadable, 5V	8-Dip	2.66	1.85	1.61
AT24C64-10PC-2.7-ND	64K (8Kx8) Serial EEPROM, Cascadable, 2.7V	8-Dip	2.78	1.93	1.69
AT24C64-10PI-ND	64K (8Kx8) Serial EEPROM, Cascadable, 5V	8-Dip	2.93	2.03	1.77
AT24C64-10PI-2.7-ND	64K (8Kx8) Serial EEPROM, Cascadable, 2.7V	8-Dip	3.05	2.11	1.85
AT24C64N-10SC-ND	64K (8Kx8) Serial EEPROM, Cascadable, 5V	SO-8	2.62	1.81	1.59
AT24C64N-10SC-2.7-ND	64K (8Kx8) Serial EEPROM, Cascadable, 2.7V	SO-8	2.74	1.90	1.66
AT24C64N-10SI-ND	64K (8Kx8) Serial EEPROM, Cascadable, 5V	SO-8	2.88	2.00	1.74
AT24C64N-10SI-2.7-ND	64K (8Kx8) Serial EEPROM, Cascadable, 2.7V	SO-8	3.00	2.08	1.82
AT24C64W-10SC-ND	64K (8Kx8) Serial EEPROM, Cascadable, 5V	SO-8*	2.66	1.85	1.61
AT24C64W-10SC-2.7-ND	64K (8Kx8) Serial EEPROM, Cascadable, 2.7V	SO-8*	2.78	1.93	1.69
AT24C64W-10SI-ND	64K (8Kx8) Serial EEPROM, Cascadable, 5V	SO-8*	2.93	2.03	1.77
AT24C64W-10SI-2.7-ND	64K (8Kx8) Serial EEPROM, Cascadable, 2.7V	SO-8*	3.05	2.11	1.85
AT24C128-10PC-ND	128K (16Kx8) Serial EEPROM, Cascadable, 5V	8-Dip	2.74	1.63	1.47
AT24C128-10PC-2.7-ND	128K (16Kx8) Serial EEPROM, Cascadable, 2.7V	8-Dip	2.47	1.71	1.50
AT24C128-10PI-ND	128K (16Kx8) Serial EEPROM, Cascadable, 5V	8-Dip	2.59	1.80	1.57
AT24C128-10PI-2.7-ND	128K (16Kx8) Serial EEPROM, Cascadable, 2.7V	8-Dip	2.69	1.86	1.63
AT24C128N-10SC-ND	128K (16Kx8) Serial EEPROM, Cascadable, 5V	SO-8	2.74	1.63	1.47
AT24C128N-10SC2.7-ND	128K (16Kx8) Serial EEPROM, Cascadable, 2.7V	SO-8	2.74	1.63	1.47
AT24C128N-10SI-ND	128K (16Kx8) Serial EEPROM, Cascadable, 5V	SO-8	2.59	1.80	1.57
AT24C128N-10SI2.7-ND	128K (16Kx8) Serial EEPROM, Cascadable, 2.7V	SO-8	2.59	1.80	1.57
AT24C128W-10SC-ND	128K (16Kx8) Serial EEPROM, Cascadable, 5V	SO-8*	2.74	1.63	1.47
AT24C128W-10SC2.7-ND	128K (16Kx8) Serial EEPROM, Cascadable, 2.7V	SO-8*	2.47	1.71	1.50
AT24C128W-10SI-ND	128K (16Kx8) Serial EEPROM, Cascadable, 5V	SO-8*	2.59	1.80	1.57
AT24C128W-10SI2.7-ND	128K (16Kx8) Serial EEPROM, Cascadable, 2.7V	SO-8*	2.69	1.86	1.63
AT24C256-10PC-ND	256K (32Kx8) Serial EEPROM, Cascadable, 5V	8-Dip	3.43	2.38	2.08
AT24C256-10PC-2.7-ND	256K (32Kx8) Serial EEPROM, Cascadable, 2.7V	8-Dip	3.60	2.49	2.18
AT24C256-10PI-2.7-ND	256K (32Kx8) Serial EEPROM, Cascadable, 2.7V	8-Dip	3.94	2.73	2.38
AT24C256W-10SC-ND	256K (32Kx8) Serial EEPROM, Cascadable, 5V	SO-8*	3.43	2.38	2.08
AT24C256W-10SC2.7-ND	256K (32Kx8) Serial EEPROM, Cascadable, 2.7V	SO-8*	3.60	2.49	2.18
AT24C256W-10SI-ND	256K (32Kx8) Serial EEPROM, Cascadable, 5V	SO-8*	3.77	2.61	2.28
AT24C256W-10SI2.7-ND	256K (32Kx8) Serial EEPROM, Cascadable, 2.7V	SO-8*	3.94	2.73	2.38
NEW! SPI Serial Interface EEPROMs *NEW!*					
AT25010-10PC-ND	1K (128x8) Serial EEPROM, 5V	8-Dip	.65	.36	.34
AT25010-10PC-2.7-ND	1K (128x8) Serial EEPROM, 2.7V	8-Dip	.75	.42	.39
AT25010-10PI-ND	1K (128x8) Serial EEPROM, 5V	8-Dip	.72	.40	.37
AT25010-10PI-2.7-ND	1K (128x8) Serial EEPROM, 2.7V	8-Dip	.81	.45	.42
AT25010N-10SC-ND	1K (128x8) Serial EEPROM, 5V	SO-8	.65	.36	.34
AT25010N-10SC-2.7-ND	1K (128x8) Serial EEPROM, 2.7V	SO-8	.75	.42	.39
AT25010N-10SI-ND	1K (128x8) Serial EEPROM, 5V	SO-8	.72	.40	.37
AT25010N-10SI-2.7-ND	1K (128x8) Serial EEPROM, 2.7V	SO-8	.81	.45	.42
AT25020-10PC-ND	2K (256x8) Serial EEPROM, 5V	8-Dip	.85	.47	.44
AT25020-10PC-2.7-ND	2K (256x8) Serial EEPROM, 2.7V	8-Dip	.98	.54	.50
AT25020-10PI-ND	2K (256x8) Serial EEPROM, 5V	8-Dip	.94	.53	.49
AT25020-10PI-2.7-ND	2K (256x8) Serial EEPROM, 2.7V	8-Dip	1.07	.60	.55
AT25020N-10SC-ND	2K (256x8) Serial EEPROM, 5V	SO-8	.85	.47	.44
AT25020N-10SC-2.7-ND	2K (256x8) Serial EEPROM, 2.7V	SO-8	.98	.54	.50
AT25020N-10SI-ND	2K (256x8) Serial EEPROM, 5V	SO-8	.94	.53	.49
AT25020N-10SI-2.7-ND	2K (256x8) Serial EEPROM, 2.7V	SO-8	1.07	.60	.55
AT25040-10PC-ND	4K (512x8) Serial EEPROM, 5V	8-Dip	1.11	.62	.57
AT25040-10PC-2.7-ND	4K (512x8) Serial EEPROM, 2.7V	8-Dip	1.27	.71	.65
AT25040-10PI-ND	4K (512x8) Serial EEPROM, 5V	8-Dip	1.24	.69	.64
AT25040-10PI-2.7-ND	4K (512x8) Serial EEPROM, 2.7V	8-Dip	1.40	.72	.58
AT25040N-10SC-ND	4K (512x8) Serial EEPROM, 5V	SO-8	1.11	.62	.57
AT25040N-10SC-2.7-ND	4K (512x8) Serial EEPROM, 2.7V	SO-8	1.27	.71	.65
AT25040N-10SI-ND	4K (512x8) Serial EEPROM, 5V	SO-8	1.24	.69	.64
AT25040N-10SI-2.7-ND	4K (512x8) Serial EEPROM, 2.7V	SO-8	1.40	.72	.58
AT25080-10PC-ND	8K (1Kx8) Serial EEPROM, 5V	8-Dip	1.33	.69	.55
AT25080-10PC-2.7-ND	8K (1Kx8) Serial EEPROM, 2.7V	8-Dip	1.53	.79	.63
AT25080-10PI-ND	8K (1Kx8) Serial EEPROM, 5V	8-Dip	1.46	.75	.60
AT25080-10PI-2.7-ND	8K (1Kx8) Serial EEPROM, 2.7V	8-Dip	1.46	.87	.78
AT25080N-10SC-ND	8K (1Kx8) Serial EEPROM, 5V	SO-8	1.33	.69	.55
AT25080N-10SC-2.7-ND	8K (1Kx8) Serial EEPROM, 2.7V	SO-8	1.53	.79	.63
AT25080N-10SI-ND	8K (1Kx8) Serial EEPROM, 5V	SO-8	1.46	.75	.60
AT25080N-10SI-2.7-ND	8K (1Kx8) Serial EEPROM, 2.7V	SO-8	1.46	.87	.78
AT25160-10PC-ND	16K (2Kx8) Serial EEPROM, 5V	8-Dip	1.43	.85	.77
AT25160-10PC-2.7-ND	16K (2Kx8) Serial EEPROM, 2.7V	8-Dip	1.65	.98	.89
AT25160-10PI-ND	16K (2Kx8) Serial EEPROM, 5V	8-Dip	1.57	.93	.84
AT25160-10PI-2.7-ND	16K (2Kx8) Serial EEPROM, 2.7V	8-Dip	1.79	1.07	.96
AT25160N-10SC-ND	16K (2Kx8) Serial EEPROM, 5V	SO-8	1.43	.85	.77
AT25160N-10SC-2.7-ND	16K (2Kx8) Serial EEPROM, 2.7V	SO-8	1.65	.98	.89
AT25160N-10SI-ND	16K (2Kx8) Serial EEPROM, 5V	SO-8	1.57	.93	.84
AT25160N-10SI-2.7-ND	16K (2Kx8) Serial EEPROM, 2.7V	SO-8	1.79	1.07	.96
AT25320-10PC-ND	32K (4Kx8) Serial EEPROM, 5V	8-Dip	2.66	1.58	1.43
AT25320-10PC-2.7-ND	32K (4Kx8) Serial EEPROM, 2.7V	8-Dip	2.62	1.81	1.59
AT25320-10PI-ND	32K (4Kx8) Serial EEPROM, 5V	8-Dip	2.50	1.73	1.51
AT25320-10PI-2.7-ND	32K (4Kx8) Serial EEPROM, 2.7V	8-Dip	2.83	1.96	1.72
AT25320N-10SC-ND	32K (4Kx8) Serial EEPROM, 5V	SO-8	2.66	1.58	1.43
AT25320N-10SC-2.7-ND	32K (4Kx8) Serial EEPROM, 2.7V	SO-8	2.62	1.81	1.59
AT25320N-10SI-ND	32K (4Kx8) Serial EEPROM, 5V	SO-8	2.50	1.73	1.51
AT25320N-10SI-2.7-ND	32K (4Kx8) Serial EEPROM, 2.7V	SO-8	2.83	1.96	1.72
AT25640-10PC-ND	64K (8Kx8) Serial EEPROM, 5V	8-Dip	3.24	2.25	1.96
AT25640-10PC-2.7-ND	64K (8Kx8) Serial EEPROM, 2.7V	8-Dip	3.74	2.59	2.27
AT25640-10PI-ND	64K (8Kx8) Serial EEPROM, 5V	8-Dip	3.58	2.48	2.17
AT25640-10PI-2.7-ND	64K (8Kx8) Serial EEPROM, 2.7V	8-Dip	4.06	2.81	2.46
AT25640N-10SC-ND	64K (8Kx8) Serial EEPROM, 5V	SO-8	3.24	2.25	1.96
AT25640N-10SC-2.7-ND	64K (8Kx8) Serial EEPROM, 2.7V	SO-8	3.74	2.59	2.27
AT25640N-10SI-ND	64K (8Kx8) Serial EEPROM, 5V	SO-8	3.58	2.48	2.17
AT25640N-10SI-2.7-ND	64K (8Kx8) Serial EEPROM, 2.7V	SO-8	4.06	2.81	2.46
AT25128-10PC-ND	128K (16Kx8) Serial EEPROM, 5V	8-Dip	4.75	3.29	2.88
AT25128-10PC-2.7-ND	128K (16Kx8) Serial EEPROM, 2.7V	8-Dip	5.45	3.41	3.30
AT25128-10PI-ND	128K (16Kx8) Serial EEPROM, 5V	8-Dip	5.23	3.27	3.17
AT25128-10PI-2.7-ND	128K (16Kx8) Serial EEPROM, 2.7V	8-Dip	5.93	3.71	3.59
AT25128N-10SC-ND	128K (16Kx8) Serial EEPROM, 5V	SO-8	2.47	1.71	1.50
AT25128N-10SC-2.7-ND	128K (16Kx8) Serial EEPROM, 2.7V	SO-8	2.83	1.96	1.72
AT25128N-10SI-ND	128K (16Kx8) Serial EEPROM, 5V	SO-8	2.71	1.88	1.64
AT25128N-10SI-2.7-ND	128K (16Kx8) Serial EEPROM, 2.7V	SO-8	3.07	2.13	1.86
AT25256-10PC-ND	256K (32Kx8) Serial EEPROM, 5V	8-Dip	3.72	2.58	2.25
AT25256-10PC-2.7-ND	256K (32Kx8) Serial EEPROM, 2.7V	8-Dip	4.30	2.98	2.60
AT25256-10PI-ND	256K (32Kx8) Serial EEPROM, 5V	8-Dip	4.10	2.84	2.48
AT25256-10PI-2.7-ND	256K (32Kx8) Serial EEPROM, 2.7V	8-Dip	4.66	3.23	2.82
NEW! 3-Wire Serial Interface EEPROMs *NEW!*					
AT93C46-10PC-ND	1K (128x8 or 64x16) Serial EEPROM, 5V	8-Dip	.59	.36	.30
AT93C46-10PC-2.7-ND	1K (128x8 or 64x16) Serial EEPROM, 2.7V	8-Dip	.59	.36	.30
AT93C46-10PI-ND	1K (128x8 or 64x16) Serial EEPROM, 5V	8-Dip	.65	.36	.34
AT93C46-10PI-2.7-ND	1K (128x8 or 64x16) Serial EEPROM, 2.7V	8-Dip	.65	.36	.34
AT93C46-10SC-2.7-ND	1K (128x8 or 64x16) Serial EEPROM, 2.7V	SO-8	.62	.38	.32
AT93C46-10SI-ND	1K (128x8 or 64x16) Serial EEPROM, 5V	SO-8	.65	.36	.34
AT93C46-10SI-2.7-ND	1K (128x8 or 64x16) Serial EEPROM, 2.7V	SO-8	.65	.36	.34
AT93C46A-10PC-ND	1K (64x16) Serial EEPROM, 5V	8-Dip	.59	.36	.30
AT93C46A-10PC-2.7-ND	1K (64x16) Serial EEPROM, 2.7V	8-Dip	.59	.36	.30
AT93C46A-10PI-ND	1K (64x16) Serial EEPROM, 5V	8-Dip	.65	.36	.34
AT93C46A-10PI-2.7-ND	1K (64x16) Serial EEPROM, 2.7V	8-Dip	.65	.36	.34
AT93C46A-10SC-2.7-ND	1K (64x16) Serial EEPROM, 2.7V	SO-8	.62	.38	.32
AT93C46A-10SI-ND	1K (64x16) Serial EEPROM, 5V	SO-8	.65	.36	.34
AT93C46A-10SI-2.7-ND	1K (64x16) Serial EEPROM, 2.7V	SO-8	.65	.36	.34
AT93C56-10PC-ND	2K (256x8 or 128x16) Serial EEPROM, 5V	8-Dip	.72	.40	.37
AT93C56-10PC-2.7-ND	2K (256x8 or 128x16) Serial EEPROM, 2.7V	8-Dip	.72	.40	.37
AT93C56-10PI-ND	2K (256x8 or 128x16) Serial EEPROM, 5V	8-Dip	.81	.45	.42
AT93C56-10PI-2.7-ND	2K (256x8 or 128x16) Serial EEPROM, 2.7V	8-Dip	.81	.45	.42
AT93C56-10SC-2.7-ND	2K (256x8 or 128x16) Serial EEPROM, 2.7V	SO-8	.75	.42	.39
AT93C56-10SI-ND	2K (256x8 or 128x16) Serial EEPROM, 5V	SO-8	.85	.47	.44
AT93C56-10SI-2.7-ND	2K (256x8 or 128x16) Serial EEPROM, 2.7V	SO-8	.85	.47	.44
AT93C66-10PC-ND	4K (512x8 or 256x16) Serial EEPROM, 5V	8-Dip	.88	.49	.45
AT93C66-10PC-2.7-ND	4K (512x8 or 256x16) Serial EEPROM, 2.7V	8-Dip	.88	.49	.45
AT93C66-10PI-ND	4K (512x8 or 256x16) Serial EEPROM, 5V	8-Dip	1.01	.56	.52
AT93C66-10PI-2.7-ND	4K (512x8 or 256x16) Serial EEPROM, 2.7V	8-Dip	1.01	.56	.52
AT93C66-10SC-2.7-ND	4K (512x8 or 256x16) Serial EEPROM, 2.7V	SO-8	.94	.53	.49
AT93C66-10SI-ND	4K (512x8 or 256x16) Serial EEPROM, 5V	SO-8	1.01	.56	.52
AT93C66-10SI-2.7-ND	4K (512x8 or 256x16) Serial EEPROM, 2.7V	SO-8	1.01	.56	.52

* .200" Body Width

ATMEL EPROMS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
Low Power Battery Voltage EPROMS					
AT27BV256-90JC-ND	256K (32Kx8) CMOS EPROM 2.7V 90nS OTP	32-PLCC	3.12	2.40	2.05
AT27BV256-12JC-ND	256K (32Kx8) CMOS EPROM 2.7V 120nS OTP	32-PLCC	2.90	2.25	1.95
AT27BV512-90JC-ND	512K (64Kx8) CMOS EPROM 2.7V 90nS OTP	32-PLCC	3.33	2.60	2.20
AT27BV512-12JC-ND	512K (64Kx8) CMOS EPROM 2.7V 120nS OTP	32-PLCC	3.12	2.40	2.05
AT27BV010-90JC-ND	1 Meg (128Kx8) CMOS EPROM 2.7V 90nS OTP	32-PLCC	4.73	3.65	3.15
AT27BV010-12JC-ND	1 Meg (128Kx8) CMOS EPROM 2.7V 120nS OTP	32-PLCC	4.09	3.15	2.70
AT27BV1024-12JC-ND	1 Meg (64Kx16) CMOS EPROM 2.7V 120nS OTP	44-PLCC	4.73	3.67	3.15
AT27BV020-90JC-ND	2 Meg (256Kx8) CMOS EPROM 2.7V 90nS OTP	32-PLCC	6.24	4.84	4.15
AT27BV020-12JC-ND	2 Meg (256Kx8) CMOS EPROM 2.7V 120nS OTP	32-PLCC	5.70	4.43	3.79
AT27BV040-12JC-ND	4 Meg (512Kx8) CMOS EPROM 2.7V 120nS OTP	32-PLCC	8.28	6.43	5.51
AT27BV040-15JC-ND	4 Meg (512Kx8) CMOS EPROM 2.7V 150nS OTP	32-PLCC	7.74	6.01	5.15
AT27BV4096-15JC-ND	4 Meg (256KX16) CMOS EPROM 2.7V 150nS OTP	44-PLCC	8.82	6.85	5.86
Low Power Low Voltage EPROMS					
AT27LV256A-55JC-ND	256K (32Kx8) CMOS EPROM 3.0V 55nS OTP	32-PLCC	3.66	2.80	2.40
AT27LV256A-55RC-ND	256K (32Kx8) CMOS EPROM 3.0V 55nS OTP	28-SOIC	3.87	2.95	2.55
AT27LV256A-70JC-ND	256K (32Kx8) CMOS EPROM 3.0V 70nS OTP	32-PLCC	3.33	2.60	2.20
AT27LV256A-70RC-ND	256K (32Kx8) CMOS EPROM 3.0V 70nS OTP	28-SOIC	3.55	2.75	2.35
AT27LV512A-70JC-ND	512K (64Kx8) CMOS EPROM 3.0V 70nS OTP	32-PLCC	3.66	2.80	2.40
AT27LV512A-70RC-ND	512K (64Kx8) CMOS EPROM 3.0V 70nS OTP	28-SOIC	3.87	3.00	2.55
AT27LV512A-90JC-ND	512K (64Kx8) CMOS EPROM 3.0V 90nS OTP	32-PLCC	3.12	2.40	2.05
AT27LV512A-90RC-ND	512K (64Kx8) CMOS EPROM 3.0V 90nS OTP	28-SOIC	3.33	2.60	2.20
AT27LV010A-90JC-ND	1 Meg (128Kx8) CMOS EPROM 3.0V 90nS OTP	32-PLCC	4.41	3.45	2.95
AT27LV010A-12JC-ND	1 Meg (128Kx8) CMOS EPROM 3.0V 120nS OTP	32-PLCC	3.87	3.00	2.55
AT27LV020A-90JC-ND	2 Meg (256Kx8) CMOS EPROM 3.0V 90nS OTP	32-PLCC	5.81	4.51	3.86
AT27LV020A-12JC-ND	2 Meg (256Kx8) CMOS EPROM 3.0V 120nS OTP	32-PLCC	5.27	4.09	3.50
AT27LV040A-90JC-ND	4 Meg (512Kx8) CMOS EPROM 3.0V 90nS OTP	32-PLCC	8.06	6.26	5.36
AT27LV040A-12JC-ND	4 Meg (512Kx8) CMOS EPROM 3.0V 120nS OTP	32-PLCC	7.63	5.93	5.08
5V EPROMS					
AT27C256R-70JC-ND	256K (32Kx8) CMOS EPROM 70nS OTP	32-PLCC	2.43	1.89	1.62
AT27C256R-70PC-ND	256K (32Kx8) CMOS EPROM 70nS OTP	28-Dip	2.43	1.89	1.62
AT27C256R-70RC-ND	256K (32Kx8) CMOS EPROM 70nS OTP	28-SOIC	2.64	2.05	1.76
AT27C512R-70JC-ND	512K (64Kx8) CMOS EPROM 70nS OTP	32-PLCC	2.64	2.05	1.76
AT27C512R-70PC-ND	512K (64Kx8) CMOS EPROM 70nS OTP	28-Dip	2.64	2.05	1.76
AT27C512R-70RC-ND	512K (64Kx8) CMOS EPROM 70nS OTP	28-SOIC	2.86	2.22	1.90
AT27C520-90SC-ND	512K (64Kx8) CMOS EPROM with Address Latch 90nS OTP	20-SOIC	2.47	1.92	1.64
AT27C010-55JC-ND	1 Meg (128Kx8) CMOS EPROM 55nS OTP	32-PLCC	3.81	2.96	2.53
AT27C010-70JC-ND	1 Meg (128Kx8) CMOS EPROM 70nS OTP	32-PLCC	3.59	2.79	2.39
AT27C010-70PC-ND	1 Meg (128Kx8) CMOS EPROM 70nS OTP	32-Dip	3.59	2.79	2.39
AT27C1024-70JC-ND	1 Meg (64Kx16) CMOS EPROM 70nS OTP	44-PLCC	4.15	3.22	2.76
AT27C1024-70PC-ND	1 Meg (64Kx16) CMOS EPROM 70nS OTP	40-Dip	4.36	3.39	2.90
AT27C020-70JC-ND	2 Meg (256Kx8) CMOS EPROM 70nS OTP	32-PLCC	4.84	3.76	3.22
AT27C020-70PC-ND	2 Meg (256Kx8) CMOS EPROM 70nS OTP	32-Dip	5.05	3.92	3.36
AT27C040-70JC-ND	4 Meg (512Kx8) CMOS EPROM 70nS OTP	32-PLCC	6.88	5.34	4.58
AT27C040-70PC-ND	4 Meg (512Kx8) CMOS EPROM 70nS OTP	32-Dip	7.10	5.51	4.72
AT27C040-90JC-ND	4 Meg (512Kx8) CMOS EPROM 90nS OTP	32-PLCC	6.34	4.93	4.22
AT27C040-90PC-ND	4 Meg (512Kx8) CMOS EPROM 90nS OTP	32-Dip	6.56	5.09	4.36
AT27C400-90JC-ND	4 Meg (512Kx8) or (256x16) CMOS EPROM 90nS OTP	44-PLCC	8.49	6.60	5.65
AT27C400-90PC-ND	4 Meg (512Kx8) or (256x16) CMOS EPROM 90nS OTP	40-Dip	8.71	6.76	5.79
AT27C4096-70JC-ND	4 Meg (256Kx16) CMOS EPROM 70nS OTP	44-PLCC	7.42	5.76	4.93
AT27C4096-70PC-ND	4 Meg (256Kx16) CMOS EPROM 70nS OTP	40-Dip	7.63	5.93	5.08
AT27C080-90PC-ND	8 Meg (1Mx8) CMOS EPROM 90nS OTP	32-Dip	13.22	10.27	8.79
AT27C080-90JC-ND	8 Meg (1Mx8) CMOS EPROM 90nS OTP	32-PLCC	12.79	9.94	8.51
AT27C080-12JC-ND	8 Meg (1Mx8) CMOS EPROM 120nS OTP	32-PLCC	12.04	9.35	8.01
AT27C800-12PC-ND	8 Meg (1Mx8) or (512Kx16) CMOS EPROM 120nS OTP	42-Dip	14.62	11.36	9.72

(Continued)

NEW! PARALLEL EEPROM

NEW! Parallel EEPROM: Battery-Voltage (2.7 to 3.6V) *NEW!*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AT28BV64B-20JC-ND	64K (8Kx8) 2.7V EEPROM, 200nS	32-PLCC	4.24	3.18	3.08
AT28BV64B-20JI-ND	64K (8Kx8) 2.7V EEPROM, 200nS	32-PLCC	4.80	3.60	3.48
AT28BV64B-20PC-ND	64K (8Kx8) 2.7V EEPROM, 200nS	28-Dip	4.24	3.18	3.08
AT28BV64B-20PI-ND	64K (8Kx8) 2.7V EEPROM, 200nS	28-Dip	4.80	3.60	3.48
AT28BV64B-20SC-ND	64K (8Kx8) 2.7V EEPROM, 200nS	SO-28	4.64	3.48	3.37
AT28BV64B-20SI-ND	64K (8Kx8) 2.7V EEPROM, 200nS	SO-28	5.28	3.96	3.83
AT28BV64B-20TC-ND	64K (8Kx8) 2.7V EEPROM, 200nS	28-TSOP	4.64	3.48	3.37
AT28BV64B-20TI-ND	64K (8Kx8) 2.7V EEPROM, 200nS	28-TSOP	5.28	3.96	3.83
AT28BV256-20JC-ND	256K (32Kx8) 2.7V EEPROM, 200nS	32-PLCC	8.35	6.73	6.18
AT28BV256-20JI-ND	256K (32Kx8) 2.7V EEPROM, 200nS	32-PLCC	9.58	7.72	7.08
AT28BV256-20PC-ND	256K (32Kx8) 2.7V EEPROM, 200nS	28-Dip	8.35	6.73	6.18
AT28BV256-20PI-ND	256K (32Kx8) 2.7V EEPROM, 200nS	28-Dip	9.58	7.72	7.08
AT28BV256-20SC-ND	256K (32Kx8) 2.7V EEPROM, 200nS	SO-28	9.14	7.37	6.76
AT28BV256-20SI-ND	256K (32Kx8) 2.7V EEPROM, 200nS	SO-28	10.37	8.36	7.67
AT28BV256-20TC-ND	256K (32Kx8) 2.7V EEPROM, 200nS	28-TSOP	9.14	7.37	6.76
AT28BV256-20TI-ND	256K (32Kx8) 2.7V EEPROM, 200nS	28-TSOP	10.37	8.36	7.67

NEW! Parallel EEPROM: Low-voltage (3.0 to 3.6V) *NEW!*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AT28LV010-20JC-ND	1M (128Kx8) 3.0V EEPROM, 200nS	32-PLCC	24.90	21.75	19.13
AT28LV010-20JI-ND	1M (128Kx8) 3.0V EEPROM, 200nS	32-PLCC	28.62	25.00	21.99
AT28LV010-20PC-ND	1M (128Kx8) 3.0V EEPROM, 200nS	32-Dip	24.90	21.75	19.13
AT28LV010-20PI-ND	1M (128Kx8) 3.0V EEPROM, 200nS	32-Dip	28.62	25.00	21.99
AT28LV010-20TC-ND	1M (128Kx8) 3.0V EEPROM, 200nS	32-TSOP	27.42	21.98	21.07
AT28LV010-20TI-ND	1M (128Kx8) 3.0V EEPROM, 200nS	32-TSOP	31.14	27.21	23.92

NEW! Parallel EEPROM: Standard Voltage (5.0V) *NEW!*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AT28C16-15JC-ND	16K (2Kx8) 5V EEPROM, 150nS	32-PLCC	2.98	2.06	1.80
AT28C16-15JI-ND	16K (2Kx8) 5V EEPROM, 150nS	32-PLCC	3.36	2.33	2.03
AT28C16-15PC-ND	16K (2Kx8) 5V EEPROM, 150nS	24-Dip	2.98	2.06	1.80
AT28C16-15PI-ND	16K (2Kx8) 5V EEPROM, 150nS	24-Dip	3.36	2.33	2.03
AT28C16-15SC-ND	16K (2Kx8) 5V EEPROM, 150nS	SO-24	3.26	2.26	1.98
AT28C16-15SI-ND	16K (2Kx8) 5V EEPROM, 150nS	SO-24	3.74	2.59	2.27
AT28C16-15TC-ND	16K (2Kx8) 5V EEPROM, 150nS	28-TSOP	3.26	2.26	1.98
AT28C16-15TI-ND	16K (2Kx8) 5V EEPROM, 150nS	28-TSOP	3.74	2.59	2.27
AT28C64B-15JC-ND	64K (8Kx8) 5V EEPROM, 150nS	32-PLCC	4.00	3.00	2.66
AT28C64B-15JI-ND	64K (8Kx8) 5V EEPROM, 150nS	32-PLCC	4.56	3.42	3.31
AT28C64B-15PC-ND	64K (8Kx8) 5V EEPROM, 150nS	28-Dip	4.00	3.00	2.66
AT28C64B-15PI-ND	64K (8Kx8) 5V EEPROM, 150nS	28-Dip	4.56	3.42	3.31
AT28C64B-15SC-ND	64K (8Kx8) 5V EEPROM, 150nS	SO-28	4.32	3.24	3.14
AT28C64B-15SI-ND	64K (8Kx8) 5V EEPROM, 150nS	SO-28	4.96	3.72	3.60
AT28C64B-15TC-ND	64K (8Kx8) 5V EEPROM, 150nS	28-TSOP	4.32	3.24	3.14
AT28C64B-15TI-ND	64K (8Kx8) 5V EEPROM, 150nS	28-TSOP	4.96	3.72	3.60
AT28HC64B-90JC-ND	64K (8Kx8) 5V EEPROM, High Speed, 90nS	32-PLCC	4.48	3.36	3.25
AT28HC64B-90JI-ND	64K (8Kx8) 5V EEPROM, High Speed, 90nS	32-PLCC	5.20	3.90	3.77
AT28HC64B-90PC-ND	64K (8Kx8) 5V EEPROM, High Speed, 90nS	28-Dip	4.48	3.36	3.25
AT28HC64B-90PI-ND	64K (8Kx8) 5V EEPROM, High Speed, 90nS	28-Dip	5.20	3.90	3.77
AT28HC64B-90SC-ND	64K (8Kx8) 5V EEPROM, High Speed, 90nS	SO-28	4.96	3.72	3.60
AT28HC64B-90SI-ND	64K (8Kx8) 5V EEPROM, High Speed, 90nS	SO-28	5.60	4.20	4.06
AT28HC64B-90TC-ND	64K (8Kx8) 5V EEPROM, High Speed, 90nS	28-TSOP	4.96	3.72	3.60
AT28HC64B-90TI-ND	64K (8Kx8) 5V EEPROM, High Speed, 90nS	28-TSOP	5.60	4.20	4.06
AT28HC64B-12JC-ND	64K (8Kx8) 5V EEPROM, High Speed, 120nS	32-PLCC	4.16	3.12	3.02
AT28HC64B-12JI-ND	64K (8Kx8) 5V EEPROM, High Speed, 120nS	32-PLCC	4.80	3.60	3.48
AT28HC64B-12PC-ND	64K (8Kx8) 5V EEPROM, High Speed, 120nS	28-Dip	4.16	3.12	3.02
AT28HC64B-12PI-ND	64K (8Kx8) 5V EEPROM, High Speed, 120nS	28-Dip	4.80	3.60	3.48
AT28HC64B-12SC-ND	64K (8Kx8) 5V EEPROM, High Speed, 120nS	SO-28	4.56	3.42	3.31
AT28HC64B-12SI-ND	64K (8Kx8) 5V EEPROM, High Speed, 120nS	SO-28	5.20	3.90	3.77
AT28HC64B-12TC-ND	64K (8Kx8) 5V EEPROM, High Speed, 120nS	28-TSOP	4.56	3.42	3.31
AT28HC64B-12TI-ND	64K (8Kx8) 5V EEPROM, High Speed, 120nS	28-TSOP	5.20	3.90	3.77
AT28C256-15JC-ND	256K (32Kx8) 5V EEPROM, 150nS	32-PLCC	8.06	6.50	5.96
AT28C256-15JI-ND	256K (32Kx8) 5V EEPROM, 150nS	32-PLCC	9.29	7.49	6.87
AT28C256-15PC-ND	256K (32Kx8) 5V EEPROM, 150nS	28-Dip	8.06	6.50	5.96
AT28C256-15PI-ND	256K (32Kx8) 5V EEPROM, 150nS	28-Dip	9.29	7.49	6.87
AT28C256-15SC-ND	256K (32Kx8) 5V EEPROM, 150nS	SO-28	8.86	7.14	6.55
AT28C256-15SI-ND	256K (32Kx8) 5V EEPROM, 150nS	SO-28	10.08	8.12	7.45
AT28C256-15TC-ND	256K (32Kx8) 5V EEPROM, 150nS	28-TSOP	8.86	7.14	6.55
AT28C256-15TI-ND	256K (32Kx8) 5V EEPROM, 150nS	28-TSOP	10.08	8.12	7.45
AT28C256F-15JC-ND	256K (32Kx8) 5V EEPROM, Fast Write, 150nS	32-PLCC	9.29	7.49	6.87
AT28C256F-15JI-ND	256K (32Kx8) 5V EEPROM, Fast Write, 150nS	32-PLCC	10.66	8.59	7.88
AT28C256F-15PC-ND	256K (32Kx8) 5V EEPROM, Fast Write, 150nS	28-Dip	9.29	7.49	6.87
AT28C256F-15PI-ND	256K (32Kx8) 5V EEPROM, Fast Write, 150nS	28-Dip	10.66	8.59	7.88
AT28C256F-15SC-ND	256K (32Kx8) 5V EEPROM, Fast Write, 150nS	SO-28	10.22	8.24	7.56
AT28C256F-15SI-ND	256K (32Kx8) 5V EEPROM, Fast Write, 150nS	SO-28	11.59	9.34	8.57
AT28C256F-15TC-ND	256K (32Kx8) 5V EEPROM, Fast Write, 150nS	28-TSOP	10.22	8.24	7.56
AT28C256F-15TI-ND	256K (32Kx8) 5V EEPROM, Fast Write, 150nS	28-TSOP	11.59	9.34	8.57
AT28HC256-70PC-ND	256K (32Kx8) 5V EEPROM, High Speed, 70nS	28-Dip	10.66	8.59	7.88
AT28HC256-70PI-ND	256K (32Kx8) 5V EEPROM, High Speed, 70nS	28-Dip	12.24	9.86	9.05
AT28HC256-90PC-ND	256K (32Kx8) 5V EEPROM, High Speed, 90nS	28-Dip	9.22	7.43	6.81
AT28HC256-90PI-ND	256K (32Kx8) 5V EEPROM, High Speed, 90nS	28-Dip	10.58	8.53	7.83
AT28HC256-90SC-ND	256K (32Kx8) 5V EEPROM, High Speed, 90nS	SO-28	10.08	8.12	7.45
AT28HC256-90SI-ND	256K (32Kx8) 5V EEPROM, High Speed, 90nS	SO-28	11.45	9.23	8.46
AT28HC256-90TC-ND	256K (32Kx8) 5V EEPROM, High Speed, 90nS	28-TSOP	10.08	8.12	7.45
AT28HC256-90TI-ND	256K (32Kx8) 5V EEPROM, High Speed, 90nS	28-TSOP	11.45	9.23	8.46
AT28HC256F-90JC-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 90nS	32-PLCC	10.80	8.70	7.98
AT28HC256F-90JI-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 90nS	32-PLCC	12.46	10.04	9.21
AT28HC256F-90PC-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 90nS	28-Dip	10.80	8.70	7.98
AT28HC256F-90PI-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 90nS	28-Dip	12.46	10.04	9.21
AT28HC256F-90SC-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 90nS	SO-28	11.88	9.57	8.78
AT28HC256F-90SI-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 90nS	SO-28	13.54	10.91	10.01
AT28HC256F-90TC-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 90nS	28-TSOP	11.88	9.57	8.78
AT28HC256F-90TI-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 90nS	28-TSOP	13.54	10.91	10.01
AT28HC256-12JC-ND	256K (32Kx8) 5V EEPROM, High Speed, 120nS	32-PLCC	8.42	6.79	6.23
AT28HC256-12JI-ND	256K (32Kx8) 5V EEPROM, High Speed, 120nS	32-PLCC	9.72	7.83	7.19
AT28HC256-12PC-ND	256K (32Kx8) 5V EEPROM, High Speed, 120nS	28-Dip	8.42	6.79	6.23
AT28HC256-12PI-ND	256K (32Kx8) 5V EEPROM, High Speed, 120nS	28-Dip	9.72	7.83	7.19
AT28HC256-12SC-ND	256K (32Kx8) 5V EEPROM, High Speed, 120nS	SO-28	9.29	7.49	6.87
AT28HC256-12SI-ND	256K (32Kx8) 5V EEPROM, High Speed, 120nS	SO-28	10.58	8.53	7.83
AT28HC256-12TC-ND	256K (32Kx8) 5V EEPROM, High Speed, 120nS	28-TSOP	9.29	7.49	6.87
AT28HC256-12TI-ND	256K (32Kx8) 5V EEPROM, High Speed, 120nS	28-TSOP	10.58	8.53	7.83
AT28HC256F-12JC-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 120nS	32-PLCC	9.94	8.01	7.35
AT28HC256F-12JI-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 120nS	32-PLCC	11.45	9.23	8.46
AT28HC256F-12PC-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 120nS	28-Dip	9.94	8.01	7.35
AT28HC256F-12PI-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 120nS	28-Dip	11.45	9.23	8.46
AT28HC256F-12SC-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 120nS	SO-28	10.94	8.82	8.09
AT28HC256F-12SI-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 120nS	SO-28	12.46	10.04	9.21
AT28HC256F-12TC-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 120nS	28-TSOP	10.94	8.82	8.09
AT28HC256F-12TI-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 120nS	28-TSOP	12.46	10.04	9.21
AT28C010-15JC-ND	1M (128Kx8) 5V EEPROM, 150nS	32-PLCC	22.71	19.84	17.45
AT28C010-15JI-ND	1M (128Kx8) 5V EEPROM, 150nS	32-PLCC	26.16	22.86	20.10
AT28C010-15PC-ND	1M (128Kx8) 5V EEPROM, 150nS	32-Dip	22.71	19.84	17.45
AT28C010-15PI-ND	1M (128Kx8) 5V EEPROM, 150nS	32-Dip	26.16	22.86	20.10
AT28C010-15TC-ND	1M (128Kx8) 5V EEPROM, 150nS	32-TSOP	24.97	21.81	19.18
AT28C010-15TI-ND	1M (128Kx8) 5V EEPROM, 150nS	32-TSOP	28.42	24.83	21.83

NEW! FLASH MEMORY

NEW! Flash Memory: Voltage (2.7 to 3.6V) Single-Voltage Read and Write *NEW!*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AT29BV010A-20JC-ND	1M (128Kx8) 2.7V Small Sector Flash, 200nS	32-PLCC	5.44	4.08	3.95
AT29BV010A-20JI-ND	1M (128Kx8) 2.7V Small Sector Flash, 200nS	32-PLCC	6.56	4.76	4.37
AT29BV010A-20TC-ND	1M (128Kx8) 2.7V Small Sector Flash, 200nS	32-TSOP	5.84	4.38	4.24
AT29BV010A-20TI-ND	1M (128Kx8) 2.7V Small Sector Flash, 200nS	32-TSOP	6.96	5.05	4.63
AT29BV040A-25TC-ND	4M (512Kx8) 2.7V Small Sector Flash, 250nS	32-TSOP	9.86	7.95	7.29
AT29BV040A-25TI-ND	4M (512Kx8) 2.7V Small Sector Flash, 250nS	32-TSOP	11.74	9.46	8.68
AT49BV512-12JC-ND	512K (64Kx8) 2.7V Boot Flash, 120nS	32-PLCC	4.22	2.64	2.56
AT49BV512-12JI-ND	512K (64Kx8) 2.7V Boot Flash, 120nS	32-PLCC	4.24	3.18	3.08
AT49BV512-12TC-ND	512K (64Kx8) 2.7V Boot Flash, 120nS	32-TSOP	4.70	2.94	2.85
AT49BV512-12TI-ND	512K (64Kx8) 2.7V Boot Flash, 120nS	32-TSOP	4.64	3.48	3.37
AT49BV002-90JC-ND	2M (256Kx8) 2.7V Parametric Flash, 90nS	32-PLCC	4.80	3.60	3.48
AT49BV002-90JI-ND	2M (256Kx8) 2.7V Parametric Flash, 90nS	32-PLCC	5.28	3.96	3.83
AT49BV002-90TC-ND	2M (256Kx8) 2.7V Parametric Flash, 90nS	32-TSOP	5.84	4.38	4.24
AT49BV002-90TI-ND	2M (256Kx8) 2.7V Parametric Flash, 90nS	32-TSOP	6.08	4.56	4.05
AT49BV002N-90JC-ND	2M (256Kx8) 2.7V Parametric Flash (No Reset), 90nS	32-PLCC	4.80	3.60	3.48
AT49BV002N-90JI-ND	2M (256Kx8) 2.7V Parametric Flash (No Reset), 90nS	32-PLCC	5.28	3.96	3.83
AT49BV002N-90TC-ND	2M (256Kx8) 2.7V Parametric Flash (No Reset), 90nS	32-TSOP	5.84	4.38	4.24
AT49BV002N-90TI-ND	2M (256Kx8) 2.7V Parametric Flash (No Reset), 90nS	32-TSOP	6.08	4.56	4.05
AT49BV040-12JC-ND	4M (512Kx8) 2.7V Boot Flash, 120nS	32-PLCC	7.20	5.40	4.79
AT49BV040-12JI-ND	4M (512Kx8) 2.7V Boot Flash, 120nS	32-PLCC	7.92	5.94	5.27
AT49BV040-12TC-ND	4M (512Kx8) 2.7V Boot Flash, 120nS	32-TSOP	7.63	6.15	5.64
AT49BV040-12TI-ND	4M (512Kx8) 2.7V Boot Flash, 120nS	32-TSOP	7.92	6.38	5.86
AT49BV040-12VC-ND	4M (512Kx8) 2.7V Boot Flash, 120nS	32-TSOP	7.92	6.38	5.86
AT49BV040-12VI-ND	4M (512Kx8) 2.7V Boot Flash, 120nS	32-TSOP	9.14	7.37	6.76
AT49BV4096A-12RC-ND	4M (512Kx8, 256Kx16) 2.7V Parametric Flash, 120nS	SO-44	7.34	5.92	5.43
AT49BV4096A-12RI-ND	4M (512Kx8, 256Kx16) 2.7V Parametric Flash, 120nS	SO-44	8.06	6.50	5.96
AT49BV4096A-12TC-ND	4M (512Kx8, 256Kx16) 2.7V Parametric Flash, 120nS	32-TSOP	8.06	6.50	5.96
AT49BV4096A-12TI-ND	4M (512Kx8, 256Kx16) 2.7V Parametric Flash, 120nS	32-TSOP	8.42	6.79	6.23

NEW! Flash Memory: Low-Voltage (3.0 to 3.6V) Single-Voltage Read and Write *NEW!*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AT29LV256-15JC-ND	256K (32Kx8) 3V Small Sector Flash, 150nS	32-PLCC	4.22	2.64	2.56
AT29LV256-15JI-ND	256K (32Kx8) 3V Small Sector Flash, 150nS	32-PLCC	4.24	3.18	3.08
AT29LV256-15TC-ND	256K (32Kx8) 3V Small Sector Flash, 150nS	28-TSOP	4.70	2.94	2.85
AT29LV256-15TI-ND	256K (32Kx8) 3V Small Sector Flash, 150nS	28-TSOP	4.64	3.48	3.37
AT29LV512-15JC-ND	512K (64Kx8) 3V Small Sector Flash, 150nS	32-PLCC	4.61	2.88	2.79
AT29LV512-15JI-ND	512K (64Kx8) 3V Small Sector Flash, 150nS	32-PLCC	4.64	3.48	3.37
AT29LV512-15TC-ND	512K (64Kx8) 3V Small Sector Flash, 150nS	32-TSOP	4.24	3.18	3.08
AT29LV512-15TI-ND	512K (64Kx8) 3V Small Sector Flash, 150nS	32-TSOP	5.04	3.78	3.66
AT29LV010A-15JC-ND	1M (128Kx8) 3V Small Sector Flash, 150nS	32-PLCC	5.28	3.96	3.83
AT29LV010A-15JI-ND	1M (128Kx8) 3V Small Sector Flash, 150nS	32-PLCC	6.32	4.74	4.21
AT29LV010A-15TC-ND	1M (128Kx8) 3V Small Sector Flash, 150nS	32-TSOP	5.68	4.26	4.12
AT29LV010A-15TI-ND	1M (128Kx8) 3V Small Sector Flash, 150nS	32-TSOP	6.72	4.88	4.47
AT29LV1024-15JC-ND	1M (64Kx16) 3V Small Sector Flash, 150nS	44-PLCC	5.52	4.14	4.01
AT29LV1024-15JI-ND	1M (64Kx16) 3V Small Sector Flash, 150nS	44-PLCC	6.64	4.82	4.42
AT29LV1024-15TC-ND	1M (64Kx16) 3V Small Sector Flash, 150nS	48-TSOP	5.92	4.44	4.30
AT29LV1024-15TI-ND	1M (64Kx16) 3V Small Sector Flash, 150nS	48-TSOP	7.04	5.11	4.69
AT29LV020-20JC-ND	2M (256Kx8) 3V Small Sector Flash, 200nS	32-PLCC	6.40	4.64	4.26
AT29LV020-20JI-ND	2M (256Kx8) 3V Small Sector Flash, 200nS	32-PLCC	7.68	5.57	5.11
AT29LV020-20TC-ND	2M (256Kx8) 3V Small Sector Flash, 200nS	32-TSOP	6.80	4.93	4.53
AT29LV020-20TI-ND	2M (256Kx8) 3V Small Sector Flash, 200nS	32-TSOP	7.27	5.86	5.38
AT29LV040A-20TC-ND	4M (512Kx8) 3V Small Sector Flash, 200nS	32-TSOP	10.08	8.12	7.45
AT29LV040A-20TI-ND	4M (512Kx8) 3V Small Sector Flash, 200nS	32-TSOP	11.09	8.94	8.20
AT49LV001-90JC-ND	1M (128Kx8) 2.7V Parametric Flash, 90nS	32-PLCC	4.70	2.94	2.85
AT49LV001-90JI-ND	1M (128Kx8) 2.7V Parametric Flash, 90nS	32-PLCC	4.32	3.24	3.14
AT49LV001-90TC-ND	1M (128Kx8) 2.7V Parametric Flash, 90nS	32-TSOP	4.96	3.72	3.60
AT49LV001-90TI-ND	1M (128Kx8) 2.7V Parametric Flash, 90nS	32-TSOP	5.12	3.84	3.72
AT49LV001-90VC-ND	1M (128Kx8) 2.7V Parametric Flash, 90nS	32-VSOP	5.04	3.78	3.66
AT49LV001-90VI-ND	1M (128Kx8) 2.7V Parametric Flash, 90nS	32-VSOP	5.36	4.02	3.89
AT49LV040-90JC-ND	4M (512Kx8) 2.7V Boot Flash, 90nS	32-PLCC	7.28	5.28	4.85
AT49LV040-90JI-ND	4M (512Kx8) 2.7V Boot Flash, 90nS	32-PLCC	7.20	5.80	5.32
AT49LV040-90TC-ND	4M (512Kx8) 2.7V Boot Flash, 90nS	32-TSOP	7.70	6.21	5.70
AT49LV040-90TI-ND	4M (512Kx8) 2.7V Boot Flash, 90nS	32-TSOP	7.99	6.44	5.91
AT49LV040-90VC-ND	4M (512Kx8) 2.7V Boot Flash, 90nS	32-VSOP	7.99	6.44	5.91
AT49LV040-90VI-ND	4M (512Kx8) 2.7V Boot Flash, 90nS	32-VSOP	9.29	7.49	6.87

NEW! Flash Memory: Standard Voltage (4.5 to 5.5V) Single-Voltage Read & Write *NEW!*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AT29C512-70JC-ND	512K (64Kx8) 5V Small Sector Flash, 70nS	32-PLCC	4.80	3.60	3.48
AT29C512-70JI-ND	512K (64Kx8) 5V Small Sector Flash, 70nS	32-PLCC	5.76	4.32	4.18
AT29C512-70PC-ND	512K (64Kx8) 5V Small Sector Flash, 70nS	32-Dip	4.80	3.60	3.48
AT29C512-70PI-ND	512K (64Kx8) 5V Small Sector Flash, 70nS	32-Dip	5.76	4.32	4.18
AT29C512-70TC-ND	512K (64Kx8) 5V Small Sector Flash, 70nS	32-TSOP	5.20	3.90	3.77
AT29C512-70TI-ND	512K (64Kx8) 5V Small Sector Flash, 70nS	32-TSOP	6.16	4.62	4.10
AT29C010A-70JC-ND	1M (128Kx8) 5V Small Sector Flash, 70nS	32-PLCC	6.24	4.68	4.15
AT29C010A-70JI-ND	1M (128Kx8) 5V Small Sector Flash, 70nS	32-PLCC	7.52	5.46	5.01
AT29C010A-70PC-ND	1M (128Kx8) 5V Small Sector Flash, 70nS	32-Dip	6.24	4.68	4.15
AT29C010A-70PI-ND	1M (128Kx8) 5V Small Sector Flash, 70nS	32-Dip	7.52	5.64	5.01
AT29C010A-70TC-ND	1M (128Kx8) 5V Small Sector Flash, 70nS	32-TSOP	6.64	4.98	4.42
AT29C010A-70TI-ND	1M (128Kx8) 5V Small Sector Flash, 70nS	32-TSOP	7.92	5.75	5.27
AT29C1024-70JC-ND	1M (64Kx16) 5V Small Sector Flash, 70nS	44-PLCC	5.36	4.02	3.89
AT29C1024-70JI-ND	1M (64Kx16) 5V Small Sector Flash, 70nS	44-PLCC	6.40	4.64	4.26
AT29C1024-70TC-ND	1M (64Kx16) 5V Small Sector Flash, 70nS	48-TSOP	5.76	4.32	4.18
AT29C1024-70TI-ND	1M (64Kx16) 5V Small Sector Flash, 70nS	48-TSOP	6.80	4.93	4.53
AT29C020-12JC-ND	2M (256Kx8) 5V Small Sector Flash, 120nS	32-PLCC	6.00	4.50	3.99
AT29C020-12JI-ND	2M (256Kx8) 5V Small Sector Flash, 120nS	32-PLCC	7.20	5.22	4.79
AT29C020-12PC-ND	2M (256Kx8) 5V Small Sector Flash, 120nS	32-Dip	6.00	4.50	3.99
AT29C020-12PI-ND	2M (256Kx8) 5V Small Sector Flash, 120nS	32-Dip	7.20	5.40	4.79
AT29C020-12TC-ND	2M (256Kx8) 5V Small Sector Flash, 120nS	32-TSOP	6.40	4.80	4.26
AT29C020-12TI-ND	2M (256Kx8) 5V Small Sector Flash, 120nS	32-TSOP	7.60	5.70	5.06
AT29C040A-12PC-ND	4M (512Kx8) 5V Small Sector Flash, 120nS	32-Dip	11.23	9.05	8.30
AT29C040A-12PI-ND	4M (512Kx8) 5V Small Sector Flash, 120nS	32-Dip	12.38	9.98	9.16
AT29C040A-12TC-ND	4M (512Kx8) 5V Small Sector Flash, 120nS	32-TSOP	11.59	9.34	8.57

(Continued)

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ATMEL *NEW!* FLASH MEMORY *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
AT49F512-70JC-ND	512K (64Kx8) 5V Boot Flash, 70nS	32-PLCC	4.22	2.64	2.56
AT49F512-70JI-ND	512K (64Kx8) 5V Boot Flash, 70nS	32-PLCC	4.24	3.18	3.08
AT49F512-70PC-ND	512K (64Kx8) 5V Boot Flash, 70nS	32-Dip	4.22	2.64	2.56
AT49F512-70PI-ND	512K (64Kx8) 5V Boot Flash, 70nS	32-Dip	4.24	3.18	3.08
AT49F512-70TC-ND	512K (64Kx8) 5V Boot Flash, 70nS	32-TSOP	4.70	2.94	2.85
AT49F512-70TI-ND	512K (64Kx8) 5V Boot Flash, 70nS	32-TSOP	4.64	3.48	3.37
AT49F001-55JC-ND	1M (128Kx8) 5V Parametric Flash, 55nS	32-PLCC	4.40	3.30	3.19
AT49F001-55JI-ND	1M (128Kx8) 5V Parametric Flash, 55nS	32-PLCC	4.88	3.66	3.54
AT49F001-55TC-ND	1M (128Kx8) 5V Parametric Flash, 55nS	32-TSOP	5.44	4.08	3.95
AT49F001-55TI-ND	1M (128Kx8) 5V Parametric Flash, 55nS	32-TSOP	5.68	4.26	4.12
AT49F001-55VC-ND	1M (128Kx8) 5V Parametric Flash, 55nS	32-VSOP	5.52	4.14	4.01
AT49F001-55VI-ND	1M (128Kx8) 5V Parametric Flash, 55nS	32-VSOP	5.92	4.44	4.30
AT49F001NT-55JC-ND	1M (128Kx8) 5V Parametric Flash, No Reset, Top Boot, 55nS	32-PLCC	4.40	3.30	3.19
AT49F001NT-55JI-ND	1M (128Kx8) 5V Parametric Flash, No Reset, Top Boot, 55nS	32-PLCC	4.88	3.66	3.54
AT49F001NT-55PC-ND	1M (128Kx8) 5V Parametric Flash, No Reset, Top Boot, 55nS	32-Dip	4.40	3.30	3.19
AT49F001NT-55PI-ND	1M (128Kx8) 5V Parametric Flash, No Reset, Top Boot, 55nS	32-Dip	4.88	3.66	3.54
AT49F001NT-55TC-ND	1M (128Kx8) 5V Parametric Flash, No Reset, Top Boot, 55nS	32-TSOP	5.44	4.08	3.95
AT49F001NT-55TI-ND	1M (128Kx8) 5V Parametric Flash, No Reset, Top Boot, 55nS	32-TSOP	5.68	4.26	4.12
AT49F001NT-55VC-ND	1M (128Kx8) 5V Parametric Flash, No Reset, Top Boot, 55nS	32-VSOP	5.52	4.14	4.01
AT49F001NT-55VI-ND	1M (128Kx8) 5V Parametric Flash, No Reset, Top Boot, 55nS	32-VSOP	5.92	4.44	4.30
AT49F1024-55VC-ND	1M (64Kx16) 5V Boot Flash, 55nS	40-VSOP	6.88	4.99	4.58
AT49F1024-55VI-ND	1M (64Kx16) 5V Boot Flash, 55nS	40-VSOP	7.28	5.28	4.85
AT49F1025-55JI-ND	1M (64Kx16) 5V Boot Flash, 55nS	44-PLCC	6.16	4.62	4.10
AT49F002T-70JC-ND	2M (256Kx8) 5V Parametric Flash, Top Boot, 70nS	32-PLCC	4.72	3.54	3.43
AT49F002T-70JI-ND	2M (256Kx8) 5V Parametric Flash, Top Boot, 70nS	32-PLCC	5.12	3.84	3.72
AT49F002T-70PC-ND	2M (256Kx8) 5V Parametric Flash, Top Boot, 70nS	32-Dip	4.72	3.54	3.43
AT49F002T-70PI-ND	2M (256Kx8) 5V Parametric Flash, Top Boot, 70nS	32-Dip	5.12	3.84	3.72
AT49F002T-70TC-ND	2M (256Kx8) 5V Parametric Flash, Top Boot, 70nS	32-TSOP	5.68	4.26	4.12
AT49F002T-70TI-ND	2M (256Kx8) 5V Parametric Flash, Top Boot, 70nS	32-TSOP	5.92	4.44	4.30
AT49F002T-70VC-ND	2M (256Kx8) 5V Parametric Flash, Top Boot, 70nS	32-VSOP	5.84	4.38	4.24
AT49F002T-70VI-ND	2M (256Kx8) 5V Parametric Flash, Top Boot, 70nS	32-VSOP	6.16	4.62	4.10
AT49F040-70PC-ND	4M (512Kx8) 5V Boot Flash, 70nS	32-Dip	7.84	5.69	5.22
AT49F040-70PI-ND	4M (512Kx8) 5V Boot Flash, 70nS	32-Dip	7.70	6.21	5.70
AT49F040-70TC-ND	4M (512Kx8) 5V Boot Flash, 70nS	32-TSOP	8.14	6.56	6.02
AT49F040-70TI-ND	4M (512Kx8) 5V Boot Flash, 70nS	32-TSOP	8.50	6.85	6.28
AT49F040-70VC-ND	4M (512Kx8) 5V Boot Flash, 70nS	32-VSOP	8.57	6.91	6.34
AT49F040-70VI-ND	4M (512Kx8) 5V Boot Flash, 70nS	32-VSOP	9.94	8.01	7.35
AT49F4096A-90RC-ND	4M (512Kx8, 256Kx16) 5V Parametric Flash, 90nS	44-SOIC	7.76	5.63	5.17
AT49F4096A-90RI-ND	4M (512Kx8, 256Kx16) 5V Parametric Flash, 90nS	44-SOIC	7.63	6.15	5.64
AT49F4096A-90TC-ND	4M (512Kx8, 256Kx16) 5V Parametric Flash, 90nS	48-TSOP	7.70	6.21	5.70
AT49F4096A-90TI-ND	4M (512Kx8, 256Kx16) 5V Parametric Flash, 90nS	48-TSOP	8.06	6.50	5.96

ATMEL *NEW!* SERIAL DATAFLASH

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
	NEW! Serial DataFlash *NEW!*				
AT45DB011B-XC-ND	1 Meg Serial DataFlash, 2.7V	14-TSSOP	5.40	3.74	3.27
AT45DB011B-XI-ND	1 Meg Serial DataFlash, 2.7V	14-TSSOP	5.93	4.11	3.59
AT45DB011B-SC-ND	1 Meg Serial DataFlash, 2.7V	SO-8	5.16	3.57	3.12
AT45DB011B-SI-ND	1 Meg Serial DataFlash, 2.7V	SO-8	5.69	3.94	3.44
AT45DB021B-TC-ND	2 Meg Serial DataFlash, 2.7V	28-TSOP	6.00	4.50	3.99
AT45DB021B-TI-ND	2 Meg Serial DataFlash, 2.7V	28-TSOP	6.56	4.92	4.37
AT45DB021B-SC-ND	2 Meg Serial DataFlash, 2.7V	SO-8	5.50	4.13	3.99
AT45DB021B-SI-ND	2 Meg Serial DataFlash, 2.7V	SO-8	5.70	4.28	4.14
AT45DB021B-RC-ND	2 Meg Serial DataFlash, 2.7V	SO-28	5.60	4.20	4.06
AT45DB021B-RI-ND	2 Meg Serial DataFlash, 2.7V	SO-28	6.16	4.62	4.10
AT45DB041B-TC-ND	4 Meg Serial DataFlash, 2.7V	28-TSOP	8.26	6.20	5.50
AT45DB041B-TI-ND	4 Meg Serial DataFlash, 2.7V	28-TSOP	9.04	6.56	6.02
AT45DB041B-SC-ND	4 Meg Serial DataFlash, 2.7V	SO-8	7.76	5.82	5.17
AT45DB041B-SI-ND	4 Meg Serial DataFlash, 2.7V	SO-8	7.96	5.97	5.30
AT45DB041B-RC-ND	4 Meg Serial DataFlash, 2.7V	SO-28	7.86	5.90	5.23
AT45DB041B-RI-ND	4 Meg Serial DataFlash, 2.7V	SO-28	8.64	6.27	5.75
AT45DB041B-CC-ND	4 Meg Serial DataFlash, 2.7V	14-CBGA	8.66	6.28	5.76
AT45DB041B-CI-ND	4 Meg Serial DataFlash, 2.7V	14-CBGA	8.86	6.43	5.90
AT45DB081B-TC-ND	8 Meg Serial DataFlash, 2.7V	28-TSOP	11.66	9.40	8.62
AT45DB081B-TI-ND	8 Meg Serial DataFlash, 2.7V	28-TSOP	12.80	10.31	9.46
AT45DB081B-RC-ND	8 Meg Serial DataFlash, 2.7V	SO-28	11.30	9.11	8.36
AT45DB081B-RI-ND	8 Meg Serial DataFlash, 2.7V	SO-28	12.44	10.02	9.20
AT45DB081B-CC-ND	8 Meg Serial DataFlash, 2.7V	14-CBGA	12.02	9.69	8.89
AT45DB081B-CI-ND	8 Meg Serial DataFlash, 2.7V	14-CBGA	12.20	9.84	9.02
AT45DB161B-TC-ND	16 Meg Serial DataFlash, 2.7V	28-TSOP	17.02	14.87	13.07
AT45DB161B-TI-ND	16 Meg Serial DataFlash, 2.7V	28-TSOP	18.69	16.33	14.36
AT45DB161B-RC-ND	16 Meg Serial DataFlash, 2.7V	SO-28	16.68	14.58	12.82
AT45DB161B-RI-ND	16 Meg Serial DataFlash, 2.7V	SO-28	18.36	16.04	14.11
AT45DB161B-CC-ND	16 Meg Serial DataFlash, 2.7V	24-CBGA	17.35	15.16	13.33
AT45DB161B-CI-ND	16 Meg Serial DataFlash, 2.7V	24-CBGA	17.51	15.30	13.46
AT45DB321B-TC-ND	32 Meg Serial DataFlash, 2.7V	32-TSOP	26.69	23.32	20.51
AT45DB321B-TI-ND	32 Meg Serial DataFlash, 2.7V	32-TSOP	29.37	25.66	22.56
AT45DB321B-CC-ND	32 Meg Serial DataFlash, 2.7V	44-CBGA	27.02	23.61	20.76
AT45DB321B-CI-ND	32 Meg Serial DataFlash, 2.7V	44-CBGA	27.19	23.76	20.89
AT45DB642-TC-ND	64 Meg Serial DataFlash, 2.7V	40-TSOP	45.65	39.88	35.07

ATMEL SPLDs (PAL Compatible 16V8, 20V8, 22V10)

Atmel SPLDs are a family of products based on the classic PAL architecture and consist of the popular industry standard 16V8, 20V8, and 22V10 in different speed, package, and power specifications. Already in wide use and supported by a wide variety of development tools, these variations offer features such as quarter-power, low standby power, and zero (<25µA) standby power. Atmel's family of Flash-based electrically erasable devices combine proven high-performance and low-power technologies.

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
ATF16V8B-10JC-ND	SPLD, 8 Output Macrocell, 10nS	20-PLCC	1.87	1.30	1.14
ATF16V8B-10PC-ND	SPLD, 8 Output Macrocell, 10nS	20-Dip	1.87	1.30	1.14
ATF16V8B-10SC-ND	SPLD, 8 Output Macrocell, 10nS	20-SOIC	1.87	1.30	1.14
ATF16V8BQ-10JC-ND	SPLD, 8 Output Macrocell, 1/4 Power, 10nS	20-PLCC	2.88	1.80	1.74
ATF16V8BQ-10PC-ND	SPLD, 8 Output Macrocell, 1/4 Power, 10nS	20-Dip	2.88	1.80	1.74
ATF16V8BQL-15JC-ND	SPLD, 8 Output Macrocell, 1/4 Power, Low Standby Power, 15nS	20-PLCC	1.23	.74	.66
ATF16V8BQL-15PC-ND	SPLD, 8 Output Macrocell, 1/4 Power, Low Standby Power, 15nS	20-Dip	1.23	.74	.66
ATF16V8BQL-15SC-ND	SPLD, 8 Output Macrocell, 1/4 Power, Low Standby Power, 15nS	20-SOIC	1.23	.74	.66
ATF16V8CZ-15JC-ND	SPLD, 8 Output Macrocell, Zero Standby Power, 15nS	20-PLCC	2.38	1.65	1.44
ATF16V8CZ-15PC-ND	SPLD, 8 Output Macrocell, Zero Standby Power, 15nS	20-Dip	2.38	1.65	1.44
ATF16V8CZ-15SC-ND	SPLD, 8 Output Macrocell, Zero Standby Power, 15nS	20-SOIC	2.38	1.65	1.44
ATF16LV8C-10JC-ND	SPLD, 8 Output Macrocell, 3 Volt, 10nS	20-PLCC	2.35	1.63	1.43
ATF16LV8C-10JI-ND	SPLD, 8 Output Macrocell, 3 Volt, 10nS, Ind. Temp.	20-PLCC	3.05	1.91	1.85
ATF16LV8C-10PC-ND	SPLD, 8 Output Macrocell, 3 Volt, 10nS	20-Dip	2.35	1.63	1.43
ATF16LV8C-10SC-ND	SPLD, 8 Output Macrocell, 3 Volt, 10nS	20-SOIC	2.35	1.63	1.43
ATF20V8B-10JC-ND	SPLD, 8 Output Macrocell, 10nS	28-PLCC	2.16	1.50	1.31
ATF20V8B-10PC-ND	SPLD, 8 Output Macrocell, 10nS	24-Dip	2.16	1.50	1.31
ATF20V8B-10SC-ND	SPLD, 8 Output Macrocell, 10nS	24-SOIC	2.16	1.50	1.31
ATF20V8BQ-10JC-ND	SPLD, 8 Output Macrocell, 1/4 Power, 10nS	28-PLCC	3.10	2.33	2.25
ATF20V8BQ-10PC-ND	SPLD, 8 Output Macrocell, 1/4 Power, 10nS	24-Dip	3.10	2.33	2.25
ATF22V10B-15JC-ND	SPLD, 10 Output Macrocell, 15nS	28-PLCC	2.58	2.00	1.72
ATF22V10BQ-15JC-ND	SPLD, 10 Output Macrocell, 1/4 Power, 15nS	28-PLCC	6.34	4.92	4.21
ATF22V10BQ-15SC-ND	SPLD, 10 Output Macrocell, 1/4 Power, 15nS	24-SOIC	6.34	4.92	4.21
ATF22V10BQL-20SC-ND	SPLD, 10 Output Macrocell, 1/4 Power, Low Standby Power, 20nS	24-SOIC	4.24	3.29	2.82
ATF22V10C-10JC-ND	SPLD, 10 Output Macrocell, 10nS	28-PLCC	3.60	2.70	2.61
ATF22V10C-10PC-ND	SPLD, 10 Output Macrocell, 10nS	24-Dip	3.60	2.70	2.61
ATF22V10C-10SC-ND	SPLD, 10 Output Macrocell, 10nS	24-SOIC	3.60	2.70	2.61
ATF22V10CQ-15JC-ND	SPLD, 10 Output Macrocell, 1/4 Power, 15nS *NEW!*	28-PLCC	3.64	2.73	2.64
ATF22V10CQ-15PC-ND	SPLD, 10 Output Macrocell, 1/4 Power, 15nS *NEW!*	24-Dip	3.64	2.73	2.64
ATF22V10CQ-15SC-ND	SPLD, 10 Output Macrocell, 1/4 Power, 15nS *NEW!*	24-SOIC	3.64	2.73	2.64
ATF22V10CQZ-20JC-ND	SPLD, 10 Output Macrocell, 1/4 Power, Zero Standby Power, 20nS *NEW!*	28-PLCC	2.83	1.96	1.72
ATF22V10CQZ-20PC-ND	SPLD, 10 Output Macrocell, 1/4 Power, Zero Standby Power, 20nS *NEW!*	24-Dip	2.83	1.96	1.72
ATF22V10CQZ-20SC-ND	SPLD, 10 Output Macrocell, 1/4 Power, Zero Standby Power, 20nS *NEW!*	24-SOIC	2.83	1.96	1.72
ATF22V10CZ-15JC-ND	SPLD, 10 Output Macrocell, Zero Standby Power, 15nS	28-PLCC	3.60	2.70	2.61
ATF22V10CZ-15PC-ND	SPLD, 10 Output Macrocell, Zero Standby Power, 15nS	24-Dip	3.60	2.70	2.61
ATF22V10CZ-15SC-ND	SPLD, 10 Output Macrocell, Zero Standby Power, 15nS	24-SOIC	3.60	2.70	2.61
ATF22LV10C-10JC-ND	SPLD, 10 Output Macrocell, 3 Volt, 10nS	28-PLCC	4.50	3.38	3.27
ATF22LV10C-10PC-ND	SPLD, 10 Output Macrocell, 3 Volt, 10nS	24-Dip	4.50	3.38	3.27
ATF22LV10C-10SC-ND	SPLD, 10 Output Macrocell, 3 Volt, 10nS	24-SOIC	4.50	3.38	3.27

ATMEL *NEW!* 8051 ARCHITECTURE MICROCONTROLLERS

Atmel offers a broad range of microcontrollers based on the 8051 architecture, with on-chip Flash or one-time programmable (OTP) QuickFlash™ program memory. The product line includes industry-standard socket drop-in devices, small footprint 20-pin devices, and In-System Programmable (ISP) parts. Device offerings are available in both commercial and industrial grades.

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
	NEW! One-Time Programmable 8051-Architecture Microcontrollers *NEW!*				
AT87F51-24AC-ND	80C31 MCU, 4K Bytes OTP QuickFlash™, 24MHz	44-TQFP	2.95	2.05	1.79
AT87F51-24AI-ND	80C31 MCU, 4K Bytes OTP QuickFlash™, 24MHz	44-TQFP	3.14	2.18	1.90
AT87F51-24JC-ND	80C31 MCU, 4K Bytes OTP QuickFlash™, 24MHz	44-PLCC	2.78	1.93	1.69
AT87F51-24JI-ND	80C31 MCU, 4K Bytes OTP QuickFlash™, 24MHz	44-PLCC	2.98	2.06	1.80
AT87F51-24PC-ND	80C31 MCU, 4K Bytes OTP QuickFlash™, 24MHz	40-Dip	2.78	1.93	1.69
AT87F51-24PI-ND	80C31 MCU, 4K Bytes OTP QuickFlash™, 24MHz	40-Dip	2.98	2.06	1.80
AT87F52-24AC-ND	80C32 MCU, 8K Bytes OTP QuickFlash™, 24MHz	44-TQFP	3.19	2.21	1.93
AT87F52-24AI-ND	80C32 MCU, 8K Bytes OTP QuickFlash™, 24MHz	44-TQFP	3.41	2.36	2.06
AT87F52-24JC-ND	80C32 MCU, 8K Bytes OTP QuickFlash™, 24MHz	44-PLCC	3.02	2.10	1.83
AT87F52-24JI-ND	80C32 MCU, 8K Bytes OTP QuickFlash™, 24MHz	44-PLCC	3.24	2.25	1.96
AT87F52-24PC-ND	80C32 MCU, 8K Bytes OTP QuickFlash™, 24MHz	40-Dip	3.02	2.10	1.83
AT87F52-24PI-ND	80C32 MCU, 8K Bytes OTP QuickFlash™, 24MHz	40-Dip	3.24	2.25	1.96
	NEW! Flash Reprogrammable 8051-Architecture Microcontrollers *NEW!*				
AT89C1051U-24PC-ND	80C31 MCU with UART, 1K Bytes Flash, 24MHz	20-Dip	2.52	1.75	1.53
AT89C1051U-24PI-ND	80C31 MCU with UART, 1K Bytes Flash, 24MHz	20-Dip	2.71	1.88	1.64
AT89C1051U-24SC-ND	80C31 MCU with UART, 1K Bytes Flash, 24MHz	SO-20	2.52	1.75	1.53
AT89C1051U-24SI-ND	80C31 MCU with UART, 1K Bytes Flash, 24MHz	SO-20	2.71	1.88	1.64
AT89C2051-24PC-ND	80C31 MCU with UART, 2K Bytes Flash, 24MHz	20-Dip	2.86	1.98	1.73
AT89C2051-24PI-ND	80C31 MCU with UART, 2K Bytes Flash, 24MHz	20-Dip	3.05	2.11	1.85
AT89C2051-24SC-ND	80C31 MCU with UART, 2K Bytes Flash, 24MHz	SO-20	2.86	1.98	1.73
AT89C2051-24SI-ND	80C31 MCU with UART, 2K Bytes Flash, 24MHz	SO-20	3.05	2.11	1.85
AT89C4051-24PC-ND	80C31 MCU with UART, 4K Bytes Flash, 24MHz	20-Dip	3.53	2.45	2.14
AT89C4051-24PI-ND	80C31 MCU with UART, 4K Bytes Flash, 24MHz	20-Dip	3.79	2.63	2.30
AT89C4051-24SC-ND	80C31 MCU with UART, 4K Bytes Flash, 24MHz	SO-20	3.53	2.45	2.14
AT89C4051-24SI-ND	80C31 MCU with UART, 4K Bytes Flash, 24MHz	SO-20	3.79	2.63	2.30
AT89C51-24AC-ND	80C31 MCU, 4K Bytes Flash, 24MHz	44-TQFP	4.54	3.14	2.75
AT89C51-24AI-ND	80C31 MCU, 4K Bytes Flash, 24MHz	44-TQFP	4.85	3.03	2.93
AT89C51-24JC-ND	80C31 MCU, 4K Bytes Flash, 24MHz	44-PLCC	4.37	3.03	2.64
AT89C51-24JI-ND	80C31 MCU, 4K Bytes Flash, 24MHz	44-PLCC	4.68	3.24	2.83
AT89C51-24PC-ND	80C31 MCU, 4K Bytes Flash, 24MHz	40-Dip	4.37	3.03	2.64
AT89C51-24PI-ND	80C31 MCU, 4K Bytes Flash, 24MHz	40-Dip	4.68	3.24	2.83
AT89C52-24AC-ND	80C32 MCU, 8K Bytes Flash, 24MHz	44-TQFP	5.04	3.15	3.05
AT89C52-24AI-ND	80C32 MCU, 8K Bytes Flash, 24MHz	44-TQFP	5.38	3.36	3.25
AT89C52-24JC-ND	80C32 MCU, 8K Bytes Flash, 24MHz	44-PLCC	4.87	3.05	2.95
AT89C52-24JI-ND	80C32 MCU, 8K Bytes Flash, 24MHz	44-PLCC	5.21	3.26	3.15
AT89C52-24PC-ND	80C32 MCU, 8K Bytes Flash, 24MHz	40-Dip	4.87	3.05	2.95
AT89C52-24PI-ND	80C32 MCU, 8K Bytes Flash, 24MHz	40-Dip	5.21	3.26	3.15
AT89S8252-24AC-ND	80C32 MCU with SPI, 8K Bytes Flash, 2K Bytes EEPROM, 24MHz	44-TQFP	6.00	4.50	3.99
AT89S8252-24AI-ND	80C32 MCU with SPI, 8K Bytes Flash, 2K Bytes EEPROM, 24MHz	44-TQFP	6.40	4.80	4.26
AT89S8252-24JC-ND	80C32 MCU with SPI, 8K Bytes Flash, 2K Bytes EEPROM, 24MHz	44-PLCC	5.80	4.35	4.21
AT89S8252-24JI-ND	80C32 MCU with SPI, 8K Bytes Flash, 2K Bytes EEPROM, 24MHz	44-PLCC	6.20	4.65	4.13
AT89S8252-24PC-ND	80C32 MCU with SPI, 8K Bytes Flash, 2K Bytes EEPROM, 24MHz	40-Dip	5.80	4.35	4.21
AT89S8252-24PI-ND	80C32 MCU with SPI, 8K Bytes Flash, 2K Bytes EEPROM, 24MHz	40-Dip	6.20	4.65	4.13
AT89S53-24AC-ND	80C32 MCU with SPI, 12K Bytes Flash, 24MHz	44-TQFP	5.04	3.15	3.05
AT89S53-24AI-ND	80C32 MCU with SPI, 12K Bytes Flash, 24MHz	44-TQFP	5.38	3.36	3.25
AT89S53-24JC-ND	80C32 MCU with SPI, 12K Bytes Flash, 24MHz	44-PLCC	4.87	3.05	2.95
AT89S53-24JI-ND	80C32 MCU with SPI, 12K Bytes Flash, 24MHz	44-PLCC	5.21	3.26	3.15
AT89S53-24PC-ND	80C32 MCU with SPI, 12K Bytes Flash, 24MHz	40-Dip	4.87	3.05	2.95
AT89S53-24PI-ND	80C32 MCU with SPI, 12K Bytes Flash, 24MHz	40-Dip	5.21	3.26	3.15

RF Modules / Broadband Amplifiers / Evaluation Kits

Fig. 1

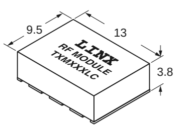


Fig. 2

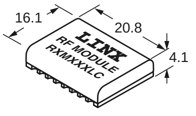


Fig. 3

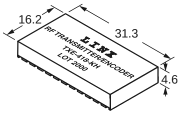


Fig. 4

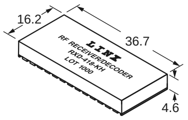


Fig. 5

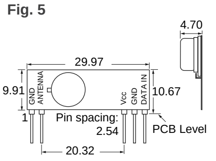


Fig. 6

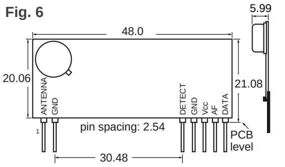


Fig. 7

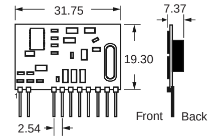


Fig. 8

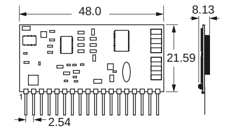


Fig. 9

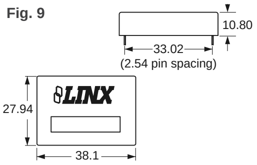


Fig. 10

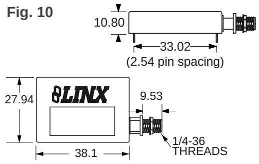
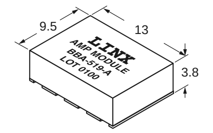


Fig. 11



LC Series - Ultra-Compact Low-Cost RF TX/RX Modules: Operating in the 260-470 MHz band, these tiny RF modules provide a complete and cost-effective solution for the wireless transfer of serial control, and command information over distances in excess of 300 feet. **Transmitter:** • 2.7 - 5.2 VDC range • 1.5 mA avg. • +3 dbm output • 5Kbps max. data rate • Low harmonics • Compact hand or auto place SMD package. **Receiver:** • 2.7 - 5.2 VDC range • Low power consumption, (6mA operational, 300µA sleep) • -97 typical sensitivity @10-5 • 5Kbps max. data rate • Balanced LO for easy certification • Compact hand or auto place SMD package.

BBA Series - Broadband RF Amplifiers: These amplifiers are well suited to a wide range of amplification and buffering applications including extending the range of Linx's own RF modules (when legally appropriate). Housed in a compact SMD package, the hybrid amps are prematched to 50Ω and and require no external RF components. **BBA-322:** • High Gain Model • 10 Mhz-3 Ghz Broadband Operation • +20dB Small Signal Gain @ 900MHz • Up to +10 (10mW) Linear Output Power • 3.8 dB Noise Figure • Operates From a Single Supply. **BBA-519:** • High Output Model • 10 Mhz-4Ghz Broadband Operation • +18dB Small Signal Gain @ 900MHz • Up to +17 (50mW) Linear Output Power • 4.8dB Noise Figure • Operates From a Single Supply

RM Series: Provides a complete TX/RX solution in a compact SIP style module. The RM series utilizes an advanced SAW based design and FM/FSK modulation and operates in the 260-470 band. **Transmitter:** • 5.9 - 9.0 VDC range • 6.0 mA avg. • +3 dbm output • 10,000 Kbps max. data rate • SIP package. **RM Receiver:** • 4.0 - 9.0 VDC range • 14 mA avg. • -103 typical sensitivity • 10,000 Kbps max. data rate • SIP package.

HP-II Series - High-Performance Low-Cost RF TX/RX Modules: These modules are designed for the popular 902-928MHz band. The modules offer 8 selectable channels and are capable of transmitting analog and digital information for distances of up to 1000 ft. (under optimal conditions). **Transmitter:** • Eight-parallel selectable channels • Synthesized architecture • 2.7-16 VDC supply range • Low power (15 mA average current): • 0dbm output power • 50Kbps maximum data rate • 100Hz to 25Khz analog bandwidth • CTS • Powerdown control • Compact SIP package. **Receiver:** • Eight-parallel selectable channels • Synthesized architecture • 2.7-1.6 VDC supply range • Low power (21mA average current: 50µA powerdown) • 50Kbps maximum data rate • 50Hz-25Khz analog bandwidth • RSSI output • Powerdown control • Compact SIP package

SC/PA/MC Series - High-Performance, Low-Cost RF Transceiver: Housed in a compact through-hole package Linx transceiver modules are designed for the cost-effective, bi-directional transfer of wireless information. **SC Transceiver:** • Synthesized architecture • 2.7-16VDC supply range • Low power (15mA Avg.) • Adjustable output power • UART compatible • 33.6Kbps max. data rate • 100Hz to 25Khz analog bandwidth • Integral antenna switch • Powerdown control. **SC-PA Version Adds:** • Integrated RP-SMA antenna connnection • FCC approved to eliminate additional testing (when used with approved antennas). **MC Transceiver:** • All the functions of the SC series +250 channels • 125Kbps data rate • Compatible with the Linx HP series • For digital data only

KH Series - Transmitter And Receiver Featuring Integrated Encoder/Decoder's: Housed in a compact SMD package the KH series combines the popular LC TX/RX with an integrated encoder/decoder pair. The encoder module accepts up to eight parallel inputs. This allows the direct connection of switches or a microcontroller. KH decoder module provides eight switched outputs and nine address lines which correspond to transmitters pin state.

Fig.	Description	MHz	Digi-Key Part No.	Price Each 1	25	100	Linx Part No.
			LC Series				
1	Transmitter	315 418 433	TXM-315-LC-ND TXM-418-LC-ND TXM-433-LC-ND	6.90 6.90 6.90	6.31 6.31 6.31	5.60 5.60 5.60	TXM-315-LC TXM-418-LC TXM-433-LC
2	Receiver	315 418 433	RXM-315-LC-S-ND RXM-418-LC-S-ND RXM-433-LC-S-ND	13.79 13.79 13.79	12.61 12.61 12.61	11.25 11.25 11.25	RXM-315-LC-S RXM-418-LC-S RXM-433-LC-S
			KH Series				
3	Transmitter	315 418 433	TXE-315-KH-ND TXE-418-KH-ND TXE-433-KH-ND	9.98 9.98 9.98	9.12 9.12 9.12	7.80 7.80 7.80	TXE-315-KH TXE-418-KH TXE-433-KH
4	Receiver	315 418 433	RXD-315-KH-ND RXD-418-KH-ND RXD-433-KH-ND	15.93 15.93 15.93	14.56 14.56 14.56	12.75 12.75 12.75	RXD-315-KH RXD-418-KH RXD-433-KH
			RM Series				
5	Transmitter	418 433	TXM-418-RM-ND TXM-433-RM-ND	22.45 22.45	20.53 20.53	16.21 16.21	TXM-418-RM TXM-433-RM
6	Receiver	418 433	RXM-418-RM-ND RXM-433-RM-ND	36.66 36.66	33.52 33.52	28.31 28.31	RXM-418-RM RXM-433-RM
			HP Series				
7	Transmitter 8 Channel	900	TXM-900-HP-II-ND	31.29	28.61	23.81	TXM-900-HP-II
8	Receiver 8 Channel	900	RXM-900-HP-II-ND	46.90	42.88	34.88	RXM-900-HP-II
			SC/SC-PA/MC Series				
9	SC Transceiver	900	TR-916-SC-ND	44.80	40.96	39.61	TR-900-SC
10	SC-PA, FCC Precertified Transceiver MC, 180 Channel Transceiver	900 900	TR-916-SC-PA-ND TR-900-MC-ND	48.30 84.35	46.92 77.12	46.31 64.95	TR-900-SC-PA TR-900-MC
			BBA Series				
11	High-Gain Broadband RF Amplifier High-Power Broadband RF Amplifier	10~3,000 10~4,000	BBA-322-A-ND BBA-519-A-ND	14.80 15.00	14.06 14.25	13.50 13.95	BBA-322-A BBA-519-A

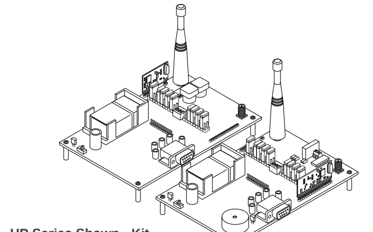
Evaluation Kits

These kits provide the most complete opportunity to evaluate the Linx module series of your choice and then begin the integration of it into your own design.

Basic Evaluation Kit: This kit is a quick way to evaluate the field performance of Linx products. The kit does not allow for the level of testing and interface possible with Master Kits but provides a cost-effective starting point. **Basic Kits Contain:** • 2 Transmitter Modules & 2 Receiver Modules (or 2 Transceiver Modules) • 2 Antennas • 2 Fully Assembled Evaluation Boards w/batteries • Manuals • Part 2 + Part 15 Guidelines.

Master Evaluation/Development System: The kits not only allow evaluation of the module series you have chosen, but also speeds the development of your own design via on-board prototyping area and breakout headers. **Master Kits Contain:** • 2 Transmitter Modules & 2 Receiver Modules • 2 Antennas • 2 9-Volt Batteries • 2 Fully Assembled Evaluation Boards • Manuals and FCC Guidelines

Description	MHz	Digi-Key Part No.	Price Each	Linx Part No.
		Basic Evaluation Kits		
LC Series	315 418 433	EVAL-315-LC-S-ND EVAL-418-LC-S-ND EVAL-433-LC-S-ND	139.00 139.00 139.00	EVAL-315-S-LC EVAL-418-LC-S EVAL-433-LC-S
SC Series	916	EVAL-916-SC-ND	199.00	EVAL-916-SC
SC-PA Series	916	EVAL-916-SC-PA-ND	199.00	EVAL-916-SC-PA
KH Series	315 418 433	EVAL-315-KH-ND EVAL-418-KH-ND EVAL-433-KH-ND	149.00 149.00 149.00	EVAL-315-KH EVAL-418-KH EVAL-433-KH
		Master Evaluation Kits		
RM Series	418 433	MDEV-418-RM-ND MDEV-433-RM-ND	249.00 249.00	MDEV-418-RM MDEV-433-RM
HP Series	900	MDEV-900-HP-II-ND	299.00	MDEV-900-HP-II



HP Series Shown - Kit contents varies by part #.

OEM Modules

All units below are pre-approved with the FCC to allow immediate integration and sale in most OEM product.

Handheld Transmitter: Compact 8-button handheld remote is capable of 100+ feet transmission ranges. The transmission can be decoded using a standard decoder IC, microcontroller, or matching Linx function module. Selectable addressing provides security and allows distinct TX/RX relationships.

Keyfob Transmitter: This tiny keyfob features outstanding range performance and is configured with 1 to 5 buttons for a variety of OEM applications.

1-4 Position Relay Function Module: Provides 4 latched relay outputs which are capable of switching external AC or DC powered loads up to 5 amps. Selectable addressing.

AC Switch Function Module: Plugs directly into a wall receptacle and is capable of switching devices at loads up to 1800 watts (15 amps) or 1 HP @ 120 VAC.

Decoder Module: Designed for integration onto a OEM's PCB. Provides eight switched outputs which correspond to the buttons on a command module. Pins on .100 (2.54mm) centers allow direct or socketed connection to a user's PCB. Integral antenna tilts and swivels.

FCC Pre-Certified OEM Products

PRECERTIFIED FCC INSTANT RF

Fig.	Description	MHz	Digi-Key Part No.	Price Each 1	25	100	Linx Part No.
1	Handheld Transmitter	315 418 433	CMD-HHTX-315-ND CMD-HHTX-418-ND CMD-HHTX-433-ND	32.03 32.03 32.03	29.28 29.28 29.28	24.95 24.95 24.95	CMD-HHTX-315 CMD-HHTX-418 CMD-HHTX-433
2	1 to 5 Button FCC Precertified Keyfob Transmitter	315 418 433	CMD-KEY5-315-ND CMD-KEY5-418-ND CMD-KEY5-433-ND	20.60 20.60 20.60	19.57 19.57 19.57	18.49 17.95 17.95	CMD-KEY5-315 CMD-KEY5-418 CMD-KEY5-433
3	1 to 4 Position Relay Function Module	315 418 433	FCTN-RLY4XX-315-ND FCTN-RLY4XX-418-ND FCTN-RLY4XX-433-ND	59.85 59.85 59.85	54.72 54.72 54.72	49.96 49.96 49.96	FCTN-RLY4XX-315 FCTN-RLY4XX-418 FCTN-RLY4XX-433
4	AC Switch Function Module - 120 VAC	315 418 433	FCTN-WALL-315-1-ND FCTN-WALL-418-1-ND FCTN-WALL-433-1-ND	51.45 51.45 51.45	47.04 47.04 47.04	44.95 44.95 44.95	FCTN-WALL-315-1 FCTN-WALL-418-1 FCTN-WALL-433-1
5	FCC Precertified Receiver Decoder Module	315 418 433	FCTN-DEC1-315-ND FCTN-DEC1-418-ND FCTN-DEC1-433-ND	23.63 23.63 23.63	21.60 21.60 21.60	17.95 17.95 17.95	FCTN-DEC1-315 FCTN-DEC1-418 FCTN-DEC1-433

Fig. 1

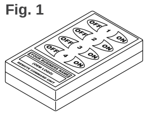


Fig. 4

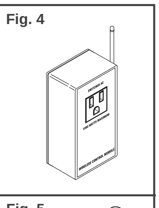


Fig. 2

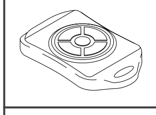


Fig. 3

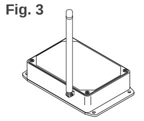
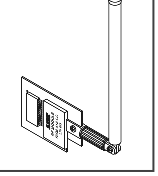


Fig. 5



Antennas / Connectors

Antennas are a critical and often neglected factor in determining the range and reliability of any wireless link. Linx antennas are ideal for achieving maximum performance and cost efficiency from most discrete or modular designs. All antennas are designed to meet FCC and international standards.

LP Series: LP series antennas are low-cost, reduced height permanently attached 1/4-wave whips. They are ideal for applications requiring a rugged, cosmetically attractive, yet cost-effective antenna solution. The antennas are easily secured directly to a user's PCB via a single screw.

PW Series: Designed for permanent attachment, the PW series of 1/4-wave whip antenna is designed to offer outstanding performance in a rugged, cost-effective Part 15-compliant package. The antenna is attached by securing its base through a 1/4" hole in the product's package. The antenna is fed through the base via RG-174 (7" standard length) coax which may be soldered directly to a PCB or attached via a connector.

CW Series: The CW series antennas features an FCC Part 15-compliant Reverse Polarity SMA connector allowing for easy field replacement. These antennas deliver outstanding performance in a rugged and cosmetically attractive package.

RH Series - Reduced Height: Significantly smaller than our larger whips, the RH series is ideally suited for products where cosmetic or functional requirements dictate a compact, aesthetically pleasing antenna.

RA Series: The RA series offers maximum mounting and orientation flexibility in a cost-effective reduced height package. The antenna's innovative base allows a wide range of horizontal and vertical motions which enhances versatility for both the designer and the customer. The antenna mounts quickly to a PCB via a single screw and meets all Part 15 Requirements.

SP Series - The "Splatch": The Splatch uses a grounded line technique to extract outstanding performance from a tiny surface-mount element. Unlike many compact antennas the Splatch is highly immune to proximity effects making it an ideal choice for hand-held applications such as remote controls, pagers, and alert devices. This unique antenna is designed for hand or reflow mounting directly to a product's circuit board.

HD Series - Reduced Height: This reduced height 1/4-wave antenna is ready for years of abuse thanks to a highly flexible internal helical which is over-molded with a heavy-duty protective jacket. The HD series is an excellent choice for outdoor application, or for use in adverse environments where the antenna must resist shock, harsh weather, and tampering.

PMB Series: PMB series 1/4 wave antennas feature a soft blade type element which can be rotated 360°. A molded tab allows coding of the customers case to control the rotational travel.

GPS w/ SMA Connector: This sleekly housed active GPS antenna sets a new standard of value and performance. The antenna operates from 2.5 ~ 5.5 volts and consumes as little as 4mA. The unit's rugged housing is fully weatherized and may be mounted via its magnetic base or integral screw receptacles.

RCS Series - Ultra-Compact Right Angle: The RCS series is ideally suited for products requiring an attractive yet compact antenna in a right-angle form factor.

RCL Series - Compact Right Angle: Similar to the RCS series but in a larger form factor. It is useful in products where additional height above the product's case is needed or a slightly wider operational bandwidth is desired.

Dual Band Dome Antenna: This dome antenna is ideal for applications requiring both 824 to 894 MHz cellular and 1.575 GHz (GPS) reception. Each internal antenna has a 16.5' (5.03 meters) coaxial cable with a BNC connector for the 824 to 894 MHz cellular antenna and an SMA connector for the 1.575 GHz antenna. Mounting is accomplished via an adhesive pad and locking nut.

Fig.	Description	MHz	Digi-Key Part No.	Price Each 1	25	100	Linx Part No.
1	Permanent Mount Reduced Height 1/4 Wave Whip	315	ANT-315-PW-LP-ND	2.03	1.86	1.79	ANT-315-PW-LP
		418	ANT-418-PW-LP-ND	2.03	1.86	1.79	ANT-418-PW-LP
		433	ANT-433-PW-LP-ND	2.03	1.86	1.79	ANT-433-PW-LP
		916	ANT-916-PW-LP-ND	2.03	1.86	1.79	ANT-916-PW-LP
2	Permanent Mount 1/4 Wave Whip	418	ANT-418-PW-QW-ND	6.83	6.24	5.07	ANT-418-PW-QW
		433	ANT-433-PW-QW-ND	6.70	6.13	4.97	ANT-433-PW-QW
		868	ANT-868-PW-QW-ND	6.58	6.02	4.85	ANT-868-PW-QW
		916	ANT-916-PW-QW-ND	6.44	5.89	4.78	ANT-916-PW-QW
3	RP-SMA 1/4 Wave Whip	418	ANT-418-CW-QW-ND	7.88	7.20	5.74	ANT-418-CW-QW
		433	ANT-433-CW-QW-ND	7.70	7.04	5.61	ANT-433-CW-QW
		868	ANT-868-CW-QW-ND	7.53	6.88	5.48	ANT-868-CW-QW
		916	ANT-916-CW-QW-ND	7.35	6.72	5.36	ANT-916-CW-QW
4	RP-SMA Reduced Height 1/4 Wave Whip	315	ANT-315-CW-RH-ND	7.61	6.96	5.25	ANT-315-CW-RH
		418	ANT-418-CW-RH-ND	7.61	6.96	5.25	ANT-418-CW-RH
		433	ANT-433-CW-RH-ND	7.61	6.96	5.25	ANT-433-CW-RH
		916	ANT-916-CW-RH-ND	7.61	6.96	5.25	ANT-916-CW-RH
5	Permanent Mount Swivel Angle 1/4 Wave Whip	315	ANT-315-PW-RA-ND	3.45	3.11	2.89	ANT-315-PW-RA
		418	ANT-418-PW-RA-ND	3.45	3.11	2.89	ANT-418-PW-RA
		433	ANT-433-PW-RA-ND	3.45	3.11	2.89	ANT-433-PW-RA
		916	ANT-916-PW-RA-ND	3.45	3.11	2.89	ANT-916-PW-RA
6	Planar Antenna (SMT)	315	ANT-315-SP-ND	2.08	1.82	1.75	ANT-315-SP
		418	ANT-418-SP-ND	2.08	1.82	1.75	ANT-418-SP
		433	ANT-433-SP-ND	2.08	1.82	1.75	ANT-433-SP
		868	ANT-868-SP-ND	2.08	1.82	1.75	ANT-868-SP
		916	ANT-916-SP-ND	2.08	1.82	1.75	ANT-916-SP
7	RP-SMA Reduced Height 1/4 Wave Whip	315	ANT-315-CW-HD-ND	7.61	6.96	5.50	ANT-315-CW-HD
		418	ANT-418-CW-HD-ND	7.61	6.96	5.50	ANT-418-CW-HD
		433	ANT-433-CW-HD-ND	7.61	6.96	5.50	ANT-433-CW-HD
		916	ANT-916-CW-HD-ND	7.61	6.96	5.50	ANT-916-CW-HD
8	Permanent Mt. Right Angle Blade Style 1/4 Wave Whip	916	ANT-916-PMB-ND	3.40	3.11	2.64	ANT-916-PMB
9	High Performance GPS w/SMA	1575.42	ANT-GPS-SE-SMA-ND	37.54	34.32	27.76	ANT-GPS-SE-SMA
10	RP-SMA Right Angle Compact 1/4 Wave Whip	916	ANT-916-CW-RCS-ND	6.46	5.91	5.25	ANT-916-CW-RCS
		2.4	ANT-2.4-CW-RCS-ND	6.46	5.91	5.25	ANT-2.4-CW-RCS
11	1/4 Wave Whip	916	ANT-916-CW-RCL-ND	7.04	6.44	5.50	ANT-916-CW-RCL
12	Dual Band Dome with SMA White Body	1575.42(GPS) 824-894 (Cell.)	ANT-DBD-DA-SMA/W-ND	94.15	86.08	69.96	ANT-DBD-DA-SMA/W

Fig. 1

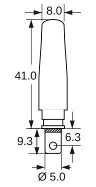


Fig. 2

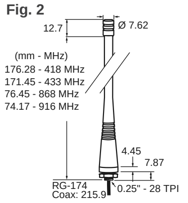


Fig. 3

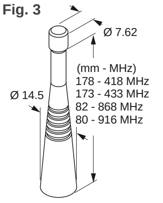


Fig. 4

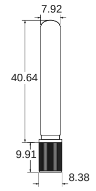


Fig. 5

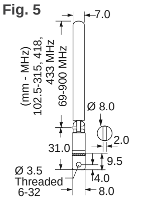


Fig. 6

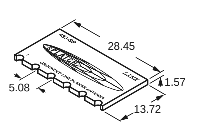


Fig. 7

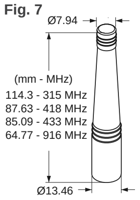


Fig. 8

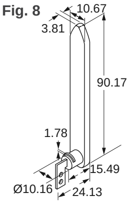


Fig. 9

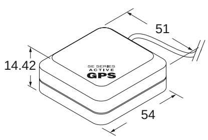


Fig. 10

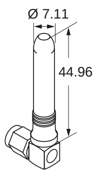


Fig. 11

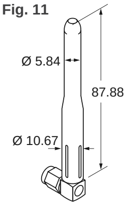
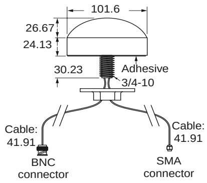


Fig. 12



RP-SMA Connectors for OEM Antennas

Fig. 1

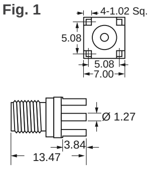


Fig. 2

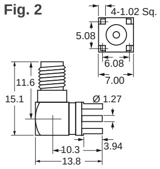


Fig. 3

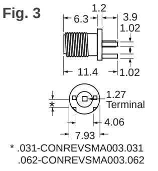


Fig. 4

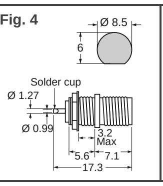


Fig. 5

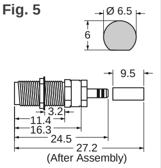


Fig. 6

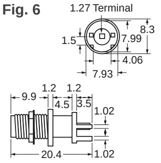


Fig. 7

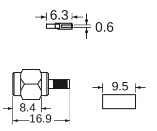


Fig. 8

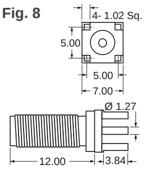


Fig.	Description	Digi-Key Part No.	Price Each 1	25	100	200	Linx Part No.
1	PCB Mount Connector	CONREVSMA001-ND	3.13	2.87	2.21	2.04	CONREVSMA001
2	Connector Right Angle PCB Mount	CONREVSMA002-ND	5.48	5.01	3.87	3.58	CONREVSMA002
3	Card Edge Mount Connector for Board Thickness .031" (.79mm)	CONREVSMA003.031-ND	3.75	3.43	2.65	2.45	CONREVSMA003.031
	Card Edge Mount Connector for Board Thickness .062" (1.57mm)	CONREVSMA003.062-ND	3.75	3.43	2.65	2.45	CONREVSMA003.062
4	Front Mount Bulkhead Receptacle	CONREVSMA004-ND	3.54	3.24	2.50	2.30	CONREVSMA004
5	Bulkhead Crimp Jack-Captive Contact	CONREVSMA005-ND	5.88	5.38	4.16	3.84	CONREVSMA005
5	Bulkhead Crimp Jack-Captive Contact w/8.5" Contact	CONREVSMA005C08.5-ND	7.82	7.16	5.54	5.11	CONREVSMA005-C08.5
6	Card Edge Multi-Mount Connector	CONREVSMA006-ND	5.48	5.01	3.87	3.58	CONREVSMA006
7	Cable End Connector For RG-174	CONREVSMA007-ND	5.22	4.77	3.69	3.41	CONREVSMA007
8	PCB Mount Connector-Long	CONREVSMA008-ND	3.75	3.43	2.65	2.45	CONREVSMA008

DATA BOOKS

NATIONAL SEMICONDUCTOR

Digi-Key Part No.	Price Each

1995 Application Specific Analog Products

Contains data on: audio, automotive, video and special function.

9241B-ND **$16.00**

1996-1997 COP8 Data Book

Contains data on: COP8 family and applications, microwire/plus peripherals, development support and appendices/physical dimensions.

9280B-ND **$18.00**

1995 Data Acquisition Data Book

Contains data on: D/A and A/D Converters, voltage ref., sample and hold, temperature sensors, analog switches-multiplexors and active filters.

9242B-ND **$18.00**

1991 DRAM Management Handbook

9158B-ND **$11.00**

1995 Operational Amplifiers Data Book

Contains data on: Op amps, buffers, voltage comparators, instrumentation amplifiers, surface mount, appendixes/physical dimensions.

9243B-ND **$17.00**

1993 Packaging Data Book

Contains data on: introduction, Hermetic packages, plastic packages, advanced pkg. technology, package reliability considerations, packaging considerations, surface mount considerations and appendix.

9255B-ND **$7.00**

1995 Power ICs Data Book

Contains data on: linear, low dropout, and switching volt. regulators, motion control, peripheral drivers, high current switches, surface mount, and appendixes/physical dim.

9244B-ND **$12.00**

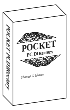
Real-Time Clock Handbook

9205B-ND **$7.00**

POCKET REFERENCE SERIES

Digi-Key Part No.	Price Each

Pocket PC DIRectory



Contains directory information on over 1500 companies involved in PC manufacturing. Includes company names and addresses, phone, fax and world wide web address.

9273B-ND **$8.95**

MISCELLANEOUS

Digi-Key Part No.	Price Each

Aromat Timer, Counter Data Book

9278B-ND **$2.95**

Aromat Relay Guide Data Book

9277B-ND **$2.95**

Burr-Brown Linear & Mixed Signal Products Data Book

LI-501-ND **$4.94**

C&K Switch Data Book

9138B-ND **$2.95**

Condor Power Engineering Manual

9288B-ND **$2.95**

Crydom Solid State Relay Design Guide

9213B-ND **$19.95**

ECS X-Tal/Oscillator Data Book

9256B-ND **$2.95**

E-Switch Data Book

9157B-ND **$2.95**

Charleswater ESD Awareness Guide

16-1013-ND **$3.44**

Grayhill Engineering Catalog

9154B-ND **$4.95**

IERC Heatsinks Databook

9295B-ND **$2.50**

International Rectifier Hexfet Power Mosfet Designers Book

9091B-ND **$9.95**

Keystone Carbon Thermistor Catalog

9190B-ND **$4.98**

Lambda 2000-2001 Power Supply Solutions Book

9293B-ND **$1.95**

1990 Linear Technology Applications Handbook, Vol. I

9177B-ND **$19.95**

1990 Linear Technology Data Book, Vol. I

9175B-ND **$9.95**

1992 Linear Technology Data Book, Vol. II

9176B-ND **$9.95**

1993 Linear Technology Applications Handbook, Vol. II

9258B-ND **$19.95**

1994 Linear Technology Data Book, Vol. III

9210B-ND **$9.95**

1995 Linear Technology Data Book, Vol. IV

9257B-ND **$10.00**

1996 Linear Technology Data Book, Vol. V

9285B-ND **$10.00**

1997 Linear Technology Applications Handbook

9286B-ND **$20.00**

1997 Linear Technology Data Book, Vol. VI

9294B-ND **$12.50**

Linear View CD-ROM

Contains Data Sheets and Applications Information.

LTDS-ND **$3.00**

Lumex Master Catalog CD-ROM

67-1542-ND **$1.95**

Microchip PIC16C7X Series Family Data Book

9267B-ND **$6.95**

Microchip Embedded Control PIC Handbook, Volume 1

DS00092D-ND **$9.95**

Microchip Embedded Control Handbook Update 2000

DS00711-ND **$5.00**

Omron Counters Full Line Catalog

9248B-ND **$2.00**

Omron Solid State Timers Catalog

9249B-ND **$1.00**

Omron Photomicrosensors Data Book

9136B-ND **$2.95**

Omron Relay Data Book

9135B-ND **$2.95**

Raychem PolySwitch® Resettable Fuses Data Book

H55440-ND **$7.95**

Teccor Thyristor Product Catalog

9291B-ND **$3.00**

Teccor Sidactor Data Book

9292B-ND **$2.25**

Toko Application Notes for Balun Transformers 458DB-456DB

9179B-ND **$1.95**

Toko Application Notes for Balun Transformers 458DS-456DS

9180B-ND **$1.95**

Toko Coils and Filters Catalog

9139B-ND **$9.95**

Toko IC Data Book

9194B-ND **$15.00**

Xilinx Programmable Logic Data Book

9282B-ND **$1.95**

Panasonic® Hall Effect Sensor ICs

Panasonic's Hall IC is a combination of a Hall element, amplifier, Schmidt circuit, and stabilized power supply/temperature compensator integrated on an identical chip by using the IC technology. It amplifies Hall element output at the amplifier, converts into a digital signal through the Schmidt circuit, and drives the TTL or MOS IC directly.

Features: • Stable temperature characteristics due to the additional temperature compensator • TTL and MOS ICs directly drivable by output • Semipermanent service life due to no contact parts • Small change of the operating flux density against mechnical stress • Provided with the output pull-up resistors (typ 27kΩ or open collector output (see chart) • Operating Temperature:-40°C to 100°C (-40°C to 85°C for DN6851 - DN6853) • Supply Current Max: 6mA • Output Circuit Max: 20mA

Applications:
- Speed Sensors
- Position Sensors
- Rotation Sensors
- Keyboard Switches
- Microswitches

Fig. 1

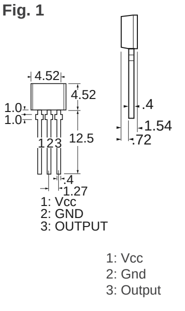


Fig. 2

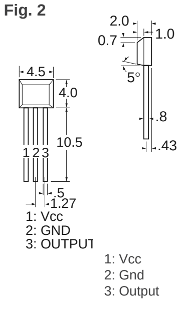


Fig. 3

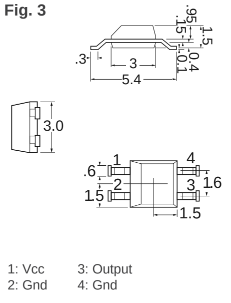


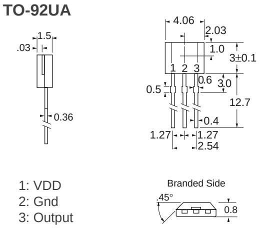
Fig.	Supply Voltage Range (V)	Oper.** Flux Density (Gauss) (L-H)	(H-L)	Output* Type	Oper.† Type	Pkg.	Digi-Key Part No.	Price Each 1	10	100
1	4.5 – 16	-175	175	Pullup	Bidirectional	3-Sip	DN6847SE-ND	1.68	1.35	1.01
2	4.5 – 16	5	220	0C	Unidirectional	3-Sip	DN6848-ND	1.04	.87	.70
3	4.5 – 16	5	220	0C	Unidirectional	SOH-4D	DN6848S-ND	1.04	.87	.70
2	4.5 – 16	-175	175	0C	Bidirectional	3-Sip	DN6849-ND	1.69	1.36	1.02
3	4.5 – 16	-175	175	0C	Bidirectional	SOH-4D	DN6849S-ND	1.69	1.36	1.02
1	4.5 – 16	-175	175	0C	Bidirectional	3-Sip	DN6849SE-ND	1.69	1.36	1.02
2	3.6 – 16	-200	200	Pullup	Bidirectional	3-Sip	DN6851A-ND	.90	.76	.61
2	3.6 – 16	100	450	0C	Unidirectional	3-Sip	DN6852A-ND	1.04	.87	.70
2	3.6 – 16	-200	200	0C	Bidirectional	3-Sip	DN6853A-ND	1.35	1.13	.91
2	4.5 – 16	-120	120	Pullup	Bidirectional	3-Sip	DN8897-ND	1.69	1.36	1.02
2	4.5 – 16	-120	120	0C	Bidirectional	3-Sip	DN8899-ND	1.69	1.36	1.02

* Output Type: Pull-up Resistors = 27K Internal; 0C = open collector. ** To convert Gauss to millitesla, divide by 10

† Unidirectional and is only sensitive to either north or southside of magnetic; Bidirectional is sensitive to an alternating magnetic fields of both north and south sides.

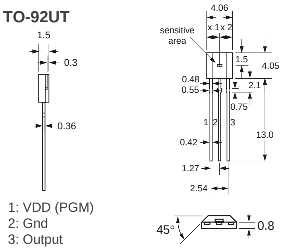
MICRONAS Hall Effect Sensor ICs

TO-92UA



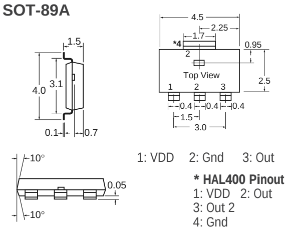
1: VDD
2: Gnd
3: Output

TO-92UT



1: VDD (PGM)
2: Gnd
3: Output

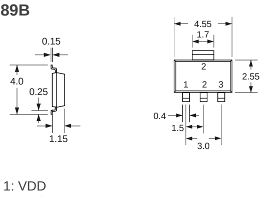
SOT-89A



1: VDD 2: Gnd 3: Out

*** HAL400 Pinout**
1: VDD 2: Out
3: Out 2
4: Gnd

SOT-89B



1: VDD
2: Gnd
3: Output

FEATURES:

On-Chip temperature compensation circuitry minimizes shifts in ON and OFF points and hysteresis over temperature and supply voltage. Ideal sensors for ignition timing, anti-lock brake systems, speed measurement, angular and linear measurement/positioning. Designed for use in hostile automotive and industrial environments.

SWITCHING SPECIFICATIONS:

Bipolar: Output turns low with magnetic south to branded side of package (open drain).

Unipolar: Output turns low with magnetic south to branded side of package, output turns high if magnetic field is removed.

Latching: Output turns low with magnetic south to branded side of package, output does not change states when magnetic field is removed.

Differential: Output determined by magnetic south pole flux density between 2 internal sensors, output low with B_{S1}-B_{S2}>B_{on}, output high with B_{S1}-B_{S2}<B_{off}.

Linear: The 2 outputs give a differential voltage that is analog to the magnetic flux density, south magnetic pole to branded side package yields V_{out1}<V_{out2}; north magnetic pole to branded side of package yields V_{out1}>V_{out2} (do not connect V_{out1} or V_{out2} to ground).

Switch Mode	Switch Frequency	Supply Voltage	Cont. Output Current	On/Off (Max./Min.) Point B mT	Digi-Key Part No.	Price Each 1	10	100	500	Micronas Part No.
TO-92UA										
Latching	DC-10kHz	3.8-24V	10 mA	5.0/-5.0	HAL502UA-E-ND	.78	.71	.57	.47	HAL502UA-E
Latching	DC-10kHz	3.8-24V	10 mA	10.8/-10.8	HAL503UA-E-ND	.78	.71	.57	.47	HAL503UA-E
Unipolar	DC-10kHz	3.8-24V	10 mA	15.7/4.2	HAL504UA-E-ND	.78	.71	.57	.47	HAL504UA-E
Latching	DC-10kHz	3.8-24V	10 mA	18.3/-18.3	HAL505UA-E-ND	.78	.71	.57	.47	HAL505UA-E
Unipolar	DC-10kHz	3.8-24V	10 mA	21.9/11.4	HAL508UA-E-ND	.78	.71	.57	.47	HAL508UA-E
Differential	DC-10kHz	4.5-24V	10 mA	3.0/-3.0	HAL300UA-E-ND	1.95	1.76	1.41	1.17	HAL300UA-E
TO-92UT										
Prog. Linear	DC-2kHz	4.5-5.5V	1mA	Programmable	HAL805UT-E-ND	3.90	3.51	2.81	2.34	HAL805UT-E

Switch Mode	Switch Frequency	Supply Voltage	Cont. Output Current	On/Off (Max./Min.) Point B mT	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	Micronas Part No.
SOT-89A											
Unipolar	DC-20kHz	4.5-24V	10 mA	36.0/4.3	HAL214S-ECT-ND	2.76	2.48	1.99	HAL214S-ETR-ND	742.00	HAL214S-E
Latching	DC-10kHz	3.8-24V	10 mA	5.0/-5.0	HAL502S-ECT-ND	3.54	3.19	2.55	—	—	HAL502S-E
Latching	DC-10kHz	3.8-24V	10 mA	10.8/-10.8	HAL503S-ECT-ND	3.54	3.19	2.55	HAL503S-ETR-ND	952.00	HAL503S-E
Unipolar	DC-10kHz	3.8-24V	10 mA	15.7/4.2	HAL504S-ECT-ND	3.54	3.19	2.55	—	—	HAL504S-E
Latching	DC-10kHz	3.8-24V	10 mA	18.3/-18.3	HAL505S-ECT-ND	3.54	3.19	2.55	—	—	HAL505S-E
Unipolar	DC-10kHz	3.8-24V	10 mA	21.9/11.4	HAL508S-ECT-ND	3.54	3.19	2.55	HAL508S-ETR-ND	952.00	HAL508S-E
Differential	DC-10kHz	4.5-24V	10 mA	3.0/-3.0	HAL300S-ECT-ND	4.06	3.65	2.92	HAL300S-ETR-ND	1092.00	HAL300S-E
Linear	DC-5kHz	4.8-12V	2.25 mA	—	HAL400S-CCT-ND	7.80	7.02	5.61	—	—	HAL400S-C
SOT-89B											
Bipolar	DC-20kHz	4.5-24V	10 mA	12.5/-12.5	HAL115SF-ECT-ND	1.30	1.17	.94	—	—	HAL115SF-E
Unipolar	DC-20kHz	4.5-24V	10 mA	36.0/3.6	HAL114SF-ECT-ND	1.30	1.17	.94	HAL114SF-ETR-ND	350.00	HAL114SF-E
Differential	DC-10kHz	4.5-24V	10 mA	3.5/-3.5	HAL320SF-ECT-ND	3.85	3.47	2.77	HAL320SF-ETR-ND	1036.00	HAL320SF-E
Latching	DC-10kHz	3.8-24V	10 mA	5.0/-5.0	HAL502SF-ECT-ND	1.67	1.50	1.20	—	—	HAL502SF-E
Latching	DC-10kHz	3.8-24V	10 mA	10.8/-10.8	HAL503SF-ECT-ND	1.67	1.50	1.20	HAL503SF-ETR-ND	448.00	HAL503SF-E
Unipolar	DC-10kHz	3.8-24V	10 mA	15.7/4.2	HAL504SF-ECT-ND	1.67	1.50	1.20	—	—	HAL504SF-E
Latching	DC-10kHz	3.8-24V	10 mA	18.3/-18.3	HAL505SF-ECT-ND	1.67	1.50	1.20	HAL505SF-ETR-ND	448.00	HAL505SF-E
Unipolar	DC-10kHz	3.8-24V	10 mA	7.7/1.7	HAL506SF-ECT-ND	1.67	1.50	1.20	HAL506SF-ETR-ND	448.00	HAL506SF-E
Unipolar	DC-10kHz	3.8-24V	10 mA	21.9/11.4	HAL508SF-ECT-ND	1.67	1.50	1.20	HAL508SF-ETR-ND	448.00	HAL508SF-E

HAL115DS-ND	Data Sheet for HAL115	**$2.60**
HAL300DS-ND	Data Sheet for HAL300	**$2.60**

CHERRY

Solid State Magnetic Hall Effect Sensors

Cherry magnetic sensors are used to detect changes in magnetic field polarities and the motion of ferrous metals such as gear tooth movements. Used for such applications as speed and proximity sensing, magnetic polarity detection and current flow monitoring. Solid state design for unlimited life.

Features:

HE31-3500 magnetically biased bipolar digital latch. Extreme sensitivity. Internal transistor switches on when exposed to south pole and remains on until north pole magnetic field is introduced.

MP100701 is an aluminum threaded barrel sensor for speed and position sensing. The threaded barrel allows precise positioning and adjustment.

Fig. 2, 5, and 6 are barrel sensors intended for gear tooth speed sensing. High speed capability, ideal for sensing power gears, conveyer speed and other rotating gears. Built-in magnet supplies its own bias field. GS101202 is plastic housing with steel bushing.

Fig. 1

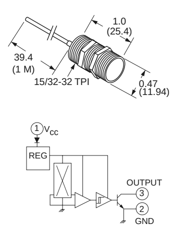


Fig. 2

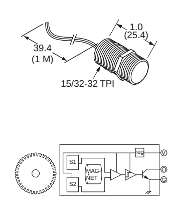


Fig. 3

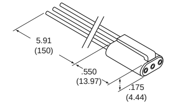


Fig. 4

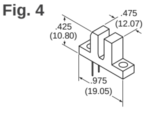
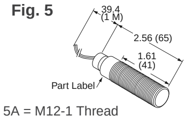


Fig. 5



5A = M12-1 Thread
5B = M18-1 Thread

Fig. 6

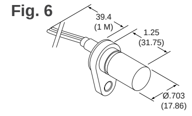
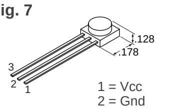


Fig. 7



1 = Vcc
2 = Gnd
3 = Output

Fig. 8

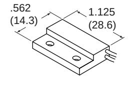


Fig.	Supply Voltage	Output Current	Terminal Type	Polarity	Digi-Key Part No.	Price Each 1	10	100	Cherry Part No.
1	4.75-24 VDC	25mA	20AWG Wires	South Pole	CH396-ND	24.44	21.72	15.03	MP100701
2	4.5-24 VDC	25mA	20AWG Wires	Gear Teeth	CH398-ND	30.24	26.88	18.60	GS100701
3	4.75-24 VDC	25mA	24AWG Wires	South Pole	CH399-ND *NEW!*	6.08	5.40	4.23	MP101301
4	4.5-24 VDC	6mA	PC Mount	Ferrous Vane	CH401-ND *NEW!*	5.08	4.52	3.54	VN101501
5A	4.5-24 VDC	25mA	22AWG Wires	Gear Teeth	CH414-ND* *NEW!*	54.00	48.00	37.60	GS100102
5B	4.5-24 VDC	25mA	22AWG Wires	Gear Teeth	CH415-ND* *NEW!*	57.24	50.88	39.86	GS100202
5A	4.5-24 VDC	25mA	20AWG Wires	Gear Teeth	CH416-ND *NEW!*	30.24	26.88	21.06	GS100502
6	5-24 VDC	25mA	22AWG Wires	Gear Teeth	CH417-ND *NEW!*	32.29	28.71	22.49	GS101202
7	4.5-24 VDC	20mA	PC Mount	South Pole	CH395-ND	4.19	3.72	2.57	HE31-3500
8	4.5-24 VDC	25mA	24AWG Wires	North Pole	CH400-ND *NEW!*	6.89	6.12	4.80	MP102103

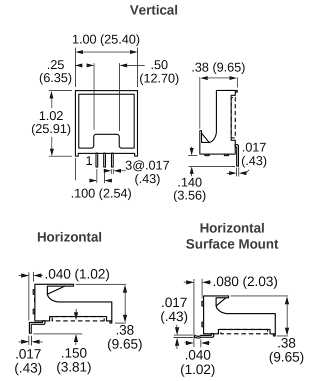
*Industrial Grade-Stainless Steel

Power Trends Products from Texas Instruments

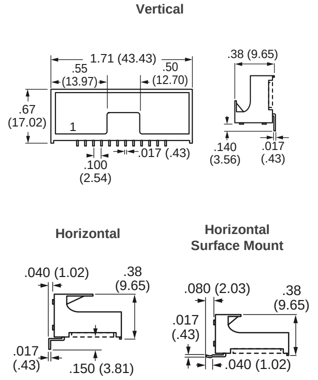
Integrated Switching Regulators

Power Trends Products from Texas Instruments manufactures the industry's smallest, most efficient and easy to use Integrated Switching Regulators (ISRs). Using a unique, proprietary design which employs 1 MHz switching technology to produce state-of-the-art power densities, these ISRs let you select the product performance that exactly matches your application. **Features:** • Easy to use—just plug them in. In most cases, only one external component is required, if any • Output voltages are laser-trimmed for accuracy • High efficiencies and low component counts combine to yield MTBFs in excess of 1,000,000 hours

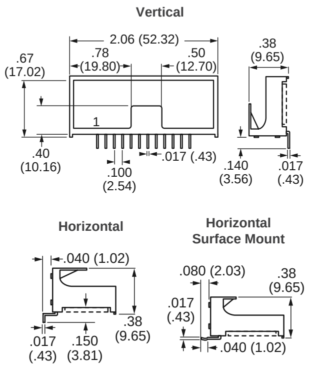
Package Style 100



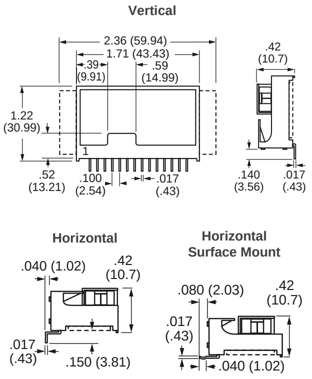
Package Style 200



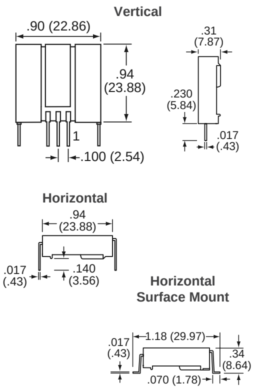
Package Style 300 (12 Pin SIP) / 310 (14 Pin SIP)



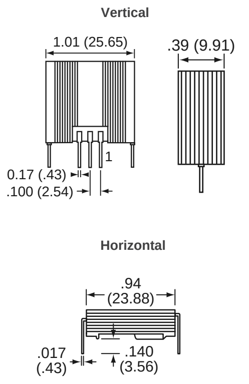
Package Style 400



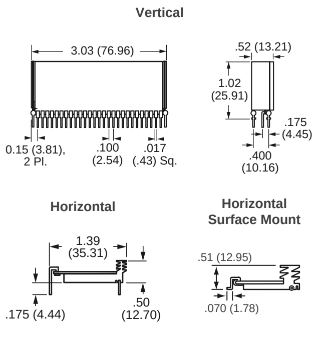
Package Style 500



Package Style 600

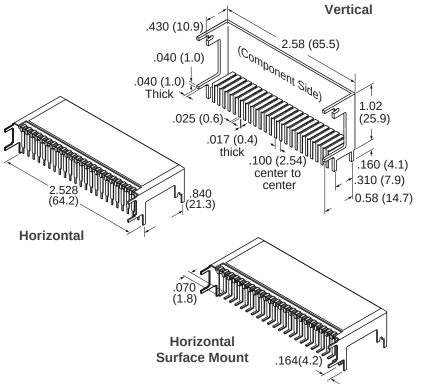


Package Style 800 (Vertical) / 810 (Horizontal/Surface Mount)



5-bit Programmable
DC VOUT (1.3V to 3.5V)

Package Style 1320 (Vertical) / 1330 (Horizontal/Surface Mount)



DC Vout	Max. Amp Iout	Min. Amp Iout	DC Vin Range	Circuit Board Orientation	Pkg. Style	External Components Required	Vout Adj.	On/Off Control	Remote Sense	Over-Temp Protection	Short Circuit Protection	Fast Transient Response	Recommended Operating Temp. Range (°C)	Digi-Key Part No.	Price Each 1	25	100
3.3	1.00	.10 (a)	9 to 26	Horz.	100	100UF (r)	—	—	—	X	X	—	-20 to +80 (b)	PT5103A-ND	13.84	12.02	9.50
3.3	1.00	.10 (a)	9 to 26	Horz. SMD	100	100UF (r)	—	—	—	X	X	—	-20 to +80 (b)	PT5103C-ND	13.84	12.02	9.50
3.3	1.00	.10 (a)	9 to 26	Vert.	100	100UF (r)	—	—	—	X	X	—	-20 to +80 (b)	PT5103N-ND	13.84	12.02	9.50
3.3	1.00	.10 (a)	9 to 26	Horz.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +85 (b)	PT6102A-ND	14.26	12.23	9.71
3.3	1.00	.10 (a)	9 to 26	Horz. SMD	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +85 (b)	PT6102C-ND	14.26	12.23	9.71
3.3	1.00	.10 (a)	9 to 26	Vert.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +85 (b)	PT6102N-ND	14.26	12.23	9.71
3.3	1.50	.10 (a)	7 to 26	Horz.	500	100UF (r)	—	—	—	X	X	X	-40 to +80 (b)	78ST133HC-ND	20.41	16.70	13.76
3.3	1.50	.10 (a)	7 to 26	Horz. SMD	500	100UF (r)	—	—	—	X	X	X	-40 to +80 (b)	78ST133SC-ND	20.41	16.70	13.76
3.3	1.50	.10 (a)	7 to 26	Vert.	500	100UF (r)	—	—	—	X	X	X	-40 to +80 (b)	78ST133VC-ND	20.41	16.70	13.76
3.3	1.50	.10 (a)	9 to 26	Horz.	500	100UF (r)	—	—	—	X	X	X	-40 to +80 (b)	PT78ST133H-ND	16.32	14.07	11.13
3.3	1.50	.10 (a)	9 to 26	Horz. SMD	500	100UF (r)	—	—	—	X	X	X	-40 to +80 (b)	PT78ST133S-ND	16.32	14.07	11.13
3.3	1.50	.10 (a)	9 to 26	Vert.	500	100UF (r)	—	—	—	X	X	X	-40 to +80 (b)	PT78ST133V-ND	16.32	14.07	11.13
3.3	2.00	.10 (a)	7 to 15	Horz.	500	100UF (r)	—	—	—	X	X	—	-40 to +85 (b)	78HT233HC-ND	24.42	19.85	16.54
3.3	2.00	.10 (a)	7 to 15	Horz. SMD	500	100UF (r)	—	—	—	X	X	—	-40 to +85 (b)	78HT233SC-ND	24.42	19.85	16.54
3.3	2.00	.10 (a)	7 to 15	Vert.	500	100UF (r)	—	—	—	X	X	—	-40 to +85 (b)	78HT233VC-ND	24.42	19.85	16.54
3.3	2.00	.10 (a)	7 to 15	Horz.	500	100UF (r)	—	—	—	X	X	X	-40 to +85 (b)	78ST233HC-ND	24.42	19.85	16.54
3.3	2.00	.10 (a)	7 to 15	Horz. SMD	500	100UF (r)	—	—	—	X	X	X	-40 to +85 (b)	78ST233SC-ND	24.42	19.85	16.54
3.3	2.00	.10 (a)	7 to 15	Vert.	500	100UF (r)	—	—	—	X	X	X	-40 to +85 (b)	78ST233VC-ND	24.42	19.85	16.54
3.3	2.00	.10 (a)	7 to 26	Horz.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +85 (b)	PT6203A-ND	19.99	16.70	13.39
3.3	2.00	.10 (a)	7 to 26	Horz. SMD	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +85 (b)	PT6203C-ND	19.99	16.70	13.39
3.3	2.00	.10 (a)	7 to 26	Vert.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +85 (b)	PT6203N-ND	19.99	16.70	13.39
3.3	2.00	.10 (a)	9 to 26	Horz.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +85 (b)	PT6213D-ND	19.99	16.70	13.39
3.3	2.00	.10 (a)	9 to 26	Horz. SMD	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +85 (b)	PT6213E-ND	19.99	16.70	13.39
3.3	2.00	.10 (a)	9 to 26	Vert.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +85 (b)	PT6213P-ND	19.99	16.70	13.39
3.3	2.00	.10 (a)	9 to 15	Horz.	500	100UF (r)	—	—	—	X	X	X	-40 to +75 (b)	PT78HT233H-ND	20.41	16.17	13.23
3.3	2.00	.10 (a)	9 to 15	Horz. SMD	500	100UF (r)	—	—	—	X	X	X	-40 to +75 (b)	PT78HT233S-ND	20.41	16.17	13.23
3.3	2.00	.10 (a)	9 to 15	Vert.	500	100UF (r)	—	—	—	X	X	X	-40 to +75 (b)	PT78HT233V-ND	20.41	16.17	13.23

(Continued)

DC Vout	Max. Amp Iout	Min. Amp Iout	DC Vin Range	Circuit Board Orientation	Pkg. Style	External Components Required	Vout Adj.	On/Off Control	Remote Sense	Over-Temp Protection	Short Circuit Protection	Fast Transient Response	Recommended Operating Temp. Range (°C)	Digi-Key Part No.	Price Each		
															1	25	100
3.3	3.00	.10 (a)	9 to 26	Horz.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +80 (b)	PT6303A-ND	22.47	18.80	14.96
3.3	3.00	.10 (a)	9 to 26	Horz. SMD	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +80 (b)	PT6303C-ND	22.47	18.80	14.96
3.3	3.00	.10 (a)	9 to 26	Vert.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +80 (b)	PT6303N-ND	22.47	18.80	14.96
3.3	3.00	.10 (a)	4.5 to 5.5	Horz.	300	2/100UF (r)	X	—	—	X	—	—	0 to +70 (b)	PT6405D-ND	26.46	23.21	18.38
3.3	3.00	.10 (a)	4.5 to 5.5	Horz. SMD	300	2/100UF (r)	X	—	—	X	—	—	0 to +70 (b)	PT6405E-ND	26.46	23.21	18.38
3.3	3.00	.10 (a)	4.5 to 5.5	Vert.	300	2/100UF (r)	X	—	—	X	—	—	0 to +70 (b)	PT6405P-ND	26.46	23.21	18.38
3.3	3.00	0.0	4.5 to 5.5	Horz.	310	2/100UF (r)	X	—	X	X	—	—	0 to +70 (b)	PT6425D-ND	27.70	24.10	19.17
3.3	3.00	0.0	4.5 to 5.5	Horz. SMD	310	2/100UF (r)	X	—	X	X	—	—	0 to +70 (b)	PT6425E-ND	27.70	24.10	19.17
3.3	3.00	0.0	4.5 to 5.5	Vert.	310	2/100UF (r)	X	—	X	X	—	—	0 to +70 (b)	PT6425P-ND	27.70	24.10	19.17
3.3	3.00 (i)	.30	4.5 to 9	Horz.	200	100UF (s)	X	Inhibit	—	X	X	—	0 to +70 (b)	PT6305A-ND	26.46	23.21	18.38
3.3	3.00 (i)	.30	4.5 to 9	Horz. SMD	200	100UF (s)	X	Inhibit	—	X	X	—	0 to +70 (b)	PT6305C-ND	26.46	23.21	18.38
3.3	3.00 (i)	.30	4.5 to 9	Vert.	200	100UF (s)	X	Inhibit	—	X	X	—	0 to +70 (b)	PT6305N-ND	26.46	23.21	18.38
3.3	7.00 – 9.00 (e)	.10 (a)	4.5 to 6	Horz.	400	2/330UF (t)	X	Stnby	X	X	—	—	0 to +65 (e)	PT6601D-ND	33.03	31.08	22.68
3.3	7.00 – 9.00 (e)	.10 (a)	4.5 to 6	Horz. SMD	400	2/330UF (t)	X	Stnby	X	X	—	—	0 to +65 (e)	PT6601E-ND	33.03	31.08	22.68
3.3	7.00 – 9.00 (e)	.10 (a)	4.5 to 6	Vert.	400	2/330UF (t)	X	Stnby	X	X	—	—	0 to +65 (e)	PT6601P-ND	33.03	31.08	22.68
3.3 & 1.5/1.2 (j)	6 & 1.45/1.20 (p)	.10(m,a) & 0.0/0.0	4.5 to 5.5	Horz.	1330	NONE	2	Stnby	2	X	—	—	-40 (d) to +85 (e)	PT6932A-ND	49.62	46.10	32.03
3.3 & 1.5/1.2 (j)	6 & 1.45/1.20 (p)	.10(m,a) & 0.0/0.0	4.5 to 5.5	Horz. SMD	1330	NONE	2	Stnby	2	X	—	—	-40 (d) to +85 (e)	PT6932C-ND	49.62	46.10	32.03
3.3 & 1.5/1.2 (j)	6 & 1.45/1.20 (p)	.10(m,a) & 0.0/0.0	4.5 to 5.5	Vert.	1320	NONE	2	Stnby	2	X	—	—	-40 (d) to +85 (e)	PT6932N-ND	49.62	46.10	32.03
3.3 & 2.5/1.8 (j)	6 & 2.20/1.75 (p)	.10(m,a) & 0.0/0.0	4.5 to 5.5	Horz.	1330	560UF/IN, 330UF/OUT (s)	2	Stnby	2	X	—	—	-40 (d) to +85 (e)	PT6931A-ND	49.62	46.10	32.03
3.3 & 2.5/1.8 (j)	6 & 2.20/1.75 (p)	.10(m,a) & 0.0/0.0	4.5 to 5.5	Horz. SMD	1330	560UF/IN, 330UF/OUT (s)	2	Stnby	2	X	—	—	-40 (d) to +85 (e)	PT6931C-ND	49.62	46.10	32.03
3.3 & 2.5/1.8 (j)	6 & 2.20/1.75 (p)	.10(m,a) & 0.0/0.0	4.5 to 5.5	Vert.	1320	560UF/IN, 330UF/OUT (s)	2	Stnby	2	X	—	—	-40 (d) to +85 (e)	PT6931N-ND	49.62	46.10	32.03
5.0	1.00	.10 (a)	9 to 38	Horz.	100	100UF (r)	—	—	—	X	X	—	-20 to +80 (b)	PT5101A-ND	13.84	12.02	9.50
5.0	1.00	.10 (a)	9 to 38	Horz. SMD	100	100UF (r)	—	—	—	X	X	—	-20 to +80 (b)	PT5101C-ND	13.84	12.02	9.50
5.0	1.00	.10 (a)	9 to 38	Vert.	100	100UF (r)	—	—	—	X	X	—	-20 to +80 (b)	PT5101N-ND	13.84	12.02	9.50
5.0	1.00	.10 (a)	9 to 30/38 (c)	Horz.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +85 (b)	PT6101A-ND	14.26	12.23	9.71
5.0	1.00	.10 (a)	9 to 30/38 (c)	Horz. SMD	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +85 (b)	PT6101C-ND	14.26	12.23	9.71
5.0	1.00	.10 (a)	9 to 30/38 (c)	Vert.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +85 (b)	PT6101N-ND	14.26	12.23	9.71
5.0	1.50	.10 (a)	7 to 30	Horz.	500	None	—	—	—	X	X	—	-40 to +80 (b)	78SR105HC-ND	20.41	16.70	13.76
5.0	1.50	.10 (a)	7 to 30	Horz. SMD	500	None	—	—	—	X	X	—	-40 to +80 (b)	78SR105SC-ND	20.41	16.70	13.76
5.0	1.50	.10 (a)	7 to 30	Vert.	500	None	—	—	—	X	X	—	-40 to +80 (b)	78SR105VC-ND	20.41	16.70	13.76
5.0	1.50	.10 (a)	7 to 30	Horz.	500	100UF (r)	—	—	—	X	X	X	-40 to +80 (b)	78ST105HC-ND	20.41	16.70	13.76
5.0	1.50	.10 (a)	7 to 30	Vert.	500	100UF (r)	—	—	—	X	X	X	-40 to +80 (b)	78ST105VC-ND	20.41	16.70	13.76
5.0	1.50	.10 (a)	9 to 38	Horz.	500	100UF (r)	—	—	—	X	X	X	-40 to +80 (b)	PT78ST105H-ND	16.32	14.07	11.13
5.0	1.50	.10 (a)	9 to 38	Horz. SMD	500	100UF (r)	—	—	—	X	X	X	-40 to +80 (b)	PT78ST105S-ND	16.32	14.07	11.13
5.0	1.50	.10 (a)	9 to 38	Vert.	500	100UF (r)	—	—	—	X	X	X	-40 to +80 (b)	PT78ST105V-ND	16.32	14.07	11.13
5.0	2.00	.10 (a)	V_O +2 to 28	Horz.	500	100UF (r)	—	—	—	X	X	X	-40 to +85 (b)	78HT205HC-ND	24.42	19.85	16.54
5.0	2.00	.10 (a)	V_O +2 to 28	Horz. SMD	500	100UF (r)	—	—	—	X	X	X	-40 to +85 (b)	78HT205SC-ND	24.42	19.85	16.54
5.0	2.00	.10 (a)	V_O +2 to 28	Vert.	500	100UF (r)	—	—	—	X	X	X	-40 to +85 (b)	78HT205VC-ND	24.42	19.85	16.54
5.0	2.00	.10 (a)	7.25 to 30	Horz.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +60 (b)	PT6202A-ND	19.99	16.70	13.39
5.0	2.00	.10 (a)	7.25 to 30	Horz. SMD	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +60 (b)	PT6202C-ND	19.99	16.70	13.39
5.0	2.00	.10 (a)	7.25 to 30	Vert.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +60 (b)	PT6202N-ND	19.99	16.70	13.39
5.0	2.00	.10 (a)	8 to 20	Horz.	500	100UF (r)	—	—	—	X	X	X	-40 to +85 (b)	78ST205HC-ND	24.42	19.85	16.54
5.0	2.00	.10 (a)	8 to 20	Horz. SMD	500	100UF (r)	—	—	—	X	X	X	-40 to +85 (b)	78ST205SC-ND	24.42	19.85	16.54
5.0	2.00	.10 (a)	8 to 20	Vert.	500	100UF (r)	—	—	—	X	X	X	-40 to +85 (b)	78ST205VC-ND	24.42	19.85	16.54
5.0	2.00	.10 (a)	9 to 30/38 (c)	Horz.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +85 (b)	PT6212D-ND	19.99	16.70	13.39
5.0	2.00	.10 (a)	9 to 30/38 (c)	Horz. SMD	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +85 (b)	PT6212E-ND	19.99	16.70	13.39
5.0	2.00	.10 (a)	9 to 30/38 (c)	Vert.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +85 (b)	PT6212P-ND	19.99	16.70	13.39
5.0	2.00	.10 (a)	9 to 28	Horz.	500	100UF (r)	—	—	—	X	X	X	-40 to +75 (b)	PT78HT205H-ND	20.41	16.17	13.23
5.0	2.00	.10 (a)	9 to 28	Horz. SMD	500	100UF (r)	—	—	—	X	X	X	-40 to +75 (b)	PT78HT205S-ND	20.41	16.17	13.23
5.0	2.00	.10 (a)	9 to 28	Vert.	500	100UF (r)	—	—	—	X	X	X	-40 to +75 (b)	PT78HT205V-ND	20.41	16.17	13.23
5.0	3.00	.10 (a)	V_O +3 to 28	Horz.	600	100UF (r)	—	—	—	X	X	X	-40 to +70 (b)	78HT305HC-ND	29.84	23.00	18.85
5.0	3.00	.10 (a)	V_O +3 to 28	Vert.	600 (u)	100UF (r)	—	—	—	X	X	X	-40 to +70 (b)	78HT305VC-ND	29.84	23.00	18.85
5.0	3.00	.10 (a)	8 to 20	Horz.	600	100UF (r)	—	—	—	X	X	X	-40 to +70 (b)	78ST305HC-ND	29.84	23.00	18.85
5.0	3.00	.10 (a)	8 to 20	Vert.	600 (u)	100UF (r)	—	—	—	X	X	X	-40 to +70 (b)	78ST305VC-ND	29.84	23.00	18.85
5.0	3.00	.10 (a)	9 to 30/38 (c)	Horz.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +80 (b)	PT6302A-ND	22.47	18.80	14.96
5.0	3.00	.10 (a)	9 to 30/38 (c)	Horz. SMD	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +80 (b)	PT6302C-ND	22.47	18.80	14.96
5.0	3.00	.10 (a)	9 to 30/38 (c)	Vert.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +80 (b)	PT6302N-ND	22.47	18.80	14.96
5.0	4.00	.10 (a)	3.1 to 3.6	Horz.	400	2/560UF (s)	X	—	X	—	—	—	-40 to +65	PT6671D-ND	35.89	32.55	24.15
5.0	4.00	.10 (a)	3.1 to 3.6	Horz. SMD	400	2/560UF (s)	X	—	X	—	—	—	-40 to +65	PT6671E-ND	35.89	32.55	24.15
5.0	4.00	.10 (a)	3.1 to 3.6	Vert.	400	2/560UF (s)	X	—	X	—	—	—	-40 to +65	PT6671P-ND	35.89	32.55	24.15
5.0	5.00	.10 (a)	9 to 28	Horz.	400	100UF/330UF (t)	X	Stnby	X	—	—	—	-40 to +65	PT6653D-ND	35.89	32.55	24.15
5.0	5.00	.10 (a)	9 to 28	Horz. SMD	400	100UF/330UF (t)	X	Stnby	X	—	—	—	-40 to +65	PT6653E-ND	35.89	32.55	24.15
5.0	5.00	.10 (a)	9 to 28	Vert.	400	100UF/330UF (t)	X	Stnby	X	—	—	—	-40 to +65	PT6653P-ND	35.89	32.55	24.15
5.0	6.50-7.5 (p,q)	.10 (a)	9 to 14	Horz.	400	2/330UF (t)	X	Stnby	X	X	—	—	-40 to +65	PT6625D-ND	35.89	32.55	24.15
5.0	6.50-7.5 (p,q)	.10 (a)	9 to 14	Horz. SMD	400	2/330UF (t)	X	Stnby	X	X	—	—	-40 to +65	PT6625E-ND	35.89	32.55	24.15
5.0	6.50-7.5 (p,q)	.10 (a)	9 to 14	Vert.	400	2/330UF (t)	X	Stnby	X	X	—	—	-40 to +65	PT6625P-ND	35.89	32.55	24.15
6.0	1.50	.10 (a)	8 to 30	Horz.	500	None	—	—	—	X	X	—	-40 to +80 (b)	78SR106HC-ND	20.41	16.70	13.76
8.0	1.50	.10 (a)	7 to 30	Horz.	500	None	—	—	—	X	X	—	-40 to +80 (b)	78SR108HC-ND	20.41	16.70	13.76
8.0	1.50	.10 (a)	7 to 30	Vert.	500	None	—	—	—	X	X	—	-40 to +80 (b)	78SR108VC-ND	20.41	16.70	13.76
12.0	1.00	.10 (a)	4.75 to V_O-1	Horz.	100	100UF (r)	—	—	—	X	—	—	-20 to +70 (e)	PT5041A-ND	17.96	15.12	12.08
12.0	1.00	.10 (a)	4.75 to V_O -1	Horz. SMD	100	100UF (r)	—	—	—	X	—	—	-20 to +70 (e)	PT5041C-ND	17.96	15.12	12.08

(Continued)

DC Vout	Max. Amp Iout	Min. Amp Iout	DC Vin Range	Circuit Board Orientation	Pkg. Style	External Components Required	Vout Adj.	On/Off Control	Remote Sense	Over-Temp Protection	Short Circuit Protection	Fast Transient Response	Recommended Operating Temp. Range (°C)	Digi-Key Part No.	Price Each		
															1	25	100
12.0	1.00	.10 (a)	4.75 to V_O -1	Vert.	100	100UF (r)	—	—	—	X	—	—	-20 to +70 (e)	PT5041N-ND	17.96	15.12	12.08
12.0	1.00	.10 (a)	16 to 38	Horz.	100	100UF (r)	—	—	—	X	X	—	-20 to +80 (b)	PT5102A-ND	13.84	12.02	9.50
12.0	1.00	.10 (a)	16 to 38	Horz. SMD	100	100UF (r)	—	—	—	X	X	—	-20 to +80 (b)	PT5102C-ND	13.84	12.02	9.50
12.0	1.00	.10 (a)	16 to 38	Vert.	100	100UF (r)	—	—	—	X	X	—	-20 to +80 (b)	PT5102N-ND	13.84	12.02	9.50
12.0	1.00	.10 (a)	16 to 30/38(c)	Horz.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +80 (b)	PT6103A-ND	14.26	12.23	9.71
12.0	1.00	.10 (a)	16 to 30/38(c)	Horz. SMD	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +80 (b)	PT6103C-ND	14.26	12.23	9.71
12.0	1.00	.10 (a)	16 to 30/38(c)	Vert.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +80 (b)	PT6103N-ND	14.26	12.23	9.71
12.0	1.50	.10 (a)	14.5 to 30	Horz.	500	None	—	—	—	X	X	—	-40 to +80 (b)	78SR112HC-ND	20.41	16.70	13.76
12.0	1.50	.10 (a)	14.5 to 30	Horz. SMD	500	None	—	—	—	X	X	—	-40 to +80 (b)	78SR112SC-ND	20.41	16.70	13.76
12.0	1.50	.10 (a)	14.5 to 30	Vert.	500	None	—	—	—	X	X	—	-40 to +80 (b)	78SR112VC-ND	20.41	16.70	13.76
12.0	1.50	.10 (a)	14.5 to 30	Horz.	500	100UF (r)	—	—	—	X	X	X	-40 to +80 (b)	78ST112HC-ND	20.41	16.70	13.76
12.0	1.50	.10 (a)	14.5 to 30	Horz. SMD	500	100UF (r)	—	—	—	X	X	X	-40 to +80 (b)	78ST112SC-ND	20.41	16.70	13.76
12.0	1.50	.10 (a)	14.5 to 30	Vert.	500	100UF (r)	—	—	—	X	X	X	-40 to +80 (b)	78ST112VC-ND	20.41	16.70	13.76
12.0	1.50	.10 (a)	16 to 38	Horz.	500	100UF (r)	—	—	—	X	X	X	-40 to +80 (b)	PT78ST112H-ND	16.32	14.07	11.13
12.0	1.50	.10 (a)	16 to 38	Horz. SMD	500	100UF (r)	—	—	—	X	X	X	-40 to +80 (b)	PT78ST112S-ND	16.32	14.07	11.13
12.0	1.50	.10 (a)	16 to 38	Vert.	500	100UF (r)	—	—	—	X	X	X	-40 to +80 (b)	PT78ST112V-ND	16.32	14.07	11.13
12.0	1.25 (e)	.10 (a)	3.1 to 3.6	Horz.	400	2/560UF (s)	X	—	X	—	—	—	-40 to +65 (e)	PT6673D-ND	35.89	32.55	24.15
12.0	1.25 (e)	.10 (a)	3.1 to 3.6	Horz. SMD	400	2/560UF (s)	X	—	X	—	—	—	-40 to +65 (e)	PT6673E-ND	35.89	32.55	24.15
12.0	1.25 (e)	.10 (a)	3.1 to 3.6	Vert.	400	2/560UF (s)	X	—	X	—	—	—	-40 to +65 (e)	PT6673P-ND	35.89	32.55	24.15
12.0	2.00	.10 (a)	14.5 to 28	Horz.	600	100UF (r)	—	—	—	X	X	X	-40 to +55 (b)	78ST212HC-ND	31.48	24.68	19.89
12.0	2.00	.10 (a)	14.5 to 28	Vert.	600	100UF (r)	—	—	—	X	X	X	-40 to +55 (b)	78ST212VC-ND	31.48	24.68	19.89
12.0	2.00	.10 (a)	14.5 to 30	Horz.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +60 (b)	PT6204A-ND	19.99	16.70	13.39
12.0	2.00	.10 (a)	14.5 to 30	Horz. SMD	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +60 (b)	PT6204C-ND	19.99	16.70	13.39
12.0	2.00	.10 (a)	14.5 to 30	Vert.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +60 (b)	PT6204N-ND	19.99	16.70	13.39
12.0	2.00	.10 (a)	16 to 30/38 (c)	Horz.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +75 (b)	PT6214D-ND	19.99	16.70	13.39
12.0	2.00	.10 (a)	16 to 30/38 (c)	Horz. SMD	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +75 (b)	PT6214E-ND	19.99	16.70	13.39
12.0	2.00	.10 (a)	16 to 30/38 (c)	Vert.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +75 (b)	PT6214P-ND	19.99	16.70	13.39
12.0	2.00	.10 (a)	4.5 to 5.5	Horz.	400	2/560UF (s)	X	—	X	—	—	—	-40 to +65 (e)	PT6674D-ND	35.89	32.55	24.15
12.0	2.00	.10 (a)	4.5 to 5.5	Horz. SMD	400	2/560UF (s)	X	—	X	—	—	—	-40 to +65 (e)	PT6674E-ND	35.89	32.55	24.15
12.0	2.00	.10 (a)	4.5 to 5.5	Vert.	400	2/560UF (s)	X	—	X	—	—	—	-40 to +65 (e)	PT6674P-ND	35.89	32.55	24.15
12.0	2.00	.10 (a)	16 to 28	Vert.	600 (u)	100UF (r)	—	—	—	X	X	—	-40 to +55 (b)	PT78ST212V-ND	30.77	23.10	18.90
12.0	3.00	.10 (a)	16 to 30/38 (c)	Horz.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +80 (b)	PT6304A-ND	22.47	18.80	14.96
12.0	3.00	.10 (a)	16 to 30/38 (c)	Horz. SMD	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +80 (b)	PT6304C-ND	22.47	18.80	14.96
12.0	3.00	.10 (a)	16 to 30/38 (c)	Vert.	200	100UF (r)	X	Inhibit	—	X	X	—	-40 to +80 (b)	PT6304N-ND	22.47	18.80	14.96
12.0	5.00	.10 (a)	V_O+3 to 28	Horz.	400	100UF/330UF (t)	X	Stnby	X	—	—	—	-40 to +65	PT6656D-ND	35.89	32.55	24.15
12.0	5.00	.10 (a)	V_O+3 to 28	Horz. SMD	400	100UF/330UF (t)	X	Stnby	X	—	—	—	-40 to +65	PT6656E-ND	35.89	32.55	24.15
12.0	5.00	.10 (a)	V_O+3 to 28	Vert.	400	100UF/330UF (t)	X	Stnby	X	—	—	—	-40 to +65	PT6656P-ND	35.89	32.55	24.15
15.0	1.50	.10 (a)	18.5 to 30	Horz.	500	None	—	—	—	X	X	—	-40 to +80(b)	78SR115HC-ND	20.41	16.70	13.76
15.0	1.50	.10 (a)	18.5 to 30	Vert.	500	None	—	—	—	X	X	—	-40 to +80(b)	78SR115VC-ND	20.41	16.70	13.76
-3.3	-1.00	-.25 (a)	4.75 to 7 (l)	Horz. SMD	100	100UF (r)	—	—	—	—	—	—	-20 to +65 (e)	PT5021C-ND	17.96	15.12	12.08
-3.3	-1.00	-.25 (a)	4.75 to 7 (l)	Horz.	100	100UF (r)	—	—	—	—	—	—	-20 to +65 (e)	PT5021A-ND	17.96	15.12	12.08
-3.3	-1.00	-.25 (a)	4.75 to 7 (l)	Vert.	100	100UF (r)	—	—	—	—	—	—	-20 to +65 (e)	PT5021N-ND	17.96	15.12	12.08
-5.0	-1.00	-.05 (a)	7 to 25	Vert.	500	100UF (r)	—	—	—	X	X	X	-40 to +60 (b)	PT78NR105V-ND	16.32	14.07	11.13
-5.0	-1.00	-.05 (a)	7 to 25	Horz. SMD	500	100UF (r)	—	—	—	X	X	X	-40 to +60 (b)	PT78NR105S-ND	16.32	14.07	11.13
-5.0	-1.00	-.05 (a)	7 to 25	Horz.	500	100UF (r)	—	—	—	X	X	X	-40 to +60 (b)	PT78NR105H-ND	16.32	14.07	11.13
-5.0	-1.00	-.25 (a)	4.75 to 7 (l)	Vert.	100	100UF (r)	—	—	—	—	—	—	-20 to +65 (e)	PT5022N-ND	17.96	15.12	12.08
-5.0	-1.00	-.25 (a)	4.75 to 7 (l)	Horz. SMD	100	100UF (r)	—	—	—	—	—	—	-20 to +65 (e)	PT5022C-ND	17.96	15.12	12.08
-5.0	-1.00	-.25 (a)	4.75 to 7 (l)	Horz.	100	100UF (r)	—	—	—	—	—	—	-20 to +65 (e)	PT5022A-ND	17.96	15.12	12.08
-5.0	-1.50	-.10 (a)	-9 to -30	Vert.	500	1N5339B	—	—	—	X	X	—	-40 to +60 (b)	PT79SR105V-ND	20.41	16.70	13.76
-5.0	-1.50	-.10 (a)	-9 to -30	Horz. SMD	500	1N5339B	—	—	—	X	X	—	-40 to +60 (b)	PT79SR105S-ND	20.41	16.70	13.76
-5.0	-1.50	-.10 (a)	-9 to -30	Horz.	500	1N5339B	—	—	—	X	X	—	-40 to +60 (b)	PT79SR105H-ND	20.41	16.70	13.76
-5.2	-1.50	-.10 (a)	-9 to -30	Horz.	500	1N5351B	—	—	—	X	X	—	-40 to +60 (b)	PT79SR152H-ND	20.41	16.70	13.76
-12.0	-0.40	-.05 (a)	7 to 20	Vert.	500	100UF (r)	—	—	—	X	X	X	-40 to +60 (b)	PT78NR112V-ND	16.32	14.07	11.13
-12.0	-0.40	-.05 (a)	7 to 20	Horz. SMD	500	100UF (r)	—	—	—	X	X	X	-40 to +60 (b)	PT78NR112S-ND	16.32	14.07	11.13
-12.0	-0.40	-.05 (a)	7 to 20	Horz.	500	100UF (r)	—	—	—	X	X	X	-40 to +60 (b)	PT78NR112H-ND	16.32	14.07	11.13
-12.0	-0.50	-.10 (a)	4.75 to 7 (l)	Vert.	100	100UF (r)	—	—	—	—	—	—	-20 to +65 (e)	PT5024N-ND	17.96	15.12	12.08
-12.0	-0.50	-.10 (a)	4.75 to 7 (l)	Horz. SMD	100	100UF (r)	—	—	—	—	—	—	-20 to +65 (e)	PT5024C-ND	17.96	15.12	12.08
-12.0	-0.50	-.10 (a)	4.75 to 7 (l)	Horz.	100	100UF (r)	—	—	—	—	—	—	-20 to +65 (e)	PT5024A-ND	17.96	15.12	12.08
-12.0	-1.50	-.10 (a)	-19 to -30	Vert.	500	1N5351B	—	—	—	X	X	—	-40 to +60 (b)	PT79SR112V-ND	20.41	16.70	13.76
-12.0	-1.50	-.10 (a)	-19 to -30	Horz. SMD	500	1N5351B	—	—	—	X	X	—	-40 to +60 (b)	PT79SR112S-ND	20.41	16.70	13.76
-12.0	-1.50	-.10 (a)	-19 to -30	Horz.	500	1N5351B	—	—	—	X	X	—	-40 to +60 (b)	PT79SR112H-ND	20.41	16.70	13.76
±12	+0.50, -0.25	.05 (h)	4.75 to V_O-1	Horz.	300	100UF (r)	X	—	—	X	—	—	0 to +65(e)	PT5061A-ND	20.41	17.33	13.91
±12	+0.50, -0.25	.05 (h)	4.75 to V_O-1	Horz. SMD	300	100UF (r)	X	—	—	X	—	—	0 to +65(e)	PT5061C-ND	20.41	17.33	13.91
±12	+0.50, -0.25	.05 (h)	4.75 to V_O-1	Vert.	300	100UF (r)	X	—	—	X	—	—	0 to +65(e)	PT5061N-ND	20.41	17.33	13.91

(a) ISR will operate down to no load with reduced specification
(b) See thermal derating chart
(c) Input voltage cannot exceed 30V when the inhibit function is used
(d) Operating temperatures below 0 (0°C), use tantalum capacitors on both input and output
(e) See manufacturer's safe operating area curves for appropriate derating
(f) UL approved
(g) Not pin compatible with other PT4200 or PT4300 series product
(h) Do not operate below minimum load
(i) PT6305 series can easily be paralled to provide output current in multiples of 3 Amps. Please contact Power Trends for application note.
(j) With pin 23 open, V2out = 2.5V/1.5V with pin 23 shorted to pin 22, V2out = 1.8V/1.2V
(k) Denote minimum input voltage is adjustable - see application note
(l) For applications with input voltages greater than 7VDC, Use the PT78NR100 series
(m) Io min. current of .10A can be divided between both outputs, V1 or V2.
(n) Minimum input voltage is 4.5V or Vout +1.2V, whichever is greater
(o) PT7705 series can be easily paralleled with one or more of the PT7749 current boosters to provide increased output current in increments of 15 to 18 Amps
(p) Please refer to manufacturer's data sheet for further explanation of ratings
(q) See manufacturer's safe operating area curves - output power is limited to 30W max
(r) An electrolytic or tantalum capacitor on the output is required for proper operation
(s) Only use an electrolytic capacitor for proper operation
(t) Please use Panasonic low ESR, FA series capacitors for proper operation
(u) Heat sink orientation - see manufacturer's data sheet
Inhibit: The power to the complete part is shut off, quiescent current in this mode is less than 100 uA
Stnby: Standby mode is when the part is powered up, but the output is in shut off or sleep mode

TOKO Low Dropout Voltage Regulators

Series TK112

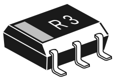
Features:

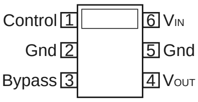
- High voltage precision at ±2.0%
- Active high On/Off control
- Very low dropout voltage 80mV at 30mA
- Very low noise
- Very small SOT-23L package
- Internal thermal shutdown
- Short circuit protection.

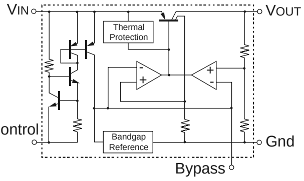
Description:

The TK112xxB is a low dropout linear regulator with a built-in electronic switch. The internal switch can be controlled by TTL or CMOS logic levels. The device is in the ON state when the control pin is pulled to a logic high level. An external capacitor can be connected to the noise bypass pin to lower the output noise level to 30µVrms.

An internal PNP pass transistor is used to achieve a low dropout voltage of 80mV (typ.) at 30mA load current. The TK112xxB has a very low quiescent current of 170µA at no load and 1 mA with a 30mA load. The standby current is typically 100 nA. The internal thermal shutdown circuitry limits the junction temperature to below 150°C. The load current is internally monitored and the device will shutdown in the presence of a short circuit or overcurrent condition at the output.







Output Voltage	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,300	Toko Part No.
2.5	TK11225CT-ND	1.34	12.64	118.50	TK11225TR-ND	881.00/M	TK11225BMCL
2.75	TK11227CT-ND	1.34	12.64	118.50	TK11227TR-ND	881.00/M	TK11227BMCL
3.0	TK11230CT-ND	1.34	12.64	118.50	TK11230TR-ND	881.00/M	TK11230BMCL
3.3	TK11233CT-ND	1.34	12.64	116.53	TK11233TR-ND	758.00/M	TK11233BMCL
3.5	TK11235CT-ND	1.34	12.64	118.50	TK11235TR-ND	881.00/M	TK11235BMCL
3.7	TK11237CT-ND	1.34	12.64	116.53	TK11237TR-ND	758.00/M	TK11237BMCL
4.0	TK11240CT-ND	1.34	12.64	118.50	TK11240TR-ND	881.00/M	TK11240BMCL
4.5	TK11245CT-ND	1.34	12.64	118.50	TK11245TR-ND	881.00/M	TK11245BMCL
4.75	TK11247CT-ND	1.34	12.64	118.50	TK11247TR-ND	881.00/M	TK11247BMCL
5.0	TK11250CT-ND	1.34	12.64	118.50	TK11250TR-ND	881.00/M	TK11250BMCL
5.5	TK11255CT-ND	1.34	12.64	116.53	TK11255TR-ND	758.00/M	TK11255BMCL
8.0	TK11280CT-ND	1.34	12.64	116.53	TK11280TR-ND	758.00/M	TK11280BMCL

Series TK113

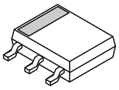
Features:

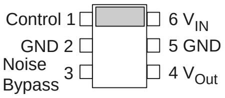
- High voltage precision at ±2.0%
- Active low On/Off control
- Very low dropout voltage 80mV at 30mA
- Very low noise
- Very small SOT-23L or SOT-89-5 surface mount packages
- Internal thermal shutdown
- Short circuit protection.

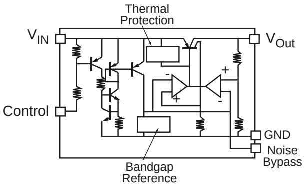
Description:

The TK113xxB is a low dropout linear regulator with a built-in electronic switch. The internal switch can be controlled by TTL or CMOS logic levels. The device is in the ON state when the control pin is pulled to a low level. An external capacitor can be connected to the noise bypass pin to lower the output noise level to 30 µVrms.

An internal PNP pass transistor is used to achieve a low dropout voltage of 80mV (typ.) at 30mA load current. The TK113xxB has a very low quiescent current of 170µA at no load and 1mA with a 30mA load. The standby current is typically 100nA. The internal thermal shutdown circuitry limits the junction temperature to below 150°C. The load current is internally monitored and the device will shutdown in the presence of a short circuit or overcurrent condition at the output.







Output Voltage	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,300	Toko Part No.
3.0	TK11330CT-ND	1.35	12.64	118.50	TK11330TR-ND	881.00/M	TK11330BMCL
3.3	TK11333CT-ND	1.35	12.64	118.50	TK11333TR-ND	881.00/M	TK11333BMCL
4.0	TK11340CT-ND	1.35	12.64	118.50	TK11340TR-ND	881.00/M	TK11340BMCL
4.5	TK11345CT-ND	1.35	12.64	118.50	TK11345TR-ND	881.00/M	TK11345BMCL
4.8	TK11348CT-ND	1.35	12.64	118.50	TK11348TR-ND	881.00/M	TK11348BMCL
5.0	TK11350CT-ND	1.35	12.64	118.50	TK11350TR-ND	881.00/M	TK11350BMCL

Series TK114

Features:

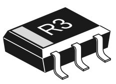
- Electronic On/Off Switch
- Very low standby current ("On", no load)
- Internal thermal shut-down
- Short circuit protection
- SOT-23L surface mount package.

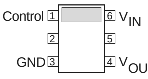
Absolute Maximum Ratings:

Supply Voltage: 14V.
Load Current: 180mA.
Power Dissipation: 200mW.
Operating Temperature Range: -20°C to +75°C.

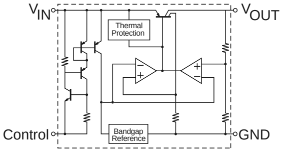
Electrical Characteristics:

VOUT: ±3.5% max.
LIREG: 0.04%/V Typ.
LDREG: 0.02%/mA Typ.
VIN: 3.1V min., 13V max.
VRipple: 55dB.





Block Diagram



TK114xx

Output Voltage	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Toko Part No.
4.7	TK11447CT-ND	1.49	14.05	131.70	TK11447MTL
8.0	TK11480CT-ND	1.49	14.05	131.70	TK11480MTL

Series TK115

Features:

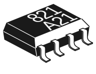
- Very low standby current ("On", no load)
- Internal thermal shutdown
- Short circuit protection.

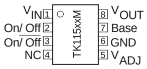
Absolute Maximum Ratings:

- **Supply Voltage:** 14V.
- **Load Current:** 180mA.
- **Power Dissipation:** 600mW.
- **Operating Temperature Range:** -20°C to +75°C

Electrical Characteristics:

- **VOUT:** ±3% max.
- **LIREG:** 0.02%/V Typ.
- **LDREG:** 0.01%/mA Typ.
- **VIN:** 3.1V min., 13V max.
- **VRipple:**55dB.





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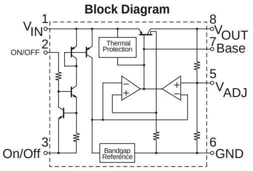


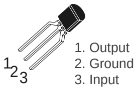
TK115xx

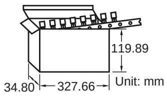
Output Voltage	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	Toko Part No.
3.0	TK11530CT-ND	2.43	22.88	214.50	TK11530TR-ND	1594.00	TK11530MTL
3.5	TK11535CT-ND	2.43	22.88	214.50	—	—	TK11535MTL
4.5	TK11545CT-ND	2.43	22.88	214.50	—	—	TK11545MTL
4.7	TK11547CT-ND	2.43	22.88	214.50	—	—	TK11547MTL
5.0	TK11550CT-ND	2.43	22.88	214.50	—	—	TK11550MTL
8.0	TK11580CT-ND	2.43	22.88	214.50	—	—	TK11580MTL

Series TK116

Features:

- Internal thermal shutdown
- Short circuit protection
- 3% Output voltage accuracy





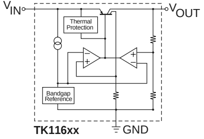
Absolute Maximum Ratings:

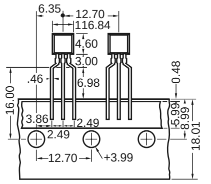
- **Supply Voltage:** 16V
- **Load Current:** 180mA
- **Power Dissipation:** 500mW
- **Operating Temperature Range:** -20°C to +75°C

Electrical Characteristics:

- **VOUT:** ±3% max
- **LIREG:** 0.01%/V Typ
- **LDREG:** 0.02%/ mA Typ
- **VIN:** 2.5V min., 14V max
- **VRipple:** 55dB

Block Diagram





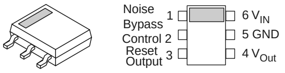
Output Voltage	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Box Pricing 1,500	Toko Part No.
2.5	TK11625CT-ND	1.30	12.19	114.30	—	—	TK11625NT
3.5	TK11635CT-ND	1.30	12.19	114.30	—	—	TK11635NT
5.0	TK11650CT-ND	1.30	12.19	114.30	TK11650TB-ND	850.00/M	TK11650NT

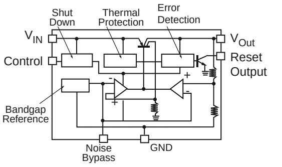
TOKO Low Dropout Voltage Regulators

Series TK119

Features:

• Reset output for microprocessor • Very low dropout voltage • Very low quiescent current (no load) • Internal thermal/overload shutdown • Low noise voltage • Input and output voltage sense • ±2.5% output voltage accuracy • CMOS or TTL On/Off control • High speed On/Off transient (Typ. 50µs)





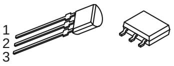
Description:

The TK119 series are low power linear regulators with on/off switch. Built-in voltage comparators provide a reset logic LOW level whenever the input or output voltage falls outside internally preset limits. The internal electronic switch can be controlled by CMOS or TLL levels. The device is in the OFF state when the control pin is biased HIGH. An internal PNP pass transistor is used to achieve a low dropout voltage (typically 200mV at 50mA load current). The device has a very low quiescent current (130µA) in the ON mode with no load and 2mA with 30nA load. The quiescent current is typically 4mA at 60mA load. The current consumption in the OFF mode is 65µA. An internal thermal shutdown circuit limits the junction temperature to below 150°C. The load current is internally monitored and the device will shut down (no load current) in the presence of a short circuit at the output. The output noise is very low at 10dB down from V_O when an external noise bypass capacitor is used. The TK119xx is available in a small SOT-23L surface mount package.

Output Voltage	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,300	Toko Part No.
2.25	TK11922CT-ND	2.25	21.06	197.40	—	—	TK11922MTL
2.7	TK11927CT-ND	2.25	21.06	197.40	—	—	TK11927MTL
3.0	TK11930CT-ND	2.03	19.42	149.57	TK11930TR-ND	973.00/M	TK11930MTL
3.2	TK11932CT-ND	1.73	16.22	152.10	TK11932TR-ND	1130.61/M	TK11932MTL
4.8	TK11948CT-ND	1.73	16.22	152.10	—	—	TK11948MTL
5.0	TK11950CT-ND	2.25	21.06	197.40	TK11950TR-ND	1467.34/M	TK11950MTL

Series TK711xx, TK712xx, TK713xx

Low Saturation, Linear Regulator

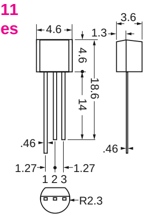


Features: • Low dropout voltage • Low quiescent current • Very stable output • Extremely small package (SOT25) • Built-in output on/off control on 713xx • Noise reduction available on 712xx

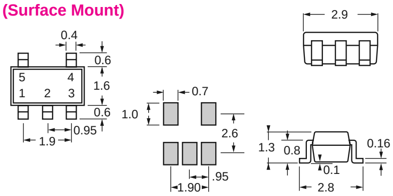
Description: TK711xx/712xx/713xx series are low saturation, linear regulators used for applications with large supply voltage change. Since a PNP power transistor is used, dropout voltage is very low, making it possible to maintain a stable output voltage even as the battery voltage decreases. This allows longer battery operation. The TK711xx series is connected in a basic three terminal configuration. The TK712xx series has a noise bypass pin available. The TK713xx series has an on/off control pin only (a low level turns the output on). Since the current at the high level is extremely stable (12 µA type. at V_{IN} = 5 V), a smaller output capacitor can be used.

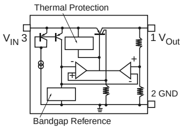
The TK711xx is available in a TO-92 package while the 712xx and 713xx are available in a very small SOT25 surface mount package.

TO-92N
TK711 Series



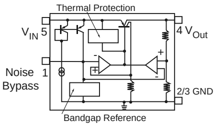
SOT25
TK712 and 713 Series (Surface Mount)

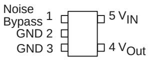




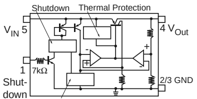
Pin 1. Output
2. Ground
3. Input

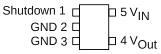
Series 711xx





Series 712xx





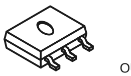
Series 713xx

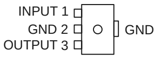
Output Voltage (V)	Digi-Key Part No.	Pricing 1	100	500	Toko Part No.
2.0	TK71120NBX-ND	1.65	144.60	631.50	TK71120N
2.5	TK71125NBX-ND	1.65	144.60	631.50	TK71125N
4.0	TK71140NBX-ND	1.14	99.90	436.00	TK71140N

Output Voltage (V)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Toko Part No.
4.0	TK71240CT-ND	1.30	12.13	113.70	TK71240MTL
5.0	TK71250CT-ND	1.30	12.13	113.70	TK71250MTL
2.0	TK71320CT-ND	1.30	12.13	113.70	TK71320MTL

Series TK116xxU

Linear 3-Terminal Regulator

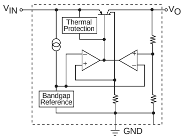




Features:

• Low dropout voltage • Very low standby current (no load) • Good load regulation • Internal thermal shutdown • Short circuit protection • 3% Output voltage accuracy • Customized versions are available

Block Diagram



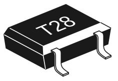
Description:

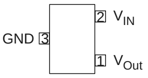
The TK116xxU series devices are low power, linear 3-terminal regulators. An internal PNP pass-transistor is used in order to achieve low dropout voltage (typically 160mV at 80mA load current). The regulated output voltages of 3, 5 and 9V are available. The device has very low (400µA) quiescent current with no load and 2mA with 60mA load. An internal thermal shutdown circuit limits the junction temperature to below 150°C. The load current is internally monitored and the device will shutdown in the presence of a short circuit at the output.

Output Voltage (V)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	Toko Part No.
3.0	TK11630UCT-ND	1.78	17.04	131.28	TK11630UTR-ND	854.00	TK11630UTL
5.0	TK11650UCT-ND	1.78	17.04	131.28	TK11650UTR-ND	854.00	TK11650UTL
9.0	TK11690UCT-ND	1.78	17.04	131.28	TK11690UTR-ND	854.00	TK11690UTL

Series TK715xx

Low Dropout Voltage Regulator





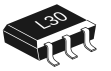
Features: • High voltage precision at ±2.0% or ±60mV • Very low quiescent current • Very low dropout voltage • Reverse bias protection • Miniature package (SOT23-3) • Short circuit protection • High ripple rejection

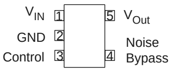
Description: The TK715xx is a low dropout linear regulator housed in a small SOT23-3 package, rated at 350mW. An internal PNP transistor is used to achieve a low dropout voltage of 105mV (typ) at 50mA load current. This device offers high precision output voltage of ±2.0% or ±60mV. The TK715xx has a very low quiescent current of 25µA (typ) at no load. The low quiescent current and dropout voltage make this part ideal for battery powered applications. The internal reverse bias protection eliminates the requirement for a reverse voltage protection diode, saving cost and board space. The high 64dB ripple rejection and low noise provide enhanced performance for critical applications.

Output Voltage (V)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000	Toko Part No.
2.5	TK71525SCLCT-ND	1.76	11.08	84.80	TK71525SCLTR-ND	551.00/M	TK71525SCL
2.8	TK71528SCLCT-ND	1.76	11.08	84.80	TK71528SCLTR-ND	551.00/M	TK71528SCL
3.0	TK71530SCLCT-ND	1.76	11.08	86.00	TK71530SCLTR-ND	551.00/M	TK71530SCL
3.2	TK71532SCLCT-ND	1.76	11.08	84.80	TK71532SCLTR-ND	551.00/M	TK71532SCL
3.3	TK71533SCLCT-ND	1.76	11.08	84.80	TK71533SCLTR-ND	551.00/M	TK71533SCL
3.5	TK71535SCLCT-ND	1.76	11.08	84.80	TK71535SCLTR-ND	551.00/M	TK71535SCL
3.6	TK71536SCLCT-ND	1.76	11.08	84.80	TK71536SCLTR-ND	551.00/M	TK71536SCL
3.8	TK71538SCLCT-ND	1.76	11.08	84.80	TK71538SCLTR-ND	551.00/M	TK71538SCL
4.0	TK71540SCLCT-ND	1.76	11.08	84.80	TK71540SCLTR-ND	551.00/M	TK71540SCL
4.7	TK71547SCLCT-ND	1.76	11.08	84.80	TK71547SCLTR-ND	551.00/M	TK71547SCL
5.0	TK71550SCLCT-ND	1.76	11.08	84.80	TK71550SCLTR-ND	551.00/M	TK71550SCL
8.0	TK71580SCLCT-ND	1.76	11.08	84.80	TK71580SCLTR-ND	551.00/M	TK71580SCL

Series TK716xx

Low Dropout Voltage Regulator





Features: Available in ±2.0% or ±1.0% output tolerance • Active high On/Off control • Very low quiescent current • Very low dropout voltage • Reverse bias protection • Miniature package (SOT23-5) • Short circuit protection • High ripple rejection • Very high output impedance (Output Off) • Very low noise

Description: The TK716xx is a low dropout linear regulator housed in a small SOT23-5 package, rated at 500mW. The device is in the ON state when the control pin is pulled to a logic high level. An internal PNP pass transistor is used to achieve a low dropout voltage of 90mV (typ) at 50mA load current. This device offers high precision output voltage of ±2.0% or ±1.0%. The low quiescent current and dropout voltage make this part ideal for battery powered applications. This part incorporates an output disconnect feature to reduce the reverse bias current in the OFF state to less than 50nA. The internal reverse bias protection eliminates the requirement for a reverse voltage protection diode, saving cost and board space. The high 60dB ripple rejection (400Hz) and low noise provide enhanced performance for critical applications. An external capacitor can be connected to the noise bypass pin to lower the output noise level to 30µVrms.

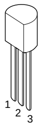
Output Voltage (V)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000	Toko Part No.
2.5	TK71625SCLCT-ND	1.76	11.08	84.80	TK71625SCLTR-ND	551.00/M	TK71625SCL
2.7	TK71627SCLCT-ND	1.76	11.08	84.80	TK71627SCLTR-ND	551.00/M	TK71627SCL
2.8	TK71628SCLCT-ND	1.76	11.08	84.80	TK71628SCLTR-ND	551.00/M	TK71628SCL
3.0	TK71630SCLCT-ND	1.76	11.08	84.80	TK71630SCLTR-ND	551.00/M	TK71630SCL
3.2	TK71632SCLCT-ND	1.76	11.08	84.80	TK71632SCLTR-ND	551.00/M	TK71632SCL
3.3	TK71633SCLCT-ND	1.76	11.08	84.80	TK71633SCLTR-ND	551.00/M	TK71633SCL
3.5	TK71635SCLCT-ND	1.76	11.08	84.80	TK71635SCLTR-ND	551.00/M	TK71635SCL
3.6	TK71636SCLCT-ND	1.76	11.08	84.80	TK71636SCLTR-ND	551.00/M	TK71636SCL
4.0	TK71640SCLCT-ND	1.76	11.08	84.80	TK71640SCLTR-ND	551.00/M	TK71640SCL
4.5	TK71645SCLCT-ND	1.76	11.08	84.80	TK71645SCLTR-ND	551.00/M	TK71645SCL
4.7	TK71647SCLCT-ND	1.76	11.08	84.80	TK71647SCLTR-ND	551.00/M	TK71647SCL
5.0	TK71650SCLCT-ND	1.76	11.08	84.80	TK71650SCLTR-ND	551.00/M	TK71650SCL

MICROCHIP

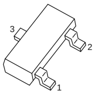
Microcontroller Supervisors

Microchip's new MCP1XX family of microcontroller supervisor products can be used for power on reset and brown out detection. Select from seven reset trip points and three output options—open drain, open drain with 5K ohm pull-up, and CMOS push-pull options are available. These parts will reset within the Reset Voltage Range and will operate down to VDD = 1 Volt.

TO-92



SOT-23
Top View



Offered in both TO-92 and SOT-23 packages in most pin-out configurations.

Configuration	Package	Pin Out 1	2	3
A	TO-92	OUT	VDD	VSS
B	SOT-23	VSS	OUT	VDD
C	SOT-23	OUT	VDD	VSS

Reset Out	Reset Voltage Min.	Max.	Pkg.	Conf.	Digi-Key Part No.	Pricing 1	25	100
CMOS Push-Pull Active Low								
Low	4.60	4.85	TO-92	A	MCP100-485DI/TO-ND	.95	14.00	51.00
Low	4.50	4.75	TO-92	A	MCP100-475DI/TO-ND	.95	14.00	51.00
Low	4.35	4.60	TO-92	A	MCP100-460DI/TO-ND	.95	14.00	51.00
Low	4.25	4.50	TO-92	A	MCP100-450DI/TO-ND	.95	14.00	51.00
Low	3.00	3.15	TO-92	A	MCP100-315DI/TO-ND	.95	14.00	51.00
Low	2.85	3.00	TO-92	A	MCP100-300DI/TO-ND	.95	14.00	51.00
Low	2.55	2.70	TO-92	A	MCP100-270DI/TO-ND	.95	14.00	51.00
CMOS Push-Pull Active High								
High	4.60	4.85	TO-92	A	MCP101-485DI/TO-ND	.95	14.00	51.00
High	4.50	4.75	TO-92	A	MCP101-475DI/TO-ND	.95	14.00	51.00
High	4.35	4.60	TO-92	A	MCP101-460DI/TO-ND	.95	14.00	51.00
High	4.25	4.50	TO-92	A	MCP101-450DI/TO-ND	.95	14.00	51.00
High	3.00	3.15	TO-92	A	MCP101-315DI/TO-ND	.95	14.00	51.00
High	2.85	3.00	TO-92	A	MCP101-300DI/TO-ND	.95	14.00	51.00
High	2.55	2.70	TO-92	A	MCP101-270DI/TO-ND	.95	14.00	51.00
N-Channel Open Drain								
Low	4.60	4.85	TO-92	A	MCP120-485DI/TO-ND	.95	14.00	51.00
Low	4.50	4.75	TO-92	A	MCP120-475DI/TO-ND	.95	14.00	51.00
Low	4.35	4.60	TO-92	A	MCP120-460DI/TO-ND	.95	14.00	51.00
Low	4.25	4.50	TO-92	A	MCP120-450DI/TO-ND	.95	14.00	51.00
Low	3.00	3.15	TO-92	A	MCP120-315DI/TO-ND	.95	14.00	51.00
Low	2.85	3.00	TO-92	A	MCP120-300DI/TO-ND	.95	14.00	51.00
Low	2.55	2.70	TO-92	A	MCP120-270DI/TO-ND	.95	14.00	51.00
N-Channel Open Drain with Internal 5K Pull Up								
Low	4.60	4.85	TO-92	A	MCP130-485DI/TO-ND	.95	14.00	51.00
Low	4.50	4.75	TO-92	A	MCP130-475DI/TO-ND	.95	14.00	51.00
Low	4.35	4.60	TO-92	A	MCP130-460DI/TO-ND	.95	14.00	51.00
Low	4.25	4.50	TO-92	A	MCP130-450DI/TO-ND	.95	14.00	51.00
Low	3.00	3.15	TO-92	A	MCP130-315DI/TO-ND	.95	14.00	51.00
Low	2.85	3.00	TO-92	A	MCP130-300DI/TO-ND	.95	14.00	51.00
Low	2.55	2.70	TO-92	A	MCP130-270DI/TO-ND	.95	14.00	51.00

Reset Out	Reset Voltage Min.	Max.	Pkg.	Conf.	Digi-Key Part No.	Cut Tape Pricing 1	25	100	Digi-Key Part No.	T & R Pricing 3,000
CMOS Push-Pull Active Low										
Low	4.60	4.85	SOT-23	B	MCP809T-485I/TTCT-ND	.95	14.00	51.00	MCP809T-485I/TTTR-ND	560.00/M
Low	4.50	4.75	SOT-23	B	MCP809T-475I/TTCT-ND	.95	14.00	51.00	MCP809T-475I/TTTR-ND	560.00/M
Low	4.35	4.60	SOT-23	B	MCP809T-460I/TTCT-ND	.95	14.00	51.00	MCP809T-460I/TTTR-ND	560.00/M
Low	4.25	4.50	SOT-23	B	MCP809T-450I/TTCT-ND	.95	14.00	51.00	MCP809T-450I/TTTR-ND	560.00/M
Low	3.00	3.15	SOT-23	B	MCP809T-315I/TTCT-ND	.95	14.00	51.00	MCP809T-315I/TTTR-ND	560.00/M
Low	2.85	3.00	SOT-23	B	MCP809T-300I/TTCT-ND	.95	14.00	51.00	MCP809T-300I/TTTR-ND	560.00/M
Low	2.55	2.70	SOT -23	B	MCP809T-270I/TTCT-ND	.95	14.00	51.00	MCP809T-270I/TTTR-ND	560.00/M
CMOS Push-Pull Active High										
High	4.60	4.85	SOT-23	B	MCP810T-485I/TTCT-ND	.95	14.00	51.00	MCP810T-485I/TTTR-ND	560.00/M
High	4.50	4.75	SOT-23	B	MCP810T-475I/TTCT-ND	.95	14.00	51.00	MCP810T-475I/TTTR-ND	560.00/M
High	4.35	4.60	SOT-23	B	MCP810T-460I/TTCT-ND	.95	14.00	51.00	MCP810T-460I/TTTR-ND	560.00/M
High	4.25	4.50	SOT-23	B	MCP810T-450I/TTCT-ND	.95	14.00	51.00	MCP810T-450I/TTTR-ND	560.00/M
High	3.00	3.15	SOT-23	B	MCP810T-315I/TTCT-ND	.95	14.00	51.00	MCP810T-315I/TTTR-ND	560.00/M
High	2.85	3.00	SOT-23	B	MCP810T-300I/TTCT-ND	.95	14.00	51.00	MCP810T-300I/TTTR-ND	560.00/M
High	2.55	2.70	SOT-23	B	MCP810T-270I/TTCT-ND	.95	14.00	51.00	MCP810T-270I/TTTR-ND	560.00/M
N-Channel Open Drain										
Low	4.60	4.85	SOT-23	C	MCP120T-485I/TTCT-ND	.95	14.00	51.00	MCP120T-485I/TTTR-ND	560.00/M
Low	4.50	4.75	SOT-23	C	MCP120T-475I/TTCT-ND	.95	14.00	51.00	MCP120T-475I/TTTR-ND	560.00/M
Low	4.35	4.60	SOT-23	C	MCP120T-460I/TTCT-ND	.95	14.00	51.00	MCP120T-460I/TTTR-ND	560.00/M
Low	4.25	4.50	SOT-23	C	MCP120T-450I/TTCT-ND	.95	14.00	51.00	MCP120T-450I/TTTR-ND	560.00/M
Low	3.00	3.15	SOT-23	C	MCP120T-315I/TTCT-ND	.95	14.00	51.00	MCP120T-315I/TTTR-ND	560.00/M
Low	2.85	3.00	SOT-23	C	MCP120T-300I/TTCT-ND	.95	14.00	51.00	MCP120T-300I/TTTR-ND	560.00/M
Low	2.55	2.70	SOT-23	C	MCP120T-270I/TTCT-ND	.95	14.00	51.00	MCP120T-270I/TTTR-ND	560.00/M
N-Channel Open Drain with Internal 5K Pull Up										
Low	4.60	4.85	SOT-23	C	MCP130T-485I/TTCT-ND	.95	14.00	51.00	MCP130T-485I/TTTR-ND	560.00/M
Low	4.50	4.75	SOT-23	C	MCP130T-475I/TTCT-ND	.95	14.00	51.00	MCP130T-475I/TTTR-ND	560.00/M
Low	4.35	4.60	SOT-23	C	MCP130T-460I/TTCT-ND	.95	14.00	51.00	MCP130T-460I/TTTR-ND	560.00/M
Low	4.25	4.50	SOT-23	C	MCP130T-450I/TTCT-ND	.95	14.00	51.00	MCP130T-450I/TTTR-ND	560.00/M
Low	3.00	3.15	SOT-23	C	MCP130T-315I/TTCT-ND	.95	14.00	51.00	MCP130T-315I/TTTR-ND	560.00/M
Low	2.85	3.00	SOT-23	C	MCP130T-300I/TTCT-ND	.95	14.00	51.00	MCP130T-300I/TTTR-ND	560.00/M
Low	2.55	2.70	SOT-23	C	MCP130T-270I/TTCT-ND	.95	14.00	51.00	MCP130T-270I/TTTR-ND	560.00/M

Panasonic

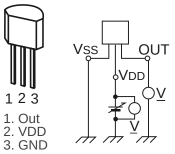
Voltage Detectors

Highly Reliable, Easy-to-Use
CMOS LSI Is for Voltage Detection

The MN1380 Series is a series of devices with functions for: • Monitoring the power supply voltage supplied to microcomputers and to LSI systems • Generating the RESET signal for carrying out initialization when the power supply is turned ON • Preventing runaway in systems when the power supply voltage fluctuates. Recently, there has been an increase in the number of battery-driven products such as cordless telephones, notebook-type personal computers, etc. In these products, highly accurate monitoring of the power supply voltage is an important point in terms of system operation and data backup. While maintaining the voltage detection precision of similar voltage detection devices so far, the MN1380 Series of devices consumes 1/10 the current. In addition, users can choose from one of three output formats: CMOS output, N-ch open drain and inverted CMOS output.

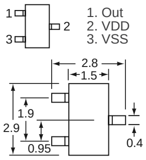
Item	Symbol	Rating	Unit
Drain Supply Voltage	VDD	7.0	V
Output Voltage	V0	-0.3 ~ VDD + 0.3	V
Operating Ambient Temperature	Ta	-20 ~ +70	°C
Storage Temperature	Tstg	-55 ~ +125	°C
Detection Voltage Hysteresis Max		300	MV

TO-92



1. Out
2. VDD
3. GND

Mini-Type
TO-236/SC-59A



1. Out
2. VDD
3. VSS

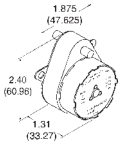
Output Type	Detection Voltage at Drain Supply (Trigger V) Min	Max	Reset Time (µs) tOH	tOL	Digi-Key Part No.	Pricing 1	10	100
TO-92								
CMOS	2.0	2.2	3.0	250	MN1381-C-ND	1.02	8.48	67.87
	2.2	2.4	3.0	250	MN1381-E-ND	1.02	8.48	67.87
	2.4	2.6	3.0	115	MN1381-G-ND	1.02	8.48	67.87
	2.6	2.9	3.0	115	MN1381-J-ND	1.02	8.48	67.87
	3.0	3.3	2.0	15	MN1381-L-ND	1.02	8.48	67.87
	3.4	3.7	2.0	15	MN1381-N-ND	1.02	8.48	67.87
	3.8	4.1	2.0	15	MN1381-Q-ND	1.02	8.48	67.87
	4.2	4.5	2.0	15	MN1381-S-ND	1.02	8.48	67.87
	4.6	4.9	—	—	MN1381-U-ND	1.02	8.48	67.87
N Channel O.D.	2.0	2.2	2.5	160	MN13811-C-ND	1.02	8.48	67.87
	2.2	2.4	2.5	160	MN13811-E-ND	1.02	8.48	67.87
	2.4	2.6	3.0	100	MN13811-G-ND	1.02	8.48	67.87
	3.0	3.3	4.0	35	MN13811-L-ND	1.02	8.48	67.87
	3.4	3.7	4.0	35	MN13811-N-ND	1.02	8.48	67.87
	3.8	4.1	4.0	35	MN13811-Q-ND	1.02	8.48	67.87
	4.2	4.5	4.0	35	MN13811-S-ND	1.02	8.48	67.87
	4.6	4.9	—	—	MN13811-U-ND	1.02	8.48	67.87
CMOS Inverted	2.0	2.2	230	3.0	MN13812-C-ND	1.02	8.48	67.87
	2.2	2.4	230	3.0	MN13812-E-ND	1.02	8.48	67.87
	2.4	2.6	100	3.0	MN13812-G-ND	1.02	8.48	67.87
	3.0	3.3	30	3.0	MN13812-L-ND	1.02	8.48	67.87
	3.4	3.7	30	3.0	MN13812-N-ND	1.02	8.48	67.87
	3.8	4.1	30	3.0	MN13812-Q-ND	1.02	8.48	67.87
	4.2	4.5	30	3.0	MN13812-S-ND	1.02	8.48	67.87
	4.6	4.9	30	3.0	MN13812-U-ND	1.02	8.48	67.87

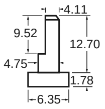
Output Type	Detection Voltage at Drain Supply (Trigger V) Min	Max	Reset Time (µs) tOH	tOL	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
MINI-TYPE										
CMOS	2.0	2.2	3.0	250.0	MN1382-CCT-ND	1.02	8.48	67.87	MN1382-CTR-ND	441.17/M
	2.1	2.3	3.0	250.0	MN1382-DCT-ND	1.02	8.48	67.87	MN1382-DTR-ND	441.17/M
	2.2	2.4	3.0	250.0	MN1382-ECT-ND	1.02	8.48	67.87	MN1382-ETR-ND	441.17/M
	2.3	2.5	3.0	250.0	MN1382-FCT-ND	1.02	8.48	67.87	MN1382-FTR-ND	441.17/M
	2.4	2.6	3.0	115.0	MN1382-GCT-ND	1.02	8.48	67.87	MN1382-GTR-ND	441.17/M
	2.5	2.7	3.0	115.0	MN1382-HCT-ND	1.02	8.48	67.87	MN1382-HTR-ND	441.17/M
	2.6	2.9	3.0	115.0	MN1382-JCT-ND	1.02	8.48	67.87	MN1382-JTR-ND	441.17/M
	2.8	3.1	3.0	115.0	MN1382-KCT-ND	1.02	8.48	67.87	MN1382-KTR-ND	441.17/M
	3.0	3.3	2.0	15.0	MN1382-LCT-ND	1.02	8.48	67.87	MN1382-LTR-ND	441.17/M
	3.2	3.5	2.0	15.0	MN1382-MCT-ND	1.02	8.48	67.87	MN1382-MTR-ND	441.17/M
	3.4	3.7	2.0	15.0	MN1382-NCT-ND	1.02	8.48	67.87	MN1382-NTR-ND	441.17/M
	3.6	3.9	2.0	15.0	MN1382-PCT-ND	1.02	8.48	67.87	MN1382-PTR-ND	441.17/M
	3.8	4.1	2.0	15.0	MN1382-QCT-ND	1.02	8.48	67.87	MN1382-QTR-ND	441.17/M
	4.0	4.3	2.0	15.0	MN1382-RCT-ND	1.02	8.48	67.87	MN1382-RTR-ND	441.17/M
	4.2	4.5	2.0	15.0	MN1382-SCT-ND	1.02	8.48	67.87	MN1382-STR-ND	441.17/M
	4.4	4.7	2.0	15.0	MN1382-TCT-ND	1.02	8.48	67.87	MN1382-TTR-ND	441.17/M
	4.6	4.9	—	—	MN1382-UCT-ND	1.02	8.48	67.87	MN1382-UTR-ND	441.17/M
N Channel Open Drain	2.0	2.2	2.5	160.0	MN13821-CCT-ND	1.02	8.48	67.87	MN13821-CTR-ND	441.17/M
	2.1	2.3	2.5	160.0	MN13821-DCT-ND	1.02	8.48	67.87	MN13821-DTR-ND	441.17/M
	2.2	2.4	2.5	160.0	MN13821-ECT-ND	1.02	8.48	67.87	MN13821-ETR-ND	441.17/M
	2.3	2.5	2.5	160.0	MN13821-FCT-ND	1.02	8.48	67.87	MN13821-FTR-ND	441.17/M
	2.4	2.6	3.0	100.0	MN13821-GCT-ND	1.02	8.48	67.87	MN13821-GTR-ND	441.17/M
	2.5	2.7	3.0	100.0	MN13821-HCT-ND	1.02	8.48	67.87	MN13821-HTR-ND	441.17/M
	2.6	2.9	3.0	100.0	MN13821-JCT-ND	1.02	8.48	67.87	MN13821-JTR-ND	441.17/M
	2.8	3.1	3.0	100.0	MN13821-KCT-ND	1.02	8.48	67.87	MN13821-KTR-ND	441.17/M
	3.0	3.3	4.0	35.0	MN13821-LCT-ND	1.02	8.48	67.87	MN13821-LTR-ND	441.17/M
	3.2	3.5	4.0	35.0	MN13821-MCT-ND	1.02	8.48	67.87	MN13821-MTR-ND	441.17/M
	3.4	3.7	4.0	35.0	MN13821-NCT-ND	1.02	8.48	67.87	MN13821-NTR-ND	441.17/M
	3.6	3.9	4.0	35.0	MN13821-PCT-ND	1.02	8.48	67.87	MN13821-PTR-ND	441.17/M
	3.8	4.1	4.0	35.0	MN13821-QCT-ND	1.02	8.48	67.87	MN13821-QTR-ND	441.17/M
	4.0	4.3	4.0	35.0	MN13821-RCT-ND	1.02	8.48	67.87	MN13821-RTR-ND	441.17/M
	4.2	4.5	4.0	35.0	MN13821-SCT-ND	1.02	8.48	67.87	MN13821-STR-ND	441.17/M
	4.4	4.7	4.0	35.0	MN13821-TCT-ND	1.02	8.48	67.87	MN13821-TTR-ND	441.17/M
	4.6	4.9	—	—	MN13821-UCT-ND	1.02	8.48	67.87	MN13821-UTR-ND	441.17/M
CMOS Inverted	2.0	2.2	230.0	3.0	MN13822-CCT-ND	1.02	8.48	67.87	MN13822-CTR-ND	441.17/M
	2.1	2.3	230.0	3.0	MN13822-DCT-ND	1.02	8.48	67.87	MN13822-DTR-ND	441.17/M
	2.2	2.4	230.0	3.0	MN13822-ECT-ND	1.02	8.48	67.87	MN13822-ETR-ND	441.17/M
	2.3	2.5	230.0	3.0	MN13822-FCT-ND	1.02	8.48	67.87	MN13822-FTR-ND	441.17/M
	2.4	2.6	100.0	3.0	MN13822-GCT-ND	1.02	8.48	67.87	MN13822-GTR-ND	441.17/M
	2.5	2.7	100.0	3.0	MN13822-HCT-ND	1.02	8.48	67.87	MN13822-HTR-ND	441.17/M
	2.6	2.9	100.0	3.0	MN13822-JCT-ND	1.02	8.48	67.87	MN13822-JTR-ND	441.17/M
	2.8	3.1	100.0	3.0	MN13822-KCT-ND	1.02	8.48	67.87	MN13822-KTR-ND	441.17/M
	3.0	3.3	30.0	3.0	MN13822-LCT-ND	1.02	8.48	67.87	MN13822-LTR-ND	441.17/M
	3.2	3.5	30.0	3.0	MN13822-MCT-ND	1.02	8.48	67.87	MN13822-MTR-ND	441.17/M
	3.4	3.7	30.0	3.0	MN13822-NCT-ND	1.02	8.48	67.87	MN13822-NTR-ND	441.17/M
	3.6	3.9	30.0	3.0	MN13822-PCT-ND	1.02	8.48	67.87	MN13822-PTR-ND	441.17/M
	3.8	4.1	30.0	3.0	MN13822-QCT-ND	1.02	8.48	67.87	MN13822-QTR-ND	441.17/M
	4.0	4.3	30.0	3.0	MN13822-RCT-ND	1.02	8.48	67.87	MN13822-RTR-ND	441.17/M
	4.2	4.5	30.0	3.0	MN13822-SCT-ND	1.02	8.48	67.87	MN13822-STR-ND	441.17/M
	4.4	4.7	30.0	3.0	MN13822-TCT-ND	1.02	8.48	67.87	MN13822-TTR-ND	441.17/M
	4.6	4.9	—	—	MN13822-UCT-ND	1.02	8.48	67.87	MN13822-UTR-ND	441.17/M

CRAMER COMPANY

AC/DC Geared Motors

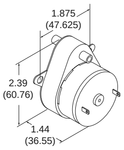
105 Series





Flatted Round Shaft
(Std. for both series)

800I Series



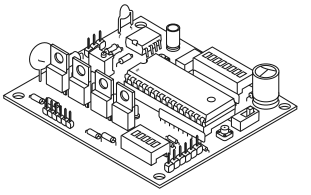
105 Series: Unidirectional operation assured by ball and slot "no-back" system. Motors listed are all clockwise rotation when facing the output shaft. **Characteristics:** Rotor Speed 600 rpm,115V AC, 60 Hz Coil, 2.7 watts, -20°C to +55°C Operating Temperature. Heat rise +54°C nominal. Motor develops 300 oz. in. Torque starting & running at 1 RPM. Motors shown utilize standard gearing rated for 30 oz. in. max. load. To determine torque available on motors shown, divide 300 oz. in. by listed motor speed.

800I Series DC Gearmotor: Basic 2400 and 4800 armature speed used. Geartrain rating 30 oz. in. dynamic, 90 oz. in. static. Starting and running torque 60oz-in.@ 1rpm. These ratings are conventionally stated for output geared to 1rpm. The torque theoretically available at another output speed is the torque at 1rpm divided by the desired speed. Input power 2 watts. Motor output speed will be higher if load is less than 30 oz. in. Voltages offered 12VDC and 24VDC. DC motors are reversible by reversing polarity at terminals. Operating these motors at voltages greater than 10% of nominal, could possibly cause premature motor failure.

Voltage	RPM	Digi-Key Part No.	Price Each 1	10	50	100	Cramer Part No.
			105 Series				
110VAC	12	CRA101-ND	26.22	22.91	20.70	19.32	MBA08AA24AABT542X
110VAC	10	CRA102-ND	26.22	22.91	20.70	19.32	MBA08AA13MADT542X
110VAC	6	CRA103-ND	26.22	22.91	20.70	19.32	MBA08AA24FAAT542X
110VAC	2	CRA104-ND	26.22	22.91	20.70	19.32	MBA08AA1A5ABT542X
110VAC	1	CRA105-ND	26.22	22.91	20.70	19.32	MBA08AA1C5ABT542X
110VAC	1/2	CRA106-ND	26.22	22.91	20.70	19.32	MBA08AA26HAAT542X
			800I Series				
12VDC	1	CRA201-ND	46.55	40.67	36.75	34.30	DC3275
12VDC	10	CRA202-ND	46.55	40.67	36.75	34.30	DC3276
12VDC	30	CRA203-ND	46.55	40.67	36.75	34.30	DC3277
24VDC	1	CRA204-ND	46.55	40.67	36.75	34.30	DC3278
24VDC	10	CRA205-ND	46.55	40.67	36.75	34.30	DC3279
24VDC	30	CRA206-ND	46.55	40.67	36.75	34.30	DC3280

MODERN TECHNOLOGY

Unipolar Stepper Motor Driver Board



The MTSD-V1 can be used as a stand-alone uni-polar stepper motor driver board, or in conjunction with a PC or programmable controller for greater flexibility.

Applications:

Robotics, Motion Control, Education, Light Duty Industrial • Adjustable On-Board Step Clock (15-1500 hz) • Continuous Run or Pre-settable Step Count from 0-255 steps • Pushbutton Repeat (pre-set step count) • LED Phase/Step Indicators • .1" SIP Header Connectors (.025" square pins).

"Stand Alone" Functions (Dip Switch Selectable):

• Disable/Enable • CW/CCW Direction • Single/Dual Phase Drive • Locked/Free Motor during Disable • Continuous Run/Pre-set Step Count (0-225 steps).

Programmable Controller Input Functions:

• Disable/Enable CW/CCW Direction • Pre-set Step Count Repeat • Logic OUTOUT pin to ID end of pre-set step count • External Clock Input (10 KHz max).

Power Requirements: • Logic Supply:

5 volts DC @ 50mA • **Motor Supply:** Maximum of 24 volts DC @ 1.85 amps draw

Board Dimensions:

3.20" x 2.70" x .875" (81.28mm x 68.58mm x 22.23mm)

MTSD-V1-ND .... **$82.40 each**

molex GC/Waldom

TO-220 Solder Tail Transistor Sockets

Fig. 1

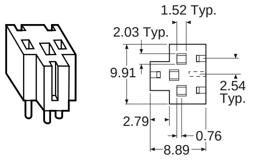
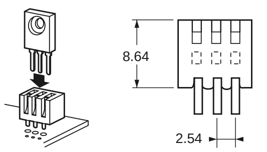


Fig. 2



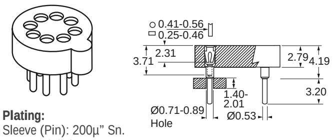
P.C. Board Mount: .100" (2.54mm) center. These three circuit transistor sockets are preassembled and ready for soldering to a P.C. Board. The proven double cantilever design eliminates circuit failure due to thermal expansion and/or mechanical tolerances. Linear movement of the transistor leads in the socket does not affect contact reliability.

Material: Tin-Plated Brass, 94V-2 Rated Nylon

Fig.	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
1	WM2550-ND	1.35	.98	.87	09-48-3031
2	WM2551-ND	1.69	1.23	1.09	10-18-2031

MILL-MAX

Transistor Sockets



Plating:
Sleeve (Pin): 200µ" Sn.
Contact (Clip): 30µ" Au.

No. of Pins	Digi-Key Part No.	Price Each 1	10	100	Mill-Max Part No.
		TO-5 Package			
3	ED2150-ND	.58	.49	.41	917-93-103-41-005
4	ED2151-ND	.77	.65	.54	917-93-104-41-005
8	ED2152-ND	1.48	1.25	1.03	917-93-108-41-005
		TO-100 Package			
8	ED2153-ND	1.48	1.25	1.03	917-93-208-41-005
10	ED2154-ND	1.77	1.50	1.23	917-93-210-41-005

Chemtronics®

Heat Sink Grease

For fast heat transfer from components

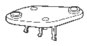
- Nonflammable
- Noncorrosive
- Silicon
- Will not dry out, harden or melt
- 5 oz. tube
- Meets MIL-C-47113
- Stable from: -0°F to +342°F (-18°C to 172°C)

Digi-Key Part No.	Price Each 1	25	100	Mfg. Part No.
CT40-5-ND	13.74	12.42	11.60	CT40-5

KEYSTONE ELECTRONICS CORP.

TO-3 Power Transistor Sockets

Fig. 1



Chassis Mount
- Top Plate: Molded Nylon
- Base: Phenolic
- Dimensions: 1.53"x.073" (38.86mm x 1.85mm)
- Standoffs: 0.09" (2.29mm)

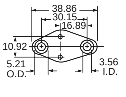


Fig. 2

Chassis Mount
- Top Plate: Phenolic
- Base: Phenolic
- Dimensions: 1.35"x1.00" (34.29mm x 25.40mm)
- Standoffs: None

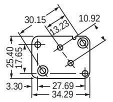
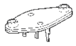
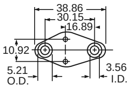


Fig. 3



P.C. Board Mount
- Top Plate: Molded Nylon
- Base: Phenolic
- Dimensions: 1.53"x.073" (38.86mm x 1.85mm)
- Standoffs: 0.09" (2.29mm)



Transistor Mounting Hardware

Fig. 4A

TO-220
Complete
Mounting Kit
(A, B, C, D, E)

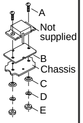
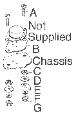


Fig. 4B

TO-3
Complete
Mounting Kit
(A, B, C, D, E, F, G)

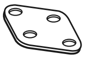


⁎ **6-20** Mounting Screws
(A Only, 2 Required)

Fig.	Digi-Key Part No.	Price Each 1	10	100	Keystone Part No.
1	4601K-ND	1.56	1.29	1.23	4601
2	4606K-ND	1.33	1.10	.99	4606
3	4600K-ND	1.39	1.16	1.04	4600
4A	4724K-ND	.98	.94	.87	4724
4B	4725K-ND	.98	.94	.87	4725
4⁎	4706K-ND	2.91/20	16.90/200		4706

KEYSTONE ELECTRONICS CORP.

MICA Insulators For Transistor Mounting



These precision stamped MICA Insulators provide good thermal conductivity (.009 watts per square inch per °C per inch in thickness). Excellent thermal resistance 1100°F (593°C). Dielectric constant of 7 at 1000KHz. Specifications: .003" (.08mm) thick MICA ± .001" (± .03mm).

Fig. 1

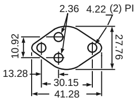


Fig. 2

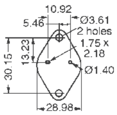


Fig. 3

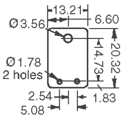
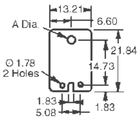


Fig. 4



"A" Dim. (Dia.)
4672K: 3.58mm **4673K:** 2.92mm

Fig.	Digi-Key Part No.	Pricing 10	100	500	1,000	Keystone Part No.
1	4651K-ND	.69	5.70	24.00	32.70	4651
2	4662K-ND	.76	6.20	27.00	35.80	4662
3	4671K-ND	.98	5.70	24.00	23.20	4671
4	4672K-ND	.75	5.70	24.00	16.95	4672
4	4673K-ND	.75	5.70	24.00	16.95	4673

Wakefield Engineering

Heat Sinks

Wakefield Engineering is recognized as a worldwide leader in innovative thermal management solutions. Their products range from board level heat sinks for both surface mount and thru-hole, to fan mounted heat sinks for microprocessors and CPU's. Wakefield Engineering offers a single source for all of your thermal requirements. DeltaPads are replacements to heat sink grease but without any mess. They are heat conducting, electrically isolating pads to go between the heat sink and your semiconductor device. TO-220 heatsinks will also fit TO-202 and TO-126 packages.

Fig. 1

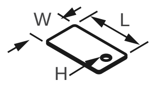


Fig. 2

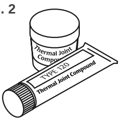


Fig. 3

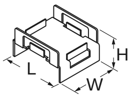


Fig. 4

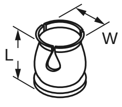


Fig. 5

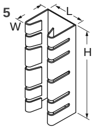


Fig. 6

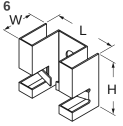


Fig. 7

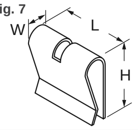


Fig. 8

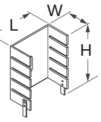


Fig. 9

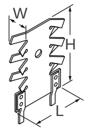


Fig. 10

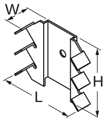


Fig. 11

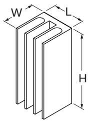


Fig. 12

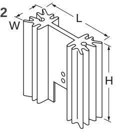


Fig. 13

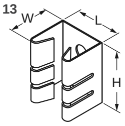


Fig. 14

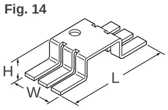


Fig. 15

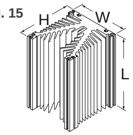


Fig. 16

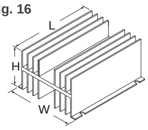


Fig. 17

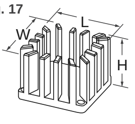


Fig. 18

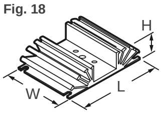


Fig. 19

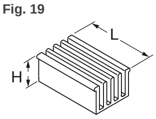


Fig. 20

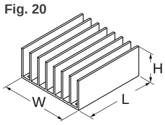


Fig. 21

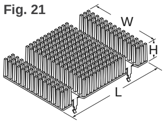


Fig. 22

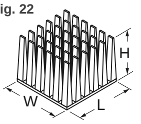


Fig. 23

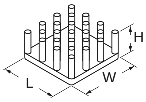


Fig.	Description	Dimensions – Inch (mm) L x W x H	Digi-Key Part No.	Price Each 1	10	100	Mfg. Part No.
1	DeltaPad Thermal Pad TO-220 No Adhesive .007" (.18mm)	.710 x .500 x .141 dia. (18.03 x 12.70 x 3.58 dia.)	345-1000-ND	.32	.23	.16	173-7-220P
1	DeltaPad Thermal Pad TO-220, No Adhesive .009" (.23mm)	.750 x .500 x .125 dia. (19.05 x 12.70 x 3.18 dia.)	345-1001-ND	.32	.23	.16	173-9-240P
1	Kapton Thermal Pad, TO-220, No Adhesive .006" (.15mm)	.710 x .500 x .141 dia. (18.03 x 12.70 x 3.58 dia.)	345-1002-ND	.56	.40	.28	175-6-220P
1	Kapton Thermal Pad TO-220, No Adhesive .006" (.15mm)	.750 x .500 x .125 dia. (19.05 x 12.70 x 3.18 dia.)	345-1003-ND	.56	.40	.28	175-6-230P
1	Kapton Thermal Pad TO-220, No Adhesive .006" (.15mm)	.750 x .500 x .147 dia. (19.05 x 12.70 x 3.73 dia.)	345-1004-ND	.35	.25	.18	175-6-240P
1	Kapton Thermal Pad TO-220, No Adhesive .006" (.15mm)	.860 x .740 x .160 (21.84 x 18.80 x 4.06)	345-1005-ND	.70	.50	.35	175-6-280P
2	Silicon Thermal Grease, 4 gram Plastic Pak	—	345-1006-ND	4.00	3.60	2.80	120-SA
2	Silicon Thermal Grease, 2 Oz. Jar	—	345-1007-ND	10.40	9.36	7.28	120-2
2	Silicon Thermal Grease, 5 Oz. Tube	—	345-1008-ND	19.68	17.71	13.78	120-5
2	Silicon Thermal Grease, 8 Oz. Jar	—	345-1009-ND	24.48	22.03	17.14	120-8
2	Silicon Thermal Grease, 5 Lbs. Can	—	345-1010-ND	128.08	115.27	89.66	120-80
2	Synthetic Non-Silicon Thermal Compound 4 Oz Tube	—	345-1011-ND	31.03	27.93	21.72	126-4
3	D-Pack/SOT-23 Heat Sink, Pretinned, Autoinsertable	.74 x .60 x .36 (18.80 x 15.24 x 9.14)	345-1012-ND	.39	.28	.20	217-36CT6
4	TO-5 Clip-On Cup Style With 4-40 Thd Base	.37 x .38 dia. (9.40 x 9.65 dia.)	345-1013-ND	8.88	7.99	6.22	260-4T5E
5	TO-220, Self-Locking, Horz/Vert Mount, Black	.57 x .50 x .60 (14.48 x 12.70 x 15.24)	345-1014-ND	.67	.48	.34	233-60AB
5	TO-220, Self-Locking, Vertical Mount With Tabs Black	.57 x .50 x .725 (14.48 x 12.70 x 18.42)	345-1015-ND	.95	.68	.48	233-60AB-10
6	TO-220, Self-Locking, Horz/Vert Mount, Black	1.0 x .50 x .85 (25.40 x 12.70 x 21.59)	345-1016-ND	.74	.53	.37	235-85AB
7	TO-220, Self-Locking, Horz/Vert Mount, Black	.80 x .27 x .80 (20.32 x 6.86 x 20.32)	345-1017-ND	.32	.23	.16	243-3PAB
8	TO-220, Vertical Mount Wave-Solderable, With Tabs Black	1.0 x .50 x 1.18 (25.40 x 12.70 x 29.97)	345-1018-ND	1.19	.85	.60	287-1AB
8	TO-220, Low Cost Horz/Vert Mount, Black	1.0 x .50 x .71 (25.40 x 12.70 x 18.03)	345-1019-ND	.49	.35	.25	289-AB
8	TO-220, Dual Low Cost Horz/Vert Mount, Black	1.0 x .50 x 1.18 (25.40 x 12.70 x 29.97)	345-1020-ND	.60	.43	.30	290-1AB
8	TO-220, Dual Mount Low Cost, Black	1.0 x .50 x 1.18 (25.40 x 12.70 x 29.97)	345-1021-ND	.60	.43	.30	290-2AB
8	TO-220, Low Cost Horz/Vert Mount, Black	.75 x .375 x .75 (19.05 x 9.52 x 19.05)	345-1022-ND	.46	.33	.23	273-AB
8	TO-220, Low Cost Horz/Vert Mount, Black	.52 x .375 x .750 (13.21 x 9.52 x 19.05)	345-1023-ND	.46	.33	.23	274-1AB
9	TO-220, Vertical Mount Wave-Solderable, With Tabs	.875 x .215 x 1.25 (22.23 x 5.46 x 31.75)	345-1024-ND	1.05	.75	.53	288-1AB
10	TO-220 Self-Locking, Vertical Mount, Black	1.0 x .36 x .860 (25.40 x 9.14 x 21.84)	345-1025-ND	.67	.48	.34	291-H36AB
11	TO-220 Power Vertical Mount With Pins/6-32Thds, Black	.64 x .64 x 1.0 (16.26 x 16.26 x 25.40)	345-1026-ND	1.72	1.23	.86	634-10ABP
11	TO-220 Power Vertical Mount With Pins/6-32Thds, Black	.64 x .64 x 2.0 (16.26 x 16.26 x 50.80)	345-1027-ND	1.93	1.38	.97	634-20ABP
12	TO-220 Power Vertical Mount With Pins, Black	1.375 x .50 x 1.0 (34.93 x 12.70 x 25.40)	345-1028-ND	2.00	1.43	1.00	637-10ABP
12	TO-220 Power Vertical Mount With Pins, Black	1.375 x .50 x 1.5 (34.93 x 12.70 x 38.10)	345-1029-ND	2.07	1.48	1.04	637-15ABP
12	TO-220 Power Vertical Mount With Pins, Black	1.375 x .50 x 2.0 (34.93 x 12.70 x 50.80)	345-1030-ND	2.31	1.65	1.16	637-20ABP
12	TO-220 Power Vertical Mount With Pins, Black	1.650 x 1.0 x 1.0 (41.91 x 25.40 x 25.40)	345-1031-ND	2.70	1.93	1.35	647-10ABP
12	TO-220 Power Vertical Mount With Pins, Black	1.650 x 1.0 x 1.5 (41.91 x 25.40 x 38.10)	345-1032-ND	2.91	2.08	1.46	647-15ABP
12	TO-220 Power Vertical Mount With Pins, Black	1.650 x 1.0 x 1.5 (41.91 x 25.40 x 38.10)	345-1033-ND	2.91	2.08	1.46	657-15ABP
12	TO-220 Power Vertical Mount With Pins, Black	1.650 x 1.0 x 1.5 (41.91 x 25.40 x 38.10)	345-1034-ND	2.91	2.08	1.46	657-15ABPN
12	TO-220 Power Vertical Mount With Pins, Black	1.650 x 1.0 x 2.0 (41.91 x 25.40 x 50.80)	345-1035-ND	3.19	2.28	1.60	657-20ABP
12	TO-220 Pwr SpeedClip Mount With Pins (Order clip below)	1.375 x .50 x 1.0 (34.93 x 12.70 x 25.40)	345-1037-ND	2.66	1.90	1.33	667-10ABPP
—	SpeedClip, Stainless Steel for 667 Series	—	345-1039-ND	.49	.35	.25	330-SC
13	TO-220 Self-Locking Horz/Vert Mount, Black	.57 x .50 x .75 (14.48 x 12.70 x 19.05)	345-1040-ND	.67	.48	.34	230-75AB
14	TO-220 Low Cost Horz/Vert Mount, Black	1.75 x .375 x .70 (44.45 x 9.52 x 17.78)	345-1041-ND	.53	.38	.27	270-AB
14	TO-220 Top Mount Booster for 270,272,280 Series, Black	1.75 x .50 x .70 (44.45 x 12.70 x 17.78)	345-1042-ND	.53	.38	.27	271-AB
14	TO-220 Dual Mount Horz, Black	1.75 x .375 x 1.45 (44.45 x 9.52 x 36.83)	345-1043-ND	.63	.45	.32	272-AB
15	IGBT and SSR's Power Module's Black	7.087 x 4.92 x 5.34 (180.01 x 124.97 x 135.64)	345-1046-ND	104.95	94.46	73.47	392-180AB
16	TO-3 Power Horz Mount Double Fin, Black	4.750 x 1.5 x 1.25 (120.65 x 38.10 x 31.75)	345-1047-ND	9.28	8.35	6.50	401-A
16	Power Heat Sink Horz, Double Fin, No Holes	4.750 x 1.5 x 1.25 (120.65 x 38.10 x 31.75)	345-1048-ND	6.23	5.61	4.36	401-K
16	Power Heat Sink, Horz, Double Fin, No Holes	4.750 x 3.0 x 2.62 (120.65 x 76.20 x 66.55)	345-1049-ND	11.15	10.04	7.81	421-K
16	Power Heat Sink, Horz, Double Fin, No Holes	4.750 x 5.5 x 2.62 (120.65 x 139.70 x 66.55)	345-1050-ND	16.88	15.19	11.82	423-K
17	TO-3 Power, Horz Mount, Omnidirectional, Black	1.81 x 1.81 x 1.25 (45.97 x 45.97 x 31.75)	345-1051-ND	4.55	4.10	3.19	680-125A
18	TO-3 Heavy Duty Power, Horz Mount, Black	4.125 x 3.0 x 1.0 (104.78 x 76.20 x 25.40)	345-1052-ND	7.90	7.11	5.53	641-A
18	Power Heat Sink, Horz Mount, No Holes, Black	4.125 x 3.0 x 1.0 (104.78 x 76.20 x 25.40)	345-1053-ND	7.63	6.87	5.34	641-K
19	14-16 Dip IC Heat Sink, Glue On, Black	.75 x .25 x .24 (19.05 x 6.35 x 6.10)	345-1054-ND	2.14	1.53	1.07	651-B
20	Half Brick DC/DC Converter, Vert, Black	2.28 x 2.4 x .95 (57.91 x 60.96 x 24.13)	345-1055-ND	4.63	4.17	3.24	518-95AB
20	Half Brick DC/DC Convert With Hardware/Thermal Pad	2.28 x 2.4 x .95 (57.91 x 60.96 x 24.13)	345-1056-ND	8.08	7.27	5.66	518-95AB-MS4
20	Half Brick DC/DC Converter Vert, Black	2.28 x 2.4 x .45 (57.91 x 60.96 x 11.43)	345-1057-ND	8.08	7.27	5.66	528-45AB

CPU, PGA and BGA Heat Sinks

Fig.	Description	Dimensions – Inch (mm) L x W x H	Digi-Key Part No.	Price Each 1	10	100	Mfg. Part No.
	CPU Cooler						
21	40mm QFP and 21mm BGA With Clips and Thermal Tape, Black	2.89 x 2.0 x .5 (73.41 x 50.80 x 12.70)	345-1058-ND	6.05	5.45	4.24	609-50ABS3
22	21mm BGA With Thermal Double Sided Tape	.827 x .827 x .25 (21.01 x 21.01 x 6.35)	345-1059-ND	2.66	1.90	1.33	624-25ABT4
22	25mm BGA With Thermal Double Sided Tape	.984 x .984 x .25 (24.99 x 24.99 x 6.35)	345-1060-ND	2.98	2.13	1.49	625-25ABT4
22	17x17 PGA No Tape, Black	1.75 x 1.7 x .40 (44.45 x 43.18 x 10.16)	345-1061-ND	2.87	2.05	1.44	628-40AB
22	17x17 PGA No Tape, Black	1.75 x 1.7 x .65 (44.45 x 43.18 x 16.51)	345-1062-ND	2.75	2.48	1.93	628-65AB
22	28-38mm CQFP No Tape, Black	1.1 x 1.1 x .25 (27.94 x 27.94 x 6.35)	345-1036-ND	1.89	1.35	.95	658-25AB
22	28-38mm CQFP With Thermal Tape (Chomerics T-405), Black	1.1 x 1.1 x .25 (27.94 x 27.94 x 6.35)	345-1063-ND	3.05	2.18	1.53	658-25ABT1
22	28-38mm CQFP With Thermal Tape (Arclad 8223) Black	1.1 x 1.1 x .25 (27.94 x 27.94 x 6.35)	345-1064-ND	2.63	1.88	1.32	658-25ABT2
22	28-38mm CQFP With Thermal Tape (Chromerics T-412), Black	1.1 x 1.1 x .25 (27.94 x 27.94 x 6.35)	345-1065-ND	3.47	2.48	1.74	658-25ABT4
22	28-38mm CQFP No Tape, Black	1.1 x 1.1 x .35 (27.94 x 27.94 x 8.89)	345-1066-ND	1.93	1.38	.97	658-35AB
22	28-38mm CQFP With Thermal Tape (Chromerics T-412), Black	1.1 x 1.1 x .35 (27.94 x 27.94 x 8.89)	345-1067-ND	3.15	2.25	1.58	658-35ABT3
22	28-38mm CQFP With Thermal Tape (Chromerics T-410), Black	1.1 x 1.1 x .45 (27.94 x 27.94 x 11.43)	345-1068-ND	3.43	2.45	1.72	658-35ABT4
22	28-38mm CQFP No Tape, Black	1.1 x 1.1 x .45 (27.94 x 27.94 x 11.43)	345-1069-ND	2.10	1.50	1.05	658-45AB
22	28-38mm CQFP With Thermal Tape (Chromerics T-412), Black	1.1 x 1.1 x .45 (27.94 x 27.94 x 11.43)	345-1070-ND	2.73	1.95	1.37	658-45ABT3
22	28-38mm CQFP With Thermal Tape (Chromerics T-410), Black	1.1 x 1.1 x .45 (27.94 x 27.94 x 11.43)	345-1071-ND	2.63	2.37	1.84	658-45ABT4
22	28-38mm CQFP No Tape, Black	1.1 x 1.1 x .60 (27.94 x 27.94 x 15.24)	345-1072-ND	2.17	1.55	1.09	658-60AB
22	28-38mm CQFP With Thermal Tape (Chromerics T-405), Black	1.1 x 1.1 x .60 (27.94 x 27.94 x 15.24)	345-1073-ND	3.33	2.38	1.67	658-60ABT1
22	28-38mm CQFP With Thermal Tape (Arclad 8223), Black	1.1 x 1.1 x .60 (27.94 x 27.94 x 15.24)	345-1074-ND	2.80	2.00	1.40	658-60ABT2
22	28-38mm CQFP With Thermal Tape (Chromerics T-412), Black	1.1 x 1.1 x .60 (27.94 x 27.94 x 15.24)	345-1075-ND	3.47	2.48	1.74	658-60ABT3
	CPU Composite Cooler						
23	CPU Composite Cooler for 84-100QFP, 169BGA, No Tape, Black	.65 x .65 x .40 (16.51 x 16.51 x 10.16)	345-1076-ND	1.54	1.10	.77	D10650-40
23	CPU Composite Cooler for 128-200QFP, 313BGA, No Tape, Black	.85 x .85 x .40 (21.59 x 21.59 x 10.16)	345-1077-ND	1.89	1.35	.95	D10850-40

Wakefield 609 Series fits PowerPC 601, 604, 255BGA
Wakefield 628 Series fits IntelDX4, Intel 80486DX2, AM486DX2/DX4
Wakefield 658 Series fits IntelDX4, AM29240, PowerPC 603

Heat Sinks

Aavid's Ultrastick is a unique phase-change thermal interface material that surpasses grease in thermal performance and long-term stability. This solid, silicone free, paraffin based thermal compound changes phase at 60°C, with a concurrent volumetric expansion that fills gaps between the mating surfaces. One cost effective application leaves a thin, film like deposit, providing excellent heat transfer and low interface thermal resistance.

Features:

- Thermal resistance 20% lower than thermal grease, with significant long-term reliability benefits
- Excellent heat transfer properties, consistent at mounting pressures from less than 5 psi to more than 200 psi
- No run-out, migration, dry-out, or flaking that can occur with typical thermal grease
- Non-toxic and inert
- Electrically nonconducive
- Easy to use and dry to the touch after application, reducing labor costs
- Each bar covers approximately 1,000 in^2

HS243-ND................................$17.50

Fig. 1

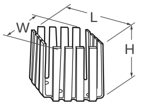


Fig. 2

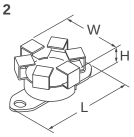


Fig. 3

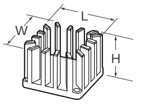


Fig. 4

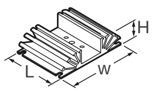


Fig. 5

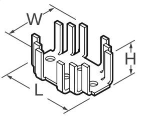
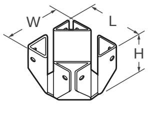


Fig. 6



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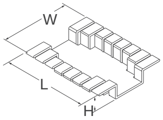


Fig. 8 *NEW!*

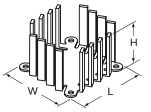


Fig. 9

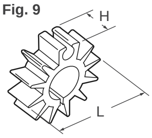


Fig. 10

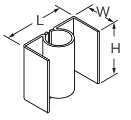


Fig. 11

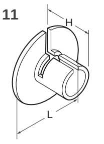


Fig. 12 *NEW!*

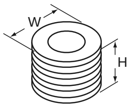


Fig. 13

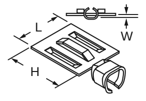


Fig. 14

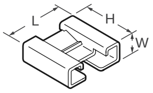


Fig. 15

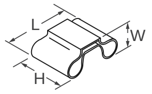


Fig. 16

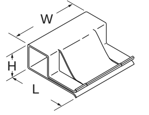


Fig. 17

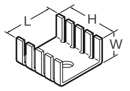


Fig.	Description	Dimensions – Inch (mm) L x W x H	Thermal Resist. °C/W	Digi-Key Part No.	Price Each 1	10	100	Mfg. Part No.
1	TO-3, Compact Heat Sink, 5W, Black	1.88 x 1.40 x .50 (47.75 x 35.56 x 12.70)	11.5	HS148-ND	.80	.72	.56	501303B00000
1	TO-3, Compact Heat Sink, 7W, Black	1.88 x 1.40 x .75 (47.75 x 35.56 x 19.05)	8.3	HS149-ND	.88	.79	.62	501403B00000
1	TO-3, With Wave-On Mounts, 9W, Black	1.88 x 1.40 x .75 (45.97 x 35.56 x 19.05)	8.3	HS267-ND *NEW!*	2.62	2.36	1.84	501403B00100
1	TO-3, Compact Heat Sink, 8.5W, Black	1.88 x 1.40 x 1.00 (47.75 x 35.56 x 25.40)	6.3	HS248-ND	1.22	1.10	.86	501503B00000
1	TO-3, With Wave-On Mounts, 9W, Black	1.88 x 1.40 x 1.00 (45.97 x 35.56 x 25.4)	6.3	HS269-ND *NEW!*	2.40	2.16	1.68	501503B00100
1	TO-3, Compact Heat Sink, 9.5W, Black	1.88 x 1.40 x 1.25 (47.75 x 35.56 x 31.75)	5.4	HS110-ND	1.23	1.11	.86	501603B00000
1	TO-3, Compact, 9W, Gold	1.88 x 1.40 x 1.25 (45.97 x 35.56 x 31.75)	5.4	HS270-ND *NEW!*	1.16	1.04	.81	501603C00000
2	TO-3, Expandable Collar Type (Can be used with Fig. 1), Black	1.54 x 1.125 x .87 (39.12 x 28.58 x 22.10)	22.0	HS236-ND	.90	.81	.63	579103B00000
3	TO-3, 25W, Black	1.81 x 1.81 x 1.25 (45.97 x 45.97 x 31.75)	5.4	HS103-1.25-ND	4.73	4.26	3.31	568303B00000
3	TO-3, 17W, Black	1.81 x 1.81 x .50 (45.97 x 45.97 x 12.70)	12.5	HS103-0.5-ND	7.93	7.14	5.55	568003B00000
3	TO-3, Free/Forced Air No Holes,12W, Black	1.83 x 1.83 x .50 (46.48 x 46.48 x 12.7)	5.4	HS291-ND *NEW!*	7.41	6.68	5.19	568000B00000
3	TO-3, Free or Forced Air Cooling, 12W, Black	1.83 x 1.83 x .75 (46.48 x 46.48 x 19.05)	5.4	HS293-ND *NEW!*	7.71	6.94	5.40	568103B00000
3	TO-3, Free or Forced Air Cooling, 12W, Black	1.81 x 1.81 x 1.00 (45.97 x 45.97 x 25.4)	5.4	HS294-ND *NEW!*	7.11	6.40	4.98	568203B00000
4	TO-3, Power Cooler, 50W, Black	3.00 x 4.125 x 1.00 (76.20 x 104.78 x 25.40)	5.4	HS117-ND	7.00	6.30	4.90	198540B00000
5	TO-3, Space Saver, 6W, Black	1.63 x 1.29 x .75 (41.40 x 32.77 x 19.05)	5.4	HS140-ND	1.83	1.65	1.28	502203B00000
5	TO-3, Space Saver, 8W, Black	1.63 x 1.29 x 1.00 (41.40 x 32.77 x 25.40)	5.4	HS141-ND	1.98	1.78	1.39	502303B00000
5	TO-3, Space Saver, 12W, Black	1.63 x 1.29 x 1.250 (41.40 x 32.77 x 31.75)	5.4	HS142-ND	1.88	1.69	1.32	502403B00000
6	TO-3, Heatsink, Fold-Back Fins, No Holes, 10W, Black	1.83 x 1.83 x 1.00 (16.26 x 16.26 x 25.4)	5.4	HS296-ND *NEW!*	2.83	2.55	1.99	569000B00000
6	TO-3, Fold-Back Fins, 20W, Black	1.83 x 1.83 x 1.31 (46.48 x 46.48 x 33.27)	5.4	HS110-3-ND	1.38	1.24	.97	569003B00000
6	TO-3, Fold-Back Fins, 10W, Gold	1.83 x 1.83 x 1.31 (46.48 x 46.48 x 33.27)	5.4	HS298-ND *NEW!*	1.35	1.22	.95	569003C00000
7	TO-3, Universal Hole Pattern, Low Profile, Black	2.00 x 1.75 x .375 (50.80 x 44.45 x 9.53)	7.0	HS228-ND	.95	.86	.67	506007B00000
8	TO-3, Slanted Fin, 10W, Black	.75 x 1.88 x .50 (19.05 x 47.75 x 12.7)	3.5	HS260-ND *NEW!*	2.04	1.84	1.43	500103B00000
8	TO-3, Slanted Fin, 12W, Black	1.81 x 1.81 x 1.25 (45.97 x 45.97 x 31.75)	2.5	HS264-ND *NEW!*	1.98	1.78	1.39	500403B00000
8	TO-3, Slanted Fin, 14W, Black	1.81 x 1.81 x 1.50 (45.97 x 45.97 x 38.1)	2.2	HS265-ND *NEW!*	3.75	3.38	2.63	500503B00000
9	TO-5, High Performance, 2W, Black	.75 dia x .25 (19.05 dia x 6.35)	56.0	HS101-ND	1.05	.95	.74	323005B00000
9	TO-5, Press-On, High Performance, 1W, Black	.75 dia x .375 (19.05 dia x 9.52)	30.0	HS259-ND *NEW!*	1.19	1.07	.84	326005B00000
10	TO-5, Snap-On Cooler, 1.5W, Black	.83 x .395 x .50 (21.08 x 10.03 x 12.70)	38.0	HS217-ND	.39	.28	.20	578205B00000
10	TO-5, Snap-On Cooler, 2W, Black	.83 x .395 x .75 (21.08 x 10.03 x 19.05)	35.0	HS218-ND	.46	.33	.23	578305B00000
11	TO-5, Dual Fin Press-Fit Heat Sink, Black	.75 dia x .40 (19.05 dia x 10.16)	56.0	HS242-ND	2.38	2.14	1.67	322505B00000
11	TO-5, Press-On, 1.25W, Black	.75 dia x .25 (19.05 dia x 6.35)	40.0	HS257-ND *NEW!*	2.40	2.16	1.68	322605B00000
11	TO-5, Press-On, 1.25W, Gold	.75 dia x .25 (19.05 dia x 6.35)	40.0	HS258-ND *NEW!*	1.04	.94	.73	322605C00000
11	TO-92 and TO-18, Press Fit, 1W, Black	.50 dia x .235 (12.70 dia x 5.97)	100.0	HS100-ND	1.23	1.11	.86	322400B00000
12	TO-5, Press-On, 1W, Black	.5 dia x .25 (127 dia x 6.35)	56.0	HS253-ND *NEW!*	.64	.58	.45	320205B00000
12	TO-5, 2 Pc Part for Max Dissipation, 1W, Gold	.625 dia x .271 (15.88 dia x 6.88)	22.0	HS254-ND *NEW!*	6.96	6.27	4.88	321127C00000
12	TO-5, 2 Pc Part for Max Dissipation, 2W, Black	.75 dia x .290 (19.05 dia x 7.37)	20.0	HS255-ND *NEW!*	10.07	9.07	7.05	321527B00000
13	TO-92, Press Fit Heat Sink, For Standard or Modified Pkg, Black	.60 x .05 x .50 (15.24 x 1.27 x 12.70)	64.0	HS251-ND	.42	.31	.22	575200B00000
15	TO-126, Vertical Mount Clip-On Cooler, Black	.775 x .32 x .52 (19.69 x 8.13 x 13.21)	26.0	HS216-ND	.42	.30	.21	577500B00000
16	TO-202, Compact Clip-On Heat Sink, Black	.58 x .80 x .25 (14.73 x 20.32 x 6.35)	28.0	HS247-ND	.53	.38	.27	574004B00000
17	TO-202, Low Profile Heat Sink, Black	.52 x .375 x .75 (13.21 x 9.53 x 19.05)	27.2	HS214-ND	.42	.30	.21	577304B00000
17	TO-202, Low Profile Heat Sink, Black	.52 x .50 x .75 (13.21 x 12.70 x 19.05)	24.0	HS215-ND	.42	.30	.21	577404B00000
17	TO-218, Power Cooler, With Pins, 10W, Black	1.38 x .50 x 2.00 (35.05 x 12.70 x 50.80)	8.3	HS185-ND	1.23	1.11	.86	513201B02500
18	TO-218, Power Cooler, With Pins, 20W, Black	1.65 x 1.00 x 1.50 (41.91 x 25.40 x 38.10)	3.7	HS187-ND	1.58	1.42	1.11	529801B02500
19	TO-218, Quick Attach, With Pins, 12W, Black	1.95 x .50 x 1.97 (49.53 x 12.70 x 50.04)	6.5	HS134-ND	1.20	1.08	.84	592201B03400
18	TO-218, Vertical Power, 10W, With Pins, Black	1.65 x 1.0 x 2.5 (41.91 x 25.4 x 63.5)	2.5	HS277-ND *NEW!*	1.75	1.58	1.23	530001B02500
20	TO-218, Twisted High Rise Fins, With Kool Clip, Black	1.75 x .50 x 1.75 (44.45 x 12.70 x 44.45)	6.3	HS109-ND	1.75	1.58	1.23	530101B00150
26	TO-218, Slide-On, Vertical PC Mount, With Standard Tabs, Black	1.00 x .50 x 1.22 (25.40 x 12.70 x 30.99)	11.5	HS234-ND	1.43	1.29	1.00	566010B03400
3	TO-220, Dual Mount Power Cooler, Black	1.81 x 1.81 x 1.25 (45.97 x 45.97 x 31.75)	5.5	HS135-ND	8.74	7.87	6.13	568322B00000
6	TO-220, Dual Mount Power Cooler, 20W, Black	1.83 x 1.83 x 1.31 (46.48 x 46.48 x 33.27)	5.5	HS110-220-ND	1.70	1.53	1.19	569022B00000
14	TO-220, Clip-On Cooler, 5W, Black	.90 x 1.02 x .39 (22.86 x 25.91 x 9.91)	16.8	HS119-ND	.56	.40	.28	574204B00000
17	TO-220, Compact Heat Sink, Black	.52 x .25 x .75 (13.21 x 6.35 x 19.05)	32.0	HS105-ND	.39	.28	.20	577002B00000
17	TO-220, Compact Heat Sink, Black	.52 x .375 x .75 (13.21 x 9.53 x 19.05)	25.9	HS106-ND	.32	.23	.16	577102B00000
17	TO-220, Compact Heat Sink, Black	.52 x .50 x .75 (13.21 x 12.70 x 19.05)	24.4	HS107-ND	.35	.25	.18	577202B00000
17	TO-220, Low Profile, 2.5W, Gold	.75 x .75 x .375 (19.05 x 19.05 x 9.52)	24.0	HS272-ND *NEW!*	.33	.30	.23	507302C00000
17	TO-220, Low Profile, Low Cost Cooler, 2.5W, Black	.75 x .75 x .375 (19.05 x 19.05 x 9.53)	24.0	HS115-ND	.39	.28	.20	507302B00000
17	TO-220, 2 Hole Pattern Comp. Sink, Black	1.00 x .50 x 1.18 (25.40 x 12.70 x 29.97)	16.7	HS230-ND	.50	.40	.30	530613B00000
17	TO-220, Horizontal/Vertical Mount, 4.5W, Black	1 x 1.18 x .50 (25.4 x 29.97 x 12.7)	16.7	HS278-ND *NEW!*	.43	.39	.30	530614B00000
17	TO-220, Horizontal/Vertical Mount, 3.7W, Gold	1 x .71 x .5 (25.4 x 18.03 x 12.7)	20.3	HS279-ND *NEW!*	.30	.28	.22	530714C00000
17	TO-220, Compact Heat Sink, With Tabs, Black	.52 x .25 x .75 (13.21 x 6.35 x 19.05)	32.0	HS212-ND	.60	.43	.30	577002B04000
17	TO-220, Compact Heat Sink, With Tabs, Black	.52 x .375 x .75 (13.21 x 9.53 x 19.05)	25.9	HS213-ND	.60	.43	.30	577102B04000
17	TO-220, Low Cost Vertical Mount, With Front Tabs, Black	1.00 x .50 x 1.18 (25.40 x 12.70 x 29.97)	13.6	HS206-ND*	2.58	2.32	1.81	575002T00000
17	TO-220, Low Cost Vertical Mount, With Center Tabs, Black	1.00 x .50 x 1.18 (25.40 x 12.70 x 29.97)	13.6	HS186-ND*	2.75	2.48	1.93	523002T00000
17	TO-220, Vertical Mount With Black Tabs	1.00 x .50 x 1.18 (25.40 x 12.70 x 29.97)	13.0	HS194-ND	.48	.38	.28	563002B00000
17	TO-220, Vertical Mount With Black Tabs	1.00 x .50 x .95 (25.40 x 12.70 x 24.13)	16.6	HS207-ND	.60	.47	.35	576602B00000
17	TO-220, Vertical Mount With Pre-Tinned Tabs, Black	1.00 x .50 x .95 (25.40 x 12.70 x 24.13)	16.6	HS208-ND*	2.35	2.12	1.65	576602T00000
18	TO-220, Power Cooler, 9.0W, Screw Mount, Gold	1.5 x 1.375 x 1.00 (38.1 x 34.93 x 25.4)	13.4	HS282-ND *NEW!*	1.21	1.09	.85	531002C00000
18	TO-220, Power Cooler, With Pins, Heavy Duty, Black	1.38 x .50 x 1.00 (35.05 x 12.70 x 25.40)	13.4	HS190-ND	1.20	1.08	.84	531002B02500
18	TO-220, Power Cooler, 9.0W, Black	1.38 x .5 x 1.5 (35.05 x 12.7 x 50.8)	10.4	HS284-ND *NEW!*	1.18	1.06	.83	531102B00000
18	TO-220, Power Cooler, With Pins, Heavy Duty, Black	1.38 x .50 x 1.50 (35.05 x 12.70 x 38.10)	10.4	HS191-ND	1.28	1.15	.90	531102B02500
18	TO-220, Power Cooler, With Pins, 2-Sided Mount, Black	1.38 x .50 x 1.50 (35.05 x 12.70 x 38.10)	11.0	HS184-ND	1.08	.97	.76	513102B02500
18	TO-220, Power Cooler, With Pins, 2-Sided Mount, Black	1.65 x 1.00 x 1.50 (41.91 x 25.40 x 38.10)	3.7	HS188-ND	1.55	1.40	1.09	529802B02500

***** Dielectric Coating Unless otherwise noted, all heat sinks are black anodized aluminum.

(Continued)

Fig. 18

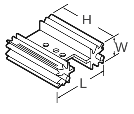


Fig. 19

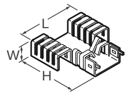


Fig. 20

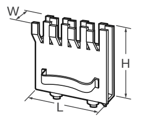


Fig. 21

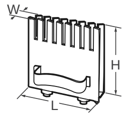


Fig. 22

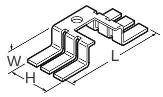


Fig. 23

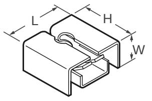


Fig. 24

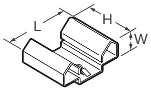


Fig. 25

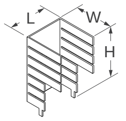


Fig. 26

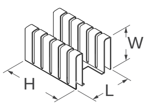


Fig. 27

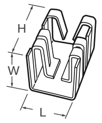
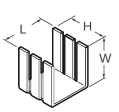


Fig. 28



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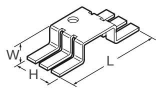


Fig. 30

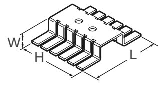


Fig. 31

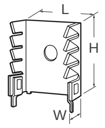


Fig. 32

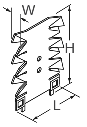


Fig. 33

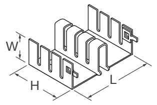


Fig. 34

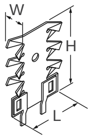


Fig. 35 *NEW!*

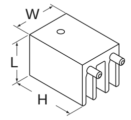


Fig. 36

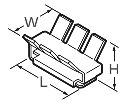


Fig. 37

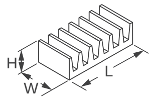


Fig. 38

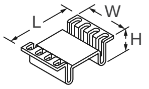


Fig.	Description	Dimensions – Inch (mm) L x W x H	Thermal Resist. °C/W	Digi-Key Part No.	Price Each 1	10	100	Mfg. Part No.
18	TO-220, Power Cooler, Black	1.38 x .50 x 1.00 (35.05 x 12.70 x 25.40)	13.4	HS231-ND	1.10	.99	.77	531002B00000
18	TO-220, Power Cooler, Screw Mount, Gold	1.38 x .50 x 1.50 (35.05 x 12.70 x 38.10)	10.4	HS131-ND	1.40	1.26	.98	531102C00000
18	TO-220, Power Cooler, With Pins, Gold	1.38 x .50 x 1.50 (35.05 x 12.70 x 38.10)	10.4	HS131-P-ND	1.68	1.51	1.18	531102C02500
18	TO-220, Power Cooler, Screw Mount, Gold	1.38 x .50 x 2.00 (35.05 x 12.70 x 50.80)	8.3	HS132-ND	1.43	1.29	1.00	531202C00000
18	TO-220, Power Cooler, With Pins, Gold	1.38 x .50 x 2.00 (35.05 x 12.70 x 50.80)	8.3	HS132-P-ND	1.70	1.53	1.19	531202C02500
18	TO-220, Power Cooler, 9.0W, Black	1.38 x .50 x 2.00 (35.05 x 12.7 x 50.8)	8.3	HS287-ND *NEW!*	1.33	1.20	.94	531202B00000
18	TO-220, Power Cooler, With Pins, Black	1.38 x .50 x 2.00 (35.05 x 12.70 x 50.80)	8.3	HS241-ND	1.39	1.25	.97	531202B02500
18	TO-220, Vertical Power, 10W, Screw Mount, Black	1.65 x 1.0 x 1.5 (41.91 x 25.4 x 38.1)	2.5	HS276-ND *NEW!*	1.38	1.25	.97	529802B00000
18	TO-220, Power Cooler, With Pins, Black	1.65 x 1.00 x 2.00 (41.91 x 25.40 x 50.80)	3.4	HS229-ND	1.83	1.65	1.28	529902B02500
18	TO-220, Power Cooler, With Pins, 9.0W, Black	1.38 x .50 x 2.5 (35.05 x 12.7 x 63.5)	8.0	HS290-ND *NEW!*	1.43	1.29	1.01	531302B02500
18	TO-220, Power Cooler, Screw Mount, Gold	1.38 x .50 x 2.50 (35.05 x 12.70 x 63.50)	8.0	HS133-ND	1.70	1.53	1.19	531302C00000
18	TO-220, Power Cooler, With Pins, Gold	1.38 x .50 x 2.50 (35.05 x 12.70 x 63.50)	8.0	HS133-P-ND	1.60	1.44	1.12	531302C02500
18	TO-220, Power Cooler, With Pins, Black	1.65 x 1.00 x 2.50 (41.91 x 25.40 x 63.50)	3.8	HS239-ND	1.75	1.58	1.23	530002B02500
20	TO-220, Staggered High Rise Fins, With Kool Clip, Black	1.75 x .50 x 1.75 (44.45 x 12.70 x 44.45)	16.8	HS151-ND	1.75	1.58	1.23	530402B00150
21	TO-220, Twisted High Rise Fins, With Kool Clip, Black	1.75 x .50 x 1.75 (44.45 x 12.70 x 44.45)	6.3	HS152-ND	1.75	1.58	1.23	530102B00150
21	TO-220, Dual Mount, With Kool Clip, Black	1.75 x .50 x 1.75 (44.45 x 12.70 x 44.45)	4.4	HS249-ND	1.96	1.77	1.37	530162B00162
22	TO-220, 2W Extended Cap For HS112 and HS114, Black	1.75 x .70 x .50 (17.78 x 44.45 x 12.70)	15.6	HS113-ND	.42	.30	.21	507102B00000
23	TO-220, Vertical Mount Clip-On Cooler, With 1 Mount Hole, Black	.75 x .86 x .395 (19.05 x 21.84 x 10.03)	23.2	HS111-ND	.39	.28	.20	574102B00000
23	TO-220, Vertical Mount Clip-On Cooler, Black	.86 x .395 x .75 (21.84 x 10.03 x 19.05)	21.2	HS198-ND	.39	.28	.20	574502B00000
23	TO-220, Horizontal Mount Clip-On, PC Mount, With Std. Tabs, Blk	.86 x .395 x .75 (21.84 x 10.03 x 19.05)	23.2	HS197-ND	.84	.66	.49	574402B03200
23	TO-220, Vertical Mount Clip-On, PC Mount, w/Long Tabs, Black	.86 x .395 x .75 (21.84 x 10.03 x 19.05)	21.2	HS200-ND	.53	.48	.37	574502B03300
23	TO-220, Vertical Mount Clip-On, PC Mount, w/Long Tabs, Black	.86 x .395 x 1.375 (21.84 x 10.03 x 34.93)	16.0	HS204-ND	.73	.66	.51	574902B03300
23	TO-220, Vertical Mount Clip-On, PC Mount, w/Stepped Tabs, Black	.86 x .395 x .75 (21.84 x 10.03 x 19.05)	21.2	HS201-ND	.57	.45	.34	574502B03700
23	TO-220, Vertical Mount Clip-On, PC Mount, w/Stepped Tabs, Black	.86 x .395 x .69 (21.84 x 10.03 x 17.53)	21.6	HS203-ND	.68	.61	.48	574602B03700
23	TO-220, Vertical Mount Clip-On, PC Mount, w/Standard Tabs, Black	.86 x .395 x 1.375 (21.84 x 10.03 x 34.93)	16.0	HS205-ND	1.00	.90	.70	574902B04300
24	TO-220, Snap Down, 5W, Black	.75 x 1.12 x .435 (19.05 x 28.45 x 11.05)	16.9	HS116-ND	.51	.40	.30	575102B00000
24	TO-220, Snap-Down With Built-In Clip, For Standard TO-220s, Black	.975 x .44 x .75 (24.77 x 11.18 x 19.05)	16.8	HS220-ND	.46	.33	.23	579302B00000
24	TO-220, Snap-Down With Built-In Clip, For Tapered TO-220s, Black	.975 x .44 x .75 (24.77 x 11.18 x 19.05)	16.8	HS221-ND	.53	.38	.27	579402B00000
25	TO-220, High Performance PC Mount, With Tabs, Black	1.00 x 1.00 x 1.675 (25.40 x 25.40 x 42.55)	10.0	HS222-ND	1.00	.90	.70	590102B03600
26	TO-220, SlimLine High Performance, Horizontal Mount, Black	1.00 x .787 x 1.45 (25.40 x 19.99 x 36.83)	12.4	HS193-ND	.65	.59	.46	551002B00000
27	TO-220, Slide-On, Horizontal PC Mount, With Tabs, Black	.50 x .50 x .75 (12.70 x 12.70 x 19.05)	18.8	HS150-ND	.55	.50	.39	576802B03100
27	TO-220, Slide-On, 5W, Black	.50 x .50 x .75 (12.70 x 12.70 x 19.05)	18.8	HS121-ND	.53	.38	.27	576802B00000
27	TO-220, Slide-On, 5W, Unfinished, Black	.57 x .50 x .60 (14.48 x 12.70 x 15.24)	26.8	HS237-ND	.63	.45	.32	591202U00000
27	TO-220, Slide-On, Vertical PC Mount, With Wide Tabs, Black	.50 x .50 x .75 (12.70 x 12.70 x 19.05)	18.8	HS209-ND	.58	.52	.41	576802B03700
27	TO-220, Slide-On, Vertical PC Mount, With Long Tabs, Black	.50 x .50 x .75 (12.70 x 12.70 x 19.05)	18.8	HS210-ND	.60	.47	.35	576802B03900
27	TO-220, Slide-On, Vertical PC Mount, With Standard Tabs, Black	.50 x .50 x .75 (12.70 x 12.70 x 19.05)	18.8	HS211-ND	.58	.52	.41	576802B04100
27	TO-220, Slide-On, Vertical PC Mount, With Surelock Tabs, Black	.57 x .50 x .75 (14.48 x 12.70 x 19.05)	26.8	HS223-ND	.73	.66	.51	591302B02800
27	TO-220, Slide-On, Vertical PC Mount, With Standard Tabs, Black	.75 x .50 x .50 (19.05 x 12.70 x 12.70)	18.8	HS122-ND	.53	.48	.37	576802B04000
27	TO-220, Slide-On, Vertical PC Mount, With SureLock Tabs, Black	.95 x 1.00 x 1.22 (24.13 x 25.40 x 30.99)	11.5	HS240-ND	1.48	1.34	1.04	566010B02800
28	TO-220, Economy Power Cooler, Lightweight , Black	1.00 x .50 x .71 (25.40 x 12.70 x 18.03)	20.3	HS189-ND	.42	.30	.21	530714B00000
28	TO-220, Power Cooler, 10W, Black	.78 x .85 x 1.45 (19.81 x 21.59 x 36.83)	6.4	HS104-2-ND	.57	.45	.34	504222B00000
28	TO-220, Power Cooler, 6W, Black	.70 x .70 x .85 (17.78 x 17.78 x 21.59)	15.6	HS104-1-ND	.46	.33	.23	504102B00000
29	TO-220, Basic Manual Attachment, Low Profile, Black	.70 x 1.75 x .375 (17.78 x 44.45 x 9.53)	15.6	HS112-ND	.39	.28	.20	507002B00000
30	TO-220, Dual Basic Manual Attachment, Horizontal Mount, Black	1.45 x 1.75 x .375 (36.83 x 44.45 x 9.53)	9.6	HS114-ND	.70	.50	.35	507222B00000
31	TO-220, Twisted Fin, Vertical PC Mount, Black	1.00 x .50 x 1.18 (25.40 x 12.70 x 29.97)	13.4	HS120-ND	.78	.70	.55	593002B03400
31	TO-220, Twisted Fin, With Surelock Tabs and Kool Clip, Black	1.00 x .50 x 1.18 (25.40 x 12.70 x 29.97)	13.0	HS232-ND	1.28	1.15	.90	534202B02853
31	TO-220, Twisted Fin, Vertical, With Tabs and Kool Clip, Black	1.00 x .50 x 1.18 (25.40 x 12.70 x 29.97)	13.0	HS233-ND	1.50	1.35	1.05	534202B33453
32	TO-220, Spacesaver, Vertical Mount, With Tabs, Black	1.38 x .50 x 2.00 (35.05 x 12.70 x 50.80)	10.0	HS225-ND	.90	.81	.63	593202B03500
32	TO-220, Spacesaver, Vertical Mount, With Kool Clip/Tabs, Black	1.38 x .48 x 2.00 (35.05 x 12.19 x 50.80)	10.4	HS192-ND	.95	.86	.67	534302B03553
33	TO-220, Dual Basic Manual Attachment, Vertical Mount, Black	1.48 x .50 x 1.03 (37.59 x 12.70 x 26.16)	13.2	HS219-ND	.70	.63	.49	578622B03200
34	TO-220, Spacesaver Vertical Mount, With Tabs, Black	.875 x .25 x 1.25 (22.23 x 6.35 x 31.75)	22.0	HS224-ND	.73	.66	.51	592502B03400
34	TO-220, Spacesaver Vert. Mnt, With Kool Clip-SureLock Tabs, Blk	1.38 x .50 x 2.00 (35.05 x 12.70 x 50.80)	8.8	HS238-ND	1.30	1.17	.91	594302B02853
35	TO-220, Vertical Mount, 1W, Black	.64 x .64 x 1.5 (16.26 x 16.26 x 50.8)	17.4	HS300-ND *NEW!*	1.36	1.23	.96	581002B00000
35	TO-220, Vertical Mount, 2.5W, With Pins, Black	.64 x .64 x 1.00 (16.26 x 16.26 x 25.4)	17.4	HS301-ND *NEW!*	1.38	1.25	.97	581002B02500
35	TO-220, Vertical Mount, 2.5W, With Pins, Gold	.64 x .64 x 1.00 (16.26 x 16.26 x 25.4)	17.4	HS302-ND *NEW!*	1.90	1.71	1.33	581002C02500
35	TO-220, Vertical Mount, 2.5W, Black	.64 x .64 x 1.5 (16.26 x 16.26 x 50.8)	16.8	HS303-ND *NEW!*	1.32	1.19	.93	581102B00000
35	TO-220, Vertical Mount, 2.5W, With Pins, Black	.64 x .64 x 1.5 (16.26 x 16.26 x 50.8)	16.8	HS304-ND *NEW!*	1.43	1.29	1.01	581102B02500
35	TO-220, Vertical Mount, 2.5W, With Pins, Black	.64 x .64 x 2.00 (16.26 x 16.26 x 50.8)	12.8	HS305-ND *NEW!*	1.92	1.73	1.35	581202B02500
36	Dip Cooler, 14 or 16 Pin IC, Slide-On, Black	.887 x .60 x .41 (22.53 x 15.24 x 10.41)	38.0	HS179-ND	.45	.36	.27	580200B00000
36	Dip Cooler, 24 Pin IC, Slide-On, Black	1.46 x 1.008 x .58 (37.08 x 25.60 x 14.73)	20.0	HS182-ND	.70	.63	.49	580500B00000
36	Dip Cooler, 40 Pin IC, Slide-On, Black	2.256 x .98 x .59 (57.30 x 24.89 x 14.99)	22.0	HS183-ND	.75	.68	.53	580700B00000
37	Dip Cooler, 14-16 Pin, Glue-On, Black	.73 x .25 x .19 (18.54 x 6.35 x 4.83)	62.5	HS227-ND	.65	.59	.46	501200B00000
37	Dip Cooler, 24 Pin IC, Glue-On, Black	1.25 x .53 x .19 (31.75 x 13.47 x 4.83)	44.0	HS273-ND *NEW!*	.73	.66	.52	508500B00000
37	Dip Cooler, 40 Pin IC, Glue-On, Black	2.0 x .53 x .19 (50.8 x 13.47 x 4.83)	28.0	HS274-ND *NEW!*	1.37	1.23	.96	508700B00000

***** Dielectric Coating   Unless otherwise noted, all heat sinks are black anodized aluminum.

Fig.	Description	Dimensions – Inch (mm) L x W x H	Digi-Key Part No.	Cut Tape Price Each 1	10	Tape & Reel Pricing† 250	500	Mfg. Part No.
38	SMT D2 Pak Heat Sink, Autoinsertable, Pretinned	1.03x.50x.40 (26.16x12.70x10.16)	HS123CT-ND	.65	.59	107.25	195.00	573300D00010
38	SMT D3 Pak Heat Sink, Autoinsertable, Pretinned	1.22x.50x.40 (30.99x12.70x10.16)	HS124CT-ND	.70	.63	111.38	202.50	573400D00010

† For Tape and Reel Part Number, change the CT to TR.

IERC
A CTS COMPANY

Heat Sinks

International Electronic Research Corporation has helped pioneer the development of semiconductor heat sinks since 1954. Primarily used by all levels of OEM's engaged in the manufacture of commercial and military equipment, IERC maintains stock and support from prototype through production. IERC has prided themselves for their flexible manufacturing, quality products and on-time delivery.

Clip-On versions have a built-in clip for attaching device to heat sink without additional hardware, positive locks prevent the semiconductor from sliding out. TO-220 versions will also fit TO-202, TO-218 and TO-126 pkgs.

Wattage values listed are at still air conduction only. Moving air will increase this value.

Fig. 1

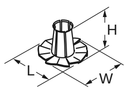


Fig. 2 *NEW!*

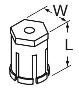


Fig. 3 *NEW!*

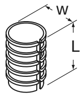


Fig. 4 *NEW!*

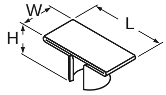


Fig. 5 *NEW!*

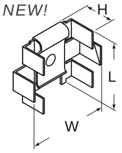


Fig. 6

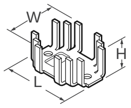


Fig. 7 *NEW!*

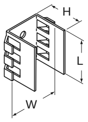


Fig. 8

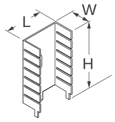


Fig. 9

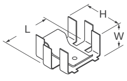


Fig. 10

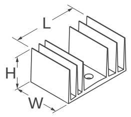


Fig. 11

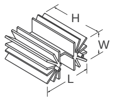


Fig. 12

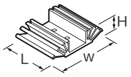


Fig. 13

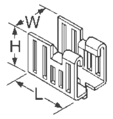


Fig. 14

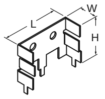


Fig. 15

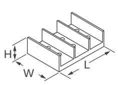


Fig. 16

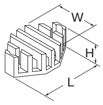


Fig. 17

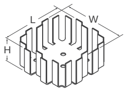


Fig. 18

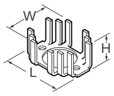


Fig. 19

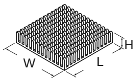


Fig.	Description	Dimensions - Inch (mm) L x W x H	Thermal Res. C/Watt	Digi-Key Part No.	Price Each 1	10	100	IERC Part No.
1	TO-5, Single Fan Top, Black, .5W	.750 x .750 x .250 (19.05 x 19.05 x 6.35)	81.1	294-1122-ND *NEW!*	2.35	2.12	1.65	TXBF-032-025B
1	TO-18, Single Fan Top, .5W	.500 x .500 x .250 (12.70 x 12.70 x 6.35)	150	294-1004-ND	.65	.59	.46	TXBF-019-025B
2	TO-5, Press-On Mount, w/Hardware, Black, 1W	.380 x .380 x .310 (9.65 x 9.65 x 7.87)	73.17	294-1120-ND *NEW!*	9.82	8.84	6.88	TXB2P-032-037B
2	TO-5, Press-On Mount, Black, 1W	.380 x .380 x .310 (9.65 x 9.65 x 7.87)	73.17	294-1121-ND *NEW!*	1.86	1.67	1.30	TXBE-032-031B
2	TO-8, Press-On Mount, w/out Hardware, Black, 1W	.380 x .380 x .310 (9.65 x 9.65 x 7.87)	73.17	294-1118-ND *NEW!*	9.29	8.37	6.51	TXB2-032-037B
2	TO-18, Press-On Mount, w/Hardware Black, 5W	.220 x .220 x .340 (5.59 x 5.59 x 8.64)	150.26	294-1123-ND *NEW!*	20.13	18.12	14.10	TXP1808B
2	TO-18, Press-On Mount, w/Hardware, Black, .6W	.220 x .220 x .280 (5.59 x 5.59 x 7.11)	150.26	294-1119-ND *NEW!*	9.49	8.54	6.65	TXB2P-019-028B
3	TO-5, Press-On Mount, Black, 2W	.440 x .440 x .500 (11.18 x 11.18 x 12.70)	35	294-1105-ND *NEW!*	1.07	.96	.75	7-120-BA
4	TO-5, Press-On Mount, Black, 1W	.700 x .325 x .250 (17.78 x 8.26 x 6.35)	58	294-1106-ND *NEW!*	.86	.77	.60	7-175-BA
5	TO-220, Vertical/Horizontal Clip-on Mount, Black, 1.5W	.810 x 1.00 x .310 (20.57 x 25.40 x 7.87)	140.5	294-1115-ND *NEW!*	.70	.63	.49	PSC2-2CB
6	TO-220, Power Horizontal Mount, Black 2W	1.63 x 1.29 x .750 (41.40 x 32.77 x 19.05)	13.6	294-1113-ND *NEW!*	1.66	1.49	1.16	LAT0127B3CB
6	TO-220, Power Horizontal Mount, 8W	1.31 x .90 x .750 (33.27 x 22.86 x 19.05)	17	294-1036-ND	.88	.79	.62	LAE66A3CB
7	TO-220, Horizontal/Vertical Mount w/Tabs, Black, 2.5W	.710 x .800 x .500 (18.03 x 20.32 x 12.70)	30	294-1107-ND *NEW!*	.66	.60	.47	7-361-BA
7	TO-220, Horizontal/Vertical Mount w/Tabs, Black, 2W	.710 x .800 x .340 (18.03 x 20.32 x 8.64)	38	294-1108-ND *NEW!*	.66	.60	.47	7-362-BA
8	TO-220, Vertical Mount, 3W	.750 x .375 x .750 (19.05 x 9.52 x 19.05)	25	294-1011-ND	.60	.43	.30	7-195-2-BA
8	TO-220, Horizontal Mount, 3W (No Mounting Hole)	1.09 x .620 x 1.31 (27.69 x 15.75 x 33.27)	30	294-1013-ND	.66	.52	.39	7-300-000-BA
8	TO-220, Vertical/Horizontal Mount w/Tabs, Nickel, 3W	1.25 x .880 x .250 (31.75 x 22.35 x 6.35)	25.4	294-1114-ND *NEW!*	2.72	2.45	1.91	PSB2-1ND
8	TO-220, Vertical PC Mount w/Tabs, 5W	1.00 x .500 x 1.18 (25.40 x 12.70 x 29.97)	20	294-1042-ND	.60	.54	.42	PB1-36CB
8	TO-220, Vertical PC Mount w/Board Locks	1.00 x .500 x 1.18 (25.40 x 12.70 x 29.97)	28	294-1043-ND	1.00	.90	.70	PB1ST-69CB
8	TO-220, Vertical PC Mount w/Tabs, 6W	.880 x .250 x 1.25 (22.35 x 6.35 x 31.75)	25.4	294-1045-ND	.63	.50	.37	PSB2-1CB
9	TO-220, High Efficiency, 3W	.710 x .310 x 1.00 (18.03 x 7.87 x 25.40)	30	294-1040-ND	.54	.43	.32	PA2-1CB
9	TO-220, High Efficiency, 4W	.710 x .500 x 1.00 (18.03 x 12.70 x 25.40)	26.8	294-1039-ND	.54	.43	.32	PA1-1CB
9	TO-220, Low Profile Clip-On, w/ Antirotation, Black	.810 x .310 x 1.00 (20.57 x 7.87 x 25.40)	40.5	294-1049-ND	.35	.25	.18	PSC2T-2CB
10	TO-220, Power Vertical Mount, 7W	1.15 x .460 x .750 (29.21 x 11.68 x 19.05)	14	294-1034-ND	.80	.72	.56	7-340-1PP-BA
10	TO-220, Power Horizontal Mount, 7W	1.15 x .460 x .750 (29.21 x 11.68 x 19.05)	14	294-1035-ND	.80	.72	.56	7-340-3PP-BA
10	Dual TO-220, Universal Mount, 9W	1.50 x 1.15 x .460 (38.10 x 29.21 x 11.68)	7	294-1080-ND	.93	.84	.65	7-340-2PP-BA
11	TO-220, Power Vertical Mount w/Pins, 11W	1.38 x .500 x 1.50 (35.05 x 6.35 x 38.10)	13	294-1024-ND	4.35	3.92	3.05	7-338-1PP-BA
11	TO-220, Power Vertical Mount w/Pins, 11W	1.65 x 1.00 x 1.50 (41.91 x 25.40 x 38.10)	11	294-1029-ND	1.70	1.53	1.19	7-339-1PP-BA
11	TO-220, Power Vertical Mount w/Pins, 15W	2.00 x 1.65 x 1.00 (50.80 x 41.91 x 25.40)	5	294-1031-ND	1.90	1.71	1.33	7-339-3PP-BA
11	TO-220, Power Vertical Mount w/Pins, 17W	1.38 x .500 x 2.50 (35.05 x 6.35 x 63.50)	4	294-1027-ND	1.93	1.74	1.35	7-338-4PP-BA
11	TO-220, Power Vertical Mount w/Pins, 17W	2.50 x 1.65 x 1.00 (63.50 x 41.91 x 25.40)	4	294-1032-ND	2.13	1.92	1.49	7-339-4PP-BA
12	TO-220, Power Horizontal/Vertical Mount, 12W	.750 x 2.00 x .553 (19.05 x 50.80 x 14.05)	9	294-1067-ND	.93	.84	.65	7-345-1PP-BA
12	TO-220, Power Horizontal Mount, 12W	.750 x 2.00 x .553 (19.05 x 50.80 x 14.05)	9	294-1068-ND	1.15	1.04	.81	7-345-3PP-BA
12	Dual TO-220, Power Universal Mount, 15W	1.50 x 2.25 x .500 (38.10 x 57.15 x 12.70)	4	294-1082-ND	1.33	1.20	.93	7-345-2PP-BA
13	TO-220, Clip-On, Horizontal (Stamped Copper), Tin Finish	.750 x .520 x .510 (19.05 x 13.21 x 12.95)	35	294-1053-ND	.58	.52	.41	S702
14	Dual TO-220, Vertical w/Tabs, Black, 4W	1.50 x 1.18 x .500 (38.10 x 29.97 x 12.70)	15	294-1117-ND *NEW!*	.83	.75	.59	PSE1-2CB
15	Triple TO-220, Vertical Mount, 7W	1.61 x .750 x .690 (40.89 x 19.05 x 17.53)	9	294-1085-ND	1.50	1.35	1.05	7-342-1PP-BA
15	Six TO-220, Horizontal Mount, 15W	1.61 x 1.50 x .690 (40.89 x 38.10 x 17.53)	4	294-1086-ND	2.10	1.89	1.47	7-342-2PP-BA
16	TO-3, Power Cap, Spacesaver, 2W	1.56 x 1.06 x .500 (39.62 x 26.92 x 12.70)	32	294-1095-ND	2.90	2.61	2.03	7-423-BA
17	TO-3, Power Horizontal Mount, Black, 8W	1.78 x 1.78 x 1.00 (45.21 x 45.21 x 25.40)	7.1	294-1124-ND *NEW!*	2.21	2.00	1.55	UP-TO3-CB
17	TO-3, Power Horizontal Mount, 15W	2.50 x 2.50 x .900 (63.50 x 63.50 x 22.86)	5.4	294-1088-ND	2.93	2.64	2.05	HP1-TO3-CB
18	TO-3, Power Horizontal Mount, 12W	1.63 x 1.29 x 1.25 (41.40 x 32.77 x 31.75)	11.1	294-1092-ND	1.35	1.22	.95	LA363B5CB
19	Various Semiconductor, Adhesive Backed	.910 x .910 x .355 (23.11 x 23.11 x 9.02)	26.9	294-1097-ND	2.53	2.28	1.77	BDN09-3CB/A01
19	Various Semiconductor, Adhesive Backed	1.01 x 1.01 x .355 (25.65 x 25.65 x 9.02)	26.4	294-1098-ND	2.85	2.57	2.00	BDN10-3CB/A01
19	Various Semiconductor, Adhesive Backed	1.11 x 1.11 x .355 (28.19 x 28.19 x 9.02)	20.9	294-1109-ND *NEW!*	4.32	3.89	3.03	BDN11-3CB/A01
19	Various Semiconductor, Adhesive Backed	1.21 x 1.21 x .355 (30.73 x 30.73 x 9.02)	19.6	294-1099-ND	3.00	2.70	2.10	BDN12-3CB/A01
19	Various Semiconductor, Adhesive Backed	1.21 x 1.21 x .555 (30.73 x 30.73 x 14.10)	16.5	294-1110-ND *NEW!*	4.85	4.37	3.40	BDN12-5CB/A01
19	Various Semiconductor, Adhesive Backed	1.31 x 1.31 x .355 (33.27 x 33.27 x 9.02)	16.1	294-1100-ND	3.13	2.82	2.19	BDN13-3CB/A01
19	Various Semiconductor, Adhesive Backed	1.41 x 1.41 x .355 (35.81 x 35.81 x 9.02)	16.2	294-1101-ND	3.23	2.91	2.26	BDN14-3CB/A01
19	Various Semiconductor, Adhesive Backed	1.51 x 1.51 x .355 (38.35 x 38.35 x 9.02)	15.1	294-1102-ND	3.15	2.84	2.21	BDN15-3CB/A01
19	Various Semiconductor, Adhesive Backed	1.61 x 1.61 x .355 (40.89 x 40.89 x 9.02)	13.5	294-1103-ND	3.23	2.91	2.26	BDN16-3CB/A01
19	Various Semiconductor, Adhesive Backed	1.71 x 1.71 x .355 (43.43 x 43.43 x 9.02)	11.5	294-1111-ND *NEW!*	6.29	5.66	4.41	BDN17-3CB/A01
19	Various Semiconductor, Adhesive Backed	1.81 x 1.81 x .355 (45.97 x 45.97 x 9.02)	10.8	294-1104-ND	4.05	3.65	2.84	BDN18-3CB/A01
19	Various Semiconductor, Adhesive Backed	1.81 x 1.81 x .605 (45.97 x 45.97 x 15.37)	8.1	294-1112-ND *NEW!*	6.76	6.09	4.74	BDN18-6CB/A01

THE BERGQUIST COMPANY

Heat Sink Pads “The Alternative To Grease”

Sil-Pad 600® is a thermally conductive, silicone elastomer filled with special ingredients to provide higher thermal properties than the original fiberglass based Sil-Pad This material has excellent physical and mechanical characteristics while remaining cost competitive. (Electrically Insulating Material)

Sil-Pad 900-S® family of thermally conductive insulation materials are designed for low cost applications requiring high thermal performance. Intended as an improved Sil Pad 600 alternative.

Q-Pad 3® is a thermally conductive, fiberglass reinforced graphite imbedded elastomer which conforms to surface textures extremely well. This material eliminates problems associated with thermal grease such as contamination of electronic assemblies and reflow solder baths. Q-Pad 3 may be installed prior to soldering and cleaning. (Electrically Conducting Material)

Sil-Pad K10® is a thermally conductive Kapton composite film coated with boron nitride filled polyester resin. Offering the highest thermal properties of the Kapton insulators with minimum thickness and lower thermal resistance. Designed to replace brittle ceramic insulators. (Electrically Insulating Material)

NEW! **Sil-Pad KA-10™** is the highest performance insulator that utilizes Bergquist's dielectric material T- Film™

CPU Pad® is a thermally conductive, electrically insulating, Kapton double coated tape. Typically used between the CPU and heat sink, it was designed to be used in place of clips used to attach heat sink to CPU. No clamping times or high pressure is required.

SPT 400 is a thermally conductive insulation for clip mounted plastic power devices. These TO-220 thermal tubes slip over the semiconductor device and conduct the heat to the heat sink and clip. Designed to be used on heat sinks with metal clips to attach device to heat sink. (Electrically Insulating Material)

HI-FLOW™ 115-AC is a thermally conductive fiber reinforced phase change material. The product consists of a thermally conductive 65° C phase change compound coated on a fiberglass web, with an adhesive coating on one side for attachment to a cold heat sink. Handles like a Sil-Pad, at room temperature and flows like high quality grease at elevated temperature.

Bond Ply™ 100 is a thermally conductive, double-sided pressure sensitive adhesive tape. The tape consists of a high performance, thermally conductive acrylic adhesive coated with a fiberglass reinforced interweave. Bond Ply 100 is designed to attain high bond strength to a variety of surfaces, and to maintain high bond strength with long term exposure to moderate heat and high humidity. Typical Applications: • Mounting a heat sink to a BGA graphic processor • Mounting a heat sink to a computer processor • Mounting a heat sink to a drive processor • Mounting a heat spreader to a power converter PCB • Mounting a heat spreader to a motor control PCB.

Gap Pad™ 1500 is designed to cost-effectively maximize heat transfer from electronic components to heat sinks or heat spreaders. GP 1500 is a highly comformable low-modulus material that fills air gaps due to steps, rough surfaces, and high stack-up tolerances. The softness relieves stress and absorbs shocks minimizing damage to delicate leads. GP 1500 is an electrically isolating material that allows its use in applications requiring isolation between heat sinks and high voltage, bare leaded devices.

Fig. 1

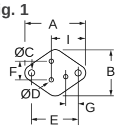


Fig. 2

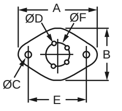


Fig. 3

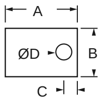


Fig. 4

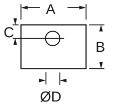


Fig. 5

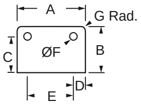


Fig. 6

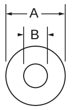


Fig. 7

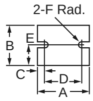


Fig. 8

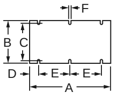


Fig. 9

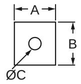


Fig. 10

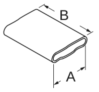


Fig.	Device Type	Dimensions – Inch (mm)							Digi-Key Part No.	Price Each				Bergquist Part No.
		A	B	C	D	E	F	G		1	10	50	100	
1	TO-3	1.65 (41.91)	1.14 (28.96)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	.072 (1.83)	BER100-ND	1.09	.98	.88	.78	SP600-05
	TO-3	1.65 (41.91)	1.14 (28.96)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	.072 (1.83)	BER172-ND	1.09	.98	.88	.78	SP900S-05
	TO-3	1.78 (45.21)	1.25 (31.75)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	.072 (1.83)	BER101-ND	1.17	1.05	.94	.84	SP600-02
	TO-3	1.78 (45.21)	1.25 (31.75)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	.072 (1.83)	BER171-ND	1.06	.95	.85	.75	SP900S-02
	TO-3	1.65 (41.91)	1.14 (28.96)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	.072 (1.83)	BER111-ND	2.32	2.08	1.86	1.65	K10-05
	TO-3	1.65 (41.91)	1.14 (28.96)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	.072 (1.83)	BER184-ND *NEW!*	1.47	1.31	1.18	1.04	KA10-05
	TO-3	1.78 (45.21)	1.25 (31.75)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	.072 (1.83)	BER112-ND	2.60	2.33	2.09	1.85	K10-02
	TO-3	1.78 (45.21)	1.25 (31.75)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	.072 (1.83)	BER185-ND *NEW!*	1.69	1.51	1.36	1.20	KA10-02
	TO-3	1.65 (41.91)	1.14 (28.96)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	.072 (1.83)	BER122-ND	.71	.63	.57	.50	Q3-05
	TO-3	1.250 (31.75)	.700 (17.78)	.140 (3.56)	.062 (1.57)	.960 (24.38)	.200 (5.08)	.100 (2.54)	BER152-ND	1.03	.93	.83	.74	K10-30
	TO-3	1.250 (31.75)	.700 (17.78)	.140 (3.56)	.062 (1.57)	.960 (24.38)	.200 (5.08)	.100 (2.54)	BER197-ND *NEW!*	1.26	1.13	1.01	.90	KA10-30
2	TO-3 (4PIN)	1.56 (39.62)	1.05 (26.67)	.156 (39.62)	.080 (2.03)	1.170 (29.72)	.470 (11.94)	—	BER139-ND	.72	.65	.58	.51	SP600-86
	TO-3 (4PIN)	1.56 (39.62)	1.05 (26.67)	.156 (39.62)	.080 (2.03)	1.170 (29.72)	.470 (11.94)	—	BER140-ND	1.49	1.33	1.19	1.06	K10-86
	TO-3 (4PIN)	1.56 (39.62)	1.05 (26.67)	.156 (39.62)	.080 (2.03)	1.170 (29.72)	.470 (11.94)	—	BER194-ND *NEW!*	1.31	1.17	1.05	.93	KA10-86
	TO-3 (4PIN)	1.56 (39.62)	1.05 (26.67)	.156 (39.62)	.080 (2.03)	1.170 (29.72)	.470 (11.94)	—	BER141-ND	.49	.45	.40	.35	Q3-86
3	TO-247AC	1.00 (25.40)	.750 (19.05)	.300 (7.62)	.140 (3.56)	—	—	—	BER109-ND	.82	.74	.66	.59	SP600-104
	TO-247AC	1.00 (25.40)	.750 (19.05)	.300 (7.62)	.140 (3.56)	—	—	—	BER178-ND	.82	.74	.66	.59	SP900S-104
	TO-247AC	1.00 (25.40)	.750 (19.05)	.300 (7.62)	.140 (3.56)	—	—	—	BER120-ND	1.36	1.22	1.09	.97	K10-104
	TO-247AC	1.00 (25.40)	.750 (19.05)	.300 (7.62)	.140 (3.56)	—	—	—	BER192-ND *NEW!*	.71	.64	.57	.51	KA10-104
	TO-247AC	1.00 (25.40)	.750 (19.05)	.300 (7.62)	.140 (3.56)	—	—	—	BER131-ND	.63	.56	.51	.45	Q3-104
3	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.125 (3.18)	—	—	—	BER102-ND	.73	.66	.59	.52	SP600-58
	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.125 (3.18)	—	—	—	BER176-ND	.73	.66	.59	.52	SP900S-58
	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.147 (3.73)	—	—	—	BER103-ND	.73	.66	.59	.52	SP600-54
	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.147 (3.73)	—	—	—	BER175-ND	.73	.66	.59	.52	SP900S-54
	TO-220	.750 (19.05)	.500 (12.70)	—	—	—	—	—	BER110-ND	.73	.66	.59	.52	SP600-43
	TO-220	.750 (19.05)	.500 (12.70)	—	—	—	—	—	BER174-ND	.73	.66	.59	.52	SP900S-43
	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.125 (3.18)	—	—	—	BER113-ND	1.02	.92	.82	.73	K10-58
	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.125 (3.18)	—	—	—	BER186-ND *NEW!*	.45	.40	.36	.32	KA10-58
	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.147 (3.73)	—	—	—	BER114-ND	1.02	.92	.82	.73	K10-54
	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.147 (3.73)	—	—	—	BER187-ND *NEW!*	.45	.40	.36	.32	KA10-54
	TO-220	.750 (19.05)	.500 (12.70)	—	—	—	—	—	BER121-ND	1.02	.92	.82	.73	K10-43
	TO-220	.750 (19.05)	.500 (12.70)	—	—	—	—	—	BER193-ND *NEW!*	.66	.59	.53	.47	KA10-43
	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.125 (3.18)	—	—	—	BER124-ND	.60	.54	.49	.43	Q3-58
	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.147 (3.73)	—	—	—	BER125-ND	.60	.54	.49	.43	Q3-54
	TO-220	.750 (19.05)	.500 (12.70)	—	—	—	—	—	BER132-ND	.60	.54	.49	.43	Q3-43
	TO-220	.687 (17.45)	.562 (14.27)	.218 (5.54)	.125 (3.18)	—	—	—	BER146-ND	.72	.65	.58	.52	K10-51
	TO-220	.687 (17.45)	.562 (14.27)	.218 (5.54)	.125 (3.18)	—	—	—	BER196-ND *NEW!*	.46	.41	.37	.33	KA10-51
	TO-220	.687 (17.45)	.562 (14.27)	.218 (5.54)	.125 (3.18)	—	—	—	BER147-ND	.43	.39	.35	.31	Q3-51
3	TO-218	.860 (21.84)	.740 (18.80)	.200 (5.08)	.160 (4.06)	—	—	—	BER108-ND	.80	.72	.64	.57	SP600-90
	TO-218	.860 (21.84)	.740 (18.80)	.200 (5.08)	.160 (4.06)	—	—	—	BER177-ND	.80	.72	.64	.57	SP900S-90
	TO-218	.860 (21.84)	.740 (18.80)	.200 (5.08)	.160 (4.06)	—	—	—	BER119-ND	1.26	1.13	1.01	.90	K10-90
	TO-218	.860 (21.84)	.740 (18.80)	.200 (5.08)	.160 (4.06)	—	—	—	BER191-ND *NEW!*	.63	.57	.51	.45	KA10-90
	TO-218	.860 (21.84)	.740 (18.80)	.200 (5.08)	.160 (4.06)	—	—	—	BER130-ND	.62	.56	.50	.44	Q3-90
4	MULTI	.945 (24.00)	.827 (21.01)	.196 (4.98)	.150 (3.81)	—	—	—	BER107-ND	.83	.75	.67	.59	SP600-114
	MULTI	.945 (24.00)	.827 (21.01)	.196 (4.98)	.150 (3.81)	—	—	—	BER180-ND	.83	.75	.67	.59	SP900S-114
	MULTI	.945 (24.00)	.827 (21.01)	.196 (4.98)	.150 (3.81)	—	—	—	BER118-ND	1.38	1.24	1.11	.98	K10-114
	MULTI	.945 (24.00)	.827 (21.01)	.196 (4.98)	.150 (3.81)	—	—	—	BER190-ND *NEW!*	.73	.66	.59	.52	KA10-114
5	SIP	1.450 (36.83)	.838 (21.29)	.612 (15.54)	.245 (6.22)	.960 (24.38)	.170 (4.32)	.120 (3.05)	BER106-ND	.94	.84	.75	.67	SP600-105
	SIP	1.450 (36.83)	.838 (21.29)	.612 (15.54)	.245 (6.22)	.960 (24.38)	.170 (4.32)	.120 (3.05)	BER179-ND	.94	.84	.75	.67	SP900S-105
	SIP	1.450 (36.83)	.838 (21.29)	.612 (15.54)	.245 (6.22)	.960 (24.38)	.170 (4.32)	.120 (3.05)	BER117-ND	1.76	1.58	1.42	1.25	K10-105
	SIP	1.450 (36.83)	.838 (21.29)	.612 (15.54)	.245 (6.22)	.960 (24.38)	.170 (4.32)	.120 (3.05)	BER189-ND *NEW!*	1.03	.92	.83	.73	KA10-105
6	DO-5	1.00 (25.40)	.260 (6.60)	—	—	—	—	—	BER105-ND	.88	.79	.71	.63	SP600-25
	DO-5	1.00 (25.40)	.260 (6.60)	—	—	—	—	—	BER173-ND	.88	.79	.71	.63	SP900S-25
	DO-5	1.00 (25.40)	.260 (6.60)	—	—	—	—	—	BER116-ND	1.57	1.41	1.26	1.12	K10-25
	DO-5	1.00 (25.40)	.260 (6.60)	—	—	—	—	—	BER188-ND *NEW!*	.88	.79	.71	.63	KA10-25
7	SIP Module	1.50 (38.10)	.900 (22.86)	.150 (3.81)	1.20 (30.48)	.450 (11.43)	.075 (1.91)	—	BER136-ND	.48	.43	.39	.34	Q3-67
	SIP Module	2.50 (63.50)	2.00 (50.80)	.344 (8.74)	1.81 (46.02)	1.00 (25.40)	.156 (3.96)	—	BER137-ND	.65	.58	.52	.46	Q3-101
8	DC-DC Conv	4.60 (116.84)	2.40 (60.96)	2.15 (54.61)	.500 (12.70)	1.80 (45.72)	.125 (3.18)	—	BER138-ND	1.43	1.28	1.15	1.01	Q3AC-108
9	CPU	.63 (16.00)	.63 (16.00)	—	—	—	—	—	BER133-ND	.52	.47	.42	.38	CPU .63X.63
	CPU	1.75 (44.45)	1.75 (44.45)	—	—	—	—	—	BER134-ND	1.29	1.15	1.03	.92	CPU 1.75X1.75
	CPU	1.375 (34.93)	1.375 (34.93)	—	—	—	—	—	BER135-ND	.86	.78	.70	.62	CPU 1.375X1.375
9	Bridge Rect.	1.00 (25.40)	1.00 (25.40)	.187 (4.75)	—	—	—	—	BER142-ND	.46	.42	.37	.33	Q3-48
	Bridge Rect.	1.25 (31.75)	1.25 (31.75)	.200 (5.08)	—	—	—	—	BER144-ND	.49	.44	.39	.35	Q3-46
	Bridge Rect.	1.25 (31.75)	1.25 (31.75)	.200 (5.08)	—	—	—	—	BER145-ND	1.44	1.29	1.15	1.02	K10-46
	Bridge Rect.	1.25 (31.75)	1.25 (31.75)	.200 (5.08)	—	—	—	—	BER195-ND *NEW!*	1.25	1.12	1.01	.89	KA10-46
10	TO-220 Tubes	.433 (11.00)	.985 (25.02)	—	—	—	—	—	BER156-ND	.73	.66	.59	.52	SPT400 -12-11-25
	TO-247 Tubes	.532 (13.50)	.985 (25.02)	—	—	—	—	—	BER157-ND	.89	.80	.72	.64	SPT400-12- 13.5-25
Single Side Adhesive Backed Pads (Phase Change)														
1	TO-3	1.65 (41.91)	1.14 (28.96)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	.072 (1.83)	BER166-ND	.28	.25	.23	.20	HF115TAAC-05
2	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.147 (3.73)	—	—	—	BER167-ND	.10	.09	.08	.07	HF115TAAC-54
2	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.125 (3.18)	—	—	—	BER168-ND	.10	.09	.08	.07	HF115TAAC-58
3	TO-218	.860 (21.84)	.740 (18.80)	.200 (5.08)	.160 (4.06)	—	—	—	BER169-ND	.12	.10	.09	.08	HF115TAAC-90
5	SIP	1.450 (36.83)	.830 (21.08)	.612 (15.54)	.245 (6.22)	.960 (24.38)	.170 (4.32)	.120 (3.05)	BER170-ND	.14	.13	.11	.10	HF115TAAC-105
Single Side Adhesive Backed Pads (Low Mounting Pressure)														
1	TO-3	1.65 (41.91)	1.14 (28.96)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	.072 (1.83)	BER181-ND	1.14	1.03	.92	.81	SP900EAAC-05
2	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.147 (3.73)	—	—	—	BER182-ND	.74	.67	.60	.53	SP900EAAC-54
2	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.125 (3.18)	—	—	—	BER183-ND	.74	.67	.60	.53	SP900EAAC-58
Bond Ply Double SIded Thermal Tape														
Double Sided Adhesive Thermal Pad, .005” (.127) Thick, 10” (25.4cm) Square Sheet									BER158-ND	41.44	36.98	33.15	29.33	BOND PLY 105 10x10”
Double Sided Adhesive Thermal Pad, .008” (.203) Thick, 10” (25.4cm) Square Sheet									BER159-ND	50.99	45.51	40.80	36.09	BOND PLY 108 10x10”
Double Sided Adhesive Thermal Pad, .011” (.279) Thick, 10” (25.4cm) Square Sheet									BER160-ND	63.77	56.90	51.02	45.13	BOND PLY 111 10x10”
Gap Pad Thermal Gap Filling Material														
High Thermally Conductive Pad, .020” (.508) Thick, 4” (10.16cm) Square Sheet									BER161-ND	9.98	8.91	7.99	7.07	GAPPAD1500-20MIL4X4
High Thermally Conductive Pad, .040” (1.02) Thick, 4” (10.16cm) Square Sheet									BER162-ND	14.33	12.79	11.47	10.15	GAPPAD1500-40MIL4X4
High Thermally Conductive Pad, .060” (1.52) Thick, 4” (10.16cm) Square Sheet									BER163-ND	16.45	14.68	13.16	11.64	GAPPAD1500-60MIL4X4
High Thermally Conductive Pad, .080” (2.03) Thick, 4” (10.16cm) Square Sheet									BER164-ND	19.44	17.35	15.55	13.76	GAPPAD1500-80MIL4X4
High Thermally Conductive Pad, .125” (3.18) Thick, 4” (10.16cm) Square Sheet									BER165-ND	26.39	23.55	21.12	18.68	GAPPAD1500-125MIL4X4

PCMCIA IC Memory Card Connectors

HIROSE ELECTRIC CO.,LTD.

Fig. 1

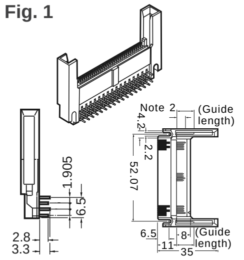


Fig. 2

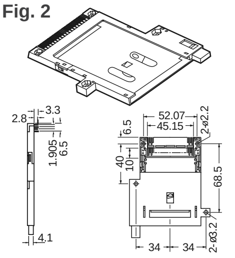


Fig. 3

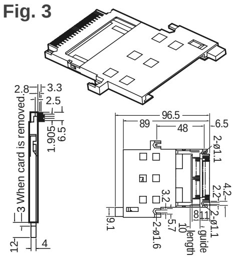


Fig. 4

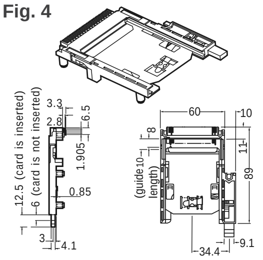
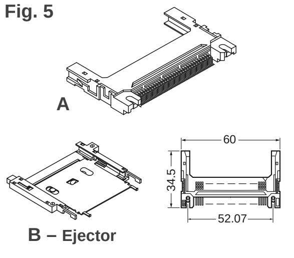


Fig. 5



- Leading features of PCMCIA standard of mis-insertion prevention mechanism and sequencing mechanism for circuit protection, are incorporated
- Receptacle is of surface mount type
- Pushbutton switch of ejecting section has an inner spring which makes the pushbutton free from vibration.

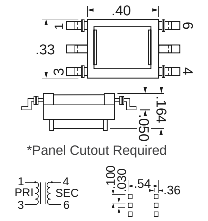
Material: Insulator: Black. **Contact:** Selective gold plating. **Ejector:** SUS. **Electrical Specifications: Current Rating:** 0.5A per pin. **Rated Voltage:** 125V AC. **Withstanding Voltage:** 500V AC for one minute at specified value. **Insulation Resistance:** Min. 1000MΩ at 500V DC. **Contact Resistance:** Max. 40mΩ at 1mA DC.

Fig.	No. of Pins	Type	Description	Digi-Key Part No.	Pricing 1	Pricing 10	Hirose Part No.
1	68	I, II	Memory Card Connector	HR801-ND	5.47	47.76	IC1FA-68PD-1.27DS
2	68	I, II	Memory Card Connector w/ Ejecting Mechanism	HR802-ND	10.78	94.29	IC1G-68PD-1.27DS-EJ
2	68	I,II	With Ejector and ESD Groundings Features	HR810-ND	11.45	100.17	IC1G-68PD-1.27DS-EJ-E
3	68	I	Memory Card Connector w/ Ejecting Mechanism	HR803-ND	10.99	96.18	IC1F-68PD-1.27DS-EJ
4	68	I, II	Memory Card Connector w/ Ejecting Mech and Std-off	HR804-ND	10.66	93.24	IC1FB-68PD-1.27DS-EJ
5A	68	I, II	SMT Connector Without Ejector	HR805-ND	7.85	69.08	IC1G-68PD-1.27SF
5B	68	I, II	SMT Ejector for HR805	HR806-ND	6.41	55.92	IC1G-68PD-EJ

BANTAM™
SMT Modem/Telcom Transformers

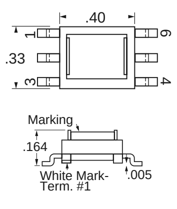
tamura MICROTRAN.

TTC-103SL



*Panel Cutout Required

TTC-203SL



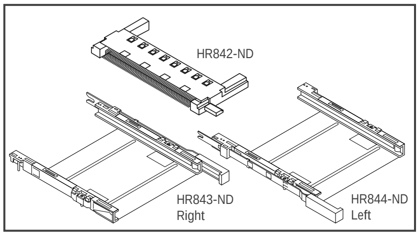
For PCMCIA Type II data/fax modem card V.32 bis/V.17; 14,400 bps applications. **Turns ratio:** 1:1 ±2% Impedance: pri: 600Ω, sec: 346Ω. **Frequency response:** +.15 / -.35 dB 300-3500 Hz; REf. 1KHz. **D.C. resistance at 20°C:** Pri: 127 Ohms ±15%, Sec: 150 Ohms ±15% • **Insertion loss:** 2.7dB ±.4 dB at 1 KHz • **D.C. Unbalance:** 0MA • **Longitudinal balance:** 60dB min 200-4000 Hz (FCC part 68) • **Dielectric rating:** 1000VAC, 1 min (FCC part 68) • **Return loss:** 25dB min at 300-3500 Hz • **Total harmonic distortion:** -76dB max. at 600 Hz and -10dBM • **Terminal coplanarity:** 0.004" • **Flammability:** UL 94V-0 • **Solderability:** per MIL-STD-202 • **Finish:** Varnish • **Weight:** .036 oz. (1gr)

***** TTC-103SL must be mounted through a circuit board cutout .4" x .33" (10.16mm x 8.38mm). † TTC-203SL Above board surface mount component.

MT4121-ND* (TTC-103SL) **$13.48/1; $119.80/10**
MT4122-ND† (TTC-203SL) **$13.48/1; $119.80/10**

IC11 Series PC Card Connectors for PC CardBus

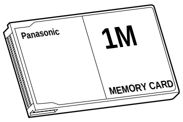
HIROSE ELECTRIC CO.,LTD.



Features: • **Space-Saving Design:** Miniature and thin at 62.9mm (W) x 85mm (L) x 5.65mm (H), this space-saving design is only 8mm from the card edge position to the connector tip portion • **Increased Degree of Card Ejection:** An original ejection design increases the degree of card ejection • **Materials:** Insulation: SMT portion — Liquid crystal polymer (UL94V-0), beige; Card guide portion — PBTresin (UL94V-0), black. Eject button — PBTresin (UL94V-0), black. Contacts: Signal portion — brass with partial gold plating; CardBus ground plate portion — phosphor bronze with partial gold plating.

Description	Digi-Key Part No.	Pricing 1	Pricing 10	Pricing 50	Hirose Part No.
68 Position PC Card Connector for PC CardBus					
—	HR842-ND	8.03	70.62	312.98	IC11-68L-1.27SF-EJR
Ejector PC CardBus Connector					
Right	HR843-ND	3.63	31.68	132.00	IC11-BD-EJR
Left	HR844-ND	3.22	28.08	117.00	IC11-BD-EJL

Panasonic® PC Cards



PCMCIA

PCMCIA (Personal Computer Memory Card International Association) has jointly defined standard specifications for an IC memory card system interface. Now the IC memory card can be used as general-purpose media for exchanging data between systems.

SRAM Cards:

34 Pin Matsushita Standard:
- Replaceable battery (CR2330)

68 Pin JEIDA 4.2/PCMCIA Rel 2.1:
- Available with or without attribute memory • Tool less replaceable battery (CR2025) • Contains a rechargeable sub-battery which provides data back-up for up to one hour during battery changes. • Type I Card

Flash Cards:

68 Pin Series 1 JEIDA 4.0/PCMCIA Rel 1.0:
- Uses 2Mbit memory chips • Type I Card

68 Pin Series 2 JEIDA 4.2/PCMCIA Rel 2.1:
- Uses 8Mbit memory chips • Type I Card

Description	Digi-Key Part No.	Price Each
SRAM Card MATSUSHITA Standard, 34 Pins		
32Kx8, 150ns, 75mA, 5 yr. backup	BN-032MCE-ND	36.92
SRAM Card PCMCIA/JEIDA Standard, 68 Pins		
64Kx8/32Kx16, 200ns, 150mA, 5 yr. backup	BN-064HSR-ND	39.68
128Kx8/64Kx16, 200ns, 150mA, 5 yr. backup	BN-128HSR-ND	45.23
256Kx8/128Kx16, 200ns, 150mA, 5 yr. backup	BN-256HSR-ND	57.15
512Kx8/256Kx16, 200ns, 150mA, 5 yr. backup	BN-512HSR-ND	81.18
1Mx8/512Kx16, 200ns, 150mA, 4 yr. backup	BN-01MHSR-ND	118.71
2Mx8/1Mx16, 200ns, 150mA, 2 yr. backup	BN-02MHSR-ND	193.50
4Mx8/2Mx16, 200ns, 150mA, 1 yr. backup	BN-04MHSR-ND	301.00
SRAM Card w/Attribute Memory PCMCIA/JEIDA Standard, 68 Pins		
64Kx8/32Kx16, 200ns, 150mA, 5 yr. backup	BN-064HSRC-ND	43.60
128Kx8/64Kx16, 200ns, 150mA, 5 yr. backup	BN-128HSRC-ND	48.69
256Kx8/128Kx16, 200ns, 150mA, 5 yr. backup	BN-256HSRC-ND	62.09
512Kx8/256Kx16, 200ns, 150mA, 5 yr. backup	BN-512HSRC-ND	84.74
1Mx8/512Kx16, 200ns, 150mA, 4 yr. backup	BN-01MHSRC-ND	120.18
2Mx8/1Mx16, 200ns, 150mA, 2 yr. backup	BN-02MHSRC-ND	186.20
4Mx8/2Mx16, 200ns, 150mA, 1 yr. backup	BN-04MHSRC-ND	306.60
Flash Card, PCMCIA/JEIDA Standard, 68 Pins (Series 1)		
1Mx8/512Kx16, 250ns, 70mA	BN-01MHFRE-ND	112.00
Flash Card, PCMCIA/JEIDA Standard, 68 Pins (Series 2)		
4Mx8/2Mx16, 250ns, 150mA	BN-04MHF3CE-ND	83.87
8Mx8/4Mx16, 250ns, 150mA	BN-08MHF3CE-ND	145.96
10Mx8/5Mx16, 250ns, 150mA	BN-10MHF3CE-ND	335.78
16Mx8/8Mx16, 250ns, 150mA	BN-16MHF3CE-ND	279.13

PCMCIA IC Memory Card Connectors

HIROSE ELECTRIC CO.,LTD.

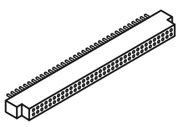


Fig. 1A

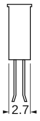


Fig. 1B

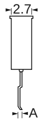


Fig. 1C

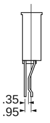


Fig. 1D

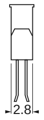
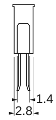


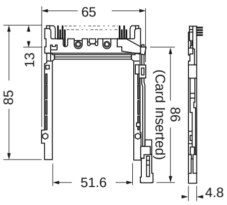
Fig. 1E



IC1 Series — Figure 1:

The IC1 Series connectors comply with Ver. 3 and Ver. 4.2, JEIDA and PCMCIA 2.0 Standards.

Features: • Provided with complete features of the JEIDA and PCMCIA Standards, such as polarizing method and sequence construction for circuit protection. • Surface-mount socket connectors (card side). • Off-center socket connectors are also available that allow high packaging profile. • All the pin connectors described are compatible with cards of type I and II. • Surface mount header connectors are available.



IC7 Series — Figure 2:

The IC7 Series of miniature, lightweight 68-pin connectors complies with JEIDA Ver. 4.2 and is suitable for use with PCMCIA Type III cards.

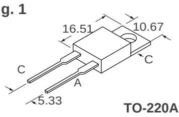
Features: • Smaller and thinner than our previous product. • Forty-seven percent lighter than our previous product. • Equipped with an eject button for smooth removal of cards. • Two types of eject button, either left or right. • There is also a reverse type for mounting on the back surface of the board. • Equipped with a frame ground terminal. • Types available for dip and SMT board mounting methods. • The SMT type can be mounted on both sides of the board and can also be used as a 2-slot connector.

Fig.	No.of Pins	Type	Description	Digi-Key Part No.	Pricing 1	Pricing 10	Hirose Part No.
Socket Connector Memory Card							
1A	68	I, II	2.7mm Dual	HR831-ND	3.74	32.64	IC1F-68RD-1.27SH
1B	68	I, II	Single Side, A = .3mm	HR828-ND	5.01	43.68	IC1F-68RD-1.27SF
1B	68	I, II	Single Side, A = .854mm	HR829-ND	5.06	44.16	IC1F-68RD-1.27SFA
1C	68	I, II	Off-Center	HR830-ND	4.48	39.12	IC1H-68RD-1.27SH
1D	68	I, II	2.8mm Dual	HR832-ND	4.48	39.12	IC1BB-68RD-1.27SH
1E	68	I, II	2.8mm Dual	HR833-ND	5.25	45.84	IC1BA-68RD-1.27SH
Memory Card Connector							
2	68	I, II, III	Light Weight, Right Eject	HR816-ND	6.38	56.10	IC7-68PD-1.27DS-EJR
2	68	I, II, III	Light Weight, Left Eject	HR817-ND	6.38	56.10	IC7-68PD-1.27DS-EJL
2	68	I, II, III	Light Weight, Rev Right Eject	HR818-ND	6.38	56.10	IC7-68PDR-1.27DS-EJR
2	68	I, II, III	Light Weight, Rev Left Eject	HR819-ND	6.38	56.10	IC7-68PDR-1.27DS-EJL

IXYS

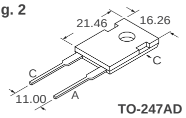
Semiconductors

Fig. 1



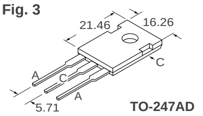
TO-220AC

Fig. 2



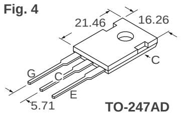
TO-247AD

Fig. 3



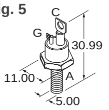
TO-247AD

Fig. 4



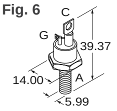
TO-247AD

Fig. 5



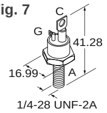
TO-64

Fig. 6



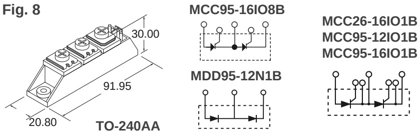
TO-48

Fig. 7



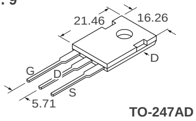
TO-65

Fig. 8



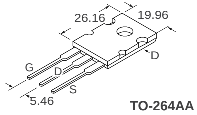
TO-240AA

Fig. 9



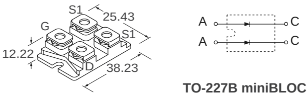
TO-247AD

Fig. 10



TO-264AA

Fig. 11



TO-227B miniBLOC™

Fig. 12

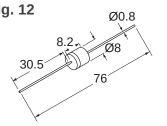


Fig. 13

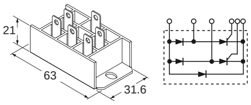
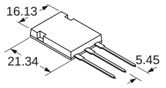
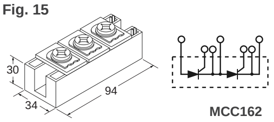


Fig. 14



PLUS247™

Fig. 15



MCC162

Fig.	V_{RRM} V	I_{FAV} @ T_C A	°C	I_{FRMS} A	Digi-Key Part No.	Price Each 1	10	50	IXYS Part No.
Diode Module									
8	1200	2x120	105	2x180	MDD95-12N1B-ND	50.55	42.13	32.40	MDD95-12N1B
Avalanche Diode									
12	1600	3.6	45	7	DSA2-16A-ND	7.92	6.60	5.10	DSA2-16A

Fig.	V_{RRM} V	I_{FAV} @ T_C A	°C	t_{rr} typ. T_{VJ} = 25°C ns	Digi-Key Part No.	Price Each 1	10	100	IXYS Part No.
Fast Recovery Epitaxial Diodes (FRED)									
1	600	8	115	35	DSEI8-06A-ND	1.41	1.18	.70	DSEI8-06A
	600	14	100	35	DSEI12-06A-ND	1.95	1.63	.90	DSEI12-06A
	1000	12	100	50	DSEI12-10A-ND	2.13	1.78	1.00	DSEI12-10A
	1200	11	100	50	DSEI12-12A-ND	2.46	2.05	1.20	DSEI12-12A
	1200	17	85	40	DSEI20-12A-ND	3.18	2.65	1.50	DSEI20-12A
2	600	37	85	35	DSEI30-06A-ND	4.23	3.53	2.00	DSEI30-06A
	1000	30	85	35	DSEI30-10A-ND	6.18	5.15	2.90	DSEI30-10A
	1200	26	85	40	DSEI30-12A-ND	7.05	5.88	3.40	DSEI30-12A
	600	60	70	35	DSEI60-06A-ND	6.00	5.00	2.90	DSEI60-06A
	1000	60	60	35	DSEI60-10A-ND	7.95	6.63	3.80	DSEI60-10A
	1200	52	60	40	DSEI60-12A-ND	9.18	7.65	4.40	DSEI60-12A
3	600	2x30	85	35	DSEK30-06A-ND	9.54	7.95	4.50	DSEK30-06A
11	200	2x123	70	35	DSEI2X121-02A-ND	43.23	36.03	20.60	DSEI2X121-02A
	600	2x60	70	35	DSEI2X61-06C-ND	24.72	20.60	11.80	DSEI2X61-06C
	1000	2x60	50	35	DSEI2X61-10B-ND	30.00	25.00	14.30	DSEI2X61-10B
	600	2x106	70	35	DSEI2X101-06A-ND	36.87	30.73	17.50	DSEI2X101-06A
HIPerFRED™ Epitaxial Diode with Soft Recovery									
2	600	30	135	35	DSEP30-06A-ND	4.92	4.10	2.30	DSEP30-06A
	1200	30	115	40	DSEP30-12A-ND	8.13	6.78	3.90	DSEP30-12A
11	600	2x60	65	35	DSEP2X61-06A-ND	28.41	23.68	15.16	DSEP2X61-06A

Fig.	V_{RRM} V	I_{FAV} @ T_C A	°C	V_F V	Digi-Key Part No.	Price Each 1	10	100	IXYS Part No.
Power Schottky Rectifier									
1	45	16	160	0.57	DSS16-0045A-ND	2.46	2.05	1.20	DSS16-0045A
3	15	2x20	135	0.32	DSSK40-0015B-ND	10.80	9.00	5.76	DSSK40-0015B
	45	2x30	150	0.60	DSSK60-0045A-ND	12.72	10.60	6.10	DSSK60-0045A
	15	2x35	130	0.33	DSSK70-0015B-ND	12.63	10.53	6.74	DSSK70-0015B
11	45	2x60	105	0.66	DSS2X61-0045A-ND	23.22	19.35	11.10	DSS2X61-0045A

Fig.	V_{RRM} V	I_{dAVM} @ T_K A	°C	Digi-Key Part No.	Price Each 1	10	50	IXYS Part No.
Half Controlled Single Phase Rectifier Bridge with Freewheeling Diode								
13	1600	32	85	VHF28-16IO5-ND	58.23	48.53	37.40	VHF28-16IO5

Fig.	V_{CES} V	I_C T_C = 25°C A	V_{CE} (sat) max. V	t_{rr} typ. 25°C ns	Digi-Key Part No.	Price Each 1	10	100	IXYS Part No.
IGBTs — Insulated Gate Bipolar Transistors – High Speed									
4	600	48	2.7	275	IXGH24N60A-ND	6.20	5.61	4.24	IXGH24N60A
	600	60	2.5	80	IXGH32N60B-ND	9.05	8.19	6.20	IXGH32N60B
	600	75	2.7	275	IXGH50N60A-ND	17.01	15.39	11.64	IXGH50N60A
	600	48	2.5	80	IXGH24N60B-ND	6.20	5.61	4.24	IXGH24N60B
	600	48	2.5	60	IXGH24N60C-ND	6.51	5.89	4.46	IXGH24N60C
	600	60	2.5	55	IXGH32N60C-ND	9.51	8.61	6.51	IXGH32N60C
	600	75	2.5	150	IXGH50N60B-ND	17.01	15.39	11.64	IXGH50N60B
IGBTs — Insulated Gate Bipolar Transistors with Diode, Combi Pack – low $V_{CE\ (sat)}$									
4	1000	20	3.5	800	IXGH10N100U1-ND	11.66	10.55	7.98	IXGH10N100U1
	1000	34	3.5	750	IXGH17N100U1-ND	11.91	10.78	8.15	IXGH17N100U1
	1200	50	3.0	200	IXDH30N120AU1-ND	19.05	15.88	9.10	IXDH30N120AU1
IGBTs — Insulated Gate Bipolar Transistors with Diode, Combi Pack – High Speed									
4	600	48	2.7	275	IXGH24N60AU1-ND	9.49	8.59	6.50	IXGH24N60AU1
	600	60	1.8	100	IXGH30N60BD1-ND	14.20	12.85	9.72	IXGH30N60BD1
	600	60	2.5	55	IXGH32N60CD1-ND	14.57	13.19	9.97	IXGH32N60CD1
	600	55	2.5	70	IXSH30N60CD1-ND	14.57	13.19	9.97	IXSH30N60CD1
	1000	20	4.0	500	IXGH10N100AU1-ND	11.30	10.23	7.74	IXGH10N100AU1
	1000	34	4.0	450	IXGH17N100AU1-ND	12.08	10.93	8.27	IXGH17N100AU1

Fig.	V_{CES} V	I_C T_C = 25°C A	V_{CE} (sat) typ. V	t_{rr} 25°C ns	Digi-Key Part No.	Price Each 1	10	100	IXYS Part No.
High Voltage BIMOSFET™ Monolithic Bipolar MOS Transistor									
4	1600	15	5.8	40	IXBH15N160-ND	19.59	16.33	10.13	IXBH15N160

Fig.	V_{DRM} V	I_{TAV} T_C = 85°C A	I_{TRMS} A	Digi-Key Part No.	Price Each 1	10	100	IXYS Part No.
Phase Control SCRs								
5	800	16	25	CS8-08IO2-ND	13.02	10.85	6.20	CS8-08IO2
	1200	16	25	CS8-12IO2-ND	14.28	11.90	6.80	CS8-12IO2
6	800	25	50	CS23-08IO2-ND	16.23	13.53	7.70	CS23-08IO2
	1200	25	50	CS23-12IO2-ND	18.00	15.00	8.60	CS23-12IO2
7	800	60	120	CS35-08IO4-ND	20.19	16.83	9.60	CS35-08IO4
	1200	60	120	CS35-12IO4-ND	22.23	18.53	10.60	CS35-12IO4
	1400	60	120	CS35-14IO4-ND	26.61	22.18	12.70	CS35-14IO4

Fig.	V_{DRM} V	I_{TAV} @ T_C A	°C	I_{TRMS} A	Digi-Key Part No.	Price Each 1	10	50	IXYS Part No.
SCR Module									
8	1200	2x116	85	2x180	MCC95-12IO1B-ND	64.50	53.75	41.40	MCC95-12IO1B
	1600	116	85	180	MCC95-16IO8B-ND	74.37	61.98	47.80	MCC95-16IO8B
	1600	2x32	85	2x50	MCC26-16IO1B-ND	41.55	34.63	26.70	MCC26-16IO1B
	1600	2x116	85	2x180	MCC95-16IO1B-ND	75.15	62.63	48.20	MCC95-16IO1B
15	1600	2x190	85	2x300	MCC162-16IO1-ND	178.59	148.83	130.98	MCC162-16IO1

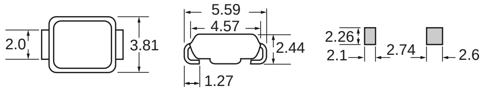
Fig.	V_{DSS} max. V	I_{D25} T_C = 25°C A	$R_{DS(on)}$ T_C = 25°C Ω	t_{rr} typ. 25°C ns	Digi-Key Part No.	Price Each 1	10	100	IXYS Part No.
MOSFETs — N-Channel Enhancement-Mode									
9	500	14	0.4	500	IRFP450X-ND	4.47	4.05	3.06	IRFP450
MOSFETs — N-Channel Enhancement-Mode with Fast Intrinsic Diode									
9	70	76	0.011	150	IXFH76N07-11-ND	14.74	13.34	10.10	IXFH76N07-11
	70	76	0.012	150	IXFH76N07-12-ND	13.27	12.01	9.09	IXFH76N07-12
	100	80	0.015	≤200	IXFH80N10Q-ND	18.44	16.69	13.61	IXFH80N10Q
	200	42	0.06	200	IXFH42N20-ND	13.50	12.22	9.25	IXFH42N20
	200	50	0.045	200	IXFH50N20-ND	13.86	12.54	9.49	IXFH50N20
	200	58	0.04	200	IXFH58N20-ND	16.09	14.56	11.01	IXFH58N20
	200	58	0.040	≤200	IXFH58N20Q-ND	16.09	14.56	11.01	IXFH58N20Q
	300	40	0.08	200	IXFH40N30-ND	14.18	12.83	9.71	IXFH40N30
	300	40	0.085	≤200	IXFH40N30Q-ND	14.18	12.83	9.71	IXFH40N30Q
	300	40	0.085	400	IXTH40N30-ND	14.18	12.83	9.71	IXTH40N30
	500	13	0.4	250	IXFH13N50-ND	5.65	5.12	3.86	IXFH13N50
	500	21	0.25	250	IXFH21N50-ND	9.87	8.93	6.76	IXFH21N50
	500	24	0.23	250	IXFH24N50-ND	10.88	9.85	7.45	IXFH24N50
	500	26	0.20	250	IXFH26N50-ND	11.76	10.64	8.05	IXFH26N50
	500	26	0.20	≤250	IXFH26N50Q-ND	11.76	10.64	8.05	IXFH26N50Q
	500	32	0.15	≤250	IXFH32N50-ND	18.14	16.42	12.42	IXFH32N50
	600	20	0.35	250	IXFH20N60-ND	13.67	12.37	9.36	IXFH20N60
	800	7	1.4	250	IXFH7N80-ND	6.99	6.33	4.78	IXFH7N80
	800	11	0.95	250	IXFH11N80-ND	18.94	17.14	12.97	IXFH11N80
	800	13	0.80	250	IXFH13N80-ND	14.57	13.19	9.98	IXFH13N80
	800	15	0.60	250	IXFH15N80-ND	18.48	16.72	12.65	IXFH15N80
	900	6	1.8	250	IXFH6N90-ND	8.11	7.34	5.54	IXFH6N90
	900	10	1.1	250	IXFH10N90-ND	17.56	15.89	12.02	IXFH10N90
	1000	6	2.0	250	IXFH6N100-ND	9.85	8.92	6.74	IXFH6N100
	1000	10	1.2	250	IXFH10N100-ND	17.64	15.96	12.08	IXFH10N100
	1000	12	1.05	250	IXFH12N100-ND	26.52	22.10	12.71	IXFH12N100
10	70	110	0.006	150	IXFK110N07-ND	20.37	18.43	13.94	IXFK110N07
	200	90	0.020	200	IXFK90N20-ND	21.84	19.76	14.95	IXFK90N20
	500	48	0.10	250	IXFK48N50-ND	24.78	22.42	16.96	IXFK48N50
	500	55	0.085	250	IXFK55N50-ND	27.26	24.67	18.66	IXFK55N50
14	200	120	0.017	≤250	IXFX120N20-ND	21.00	19.00	14.50	IXFX120N20
	500	55	0.080	≤250	IXFX55N50-ND	23.14	20.94	15.85	IXFX55N50
	1000	15	0.70	≤200	IXFX15N100-ND	25.73	23.28	17.61	IXFX15N100
MOSFETs — MiniBLOC™ N-Channel Enhancement-Mode with Fast Intrinsic Diode									
11	70	200	0.006	150	IXFN200N07-ND	35.91	32.49	24.59	IXFN200N07
	200	106	0.020	200	IXFN106N20-ND	38.64	34.96	26.45	IXFN106N20
	200	180	0.010	≤250	IXFN180N20-ND	65.69	59.44	48.49	IXFN180N20
	500	44	0.12	≤250	IXFN44N50-ND	32.87	29.74	22.49	IXFN44N50
	500	48	0.10	250	IXFN48N50-ND	39.90	36.10	27.31	IXFN48N50
	1000	36	0.24	180	IXFN36N100-ND	86.81	78.55	64.08	IXFN36N100
14	100	180	0.008	≤250	IXFX180N10-ND	19.95	18.05	14.73	IXFX180N10

Description	Package	Digi-Key Part No.	Price Each 1	10	50	IXYS Part No.
Integrated Circuits						
Full-feature low-side driver	16-Dip	IXBD4410PI-ND	10.79	9.77	8.68	IXBD4410PI
Inverter interface and digital deadtime generator for 3-phase PWM controls	18-Dip	IXDP630PI-ND	4.58	4.15	3.70	IXDP630PI

CRYDOM COMPANY

SMBJ Series – 600 Watt Surface Mount TVS

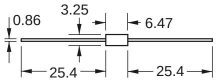
Features:
- Glass passivated junction
- Uni-directional and bi-directional
- Jedec package designed to meet SM assembly needs
- Low lead inductance
- 100% surge tested



Description	Voltage Range *(Value)* See Chart	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
600 Watt J-Bend Unidirectional	5.0 - 36	SMBJ(Value)ACCCT-ND	.36	.33	.27	SMBJ(Value)ACCTR-ND	135.00/M
600 Watt J-Bend Bidirectional	5.0 - 36	SMBJ(Value)CACCCT-ND	.40	.36	.30	SMBJ(Value)CACCTR-ND	150.00/M

(Value) Reverse Standoff Voltage V_R (Volts)	Breakdown Voltage V_{BR} (V) @ I_T Min.	Max.	*(Value)* Reverse Standoff Voltage V_R (Volts)	Breakdown Voltage V_{BR} (V) @ I_T Min.	Max.
5.0	6.40	7.25	**15**	16.70	19.20
6.0	6.67	7.67	**18**	20.00	23.30
6.5	7.22	8.30	**20**	22.20	25.50
7.0	7.78	8.95	**22**	24.40	28.00
7.5	8.33	9.58	**24**	26.70	30.70
10	11.10	12.80	**26**	28.90	33.20
12	13.30	15.30	**28**	31.10	35.80
13	14.40	16.50	**30**	33.30	38.30
14	15.60	17.90	**33**	36.70	42.20
			36	40.00	46.00

P6KE Series – 600 Watt Axial TVS

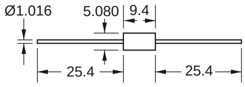


Features:
- Glass passivated junction
- Excellent clamping capability
- Uni-directional and bi-directional
- 100% surge tested
- UL listed

Description	Voltage Range *(Value)* See Chart	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 5,000
600 Watt Unidirectional	6.8 - 68	P6KE(Value)ACCCT-ND	.37	.34	.28	P6KE(Value)ACCTR-ND	139.50/M
600 Watt Bidirectional	6.8 - 68	P6KE(Value)CACCCT-ND	.44	.40	.33	P6KE(Value)CACCTR-ND	165.00/M

(Value) Nom. Breakdown Voltage	Reverse Standoff Voltage V_R (Volts)	Breakdown Voltage V_{BR} (V) @ I_T Min.	Max.	Max. Reverse Leakage I_R @ V_R (µA)
6.8	5.8	6.45	7.14	1000.0
7.5	6.4	7.13	7.88	500.0
12	10.2	11.40	12.6	5.0
15	12.8	14.3	15.8	5.0
20	17.1	19.0	21.0	5.0
27	23.1	25.7	28.4	5.0
30	25.6	28.5	31.5	5.0
33	28.2	31.4	34.7	5.0
68	58.1	64.6	71.4	5.0

1.5KE Series – 1500 Watt Axial TVS

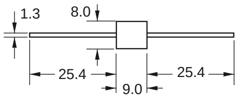


Features:
- Glass passivated junction
- Low clamping factor
- Uni-directional and bi-directional
- 100% surge tested
- UL listed

Description	Voltage Range *(Value)* See Chart	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,500
1500 Watt Unidirectional	6.8 - 30	1.5KE(Value)ACCCT-ND	.69	.63	.52	1.5KE(Value)ACCTR-ND	259.50/M
1500 Watt Bidirectional	6.8 - 30	1.5KE(Value)CACCCT-ND	.74	.67	.56	1.5KE(Value)CACCTR-ND	279.00/M

(Value) Nom. Breakdown Voltage	Reverse Standoff Voltage V_R (Volts)	Breakdown Voltage V_{BR} (V) @ I_T Min.	Max.	Max. Reverse Leakage I_R @ V_R (µA)
6.8	5.8	6.45	7.14	1000.0
7.5	6.4	7.13	7.88	500.0
10	8.55	9.5	10.5	10.0
15	12.8	14.3	15.8	5.0
30	25.6	28.5	31.5	5.0

5KP Series – 5000 Watt Axial TVS



Features:
- Glass passivated junction
- Low clamping factor
- Uni-directional and bi-directional
- 100% surge tested
- UL listed

Description	Tol.	Voltage Range *(Value)* See Chart	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000
5000 Watt Unidirectional	5%	5.0 - 70.0	5KP(Value)ACCCT-ND	2.37	2.14	1.78	5KP(Value)ACCTR-ND	889.50
5000 Watt Bidirectional	10%	5.0	5KP5.0CCCCT-ND	2.37	2.14	1.78	5KP5.0CCCTR-ND	889.50
5000 Watt Bidirectional	5%	6.0 - 70.0	5KP(Value)CACCCT-ND	2.37	2.14	1.78	5KP(Value)CACCTR-ND	889.50

(Value) Nom. Breakdown Voltage	Reverse Standoff Voltage V_R (Volts)	Breakdown Voltage V_{BR} (V) @ I_T Min.	Max.	Max. Reverse Leakage I_R @ V_R (µA)
5.0	**5.0**	6.40	7.00	5000.0
6.0	**6.0**	6.67	7.37	5000.0
10	**10.0**	11.1	12.3	15.0
15	**15.0**	16.7	18.5	10.0
24	**24.0**	26.7	29.5	10.0
30	**30.0**	33.3	36.8	10.0
33	**33.0**	36.7	40.6	10.0
36	**36.0**	40.0	44.2	10.0
40	**40.0**	44.4	49.1	10.0
43	**43.0**	47.8	52.8	10.0
70	**70.0**	77.0	86.0	10.0

Thyristors – SiBOD™

Crydom Thyristor Suppression Devices (SiBOD™ Avalanche Devices) offer the highest quality and performance for protection of sensitive telecommunications circuitry. They "crow-bar" potentially dangerous transients – switching them to ground and dissipating the voltage to zero. This approach handles more energy than TVS diode "clamping".

Fig. 1

Modified TO-220

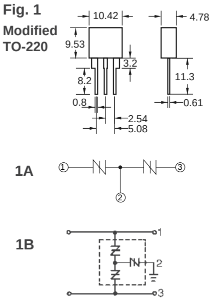


Fig. 2

DO-214

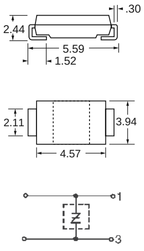


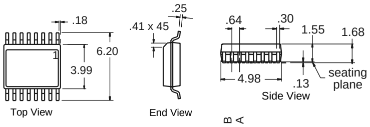
Fig.	Package	Reverse Standoff Voltage (V_R)	Maximum Breakover Voltage (V_{BO})@I_{BO}	Peak Pulse Current (A)	Minimum Holding Current (I_H)	Digi-Key Part No.	Price Each 1	10	100	500	Crydom Part No.
1A	TO-220	25.0	40.0	100.0	150.0	CR0602AA-ND	1.33	1.18	1.07	.89	CR0602AA
	TO-220	25.0	40.0	150.0	150.0	CR0602AB-ND	1.47	1.31	1.18	.98	CR0602AB
	TO-220	25.0	40.0	200.0	150.0	CR0602AC-ND	1.63	1.45	1.31	1.09	CR0602AC
1A	TO-220	65.0	95.0	100.0	150.0	CR1602AA-ND	1.33	1.18	1.07	.89	CR1602AA
	TO-220	65.0	95.0	150.0	150.0	CR1602AB-ND	1.47	1.31	1.18	.98	CR1602AB
	TO-220	65.0	95.0	200.0	150.0	CR1602AC-ND	1.63	1.45	1.31	1.09	CR1602AC
1A	TO-220	140.0	180.0	100.0	150.0	CR3002AA-ND	1.33	1.18	1.07	.89	CR3002AA
	TO-220	140.0	180.0	150.0	150.0	CR3002AB-ND	1.47	1.31	1.18	.98	CR3002AB
	TO-220	140.0	180.0	200.0	150.0	CR3002AC-ND	1.63	1.45	1.31	1.09	CR3002AC
1A	TO-220	275.0	350.0	100.0	150.0	CR6002AA-ND	1.33	1.18	1.07	.89	CR6002AA
	TO-220	275.0	350.0	150.0	150.0	CR6002AB-ND	1.47	1.31	1.18	.98	CR6002AB
	TO-220	275.0	350.0	200.0	150.0	CR6002AC-ND	1.63	1.45	1.31	1.09	CR6002AC
1B	TO-220	270.0	350.0	100.0	150.0	CR3203AA-ND	1.76	1.57	1.41	1.18	CR3203AA
	TO-220	270.0	350.0	150.0	150.0	CR3203AB-ND	2.03	1.81	1.63	1.36	CR3203AB
	TO-220	270.0	350.0	200.0	150.0	CR3203AC-ND	2.35	2.09	1.88	1.57	CR3203AC

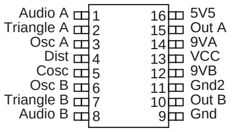
Fig.	Package	Rev. Standoff Voltage (V_R)	Max. Breakover Volt. (V_{BO})@I_{BO}	Peak Pulse Current (A)	Min. Holding Current (I_H)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	500	Digi-Key Part No.	T & R Pricing 3,000
2	DO-214	25	40	100.0	150	CR0300SACT-ND	1.23	.98	.74	.49	CR0300SATR-ND	318.50/M
	DO-214	25	40	150.0	150	CR0300SBCT-ND	1.47	1.18	.89	.59	CR0300SBTR-ND	382.20/M
	DO-214	25	40	200.0	150	CR0300SCCT-ND	1.72	1.38	1.04	.69	CR0300SCTR-ND	447.20/M
2	DO-214	58	77	100.0	150	CR0640SACT-ND	1.23	.98	.74	.49	CR0640SATR-ND	318.50/M
	DO-214	58	77	150.0	150	CR0640SBCT-ND	1.47	1.18	.89	.59	CR0640SBTR-ND	382.20/M
	DO-214	58	77	200.0	150	CR0640SCCT-ND	1.72	1.38	1.04	.69	CR0640SCTR-ND	447.20/M
2	DO-214	65	88	100.0	150	CR0720SACT-ND	1.23	.98	.74	.49	CR0720SATR-ND	318.50/M
	DO-214	65	88	150.0	150	CR0720SBCT-ND	1.47	1.18	.89	.59	CR0720SBTR-ND	382.20/M
	DO-214	65	88	200.0	150	CR0720SCCT-ND	1.72	1.38	1.04	.69	CR0720SCTR-ND	447.20/M
2	DO-214	220	300	100.0	150	CR2600SACT-ND	1.23	.98	.74	.49	CR2600SATR-ND	318.50/M
	DO-214	220	300	150.0	150	CR2600SBCT-ND	1.47	1.18	.89	.59	CR2600SBTR-ND	382.20/M
	DO-214	220	300	200.0	150	CR2600SCCT-ND	1.72	1.38	1.04	.69	CR2600SCTR-ND	447.20/M
2	DO-214	275	350	100.0	150	CR3100SACT-ND	1.23	.98	.74	.49	CR3100SATR-ND	318.50/M
	DO-214	275	350	150.0	150	CR3100SBCT-ND	1.47	1.18	.89	.59	CR3100SBTR-ND	382.20/M
	DO-214	275	350	200.0	150	CR3100SCCT-ND	1.72	1.38	1.04	.69	CR3100SCTR-ND	447.20/M

ZXCD1000 High Fidelity Class D Audio Amp Solution

The ZXCD1000 provides complete control and modulation functions at the heart of a high efficiency high performance Class D switching audio amplifier solution.

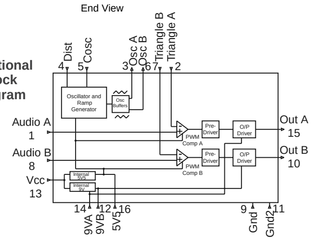
In combination with standard magnetics and Zetex HDMOS MOSFET devices, the ZXCD1000 provides a high performance Class D audio amplifier with all the inherent benefits of Class D.





Connection Diagram

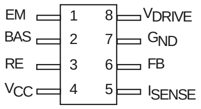
Functional Block Diagram

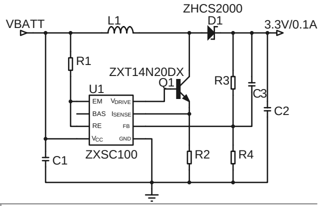


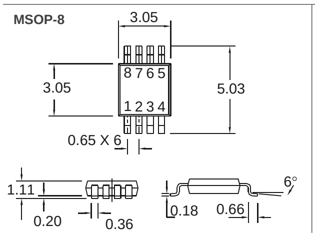
Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	T & R Pricing 500	Zetex Part No.
ZXCD1000EQ16CT-ND	4.06	3.48	3.19	ZXCD1000EQ16TR-ND	1218.00	ZXCD1000EQ16TA

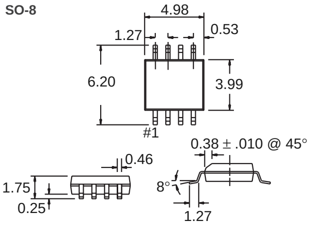
ZXSC100 Single Cell DC-DC Converter Solution

The ZXSC100 series is designed for DC-DC applications where step-up voltage conversion from very low input voltages is required. These applications mainly operate from single nickel cadmium or nickel metal hydride battery cells. The ZXSC100 devices are non-synchronous PFM, DC-DC controller ICs which drive an external transistor. Zetex SuperSOT4™ switching transistors, with saturation resistance as low as 13mΩ are recommended as the external switching element. These bipolar transistors are the best switching devices available for this type of DC-DC conversion, enabling high efficiency conversion with input voltages down to below 1 volt.





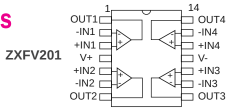




Package	Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	Tape & Reel Pricing 500	Zetex Part No.
MSOP-8	ZXSC100X8CT-ND	1.75	1.50	1.38	ZXSC100X8TR-ND	525.00	ZXSC100X8TA
SO-8	ZXSC100N8CT-ND	1.75	1.50	1.38	ZXSC100N8TR-ND	525.00	ZXSC100N8TA

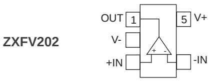
ZXSC100-EVAL-ND Evaluation Board for ZXSC100 ....**$150.00**

ZXFV201 / 202 Video Amplifiers



The ZXFV201 is a quad high speed amplifier designed for video and other high speed applications. It features low differential gain and phase performance. High output drive capability compliments this part for use in video applications.

The ZXFV202 is a single high speed amplifier designed for video and other high speed applications. Packaged in a small SOT23-5 it is ideally suited to applications where space is at a premium. In applications where cross talk is critical this part provides better isolation than dual or quad devices. It features low differential gain and phase performance. High output drive capability compliments this part for use in video applications.

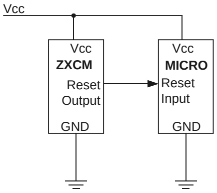


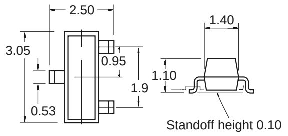
Description	Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing	Zetex Part No.
Quad Video Amp	ZXFV201N14CT-ND	4.20	3.60	3.30	ZXFV201N14TR-ND	500	1260.00	ZXFV201N14TA
Video Amp	ZXFV202E5CT-ND	1.75	1.50	1.38	ZXFV202E5TR-ND	3,000	750.00/M	ZXFV202E5TA

ZXCM209 / 210

Very Low Power Microprocessor Reset Devices

The ZXCM209/210 are three terminal supervisory circuits used to monitor the power supplies in microprocessor and digital systems. They provide a high performance economical solution when used with 5V, 3V or lower powered circuits. Reset thresholds suitable for operation with a variety of supply voltages are available. • Temp. Range: -55°C to +125°C • SOT-23 Package

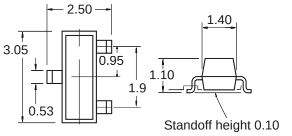


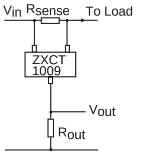


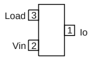
Part Mark	Thresh-old Code	Reset Thresh-old (V)	Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	Tape & Reel Pricing 3,000	Zetex Part No.
ZXCM209 — Low Reset Output									
M22	L	4.63	ZXCM209LFCT-ND	.74	.63	.58	ZXCM209LFTR-ND	315.00/M	ZXCM209LFTA
M23	M	4.38	ZXCM209MFCT-ND	.74	.63	.58	ZXCM209MFTR-ND	315.00/M	ZXCM209MFTA
M24	J	4.00	ZXCM209JFCT-ND	.74	.63	.58	ZXCM209JFTR-ND	315.00/M	ZXCM209JFTA
M25	T	3.08	ZXCM209TFCT-ND	.74	.63	.58	ZXCM209TFTR-ND	315.00/M	ZXCM209TFTA
M26	S	2.93	ZXCM209SFCT-ND	.74	.63	.58	ZXCM209SFTR-ND	315.00/M	ZXCM209SFTA
M27	R	2.63	ZXCM209RFCT-ND	.74	.63	.58	ZXCM209RFTR-ND	315.00/M	ZXCM209RFTA
ZXCM210 — High Reset Output									
M28	L	4.63	ZXCM210LFCT-ND	.74	.63	.58	ZXCM210LFTR-ND	315.00/M	ZXCM210LFTA

ZXCT1009 High-Side Current Monitor

The ZXCT1009 is a high-side current sense monitor. Using this device eliminates the need to disrupt the ground plane when sensing a load current. It takes a high-side voltage developed across a current shunt resistor and translates it into a proportional output current.







TOP VIEW

Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	Tape & Reel Pricing 3,000	Zetex Part No.
ZXCT1009FCT-ND	1.23	1.05	.97	ZXCT1009FTR-ND	525.00/M	ZXCT1009FTA

Trench MOSFETs

A new Trench structure is used for this latest family of N-channel MOSFETs. The 20, 30, 60 and 100 volt platforms have been optimized to provide a very low on-resistance coupled with a low gate charge requirement. With the emphasis on small surface mount packages, ranging in size from the small SOT-23 to the larger SO-8, the resulting family of devices can be used in a wide range of power management and load management applications. (P-Channel devices are in development.)

Type	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel* Size	Tape & Reel* Pricing	Zetex Part No.
8-MSOP MOSFETS							
N-Channel	ZXMN2A02X8CT-ND	2.40	1.80	1.20	1,000	680.00	ZXMN2A02X8TA
	ZXMN3A02X8CT-ND	2.40	1.80	1.20	1,000	680.00	ZXMN3A02X8TA
SOT-23 Package							
N-Channel	ZXMN3A01FCT-ND	.63	.48	.32	3,000	157.50/M	ZXMN3A01FTA
	ZXMN10A07FCT-ND	.72	.54	.36	3,000	180.00/M	ZXMN10A07FTA
	ZXMN2A01FCT-ND	.63	.48	.32	3,000	157.50/M	ZXMN2A01FTA
	ZXMN6A07FCT-ND	.72	.54	.36	3,000	180.00/M	ZXMN6A07FTA
SO-8 Package							
N-Channel	ZXMN6A10N8CT-ND	8.40	6.30	4.20	500	1470.00	ZXMN6A10N8TA
	ZXMN6A09DN8CT-ND	7.20	5.40	3.60	500	1260.00	ZXMN6A09DN8TA
	ZXMN3A06DN8CT-ND	3.30	2.48	1.65	1,000	935.00	ZXMN3A06DN8TA
	ZXMN3A04DN8CT-ND	5.40	4.05	2.70	500	945.00	ZXMN3A04DN8TA
	ZXMN3B04N8CT-ND	5.40	4.05	2.70	500	945.00	ZXMN3B04N8TA
	ZXMN2A05N8CT-ND	7.80	5.85	3.90	500	1365.00	ZXMN2A05N8TA
	ZXMN3A05N8CT-ND	7.80	5.85	3.90	500	1365.00	ZXMN3A05N8TA

Type	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel* Size	Tape & Reel* Pricing	Zetex Part No.
N-Channel	ZXMN2A04DN8CT-ND	5.40	4.05	2.70	500	945.00	ZXMN2A04DN8TA
	ZXMN6A11DN8CT-ND	2.40	1.80	1.20	500	420.00	ZXMN6A11DN8TA
SOT-223 Package							
N-Channel	ZXMN6A11GCT-ND	1.20	.90	.60	1,000	340.00	ZXMN6A11GTA
	ZXMN10A11GCT-ND	1.20	.90	.60	1,000	340.00	ZXMN10A11GTA
SOT-89 Package							
N-Channel	ZXMN6A07ZCT-ND	.90	.68	.45	1,000	255.00	ZXMN6A07ZTA
	ZXMN10A07ZCT-ND	.90	.68	.45	1,000	255.00	ZXMN10A07ZTA
SOT23-6 Package							
N-Channel	ZXMN3A03E6CT-ND	1.26	.95	.63	3,000	315.00/M	ZXMN3A03E6TA
	ZXMN2A01E6CT-ND	.96	.72	.48	3,000	240.00/M	ZXMN2A01E6TA
	ZXMN10A08E6CT-ND	1.44	1.08	.72	3,000	360.00/M	ZXMN10A08E6TA
	ZXMN6A08E6CT-ND	1.44	1.08	.72	3,000	360.00/M	ZXMN6A08E6TA
	ZXMN3A01E6CT-ND	.96	.72	.48	3,000	240.00/M	ZXMN3A01E6TA
	ZXMN2A03E6CT-ND	1.26	.95	.63	3,000	315.00/M	ZXMN2A03E6TA

* For Tape & Reel part number, change CT-ND to TR-ND

ZETEX

ZETEX Super E-Line Transistors — (modified TO-92) & TO-92 Packages

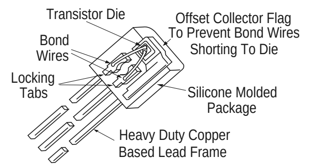
Type	V_{CEO} (V)	V_{CBO} (V)	I_C (A)	Max. I_{CM} (A)	V_{CE} (Sat.) Max. (V)	V_{CE} (Sat.) @ I_C (mA)	V_{CE} (Sat.) I_B (mA)	h_{FE} Min./Max.	I_C @ V_{CE} (mA/V)	Min. f_T (MHz)	Digi-Key Part No.	Pricing 1	10	100	1,000
Medium Power Transistors — 1,000mW															
NPN	400	400	0.3	0.5	0.5	50	6	100/300	50/10	50	ZTX458-ND	.54	4.05	27.00	180.00
	300	300	0.5	1	0.3	100	10	50/300	50/10	75	ZTX457-ND	.48	3.60	24.00	160.00
	140	160	1	2	0.7	150	15	100/300	150/10	100	ZTX455-ND	.48	3.60	24.00	160.00
	100	120	1	2	0.7	150	15	40/200	150/10	150	ZTX453-ND	.48	3.60	24.00	160.00
	60	80	1	2	0.35	150	15	50/150	150/10	150	ZTX451-ND‡	.48	3.60	24.00	160.00
	45	60	1	2	0.25	150	15	100/300	150/10	150	ZTX450-ND‡	.48	3.60	24.00	160.00
	30	50	1	2	0.5	1000	100	100/300	500/2	150	ZTX449-ND‡	.48	3.60	24.00	160.00
PNP	-400	-400	-0.2	-0.5	-0.5	-50	-6	100/300	-50/-10	50	ZTX558-ND	.54	4.05	27.00	180.00
	-300	-300	-0.5	-1	-0.3	-50	-5	50/300	-50/-10	75	ZTX557-ND	.48	3.60	24.00	160.00
	-200	-200	-1	-2	-0.3	-100	-10	50/300	-300/-10	100	ZTX576-ND	.48	3.60	24.00	160.00
	-150	-160	-1	-2	-0.3	-100	-10	50/300	-300/-10	100	ZTX555-ND	.48	3.60	24.00	160.00
	-100	-120	-1	-2	-0.25	-150	-15	40/200	-150/-10	150	ZTX553-ND	.48	3.60	24.00	160.00
	-60	-80	-1	-2	-0.35	-150	-15	50/150	-150/-10	150	ZTX551-ND‡	.51	3.83	25.50	170.00
	-45	-60	-1	-2	-0.25	-150	-15	100/300	-150/-10	150	ZTX550-ND‡	.51	3.83	25.50	170.00
	-30	-35	-1	-2	-0.5	-1000	-100	100/300	-500/-2	100	ZTX549-ND	.51	3.83	25.50	170.00
High Performance Transistors — 1,000mW															
NPN	400	400	0.5	1	0.5	100	10	50/—	100/5	50	ZTX658-ND	.90	6.75	45.00	300.00
	300	300	0.5	1	0.5	100	10	50/—	100/5	30	ZTX657-ND	.78	5.85	39.00	260.00
	200	200	0.5	1	0.5	100	10	50/—	100/5	30	ZTX656-ND	.78	5.85	39.00	260.00
	150	150	1	2	0.5	1000	200	50/—	500/5	30	ZTX655-ND	.78	5.85	39.00	260.00
	100	120	2	6	0.5	2000	200	100/300	500/2	140	ZTX653-ND‡	.78	5.85	39.00	260.00
	60	80	2	6	0.5	2000	200	100/300	500/2	140	ZTX651-ND‡	.78	5.85	39.00	260.00
	25	35	2	6	0.5	2000	200	100/300	1000/2	150	ZTX649-ND‡	.78	5.85	39.00	260.00
PNP	-400	-400	-0.5	-1	-0.5	-100	-10	50/—	-100/-5	50	ZTX758-ND	.90	6.75	45.00	300.00
	-300	-300	-0.5	-1	-0.5	-100	-10	50/—	-100/-5	30	ZTX757-ND	.78	5.85	39.00	260.00
	-200	-200	-1	-2	-0.5	-500	-50	50/—	-500/-5	30	ZTX776-ND	.78	5.85	39.00	260.00
	-150	-150	-1	-2	-0.5	-1000	-200	50/—	-500/-5	30	ZTX755-ND	.78	5.85	39.00	260.00
	-100	-120	-2	-6	-0.5	-2000	-200	100/300	-500/-2	100	ZTX753-ND‡	.78	5.85	39.00	260.00
	-60	-80	-2	-6	-0.5	-2000	-200	100/300	-500/-2	100	ZTX751-ND‡	.78	5.85	39.00	260.00
	-25	-35	-2	-6	-0.5	-2000	-200	100/300	-1000/-2	100	ZTX749-ND‡	.78	5.85	39.00	260.00
High Gain Transistors — 1,000mW															
NPN	180	180	0.5	1	0.25	200	5	500/—	100/5	70	ZTX696B-ND	.90	6.75	45.00	300.00
	160	200	3	6	0.3	3000	200	300/1200	500/10	100	ZTX1056A-ND	1.14	8.55	51.30	323.00
	120	175	3	6	0.31	3000	150	300/1200	1000/10	100	ZTX1055A-ND	1.14	8.55	51.30	323.00
	120	120	0.5	1	0.5	400	5	400/—	200/2	130	ZTX694B-ND	.90	6.75	45.00	300.00
	75	150	3	10	0.25	3000	100	300/1200	1000/2	100	ZTX1053A-ND	1.14	8.55	51.30	323.00
	70	70	1	2	0.5	1000	10	400/—	500/2	150	ZTX692B-ND‡	.90	6.75	45.00	300.00
	45	45	2	6	0.5	1000	5	400/—	1000/2	150	ZTX690B-ND‡	.90	6.75	45.00	300.00
	40	150	4	10	0.21	4000	100	300/1200	1000/2	100	ZTX1051A-ND	1.14	8.55	51.30	323.00
	25	80	4	15	0.18	2000	10	300/1200	1000/2	100	ZTX1049A-ND‡	1.14	8.55	51.30	323.00
	20	20	3	8	0.5	2000	10	400/—	2000/2	150	ZTX689B-ND‡	.90	6.75	45.00	300.00
	20	20	3.5	10	0.255	3500	50	300/—	200/2	100	ZTX618-ND‡	1.08	8.10	48.60	306.00
	17.5	50	4	20	0.21	4000	20	300/1200	1000/2	150	ZTX1048A-ND‡	1.14	8.55	51.30	323.00
	12	12	3	10	0.35	3000	20	400/—	3000/2	150	ZTX688B-ND	.90	6.75	45.00	300.00
	10	35	4	20	0.19	4000	20	300/1200	1000/2	150	ZTX1047A-ND	1.14	8.55	51.30	323.00
PNP	-200	-200	-0.5	-1	-0.3	-200	-20	300/800	-10/-10	100	ZTX796A-ND	.90	6.75	45.00	300.00
	-140	-140	-0.5	-1	-0.3	-200	-5	300/800	-10/-2	100	ZTX795A-ND	.90	6.75	45.00	300.00
	-70	-75	-2	-4	-0.5	-1000	-25	300/800	-10/-2	100	ZTX792A-ND	.90	6.75	45.00	300.00
	-40	-50	-2	-6	-0.75	-2000	-50	300/800	-10/-2	100	ZTX790A-ND‡	.90	6.75	45.00	300.00
	-40	-45	-3	-5	-0.23	-1800	-70	250/800	-500/-2	145	ZTX1151A-ND	1.32	9.90	59.40	374.00
	-25	-25	-3	-8	-0.45	-2000	-20	300/800	-10/-2	100	ZTX789A-ND‡	.90	6.75	45.00	300.00
	-25	-30	-3	-10	-0.3	-3000	-70	250/800	-500/-2	135	ZTX1149A-ND	1.32	9.90	59.40	374.00
	-20	-20	-2.5	-6	-0.26	-2500	-200	300/—	-10/-2	150	ZTX718-ND‡	1.08	8.10	48.60	306.00
	-15	-15	-3	-8	-0.45	-2000	-10	500/1500	-10/-2	100	ZTX788B-ND‡	.90	6.75	45.00	300.00
	-15	-20	-3	-10	-0.32	-2000	-20	300/800	-10/-1	100	ZTX788A-ND	.90	6.75	45.00	300.00
	-12	-15	-4	-20	-0.235	-4000	-70	250/850	-500/-2	115	ZTX1147A-ND	1.32	9.90	59.40	374.00
High Performance Darlington Transistors — 1,000mW															
NPN	160	180	1	4	1.2	1000	10	2K-100K	500/10	150	ZTX601-ND	.78	5.85	39.00	260.00
	160	180	1	4	1.2	1000	10	10K-100K	500/10	150	ZTX601B-ND	.78	5.85	39.00	260.00
	140	160	1	4	1.2	1000	10	10K-100K	500/10	150	ZTX600B-ND	.78	5.85	39.00	260.00
	120	140	1	4	1.5	1000	1	2K-100K	1000/5	150	ZTX605-ND‡	.78	5.85	39.00	260.00
	100	120	0.8	2	1.25	800	8	10K/—	500/5	—	ZTX614-ND	.54	4.05	27.00	180.00
	80	100	1	4	1.0	1000	1	2K-100K	1000/5	150	ZTX603-ND‡	.78	5.85	39.00	260.00
PNP	-120	-140	-1	-4	-1.3	-1000	-1	3K/30K	-1000/-5	160	ZTX705-ND‡	.78	5.85	39.00	260.00
	-60	-80	-0.8	-2	-1.25	-800	-8	10K/—	-500/-5	—	ZTX712-ND	.60	4.50	30.00	200.00
RF Transistors															
NPN	25	30	.025	—	0.5	4	4	60/—	4/10	650	MPSH10ZX-ND†‡	.60	4.50	30.00	200.00
	15	30	.025	0.05	—	—	—	25/150	2/1	1300	ZTX325-ND‡	.75	5.63	37.50	250.00
High Current Transistors — 1.2 Watt															
NPN	300	330	3	5	0.25	3000	600	100/300	500/10	80	ZTX857-ND	1.50	11.25	67.50	425.00
	150	250	4	10	0.26	4000	400	100/300	1000/5	90	ZTX855-ND‡	1.50	11.25	67.50	425.00
	100	200	4	10	0.20	4000	400	100/300	2000/2	130	ZTX853-ND	1.50	11.25	67.50	425.00
	60	150	5	20	0.25	5000	200	100/300	2000/1	130	ZTX851-ND‡	1.50	11.25	67.50	425.00
	30	80	5	20	0.22	5000	200	100/300	1000/1	100	ZTX849-ND‡	1.50	11.25	67.50	425.00
	25	60	5	20	0.22	5000	100	300/—	1000/1	100	ZTX869-ND‡	1.50	11.25	67.50	425.00
PNP	-400	-400	-0.5	-1.5	-0.40	-500	-100	100/300	-500/-10	85	ZTX958-ND	1.56	11.70	70.20	442.00
	-330	-300	-1	-2	-0.20	-1000	-300	100/300	-500/-10	85	ZTX957-ND	1.56	11.70	70.20	442.00
	-200	-220	-2	-5	-0.25	-2000	-400	100/300	-1000/-5	110	ZTX956-ND	1.56	11.70	70.20	442.00
	-100	-140	-3.5	-10	-0.33	-4000	-400	100/300	-1000/-1	125	ZTX953-ND	1.56	11.70	70.20	442.00
	-60	-100	-4	-15	-0.30	-4000	-400	100/300	-1000/-1	120	ZTX951-ND‡	1.56	11.70	70.20	442.00
	-30	-50	-4.5	-20	-0.32	-5000	-300	100/300	-1000/-1	100	ZTX949-ND‡	1.56	11.70	70.20	442.00
	-20	-40	-4.5	-20	-0.31	-5000	-300	100/300	-1000/-1	80	ZTX948-ND	1.56	11.70	70.20	442.00
	-12	-15	-4.5	-20	-0.30	-5000	-200	300/1000	-500/-1	85	ZTX968-ND‡	1.56	11.70	70.20	442.00
Avalanche Mode Transistors															
NPN	100	260	—	60	0.25	250	—	25/—	10/10	40	ZTX415-ND‡	21.00	157.50	945.00	5950.00
	50	150	—	50	0.31	130	—	50/—	10/10	150	ZTX413-ND‡	19.50	146.25	877.50	5525.00

‡ Additional Information included in Zetex Application Handbook, part number ST321-ND.

ZETEX *Now QS9000 Accredited!*

ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

Super E-Line — TO-92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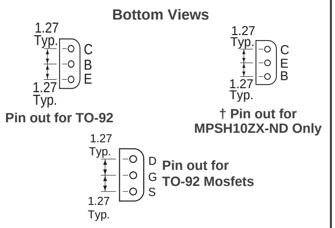
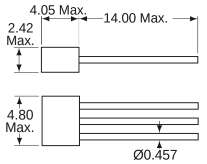
Offset Collector Flag To Prevent Bond Wires Shorting To Die
Bond Wires
Locking Tabs
Silicone Molded Package
Heavy Duty Copper Based Lead Frame





Super E-Line

The standard lead formation is collector-base-emitter (c-b-e) “in-line.” The Zetex Super E-Line range brings together advanced chip technology and assembly techniques to give superior performance in a TO-92 style package. Parallel studies into chip design and assembly techniques have been combined to produce the outstanding features of the Super E-Line.

High Current Gain:

A major objective of the chip design was to produce a range of transistors with improved gain properties at high current levels. By utilizing advanced power efficient geometries and diffusion techniques, *minimum gains of 75 have been achieved at collector currents of 2 amps on standard hFE range product, while “Super-ß” types can show a minimum gain of 400 at 3A (without a heat sink!)*

High Performance Complementary Pairs:

Selective chip design has produced excellent gain linearity and extremely low base resistance, ideal for consumer applications including audio amplifiers and complementary drivers.

High Current Handling Capability:

Improvements in equalizing current distribution across the chip (avoiding ‘hot spots’) has produced a continuous current (IC) rating of 5 amps and peak pulse currents (ICM) of 20 amps. This makes the ZTX850 and ZTX950 series ideal for applications such as solenoids, actuators, relays, lamp drivers, motor drivers and photo flash units. The ZETEX SUPER E-LINE gives performance and reliability beyond standard TO-92 products and metal-can transistors. The package is approved over and beyond the full military temperature range. Zetex E-Line transistors are currently in use in many military applications and have been approved for 20 years application use in telecommunication equipment.

Low Saturation Voltage

Advanced chip geometry design and optimized processing lead to minimized Rce(sat). For example the ZTX849 demonstrates an equivalent on-resistance of 36mΩ at 5A. This allows cost effective replacement of much large packaged devices in switching applications.

Environmental Protection:

The silicone plastic used for the Zetex E-Line encapsulation protects the active semiconductor chip from exposure to corrosive agents, moisture and extreme environmental conditions. The absence of ionic contamination in the silicone allows chip operation up to 200°C without risk of failure. In regular tests conducted by the Quality Assurance Dept., E-Line devices are operated at Tamb = 230°C under reverse bias conditions. All devices must survive without degradation. This presents the wide operating and storage temperature range normally associated only with metal-can devices.

Operating and Storage Temperature Range: -55°C to +200°C.

Diodes — SOT-23 Package

V_{BR} at I_R = 10µA Min. (V)	V_F at I_F = 1mA Max. (mV)	I_R Max. nA/ V_R (V)	I_F at V_F = 1V Min. (mA)	C_T @ V_R = OV f = 1MHz Max. (pF)	Pinning Configuration	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Schottky Barrier Diodes — SOT-23 Package											
70	410	200 / 50	15	2.0	Single	ZC2800ECT-ND	1.38	1.04	.63	ZC2800ETR-ND	345.00/M
15	410	100 / 10	20	1.2	Single	ZC2811ECT-ND	1.80	1.35	.81	ZC2811ETR-ND	450.00/M
50	410	200 / 35	15	2.0	Single	ZC5800ECT-ND	.93	.70	.42	ZC5800ETR-ND	232.50/M
30	400	2500 / 25	100	10	Com. Cathode	BAT54CT-ND	.72	.54	.36	BAT54TR-ND	216.00/M
NEW! Schottky Barrier Diodes — SOT-23-6 Package NEW!											
40	385	300/30	2000	50	—	ZHCS2000CT-ND *	1.29	.97	.65	ZHCS2000TR-ND	322.50/M
Schottky Barrier Diodes — SOD-323 Package											
70	410	200 / 50	15	2.0	Single	ZMS2800CT-ND	.99	.75	.45	ZMS2800TR-ND	247.50/M
50	410	200 / 35	15	2.0	Single	ZMS5800CT-ND	.99	.75	.45	ZMS5800TR-ND	247.50/M
Dual Schottky Barrier Diodes — SOT-23 Package											
70	410	200 / 50	15	2.0	Series	BAS70-04ZXCT-ND	1.92	1.44	.87	BAS70-04ZXTR-ND	480.00/M
70	410	200 / 50	15	2.0	Com. Anode	BAS70-06ZXCT-ND	1.92	1.44	.87	BAS70-06ZXTR-ND	480.00/M
70	410	200 / 50	15	2.0	Com. Cathode	BAS70-05CT-ND	1.92	1.44	.87	BAS70-05TR-ND	480.00/M
30	400	2000 / 25	200	10	Com. Anode	BAT54ACT-ND †	.84	.63	.42	BAT54ATR-ND	252.00/M
30	400	2000 / 25	200	10	Series	BAT54SCT-ND †	.84	.63	.42	BAT54STR-ND	252.00/M
30	400	2000 / 25	200	10	Com. Cathode	BAT54CCT-ND †	.84	.63	.42	BAT54CTR-ND	252.00/M
15	410	100 / 10	20	1.2	Series	ZC2812ECT-ND	2.55	1.92	1.15	ZC2812ETR-ND	637.50/M
15	410	100 / 10	20	1.2	Com. Anode	ZC2813ECT-ND	2.55	1.92	1.15	ZC2813ETR-ND	637.50/M
Dual Schottky Barrier Diodes — SOT-323 Package											
70	410	200 / 50	15	2.0	Series	ZUMD70-04CT-ND	.75	.57	.34	ZUMD70-04TR-ND	187.50/M
30	320	2000 / 25	200	10	Com. Cathode	ZUMD54CCT-ND †	.75	.57	.34	ZUMD54CTR-ND	187.50/M

* VR = 25V † VR = 1V

V_{BR} (V)	I_R max.	I_R Typical	@VR	VF @200mA	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Silicon Planar Low Leakage Diodes - Common Cathode — SOT-23 Package										
50	3nA	<25pA	50	1.4	FLLD258CT-ND	.45	.34	.23	FLLD258TR-ND	135.00/M
Silicon Planar Low Leakage Diodes - Series — SOT-23 Package										
100	5nA	<25pA	100	1.4	FLLD261CT-ND	.45	.34	.23	FLLD261TR-ND	135.00/M
Silicon Planar Low Leakage Diodes - Common Anode — SOT-23 Package										
100	5nA	<25pA	100	1.4	FLLD263CT-ND	.45	.34	.23	FLLD263TR-ND	135.00/M

Silicon voltage regulator diodes designed for voltage reference and stabilizer applications. Encapsulated in the popular SOT-23 package, these devices are designed specifically for use in thin and thick film hybrid circuits in both industrial and commercial applications.

Specifications:

• Nominal Tolerance: ±5% • Max. Power Dissipation at T_{amb} = 25°C: P_{tot} 350mW • Operating and Storage Temperature Range: -65°C to +150°C • Max. Forward Current: I_F 250mA

Zener Voltage Vz at Iz = 5mA Min.	Nom.	Max.	Diff. Resistance rz at Iz = 5mA Max. (Ohms)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Zener Diodes — Silicon Voltage Regulator Diodes — SOT-23 Package									
2.5	2.7	2.9	100	BZX84C2V7ZXCT-ND•	.39	.30	.20	BZX84C2V7ZXTR-ND	117.00/M
2.8	3.0	3.2	100	BZX84C3V0ZXCT-ND•	.39	.30	.20	BZX84C3V0ZXTR-ND	117.00/M
3.1	3.3	3.5	100	BZX84C3V3ZXCT-ND•	.39	.30	.20	BZX84C3V3ZXTR-ND	117.00/M
3.4	3.6	3.8	100	BZX84C3V6ZXCT-ND	.39	.30	.20	BZX84C3V6ZXTR-ND	117.00/M
3.7	3.9	4.1	100	BZX84C3V9ZXCT-ND•	.39	.30	.20	BZX84C3V9ZXTR-ND	117.00/M
4.0	4.3	4.6	90	BZX84C4V3ZXCT-ND	.39	.30	.20	BZX84C4V3ZXTR-ND	117.00/M
4.4	4.7	5.0	80	BZX84C4V7ZXCT-ND	.39	.30	.20	BZX84C4V7ZXTR-ND	117.00/M
4.8	5.1	5.4	60	BZX84C5V1ZXCT-ND•	.39	.30	.20	BZX84C5V1ZXTR-ND	117.00/M
5.2	5.6	6.0	40	BZX84C5V6ZXCT-ND•	.39	.30	.20	BZX84C5V6ZXTR-ND	117.00/M
5.8	6.2	6.6	10	BZX84C6V2ZXCT-ND•	.39	.30	.20	BZX84C6V2ZXTR-ND	117.00/M
6.4	6.8	7.2	15	BZX84C6V8ZXCT-ND•	.39	.30	.20	BZX84C6V8ZXTR-ND	117.00/M
7.0	7.5	7.9	15	BZX84C7V5ZXCT-ND	.39	.30	.20	BZX84C7V5ZXTR-ND	117.00/M
7.7	8.2	8.7	15	BZX84C8V2ZXCT-ND	.39	.30	.20	BZX84C8V2ZXTR-ND	117.00/M
8.5	9.1	9.6	15	BZX84C9V1ZXCT-ND•	.39	.30	.20	BZX84C9V1ZXTR-ND	117.00/M
9.4	10	10.6	20	BZX84C10ZXCT-ND•	.39	.30	.20	BZX84C10ZXTR-ND	117.00/M
10.4	11	11.6	20	BZX84C11ZXCT-ND	.39	.30	.20	BZX84C11ZXTR-ND	117.00/M
11.4	12.0	12.7	25	BZX84C12ZXCT-ND•	.39	.30	.20	BZX84C12ZXTR-ND	117.00/M
12.4	13	14.1	30	BZX84C13ZXCT-ND	.39	.30	.20	BZX84C13ZXTR-ND	117.00/M
13.8	15	15.6	30	BZX84C15ZXCT-ND•	.39	.30	.20	BZX84C15ZXTR-ND	117.00/M
15.3	16	17.1	40	BZX84C16ZXCT-ND	.39	.30	.20	BZX84C16ZXTR-ND	117.00/M
16.8	18	19.1	45	BZX84C18ZXCT-ND•	.39	.30	.20	BZX84C18ZXTR-ND	117.00/M
18.8	20	21.2	55	BZX84C20ZXCT-ND•	.39	.30	.20	BZX84C20ZXTR-ND	117.00/M
20.8	22	23.3	55	BZX84C22ZXCT-ND	.39	.30	.20	BZX84C22ZXTR-ND	117.00/M
22.8	24	25.6	70	BZX84C24ZXCT-ND•	.39	.30	.20	BZX84C24ZXTR-ND	117.00/M
25.1	27	28.9	80	BZX84C27ZXCT-ND†	.39	.30	.20	BZX84C27ZXTR-ND	117.00/M
28	30	32	80	BZX84C30ZXCT-ND•†	.39	.30	.20	BZX84C30ZXTR-ND	117.00/M
31.0	33.0	35.0	80	BZX84C33ZXCT-ND•†	.39	.30	.20	BZX84C33ZXTR-ND	117.00/M
34.0	36.0	38.0	90	BZX84C36ZXCT-ND•†	.39	.30	.20	BZX84C36ZXTR-ND	117.00/M
37	39	41	130	BZX84C39ZXCT-ND†	.39	.30	.20	BZX84C39ZXTR-ND	117.00/M
40	43	46	150	BZX84C43ZXCT-ND†	.39	.30	.20	BZX84C43ZXTR-ND	117.00/M
44	47	50	170	BZX84C47ZXCT-ND†	.39	.30	.20	BZX84C47ZXTR-ND	117.00/M

† Iz at 2mA

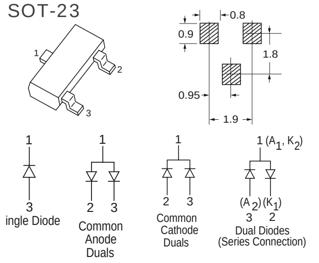
• **BZX1-KIT-ND** ***Digi-Key® SMD Zener Diode Kit*** 10 each of values denoted (180 total pieces) **$49.95**

‡ *Additional Information included in Zetex Application Handbook, part number ST321-ND.*

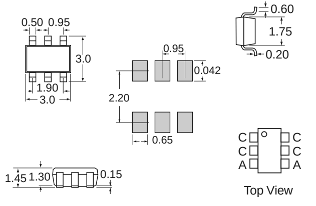
Now QS9000 Accredited!

ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

SOT-23



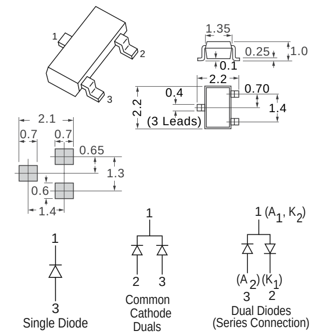
SOT-23-6 *NEW!*



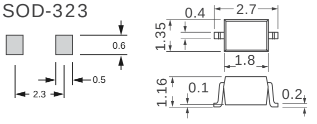
SOT-23 Tape and Reel Information:

Tape packaging has special attractions for customers using manual placement since it makes it easier to assemble and orientate these tiny components; stock accounting is also simplified.

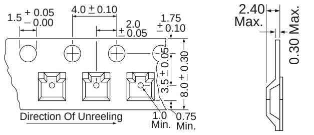
SOT-323



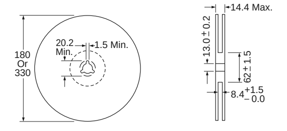
SOD-323



Tape Specs



Reel Specs



ZETEX Diodes — SOT-23 and SO-16 Packages

Description	Ratings V_R (V)	Ratings I_F (mA)	trr Max. (ns)	Max. V_F at I_F = mA 10/50/100	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Silicon Planar High Speed Switching Diodes — SOT-23 Package										
Single Diode	75	100	6	0.855/1.0/—	BAS16ZXCT-ND	.39	.30	.20	BAS16ZXTR-ND	117.00/M
Single Diode	75	75	4/8	1.0/–/–	FMMD914CT-ND	.36	.27	.18	FMMD914TR-ND	108.00/M
Single Diode	50	150	4	–/–/1.0	BAR74ZXCT-ND	.39	.30	.20	BAR74ZXTR-ND	117.00/M
Dual Diode w/ Common Cathode	70	200	5	0.7/–/1.1	FMMD6100CT-ND	.36	.27	.18	FMMD6100TR-ND	108.00/M
Dual Diode w/ Common Cathode	70	100	6	0.855/1.1/1.3	BAV70ZXCT-ND	.39	.30	.20	BAV70ZXTR-ND	117.00/M
Dual Diode w/ Common Cathode	50	150	4	–/–/1.0	BAV74ZXCT-ND	.39	.30	.20	BAV74ZXTR-ND	117.00/M
Dual Diode w/ Series Connection	70	100	6	0.855/1.1/1.3	BAV99ZXCT-ND	.39	.30	.20	BAV99ZXTR-ND	117.00/M
Dual Diode w/ Common Anode	70	100	6	0.855/1.1/1.3	BAW56ZXCT-ND	.39	.30	.20	BAW56ZXTR-ND	117.00/M
Single Diode	200	200	50	1.0	BAS21ZXCT-ND	.36	.27	.18	BAS21ZXTR-ND	108.00/M

V_{BR} (V)	$I_{F(DC)}$ (mA)	I_{FSM} (A)	V_F (mV)	@mA	V_F (mV)	@mA	P_{tot} (mW)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Silicon Planar High Current Schottky Diodes — SOT-23 Package													
40	500	6.75	550	500	1050	1500	330	ZHCS500CT-ND	.72	.54	.36	ZHCS500TR-ND	216.00/M
60	500	6.75	550	500	1120	1500	330	ZHCS506CT-ND	.78	.59	.39	ZHCS506TR-ND	234.00/M
40	750	12	490	750	650	1500	625	ZHCS750CT-ND	.96	.72	.44	ZHCS750TR-ND	240.00/M
60	750	12	520	750	760	1500	625	ZHCS756CT-ND	1.02	.77	.51	ZHCS756TR-ND	306.00/M
40	1000	12	500	1000	600	1500	625	ZHCS1000CT-ND	1.20	.90	.54	ZHCS1000TR-ND	300.00/M
60	1000	12	510	1000	620	1500	625	ZHCS1006CT-ND	1.26	.95	.63	ZHCS1006TR-ND	378.00/M
Silicon Planar High Current Schottky Diodes — SOD-323 Package													
40	400	6.75	500	400	1050	1500	300	ZHCS400CT-ND	.63	.48	.32	ZHCS400TR-ND	189.00/M

Max. Reverse Voltage (V)	Max. Forward Current (mA)	Forward Voltage to V_{CC} (V)	Forward Voltage from G_{ND} (V)	Max. Reverse Current (µA)	Typical Capacitance (pF)	Typical Recovery Time (ns)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	1,000
Schottky Diode Array — SO-16 Package													
7	50	0.85	0.75	6	6	8	SDA24N16CT-ND‡	4.65	3.49	2.10	SDA24N16TR-ND‡	813.75	1317.50

‡ Additional Information included in Zetex Application Handbook, part number ST321-ND.

ZETEX Transistors — SOT-89 Package

Type	V_{CBO} (V)	V_{CEO} (V)	I_C (mA)	h_{FE} @ Min./Max.	I_C/V_{CE} (mA/V)	V_{CE} (Sat.) Max. @ (V)	I_C (mA)	I_B (mA)	f_T Typ. (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	Digi-Key Part No.	Tape & Reel Size	Pricing
1 Watt — SOT-89 Package															
NPN	400	400	500	35/—	200/10	0.2	100	10	50	FCX658ACT-ND *NEW!*	.84	.63	FCX658ATR-ND *NEW!*	3,000	210.00/M
	400	400	225	100/300	50/10	0.5	50	6	50	FCX458CT-ND	1.05	.79	FCX458TR-ND	1,000	297.50
	400	350	500	40/—	20/10	0.5	50	4	70	BST39CT-ND	.96	.72	BST39TR-ND	1,000	272.00
	300	250	500	40/—	20/10	0.5	50	4	70	BST40CT-ND	.96	.72	BST40TR-ND	1,000	272.00
	170	150	100	100/300	250/10	0.3	500	50	100	FCX495CT-ND	1.02	.77	FCX495TR-ND	1,000	289.00
	150	75	3000	270/1200	1000/2	0.25	3000	100	140	FCX1053ACT-ND	1.05	.79	FCX1053ATR-ND	1,000	297.50
	150	40	3000	270/1200	1000/2	0.34	5000	100	155	FCX1051ACT-ND	1.05	.79	FCX1051ATR-ND	1,000	297.50
	120	100	1000	100/300	250/10	0.3	500	50	150	FCX493CT-ND	1.05	.79	FCX493TR-ND	1,000	297.50
	100	80	1000	100/250	150/2	0.5	500	50	150	BCX5616CT-ND	.93	.70	BCX5616TR-ND	1,000	263.50
	90	80	500	2000/—	500/10	1.3	500	0.5	150	BST52CT-ND*	.96	.72	BST52TR-ND*	1,000	272.00
	80	60	1000	100/300	500/5	0.5	1000	100	150	FCX491CT-ND	1.05	.79	FCX491TR-ND	1,000	297.50
	80	60	500	1000/—	150/10	1.3	500	.5	—	BST51CT-ND*	.96	.72	BST51TR-ND*	1,000	272.00
	60	60	1000	100/250	150/2	0.5	500	50	150	BCX5516CT-ND	.93	.70	BCX5516TR-ND	1,000	263.50
	50	50	2000	200/—	1000/2	0.35	3000	100	165	FCX619CT-ND	.87	.66	FCX619TR-ND	1,000	246.50
	45	45	2000	400/150	2000/2	0.30	1000	5	150	FCX690BCT-ND	.87	.66	FCX690BTR-ND	1,000	246.50
	40	40	1000	300/900	500/5	0.5	1000	100	150	FCX491ACT-ND	1.05	.79	FCX491ATR-ND	1,000	297.50
	40	30	500	20,000	100/5	1.0	100	0.1	150	BCV29CT-ND*	.96	.72	BCV29TR-ND*	1,000	272.00
	35	10	4000	300/1200	1000/2	0.35	5000	25	150	FCX1047ACT-ND	1.05	.79	FCX1047ATR-ND	1,000	297.50
	25	20	1000	85/375	500/1	0.5	1000	100	60	BC868CT-ND	.90	.68	BC868TR-ND	1,000	300.00
	15	15	4000	200/—	3000/2	0.20	3000	50	120	FCX617CT-ND	.87	.66	FCX617TR-ND	1,000	246.50
	12	12	3000	400/—	3000/2	0.40	4000	50	150	FCX688BCT-ND	.87	.66	FCX688BTR-ND	1,000	246.50
PNP	-400	-400	-200	100/300	-50/-10	-0.5	-50	-6	50	FCX558CT-ND	1.05	.79	FCX558TR-ND	1,000	297.50
	-300	-300	-50	50/-	-25/-20	-0.6	-30	-5	100	BF621CT-ND	.90	.68	BF621TR-ND	1,000	300.00
	-220	-200	-300	85/300	25	-0.35	-250	25	150	FCX596CT-ND	1.02	.77	FCX596TR-ND	1,000	289.00
	-200	-200	-500	30/150	-50/-10	-2.0	-50	-5	15	BST15CT-ND	.96	.72	BST15TR-ND	1,000	272.00
	-120	-100	-1000	100/300	-500/-5	-0.3	-500	-50	50	FCX593CT-ND	1.05	.79	FCX593TR-ND	1,000	297.50
	-100	-80	-1000	100/250	-150/-2	-0.5	-500	-50	150	BCX5316CT-ND	.93	.70	BCX5316TR-ND	1,000	263.50
	-80	-60	-1000	100/300	-500-5	-0.6	-1000	-100	150	FCX591CT-ND	1.05	.79	FCX591TR-ND	1,000	297.50
	-80	-60	-500	10,000/-	-100/-5	-1.0	-100	-0.1	200	BCV48CT-ND*	.96	.72	BCV48TR-ND*	1,000	272.00
	-80	-60	-500	2,000	-500/-10	-1.3	-500	-50	200	BST61CT-ND*	.96	.72	BST61TR-ND*	1,000	272.00
	-70	-60	-1000	100/300	-100/-5	-0.5	-500	-50	100	BSR31CT-ND	.96	.72	BSR31TR-ND	1,000	272.00
	-60	-60	-1000	100/250	-150/-2	-0.5	-500	-50	150	BCX5216CT-ND	.93	.70	BCX5216TR-ND	1,000	263.50
	-50	-30	-1000	100/300	-500/-2	-0.35	-1000	-100	100	FCX589CT-ND	1.05	.79	FCX589TR-ND	1,000	297.50
	-50	-40	-2000	250/150	-2000/-2	-0.45	-500	-10	100	FCX790ACT-ND	.87	.66	FCX790ATR-ND	1,000	246.50
	-45	-40	-3000	250/800	-500/-2	-0.30	-3000	-250	145	FCX1151ACT-ND	1.05	.79	FCX1151ATR-ND	1,000	297.50
	-40	-40	-1000	300/800	-100/-5	-0.35	-500	-20	150	FCX591ACT-ND	1.05	.79	FCX591ATR-ND	1,000	297.50
	-30	-25	-3000	250/800	-500/-2	-0.30	-3000	-100	135	FCX1149ACT-ND	.87	.66	FCX1149ATR-ND	1,000	246.50
	-25	-20	-1000	85/375	-500/-1	-0.5	-1000	-100	60	BC869CT-ND	.90	.68	BC869TR-ND	1,000	300.00
	-25	-25	-3000	300/800	-10/-2	-0.19	-1000	-10	100	FCX789ACT-ND	.87	.66	FCX789ATR-ND	1,000	246.50
	-20	-20	-2500	300/—	-100/-2	-0.22	-1500	-50	150	FCX718CT-ND	.87	.66	FCX718TR-ND	1,000	246.50
	-15	-12	-3000	250/850	-500/-2	-0.25	-3000	-30	115	FCX1147ACT-ND	1.05	.79	FCX1147ATR-ND	1,000	297.50
	-12	-12	-3000	300/—	-100/-2	-0.32	-3000	-50	110	FCX717CT-ND	.87	.66	FCX717TR-ND	1,000	246.50

***** Darlington

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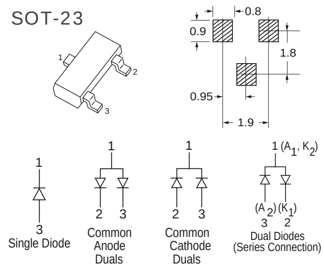
ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

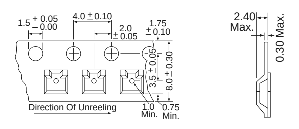
SOT-23



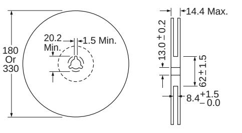
SOT-23 Tape and Reel Information:

Tape packaging has special attractions for customers using manual placement since it makes it easier to assemble and orientate these tiny components; stock accounting is also simplified.

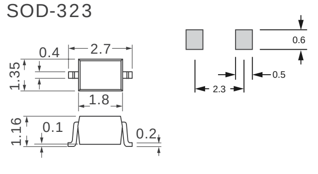
Tape Specs



Reel Specs



SOD-323



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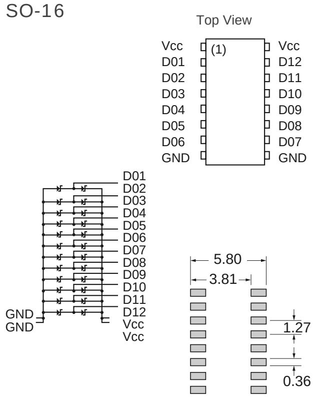
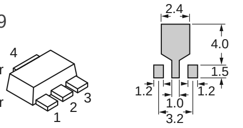


SOT-89

1 Base
2 Collector
3 Emitter
4 Collector



ZETEX Transistors — SOT-23, SOT23-6 and MSOP-8 Packages

Type	V_{CBO} (V)	V_{CEO} (V)	I_C (mA)	h_{FE} @		V_{CE} (Sat.)			f_T Typ. (MHz)	Digi-Key Part No.	Cut Tape Price Each		Digi-Key Part No.	Tape & Reel	
				Min./Max.	I_C/V_{CE} (mA/V)	Max. @ (V)	I_C (mA)	I_B (mA)			1	10		Size	Pricing
General Purpose — 330mW — SOT-23 Package															
NPN	80	80	1500	300/900	200/2	0.20	1500	50	160	FMMT620CT-ND *NEW!*	.69	.52	FMMT620TR-ND *NEW!*	3,000	172.50/M
	60	40	200	100/300	10/1	0.2	10	1	300	FMMT3904CT-ND	.36	.27	FMMT3904TR-ND	3,000	108.00/M
	45	45	200	380/630	2/5	0.35	10	0.25	250	BCX70KCT-ND	.36	.27	BCX70KTR-ND	3,000	108.00/M
	32	32	200	380/630	2/5	0.35	10	0.25	250	BCW60DCT-ND	.36	.27	BCW60DTR-ND	3,000	108.00/M
	40	30	200	50/150	2/1	0.3	50	5	250	FMMT4123CT-ND	.36	.27	FMMT4123TR-ND	3,000	108.00/M
PNP	-60	-40	-200	100/300	-10/-1	-0.2	-10	-1.0	300	FMMT3906CT-ND	.36	.27	FMMT3906TR-ND	3,000	108.00/M
	-45	-45	-200	380/630	-2/-5	-0.25	-10	-0.25	180	BCX71KCT-ND	.36	.27	BCX71KTR-ND	3,000	108.00/M
	-32	-32	-200	380/630	-2/-5	-0.25	-10	-0.25	180	BCW61DCT-ND	.36	.27	BCW61DTR-ND	3,000	108.00/M
Switching Transistors — 330mW — SOT-23 Package															
NPN	75	40	600	100/300	150/10	0.3	150	15	300	FMMT2222ACT-ND	.36	.27	FMMT2222ATR-ND	3,000	108.00/M
	60	40	600	100/300	150/1	0.4	150	15	200	FMMT4401CT-ND	.36	.27	FMMT4401TR-ND	3,000	108.00/M
	30	25	200	120/360	2/1	0.3	50	5	300	FMMT4124CT-ND	.36	.27	FMMT4124TR-ND	3,000	108.00/M
	40	15	200	40/120	10/1	0.25	10	1	500	FMMT2369CT-ND	.36	.27	FMMT2369TR-ND	3,000	108.00/M
PNP	-60	-60	-600	100/300	-150/-10	-0.4	-150	-15	200	FMMT2907ACT-ND	.36	.27	FMMT2907ATR-ND	3,000	108.00/M
	-40	-40	-600	100/300	-150/-1	-0.4	-150	-15	200	FMMT4403CT-ND	.36	.27	FMMT4403TR-ND	3,000	108.00/M
	-30	-30	-200	50/150	-2/-1	-0.4	-50	-5	200	FMMT4125CT-ND	.36	.27	FMMT4125TR-ND	3,000	108.00/M
	-25	-25	-200	120/360	-2/-1	-0.4	-50	-5	250	FMMT4126CT-ND	.36	.27	FMMT4126TR-ND	3,000	108.00/M
RF Transistors — SOT-23 Package															
NPN	30	25	25	60/—	4/10	0.5	4	0.4	650	FMMTH10CT-ND	.60	.45	FMMTH10TR-ND	3,000	180.00/M
	20	12	50	25/250	3/1	0.4	10	1	900	FMMT5179CT-ND‡	.54	.41	FMMT5179TR-ND‡	3,000	162.00/M
	30	15	100	20/—	3/1	0.4	10	1	600	FMMT918CT-ND	.48	.36	FMMT918TR-ND	3,000	144.00/M
	30	20	25	40/—	7/10	—	—	—	450	BFS20CT-ND	.48	.36	BFS20TR-ND	3,000	144.00/M
	30	15	25	25/150	2/1	—	—	—	1300	BFS17CT-ND‡	.51	.39	BFS17TR-ND‡	3,000	153.00/M
	25	15	25	70/200	2/1	—	—	—	1300	BFS17HCT-ND	.54	.41	BFS17HTR-ND	3,000	162.00/M
High Voltage — 330mW — SOT-23 Package															
NPN	300	300	200	40/—	30/10	0.5	20	2.0	50	FMMTA42CT-ND	.39	.30	FMMTA42TR-ND	3,000	117.00/M
	180	160	400	80/250	10/5	0.4	50	5	200	FMMT5551CT-ND	.45	.34	FMMT5551TR-ND	3,000	135.00/M
	120	80	100	20/—	10/1	0.15	4	0.4	100	BSS64ZXCT-ND	.45	.34	BSS64ZXTR-ND	3,000	135.00/M
PNP	-500	-500	-500	80/—	-50/-10	-0.2	-20	-2	90	FMMT560CT-ND	.90	.68	FMMT560TR-ND	3,000	270.00/M
	-300	-300	-200	25/—	-30/-10	-0.5	-20	-2.0	50	FMMTA92CT-ND	.39	.30	FMMTA92TR-ND	3,000	117.00/M
	-160	-150	-600	60/240	-10/-5	-0.5	-50	-5	200	FMMT5401CT-ND	.39	.30	FMMT5401TR-ND	3,000	117.00/M
	-110	-100	-100	30/—	-10/-1	-0.25	-25	-2.5	85	BSS63ZXCT-ND	.45	.34	BSS63ZXTR-ND	3,000	135.00/M
Darlington — 330mW — SOT-23 Package															
NPN	80	60	300	10K/—	500/5	1.25	800	8.0	100	FMMT38CCT-ND	.48	.36	FMMT38CTR-ND	3,000	144.00/M
	30	30	300	10K/—	10/5	1.5	100	0.1	100	FMMTA14CT-ND	.39	.30	FMMTA14TR-ND	3,000	117.00/M
	30	30	300	5K/—	10/5	1.5	100	0.1	100	FMMTA13CT-ND	.39	.30	FMMTA13TR-ND	3,000	117.00/M
PNP	-30	-30	-500	10K/—	-10/-5	-1.5	-100	-0.1	150	FMMTA63CT-ND	.39	.30	FMMTA63TR-ND	3,000	117.00/M
	-30	-30	-500	20K/—	-10/-5	-1.5	-100	-0.1	150	FMMTA64CT-ND	.39	.30	FMMTA64TR-ND	3,000	117.00/M
High Performance — 500mW — SOT-23 Package															
NPN	400	400	225	100/300	50/10	0.2	20	2	50	FMMT458CT-ND	.66	.50	FMMT458TR-ND	3,000	198.00/M
	300	300	500	100/300	100/10	0.2	100	10	75	FMMT497CT-ND	.51	.39	FMMT497TR-ND	3,000	153.00/M
	170	150	1000	100/300	250/10	0.2	250	25	100	FMMT495CT-ND	.51	.39	FMMT495TR-ND	3,000	153.00/M
	140	120	1000	100/300	250/10	0.2	250	25	100	FMMT494CT-ND	.51	.39	FMMT494TR-ND	3,000	153.00/M
	120	100	1000	100/300	250/10	0.25	500	50	150	FMMT493CT-ND	.51	.39	FMMT493TR-ND	3,000	153.00/M
	120	100	500	5K/—	500/5	1.0	500	5	100	FMMT614CT-ND*	.63	.48	FMMT614TR-ND*	3,000	189.00/M
	80	60	1000	50/150	150/10	0.35	150	15	150	FMMT451CT-ND	.51	.39	FMMT451TR-ND	3,000	153.00/M
	80	60	1000	100/300	500/5	0.3	500	50	150	FMMT491CT-ND‡	.51	.39	FMMT491TR-ND‡	3,000	153.00/M
	40	40	1000	300/900	500/5	0.3	500	50	150	FMMT491ACT-ND	.51	.39	FMMT491ATR-ND	3,000	153.00/M
	50	30	1000	100/300	1000/2	0.3	1000	100	150	FMMT489CT-ND‡	.51	.39	FMMT489TR-ND‡	3,000	153.00/M
	50	30	1000	100/300	500/2	0.5	1000	100	150	FMMT449CT-ND	.48	.36	FMMT449TR-ND	3,000	144.00/M
PNP	-400	-400	-150	100/300	-50/-10	-0.2	-20	-2	50	FMMT558CT-ND	.66	.50	FMMT558TR-ND	3,000	198.00/M
	-300	-300	-200	100/—	-100/-10	-0.25	-100	-20	75	FMMT597CT-ND	.54	.41	FMMT597TR-ND	3,000	162.00/M
	-220	-200	-500	100/300	-250/-10	-0.35	-250	-25	150	FMMT596CT-ND	.54	.41	FMMT596TR-ND	3,000	162.00/M
	-120	-100	-1000	100/300	-500/-10	-0.3	-500	-50	150	FMMT593CT-ND	.54	.41	FMMT593TR-ND	3,000	162.00/M
	-80	-60	-1000	100/300	-500/-5	-0.3	-500	-50	150	FMMT591CT-ND	.54	.41	FMMT591TR-ND	3,000	162.00/M
	-80	-60	-1000	50/150	-150/-10	-0.35	-150	-15	150	FMMT551CT-ND	.51	.39	FMMT551TR-ND	3,000	153.00/M
	-50	-30	-1000	100/300	-500/-2	-0.35	-1000	-100	100	FMMT589CT-ND‡	.54	.41	FMMT589TR-ND‡	3,000	162.00/M
	-40	-40	-1000	300/800	-100/-5	-0.35	-500	-20	150	FMMT591ACT-ND	.54	.41	FMMT591ATR-ND	3,000	162.00/M
	-35	-30	-1000	100/300	-500/-2	-0.5	-1000	-100	100	FMMT549CT-ND	.51	.39	FMMT549TR-ND	3,000	153.00/M
Medium Power — 330mW — SOT-23 Package															
NPN	80	80	500	50/—	100/10	0.25	100	10	100	FMMTA06CT-ND	.39	.30	FMMTA06TR-ND	3,000	117.00/M
	75	45	800	250/630	100/1	0.3	100	10	100	BCW66HCT-ND	.36	.27	BCW66HTR-ND	3,000	108.00/M
	60	32	800	250/630	100/1	0.3	100	10	100	BCW65CCT-ND	.36	.27	BCW65CTR-ND	3,000	108.00/M
	50	45	500	100/600	100/1	0.62	500	50	200	BCX19CT-ND	.36	.27	BCX19TR-ND	3,000	108.00/M
PNP	-80	-80	-500	50/—	-100/-1	-0.25	-100	-10	100	FMMTA56CT-ND	.39	.30	FMMTA56TR-ND	3,000	117.00/M
	-60	-45	-800	250/630	-100/-1	-0.3	-100	-10	100	BCW68HCT-ND	.36	.27	BCW68HTR-ND	3,000	108.00/M
	-50	-45	-800	100/600	-100/-1	-0.62	-500	-50	100	BCX17CT-ND	.36	.27	BCX17TR-ND	3,000	108.00/M
	-45	-30	-800	250/630	-100/-1	-0.3	-100	-10	100	BCW67CCT-ND	.36	.27	BCW67CTR-ND	3,000	108.00/M
SuperSOTs — 625mW — SOT-23 Package															
NPN	150	150	1000	300/—	200/10	0.3	1000	50	135	FMMT625CT-ND	.99	.75	FMMT625TR-ND	3,000	247.50/M
	125	125	1000	100/—	1000/10	0.25	1000	50	155	FMMT624CT-ND	.99	.75	FMMT624TR-ND	3,000	247.50/M
	50	50	2000	100/—	2000/2	0.2	1000	10	165	FMMT619CT-ND‡	.99	.75	FMMT619TR-ND‡	3,000	247.50/M
	40	15	3300	300/900	200/2	0.15	3000	150	145	ZXT11N15DFCT-ND	.72	.54	ZXT11N15DFTR-ND	3,000	180.00/M
	40	20	2500	300/900	100/2	0.13	2500	250	160	ZXT11N20DFCT-ND	.72	.54	ZXT11N20DFTR-ND	3,000	180.00/M
	20	20	2500	200/—	2000/2	0.2	2500	50	140	FMMT618CT-ND‡	.99	.75	FMMT618TR-ND‡	3,000	247.50/M
	15	15	3000	200/—	3000/2	0.2	3000	50	120	FMMT617CT-ND‡	.99	.75	FMMT617TR-ND‡	3,000	247.50/M
PNP	-100	-100	-1000	250/—	-500/-10	-0.20	-500	-50	150	FMMT723CT-ND	1.05	.79	FMMT723TR-ND	3,000	262.50/M
	-70	-70	-1500	150/—	-1000/-5	-0.30	-500	-20	150	FMMT722CT-ND	1.05	.79	FMMT722TR-ND	3,000	262.50/M
	-40	-40	-1500	150/—	-1000/-2	-0.25	-1000	-50	150	FMMT720CT-ND‡	1.05	.79	FMMT720TR-ND‡	3,000	262.50/M
	-20	-20	-1500	150/—	-2000/-2	-0.20	-1000	-20	150	FMMT718CT-ND‡	1.05	.79	FMMT718TR-ND‡	3,000	262.50/M
	-12	-12	-2500	180/—	-2500/-2	-0.17	-1500	-50	110	FMMT717CT-ND‡	1.05	.79	FMMT717TR-ND‡	3,000	262.50/M
Avalanche Mode Transistors — SOT-23 Package															
NPN	100	260	0.5	25	10/10	0.5	10	1	40	FMMT415CT-ND	21.00	15.75	FMMT415TR-ND	3,000	5250.00/M
	100	320	0.5	25	10/10	0.5	10	1	40	FMMT417CT-ND	24.00	18.00	FMMT417TR-ND	3,000	6000.00/M
SuperSOT 4 — 1.1W — SOT23-6 Package															
NPN	40	15	5000	300/900	1000/2	0.20	5000	1000	72	ZXT13N15DE6CT-ND	.81	.61	ZXT13N15DE6TR-ND	3,000	202.50/M
	50	20	4500	300/900	1000/2	0.23	4500	45	96	ZXT13N20DE6CT-ND	.81	.61	ZXT13N20DE6TR-ND	3,000	202.50/M
	50	50	1000	200/—	10/2	0.035	100	10	215	ZXTD09N50DE6CT-ND *NEW!*	1.20	.90	ZXTD09N50DE6TR-ND *NEW!*	2,500	300.00/M
	100	50	4000	300/900	1000/2	0.23	4000	100	115	ZXT13N50DE6CT-ND	.81	.61	ZXT13N50DE6TR-ND	3,000	202.50/M
PNP	-50	-40	-3000	300/900	-1000/-2	-0.24	-3000	-300	115	ZXT13P40DE6CT-ND	.81	.61	ZXT13P40DE6TR-ND	3,000	202.50/M
	-25	-20	-3500	300/900	-1000/-2	-0.25	-3500	-350	90	ZXT13P20DE6CT-ND	.81	.61	ZXT13P20DE6TR-ND	3,000	202.50/M
	-20	-12	-4000	300/900	-1000/-2	-0.25	-4000	-50	55	ZXT13P12DE6CT-ND	.81	.61	ZXT13P12DE6TR-ND	3,000	202.50/M
	-12	-12	-1250	125/—	-1250/-2	-0.240	-1250	-100	220	ZXTS1000E6CT-ND *NEW!*	1.20	.90	ZXTS1000E6TR-ND *NEW!*	2,500	300.00/M
SuperSOT 4 — 1.1W — MSOP-8 Package															
NPN	50	20	7000	300/900	1000/2	0.14	7000	70	180	ZXT14N20DXCT-ND	1.62	1.22	ZXT14N20DXTR-ND	1,000	459.00
	100	50	6000	300/900	1000/2	0.155	6000	120	185	ZXT14N50DXCT-ND	1.62	1.22	ZXT14N50DXTR-ND	1,000	459.00
PNP	-50	-40	-4000	300/900	-1000/-2	-0.16	-4000	-200	185	ZXT14P40DXCT-ND	1.62	1.22	ZXT14P40DXTR-ND	1,000	459.00
	-25	-20	-5000	300/900	-1000/-2	-0.20	-5000	-100	170	ZXT14P20DXCT-ND	1.62	1.22	ZXT14P20DXTR-ND	1,000	459.00
	-20	-12	-6000	300/900	-1000/-2	-0.163	-6000	-60	110	ZXT14P12DXCT-ND	1.62	1.22	ZXT14P12DXTR-ND	1,000	459.00
Dual SuperSOT 4 — 1.25W — MSOP-8 Package															
Dual NPN	50	20	3500	300/900	1000/2	0.20	3500	50	112	ZXT12N20DXCT-ND	1.98	1.49	ZXT12N20DXTR-ND	1,000	561.00
	100	50	3000	300/900	1000/2	0.25	3000	50	132	ZXT12N50DXCT-ND	1.98	1.49	ZXT12N50DXTR-ND	1,000	561.00
Dual PNP	-50	-40	-2000	300/900	-1000/-2	-0.26	-2000	-100	130	ZXT12P40DXCT-ND	1.98	1.49	ZXT12P40DXTR-ND	1,000	561.00
	-25	-20	-2500	300/900	-1000/-2	-0.20	-2500	-125	110	ZXT12P20DXCT-ND	1.98	1.49	ZXT12P20DXTR-ND	1,000	561.00
	-20	-12	-3000	300/900	-1000/-2	-0.27	-3000	-30	85	ZXT12P12DXCT-ND	1.98	1.49	ZXT12P12DXTR-ND	1,000	561.00

* Darlington ‡ *Additional Information included in Zetex Application Handbook, part number ST321-ND.*

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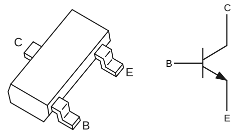
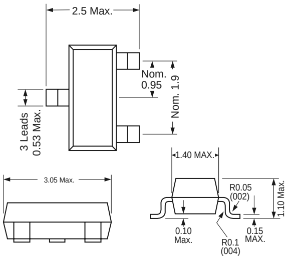
ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

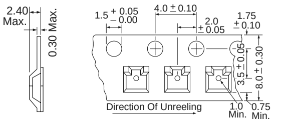
SOT-23 Conventional



SOT-23 Package Outline



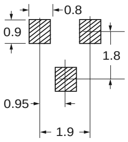
SOT-23 Tape Specs



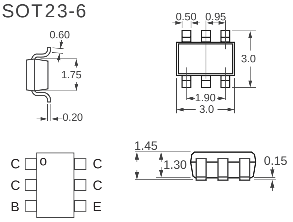
SOT-23 Tape and Reel Information:

Tape packaging also has special attractions for customers using manual placement since it makes it easier to assemble and orient these tiny components; stock accounting is also simplified.

SOT-23 PC Layout

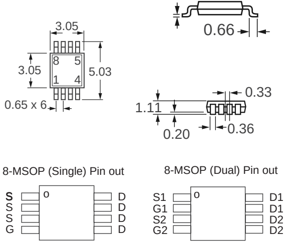


SOT23-6



Pin out for SOT23-6

8-MSOP MOSFET



8-MSOP (Single) Pin out

8-MSOP (Dual) Pin out

ZETEX Transistors — SOT-223 Package

Type	V_{CBO} (V)	V_{CEO} (V)	I_C (cont) (A)	I_{CM} (A)	h_{FE} at I_C/V_{CE} Min./Max.	(mA/V)	V_{CE} (Sat.) Max. at I_C/I_B (V)	(mA)	f_T (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	Digi-Key Part No.	Tape & Reel Pricing 1,000
High Performance Transistors (Including Darlington) — SOT-223 Package														
NPN	400	400	0.5	1.0	50/–	100/5	0.5	100/10	50	FZT658CT-ND	1.38	1.04	FZT658TR-ND	391.00
	300	300	0.5	1.0	50/–	100/5	0.5	100/10	30	FZT657CT-ND	1.38	1.04	FZT657TR-ND	391.00
	150	150	1.0	2.0	50/–	500/5	0.5	500/50	30	FZT655CT-ND	1.38	1.04	FZT655TR-ND	391.00
	120	100	2.0	6.0	100/300	500/2	0.3	1000/100	175	FZT653CT-ND	1.38	1.04	FZT653TR-ND	391.00
	80	60	3.0	6.0	100/300	500/2	0.3	1000/100	175	FZT651CT-ND	1.38	1.04	FZT651TR-ND	391.00
	35	25	3.0	8.0	100/300	1000/2	0.3	1000/100	240	FZT649CT-ND	1.38	1.04	FZT649TR-ND	391.00
	140	120	2.0	4.0	5K/–	500/5	1.0	250/0.25	150	FZT605CT-ND*‡	1.38	1.04	FZT605TR-ND*‡	391.00
	120	100	1.5	4.0	5K/–	500/5	1.0	250/0.25	150	FZT604CT-ND*	1.38	1.04	FZT604TR-ND*	391.00
	100	80	2.0	6.0	5K/100K	500/5	1.0	1000/1	150	FZT603CT-ND*	1.38	1.04	FZT603TR-ND*	391.00
	160	140	2.0	4.0	1K/–	1000/10	1.2	1000/10	150	FZT600CT-ND*	1.38	1.04	FZT600TR-ND*	391.00
PNP	-400	-400	-0.5	-1.0	50/–	-100/-5	-0.5	-100/-10	50	FZT758CT-ND	1.38	1.04	FZT758TR-ND	391.00
	-300	-300	-0.5	-1.0	50/–	-100/-5	-0.5	-100/-10	30	FZT757CT-ND	1.38	1.04	FZT757TR-ND	391.00
	-150	-150	-1.0	-2.0	50/–	-500/-5	-0.5	-500/-50	30	FZT755CT-ND	1.38	1.04	FZT755TR-ND	391.00
	-120	-100	-2.0	-6.0	100/300	-500/-2	-0.3	-1000/-100	100	FZT753CT-ND	1.38	1.04	FZT753TR-ND	391.00
	-80	-60	-3.0	-6.0	100/300	-500/-2	-0.3	-1000/-100	100	FZT751CT-ND	1.38	1.04	FZT751TR-ND	391.00
	-35	-25	-3.0	-8.0	100/300	-1000/-2	-0.3	-1000/-100	100	FZT749CT-ND	1.38	1.04	FZT749TR-ND	391.00
	-140	-120	-2.0	-4.0	3K/30K	-1000/-5	-1.3	-1000/-1	100	FZT705CT-ND*	1.38	1.04	FZT705TR-ND*	391.00
	-120	-100	-2.0	-4.0	3K/30K	-1000/-5	-1.3	-1000/-1	100	FZT704CT-ND*	1.38	1.04	FZT704TR-ND*	391.00
Medium Power Transistors — SOT-223 Package														
NPN	400	350	0.5	1.0	50/–	100/5	0.5	50/4	70	BSP19CT-ND	1.02	.77	BSP19TR-ND	289.00
	300	250	0.5	1.0	30/200	30/10	0.5	50/4	40	BSP20CT-ND	1.02	.77	BSP20TR-ND	289.00
	300	300	0.05	0.1	50/–	25/20	0.6	30/5	100	BF720CT-ND	1.02	.77	BF720TR-ND	289.00
	120	100	1.0	2.0	100/300	250/10	0.3	500/50	150	FZT493CT-ND	1.26	.95	FZT493TR-ND	357.00
	100	80	1.0	1.5	40/250	150/2	0.5	500/50	100	BCP56CT-ND	1.02	.77	BCP56TR-ND	289.00
	80	60	1.0	2.0	100/300	500/5	0.25	500/50	150	FZT491CT-ND	1.26	.95	FZT491TR-ND	357.00
	60	60	1.0	1.5	40/250	150/2	0.5	500/50	100	BCP55CT-ND	1.02	.77	BCP55TR-ND	289.00
	45	45	1.0	1.5	40/250	150/2	0.5	500/50	100	BCP54CT-ND	1.02	.77	BCP54TR-ND	289.00
	25	20	1.0	2.0	63/400	500/1	1.0	1000/100	100	BCP68CT-ND	1.02	.77	BCP68TR-ND	289.00
PNP	-120	-100	-1.0	-2.0	100/300	-500/-2	-0.3	-500/-50	150	FZT593CT-ND	1.26	.95	FZT593TR-ND	357.00
	-100	-80	-1.0	-1.5	40/250	-150/-2	-0.5	-500/-50	125	BCP53CT-ND	1.02	.77	BCP53TR-ND	289.00
	-80	-60	-1.0	-2.0	100/300	-500/-5	-0.3	-500/-50	150	FZT591CT-ND	1.26	.95	FZT591TR-ND	357.00
	-70	-60	-1.0	-2.0	100/300	-100/-1	-0.25	-150/-15	100	BSP31CT-ND	1.02	.77	BSP31TR-ND	289.00
	-60	-60	-1.0	-1.5	40/250	-150/-2	-0.5	-500/-50	125	BCP52CT-ND	1.02	.77	BCP52TR-ND	289.00
	-45	-45	-1.0	-1.5	40/250	-150/-2	-0.5	-500/-50	125	BCP51CT-ND	1.02	.77	BCP51TR-ND	289.00
	-35	-30	-1.0	-2.0	100/300	-500/-5	-0.5	-1000/-100	100	FZT549CT-ND	1.26	.95	FZT549TR-ND	357.00
	-25	-20	-1.0	-2.0	63/400	-500/-1	-0.5	-1000/-100	100	BCP69CT-ND	1.02	.77	BCP69TR-ND	289.00
High Gain Transistors — SOT-223 Package														
NPN	180	180	0.5	1.0	500/–	100/5	0.25	200/5	70	FZT696BCT-ND	1.50	1.13	FZT696BTR-ND	425.00
	150	75	4.5	10.0	300/1200	500/2	0.21	2000/100	140	FZT1053ACT-ND	1.56	1.17	FZT1053ATR-ND	442.00
	150	60	5.0	10.0	270/1200	1000/2	0.18	3000/10	150	FZT1051ACT-ND	1.56	1.17	FZT1051ATR-ND	442.00
	120	120	1.0	2.0	400/–	200/2	0.25	100/0.5	130	FZT694BCT-ND	1.50	1.13	FZT694BTR-ND	425.00
	80	30	5.0	20.0	300/1200	1000/2	0.33	5000/50	180	FZT1049ACT-ND	1.56	1.17	FZT1049ATR-ND	442.00
	70	70	1.0	2.0	400/–	500/2	0.15	100/0.5	150	FZT692BCT-ND	1.50	1.13	FZT692BTR-ND	425.00
	50	17.5	5.0	20.0	300/1200	1000/2	0.35	5000/25	150	FZT1048ACT-ND	1.56	1.17	FZT1048ATR-ND	442.00
	45	45	2.0	6.0	400/–	1000/2	0.1	100/0.5	150	FZT690BCT-ND	1.50	1.13	FZT690BTR-ND	425.00
	35	10	5.0	20.0	300/1200	1000/2	0.35	5000/25	150	FZT1047ACT-ND	1.56	1.17	FZT1047ATR-ND	442.00
	20	20	3.0	8.0	400/–	2000/2	0.45	3000/20	150	FZT689BCT-ND	1.50	1.13	FZT689BTR-ND	425.00
	12	12	4.0	10.0	400/–	3000/2	0.35	3000/20	150	FZT688BCT-ND	1.50	1.13	FZT688BTR-ND	425.00
PNP	-200	-200	-0.5	-1.0	250/–	-300/-10	-0.3	-200/-20	100	FZT796ACT-ND	1.50	1.13	FZT796ATR-ND	425.00
	-140	-140	-0.5	-1.0	250/–	-200/-2	-0.3	-200/-5	100	FZT795ACT-ND	1.50	1.13	FZT795ATR-ND	425.00
	-75	-70	-2.0	-5.0	250/–	-500/-2	-0.5	-1000/-25	100	FZT792ACT-ND	1.50	1.13	FZT792ATR-ND	425.00
	-50	-40	-2.0	-6.0	250/–	-500/-2	-0.45	-1000/-10	100	FZT790ACT-ND	1.50	1.13	FZT790ATR-ND	425.00
	-45	-40	-3.0	-5.0	250/800	-500/-2	0.3	-3000/-250	145	FZT1151ACT-ND	1.62	1.22	FZT1151ATR-ND	459.00
	-30	-25	-4.0	-10.0	250/800	-500/-2	0.35	-4000/-140	135	FZT1149ACT-ND	1.62	1.22	FZT1149ATR-ND	459.00
	-25	-25	-2.0	-6.0	250/–	-1000/-2	-0.45	-2000/-20	100	FZT789ACT-ND‡	1.50	1.13	FZT789ATR-ND‡	425.00
	-15	-15	-3.0	-8.0	300/–	-2000/-2	-0.45	-2000/-10	100	FZT788BCT-ND	1.50	1.13	FZT788BTR-ND	425.00
	-15	-12	-5.0	-20.0	250/850	-500/-2	0.4	-5000/-50	115	FZT1147ACT-ND	1.62	1.22	FZT1147ATR-ND	459.00
High Current Transistors — SOT-223 Package														
NPN	350	300	3.5	5.0	100/300	1000/5	0.23	2000/200	80	FZT857CT-ND	2.10	1.58	FZT857TR-ND	595.00
	200	150	5.0	10.0	100/300	1000/5	0.11	1000/100	90	FZT855CT-ND	2.10	1.58	FZT855TR-ND	595.00
	200	100	6.0	10.0	100/300	2000/2	0.15	2000/100	130	FZT853CT-ND	2.10	1.58	FZT853TR-ND	595.00
	150	60	6.0	20.0	100/300	2000/1	0.17	2000/50	130	FZT851CT-ND	2.10	1.58	FZT851TR-ND	595.00
	80	30	7.0	20.0	100/300	1000/1	0.215	2000/20	100	FZT849CT-ND‡	2.10	1.58	FZT849TR-ND‡	595.00
	80	25	6.5	20.0	300/–	1000/1	0.215	2000/10	100	FZT869CT-ND	2.10	1.58	FZT869TR-ND	595.00
PNP	-400	-400	-0.5	-1.5	100/300	-500/-10	-0.40	-500/-100	85	FZT958CT-ND	2.10	1.58	FZT958TR-ND	595.00
	-300	-300	-1.0	-2.0	100/300	-500/-10	-0.24	-1000/-300	85	FZT957CT-ND	2.10	1.58	FZT957TR-ND	595.00
	-220	-200	-2.0	-5.0	100/300	-1000/-5	-0.165	-1000/-100	110	FZT956CT-ND	2.10	1.58	FZT956TR-ND	595.00
	-180	-140	-4.0	-10.0	100/300	-1000/-5	-0.15	-1000/-100	110	FZT955CT-ND	2.10	1.58	FZT955TR-ND	595.00
	-140	-100	-5.0	-10.0	100/300	-1000/-1	-0.22	-2000/-200	125	FZT953CT-ND	2.10	1.58	FZT953TR-ND	595.00
	-100	-60	-5.0	-15.0	100/300	-2000/-1	-0.21	-2000/-200	120	FZT951CT-ND	2.10	1.58	FZT951TR-ND	595.00
	-50	-30	-5.5	-20.0	100/300	-1000/-1	-0.27	-2000/-200	80	FZT949CT-ND‡	2.10	1.58	FZT949TR-ND‡	595.00
	-40	-20	-6.0	-20.0	100/300	-1000/-1	-0.18	-2000/-200	80	FZT948CT-ND	2.10	1.58	FZT948TR-ND	595.00
	-15	-12	-6.0	-20.0	300/1000	-500/-1	-0.17	-2000/-50	80	FZT968CT-ND	2.10	1.58	FZT968TR-ND	595.00
Switching Transistors — SOT-223 Package														
NPN	75	40	0.6	—	100/300	150/10	0.4	150/15	250	FZT2222ACT-ND	1.11	.84	FZT2222ATR-ND	314.50
PNP	-60	-60	-0.6	—	100/300	-150/-10	-0.4	-150/-15	200	FZT2907ACT-ND	1.11	.84	FZT2907ATR-ND	314.50
	-40	-40	-0.6	—	100/300	-150/-2	-0.4	-150/-15	200	FZT4403CT-ND	1.11	.84	FZT4403TR-ND	314.50

* Darlington ‡ *Additional Information included in Zetex Application Handbook, part number ST321-ND.*

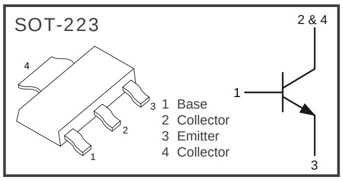
Transistors — SOT-323 Package

Type	V_{CBO} (V)	V_{CEO} (V)	I_C (mA)	h_{FE} Min./Max.	at I_C/V_{CE} (mA/V)	$V_{CE(sat)}$ Max. (V)	I_C (mA)	I_B (mA)	fT typ (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Super 323-500mW															
NPN	50	50	1000	200/-	500/5	0.18	500	25	180	ZUMT619CT-ND	.75	.57	.38	ZUMT619TR-ND	225.00/M
	20	20	1250	200/-	1000/2	0.2	1000	10	195	ZUMT618CT-ND	.75	.57	.38	ZUMT618TR-ND	225.00/M
	15	15	1500	200/-	1000/2	0.18	1000	10	130	ZUMT617CT-ND	.75	.57	.38	ZUMT617TR-ND	225.00/M
PNP	-40	-40	-1000	180/-	-500/-5	-0.3	-500	-25	190	ZUMT720CT-ND	.75	.57	.38	ZUMT720TR-ND	225.00/M
	-20	-20	-1000	180/-	-500/-2	-0.18	-500	-20	180	ZUMT718CT-ND	.75	.57	.38	ZUMT718TR-ND	225.00/M
	-12	-12	-1250	180/-	-1000/2	-0.24	-1000	-50	110	ZUMT717CT-ND	.75	.57	.38	ZUMT717TR-ND	225.00/M
RF Transistors															
NPN	30	15	100	20/-	3/1	0.4	10	10	600	ZUMT918CT-ND	.54	.41	.27	ZUMT918TR-ND	162.00/M
	25	15	25	25/150	2/1	—	—	—	1300	ZUMTS17CT-ND	.57	.43	.29	ZUMTS17TR-ND	171.00/M
Switching Transistors — 330mW —SOT-323 Package															
NPN	40	15	200	40/120	10/1	0.20	10	1	500	ZUMT2369ACT-ND	.51	.39	.26	ZUMT2369ATR-ND	153.00/M

ZETEX *Now QS9000 Accredited!*

ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

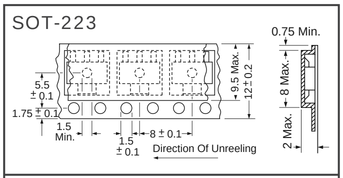
SOT-223



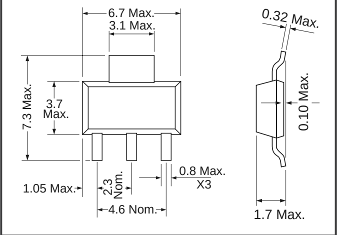
General Information: As surface mount continues to increase its penetration throughout the world of electronics, the SOT-223 is one of many surface mount packages which are the driving force behind this phenomenal growth. The package is capable of housing semiconductor crystals up to 2.5mm x 2.5mm offering power capabilities up to and above 2W (subject to mounting). Designed in a similar fashion to the very popular SOT-23 package, it ensures that it is fully compatible with all industry standard wave and reflow soldering techniques.

Maximum Thermal Ratings: Junction Temperature: 150°C. Operating and Storage Temperature: -55°C to +150°C.

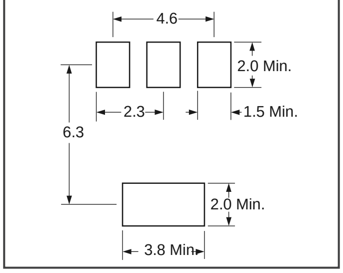
SOT-223



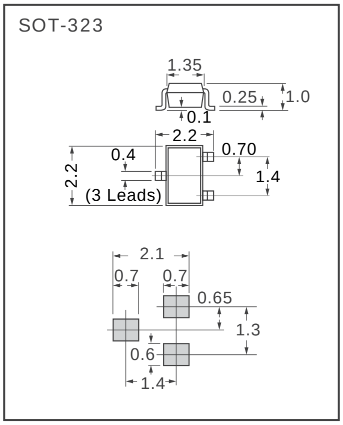
SOT-223 Package Outline



SOT-223 Pad Layout



SOT-323



ZETEX Transistors — Dual SM-8 Package

V_{CEO} (V)	V_{CBO} (V)	I_C (A)	I_{CM} (A)	VCE(sat) (mV) max	IC (A)	IB (mA)	hFE min	IC (A)	VCE (V)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing
Dual NPN Transistors																
15	15	3	12	200	3	50	200	3	2	ZDT617CT-ND	2.49	1.87	1.13	ZDT617TR-ND	1,000	705.50
17.5	50	5	20	300	5	50	300	1	2	ZDT1048CT-ND‡	3.48	2.61	1.57	ZDT1048TR-ND‡	1,000	986.00
25	35	2	6	500	2	200	75	2	2	ZDT649CT-ND	2.49	1.87	1.13	ZDT649TR-ND	1,000	705.50
50	50	2	6	200	1	10	200	1	2	ZDT619CT-ND	2.49	1.87	1.13	ZDT619TR-ND	1,000	705.50
45	45	2	6	500	1	5	400	1	2	ZDT690CT-ND	2.49	1.87	1.13	ZDT690TR-ND	1,000	705.50
60	80	2	6	500	2	200	100	1	2	ZDT651CT-ND	2.49	1.87	1.13	ZDT651TR-ND	1,000	705.50
120	140	1	4	1500	1	1	2000	1	5	ZDT605CT-ND*	2.49	1.87	1.13	ZDT605TR-ND*	1,000	705.50
Dual PNP Transistors																
-12	-12	-2.5	-10	-220	-2.5	50	180	-2.5	-2	ZDT717CT-ND	2.49	1.87	1.13	ZDT717TR-ND	1,000	705.50
-400	-400	-0.5	-1	-0.5	-0.1	-10	50	-0.1	-5	ZDT758CT-ND	3.00	2.50	1.50	—	—	
NPN/PNP Transistors Combinations																
20 -20	20 -20	2 -1.5	6 -6	200 -220	2.5 -1.5	50 -50	200 150	2 -2	2 -2	ZDT6718CT-ND	2.49	1.87	1.13	ZDT6718TR-ND	1,000	705.50
45 -40	45 -50	2 -2	6 -6	500 -450	1 -1	5 -10	150 150	2 -2	2 -2	ZDT6790CT-ND‡	2.49	1.87	1.13	ZDT6790TR-ND‡	1,000	705.50
60 -60	80 -80	2 -2	4 -4	1200 -1200	2 -2	2 -2	2000 2000	2 -2	3 -3	ZDT6702CT-ND*	2.49	1.87	1.13	ZDT6702TR-ND*	1,000	705.50
60 -60	80 -80	1 -1	6 -2	500 -600	1 -1	100 -100	100 100	0.5 0.5	5 5	ZXTD4591E6CT-ND† *NEW!*	1.20	.90	.60	ZXTD4591E6TR-ND *NEW!*	2,500	300.00/M
120 -120	140 -140	1 -1	4 -4	1500 1300	1 -1	1 -1	2000 3000	1 -1	5 -5	ZDT6705CT-ND*	2.49	1.87	1.13	ZDT6705TR-ND*	1,000	705.50
300 -300	300 -300	0.5 -0.5	1 -1	500 -500	0.1 -0.1	10 -10	50 50	0.1 -0.1	5 -5	ZDT6757CT-ND	2.49	1.87	1.13	ZDT6757TR-ND	1,000	705.50

* Darlington † SOT23-6 ‡ *Additional Information included in Zetex Application Handbook, part number ST321-ND.*

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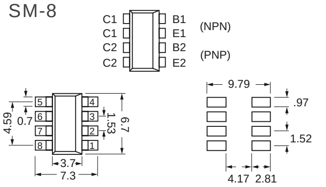
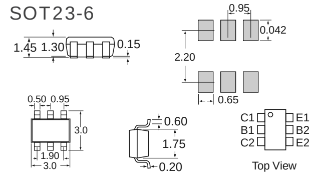
ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

SM-8



SOT23-6

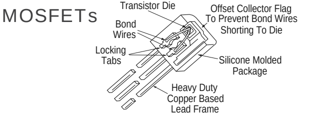


ZETEX MOSFETs — Super E-Line, Modified TO-92 Package

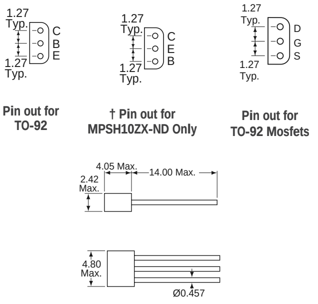
Type	BV_{DSS} (V)	I_D (mA)	I_{DM} (A)	$V_{GS\,(th)}$ (V) Min.	at Max.	I_D (mA)	$R_{DS\,(on)}$ (Ω) Max. @	I_D (mA)	V_{GS} (V)	P_D (W)	Digi-Key Part No.	Price Each 1	10	100	1,000
MOSFETs — TO-92															
N-Channel	450	90	0.6	1.0	3.0	1	50	100	10	0.7	ZVN0545A-ND‡	2.76	2.07	1.25	.79
	350	90	0.8	0.5	1.5	1	40	50	3	0.7	ZVNL535A-ND	2.07	1.56	.94	.59
	240	260	1	0.8	1.8	1	6	100	2.5	—	ZVN4424A-ND‡	1.68	1.26	.76	.48
	200	120	2	—	—	—	23	25	2.6	0.5	BS107P-ND	1.08	.81	.49	.31
	200	180	2	0.5	1.5	1	10	125	3	0.7	ZVNL120A-ND	1.38	1.04	.63	.40
	100	320	6	0.8	2.4	1	4	1000	10	0.7	ZVN2110A-ND‡	1.02	.77	.46	.29
	100	200	2	0.8	2.4	1	10	500	10	0.625	ZVN3310A-ND	.75	.57	.38	.25
	100	900	12	1.0	3.0	1	0.65	1500	5	0.85	ZVN4310A-ND	2.10	1.58	.95	.60
	100	450	6	0.8	2.4	1	1.8	500	5	0.7	ZVN4210A-ND‡	1.26	.95	.57	.36
	100	320	6	0.75	1.5	1	4.5	250	5	0.7	ZVNL110A-ND	1.02	.77	.46	.29
	60	600	8	1.3	3.0	1	1.5	500	5	0.7	ZVN4206A-ND‡	1.02	.77	.46	.29
	60	450	8	0.8	2.4	1	2	1000	10	0.7	ZVN2106A-ND	1.02	.77	.46	.29
	60	270	3	0.8	2.4	1	5	500	10	0.625	ZVN3306A-ND	.75	.57	.38	.25
	60	270	3	0.8	2.5	1	7.5	200	5	0.625	VN10LP-ND	.75	.57	.38	.25
	60	270	3	0.8	3.0	1	5	200	10	0.625	BS170P-ND	.75	.57	.38	.25
	60	1100	20	1.3	3.0	1	0.45	1500	5	0.85	ZVN4306A-ND	2.10	1.58	.95	.60
P-Channel	-450	-45	-0.4	-1.5	-4.5	-1	150	-50	-10	0.7	ZVP0545A-ND‡	3.09	2.32	1.40	.88
	-240	-200	-1	-0.8	-2.5	-1	15	-100	-3.5	—	ZVP4424A-ND‡	1.74	1.31	.79	.50
	-200	-120	-1.2	-1.5	-4.5	-1	25	-150	-10	0.7	ZVP2120A-ND	1.38	1.04	.63	.40
	-100	-230	-3	-1.5	-4.5	-1	8	-375	-10	0.7	ZVP2110A-ND	1.23	.93	.56	.35
	-100	-140	-1.2	-1.5	-4.5	-1	20	-150	-10	0.625	ZVP3310A-ND	.99	.75	.45	.29
	-60	-280	-4	-1.5	-4.5	-1	5	-500	-10	0.7	ZVP2106A-ND	1.23	.93	.56	.35
	-60	-160	-1.6	-1.5	-4.5	-1	14	-200	-10	0.625	ZVP3306A-ND	.99	.75	.45	.29
	-50	-175	-0.52	-0.8	-2.0	-1	10	-100	-5	0.625	ZVP4105A-ND	1.23	.93	.56	.35
	-45	-230	-3	-1.0	-3.5	-1	14	-200	-10	0.7	BS250P-ND	.69	.52	.35	.23
Avalanche Rated (Relay/Solenoid Drivers)															
N-Channel	60	600	8	1.3	3	1	1.5	500	5	0.7	ZVN4206AV-ND‡	1.50	1.13	.68	.43
	60	1100	20	1.3	3	1	0.45	1500	5	—	ZVN4306AV-ND‡	2.10	1.58	.95	.60

‡ *Additional Information included in Zetex Application Handbook, part number ST321-ND.*

Super E-Line — TO-92 MOSFETs


Transistor Die
Offset Collector Flag To Prevent Bond Wires Shorting To Die
Bond Wires
Locking Tabs
Silicone Molded Package
Heavy Duty Copper Based Lead Frame

Bottom Views

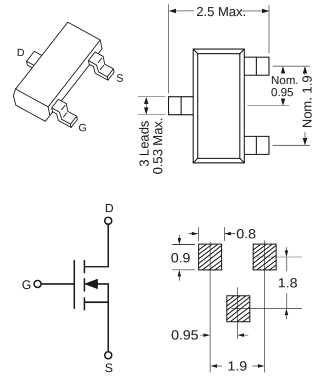


MOSFETs — SOT-23 Package

Type	BV_{DSS} (V)	I_D (mA)	I_{DM} (A)	P_D (mW)	$V_{GS\,(th)}$ (V) Min.	at Max.	I_D (mA)	$R_{DS\,(on)}$ (Ω) Max. @	I_D (mA)	V_{GS} (V)	Digi-Key Part No.	Cut Tape Price Each 1	10	Digi-Key Part No.	Tape & Reel Pricing 3,000
Small Signal MOSFETs (SOTFETs) — 350mW															
N-Channel	200	60	1	300	1.0	3	1	25	100	10	ZVN3320FCT-ND	1.14	.86	ZVN3320FTR-ND	285.00/M
	100	170	.68	360	0.8	2.8	1	6	100	10	BSS123CT-ND	.60	.45	BSS123TR-ND	150.00/M
	100	100	2	330	0.8	2.4	1	10	500	10	ZVN3310FCT-ND	.93	.70	ZVN3310FTR-ND	232.50/M
	60	150	3	330	0.8	2.4	1	5	500	10	ZVN3306FCT-ND	.93	.70	ZVN3306FTR-ND	232.50/M
	60	200	3	330	1.3	3	1	2.5	500	10	ZVN4106FCT-ND‡	1.02	.77	ZVN4106FTR-ND‡	255.00/M
	60	150	3	330	0.8	2.5	1	7.5	200	5	VN10LFCT-ND	1.02	.77	VN10LFTR-ND	255.00/M
	60	115	0.8	300	1.0	2.5	250µA	7.5	500	10	2N7002CT-ND‡	.81	.61	2N7002TR-ND ‡	243.00/M
	60	150	3	330	0.8	3	1	5	200	10	BS170FCT-ND	1.02	.77	BS170FTR-ND	255.00/M
	50	200	0.8	360	0.5	1.5	1	3.5	200	5	BSS138ZXCT-ND‡	.60	.45	BSS138ZXTR-ND‡	150.00/M
	20	1.7	—	0.7	—	—	0.3	—	2.5	0.8	ZXMN2A01FCT-ND *NEW!*	.63	.48	ZXMN2A01FTR-ND *NEW!*	157.50/M
P-Channel	-100	-75	-1.2	330	-1.5	-3.5	-1	20	-150	-10	ZVP3310FCT-ND	1.11	.84	ZVP3310FTR-ND	277.50/M
	-60	-90	-1.6	330	-1.5	-3.5	-1	14	-200	-10	ZVP3306FCT-ND	1.11	.84	ZVP3306FTR-ND	277.50/M
	-50	-130	-0.52	360	-0.8	-2.0	-1	10	-100	-5	BSS84ZXCT-ND	.60	.45	BSS84ZXTR-ND	180.00/M
	-45	-90	-1.6	330	-1	-3.5	-1	14	-200	-10	BS250FCT-ND	1.05	.79	BS250FTR-ND	262.50/M

‡ *Additional Information included in Zetex Application Handbook, part number ST321-ND.* *(Continued)*

SOT-23 MOSFETs (SOTFETs™)



ZETEX Low Voltage MOSFETs — SOT-23 and SC59-6 Packages

Type	V_{DS} (V)	I_D (A)	$R_{DS(ON)}$ 2.7V	Max. Ohms @V_{GS} 4.5V	10V	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
SOT-23 Package											
N-Channel	20	1.2	0.35	0.25	—	ZXM61N02FCT-ND	.72	.54	.36	ZXM61N02FTR-ND	240.00/M
	30	1.2	—	0.40	0.25	ZXM61N03FCT-ND	.72	.54	.36	ZXM61N03FTR-ND	240.00/M
	30	1.8		0.18	0.12	ZXMN3A01FCT-ND *NEW!*	.63	.48	.32	ZXMN3A01FTR-ND *NEW!*	157.50/M
	100	0.6	—	1.3	1.2	ZXMN10A07FCT-ND *NEW!*	.72	.54	.36	ZXMN10A07FTR-ND *NEW!*	180.00/M
P-Channel	-20	-0.8	0.90	0.60	—	ZXM61P02FCT-ND	.75	.57	.38	ZXM61P02FTR-ND	250.00/M
	-30	-0.8	—	1.00	0.60	ZXM61P03FCT-ND	.75	.57	.38	ZXM61P03FTR-ND	250.00/M
SC59-6 Package											
N-Channel	20	3.2	0.17	0.10	—	ZXM62N02E6CT-ND	1.02	.77	.46	ZXM62N02E6TR-ND	255.00/M
	30	3.2	—	0.20	0.10	ZXM62N03E6CT-ND	1.02	.77	.46	ZXM62N03E6TR-ND	255.00/M
P-Channel	-20	-1.6	0.375	0.20	—	ZXM62P02E6CT-ND	1.08	.81	.49	ZXM62P02E6TR-ND	270.00/M
	-30	-1.6	—	0.40	0.20	ZXM62P03E6CT-ND	1.08	.81	.49	ZXM62P03E6TR-ND	270.00/M

MOSFETs — Dual N-Channel SM-8

BV_{DSS} (V)	I_D (A)	I_{DM} (A)	$V_{GS(th)}$ (V) min.	@ max.	I_D mA	$R_{DS(on)}$ (Ω) max.	V_{GS} (V)	I_D (A)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	5,000
Dual N-Channel MOSFETs															
60	1	8	1.3	3	1	1	10	1.5	ZDM4206NCT-ND	2.88	2.16	1.30	ZDM4206NTR-ND	816.00	624.00/M
60	1.3	15	1.3	3	1	0.33	10	3	ZDM4306NCT-ND	4.35	3.27	1.96	ZDM4306NTR-ND	1232.50	942.50/M

Additional Information included in Zetex Application Handbook, part number ST321-ND .

MOSFETs — 8-MSOP Package

(P_D = 800mW single chip device;
P_D = 625mW for dual chip devices)

Type	V_{DS} (V)	I_D (A)	$R_{DS(on)}$ 2.7V	Max. Ohms @ V_{GS}= 4.5V	10V	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing
8-MSOP MOSFETS												
N-Channel	20	5.7	0.05	0.035	—	ZXM64N02XCT-ND	1.98	1.49	.90	ZXM64N02XTR-ND	1,000	561.00
	20	5.8	30	0.7	—	ZXMN2A02X8CT-ND *NEW!*	2.40	1.80	1.20	ZXMN2A02X8TR-ND *NEW!*	1,000	680.00
	30	6.7	—	0.035	0.025	ZXMN3A02X8CT-ND *NEW!*	2.40	1.80	1.20	ZXMN3A02X8TR-ND *NEW!*	1,000	680.00
	30	5.7	—	0.06	0.035	ZXM64N03XCT-ND	1.98	1.49	.90	ZXM64N03XTR-ND	1,000	561.00
P-Channel	-20	-3.6	0.13	0.09	—	ZXM64P02XCT-ND	2.10	1.58	.95	ZXM64P02XTR-ND	1,000	595.00
	-30	-3.6	—	0.15	0.09	ZXM64P03XCT-ND	2.40	1.80	1.08	ZXM64P03XTR-ND	1,000	595.00
Dual N-Channel	20	2.4	0.20	0.135	—	ZXMD63N02XCT-ND	2.40	1.80	1.08	ZXMD63N02XTR-ND	1,000	680.00
	30	2.4	—	0.222	0.135	ZXMD63N03XCT-ND	2.40	1.80	1.08	ZXMD63N03XTR-ND	1,000	680.00
Dual P-Channel	-20	-1.7	0.40	0.27	—	ZXMD63P02XCT-ND	2.52	1.89	1.14	ZXMD63P02XTR-ND	1,000	714.00
	-30	-1.7	—	0.45	0.27	ZXMD63P03XCT-ND	2.52	1.89	1.14	ZXMD63P03XTR-ND	1,000	714.00
N & P Channel Complimentary	20	1.7	0.20	0.135	—	ZXMD63C02XCT-ND	2.28	1.71	1.03	ZXMD63C02XTR-ND	1,000	646.00
	-20	-1.2	0.40	0.27	—							
	30	1.7	—	0.222	0.135	ZXMD63C03XCT-ND	2.28	1.71	1.03	ZXMD63C03XTR-ND	1,000	646.00
	-20	-1.2	—	0.45	0.27							

MOSFETs — SOT-223 Package

Type	BV_{DSS} (V)	I_D (A)	I_{DM} (A)	$V_{GS\ (th)}$ V at I_D Min.	Max.	(mA)	$R_{DS\ (on)}$ Ω Max.	I_D (mA)	V_{GS} (V)	PD (W)	Digi-Key Part No.	Cut Tape Price Each 1	10	Digi-Key Part No.	Tape & Reel Pricing 1,000
MOSFET Transistors															
N-Channel	450	0.14	0.6	1.0	3.0	1.0	50	0.1	10	2.0	ZVN0545GCT-ND	1.50	1.13	ZVN0545GTR-ND	425.00
	250	0.31	1.44	0.8	1.8	1	14.0	360	4.5	2.0	ZVN4525GCT-ND *NEW!*	.96	.72	ZVN4525GTR-ND *NEW!*	272.00
	240	0.5	1.0	0.8	1.8	1.0	6.0	0.1	2.5	2.5	ZVN4424GCT-ND	1.74	1.31	ZVN4424GTR-ND	493.00
	200	0.32	2.0	1.0	3.0	1.0	10	0.25	10	2.0	ZVN2120GCT-ND	1.50	1.13	ZVN2120GTR-ND	425.00
	200	0.32	2.0	0.5	1.5	1.0	10	0.125	3	2.0	ZVNL120GCT-ND	1.50	1.13	ZVNL120GTR-ND	425.00
	100	1	—	2	4	—	0.65	—	4.5	2.0	ZXMN10A11GCT-ND *NEW!*	1.20	.90	ZXMN10A11GTR-ND *NEW!*	340.00
	100	0.6	6.0	0.75	1.5	1.0	4.5	0.25	5	2.0	ZVNL110GCT-ND	1.50	1.13	ZVNL110GTR-ND	425.00
	100	0.5	6.0	0.8	2.4	1.0	4.0	1.0	10	2.0	ZVN2110GCT-ND	1.50	1.13	ZVN2110GTR-ND	425.00
	60	2.4	—	1	3	—	0.28	—	4.5	2	ZXMN6A11GCT-ND *NEW!*	1.20	.90	ZXMN6A11GTR-ND *NEW!*	340.00
	60	1.0	8.0	1.3	3.0	1.0	1.0	1.5	10	2.0	ZVN4206GCT-ND	1.80	1.35	ZVN4206GTR-ND	510.00
	60	0.7	8.0	0.8	2.4	1.0	2.0	1.0	10	2.0	ZVN2106GCT-ND	1.50	1.13	ZVN2106GTR-ND	425.00
P-Channel	-450	-0.075	-0.4	-1.5	-4.5	-1.0	150	-50	-10	2.0	ZVP0545GCT-ND	1.80	1.35	ZVP0545GTR-ND	510.00
	-250	-0.265	-1.0	-0.8	-2.0	1.0	14.0	200	-10	2.0	ZVP4525GCT-ND *NEW!*	.96	.72	ZVP4525GTR-ND *NEW!*	272.00
	-240	-1.0	-1.0	-0.7	-2.0	-1.0	9.0	-200	-10	2.5	ZVP4424GCT-ND	1.80	1.35	ZVP4424GTR-ND	510.00
	-100	-0.35	-3.0	-1.5	-3.5	-1.0	8.0	-0.375	-10	2.0	ZVP2110GCT-ND	1.80	1.35	ZVP2110GTR-ND	510.00
	-60	-0.45	-4.0	-1.5	-3.5	-1.0	5.0	-0.5	-10	2.0	ZVP2106GCT-ND	1.80	1.35	ZVP2106GTR-ND	510.00
Avalanche Rated MOSFETs															
N-Channel	60	1.0	8.0	1.3	3.0	1.0	1.0	1.5	10	2.0	ZVN4206GVCT-ND	1.89	1.42	ZVN4206GVTR-ND	535.50
	60	2.1	20	1.3	3.0	1.0	0.33	3.0	10	3.0	ZVN4306GVCT-ND	2.10	1.58	ZVN4306GVTR-ND	595.00
MOSFET Transistors — Low RDS (on)															
N-Channel	100	1.7	12	1.0	3.0	1.0	0.50	3.0	10	3.0	ZVN4310GCT-ND	2.46	1.85	ZVN4310GTR-ND	697.00
	60	2.1	20	1.3	3.0	1.0	0.33	3.0	10	3.0	ZVN4306GCT-ND	2.46	1.85	ZVN4306GTR-ND	697.00

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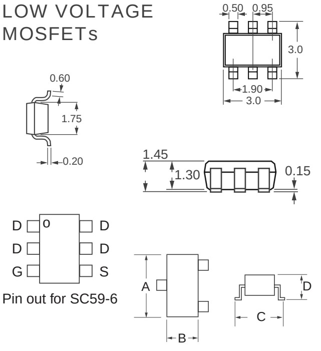
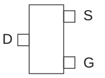
ST321-ND	Zetex Application Handbook	**$4.98**

LOW VOLTAGE MOSFETs



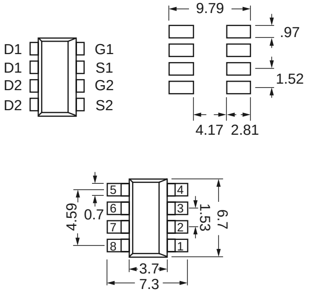
Pin out for SC59-6



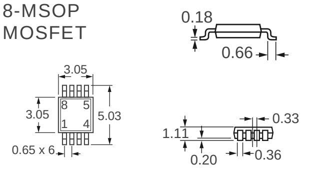
Pin out for SOT-23

Package	Dimension (mm) A	B	C	D
SOT-23	3	1.46	2.5	1.1
SC59-6	3	1.75	3	1.45

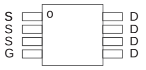
SM-8 MOSFET



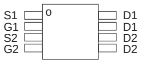
8-MSOP MOSFET



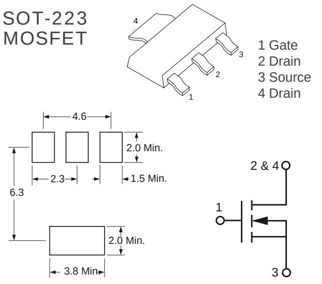
8-MSOP (Single) Pin out



8-MSOP (Dual) Pin out



SOT-223 MOSFET



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Type	BVDSS (V)	ID (A)	IDM (A)	VGS (th) V at ID Min.	Max.	(mA)	RDS (on) Ω Max.	ID (mA)	VGS (V)	PD (W)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing
SO-8 Package																	
N-Channel	20	9.9	—	0.7	—	—	0.02	—	2.5	2.5	ZXM66N02N8CT-ND	3.60	2.70	1.80	ZXM66N02N8TR-ND	1,000	1020.00
	30	9.9	—	0.7	—	—	0.02	—	4.5	2.5	ZXM66N03N8CT-ND	3.60	2.70	1.80	ZXM66N03N8TR-ND	1,000	1020.00
	20	5.7	—	0.7	—	—	0.045	—	2.5	2	ZXMD65N02N8CT-ND*	3.30	2.48	1.65	ZXMD65N02N8TR-ND	1,000	935.00
	30	5.7	—	0.7	—	—	0.045	—	4.5	2	ZXMD65N03N8CT-ND*	3.30	2.48	1.65	ZXMD65N03N8TR-ND	500	577.50
	60	1	—	1	3	—	0.55	—	4.5	0.8	ZXMN6A07FCT-ND	.72	.54	.36	ZXMN6A07FTR-ND	3,000	180.00/M
	60	7.6	—	1	3	—	0.03	—	4.5	2.5	ZXMN6A10N8CT-ND	8.40	6.30	4.20	ZXMN6A10N8TR-ND	500	1470.00
	60	4.4	—	1	3	—	0.075	—	4.5	2	ZXMN6A09DN8CT-ND	7.20	5.40	3.60	ZXMN6A09DN8TR-ND	500	1260.00
	30	4.8	—	1	—	—	0.075	—	4.5	2	ZXMN3A06DN8CT-ND	3.30	2.48	1.65	ZXMN3A06DN8TR-ND	1,000	935.00
	30	6.8	—	1	—	.—	0.035	—	4.5	2	ZXMN3A04DN8CT-ND	5.40	4.05	2.70	ZXMN3A04DN8TR-ND	500	945.00
	30	7.6	—	1	—	—	0.025	—	4.5	2.5	ZXMN3B04N8CT-ND	5.40	4.05	2.70	ZXMN3B04N8TR-ND	500	945.00
	20	12	—	0.7	—	—	0.015	—	2.5	2.5	ZXMN2A05N8CT-ND	7.80	5.85	3.90	ZXMN2A05N8TR-ND	500	1365.00
	30	12	—	1	—	—	0.012	—	4.5	2.5	ZXMN3A05N8CT-ND	7.80	5.85	3.90	ZXMN3A05N8TR-ND	500	1365.00
	20	6	—	0.7	—	—	0.045	—	2.5	2	ZXMN2A04DN8CT-ND	5.40	4.05	2.70	ZXMN2A04DN8TR-ND	500	945.00
P-Channel	-20	-7.6	—	-0.7	—	—	0.05	—	-2.5	2.5	ZXM66P02N8CT-ND	3.60	2.70	1.80	ZXM66P02N8TR-ND	500	630.00
	-20	-4.4	—	-0.7	—	—	0.15	—	-2.5	2	ZXMD65P02N8CT-ND*	3.30	2.48	1.65	ZXMD65P02N8TR-ND	500	577.50
	-30	-7.6	—	-1	—	—	0.04	—	-4.5	2.5	ZXM66P03N8CT-ND*	3.60	2.70	1.80	ZXM66P03N8TR-ND	500	630.00
	-30	-4.4	—	-1	—	—	0.09	—	-4.5	2	ZXMD65P03N8CT-ND*	3.30	2.48	1.65	ZXMD65P03N8TR-ND	500	577.50
	-60	-2.3	—	-1	—	—	0.3	2	-4.5	2	ZXMN6A11DN8CT-ND	2.40	1.80	1.20	ZXMN6A11DN8TR-ND	500	420.00
SOT-89 Package																	
P-Channel	-250	-0.2	-1	-0.8	-2	1	14	-200	-10	2	ZVP4525ZCT-ND	1.14	.86	.57	ZVP4525ZTR-ND	1,000	323.00
N-Channel	250	0.24	1.44	0.8	1.8	1	9	360	4.5	1.2	ZVN4525ZCT-ND	.96	.72	.48	ZVN4525ZTR-ND	1,000	272.00
	60	1.2	—	1	3	—	0.55	—	4.5	1	ZXMN6A07ZCT-ND	.90	.68	.45	ZXMN6A07ZTR-ND	1,000	255.00
	100	0.7	—	2	4	—	1.3	—	4.5	1	ZXMN10A07ZCT-ND	.90	.68	.45	ZXMN10A07ZTR-ND	1,000	255.00
SOT23-6 Package																	
N-Channel	250	0.23	1.44	0.8	1.8	1	8.5	500	10	1.1	ZVN4525E6CT-ND	1.14	.86	.57	ZVN4525E6TR-ND	3,000	285.00/M
	30	4.2	—	1	—	—	0.075	—	4.5	1.7	ZXMN3A03E6CT-ND	1.26	.95	.63	ZXMN3A03E6TR-ND	3,000	315.00/M
	20	2.5	—	0.7	—	—	0.3	—	2.5	1.7	ZXMN2A01E6CT-ND	.96	.72	.48	ZXMN2A01E6TR-ND	3,000	240.00/M
	100	1.5	—	2	4	—	0.44	—	4.5	1.7	ZXMN10A08E6CT-ND	1.44	1.08	.72	ZXMN10A08E6TR-ND	3,000	360.00/M
	60	2.5	—	1	3	—	0.2	—	4.5	1.7	ZXMN6A08E6CT-ND	1.44	1.08	.72	ZXMN6A08E6TR-ND	3,000	360.00/M
	30	2.8	—	1	—	—	0.18	—	4.5	1.7	ZXMN3A01E6CT-ND	.96	.72	.48	ZXMN3A01E6TR-ND	3,000	240.00/M
	20	4.5	—	—	0.12	—	.11	—	2.5	—	ZXMN2A03E6CT-ND	1.26	.95	.63	ZXMN2A03E6TR-ND	3,000	315.00/M
P-Channel	-250	-.197	-1	-0.8	-2.0	1	14	-200	-10	1.1	ZVP4525E6CT-ND	.96	.72	.48	ZVP4525E6TR-ND	3,000	240.00/M

* Dual Mosfet

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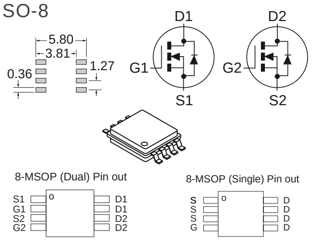
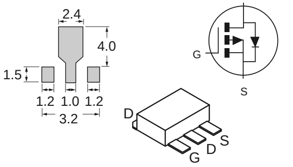
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

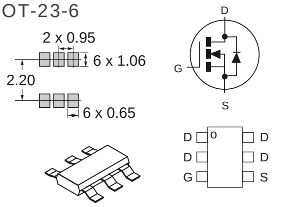
SO-8



SOT-89



SOT-23-6

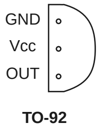


ZETEX Voltage Supply Monitors

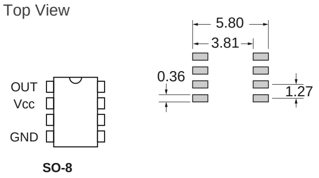
Typical V cc (V)	Threshold Voltage (V)	Typical Hysteresis (mV)	Max. Output Sink Current (mA)	Input Voltage Range (V)	Max. Quiescent Current (µA)	Digi-Key Part No.	Price Each 1	10	100	1,000
Voltage Supply Monitors — TO-92										
5	4.6	20	60	1 to 6.5	200	ZM33064C-ND	1.80	1.35	.81	.51
5	4.3	20	60	1 to 6.5	200	ZM33164CL-ND	1.62	1.22	.73	.46
3	2.63	20	60	1 to 6.5	200	ZSM300C-ND	1.62	1.22	.73	.46
3	2.68	20	60	1 to 10	190	ZM331643C-ND	1.62	1.22	.73	.46
3.3	3.08	20	60	1 to 6.5	200	ZSM330C-ND	1.62	1.22	.73	.46
5	4.6	20	60	1 to 6.5	200	ZSM560C-ND	1.62	1.22	.73	.46
5	4.6	20	60	1 to 7.0	200	ZSM561C-ND	1.62	1.22	.73	.46
3.3	3.1	20	50	-1 to 10	180	ZSH330C-ND	1.62	1.22	.73	.46
5	4.6	20	50	-1 to 10	180	ZSH560C-ND	1.62	1.22	.73	.46

Typical V cc (V)	Thresh-hold Voltage (V)	Typical Hysteresis (mV)	Max. Output Sink Current (mA)	Input Voltage Range (V)	Max. Quiescent Current (µA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	1,000
Voltage Supply Monitors — SO-8												
5	4.6	20	60	1 to 6.5	200	ZM33064N8CT-ND	2.97	2.23	1.34	ZM33064N8TR-ND	519.75	841.50
5	4.3	20	60	1 to 6.5	200	ZM33164N8CT-ND	2.49	1.87	1.13	ZM33164N8TR-ND	435.75	705.50
3	2.68	20	60	1 to 10	190	ZM331643N8CT-ND	2.49	1.87	1.13	ZM331643N8TR-ND	435.75	705.50
3	2.63	20	60	1 to 6.5	200	ZSM300N8CT-ND	2.49	1.87	1.13	ZSM300N8TR-ND	435.75	705.50
3.3	3.08	20	60	1 to 6.5	200	ZSM330N8CT-ND	2.49	1.87	1.13	ZSM330N8TR-ND	435.75	705.50
5	4.6	20	60	1 to 6.5	200	ZSM560N8CT-ND	2.49	1.87	1.13	ZSM560N8TR-ND	435.75	705.50
3.3	3.1	20	50	-1 to 10	180	ZSH330N8CT-ND	2.49	1.87	1.13	ZSH330N8TR-ND	435.75	705.50
5	4.6	20	50	-1 to 10	180	ZSH560N8CT-ND	2.49	1.87	1.13	ZSH560N8TR-ND	435.75	705.50
Voltage Supply Monitors — SOT-223												
5	4.6	20	60	1 to 6.5	200	ZM33064GCT-ND	2.28	1.71	1.03	ZM33064GTR-ND	—	646.00
5	4.3	20	60	1 to 6.5	200	ZM33164GCT-ND	1.92	1.44	.87	ZM33164GTR-ND	—	544.00
3	2.68	20	60	1 to 10	190	ZM331643GCT-ND	1.92	1.44	.87	ZM331643GTR-ND	—	544.00
3	2.63	20	60	1 to 6.5	200	ZSM300GCT-ND	1.92	1.44	.87	ZSM300GTR-ND	—	544.00
3.3	3.08	20	60	1 to 6.5	200	ZSM330GCT-ND	1.92	1.44	.87	ZSM330GTR-ND	—	544.00
5	4.6	20	60	1 to 6.5	200	ZSM560GCT-ND	1.92	1.44	.87	ZSM560GTR-ND	—	544.00
5	4.6	20	60	1 to 7.0	200	ZSM561GCT-ND	1.92	1.44	.87	ZSM561GTR-ND	—	544.00
3.3	3.1	20	50	-1 to 10	180	ZSH330GCT-ND	1.92	1.44	.87	ZSH330GTR-ND	—	544.00
5	4.6	20	50	-1 to 10	180	ZSH560GCT-ND	1.92	1.44	.87	ZSH560GTR-ND	—	544.00

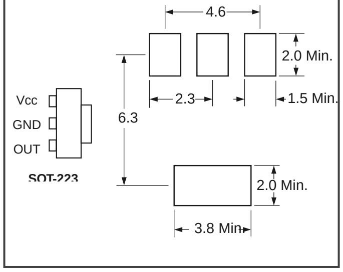
TO-92
Pkg. Suffix C
Bottom View



SO-8
Pkg. Suffix N8
Top View



SOT-223
Pkg. Suffix G
Top View



Voltage Regulators

Output Voltage (V)	Max. Output Current (mA)	Ptot (W)	Max Line Regulation (mV)	Max Load Regulation (mV)	Digi-Key Part No.	Price Each 1	10	100	1,000
200mA ZR78L Series Local Voltage Regulators — TO-92									
3.0	200	0.6	40	25	ZR78L03C-ND	1.08	.81	.49	.31
3.3	200	0.6	30	25	ZR78L033C-ND	1.08	.81	.49	.31
4.0	200	0.6	40	25	ZR78L04C-ND	1.08	.81	.49	.31
4.85	200	0.6	40	25	ZR78L048C-ND	1.08	.81	.49	.31
5.0	200	0.6	40	25	ZR78L05C-ND	1.08	.81	.49	.31
6.0	200	0.6	40	30	ZR78L06C-ND	1.08	.81	.49	.31
8.0	200	0.6	40	30	ZR78L08C-ND	1.08	.81	.49	.31
8.5	200	0.6	40	30	ZR78L085C-ND	1.08	.81	.49	.31
9.0	200	0.6	40	30	ZR78L09C-ND	1.08	.81	.49	.31

Output Voltage (V)	Max. Output Current (mA)	Ptot (W)	Max Line Regulation (mV)	Max Load Regulation (mV)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000
200mA ZR78L Series Local Voltage Regulators — SOT-223										
2.85	200	2	40	25	ZR78L028GCT-ND	2.22	1.67	1.00	ZR78L028GTR-ND	629.00
3.0	200	2	40	25	ZR78L03GCT-ND	2.22	1.67	1.00	ZR78L03GTR-ND	629.00
3.3	200	2	30	25	ZR78L033GCT-ND	2.22	1.67	1.00	ZR78L033GTR-ND	629.00
4.0	200	2	40	25	ZR78L04GCT-ND	2.22	1.67	1.00	ZR78L04GTR-ND	629.00
4.85	200	2	40	25	ZR78L048GCT-ND	2.22	1.67	1.00	ZR78L048GTR-ND	629.00
5.0	200	2	40	25	ZR78L05GCT-ND	2.22	1.67	1.00	ZR78L05GTR-ND	629.00
5.2	200	2	40	25	ZR78L052GCT-ND	2.22	1.67	1.00	ZR78L052GTR-ND	629.00
5.7	200	2	40	30	ZR78L057GCT-ND	2.22	1.67	1.00	ZR78L057GTR-ND	629.00
6.0	200	2	40	30	ZR78L06GCT-ND	2.22	1.67	1.00	ZR78L06GTR-ND	629.00
7.0	200	2	40	25	ZR78L07GCT-ND	2.22	1.67	1.00	ZR78L07GTR-ND	629.00
8.0	200	2	40	30	ZR78L08GCT-ND	2.22	1.67	1.00	ZR78L08GTR-ND	629.00
8.5	200	2	40	30	ZR78L085GCT-ND	2.22	1.67	1.00	ZR78L085GTR-ND	629.00
9.0	200	2	40	30	ZR78L09GCT-ND	2.22	1.67	1.00	ZR78L09GTR-ND	629.00
10.0	200	2	40	30	ZR78L10GCT-ND	2.22	1.67	1.00	ZR78L10GTR-ND	629.00
12.0	200	2	40	30	ZR78L12GCT-ND	2.22	1.67	1.00	ZR78L12GTR-ND	629.00

Output Voltage (V)	Max. Output Current (mA)	Ptot (W)	Max Line Regulation (mV)	Max Load Regulation (mV)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	1000
200mA ZSR Series Local Voltage Regulators — SO-8											
2.85	200	0.78	40	25	ZSR285N8CT-ND	2.49	1.87	1.13	ZSR285N8TR-ND	435.75	705.50
3.0	200	0.78	40	25	ZSR300N8CT-ND	2.49	1.87	1.13	ZSR300N8TR-ND	435.75	705.50
3.3	200	0.78	30	25	ZSR330N8CT-ND	2.49	1.87	1.13	ZSR330N8TR-ND	435.75	705.50
4.0	200	0.78	40	25	ZSR400N8CT-ND	2.49	1.87	1.13	ZSR400N8TR-ND	435.75	705.50
4.85	200	0.78	40	25	ZSR485N8CT-ND	2.49	1.87	1.13	ZSR485N8TR-ND	—	705.50
5.0	200	0.78	40	25	ZSR500N8CT-ND	2.49	1.87	1.13	ZSR500N8TR-ND	435.75	705.50
5.2	200	0.78	40	25	ZSR520N8CT-ND	2.49	1.87	1.13	ZSR520N8TR-ND	—	705.50
5.7	200	0.78	40	30	ZSR570N8CT-ND	2.49	1.87	1.13	ZSR570N8TR-ND	435.75	705.50
6.0	200	0.78	40	30	ZSR600N8CT-ND	2.49	1.87	1.13	ZSR600N8TR-ND	435.75	705.50
7.0	200	0.78	40	25	ZSR700N8CT-ND	2.49	1.87	1.13	ZSR700N8TR-ND	—	705.50
8.0	200	0.78	40	30	ZSR800N8CT-ND	2.49	1.87	1.13	ZSR800N8TR-ND	435.75	705.50
8.5	200	0.78	40	30	ZSR850N8CT-ND	2.49	1.87	1.13	ZSR850N8TR-ND	—	705.50
9.0	200	0.78	40	30	ZSR900N8CT-ND	2.49	1.87	1.13	ZSR900N8TR-ND	435.75	705.50
10.0	200	0.78	40	30	ZSR1000N8CT-ND	2.49	1.87	1.13	ZSR1000N8TR-ND	435.75	705.50
12.0	200	0.78	40	30	ZSR1200N8CT-ND	2.49	1.87	1.13	ZSR1200N8TR-ND	—	705.50

Micro Power Low Dropout Regulators

V Out (V)	Dropout (mV)@IL =50mA	Max. Load I(mA)	Shutdown I(µA)	Package	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Micro Power Low Dropout Regulators										
3.30	85	150	0.01	SOT23-5	ZXCL330E5CT-ND	1.32	.99	.60	ZXCL330E5TR-ND	330.00/M
3.00	85	150	0.01	SOT23-5	ZXCL300E5CT-ND	1.32	.99	.60	ZXCL300E5TR-ND	330.00/M
2.8	85	150	0.01	SOT23-5	ZXCL280E5CT-ND	1.32	.99	.60	ZXCL280E5TR-ND	330.00/M
2.60	85	150	0.01	SOT23-5	ZXCL260E5CT-ND	1.32	.99	.60	ZXCL260E5TR-ND	330.00/M
3.30	85	150	0.01	SC-70	ZXCL330H5CT-ND	1.32	.99	.60	ZXCL330H5TR-ND	330.00/M
3.00	85	150	0.01	SC-70	ZXCL300H5CT-ND	1.32	.99	.60	ZXCL300H5TR-ND	330.00/M
2.80	85	150	0.01	SC-70	ZXCL280H5CT-ND	1.32	.99	.60	ZXCL280H5TR-ND	330.00/M
2.60	85	150	0.01	SC-70	ZXCL260H5CT-ND	1.32	.99	.60	ZXCL260H5TR-ND	330.00/M

Shunt Voltage Regulators

Reference Voltage (V)	Output Voltage (V) Min.	Max.	Min. Operating Current (µA)	Tol. (%)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Shunt Voltage Regulators — SOT-23										
2.5	2.5	20	50	2	ZR431FCT-ND‡	1.32	.99	.60	ZR431FTR-ND‡	330.00/M
2.5	2.5	20	50	1	ZR431F01CT-ND‡	1.62	1.22	.73	ZR431F01TR-ND‡	405.00/M
Shunt Voltage Regulators — SOT-23										
1.24	1.24	15	30	2.5	ZR2431F02CT-ND	1.32	.99	.60	ZR2431F02TR-ND	330.00/M
1.24	1.24	15	30	1	ZR2431F01CT-ND	1.74	1.31	.79	ZR2431F01TR-ND	435.00/M
Improved Stability Low Voltage Shunt Regulators — SOT-23										
1.24	1.24	10	30	1	ZR431LF01CT-ND	1.74	1.31	.79	ZR431LF01TR-ND	435.00/M
1.24	1.24	10	30	2.5	ZR431LF02CT-ND	1.32	.99	.60	ZR431LF02TR-ND	330.00/M

Reference Voltage (V)	Output Voltage (V) Min.	Max.	Min. Operating Current (µA)	Tol. %	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500
Shunt Voltage Regulators — SO-8										
2.5	2.5	20	50	2	ZR431N8CT-ND	2.55	1.92	1.15	ZR431N8TR-ND	446.25
2.5	2.5	20	50	1	ZR431N801CT-ND	2.70	2.03	1.22	ZR431N801TR-ND	472.50
1.24	1.24	15	30	2.5	ZR2431N802CT-ND	2.61	1.96	1.18	ZR2431N802TR-ND	456.75
1.24	1.24	15	30	1	ZR2431N801CT-ND	2.79	2.10	1.26	ZR2431N801TR-ND	488.25

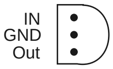
Reference Voltage (V)	Output Voltage (V) Min.	Max.	Min. Operating Current (µA)	Tolerance (%)	Digi-Key Part No.	Price Each 1	10	100
Shunt Voltage Regulators — TO-92								
2.5	2.5	20	50	2	ZR431C-ND‡	1.08	.81	.49
2.5	2.5	20	50	1	ZR431C01-ND‡	1.38	1.04	.63
1.24	1.24	15	30	2.5	ZR2431C02-ND	1.08	.81	.49
1.24	1.24	15	30	1	ZR2431C01-ND	1.47	1.11	.67
Improved Stability Low Voltage Shunt Regulators — TO-92								
1.24	1.24	10	30	1	ZR431LC01-ND	1.47	1.11	.67
1.24	1.24	10	30	2.5	ZR431LC02-ND	1.08	.81	.49

‡ Additional Information included in Zetex Application Handbook, part number ST321-ND.

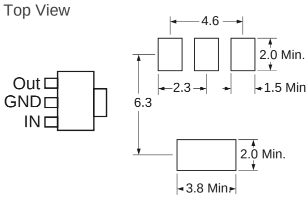
ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

Local Voltage Regulators

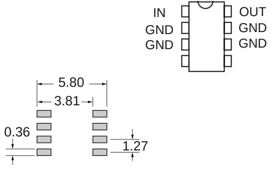
TO-92
Bottom View



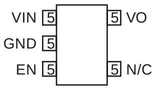
SOT-223
Top View



SO-8
Top View
Pkg. Suffix N8



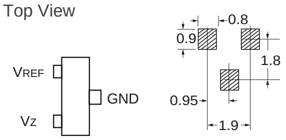
Micro Power Low Dropout Regulators



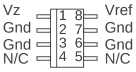
(TOP VIEW)

Shunt Voltage Regulators SC-70

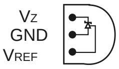
SOT-23
Top View



SO-8
Top View



TO-92
Bottom View



Voltage Regulators and References

Ultra Low Dropout Regulators

V Out (V)	Dropout Voltage (mV)	I Max. (mA)	Shutdown Current (µA)	Max Load Reg. (mV)	Max Line Reg. (mV)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000
Ultra Low Dropout Regulators — SM-8											
3.3	35	300	11	52	78	ZLDO330T8CT-ND‡	3.30	2.48	1.49	ZLDO330T8TR-ND‡	935.00
4.85	35	300	11	69	119	ZLDO485T8CT-ND‡	3.30	2.48	1.49	ZLDO485T8TR-ND‡	935.00
5	35	300	11	70	123	ZLDO500T8CT-ND‡	3.30	2.48	1.49	ZLDO500T8TR-ND‡	935.00

Miniature Voltage Regulators

Output Voltage (V)	Max. Output Current (mA)	Max. Quiescent Current (µA)	Typical Dropout Voltage (V)	Max. Line Reg. (mV)	Max. Load Reg. (mV)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Miniature Voltage Regulators — SOT-23											
2.5	50	40	1.7	15	30	ZMR250FCT-ND‡	1.77	1.33	.80	ZMR250FTR-ND‡	442.50/M
5.0	50	70	1.7	15	40	ZMR500FCT-ND	1.41	1.06	.64	ZMR500FTR-ND	352.50/M
Miniature Voltage Regulators — TO-92											
2.5	50	40	1.7	15	30	ZMR250C-ND*	1.41	1.06	.64	—	—
5.0	50	70	1.7	15	40	ZMR500C-ND*	1.41	1.06	.64	—	—

∗ Bulk Pricing

‡ *Additional Information included in Zetex Application Handbook, part number ST321-ND.*

Micropower Voltage Reference

Reverse Breakdown Voltage (V)	Min. Current (µA)	Max. Current (mA)	Max. Temp. Coefficient (ppm/°C)	Max. Slope Resistance (Ohms)	Tol. (%)	Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Micropower Voltage Reference — SOT-23 Package											
2.50	20	20	90	1	2	ZR285F02CT-ND	.91	.65	.52	ZR285F02TR-ND	325.00/M
2.50	20	20	90	1	3	ZR285F03CT-ND	.77	.55	.44	ZR285F03TR-ND	275.00/M
2.50	50	20	90	2	1	ZR40401F25CT-ND	1.23	.88	.70	ZR40401F25TR-ND	437.50/M
2.50	50	20	90	2	2	ZR40402F25CT-ND	.91	.65	.52	ZR40402F25TR-ND	325.00/M
4.096	50	20	90	2	1	ZR40401F41CT-ND	1.23	.88	.70	ZR40401F41TR-ND	437.50/M
4.096	50	20	90	2	2	ZR40402F41CT-ND	.91	.65	.52	ZR40402F41TR-ND	325.00/M
5.00	50	20	90	1.5	1	ZR40401F50CT-ND	1.23	.88	.70	ZR40401F50TR-ND	437.50/M
5.00	50	20	90	1.5	2	ZR40402F50CT-ND	.91	.65	.52	ZR40402F50TR-ND	325.00/M
2.45	2000	120	50	0.5	1	ZRA245F01CT-ND	1.23	.88	.70	ZRA245F01TR-ND	437.50/M
2.45	2000	120	50	0.5	3	ZRA245F03CT-ND	.77	.55	.44	ZRA245F03TR-ND	275.00/M
1.22	30	5	90	0.5	0.5	ZXRE125CFCT-ND	1.72	1.23	.98	ZXRE125CFTR-ND	612.50/M
1.22	30	5	90	0.5	1	ZXRE125DFCT-ND	1.23	.88	.70	ZXRE125DFTR-ND	437.50/M
1.22	30	5	90	0.5	2	ZXRE125EFCT-ND	.91	.65	.52	ZXRE125EFTR-ND	325.00/M
1.22	30	5	90	0.5	3	ZXRE125FFCT-ND	.77	.55	.44	ZXRE125FFTR-ND	275.00/M
1.22	8	20	75	0.5	0.5	ZXRE1004CFCT-ND	2.57	1.84	1.47	ZXRE1004CFTR-ND	918.75/M
1.22	8	20	75	0.5	1	ZXRE1004DFCT-ND	2.24	1.60	1.28	ZXRE1004DFTR-ND	800.00/M
1.22	8	20	75	0.5	2	ZXRE1004EFCT-ND	1.93	1.38	1.10	ZXRE1004EFTR-ND	687.50/M
1.22	4	20	75	0.6	3	ZXRE1004FFCT-ND	1.80	1.29	1.03	ZXRE1004FFTR-ND	643.75/M
1.225	30	12	75	0.5	0.5	ZXRE4041CFCT-ND	1.72	1.23	.98	ZXRE4041CFTR-ND	612.50/M
1.225	30	12	75	0.5	1	ZXRE4041DFCT-ND	1.23	.88	.70	ZXRE4041DFTR-ND	437.50/M
1.225	30	12	75	0.5	2	ZXRE4041EFCT-ND	.91	.65	.52	ZXRE4041EFTR-ND	325.00/M
2.5	20	5	90	1	1	ZRC250F01CT-ND	1.23	.88	.70	ZRC250F01TR-ND	437.50/M
2.5	20	5	90	1	2	ZRC250F02CT-ND	.91	.65	.52	ZRC250F02TR-ND	325.00/M
2.5	20	5	90	1	3	ZRC250F03CT-ND	.77	.55	.44	ZRC250F03TR-ND	275.00/M
5	50	15	50	1.5	1	ZRB500F01CT-ND	1.23	.88	.70	ZRB500F01TR-ND	437.50/M
5	50	15	50	1.5	2	ZRB500F02CT-ND	.91	.65	.52	ZRB500F02TR-ND	325.00/M
5	50	15	50	1.5	3	ZRB500F03CT-ND	.77	.55	.44	ZRB500F03TR-ND	275.00/M
3.3	20	5	50	2	1	ZRC330F01CT-ND	1.23	.88	.70	ZRC330F01TR-ND	645.00/M
3.3	20	5	50	2	2	ZRC330F02CT-ND	.91	.65	.52	ZRC330F02TR-ND	325.00/M
3.3	20	5	50	2	3	ZRC330F03CT-ND	.77	.55	.44	ZRC330F03TR-ND	275.00/M

V_O (V)	ΔVref (mV) Typ	Max	Iref (mA) Min	Max	Slope Resistance Typ	Max	Trim Range	Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	Tape & Reel Pricing 1,000
Precision Micropower Voltage Reference, Trimmable — SOT-223													
2.5	2.7	8.8	0.15	75	0.85	2	5.0%	ZRT025GC1CT-ND	1.94	1.39	1.11	ZRT025GC1TR-ND	693.75
4.0	4.2	14.0	0.15	75	1.1	3	5.0%	ZRT040GC1CT-ND	1.94	1.39	1.11	ZRT040GC1TR-ND	693.75
5.0	5.4	17.2	0.15	60	1.25	2	5.0%	ZRT050GC1CT-ND	1.94	1.39	1.11	ZRT050GC1TR-ND	693.75
6.2	6.5	22.0	0.15	50	1.4	3	5.0%	ZRT062GC1CT-ND	1.94	1.39	1.11	ZRT062GC1TR-ND	693.75
9.8	10.8	34.4	0.15	30	1.8	4	2.5%	ZRT100GC1CT-ND	1.94	1.39	1.11	ZRT100GC1TR-ND	693.75

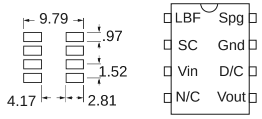
Reverse Breakdown Voltage (V)	Min. Current (µA)	Max. Current (mA)	Max. Temp. Coefficient (ppm/°C)	Max. Slope Resistance (Ohms)	Tolerance (%)	Digi-Key Part No.	Price Each 1	25	100	1,000
Micropower Voltage Reference — TO-92 Package										
2.50	20	20	90	1	2	ZR285R02-ND	.91	.65	.39	.33
2.50	20	20	90	1	3	ZR285R03-ND	.77	.55	.33	.28
2.50	50	20	90	2	1	ZR40401R25-ND	1.23	.88	.53	.44
2.50	50	20	90	2	2	ZR40402R25-ND	.91	.65	.39	.33
4.096	50	20	90	2	1	ZR40401R41-ND	1.23	.88	.53	.44
4.096	50	20	90	2	2	ZR40402R41-ND	.91	.65	.39	.33
5.00	50	20	90	1.5	1	ZR40401R50-ND	1.23	.88	.53	.44
5.00	50	20	90	1.5	2	ZR40402R50-ND	.91	.65	.39	.33
2.45	2000	120	50	0.5	1	ZRA245A01-ND	1.23	.88	.53	.44
2.45	2000	120	50	0.5	3	ZRA245A03-ND	.77	.55	.33	.28

ZETEX *Now QS9000 Accredited!*

ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

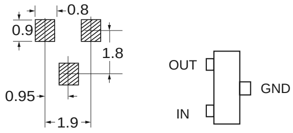
Ultra Low Dropout Regulators

SM-8

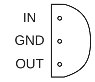


Miniature Voltage Regulators

SOT-23
Pkg. Suffix F Top View

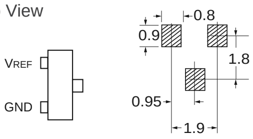


TO-92
Pkg. Suffix C
Bottom View



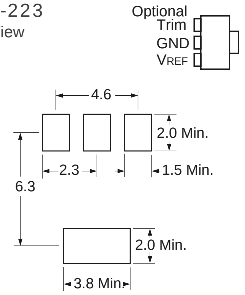
Micropower Voltage Reference

SOT-23
Pkg. Suffix F
Top View



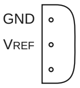
Precision Micropower Voltage Reference

SOT-223
Top View

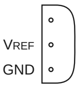


Micropower Voltage Reference

TO-92
3 Pin E-LINE
Bottom View



Pkg. Suffix R



Pkg. Suffix A

ZETEX Micropower Voltage Reference

V_R (V)	I_R Min. (µA)	I_R Max. (mA)	TC ppm/°C	R_S Max. (Ω)	Tolerance	Digi-Key Part No.	Price Each 1	25	100	1,000
Micropower Voltage Reference, 330mW — TO-92 Package										
2.45/2.55	20	5	90	1.0	2%	ZRC250A02-ND	.91	.65	.39	.33
4.0	23	5	90	2.0	2%	ZRC400A02-ND	.91	.65	.39	.33
5.0	25	5	90	2.0	2%	ZRC500A02-ND	1.21	.87	.52	.44
5.0	50	15	50	1.5	1%	ZRB500A01-ND	1.23	.88	.53	.44
5.0	50	15	50	1.5	3%	ZRB500A03-ND	2.05	.79	.48	.40
3.3	20	5	50	2.0	1%	ZRC330A01-ND	1.23	.88	.53	.44
3.3	20	5	50	2.0	3%	ZRC330A03-ND	.77	.55	.33	.28
2.5	20	5	90	1.0	1%	ZRC250A01-ND	1.23	.88	.53	.44
2.5	20	5	90	1.0	3%	ZRC250A03-ND	.77	.55	.33	.28
2.5	20	5	90	1.0	1%	ZRC250R01-ND	1.23	.88	.53	.44
2.5	20	5	90	1.0	3%	ZRC250R03-ND	.77	.55	.33	.28
1.22	8	20	75	0.5	1%	ZXRE1004DR-ND	2.24	1.60	.96	.80
1.225	30	12	75	0.5	1%	ZXRE4041DR-ND	1.23	.88	.53	.44
1.22	30	5	90	0.5	1%	ZXRE125DR-ND	1.23	.88	.53	.44
1.22	30	5	90	0.5	2%	ZXRE125ER-ND	.91	.65	.39	.33
1.22	30	5	90	0.5	3%	ZXRE125FR-ND	.77	.55	.33	.28

Reverse Breakdown Voltage (V)	Min. Current (µA)	Max. Current (mA)	Max. Temp. Coefficient (ppm/°C)	Max. Slope Resistance (Ohms)	Tol. (%)	Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	T & R Pricing 500
Micropower Voltage Reference — SO-8 Package											
2.45	2000	120	50	0.5	1	ZRA245N801CT-ND	1.66	1.19	.95	ZRA245N801TR-ND	315.88
2.45	2000	120	50	0.5	3	ZRA245N803CT-ND	1.44	1.03	.82	ZRA245N803TR-ND	272.65
2.50	20	20	90	1.0	2	ZR285N802CT-ND	1.54	1.10	.88	ZR285N802TR-ND	292.60
2.50	20	20	90	1.0	3	ZR285N803CT-ND	1.44	1.03	.82	ZR285N803TR-ND	272.65
2.50	50	20	90	2.0	1	ZR40401N825CT-ND	1.66	1.19	.95	ZR40401N825TR-ND	315.88
2.50	50	20	90	2.0	2	ZR40402N825CT-ND	1.49	1.07	.85	ZR40402N825TR-ND	282.63
3.3	20	5	50	2.0	1	ZRC330N801CT-ND	1.66	1.19	.95	ZRC330N801TR-ND	315.88
3.3	20	5	50	2.0	3	ZRC330N803CT-ND	1.44	1.03	.82	ZRC330N803TR-ND	272.65
4.096	50	20	90	2.0	1	ZR40401N841CT-ND	1.66	1.19	.95	ZR40401N841TR-ND	315.88
4.096	50	20	90	2.0	2	ZR40402N841CT-ND	1.49	1.07	.85	ZR40402N841TR-ND	282.63
5.0	50	20	90	1.5	1	ZR40401N850CT-ND	1.66	1.19	.95	ZR40401N850TR-ND	315.88
5.0	50	20	90	1.5	2	ZR40402N850CT-ND	1.49	1.07	.85	ZR40402N850TR-ND	282.63
5.0	50	15	50	1.5	1	ZRB500N801CT-ND	1.66	1.19	.95	ZRB500N801TR-ND	315.88
5.0	50	15	50	1.5	3	ZRB500N803CT-ND	1.44	1.03	.82	ZRB500N803TR-ND	272.65
2.5	20	5	90	1.0	1	ZRC250N801CT-ND	1.66	1.19	.95	ZRC250N801TR-ND	315.88
2.5	20	5	90	1.0	3	ZRC250N803CT-ND	1.44	1.03	.82	ZRC250N803TR-ND	272.65
1.22	8	20	75	0.5	1	ZXRE1004DN8CT-ND	2.24	1.60	1.28	ZXRE1004DN8TR-ND	425.60
1.22	8	20	75	0.5	2	ZXRE1004EN8CT-ND	1.93	1.38	1.10	ZXRE1004EN8TR-ND	365.75
1.22	8	20	75	0.5	3	ZXRE1004FN8CT-ND	1.80	1.29	1.03	ZXRE1004FN8TR-ND	342.48
1.22	30	5	90	0.5	1	ZXRE125DN8CT-ND	1.45	1.04	.83	ZXRE125DN8TR-ND	275.98
1.22	30	5	90	0.5	2	ZXRE125EN8CT-ND	1.28	.92	.73	ZXRE125EN8TR-ND	242.73
1.22	30	5	90	0.5	3	ZXRE125FN8CT-ND	1.17	.84	.67	ZXRE125FN8TR-ND	222.78
1.225	30	12	75	0.5	1	ZXRE4041DN8CT-ND	1.45	1.04	.83	ZXRE4041DN8TR-ND	275.98
1.225	30	12	75	0.5	2	ZXRE4041EN8CT-ND	1.28	.92	.73	ZXRE4041EN8TR-ND	242.73
1.225	30	12	75	0.5	3	ZXRE4041FN8CT-ND	1.17	.84	.67	ZXRE4041FN8TR-ND	222.78

"H" Bridge

Polarity	V_{CBO} (V)	V_{CEO} (V)	I_C (DC) (A)	I_{CM} (A)	V_{CE} (sat) (V)	I_C/I_B (mA)	h_{FE} min	I_C (mA)	V_{CE} (V)	Digi-Key Part No.	Cut Tape Price Each 1	10	Digi-Key Part No.	Tape & Reel Pricing 1,000
'H' Bridge — SM-8														
NPN PNP	20 -20	20 -20	2.5 -2.5	6 -6	0.15 -0.2	1000/10 -1000/-20	200 150	2 -2	2 -2	ZHB6718CT-ND	5.01	3.76	ZHB6718TR-ND	1419.50
NPN PNP	40 -40	50 -50	2 -2	6 -6	0.5 -0.45	1000/5 -1000/-10	150 150	2 -2	2 -2	ZHB6790CT-ND	5.01	3.76	ZHB6790TR-ND	1419.50

Automotive and Household Security Siren Driver

Features: • Direct drive of darlington, mosfet and IGBT output stages • Suitable for automotive and static alarm systems

Operating Voltage (V)	Operating Current (mA)	Sleep Mode Current (µA)	Operating Temp. (C)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T & R Pricing 500
4-18V	10	1	-40° – 125°	ZSD100D8-ND‡	2.25	1.69	1.02	—	—
4-18V	10	1	-40° – 125°	ZSD100N8CT-ND‡	2.70	2.03	1.22	ZSD100N8TR-ND‡	472.50

‡ *Additional Information included in Zetex Application Handbook, part number ST321-ND.*

Precision Single Cell Timer

Supply Voltage Min./Max. (V)	Supply Current Min./Max. (µA)	Sink Current (mA)	T_{PD} (µS)	Maximum Frequency (KHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500
8 Dip										
0.9 / 6.0	74 / 200	100	2	330	ZSCT1555D8-ND†	3.09	2.32	1.40	—	—
8-SOIC										
0.9 / 6.0	74 / 200	100	2	330	ZSCT1555N8CT-ND	3.09	2.32	1.40	ZSCT1555N8TR-ND	540.75

† Tube Pricing

Current Mirror — SM-8 Package

This device offers excellent matching between transistor elements to allow a space and cost-effective solution for high side current sense applications. Uncommitted sensitivity is selected by external resistors.

Type	V_{CBO} (V)	V_{CEO} (V)	V_{EBO} (V)	I_{CM} (Amps)	I_C (Amps)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T & R Pricing 1,000
NPN PNP	140 -140	120 -120	10 -10	4 -4	1 -1	ZDS1009CT-ND	4.41	3.31	1.99	ZDS1009TR-ND	1249.50

TRAC The Fastest Analog Solution

Field Programmable Analog Device

Field programmable Analog Device which is supported by powerful PC based Design and Simulation tools, plus a hardware emulator for fast hardware prototyping, **TRAC** provides real time and computational approach to signal processing, assuring design integration and secrecy. For more information check TRAC site @ http://www.zetex.com)

Description	Part Number	Pricing 1	25	100
TRAC020LH in QSOP36	TRAC020LHQ36-ND	16.50	387.50	1400.00
TRAC Development Kit	TRAC020LHUSA-ND	460.00	—	—

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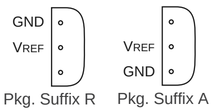
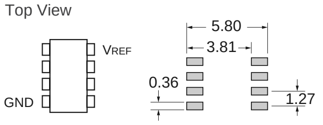
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

Micropower Voltage Reference

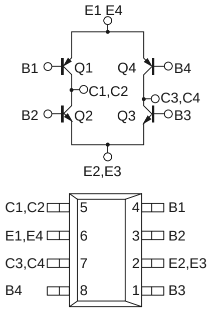
TO-92
3 Pin E-LINE
Bottom View



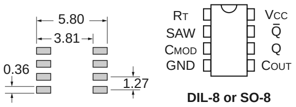
SO-8
Pkg. Suffix N8
Top View



H Bridge

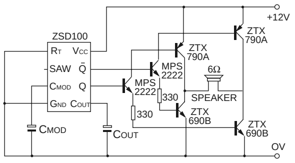


IC Siren Driver



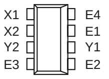
DIL-8 or SO-8
(D8) (N8)

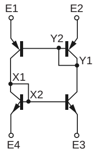
Sample Circuit



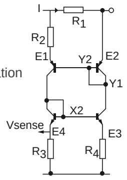
Current Mirror

SM-8





Typical
Application
Circuit



$V_{sense} = IR_1 \frac{R_3}{R_2}$

For balance R3=R4

e.g.

R2=100mΩ
R1=R3=R4=100Ω

V_{sense} sensitivity = 100mV/A

Variable Capacitance Diodes — SOT-23 and SOD-323 Packages

ZETEX Now QS9000 Accredited!

V_{BR} @ I_R = 10μA Min. (V)	I_R Max. μA/ V_R (V)	Cd @ V_R = 25V Max. (pf)	RD Max. Ω	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Silicon Planar Variable Capacitance Diodes — SOT-23 Package									
28	0.05/28	2.8	1.2	BBY31CT-ND‡	.54	4.05	27.00	BBY31TR-ND‡	162.00/M
28	0.05/28	6.0	0.6	BBY40CT-ND‡	.54	4.05	27.00	BBY40TR-ND‡	162.00/M

P_{TOT} (mW)	V_{BR} (V)	C2 Nominal Capacitance (pF)	Capacitance Ratio C_2/C_{20} at f = 1MHz Min.	Max.	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Silicon Planar Variable Capacitance Diodes — SOT-23 Package										
330	25	8.2	4.3	5.8	ZC829ACT-ND	2.52	18.90	113.40	ZC829ATR-ND	630.00/M
330	25	10	4.5	6.0	ZC830ACT-ND‡	2.52	18.90	113.40	ZC830ATR-ND‡	630.00/M
330	25	15	4.5	6.0	ZC831ACT-ND‡	2.52	18.90	113.40	ZC831ATR-ND‡	630.00/M
330	25	22	5.0	6.5	ZC832ACT-ND‡	2.52	18.90	113.40	ZC832ATR-ND‡	630.00/M
330	25	33	5.0	6.5	ZC833ACT-ND‡	2.52	18.90	113.40	ZC833ATR-ND‡	630.00/M
330	25	47	5.0	6.5	ZC834ACT-ND‡	2.52	18.90	113.40	ZC834ATR-ND‡	630.00/M
330	25	68	5.0	6.5	ZC835ACT-ND‡	2.52	18.90	113.40	ZC835ATR-ND‡	630.00/M
330	25	100	5.0	6.5	ZC836ACT-ND‡	2.52	18.90	113.40	ZC836ATR-ND‡	630.00/M
Silicon Planar Variable Capacitance Diodes — SOD-323 Package										
300	25	8.2	4.3	5.8	ZMV829ACT-ND	2.49	18.68	112.05	ZMV829ATR-ND	622.50/M
300	25	10	4.5	6.0	ZMV830ACT-ND	2.49	18.68	112.05	ZMV830ATR-ND	622.50/M
300	25	15	4.5	6.0	ZMV831ACT-ND	2.49	18.68	112.05	ZMV831ATR-ND	622.50/M
300	25	22	5.0	6.5	ZMV832ACT-ND	2.49	18.68	112.05	ZMV832ATR-ND	622.50/M
300	25	33	5.0	6.5	ZMV833ACT-ND	2.49	18.68	112.05	ZMV833ATR-ND	622.50/M
300	25	47	5.0	6.5	ZMV834ACT-ND	2.49	18.68	112.05	ZMV834ATR-ND	622.50/M
300	25	68	5.0	6.5	ZMV835ACT-ND	1.98	14.85	89.10	ZMV835ATR-ND	495.00/M

P_{TOT} (mW)	V_{BR} (V)	min. C_d at V_R=1V	min/max C_d at V_R=2.5V	max. Cd at V_R=4V	Q min.	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Silicon Planar Variable Capacitance Diodes - Hyper-hyperabrupt Variety — SOT-23 Package											
330	12	8.7	4.3 / 5.5	2.9	350	ZC930CT-ND	3.39	25.43	152.55	ZC930TR-ND	847.50/M
330	12	14.5	6.5 / 7.8	4	300	ZC931CT-ND	3.39	25.43	152.55	ZC931TR-ND	847.50/M
330	12	17	8.5 / 10.5	5.5	200	ZC932CT-ND	3.39	25.43	152.55	ZC932TR-ND	847.50/M
330	12	42	18 / 27	12	150	ZC933CT-ND	3.39	25.43	152.55	ZC933TR-ND	847.50/M
330	12	42	20.25 / 24.75	12	150	ZC933ACT-ND	3.39	25.43	152.55	ZC933ATR-ND	847.50/M
330	12	95	40 / 65	25	80	ZC934CT-ND	3.39	25.43	152.55	ZC934TR-ND	847.50/M
330	12	95	47.25 / 57.75	25	80	ZC934ACT-ND	3.39	25.43	152.55	ZC934ATR-ND	847.50/M
Silicon Planar Variable Capacitance Diodes - Hyper-hyperabrupt Variety — SOD-323 Package											
300	12	8.7	4.3 / 5.5	2.9	350	ZMV930CT-ND	2.19	16.43	98.55	ZMV930TR-ND	547.50/M
300	12	14.5	6.5 / 7.8	4	300	ZMV931CT-ND	2.19	16.43	98.55	ZMV931TR-ND	547.50/M
300	12	17	8.5 / 10.5	5.5	200	ZMV932CT-ND	2.19	16.43	98.55	ZMV932TR-ND	547.50/M
300	12	42	18 / 27	12	150	ZMV933CT-ND	2.19	16.43	98.55	ZMV933TR-ND	547.50/M
300	12	42	20.25 / 24.75	12	150	ZMV933ACT-ND	2.34	17.55	105.30	ZMV933ATR-ND	585.00/M
300	12	95	40 / 65	25	80	ZMV934CT-ND	2.19	16.43	98.55	ZMV934TR-ND	547.50/M
300	12	95	47.25 / 57.75	25	80	ZMV934ACT-ND	2.34	17.55	105.30	ZMV934ATR-ND	585.00/M

P_{TOT} (mW)	V_{BR} (V)	C2 Nominal Capacitance (pF)	Capacitance Ratio C_2/C_{20} at f=1MHz Min.	Max.	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Silicon Planar Variable Capacitance Diodes - Dual, Common Cathode — SOT-23 Package										
330	25	33	5.0	6.5	ZDC833ACT-ND	2.82	21.15	126.90	ZDC833ATR-ND	705.00/M

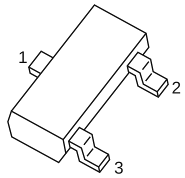
P_{TOT} (mW)	V_{BR} (V)	I_R (μA)	C_d(pF) Min.	Max.	V/MHz	C_3/C_{25} Min.	Max.	Q Min	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Silicon Planar Variable Capacitance Diodes — SOT-23 Package														
330	30	0.05	1.8	2.8	25/1	4.0	6.0	250	FMMV105GCT-ND‡	.81	6.08	40.50	FMMV105GTR-ND‡	243.00/M
330	30	0.02	26	32	3/1	5.0	6.5	200	FMMV109CT-ND‡	.81	6.08	40.50	FMMV109TR-ND‡	243.00/M
330	30	0.1	20	25	3/1	4.5	—	200	FMMV3102CT-ND‡	.81	6.08	40.50	FMMV3102TR-ND‡	243.00/M

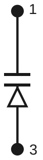
P_{TOT} (mW)	V_R (V)	I_F (mA)	C_d(pF) @ 4V Nom.	Max.	Tuning Ratio C_2/C_{30} @ f=1MHz Min.	Max.	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Silicon Planar Variable Capacitance Diodes — SOT-23 Package												
330	30	20	6.8	7.5	2.5	3.3	FMMV2101CT-ND‡	.81	6.08	40.50	FMMV2101TR-ND‡	243.00/M
330	30	20	10	11	2.6	3.3	FMMV2103CT-ND‡	.81	6.08	40.50	FMMV2103TR-ND‡	243.00/M
330	30	20	12	13.2	2.6	3.3	FMMV2104CT-ND‡	.81	6.08	40.50	FMMV2104TR-ND‡	243.00/M
330	30	20	15	16.5	2.6	3.3	FMMV2105CT-ND‡	.81	6.08	40.50	FMMV2105TR-ND‡	243.00/M
330	30	20	22	24.2	2.7	3.3	FMMV2107CT-ND‡	.81	6.08	40.50	FMMV2107TR-ND‡	243.00/M
330	30	20	27	29.7	2.7	3.3	FMMV2108CT-ND‡	.81	6.08	40.50	FMMV2108TR-ND‡	243.00/M
330	30	20	33	36.3	2.7	3.3	FMMV2109CT-ND‡	.81	6.08	40.50	FMMV2109TR-ND‡	243.00/M

‡ *Additional Information included in Zetex Application Handbook, part number ST321-ND.*

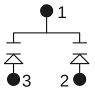
ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

SOT-23
Variable Capacitance Diodes

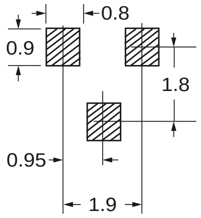




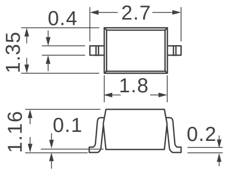
Single Diode

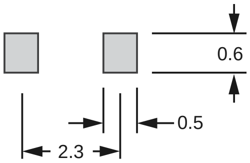


Dual Diodes



SOD-323
Variable Capacitance Diodes





Panasonic Transistor Arrays

Composite Transistors (Built-in Resistor)

Dim. in mm

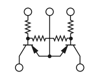
Fig. 1


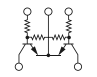
Fig. 2


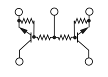
Fig. 3


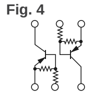
Fig. 4


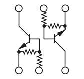
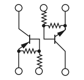
Fig. 5


Fig. 6


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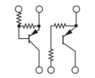


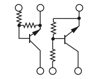
Fig. 8


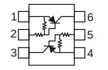
Fig. 9 *NEW!*


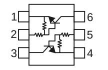
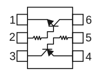
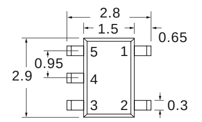
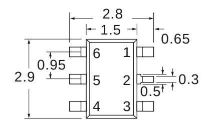
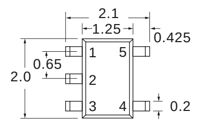
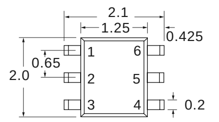
Fig. 10 *NEW!*


Fig. 11 *NEW!*


Mini Type (5-pin) / EIAJ: SC-74A


Mini Type (6-pin) / EIAJ: SC-74


S-Mini Type (5-pin) / EIAJ: SC-88A


S-Mini Type (6-pin) / EIAJ: SC-88


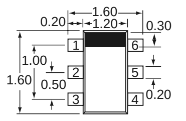
NEW! **SS-Mini Type (6-pin)**


Fig.	Package	Basic Type		Resistor Value		Digi-Key	Cut Tape Price Each			Digi-Key	Tape and Reel Pricing	
		PNP	NPN	RB (K ohm)	RBE (K ohm)	Part No.	1	10	100	Part No.	Size	Pricing
1	Mini 5Pin	UN211F x2	—	4.7	10	XN111FCT-ND	.44	.36	.25	XN111FTR-ND	3,000	116.10/M
1	Mini 5Pin	UN211H x2	—	2	10	XN111HCT-ND	.44	.36	.25	XN111HTR-ND	3,000	116.10/M
1	Mini 5Pin	UN1110 x2	—	47	open	XN1110CT-ND	.48	.39	.27	XN1110TR-ND	3,000	125.57/M
1	Mini 5Pin	UN2111 x2	—	10	10	XN1111CT-ND	.44	.36	.25	XN1111TR-ND	3,000	116.10/M
1	Mini 5Pin	UN2112 x2	—	22	22	XN1112CT-ND	.44	.36	.25	XN1112TR-ND	3,000	116.10/M
1	Mini 5Pin	UN2113 x2	—	47	47	XN1113CT-ND	.44	.36	.25	XN1113TR-ND	3,000	116.10/M
1	Mini 5Pin	UN2114 x2	—	10	47	XN1114CT-ND	.44	.36	.25	XN1114TR-ND	3,000	116.10/M
1	Mini 5Pin	UN2115 x2	—	10	open	XN1115CT-ND	.44	.36	.25	XN1115TR-ND	3,000	116.10/M
1	Mini 5Pin	UN2116 x2	—	4.7	open	XN1116CT-ND	.44	.36	.25	XN1116TR-ND	3,000	116.10/M
1	Mini 5Pin	UN2119 x2	—	1	10	XN1119CT-ND	.44	.36	.25	XN1119TR-ND	3,000	116.10/M
2	Mini 5Pin	—	UN2210 x2	47	open	XN1210CT-ND	.44	.36	.25	XN1210TR-ND	3,000	116.10/M
2	Mini 5Pin	—	UN2211 x2	10	10	XN1211CT-ND	.44	.36	.25	XN1211TR-ND	3,000	116.10/M
2	Mini 5Pin	—	UN2212 x2	22	22	XN1212CT-ND	.44	.36	.25	XN1212TR-ND	3,000	116.10/M
2	Mini 5Pin	—	UN2213 x2	47	47	XN1213CT-ND	.44	.36	.25	XN1213TR-ND	3,000	116.10/M
2	Mini 5Pin	—	UN2214 x2	10	47	XN1214CT-ND	.44	.36	.25	XN1214TR-ND	3,000	116.10/M
2	Mini 5Pin	—	UN2215 x2	10	open	XN1215CT-ND	.44	.36	.25	XN1215TR-ND	3,000	116.10/M
2	Mini 5Pin	—	UN2216 x2	4.7	open	XN1216CT-ND	.44	.36	.25	XN1216TR-ND	3,000	116.10/M
3	Mini 5Pin	—	UN2211 x2	10	10	XN2211CT-ND	.44	.36	.25	XN2211TR-ND	3,000	116.10/M
4	Mini 6Pin	UN2111 x2	—	10	10	XN4111CT-ND	.44	.36	.25	XN4111TR-ND	3,000	116.10/M
4	Mini 6Pin	UN2112 x2	—	22	22	XN4112CT-ND	.44	.36	.25	XN4112TR-ND	3,000	116.10/M
4	Mini 6Pin	UN2113 x2	—	47	47	XN4113CT-ND	.44	.36	.25	XN4113TR-ND	3,000	116.10/M
4	Mini 6Pin	UN2114 x2	—	10	47	XN4114CT-ND	.44	.36	.25	XN4114TR-ND	3,000	116.10/M
4	Mini 6Pin	UN2115 x2	—	10	open	XN4115CT-ND	.44	.36	.25	XN4115TR-ND	3,000	116.10/M
4	Mini 6Pin	UN2116 x2	—	4.7	open	XN4116CT-ND	.44	.36	.25	XN4116TR-ND	3,000	116.10/M
5	Mini 6Pin	—	UN1210 x2	47	open	XN4210CT-ND	.48	.39	.27	XN4210TR-ND	3,000	125.57/M
5	Mini 6Pin	—	UN2211 x2	10	10	XN4211CT-ND	.44	.36	.25	XN4211TR-ND	3,000	116.10/M
5	Mini 6Pin	—	UN2212 x2	22	22	XN4212CT-ND	.44	.36	.25	XN4212TR-ND	3,000	116.10/M
5	Mini 6Pin	—	UN2213 x2	47	47	XN4213CT-ND	.44	.36	.25	XN4213TR-ND	3,000	116.10/M
5	Mini 6Pin	—	UN2214 x2	10	47	XN4214CT-ND	.44	.36	.25	XN4214TR-ND	3,000	116.10/M
5	Mini 6Pin	—	UN2215 x2	10	open	XN4215CT-ND	.44	.36	.25	XN4215TR-ND	3,000	116.10/M
5	Mini 6Pin	—	UN2216 x2	4.7	open	XN4216CT-ND	.44	.36	.25	XN4216TR-ND	3,000	116.10/M
6	Mini 6Pin	UN2111 x1	UN2211 x1	10/10	10/10	XN4311CT-ND	.44	.36	.25	XN4311TR-ND	3,000	116.10/M
6	Mini 6Pin	UN2112 x1	UN2212 x1	22/22	22/22	XN4312CT-ND	.44	.36	.25	XN4312TR-ND	3,000	116.10/M
6	Mini 6Pin	UN2114 x1	UN2114 x1	10/10	47/47	XN4314CT-ND	.44	.36	.25	XN4314TR-ND	3,000	116.10/M
6	Mini 6Pin	UN2115 x1	UN2115 x1	10/10	open/open	XN4315CT-ND	.44	.36	.25	XN4315TR-ND	3,000	116.10/M
6	Mini 6Pin	UN2116 x1	UN2116 x1	4.7/4.7	open/open	XN4316CT-ND	.44	.36	.25	XN4316TR-ND	3,000	116.10/M
6	Mini 6Pin	UN2122 x1	UN2213 x1	4.7/4.7	4.7/4.7	XN4381CT-ND	.44	.36	.25	XN4381TR-ND	3,000	116.10/M
7	Mini 6Pin	—	UN1213 x2	47	47	XN6213CT-ND	.48	.39	.27	XN6213TR-ND	3,000	125.57/M
7	Mini 6Pin	—	UN1215 x2	10	open	XN6215CT-ND	.48	.39	.27	XN6215TR-ND	3,000	125.57/M
7	Mini 6Pin	—	UN1216 x2	4.7	open	XN6216CT-ND	.48	.39	.27	XN6216TR-ND	3,000	125.57/M
1	S Mini 5Pin	UN111F x2	—	4.7	10	XP111FCT-ND	.52	.42	.29	XP111FTR-ND	3,000	134.78/M
1	S Mini 5Pin	UN111H x2	—	2.2	10	XP111HCT-ND	.52	.42	.29	XP111HTR-ND	3,000	134.78/M
1	S Mini 5Pin	UN1111 x2	—	10	10	XP1111CT-ND	.52	.42	.29	XP1111TR-ND	3,000	134.78/M
1	S Mini 5Pin	UN1112 x2	—	22	22	XP1112CT-ND	.52	.42	.29	XP1112TR-ND	3,000	134.78/M
1	S Mini 5Pin	UN1113 x2	—	47	47	XP1113CT-ND	.52	.42	.29	XP1113TR-ND	3,000	134.78/M
1	S Mini 5Pin	UN1114 x2	—	10	47	XP1114CT-ND	.52	.42	.29	XP1114TR-ND	3,000	134.78/M
1	S Mini 5Pin	UN1115 x2	—	10	open	XP1115CT-ND	.52	.42	.29	XP1115TR-ND	3,000	134.78/M
1	S Mini 5Pin	UN1116 x2	—	4.7	open	XP1116CT-ND	.52	.42	.29	XP1116TR-ND	3,000	134.78/M
1	S Mini 5Pin	UN1119 x2	—	1	10	XP1119CT-ND	.52	.42	.29	XP1119TR-ND	3,000	134.78/M
2	S Mini 5Pin		UN1210 x2	47	open	XP1210CT-ND	.52	.42	.29	XP1210TR-ND	3,000	134.78/M
2	S Mini 5Pin		UN1211 x2	10	10	XP1211CT-ND	.52	.42	.29	XP1211TR-ND	3,000	134.78/M
2	S Mini 5Pin	—	UN1212 x2	22	22	XP1212CT-ND	.52	.42	.29	XP1212TR-ND	3,000	134.78/M
2	S Mini 5Pin	—	UN1213 x2	47	47	XP1213CT-ND	.52	.42	.29	XP1213TR-ND	3,000	134.78/M
2	S Mini 5Pin	—	UN1214 x2	10	47	XP1214CT-ND	.52	.42	.29	XP1214TR-ND	3,000	134.78/M
2	S Mini 5Pin	—	UN1215 x2	10	open	XP1215CT-ND	.52	.42	.29	XP1215TR-ND	3,000	134.78/M
2	S Mini 5Pin	—	UN1216 x2	4.7	open	XP1216CT-ND	.52	.42	.29	XP1216TR-ND	3,000	134.78/M
2	S Mini 5Pin	—	UN1217 x2	22	open	XP1217CT-ND	.52	.42	.29	XP1217TR-ND	3,000	134.78/M
3	S Mini 6Pin	UN1111 x2	—	10	10	XP4111CT-ND	.52	.42	.29	XP4111TR-ND	3,000	134.78/M
3	S Mini 6Pin	UN1112 x2	—	22	22	XP4112CT-ND	.52	.42	.29	XP4112TR-ND	3,000	134.78/M
3	S Mini 6Pin	UN1113 x2	—	47	47	XP4113CT-ND	.52	.42	.29	XP4113TR-ND	3,000	134.78/M
3	S Mini 6Pin	UN1114 x2	—	10	47	XP4114CT-ND	.52	.42	.29	XP4114TR-ND	3,000	134.78/M
3	S Mini 6Pin	UN1115 x2	—	10	open	XP4115CT-ND	.52	.42	.29	XP4115TR-ND	3,000	134.78/M
3	S Mini 6Pin	UN1116 x2	—	4.7	open	XP4116CT-ND	.52	.42	.29	XP4116TR-ND	3,000	134.78/M
5	S Mini 6Pin	UN1210 x2	—	47	open	XP4210CT-ND	.52	.42	.29	XP4210TR-ND	3,000	134.78/M
5	S Mini 6Pin	UN1211 x2	—	10	10	XP4211CT-ND	.52	.42	.29	XP4211TR-ND	3,000	134.78/M
5	S Mini 6Pin	UN1212 x2	—	22	22	XP4212CT-ND	.52	.42	.29	XP4212TR-ND	3,000	134.78/M
5	S Mini 6Pin	UN1213 x2	—	47	47	XP4213CT-ND	.52	.42	.29	XP4213TR-ND	3,000	134.78/M
5	S Mini 6Pin	UN1214 x2	—	10	47	XP4214CT-ND	.52	.42	.29	XP4214TR-ND	3,000	134.78/M
5	S Mini 6Pin	UN1215 x2	—	10	open	XP4215CT-ND	.52	.42	.29	XP4215TR-ND	3,000	134.78/M
5	S Mini 6Pin	UN1216 x2	—	4.7	open	XP4216CT-ND	.52	.42	.29	XP4216TR-ND	3,000	134.78/M
6	S Mini 6Pin	UN1211 x1	UN1111 x1	10	10	XP4311CT-ND	.52	.42	.29	XP4311TR-ND	3,000	134.78/M
6	S Mini 6Pin	UN1212 x1	UN1112 x1	22	22	XP4312CT-ND	.52	.42	.29	XP4312TR-ND	3,000	134.78/M
6	S Mini 6Pin	UN2214 x1	UN2114 x1	10	47	XP4314CT-ND	.52	.42	.29	XP4314TR-ND	3,000	134.78/M
6	S Mini 6Pin	UN1215 x1	UN1115 x1	10	open	XP4315CT-ND	.52	.42	.29	XP4315TR-ND	3,000	134.78/M
6	S Mini 6Pin	UN1216 x1	UN1116 x1	4.7	open	XP4316CT-ND	.52	.42	.29	XP4316TR-ND	3,000	134.78/M
7	S Mini 6Pin	UN1115 x2	—	10	open	XP6115CT-ND	.52	.42	.29	XP6115TR-ND	3,000	134.78/M
8	S Mini 6Pin	UN1211 x2	—	10	10	XP6211CT-ND	.52	.42	.29	XP6211TR-ND	3,000	134.78/M
8	S Mini 6Pin	UN1212 x2	—	22	22	XP6212CT-ND	.52	.42	.29	XP6212TR-ND	3,000	134.78/M
8	S Mini 6Pin	UN1213 x2	—	47	47	XP6213CT-ND	.52	.42	.29	XP6213TR-ND	3,000	134.78/M
8	S Mini 6Pin	UN1214 x2	—	10	47	XP6214CT-ND	.52	.42	.29	XP6214TR-ND	3,000	134.78/M
8	S Mini 6Pin	UN1215 x2	—	10	open	XP6215CT-ND	.52	.42	.29	XP6215TR-ND	3,000	134.78/M
9	SS Mini 6Pin	UN2111 x2	—	10	10	UP0411100LCT-ND *NEW!*	.61	.46	.35	UP0411100LTR-ND *NEW!*	8,000	194.21/M
10	SS Mini 6Pin	—	UN2213 x2	47	47	UP0421300LCT-ND *NEW!*	.61	.46	.35	UP0421300LTR-ND *NEW!*	8,000	194.21/M
11	SS Mini 6Pin	UN2116 x1	UN2216 x1	4.7	open	UP0431600LCT-ND *NEW!*	.61	.46	.35	UP0431600LTR-ND *NEW!*	8,000	194.21/M

Panasonic

Transistor Arrays

Composite Transistors

Fig. 1

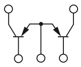


Fig. 2

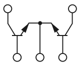


Fig. 3

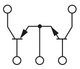


Fig. 4

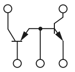


Fig. 5

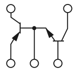


Fig. 6

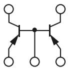


Fig. 7

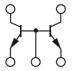


Fig. 8

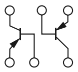


Fig. 9

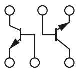


Fig. 10

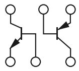


Fig. 11

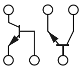


Fig. 12

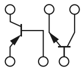


Fig. 13

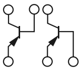


Fig. 14

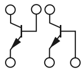


Fig. 15 *NEW!*

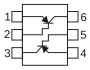


Fig. 16 *NEW!*

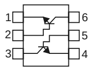
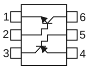
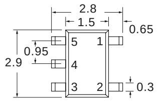


Fig. 17 *NEW!*

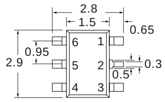


Dim. in mm

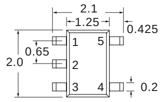
Mini Type (5-pin)
EIAJ: SC-74A



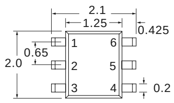
Mini Type (6-pin)
EIAJ: SC-74



S-Mini Type (5-pin)
EIAJ: SC-88A



S-Mini Type (6-pin)
EIAJ: SC-88



NEW! **SS-Mini Type (6-pin)**

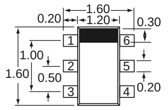


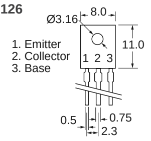
Fig.	Basic Type PNP	NPN	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing
Mini Type 5-Pin								
1	2SB709A x2	—	XN1401CT-ND	.41	.34	.23	XN1401TR-ND	322.47/3,000
2	—	2SD601A x2	XN1501CT-ND	.41	.34	.23	XN1501TR-ND	322.47/3,000
2	—	2SD1938 x2	XN1504CT-ND	.59	.45	.34	XN1504TR-ND	577.08/3,000
2	—	2SC4561 x2	XN1509CT-ND	.54	.41	.31	XN1509TR-ND	527.75/3,000
2	—	2SC3130 x2	XN1531CT-ND	.89	.67	.51	XN1531TR-ND	870.52/3,000
3	2SB709A x1	2SD601A x1	XN1601CT-ND	.41	.34	.23	XN1601TR-ND	322.47/3,000
6	2SB709A x2	—	XN2401CT-ND	.41	.34	.23	XN2401TR-ND	322.47/3,000
7	—	2SD601A x2	XN2501CT-ND	.41	.34	.23	XN2501TR-ND	322.47/3,000
7	—	2SC3130 x2	XN2531CT-ND	.66	.50	.37	XN2531TR-ND	641.20/3,000
4	2SB709A x1	2SD601A x1	XN1B301CT-ND	.44	.36	.25	XN1B301TR-ND	348.28/3,000
5	2SB709A x1	2SD601A x1	XN1C301CT-ND	.44	.36	.25	XN1C301TR-ND	348.28/3,000
Mini Type 6-Pin								
8	2SB709A x2	—	XN4401CT-ND	.41	.34	.23	XN4401TR-ND	322.47/3,000
8	2SB710A x2	—	XN4402CT-ND	.56	.42	.32	XN4402TR-ND	542.53/3,000
8	2SB970 x2	—	XN4404CT-ND	.64	.49	.37	XN4404TR-ND	626.42/3,000
9	—	2SD601A x2	XN4501CT-ND	.41	.34	.23	XN4501TR-ND	322.47/3,000
9	—	2SD602A x2	XN4502CT-ND	.57	.46	.35	XN4502TR-ND	463.56/3,000
9	—	2SD1328 x2	XN4504CT-ND	.60	.45	.34	XN4504TR-ND	582.00/3,000
10	2SB709A x1	2SD601A x1	XN4601CT-ND	.41	.34	.23	XN4601TR-ND	322.47/3,000
10	2SB970 x1	2SD1328 x1	XN4604CT-ND	.81	.61	.46	XN4604TR-ND	789.17/3,000
10	2SB970 x1	2SD601A x1	XN4608CT-ND	.49	.37	.28	XN4608TR-ND	475.96/3,000
10	2SB709A x1	2SD1328 x1	XN4609CT-ND	.58	.44	.33	XN4609TR-ND	567.22/3,000
11	—	2SD601A x2	XN5501CT-ND	.41	.34	.23	XN5501TR-ND	322.47/3,000
11	—	2SC3130 x2	XN5531CT-ND	.66	.50	.37	XN5531TR-ND	641.20/3,000
11	—	2SD1149 x2	XN5553CT-ND	.79	.60	.45	XN5553TR-ND	774.38/3,000
12	2SB709A x1	2SD601A x1	XN5601CT-ND	.41	.34	.23	XN5601TR-ND	322.47/3,000
13	2SB709A x2	—	XN6401CT-ND	.41	.34	.23	XN6401TR-ND	322.47/3,000
14	—	2SD601A x2	XN6501CT-ND	.41	.34	.23	XN6501TR-ND	322.47/3,000
14	—	2SC2404 x2	XN6534CT-ND	.81	.61	.46	XN6534TR-ND	789.17/3,000
14	—	2SC3110 x2	XN6537CT-ND	.66	.50	.37	XN6537TR-ND	641.20/3,000
14	—	2SC3904 x2	XN6543CT-ND	.95	.79	.64	XN6543TR-ND	1233.06/3,000
S-Mini Type 5-Pin								
1	2SB709A x2	—	XP1401CT-ND	.42	.34	.24	XP1401TR-ND	328.95/3,000
2	—	2SD601A x2	XP1501CT-ND	.42	.34	.24	XP1501TR-ND	328.95/3,000
6	2SB709A x2	—	XP2401CT-ND	.42	.34	.24	XP2401TR-ND	328.95/3,000
7	—	2SD601A x2	XP2501CT-ND	.42	.34	.24	XP2501TR-ND	328.95/3,000
4	2SB709A x1	2SD601A x1	XP1B301CT-ND	.45	.37	.26	XP1B301TR-ND	354.76/3,000
5	2SB709A x1	2SD601A x1	XP1C301CT-ND	.45	.37	.26	XP1C301TR-ND	354.76/3,000
S-Mini Type 6-Pin								
8	2SB709A x2	—	XP4401CT-ND	.42	.34	.24	XP4401TR-ND	328.95/3,000
10	2SB709A x1	2SD601A x1	XP4601CT-ND	.42	.34	.24	XP4601TR-ND	328.95/3,000
10	2SA1738 x1	2SC3757 x1	XP4654CT-ND	.71	.54	.40	XP4654TR-ND	690.53/3,000
11	—	2SC4782 x2	XP5555CT-ND	.63	.48	.36	XP5555TR-ND	616.55/3,000
12	2SB709A x1	2SD601A x1	XP5601CT-ND	.42	.34	.24	XP5601TR-ND	328.95/3,000
13	2SB709A x2	—	XP6401CT-ND	.42	.34	.24	XP6401TR-ND	328.95/3,000
14	—	2SD601A x2	XP6501CT-ND	.42	.34	.24	XP6501TR-ND	328.95/3,000
NEW! SS-Mini Type 6-Pin NEW!								
15	2SB709A x2	—	UP0440100LCT-ND	.61	.46	.35	UP0440100LTR-ND	1553.66/8,000
16	—	2SD601A x2	UP0450100LCT-ND	.61	.46	.35	UP0450100LTR-ND	1553.66/8,000
17	2SB709A x1	2SD601A x1	UP0460100LCT-ND	.61	.46	.35	UP0460100LTR-ND	1553.66/8,000

Panasonic

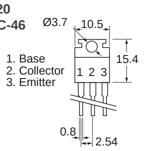
Transistors & MOSFETS

Power Transistors

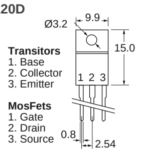
TO-126



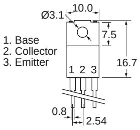
TO-220
EIAJ: SC-46



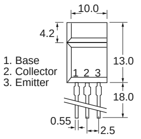
TO-220D



TO-220F
EIAJ:SC-67



MT-4



Application	Package	V_{CEO} (V)	IC	Digi-Key Part No.	Price Each 1	10	100	Digi-Key Part No.	Tape & Box Pricing 1,000
PNP Type									
AF Power Amp	TO-126	60	2A	2SA1096A-ND	1.35	1.13	.91	—	—
AF Power Amp	TO-126	120	0.5A	2SA1110-ND	.89	.75	.60	—	—
AF Output Driver	TO-126	120	0.5A	2SA794A-ND	1.35	1.13	.91	—	—
AF Output Driver	TO-126	35	1A	2SA885-ND	.77	.65	.52	—	—
AF Power Amp	TO-126	40	1.5A	2SA886-ND	.77	.65	.52	—	—
AF Power Amp	TO-126	18	1A	2SA900-ND	1.13	.94	.76	—	—
AF Power Pre-Amp	TO-126	150	50mA	2SA914-ND	1.35	1.13	.91	—	—
AF Power Amp	TO-126	40	1.5A	2SA963-ND	1.47	1.23	.99	—	—
AF Amp	TO-126	400	0.1A	2SB1011-ND	.81	.68	.55	—	—
AF Driver	TO-220F	180	1A	2SA1535A-ND	1.16	.97	.78	—	—
Vertical Deflection	TO-220F	180	2A	2SB940A-ND	.97	.81	.65	—	—
Power Switching	TO-220F	80	3A	2SB943-ND	1.45	1.17	.88	—	—
Low Volt Switching	TO-220F	40	10A	2SB947A-ND	1.77	1.42	1.07	—	—
Power Amp/Switching	TO-220F	80	2A	2SB949A-ND	1.16	.97	.78	—	—
Power Amp/Switching	TO-220F	80	4A	2SB950A-ND	1.35	1.13	.91	—	—
Med. Speed Switch	TO-220F	80	8A	2SB951A-ND	1.61	1.29	.97	—	—
Power Amp	TO-220D	60	3A	2SA2057-ND *NEW!*	1.02	.85	.68	—	—
General Amp	TO-220D	80	3A	2SB1548A-ND	.85	.71	.57	—	—
Power Amp	MT-4	80	3A	2SB1417ACT-ND†	1.16	.97	.78	2SB1417ATB-ND	514.60
Power Amp	MT-4	80	2A	2SB1418ACT-ND†	1.35	1.13	.91	2SB1418ATB-ND	600.38
NPN Type									
AF High Power Driver	TO-126	120	0.5A	2SC1567A-ND	1.29	1.04	.78	—	—
Med. Power Amp	TO-126	18	1A	2SC1568-ND	.77	.65	.52	—	—
Med. Power Amp	TO-126	35	1A	2SC1846-ND	.62	.47	.35	—	—
Med. Power Amp	TO-126	40	1.5A	2SC1847-ND	.85	.64	.48	—	—
AF Power Pre-Amp	TO-126	150	50mA	2SC1953-ND	1.24	1.04	.83	—	—
AF Power Amp	TO-126	40	1.5A	2SC2209-ND	1.16	.97	.78	—	—
TV Video Out Amp	TO-126	250	0.1A	2SC2258-ND	.77	.58	.44	—	—
AF Power Amp	TO-126	60	1.5A	2SC2497A-ND	1.24	1.04	.83	—	—
AF Power Amp	TO-126	120	0.5A	2SC2590-ND	.83	.62	.47	—	—
AF Power Amp	TO-126	20	5A	2SC2594-ND	1.01	.84	.68	—	—
RF Power Amp	TO-126	16	0.5A	2SC2988-ND	2.32	1.86	1.45	—	—
Video Amp	TO-126	50	0.15A	2SC3611-ND	.64	.49	.37	—	—
Horz. Deflection Driver	TO-126	300	0.2A	2SC4212-ND	.77	.58	.44	—	—
Color Chroma Input	TO-126	400	70mA	2SC5121-ND	.77	.58	.44	—	—
AF Amp	TO-126	60	1A	2SD1645-ND*	.89	.75	.60	—	—
AF Amp	TO-126	60	1A	2SD2018-ND*	.67	.51	.38	—	—
AF Amp	TO-126	80	1A	2SD946B-ND*	.89	.75	.60	—	—
Color Chroma Output	TO-220F	300	0.1A	2SC3942-ND	.97	.81	.65	—	—
Video Amp	TO-220F	50	0.15A	2SC3943-ND	1.35	1.13	.91	—	—
High Power Amp	TO-220F	180	1A	2SC3944A-ND	1.08	.91	.73	—	—
Vertical Deflection	TO-220F	180	2A	2SD1264A-ND	.89	.75	.60	—	—
Power Amp	TO-220F	80	4A	2SD1267A-ND	1.35	1.13	.91	—	—
Power Switching	TO-220F	100	7A	2SD1271A-ND	1.61	1.29	.97	—	—
Power Amp	TO-220F	250	5A	2SD1274B-ND	1.77	1.42	1.07	—	—
Power Amp	TO-220F	80	2A	2SD1275A-ND*	1.08	.91	.73	—	—
Power Amp	TO-220F	80	4A	2SD1276A-ND*	1.28	1.07	.86	—	—
Med. Speed Switch	TO-220F	80	8A	2SD1277A-ND*	1.45	1.17	.88	—	—
High DC Current Gain	TO-220F	60	6A	2SD1474-ND	1.45	1.17	.88	—	—
High Power Amp	TO-220F	100	5A	2SD1499-ND	1.47	1.23	.99	—	—
Power Switching	TO-220F	60	4A	2SD2000-ND	.89	.75	.60	—	—
High Speed Switch	TO-220D	400	3A	2SC4953-ND	1.29	1.04	.78	—	—
High Speed Switch	TO-220D	500	1.5A	2SC5392-ND	1.45	1.17	.88	—	—
General Amp	TO-220D	80	3A	2SD2374A-ND	.77	.65	.52	—	—
High Gain	TO-220D	60	3A	2SD2375-ND	.97	.81	.65	—	—
Power Amp	TO-220D	60	3A	2SC5739-ND *NEW!*	.93	.78	.62	—	—
High Gain	TO-220D	60	5A	2SD2528-ND	1.29	1.04	.78	—	—
General Amp	TO-220D	80	3A	2SD2549-ND	.93	.70	.53	—	—
Power Amp	MT-4	80	3A	2SD2137ACT-ND†	1.08	.91	.73	2SD2137ATB-ND	480.30
Power Amp	MT-4	80	2A	2SD2138ACT-ND†	1.35	1.13	.91	2SD2138ATB-ND	600.38
High DC Current Gain	MT-4	60	3A	2SD2139ACT-ND†	1.16	.97	.78	2SD2139ATB-ND	514.60

* Darlington † Cut Tape Pricing

Power MosFets

Package	V_{GSS} (V)	ID	Digi-Key Part No.	Price Each 1	10	100	500	1,000
N-Channel Type								
TO-220D	250	8A	2SK3042-ND	1.74	1.40	1.05	.94	.91
TO-220D	450	5A	2SK3043-ND	1.80	1.45	1.09	.98	.94
TO-220D	450	8A	2SK3044-ND	2.47	1.98	1.48	1.34	1.29
TO-220D	500	2.5A	2SK3045-ND	1.52	1.22	.92	.82	.79
TO-220D	500	8A	2SK3046-ND	2.37	1.90	1.43	1.29	1.24
TO-220D	800	2A	2SK3047-ND	1.83	1.47	1.11	1.00	.96
TO-220D	600	3A	2SK3048-ND	1.77	1.42	1.07	.96	.93
TO-220D	600	5A	2SK3049-ND	2.47	1.98	1.48	1.34	1.29

Panasonic

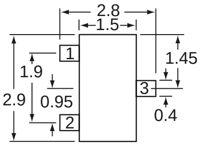
PNP/NPN Transistors

Mini Type

Surface Mount with built-in resistors for preset gains

V_{CEO}=50V/-50V
IC=100mA/-100mA
PC=200mW
JEDEC: TO-236
EIAJ: SC-59A

1. Base
2. Emitter
3. Collector



Resistance Value		hFE min		Cut Tape Price Each				Tape & Reel
R_B K Ohms	R_{BE} K Ohms	Vce=10V IC=5mA	Digi-Key Part No.	1	10	100	Digi-Key Part No.	Pricing 3,000
PNP								
10	10	35	UN2111CT-ND	.37	.29	.20	UN2111TR-ND	74.92/M
22	22	60	UN2112CT-ND	.37	.29	.20	UN2112TR-ND	74.92/M
47	47	80	UN2113CT-ND	.37	.29	.20	UN2113TR-ND	74.92/M
10	47	80	UN2114CT-ND	.37	.29	.20	UN2114TR-ND	74.92/M
10	∞	160	UN2115CT-ND	.37	.29	.20	UN2115TR-ND	74.92/M
4.7	∞	160	UN2116CT-ND	.37	.29	.20	UN2116TR-ND	74.92/M
22	∞	160	UN2117CT-ND	.37	.29	.20	UN2117TR-ND	74.92/M
0.51	5.1	20	UN2118CT-ND	.37	.29	.20	UN2118TR-ND	74.92/M
1	10	30	UN2119CT-ND	.37	.29	.20	UN2119TR-ND	74.92/M
47	∞	160	UN2110CT-ND	.37	.29	.20	UN2110TR-ND	74.92/M
47	10	30	UN211DCT-ND	.37	.29	.20	UN211DTR-ND	74.92/M
47	22	60	UN211ECT-ND	.37	.29	.20	UN211ETR-ND	74.92/M
4.7	10	30	UN211FCT-ND	.37	.29	.20	UN211FTR-ND	74.92/M
2.2	10	30	UN211HCT-ND	.37	.29	.20	UN211HTR-ND	74.92/M
4.7	4.7	20	UN211LCT-ND	.37	.29	.20	UN211LTR-ND	74.92/M
2.2	47	80	UN211MCT-ND	.37	.29	.20	UN211MTR-ND	74.92/M
4.7	47	80	UN211NCT-ND	.37	.29	.20	UN211NTR-ND	74.92/M
2.2	2.2	6	UN211VCT-ND	.37	.29	.20	UN211VTR-ND	74.92/M
NPN								
10	10	35	UN2211CT-ND	.37	.29	.20	UN2211TR-ND	74.92/M
22	22	60	UN2212CT-ND	.37	.29	.20	UN2212TR-ND	74.92/M
47	47	80	UN2213CT-ND	.37	.29	.20	UN2213TR-ND	74.92/M
10	47	80	UN2214CT-ND	.37	.29	.20	UN2214TR-ND	74.92/M
10	∞	160	UN2215CT-ND	.37	.29	.20	UN2215TR-ND	74.92/M
4.7	∞	160	UN2216CT-ND	.37	.29	.20	UN2216TR-ND	74.92/M
22	∞	160	UN2217CT-ND	.37	.29	.20	UN2217TR-ND	74.92/M
0.51	5.1	20	UN2218CT-ND	.37	.29	.20	UN2218TR-ND	74.92/M
1	10	30	UN2219CT-ND	.37	.29	.20	UN2219TR-ND	74.92/M
47	∞	160	UN2210CT-ND	.37	.29	.20	UN2210TR-ND	74.92/M
47	10	30	UN221DCT-ND	.37	.29	.20	UN221DTR-ND	74.92/M
47	22	60	UN221ECT-ND	.37	.29	.20	UN221ETR-ND	74.92/M
4.7	10	30	UN221FCT-ND	.37	.29	.20	UN221FTR-ND	74.92/M
10	4.7	20	UN221KCT-ND	.37	.29	.20	UN221KTR-ND	74.92/M
4.7	4.7	20	UN221LCT-ND	.37	.29	.20	UN221LTR-ND	74.92/M
2.2	47	80	UN221MCT-ND	.37	.29	.20	UN221MTR-ND	74.92/M
4.7	47	80	UN221NCT-ND	.37	.29	.20	UN221NTR-ND	74.92/M
2.2	2.2	6	UN221VCT-ND	.37	.29	.20	UN221VTR-ND	74.92/M

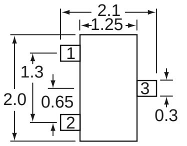
PNP/NPN Transistors

S-Mini Type

Surface Mount with built-in resistors for preset gains

V_{CEO}=50V/-50V **S-Mini Type Package**
IC=100mA/-100mA **EIAJ: SC-70**
PC=150mW

1. Base
2. Emitter
3. Collector



Dim. in mm

Resistance Value		hFE min		Cut Tape Price Each				Tape & Reel
R_B K Ohms	R_{BE} K Ohms	Vce=10V IC=5mA	Digi-Key Part No.	1	10	100	Digi-Key Part No.	Pricing 3,000
PNP								
10	10	35	UN5111CT-ND	.40	.30	.21	UN5111TR-ND	79.70/M
22	22	60	UN5112CT-ND	.40	.30	.21	UN5112TR-ND	79.70/M
47	47	80	UN5113CT-ND	.40	.30	.21	UN5113TR-ND	79.70/M
10	47	80	UN5114CT-ND	.40	.30	.21	UN5114TR-ND	79.70/M
10	∞	160	UN5115CT-ND	.40	.30	.21	UN5115TR-ND	79.70/M
4.7	∞	160	UN5116CT-ND	.40	.30	.21	UN5116TR-ND	79.70/M
22	∞	160	UN5117CT-ND	.40	.30	.21	UN5117TR-ND	79.70/M
0.51	5.1	20	UN5118CT-ND	.40	.30	.21	UN5118TR-ND	79.70/M
1	10	30	UN5119CT-ND	.40	.30	.21	UN5119TR-ND	79.70/M
47	∞	160	UN5110CT-ND	.40	.30	.21	UN5110TR-ND	79.70/M
47	10	30	UN511DCT-ND	.40	.30	.21	UN511DTR-ND	79.70/M
47	22	60	UN511ECT-ND	.40	.30	.21	UN511ETR-ND	79.70/M
4.7	10	30	UN511FCT-ND	.40	.30	.21	UN511FTR-ND	79.70/M
2.2	10	30	UN511HCT-ND	.40	.30	.21	UN511HTR-ND	79.70/M
4.7	4.7	20	UN511LCT-ND	.40	.30	.21	UN511LTR-ND	79.70/M
2.2	47	80	UN511MCT-ND	.40	.30	.21	UN511MTR-ND	79.70/M
4.7	47	80	UN511NCT-ND	.40	.30	.21	UN511NTR-ND	79.70/M
2.2	2.2	6	UN511VCT-ND	.40	.30	.21	UN511VTR-ND	79.70/M
NPN								
10	10	35	UN5211CT-ND	.40	.30	.21	UN5211TR-ND	79.70/M
22	22	60	UN5212CT-ND	.40	.30	.21	UN5212TR-ND	79.70/M
47	47	80	UN5213CT-ND	.40	.30	.21	UN5213TR-ND	79.70/M
10	47	80	UN5214CT-ND	.40	.30	.21	UN5214TR-ND	79.70/M
10	∞	160	UN5215CT-ND	.40	.30	.21	UN5215TR-ND	79.70/M
4.7	∞	160	UN5216CT-ND	.40	.30	.21	UN5216TR-ND	79.70/M
22	∞	160	UN5217CT-ND	.40	.30	.21	UN5217TR-ND	79.70/M
0.51	5.1	20	UN5218CT-ND	.40	.30	.21	UN5218TR-ND	79.70/M
1	10	30	UN5219CT-ND	.40	.30	.21	UN5219TR-ND	79.70/M
47	∞	160	UN5210CT-ND	.40	.30	.21	UN5210TR-ND	79.70/M
47	10	30	UN521DCT-ND	.40	.30	.21	UN521DTR-ND	79.70/M
47	22	60	UN521ECT-ND	.40	.30	.21	UN521ETR-ND	79.70/M
4.7	10	30	UN521FCT-ND	.40	.30	.21	UN521FTR-ND	79.70/M
10	4.7	20	UN521KCT-ND	.40	.30	.21	UN521KTR-ND	79.70/M
4.7	4.7	20	UN521LCT-ND	.40	.30	.21	UN521LTR-ND	79.70/M
2.2	47	80	UN521MCT-ND	.40	.30	.21	UN521MTR-ND	79.70/M
4.7	47	80	UN521NCT-ND	.40	.30	.21	UN521NTR-ND	79.70/M
2.2	2.2	6	UN521VCT-ND	.40	.30	.21	UN521VTR-ND	79.70/M

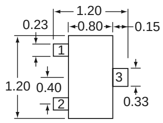
NEW! PNP/NPN Transistors

SSS-Mini Type

Surface Mount with built-in-resistors for preset gains

V_{CEO}= -50V/50V
IC= -100mA/100mA
PC=100mW

1. Base
2. Emitter
3. Collector



Dim. in mm

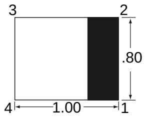
Resistance Value		hFE min		Cut Tape Price Each				Tape & Reel
R_B K Ohms	R_{BE} K Ohms	Vce=10V IC=5mA	Digi-Key Part No.	1	10	100	Digi-Key Part No.	Pricing 10,000
PNP								
47	47	80	UNR311300LCT-ND	.43	.35	.24	UNR311300LTR-ND	98.28/M
NPN								
47	47	80	UNR321300LCT-ND	.43	.35	.24	UNR321300LTR-ND	98.28/M
4.7	∞	160	UNR321600LCT-ND	.43	.35	.24	UNR321600LTR-ND	98.28/M
4.7	47	80	UNR321N00LCT-ND	.43	.35	.24	UNR321N00LTR-ND	98.28/M

NEW! PNP/NPN Transistors

1008 Mold Leadless Type

Surface Mount with built-in-resistors for preset gains

V_{CEO}= -50V/50V
IC= -100mA/100mA
PC=150mW



Dim. in mm

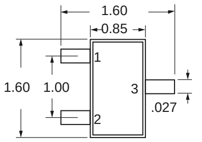
Resistance Value		hFE min		Cut Tape Price Each				Tape & Reel
R_B K Ohms	R_{BE} K Ohms	Vce=10V IC=5mA	Digi-Key Part No.	1	10	100	Digi-Key Part No.	Pricing 10,000
PNP								
10	10	35	UNRL11100ACT-ND	.69	.53	.40	UNRL11100ATR-ND	217.00/M
47	47	80	UNRL11300ACT-ND	.69	.53	.40	UNRL11300ATR-ND	217.00/M
10	∞	160	UNRL11500ACT-ND	.69	.53	.40	UNRL11500ATR-ND	217.00/M
NPN								
10	10	35	UNRL21100ACT-ND	.69	.53	.40	UNRL21100ATR-ND	217.00/M
47	47	80	UNRL21300ACT-ND	.69	.53	.40	UNRL21300ATR-ND	217.00/M
10	∞	160	UNRL21500ACT-ND	.69	.53	.40	UNRL21500ATR-ND	217.00/M

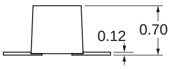
PNP/NPN Transistors

SS-Mini Flat (J-Type)

Surface Mount with built in resistors for preset gains

V_{CEO}=50V/50V
IC=100mA/-100mA
PT=125mW
EIAJ: SC-81





1. Base
2. Emitter
3. Collector

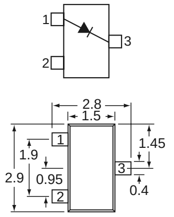
Dim. in mm

Resistance Value		hFE min		Cut Tape Price Each				Tape & Reel
R_B K Ohms	R_{BE} K Ohms	Vce=10V IC=5mA	Digi-Key Part No.	1	10	100	Digi-Key Part No.	Pricing 3,000
PNP								
10	10	35	UN9111JCT-ND	.40	.30	.21	UN9111JTR-ND	79.18/M
22	22	60	UN9112JCT-ND	.40	.30	.21	UN9112JTR-ND	79.18/M
47	47	80	UN9113JCT-ND	.40	.30	.21	UN9113JTR-ND	79.18/M
10	47	80	UN9114JCT-ND	.40	.30	.21	UN9114JTR-ND	79.18/M
10	∞	160	UN9115JCT-ND	.40	.30	.21	UN9115JTR-ND	79.18/M
4.7	∞	160	UN9116JCT-ND	.40	.30	.21	UN9116JTR-ND	79.18/M
22	∞	160	UN9117JCT-ND	.40	.30	.21	UN9117JTR-ND	79.18/M
0.51	5.1	20	UN9118JCT-ND	.40	.30	.21	UN9118JTR-ND	79.18/M
1	10	30	UN9119JCT-ND	.40	.30	.21	UN9119JTR-ND	79.18/M
47	∞	160	UN9110JCT-ND	.40	.30	.21	UN9110JTR-ND	79.18/M
22	47	80	UN911TJCT-ND	.40	.30	.21	UN911TJTR-ND	79.18/M
47	22	60	UN911EJCT-ND	.40	.30	.21	UN911EJTR-ND	79.18/M
4.7	10	30	UN911FJCT-ND	.40	.30	.21	UN911FJTR-ND	79.18/M
2.2	10	30	UN911HJCT-ND	.40	.30	.21	UN911HJTR-ND	79.18/M
4.7	4.7	20	UN911LJCT-ND	.40	.30	.21	UN911LJTR-ND	79.18/M
4.7	47	80	UN911NJCT-ND	.40	.30	.21	UN911NJTR-ND	79.18/M
100	100	80	UNR911AJCT-ND	.40	.30	.21	UNR911AJTR-ND	79.18/M
100	—	160	UNR911BJCT-ND	.40	.30	.21	UNR911BJTR-ND	79.18/M
2.2	47	80	UNR911MJCT-ND	.40	.30	.21	UNR911MJTR-ND	79.18/M
NPN								
10	10	35	UN9211JCT-ND	.40	.30	.21	UN9211JTR-ND	79.18/M
22	22	60	UN9212JCT-ND	.40	.30	.21	UN9212JTR-ND	79.18/M
47	47	80	UN9213JCT-ND	.40	.30	.21	UN9213JTR-ND	79.18/M
10	47	80	UN9214JCT-ND	.40	.30	.21	UN9214JTR-ND	79.18/M
10	∞	160	UN9215JCT-ND	.40	.30	.21	UN9215JTR-ND	79.18/M
4.7	∞	160	UN9216JCT-ND	.40	.30	.21	UN9216JTR-ND	79.18/M
22	∞	160	UN9217JCT-ND	.40	.30	.21	UN9217JTR-ND	79.18/M
0.51	5.1	20	UN9218JCT-ND	.40	.30	.21	UN9218JTR-ND	79.18/M
1	10	30	UN9219JCT-ND	.40	.30	.21	UN9219JTR-ND	79.18/M
47	∞	160	UN9210JCT-ND	.40	.30	.21	UN9210JTR-ND	79.18/M
22	47	80	UN921MJCT-ND	.40	.30	.21	UN921MJTR-ND	79.18/M
22	47	80	UN921TJCT-ND	.40	.30	.21	UN921TJTR-ND	79.18/M
47	10	30	UN921DJCT-ND	.40	.30	.21	UN921DJTR-ND	79.18/M
47	22	60	UN921EJCT-ND	.40	.30	.21	UN921EJTR-ND	79.18/M
4.7	10	30	UN921FJCT-ND	.40	.30	.21	UN921FJTR-ND	79.18/M
4.7	4.7	20	UN921LJCT-ND	.40	.30	.21	UN921LJTR-ND	79.18/M
100	100	80	UNR921AJCT-ND	.40	.30	.21	UNR921AJTR-ND	79.18/M
100	100	160	UNR921BJCT-ND	.40	.30	.21	UNR921BJTR-ND	79.18/M
2.2	2.2	6	UNR921NJCT-ND	.40	.30	.21	UNR921NJTR-ND	79.18/M
2.2	2.2	6	UNR921VJCT-ND	.40	.30	.21	UNR921VJTR-ND	79.18/M

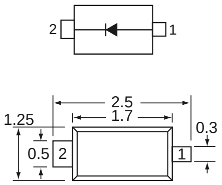
Panasonic Zener Diodes Silicon Planar Type

Zener Voltage Vz			IZ (mA)	RZ(max.) (Ohms)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel	
Min.	Nom.	Max.				1	10	100		Size	Pricing
Mini Type Package / MA3000 Series - 200mW											
2.28	2.40	2.60	5	100	MA3024CT-ND	.37	.31	.21	MA3024TR-ND	3,000	97.94/M
2.50	2.70	2.90	5	110	MA3027CT-ND	.37	.31	.21	MA3027TR-ND	3,000	97.94/M
2.80	3.00	3.20	5	120	MA3030CT-ND	.37	.31	.21	MA3030TR-ND	3,000	97.94/M
3.10	3.30	3.50	5	130	MA3033CT-ND	.37	.31	.21	MA3033TR-ND	3,000	97.94/M
3.40	3.60	3.80	5	130	MA3036CT-ND	.37	.31	.21	MA3036TR-ND	3,000	97.94/M
3.70	3.90	4.10	5	130	MA3039CT-ND	.37	.31	.21	MA3039TR-ND	3,000	97.94/M
4.00	4.30	4.60	5	130	MA3043CT-ND	.37	.31	.21	MA3043TR-ND	3,000	97.94/M
4.40	4.70	5.00	5	80	MA3047CT-ND	.37	.31	.21	MA3047TR-ND	3,000	97.94/M
4.80	5.10	5.40	5	60	MA3051CT-ND	.37	.31	.21	MA3051TR-ND	3,000	97.94/M
5.30	5.60	6.00	5	40	MA3056CT-ND	.37	.31	.21	MA3056TR-ND	3,000	97.94/M
5.80	6.20	6.60	5	20	MA3062CT-ND	.37	.31	.21	MA3062TR-ND	3,000	97.94/M
6.40	6.80	7.20	5	15	MA3068CT-ND	.37	.31	.21	MA3068TR-ND	3,000	97.94/M
7.00	7.50	7.90	5	15	MA3075CT-ND	.37	.31	.21	MA3075TR-ND	3,000	97.94/M
7.70	8.20	8.70	5	15	MA3082CT-ND	.37	.31	.21	MA3082TR-ND	3,000	97.94/M
8.50	9.10	9.60	5	15	MA3091CT-ND	.37	.31	.21	MA3091TR-ND	3,000	97.94/M
9.40	10.00	10.60	5	20	MA3100CT-ND	.37	.31	.21	MA3100TR-ND	3,000	97.94/M
10.40	11.00	11.60	5	20	MA3110CT-ND	.37	.31	.21	MA3110TR-ND	3,000	97.94/M
11.40	12.00	12.70	5	25	MA3120CT-ND	.37	.31	.21	MA3120TR-ND	3,000	97.94/M
12.40	13.00	14.10	5	30	MA3130CT-ND	.37	.31	.21	MA3130TR-ND	3,000	97.94/M
13.65	14.00	14.35	5	30	MA3140CT-ND	.37	.31	.21	MA3140TR-ND	3,000	97.94/M
13.90	15.00	15.60	5	30	MA3150CT-ND	.37	.31	.21	MA3150TR-ND	3,000	97.94/M
15.30	16.00	17.10	5	40	MA3160CT-ND	.37	.31	.21	MA3160TR-ND	3,000	97.94/M
16.90	18.00	19.10	5	45	MA3180CT-ND	.37	.31	.21	MA3180TR-ND	3,000	97.94/M
18.80	20.00	21.20	5	55	MA3200CT-ND	.37	.31	.21	MA3200TR-ND	3,000	97.94/M
20.80	22.00	23.30	5	55	MA3220CT-ND	.37	.31	.21	MA3220TR-ND	3,000	97.94/M
22.80	24.00	25.60	5	70	MA3240CT-ND	.37	.31	.21	MA3240TR-ND	3,000	97.94/M
25.10	27.00	28.90	5	80	MA3270CT-ND	.37	.31	.21	MA3270TR-ND	3,000	97.94/M
28.00	30.00	32.00	5	80	MA3300CT-ND	.37	.31	.21	MA3300TR-ND	3,000	97.94/M
31.00	33.00	35.00	5	80	MA3330CT-ND	.37	.31	.21	MA3330TR-ND	3,000	97.94/M
34.00	36.00	38.00	5	90	MA3360CT-ND	.37	.31	.21	MA3360TR-ND	3,000	97.94/M
S-Mini Type Package / MA8000 Series - 200mW											
2.28	2.40	2.60	5	100	MA8024CT-ND	.43	.34	.24	MA8024TR-ND	3,000	96.99/M
2.50	2.70	2.90	5	110	MA8027CT-ND	.43	.34	.24	MA8027TR-ND	3,000	96.99/M
2.80	3.00	3.20	5	120	MA8030CT-ND	.43	.34	.24	MA8030TR-ND	3,000	96.99/M
3.10	3.30	3.50	5	130	MA8033CT-ND	.43	.34	.24	MA8033TR-ND	3,000	96.99/M
3.40	3.60	3.80	5	130	MA8036CT-ND	.43	.34	.24	MA8036TR-ND	3,000	96.99/M
3.70	3.90	4.10	5	130	MA8039CT-ND	.43	.34	.24	MA8039TR-ND	3,000	96.99/M
4.00	4.30	4.60	5	130	MA8043CT-ND	.43	.34	.24	MA8043TR-ND	3,000	96.99/M
4.40	4.70	5.00	5	80	MA8047CT-ND	.43	.34	.24	MA8047TR-ND	3,000	96.99/M
4.80	5.10	5.40	5	60	MA8051CT-ND	.43	.34	.24	MA8051TR-ND	3,000	96.99/M
5.30	5.60	6.00	5	40	MA8056CT-ND	.43	.34	.24	MA8056TR-ND	3,000	96.99/M
5.80	6.20	6.60	5	30	MA8062CT-ND	.43	.34	.24	MA8062TR-ND	3,000	96.99/M
6.40	6.80	7.20	5	20	MA8068CT-ND	.43	.34	.24	MA8068TR-ND	3,000	96.99/M
7.00	7.50	7.90	5	20	MA8075CT-ND	.43	.34	.24	MA8075TR-ND	3,000	96.99/M
7.70	8.20	8.70	5	20	MA8082CT-ND	.43	.34	.24	MA8082TR-ND	3,000	96.99/M
8.50	9.10	9.60	5	20	MA8091CT-ND	.43	.34	.24	MA8091TR-ND	3,000	96.99/M
9.40	10.00	10.60	5	30	MA8100CT-ND	.43	.34	.24	MA8100TR-ND	3,000	96.99/M
10.40	11.00	11.60	5	30	MA8110CT-ND	.43	.34	.24	MA8110TR-ND	3,000	96.99/M
11.40	12.00	12.70	5	30	MA8120CT-ND	.43	.34	.24	MA8120TR-ND	3,000	96.99/M
12.40	13.00	14.10	5	35	MA8130CT-ND	.43	.34	.24	MA8130TR-ND	3,000	96.99/M
13.65	14.00	14.35	5	40	MA8140CT-ND	.43	.34	.24	MA8140TR-ND	3,000	96.99/M
13.90	15.00	15.60	5	40	MA8150CT-ND	.43	.34	.24	MA8150TR-ND	3,000	96.99/M
15.30	16.00	17.10	5	50	MA8160CT-ND	.43	.34	.24	MA8160TR-ND	3,000	96.99/M
16.90	18.00	19.10	5	60	MA8180CT-ND	.43	.34	.24	MA8180TR-ND	3,000	96.99/M
18.80	20.00	21.20	5	80	MA8200CT-ND	.43	.34	.24	MA8200TR-ND	3,000	96.99/M
20.80	22.00	23.30	5	80	MA8220CT-ND	.43	.34	.24	MA8220TR-ND	3,000	96.99/M
22.80	24.00	25.60	5	100	MA8240CT-ND	.43	.34	.24	MA8240TR-ND	3,000	96.99/M
25.10	27.00	28.90	2	120	MA8270CT-ND	.43	.34	.24	MA8270TR-ND	3,000	96.99/M
28.00	30.00	32.00	2	160	MA8300CT-ND	.43	.34	.24	MA8300TR-ND	3,000	96.99/M
31.00	33.00	35.00	2	200	MA8330CT-ND	.43	.34	.24	MA8330TR-ND	3,000	96.99/M
34.00	36.00	38.00	2	250	MA8360CT-ND	.43	.34	.24	MA8360TR-ND	3,000	96.99/M
SS-Mini Type Package 2 Pin / MAZS000 Series - 150mW											
3.1	3.3	3.5	5	130	MAZS033CT-ND	.44	.36	.25	MAZS033TR-ND	3,000	113.84/M
3.7	3.9	4.1	5	130	MAZS039CT-ND	.44	.36	.25	MAZS039TR-ND	3,000	113.84/M
4	4.3	4.6	5	130	MAZS043CT-ND	.44	.36	.25	MAZS043TR-ND	3,000	113.84/M
4.4	4.7	5	5	80	MAZS047CT-ND	.44	.36	.25	MAZS047TR-ND	3,000	113.84/M
4.8	5.1	5.4	5	60	MAZS051CT-ND	.44	.36	.25	MAZS051TR-ND	3,000	113.84/M
5.3	5.6	6	5	40	MAZS056CT-ND	.44	.36	.25	MAZS056TR-ND	3,000	113.84/M
5.8	6.2	6.6	5	30	MAZS062CT-ND	.44	.36	.25	MAZS062TR-ND	3,000	113.84/M
6.4	6.8	7.2	5	20	MAZS068CT-ND	.44	.36	.25	MAZS068TR-ND	3,000	113.84/M
7	7.5	7.9	5	20	MAZS075CT-ND	.44	.36	.25	MAZS075TR-ND	3,000	113.84/M
7.7	8.2	8.7	5	20	MAZS082CT-ND	.44	.36	.25	MAZS082TR-ND	3,000	113.84/M
9.4	10	10.6	5	30	MAZS100CT-ND	.44	.36	.25	MAZS100TR-ND	3,000	113.84/M
11.4	12	12.7	5	30	MAZS120CT-ND	.44	.36	.25	MAZS120TR-ND	3,000	113.84/M
20.8	22	23.3	5	80	MAZS220CT-ND	.44	.36	.25	MAZS220TR-ND	3,000	113.84/M
34	36	38	2	250	MAZS360CT-ND	.44	.36	.25	MAZS360TR-ND	3,000	113.84/M
SS-Mini Type Package 3 Pin / MAZS000 Series - 150mW											
6.4	6.8	7.2	5	30	MAZT068HCT-ND	.42	.34	.26	MAZT068HTR-ND	3,000	113.78/M
7.7	8.2	8.7	5	30	MAZT082HCT-ND	.42	.34	.26	MAZT082HTR-ND	3,000	113.78/M
S-Mini Type Package 5 Pin / MAZS000 Series - 200mW											
6.4	6.8	7.2	5	30	MAZZ068HCT-ND	.49	.37	.28	MAZZ068HTR-ND	3,000	159.36/M
NEW! 1008 Mold Leadless Package 4 Pin / 100mW NEW!											
7.7	8.2	8.7	5	20	MAZR08200ACT-ND	.43	.35	.26	MAZR08200ATR-ND	10,000	109.39/M
7.7	8.2	8.7	5	20	MAZR082H0ACT-ND	.69	.52	.39	MAZR082H0ATR-ND	10,000	214.48/M

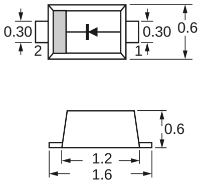
Mini Type Package



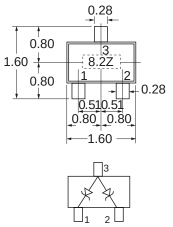
S-Mini Type Package



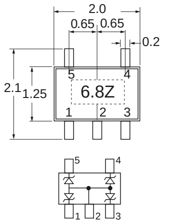
SS-Mini Type Package (2 pin)



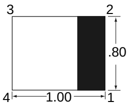
SS-Mini Type Package (3 pin)

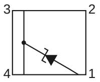


S-Mini Type Package (5 pin)

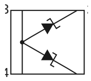


NEW! **1008 Mold Leadless Package (4 pin)**





MAZR08200A



MAZR082H0A

Panasonic Small Signal Transistors

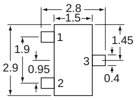
Mini, S-Mini, SS-Mini, Mini Power, MT-1 & MT-2 Type Package

Dim. in mm

Application	Package	VCEO (V)	IC (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Box Size	Tape & Box Pricing	Tape & Reel Size	Tape & Reel Pricing
					PNP Type							
General Amp	Mini 3P	45	100	2SB709ACT-ND	.26	.20	.14	2SB709ATR-ND	—	—	3,000	52.26/M
General Amp	Mini 3P	25	500	2SB710CT-ND	.41	.33	.25	2SB710TR-ND	—	—	3,000	110.08/M
General Amp	Mini 3P	50	500	2SB710ACT-ND	.41	.33	.25	2SB710ATR-ND	—	—	3,000	110.08/M
General Amp	S-Mini 3P	45	100	2SB1218ACT-ND	.38	.29	.20	2SB1218ATR-ND	—	—	3,000	75.62/M
General Amp	S-Mini 3P	25	500	2SB1219CT-ND	.45	.36	.28	2SB1219TR-ND	—	—	3,000	121.60/M
General Amp	S-Mini 3P	50	500	2SB1219ACT-ND	.45	.36	.28	2SB1219ATR-ND	—	—	3,000	121.60/M
General Amp	SS-Mini (J)	50	100	2SB1462JCT-ND	.34	.27	.19	2SB1462JTR-ND	—	—	3,000	77.35/M
General Amp	MT-1	50	100	2SB1320ACT-ND	.41	.32	.23	2SB1320ATB-ND	2,000	96.94/M	—	—
Low Freq. Amp	MT-1	50	500	2SB1321ACT-ND	.48	.39	.29	2SB1321ATB-ND	2,000	134.95/M	—	—
Low Freq. Amp	MT-2	50	2000	2SB1434CT-ND	.68	.52	.39	2SB1434TB-ND	2,000	227.14/M	—	—
Low Freq. Amp	MT-2	50	1000	2SB1322ACT-ND	.59	.44	.33	2SB1322ATB-ND	2,000	194.94/M	—	—
Low Freq. Amp	Mini-Pwr.	20	4000	2SB1073CT-ND	.57	.43	.32	2SB1073TR-ND	—	—	1,000	188.69
Low Freq. Output Amp	Mini-Pwr.	50	2000	2SB1440CT-ND	.72	.55	.41	2SB1440TR-ND	—	—	1,000	240.16
Low Freq. Amp	Mini-Pwr.	10	1000	2SB1537CT-ND	.52	.39	.30	2SB1537TR-ND	—	—	1,000	171.53
Low Freq. Output Amp	Mini-Pwr.	10	1500	2SB1589CT-ND	.52	.39	.30	2SB1589TR-ND	—	—	1,000	171.53
Low Freq. Output Amp	Mini-Pwr.	50	1000	2SB766ACT-ND	.52	.39	.30	2SB766ATR-ND	—	—	1,000	171.53
Low Freq. Driver Amp	Mini-Pwr.	120	500	2SB789ACT-ND	.77	.58	.44	2SB789ATR-ND	—	—	1,000	257.30
Low Freq. Power Amp	Mini-Pwr.	20	1000	2SB956CT-ND	.52	.39	.30	2SB956TR-ND	—	—	1,000	171.53
Low Freq. Amp	New S Type	50	100	2SA1309ACT-ND	.33	.27	.19	2SA1309ATB-ND	5,000	70.88/M	—	—
Low Freq. Amp	New S Type	50	500	2SB1030ACT-ND	.42	.34	.26	2SB1030ATB-ND	5,000	110.39/M	—	—
					NPN Type							
General Amp	Mini 3P	50	100	2SD601ACT-ND	.26	.20	.14	2SD601ATR-ND	—	—	3,000	52.26/M
General Amp	Mini 3P	50	500	2SD602ACT-ND	.49	.40	.28	2SD602ATR-ND	—	—	3,000	128.10/M
High Freq. Amp	Mini 3P	20	50	2SC2480CT-ND	.41	.34	.23	2SC2480TR-ND	—	—	3,000	108.00/M
Low Volt Amp	Mini 3P	20	500	2SD1328CT-ND	.40	.32	.25	2SD1328TR-ND	—	—	3,000	108.03/M
General Amp	S-Mini 3P	50	100	2SD1819ACT-ND	.38	.31	.22	2SD1819ATR-ND	—	—	3,000	100.29/M
General Amp	S-Mini 3P	25	500	2SD1820CT-ND	.45	.36	.27	2SD1820TR-ND	—	—	3,000	120.30/M
General Amp	S-Mini 3P	50	500	2SD1820ACT-ND	.45	.36	.27	2SD1820ATR-ND	—	—	3,000	120.30/M
High Freq. Amp	S-Mini 3P	20	50	2SC3932CT-ND	.41	.33	.25	2SC3932TR-ND	—	—	3,000	110.64/M
General Amp	SS-Mini (J)	50	100	2SD2216JCT-ND	.33	.27	.19	2SD2216JTR-ND	—	—	3,000	75.03/M
High Freq. Amp	SS-Mini (J)	20	15	2SC4627JCT-ND	.42	.34	.26	2SC4627JTR-ND	—	—	3,000	114.28/M
UHF Low Noise Amp	Mini-Pwr.	10	80	2SC5019CT-ND	.72	.55	.41	2SC5019TR-ND	—	—	1,000	240.16
Med. Output Pwr. Amp	Mini-Pwr.	20	1000	2SD1280CT-ND	.77	.58	.44	2SD1280TR-ND	—	—	1,000	257.30
Low Freq. Output Amp	Mini-Pwr.	50	3000	2SD2185CT-ND	.67	.51	.38	2SD2185TR-ND	—	—	1,000	223.00
Low Volt Output Amp	Mini-Pwr.	20	500	2SD2210CT-ND	.57	.46	.35	2SD2210TR-ND	—	—	1,000	158.90
Low Freq. Output Amp	Mini-Pwr.	10	1500	2SD2441CT-ND	.52	.39	.30	2SD2441TR-ND	—	—	1,000	171.53
Low Freq. Power Amp	Mini-Pwr.	50	1000	2SD874ACT-ND	.59	.48	.36	2SD874ATR-ND	—	—	1,000	166.12
Low Freq. Driver Amp	Mini-Pwr.	120	500	2SD968ACT-ND	.98	.74	.56	2SD968ATR-ND	—	—	1,000	325.92
General Amp	MT-1	50	100	2SD1991ACT-ND	.37	.30	.21	2SD1991ATB-ND	2,000	88.83/M	—	—
Low Freq. Amp	MT-1	50	500	2SD1992ACT-ND	.45	.36	.27	2SD1992ATB-ND	2,000	124.76/M	—	—
Low Freq. Amp	MT-1	50	1000	2SD1994ACT-ND	.59	.47	.36	2SD1994ATB-ND	2,000	164.01/M	—	—
Low Freq. Amp	MT-1	50	2000	2SD2177CT-ND	.93	.70	.53	2SD2177TB-ND	2,000	310.54/M	—	—
Low Freq. Amp	MT-1	60	2000	2SD2177ACT-ND	.93	.70	.53	2SD2177ATB-ND	2,000	310.54/M	—	—
Low Freq. Amp	New S Type	50	100	2SC3311ACT-ND	.33	.27	.19	2SC3311ATB-ND	5,000	70.88/M	—	—
Low Freq. Amp	New S Type	50	500	2SD1423ACT-ND	.42	.34	.26	2SD1423ATB-ND	5,000	110.39/M	—	—
Low Freq. Amp	New S Type	20	500	2SD1450CT-ND	.42	.34	.26	2SD1450TB-ND	5,000	110.39/M	—	—

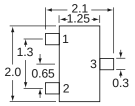
Mini Type

1. Base
2. Emitter
3. Collector



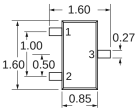
S-Mini Type

1. Base
2. Emitter
3. Collector



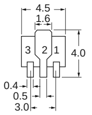
SS-Mini Flat J Type

1. Base
2. Emitter
3. Collector



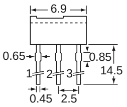
Mini Power Type

1. Base
2. Collector
3. Emitter



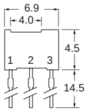
MT-1 Type

1. Emitter
2. Collector
3. Base



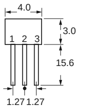
MT-2 Type

1. Emitter
2. Collector
3. Base



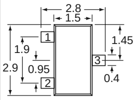
New S Type

1. Emitter
2. Collector
3. Base

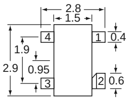


Panasonic Switching Diodes – Silicon Epitaxial Planar Type

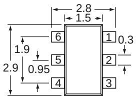
Mini Type (3-pin)
JEDEC: TO-236
EIAJ: SC-59



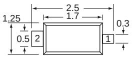
Mini Type (4-pin)



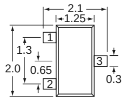
Mini Type (6-pin)



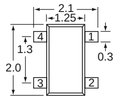
S-Mini Type (2-pin)



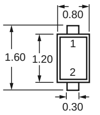
S-Mini Type (3-pin)
EIAJ: SC-70



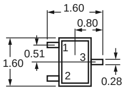
S-Mini Type (4-pin)



SS-Mini Type (2-pin)



SS-Mini Type (3-pin)



1008 Mold Leadless (4-pin)

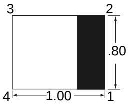


Fig.	Package	Description	VR (v)	IF (mA)	IR (uA)	trr (ns)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing
1	Mini 3P	Single	80	100	0.1	3	MA152ACT-ND	.40	.30	.21	MA152ATR-ND	3,000	79.76/M
2	Mini 3P	Single	80	100	0.1	3	MA152KCT-ND	.40	.30	.21	MA152KTR-ND	3,000	79.76/M
3	Mini 3P	Dual Com Anode	80	100	0.1	10	MA152WACT-ND	.37	.30	.21	MA152WATR-ND	3,000	84.03/M
4	Mini 3P	Dual Com Cathode	80	100	0.1	3	MA152WKCT-ND	.37	.30	.21	MA152WKTR-ND	3,000	84.03/M
5	Mini 3P	Dual Series	80	65	0.1	150/9	MA153ACT-ND	.37	.30	.21	MA153ATR-ND	3,000	95.68/M
2	Mini 3P	Single	200	100	1	–	MA158CT-ND	.53	.43	.32	MA158TR-ND	3,000	143.32/M
5	Mini 3P	Dual Series	40	75	0.01	100	MA198CT-ND	.40	.33	.23	MA198TR-ND	3,000	104.30/M
2	Mini 3P	Single	200	100	1	60	MA199CT-ND	.49	.37	.28	MA199TR-ND	3,000	160.20/M
6	Mini 4P	Dual	80	75	0.1	3	MA159ACT-ND	.48	.39	.29	MA159ATR-ND	3,000	128.56/M
6	Mini 4P	Dual	200	100	1	–	MA174CT-ND	.67	.51	.38	MA174TR-ND	3,000	218.99/M
7	Mini 6P	Triple	80	100	0.1	3	MA121CT-ND	.51	.41	.31	MA121TR-ND	3,000	136.84/M
8	Mini 6P	Quad	80	100	0.1	3	MA124CT-ND	.70	.53	.40	MA124TR-ND	3,000	228.70/M
9	Mini 6P	Quad	40	100	0.1	150/9	MA125CT-ND	.73	.55	.42	MA125TR-ND	3,000	238.23/M
10	Mini 6P	Quad	80	100	0.1	10	MA127CT-ND	.46	.37	.28	MA127TR-ND	3,000	124.07/M
11	Mini 6P	Quad	80	100	0.1	3	MA128CT-ND	.45	.36	.27	MA128TR-ND	3,000	121.18/M
12	S-Mini 2P	Single	80	100	0.1	3	MA111CT-ND	.35	.27	.19	MA111TR-ND	3,000	69.62/M
12	S-Mini 2P	Single	40	200	0.5	10	MA112CT-ND	.44	.36	.27	MA112TR-ND	3,000	118.30/M
12	S-Mini 2P	Single	80	200	0.5	10	MA113CT-ND	.41	.34	.23	MA113TR-ND	3,000	108.16/M
12	S-Mini 2P	Single	150	200	0.2	–	MA114CT-ND	.62	.47	.35	MA114TR-ND	3,000	201.14/M
12	S-Mini 2P	Single	200	200	0.2	–	MA115CT-ND	.59	.45	.34	MA115TR-ND	3,000	192.29/M
12	S-Mini 2P	Single	40	100	0.01	100	MA116CT-ND	.45	.37	.28	MA116TR-ND	3,000	122.08/M
1	S-Mini 3P	Single	80	100	0.1	3	MA142ACT-ND	.34	.27	.19	MA142ATR-ND	3,000	76.11/M
2	S-Mini 3P	Single	80	100	0.1	3	MA142KCT-ND	.34	.27	.19	MA142KTR-ND	3,000	76.11/M
3	S-Mini 3P	Dual Com Anode	80	100	0.1	10	MA142WACT-ND	.36	.30	.21	MA142WATR-ND	3,000	94.56/M
4	S-Mini 3P	Dual Com Cathode	80	100	0.1	3	MA142WKCT-ND	.36	.30	.21	MA142WKTR-ND	3,000	94.56/M
5	S-Mini 3P	Dual Series	40	65	0.1	150/9	MA143CT-ND	.39	.32	.22	MA143TR-ND	3,000	102.04/M
5	S-Mini 3P	Dual Series	80	65	0.1	150/9	MA143ACT-ND	.39	.32	.22	MA143ATR-ND	3,000	102.04/M
5	S-Mini 3P	Dual Series	80	65	0.1	3	MA147CT-ND	.44	.36	.27	MA147TR-ND	3,000	119.56/M
6	S-Mini 4P	Dual	80	75	0.1	3	MA4S159CT-ND	.58	.47	.35	MA4S159TR-ND	3,000	157.01/M
12	SS-Mini 2P	Single	80	100	0.1	3	MA2S111CT-ND	.36	.29	.20	MA2S111TR-ND	3,000	81.26/M
1	SS-Mini 3P	Single	80	100	0.1	3	MA132ACT-ND	.36	.29	.20	MA132ATR-ND	3,000	81.26/M
2	SS-Mini 3P	Single	80	100	0.1	3	MA132KCT-ND	.36	.29	.20	MA132KTR-ND	3,000	81.26/M
3	SS-Mini 3P	Dual Com Anode	80	100	0.1	10	MA132WACT-ND	.38	.31	.21	MA132WATR-ND	3,000	98.67/M
4	SS-Mini 3P	Dual Com Cathode	80	100	0.1	3	MA132WKCT-ND	.38	.31	.21	MA132WKTR-ND	3,000	98.67/M
5	SS-Mini 3P	Dual Series	80	65	0.1	150/9	MA133CT-ND	.42	.34	.26	MA133TR-ND	3,000	113.17/M
5	SS-Mini 3P	Dual Series	80	65	0.1	3	MA137CT-ND	.42	.34	.26	MA137TR-ND	3,000	113.17/M
13	1008 Mold Leadless 4P	Single	80	100	0.1	3	MA4L11100ACT-ND *NEW!*	.50	.41	.28	MA4L11100ATR-ND *NEW!*	10,000	114.92/M

Fig. 1

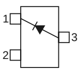


Fig. 2

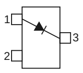


Fig. 3

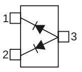


Fig. 4

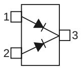


Fig. 5

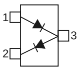


Fig. 6

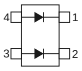


Fig. 7

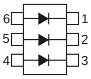


Fig. 8

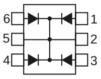


Fig. 9

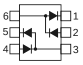


Fig. 10

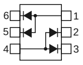


Fig. 11

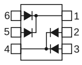


Fig. 12

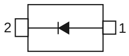
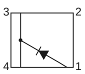


Fig. 13



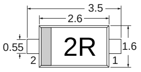
Schottky Barrier Diodes – Silicon Epitaxial Planar Type

Fig.	Description	VR (v)	IF (mA)	VF@1mA (V)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing
					Mini Type 2-Pin						
7	Single	20	1000	0.45	MA2YD15CT-ND	.55	.42	.31	MA2YD15TR-ND	3,000	178.65/M
					Mini Type 3-Pin						
1	Single	30	700	.55*	MA10701CT-ND	.47	.38	.29	MA10701TR-ND	3,000	126.40/M
1	Single	15	30	0.4	MA704CT-ND	.44	.36	.27	MA704TR-ND	3,000	118.30/M
1	Single	30	30	0.4	MA704ACT-ND	.44	.36	.27	MA704ATR-ND	3,000	118.30/M
2	Dual Com Anode	30	30	0.4	MA704WACT-ND	.70	.53	.40	MA704WATR-ND	3,000	228.35/M
3	Dual Com Cathode	30	30	0.4	MA704WKCT-ND	.70	.53	.40	MA704WKTR-ND	3,000	228.35/M
4	Dual Series	30	20/30	0.3	MA715CT-ND	.75	.57	.43	MA715TR-ND	3,000	245.34/M
4	Dual Series	30	20/30	0.4	MA716CT-ND	.61	.46	.35	MA716TR-ND	3,000	198.18/M
1	Single	30	30	0.3	MA717CT-ND	.52	.42	.32	MA717TR-ND	3,000	139.54/M
2	Dual Com Anode	30	110/150	0.3	MA717WACT-ND	.91	.68	.51	MA717WATR-ND	3,000	294.40/M
3	Dual Com Cathode	30	110/150	0.3	MA717WKCT-ND	.91	.68	.51	MA717WKTR-ND	3,000	294.40/M
1	Single	40	500	.55*	MA720CT-ND	.58	.47	.35	MA720TR-ND	3,000	157.20/M
1	Single	30	200	.55*	MA721CT-ND	.59	.48	.36	MA721TR-ND	3,000	160.61/M
2	Dual Com Anode	30	130/200	.55*	MA721WACT-ND	.84	.64	.48	MA721WATR-ND	3,000	274.12/M
3	Dual Com Cathode	30	130/200	.55*	MA721WKCT-ND	.84	.64	.48	MA721WKTR-ND	3,000	274.12/M
1	Single	50	200	.55*	MA727CT-ND	.58	.44	.33	MA727TR-ND	3,000	188.46/M
4	Dual Series	30	220/300	.55*	MA740CT-ND	.94	.71	.53	MA740TR-ND	3,000	305.00/M
1	Single	20	500	.50*	MA748CT-ND	.59	.48	.36	MA748TR-ND	3,000	160.61/M
1	Single	30	100	.55*	MA786CT-ND	.50	.40	.30	MA786TR-ND	3,000	134.15/M
2	Dual Com Anode	30	200/300	.55*	MA786WACT-ND	.65	.49	.37	MA786WATR-ND	3,000	211.02/M
3	Dual Com Cathode	30	200/300	.55*	MA786WKCT-ND	.65	.49	.37	MA786WKTR-ND	3,000	211.02/M
1	Single	20	1000	0.45	MA3XD11CT-ND	.59	.48	.36	MA3XD11TR-ND	3,000	159.59/M
1	Single	20	1000	0.45	MA3XD15CT-ND	.52	.39	.30	MA3XD15TR-ND	3,000	169.04/M
					Mini Type 4-Pin						
5	Dual	30	20/30	0.4	MA713CT-ND	.61	.47	.35	MA713TR-ND	3,000	199.74/M
9	Dual	30	20/30	0.4	MA714CT-ND	.75	.56	.42	MA714TR-ND	3,000	242.57/M
5	Dual	30	150	.55*	MA724CT-ND	.69	.52	.39	MA724TR-ND	3,000	224.36/M
9	Dual	30	150/200	.55*	MA726CT-ND	.93	.71	.53	MA726TR-ND	3,000	303.61/M
5	Dual	50	150/200	.55*	MA746CT-ND	.80	.60	.45	MA746TR-ND	3,000	259.21/M
5	Dual	50	70/100	.55*	MA796CT-ND	.64	.48	.36	MA796TR-ND	3,000	207.37/M
					Mini Type 6-Pin						
6	Triple	30	30	0.4	MA718CT-ND	.88	.74	.59	MA718TR-ND	3,000	380.94/M
					S-Mini Type 2-Pin						
7	Single	30	30	0.4	MA728CT-ND	.52	.42	.29	MA728TR-ND	3,000	135.82/M
7	Single	30	200	.55*	MA729CT-ND	.57	.46	.35	MA729TR-ND	3,000	153.23/M
7	Single	30	30	0.3	MA732CT-ND	.44	.36	.27	MA732TR-ND	3,000	119.56/M
7	Single	30	100	.55*	MA784CT-ND	.51	.42	.29	MA784TR-ND	3,000	133.10/M
7	Single	50	100	.55*	MA785CT-ND	.45	.37	.28	MA785TR-ND	3,000	122.45/M
7	Single	20	200	0.47	MA2SD19CT-ND	.50	.40	.30	MA2SD19TR-ND	3,000	134.21/M
7	Single	60	100	1.0*	MA2SP01CT-ND	.59	.48	.36	MA2SP01TR-ND	3,000	159.59/M
7	Single	60	100	1.0*	MA2SP02CT-ND	.59	.48	.36	MA2SP02TR-ND	3,000	159.59/M
					S-Mini Type 3-Pin						
1	Single	40	500	.55*	MA10700CT-ND	.55	.45	.34	MA10700TR-ND	3,000	148.91/M
1	Single	20	500	.55*	MA10702CT-ND	.55	.44	.33	MA10702TR-ND	3,000	148.19/M
1	Single	30	30	0.4	MA741CT-ND	.48	.39	.29	MA741TR-ND	3,000	130.01/M
2	Dual Com Anode	30	20/30	0.4	MA741WACT-ND	.61	.46	.35	MA741WATR-ND	3,000	198.88/M
3	Dual Com Cathode	30	20/30	0.4	MA741WKCT-ND	.61	.46	.35	MA741WKTR-ND	3,000	198.88/M
4	Dual Series	30	20/30	0.4	MA742CT-ND	.64	.48	.36	MA742TR-ND	3,000	207.37/M
1	Single	30	200	.55*	MA744CT-ND	.57	.43	.32	MA744TR-ND	3,000	184.50/M
1	Single	30	30	0.3	MA745CT-ND	.66	.50	.38	MA745TR-ND	3,000	215.35/M
2	Dual Com Anode	30	20/30	0.3	MA745WACT-ND	.62	.47	.36	MA745WATR-ND	3,000	202.87/M
3	Dual Com Cathode	30	20/30	0.3	MA745WKCT-ND	.62	.47	.36	MA745WKTR-ND	3,000	202.87/M
2	Dual Com Anode	30	70/100	.55*	MA792WACT-ND	.51	.41	.31	MA792WATR-ND	3,000	137.57/M
3	Dual Com Cathode	30	70/100	.55*	MA792WKCT-ND	.51	.41	.31	MA792WKTR-ND	3,000	137.57/M
4	Dual Series	30	70/100	.55*	MA793CT-ND	.62	.47	.35	MA793TR-ND	3,000	200.96/M
					Mini-Power Type 2-Pin						
8	Single	40	1000	.55*	MA701ACT-ND	.84	.64	.48	MA701ATR-ND	1,000	280.08
					New Mini-Power Type 2-Pin						
7	Single	30	1500	.37**	MA10705CT-ND	.84	.64	.48	MA10705TR-ND	1,500	280.45/M
7	Single	30	1000	.50**	MA735CT-ND	.85	.64	.48	MA735TR-ND	1,500	281.52/M
7	Single	40	1000	.55**	MA736CT-ND	.70	.53	.40	MA736TR-ND	1,500	234.34/M
7	Single	30	1500	.50†	MA737CT-ND	.99	.75	.56	MA737TR-ND	1,500	328.52/M
7	Single	40	1500	.55†	MA738CT-ND	.73	.55	.42	MA738TR-ND	1,500	243.20/M
7	Single	90	700	.80*	MA739CT-ND	.88	.67	.50	MA739TR-ND	1,500	293.06/M
					SS-Mini Type 2-Pin						
7	Single	30	30	0.4	MA2S728CT-ND	.50	.41	.28	MA2S728TR-ND	3,000	131.55/M
7	Single	30	100	.55*	MA2S784CT-ND	.52	.42	.31	MA2S784TR-ND	3,000	139.30/M
7	Single	20	200	0.47	MA2SD10CT-ND	.52	.42	.31	MA2SD10TR-ND	3,000	139.30/M
					SS-Mini Type 3-Pin						
1	Single	30	30	0.4	MA781CT-ND	.52	.42	.31	MA781TR-ND	3,000	139.30/M
2	Dual Com Anode	30	30	0.4	MA781WACT-ND	.62	.47	.35	MA781WATR-ND	3,000	201.19/M
3	Dual Com Cathode	30	30	0.4	MA781WKCT-ND	.62	.47	.35	MA781WKTR-ND	3,000	201.19/M
1	Single	30	30	0.3	MA795CT-ND	.52	.42	.31	MA795TR-ND	3,000	139.30/M
2	Dual Com Anode	30	30	0.3	MA795WACT-ND	.62	.47	.35	MA795WATR-ND	3,000	201.19/M
3	Dual Com Cathode	30	20	0.3	MA795WKCT-ND	.62	.47	.35	MA795WKTR-ND	3,000	201.19/M
					NEW! 1008 Mold Leadless Type 4-Pin NEW!						
10	Single	30	30	0.4	MA4L72800ACT-ND	.47	.38	.29	MA4L72800ATR-ND	10,000	119.24/M
10	Single	30	100	0.55*	MA4L78400ACT-ND	.55	.45	.34	MA4L78400ATR-ND	10,000	140.66/M

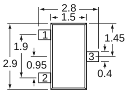
* @ IF ** @1A †@2A

Dim. in mm

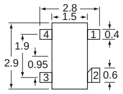
Mini Type (2-pin)



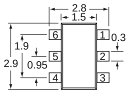
Mini Type (3-pin)
JEDEC: TO-236
EIAJ: SC-59



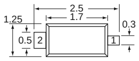
Mini Type (4-pin)



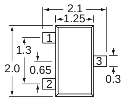
Mini Type (6-pin)



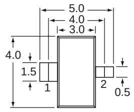
S-Mini Type (2-pin)



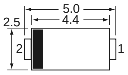
S-Mini Type (3-pin)
EIAJ: SC-70



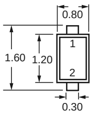
Mini-Power Type (2-pin)



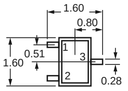
New Mini-Power Type (2-pin)



SS-Mini Type (2-pin)



SS-Mini Type (3-pin)



NEW! **1008 Mold Leadless Type (4-pin)**

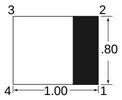


Fig. 1

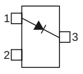


Fig. 2

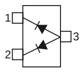


Fig. 3

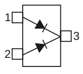


Fig. 4

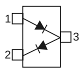


Fig. 5

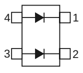


Fig. 6

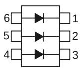


Fig. 7

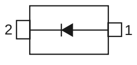


Fig. 8

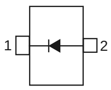


Fig. 9

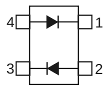
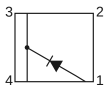


Fig. 10 *NEW!*



International
IOR Rectifier

IGBT Transistors

The field of 3-phase 220V PWM motor drives has had mainly bipolars and power MOSFETs competing with one another. Power MOSFETs have been the choice of power electronic designers, especially at power levels below 5 hp because of the ease of drive and their rugged properties. Since FETs are voltage-controlled devices, they require only very small gate current pulses to turn them off and on. The average currents necessary for controlling the device state are often magnitudes lower than those required by bipolar devices of similar ratings. What's more, the FET's wide switching safe operating area (SOA), avalanche and dv/dt capabilities allow for snubberless operation, often a great advantage over bipolars. The $R_{DS(on)}$ of the FET does, however, rise exponentially with voltage rating. The IGBT combines the best of both worlds. It is a voltage-controlled device (like the MOSFET) allowing designers to greatly simplify their drive circuits. It is a rugged device with a square switching SOA and high peak current capability. In addition, it exhibits low forward voltage characteristics similar to bipolars, reducing the conduction loss. For those IGBT's without an internal reverse diode, designers can choose an external fast recovery diode to suit a specific application. (HexFred; see section below for description.) All this indicates that the IGBT will be the device of choice for applications requiring high current densities at high voltages coupled with switching frequencies up to 20 to 50 kHz.

High Efficiency WARP™ Speed IGBTs: Optimized for 75-150kHz hard switching frequency. For use in UPS, welding, switch mode power supplies and PFC stages.

HEXFRED technology sets a new standard for high performance ultrafast diodes. This performance advantage can be utilized by the designer resulting in higher efficiency circuits and lower overall system cost. HEXFREDS will: • Allow IGBTS and MOSFETS to run cooler by 10°C, 20°C • Improve overall system efficiency by 1%, 2% • Reduce noise and the need for snubber circuitry • Allow for higher frequency operation • Allow many marginal circuits to work more reliably.

Fig. 1

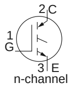


Fig. 2

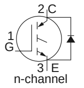


Fig. 3

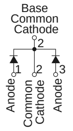


Fig. 4

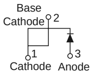


Fig. 5

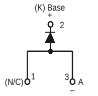
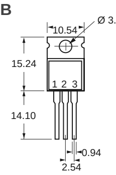


Fig.	Package	VCE	VCE (Sat) Max	IC @ TC +25°C	Pulse Current ICM	Max Power Dissipation	Delay Time (ns) Td(on)	Td(off)	ETS Total Switching Loss @ IC MJ	Amps	Digi-Key Part No.	Price Each 1	10	100
1	TO-220AB	600	1.4	19	38	60	27	540	2.17	10	IRG4BC20S-ND	2.78	2.22	1.59
		600	2.27	13	52	60	20	190	.22	6.5	IRG4BC20U-ND	2.32	1.98	1.63
		600	1.99	31	120	100	20	290	2.50	17.0	IRG4BC30F-ND	2.98	2.54	2.09
		600	1.4	34	68	100	22	540	3.71	18	IRG4BC30S-ND	3.73	2.98	2.13
		600	2.52	23	92	100	20	180	.73	12.0	IRG4BC30U-ND	3.10	2.64	2.17
		600	1.5	49	200	160	26	240	2.18	27	IRG4BC40F-ND	5.80	4.64	3.31
		600	2.15	40	160	160	30	220	1.40	20.0	IRG4BC40U-ND	4.76	4.05	3.34
2	TO-220AB	600	2.15	8.5	34	38	40	87	0.26	25	IRG4BC10UD-ND	2.50	2.00	1.43
		600	1.66	16	64	60	43	240	0.89	9	IRG4BC20FD-ND	3.80	3.04	2.17
		600	2.27	16	32	60	54	180	0.64	9	IRG4BC20KD-ND	3.93	3.14	2.24
		600	2.27	13	52	60	38	100	.49	6.5	IRG4BC20UD-ND	3.14	2.67	2.20
		600	1.99	31	120	100	42	310	3.20	17.0	IRG4BC30FD-ND	4.86	4.14	3.41
		600	2.21	28	58	100	60	160	1.18	16	IRG4BC30KD-ND	4.75	3.80	2.71
		600	2.52	23	92	100	40	120	.89	12.0	IRG4BC30UD-ND	4.98	4.24	3.49
1	TO-247AC	600	1.59	31	120	100	21	200	1.41	17.0	IRG4PC30F-ND	4.45	3.56	2.54
		600	1.5	49	200	160	26	240	2.18	27	IRG4PC40F-ND	6.13	4.90	3.50
		600	2.1	42	84	160	30	140	0.95	25	IRG4PC40K-ND	6.40	5.12	3.66
		600	1.68	60	120	160	23	1000	12.00	31.0	IRG4PC40S-ND	4.90	4.17	3.43
		600	2.15	40	160	160	30	220	1.40	20.0	IRG4PC40U-ND	5.12	4.36	3.59
		600	1.79	70	280	200	28	390	5.00	39.0	IRG4PC50F-ND	8.40	7.14	5.88
		600	2.00	55	220	200	31	230	1.60	27.0	IRG4PC50U-ND	8.62	7.33	6.04
2	TO-247AC	600	1.99	31	120	100	42	310	3.20	17.0	IRG4PC30FD-ND	5.34	4.54	3.74
		600	1.85	49	200	160	63	350	4.70	27.0	IRG4PC40FD-ND	8.20	6.97	5.74
		600	2.15	40	160	160	40	200	1.60	20.0	IRG4PC40UD-ND	8.40	7.14	5.88
		600	1.79	70	280	200	59	260	6.50	39.0	IRG4PC50FD-ND	13.28	11.29	9.30
		600	2.00	55	220	200	44	240	2.30	27.0	IRG4PC50UD-ND	13.52	11.50	9.47
1	TO-247AC	1200	2.74	30	60	160	30	200	4.93	25	IRG4PH40K-ND	6.00	4.80	3.43
		1200	2.43	30	82	160	24	220	4.44	21	IRG4PH40U-ND	6.00	4.80	3.43
		1200	1.47	57	114	200	32	845	21.4	33	IRG4PH50S-ND	7.65	6.12	3.71
2	TO-247AC	1200	2.1	45	84	160	30	140	.95	25	IRG4PH50KD-ND	14.20	11.36	8.11
1	TO-247AC	600	1.47	70	114	200	32	845	21.4	33	IRG4PC50S-ND	10.50	8.40	6.00
1	TO-247AC	1200	3.20	45	180	200	31	320	5.40	24.0	IRG4PH50U-ND	11.42	9.71	8.00
2	TO-247AC	600	3.1	28	40	100	39	340	2.6	10	IRG4PC30KD-ND	5.38	4.30	3.07
		600	2.74	42	60	160	50	140	2.8	15	IRG4PC40KD-ND	10.50	8.40	6.00
		600	2.77	52	90	200	67	310	7.9	24	IRG4PC50KD-ND	14.05	11.24	8.03
2	TO-247AC	1200	3.1	20	40	100	39	340	2.6	10	IRG4PH30KD-ND	7.63	6.10	4.36
		1200	2.74	30	60	160	50	140	2.8	15	IRG4PH40KD-ND	8.20	6.56	4.69
		1200	2.43	30	82	160	46	150	4.6	21	IRG4PH40UD-ND	8.20	6.56	4.69
		1200	3.20	45	180	200	46	240	6.38	24.0	IRG4PH50UD-ND	18.86	16.04	13.21
1	Super 247	600	2.00	85	200	350	34	56	2.41	15	IRG4PSC71U-ND	18.13	14.50	8.79
2	Super 247	600	2.00	85	60	350	90	245	7.2	75	IRG4PSC71UD-ND	21.00	16.80	10.19
High Efficiency WARP™ Speed IGBTs														
1	TO-220AB	600	2.16	13	52	60	22	110	0.14	6.5	IRG4BC20W-ND	2.32	1.98	1.66
		600	2.70	23	92	100	24	150	0.26	12.0	IRG4BC30W-ND	3.24	2.76	2.31
		600	2.05	40	160	160	27	100	0.34	20.0	IRG4BC40W-ND	6.20	5.27	4.43
1	TO-247AC	600	2.70	23	92	100	25	99	0.26	12.0	IRG4PC30W-ND	3.60	3.06	2.57
		600	2.05	40	160	160	27	100	0.34	20.0	IRG4PC40W-ND	6.46	5.50	4.61
		600	2.30	55	220	200	46	120	0.40	27.0	IRG4PC50W-ND	9.06	7.71	6.47
1	TO-247AC	900	2.25	51	204	200	29	110	1.25	28	IRG4PF50W-ND	7.65	6.12	3.71

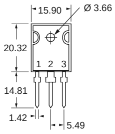
HexFreds Diodes

Fig.	Package	VR	VF	IF(AV) (A)	TRR(Typical) NS	QRR(Typical) NC	IRRM (A)	Digi-Key Part No.	Price Each 1	10	100
3	TO-220AB	600	1.7	16	18	65	5	HFA16TA60C-ND	3.36	2.86	2.36
	TO-247AC	600	1.7	30	19	80	6	HFA30PA60C-ND	6.62	5.63	4.64
	TO-220AB	600	1.7	30	19	80	6	HFA30TA60C-ND	5.02	4.27	3.52
	TO-247AC	600	1.7	16	55	60	5	HFA16PA60C-ND	5.00	4.00	2.86
4	TO-220AC	600	1.7	8	18	65	5	HFA08TB60-ND	2.02	1.72	1.42
	TO-247AC/MOD	600	1.7	15	19	80	6	HFA15PB60-ND	3.88	3.30	2.72
	TO-220AC	600	1.7	15	19	80	6	HFA15TB60-ND	3.00	2.55	2.10
	TO-247AC/MOD	600	1.7	25	23	112	10	HFA25PB60-ND	6.64	5.65	4.65
	TO-220AC	600	1.7	25	23	112	10	HFA25TB60-ND	4.14	3.52	2.90
	TO-247AC/MOD	1200	3.0	16	30	260	5.8	HFA16PB120-ND	8.36	7.11	5.86
	TO-247AC/MOD	600	1.7	8	55	65	5	HFA08PB60-ND	3.58	2.86	2.04
	TO-247AC/MOD	1200	3	6	26	80	4.4	HFA06PB120-ND	5.50	4.40	3.14
5	SMD-220	600	1.4	8	18	65	5	HFA08TB60STRL-ND	1285.60/800		

TO-220AB



TO-247AC



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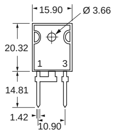
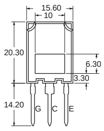
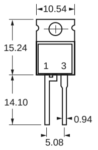


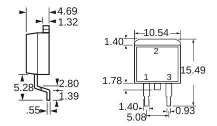
SUPER-247



TO-220AC



SMD-220

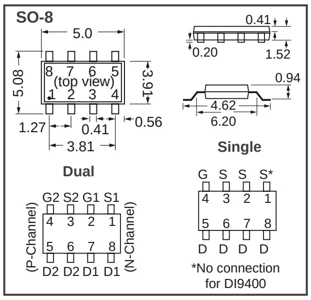


DIODES INCORPORATED

Surface Mount MOSFETS

V_{DSS}	R_{DS} (On) OHMS	I_D Cont. (A)	P_D (watts)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 2,500	5,000
Single P-Channel Enhancement Mode FETs										
-30	0.24	3.4	2.5	DI9400CT-ND	4.50	3.75	3.00	—	—	—
-20	0.12	4.3	2.5	DI9405CT-ND	4.68	3.90	3.12	DI9405TR-ND	1560.00/M	1365.00/M
-20	0.12	5.3	2.5	DI9430CT-ND	4.92	4.10	3.28	DI9430TR-ND	1640.00/M	1435.00/M
-30	0.064	5.3	2.5	DI9435CT-ND	4.98	4.15	3.32	DI9435TR-ND	1660.00/M	1453.00/M
Dual N & P-Channel Enhancement Mode FETs										
20, -20	0.11, 0.35	3, -2.5	1.6	DI9942CT-ND	5.40	4.50	3.60	DI9942TR-ND	1800.00/M	1575.00/M
30, -30	0.11, -0.24	3.7, -2.9	2	DI9952CT-ND	5.58	4.65	3.72	—	—	—
Dual N-Channel Enhancement Mode FETs										
60	0.17	3.5	1.6	DI9945CT-ND	5.40	4.50	3.60	DI9945TR-ND	1800.00/M	1575.00/M
30	0.11	3.7	2	DI9956CT-ND	5.22	4.35	3.48	DI9956TR-ND	1740.00/M	1523.00/M

SO-8

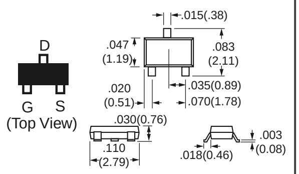


FAIRCHILD
SEMICONDUCTOR

Surface Mount and Through-Hole Power MOSFETS

Fig.	Type	VDS (V)	RDS(on) Max (Ω) VGS @ 10V	VGS @ 4.5V	VGS @ 2.7V	ID (A)	PD (W)	Config. or Pkg.	Digi-Key Part No	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing
SuperSOT™-3 High Drain Current (SOT-23 / TO-236AB)														
1	N-Chan.	30	—	0.25	—	1.1	0.5	Single	NDS351NCT-ND	.66	4.95	37.13	NDS351NTR-ND	643.50/3,000
1		30	—	0.125	—	1.6	0.5	Single	NDS355NCT-ND	.66	4.95	37.13	NDS355NTR-ND	643.50/3,000
1	P-Chan.	-20	—	0.5	—	-0.85	0.5	Single	NDS352PCT-ND	.84	6.27	47.03	NDS352PTR-ND	815.10/3,000
1		-20	—	0.3	—	-1.1	0.5	Single	NDS356PCT-ND	.97	7.26	54.45	NDS356PTR-ND	943.80/3,000
SOT-23 (TO236AB)														
1	N-Chan.	50	3.5	6	—	0.22	0.36	Single	BSS138CT-ND	.39	2.89	20.02	BSS138TR-ND	231.00/3,000
1		60	7.5	—	—	0.115	0.2	Single	2N7002NCT-ND	.32	2.39	16.59	2N7002NTR-ND	191.40/3,000
1		60	2	—	—	0.28	0.3	Single	NDS7002ACT-ND	.39	2.89	20.02	NDS7002ATR-ND	231.00/3,000
1		100	6	—	—	0.17	0.36	Single	BSS123NCT-ND	.38	2.96	20.81	BSS123NTR-ND	255.42/3,000
1	P-Chan.	-50	10	—	—	-0.13	0.3	Single	BSS84CT-ND	.36	2.89	19.80	BSS84TR-ND	280.50/3,000
1		-60	5	7.5	—	-0.18	0.36	Single	NDS0605CT-ND	.39	3.18	21.78	NDS0605TR-ND	308.55/3,000
1		-60	10	—	—	-0.12	0.36	Single	NDS0610CT-ND	.39	3.18	21.78	NDS0610TR-ND	308.55/3,000
SuperSOT™-6 (SOT-6)														
2	N-Chan.	30	0.06	0.09	—	3.2	1.6	Single	NDC651NCT-ND	.85	6.40	48.02	NDC651NTR-ND	832.26/3,000
3		50	2	—	—	0.35	0.5	Dual	NDC7002NCT-ND	.70	5.28	39.60	NDC7002NTR-ND	686.40/3,000
2	P-Chan.	-30	0.11	0.18	—	-2.4	1.6	Single	NDC652PCT-ND	.92	6.93	51.98	NDC652PTR-ND	900.90/3,000
3		-50	5	—	—	-0.22	0.5	Dual	NDC7003PCT-ND	.70	5.28	39.60	NDC7003PTR-ND	686.40/3,000
3	N-Chan.	50	2	—	—	0.35	0.5	Compl.	NDC7001CCT-ND	.73	5.45	40.84	NDC7001CTR-ND	707.85/3,000
3	P-Chan.	-50	5	—	—	-0.22	0.5							
Power MOSFET (SO-8)														
6	N-Chan.	20	—	0.05	0.07	4.5	2	Dual	NDS8926CT-ND	1.60	12.76	95.70	NDS8926TR-ND	2041.60/2,500
5		30	0.015	0.02	—	10.0	2.5	Single	NDS8410CT-ND	1.38	11.00	82.50	NDS8410TR-ND	1760.00/2,500
6		30	0.037	0.055	—	5.3	2	Dual	NDS8936CT-ND	1.25	10.45	83.60	NDS8936TR-ND	1358.50/2,500
4		30	0.028	0.042	—	7.3	2.5	Single	NDS9410ACT-ND	1.45	12.10	96.80	NDS9410ATR-ND	1573.00/2,500
6		30	0.05	0.08	—	5	2	Dual	NDS9936CT-ND	.84	7.01	56.10	NDS9936TR-ND	911.63/2,500
6		30	0.08	0.11	—	3.7	2	Dual	NDS9956ACT-ND	.89	7.43	59.40	NDS9956ATR-ND	965.25/2,500
6		50	0.13	0.2	—	3	2	Dual	NDS9955CT-ND	1.49	12.38	99.00	NDS9955TR-ND	1608.75/2,500
6		50	0.3	0.5	—	2	2	Dual	NDS9959CT-ND	1.02	8.53	68.20	NDS9959TR-ND	1108.25/2,500
6		60	0.1	0.2	—	3.5	2	Dual	NDS9945CT-ND	1.29	10.73	85.80	NDS9945TR-ND	1394.25/2,500
6		60	0.16	0.25	—	2.6	2	Dual	NDS9957CT-ND	1.27	10.12	75.90	NDS9957TR-ND	1619.20/2,500
5	P-Chan.	-20	—	0.035	0.05	-6.7	2.5	Single	NDS8434CT-ND	1.43	11.44	85.80	NDS8434TR-ND	1830.40/2,500
4		-20	0.1	0.16	—	-4.3	2.5	Single	NDS9405CT-ND	1.62	12.98	97.35	NDS9405TR-ND	2076.80/2,500
5		-20	0.06	0.115	—	-5.3	2.5	Single	NDS9430CT-ND	1.42	11.83	94.60	NDS9430TR-ND	1537.25/2,500
6		-20	—	0.11	0.19	-3.2	2	Dual	NDS9933CT-ND	1.74	13.89	104.16	NDS9933TR-ND	2222.08/2,500
6		-20	0.1	0.19	—	-3.5	2	Dual	NDS9947CT-ND	1.42	11.83	94.60	NDS9947TR-ND	1537.25/2,500
5		-30	0.028	0.045	—	-7.0	2.5	Single	NDS8435CT-ND	1.40	11.22	84.15	NDS8435TR-ND	1795.20/2,500
6		-30	0.065	0.1	—	-4.0	2	Dual	NDS8947CT-ND	1.51	12.10	90.75	NDS8947TR-ND	1936.00/2,500
4		-30	0.13	0.2	—	-3.6	2.5	Single	NDS9400ACT-ND	.95	7.95	63.58	NDS9400ATR-ND	1033.18/2,500
5		-30	0.05	0.09	—	-5.3	2.5	Single	NDS9435ACT-ND	1.29	10.34	77.55	NDS9435ATR-ND	1654.40/2,500
6		-30	0.13	0.2	—	-2.9	2	Dual	NDS9953ACT-ND	1.02	8.53	68.20	NDS9953ATR-ND	1108.25/2,500
5		-60	0.15	0.24	—	-3.3	2.5	Single	NDS9407CT-ND	1.35	10.78	80.85	NDS9407TR-ND	1724.80/2,500
6		-60	0.25	0.5	—	-2.3	2	Dual	NDS9948CT-ND	1.32	11.00	88.00	NDS9948TR-ND	1430.00/2,500
PowerSOT (SOT-223)														
8	N-Chan.	30	0.05	0.08	—	5.5	3	Single	NDT451NCT-ND	1.09	9.08	72.60	NDT451NTR-ND	1179.75/2,500
8		30	0.037	0.055	—	7.1	3	Single	NDT451ANCT-ND	.86	7.15	57.20	NDT451ANTR-ND	929.50/2,500
8		30	0.028	0.042	—	8	3	Single	NDT453NCT-ND	1.25	10.45	83.60	NDT453NTR-ND	1358.50/2,500
8		30	0.015	0.02	—	11.5	3	Single	NDT455NCT-ND	1.60	12.76	95.70	NDT455NTR-ND	2041.60/2,500
8		60	0.12	—	—	3.7	3	Single	NDT3055CT-ND	.85	6.40	48.02	NDT3055TR-ND	693.55/2,500
8		60	—	0.15	—	3.5	3	Single	NDT3055LCT-ND	.85	6.40	48.02	NDT3055LTR-ND	693.55/2,500
8	P-Chan.	-30	0.18	0.32	—	-3	3	Single	NDT452PCT-ND	1.06	8.80	70.40	NDT452PTR-ND	1144.00/2,500
8		-30	0.035	0.05	—	-7.3	3	Single	NDT456PCT-ND	1.60	12.76	95.70	NDT456PTR-ND	2041.60/2,500
8		-60	0.3	0.5	—	-2.5	3	Single	NDT2955CT-ND	.84	6.27	47.03	NDT2955TR-ND	679.25/2,500
Power MOSFET (SO-8) (Complementary N-P Channel 3 Phase Brushless Motor Driver)														
6	N-Chan.	20	0.125	0.25	—	3	2	Compl.	NDS9942CT-ND	1.51	12.10	90.72	NDS9942TR-ND	1935.36/2,500
6	P-Chan.	-20	0.2	0.4	—	-2.5	2							
6	N-Chan.	20	0.125	0.25	—	3	2	Compl.	NDS9943CT-ND	1.51	12.10	90.75	NDS9943TR-ND	1936.00/2,500
6	P-Chan.	-20	0.16	0.3	—	-2.8	2							
6	N-Chan.	20	0.1	0.15	—	3.5	2	Compl.	NDS9958CT-ND	1.35	11.28	90.20	NDS9958TR-ND	1465.75/2,500
6	P-Chan.	-20	0.1	0.19	—	-3	2							
6	N-Chan.	30	0.037	0.055	—	5.3	2	Compl.	NDS8958CT-ND	1.35	11.28	90.20	NDS8958TR-ND	1465.75/2,500
6	P-Chan.	-30	0.065	0.10	—	-4.0	2							
6	N-Chan.	30	0.08	0.11	—	4	2	Compl.	NDS9952ACT-ND	1.09	9.08	72.60	NDS9952ATR-ND	1179.75/2,500
6	P-Chan.	-30	0.13	0.2	—	-2.9	2							
Power MOSFET (SO-8) (Complementary MOSFETS Half Bridge)														
7	N-Chan.	30	0.037	0.055	—	6.3	2.5	Compl.	NDS8858HCT-ND	1.35	11.28	90.20	NDS8858HTR-ND	1465.75/2,500
7	P-Chan.	-30	0.065	0.10	—	-4.8	2.5							
7	N-Chan.	30	0.08	0.11	—	4.3	2.5	Compl.	NDS8852HCT-ND	1.09	9.08	72.60	NDS8852HTR-ND	1179.75/2,500
7	P-Chan.	-30	0.13	0.2	—	-3.4	2.5							
Power MOSFET (TO-263AB)														
9	N-Chan.	30	0.022	0.04	—	25	50	TO-263AB	NDB603ALCT-ND	1.42	11.83	94.60	NDB603ALTR-ND	529.76/800
9		50	0.1	—	—	15	50	TO-263AB	NDB4050CT-ND	1.10	9.20	73.60	NDB4050TR-ND	397.44/800
9		50	—	—	0.1	15	50	TO-263AB	NDB4050LCT-ND	1.02	8.53	68.20	NDB4050LTR-ND	381.92/800
9		60	0.1	—	—	15	50	TO-263AB	NDB4060CT-ND	1.36	11.34	90.72	—	—
9		60	—	—	0.1	15	50	TO-263AB	NDB4060LCT-ND	3.72	27.90	186.00	—	—
9		60	0.025	—	—	48	100	TO-263AB	NDB6060CT-ND	1.50	11.96	89.70	—	—
9		60	—	—	0.025	48	100	TO-263AB	NDB6060LCT-ND	1.32	10.56	79.20	NDB6060LTR-ND	570.24/800
9		60	0.015	—	—	75	150	TO-263AB	NDB7060CT-ND	13.80	103.50	690.00	NDB7060TR-ND	2576.00/800
9		60	—	—	0.015	75	150	TO-263AB	NDB7060LCT-ND	16.02	120.15	801.00	NDB7060LTR-ND	2840.88/800
Through-Hole Power MOSFET (TO-220AB)														
10	N-Chan.	30	0.022	0.04	—	25	50	TO-220AB	NDP603AL-ND	1.25	10.45	83.60	—	—
10		50	0.1	—	—	15	50	TO-220AB	NDP4050-ND	1.12	9.35	74.80	—	—
10		50	—	—	0.1	15	50	TO-220AB	NDP4050L-ND	1.09	9.08	72.60	—	—
10		50	0.015	—	—	75	150	TO-220AB	NDP7050-ND	3.91	31.28	243.32	—	—
10		50	—	—	0.015	75	150	TO-220AB	NDP7050L-ND	2.45	19.60	152.46	—	—
10		60	0.1	—	—	15	50	TO-220AB	NDP4060-ND	1.02	8.53	68.20	—	—
10		60	—	—	0.1	15	50	TO-220AB	NDP4060L-ND	1.02	8.53	68.20	—	—
10		60	0.025	—	—	48	100	TO-220AB	NDP6060-ND	1.87	14.96	112.20	—	—
10		60	—	—	0.025	48	100	TO-220AB	NDP6060L-ND	1.87	14.96	112.20	—	—
10		60	0.015	—	—	75	150	TO-220AB	NDP7060-ND	2.45	19.60	152.46	—	—
10		60	—	—	0.015	75	150	TO-220AB	NDP7060L-ND	2.45	19.60	152.46	—	—
Through-Hole Power MOSFET (TO-92)														
11	N-Chan.	60	5	—	—	0.2	0.4	TO-92	2N7000-ND	.31	2.31	16.02	—	—
11	N-Chan.	60	5	—	—	0.5	0.83	TO-92	BS170-ND	.39	3.03	21.30	—	—
11	N-Chan.	100	6	—	—	0.22	0.63	TO-92	BSS100-ND	.36	2.89	19.80	—	—
11	P-Chan.	-50	10	—	—	-0.17	0.8	TO-92	BSS110-ND	.36	2.89	19.80	—	—
11	P-Chan.	-60	10	—	—	-0.18	0.8	TO-92	NDF0610-ND	.50	4.04	27.72	—	—

Fig. 1 SOT-23 (TO-236AB)



SuperSOT™-6

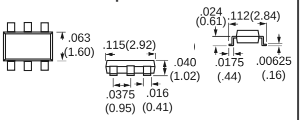


Fig. 2

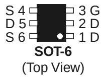
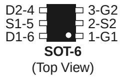


Fig. 3



NDC7001CCT:
G1, S1, D1 are N-Chan

Fig. 4

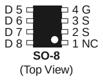


Fig. 5

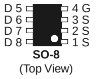
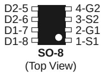


Fig. 6



1, 2, 7, 8 are N-Chan for complementary parts only.

Fig. 7

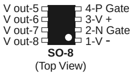


Fig. 8 SOT-223

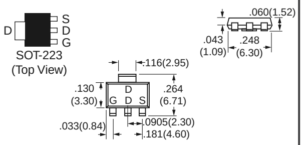


Fig. 9 TO-263AB

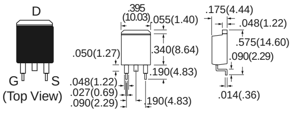


Fig. 10 TO-220AB

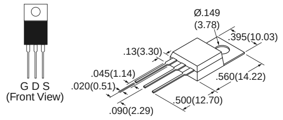
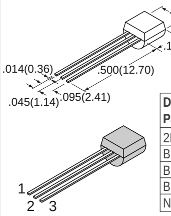


Fig. 11 TO-92



Digi-Key Part No.	Pins 1	2	3
2N7000-ND	S	G	D
BS170-ND	D	G	S
BSS100-ND	D	G	S
BSS110-ND	D	G	S
NDF0610-ND	S	G	D

N and P Channel HEXFETs

Electrical characteristics at 25°C unless otherwise noted.
Dimensions shown in mm

Fig. 1 — TO-220AB

1. Gate
2. Drain
3. Source
4. Drain

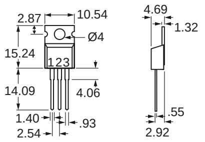


Fig. 2 — TO-220 Fullpak

1. Gate
2. Drain
3. Source

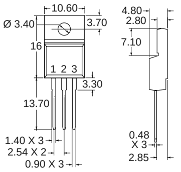


Fig. 3 — TO-247AC

1. Gate
2. Drain
3. Source
4. Drain

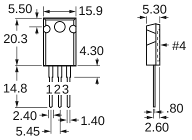


Fig. 4 — TO-262

1. Gate
2. Drain
3. Source
4. Drain

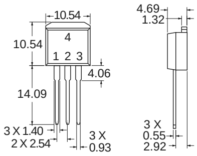


Fig. 5 — I-PAK

1. Gate
2. Drain
3. Source
4. Drain

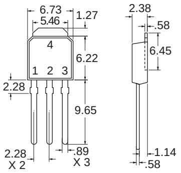


Fig. 6 — 4-Pin Dip (HEXDIP)

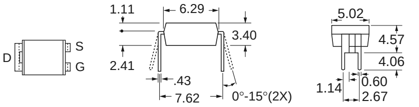


Fig. 7 — SMD-220

1. Gate
2. Drain
3. Source

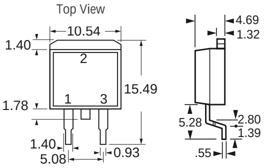


Fig. 8 — D-Pak

1. Gate
2. Drain
3. Source
4. Drain

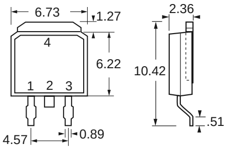
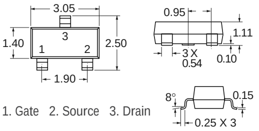


Fig. 9 — Micro-3 (SOT-23)



1. Gate 2. Source 3. Drain

Fig. 10 — Micro-6 Surface Mount

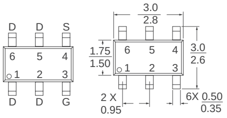


Fig. 11 — Micro-8 Outline

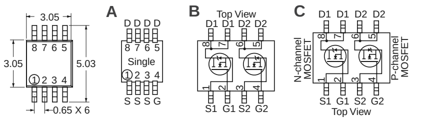


Fig. 12 — SOT-223

1. Gate
2. Drain
3. Source
4. Drain

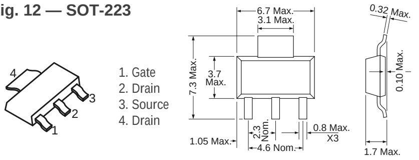
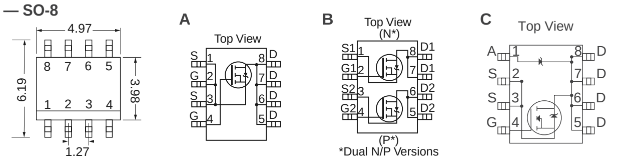


Fig. 13 — SO-8



*Dual N/P Versions

Fig. 14 — TO-220-5

1. Gate
2. Sense
3. Drain
4. Kelvin
5. Source

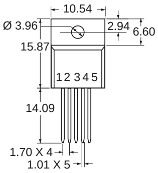


Fig. 15 — Super 247

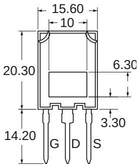


Fig. 16 — SOT-227

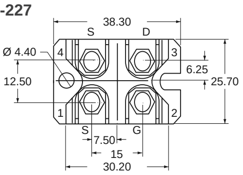


Fig.	VDS (V)	RDS (on) (Ω)	ID Cont. (A) 25°C	IDM (A)	PD Max. (W)	Digi-Key Part No.	Price Each 1	10	100
P-CHANNEL TYPES									
TO-220AB									
1	-55	0.02	-64	-260	150	IRF4905-ND	7.20	5.10	4.20
	-100	0.06	-35	-140	150	IRF5210-ND	3.36	2.38	1.96
	-55	0.06	-31	-110	110	IRF5305-ND	1.60	1.28	.91
	-150	0.29	-11	-44	83	IRF6215-ND	1.51	1.08	.89
	-100	1.2	-3	-12	20	IRF9510-ND	1.32	.94	.77
	-100	0.2	-13	-56	75	IRF9530N-ND	1.51	1.08	.89
	-100	0.117	-19	-76	94	IRF9540N-ND	2.57	1.82	1.50
	-200	3	-1.75	-7	20	IRF9610-ND	1.27	.91	.75
	-200	1.5	-3.5	-14	40	IRF9620-ND	1.80	1.28	1.05
	-200	0.8	-6.5	-26	75	IRF9630-ND	1.99	1.42	1.17
	-200	0.5	-11	-44	125	IRF9640-ND	2.71	1.93	1.59
	-60	0.5	-6.7	-27	43	IRF9Z14-ND	1.10	.79	.65
	-50	0.28	-9.7	—	—	IRF9Z20-ND	1.50	1.20	.86
	-60	0.28	-11	-44	60	IRF9Z24-ND	1.50	1.20	.86
	-55	0.175	-12	-48	45	IRF9Z24N-ND	1.20	.85	.70
	-50	0.14	-18	—	—	IRF9Z30-ND	2.25	1.80	1.29
	-55	0.1	-17	-68	56	IRF9Z34N-ND	1.82	1.30	1.07
TO-220 Fullpak									
2	-100	0.03	-7.7	-31	42	IRFI9530G-ND	2.00	1.60	1.14
	-100	0.117	-13	-44	48	IRFI9540G-ND	3.23	2.58	1.84
	-200	1.5	-3	-12	30	IRFI9620G-ND	2.00	1.60	1.14
	-200	0.8	-4.3	-17	35	IRFI9630G-ND	2.20	1.76	1.26
	-60	0.14	-12	-48	42	IRFI9Z34G-ND	2.38	1.90	1.36
TO-247AC									
3	-100	.20	-21	—	180	IRFP9140-ND	9.91	7.03	5.79
	-100	0.117	-23	-76	140	IRFP9140N-ND	10.33	8.26	5.90
	-200	.5	-12	—	150	IRFP9240-ND	4.87	3.46	2.85
TO-262									
4	-55	0.02	-74	-260	200	IRF4905L-ND	8.00	6.40	4.57
I-Pak									
5	-50	0.28	-9.9	—	—	IRFU9020-ND	1.53	1.22	.87
	-55	0.065	-28	-110	110	IRFU5305-ND	1.83	1.46	1.04
	-55	0.11	-18	-64	57	IRFU5505-ND	1.33	1.06	.76
	-60	0.5	-5.1	-20	25	IRFU9014-ND	1.10	.88	.63
	-60	0.28	-8.8	-35	42	IRFU9024-ND	1.53	1.22	.87
	-100	1.2	-3.1	-12	25	IRFU9110-ND	1.15	.92	.66
5	-100	0.6	-5.6	-22	42	IRFU9120-ND	1.43	1.14	.81
	-100	0.48	-6.5	-26	40	IRFU9120N-ND	1.23	.98	.70
	-200	3	-1.9	-7.6	25	IRFU9210-ND	1.35	1.08	.77
	-200	1.5	-3.6	-14	42	IRFU9220-ND	1.85	1.48	1.06
4-Pin Dip									
6	-100	1.2	-0.7	-3	1.0	IRFD9110-ND	1.13	.80	.66
	-100	0.6	-1.0	-8	1.0	IRFD9120-ND	1.32	.94	.77
	-200	3	-0.4	-1.6	1.0	IRFD9210-ND	1.32	.94	.77
	-200	1.5	-0.6	-4.8	1.0	IRFD9220-ND	2.14	1.52	1.25
	-50	0.5	-1.1	—	—	IRFD9010-ND	1.00	.80	.57
	-60	0.5	-1.1	-8.8	1.3	IRFD9014-ND	1.00	.80	.57
	-50	0.28	-1.6	—	—	IRFD9020-ND	1.35	1.08	.77
	-60	0.28	-1.6	-13	1.3	IRFD9024-ND	1.35	1.08	.77
SMD-220									
7	-55	0.02	-74	-260	200	IRF4905S-ND	8.00	6.40	4.57
	-55	0.02	-74	-260	200	IRF4905STRL-ND	3456.00/800		
	-100	0.06	-40	-140	200	IRF5210S-ND	3.53	2.50	2.06
	-100	0.06	-40	-140	200	IRF5210STRL-ND	1588.00/800		
	-100	0.06	-40	-140	200	IRF5210STRR-ND	1588.00/800		
	-55	0.06	-31	-110	110	IRF5305S-ND	1.98	1.58	1.13
	-150	0.29	-13	-44	110	IRF6215S-ND	1.70	1.36	.97
	-150	0.29	-13	-44	110	IRF6215STRR-ND	734.40/800		
	-100	1.2	-4	-16	43	IRF9510S-ND	1.63	1.30	.93
	-100	0.3	-12	-48	88	IRF9530S-ND	2.13	1.70	1.21
	-100	0.3	-12	-48	88	IRF9530STRL-ND	918.40/800		
	-100	0.2	-19	-72	150	IRF9540S-ND	3.35	2.68	1.91
	-100	0.2	-19	-72	150	IRF9540STRL-ND	1447.20/800		
	-100	0.48	-6.8	-27	48	IRF9520NS-ND	1.40	1.12	.80
	-100	0.2	-14	-56	79	IRF9530NS-ND	1.83	1.46	1.04
	-100	0.117	-23	-76	140	IRF9540NS-ND	2.81	1.99	1.64
	-100	0.117	-23	-76	140	IRF9540NSTRL-ND	1264.00/800		
	-200	3	-1.8	-7	20	IRF9610S-ND	1.58	1.26	.90
	-200	1.5	-3.5	-14	40	IRF9620S-ND	2.13	1.70	1.21
	-200	0.8	-6.5	-26	74	IRF9630S-ND	2.33	1.86	1.33
	-200	0.5	-11	-44	125	IRF9640S-ND	3.08	2.46	1.76
	-200	0.5	-11	-44	125	IRF9640STRL-ND	1328.80/800		
	-60	0.5	-6.7	-27	43	IRF9Z14S-ND	1.40	1.12	.80
	-55	0.175	-12	-48	45	IRF9Z24NS-ND	1.50	1.20	.86
	-60	0.28	-11	-44	60	IRF9Z24S-ND	1.75	1.40	1.00
	-60	0.28	-11	-44	60	IRF9Z24STRR-ND	756.00/800		
	-55	0.1	-19	-68	68	IRF9Z34NS-ND	2.15	1.72	1.23

(Continued)

N and P Channel HEXFETs *(Cont.)*

Fig.	VDS (V)	RDS (on) (Ω)	ID Cont. (A) 25°C	IDM (A)	PD Max. (W)	Digi-Key Part No.	Price Each 1	10	100
7	-55	0.1	-19	-68	68	IRF9Z34NSTRL-ND	928.80/800		
	-60	0.14	-18	-72	88	IRF9Z34S-ND	2.50	2.00	1.43
	-60	0.14	-18	-72	88	IRF9Z34STRL-ND	1080.00/800		
D-PAK (TO-252AA)									
8	-55	0.065	-31	-110	110	IRFR5305-ND	1.75	1.25	1.03
	-55	0.065	-31	-110	110	IRFR5305TR-ND	1972.00/2,000		
	-55	0.11	-18	-64	57	IRFR5505-ND	1.33	1.06	.76
	-50	0.5	-5.3	—	—	IRFR9010-ND	1.10	.88	.63
	-50	0.5	-5.3	—	—	IRFR9010TR-ND	1188.00/2,000		
	-60	0.5	-5.1	-20	25	IRFR9014-ND	1.10	.88	.63
	-60	0.5	-5.1	-20	25	IRFR9014TR-ND	1188.00/2,000		
	-60	0.5	-5.1	-20	25	IRFR9014TRL-ND	1782.00/3,000		
	-50	0.28	-9.9	—	—	IRFR9020-ND	1.53	1.22	.87
	-50	0.28	-9.9	—	—	IRFR9020TR-ND	1648.00/2,000		
	-60	0.28	-8.8	-35	42	IRFR9024-ND	1.53	1.22	.87
	-60	0.28	-8.8	-35	42	IRFR9024TR-ND	1648.00/2,000		
	-55	0.175	-11	-44	38	IRFR9024N-ND	1.18	.84	.69
	-55	0.175	-11	-44	38	IRFR9024NTR-ND	1324.00/2,000		
	-100	1.2	-3.1	-12	25	IRFR9110-ND	1.15	.92	.66
	-100	1.2	-3.1	-12	25	IRFR9110TR-ND	1242.00/2,000		
	-100	1.2	-3.1	-12	25	IRFR9110TRL-ND	1863.00/3,000		
	-100	0.48	-6.5	-26	40	IRFR9120N-ND	1.18	.84	.69
	-100	0.48	-6.5	-26	40	IRFR9120NTR-ND	1324.00/2,000		
	-100	0.6	-5.6	-22	42	IRFR9120TR-ND	1540.00/2,000		
	-100	0.6	-5.6	-22	42	IRFR9120TRL-ND	2310.00/3,000		
	-200	3	-1.9	-7.6	25	IRFR9210-ND	1.35	1.08	.81
	-200	3	-1.9	-7.6	25	IRFR9210TR-ND	1458.00/2,000		
	-250	3	-2.7	-11	50	IRFR9214-ND	.85	.68	.49
	-200	1.5	-3.6	-14	42	IRFR9220-ND	1.85	1.48	1.06
	-200	1.5	-3.6	-14	42	IRFR9220TR-ND	1998.00/2,000		
	-400	7	-1.8	-7.2	50	IRFR9310-ND	.88	.70	.50
	-400	7	-1.8	-7.2	50	IRFR9310TR-ND	946.00/2,000		
Micro-3 (SOT-23) Logic Level									
9	-30	0.6	-0.61	-4.8	0.54	IRLML5103CT-ND	.72	.54	.42
	-30	0.6	-0.61	-4.8	0.54	IRLML5103TR-ND	972.00/3,000		
	-20	0.6	-0.62	-4.9	0.54	IRLML6302CT-ND	.66	.50	.39
	-20	0.6	-0.62	-4.9	0.54	IRLML6302TR-ND	891.00/3,000		
	-12	0.05	-4.3	-34	1.3	IRLML6401CT-ND	.66	.50	.39
	-12	0.05	-4.3	-34	1.3	IRLML6401TR-ND	891.00/3,000		
	-20	0.065	-3.7	-22	1.3	IRLML6402CT-ND	.66	.50	.39
	-20	0.065	-3.7	-22	1.3	IRLML6402TR-ND	891.00/3,000		
	-20	0.05	-5.6	-45	2	IRLMS6802CT-ND	.96	.72	.56
	-20	0.05	-5.6	-45	2	IRLMS6802TR-ND	1296.00/3,000		
Micro-6 Logic Level									
10	-20	0.2	-2.3	-13	1.7	IRLMS6702CT-ND	.96	.72	.56
	-20	0.2	-2.3	-13	1.7	IRLMS6702TR-ND	1200.00/3,000		
	-30	0.2	-2.3	-13	1.7	IRLMS5703CT-ND	.96	.72	.56
	-30	0.2	-2.3	-13	1.7	IRLMS5703TR-ND	1200.00/3,000		
	-20	0.065	-4.4	-20	2	SI3443DVCT-ND	.68	.54	.48
	-20	0.065	-4.4	-20	2	SI3443DVTR-ND	1095.00/3,000		
Micro-8 Logic Level									
11A	-20	0.09	-3.6	-19	1.8	IRF7604CT-ND	2.37	1.78	1.39
	-20	0.09	-3.6	-19	1.8	IRF7604TR-ND	4268.00/4,000		
	-30	0.09	-3.6	-19	1.8	IRF7606CT-ND	2.10	1.58	1.23
	-30	0.09	-3.6	-19	1.8	IRF7606TR-ND	3780.00/4,000		
	-20	0.02	-8.2	-66	1.8	IRF7663CT-ND	2.10	1.58	1.23
	-20	0.02	-8.2	-66	1.8	IRF7663TR-ND	3780.00/4,000		
	-20	0.27	-1.7	-14	1.25	IRF7524D1CT-ND	1.20	.90	.70
	-20	0.27	-1.7	-14	1.25	IRF7524D1TR-ND	2160.00/4,000		
Micro-8 Dual Logic Level									
11B	-20	0.27	-1.7	-9.6	1.25	IRF7504CT-ND	2.10	1.58	1.23
	-20	0.27	-1.7	-9.6	1.25	IRF7504TR-ND	3780.00/4,000		
	-30	0.27	-1.7	-9.6	1.25	IRF7506CT-ND	1.89	1.42	1.11
	-30	0.27	-1.7	-9.6	1.25	IRF7506TR-ND	3404.00/4,000		
	-20	0.055	-4.3	-34	1.25	IRF7555CT-ND	2.10	1.58	1.23
	-20	0.055	-4.3	-34	1.25	IRF7555TR-ND	3780.00/4,000		
SOT-223									
12	-60	0.5	-1.8	-14	3.1	IRFL9014-ND	1.75	1.40	1.00
	-60	0.5	-1.8	-14	3.1	IRFL9014TR-ND	2362.50/2,500		
	-100	1.2	-1.1	-8.8	3.1	IRFL9110-ND	1.63	1.30	.93
	-100	1.2	-1.1	-8.8	3.1	IRFL9110TR-ND	2195.00/2,500		
SO-8									
13A	-30	0.02	-5.6	-45	1	IRF7416-ND	2.76	1.96	1.61
	-30	0.02	-5.6	-45	1	IRF7416TR-ND	6212.00/4,000		
SO-8 Logic Level									
13A	-30	0.07	-5.3	—	2.5	IRF7205-ND	1.87	1.33	1.10
	-30	0.07	-5.3	—	2.5	IRF7205TR-ND	4212.00/4,000		
	-12	0.005	-16	-100	2.5	IRF7210-ND	3.13	2.50	1.78
	-12	0.012	-11	-88	2.5	IRF7220-ND	2.83	2.26	1.61
	-12	0.012	-11	-88	2.5	IRF7220TR-ND	6104.00/4,000		
	-20	0.04	-6.7	-27	2.5	IRF7404-ND	2.38	1.90	1.36
	-20	0.04	-6.7	-27	2.5	IRF7404TR-ND	5132.00/4,000		
	-30	0.045	-5.8	-23	2.5	IRF7406-ND	2.25	1.80	1.29
	-20	0.06	-5.3	-21	1.6	IRF7204CT-ND	3.39	2.55	1.98
	-20	0.06	-5.3	-21	1.6	IRF7204TR-ND	3900.00/4,000		
	-30	0.02	-30	-50	2.5	SI4435DY-ND	1.50	1.20	.85
	-30	0.02	-30	-50	2.5	SI4435DYTR-ND	3240.00/4,000		
SO-8 Dual Logic Level									
13B	-20	.25	-2.3	-10	2	IRF7104-ND	1.68	1.19	.98
	-20	.25	-2.3	-10	2	IRF7104TR-ND	3780.00/4,000		
	-20	0.09	-4.3	-17	2	IRF7304-ND	2.13	1.70	1.21
	-20	0.09	-4.3	-17	2	IRF7304TR-ND	4592.00/4,000		
	-30	0.1	-3.6	-14	2	IRF7306-ND	2.00	1.60	1.14
	-30	0.1	-3.6	-14	2	IRF7306TR-ND	4320.00/4,000		
	-20	0.058	-5.3	-21	2	IRF7314-ND	2.76	1.96	1.61
	-20	0.058	-5.3	-21	2	IRF7314TR-ND	6212.00/4,000		
	-30	0.058	-4.9	-30	2	IRF7316-ND	2.76	1.96	1.61
	-30	0.058	-4.9	-30	2	IRF7316TR-ND	6212.00/4,000		
	-20	0.018	-9	-71	2	IRF7324-ND	2.83	2.26	1.61
	-20	0.18	-2.9	-23	2	IRF7324D1-ND	1.03	.82	.56
	-55	0.105	-3.4	-27	2	IRF7342-ND	1.55	1.24	.88
13B	-55	0.105	-3.4	-27	2	IRF7342TR-ND	3348.00/4,000		
	-30	0.25	-2.3	-10	2	IRF9953-ND	1.75	1.40	1.00
SO-8 "Fetky™" Mosfet and Schottky Diode									
13D	-30	0.062	-4.7	-38	2	IRF7321D2-ND	1.48	1.18	.80
	-30	0.062	-4.7	-38	2	IRF7321D2TR-ND	3188.00/4,000		
SO-8 "Fetky™" Mosfet and Schottky Diode Logic Level									
13D	-20	0.09	-4.1	-18	2	IRF7422D2-ND	1.20	.85	.70
N-CHANNEL TYPES									
TO-220AB									
1	100	0.6	4.0	16	20	IRF510-ND	.77	.55	.45
	100	0.11	15.0	60	63	IRF530N-ND	1.25	.89	.73
	100	0.077	28	110	150	IRF540-ND	2.00	1.60	1.14
	100	0.052	27	110	94	IRF540N-ND	1.92	1.36	1.12
	200	1.5	2.5	10	20	IRF610-ND	1.08	.77	.63
	250	2	2.7	8	36	IRF614-ND	1.13	.90	.64
	200	0.8	5	20	40	IRF620-ND	1.32	.94	.77
	250	1.1	4.4	14	50	IRF624-ND	1.45	1.16	.83
	200	0.3	9.3	37	82	IRF630N-ND	1.05	.84	.74
	250	0.45	8.1	32	74	IRF634-ND	1.50	1.20	.86
	200	0.18	18	72	125	IRF640-ND	1.99	1.42	1.17
	200	0.15	18	72	150	IRF640N-ND	1.48	1.19	1.04
	250	0.28	14	56	125	IRF644-ND	3.10	2.48	1.77
	400	3.6	1.5	6	20	IRF710-ND	.94	.67	.55
	400	1.8	3	12	40	IRF720-ND	1.03	.74	.61
	400	1	5.5	22	74	IRF730-ND	1.37	.97	.80
	400	1	5.5	22	74	IRF730A-ND	1.43	1.14	.81
	450	1.2	4.9	20	74	IRF734-ND	1.60	1.28	.91
	400	0.55	10	40	125	IRF740-ND	2.11	1.50	1.24
	400	0.55	10	40	125	IRF740A-ND	2.20	1.76	1.25
	450	0.63	8.8	35	125	IRF744-ND	2.20	1.76	1.26
	500	3	2.5	10	40	IRF820-ND	1.06	.75	.62
	500	1.5	4.5	18	75	IRF830-ND	1.46	1.04	.86
	500	1.4	5	20	74	IRF830A-ND	1.53	1.22	.87
	500	0.85	8	32	125	IRF840-ND	2.16	1.53	1.26
	500	0.85	8	32	125	IRF840A-ND	2.25	1.80	1.28
	500	0.85	8	28	125	IRF840LC-ND	2.80	2.24	1.60
	60	0.012	81	330	170	IRF1010E-ND	3.24	2.30	1.89
	55	0.012	72	290	130	IRF1010N-ND	3.24	2.30	1.89
	40	0.009	100	400	170	IRF1104-ND	2.43	1.94	1.38
	100	0.036	36	140	120	IRF1310N-ND	3.36	2.38	1.96
	75	0.013	71	280	150	IRF2807-ND	2.78	1.98	1.63
	55	0.008	98	390	150	IRF3205-ND	6.24	4.42	3.64
	150	0.082	21	84	94	IRF3315-ND	2.23	1.59	1.31
	150	0.042	37	150	150	IRF3415-ND	4.03	2.86	2.36
	100	0.028	46	180	150	IRF3710-ND	5.52	3.91	3.22
	500	0.52	11	44	170	IRFB11N50A-ND	1.73	1.38	.97
	600	0.75	9.2	37	170	IRFB9N60A-ND	1.70	1.36	.97
	650	0.93	8.5	21	167	IRFB9N65A-ND	2.43	1.94	1.41
	600	4.4	2.2	6.8	50	IRFBC20-ND	1.99	1.42	1.17
	600	2.2	3.6	14	74	IRFBC30-ND	2.38	1.69	1.39
	600	2.2	3.6	14	74	IRFBC30A-ND	2.48	1.98	1.41
	600	1.2	6.2	25	125	IRFBC40-ND	3.73	2.98	2.13
	600	1.2	6.2	25	125	IRFBC40A-ND	3.73	2.98	2.12
	800	6.5	1.8	—	54	IRFBE20-ND	1.66	1.18	.97
	800	3	4.1	—	125	IRFBE30-ND	2.64	1.87	1.54
	900	8	1.7	—	54	IRFBF20-ND	1.87	1.33	1.10
	900	3.7	3.6	—	125	IRFBF30-ND	3.31	2.35	1.94
	1000	11	1.4	—	54	IRFBG20-ND	2.26	1.60	1.32
	1000	5	3.1	—	125	IRFBG30-ND	3.10	2.20	1.81
	100	0.20	7.2	38	27	IRFI520N-ND	1.22	.87	.72
	100	0.11	11	60	33	IRFI530N-ND	1.37	.97	.80
	100	0.052	18	110	42	IRFI540N-ND	2.04	1.45	1.19
	55	0.012	49	290	58	IRFI1010N-ND	3.36	2.38	1.96
	100	0.036	22	140	45	IRFI1310N-ND	3.48	2.47	2.03
	55	0.008	64	390	63	IRFI3205-ND	6.36	4.51	3.71
	60	0.071	14	68	29	IRFIZ24E-ND	1.08	.77	.63
	55	0.07	13	—	26	IRFIZ24N-ND	1.08	.77	.63
	60	0.042	21	100	37	IRFIZ34E-ND	1.27	.91	.75
	55	0.04	19	100	21	IRFIZ34N-ND	1.37	.97	.80
	55	0.024	31	160	45	IRFIZ44N-ND	1.63	1.16	.96
	55	0.02	33	180	45	IRFIZ46N-ND	2.11	1.50	1.24
	55	0.016	36	210	42	IRFIZ48N-ND	3.96	2.81	2.31
	60	0.2	10	40	36	IRFZ14-ND	.79	.57	.47
	50	0.05	30	—	—	IRFZ30-ND	1.30	1.04	.74
	60	0.05	30	120	88	IRFZ34-ND	1.30	1.04	.74
	60	0.042	28	112	68	IRFZ34E-ND	1.25	.89	.73
	55	0.04	26	100	56	IRFZ34N-ND	1.25	.89	.73
	50	0.028	35	—	—	IRFZ40-ND	1.58	1.26	.90
	60	0.023	48	192	110	IRFZ44E-ND	1.51	1.08	.89
	55	0.024	41	160	83	IRFZ44N-ND	1.51	1.08	.89
	60	0.0165	55	220	115	IRFZ44V-ND	1.51	1.21	1.06
	55	0.02	46	180	88	IRFZ46N-ND	1.99	1.42	1.17
	55	0.016	53	210	94	IRFZ48N-ND	3.84	2.72	2.24
	60	0.012	72	290	150	IRFZ48V-ND	2.15	1.72	1.51
TO-220AB Logic Level									
1	40	0.0065	130	520	200	IRL1004-ND	3.65	2.92	2.08
	30	0.007	100	400	130	IRL2203N-ND	3.60	2.55	2.10
	55	0.008	104	360	200	IRL2505-ND	6.50	5.20	3.71
	100	0.026	55	190	200	IRL2910-ND	5.75	4.60	3.29
	20	0.013	61	240	89	IRL3102-ND	1.70	1.36	.97
	30	0.014	64	220	110	IRL3103-ND	2.64	1.87	1.54
	30	0.014	64	220	89	IRL3103D1-ND	3.60	2.55	2.10
	20	0.016	48	190	69	IRL3202-ND	1.40	1.12	.80
	20	0.02	39	160	57	IRL3302-ND	1.40	1.12	.81
	30	0.026	38	140	68	IRL3303-ND	1.87	1.33	1.10
	20	0.007	110	420	140	IRL3502-ND	2.70	2.16	1.54
	55	0.01	77	310	130	IRL3705N-ND	3.60	2.55	2.10
	30	0.006	120	470	150	IRL3803-ND	6.96	4.93	4.06
	100	0.54	5.6	16	43	IRL510-ND	.64	.55	.45
	100	0.18	10	35	47	IRL520N-ND	.86	.62	.51

(Continued)

N and P Channel HEXFETs *(Cont.)*

Fig.	VDS (V)	RDS (on) (Ω)	ID Cont. (A) 25°C	IDM (A)	PD Max. (W)	Digi-Key Part No.	Price Each 1	10	100
1	100	0.1	15	60	63	IRL530N-ND	1.13	.80	.66
	100	0.044	30	120	94	IRL540N-ND	1.99	1.42	1.17
	200	0.8	5.2	21	50	IRL620-ND	1.45	1.16	.83
	200	0.4	9	36	74	IRL630-ND	1.88	1.50	1.07
	200	0.18	17	68	125	IRL640-ND	2.25	1.80	1.29
	100	0.18	7.7	35	27	IRLI520N-ND	1.20	.85	.70
	100	0.1	11	60	33	IRLI530N-ND	1.25	.89	.73
	100	0.044	20	120	42	IRLI540N-ND	2.11	1.50	1.24
	30	0.007	61	400	47	IRLI2203N-ND	3.72	2.64	2.17
	55	0.01	52	310	58	IRLI3705N-ND	3.72	2.64	2.17
	30	0.006	76	470	63	IRLI3803-ND	7.08	5.02	4.13
	55	0.06	14	72	26	IRLIZ24N-ND	1.44	1.02	.84
	55	0.035	22	110	37	IRLIZ34N-ND	1.49	1.06	.87
	55	0.022	30	160	45	IRLIZ44N-ND	1.85	1.31	1.08
	60	0.2	10	40	43	IRLZ14-ND	.72	.62	.51
	55	0.074	18	72	45	IRLZ24N-ND	1.32	.94	.77
	55	0.042	27	110	56	IRLZ34N-ND	1.37	.97	.80
	60	0.028	50	200	150	IRLZ44-ND	1.80	1.44	1.03
	55	0.022	41	160	83	IRLZ44N-ND	1.73	1.23	1.01
TO-220 Fullpak									
2	100	0.54	4.5	18	27	IRFI510G-ND	1.20	.96	.68
	100	0.16	9.7	39	42	IRFI530G-ND	1.43	1.14	.81
	100	0.077	17	68	48	IRFI540G-ND	2.13	1.70	1.21
	250	2	2.1	8.4	23	IRFI614G-ND	1.25	1.00	.71
	200	0.8	4.1	16	30	IRFI620G-ND	1.50	1.20	.86
	250	1.1	3.4	14	30	IRFI624G-ND	1.58	1.26	.90
	200	0.4	5.9	24	35	IRFI630G-ND	1.58	1.26	.90
	250	0.45	5.6	22	35	IRFI634G-ND	1.63	1.30	.93
	200	0.18	9.8	39	40	IRFI640G-ND	2.20	1.76	1.26
	250	0.28	7.9	32	40	IRFI644G-ND	3.23	2.58	1.84
	400	1.8	2.6	10	30	IRFI720G-ND	1.20	.96	.84
	400	1	3.7	15	35	IRFI730G-ND	1.55	1.24	.89
	450	0.63	4.9	20	40	IRFI744G-ND	2.33	1.86	1.33
	500	3	2.1	8.4	30	IRFI820G-ND	1.23	.98	.70
	500	1.5	3.1	12	35	IRFI830G-ND	1.65	1.32	.94
	500	0.85	4.6	18	40	IRFI840G-ND	2.38	1.90	1.36
	500	0.85	4.5	18	40	IRFI840GLC-ND	2.93	2.34	1.67
	650	0.93	5.1	21	60	IRFIB5N65A-ND	2.55	2.04	1.47
	600	0.75	5.5	37	60	IRFIB6N60A-ND	2.15	1.72	1.23
	500	0.52	6.6	44	60	IRFIB7N50A-ND	2.18	1.74	1.24
	600	4.4	1.7	6.8	30	IRFIBC20G-ND	2.20	1.76	1.26
	600	2.2	2.5	10	35	IRFIBC30G-ND	2.60	2.08	1.49
	600	1.2	3.5	14	40	IRFIBC40G-ND	3.85	3.08	2.20
	800	6.5	1.4	5.6	30	IRFIBE20G-ND	1.85	1.48	1.06
	800	3	2.1	8.5	35	IRFIBE30G-ND	2.88	2.30	1.64
	900	8	1.2	4.8	30	IRFIBF20G-ND	2.08	1.66	1.19
	900	3.7	1.9	7.6	35	IRFIBF30G-ND	3.58	2.86	2.04
	60	0.2	8	32	27	IRFIZ14G-ND	1.15	.92	.66
	60	0.1	14	56	37	IRFIZ24G-ND	1.13	.90	.64
	60	0.05	20	80	42	IRFIZ34G-ND	1.43	1.14	.81
	100	0.27	7.2	29	37	IRLI520G-ND	1.23	.98	.70
	100	0.16	9.7	39	42	IRLI530G-ND	1.30	1.04	.74
	200	0.8	4.1	16	30	IRLI620G-ND	1.58	1.26	.90
	60	0.028	30	120	48	IRLIZ44G-ND	2.48	1.98	1.41
TO-220 Fullpak Logic-Level									
2	200	0.4	6.2	25	35	IRLI630G-ND	2.00	1.60	1.14
	200	0.18	9.9	40	40	IRLI640G-ND	2.38	1.90	1.36
TO-220-5 Current Sense									
14	100	0.16	14	56	88	IRC530-ND	2.35	1.88	1.34
	100	0.077	28	110	150	IRC540-ND	3.15	2.52	1.80
	200	0.18	18	72	125	IRC640-ND	3.28	2.62	1.87
	55	0.04	26	68	60	IRCZ24-ND	1.98	1.58	1.13
	60	0.028	50	210	150	IRCZ44-ND	3.20	2.56	1.83
TO-247AC									
3	55	0.024	49	180	100	IRFP044N-ND	3.10	2.20	1.81
	55	0.016	64	210	140	IRFP048N-ND	4.34	3.08	2.54
	60	0.014	70	360	230	IRFP054-ND	7.30	5.84	4.17
	55	0.012	72	290	130	IRFP054N-ND	7.01	4.97	4.09
	60	0.009	70	520	300	IRFP064-ND	13.75	11.00	7.86
	55	0.008	98	390	150	IRFP064N-ND	13.20	9.35	7.70
	100	0.052	27	110	94	IRFP140N-ND	3.55	2.52	2.08
	100	0.055	41	160	230	IRFP150-ND	5.78	4.62	3.30
	100	0.036	39	140	140	IRFP150N-ND	5.54	3.93	3.24
	500	0.23	22	88	277	IRFP22N50A-ND	4.33	3.46	2.45
	200	0.18	20	—	150	IRFP240-ND	4.01	2.84	2.34
	250	0.28	15	—	150	IRFP244-ND	4.56	3.23	2.66
	200	0.075	30	120	214	IRFP250N-ND	3.33	2.66	2.33
	250	0.14	23	92	190	IRFP254-ND	6.20	4.96	3.54
	200	0.04	50	200	300	IRFP260N-ND	4.99	3.99	3.50
	250	.075	38	—	280	IRFP264-ND	10.54	7.47	6.15
	400	0.55	11	—	150	IRFP340-ND	4.44	3.15	2.59
	450	0.63	9.5	38	150	IRFP344-ND	4.08	3.26	2.33
	400	0.3	16	64	190	IRFP350-ND	6.20	4.96	3.54
	400	0.35	14	56	190	IRFP354-ND	6.20	4.96	3.54
	400	0.2	23	92	280	IRFP360-ND	11.50	8.15	6.71
	400	0.2	23	92	280	IRFP360LC-ND	12.25	9.80	7.00
	100	0.025	57	180	200	IRFP3710-ND	6.25	5.00	3.57
	500	.85	8.8	—	150	IRFP440-ND	6.60	4.68	3.85
	500	0.6	11	44	180	IRFP448-ND	6.88	5.50	3.93
	500	0.4	14	56	190	IRFP450A-ND	5.38	4.30	3.07
	500	0.4	14	—	190	IRFP450IR-ND	5.16	3.66	3.01
	500	0.27	20	80	280	IRFP460-ND	9.91	7.03	5.79
	500	0.27	20	80	280	IRFP460A-ND	10.33	8.26	5.90
	600	2.2	4.3	17	100	IRFPC30-ND	5.00	4.00	2.86
	600	1.2	6.8	27	150	IRFPC40-ND	7.20	5.76	4.11
	600	0.82	8.9	36	170	IRFPC48-ND	12.73	10.18	7.27
	600	0.6	11	44	180	IRFPC50-ND	11.23	7.96	6.56
	600	0.58	11	44	180	IRFPC50A-ND	11.70	9.36	6.69
	600	0.4	16	64	280	IRFPC60-ND	16.13	12.90	9.21
	600	0.4	16	64	280	IRFPC60LC-ND	16.80	13.44	9.60
	800	3	4.1	16	125	IRFPE30-ND	7.03	5.62	4.01
	800	2	5.4	22	150	IRFPE40-ND	8.15	6.52	4.66
	800	1.2	7.8	—	190	IRFPE50-ND	10.63	7.54	6.21
3	800	3	4.1	16	125	IRFPF30-ND	7.20	5.76	4.11
	900	2.5	4.7	19	150	IRFPF40-ND	9.53	7.62	5.44
	900	1.6	6.7	27	190	IRFPF50-ND	14.45	11.56	8.26
	1000	5.0	3.1	—	125	IRFPG30-ND	7.44	5.27	4.34
	1000	3.5	4.3	17	150	IRFPG40-ND	10.00	8.00	5.71
	1000	2	6.1	—	190	IRFPG50-ND	13.49	9.56	7.87
TO-262									
4	500	0.85	8	28	125	IRF840L-ND	2.75	2.20	1.57
	55	0.022	49	160	110	IRFZ44NL-ND	2.03	1.62	1.16
	100	0.1	17	60	79	IRL530NL-ND	1.88	1.50	1.07
TO-262 Logic Level									
4	600	0.75	9.2	37	170	IRFSL9N60A-ND	2.28	1.82	1.60
	30	0.014	64	220	110	IRL3103L-ND	3.25	2.60	1.86
	60	0.2	10	40	43	IRLZ14L-ND	1.15	.92	.66
I-PAK									
5	30	0.031	33	120	57	IRFU3303-ND	1.10	.88	.63
	60	0.2	7.7	—	—	IRFU014-ND	.88	.70	.50
	50	0.1	15	—	—	IRFU020-ND	1.20	.96	.69
	60	0.1	14	—	—	IRFU024-ND	1.20	.96	.69
	55	0.075	17	68	45	IRFU024N-ND	1.20	.96	.69
	100	0.27	7.7	31	42	IRFU120-ND	1.10	.88	.63
	100	0.2	9.4	38	48	IRFU120N-ND	1.10	.88	.63
	200	1.5	2.6	10	25	IRFU210-ND	.98	.78	.56
	200	0.8	4.8	19	42	IRFU220-ND	1.10	.88	.63
	400	3.6	1.7	6	25	IRFU310-ND	1.08	.86	.61
	400	1.8	3.1	12	42	IRFU320-ND	1.35	1.08	.77
	500	3	2.4	8	42	IRFU420-ND	1.33	1.06	.76
I-PAK Logic-Level									
5	30	0.019	55	220	107	IRLU3103-ND	3.00	2.40	1.71
	30	0.031	35	140	68	IRLU3303-ND	1.68	1.34	.96
	30	0.045	23	96	45	IRLU2703-ND	.85	.68	.49
	55	0.065	17	72	45	IRLU024N-ND	1.13	.90	.64
	60	0.1	14	56	42	IRLR024-ND	1.13	.90	.64
	60	0.2	7.7	31	25	IRLR014-ND	1.00	.80	.57
	60	0.2	7.7	—	—	IRLU014-ND	1.00	.80	.57
	100	0.185	10	35	48	IRLU120N-ND	1.10	.88	.63
	100	0.105	17	60	79	IRLU3410-ND	1.45	1.16	.83
Super-247									
15	500	0.13	36	144	446	IRFPS37N50A-ND	10.45	8.36	5.96
4-Pin Dip									
6	600	4.4	0.32	2.6	1	IRFDC20-ND	1.83	1.46	1.04
	50	0.2	1.7	—	—	IRFD010-ND	.88	.70	.50
	60	0.2	1.7	14	1.3	IRFD014-ND	.88	.70	.50
	50	0.1	2.4	—	—	IRFD020-ND	1.38	1.10	.79
	60	0.1	2.5	20	1.3	IRFD024-ND	1.38	1.10	.79
	100	0.6	1.0	8.0	1.0	IRFD110-ND	.74	.53	.44
	100	0.3	1.3	5.2	1.0	IRFD120-ND	.94	.67	.55
	200	1.5	0.6	2.5	1.0	IRFD210-ND	.96	.68	.56
	250	2	0.45	3.6	1	IRFD214-ND	1.00	.80	.57
	200	0.8	0.8	6.4	1.0	IRFD220-ND	1.03	.74	.61
	250	1.1	0.63	5	1	IRFD224-ND	1.08	.86	.61
	400	3.6	0.35	2.8	1	IRFD310-ND	1.18	.94	.67
	400	1.8	0.49	3.9	1	IRFD320-ND	1.58	1.26	.90
	500	3	0.46	3	1	IRFD420-ND	1.50	1.20	.86
4-Pin Dip Logic Level									
6	60	.20	1.7	14	1.3	IRLD014-ND	.90	.77	.63
	60	.10	2.5	20	1.3	IRLD024-ND	1.26	1.08	.89
	100	.54	1	8	1.3	IRLD110-ND	.84	.72	.59
	100	.27	1.3	10	1.3	IRLD120-ND	.96	.82	.68
SOT-227									
16	100	0.0065	180	720	480	FB180SA10-ND	35.85	28.68	20.44
SMD-220									
7	30	0.014	54	220	70	IRL3103D1S-ND	3.60	2.55	2.10
	30	0.026	38	140	68	IRL3303S-ND	2.35	1.67	1.38
	60	0.012	83	330	170	IRF1010ES-ND	3.88	3.10	2.21
	55	0.011	84	290	170	IRF1010NS-ND	3.63	2.90	2.07
	100	0.036	42	140	160	IRF1310NS-ND	3.75	3.00	2.14
	100	0.036	42	140	160	IRF1310NSTRL-ND	1620.00/800		
	75	0.013	71	280	150	IRF2807S-ND	2.90	2.06	1.70
	55	0.008	110	390	200	IRF3205S-ND	6.72	4.76	3.92
	55	0.008	110	390	200	IRF3205STRL-ND	3024.00/800		
	150	0.082	21	84	94	IRF3315S-ND	2.42	1.72	1.42
	150	0.042	43	150	200	IRF3415S-ND	4.13	2.93	2.41
	150	0.042	43	150	200	IRF3415STRL-ND	1857.60/800		
	150	0.045	41	164	200	IRF3515S-ND	2.88	2.30	1.64
	100	0.025	57	180	200	IRF3710S-ND	6.00	4.25	3.50
	100	0.025	57	180	200	IRF3710STRR-ND	2700.00/800		
	100	0.54	5.6	20	43	IRF510S-ND	1.08	.86	.61
	100	0.2	9.7	38	48	IRF520NS-ND	1.18	.94	.67
	100	0.11	17	80	79	IRF530NS-ND	1.38	1.10	.79
	100	0.11	17	80	79	IRF530NSTRL-ND	594.40/800		
	100	0.11	17	80	79	IRF530NSTRR-ND	594.40/800		
	100	0.16	14	56	88	IRF530S-ND	1.38	1.10	.79
	100	0.16	14	56	88	IRF530STRR-ND	594.40/800		
	100	0.052	33	110	140	IRF540NS-ND	2.25	1.80	1.29
	100	0.052	33	110	140	IRF540NSTRL-ND	972.00/800		
	100	0.052	33	110	140	IRF540NSTRR-ND	972.00/800		
	100	0.077	28	110	150	IRF540S-ND	2.25	1.80	1.28
	100	0.077	28	110	150	IRF540STRL-ND	972.00/800		
	100	0.077	28	110	150	IRF540STRR-ND	972.00/800		
	200	1.5	3.3	10	36	IRF610S-ND	1.38	1.10	.79
	250	2	2.7	8	36	IRF614S-ND	1.38	1.10	.79
	200	0.8	5.2	18	50	IRF620S-ND	1.63	1.30	.93
	250	1.1	4.4	—	50	IRF624S-ND	1.63	1.16	.96
	200	0.3	9.3	37	82	IRF630NS-ND	1.06	.85	.75
	200	0.3	9.3	37	82	IRF630NSTRL-ND	459.20/800		
	250	.45	8.1	—	74	IRF634S-ND	1.68	1.19	.98
	200	0.15	18	72	150	IRF640NS-ND	1.46	1.17	1.03
	200	0.15	18	72	150	IRF640NSTRL-ND	629.60/800		

(Continued)

N and P Channel HEXFETs *(Cont.)*

Fig.	VDS (V)	RDS (on) (Ω)	ID Cont. (A) 25°C	IDM (A)	PD Max. (W)	Digi-Key Part No.	Price Each 1	10	100
7	200	0.15	18	72	150	IRF640NSTRR-ND	629.60/800		
	250	0.28	14	56	125	IRF644S-ND	3.22	2.28	1.88
	250	0.28	14	56	125	IRF644STRL-ND	1447.20/800		
	400	3.6	2	6	36	IRF710S-ND	1.23	.98	.70
	400	1.8	3.3	—	50	IRF720S-ND	1.27	.91	.75
	400	1	5.5	—	74	IRF730S-ND	1.61	1.14	.94
	400	1	5.5	22	74	IRF730AS-ND	1.68	1.34	.95
	400	0.55	10	40	125	IRF740AS-ND	2.45	1.96	1.40
	400	0.55	10	—	125	IRF740S-ND	2.35	1.67	1.38
	400	0.55	10	40	125	IRF740STRL-ND	1058.40/800		
	500	3	2.5	—	50	IRF820S-ND	1.30	.92	.76
	500	1.5	4.5	—	74	IRF830S-ND	1.70	1.21	1.00
	500	1.4	5	20	74	IRF830AS-ND	1.78	1.42	1.01
	500	.85	8	—	125	IRF840S-ND	2.40	1.70	1.40
	500	0.85	8	32	125	IRF840AS-ND	2.50	2.00	1.43
	100	0.6	6.8	-27	60	IRF9520S-ND	1.75	1.40	1.00
	100	0.6	6.8	-27	60	IRF9520STRL-ND	756.00/800		
	600	2.2	3.6	14	74	IRFBC30AS-ND	2.73	2.18	1.55
	600	2.2	3.6	14	74	IRFBC30S-ND	2.73	2.18	1.56
	600	1.2	6.2	25	125	IRFBC40AS-ND	3.98	3.18	2.27
	600	1.2	6.2	25	130	IRFBC40S-ND	3.98	3.18	2.27
	900	8	1.7	6.8	54	IRFBF20S-ND	1.98	1.58	1.39
	500	0.52	11	44	170	IRFS11N50A-ND	1.85	1.48	1.05
	60	0.2	10	40	43	IRFZ14S-ND	1.08	.86	.61
	55	0.07	17	68	45	IRFZ24NS-ND	1.18	.94	.67
	60	0.1	17	68	60	IRFZ24S-ND	1.18	.94	.67
	55	0.04	29	100	68	IRFZ34NS-ND	1.55	1.24	.89
	55	0.04	29	100	68	IRFZ34NSTRL-ND	669.60/800		
	55	0.04	29	100	68	IRFZ34NSTRR-ND	669.60/800		
	60	0.023	48	192	110	IRFZ44ES-ND	1.63	1.16	.96
	60	0.023	48	192	110	IRFZ44ESTRR-ND	734.40/800		
	55	0.022	49	160	110	IRFZ44NS-ND	2.00	1.60	1.14
	55	0.022	49	160	110	IRFZ44NSTRL-ND	864.00/800		
	60	0.028	50	200	150	IRFZ44S-ND	2.00	1.60	1.14
	60	0.028	50	200	150	IRFZ44STRR-ND	864.00/800		
	55	0.02	53	180	120	IRFZ46NS-ND	2.33	1.86	1.33
	55	0.016	64	210	140	IRFZ48NS-ND	4.25	3.40	2.43
	55	0.016	64	210	140	IRFZ48NSTRL-ND	1836.00/800		
	55	0.016	64	210	140	IRFZ48NSTRR-ND	1836.00/800		
SMD-220 Logic Level									
7	20	0.009	77	308	87	IRF3704S-ND	4.38	3.50	3.07
	40	0.0065	130	520	200	IRL1004S-ND	3.80	3.04	2.16
	30	0.007	116	400	170	IRL2203NS-ND	4.00	3.20	2.29
	30	0.007	116	400	170	IRL2203NSTRL-ND	1728.00/800		
	55	0.008	104	360	200	IRL2505S-ND	7.00	5.60	4.00
	100	0.026	55	190	200	IRL2910S-ND	6.25	5.00	3.57
	20	0.013	61	240	89	IRL3102S-ND	1.85	1.48	1.06
	30	0.014	64	220	110	IRL3103S-ND	3.12	2.21	1.82
	30	0.014	64	220	110	IRL3103STRL-ND	1404.00/800		
	20	0.016	48	190	69	IRL3202S-ND	1.55	1.24	.89
	20	0.02	39	160	57	IRL3302S-ND	1.30	1.04	.74
	20	0.007	110	420	140	IRL3502S-ND	1.90	1.52	1.33
	20	0.007	110	420	140	IRL3502STRL-ND	1220.80/800		
	55	0.01	89	310	170	IRL3705NS-ND	4.00	3.20	2.29
	55	0.01	89	310	170	IRL3705NSTRL-ND	1728.00/800		
	30	0.006	140	470	200	IRL3803S-ND	7.44	5.27	4.34
	30	0.006	140	470	200	IRL3803STRL-ND	3348.00/800		
	100	0.18	10	35	48	IRL520NS-ND	1.30	1.04	.74
	100	0.18	10	35	48	IRL520NSTRL-ND	561.60/800		
	100	0.1	17	60	79	IRL530NS-ND	1.63	1.30	.93
	100	0.1	17	60	79	IRL530NSTRL-ND	702.40/800		
	100	0.1	17	80	79	IRL530NSTRR-ND	702.40/800		
	100	0.16	15	60	88	IRL530STRR-ND	702.40/800		
	100	0.044	36	120	140	IRL540NS-ND	2.25	1.80	1.29
	100	0.044	36	120	140	IRL540NSTRL-ND	972.00/800		
	100	0.077	28	110	150	IRL540S-ND	2.25	1.80	1.29
	200	0.8	5.2	21	50	IRL620S-ND	1.70	1.36	.97
	200	0.4	9	36	74	IRL630S-ND	2.13	1.70	1.21
	200	0.4	9	36	74	IRL630STRL-ND	918.40/800		
	200	0.18	17	68	125	IRL640S-ND	2.63	2.10	1.50
	60	0.2	10	40	43	IRLZ14S-ND	1.15	.92	.66
	55	0.06	18	72	45	IRLZ24NS-ND	1.63	1.30	.93
	55	0.035	30	110	68	IRLZ34NS-ND	1.68	1.34	.96
	55	0.035	30	110	68	IRLZ34NSTRL-ND	724.00/800		
	55	0.022	47	160	110	IRLZ44NS-ND	2.00	1.60	1.14
	55	0.022	47	160	110	IRLZ44NSTRL-ND	864.00/800		
	55	0.022	47	160	110	IRLZ44NSTRR-ND	864.00/800		
	60	0.028	50	200	150	IRLZ44S-ND	2.00	1.60	1.14
	60	0.028	50	200	150	IRLZ44STRR-ND	864.00/800		
D-Pak									
8	60	0.2	7.7	31	25	IRFR014TR-ND	946.00/2,000		
	50	0.1	15	—	—	IRFR020-ND	1.20	.96	.69
	50	0.1	15	—	—	IRFR020TR-ND	1296.00/2,000		
	50	0.1	15	—	—	IRFR020TRL-ND	1944.00/3,000		
	60	0.075	17	68	45	IRFR024-ND	1.20	.96	.69
	60	0.075	17	68	45	IRFR024TR-ND	1296.00/2,000		
	55	0.075	16	68	38	IRFR024N-ND	1.15	.82	.68
	55	0.075	16	68	38	IRFR024NTR-ND	1296.00/2,000		
	55	0.075	16	68	38	IRFR024NTRL-ND	1944.00/3,000		
	100	0.54	4.3	17	25	IRFR110TR-ND	1080.00/2,000		
	55	0.027	37	160	107	IRFR1205-ND	2.64	1.87	1.54
	55	0.027	37	160	107	IRFR1205TR-ND	2970.00/2,000		
	100	0.27	7.7	31	42	IRFR120-ND	1.10	.88	.63
	100	0.27	7.7	31	42	IRFR120TR-ND	1188.00/2,000		
	100	0.27	7.7	31	42	IRFR120TRL-ND	1782.00/3,000		
	100	0.21	9.4	38	48	IRFR120N-ND	1.06	.75	.62
	100	0.21	9.4	38	48	IRFR120NTR-ND	1188.00/2,000		
	100	0.21	9.4	38	48	IRFR120NTRL-ND	1782.00/3,000		
	600	7	1.4	5.6	36	IRFR1N60A-ND	.73	.58	.41
	200	1.5	2.6	10	25	IRFR210-ND	.98	.78	.56
	250	2	2.2	8.8	25	IRFR214-ND	1.00	.80	.57
	200	0.8	4.8	19	42	IRFR220-ND	1.10	.88	.66
	200	0.8	4.8	19	42	IRFR220TR-ND	1188.00/2,000		
	200	0.8	4.8	19	42	IRFR220TRL-ND	1782.00/3,000		
	250	1.1	3.8	15	42	IRFR224-ND	1.13	.90	.64
8	250	1.1	3.8	15	42	IRFR224TR-ND	1216.00/2,000		
	250	1.1	3.8	15	42	IRFR224TRL-ND	1824.00/3,000		
	400	3.6	1.7	6	25	IRFR310-ND	1.08	.86	.61
	400	3.6	1.7	6	25	IRFR310TR-ND	1162.00/2,000		
	400	1.8	3.1	12	42	IRFR320-ND	1.35	1.08	.77
	400	1.8	3.1	12	42	IRFR320TR-ND	1458.00/2,000		
	30	0.031	33	120	57	IRFR3303-ND	1.10	.88	.63
	30	0.031	33	120	57	IRFR3303TR-ND	1188.00/2,000		
	100	0.115	16	60	79	IRFR3910-ND	1.87	1.33	1.10
	100	0.115	16	60	79	IRFR3910TR-ND	2106.00/2,000		
	100	0.115	16	60	79	IRFR3910TRL-ND	3159.00/3,000		
	55	0.045	27	100	68	IRFR4105-ND	2.63	2.10	1.50
	500	3	2.4	8	42	IRFR420-ND	1.33	1.06	.76
	500	3	2.4	8	42	IRFR420TR-ND	1432.00/2,000		
	600	4.4	2	8	42	IRFRC20-ND	2.00	1.60	1.14
	600	4.4	2	8	42	IRFRC20TR-ND	2160.00/2,000		
D-PAK Logic Level									
8	60	0.2	7.7	31	25	IRLR014TR-ND	1080.00/2,000		
	55	0.065	17	72	45	IRLR024N-ND	1.08	.77	.63
	55	0.065	17	72	45	IRLR024NTR-ND	1216.00/2,000		
	60	0.1	14	56	42	IRLR024TR-ND	1216.00/2,000		
	100	0.54	4.3	17	25	IRLR110-ND	1.08	.86	.61
	100	0.54	4.3	17	25	IRLR110TR-ND	1162.00/2,000		
	100	0.54	4.3	17	25	IRLR110TRL-ND	1743.00/3,000		
	100	0.27	7.7	31	42	IRLR120-ND	1.10	.88	.63
	100	0.27	7.7	31	42	IRLR120TR-ND	1188.00/2,000		
	100	0.185	11	35	48	IRLR120N-ND	1.06	.75	.62
	100	0.185	11	35	48	IRLR120NTR-ND	1188.00/2,000		
	100	0.185	11	35	48	IRLR120NTRL-ND	1782.00/3,000		
	30	0.045	23	96	45	IRLR2703-ND	.85	.68	.49
	55	0.027	36	160	110	IRLR2905-ND	2.64	1.87	1.54
	55	0.027	36	160	110	IRLR2905TR-ND	2970.00/2,000		
	30	0.019	55	220	107	IRLR3103TR-ND	3240.00/2,000		
	30	0.031	35	140	68	IRLR3303-ND	1.68	1.34	.96
	30	0.031	35	140	68	IRLR3303TR-ND	1810.00/2,000		
	100	0.105	17	60	79	IRLR3410-ND	1.45	1.16	.83
	100	0.105	17	60	79	IRLR3410TR-ND	1566.00/2,000		
Micro-3 (SOT-23) Logic Level									
9	20	0.25	1.2	7.4	540	IRLML2402CT-ND	.66	.50	.39
	20	0.25	1.2	7.4	540	IRLML2402TR-ND	891.00/3,000		
	20	0.045	4.2	33	1.25	IRLML2502CT-ND	.66	.50	.39
	20	0.045	4.2	33	1.25	IRLML2502TR-ND	891.00/3,000		
	30	0.25	1.2	7.3	540	IRLML2803CT-ND	.60	.45	.35
	30	0.25	1.2	7.3	540	IRLML2803TR-ND	810.00/3,000		
Micro-6 Logic Level									
10	30	0.1	3.2	18	1.7	IRLMS1503CT-ND	.87	.66	.51
	30	0.1	3.2	18	1.7	IRLMS1503TR-ND	1176.00/3,000		
	20	0.1	3.2	18	1.7	IRLMS1902CT-ND	.96	.72	.56
	20	0.1	3.2	18	1.7	IRLMS1902TR-ND	1296.00/3,000		
Micro-8 Logic Level									
11A	20	0.035	5.7	30	1.8	IRF7601CT-ND	2.16	1.62	1.26
	20	0.035	5.7	30	1.8	IRF7601TR-ND	3888.00/4,000		
	30	0.035	5.6	30	1.8	IRF7603CT-ND	1.92	1.44	1.12
	30	0.035	5.6	30	1.8	IRF7603TR-ND	3456.00/4,000		
Micro-8 Dual Logic Level									
11B	20	0.135	2.4	19	1.25	IRF7501CT-ND	1.89	1.42	1.11
	20	0.135	2.4	19	1.25	IRF7501TR-ND	3404.00/4,000		
	30	0.135	2.4	14	1.25	IRF7503CT-ND	1.74	1.31	1.02
	30	0.135	2.4	14	1.25	IRF7503TR-ND	3132.00/4,000		
SOT-223									
12	60	0.2	2.7	22	3.1	IRFL014-ND	1.30	1.04	.74
	60	0.2	2.7	22	3.1	IRFL014TR-ND	1755.00/2,500		
	100	0.54	1.5	12	3.1	IRFL110-ND	1.20	.96	.69
	100	0.54	1.5	12	3.1	IRFL110TR-ND	1620.00/2,500		
	200	1.5	0.96	7.7	3.1	IRFL210-ND	1.30	1.04	.74
	200	1.5	0.96	7.7	3.1	IRFL210TR-ND	1755.00/2,500		
	250	2	0.79	6.3	3.1	IRFL214-ND	1.40	1.12	.80
	55	0.045	3.7	30	1	IRFL4105CT-ND	2.10	1.58	1.23
	55	0.045	3.7	30	1	IRFL4105TR-ND	2187.50/2,500		
	100	0.2	1.6	13	1	IRFL4310CT-ND	3.21	2.41	1.88
	100	0.2	1.6	13	1	IRFL4310TR-ND	1875.00/2,500		
	55	0.04	3.8	30	1	IRLL2705CT-ND	2.10	1.58	1.23
	55	0.04	3.8	30	1	IRLL2705TR-ND	2187.50/2,500		
	30	0.031	4.6	37	1	IRLL3303CT-ND	3.78	2.84	2.21
	30	0.031	4.6	37	1	IRLL3303TR-ND	2343.75/2,500		
SOT-223 Logic-Level									
12	60	0.2	2.7	22	3.1	IRLL014-ND	1.38	1.10	.79
	60	0.2	2.7	22	3.1	IRLL014TR-ND	1857.50/2,500		
	55	0.14	2	16	2.1	IRLL014N-ND	.68	.54	.39
	55	0.14	2	16	2.1	IRLL014NTR-ND	912.50/2,500		
	100	0.54	1.5	12	3.1	IRLL110-ND	1.30	1.04	.74
	100	0.54	1.5	12	3.1	IRLL110TR-ND	1755.00/2,500		
SO-8									
13A	30	0.03	7	37	2.5	IRF9410-ND	1.80	1.44	1.03
SO-8 Logic Level									
13A	30	0.03	7.3	58	2.5	IRF7201-ND	1.73	1.23	1.01
	30	0.03	7.3	58	2.5	IRF7201TR-ND	3888.00/4,000		
	20	0.022	8.7	35	2.5	IRF7401-ND	2.38	1.90	1.36
	20	0.022	8.7	35	2.5	IRF7401TR-ND	5132.00/4,000		
	30	0.022	8.5	34	2.5	IRF7403-ND	2.25	1.80	1.29
	30	0.011	13	58	2.5	IRF7413-ND	2.20	1.87	1.54
	30	0.011	13	58	2.5	IRF7413TR-ND	5940.00/4,000		
	30	0.0075	15	120	2.5	IRF7455-ND	1.53	1.22	.87
	30	0.0075	15	120	2.5	IRF7455TR-ND	3296.00/4,000		
	20	0.0065	16	130	2.5	IRF7456-ND	1.58	1.26	.90
	20	0.0065	16	130	2.5	IRF7456TR-ND	3404.00/4,000		

(Continued)

N and P Channel HEXFETs *(Cont.)*

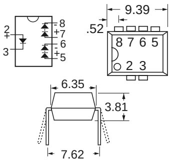
Fig.	VDS (V)	RDS (on) (Ω)	ID Cont. (A) 25°C	IDM (A)	PD Max. (W)	Digi-Key Part No.	Price Each 1	10	100
13A	30	0.008	14	110	2.5	IRF7463-ND	1.55	1.24	.88
	20	0.03	5.4	40	1.3	IRF7530CT-ND	1.44	1.08	.84
	20	0.03	5.4	40	1.3	IRF7530TR-ND	2592.00/4,000		
	30	0.011	13	100	2.5	IRF7805-ND	2.00	1.60	1.09
	30	0.011	13	100	2.5	IRF7805TR-ND	4320.00/4,000		
	30	25	8.3	66	2.5	IRF7807-ND	1.13	.90	.61
	30	25	8.3	66	2.5	IRF7807TR-ND	2432.00/4,000		
	28	0.012	11.4	100	2.5	IRF7809-ND	3.25	2.60	1.77
	28	0.012	11.4	100	2.5	IRF7809A-ND	3.00	2.40	1.63
	28	0.012	11.4	100	2.5	IRF7811-ND	2.75	2.20	1.50
	28	0.012	11.4	100	2.5	IRF7811A-ND	2.50	2.00	1.36
	28	0.012	11.4	100	2.5	IRF7811ATR-ND	5400.00/4,000		
	30	0.0135	10	50	2.5	SI4410DY-ND	2.83	2.26	1.61
SO-8 Dual Logic Level									
13B	20	0.1	3.5	14	2.0	IRF7101-ND	1.30	1.11	.91
	20	0.1	3.5	14	2.0	IRF7101TR-ND	3512.00/4,000		
	50	0.13	3.0	10	2.0	IRF7103-ND	1.40	1.19	.98
	50	0.13	3.0	10	2.0	IRF7103TR-ND	3780.00/4,000		
	20	0.05	5.2	21	2.0	IRF7301-ND	2.13	1.70	1.21
	20	0.05	5.2	21	2.0	IRF7301TR-ND	4592.00/4,000		
	30	0.05	4.9	20	2.0	IRF7303-ND	2.00	1.60	1.14
	30	0.05	4.9	20	2.0	IRF7303TR-ND	4320.00/4,000		
	20	0.029	6.6	26	2.0	IRF7311-ND	2.64	1.87	1.54
	20	0.029	6.6	26	2.0	IRF7311TR-ND	5940.00/4,000		
	30	0.029	6.5	30	2.5	IRF7313-ND	2.64	1.87	1.54
	30	0.029	6.5	30	2.5	IRF7313TR-ND	5940.00/4,000		
	55	0.05	4.7	38	2.0	IRF7341-ND	1.55	1.24	.88
	55	0.05	4.7	38	2.0	IRF7341TR-ND	3348.00/4,000		
	30	0.1	3.5	16	2.0	IRF9956-ND	1.63	1.30	.93
SO-8 “Fetky™” Mosfet and Schottky Diode									
13C	30	0.035	5.8	33	2.5	IRF7421D1-ND	1.08	.77	.63
	30	0.029	6.5	52	2.0	IRF7353D1-ND	1.13	.90	.61
	30	0.029	6.5	52	2.0	IRF7353D1TR-ND	2432.00/4,000		
SO-8 “Fetky™” Mosfet and Schottky Diode Logic Level									
13C	30	0.025	8.3	66	2.5	IRF7807D1-ND	1.63	1.30	.88
	30	0.025	8.3	66	2.5	IRF7807D2-ND	1.75	1.40	.95
Dual N- and P- Channel									
Micro-8 Logic-Level									
11C	30/ -30	0.11/ -0.2	2.7/ -2.0	21/ -16	1.25	IRF7509CT-ND	1.89	1.42	1.09
	30/ -30	0.11/ -0.2	2.7/ -2.0	21/ -16	1.25	IRF7509TR-ND	3404.00/4,000		
	20/ -20	.135/ -.27	2.4/ -1.7	19/ -14	1.25	IRF7507CT-ND	2.10	1.58	1.23
	20/ -20	.135/ -.27	2.4/ -1.7	19/ -14	1.25	IRF7507TR-ND	3780.00/4,000		
SO-8									
13B	20/ -20	0.029/ -0.058	6.6/ -5.3	26/ -21	2	IRF7317-ND	2.88	2.30	1.64

Fig.	VDS (V)	RDS (on) (Ω)	ID Cont. (A) 25°C	IDM (A)	PD Max. (W)	Digi-Key Part No.	Price Each 1	10	100
13B	20/ -20	0.029/ -0.058	6.6/ -5.3	26/ -21	2	IRF7317TR-ND	6212.00/4,000		
	30/ -30	0.029/ -0.058	6.5/ -4.9	30/ -30	2	IRF7319-ND	2.88	2.30	1.64
SO-8 Logic Level									
13B	25/ -25	.10/ -.25	3.5/ -2.3	14/ -10	2.0	IRF7105-ND	1.75	1.25	1.03
	25/ -25	.10/ -.25	3.5/ -2.3	14/ -10	2.0	IRF7105TR-ND	3944.00/4,000		
	20/ -20	0.05/ -0.090	5.2/ -4.3	21/ -17	2	IRF7307-ND	2.13	1.70	1.21
	20/ -20	0.05/ -0.090	5.2/ -4.3	21/ -17	2	IRF7307TR-ND	4592.00/4,000		
	30/ -30	0.05/ -0.10	4.0/ -3.0	16/ -12	1.4	IRF7309-ND	2.00	1.60	1.14
	30/ -30	0.05/ -0.10	4.0/ -3.0	16/ -12	1.4	IRF7309TR-ND	4320.00/4,000		
	55/ -55	0.043/ -0.056	4.7/ -3.4	38/ -27	2	IRF7343-ND	1.70	1.36	.97
	55/ -55	0.043/ -0.056	4.7/ -3.4	38/ -27	2	IRF7343TR-ND	3672.00/4,000		
	30/ -30	0.045/ -0.090	5.8/ -4.3	46/ -34	2.5	IRF7379-ND	3.00	2.40	1.71
	30/ -30	0.029/ -0.058	7.3/ -5.3	30/ -30	2.5	IRF7389-ND	2.88	2.30	1.64
	30/ -30	0.10/ -0.25	3.5/ -2.3	16/ -10	2	IRF9952-ND	1.83	1.46	1.04

Photovoltaic Isolators

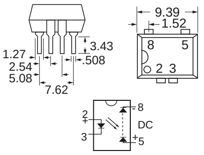
The PhotoVoltaic Isolator (PVI) generates an electrically isolated DC voltage upon receipt of a DC input signal. The PVI is ideally suited for driving power MOSFETs, IGBTs or sensitive gate SCRs to form solid state relays.

PVI1050 — Input Circuit: • Vf (led): 1.2 • Imin (mA): 10 • Imax (mA): 50. **Output Circuit:** • Vout (dc): 5/10 • Imin (µA): 10/5 • Ton/Toff Max (µs): 40/400



PVI5050 — Input Circuit: • Vf (led): 1.2 • Imin (mA): 10 • Imax (mA): 50. **Output Circuit:** • Vout (dc): 5 • Imin (µA): 5 • Ton/Toff Max (µs): 40/4000

PVI5080 — Input Circuit: • Vf (led): 1.25 • Imin (mA): 2 • Imax (mA): 50. **Output Circuit:** • Vout (dc): 5 • Imin (µA): 8 • Ton/Toff Max (µs): 30/400



Digi-Key Part No.	Price Each 1	10	100
PVI1050-ND	5.63	4.50	3.94
PVI5050-ND	3.00	2.40	2.10
PVI5080-ND	4.25	3.40	2.97

TOSHIBA MOSFETs

Fig.	VDS (V)	RDS (on) (Ω)	ID Cont. (A) 25°C	IDM (A)	PD Max (W)	Digi-Key Part No.	Price Each 1	10	100	Tape & Reel Pricing* 700
P-CHANNEL TYPES										
2-10S1B Package										
1	100	0.15	16	64	60	2SJ412-ND	1.54	1.23	.93	—
2-7B2B Package										
2	60	0.16	5	20	20	2SJ377TE16CT-ND‡	2.70	2.03	1.24	535.50
N-CHANNEL TYPES										
TO-220AB Package										
3	100	0.066	27	108	75	2SK2314-ND	1.42	1.14	.86	—
3	200	0.18	15	45	80	YTA640-ND	1.54	1.23	.93	—
3	400	0.40	10	40	80	2SK2841-ND	1.65	1.32	.99	—
3	500	0.75	8	32	80	2SK2542-ND	1.45	1.16	.87	—
3	60	0.15	45	180	125	2SK1542-ND	2.33	1.87	1.46	—
2-7B1B Package										
4	60	0.12	5	20	20	2SK2231-ND	.82	.62	.47	—
4	50	0.032	20	50	40	2SK2614-ND	1.02	.82	.61	—
2-10R1B Package										
5	60	0.036	25	100	35	2SK2232T-ND	1.26	1.05	.84	—
5	60	0.013	45	180	45	2SK2312-ND	2.40	1.92	1.44	—
5	900	3.7	3	9	40	2SK2700T-ND†	1.44	1.15	.87	—
2-16C1B Package										
6	500	0.35	15	60	150	2SK2698T-ND	3.22	2.58	2.01	—
6	100	0.025	50	200	150	2SK1381-ND	5.01	4.52	4.01	—
6	500	0.75	10	40	125	2SK2601-ND	1.90	1.52	1.14	—
2-7B2B Package										
2	100	0.28	3	12	20	2SK2201TE16CT-ND‡	2.82	2.12	1.29	559.30
2	60	0.12	5	20	20	2SK2231TE16CT-ND‡	2.64	1.98	1.21	523.60
2-16F1B Package										
7	600	0.31	15	60	90	2SK2953-ND†	4.04	3.24	2.73	—
2-16H1B Package										
8	500	0.21	20	80	160	2SK3117-ND	5.50	4.40	3.72	—

* For Tape and Reel Part Number, change CT-ND to TR-ND ‡ Cut Tape Pricing.
† Isolated Tab

Fig. 1 — TO-220FL Pkg.

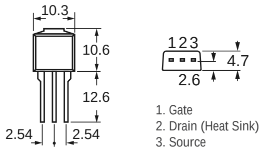


Fig. 2 — 2-7B2B Pkg.

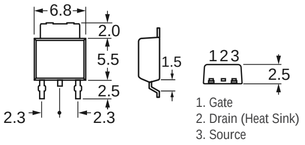


Fig. 3 — TO-220AB Pkg.

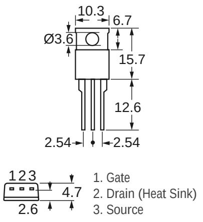


Fig. 4 — 2-7B1B Pkg.

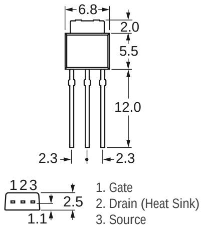


Fig. 5 — 2-10R1B Pkg.

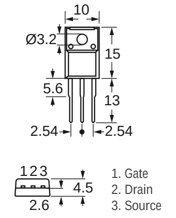


Fig. 6 — 2-16C1B Pkg.

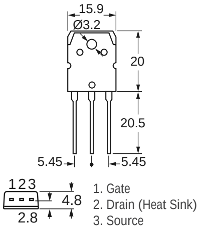


Fig. 7 — 2-16F1B Pkg.

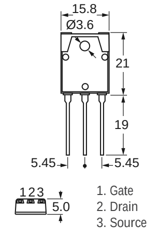
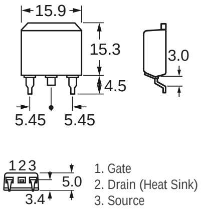


Fig. 8 — 2-16H1B Pkg.



GENERAL SEMICONDUCTOR

Diodes-Bridge Rectifiers

Fig. 1

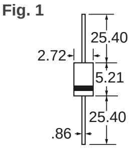


Fig. 2

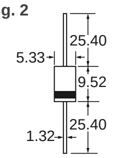


Fig. 3

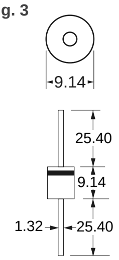


Fig. 4

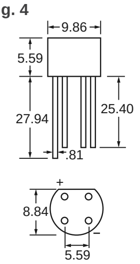


Fig. 5

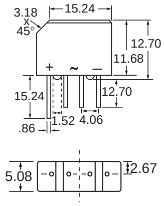


Fig. 6

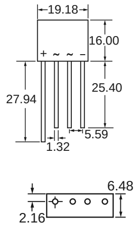


Fig. 7

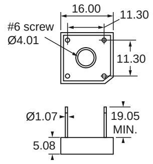


Fig.	Max. Avg. Rect. Current (A)	Max. Peak Reverse Voltage (V)	Peak Forward Surge Current 8.3ms (A)	Max. Instant. Forward Voltage (V)	Typ. Reverse Recovery Time (µS)	Oper. Junction Temp. (°C)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 800	1,400	5,500
Silicon Rectifiers														
1	1.0	50	30	1.1	30	-50 to 175	1N4001GICT-ND	—	.40	3.20	1N4001GITR-ND	—	—	16.00/M
		100	30	1.1	30	-50 to 175	1N4002GICT-ND	—	.40	3.20	1N4002GITR-ND	—	—	16.00/M
		200	30	1.1	30	-50 to 175	1N4003GICT-ND	—	.40	3.20	1N4003GITR-ND	—	—	16.00/M
		400	30	1.1	30	-50 to 175	1N4004GICT-ND	—	.40	3.20	1N4004GITR-ND	—	—	16.00/M
		600	30	1.1	30	-50 to 175	1N4005GICT-ND	—	.40	3.20	1N4005GITR-ND	—	—	16.00/M
		800	30	1.1	30	-50 to 175	1N4006GICT-ND	—	.40	3.20	1N4006GITR-ND	—	—	16.00/M
		1000	30	1.1	30	-50 to 175	1N4007GICT-ND	—	.40	3.20	1N4007GITR-ND	—	—	16.00/M
2	3.0	50	200	1.2	—	-50 to 170	1N5400GICT-ND	.32	2.31	16.80	1N5400GITR-ND	—	105.00/M	—
		100	200	1.2	—	-50 to 170	1N5401GICT-ND	.32	2.31	16.80	1N5401GITR-ND	—	105.00/M	—
		200	200	1.2	—	-50 to 170	1N5402GICT-ND	.32	2.31	16.80	1N5402GITR-ND	—	105.00/M	—
		400	200	1.2	—	-50 to 170	1N5404GICT-ND	.32	2.31	16.80	1N5404GITR-ND	—	105.00/M	—
		600	200	1.2	—	-50 to 170	1N5406GICT-ND	.32	2.31	16.80	1N5406GITR-ND	—	105.00/M	—
		800	200	1.2	—	-50 to 170	1N5407GICT-ND	.32	2.31	16.80	1N5407GITR-ND	—	105.00/M	—
		1000	200	1.2	—	-50 to 170	1N5408GICT-ND	.32	2.31	16.80	1N5408GITR-ND	—	105.00/M	—
3	6.0	100	400	0.90	—	-50 to 150	GI751CT-ND	.60	5.10	42.50	—	—	—	—
		400	400	0.90	—	-50 to 150	GI754CT-ND	.60	5.10	42.50	—	—	—	—
		600	400	0.90	—	-50 to 150	GI756CT-ND	.63	5.40	45.00	GI756TR-ND	239.20	—	—
		800	400	0.90	—	-50 to 150	GI758CT-ND	.63	5.40	45.00	—	—	—	—
Fast Recovery Diodes														
2	3.0	100	100	1.1	0.2	-50 to 150	GI851CT-ND	.28	2.40	22.00	—	—	—	—
		200	100	1.1	0.2	-50 to 150	GI852CT-ND	.30	2.55	23.38	—	—	—	—
Schottky Barrier Rectifiers														
1	1.0	20	25	.45	—	-65 to 125	1N5817GICT-ND	.45	3.30	24.00	1N5817GITR-ND	—	—	114.00/M
		30	25	.55	—	-65 to 125	1N5818GICT-ND	.45	3.30	24.00	1N5818GITR-ND	—	—	114.00/M
		40	25	.60	—	-65 to 125	1N5819GICT-ND	.45	3.30	24.00	1N5819GITR-ND	—	—	114.00/M
2	3.0	20	80	.475	—	-65 to 125	1N5820GICT-ND	.83	6.05	44.00	1N5820GITR-ND	—	209.00/M	—
		30	80	.500	—	-65 to 125	1N5821GICT-ND	.83	6.05	44.00	1N5821GITR-ND	—	209.00/M	—
		40	80	.525	—	-65 to 125	1N5822GICT-ND	.83	6.05	44.00	1N5822GITR-ND	—	209.00/M	—
2	5.0	20	150	0.55	—	-65 to 125	SB520CT-ND	.39	3.30	27.50	SB520TR-ND	—	176.00/M	—
		30	150	0.55	—	-65 to 125	SB530CT-ND	.39	3.30	27.50	SB530TR-ND	—	176.00/M	—
		40	150	0.55	—	-65 to 125	SB540CT-ND	.39	3.30	27.50	SB540TR-ND	—	176.00/M	—
		50	150	0.67	—	-65 to 125	SB550CT-ND	.44	3.75	31.25	SB550TR-ND	—	200.00/M	—
		60	150	0.67	—	-65 to 125	SB560CT-ND	.44	3.75	31.25	SB560TR-ND	—	200.00/M	—

Fig.	Max. Avg. Rect. Current (A)	Max. Peak Reverse Voltage (V)	Peak Forward Surge Current 8.3ms (A)	Max. Instant. Forward Voltage (V)	Oper. Junction Temp. (°C)	Digi-Key Part No.	Pricing 1	10	100	500
Silicon and Glass Passivated Bridge Rectifiers										
4	1.5	50	50	1.0	-55 to 150	W005GGI-ND	.46	3.90	32.50	130.00
		100	50	1.0	-55 to 150	W01GGI-ND	.46	3.90	32.50	130.00
		200	50	1.0	-55 to 150	W02GGI-ND	.46	3.90	32.50	130.00
		400	50	1.0	-55 to 150	W04GGI-ND	.46	3.90	32.50	130.00
		600	50	1.0	-55 to 150	W06GGI-ND	.49	4.20	35.00	140.00
		800	50	1.0	-55 to 150	W08G-ND	.49	4.20	35.00	140.00
		1000	50	1.0	-55 to 150	W10GGI-ND	.49	4.20	35.00	140.00
5	2.0	50	30	1.1	-55 to 165	2KBP005M-ND	.81	6.90	—	—
		100	30	1.1	-55 to 165	2KBP01M-ND	.81	6.90	—	—
		200	30	1.1	-55 to 165	2KBP02M-ND	.81	6.90	—	—
		400	30	1.1	-55 to 165	2KBP04M-ND	.81	6.90	—	—
		600	30	1.1	-55 to 165	2KBP06M-ND	.81	6.90	—	—
		800	30	1.1	-55 to 165	2KBP08M-ND	.81	6.90	—	—
		1000	30	1.1	-55 to 165	2KBP10M-ND	.81	6.90	—	—
6	4.0	50	200	1.1	-50 to 150	KBL005-ND	1.86	16.97	155.25	—
		100	200	1.1	-50 to 150	KBL01-ND	1.90	17.34	158.63	—
		200	200	1.1	-50 to 150	KBL02-ND	1.97	17.92	163.88	—
		400	200	1.1	-50 to 150	KBL04-ND	2.07	18.86	172.50	—
		600	200	1.1	-50 to 150	KBL06-ND	2.12	19.27	176.25	—
		800	200	1.1	-50 to 150	KBL08-ND	2.16	19.68	180.00	—
		1000	200	1.1	-50 to 150	KBL10-ND	2.25	20.50	187.50	—
7	6.0	50	175	1.0	-55 to 150	GBPC6005-ND	2.17	18.60	155.00	—
		100	175	1.0	-55 to 150	GBPC601-ND	2.17	18.60	155.00	—
		200	175	1.0	-55 to 150	GBPC602-ND	2.17	18.60	155.00	—
		400	175	1.0	-55 to 150	GBPC604-ND	2.17	18.60	155.00	—
		600	175	1.0	-55 to 150	GBPC606-ND	2.31	19.80	165.00	—
		800	175	1.0	-55 to 150	GBPC608-ND	2.31	19.80	165.00	—
		1000	175	1.0	-55 to 150	GBPC610-ND	2.31	19.80	165.00	—
8	12	50	200	1.1	-55 to 150	GBPC12005-ND	3.50	30.00	250.00	—
		100	200	1.1	-55 to 150	GBPC1201-ND	3.50	30.00	250.00	—
		200	200	1.1	-55 to 150	GBPC1202-ND	3.50	30.00	250.00	—
		400	200	1.1	-55 to 150	GBPC1204-ND	3.50	30.00	250.00	—
		600	200	1.1	-55 to 150	GBPC1206-ND	3.50	30.00	250.00	—
		800	200	1.1	-55 to 150	GBPC1208-ND	3.50	30.00	250.00	—
		1000	200	1.1	-55 to 150	GBPC1210-ND	3.50	30.00	250.00	—

(Continued)

Fig. 8

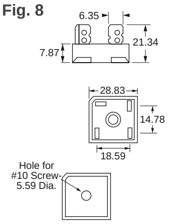


Fig. 9

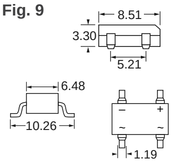


Fig. 10

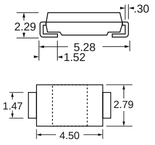


Fig. 11

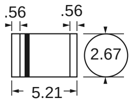


Fig.	Max. Avg. Rect. Current (A)	Max. Peak Reverse Voltage (V)	Peak Forward Surge Current 8.3ms (A)	Max. Instant. Forward Voltage (V)	Oper. Junction Temp. (°C)	Digi-Key Part No.	Pricing 1	10	100
Silicon and Glass Passivated Bridge Rectifiers (cont.)									
8	25	50	300	1.1	-55 to 150	GBPC25005-ND	3.78	32.40	270.00
		100	300	1.1	-55 to 150	GBPC2501GI-ND	3.78	32.40	270.00
		200	300	1.1	-55 to 150	GBPC2502GI-ND	3.78	32.40	270.00
		400	300	1.1	-55 to 150	GBPC2504GI-ND	3.78	32.40	270.00
		600	300	1.1	-55 to 150	GBPC2506GI-ND	3.78	32.40	270.00
		800	300	1.1	-55 to 150	GBPC2508GI-ND	3.78	32.40	270.00
		1000	300	1.1	-55 to 150	GBPC2510GI-ND	3.78	32.40	270.00
8	35	50	400	1.1	-55 to 150	GBPC35005-ND	4.38	37.50	312.50
		100	400	1.1	-55 to 150	GBPC3501GI-ND	4.38	37.50	312.50
		200	400	1.1	-55 to 150	GBPC3502GI-ND	4.38	37.50	312.50
		400	400	1.1	-55 to 150	GBPC3504GI-ND	4.38	37.50	312.50
		600	400	1.1	-55 to 150	GBPC3506GI-ND	4.38	37.50	312.50
		800	400	1.1	-55 to 150	GBPC3508GI-ND	4.38	37.50	312.50
		1000	400	1.1	-55 to 150	GBPC3510GI-ND	4.38	37.50	312.50

Fig.	Max. Avg. Rect. Current (A)	Max. Peak Rev. Voltage (V)	Peak Forward Surge Current 8.3ms (A)	Max. Instant. Forward Voltage (V)	Typ. Rev. Recovery Time (µS)	Oper. Junction Temp. (°C)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,500	1,800
Miniature Glass Passivated Single-Phase Surface Mount Bridge Rectifier													
9	1.0	200	50	1.1	5.0	-55 to 150	DF02SGICT-ND	.53	4.50	37.50	DF02SGITR-ND	225.00/M	—
		400	50	1.1	5.0	-55 to 150	DF04SGICT-ND	.53	4.50	37.50	DF04SGITR-ND	225.00/M	—
		600	50	1.1	5.0	-55 to 150	DF06SGICT-ND	.56	4.80	40.00	DF06SGITR-ND	240.00/M	—
Surface Mount Schottky Rectifier — DO-214AC													
10	1.0	20	30	0.50	0.5	-65 to 125	SS12GICT-ND	.35	3.00	25.00	SS12GITR-ND	—	150.00/M
		60	30	0.75	0.5	-65 to 125	SS16GICT-ND	.35	3.00	25.00	SS16GITR-ND	—	150.00/M
Surface Mount Schottky Barrier Rectifier — DO-213AB													
11	1.0	20	30	0.50	0.5	-55 to 125	SGL41-20GICT-ND	.28	2.40	20.00	SGL41-20GITR-ND	120.00/M	—
		40	30	0.50	0.5	-55 to 125	SGL41-40GICT-ND	.28	2.40	20.00	SGL41-40GITR-ND	120.00/M	—
		60	30	0.70	0.5	-55 to 150	SGL41-60GICT-ND	.28	2.40	20.00	SGL41-60GITR-ND	120.00/M	—

Microsemi
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Zener Diodes

Fig. 1
DO-35
500 mW

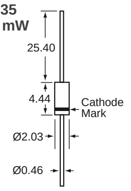


Fig. 2
DO-41
1 W

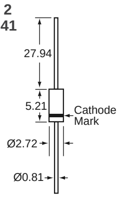
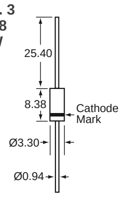


Fig. 3
T-18
5 W



500 mW Series DO-35 Silicon Zener Diodes, 1N5221 — 1N5281

(Value)	Nom. Zener Voltage Vz @ Izt Volts	Test Current Izt mA	*(Value)*	Nom. Zener Voltage Vz @ Izt Volts	Test Current Izt mA	*(Value)*	Nom. Zener Voltage Vz @ Izt Volts	Test Current Izt mA	*(Value)*	Nom. Zener Voltage Vz @ Izt Volts	Test Current Izt mA	*(Value)*	Nom. Zener Voltage Vz @ Izt Volts	Test Current Izt mA
21	2.4	20	34	6.2	20	47	17	7.4	61	47	2.7	74	130	0.95
22	2.5	20	35	6.8	20	48	18	7.0	62	51	2.5	75	140	0.90
23	2.7	20	36	7.5	20	49	19	6.6	63	56	2.2	76	150	0.85
24	2.8	20	37	8.2	20	50	20	6.2	64	60	2.1	77	160	0.80
25	3.0	20	38	8.7	20	51	22	5.6	65	62	2.0	78	170	0.74
26	3.3	20	39	9.1	20	52	24	5.2	66	68	1.8	79	180	0.68
27	3.6	20	40	10	20	53	25	5.0	67	75	1.7	81	200	0.65
28	3.9	20	41	11	20	54	27	4.6	68	82	1.5			
29	4.3	20	42	12	20	55	28	4.5	69	87	1.4			
30	4.7	20	43	13	9.5	57	33	3.8	70	91	1.4			
31	5.1	20	44	14	9.0	58	36	3.4	71	100	1.3			
32	5.6	20	45	15	8.5	59	39	3.2	72	110	1.1			
33	6.0	20	46	16	7.8	60	43	3.0	73	120	1.0			

1W Series, DO-41 Glass Zener Diodes
1N4728A — 1N4764A

(Value)	Zener Voltage (Vz) Volts	Test Current (Izt) mA	*(Value)*	Zener Voltage (Vz) Volts	Test Current (Izt) mA
28	3.3	76	46	18	14
29	3.6	69	47	20	12.5
30	3.9	64	48	22	11.5
31	4.3	58	49	24	10.5
32	4.7	53	50	27	9.5
33	5.1	49	51	30	8.5
34	5.6	45	52	33	7.5
35	6.2	41	53	36	7.0
36	6.8	37	54	39	6.5
37	7.5	34	55	43	6.0
38	8.2	31	56	47	5.5
39	9.1	28	57	51	5.0
40	10	25	58	56	4.5
41	11	23	59	62	4.0
42	12	21	60	68	3.7
43	13	19	61	75	3.3
44	15	17	62	82	3.0
45	16	15.5	63	91	2.8
			64	100	2.5

2 W Series, DO-41 Silicon Zener Diodes
2EZ3.6D5 — 2EZ200D5

(Value)	Nominal Zener Voltage (Vz) Volts	(Izt) mA	*(Value)*	Nominal Zener Voltage (Vz) Volts	(Izt) mA	*(Value)*	Nominal Zener Voltage (Vz) Volts	(Izt) mA
3.6	3.6	139	16	16	31.2	68	68	7.4
3.9	3.9	128	17	17	29.4	75	75	6.7
4.3	4.3	116	18	18	27.8	82	82	6.1
4.7	4.7	106	19	19	26.3	91	91	5.5
5.1	5.1	98	20	20	25	100	100	5.0
5.6	5.6	89.5	22	22	22.8	110	110	4.5
6.2	6.2	80.5	24	24	20.8	120	120	4.2
6.8	6.8	73.5	27	27	18.5	130	130	3.8
7.5	7.5	66.5	30	30	16.6	140	140	3.6
8.2	8.2	61	33	33	15.1	150	150	3.3
9.1	9.1	55	36	36	13.9	160	160	3.1
10	10	50	39	39	12.8	170	170	2.9
11	11	45.5	43	43	11.6	180	180	2.8
12	12	41.5	47	47	10.6	190	190	2.6
13	13	38.5	51	51	9.8	200	200	2.5
14	14	35.7	56	56	9.0			
15	15	33.4	62	62	8.1			

5 W Series, T-18 Silicon Zener Diodes
1N5333B — 1N5388B

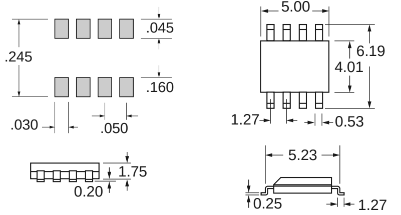
(Value)	Regu-lator Voltage (Vz)	Test Current (Iz)	*(Value)*	Regu-lator Voltage (Vz)	Test Current (Iz)	*(Value)*	Regu-lator Voltage (Vz)	Test Current (Iz)
33	3.3	380	52	15	75	71	60	20
34	3.6	350	53	16	75	72	62	20
35	3.9	320	54	17	70	73	68	20
36	4.3	290	55	18	65	74	75	20
37	4.7	260	56	19	65	75	82	15
38	5.1	240	57	20	65	76	87	15
39	5.6	220	58	22	50	77	91	15
40	6.0	200	59	24	50	78	100	12
41	6.2	200	60	25	50	79	110	12
42	6.8	175	61	27	50	80	120	10
43	7.5	175	62	28	50	81	130	10
44	8.2	150	63	30	40	82	140	8.0
45	8.7	150	64	33	40	83	150	8.0
46	9.1	150	65	36	30	84	160	8.0
47	10	125	66	39	30	85	170	8.0
48	11	125	67	43	30	86	180	5.0
49	12	100	68	47	25	87	190	5.0
50	13	100	69	51	25	88	200	5.0
51	14	100	70	56	20			

Fig.	DC Power Dissipation	Voltage Range (Code) See Chart	Digi-Key Part No.*	Cut Tape Pricing 1	10	100	Digi-Key Part No.*	Tape & Reel Pricing 3,000	4,000	6,000	8,000	10,000	12,000	24,000	30,000	Microsemi Part No.*
1	500 mW	2.4V — 200V	1N52(Value)BMSCT-ND	1.20	8.40	60.00	1N52(Value)BMSTR-ND	—	—	—	—	210.00/M	—	—	180.00/M	1N52(Value)B
2	1 W	3.3V — 100V	1N47(Value)AMSCT-ND	.25	1.65	13.20	1N47(Value)AMSTR-ND	—	74.00/M	—	59.00/M	—	—	51.00/M	—	1N47(Value)A
2	2 W	3.6V — 200V	2EZ(Value)D5MSCT-ND	.75	5.00	40.00	2EZ(Value)D5MSTR-ND	—	225.00/M	—	180.00/M	—	—	155.00/M	—	2EZ(Value)D5
3	5 W	3.3V — 200V	1N53(Value)BMSCT-ND	1.20	8.00	64.00	1N53(Value)BMSTR-ND	400.00/M	—	320.00/M	—	—	280.00/M	248.00/M	—	1N53(Value)B

* For complete part number, substitute corresponding value from chart for (Value).

Transient Voltage Suppressor Arrays

SO-8 Package



SO-16 Package

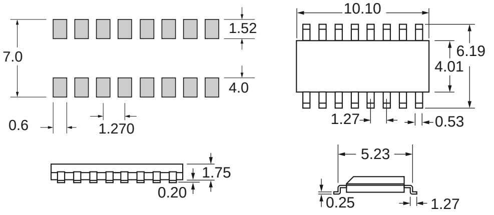
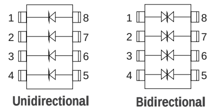


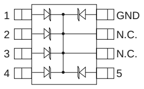
Fig.	Stand-off Voltage Vwm (V) Max.	Breakdown Voltage V_{BR} @ V_{BR} = 1mA (V) Min.	Clamping Voltage V_C @ 1 Amp (V) Max.	Leakage Current I_D @ V_{WM} (µAmps) Max.	Capacitance (f-1 MHz) @ 0 V C (pf) Typ.	Temperature Coefficient of V_{BR} αV_{BR} mV/°C Max.	Digi-Key Part No.	Pricing			Microsemi Part No.
								1	10	100	
SMDA (Unidirectional) and SMDAxxC (Bidirectional) Series — 300 Watt											
1	3.3	4	6.5	125	800	-3	SMDA03MS-ND	3.84	34.56	288.00	SMDA03
	5.0	6.0	9.8	100	600	3	SMDA05MS-ND	3.84	34.56	288.00	SMDA05
	12.0	13.3	19.0	1	185	10	SMDA12MS-ND	3.84	34.56	288.00	SMDA12
	15.0	16.7	24.0	1	140	13	SMDA15MS-ND	3.84	34.56	288.00	SMDA15
	24.0	26.7	43.0	1	90	30	SMDA24MS-ND	3.84	34.56	288.00	SMDA24
1	3.3	4.5	7.0	200	400	-5	SMDA03CMS-ND	4.20	37.80	315.00	SMDA03C
	5.0	6.0	9.8	100	300	1	SMDA05CMS-ND	4.20	37.80	315.00	SMDA05C
	12.0	13.3	19.0	1	95	8	SMDA12CMS-ND	4.20	37.80	315.00	SMDA12C
	15.0	16.7	24.0	1	70	11	SMDA15CMS-ND	4.20	37.80	315.00	SMDA15C
	24.0	26.7	43.0	1	45	28	SMDA24CMS-ND	4.20	37.80	315.00	SMDA24C
SMDB (Unidirectional) and SMDBxxC (Bidirectional) Series — 500 Watt											
1	3.3	4	6.5	125	800	-3	SMDB03MS-ND	4.32	38.88	324.00	SMDB03
	5.0	6.0	9.8	200	600	3	SMDB05MS-ND	4.32	38.88	324.00	SMDB05
	12.0	13.3	17.5	1	185	10	SMDB12MS-ND	4.32	38.88	324.00	SMDB12
	15.0	16.7	24.0	2	140	13	SMDB15MS-ND	4.32	38.88	324.00	SMDB15
	24.0	26.7	43.0	2	90	30	SMDB24MS-ND	4.32	38.88	324.00	SMDB24
1	3.3	4.5	7.0	200	400	-5	SMDB03CMS-ND	4.80	43.20	360.00	SMDB03C
	5.0	6.0	9.8	200	300	1	SMDB05CMS-ND	4.80	43.20	360.00	SMDB05C
	12.0	13.3	17.5	1	95	8	SMDB12CMS-ND	4.80	43.20	360.00	SMDB12C
	15.0	16.7	24.0	2	70	11	SMDB15CMS-ND	4.80	43.20	360.00	SMDB15C
	24.0	26.7	43.0	2	45	28	SMDB24CMS-ND	4.80	43.20	360.00	SMDB24C
SMDAxxC-5, Bidirectional — 300 Watt											
2	3.3	4	6.5	200	300	-5	SMDA03C-5MS-ND	4.24	38.16	318.00	SMDA03C-5
	5.0	6.0	9.8	100	200	3	SMDA05C-5MS-ND	4.24	38.16	318.00	SMDA05C-5
	12	13.3	19	1	75	10	SMDA12C-5MS-ND	4.24	38.16	318.00	SMDA12C-5
	15	16.7	24	1	50	13	SMDA15C-5MS-ND	4.24	38.16	318.00	SMDA15C-5
	24	26.7	43	1	35	30	SMDA24C-5MS-ND	4.24	38.16	318.00	SMDA24C-5
SMDAxx-6, Unidirectional — 300 Watt											
3	3.3	4	6.5	200	800	-3	SMDA03-6MS-ND	4.24	38.16	318.00	SMDA03-6
	5.0	6.0	9.8	100	550	3	SMDA05-6MS-ND	4.24	38.16	318.00	SMDA05-6
	12	13.3	19	1	185	10	SMDA12-6MS-ND	4.24	38.16	318.00	SMDA12-6
	15	16.7	24	1	140	13	SMDA15-6MS-ND	4.24	38.16	318.00	SMDA15-6
	24	26.7	43	1	88	30	SMDA24-6MS-ND	4.24	38.16	318.00	SMDA24-6
SMDAxxC-7, Bidirectional — 300 Watt											
4	3.3	4.5	7.0	200	300	-5	SMDA03C-7MS-ND	4.32	38.88	324.00	SMDA03C-7
	5.0	6.0	9.8	100	200	1	SMDA05C-7MS-ND	4.32	38.88	324.00	SMDA05C-7
	12	13.3	19	1	75	8	SMDA12C-7MS-ND	4.32	38.88	324.00	SMDA12C-7
	15	16.7	24	1	70	11	SMDA15C-7MS-ND	4.32	38.88	324.00	SMDA15C-7
	24	26.7	43	1	35	28	SMDA24C-7MS-ND	4.32	38.88	324.00	SMDA24C-7
SM8LCxx Series, Bidirectional — 500 Watt											
5	3.3	4	6.5	200	25	-3	SM8LC03MS-ND	4.32	38.88	324.00	SM8LC03
	5.0	6.0	9.8	125	25	3	SM8LC05MS-ND	4.32	38.88	324.00	SM8LC05
	12	13.3	17.5	1	25	10	SM8LC12MS-ND	4.32	38.88	324.00	SM8LC12
	15	16.7	24	2	25	13	SM8LC15MS-ND	4.32	38.88	324.00	SM8LC15
	24	26.7	43	2	25	30	SM8LC24MS-ND	4.32	38.88	324.00	SM8LC24
USB08xxC Series, Bidirectional — 500 Watt											
6	3.3	4	6.5	200	5	-5	USB0803CMS-ND	5.16	46.44	387.00	USB0803C
	5.0	6.0	9.8	5	5	3	USB0805CMS-ND	5.16	46.44	387.00	USB0805C
	12	13.3	17.9	1	5	10	USB0812CMS-ND	5.16	46.44	387.00	USB0812C
	15	16.7	25.5	1	5	13	USB0815CMS-ND	5.16	46.44	387.00	USB0815C
	24	26.7	47.5	1	5	30	USB0824CMS-ND	5.16	46.44	387.00	USB0824C
SM16 (Unidirectional) and SM16xxC (Bidirectional) Series — 300 Watt											
7	3.3	4	6.5	125	850	-3	SM1603MS-ND	5.40	48.60	405.00	SM1603
	5.0	6.0	9.8	200	880	3	SM1605MS-ND	5.40	48.60	405.00	SM1605
	12	13.3	17.5	1	440	10	SM1612MS-ND	5.40	48.60	405.00	SM1612
	15	16.7	24	1	400	13	SM1615MS-ND	5.40	48.60	405.00	SM1615
	24	26.7	43	2	275	30	SM1624MS-ND	5.40	48.60	405.00	SM1624
7	3.3	4	7.0	200	425	-5	SM1603CMS-ND	6.00	54.00	450.00	SM1603C
	5.0	6.0	9.8	200	440	1	SM1605CMS-ND	6.00	54.00	450.00	SM1605C
	12	13.3	17.5	1	220	8	SM1612CMS-ND	6.00	54.00	450.00	SM1612C
	15	16.7	24	2	200	11	SM1615CMS-ND	6.00	54.00	450.00	SM1615C
	24	26.7	43	2	137	28	SM1624CMS-ND	6.00	54.00	450.00	SM1624C
SM16LCxx (Unidirectional) and SM16LCxxC (Bidirectional) Series — 300 Watt											
8	3.3	4	7	400	25	-3	SM16LC03MS-ND	6.60	59.40	495.00	SM16LC03
	5.0	6.0	9.8	100	25	1	SM16LC05MS-ND	6.60	59.40	495.00	SM16LC05
	12	13.3	19.5	2	25	8	SM16LC12MS-ND	6.60	59.40	495.00	SM16LC12
	15	16.7	24	2	25	11	SM16LC15MS-ND	6.60	59.40	495.00	SM16LC15
	24	26.7	43	2	25	28	SM16LC24MS-ND	6.60	59.40	495.00	SM16LC24
9	3.3	4	7	400	25	-3	SM16LC03CMS-ND	7.68	69.12	576.00	SM16LC03C
	5.0	6.0	9.8	100	25	1	SM16LC05CMS-ND	7.68	69.12	576.00	SM16LC05C
	12	13.3	19.5	2	25	8	SM16LC12CMS-ND	7.68	69.12	576.00	SM16LC12C
	15	16.7	24	2	25	11	SM16LC15CMS-ND	7.68	69.12	576.00	SM16LC15C
	24	26.7	43	2	25	28	SM16LC24CMS-ND	7.68	69.12	576.00	SM16LC24C

Fig. 1



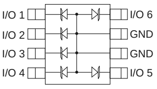
Features: • Protects 3.0/3.3 up through 24V Components • Protects 4 lines Unidirectional or Bidirectional • Provides electrically isolated protection • SO-8 packaging

Fig. 2



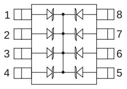
Features: • Protects up to 5 Bidirectional lines • Surge protection Per IEC 1000-4-2, 1000-4-4 • SO-8 packaging

Fig. 3



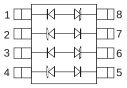
Features: • Protects up to 6 Unidirectional lines • Surge protection Per IEC 1000-4-2, 1000-4-4 • SO-8 packaging

Fig. 4



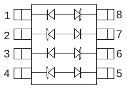
Features: • Protects up to 7 Bidirectional lines • Surge protection Per IEC 1000-4-2, 1000-4-4 • SO-8 packaging

Fig. 5



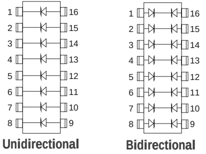
Features: • Protects up to 2 Bidirectional lines • Surge protection Per IEC 1000-4-2, 1000-4-4 • Provides electrically isolated protection • SO-8 packaging • Low capacitance of 25 pF per line pair

Fig. 6



Features: • Protects up to 2 Bidirectional lines • Surge protection Per IEC 1000-4-2, 1000-4-4 • Provides electrically isolated protection • SO-8 packaging • Ultra Low capacitance of 5 pF per line pair • Ultra Low leakage

Fig. 7



Features: • Protects 3.0/3.3 up through 24V Components • Protects 8 lines Unidirectional or Bidirectional • Provides electrically isolated protection • SO-16 packaging

Fig. 8

Features:
- Protects 3.0/3.3 up through 24V Components
- Protects 8 lines Unidirectional
- Provides electrically isolated protection
- SO-16 packaging

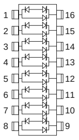
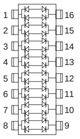


Fig. 9

Features:
- Protects 3.0/3.3 up through 24V Components
- Protects 8 lines Bidirectional
- Provides electrically isolated protection
- SO-16 packaging



M·C·C Rectifiers

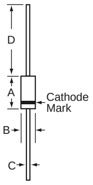
Electrical Characteristics @ 25°C unless otherwise specified

Series	DO-41	MELF	DO-214AA	DO-214AB	R-6
Average Forward Current, $I_{F(AV)}$	1.0A T_A = 75°C	1.0A T_A = 75°C	2.0A T_J = 75°C	3.0A T_J = 120°C	6.0A T_A = 60°C
Peak Forward Surge Current, I_{FSM}	30A 8.3ms, half sine	30A 8.3 ms, half sine	70A 8.3ms, half sine, T_J = 150°C	100A 8.3ms, half sine	400A 8.3ms, half sine
Maximum Forward Voltage, V_F	1.1V I_{FM} = 1.0A; T_J = 25°C*	1.1V I_{FM} = 1.0A; T_J = 25°C*	1.15V I_{FM} = 1.0A; T_J = 25°C*	1.20V I_{FM} = 3.0A; T_J = 25°C†	0.95V I_{FM} = 6.0A; T_J = 25°C‡
Maximum Reverse Recovery Time, Trr	—	—	2.0µs I_F=0.5A, I_R=1.0A, 1rr=0.25A	2.5µs I_J=0.5A, I_R=1.0A, 1rr=0.25A	—

* Pulse Test: Pulse width 300 µsec, Duty cycle 2%   † Pulse Test: Pulse width 200 µsec, Duty cycle 2%   ‡ Pulse Test: Pulse width 300 µsec, Duty cycle 1%

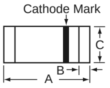
Fig. No	Max. Peak Reverse Voltage	Digi-Key Part No.	Cut Tape Pricing				Digi-Key Part No.	Tape & Reel Pricing						MCC Part No.
			1	10	100	1,000		500	1,000	3,000	5,000	10,000	12,000	
DO-41 — 1 Amp Rectifier														
1	50V	1N4001MSCT-ND	—	.43	3.40	25.50	1N4001MSTR-ND	—	—	—	17.00/M	15.00/M	—	1N4001
	100V	1N4002MSCT-ND	—	.43	3.40	25.50	1N4002MSTR-ND	—	—	—	17.00/M	15.00/M	—	1N4002
	200V	1N4003MSCT-ND	—	.43	3.40	25.50	1N4003MSTR-ND	—	—	—	17.00/M	15.00/M	—	1N4003
	400V	1N4004MSCT-ND	—	.43	3.40	25.50	1N4004MSTR-ND	—	—	—	17.00/M	15.00/M	—	1N4004
	600V	1N4005MSCT-ND	—	.43	3.40	25.50	1N4005MSTR-ND	—	—	—	17.00/M	15.00/M	—	1N4005
	800V	1N4006MSCT-ND	—	.43	3.40	25.50	1N4006MSTR-ND	—	—	—	17.00/M	15.00/M	—	1N4006
	1000V	1N4007MSCT-ND	—	.43	3.40	25.50	1N4007MSTR-ND	—	—	—	17.00/M	15.00/M	—	1N4007
MELF — 1 Amp Glass Passivated Rectifier — SMT														
2	50V	DL4001MSCT-ND	—	1.95	16.58	136.50	DL4001MSTR-ND	—	—	—	78.00/M	59.00/M	—	DL4001
	100V	DL4002MSCT-ND	—	1.95	16.58	136.50	DL4002MSTR-ND	—	—	—	78.00/M	59.00/M	—	DL4002
	200V	DL4003MSCT-ND	—	1.95	16.58	136.50	DL4003MSTR-ND	—	—	—	78.00/M	59.00/M	—	DL4003
	400V	DL4004MSCT-ND	—	1.95	16.58	136.50	DL4004MSTR-ND	—	—	—	78.00/M	59.00/M	—	DL4004
	600V	DL4005MSCT-ND	—	2.10	17.85	147.00	DL4005MSTR-ND	—	—	—	84.00/M	63.00/M	—	DL4005
	800V	DL4006MSCT-ND	—	2.25	19.13	157.50	DL4006MSTR-ND	—	—	—	90.00/M	68.00/M	—	DL4006
	1000V	DL4007MSCT-ND	—	2.45	20.83	171.50	DL4007MSTR-ND	—	—	—	98.00/M	74.00/M	—	DL4007
DO-214AA — 2 Amp Silicon Rectifier — SMT														
3	50V	S2AMSCT-ND	—	2.50	20.00	150.00	S2AMSTR-ND	—	—	100.00/M	—	—	88.00/M	S2A
	100V	S2BMSCT-ND	—	2.50	20.00	150.00	S2BMSTR-ND	—	—	100.00/M	—	—	88.00/M	S2B
	200V	S2DMSCT-ND	—	2.50	20.00	150.00	S2DMSTR-ND	—	—	100.00/M	—	—	88.00/M	S2D
	400V	S2GMSCT-ND	—	2.50	20.00	150.00	S2GMSTR-ND	—	—	100.00/M	—	—	88.00/M	S2G
	600V	S2JMSCT-ND	—	3.00	24.00	180.00	S2JMSTR-ND	—	—	120.00/M	—	—	105.00/M	S2J
	800V	S2KMSCT-ND	—	3.00	24.00	180.00	S2KMSTR-ND	—	—	120.00/M	—	—	105.00/M	S2K
	1000V	S2MMSCT-ND	—	3.00	24.00	180.00	S2MMSTR-ND	—	—	120.00/M	—	—	105.00/M	S2M
DO-214AB — 3 Amp Silicon Rectifier — SMT														
4	50V	S3AMSCT-ND	—	7.00	56.00	420.00	S3AMSTR-ND	—	—	280.00/M	—	—	245.00/M	S3A
	100V	S3BMSCT-ND	—	7.00	56.00	420.00	S3BMSTR-ND	—	—	280.00/M	—	—	245.00/M	S3B
	200V	S3DMSCT-ND	—	7.00	56.00	420.00	S3DMSTR-ND	—	—	280.00/M	—	—	245.00/M	S3D
	400V	S3GMSCT-ND	—	7.00	56.00	420.00	S3GMSTR-ND	—	—	280.00/M	—	—	245.00/M	S3G
	600V	S3JMSCT-ND	—	9.00	72.00	540.00	S3JMSTR-ND	—	—	360.00/M	—	—	315.00/M	S3J
	800V	S3KMSCT-ND	—	9.00	72.00	540.00	S3KMSTR-ND	—	—	360.00/M	—	—	315.00/M	S3K
	1000V	S3MMSCT-ND	—	9.00	72.00	540.00	S3MMSTR-ND	—	—	360.00/M	—	—	315.00/M	S3M
R-6 — 6 Amp Rectifier														
5	50V	6A05MSCT-ND	.71	5.23	38.00	—	6A05MSTR-ND	142.50	238.00	—	190.00/M	166.00/M	—	6A05
	100V	6A1MSCT-ND	.71	5.23	38.00	—	6A1MSTR-ND	142.50	238.00	—	190.00/M	166.00/M	—	6A1
	200V	6A2MSCT-ND	.71	5.23	38.00	—	6A2MSTR-ND	142.50	238.00	—	190.00/M	166.00/M	—	6A2
	400V	6A4MSCT-ND	.71	5.23	38.00	—	6A4MSTR-ND	142.50	238.00	—	190.00/M	166.00/M	—	6A4
	600V	6A6MSCT-ND	.71	5.23	38.00	—	6A6MSTR-ND	142.50	238.00	—	190.00/M	166.00/M	—	6A6
	800V	6A8MSCT-ND	.71	5.23	38.00	—	6A8MSTR-ND	142.50	238.00	—	190.00/M	166.00/M	—	6A8
	1000V	6A10MSCT-ND	.71	5.23	38.00	—	6A10MSTR-ND	142.50	238.00	—	190.00/M	166.00/M	—	6A10

Fig. 1, DO-41
1 Amp



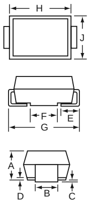
DIMENSIONS (mm.) Dim.	Min.	Max.
A	4.22	5.21
B	2.03	2.72
C	.71	.86
D	25.40	—

Fig. 2, MELF, SMT
1 Amp



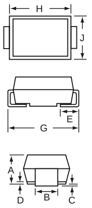
DIMENSIONS (mm.) Dim.	Min.	Max.
A	4.83	5.21
B	—	.56
C	2.41	2.51

Fig. 3, DO-214AA, SMT
2 Amp



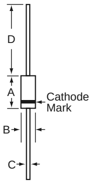
DIMENSIONS (mm.) Dim.	Min.	Max.
A	1.91	2.92
B	2.06	2.21
C	.10	.20
D	—	.51
E	.76	1.52
F	1.65	2.13
G	5.21	5.59
H	4.06	4.57
J	3.30	3.94

Fig. 4, DO-214AB, SMT
3 Amp



DIMENSIONS (mm.) Dim.	Min.	Max.
A	1.91	2.41
B	2.92	3.07
C	.10	.20
D	—	.51
E	.76	1.52
G	7.75	8.13
H	6.60	7.11
J	5.59	6.22

Fig. 5, R-6
6 Amp



DIMENSIONS (mm.) Dim.	Min.	Max.
A	8.64	9.14
B	8.64	9.14
C	1.22	1.32
D	25.40	—

M·C·C Surface Mount Schottky Rectifiers

Electrical Characteristics @ 25°C unless otherwise specified

Series	DO-214AA		DO-214AB	
Average Forward Current, $I_{F(AV)}$	1.0A	T_J = 90°C	3.0A	T_J = 120°C
Peak Forward Surge Current, I_{FSM}	50A	8.3ms, half sine	100A	8.3ms, half sine
Maximum Forward Voltage, V_F	SK12 .45V SK13 .55V SK14 .60V SK15-16 .72V SK18-110 .80V	I_{FM}=1.0A T_J=25°C*	SK32-34 .50V SK35-38 .75V	I_{FM}=3.0A T_J=25°C†

*Pulse Test: Pulse width 300 µsec, Duty cycle 2%
† Pulse Test: Pulse width 200 µsec, Duty cycle 2%

Fig. 1, DO-214AA, 1 Amp

DIMENSIONS (mm.) Dim.	Min.	Max.
A	1.91	2.92
B	2.06	2.21
C	.10	.20
D	—	.51
E	.76	1.52
F	1.65	2.13
G	5.21	5.59
H	4.06	4.57
J	3.30	3.94

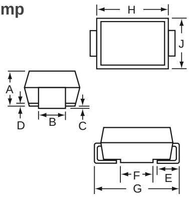


Fig. 2, DO-214AB, 3 Amp

DIMENSIONS (mm.) Dim.	Min.	Max.
A	1.91	2.41
B	2.92	3.07
C	.10	.20
D	—	.51
E	.76	1.52
G	7.75	8.13
H	6.60	7.11
J	5.59	6.22

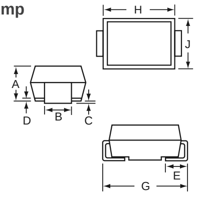


Fig. No	Max. Peak Reverse Voltage	Digi-Key Part No.	Cut Tape Pricing				Digi-Key Part No.	Tape & Reel Pricing				MCC Part No.
			1	10	100	500		3,000	6,000	12,000	24,000	
DO-214AA 1 Amp Schottky Rectifier — SMT												
1	20V	SMB5817MSCT-ND	.42	3.78	31.50	131.25	SMB5817MSTR-ND	174.00/M	158.00/M	147.00/M	131.00/M	SMB5817 (SK12)
	30V	SMB5818MSCT-ND	.42	3.78	31.50	131.25	SMB5818MSTR-ND	174.00/M	158.00/M	147.00/M	131.00/M	SMB5818 (SK13)
	40V	SMB5819MSCT-ND	.42	3.78	31.50	131.25	SMB5819MSTR-ND	174.00/M	158.00/M	147.00/M	131.00/M	SMB5819 (SK14)
	50V	SMBSR105MSCT-ND	.56	5.04	42.00	175.00	SMBSR105MSTR-ND	232.00/M	210.00/M	196.00/M	175.00/M	SMBSR105 (SK15)
	60V	SMBSR106MSCT-ND	.56	5.04	42.00	175.00	SMBSR106MSTR-ND	232.00/M	210.00/M	196.00/M	175.00/M	SMBSR106 (SK16)
	80V	SMBSR108MSCT-ND	.56	5.04	42.00	175.00	SMBSR108MSTR-ND	232.00/M	210.00/M	196.00/M	175.00/M	SMBSR108 (SK18)
	100V	SMBSR1010MSCT-ND	.64	5.76	48.00	200.00	SMBSR1010MSTR-ND	266.00/M	240.00/M	224.00/M	200.00/M	SMBSR1010 (SK110)
DO-214AB 3 Amp Schottky Rectifier — SMT												
2	20V	SK32MSCT-ND	1.04	9.36	78.00	325.00	SK32MSTR-ND	455.00/M	384.00/M	346.00/M	332.00/M	SK32
	30V	SK33MSCT-ND	1.04	9.36	78.00	325.00	SK33MSTR-ND	455.00/M	384.00/M	346.00/M	332.00/M	SK33
	40V	SK34MSCT-ND	1.04	9.36	78.00	325.00	SK34MSTR-ND	455.00/M	384.00/M	346.00/M	332.00/M	SK34
	50V	SK35MSCT-ND	1.04	9.36	78.00	325.00	SK35MSTR-ND	455.00/M	384.00/M	346.00/M	332.00/M	SK35
	60V	SK36MSCT-ND	1.04	9.36	78.00	325.00	SK36MSTR-ND	455.00/M	384.00/M	346.00/M	332.00/M	SK36
	80V	SK38MSCT-ND	1.04	9.36	78.00	325.00	SK38MSTR-ND	455.00/M	384.00/M	346.00/M	332.00/M	SK38

M·C·C Single Phase Bridge Rectifiers

Fig. 1, RB-15
1.5 Amp

DIMENSIONS (mm.)		
Dim.	**Min.**	**Max.**
A	—	9.09
B	—	3.99
C	25.40	—
D	30.48	—
E	4.57	5.59

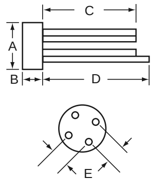


Fig. 2, RS-4L
4 Amp

DIMENSIONS (mm.)		
Dim.	**Min.**	**Max.**
A	18.54	19.56
B	15.44	16.05
C	19.05	—
D	6.22	6.53
E	4.62	5.61
G	1.50	2.01
H	1.30	—

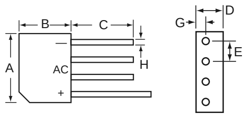


Fig. 3, DB-1 — 1 Amp

DIMENSIONS (mm.)		
Dim.	**Min.**	**Max.**
A	9.02	9.27
B	6.22	6.48
C	7.62	8.89
D	3.94	4.19
E	2.92	3.43
F	—	1.52
G	—	.51
H	4.95	5.21

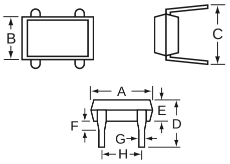


Fig. 4, BR-6
8 Amp

DIMENSIONS (mm.)		
Dim.	**Min.**	**Max.**
A	—	15.49
B	—	6.35
C	—	19.05
D	10.29	11.28
E	1.02	—
G	3.68	—

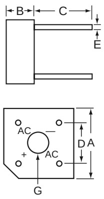


Fig. 5, PB-6
6 Amp, 10 Amp

DIMENSIONS (mm.)		
Dim.	**Min.**	**Max.**
A	—	15.49
B	—	6.35
C	—	19.05
D	10.29	11.28
E	1.02	—
G	3.68	—

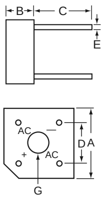


Fig. 6, MB-35W
15 Amp, 25 Amp, 35 Amp

DIMENSIONS (mm.)		
Dim.	**Min.**	**Max.**
A	—	28.96
B	—	11.48
C	—	19.05
D	17.58	18.59
E	1.02	—
G	4.78	—
H	10.90	11.89

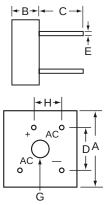
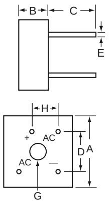


Fig. 7, MP-50W
50 Amp

DIMENSIONS (mm.)		
Dim.	**Min.**	**Max.**
A	—	28.96
B	—	11.48
C	—	19.05
D	17.58	18.59
E	1.02	—
G	4.78	—
H	10.90	11.89



Electrical Characteristics @ 25°C unless otherwise specified

Series	RB-15 RB151–RB157	RS-4L RS401L–RS407L	DB-1 DB101–DB107	BR-6 MB805–MB810	PB-6 PB605–PB610	PB-6 MB1005–MB1010	MB-35W MB1505W–MB1510W	MB-35W MB2505W–MB2510W	MB-35W MB3505W–MB3510W	MP-50W MP5005W–MP5010W
Average Forward Current, $I_{F(AV)}$	1.5A T_J = 25°C	4.0A T_J = 50°C	1A T_A = 40°C	8.0A T_C = 50°C	6.0A T_J = 50°C	10.0A T_J = 75°C	15.0A T_J = 55°C	25.0A T_J = 55°C	35.0A T_J = 55°C	50.0A T_J = 55°C
Peak Forward Surge Current, I_{FSM}	50A 8.3ms, half sine	200A 8.3 ms, half sine	50A 8.3ms, half sine	125A 8.3ms, half sine	125A 8.3ms, half sine	150A 8.3ms, half sine	300A 8.3ms, half sine	300A 8.3ms, half sine	300A 8.3ms, half sine	400A 8.3ms, half sine
Maximum Forward Voltage Drop Per Element, V_F	1.0V I_{FM}=1.5A, T_J=25°C*	1.0V I_{FM}=4.0A, T_J=25°C*	1.1V I_{FM}=1.0A, T_A=25°C	1.0V I_{FM}=4.0A, T_A=25°C*	1.1V I_{FM}=3.0A, T_J=25°C*	1.1V I_{FM}=5.0A, T_J=25°C*	1.1V I_{FM}=7.5A, T_J=25°C*	1.1V I_{FM}=12.5A, T_J=25°C*	1.1V I_{FM}=17.5A, T_J=25°C*	1.2V I_{FM}=20A, T_J=25°C*

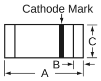
* Pulse Test: Pulse width 300 µsec, Duty cycle 1%

Fig. No.	Max. Peak Reverse Voltage	Digi-Key Part No.	Price Each 1	10	100	500	1,000	MCC Part No.
		RB-15 — 1.5 Amp Single Phase Bridge Rectifier						
1	50V	RB151MS-ND	.52	.46	.39	.33	.26	RB151
	100V	RB152MS-ND	.52	.46	.39	.33	.26	RB152
	200V	RB153MS-ND	.56	.49	.42	.35	.28	RB153
	400V	RB154MS-ND	.60	.53	.45	.38	.30	RB154
	600V	RB155MS-ND	.60	.53	.45	.38	.30	RB155
	800V	RB156MS-ND	.64	.56	.48	.40	.32	RB156
	1000V	RB157MS-ND	.76	.67	.57	.48	.38	RB157
		RS-4L — 4 Amp Single Phase Bridge Rectifier						
2	50V	RS401LMS-ND	1.56	1.37	1.17	.98	.78	RS401L
	100V	RS402LMS-ND	1.56	1.37	1.17	.98	.78	RS402L
	200V	RS403LMS-ND	1.56	1.37	1.17	.98	.78	RS403L
	400V	RS404LMS-ND	1.60	1.40	1.20	1.00	.80	RS404L
	600V	RS405LMS-ND	1.76	1.54	1.32	1.10	.88	RS405L
	800V	RS406LMS-ND	1.92	1.68	1.44	1.20	.96	RS406L
	1000V	RS407LMS-ND	2.00	1.75	1.50	1.25	1.00	RS407L
		DB-1 — 1 Amp Single Phase Glass Passivated Bridge Rectifier						
3	50V	DB101MS-ND	.52	.50	.39	.33	.26	DB101
	100V	DB102MS-ND	.52	.50	.39	.33	.26	DB102
	200V	DB103MS-ND	.56	.54	.42	.35	.28	DB103
	400V	DB104MS-ND	.60	.58	.45	.38	.30	DB104
	600V	DB105MS-ND	.64	.62	.48	.40	.32	DB105
	800V	DB106MS-ND	.72	.69	.54	.45	.36	DB106
	1000V	DB107MS-ND	.80	.77	.60	.50	.40	DB107
		BR-6 — 8 Amp Single Phase Bridge Rectifier						
4	50V	MB805MS-ND	2.20	1.93	1.65	1.38	1.10	MB805
	100V	MB81MS-ND	2.20	1.93	1.65	1.38	1.10	MB81
	200V	MB82MS-ND	2.20	1.93	1.65	1.38	1.10	MB82
	400V	MB84MS-ND	2.20	1.93	1.65	1.38	1.10	MB84
	600V	MB86MS-ND	2.20	1.93	1.65	1.38	1.10	MB86
	800V	MB88MS-ND	2.20	1.93	1.65	1.38	1.10	MB88
	1000V	MB810MS-ND	2.20	1.93	1.65	1.38	1.10	MB810
		PB-6 — 6 Amp Single Phase Bridge Rectifier						
5	50V	PB605MS-ND	1.68	1.47	1.26	1.05	.84	PB605
	100V	PB61MS-ND	1.68	1.47	1.26	1.05	.84	PB61
	200V	PB62MS-ND	1.76	1.54	1.32	1.10	.88	PB62
	400V	PB64MS-ND	1.76	1.54	1.32	1.10	.88	PB64
	600V	PB66MS-ND	1.84	1.61	1.38	1.15	.92	PB66
	800V	PB68MS-ND	1.92	1.68	1.44	1.20	.96	PB68
	1000V	PB610MS-ND	2.20	1.93	1.65	1.38	1.10	PB610

Fig. No.	Max. Peak Reverse Voltage	Digi-Key Part No.	Price Each 1	10	100	500	1,000	MCC Part No.
		PB-6 — 10 Amp Single Phase Bridge Rectifier						
5	50V	MB1005MS-ND	2.20	1.93	1.65	1.38	1.10	MB1005
	100V	MB101MS-ND	2.20	1.93	1.65	1.38	1.10	MB101
	200V	MB102MS-ND	2.20	1.93	1.65	1.38	1.10	MB102
	400V	MB104MS-ND	2.40	2.10	1.80	1.50	1.20	MB104
	600V	MB106MS-ND	2.80	2.45	2.10	1.75	1.40	MB106
	800V	MB108MS-ND	2.80	2.45	2.10	1.75	1.40	MB108
	1000V	MB1010MS-ND	3.00	2.63	2.25	1.88	1.50	MB1010
		MB-35W — 15 Amp Single Phase Bridge Rectifier						
6	50V	MB1505WMS-ND	4.00	3.50	3.00	2.50	2.00	MB1505W
	100V	MB151WMS-ND	4.40	3.85	3.30	2.75	2.20	MB151W
	200V	MB152WMS-ND	4.20	3.68	3.15	2.63	2.10	MB152W
	400V	MB154WMS-ND	4.40	3.85	3.30	2.75	2.20	MB154W
	600V	MB156WMS-ND	4.60	4.03	3.45	2.88	2.30	MB156W
	800V	MB158WMS-ND	4.60	4.03	3.45	2.88	2.30	MB158W
	1000V	MB1510WMS-ND	5.00	4.38	3.75	3.13	2.50	MB1510W
		MB-35W — 25 Amp Single Phase Bridge Rectifier						
6	50V	MB2505WMS-ND	4.40	3.85	3.30	2.75	2.20	MB2505W
	100V	MB251WMS-ND	4.40	3.85	3.30	2.75	2.20	MB251W
	200V	MB252WMS-ND	4.60	4.03	3.45	2.88	2.30	MB252W
	400V	MB254WMS-ND	4.80	4.20	3.60	3.00	2.40	MB254W
	600V	MB256WMS-ND	4.80	4.20	3.60	3.00	2.40	MB256W
	800V	MB258WMS-ND	5.00	4.38	3.75	3.13	2.50	MB258W
	1000V	MB2510WMS-ND	5.20	4.55	3.90	3.25	2.60	MB2510W
		MB-35W — 35 Amp Single Phase Bridge Rectifier						
6	50V	MB3505WMS-ND	4.80	4.20	3.60	3.00	2.40	MB3505W
	100V	MB351WMS-ND	4.80	4.20	3.60	3.00	2.40	MB351W
	200V	MB352WMS-ND	4.80	4.20	3.60	3.00	2.40	MB352W
	400V	MB354WMS-ND	5.00	4.38	3.75	3.13	2.50	MB354W
	600V	MB356WMS-ND	5.00	4.38	3.75	3.13	2.50	MB356W
	800V	MB358WMS-ND	5.20	4.55	3.90	3.25	2.60	MB358W
	1000V	MB3510WMS-ND	5.60	4.90	4.20	3.50	2.80	MB3510W
		MP-50WW — 50 Amp Single Phase Bridge Rectifier						
7	50V	MP5005WMS-ND	6.40	5.60	4.80	4.00	3.20	MB5005W
	100V	MP501WMS-ND	6.40	5.60	4.80	4.00	3.20	MB501W
	200V	MP502WMS-ND	6.40	5.60	4.80	4.00	3.20	MB502W
	400V	MP504WMS-ND	6.40	5.60	4.80	4.00	3.20	MB504W
	600V	MP506WMS-ND	6.80	5.95	5.10	4.25	3.40	MB506W
	800V	MP508WMS-ND	6.80	5.95	5.10	4.25	3.40	MB508W
	1000V	MP5010WMS-ND	7.96	6.97	5.97	4.98	3.98	MB5010W

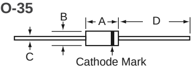
M·C·C SW Rectifiers

Fig. 1
MINIMELF
SMT



DIMENSIONS (mm)		
Dim.	**Min.**	**Max.**
A	3.40	3.61
B	.20	.41
C	1.40	1.50

Fig. 2
DO-35



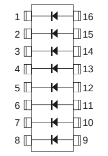
DIMENSIONS (mm.)		
Dim.	**Min.**	**Max.**
A	—	4.22
B	—	2.01
C	—	.51
D	25.40	—

Fig.	Max. Reverse Voltage V_R	Average Rectified Current I_O	Power Dissipation P_{TOT}	Reverse Recovery Time T_{RR}	Digi-Key Part No.	Cut Tape Pricing 10	100	1,000	Digi-Key Part No.	Tape & Reel Pricing 2,500	5,000	10,000	MCC Part No.
					500mW Silicon Epitaxial Diode								
1	75V	150mA	500mW	4nS*	DL4148MSCT-ND	1.10	9.35	77.00	DL4148MSTR-ND	72.00/M	66.00/M	44.00/M	DL4148
2	75V	150mA	500mW	4nS*	1N4148MSCT-ND	.53	4.20	35.00	1N4148MSTR-ND	—	—	14.00/M	IN4148

* I_F=10mA; V_R=6V; R_L=100Ω

Microsemi
Progress Powered by Technology

Switching Diode Arrays



Features: • 8 Isolated lines • Standard SOIC 16 pin Surface Mount Package • UL 94V-0 Flammability Classification

Vbr @ Ibr = 100µA (V) Min.	Ir +25°C (µA) Max.	(V) @ Vr	CAP @ 0 V (pF) Max.	trr (nS) Max.	Vf @ If = 100mA (V) Min.	Max.	Digi-Key Part No.	Pricing 1	10	100
100	.025 .100	20 50	4.0	5.0	—	1.20	S16-4148MS-ND	6.60	59.40	495.00
75	.500	75	2.5	4.0	0.82	0.92	S16-4150MS-ND	6.60	59.40	495.00

NEC RF and Microwave Products

Low Noise Bipolar Transistors

Fig.	Test f GHz	NF Typ dB	GA Typ dB	VCE V	S21E2 IC mA	Typ dB	fT Typ GHz	HFE Typ	IC Max mA	Digi-Key Part No.	Pricing 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 3,000
1	2.0	1.9	9.5	6	10	9	10.0	120	35	NE68019-ND	.66	5.50	25.67	NE68019TR-ND	367.00/M
3	2.0	1.7	9.5	6	10	8.5	10.0	100	35	NE68030-ND	.78	6.50	30.33	NE68030TR-ND	433.00/M
6	2.0	1.7	11	6	10	9	10.0	100	35	NE68039R-ND*	.84	7.00	32.67	NE68039RTR-ND	467.00/M
1	1.0	1.4	14	8	20	14	7.0	120	65	NE68119-ND	.60	5.00	23.33	NE68119TR-ND	333.00/M
3	1.0	1.5	13.5	8	20	13	7.0	120	65	NE68130-ND	.75	6.25	29.17	NE68130TR-ND	417.00/M
6	1.0	1.2	13.5	8	20	15	9.0	100	65	NE68139-ND	.72	6.00	28.00	NE68139TR-ND	400.00/M
6	1.0	1.2	13.5	8	20	15	9.0	100	65	NE68139R-ND*	.72	6.00	28.00	NE68139RTR-ND	400.00/M
1	2.0	1.5	7.5	3	10	9	12.0	110	30	NE68519-ND	.66	5.50	25.67	NE68519TR-ND	367.00/M
3	2.0	1.5	7	3	10	8.5	12.0	110	30	NE68530-ND	.81	6.75	31.50	NE68530TR-ND	450.00/M
1	2.0	1.3	7.5	1	10	7.5	9.0	100	30	NE68719-ND	.75	6.25	29.17	NE68719TR-ND	417.00/M
3	2.0	1.3	7.5	1	10	7.5	9.0	100	30	NE68730-ND	1.05	8.75	40.83	NE68730TR-ND	583.00/M
1	2.0	1.5	8	3	20	8	9.5	120	100	NE68819-ND	.60	5.00	23.33	NE68819TR-ND	333.00/M
4	2.0	1.6	9	3	10	14	14.0	120	30	NE696M01-ND	.87	7.25	33.83	NE696M01TR-ND	483.00/M
1	1.0	1.4	12.5	3	7	9	4.5	120	100	NE85619-ND	.54	4.50	21.00	NE85619TR-ND	300.00/M
3	1.0	1.3	12	10	20	12	4.5	110	100	NE85630-ND	.66	5.50	25.67	NE85630TR-ND	367.00/M
7	1.0	1.4	9	10	20	11.5	7.0	120	100	NE85633-ND	.66	5.50	25.67	NE85633TR-ND	367.00/M
6	1.0	1.5	13.5	10	20	13	7.0	120	100	NE85639R-ND*	.66	5.50	25.67	NE85639RTR-ND	367.00/M
Dual Package															
4	2.0	1.9	—	3	5	7.5	8.0	120	35	UPA800T-ND	1.17	9.75	45.50	UPA800TTR-ND	650.00/M
4	2.0	1.5	—	3	10	8.5	12.0	100	30	UPA806T-ND	1.17	9.75	45.50	UPA806TTR-ND	650.00/M
4	1.0	1.2	—	3	7	9	4.5	120	100	UPA810T-ND	.99	8.25	38.50	UPA810TTR-ND	550.00/M
4	2.0	1.5	—	3	7	5	9.0	120	100	UPA814T-ND	1.17	9.75	45.50	UPA814TTR-ND	650.00/M

* Reverse Pinout (see Fig.)

Medium Power Bipolar Transistors

Fig.	Test f GHz	P1dB VCE V	IC mA	Pin dBM	Typ dBM	ifT Typ GHz	HFE Typ	IC Max mA	Digi-Key Part No.	Pricing 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 1,000
9	1.0	12.5	100	20.5	27.5	5.5	100	250	NE46134-ND	1.68	14.00	65.33	NE46134TR-ND	933.00
9	1.0	10	40	13	22	6.5	120	100	NE85634-ND	.90	7.50	35.00	NE85634TR-ND	500.00

Bipolar Oscillator Transistors

Fig.	Posc f GHz	VCE V	IC mA	Typ W	fT Typ GHz	HFE Typ	IC Max mA	Digi-Key Part No.	Pricing 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 3,000
3	2.5	2.5	0.4	0.001	2	100	50	NE94430-ND	.36	3.00	14.00	NE94430TR-ND	200.00/M
7	2.5	2.5	0.4	0.001	2	100	50	NE94433-ND	.36	3.00	14.00	NE94433TR-ND	200.00/M

General Purpose GaAs FETs

Fig.	Gate Length um	Gate Width um	Frequency Range GHz	Test f GHz	NF/GA Bias VDS V	IDS mA	NF dB	GA dB	P1dB dBm	Digi-Key Part No.	Pricing 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 3,000
6	1	400	0.1-6	0.9	5	10	1.1	20	12	NE25139-ND	2.34	19.50	91.00	NE25139TR-ND	667.00/M
2	0.6	400	0.1-6	2.0	2	5	0.6	16	16	NE34018-ND	4.70	42.30	199.75	NE34018TR-ND	1264.00/M

Silicon MMIC Wideband Amplifiers

Fig.	f Typ @ 3dB down MHz	Vcc V	Icc Typ mA	NF Typ dB	Gain Typ dB	RLin Typ dB	RLout Typ dB	P1dB Typ dBm	ISOL Typ dB	Digi-Key Part No.	Pricing 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 1,000	3,000
8	1900	5	49	6.0	23	14	4	+15.9	35	UPC1678GV-ND	2.65	23.85	112.63	UPC1678GVTR-ND	1634.00	—
4	2900	5	12	5.0	13	25	12	-2.6	30	UPC2711TB-ND	1.41	11.75	54.83	UPC2711TBTR-ND	—	783.00/M
4	2600	5	12	4.5	20	12	13	-0.4	33	UPC2712TB-ND	1.41	11.75	54.83	UPC2712TBTR-ND	—	783.00/M
4	2700	3	7.5	6.0	12	11	5.5	-3.0	33	UPC2745TB-ND	1.38	11.50	53.67	UPC2745TBTR-ND	—	767.00/M
4	1500	3	7.5	4.0	19	13	8.5	-3.7	45	UPC2746TB-ND	1.38	11.50	53.67	UPC2746TBTR-ND	—	767.00/M
4	2900	3	27	6.5	14.5	8.5	12	+7	25	UPC2762TB-ND	1.38	11.50	53.67	UPC2762TBTR-ND	—	767.00/M
4	2400	3	27	5.5	20	12	9	+6.5	29	UPC2763TB-ND	1.38	11.50	53.67	UPC2763TBTR-ND	—	767.00/M
4	2400	3	36	6.0	21	14	10	+11.5	30	UPC2771TB-ND	1.38	11.50	53.67	UPC2771TBTR-ND	—	767.00/M
4	2700	5	25	6.0	23	7.5	20	+6	32	UPC2776TB-ND	1.41	11.75	54.83	UPC2776TBTR-ND	—	783.00/M

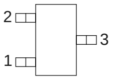
Silicon MMIC Prescalers

Fig.	fin GHz Min	Max	Pin dBm Min	Max	Vcc V	Icc Typ mA	Divide Ratio	Digi-Key Part No.	Pricing 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 1,000
8	0.5	3	-15	+6	5	19	64/128/256	UPB1506GV-ND	3.00	27.00	127.50	UPB1506GVTR-ND	1850.00
8	0.5	3	-15	+6	5	19	64/128/256	UPB1507GV-ND	3.00	27.00	127.50	UPB1507GVTR-ND	1850.00
8	0.5	3	-10	+6	5	10	2	UPB1508GV-ND	3.00	27.00	127.50	UPB1508GVTR-ND	1850.00
8	0.5	1	-20	-5	3	5	2/4/8	UPB1509GV-ND	3.00	27.00	127.50	UPB1509GVTR-ND	1850.00
8	0.5	3	-10	+6	5	15	4	UPB1510GV-ND	3.00	27.00	127.50	UPB1510GVTR-ND	1850.00

GaAs MMIC SPDT Switches

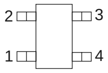
Fig.	Frequency Range GHz	IL Typ dB	Isolation @ 2GHz dB	RLin Min dB	RLout Min dB	P1dB dBm	tsw ns	Vcont V	Digi-Key Part No.	Pricing 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 2,000	3,000
8	0.1-2.5	0.6	22	11	11	+30	30	+3/0	UPG137GV-ND	2.85	25.65	121.13	UPG137GVTR-ND	1758.00/M	—
5	0.1-2.5	0.5	20	11	11	+30	30	+3/0	UPG152TA-ND	1.62	13.50	63.00	UPG152TATR-ND	—	900.00/M

Fig. 1 **SMT**



Std. Pin Conn.
1 Emitter
2 Base
3 Collector

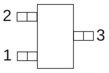
Fig. 2 **SOT-343**



Pin Conn. for NE25118 NE25139
1 Source
2 Drain
3 Gate 2
4 Gate 1

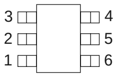
Pin Conn. for NE34018
1 Source
2 Gate
3 Source
4 Drain

Fig. 3 **SOT-323**



Std. Pin Conn.
1 Emitter
2 Base
3 Collector

Fig. 4 **SOT-363**



Pin Conn. for NE696M01
1. Emitter
2. Emitter
3. Base
4. Emitter
5. Emitter
6. Collector

Pin Conn. for UPA810T/ UPA814T

1. C2	4. B1
2. B2	5. E1
3. C1	6. E2

Pin Conn. for UPA800T/ UPA806T

1. C2	4. B1
2. E1	5. B2
3. C1	6. E2

Fig. 5 **SOT-26**

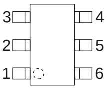
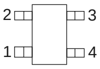


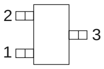
Fig. 6 **SOT-143**



Pin Conn. for UPC1688G
1. GND
2. OUT
3. V_{CC}
4. IN

Std. Pin Conn.	**Rev. Pin Conn.**	**Pin Conn. for NE25139**
1 Collector	1 Emitter	1 Source
2 Emitter	2 Collector	2 Drain
3 Base	3 Emitter	3 Gate 2
4 Emitter	4 Base	4 Gate 1

Fig. 7 **SOT-23**



Std. Pin Conn.
1 Emitter
2 Base
3 Collector

Fig. 8 **8 pin SSOP**

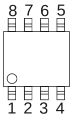
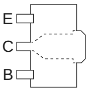
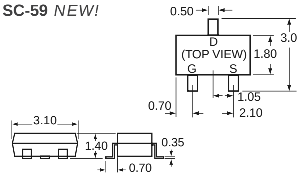


Fig. 9 **SOT-89**

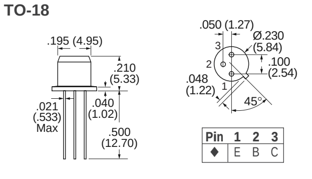


Transistors

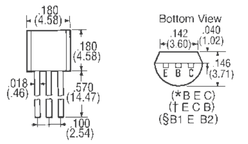
SC-59 *NEW!*



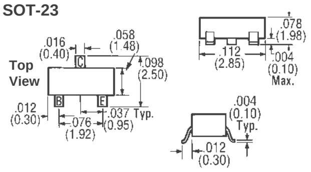
TO-18



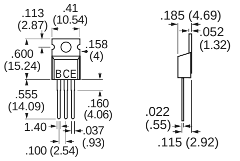
TO-92



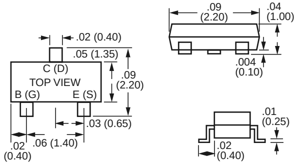
SOT-23



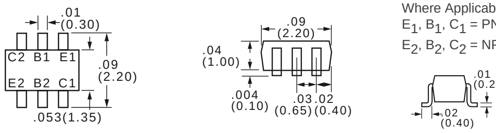
TO-220



SOT-323



SOT-363



Where Applicable:
E_1, B_1, C_1 = PNP Section
E_2, B_2, C_2 = NPN Section

FAIRCHILD SEMICONDUCTOR Transistors

Description	Min. HFE	Pkg.	Digi-Key Part No.	Pricing 1	25	100
NPN Transistors						
GP Ampl SW, 30V, 500MA	100	TO-92	2N3704-ND†	.26	4.95	14.30
SS GP Ampl, 40V, 100	50	TO-92	2N3903-ND	.28	5.16	14.30
SSGP, 40V, 100mA	100	TO-92	2N3904-ND	.21	3.96	11.44
SS GP Ampl, 30V, 50mA	50	TO-92	2N4123-ND	.21	3.96	11.44
SSGP, 25V, 50mA	60	TO-92	2N4124-ND	.21	3.96	11.44
SS GP Ampl, 40V, 500mA	50	TO-92	2N4400-ND	.21	3.96	11.44
SSGP, 40V, 500mA	100	TO-92	2N4401-ND	.21	3.96	11.44
LLGP, 80V, 10mA	60	TO-92	2N4410-ND	.21	3.96	11.44
LL LN Ampl, 30V, 10mA	350	TO-92	2N5088-ND	.21	3.96	11.44
LL LN Ampl, 25V, 10mA	450	TO-92	2N5089-ND	.21	3.96	11.44
LLGP, 50V, 10mA	250	TO-92	2N5210-ND	.21	3.96	11.44
SS GP Ampl, 140V, 50mA	60	TO-92	2N5550-ND	.25	4.74	13.16
Saturated SW, 15V, 10mA	40	TO-92	2N5769-ND	.21	3.96	11.44
RF Ampl, 15V,50mA	20	TO-92	2N5770-ND	.39	7.22	20.02
Saturated SW, 15V, 300mA	30	TO-92	2N5772-ND	.39	7.22	20.02
SS GP Ampl, 100V, 50mA	80	TO-92	2N5830-ND	.39	7.22	20.02
LL Ampl, 60V, 10mA	150	TO-92	2N5961-ND	.21	3.96	11.44
SS GP Ampl, 25V, 2mA	150	TO-92	MPS2924-ND	.41	8.27	22.68
SS GP Ampl, 25V, 100mA	150	TO-92	MPS6514-ND	.21	3.96	11.44
SS GP Ampl, 25V, 100mA	250	TO-92	MPS6515-ND	.21	3.96	11.44
SS GP Ampl, 80V, 50mA	50	TO-92	MPSA06-ND	.29	5.45	15.73
Darlington, 20V, 10mA	20K	TO-92	MPSA12-ND	.28	5.16	14.30
Darlington, 30V, 100mA	10K	TO-92	MPSA13-ND	.28	5.16	14.30
Darlington, 30V, 100mA	20K	TO-92	MPSA14-ND	.28	5.16	14.30
Medium Power, 300V, 30mA	40	TO-92	MPSA42-ND	.36	6.81	18.88
Medium Power, 200V, 30mA	50	TO-92	MPSA43-ND	.36	6.81	18.88
RF Ampl, 25V, 50mA	60	TO-92	MPSH10-ND*	.36	6.81	18.88
SSGP, 30V, 500mA	100	TO-92	PN2222-ND	.21	3.96	11.44
SSGP, 40V, 500mA	100	TO-92	PN2222A-ND	.21	3.96	11.44
Saturated SW, 15V, 10mA	20	TO-92	PN2369-ND	.21	3.96	11.44
Saturated, 15V, 100mA	40	TO-92	PN2369A-ND	.21	3.96	11.44
LL Ampl, 60V, 10mA	250	TO-92	PN2484-ND	.21	3.96	11.44
LLGP, 25V, 1mA	150	TO-92	PN3565-ND	.21	3.96	11.44
SSGP, 30V, 100mA	150	TO-92	PN3566-ND	.21	3.96	11.44
SSGP, 40V, 150mA	40	TO-92	PN3567-ND	.21	3.96	11.44
SSGP, 40V, 150mA	100	TO-92	PN3569-ND	.21	3.96	11.44
SSHS, 15V, 100mA	35	TO-92	PN4275-ND	.21	3.96	11.44
Saturated SW, 10V, 30mA	20	TO-92	PN5134-ND	.21	3.96	11.44
SSGP Ampl, 25V, 100mA	50	TO-92	PN5135-ND	.32	6.25	17.60
PNP Transistors						
SS GP Ampl, 40, 100mA	50	TO-92	2N3905-ND	.21	3.96	11.44
SSGP, 40V, 100mA	100	TO-92	2N3906-ND	.21	3.96	11.44
SS GP Ampl, 25, 50mA	120	TO-92	2N4125-ND	.21	3.96	11.44
SSGP, 25V, 50mA	60	TO-92	2N4126-ND	.21	3.96	11.44
SS GP Ampl, 40, 500mA	50	TO-92	2N4402-ND	.21	3.96	11.44
SSGP, 40V, 500mA	100	TO-92	2N4403-ND	.21	3.96	11.44
LLGP, 50V, 10mA	250	TO-92	2N5087-ND	.21	3.96	11.44
SS GP Ampl, 120, 50mA	40	TO-92	2N5400-ND	.26	4.95	14.30
SS GP Ampl, 150, 50mA	60	TO-92	2N5401-ND	.26	4.95	14.30
HS SW, 15V, 10mA	50	TO-92	2N5771-ND	1.51	30.25	90.75
SSGP, 25V, 300mA	30	TO-92	PN3638A-ND	.21	3.96	11.44

Description	Min. HFE	Pkg.	Digi-Key Part No.	Pricing 1	25	100
High Current Dr, 80V, 500mA	50	TO-92	MPSA56-ND	.29	5.45	15.73
High V Amp, 300V, 500mA	25	TO-92	MPSA92-ND	.32	5.98	16.59
Medium Power, 200V, 30mA	40	TO-92	MPSA93-ND	.33	6.26	17.37
SS GP Ampl, 100V, 50mA	40	TO-92	MPSL51-ND	.30	5.61	15.55
SSGP, 40V, 500mA	100	TO-92	PN2907-ND	.21	3.96	11.44
SSGP, 60V, 500mA	100	TO-92	PN2907A-ND	.21	3.96	11.44
SS GP Ampl, 40V, 50mA	100	TO-92	PN3251-ND	.39	7.88	21.60
Saturated SW, 12V, 50mA	30	TO-92	PN3640-ND	.55	11.00	33.00
SSGP, 60V, 300mA	100	TO-92	PN3645-ND	.49	9.92	27.22
SSGP, 40V, 50mA	70	TO-92	PN4121-ND	.25	4.74	13.16
SSGP, 40V, 50mA	150	TO-92	PN4122-ND	.21	3.96	11.44
LLLN, 60V, 1mA	300	TO-92	PN4249-ND	.21	3.96	11.44
LLLN, 40V, 1mA	250	TO-92	PN4250-ND	.21	3.96	11.44
LLLN, 60V, 1mA	250	TO-92	PN4250A-ND	.21	3.96	11.44
SS GP Ampl, 150V, 10mA	40	TO-92	PN4888-ND	.37	7.19	20.24
SSGP Ampl, 30V, 50mA	150	TO-92	PN4917-ND	.21	3.96	11.44
LL Ampl, 30V, 10mA	50	TO-92	PN5138-ND	.21	3.96	11.44
SS GP Ampl, 20V, 300mA	30	TO-92	PN5142-ND	.42	8.13	22.88
N-Channel J-FET Transistors						
GP Amp	—	TO-92	2N5457-ND	.46	9.38	25.74
VHF Amp & Mixer	—	TO-92	MPF102-ND	.40	8.03	24.09

Microsemi Progress Powered by Technology Transistors

Description	Min. HFE	Pkg.	Digi-Key Part No.	Pricing 1	10	100
NPN Transistors						
100 Volt VCE, 3 Amp	—	TO-220	TIP31CMS-ND	.76	6.84	57.00
40 Volt VCE, 0.8 Amp	30	TO-18	2N2222AMS-ND♦	.60	5.40	45.00
PNP Transistors						
100 Volt VCE, 1 Amp	—	TO-220	TIP30CMS-ND	.76	6.84	57.00
100 Volt VCE, 2 Amp	—	TO-220	TIP117MS-ND	.80	7.20	60.00
100 Volt VCE, 5 Amp	—	TO-220	TIP127MS-ND	.80	7.20	60.00

Description	Intrinsic Stand-Off Ratio (n) Min.	Max.	Pkg.	Digi-Key Part No.	Pricing 1	10	100
Uni-Junction							
Transistor	0.56	0.75	TO-92	2N4870MS-ND§	1.60	14.40	120.00
Transistor	0.70	0.85	TO-92	2N4871MS-ND§	1.60	14.40	120.00

DIODES INCORPORATED Transistors

Description	Min. HFE	Pkg.	Digi-Key Part No.	Pricing 10	100	Tape and Reel** Size	Pricing
NPN Transistors							
S.S., 40V, 600mA	100	SOT-323	MMST2222ADICT-ND* *NEW!*	3.25	23.40	3,000	111.00/M
S.S., 40V, 600mA	20	SOT-323	MMST4401CT-ND	3.25	23.40	3,000•	111.00/M
S.S., 25V, 200mA	60	SOT-323	MMST4124DICT-ND* *NEW!*	3.25	23.40	3,000	111.00/M
S.S., 160V, 200mA	30	SOT-323	MMST5551DICT-ND* *NEW!*	3.25	23.40	3,000	111.00/M
Darlington Amp, 40V, 500mA	14K	SOT-323	MMST6427DICT-ND* *NEW!*	3.25	23.40	3,000	111.00/M
S.S., 60V, 500mA	100	SOT-323	MMSTA05DICT-ND* *NEW!*	3.60	27.00	3,000	135.00/M
S.S., 80V, 500mA	100	SOT-323	MMSTA06DICT-ND* *NEW!*	3.60	27.00	3,000	135.00/M
Darlington Amp, 30V, 300mA	10K	SOT-323	MMSTA13DICT-ND* *NEW!*	3.60	27.00	3,000	135.00/M
Darlington Amp, 30V, 300mA	20K	SOT-323	MMSTA14DICT-ND* *NEW!*	3.60	27.00	3,000	135.00/M
S.S., 300V, 200mA	25	SOT-323	MMSTA42DICT-ND* *NEW!*	3.60	27.00	3,000	135.00/M
Gen. Purp., 60V, 150mA	100	TO-92	2N4401DICT-ND	1.65	13.20	2,000‡	83.00/M
SMD 350mW, 40V, 1.0	100	SOT-23	MMBT2222ADICT-ND	2.63	18.20	3,000•	70.00/M
SMD 350mW, 40V, 0.3	100	SOT-23	MMBT3904DICT-ND	2.25	15.60	2,000•	60.00/M
SMD 350mW, 40V, 0.75	100	SOT-23	MMBT4401DICT-ND	2.63	18.20	3,000•	70.00/M
Gen. Purp. 60V, 100mA, 0.25	50	SOT-23	MMBTA05DICT-ND	3.63	25.52	3,000•	104.00/M
Gen. Purp., 80V, 100mA, 0.25	50	SOT-23	MMBTA06DICT-ND	3.63	25.52	3,000•	104.00/M
Darlington Amp. 30V, 100mA	10K	SOT-23	MMBTA13DICT-ND	3.63	25.52	3,000•	104.00/M
Darlington Amp. 30V, 100mA	20K	SOT-23	MMBTA14DICT-ND	3.63	25.52	3,000•	104.00/M
S.S., 25V, 200mA	60	SOT-23	MMBT4124DICT-ND* *NEW!*	2.63	18.20	3,000	70.00/M
Darlington Amp, 40V, 500mA	14K	SOT-23	MMBT6427DICT-ND* *NEW!*	3.63	25.52	3,000	104.00/M
S.S., 300V, 200mA	25	SOT-23	MMBTA42DICT-ND* *NEW!*	3.63	25.52	3,000	104.00/M
SMD VHF/UHF, 25V, 50mA	30	SOT-23	MMBTH10DICT-ND* *NEW!*	4.00	28.80	3,000	136.00/M
SMD VHF/UHF, 40V, 50mA	60	SOT-23	MMBTH24DICT-ND* *NEW!*	4.00	28.80	3,000	136.00/M
PNP Transistors							
S.S., 60V, 600mA	75	SOT-323	MMST2907ACT-ND	3.25	23.40	3,000•	111.00/M
S.S., 40V, 200mA	60	SOT-323	MMST3906CT-ND	3.25	23.40	3,000•	111.00/M
S.S., 40V, 600mA	30	SOT-323	MMST4403CT-ND	3.25	23.40	—	—
S.S., –25V, –200mA	60	SOT-323	MMST4126DICT-ND* *NEW!*	3.25	23.40	3,000	111.00/M
S.S., –150V, –200mA	50	SOT-323	MMST5401DICT-ND* *NEW!*	3.25	23.40	3,000	111.00/M
S.S., –60V, –500mA	100	SOT-323	MMSTA55DICT-ND* *NEW!*	3.60	27.00	3,000	135.00/M
S.S., –80V, –500mA	100	SOT-323	MMSTA56DICT-ND* *NEW!*	3.60	27.00	3,000	135.00/M
Darlington Amp, –30V, –500mA	10K	SOT-323	MMSTA63DICT-ND* *NEW!*	3.60	27.00	3,000	135.00/M
Darlington Amp, –30V, –500mA	20K	SOT-323	MMSTA64DICT-ND* *NEW!*	3.60	27.00	3,000	135.00/M
S.S., –300V, –100mA	25	SOT-323	MMSTA92DICT-ND* *NEW!*	3.60	27.00	3,000	135.00/M
Gen. Purp., 40V, 100mA	30	TO-92	2N3906DICT-ND	1.45	11.60	4,000‡	58.00/M
Gen. Purp., 40V, 150mA	100	TO-92	2N4403DICT-ND	1.65	13.20	—	—
SMD 350mW, 40V, 0.75	100	SOT-23	MMBT4403DICT-ND	2.63	18.20	3,000•	70.00/M

† * ♦ § (See drawings above for pin layout). • TR = Tape & Reel ‡ TB = Tape & Box
** For Tape & Reel Part No., change CT to TR.

(Continued)

Transistors *(Cont.)*

Description	Min. HFE	Pkg.	Digi-Key Part No.	Pricing 10	Pricing 100	Tape and Reel** Size	Tape and Reel** Pricing
SMD Gen. Purp. 60V, 100mA	50	SOT-23	MMBTA55DICT-ND	3.63	25.52	3,000•	104.00/M
SMD Gen. Purp., 80V, 100mA	50	SOT-23	MMBTA56DICT-ND	3.63	25.52	3,000•	104.00/M
SMD Gen. Purp., 60V, 150mA	300	SOT-23	MMBT2907ADICT-ND	2.63	18.20	3,000•	70.00/M
S.S., –25V, –200mA	60	SOT-23	MMBT4126DICT-ND* *NEW!*	2.63	18.20	3,000	70.00/M
Darlington Amp, –30V, –500mA	10K	SOT-23	MMBTA63DICT-ND* *NEW!*	3.63	25.52	3,000	104.00/M
Darlington Amp, –30V, –500mA	20K	SOT-23	MMBTA64DICT-ND* *NEW!*	3.63	25.52	3,000	104.00/M
S.S., –300V, –100mA	25	SOT-23	MMBTA92DICT-ND* *NEW!*	3.63	25.52	3,000	104.00/M
			Dual NPN Transistor				
S.S., 40V, 600mA	35	SOT-363	MMDT2222ACT-ND	4.00	28.80	3,000•	136.00/M
S.S., 40V, 200mA	100	SOT-363	MMDT3904DICT-ND* *NEW!*	4.00	28.80	3,000	136.00/M
S.S., 40V, 600mA	100	SOT-363	MMDT4401DICT-ND* *NEW!*	4.00	30.00	3,000	150.00/M
S.S., 25V, 200mA	60	SOT-363	MMDT4124DICT-ND* *NEW!*	4.00	30.00	3,000	150.00/M
S.S., 160V, 200mA	30	SOT-363	MMDT5551DICT-ND* *NEW!*	4.00	30.00	3,000	150.00/M
			Dual PNP Transistors				
S.S., 60V, 600mA	75	SOT-363	MMDT2907ACT-ND	4.00	28.80	3,000•	136.00/M
S.S., 40V, 200mA	60	SOT-363	MMDT3906CT-ND	4.00	28.80	3,000•	136.00/M
S.S., 40V, 600mA	100	SOT-363	MMDT4403DICT-ND* *NEW!*	4.00	30.00	3,000	150.00/M
S.S., –25V, –200mA	60	SOT-363	MMDT4126DICT-ND* *NEW!*	4.00	30.00	3,000	150.00/M
S.S., –150V, –200mA	50	SOT-363	MMDT5401DICT-ND* *NEW!*	4.00	30.00	3,000	150.00/M

Description	Min. HFE	Pkg.	Digi-Key Part No.	Pricing 10	Pricing 100	Tape and Reel** Size	Tape and Reel** Pricing
			Complementary NPN/PNP Transistors				
S.S., 40V, 600mA/ S.S., 60V, 600mA	35/50	SOT-363	MMDT2227DICT-ND* *NEW!*	4.00	28.80	3,000	136.00/M
S.S., 40V, 200mA/ S.S., 40V, 200mA	40/60	SOT-363	MMDT3946CT-ND	4.00	28.80	3,000•	136.00/M
S.S., 40V, 600mA/ S.S., 40V 600mA	20/30	SOT-363	MMDT4413CT-ND	4.00	30.00	3,000•	150.00/M
S.S., 40V, 200mA/ S.S., 40V 200mA	60/60	SOT-363	MMDT4146DICT-ND* *NEW!*	4.00	30.00	3,000	150.00/M
S.S., 160V, 200mA/ S.S., 160V 200mA	30/50	SOT-363	MMDT5451DICT-ND* *NEW!*	4.00	30.00	3,000	150.00/M

DIODES INCORPORATED

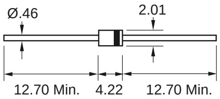
MOSFETS

Description	RDS (on) Type	Digi-Key Pkg.	Part No.	Pricing 10	Pricing 100	Tape and Reel** Size	Tape and Reel** Pricing
			N-Channel				
Enhance., 60V, 0.115A	3.2Ω	SOT-23	2N7002DICT-ND	4.00	30.00	3,000	150.00/M
Enhance., 60V, 0.250A	5.0Ω	SOT-23	BS870DICT-ND *NEW!*	4.00	30.00	3,000	150.00/M
Enhance., 50V, 0.200A	3.5Ω	SOT-23	BSS138DICT-ND *NEW!*	4.00	30.00	3,000	150.00/M
Enhance., 60V, 0.500A	5.0Ω	SOT-23	MMBF170DICT-ND *NEW!*	3.00	21.60	3,000	102.00/M
Enhance., 30V, 1.1A	0.17Ω	SC-59	DMN100DICT-ND *NEW!*	7.04	52.80	3,000	293.00/M
Enhance., 60V, 0.115A	3.2Ω	SOT-323	2N7002WCT-ND	4.80	36.00	3,000	180.00/M
			Dual N-Channel				
Enhance., 60V, 0.115A	7.5Ω	SOT-363	2N7002DWDICT-ND *NEW!*	4.80	36.00	3,000	200.00/M
			P-Channel				
Enhance., –50V, –130A	10Ω	SOT-23	BSS84DICT-ND *NEW!*	4.00	30.00	3,000	150.00/M

† * ♦ § (See drawings above for pin layout). • TR = Tape & Reel ‡ TB = Tape & Box
** For Tape & Reel Part No., change CT to TR.

DIODES INCORPORATED

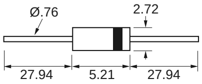
Zener Diodes



DO-35 Zener Diodes — 500mW (+5%)

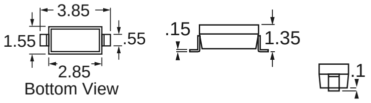
Zener Volt VZ @ IZT Nom	Test Current iZT (mA)	Max. Dynamic Impedance ZZT iZT	Digi-Key Part No.	Cut Tape Pricing 1	Cut Tape Pricing 10	Cut Tape Pricing 100	Cut Tape Pricing 1,000	Digi-Key Part No.	Tape & Reel Pricing 10,000
3.3	20	28	1N5226BDICT-ND	.36	2.10	13.65	56.70	1N5226BDITR-ND	36.00/M
3.6	20	24	1N5227BDICT-ND	.36	2.10	13.65	56.70	1N5227BDITR-ND	36.00/M
3.9	20	23	1N5228BDICT-ND	.36	2.10	13.65	56.70	1N5228BDITR-ND	36.00/M
4.3	20	22	1N5229BDICT-ND	.36	2.10	13.65	56.70	1N5229BDITR-ND	36.00/M
4.7	20	19	1N5230BDICT-ND	.36	2.10	13.65	56.70	1N5230BDITR-ND	36.00/M
5.1	20	17	1N5231BDICT-ND	.36	2.10	13.65	56.70	1N5231BDITR-ND	36.00/M
5.6	20	11	1N5232BDICT-ND	.36	2.10	13.65	56.70	1N5232BDITR-ND	36.00/M
6.0	20	7	1N5233BDICT-ND	.36	2.10	13.65	56.70	1N5233BDITR-ND	36.00/M
6.2	20	7	1N5234BDICT-ND	.36	2.10	13.65	56.70	1N5234BDITR-ND	36.00/M
6.8	20	5	1N5235BDICT-ND	.36	2.10	13.65	56.70	1N5235BDITR-ND	36.00/M
7.5	20	6	1N5236BDICT-ND	.36	2.10	13.65	56.70	1N5236BDITR-ND	36.00/M
8.2	20	8	1N5237BDICT-ND	.36	2.10	13.65	56.70	1N5237BDITR-ND	36.00/M
8.7	20	8	1N5238BDICT-ND	.36	2.10	13.65	56.70	1N5238BDITR-ND	36.00/M
9.1	20	10	1N5239BDICT-ND	.36	2.10	13.65	56.70	1N5239BDITR-ND	36.00/M
10	20	17	1N5240BDICT-ND	.36	2.10	13.65	56.70	1N5240BDITR-ND	36.00/M
11	20	22	1N5241BDICT-ND	.36	2.10	13.65	56.70	1N5241BDITR-ND	36.00/M
12	20	30	1N5242BDICT-ND	.36	2.10	13.65	56.70	1N5242BDITR-ND	36.00/M
13	9.5	13	1N5243BDICT-ND	.36	2.10	13.65	56.70	1N5243BDITR-ND	36.00/M
14	9.0	15	1N5244BDICT-ND	.36	2.10	13.65	56.70	1N5244BDITR-ND	36.00/M
15	8.5	16	1N5245BDICT-ND	.36	2.10	13.65	56.70	1N5245BDITR-ND	36.00/M
16	7.8	17	1N5246BDICT-ND	.36	2.10	13.65	56.70	1N5246BDITR-ND	36.00/M
17	7.4	19	1N5247BDICT-ND	.36	2.10	13.65	56.70	1N5247BDITR-ND	36.00/M
18	7.0	21	1N5248BDICT-ND	.36	2.10	13.65	56.70	1N5248BDITR-ND	36.00/M
19	6.6	23	1N5249BDICT-ND	.36	2.10	13.65	56.70	1N5249BDITR-ND	36.00/M
20	6.2	25	1N5250BDICT-ND	.36	2.10	13.65	56.70	1N5250BDITR-ND	36.00/M
22	5.6	29	1N5251BDICT-ND	.36	2.10	13.65	56.70	1N5251BDITR-ND	36.00/M
24	5.2	33	1N5252BDICT-ND	.36	2.10	13.65	56.70	1N5252BDITR-ND	36.00/M
25	5.0	35	1N5253BDICT-ND	.36	2.10	13.65	56.70	1N5253BDITR-ND	36.00/M
27	4.6	41	1N5254BDICT-ND	.36	2.10	13.65	56.70	1N5254BDITR-ND	36.00/M
28	4.5	44	1N5255BDICT-ND	.36	2.10	13.65	56.70	1N5255BDITR-ND	36.00/M
30	4.2	49	1N5256BDICT-ND	.36	2.10	13.65	56.70	1N5256BDITR-ND	36.00/M
33	3.8	58	1N5257BDICT-ND	.36	2.10	13.65	56.70	1N5257BDITR-ND	36.00/M
36	3.4	70	1N5258BDICT-ND	.36	2.10	13.65	56.70	1N5258BDITR-ND	36.00/M
39	3.2	80	1N5259BDICT-ND	.36	2.10	13.65	56.70	1N5259BDITR-ND	36.00/M
43	3.0	93	1N5260BDICT-ND	.36	2.10	13.65	56.70	1N5260BDITR-ND	36.00/M
47	2.7	105	1N5261BDICT-ND	.36	2.10	13.65	56.70	1N5261BDITR-ND	36.00/M
51	2.5	125	1N5262BDICT-ND	.36	2.10	13.65	56.70	1N5262BDITR-ND	36.00/M

DO-41 Zener Diodes 1W (+5%)



Zener Volt VZ @ IZT Nom	Test Current iZT (mA)	Max Dynamic Imped. ZZT iZT	Digi-Key Part No.	Cut Tape Pricing 1	Cut Tape Pricing 10	Cut Tape Pricing 100	Cut Tape Pricing 1,000	Digi-Key Part No.	Tape & Reel Pricing 5,000
3.3	76	10.0	1N4728ADICT-ND	.36	2.48	17.16	75.90	1N4728ADITR-ND	59.00/M
3.6	69	10.0	1N4729ADICT-ND	.36	2.48	17.16	75.90	1N4729ADITR-ND	59.00/M
3.9	64	9.0	1N4730ADICT-ND	.36	2.48	17.16	75.90	1N4730ADITR-ND	59.00/M
4.3	58	9.0	1N4731ADICT-ND	.36	2.48	17.16	75.90	1N4731ADITR-ND	59.00/M
4.7	53	8.0	1N4732ADICT-ND	.36	2.48	17.16	75.90	1N4732ADITR-ND	59.00/M
5.1	49	7.0	1N4733ADICT-ND	.36	2.48	17.16	75.90	1N4733ADITR-ND	59.00/M
5.6	45	5.0	1N4734ADICT-ND	.36	2.48	17.16	75.90	1N4734ADITR-ND	59.00/M
6.2	41	2.0	1N4735ADICT-ND	.36	2.48	17.16	75.90	1N4735ADITR-ND	59.00/M
6.8	37	3.5	1N4736ADICT-ND	.36	2.48	17.16	75.90	1N4736ADITR-ND	59.00/M
7.5	34	4.0	1N4737ADICT-ND	.36	2.48	17.16	75.90	1N4737ADITR-ND	59.00/M
8.2	31	4.5	1N4738ADICT-ND	.36	2.48	17.16	75.90	1N4738ADITR-ND	59.00/M
9.1	28	5.0	1N4739ADICT-ND	.36	2.48	17.16	75.90	1N4739ADITR-ND	59.00/M
10	25	7.0	1N4740ADICT-ND	.36	2.48	17.16	75.90	1N4740ADITR-ND	59.00/M
11	23	8	1N4741ADICT-ND	.36	2.48	17.16	75.90	1N4741ADITR-ND	59.00/M
12	21	9	1N4742ADICT-ND	.36	2.48	17.16	75.90	1N4742ADITR-ND	59.00/M
13	19	10	1N4743ADICT-ND	.36	2.48	17.16	75.90	1N4743ADITR-ND	59.00/M
15	17	14	1N4744ADICT-ND	.36	2.48	17.16	75.90	1N4744ADITR-ND	59.00/M
16	15	16	1N4745ADICT-ND	.36	2.48	17.16	75.90	1N4745ADITR-ND	59.00/M
18	14	20	1N4746ADICT-ND	.36	2.48	17.16	75.90	1N4746ADITR-ND	59.00/M
20	12.5	22	1N4747ADICT-ND	.36	2.48	17.16	75.90	1N4747ADITR-ND	59.00/M
22	11.5	23	1N4748ADICT-ND	.36	2.48	17.16	75.90	1N4748ADITR-ND	59.00/M
24	10.5	25	1N4749ADICT-ND	.36	2.48	17.16	75.90	1N4749ADITR-ND	59.00/M
27	9.5	35	1N4750ADICT-ND	.36	2.48	17.16	75.90	1N4750ADITR-ND	59.00/M
30	8.5	40	1N4751ADICT-ND	.36	2.48	17.16	75.90	1N4751ADITR-ND	59.00/M
33	7.5	45	1N4752ADICT-ND	.36	2.48	17.16	75.90	1N4752ADITR-ND	59.00/M
36	7	50	1N4753ADICT-ND	.36	2.48	17.16	75.90	1N4753ADITR-ND	59.00/M
39	6.5	60	1N4754ADICT-ND	.36	2.48	17.16	75.90	1N4754ADITR-ND	59.00/M
43	6	70	1N4755ADICT-ND	.36	2.48	17.16	75.90	1N4755ADITR-ND	59.00/M
47	55	80	1N4756ADICT-ND	.36	2.48	17.16	75.90	1N4756ADITR-ND	59.00/M
51	5	95	1N4757ADICT-ND	.36	2.48	17.16	75.90	1N4757ADITR-ND	59.00/M
56	4.5	110	1N4758ADICT-ND	.36	2.48	17.16	75.90	1N4758ADITR-ND	59.00/M
62	4	125	1N4759ADICT-ND	.36	2.48	17.16	75.90	1N4759ADITR-ND	59.00/M
68	3.7	150	1N4760ADICT-ND	.36	2.48	17.16	75.90	1N4760ADITR-ND	59.00/M
75	3.3	175	1N4761ADICT-ND	.36	2.48	17.16	75.90	1N4761ADITR-ND	59.00/M

NEW! SOD-123 Surface Mount Zener Diodes — 500mW



Zener Volt VZ @ IZT Nom	Test Current iZT (mA)	Max. Dynamic Impedance ZZT iZT	Digi-Key Part No.	Cut Tape Pricing 10	Cut Tape Pricing 100	Cut Tape Pricing 1,000	Digi-Key Part No.	Tape & Reel Pricing 10,000
			BZT Series					
2.4	5	100	BZT52C2V4DICT-ND	3.13	22.00	100.00	BZT52C2V4DITR-ND	78.00/M
2.7	5	100	BZT52C2V7DICT-ND	3.13	22.00	100.00	BZT52C2V7DITR-ND	78.00/M
3.0	5	95	BZT52C3V0DICT-ND	3.13	22.00	100.00	BZT52C3V0DITR-ND	78.00/M
3.3	5	95	BZT52C3V3DICT-ND	3.13	22.00	100.00	BZT52C3V3DITR-ND	78.00/M
3.6	5	90	BZT52C3V6DICT-ND	3.13	22.00	100.00	BZT52C3V6DITR-ND	78.00/M
3.9	5.0	95	BZT52C3V9DICT-ND	3.13	22.00	100.00	BZT52C3V9DITR-ND	78.00/M
4.3	5.0	95	BZT52C4V3DICT-ND	3.13	22.00	100.00	BZT52C4V3DITR-ND	78.00/M
4.7	5	80	BZT52C4V7DICT-ND	3.13	22.00	100.00	BZT52C4V7DITR-ND	78.00/M
5.1	5.0	60	BZT52C5V1DICT-ND	3.13	22.00	100.00	BZT52C5V1DITR-ND	78.00/M
5.6	5.0	40	BZT52C5V6DICT-ND	3.13	22.00	100.00	BZT52C5V6DITR-ND	78.00/M
6.2	5.0	10	BZT52C6V2DICT-ND	3.13	22.00	100.00	BZT52C6V2DITR-ND	78.00/M
6.8	5.0	15	BZT52C6V8DICT-ND	3.13	22.00	100.00	BZT52C6V8DITR-ND	78.00/M
7.5	5.0	7	BZT52C7V5DICT-ND	3.13	22.00	100.00	BZT52C7V5DITR-ND	78.00/M
8.2	5.0	15	BZT52C8V2DICT-ND	3.13	22.00	100.00	BZT52C8V2DITR-ND	78.00/M
9.1	5.0	15	BZT52C9V1DICT-ND	3.13	22.00	100.00	BZT52C9V1DITR-ND	78.00/M

(*Continued*)

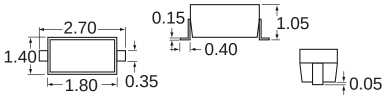
DIODES INCORPORATED Zener Diodes *(Cont.)*

NEW! SOD-123 Surface Mount Zener Diodes — 500mW

Zener Volt VZ @ IZT Nom	Test Current iZT (mA)	Max. Dynamic Imped. ZZT iZT	Digi-Key Part No.	Cut Tape Pricing 10	100	1,000	Digi-Key Part No.	Tape & Reel Pricing 10,000
BZT Series								
10.0	5.0	15	BZT52C10DICT-ND	3.13	22.00	100.00	BZT52C10DITR-ND	78.00/M
11	5.0	20	BZT52C11DICT-ND	3.13	22.00	100.00	BZT52C11DITR-ND	78.00/M
12.0	5.0	20	BZT52C12DICT-ND	3.13	22.00	100.00	BZT52C12DITR-ND	78.00/M
13	5.0	30	BZT52C13DICT-ND	3.13	22.00	100.00	BZT52C13DITR-ND	78.00/M
15	5.0	30	BZT52C15DICT-ND	3.13	22.00	100.00	BZT52C15DITR-ND	78.00/M
16	5.0	40	BZT52C16DICT-ND	3.13	22.00	100.00	BZT52C16DITR-ND	78.00/M
18	5.0	45	BZT52C18DICT-ND	3.13	22.00	100.00	BZT52C18DITR-ND	78.00/M
20.0	5.0	50	BZT52C20DICT-ND	3.13	22.00	100.00	BZT52C20DITR-ND	78.00/M
22	5.0	55	BZT52C22DICT-ND	3.13	22.00	100.00	BZT52C22DITR-ND	78.00/M
24	5.0	70	BZT52C24DICT-ND	3.13	22.00	100.00	BZT52C24DITR-ND	78.00/M
27.0	5.0	80	BZT52C27DICT-ND	3.13	22.00	100.00	BZT52C27DITR-ND	78.00/M
30	2.0	80	BZT52C30DICT-ND	3.13	22.00	100.00	BZT52C30DITR-ND	78.00/M
33	2.0	80	BZT52C33DICT-ND	3.13	22.00	100.00	BZT52C33DITR-ND	78.00/M
36	2.0	90	BZT52C36DICT-ND	3.13	22.00	100.00	BZT52C36DITR-ND	78.00/M
39	2.0	130	BZT52C39DICT-ND	3.13	22.00	100.00	BZT52C39DITR-ND	78.00/M
43	5.0	100	BZT52C43DICT-ND	3.13	22.00	100.00	BZT52C43DITR-ND	78.00/M

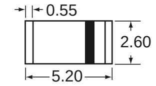
Zener Volt VZ @ IZT Nom	Test Current iZT (mA)	Max. Dynamic Imped. ZZT iZT	Digi-Key Part No.	Cut Tape Pricing 10	100	1,000	Digi-Key Part No.	Tape & Reel Pricing 3,000
MMSZ Series								
2.4	20	30	MMSZ5221BDICT-ND	3.13	22.00	100.00	MMSZ5221BDITR-ND	90.00/M
2.7	20	30	MMSZ5223BDICT-ND	3.13	22.00	100.00	MMSZ5223BDITR-ND	90.00/M
3.0	20	30	MMSZ5225BDICT-ND	3.13	22.00	100.00	MMSZ5225BDITR-ND	90.00/M
3.3	20	28	MMSZ5226BDICT-ND	3.13	22.00	100.00	MMSZ5226BDITR-ND	90.00/M
3.6	20	24	MMSZ5227BDICT-ND	3.13	22.00	100.00	MMSZ5227BDITR-ND	90.00/M
3.9	20	23	MMSZ5228BDICT-ND	3.13	22.00	100.00	MMSZ5228BDITR-ND	90.00/M
4.3	20	22	MMSZ5229BDICT-ND	3.13	22.00	100.00	MMSZ5229BDITR-ND	90.00/M
4.7	20	19	MMSZ5230BDICT-ND	3.13	22.00	100.00	MMSZ5230BDITR-ND	90.00/M
5.1	20	17	MMSZ5231BDICT-ND	3.13	22.00	100.00	MMSZ5231BDITR-ND	90.00/M
5.6	20	11	MMSZ5232BDICT-ND	3.13	22.00	100.00	MMSZ5232BDITR-ND	90.00/M
6.2	20	7	MMSZ5234BDICT-ND	3.13	22.00	100.00	MMSZ5234BDITR-ND	90.00/M
6.8	20	5	MMSZ5235BDICT-ND	3.13	22.00	100.00	MMSZ5235BDITR-ND	90.00/M
7.5	20	6	MMSZ5236BDICT-ND	3.13	22.00	100.00	MMSZ5236BDITR-ND	90.00/M
8.2	20	8	MMSZ5237BDICT-ND	3.13	22.00	100.00	MMSZ5237BDITR-ND	90.00/M
9.1	20	10	MMSZ5239BDICT-ND	3.13	22.00	100.00	MMSZ5239BDITR-ND	90.00/M
10	20	17	MMSZ5240BDICT-ND	3.13	22.00	100.00	MMSZ5240BDITR-ND	90.00/M
11	20	22	MMSZ5241BDICT-ND	3.13	22.00	100.00	MMSZ5241BDITR-ND	90.00/M
12	20	30	MMSZ5242BDICT-ND	3.13	22.00	100.00	MMSZ5242BDITR-ND	90.00/M
13	9.5	13	MMSZ5243BDICT-ND	3.13	22.00	100.00	MMSZ5243BDITR-ND	90.00/M
15	8.5	16	MMSZ5245BDICT-ND	3.13	22.00	100.00	MMSZ5245BDITR-ND	90.00/M
16	7.8	17	MMSZ5246BDICT-ND	3.13	22.00	100.00	MMSZ5246BDITR-ND	90.00/M
18	7.0	21	MMSZ5248BDICT-ND	3.13	22.00	100.00	MMSZ5248BDITR-ND	90.00/M
20	6.2	25	MMSZ5250BDICT-ND	3.13	22.00	100.00	MMSZ5250BDITR-ND	90.00/M
22	5.6	29	MMSZ5251BDICT-ND	3.13	22.00	100.00	MMSZ5251BDITR-ND	90.00/M
24	5.2	33	MMSZ5252BDICT-ND	3.13	22.00	100.00	MMSZ5252BDITR-ND	90.00/M
27	5.0	41	MMSZ5254BDICT-ND	3.13	22.00	100.00	MMSZ5254BDITR-ND	90.00/M
28	4.5	44	MMSZ5255BDICT-ND	3.13	22.00	100.00	MMSZ5255BDITR-ND	90.00/M
30	4.2	49	MMSZ5256BDICT-ND	3.13	22.00	100.00	MMSZ5256BDITR-ND	90.00/M
33	3.8	58	MMSZ5257BDICT-ND	3.13	22.00	100.00	MMSZ5257BDITR-ND	90.00/M
36	3.4	70	MMSZ5258BDICT-ND	3.13	22.00	100.00	MMSZ5258BDITR-ND	90.00/M
39	3.2	80	MMSZ5259BDICT-ND	3.13	22.00	100.00	MMSZ5259BDITR-ND	90.00/M

NEW! SOD-323 Surface Mount Zener Diodes — 200mW



Zener Volt VZ @ IZT Nom	Test Curr. iZT (mA)	Max. Dynamic Imped. ZZT iZT	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
BZT Series								
2.4	5	100	BZT52C2V4SDICT-ND	.47	3.44	24.20	BZT52C2V4SDITR-ND	99.00/M
2.7	5	100	BZT52C2V7SDICT-ND	.47	3.44	24.20	BZT52C2V7SDITR-ND	99.00/M
3.0	5	95	BZT52C3V0SDICT-ND	.47	3.44	24.20	BZT52C3V0SDITR-ND	99.00/M
3.3	5	95	BZT52C3V3SDICT-ND	.47	3.44	24.20	BZT52C3V3SDITR-ND	99.00/M
3.6	5	90	BZT52C3V6SDICT-ND	.47	3.44	24.20	BZT52C3V6SDITR-ND	99.00/M
3.9	5	90	BZT52C3V9SDICT-ND	.47	3.44	24.20	BZT52C3V9SDITR-ND	99.00/M
4.3	5	90	BZT52C4V3SDICT-ND	.47	3.44	24.20	BZT52C4V3SDITR-ND	99.00/M
4.7	5	80	BZT52C4V7SDICT-ND	.47	3.44	24.20	BZT52C4V7SDITR-ND	99.00/M
5.1	5	60	BZT52C5V1SDICT-ND	.47	3.44	24.20	BZT52C5V1SDITR-ND	99.00/M
5.6	5	40	BZT52C5V6SDICT-ND	.47	3.44	24.20	BZT52C5V6SDITR-ND	99.00/M
6.2	5	10	BZT52C6V2SDICT-ND	.47	3.44	24.20	BZT52C6V2SDITR-ND	99.00/M
6.8	5	15	BZT52C6V8SDICT-ND	.47	3.44	24.20	BZT52C6V8SDITR-ND	99.00/M
7.5	5	15	BZT52C7V5SDICT-ND	.47	3.44	24.20	BZT52C7V5SDITR-ND	99.00/M
8.2	5	15	BZT52C8V2SDICT-ND	.47	3.44	24.20	BZT52C8V2SDITR-ND	99.00/M
9.1	5	15	BZT52C9V1SDICT-ND	.47	3.44	24.20	BZT52C9V1SDITR-ND	99.00/M
10	5	20	BZT52C10SDICT-ND	.47	3.44	24.20	BZT52C10SDITR-ND	99.00/M
11	5	20	BZT52C11SDICT-ND	.47	3.44	24.20	BZT52C11SDITR-ND	99.00/M
12	5	25	BZT52C12SDICT-ND	.47	3.44	24.20	BZT52C12SDITR-ND	99.00/M
13	5	30	BZT52C13SDICT-ND	.47	3.44	24.20	BZT52C13SDITR-ND	99.00/M
15	5	30	BZT52C15SDICT-ND	.47	3.44	24.20	BZT52C15SDITR-ND	99.00/M
16	5	40	BZT52C16SDICT-ND	.47	3.44	24.20	BZT52C16SDITR-ND	99.00/M
18	5	45	BZT52C18SDICT-ND	.47	3.44	24.20	BZT52C18SDITR-ND	99.00/M
20	5	55	BZT52C20SDICT-ND	.47	3.44	24.20	BZT52C20SDITR-ND	99.00/M
22	5	55	BZT52C22SDICT-ND	.47	3.44	24.20	BZT52C22SDITR-ND	99.00/M
24	5	70	BZT52C24SDICT-ND	.47	3.44	24.20	BZT52C24SDITR-ND	99.00/M
27	2	80	BZT52C27SDICT-ND	.47	3.44	24.20	BZT52C27SDITR-ND	99.00/M
30	2	80	BZT52C30SDICT-ND	.47	3.44	24.20	BZT52C30SDITR-ND	99.00/M
33	2	80	BZT52C33SDICT-ND	.47	3.44	24.20	BZT52C33SDITR-ND	99.00/M
36	2	90	BZT52C36SDICT-ND	.47	3.44	24.20	BZT52C36SDITR-ND	99.00/M
39	2	130	BZT52C39SDICT-ND	.47	3.44	24.20	BZT52C39SDITR-ND	99.00/M
MMSZ Series								
2.4	20	30	MMSZ5221BSDICT-ND	.47	3.44	24.20	MMSZ5221BSDITR-ND	99.00/M
3.0	20	30	MMSZ5225BSDICT-ND	.47	3.44	24.20	MMSZ5225BSDITR-ND	99.00/M
3.3	20	28	MMSZ5226BSDICT-ND	.47	3.44	24.20	MMSZ5226BSDITR-ND	99.00/M
3.6	20	24	MMSZ5227BSDICT-ND	.47	3.44	24.20	MMSZ5227BSDITR-ND	99.00/M
3.9	20	23	MMSZ5228BSDICT-ND	.47	3.44	24.20	MMSZ5228BSDITR-ND	99.00/M
4.3	20	22	MMSZ5229BSDICT-ND	.47	3.44	24.20	MMSZ5229BSDITR-ND	99.00/M
4.7	20	19	MMSZ5230BSDICT-ND	.47	3.44	24.20	MMSZ5230BSDITR-ND	99.00/M
5.1	20	17	MMSZ5231BSDICT-ND	.47	3.44	24.20	MMSZ5231BSDITR-ND	99.00/M
5.6	20	11	MMSZ5232BSDICT-ND	.47	3.44	24.20	MMSZ5232BSDITR-ND	99.00/M
6.2	20	7	MMSZ5234BSDICT-ND	.47	3.44	24.20	MMSZ5234BSDITR-ND	99.00/M
6.8	20	5	MMSZ5235BSDICT-ND	.47	3.44	24.20	MMSZ5235BSDITR-ND	99.00/M
7.5	20	6	MMSZ5236BSDICT-ND	.47	3.44	24.20	MMSZ5236BSDITR-ND	99.00/M
8.2	20	8	MMSZ5237BSDICT-ND	.47	3.44	24.20	MMSZ5237BSDITR-ND	99.00/M
9.1	20	10	MMSZ5239BSDICT-ND	.47	3.44	24.20	MMSZ5239BSDITR-ND	99.00/M
10	20	17	MMSZ5240BSDICT-ND	.47	3.44	24.20	MMSZ5240BSDITR-ND	99.00/M
11	20	22	MMSZ5241BSDICT-ND	.47	3.44	24.20	MMSZ5241BSDITR-ND	99.00/M
12	20	30	MMSZ5242BSDICT-ND	.47	3.44	24.20	MMSZ5242BSDITR-ND	99.00/M
13	9.5	13	MMSZ5243BSDICT-ND	.47	3.44	24.20	MMSZ5243BSDITR-ND	99.00/M
15	8.5	16	MMSZ5245BSDICT-ND	.47	3.44	24.20	MMSZ5245BSDITR-ND	99.00/M
18	7.0	21	MMSZ5248BSDICT-ND	.47	3.44	24.20	MMSZ5248BSDITR-ND	99.00/M
20	6.2	25	MMSZ5250BSDICT-ND	.47	3.44	24.20	MMSZ5250BSDITR-ND	99.00/M
22	5.6	29	MMSZ5251BSDICT-ND	.47	3.44	24.20	MMSZ5251BSDITR-ND	99.00/M
24	5.2	33	MMSZ5252BSDICT-ND	.47	3.44	24.20	MMSZ5252BSDITR-ND	99.00/M
27	5.0	41	MMSZ5254BSDICT-ND	.47	3.44	24.20	MMSZ5254BSDITR-ND	99.00/M
28	4.5	44	MMSZ5255BSDICT-ND	.47	3.44	24.20	MMSZ5255BSDITR-ND	99.00/M
30	4.2	49	MMSZ5256BSDICT-ND	.47	3.44	24.20	MMSZ5256BSDITR-ND	99.00/M
33	3.8	58	MMSZ5257BSDICT-ND	.47	3.44	24.20	MMSZ5257BSDITR-ND	99.00/M
36	3.4	70	MMSZ5258BSDICT-ND	.47	3.44	24.20	MMSZ5258BSDITR-ND	99.00/M
39	3.2	80	MMSZ5259BSDICT-ND	.47	3.44	24.20	MMSZ5259BSDITR-ND	99.00/M

NEW! MELF (DL-41) Surface Mount Zener Diodes — 1W

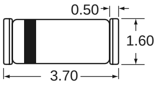


Zener Volt VZ @ IZT Nom	Test Curr. iZT (mA)	Max. Dynamic Imped. ZZT iZT	Digi-Key Part No.	Cut Tape Pricing 10	100	500	Digi-Key Part No.	Tape & Reel Pricing 5,000
3.3	76	10	ZM4728ADICT-ND	4.00	28.80	84.00	ZM4728ADITR-ND	128.00/M
3.9	64	9.0	ZM4730ADICT-ND	4.00	28.80	84.00	ZM4730ADITR-ND	128.00/M
4.3	58	9.0	ZM4731ADICT-ND	4.00	28.80	84.00	ZM4731ADITR-ND	128.00/M
4.7	53	8.0	ZM4732ADICT-ND	4.00	28.80	84.00	ZM4732ADITR-ND	128.00/M
5.1	49	7.0	ZM4733ADICT-ND	4.00	28.80	84.00	ZM4733ADITR-ND	128.00/M
5.6	45	5.0	ZM4734ADICT-ND	4.00	28.80	84.00	ZM4734ADITR-ND	128.00/M
6.2	41	2.0	ZM4735ADICT-ND	4.00	28.80	84.00	ZM4735ADITR-ND	128.00/M
6.8	37	3.5	ZM4736ADICT-ND	4.00	28.80	84.00	ZM4736ADITR-ND	128.00/M
7.5	34	4.0	ZM4737ADICT-ND	4.00	28.80	84.00	ZM4737ADITR-ND	128.00/M
8.2	31	4.5	ZM4738ADICT-ND	4.00	28.80	84.00	ZM4738ADITR-ND	128.00/M
9.1	28	5.0	ZM4739ADICT-ND	4.00	28.80	84.00	ZM4739ADITR-ND	128.00/M
10	25	7.0	ZM4740ADICT-ND	4.00	28.80	84.00	ZM4740ADITR-ND	128.00/M
11	23	8	ZM4741ADICT-ND	4.00	28.80	84.00	ZM4741ADITR-ND	128.00/M
12	21	9	ZM4742ADICT-ND	4.00	28.80	84.00	ZM4742ADITR-ND	128.00/M
13	19	10	ZM4743ADICT-ND	4.00	28.80	84.00	ZM4743ADITR-ND	128.00/M
15	17	14	ZM4744ADICT-ND	4.00	28.80	84.00	ZM4744ADITR-ND	128.00/M
16	15	16	ZM4745ADICT-ND	4.00	28.80	84.00	ZM4745ADITR-ND	128.00/M
18	14	20	ZM4746ADICT-ND	4.00	28.80	84.00	ZM4746ADITR-ND	128.00/M
20	12.5	22	ZM4747ADICT-ND	4.00	28.80	84.00	ZM4747ADITR-ND	128.00/M
22	11.5	23	ZM4748ADICT-ND	4.00	28.80	84.00	ZM4748ADITR-ND	128.00/M
24	10.5	25	ZM4749ADICT-ND	4.00	28.80	84.00	ZM4749ADITR-ND	128.00/M
27	9.5	35	ZM4750ADICT-ND	4.00	28.80	84.00	ZM4750ADITR-ND	128.00/M
30	8.5	40	ZM4751ADICT-ND	4.00	28.80	84.00	ZM4751ADITR-ND	128.00/M
33	7.5	45	ZM4752ADICT-ND	4.00	28.80	84.00	ZM4752ADITR-ND	128.00/M
36	7.0	50	ZM4753ADICT-ND	4.00	28.80	84.00	ZM4753ADITR-ND	128.00/M
39	6.5	60	ZM4754ADICT-ND	4.00	28.80	84.00	ZM4754ADITR-ND	128.00/M
43	6.0	70	ZM4755ADICT-ND	4.00	28.80	84.00	ZM4755ADITR-ND	128.00/M
47	5.5	80	ZM4756ADICT-ND	4.00	28.80	84.00	ZM4756ADITR-ND	128.00/M
51	5.0	95	ZM4757ADICT-ND	4.00	28.80	84.00	ZM4757ADITR-ND	128.00/M
56	4.5	110	ZM4758ADICT-ND	4.00	28.80	84.00	ZM4758ADITR-ND	128.00/M
62	4.0	125	ZM4759ADICT-ND	4.00	28.80	84.00	ZM4759ADITR-ND	128.00/M
68	3.7	150	ZM4760ADICT-ND	4.00	28.80	84.00	ZM4760ADITR-ND	128.00/M
75	3.3	175	ZM4761ADICT-ND	4.00	28.80	84.00	ZM4761ADITR-ND	128.00/M
82	3.0	200	ZM4762ADICT-ND	4.00	28.80	84.00	ZM4762ADITR-ND	128.00/M
91	2.8	250	ZM4763ADICT-ND	4.00	28.80	84.00	ZM4763ADITR-ND	128.00/M
100	2.5	350	ZM4764ADICT-ND	4.00	28.80	84.00	ZM4764ADITR-ND	128.00/M

(*Continued*)

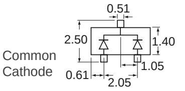
Zener Diodes *(Cont.)*

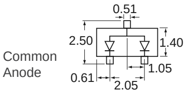
NEW! MiniMELF (DL-35) Surface Mount Zener Diodes — 500mW



Zener Volt VZ @ IZT Nom	Test Current IZT (mA)	Max. Dynamic Impedance ZZT IZT	Digi-Key Part No.	Cut Tape Pricing 10	100	1,000	Digi-Key Part No.	Tape & Reel Pricing 2,500
3.0	20	29	ZMM5225BDICT-ND	2.48	17.16	75.90	ZMM5225BDITR-ND	66.00/M
3.3	20	28	ZMM5226BDICT-ND	2.48	17.16	75.90	ZMM5226BDITR-ND	66.00/M
3.6	20	24	ZMM5227BDICT-ND	2.48	17.16	75.90	ZMM5227BDITR-ND	66.00/M
3.9	20	23	ZMM5228BDICT-ND	2.48	17.16	75.90	ZMM5228BDITR-ND	66.00/M
4.3	20	22	ZMM5229BDICT-ND	2.48	17.16	75.90	ZMM5229BDITR-ND	66.00/M
4.7	20	19	ZMM5230BDICT-ND	2.48	17.16	75.90	ZMM5230BDITR-ND	66.00/M
5.1	20	17	ZMM5231BDICT-ND	2.48	17.16	75.90	ZMM5231BDITR-ND	66.00/M
5.6	20	11	ZMM5232BDICT-ND	2.48	17.16	75.90	ZMM5232BDITR-ND	66.00/M
6.0	20	7	ZMM5233BDICT-ND	2.48	17.16	75.90	ZMM5233BDITR-ND	66.00/M
6.2	20	7	ZMM5234BDICT-ND	2.48	17.16	75.90	ZMM5234BDITR-ND	66.00/M
6.8	20	5	ZMM5235BDICT-ND	2.48	17.16	75.90	ZMM5235BDITR-ND	66.00/M
7.5	20	6	ZMM5236BDICT-ND	2.48	17.16	75.90	ZMM5236BDITR-ND	66.00/M
8.2	20	8	ZMM5237BDICT-ND	2.48	17.16	75.90	ZMM5237BDITR-ND	66.00/M
8.7	20	8	ZMM5238BDICT-ND	2.48	17.16	75.90	ZMM5238BDITR-ND	66.00/M
9.1	20	10	ZMM5239BDICT-ND	2.48	17.16	75.90	ZMM5239BDITR-ND	66.00/M
10	20	17	ZMM5240BDICT-ND	2.48	17.16	75.90	ZMM5240BDITR-ND	66.00/M
11	20	22	ZMM5241BDICT-ND	2.48	17.16	75.90	ZMM5241BDITR-ND	66.00/M
12	20	30	ZMM5242BDICT-ND	2.48	17.16	75.90	ZMM5242BDITR-ND	66.00/M
13	9.5	13	ZMM5243BDICT-ND	2.48	17.16	75.90	ZMM5243BDITR-ND	66.00/M
14	9.0	15	ZMM5244BDICT-ND	2.48	17.16	75.90	ZMM5244BDITR-ND	66.00/M
15	8.5	16	ZMM5245BDICT-ND	2.48	17.16	75.90	ZMM5245BDITR-ND	66.00/M
16	7.8	17	ZMM5246BDICT-ND	2.48	17.16	75.90	ZMM5246BDITR-ND	66.00/M
17	7.4	19	ZMM5247BDICT-ND	2.48	17.16	75.90	ZMM5247BDITR-ND	66.00/M
18	7.0	21	ZMM5248BDICT-ND	2.48	17.16	75.90	ZMM5248BDITR-ND	66.00/M
19	6.6	23	ZMM5249BDICT-ND	2.48	17.16	75.90	ZMM5249BDITR-ND	66.00/M
20	6.2	25	ZMM5250BDICT-ND	2.48	17.16	75.90	ZMM5250BDITR-ND	66.00/M
22	5.6	29	ZMM5251BDICT-ND	2.48	17.16	75.90	ZMM5251BDITR-ND	66.00/M
24	5.2	33	ZMM5252BDICT-ND	2.48	17.16	75.90	ZMM5252BDITR-ND	66.00/M
25	5.0	35	ZMM5253BDICT-ND	2.48	17.16	75.90	ZMM5253BDITR-ND	66.00/M
27	4.6	41	ZMM5254BDICT-ND	2.48	17.16	75.90	ZMM5254BDITR-ND	66.00/M
28	4.5	44	ZMM5255BDICT-ND	2.48	17.16	75.90	ZMM5255BDITR-ND	66.00/M
30	4.2	49	ZMM5256BDICT-ND	2.48	17.16	75.90	ZMM5256BDITR-ND	66.00/M
33	3.8	58	ZMM5257BDICT-ND	2.48	17.16	75.90	ZMM5257BDITR-ND	66.00/M
36	3.4	70	ZMM5258BDICT-ND	2.48	17.16	75.90	ZMM5258BDITR-ND	66.00/M
39	3.2	80	ZMM5259BDICT-ND	2.48	17.16	75.90	ZMM5259BDITR-ND	66.00/M
43	3.0	93	ZMM5260BDICT-ND	2.48	17.16	75.90	ZMM5260BDITR-ND	66.00/M
47	2.7	105	ZMM5261BDICT-ND	2.48	17.16	75.90	ZMM5261BDITR-ND	66.00/M
51	2.5	125	ZMM5262BDICT-ND	2.48	17.16	75.90	ZMM5262BDITR-ND	66.00/M
62	2.0	185	ZMM5265BDICT-ND	2.48	17.16	75.90	ZMM5265BDITR-ND	66.00/M
68	1.8	230	ZMM5266BDICT-ND	2.48	17.16	75.90	ZMM5266BDITR-ND	66.00/M

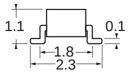
NEW! SOT-23 Dual Surface Mount Zener Diodes — 300mW



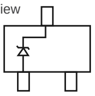


Zener Volt VZ @ IZT Nom	Test Current IZT (mA)	Max. Dynamic Imped. ZZT IZT	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
			Common Anode					
3.0	5.0	95	AZ23C3V0DICT-ND	.50	4.00	30.00	AZ23C3V0DITR-ND	150.00/M
3.9	5.0	95	AZ23C3V9DICT-ND	.50	4.00	30.00	AZ23C3V9DITR-ND	150.00/M
4.7	5.0	78	AZ23C4V7DICT-ND	.50	4.00	30.00	AZ23C4V7DITR-ND	150.00/M
5.1	5.0	60	AZ23C5V1DICT-ND	.50	4.00	30.00	AZ23C5V1DITR-ND	150.00/M
5.6	5.0	40	AZ23C5V6DICT-ND	.50	4.00	30.00	AZ23C5V6DITR-ND	150.00/M
6.2	5.0	10	AZ23C6V2DICT-ND	.50	4.00	30.00	AZ23C6V2DITR-ND	150.00/M
6.8	5.0	8	AZ23C6V8DICT-ND	.50	4.00	30.00	AZ23C6V8DITR-ND	150.00/M
10	5.0	15	AZ23C10DICT-ND	.50	4.00	30.00	AZ23C10DITR-ND	150.00/M
11	5.0	20	AZ23C11DICT-ND	.50	4.00	30.00	AZ23C11DITR-ND	150.00/M
12	5.0	20	AZ23C12DICT-ND	.50	4.00	30.00	AZ23C12DITR-ND	150.00/M
15	5.0	30	AZ23C15DICT-ND	.50	4.00	30.00	AZ23C15DITR-ND	150.00/M
16	5.0	40	AZ23C16DICT-ND	.50	4.00	30.00	AZ23C16DITR-ND	150.00/M
18	5.0	50	AZ23C18DICT-ND	.50	4.00	30.00	AZ23C18DITR-ND	150.00/M
20	5.0	50	AZ23C20DICT-ND	.50	4.00	30.00	AZ23C20DITR-ND	150.00/M
22	5.0	55	AZ23C22DICT-ND	.50	4.00	30.00	AZ23C22DITR-ND	150.00/M
27	5.0	80	AZ23C27DICT-ND	.50	4.00	30.00	AZ23C27DITR-ND	150.00/M
36	5.0	90	AZ23C36DICT-ND	.50	4.00	30.00	AZ23C36DITR-ND	150.00/M
51	5.0	100	AZ23C51DICT-ND	.50	4.00	30.00	AZ23C51DITR-ND	150.00/M
			Common Cathode					
2.7	5.0	83	DZ23C2V7DICT-ND	.45	3.60	27.00	DZ23C2V7DITR-ND	135.00/M
3.0	5.0	95	DZ23C3V0DICT-ND	.45	3.60	27.00	DZ23C3V0DITR-ND	135.00/M
3.3	5.0	95	DZ23C3V3DICT-ND	.45	3.60	27.00	DZ23C3V3DITR-ND	135.00/M
3.6	5.0	95	DZ23C3V6DICT-ND	.45	3.60	27.00	DZ23C3V6DITR-ND	135.00/M
3.9	5.0	95	DZ23C3V9DICT-ND	.45	3.60	27.00	DZ23C3V9DITR-ND	135.00/M
4.3	5.0	95	DZ23C4V3DICT-ND	.45	3.60	27.00	DZ23C4V3DITR-ND	135.00/M
5.1	5.0	60	DZ23C5V1DICT-ND	.45	3.60	27.00	DZ23C5V1DITR-ND	135.00/M
5.6	5.0	40	DZ23C5V6DICT-ND	.45	3.60	27.00	DZ23C5V6DITR-ND	135.00/M
6.2	5.0	10	DZ23C6V2DICT-ND	.45	3.60	27.00	DZ23C6V2DITR-ND	135.00/M
6.8	5.0	8	DZ23C6V8DICT-ND	.45	3.60	27.00	DZ23C6V8DITR-ND	135.00/M
7.5	5.0	7	DZ23C7V5DICT-ND	.45	3.60	27.00	DZ23C7V5DITR-ND	135.00/M
8.2	5.0	7	DZ23C8V2DICT-ND	.45	3.60	27.00	DZ23C8V2DITR-ND	135.00/M
9.1	5.0	10	DZ23C9V1DICT-ND	.45	3.60	27.00	DZ23C9V1DITR-ND	135.00/M
10	5.0	15	DZ23C10DICT-ND	.45	3.60	27.00	DZ23C10DITR-ND	135.00/M
11	5.0	20	DZ23C11DICT-ND	.45	3.60	27.00	DZ23C11DITR-ND	135.00/M
12	5.0	20	DZ23C12DICT-ND	.45	3.60	27.00	DZ23C12DITR-ND	135.00/M
13	5.0	25	DZ23C13DICT-ND	.45	3.60	27.00	DZ23C13DITR-ND	135.00/M
15	5.0	30	DZ23C15DICT-ND	.45	3.60	27.00	DZ23C15DITR-ND	135.00/M
16	5.0	40	DZ23C16DICT-ND	.45	3.60	27.00	DZ23C16DITR-ND	135.00/M
18	5.0	50	DZ23C18DICT-ND	.45	3.60	27.00	DZ23C18DITR-ND	135.00/M
20	5.0	50	DZ23C20DICT-ND	.45	3.60	27.00	DZ23C20DITR-ND	135.00/M
22	5.0	55	DZ23C22DICT-ND	.45	3.60	27.00	DZ23C22DITR-ND	135.00/M
24	5.0	80	DZ23C24DICT-ND	.45	3.60	27.00	DZ23C24DITR-ND	135.00/M
27	5.0	80	DZ23C27DICT-ND	.45	3.60	27.00	DZ23C27DITR-ND	135.00/M
30	5.0	80	DZ23C30DICT-ND	.45	3.60	27.00	DZ23C30DITR-ND	135.00/M
33	5.0	80	DZ23C33DICT-ND	.45	3.60	27.00	DZ23C33DITR-ND	135.00/M
36	5.0	90	DZ23C36DICT-ND	.45	3.60	27.00	DZ23C36DITR-ND	135.00/M
43	5.0	100	DZ23C43DICT-ND	.45	3.60	27.00	DZ23C43DITR-ND	135.00/M

NEW! SOT-23 Surface Mount Zener Diodes — 350mW



Top-View



Zener Volt VZ @ IZT Nom	Test Current IZT (mA)	Max. Dynamic Imped. ZZT IZT	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
			BZX Series					
2.4	5.0	100	BZX84C2V4DICT-ND	.44	3.00	20.80	BZX84C2V4DITR-ND	80.00/M
2.7	5.0	100	BZX84C2V7DICT-ND	.44	3.00	20.80	BZX84C2V7DITR-ND	80.00/M
3.0	5.0	95	BZX84C3V0DICT-ND	.44	3.00	20.80	BZX84C3V0DITR-ND	80.00/M
3.3	5	95	BZX84C3V3DICT-ND•	.44	3.00	20.80	BZX84C3V3DITR-ND	80.00/M
3.6	5	95	BZX84C3V6DICT-ND	.44	3.00	20.80	BZX84C3V6DITR-ND	80.00/M
3.9	5	90	BZX84C3V9DICT-ND•	.44	3.00	20.80	BZX84C3V9DITR-ND	80.00/M
4.3	5	90	BZX84C4V3DICT-ND	.44	3.00	20.80	BZX84C4V3DITR-ND	80.00/M
4.7	5	80	BZX84C4V7DICT-ND	.44	3.00	20.80	BZX84C4V7DITR-ND	80.00/M
5.1	5	60	BZX84C5V1DICT-ND•	.44	3.00	20.80	BZX84C5V1DITR-ND	80.00/M
5.6	5	40	BZX84C5V6DICT-ND•	.44	3.00	20.80	BZX84C5V6DITR-ND	80.00/M
6.2	5	10	BZX84C6V2DICT-ND•	.44	3.00	20.80	BZX84C6V2DITR-ND	80.00/M
6.8	5	15	BZX84C6V8DICT-ND•	.44	3.00	20.80	BZX84C6V8DITR-ND	80.00/M
7.5	5	15	BZX84C7V5DICT-ND	.44	3.00	20.80	BZX84C7V5DITR-ND	80.00/M
8.2	5	15	BZX84C8V2DICT-ND	.44	3.00	20.80	BZX84C8V2DITR-ND	80.00/M
9.1	5	15	BZX84C9V1DICT-ND•	.44	3.00	20.80	BZX84C9V1DITR-ND	80.00/M
10	5	20	BZX84C10DICT-ND•	.44	3.00	20.80	BZX84C10DITR-ND	80.00/M
11	5	2	BZX84C11DICT-ND	.44	3.00	20.80	BZX84C11DITR-ND	80.00/M
12	5	25	BZX84C12DICT-ND•	.44	3.00	20.80	BZX84C12DITR-ND	80.00/M
13	5	30	BZX84C13DICT-ND	.44	3.00	20.80	BZX84C13DITR-ND	80.00/M
15	5	30	BZX84C15DICT-ND•	.44	3.00	20.80	BZX84C15DITR-ND	80.00/M
16	5	40	BZX84C16DICT-ND	.44	3.00	20.80	BZX84C16DITR-ND	80.00/M
18	5	45	BZX84C18DICT-ND•	.44	3.00	20.80	BZX84C18DITR-ND	80.00/M
20	5	55	BZX84C20DICT-ND•	.44	3.00	20.80	BZX84C20DITR-ND	80.00/M
22	5	55	BZX84C22DICT-ND	.44	3.00	20.80	BZX84C22DITR-ND	80.00/M
24	5	70	BZX84C24DICT-ND•	.44	3.00	20.80	BZX84C24DITR-ND	80.00/M
27	2	80	BZX84C27DICT-ND	.44	3.00	20.80	BZX84C27DITR-ND	80.00/M
30	2	80	BZX84C30DICT-ND•	.44	3.00	20.80	BZX84C30DITR-ND	80.00/M
33	2	80	BZX84C33DICT-ND•	.44	3.00	20.80	BZX84C33DITR-ND	80.00/M
36	2	90	BZX84C36DICT-ND•	.44	3.00	20.80	BZX84C36DITR-ND	80.00/M
39	2	130	BZX84C39DICT-ND•	.44	3.00	20.80	BZX84C39DITR-ND	80.00/M
43	2	150	BZX84C43DICT-ND	.44	3.00	20.80	BZX84C43DITR-ND	80.00/M
47	2	170	BZX84C47DICT-ND•	.44	3.00	20.80	BZX84C47DITR-ND	80.00/M
51	2	180	BZX84C51DICT-ND	.44	3.00	20.80	BZX84C51DITR-ND	80.00/M
			MMBZ Series					
2.4	20	30	MMBZ5221BDICT-ND	.44	3.00	20.80	MMBZ5221BDITR-ND	80.00/M
3.3	20	28	MMBZ5226BDICT-ND	.44	3.00	20.80	MMBZ5226BDITR-ND	80.00/M
3.6	20	24	MMBZ5227BDICT-ND	.44	3.00	20.80	MMBZ5227BDITR-ND	80.00/M
3.9	20	23	MMBZ5228BDICT-ND	.44	3.00	20.80	MMBZ5228BDITR-ND	80.00/M
4.3	20	22	MMBZ5229BDICT-ND	.44	3.00	20.80	MMBZ5229BDITR-ND	80.00/M
4.7	20	19	MMBZ5230BDICT-ND	.44	3.00	20.80	MMBZ5230BDITR-ND	80.00/M
5.1	20	17	MMBZ5231BDICT-ND	.44	3.00	20.80	MMBZ5231BDITR-ND	80.00/M
5.6	20	11	MMBZ5232BDICT-ND	.44	3.00	20.80	MMBZ5232BDITR-ND	80.00/M
6.2	20	7	MMBZ5234BDICT-ND	.44	3.00	20.80	MMBZ5234BDITR-ND	80.00/M
6.8	20	5	MMBZ5235BDICT-ND	.44	3.00	20.80	MMBZ5235BDITR-ND	80.00/M
7.5	20	6	MMBZ5236BDICT-ND	.44	3.00	20.80	MMBZ5236BDITR-ND	80.00/M
8.2	20	8	MMBZ5237BDICT-ND	.44	3.00	20.80	MMBZ5237BDITR-ND	80.00/M
9.1	20	10	MMBZ5239BDICT-ND	.44	3.00	20.80	MMBZ5239BDITR-ND	80.00/M
10	20	17	MMBZ5240BDICT-ND	.44	3.00	20.80	MMBZ5240BDITR-ND	80.00/M
12	20	30	MMBZ5242BDICT-ND	.44	3.00	20.80	MMBZ5242BDITR-ND	80.00/M
13	9.5	13	MMBZ5243BDICT-ND	.44	3.00	20.80	MMBZ5243BDITR-ND	80.00/M
15	8.5	16	MMBZ5245BDICT-ND	.44	3.00	20.80	MMBZ5245BDITR-ND	80.00/M
16	7.8	17	MMBZ5246BDICT-ND	.44	3.00	20.80	MMBZ5246BDITR-ND	80.00/M
18	7.0	21	MMBZ5248BDICT-ND	.44	3.00	20.80	MMBZ5248BDITR-ND	80.00/M
24	5.2	33	MMBZ5252BDICT-ND	.44	3.00	20.80	MMBZ5252BDITR-ND	80.00/M
27	5.0	41	MMBZ5254BDICT-ND	.44	3.00	20.80	MMBZ5254BDITR-ND	80.00/M
28	4.5	44	MMBZ5255BDICT-ND	.44	3.00	20.80	MMBZ5255BDITR-ND	80.00/M
30	4.2	49	MMBZ5256BDICT-ND	.44	3.00	20.80	MMBZ5256BDITR-ND	80.00/M
33	3.8	58	MMBZ5257BDICT-ND	.44	3.00	20.80	MMBZ5257BDITR-ND	80.00/M
36	3.4	70	MMBZ5258BDICT-ND	.44	3.00	20.80	MMBZ5258BDITR-ND	80.00/M

• **BZX2-KIT-ND** ***Digi-Key® SMD Zener Diodes Kit*** 10 each of values denoted (180 total pieces) **$23.79**

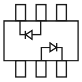
(Continued)

Zener Diodes *(Cont.)*

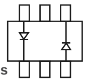
NEW! SOT-323 Surface Mount Zener Diode — 200mW

Zener Volt VZ @ IZT Nom	Test Current iZT (mA)	Max. Dynamic Imped. ZZT iZT	Digi-Key Part No.	Cut Tape Pricing 10	100	1,000	Digi-Key Part No.	Tape & Reel Pricing 3,000
BZX Series								
2.4	5.0	100	BZX84C2V4WDICT-ND	2.81	19.80	90.00	BZX84C2V4WDITR-ND	81.00/M
2.7	5.0	100	BZX84C2V7WDICT-ND	2.81	19.80	90.00	BZX84C2V7WDITR-ND	81.00/M
3.0	5.0	95	BZX84C3V0WDICT-ND	2.81	19.80	90.00	BZX84C3V0WDITR-ND	81.00/M
3.3	5.0	95	BZX84C3V3WDICT-ND	2.81	19.80	90.00	BZX84C3V3WDITR-ND	81.00/M
3.6	5.0	90	BZX84C3V6WDICT-ND	2.81	19.80	90.00	BZX84C3V6WDITR-ND	81.00/M
3.9	5.0	90	BZX84C3V9WDICT-ND	2.81	19.80	90.00	BZX84C3V9WDITR-ND	81.00/M
4.7	5.0	80	BZX84C4V7WDICT-ND	2.81	19.80	90.00	BZX84C4V7WDITR-ND	81.00/M
5.1	5.0	60	BZX84C5V1WDICT-ND	2.81	19.80	90.00	BZX84C5V1WDITR-ND	81.00/M
5.6	5.0	40	BZX84C5V6WDICT-ND	2.81	19.80	90.00	BZX84C5V6WDITR-ND	81.00/M
6.2	5.0	10	BZX84C6V2WDICT-ND	2.81	19.80	90.00	BZX84C6V2WDITR-ND	81.00/M
6.8	5.0	15	BZX84C6V8WDICT-ND	2.81	19.80	90.00	BZX84C6V8WDITR-ND	81.00/M
7.5	5.0	15	BZX84C7V5WDICT-ND	2.81	19.80	90.00	BZX84C7V5WDITR-ND	81.00/M
8.2	5.0	15	BZX84C8V2WDICT-ND	2.81	19.80	90.00	BZX84C8V2WDITR-ND	81.00/M
9.1	5.0	15	BZX84C9V1WDICT-ND	2.81	19.80	90.00	BZX84C9V1WDITR-ND	81.00/M
10	5.0	20	BZX84C10WDICT-ND	2.81	19.80	90.00	BZX84C10WDITR-ND	81.00/M
11	5.0	20	BZX84C11WDICT-ND	2.81	19.80	90.00	BZX84C11WDITR-ND	81.00/M
12	5.0	25	BZX84C12WDICT-ND	2.81	19.80	90.00	BZX84C12WDITR-ND	81.00/M
15	5.0	30	BZX84C15WDICT-ND	2.81	19.80	90.00	BZX84C15WDITR-ND	81.00/M
16	5.0	40	BZX84C16WDICT-ND	2.81	19.80	90.00	BZX84C16WDITR-ND	81.00/M
18	5.0	45	BZX84C18WDICT-ND	2.81	19.80	90.00	BZX84C18WDITR-ND	81.00/M
20	5.0	55	BZX84C20WDICT-ND	2.81	19.80	90.00	BZX84C20WDITR-ND	81.00/M
22	5.0	55	BZX84C22WDICT-ND	2.81	19.80	90.00	BZX84C22WDITR-ND	81.00/M
24	5.0	70	BZX84C24WDICT-ND	2.81	19.80	90.00	BZX84C24WDITR-ND	81.00/M
27	2.0	80	BZX84C27WDICT-ND	2.81	19.80	90.00	BZX84C27WDITR-ND	81.00/M
30	2.0	80	BZX84C30WDICT-ND	2.81	19.80	90.00	BZX84C30WDITR-ND	81.00/M
33	2.0	80	BZX84C33WDICT-ND	2.81	19.80	90.00	BZX84C33WDITR-ND	81.00/M
36	2.0	90	BZX84C36WDICT-ND	2.81	19.80	90.00	BZX84C36WDITR-ND	81.00/M
39	2.0	130	BZX84C39WDICT-ND	2.81	19.80	90.00	BZX84C39WDITR-ND	81.00/M
MMBZ Series								
2.4	20	30	MMBZ5221BWDICT-ND	2.81	19.80	90.00	MMBZ5221BWDITR-ND	81.00/M
3.0	20	30	MMBZ5225BWDICT-ND	2.81	19.80	90.00	MMBZ5225BWDITR-ND	81.00/M
3.3	20	28	MMBZ5226BWDICT-ND	2.81	19.80	90.00	MMBZ5226BWDITR-ND	81.00/M
3.6	20	24	MMBZ5227BWDICT-ND	2.81	19.80	90.00	MMBZ5227BWDITR-ND	81.00/M
3.9	20	23	MMBZ5228BWDICT-ND	2.81	19.80	90.00	MMBZ5228BWDITR-ND	81.00/M
4.7	20	19	MMBZ5230BWDICT-ND	2.81	19.80	90.00	MMBZ5230BWDITR-ND	81.00/M
5.1	20	17	MMBZ5231BWDICT-ND	2.81	19.80	90.00	MMBZ5231BWDITR-ND	81.00/M
5.6	20	11	MMBZ5232BWDICT-ND	2.81	19.80	90.00	MMBZ5232BWDITR-ND	81.00/M
6.2	20	7.0	MMBZ5234BWDICT-ND	2.81	19.80	90.00	MMBZ5234BWDITR-ND	81.00/M
6.8	20	5.0	MMBZ5235BWDICT-ND	2.81	19.80	90.00	MMBZ5235BWDITR-ND	81.00/M
7.5	20	6.0	MMBZ5236BWDICT-ND	2.81	19.80	90.00	MMBZ5236BWDITR-ND	81.00/M
8.2	20	8.0	MMBZ5237BWDICT-ND	2.81	19.80	90.00	MMBZ5237BWDITR-ND	81.00/M
9.1	20	10	MMBZ5239BWDICT-ND	2.81	19.80	90.00	MMBZ5239BWDITR-ND	81.00/M
11	20	22	MMBZ5241BWDICT-ND	2.81	19.80	90.00	MMBZ5241BWDITR-ND	81.00/M
12	20	30	MMBZ5242BWDICT-ND	2.81	19.80	90.00	MMBZ5242BWDITR-ND	81.00/M
13	9.5	13	MMBZ5243BWDICT-ND	2.81	19.80	90.00	MMBZ5243BWDITR-ND	81.00/M
15	8.5	16	MMBZ5245BWDICT-ND	2.81	19.80	90.00	MMBZ5245BWDITR-ND	81.00/M
16	7.8	17	MMBZ5246BWDICT-ND	2.81	19.80	90.00	MMBZ5246BWDITR-ND	81.00/M
18	7.0	21	MMBZ5248BWDICT-ND	2.81	19.80	90.00	MMBZ5248BWDITR-ND	81.00/M
20	6.2	25	MMBZ5250BWDICT-ND	2.81	19.80	90.00	MMBZ5250BWDITR-ND	81.00/M
22	5.6	29	MMBZ5251BWDICT-ND	2.81	19.80	90.00	MMBZ5251BWDITR-ND	81.00/M
24	5.2	33	MMBZ5252BWDICT-ND	2.81	19.80	90.00	MMBZ5252BWDITR-ND	81.00/M
27	5.0	41	MMBZ5254BWDICT-ND	2.81	19.80	90.00	MMBZ5254BWDITR-ND	81.00/M
28	4.5	44	MMBZ5255BWDICT-ND	2.81	19.80	90.00	MMBZ5255BWDITR-ND	81.00/M
36	3.4	70	MMBZ5258BWDICT-ND	2.81	19.80	90.00	MMBZ5258BWDITR-ND	81.00/M
39	3.2	80	MMBZ5259BWDICT-ND	2.81	19.80	90.00	MMBZ5259BWDITR-ND	81.00/M

NEW! SOT-363 Dual Isolated Surface Mount Zener Diodes — 200mW



BZX Series



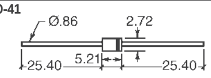
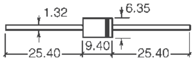
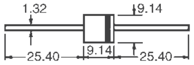
MMBZ Series

Zener Volt VZ @ IZT Nom	Test Current iZT (mA)	Max. Dynamic Imped. ZZT iZT	Digi-Key Part No.	Cut Tape Pricing 10	100	1,000	Digi-Key Part No.	Tape & Reel Pricing 3,000
BZX Series								
2.4	5.0	100	BZX84C2V4SDICT-ND	3.13	22.00	100.00	BZX84C2V4SDITR-ND	90.00/M
2.7	5.0	100	BZX84C2V7SDICT-ND	3.13	22.00	100.00	BZX84C2V7SDITR-ND	90.00/M
3.0	5.0	95	BZX84C3V0SDICT-ND	3.13	22.00	100.00	BZX84C3V0SDITR-ND	90.00/M
3.3	5.0	95	BZX84C3V3SDICT-ND	3.13	22.00	100.00	BZX84C3V3SDITR-ND	90.00/M
3.6	5.0	90	BZX84C3V6SDICT-ND	3.13	22.00	100.00	BZX84C3V6SDITR-ND	90.00/M
3.9	5.0	90	BZX84C3V9SDICT-ND	3.13	22.00	100.00	BZX84C3V9SDITR-ND	90.00/M
4.3	5.0	90	BZX84C4V3SDICT-ND	3.13	22.00	100.00	BZX84C4V3SDITR-ND	90.00/M
4.7	5.0	80	BZX84C4V7SDICT-ND	3.13	22.00	100.00	BZX84C4V7SDITR-ND	90.00/M
5.1	5.0	60	BZX84C5V1SDICT-ND	3.13	22.00	100.00	BZX84C5V1SDITR-ND	90.00/M
5.6	5.0	40	BZX84C5V6SDICT-ND	3.13	22.00	100.00	BZX84C5V6SDITR-ND	90.00/M
6.2	5.0	10	BZX84C6V2SDICT-ND	3.13	22.00	100.00	BZX84C6V2SDITR-ND	90.00/M
6.8	5.0	15	BZX84C6V8SDICT-ND	3.13	22.00	100.00	BZX84C6V8SDITR-ND	90.00/M
7.5	5.0	15	BZX84C7V5SDICT-ND	3.13	22.00	100.00	BZX84C7V5SDITR-ND	90.00/M
8.2	5.0	15	BZX84C8V2SDICT-ND	3.13	22.00	100.00	BZX84C8V2SDITR-ND	90.00/M
9.1	5.0	15	BZX84C9V1SDICT-ND	3.13	22.00	100.00	BZX84C9V1SDITR-ND	90.00/M
11	5.0	20	BZX84C11SDICT-ND	3.13	22.00	100.00	BZX84C11SDITR-ND	90.00/M
12	5.0	25	BZX84C12SDICT-ND	3.13	22.00	100.00	BZX84C12SDITR-ND	90.00/M
15	5.0	30	BZX84C15SDICT-ND	3.13	22.00	100.00	BZX84C15SDITR-ND	90.00/M
18	5.0	45	BZX84C18SDICT-ND	3.13	22.00	100.00	BZX84C18SDITR-ND	90.00/M
20	5.0	55	BZX84C20SDICT-ND	3.13	22.00	100.00	BZX84C20SDITR-ND	90.00/M
22	5.0	55	BZX84C22SDICT-ND	3.13	22.00	100.00	BZX84C22SDITR-ND	90.00/M
24	5.0	70	BZX84C24SDICT-ND	3.13	22.00	100.00	BZX84C24SDITR-ND	90.00/M
27	2.0	80	BZX84C27SDICT-ND	3.13	22.00	100.00	BZX84C27SDITR-ND	90.00/M
30	2.0	80	BZX84C30SDICT-ND	3.13	22.00	100.00	BZX84C30SDITR-ND	90.00/M
33	2.0	80	BZX84C33SDICT-ND	3.13	22.00	100.00	BZX84C33SDITR-ND	90.00/M
36	2.0	90	BZX84C36SDICT-ND	3.13	22.00	100.00	BZX84C36SDITR-ND	90.00/M
39	2.0	130	BZX84C39SDICT-ND	3.13	22.00	100.00	BZX84C39SDITR-ND	90.00/M
MMBZ Series								
3.0	20	30	MMBZ5225BSDICT-ND	3.13	22.00	100.00	MMBZ5225BSDITR-ND	90.00/M
3.3	20	28	MMBZ5226BSDICT-ND	3.13	22.00	100.00	MMBZ5226BSDITR-ND	90.00/M
3.6	20	24	MMBZ5227BSDICT-ND	3.13	22.00	100.00	MMBZ5227BSDITR-ND	90.00/M
3.9	20	23	MMBZ5228BSDICT-ND	3.13	22.00	100.00	MMBZ5228BSDITR-ND	90.00/M
4.7	20	19	MMBZ5230BSDICT-ND	3.13	22.00	100.00	MMBZ5230BSDITR-ND	90.00/M
5.6	20	11	MMBZ5232BSDICT-ND	3.13	22.00	100.00	MMBZ5232BSDITR-ND	90.00/M
6.2	20	7	MMBZ5234BSDICT-ND	3.13	22.00	100.00	MMBZ5234BSDITR-ND	90.00/M
6.8	20	5	MMBZ5235BSDICT-ND	3.13	22.00	100.00	MMBZ5235BSDITR-ND	90.00/M
7.5	20	6	MMBZ5236BSDICT-ND	3.13	22.00	100.00	MMBZ5236BSDITR-ND	90.00/M
8.2	20	8	MMBZ5237BSDICT-ND	3.13	22.00	100.00	MMBZ5237BSDITR-ND	90.00/M
9.1	20	10	MMBZ5239BSDICT-ND	3.13	22.00	100.00	MMBZ5239BSDITR-ND	90.00/M
10	20	17	MMBZ5240BSDICT-ND	3.13	22.00	100.00	MMBZ5240BSDITR-ND	90.00/M
11	20	22	MMBZ5241BSDICT-ND	3.13	22.00	100.00	MMBZ5241BSDITR-ND	90.00/M
12	20	30	MMBZ5242BSDICT-ND	3.13	22.00	100.00	MMBZ5242BSDITR-ND	90.00/M
13	9.5	13	MMBZ5243BSDICT-ND	3.13	22.00	100.00	MMBZ5243BSDITR-ND	90.00/M
15	8.5	16	MMBZ5245BSDICT-ND	3.13	22.00	100.00	MMBZ5245BSDITR-ND	90.00/M
16	7.8	17	MMBZ5246BSDICT-ND	3.13	22.00	100.00	MMBZ5246BSDITR-ND	90.00/M
18	7.0	21	MMBZ5248BSDICT-ND	3.13	22.00	100.00	MMBZ5248BSDITR-ND	90.00/M
20	6.2	25	MMBZ5250BSDICT-ND	3.13	22.00	100.00	MMBZ5250BSDITR-ND	90.00/M
22	5.6	29	MMBZ5251BSDICT-ND	3.13	22.00	100.00	MMBZ5251BSDITR-ND	90.00/M
24	5.2	33	MMBZ5252BSDICT-ND	3.13	22.00	100.00	MMBZ5252BSDITR-ND	90.00/M
27	5.0	41	MMBZ5254BSDICT-ND	3.13	22.00	100.00	MMBZ5254BSDITR-ND	90.00/M
28	4.5	44	MMBZ5255BSDICT-ND	3.13	22.00	100.00	MMBZ5255BSDITR-ND	90.00/M
30	4.2	49	MMBZ5256BSDICT-ND	3.13	22.00	100.00	MMBZ5256BSDITR-ND	90.00/M
33	3.8	58	MMBZ5257BSDICT-ND	3.13	22.00	100.00	MMBZ5257BSDITR-ND	90.00/M
36	3.4	70	MMBZ5258BSDICT-ND	3.13	22.00	100.00	MMBZ5258BSDITR-ND	90.00/M
39	3.2	80	MMBZ5259BSDICT-ND	3.13	22.00	100.00	MMBZ5259BSDITR-ND	90.00/M

SMA Surface Mount Zener Diodes —1.0W, 6% Tolerance

Zener Voltage	Test Current IZT mA	Impedance ZZT @ IZT Ohms	Digi-Key Part No.	Cut Tape Pricing 10	100	500	Digi-Key Part No.	Tape & Reel Pricing 5,000
5.1	100	5.0	SMAZ5V1DICT-ND	4.00	28.80	84.00	SMAZ5V1DITR-ND	128.00/M
5.6	100	2.0	SMAZ5V6DICT-ND	4.00	28.80	84.00	SMAZ5V6DITR-ND	128.00/M
6.2	100	2.0	SMAZ6V2DICT-ND	4.00	28.80	84.00	SMAZ6V2DITR-ND	128.00/M
6.8	100	2.0	SMAZ6V8DICT-ND	4.00	28.80	84.00	SMAZ6V8DITR-ND	128.00/M
7.5	100	2.0	SMAZ7V5DICT-ND	4.00	28.80	84.00	SMAZ7V5DITR-ND	128.00/M
8.2	100	2.0	SMAZ8V2DICT-ND	4.00	28.80	84.00	SMAZ8V2DITR-ND	128.00/M
9.1	50	4.0	SMAZ9V1DICT-ND	4.00	28.80	84.00	SMAZ9V1DITR-ND	128.00/M
10	50	4.0	SMAZ10DICT-ND	4.00	28.80	84.00	SMAZ10DITR-ND	128.00/M
12	50	7.0	SMAZ12DICT-ND	4.00	28.80	84.00	SMAZ12DITR-ND	128.00/M
15	50	10	SMAZ15DICT-ND	4.00	28.80	84.00	SMAZ15DITR-ND	128.00/M
16	25	15	SMAZ16DICT-ND	4.00	28.80	84.00	SMAZ16DITR-ND	128.00/M
18	25	15	SMAZ18DICT-ND	4.00	28.80	84.00	SMAZ18DITR-ND	128.00/M
20	25	15	SMAZ20DICT-ND	4.00	28.80	84.00	SMAZ20DITR-ND	128.00/M
22	25	15	SMAZ22DICT-ND	4.00	28.80	84.00	SMAZ22DITR-ND	128.00/M
24	25	15	SMAZ24DICT-ND	4.00	28.80	84.00	SMAZ24DITR-ND	128.00/M
27	25	15	SMAZ27DICT-ND	4.00	28.80	84.00	SMAZ27DITR-ND	128.00/M
30	25	15	SMAZ30DICT-ND	4.00	28.80	84.00	SMAZ30DITR-ND	128.00/M
33	25	15	SMAZ33DICT-ND	4.00	28.80	84.00	SMAZ33DITR-ND	128.00/M
36	10	40	SMAZ36DICT-ND	4.00	28.80	84.00	SMAZ36DITR-ND	128.00/M
39	10	40	SMAZ39DICT-ND	4.00	28.80	84.00	SMAZ39DITR-ND	128.00/M

High-Efficiency Rectifiers

Max. Avg. Rect. Current (A)	Max Peak Reverse Voltage (V)	Max. Surge Current 8.3ms (A)	Max. Reverse Current @25°C (µA)	Max. Forward Voltage Peak (V)	Max. Reverse Recovery Time (nS)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	1,200	5,000	Package
1.0	50	50	5.0	1.0	50	HER101CT-ND	.41	3.00	21.12	HER101TR-ND	—	—	82.00/M	**DO-41** 
	100	50	5.0	1.0	50	HER102CT-ND	.46	3.38	23.76	HER102TR-ND	—	—	92.00/M	
	200	50	5.0	1.0	50	HER103CT-ND	.48	3.56	25.08	HER103TR-ND	—	—	97.00/M	
	300	50	5.0	1.0	50	HER104CT-ND	.48	3.70	26.64	HER104TR-ND	—	—	118.00/M	
	400	50	5.0	1.0	50	HER105CT-ND	.46	3.68	27.60	HER105TR-ND	—	—	129.00/M	
3.0	50	200	10.0	1.0	50	HER301CT-ND	.63	5.00	37.50	HER301TR-ND	—	200.00/M	—	**DO-201AD** 
	100	200	10.0	1.0	50	HER302CT-ND	.65	5.20	39.00	HER302TR-ND	—	208.00/M	—	
	200	200	10.0	1.0	50	HER303CT-ND	.70	5.60	42.00	HER303TR-ND	—	224.00/M	—	
	300	200	10.0	1.0	50	HER304CT-ND	.64	5.12	38.40	HER304TR-ND	—	232.00/M	—	
	400	200	10.0	1.0	50	HER305CT-ND	.72	5.76	43.20	HER305TR-ND	—	261.00/M	—	
6.0	50	300	10.0	1.0	60	HER601CT-ND	.96	7.68	57.60	HER601TR-ND	198.00	—	—	**R-6** 
	100	300	10.0	1.0	60	HER602CT-ND	.86	6.76	52.00	HER602TR-ND	188.50	—	—	
	200	300	10.0	1.0	60	HER603CT-ND	.92	7.28	56.00	HER603TR-ND	203.00	—	—	
	300	300	10.0	1.0	60	HER604CT-ND	1.16	9.10	70.00	HER604TR-ND	254.00	—	—	

Operating and Storage Temperature: -65°C to +175°C.   Reverse recovery test @ 1.0A, V_R = 30V.

DIODES
INCORPORATED

Glass Passivated Bridge Rectifiers

Fig.	Max. Average Rectified Current (A)	Max. Peak Reverse Voltage (V)	Max. Surge Current 8.3ms (A)	Max. Instant. Forward Voltage (V)	Operating Temperature Range (°C)	Digi-Key Part No.	Price Each 1	10	100	500
GBPC Series										
1	15.0	100	300	1.1	-55 to +150	GBPC1501DI-ND	2.65	2.13	1.73	1.50
		200	300	1.1	-55 to +150	GBPC1502DI-ND	2.76	2.22	1.80	1.56
		400	300	1.1	-55 to +150	GBPC1504DI-ND	2.88	2.32	1.88	1.63
		600	300	1.1	-55 to +150	GBPC1506DI-ND	2.88	2.32	1.88	1.63
		800	300	1.1	-55 to +150	GBPC1508DI-ND	3.11	2.50	2.03	1.76
		1000	300	1.1	-55 to +150	GBPC1510DI-ND	3.22	2.59	2.10	1.82
	25.0	100	300	1.1	-55 to +150	GBPC2501DI-ND	2.76	2.22	1.80	1.56
		200	300	1.1	-55 to +150	GBPC2502DI-ND	2.88	2.32	1.88	1.63
		400	300	1.1	-55 to +150	GBPC2504DI-ND	2.88	2.32	1.88	1.63
		600	300	1.1	-55 to +150	GBPC2506DI-ND	2.88	2.32	1.88	1.63
		800	300	1.1	-55 to +150	GBPC2508DI-ND	3.22	2.59	2.10	1.82
		1000	300	1.1	-55 to +150	GBPC2510DI-ND	3.22	2.59	2.10	1.82
	35.0	100	400	1.1	-55 to +150	GBPC3501DI-ND	2.99	2.41	1.95	1.69
		200	400	1.1	-55 to +150	GBPC3502DI-ND	3.11	2.50	2.03	1.76
		400	400	1.1	-55 to +150	GBPC3504DI-ND	3.22	2.59	2.10	1.82
		600	400	1.1	-55 to +150	GBPC3506DI-ND	3.22	2.59	2.10	1.82
		800	400	1.1	-55 to +150	GBPC3508DI-ND	3.45	2.78	2.25	1.95
		1000	400	1.1	-55 to +150	GBPC3510DI-ND	3.57	2.87	2.33	2.02
WxxG Series										
2	1.5	50	50	1.0	-65 to +150	W005GDI-ND	.65	.52	.39	.24
		100	50	1.0	-65 to +150	W01GDI-ND	.70	.56	.42	.26
		200	50	1.0	-65 to +150	W02GDI-ND	.60	.48	.36	.25
		400	50	1.0	-65 to +150	W04GDI-ND	.64	.52	.39	.27
		600	50	1.0	-65 to +150	W06GDI-ND	.68	.55	.41	.29
		1000	50	1.0	-65 to +150	W10GDI-ND	.72	.58	.44	.30
GBJ Series										
3	10	50	170	1.05	-65 to +150	GBJ10005DI-ND	1.92	1.50	1.18	.96
		100	170	1.05	-65 to +150	GBJ1001DI-ND	1.97	1.54	1.22	.99
		200	170	1.05	-65 to +150	GBJ1002DI-ND	2.00	1.56	1.23	1.00
		400	170	1.05	-65 to +150	GBJ1004DI-ND	2.03	1.58	1.25	1.02
		600	170	1.05	-65 to +150	GBJ1006DI-ND	2.08	1.62	1.28	1.04
		1000	170	1.05	-65 to +150	GBJ1010DI-ND	2.38	1.85	1.47	1.19
	15	50	240	1.05	-65 to +150	GBJ15005DI-ND	2.08	1.62	1.28	1.04
		100	240	1.05	-65 to +150	GBJ1501DI-ND	2.16	1.68	1.33	1.08
		200	240	1.05	-65 to +150	GBJ1502DI-ND	2.19	1.71	1.35	1.10
		400	240	1.05	-65 to +150	GBJ1504DI-ND	2.21	1.73	1.37	1.11
		600	240	1.05	-65 to +150	GBJ1506DI-ND	2.27	1.77	1.40	1.14
		1000	240	1.05	-65 to +150	GBJ1510DI-ND	2.48	1.94	1.53	1.25
	20	50	240	1.05	-65 to +150	GBJ20005DI-ND	2.13	1.66	1.32	1.07
		100	240	1.05	-65 to +150	GBJ2001DI-ND	2.19	1.71	1.35	1.10
		200	240	1.05	-65 to +150	GBJ2002DI-ND	2.21	1.73	1.37	1.11
		400	240	1.05	-65 to +150	GBJ2004DI-ND	2.27	1.77	1.40	1.14
		600	240	1.05	-65 to +150	GBJ2006DI-ND	2.32	1.81	1.43	1.17
		1000	240	1.05	-65 to +150	GBJ2010DI-ND	2.51	1.96	1.55	1.26
	25	50	350	1.05	-65 to +150	GBJ25005DI-ND	2.32	1.81	1.43	1.17
		100	350	1.05	-65 to +150	GBJ2501DI-ND	2.38	1.85	1.47	1.19
		200	350	1.05	-65 to +150	GBJ2502DI-ND	2.46	1.92	1.52	1.23
		400	350	1.05	-65 to +150	GBJ2504DI-ND	2.51	1.96	1.55	1.26
		600	350	1.05	-65 to +150	GBJ2506DI-ND	2.57	2.00	1.58	1.29
		1000	350	1.05	-65 to +150	GBJ2510DI-ND	2.35	1.89	1.53	1.33
	6.0	50	170	1.0	-65 to +150	GBJ6005DI-ND	1.73	1.35	1.07	.87
		100	170	1.0	-65 to +150	GBJ601DI-ND	1.78	1.39	1.10	.90
		200	170	1.0	-65 to +150	GBJ602DI-ND	1.81	1.41	1.12	.91
		400	170	1.0	-65 to +150	GBJ604DI-ND	1.84	1.43	1.13	.92
		600	170	1.0	-65 to +150	GBJ606DI-ND	1.89	1.47	1.17	.95
		1000	170	1.0	-65 to +150	GBJ610DI-ND	2.05	1.60	1.27	1.03
	8.0	50	170	1.0	-65 to +150	GBJ8005DI-ND	1.84	1.43	1.13	.92
		100	170	1.0	-65 to +150	GBJ801DI-ND	1.89	1.47	1.17	.95
		200	170	1.0	-65 to +150	GBJ802DI-ND	1.92	1.50	1.18	.96
		400	170	1.0	-65 to +150	GBJ804DI-ND	1.94	1.52	1.20	.98
		600	170	1.0	-65 to +150	GBJ806DI-ND	2.00	1.56	1.23	1.00
		1000	170	1.0	-65 to +150	GBJ810DI-ND	2.21	1.73	1.37	1.11
GBU Series										
4	4.0	100	150	1.0	-55 to +150	GBU401DI-ND	1.35	1.07	.82	.60
		400	150	1.0	-55 to +150	GBU404DI-ND	1.42	1.12	.86	.63
		1000	150	1.0	-55 to +150	GBU410DI-ND	1.38	1.08	.85	.69
	6.0	100	175	1.0	-55 to +150	GBU601DI-ND	1.55	1.23	.94	.69
		400	175	1.0	-55 to +150	GBU604DI-ND	1.62	1.28	.98	.72
		1000	175	1.0	-55 to +150	GBU610DI-ND	1.51	1.18	.93	.76
	8.0	50	200	1.0	-55 to +150	GBU8005DI-ND	1.38	1.08	.85	.69
		100	200	1.0	-55 to +150	GBU801DI-ND	1.40	1.10	.87	.71
		200	200	1.0	-55 to +150	GBU802DI-ND	1.43	1.12	.88	.72
		400	200	1.0	-55 to +150	GBU804DI-ND	1.46	1.14	.90	.73
		600	200	1.0	-55 to +150	GBU806DI-ND	1.51	1.18	.93	.76
		1000	200	1.0	-55 to +150	GBU810DI-ND	1.70	1.33	1.05	.86
KBP Series										
5	1.5	50	40	1.1	-55 to +125	KBP005G-ND	1.16	.91	.70	.51
		100	40	1.1	-55 to +125	KBP01G-ND	1.16	.91	.70	.51
		200	40	1.1	-55 to +125	KBP02G-ND	1.19	.94	.72	.53
		400	40	1.1	-55 to +125	KBP04G-ND	1.22	.97	.74	.54
		600	40	1.1	-55 to +125	KBP06G-ND	1.32	1.04	.80	.58
		800	40	1.1	-55 to +125	KBP08G-ND	1.39	1.10	.84	.61
		1000	40	1.1	-55 to +125	KBP10G-ND	1.62	1.28	.98	.72
	2.0	50	65	1.1	-65 to +150	KBP2005GDI-ND	1.16	.91	.70	.51
		100	65	1.1	-65 to +150	KBP201GDI-ND	1.16	.91	.70	.51
		200	65	1.1	-65 to +150	KBP202GDI-ND	1.19	.94	.72	.53
		400	65	1.1	-65 to +150	KBP204GDI-ND	1.22	.97	.74	.54
		600	65	1.1	-65 to +150	KBP206GDI-ND	1.32	1.04	.80	.58
		1000	65	1.1	-65 to +150	KBP210GDI-ND	1.62	1.28	.98	.72

Fig.	Max. Average Rectified Current (A)	Max. Peak Reverse Voltage (V)	Max. Surge Current 8.3ms (A)	Max. Instant. Voltage Drop (V)	Operating Temperature Range (°C)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
HD Series											
6	0.8	100	30	1.0	-55 to +150	HD01DICT-ND	.70	.56	.42	HD01DITR-ND	210.00/M
		400	30	1.0	-55 to +150	HD04DICT-ND	.64	.52	.39	HD04DITR-ND	213.00/M
		600	30	1.0	-55 to +150	HD06DICT-ND	.68	.55	.41	HD06DITR-ND	226.00/M

Fig. 1 — GBPC Series

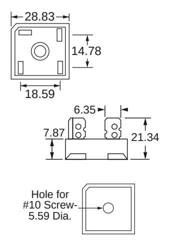


Fig. 2 — WxxG Series

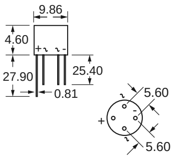


Fig. 3 — GBJ Series

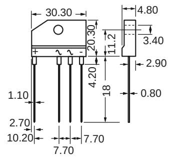


Fig. 4 — GBU Series

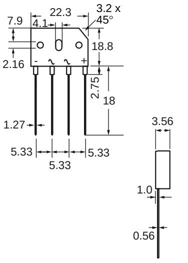


Fig. 5 — KBP Series

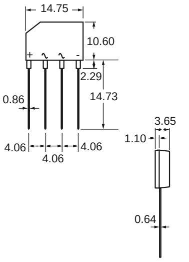
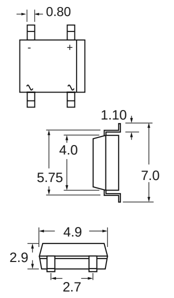


Fig. 6 — HD Series



(Continued)

Glass Passivated Bridge Rectifiers *(Cont.)*

Storage Temperature: -65°C to +150°C

Fig.	Max. Ave. Rect. Curr. (A)	Max. Peak Rev. Volt. (V)	Max. Surge Current 8.3ms (A)	Max. Inst. For. Volt. (V)	Op. Temp. Range (°C)	Digi-Key Part No.	Price Each 1	10	100	500	Tape & Reel Pricing* 1,500
						NEW! DF-S Series NEW!					
7	1.5	50	50	1.1	-65 to +150	DF15005SDICT-ND	.84	.68	.51	.35	305.00/M
		100	50	1.1	-65 to +150	DF1501SDICT-ND	.84	.68	.51	.35	305.00/M
		200	50	1.1	-65 to +150	DF1502SDICT-ND	.84	.68	.51	.35	305.00/M
		400	50	1.1	-65 to +150	DF1504SDICT-ND	.84	.68	.51	.35	305.00/M
		600	50	1.1	-65 to +150	DF1506SDICT-ND	.96	.77	.58	.40	348.00/M
		1000	50	1.1	-65 to +150	DF1510SDICT-ND	.89	.71	.54	.40	359.00/M

*For Tape and Reel Part No., change “CT-ND to “TR-ND”

Fig.	Max. Ave. Rectified Current (A)	Max. Peak Rev. Volt. (V)	Max. Surge Current 8.3ms (A)	Max. Inst. Forward Voltage (V)	Op. Temp. Range (°C)	Digi-Key Part No.	Price Each 1	10	100	500
						DF-S Series				
7	1.0	50	50	1.1	-65 to +150	DF005SDI-ND	.76	.61	.46	.32
		100	50	1.1	-65 to +150	DF01SDI-ND	.76	.61	.46	.32
		200	50	1.1	-65 to +150	DF02SDI-ND	.76	.61	.46	.32
		400	50	1.1	-65 to +150	DF04SDI-ND	.76	.61	.46	.32
		600	50	1.1	-65 to +150	DF06SDI-ND	.88	.71	.53	.37
		800	50	1.1	-65 to +150	DF08SDI-ND	.96	.77	.58	.40
		1000	50	1.1	-65 to +150	DF10SDI-ND	.96	.77	.58	.40
						DB-1 Series				
8	1.0	50	50	1.1	-65 to +150	DB101DI-ND	.60	.48	.36	.25
		100	50	1.1	-65 to +150	DB102DI-ND	.60	.48	.36	.25
		200	50	1.1	-65 to +150	DB103DI-ND	.60	.48	.36	.25
		400	50	1.1	-65 to +150	DB104DI-ND	.60	.48	.36	.25
		600	50	1.1	-65 to +150	DB105DI-ND	.80	.64	.48	.33
		1000	50	1.1	-65 to +150	DB107DI-ND	.80	.77	.60	.50
						DF-M Series				
9	1.0	50	45	1.1	-65 to +150	DF005MDI-ND	.60	.48	.36	.25
		100	45	1.1	-65 to +150	DF01MDI-ND	.60	.48	.36	.25
		200	45	1.1	-65 to +150	DF02MDI-ND	.60	.48	.36	.25
		400	45	1.1	-65 to +150	DF04MDI-ND	.60	.48	.36	.25
		600	45	1.1	-65 to +150	DF06MDI-ND	.72	.58	.44	.30
		800	45	1.1	-65 to +150	DF08MDI-ND	.80	.64	.48	.33
		1000	45	1.1	-65 to +150	DF10MDI-ND	.80	.64	.48	.33

Fig. 7 — DF-S Series

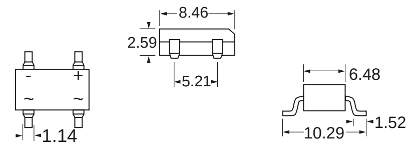


Fig. 8 — DB-1 Series

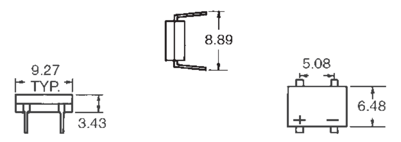
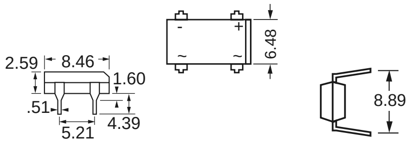


Fig. 9 — DF-M Series



Bridge Rectifiers

Fig.	Max. Avg. Rect. Current (A)	Max. Peak Reverse Voltage (V)	Max. Surge Current 8.3ms (A)	Max. Reverse Current @25°C (µA)	Max. Forward Voltage Peak (V)	Digi-Key Part No.	Price Each 1	10	100	500
1	2.0	50	50	10.0	1.0	BR805D-ND	.85	.75	.64	.54
2	4.0	50	200	10.0	1.0	RS401LDI-ND	1.32	1.04	.80	.58
		100	200	10.0	1.0	RS402LDI-ND	1.32	1.04	.80	.58
		200	200	10.0	1.0	RS403LDI-ND	1.32	1.04	.80	.58
		400	200	10.0	1.0	RS404LDI-ND	1.32	1.04	.80	.58
		600	200	10.0	1.0	RS405LDI-ND	1.35	1.05	.83	.68
3	6.0	50	200	10.0	1.0	PB605DI-ND	1.49	1.17	.90	.66
		100	200	10.0	1.0	PB61DI-ND	1.49	1.17	.90	.66
		200	200	10.0	1.0	PB62DI-ND	1.49	1.17	.90	.66
		400	200	10.0	1.0	PB64DI-ND	1.49	1.17	.90	.66
		600	200	10.0	1.0	PB66DI-ND	1.49	1.17	.90	.66
4	15.0	50	300	10.0	1.1	MB1505-ND	2.30	1.85	1.50	1.30
		100	300	10.0	1.1	MB151-ND	2.42	1.95	1.58	1.37
		200	300	10.0	1.1	MB152-ND	2.53	2.04	1.65	1.43
		400	300	10.0	1.1	MB154-ND	2.65	2.13	1.73	1.50
		600	300	10.0	1.1	MB156-ND	2.76	2.22	1.80	1.56
4	25.0	50	300	10.0	1.1	MB2505-ND	2.42	1.95	1.58	1.37
		100	300	10.0	1.1	MB251-ND	2.53	2.04	1.65	1.43
		200	300	10.0	1.1	MB252-ND	2.65	2.13	1.73	1.50
		400	300	10.0	1.1	MB254-ND	2.76	2.22	1.80	1.56
		600	300	10.0	1.1	MB256-ND	2.88	2.32	1.88	1.63
4	35.0	50	400	10.0	1.1	MB3505-ND	2.53	2.04	1.65	1.43
		100	400	10.0	1.1	MB351-ND	2.65	2.13	1.73	1.50
		200	400	10.0	1.1	MB352-ND	2.76	2.22	1.80	1.56
		400	400	10.0	1.1	MB354-ND	2.88	2.32	1.88	1.63
		600	400	10.0	1.1	MB356-ND	2.99	2.41	1.95	1.69

Operating Temperature Range: -55°C to +125°C. Storage Temperature: -55°C to +150°C

Fig. 1

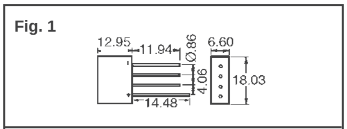


Fig. 2

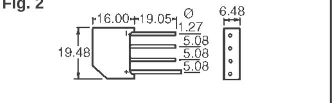


Fig. 3

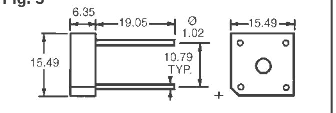
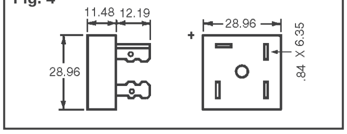


Fig. 4

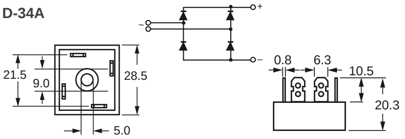


Bridge Rectifiers

Max. Ave. Rectified Current (A)	Max. Peak Reverse Voltage (V)	Max. Surge Current 10ms(A)	Max. Instant Forward Voltage (V)	Pkg.	Digi-Key Part No.	Price Each 1	10	100
25	100	350	1.1	D-34A	26MB10A-ND	6.38	5.10	3.14
25	600	350	1.1	D-34A	26MB60A-ND	6.75	5.40	3.26
35	400	420	1.2	D-34A	36MB40A-ND	6.85	5.48	3.65
35	600	420	1.2	D-34A	36MB60A-ND	7.00	5.60	3.72
35	800	420	1.2	D-34A	36MB80A-ND	7.10	5.68	3.78
35	1000	420	1.2	D-34A	36MB100A-ND	8.00	6.40	4.07
35	1200	420	1.2	D-34A	36MB120A-ND	8.13	6.50	4.10
35	1400	420	1.2	D-34A	36MB140A-ND	12.05	9.64	6.41
35	1600	420	1.2	D-34A	36MB160A-ND	14.20	11.36	7.56
2	50	63	1	D-44	2KBP005-ND	.73	.58	.34
3	200	55	1	D-46	KBPC102-ND	.78	.62	.42
3	400	55	1	D-46	KBPC104-ND	.80	.64	.43
35	1600	420	1	D-63	36MT160-ND	26.05	20.84	13.85
1	50	40	1	D-70	DF005MIR-ND	.48	.38	.34
1	100	30	1	D-70	DF01MIR-ND	.50	.40	.35
1	200	40	1	D-70	DF02MIR-ND	.55	.44	.39
1	400	40	1	D-70	DF04MIR-ND	.58	.46	.41
1	600	30	1	D-70	DF06MIR-ND	.60	.48	.42
1	50	40	1	D-71	DF005SIR-ND	.50	.40	.35
1	100	40	1	D-71	DF01SIR-ND	.55	.44	.39
1	200	40	1	D-71	DF02SIR-ND	.58	.46	.41

Operating temperature range: -40°C to + 150°C. Storage temperature range: -40°C to +150°C

D-34A



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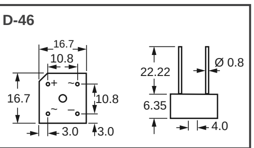
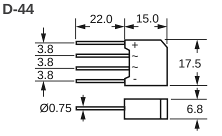


D-44



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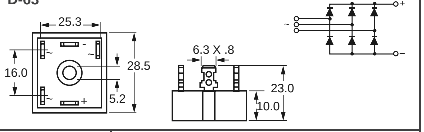

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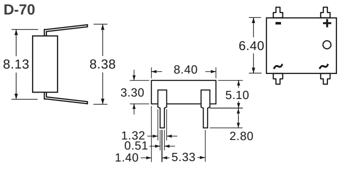
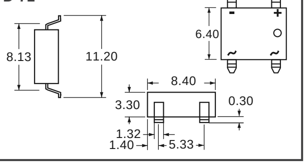


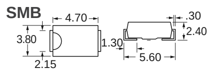
D-71

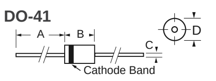


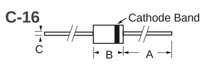
Schottky Rectifiers

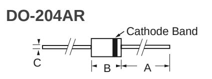
Package	IF (A)	VRRM (V)	VF (V)	IFSM(A) @ tp = 5μs Sine	TJ Junction Temp (°C)	Digi-Key Part No.	Price Each			Digi-Key Part No.	Tape & Reel	
							1	10	100		Size	Pricing
SMB	1	15	.34	140	-55 to 150	10BQ015-ND	.40	.32	.23	10BQ015TR-ND	3,000	216.00/M
	1	40	.53	430	-55 to 150	10BQ040-ND	.35	.28	.20	10BQ040TR-ND	3,000	189.00/M
	1	60	.57	700	-55 to 150	10BQ060-ND	.38	.30	.21	10BQ060TR-ND	3,000	203.00/M
	1	100	.78	780	-55 to 175	10BQ100-ND	.40	.32	.23	10BQ100TR-ND	3,000	216.00/M
DO-41	1.1	30	.55	225	-40 to 150	11DQ03-ND	.38	.33	.23	11DQ03TR-ND	5,000	135.00/M
	1.1	40	.55	225	-40 to 150	11DQ04-ND	.38	.33	.23	11DQ04TR-ND	5,000	135.00/M
	1.1	50	.58	150	-40 to 150	11DQ05-ND	.28	.22	.16	11DQ05TR-ND	5,000	149.00/M
	1.1	60	.58	150	-40 to 150	11DQ06-ND	.42	.36	.25	11DQ06TR-ND	5,000	149.00/M
	1.1	90	.85	85	-40 to 150	11DQ09-ND	.46	.39	.27	11DQ09TR-ND	5,000	162.00/M
	1.1	100	.85	85	-40 to 150	11DQ10-ND	.30	.24	.17	—	—	—
C-16	3.3	30	.55	470	-40 to 150	31DQ03-ND	.80	.68	.47	—	—	—
	3.3	40	.55	470	-40 to 150	31DQ04-ND	.84	.71	.49	—	—	—
	3.3	50	.58	340	-40 to 150	31DQ05-ND	.58	.46	.33	—	—	—
	3.3	60	.58	340	-40 to 150	31DQ06-ND	.91	.78	.54	31DQ06TR-ND	1,200	324.00/M
	3.3	90	.85	210	-40 to 150	31DQ09-ND	.99	.84	.58	—	—	—
	3.3	100	.85	210	-40 to 150	31DQ10-ND	.68	.54	.39	31DQ10TR-ND	1,200	365.00/M
DO-204AR	5	80	.66	1900	-55 to 175	50SQ080-ND	2.00	1.60	1.14	—	—	—
	5	100	.52	1900	-55 to 175	50SQ100-ND	2.14	1.37	1.27	50SQ100TR-ND	1,500	1202.00/M
	8	35	.53	2400	-55 to 175	80SQ035-ND	1.50	1.20	.86	80SQ035TR-ND	1,500	810.00/M
	8	40	.53	2400	-55 to 175	80SQ040-ND	1.63	1.30	.93	—	—	—
	8	45	.53	2400	-55 to 175	80SQ045-ND	1.73	1.11	1.03	80SQ045TR-ND	1,500	972.00/M
	9	40	.48	2150	-55 to 150	90SQ040-ND	1.60	1.28	.91	—	—	—
	9	45	.48	2150	-55 to 150	90SQ045-ND	1.70	1.36	.97	90SQ045TR-ND	1,500	918.00/M
	9	15	.31	2900	-55 to 100	95SQ015-ND	2.88	1.85	1.71	95SQ015TR-ND	1,500	1620.00/M
TO-220AC	7.5	35	.84	690	-65 to 150	MBR735-ND	.81	.65	.52	—	—	—
	7.5	45	.57	690	-65 to 150	MBR745-ND	.65	.58	.52	—	—	—
	10	35	.84	1080	-65 to 150	MBR1035-ND	1.17	.94	.75	—	—	—
	10	45	.57	1050	-65 to 150	MBR1045-ND	.94	.84	.75	—	—	—
	16	35	.63	1060	-65 to 150	MBR1635-ND	1.50	1.20	.96	—	—	—
	16	45	.57	1800	-65 to 150	MBR1645-ND	1.20	1.07	.96	—	—	—
	8	60	.72	850	-55 to 175	8TQ060-ND	2.35	1.88	1.34	—	—	—
	8	80	.72	850	-55 to 175	8TQ080-ND	2.40	1.92	1.37	—	—	—
	8	100	.58	850	-55 to 175	8TQ100-ND	2.47	1.59	1.47	—	—	—
	10	45	.57	1050	-55 to 175	10TQ045-ND	2.13	1.70	1.21	—	—	—
	18	35	.6	1800	-55 to 175	18TQ035-ND	2.00	1.60	1.14	—	—	—
	18	45	.6	1800	-55 to 175	18TQ045-ND	2.13	1.70	1.21	—	—	—
	19	15	.32	700	-55 to 100	19TQ015-ND	2.93	2.08	1.71	—	—	—
	20	45	.57	1800	-65 to 150	20TQ045-ND	2.33	1.86	1.33	—	—	—
TO-220AB	15	35	.72	690	-65 to 150	MBR1535CT-ND	1.14	.92	.73	—	—	—
	15	45	.57	690	-65 to 150	MBR1545CT-ND	.89	.81	.73	—	—	—
	20	45	.57	1060	-65 to 150	MBR2045CT-ND	1.46	1.32	1.19	—	—	—
	20	80	.85	850	-65 to 150	MBR2080CT-ND	1.86	1.49	1.19	—	—	—
	20	90	.85	850	-65 to 150	MBR2090CT-ND	1.86	1.49	1.19	—	—	—
	20	100	.7	850	-65 to 150	MBR20100CT-ND	1.46	1.27	1.14	—	—	—
	30	30	.73	1060	-65 to 150	MBR2535CT-ND	1.86	1.49	1.19	—	—	—
	30	45	.73	1060	-65 to 150	MBR2545CT-ND	1.46	1.32	1.19	—	—	—
	30	45	.76	1060	-65 to 150	MBR3045CT-ND	2.60	2.08	1.71	—	—	—
	10	150	.73	620	-55 to 175	10CTQ150-ND	3.07	2.18	1.80	—	—	—
	16	80	.72	850	-55 to 175	16CTQ080-ND	3.53	2.82	2.01	—	—	—
	16	100	.72	850	-55 to 175	16CTQ100-ND	3.90	3.12	2.23	—	—	—
	20	45	.64	1060	-55 to 175	20CTQ045-ND	2.25	1.80	1.29	—	—	—
	30	35	.62	1060	-55 to 175	30CTQ035-ND	2.25	1.80	1.28	—	—	—
	30	45	.62	1060	-55 to 175	30CTQ045-ND	2.40	1.92	1.42	—	—	—
	30	60	.62	1060	-55 to 150	30CTQ060-ND	3.40	2.72	1.94	—	—	—
	30	30	.40	900	-55 to 150	32CTQ030-ND	2.62	1.68	1.56	—	—	—
	40	15	.41	700	-55 to 125	40L15CT-ND	2.63	2.10	1.30	—	—	—
	40	45	.53	1240	-55 to 150	40CTQ045-ND	2.88	2.30	1.64	—	—	—
	40	30	.48	1100	-55 to 150	42CTQ030-ND	3.27	2.62	2.09	—	—	—
	40	100	.81	850	-55 to 175	43CTQ100-ND	3.50	2.80	2.24	—	—	—
	40	60	.75	1000	-55 to 150	48CTQ060-ND	2.95	2.36	1.70	—	—	—
TO-244AB	300	45	.69	16000	-55 to 175	301CNQ045-ND	35.13	28.10	18.51	—	—	—
	200	100	.86	16000	-55 to 175	203CNQ100-ND	49.56	39.65	31.73	—	—	—
TO-247AC	30	35	.76	1020	-65 to 150	MBR3035WT-ND	1.92	1.54	1.23	—	—	—
	30	45	.60	1020	-65 to 150	MBR3045WT-ND	1.46	1.37	1.23	—	—	—
	40	45	.59	1020	-55 to 150	MBR4045WT-ND	1.92	1.54	1.23	—	—	—
	40	60	.77	3200	-55 to 150	MBR4060WT-ND	1.86	1.49	1.19	—	—	—
	60	45	.69	2900	-55 to 150	MBR6045WT-ND	2.88	2.30	1.84	—	—	—
	30	150	1	1000	-55 to 175	30CPQ150-ND	7.38	5.90	4.21	—	—	—
	30	45	.50	1020	-55 to 150	30CPQ045-ND	4.46	3.17	2.61	—	—	—
	30	60	.50	1020	-55 to 150	30CPQ060-ND	5.50	3.90	3.21	—	—	—
	30	100	.67	920	-55 to 175	30CPQ100-ND	6.46	4.58	3.77	—	—	—
	40	45	.43	3500	-55 to 150	40CPQ045-ND	6.31	4.05	3.76	—	—	—
	40	60	.49	3200	-55 to 150	40CPQ060-ND	7.63	4.89	4.54	—	—	—
	40	100	.77	2950	-55 to 175	40CPQ100-ND	9.40	7.52	5.37	—	—	—
	70	30	.51	2180	-55 to 150	72CPQ030-ND	6.33	5.06	3.61	—	—	—
TO-249AA	160	100	.98	9000	-55 to 175	163CMQ100-ND	34.13	27.30	19.50	—	—	—
D61-6	60	45	.52	6300	-55 to 175	61CNQ045-ND	16.18	12.94	9.24	—	—	—
	60	30	.46	4600	-55 to 150	62CNQ030-ND	16.50	13.20	9.43	—	—	—
D61-8	80	45	.52	5800	-55 to 150	80CNQ045A-ND	16.55	13.24	9.46	—	—	—
	80	30	.47	5100	-55 to 150	82CNQ030A-ND	16.88	13.50	9.64	—	—	—
	80	100	.81	7000	-55 to 175	83CNQ100A-ND	16.88	13.50	9.64	—	—	—
	80	15	.36	5200	-55 to 100	85CNQ015A-ND	17.55	14.04	10.03	—	—	—
DO-5	60	45	.6	10800	-65 to 150	50HQ045-ND	10.50	8.40	6.00	—	—	—
	60	30	.5	12000	-65 to 150	55HQ030-ND	10.63	8.50	6.07	—	—	—
	60	100	.7	8400	-65 to 175	60HQ100-ND	11.33	9.06	6.47	—	—	—
	75	45	.71	9000	-65 to 175	75HQ045-ND	10.63	8.50	6.07	—	—	—
	95	15	.46	7500	-65 to 100	95HQ015-ND	11.13	8.90	6.36	—	—	—
D-PAK	7	40	.53	500	-40 to 150	6CWQ04FN-ND	1.13	.90	.64	6CWQ04FNTR-ND	2,000	608.00/M
	7	60	.61	500	-40 to 150	6CWQ06FN-ND	1.30	1.04	.74	6CWQ06FNTR-ND	2,000	702.00/M
	7	100	.81	440	-40 to 150	6CWQ10FN-ND	1.55	1.24	.89	6CWQ10FNTR-ND	2,000	837.00/M
	12	30	.47	320	-55 to 150	12CWQ03FN-ND	.93	.74	.53	12CWQ03FNTR-ND	2,000	500.00/M
	12	40	.52	320	-55 to 150	12CWQ04FN-ND	.93	.74	.53	—	—	—
	12	60	.61	500	-55 to 150	12CWQ06FN-ND	.93	.74	.53	—	—	—
	12	100	.8	330	-55 to 150	12CWQ10FN-ND	.93	.74	.53	12CWQ10FNTR-ND	2,000	500.00/M
	12	100	.8	330	-55 to 150	—	—	—	—	12CWQ10FNTRR-ND	3,000	500.00/M
D-PAK	3.5	30	.45	535	-40 to 150	30WQ03FN-ND	.75	.60	.43	—	—	—
	3.5	40	.53	500	-40 to 150	30WQ04FN-ND	.83	.66	.47	30WQ04FNTR-ND	2,000	446.00/M
	3.5	60	.61	490	-40 to 150	30WQ06FN-ND	.95	.76	.54	30WQ06FNTR-ND	2,000	513.00/M
	3.5	100	.81	440	-40 to 150	30WQ10FN-ND	1.13	.90	.64	30WQ10FNTR-ND	2,000	608.00/M
	5.5	30	.46	320	-40 to 150	50WQ03FN-ND	.93	.74	.53	—	—	—
	5.5	40	.51	340	-40 to 150	50WQ04FN-ND	1.05	.84	.60	50WQ04FNTR-ND	2,000	567.00/M

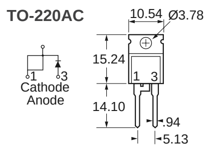
(Continued)

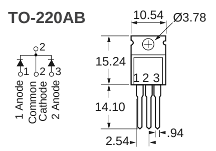


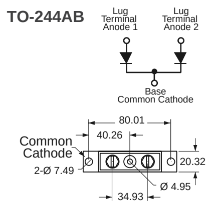


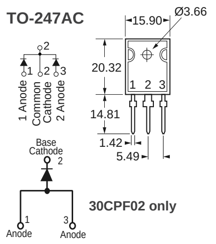


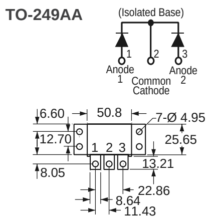


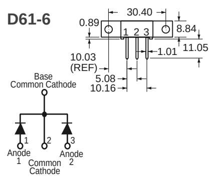


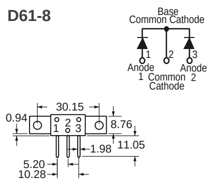












Schottky Rectifiers *(Cont.)*

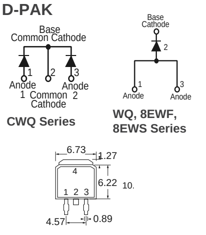
Package	IF (A)	VRRM (V)	VF (V)	IFSM(A) @ tp = 5µs Sine	TJ Junction Temp (°C)	Digi-Key Part No.	Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing
D-PAK	5.5	60	.57	320	-40 to 150	50WQ06FN-ND	1.20	.96	.69	50WQ06FNTRR-ND	3,000	648.00/M
	5.5	100	.77	30	-40 to 150	50WQ10FN-ND	1.43	1.14	.81	—	—	—
Half Pak	120	30	.41	22500	-55 to 150	122NQ030-ND	17.83	14.26	10.19	—	—	—
	120	100	.91	1600	-55 to 175	123NQ100-ND	17.83	14.26	10.19	—	—	—
	120	15	.39	10800	-55 to 100	125NQ015-ND	18.20	14.56	10.40	—	—	—
	120	15	.39	10800	-55 to 100	125NQ015R-ND	18.20	14.56	10.40	—	—	—
	180	100	.95	22000	-55 to 175	183NQ100-ND	23.15	18.52	13.23	—	—	—
	180	15	.4	15000	-55 to 100	185NQ015-ND	23.65	18.92	13.51	—	—	—
	240	15	.4	20000	-55 to 100	245NQ015-ND	28.00	22.40	16.00	—	—	—
PowlRtab	175	30	.46	8000	-55 to 150	175BGQ030-ND	6.58	5.26	2.98	—	—	—
D61-8-SL	80	45	.52	5800	-55 to 150	80CNQ045ASL-ND	15.23	12.18	8.70	—	—	—
	80	30	.47	5100	-55 to 150	82CNQ030ASL-ND	15.53	12.42	8.87	—	—	—
SMA	1.5	40	.54	120	-55 to 150	10MQ040N-ND	.33	.26	.19	10MQ040NTR-ND	7,500	176.00/M
	1.5	60	.63	40	-55 to 150	10MQ060N-ND	.33	.26	.19	10MQ060NTR-ND	7,500	176.00/M
	1.5	100	.78	120	-55 to 150	10MQ100N-ND	.35	.28	.20	10MQ100NTR-ND	7,500	189.00/M
	2.1	40	.42	330	-40 to 150	15MQ040N-ND	.55	.44	.31	15MQ040NTR-ND	7,500	297.00/M
SMC	3	15	.35	650	-55 to 100	30BQ015-ND	.90	.72	.51	30BQ015TR-ND	3,000	486.00/M
	3	40	.51	2000	-55 to 150	30BQ040-ND	.85	.68	.49	30BQ040TR-ND	3,000	459.00/M
	3	60	.58	1200	-55 to 150	30BQ060-ND	.88	.70	.50	30BQ060TR-ND	3,000	473.00/M
	3	100	.79	2100	-55 to 175	30BQ100-ND	.90	.72	.51	30BQ100TR-ND	3,000	486.00/M
SMD-220	8	80	.72	850	-55 to 175	8TQ080S-ND	3.05	2.44	1.74	—	—	—
	8	100	.72	850	-55 to 175	8TQ100S-ND	3.10	2.48	1.77	8TQ100STRR-ND	800	1382.40
	10	150	.93	620	-55 to 175	10CTQ150S-ND	3.73	2.98	2.13	—	—	—
	16	100	.72	850	-55 to 175	16CTQ100S-ND	4.48	3.58	2.56	—	—	—
	18	45	.6	1800	-55 to 175	18TQ045S-ND	2.43	1.94	1.39	—	—	—
	19	15	.36	700	-55 to 100	19TQ015S-ND	3.78	3.02	2.16	19TQ015STRL-ND	800	1684.80
	30	45	.62	1060	-55 to 175	30CTQ045S-ND	3.08	2.46	1.76	30CTQ045STRR-ND	800	1372.00
	30	60	.62	1060	-55 to 150	30CTQ060S-ND	3.93	3.14	2.24	—	—	—
	30	30	.49	1000	-55 to 150	32CTQ030S-ND	3.35	2.68	1.91	32CTQ030STRL-ND	800	1490.40
	40	45	.53	1240	-55 to 150	40CTQ045S-ND	3.03	2.42	1.73	—	—	—
	40	15	.41	700	-55 to 125	40L15CTS-ND	2.68	2.14	1.32	—	—	—
	40	30	.48	1100	-55 to 150	42CTQ030S-ND	3.03	2.42	2.19	42CTQ030STRL-ND	800	1307.20
	40	100	.81	850	-55 to 175	43CTQ100S-ND	3.50	2.80	2.24	—	—	—
	40	20	.45	1000	-55 to 150	47CTQ020S-ND	2.70	2.16	1.39	—	—	—
	40	60	.61	1000	-55 to 150	48CTQ060S-ND	3.03	2.42	1.73	—	—	—
	15	45	.84	690	-65 to 150	MBRB1545CT-ND	1.53	1.22	.70	—	—	—
	20	100	.95	850	-65 to 150	MBRB20100CT-ND	1.89	1.52	1.21	MBRB20100CTTRL-ND	800	659.20
	30	45	.73	1060	-65 to 150	—	—	—	—	MBRB2545CTTRL-ND	800	1382.40
SOT-223	2	45	.54	390	-55 to 150	20CJQ045-ND	1.00	.80	.57	—	—	—

Input Rectifier Diodes

Package	IF (A)	VRRM (V)	VF (V)	IFSM(A) @ tp=5ys Sine	TJ Junction Temp (C)	Digi-Key Part No.	Price Each 1	10	100
Fast Recovery Diodes (Discreet Circuit)									
DO-4	6	1000	110	110	-40 to 150	6FL100S05-ND	7.00	5.60	3.73
DO-5	40	600	400	400	-40 to 150	40HFL60S02-ND	12.38	9.90	6.60
	70	1000	700	700	-40 to 150	70HFL100S05-ND	15.75	12.60	8.38
D-Pak	8	200	170	170	-40 to 150	8EWF02S-ND	1.50	1.20	.85
	8	400	170	170	-40 to 150	8EWF04S-ND	1.55	1.24	.88
	8	600	170	170	-40 to 150	8EWF06S-ND	1.63	1.30	.96
	8	600	170	170	-40 to 150	8EWF06STRL-ND		2796.00/3,000	
SMD-220	10	200	150	150	-40 to 150	10ETF02S-ND	2.10	1.68	1.36
	20	200	250	250	-40 to 150	20ETF02S-ND	3.30	2.64	1.92
	10	400	150	150	-40 to 150	10ETF04S-ND	2.10	1.68	1.45
	10	600	150	150	-40 to 150	10ETF06S-ND	2.28	1.82	1.56
TO-220AC	10	400	150	150	-40 to 150	10ETF04-ND	1.95	1.56	1.34
	10	600	150	150	-40 to 150	10ETF06-ND	2.13	1.70	1.44
TO-247AC	30	200	300	300	-40 to 150	30CPF02-ND	3.63	2.90	1.81
Standard Recovery Diodes (Discreet Circuit)									
DO-4	16	1200	1.23	370	-65 to 175	16F120-ND	7.60	6.08	4.05
DO-5	85	400	1.2	1800	-65 to 180	85HF40-ND	11.55	9.24	6.16
	40	1200	1.3	595	-65 to 190	40HF120-ND	9.00	7.20	4.79
	70	1200	1.35	1250	-65 to 180	70HF120-ND	13.28	10.62	7.08
	70	1200	1.35	1250	-65 to 180	70HFR120-ND*	13.28	10.62	7.08
	40	1200	1.3	595	-65 to 190	40HFR120-ND*	9.00	7.20	4.79
	40	1400	1.3	595	-65 to 190	40HF140-ND	10.00	8.00	5.32
D-PAK	8	800	1.1	200	-55 to 150	8EWS08S-ND	1.19	.95	.76
	8	1200	1.1	200	-55 to 150	8EWS12S-ND	1.28	1.03	.82
POWIRTAB	70	200	1.33	1000	-40 to 150	70EPF02-ND	7.81	6.25	5.00
	85	200	1.35	1100	-40 to 150	85EPF02-ND	10.23	8.19	6.55
	70	400	1.33	1000	-40 to 150	70EPF04-ND	8.06	6.45	5.16
	85	400	1.35	1100	-40 to 150	85EPF04-ND	10.58	8.47	6.77
	70	600	1.33	1000	-40 to 150	70EPF06-ND	8.80	7.04	5.63
	85	600	1.35	1250	-40 to 150	85EPF06-ND	11.53	9.23	7.38
	85	1000	1.35	1250	-40 to 150	85EPF10-ND	11.55	9.24	7.39
	85	1200	1.35	1250	-40 to 150	85EPF12-ND	11.00	8.80	7.87
SMD-220	10	800	1.1	200	-40 to 150	10ETS08S-ND	2.09	1.68	1.34
	20	800	1.1	300	-40 to 150	20ETS08S-ND	2.58	2.07	1.65
	20	1200	1.1	300	-40 to 150	20ETS12S-ND	3.44	2.75	2.20
TO-220AC	10	800	1.1	200	-40 to 150	10ETS08-ND	1.80	1.44	1.15
	20	800	1.1	300	-40 to 150	20ETS08-ND	2.42	1.94	1.55
	20	1200	1.1	300	-40 to 150	20ETS12-ND	2.63	2.10	1.68
TO-247AC Modified	40	800	1.1	475	-40 to 150	40EPS08-ND	3.67	2.94	2.35
	60	800	1.1	950	-40 to 150	60EPS08-ND	5.09	4.08	3.26
	40	1200	1.1	475	-40 to 150	40EPS12-ND	4.00	3.20	2.56
	60	1200	1.1	950	-40 to 150	60EPS12-ND	4.93	3.94	3.55

* Annode to stud

D-PAK



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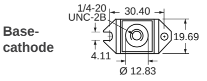

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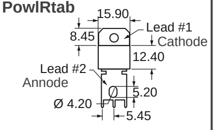

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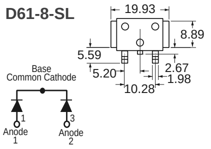

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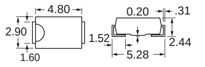

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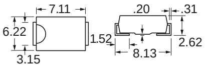

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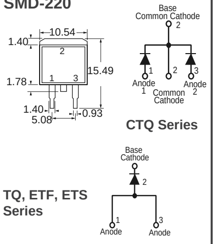

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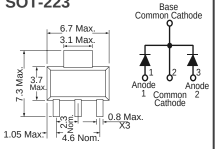
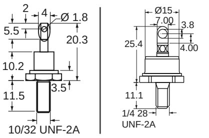
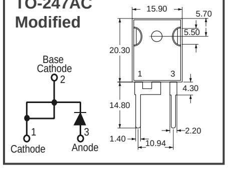


DO-4 **DO-5**



Cathode to stud

TO-247AC Modified



DIODES INCORPORATED

Schottky Barrier Rectifiers

Fig.	Max. Avg. Rect. Current (A)	Max. Peak Reverse Voltage (V)	Max. Surge Current 8.3ms(A)	Max. Rev. Current @ 25°C(mA)	Max. For. Voltage Peak (V)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel	
							1	10	100		Size	Pricing
1	1.0	20	25	1.0	0.45	1N5817DICT-ND	.39	.30	.22	1N5817DITR-ND	5,000	96.00/M
		30	25	1.0	0.55	1N5818DICT-ND	.39	.30	.22	1N5818DITR-ND	5,000	96.00/M
		40	25	1.0	0.60	1N5819DICT-ND	.39	.30	.22	1N5819DITR-ND	5,000	96.00/M
		20	40	1.0	0.55	SR102CT-ND	.49	.38	.27	SR102TR-ND	5,000	120.00/M
		30	40	1.0	0.55	SR103CT-ND	.49	.38	.27	SR103TR-ND	5,000	120.00/M
		40	40	1.0	0.55	SR104CT-ND	.49	.38	.27	SR104TR-ND	5,000	120.00/M
		50	40	1.0	0.70	SR105CT-ND	.52	.40	.29	SR105TR-ND	5,000	128.00/M
		60	40	1.0	0.70	SR106CT-ND	.53	.42	.32	SR106TR-ND	5,000	147.00/M
		100	25	0.5	0.80	SB1100DICT-ND	.55	.44	.33	SB1100DITR-ND	5,000	154.00/M
2	3.0	20	80	2.0	0.475	1N5820DICT-ND	.68	.54	.41	1N5820DITR-ND	1,200	216.00/M
		30	80	2.0	0.500	1N5821DICT-ND	.68	.54	.41	1N5821DITR-ND	1,200	216.00/M
		40	80	2.0	0.525	1N5822DICT-ND	.68	.54	.41	1N5822DITR-ND	1,200	216.00/M
		20	150	3.0	0.55	SR302CT-ND	.60	.48	.36	SR302TR-ND	1,200	218.00/M
		40	150	3.0	0.55	SR304CT-ND	.60	.48	.36	SR304TR-ND	1,200	218.00/M
		50	150	3.0	0.75	SR305CT-ND	.64	.52	.39	SR305TR-ND	1,200	232.00/M
		60	150	3.0	0.75	SR306CT-ND	.68	.55	.41	SR306TR-ND	1,200	247.00/M
		100	80	0.5	0.80	SB3100DICT-ND	.80	.64	.48	SB3100DITR-ND	1,200	290.00/M
2	5.0	20	250	10.0	0.57	SR502CT-ND	.88	.71	.53	SR502TR-ND	1,200	319.00/M
		30	250	10.0	0.57	SR503CT-ND	.92	.74	.56	SR503TR-ND	1,200	334.00/M
		40	250	10.0	0.57	SR504CT-ND	.96	.77	.58	SR504TR-ND	1,200	348.00/M
		100	150	0.5	0.80	SB5100DICT-ND	1.12	.89	.68	SB5100DITR-ND	1,200	452.00/M
3	1.0	20	25	1.0	0.45	1N5817MCT-ND	.68	.54	.41	1N5817MTR-ND	5,000	189.00/M
		30	25	1.0	0.55	1N5818MCT-ND	.68	.54	.41	1N5818MTR-ND	5,000	189.00/M
		40	25	1.0	0.60	1N5819MCT-ND	.68	.54	.41	1N5819MTR-ND	5,000	189.00/M
4	1.0	20	30	0.5	0.50	B120DICT-ND	.55	.44	.33	B120DITR-ND	5,000	154.00/M
		30	30	0.5	0.50	B130DICT-ND	.58	.46	.35	B130DITR-ND	5,000	161.00/M
		30	25	1.0	0.41	B130LDICT-ND *NEW!*	.68	.54	.41	B130LDITR-ND *NEW!*	5,000	189.00/M
		40	30	0.5	0.50	B140DICT-ND	.60	.48	.36	B140DITR-ND	5,000	168.00/M
		50	30	0.5	0.70	B150DICT-ND	.62	.50	.38	B150DITR-ND	5,000	198.00/M
		60	30	0.5	0.70	B160DICT-ND	.76	.61	.46	B160DITR-ND	5,000	242.00/M
		80	30	0.5	0.79	B180DICT-ND *NEW!*	.80	.64	.48	B180DITR-ND *NEW!*	5,000	255.00/M
		100	30	0.5	0.79	B1100DICT-ND	.84	.68	.51	B1100DITR-ND	5,000	268.00/M
4	2.0	20	50	0.5	0.50	B220ADICT-ND *NEW!*	.76	.61	.46	B220ADITR-ND *NEW!*	5,000	242.00/M
		30	50	0.5	0.50	B230ADICT-ND *NEW!*	.82	.66	.50	B230ADITR-ND *NEW!*	5,000	261.00/M
		40	50	0.5	0.50	B240ADICT-ND *NEW!*	.86	.69	.52	B240ADITR-ND *NEW!*	5,000	274.00/M
		50	50	0.5	0.70	B250ADICT-ND *NEW!*	.90	.72	.54	B250ADITR-ND *NEW!*	5,000	287.00/M
		60	50	0.5	0.70	B260ADICT-ND *NEW!*	.96	.77	.58	B260ADITR-ND *NEW!*	5,000	306.00/M
4	3.0	20	100	0.5	0.50	B320ADICT-ND *NEW!*	.96	.77	.58	B320ADITR-ND *NEW!*	5,000	306.00/M
		30	100	0.5	0.50	B330ADICT-ND *NEW!*	.83	.65	.50	B330ADITR-ND *NEW!*	5,000	319.00/M
		40	100	0.5	0.50	B340ADICT-ND *NEW!*	.86	.68	.52	B340ADITR-ND *NEW!*	5,000	332.00/M
		50	100	0.5	0.70	B350ADICT-ND *NEW!*	1.06	.84	.64	B350ADITR-ND *NEW!*	5,000	408.00/M
		60	100	0.5	0.70	B360ADICT-ND *NEW!*	1.16	.91	.70	B360ADITR-ND *NEW!*	5,000	446.00/M
5	1.0	20	30	0.5	0.50	B120BDICT-ND *NEW!*	.63	.50	.38	B120BDITR-ND *NEW!*	3,000	188.00/M
		20	30	0.5	1.1	SK12DICT-ND	.63	.50	.38	SK12DITR-ND	3,000	188.00/M
		30	30	0.5	0.50	B130BDICT-ND *NEW!*	.65	.52	.39	B130BDITR-ND *NEW!*	3,000	195.00/M
		30	40	1.0	.445	B130LBCT-ND	.70	.56	.42	B130LBTR-ND	3,000	210.00/M
		30	25	0.5	0.55	SK13DICT-ND	.68	.54	.41	SK13DITR-ND	3,000	203.00/M
		40	45	0.1	0.53	B140HBDICT-ND *NEW!*	.73	.58	.44	B140HBDITR-ND *NEW!*	3,000	218.00/M
		40	30	0.5	0.50	B140BDICT-ND *NEW!*	.68	.54	.41	B140BDITR-ND *NEW!*	3,000	203.00/M
		40	25	0.5	0.55	SK14DICT-ND	.60	.48	.36	SK14DITR-ND	3,000	200.00/M
		50	30	0.5	0.50	B150BDICT-ND *NEW!*	.70	.56	.42	B150BDITR-ND *NEW!*	3,000	233.00/M
		50	25	0.5	0.70	SK15DICT-ND	.70	.56	.42	SK15DITR-ND	3,000	233.00/M
		60	30	0.5	0.70	B160BDICT-ND *NEW!*	.84	.68	.51	B160BDITR-ND *NEW!*	3,000	279.00/M
		60	25	0.5	0.70	SK16DICT-ND	.88	.71	.53	SK16DITR-ND	3,000	293.00/M
		70	30	0.5	0.79	B170BDICT-ND *NEW!*	.86	.69	.52	B170BDITR-ND *NEW!*	3,000	286.00/M
		80	30	0.5	0.79	B180BDICT-ND *NEW!*	.88	.71	.53	B180BDITR-ND *NEW!*	3,000	293.00/M
		90	30	0.5	0.79	B190BDICT-ND *NEW!*	.90	.72	.54	B190BDITR-ND *NEW!*	3,000	299.00/M
		100	30	0.5	0.79	B1100BDICT-ND *NEW!*	.92	.74	.56	B1100BDITR-ND *NEW!*	3,000	306.00/M
		100	50	0.5	0.75	B1100LBDICT-ND *NEW!*	.83	.65	.50	B1100LBDITR-ND *NEW!*	3,000	325.00/M
5	2.0	20	50	0.5	0.50	B220DICT-ND	.84	.68	.51	B220DITR-ND	3,000	279.00/M
		30	50	0.5	0.50	B230DICT-ND	.90	.72	.54	B230DITR-ND	3,000	299.00/M
		40	50	0.5	0.50	B240DICT-ND	.96	.77	.58	B240DITR-ND	3,000	319.00/M
		50	50	0.5	0.70	B250DICT-ND	.83	.65	.50	B250DITR-ND	3,000	325.00/M
		60	50	0.5	0.70	B260DICT-ND	.89	.71	.54	B260DITR-ND	3,000	351.00/M
		70	50	0.5	0.79	B270DICT-ND *NEW!*	.92	.73	.56	B270DITR-ND *NEW!*	3,000	364.00/M
		80	50	0.5	0.79	B280DICT-ND *NEW!*	.96	.76	.58	B280DITR-ND *NEW!*	3,000	377.00/M
		90	50	0.5	0.79	B290DICT-ND *NEW!*	.99	.78	.60	B290DITR-ND *NEW!*	3,000	390.00/M
		100	50	0.5	0.79	B2100DICT-ND *NEW!*	1.02	.81	.62	B2100DITR-ND *NEW!*	3,000	403.00/M
5	3.0	20	100	0.5	0.50	B320BDICT-ND *NEW!*	.89	.71	.54	B320BDITR-ND *NEW!*	3,000	351.00/M
		30	100	0.5	0.50	B330BDICT-ND *NEW!*	.92	.73	.56	B330BDITR-ND *NEW!*	3,000	364.00/M
		40	100	0.5	0.50	B340BDICT-ND *NEW!*	.96	.76	.58	B340BDITR-ND *NEW!*	3,000	377.00/M
		50	100	0.5	0.70	B350BDICT-ND *NEW!*	1.19	.94	.72	B350BDITR-ND *NEW!*	3,000	468.00/M
		60	100	0.5	0.50	B360BDICT-ND *NEW!*	1.29	1.02	.78	B360BDITR-ND *NEW!*	3,000	507.00/M
6	3.0	20	100	0.5	0.50	B320DICT-ND	.99	.78	.60	B320DITR-ND	3,000	390.00/M
		30	100	0.5	0.50	B330DICT-ND *NEW!*	1.02	.81	.62	B330DITR-ND *NEW!*	3,000	403.00/M
		40	100	0.5	0.50	B340DICT-ND	1.09	.86	.66	B340DITR-ND	3,000	429.00/M
		50	100	0.5	0.70	B350DICT-ND	1.32	1.04	.80	B350DITR-ND	3,000	520.00/M
		60	100	0.5	0.70	B360DICT-ND	1.45	1.15	.88	B360DITR-ND	3,000	572.00/M
		70	100	0.5	0.79	B370DICT-ND *NEW!*	1.49	1.17	.90	B370DITR-ND *NEW!*	3,000	585.00/M
		80	100	0.5	0.79	B380DICT-ND *NEW!*	1.52	1.20	.92	B380DITR-ND *NEW!*	3,000	598.00/M
		100	100	0.5	0.79	B3100DICT-ND *NEW!*	1.58	1.25	.96	B3100DITR-ND *NEW!*	3,000	624.00/M
		20	100	0.5	0.50	SK32DICT-ND	.86	.68	.52	SK32DITR-ND	500	188.50
		30	100	0.5	0.50	SK33DICT-ND	.86	.68	.52	SK33DITR-ND	500	188.50
		40	100	0.5	0.50	SK34DICT-ND	.86	.68	.52	SK34DITR-ND	500	188.50
		50	100	0.5	0.75	SK35DICT-ND	.86	.68	.52	SK35DITR-ND	500	188.50
		60	100	0.5	0.75	SK36DICT-ND	.86	.68	.52	SK36DITR-ND	500	188.50
		90	100	0.5	0.79	B390DICT-ND *NEW!*	1.55	1.23	.94	B390DITR-ND *NEW!*	3,000	611.00/M
6	5.0	20	175	0.5	0.55	B520CDICT-ND	1.16	.91	.70	B520CDITR-ND	3,000	455.00/M
		30	175	0.5	0.55	B530CDICT-ND	1.22	.97	.74	B530CDITR-ND	3,000	481.00/M
		40	175	0.5	0.55	B540CDICT-ND	1.29	1.02	.78	B540CDITR-ND	3,000	507.00/M
		50	175	0.5	0.70	B550CDICT-ND	1.42	1.12	.86	B550CDITR-ND	3,000	559.00/M
		60	175	0.5	0.70	B560CDICT-ND	1.55	1.23	.94	B560CDITR-ND	3,000	611.00/M
7	10.0	40	125	1.0	0.55	SBG1040CTDI-ND	1.46	1.14	.90	—	—	—
	15.0	30	150	0.1	0.7	MBRB1530CTDICT-ND *NEW!*	1.38	1.08	.85	MBRB1530CTDITR-ND *NEW!*	800	551.20
	15.0	35	150	0.1	0.7	MBRB1535CTDICT-ND *NEW!*	1.40	1.10	.87	MBRB1535CTDITR-ND *NEW!*	800	561.60
	15.0	40	150	0.1	0.7	MBRB1540CTDICT-ND *NEW!*	1.43	1.12	.88	MBRB1540CTDITR-ND *NEW!*	800	572.80
	15.0	45	150	0.1	0.7	MBRB1545CTDICT-ND *NEW!*	1.46	1.14	.90	MBRB1545CTDITR-ND *NEW!*	800	583.20
	16.0	30	175	1.0	0.55	SBG1630CTDICT-ND *NEW!*	1.51	1.18	.93	SBG1630CTDITR-ND *NEW!*	800	604.80
	16.0	40	175	1.0	0.55	SBG1640CTDI-ND	1.57	1.22	.97	—	—	—
	20.0	40	225	1.0	0.55	SBG2040CTDI-ND	1.70	1.33	1.05	—	—	—
	30.0	40	250	1.0	0.55	SBG3040CTDI-ND	2.48	1.94	1.53	—	—	—
8	0.5	20	5.5	—	0.300	B0520LWDICT-ND *NEW!*	.50	.40	.30	B0520LWDITR-ND *NEW!*	3,000	150.00/M
		30	5.5	—	0.375	B0530WDICT-ND *NEW!*	.50	.40	.30	B0530WDITR-ND *NEW!*	3,000	150.00/M
		40	5.5	—	0.510	B0540WDICT-ND *NEW!*	.50	.40	.30	B0540WDITR-ND *NEW!*	3,000	150.00/M

(Continued)

Fig. 1 — DO-41

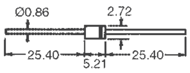


Fig. 2 — DO-201AD

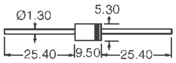


Fig. 3 — MELF (DL-41)

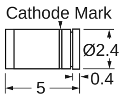


Fig. 4 — SMA

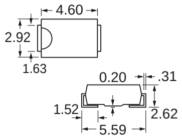


Fig. 5 — SMB

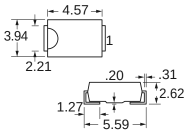


Fig. 6 — SMC

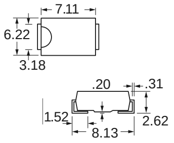


Fig. 7 — D2PAK

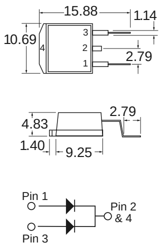
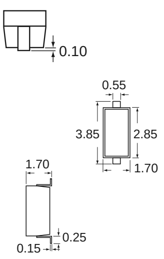


Fig. 8 — SOD-123



Schottky Barrier Rectifiers *(Cont.)*

Fig.	Max Avg. Rect. Current (A)	Max Peak Reverse Voltage	Max. Surge Current 8.3ms(A)	Max. Reverse Current @ 25°C(mA)	Max. Forward Voltage Peak (V)	Digi-Key Part No.	Price Each 1	10	100	500
9	8.0	45V	200	8.0	0.55	SBL845DI-ND	1.46	1.14	.90	.73
	16.0	45V	275	16.0	0.63	SBL1645DI-ND	1.67	1.31	1.03	.84
10	10.0	45V	250	10.0	0.60	SBL1045CTDI-ND	1.54	1.20	.95	.77
	16.0	20V	250	10.0	0.65	SR1602-ND†	3.08	2.31	1.93	1.54
10	16.0	45V	250	0.5	0.55	SBL1645CTDI-ND	1.78	1.39	1.10	.90
	20.0	45V	250	20.0	0.60	SBL2045CTDI-ND	1.89	1.47	1.17	.95
	30.0	45V	250	1.0	0.55	SBL3045CTDI-ND	2.67	2.08	1.65	1.34

Operating and Storage Temperature: -65°C to +150°C. † Dual rectifier package

Fig. 9 — TO-220

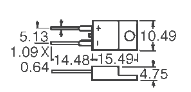
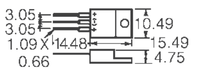


Fig. 10 — TO-220

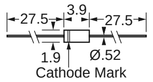


Fast Schottky Barrier Rectifiers

Fig.	Peak Rev. Voltage VRRM(V)	Leakage Current	Forward Volt. @ IF VF	IF(mA)	Junction Cap. (pF)	Reverse Recovery Time(nS)	Power Dissipation Ptot(mW)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing
1	20	5µA	.37	20	50	10	400	SD103CCT-ND	.48	.38	.29	SD103CTB-ND‡	10,000	126.00/M
	30	5µA	.37	20	50	10	400	SD103BCT-ND	.48	.38	.29	SD103BTB-ND‡	10,000	126.00/M
	40	5µA	.37	20	50	10	400	SD103ACT-ND	.48	.38	.29	SD103ATB-ND‡	10,000	126.00/M
	40	200nA	.39	1	2.2	1	400	SD101CCT-ND	.52	.40	.29	SD101CTB-ND‡	10,000	120.00/M
	50	200nA	.4	1	2.1	1	400	SD101BCT-ND	.52	.40	.29	SD101BTB-ND‡	10,000	120.00/M
	60	200nA	.41	1	2.0	1	400	SD101ACT-ND	.52	.40	.29	SD101ATB-ND‡	10,000	120.00/M
2	20	5µA	.37	20	50	10	400	LLSD103CCT-ND	.55	.44	.33	LLSD103CTR-ND*	2,500	154.00/M
	30	5µA	.37	20	50	10	400	LLSD103BCT-ND	.55	.44	.33	LLSD103BTR-ND*	2,500	154.00/M
	40	5µA	.37	20	50	10	400	LLSD103ACT-ND	.55	.44	.33	LLSD103ATR-ND*	2,500	154.00/M
	40	200nA	.39	1	2.2	1	400	LLSD101CCT-ND	.45	.36	.27	LLSD101CTR-ND*	2,500	126.00/M
	50	200nA	.4	1	2.1	1	400	LLSD101BCT-ND	.45	.36	.27	LLSD101BTR-ND*	2,500	126.00/M
	60	200nA	.41	1	2.0	1	400	LLSD101ACT-ND	.45	.36	.27	LLSD101ATR-ND*	2,500	126.00/M
3	20	5µA	.37	20	50	10	200	SD103CWSDICT-ND *NEW!*	.60	.48	.36	SD103CWSDITR-ND* *NEW!*	3,000	200.00/M
	30	500nA	1.0	200	10	5	200	BAT42WSCT-ND	.64	.52	.39	BAT42WSTR-ND*	3,000	213.00/M
	30	100µA	0.33	2	10	5	200	BAT43WSDICT-ND *NEW!*	.64	.52	.39	BAT43WSDITR-ND* *NEW!*	3,000	213.00/M
	30	2.0µA	0.32	1	10	5	200	BAT54WSDICT-ND *NEW!*	.80	.64	.48	BAT54WSDITR-ND* *NEW!*	3,000	266.00/M
	30	5µA	.37	20	50	10	200	SD103BWSDICT-ND *NEW!*	.60	.48	.36	SD103BWSDITR-ND* *NEW!*	3,000	200.00/M
	40	200nA	.39	1	2.2	1.0	200	SD101CWSDICT-ND *NEW!*	.63	.50	.38	SD101CWSDITR-ND* *NEW!*	3,000	188.00/M
	40	5.0µA	0.37	20	50	10	200	SD103AWSDICT-ND *NEW!*	.60	.48	.36	SD103AWSDITR-ND* *NEW!*	3,000	200.00/M
	50	200nA	.40	1	2.1	1.0	200	SD101BWSDICT-ND *NEW!*	.63	.50	.38	SD101BWSDITR-ND* *NEW!*	3,000	188.00/M
	60	200nA	.41	1	2.0	1	200	SD101AWSCT-ND	.63	.50	.38	SD101AWSTR-ND*	3,000	188.00/M
	70	200nA	0.41	1.0	2.0	1.0	200	1N5711WSDICT-ND *NEW!*	.72	.58	.44	1N5711WSDITR-ND* *NEW!*	3,000	239.00/M
4	20	5µA	—	—	—	10	—	SD103-CWDICT-ND	.53	.42	.32	SD103-CWDITR-ND*	10,000	140.00/M
	30	100µA	1.0	200	10	5	200	BAT42WDICT-ND *NEW!*	.60	.48	.36	BAT42WDITR-ND* *NEW!*	3,000	180.00/M
	30	500nA	1.0	200	10	5.0	200	BAT43WDICT-ND *NEW!*	.60	.48	.36	BAT43WDITR-ND* *NEW!*	3,000	180.00/M
	30	5µA	—	—	—	10	—	SD103-BWDICT-ND	.53	.42	.32	SD103-BWDITR-ND*	10,000	140.00/M
	40	200nA	—	—	—	1	—	SD101-CWDICT-ND	.48	.38	.29	SD101-CWDITR-ND*	10,000	126.00/M
	40	5µA	—	—	—	10	—	SD103-AWDICT-ND	.53	.42	.32	SD103-AWDITR-ND*	10,000	140.00/M
	50	200nA	—	—	—	1	—	SD101-BWDICT-ND	.48	.38	.29	SD101-BWDITR-ND*	10,000	126.00/M
	60	200µA	1.0	15	2.0	1	400	1N6263WDICT-ND *NEW!*	.70	.56	.42	1N6263WDITR-ND* *NEW!*	3,000	210.00/M
	60	200nA	—	—	—	1	—	SD101-AWDICT-ND	.48	.38	.29	SD101-AWDITR-ND*	10,000	126.00/M

‡ TB = Tape & Box * TR = Tape & Reel

Fig. 1 — DO-35



Cathode Mark

Fig.2 — MiniMELF

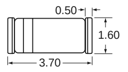


Fig. — 3 SOD-323

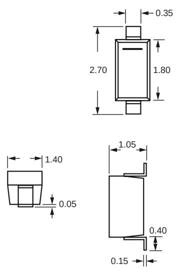
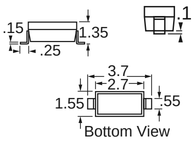


Fig. 4 — SOD-123



Bottom View

NEW! Schottky Barrier Diode Arrays SOT-363

Fig.	Peak Rev. Voltage VRRM(V)	Leakage Current	Forward Volt. @ IF VF	IF(mA)	Junction Cap. (pF)	Reverse Recovery Time (nS)	Power Dissipation Ptot (mW)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing
1	30	2.0µA	0.4	10	10	5.0	200	BAT54SDWDICT-ND	.96	.77	.58	BAT54SDWDITR-ND	3,000	319.00/M
1	40	200nA	0.38	1.0	5.0	5.0	200	BAS40DW-04DICT-ND	.80	.64	.48	BAS40DW-04DITR-ND	3,000	266.00/M
1	70	100nA	0.41	1.0	2.0	5.0	200	BAS70DW-04DICT-ND	.83	.65	.50	BAS70DW-04DITR-ND	3,000	325.00/M
2	30	2.0µA	0.4	10	10	5.0	200	BAT54CDWDICT-ND	.96	.77	.58	BAT54CDWDITR-ND	3,000	319.00/M
2	40	200nA	0.38	1.0	5.0	5.0	200	BAS40DW-05DICT-ND	.80	.64	.48	BAS40DW-05DITR-ND	3,000	266.00/M
3	30	2.0µA	0.4	10	10	5.0	200	BAT54ADWDICT-ND	.96	.77	.58	BAT54ADWDITR-ND	3,000	319.00/M
3	40	200nA	0.38	1.0	5.0	5.0	200	BAS40DW-06DICT-ND	.80	.64	.48	BAS40DW-06DITR-ND	3,000	266.00/M
3	70	100nA	0.41	1.0	2.0	5.0	200	BAS70DW-06DICT-ND	.83	.65	.50	BAS70DW-06DITR-ND	3,000	325.00/M
4	40	200nA	0.38	1.0	5.0	5.0	200	BAS40TWDICT-ND	.72	.58	.44	BAS40TWDITR-ND	3,000	239.00/M
4	70	100nA	0.41	1.0	2.0	5.0	200	BAS70TWDICT-ND	.88	.71	.53	BAS70TWDITR-ND	3,000	293.00/M

Fig. 1

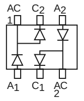


Fig. 2

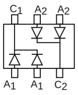


Fig. 3

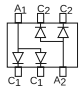
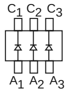


Fig. 4



NEW! Switching Diode Arrays SOT-363/SOT-353 (200mW)

Fig.	Peak Rev. Volt. VRM (V)	Reverse Curr. max. IR (uA)	VR (V)	For. Volt. max. VF (V)	@ IF (mA)	Capacitance C max. (pF)	Reverse Recovery Time Trr max. (nS)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
1	80	1.0	75	1.0	100	3.5	4.0	MMBD4448HAQWDICT-ND	.60	.48	.36	MMBD4448HAQWDITR-ND	200.00/M
2	80	1.0	75	1.0	100	3.5	4.0	MMBD4448HCQWDICT-ND	.60	.48	.36	MMBD4448HCQWDITR-ND	180.00/M
3	80	1.0	75	1.0	100	3.5	4.0	MMBD4448HTWDICT-ND	.50	.40	.30	MMBD4448HTWDITR-ND	150.00/M
4	75	2.5	75	1.0	50	2.0	4.0	BAV70DWDICT-ND	.50	.40	.30	BAV70DWDITR-ND	150.00/M
4	80	1.0	75	1.0	100	3.5	4.0	MMBD4448HCDWDICT-ND	.60	.48	.36	MMBD4448HCDWDITR-ND	180.00/M
5	75	2.5	75	1.0	50	2.0	4.0	BAV99DWDICT-ND	.50	.40	.30	BAV99DWDITR-ND	150.00/M
6	75	2.5	75	1.0	50	2.0	4.0	BAW56DWDICT-ND	.50	.40	.30	BAW56DWDITR-ND	150.00/M
6	80	1.0	75	1.0	100	3.5	4.0	MMBD4448HADWDICT-ND	.60	.48	.36	MMBD4448HADWDITR-ND	180.00/M

Fig. 1
SOT-363

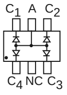


Fig. 2
SOT-353

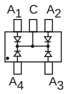


Fig. 3
SOT-363

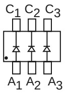


Fig. 4
SOT-363

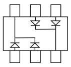


Fig. 5
SOT-363

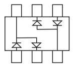
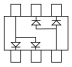


Fig. 6
SOT-363



Schottky Barrier Double Diodes

Fig.	Repetitive Peak Reverse Voltage VRRM	Forward Continuous Current IF	Forward Voltage @ 100 mA	Leakage Current	Reverse Recovery Time	Package	Digi-Key Part No.	Cut Tape Price Each			Tape & Reel*	
								10	100	1,000	Size	Pricing
1	30V	200mA	1.0V	2µA	5nS	SOT-23	BAT54DICT-ND	.40	.30	.16	3,000	150.00/M
	30V	200mA	1.0V	2µA	5nS	SOT-323	BAT54WCT-ND	.48	.36	.20	3,000	180.00/M
	40V	200mA	1.0V	200nA	5nS	SOT-23	BAS40DICT-ND *NEW!*	.52	.39	.24	3,000	213.00/M
	40V	200mA	1.0V	200nA	5nS	SOT-323	BAS40WDICT-ND *NEW!*	.64	.48	.29	3,000	266.00/M
	40V	500mA	0.5V	50µA	—	SOT-23	BAT400DDICT-ND *NEW!*	.52	.39	.24	3,000	213.00/M
	70V	70mA	1.0V	200uA	5nS	SOT-23	BAS70DICT-ND	.64	.48	.29	3,000	266.00/M
	70V	200mA	1.0V	100nA	5nS	SOT-23	BAS70HDICT-ND *NEW!*	.64	.48	.29	3,000	266.00/M
	70V	100mA	1.0V	100nA	5nS	SOT-323	BAS70WDICT-ND *NEW!*	.71	.53	.32	3,000	293.00/M
2	30V	200mA	1.0V	2µA	5nS	SOT-23	BAT54CDICT-ND	.48	.36	.22	3,000	200.00/M
	30V	200mA	1.0V	2µA	5nS	SOT-323	BAT54CWCT-ND	.58	.44	.27	3,000	239.00/M
	40V	200mA	1.0V	200nA	5nS	SOT-23	BAS40-05DICT-ND *NEW!*	.52	.39	.24	3,000	213.00/M
	40V	200mA	1.0V	200nA	5nS	SOT-323	BAS40W-05DICT-ND *NEW!*	.64	.48	.29	3,000	266.00/M
	70V	70mA	1.0V	200nA	5nS	SOT-23	BAS70-05DICT-ND	.64	.48	.29	3,000	266.00/M
	70V	200mA	1.0V	100nA	5nS	SOT-23	BAS70H-05DICT-ND *NEW!*	.64	.48	.29	3,000	266.00/M
	70V	100mA	1.0V	100nA	5nS	SOT-323	BAS70W-05DICT-ND *NEW!*	.71	.53	.32	3,000	293.00/M
3	30V	200mA	1.0V	2µA	5nS	SOT-23	BAT54SDICT-ND	.48	.36	.22	3,000	200.00/M
	30V	200mA	1.0V	2µA	5nS	SOT-323	BAT54SWCT-ND	.58	.44	.27	3,000	239.00/M
	40V	200mA	1.0V	200nA	5nS	SOT-23	BAS40-04CT-ND	.52	.39	.24	3,000	213.00/M
	40V	200mA	1.0V	200nA	5nS	SOT-323	BAS40W-04DICT-ND *NEW!*	.64	.48	.29	3,000	266.00/M
	70V	70mA	1.0V	200nA	5nS	SOT-23	BAS70-04DICT-ND	.64	.48	.29	3,000	266.00/M
	70V	200mA	1.0V	100nA	5nS	SOT-23	BAS70H-04DICT-ND *NEW!*	.64	.48	.29	3,000	266.00/M
	70V	100mA	1.0V	100nA	5nS	SOT-323	BAS70W-04DICT-ND *NEW!*	.71	.53	.32	3,000	293.00/M
4	30V	200mA	1.0V	2µA	5nS	SOT-23	BAT54ADICT-ND	.48	.36	.22	3,000	200.00/M
	30V	200mA	1.0V	2µA	5nS	SOT-323	BAT54AWCT-ND	.58	.44	.27	3,000	239.00/M
	40V	200mA	1.0V	200nA	5nS	SOT-23	BAS40-06DICT-ND *NEW!*	.52	.39	.24	3,000	213.00/M
	40V	200mA	1.0V	200nA	5nS	SOT-323	BAS40W-06DICT-ND *NEW!*	.64	.48	.29	3,000	266.00/M
	70V	70mA	1.0V	200nA	5nS	SOT-23	BAS70-06DICT-ND	.64	.48	.29	3,000	266.00/M
	70V	200mA	1.0V	100nA	5nS	SOT-23	BAS70H-06DICT-ND *NEW!*	.64	.48	.29	3,000	266.00/M
	70V	100mA	1.0V	100nA	5nS	SOT-323	BAS70W-06DICT-ND *NEW!*	.71	.53	.32	3,000	293.00/M
5	30V	200mA	1.0V	2uA	5nS	SOT-363	BAT54DWDICT-ND *NEW!*	.65	.50	.34	3,000	325.00/M

Fig. 1

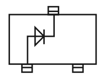


Fig. 2

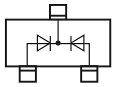


Fig. 3

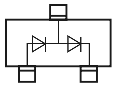


Fig. 4

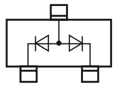
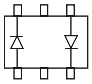


Fig. 5



(Top View Shown on all drawings)

* For Tape and Reel Part No., change “CT-ND” to “TR-ND”.

Fast Recovery Rectifiers

Fig.	Pkg.	Max. Avg. Rect. Current (A)	Max. Peak Reverse Voltage (V)	Max. Surge Current 8.3ms (A)	Max. Reverse Current @25°C (µA)	Max. Forward Voltage Peak (V)	Max. Reverse Recovery Time (nS)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel	
									1	10	100		Size	Pricing
1	DO-41	1.0	50	50	5.0	1.2	200	1N4933CT-ND	.39	.23	.15	1N4933TR-ND	5,000	46.00/M
			100	50	5.0	1.2	200	1N4934CT-ND	.39	.23	.15	1N4934TR-ND	5,000	46.00/M
			200	50	5.0	1.2	200	1N4935CT-ND	.39	.23	.15	1N4935TR-ND	5,000	46.00/M
			400	50	5.0	1.2	200	1N4936CT-ND	.39	.23	.15	1N4936TR-ND	5,000	46.00/M
			600	50	5.0	1.2	200	1N4937CT-ND	.39	.23	.15	1N4937TR-ND	5,000	46.00/M
			800	50	5.0	1.3	500	FR106CT-ND	.44	.30	.21	FR106TR-ND	5,000	72.00/M
			1000	50	5.0	1.3	500	FR107CT-ND	.44	.30	.21	FR107TR-ND	5,000	72.00/M
2	MELF	1.0	50	30	5.0	1.2	200	DL4933CT-ND	—	.33	.24	DL4933TR-ND	5,000	104.00/M
			100	30	5.0	1.2	200	DL4934CT-ND	—	.33	.24	DL4934TR-ND	5,000	104.00/M
			200	30	5.0	1.2	200	DL4935CT-ND	—	.33	.24	DL4935TR-ND	5,000	104.00/M
			400	30	5.0	1.2	200	DL4936CT-ND	—	.33	.24	DL4936TR-ND	5,000	104.00/M
			600	30	5.0	1.2	200	DL4937DICT-ND *NEW!*	.42	.33	.24	DL4937DITR-ND *NEW!*	5,000	104.00/M
3	DO-201AD	3.0	50	200	10.0	1.3	150	FR301CT-ND	.41	.32	.23	FR301TR-ND	1,200	113.00/M
			100	200	10.0	1.3	150	FR302CT-ND	.42	.32	.24	FR302TR-ND	1,200	115.00/M
			200	200	10.0	1.3	150	FR303CT-ND	.44	.34	.25	FR303TR-ND	1,200	121.00/M
			400	200	10.0	1.3	150	FR304CT-ND	.44	.34	.25	FR304TR-ND	1,200	121.00/M
			600	200	10.0	1.3	250	FR305CT-ND	.48	.37	.27	FR305TR-ND	1,200	133.00/M
			800	200	10.0	1.3	500	FR306CT-ND	.48	.37	.27	FR306TR-ND	1,200	133.00/M
			1000	200	10.0	1.3	500	FR307CT-ND	.57	.44	.32	FR307TR-ND	1,200	158.00/M
4	R-6	6.0	50	300	10.0	1.3	150	FR601CT-ND	.64	.52	.39	FR601TR-ND	500	132.00
			100	300	10.0	1.3	150	FR602CT-ND	.68	.55	.41	FR602TR-ND	500	140.50
			200	300	10.0	1.3	150	FR603CT-ND	.72	.58	.44	FR603TR-ND	500	148.50
			400	300	10.0	1.3	150	FR604CT-ND	.76	.61	.46	FR604TR-ND	500	157.00
			600	300	10.0	1.3	250	FR605CT-ND	.84	.68	.51	FR605TR-ND	500	173.50
			800	300	10.0	1.3	500	FR606CT-ND	.92	.74	.56	FR606TR-ND	500	190.00
5	TO-220A	8.0	50	300	10.0	1.3	150	FR801-ND	1.19	.94	.72	—	—	—
			100	300	10.0	1.3	150	FR802-ND	1.25	.99	.76	—	—	—
			200	300	10.0	1.3	150	FR803-ND	1.32	1.04	.80	—	—	—
			400	300	10.0	1.3	150	FR804-ND	1.45	1.15	.88	—	—	—
			600	300	10.0	1.3	250	FR805-ND	1.55	1.23	.94	—	—	—
6	TO-220	8.0	150	125	10.0	.975	35	SF163DI-ND	2.08	1.62	1.28	—	—	—
			200	125	10.0	.975	35	SF164DI-ND	2.13	1.66	1.32	—	—	—
7	SMA	1.0	100	30	5.0	1.3	150	RS1BDICT-ND *NEW!*	.55	.43	.31	RS1BDITR-ND *NEW!*	5,000	136.00/M
		1.0	200	30	5.0	1.3	150	RS1DDICT-ND *NEW!*	.45	.36	.27	RS1DDITR-ND *NEW!*	5,000	126.00/M
		1.0	400	30	5.0	1.3	150	RS1GDICT-ND *NEW!*	.48	.38	.29	RS1GDITR-ND *NEW!*	5,000	133.00/M
		1.0	600	30	5.0	1.3	250	RS1JDICT-ND *NEW!*	.50	.40	.30	RS1JDITR-ND *NEW!*	5,000	140.00/M
		1.0	800	30	5.0	1.3	500	RS1KDICT-ND *NEW!*	.53	.42	.32	RS1KDITR-ND *NEW!*	5,000	147.00/M
		1.0	1000	30	5.0	1.3	500	RS1MDICT-ND *NEW!*	.55	.44	.33	RS1MDITR-ND *NEW!*	5,000	154.00/M
		1.5	50	50	5.0	1.3	150	RS2AADICT-ND *NEW!*	.50	.40	.30	RS2AADITR-ND *NEW!*	5,000	140.00/M
		1.5	100	50	5.0	1.3	150	RS2BADICT-ND *NEW!*	.53	.42	.32	RS2BADITR-ND *NEW!*	5,000	147.00/M
		1.5	400	50	5.0	1.3	150	RS2GADICT-ND *NEW!*	.58	.46	.35	RS2GADITR-ND *NEW!*	5,000	161.00/M
		1.5	1000	50	5.0	1.3	500	RS2MADICT-ND *NEW!*	.70	.56	.42	RS2MADITR-ND *NEW!*	5,000	196.00/M
8	SMB	1.0	50	30	5.0	1.0	150	FR1ADICT-ND	.53	.41	.30	FR1ADITR-ND	3,000	138.00/M
		1.0	100	30	5.0	1.0	150	FR1BDICT-ND	.45	.36	.27	FR1BDITR-ND	3,000	135.00/M
		1.0	200	30	5.0	1.0	150	FR1DDICT-ND	.48	.38	.29	FR1DDITR-ND	3,000	143.00/M
		1.0	200	30	5.0	1.3	150	RS1DBDICT-ND *NEW!*	.45	.36	.27	RS1DBDITR-ND *NEW!*	3,000	135.00/M
		1.0	400	30	5.0	1.0	150	FR1GDICT-ND	.50	.40	.30	FR1GDITR-ND	3,000	150.00/M
		1.0	600	30	5.0	1.0	250	FR1JDICT-ND	.52	.42	.32	FR1JDITR-ND	3,000	156.00/M
		1.0	800	30	5.0	1.0	500	FR1KDICT-ND	.54	.44	.33	FR1KDITR-ND	3,000	162.00/M
		1.0	1000	30	5.0	1.0	500	FR1MDICT-ND	.57	.46	.34	FR1MDITR-ND	3,000	170.00/M
8	SMB	1.5	50	50	5.0	1.3	150	RS2ADICT-ND *NEW!*	.50	.40	.30	RS2ADITR-ND *NEW!*	3,000	150.00/M
8	SMB	3.0	50	100	5.0	1.3	150	RS3ABDICT-ND *NEW!*	.84	.68	.51	RS3ABDITR-ND *NEW!*	3,000	279.00/M
		3.0	600	100	5.0	1.3	250	RS3JBDICT-ND *NEW!*	.89	.71	.54	RS3JBDITR-ND *NEW!*	3,000	351.00/M
9	SMC	3.0	50	100	5.0	1.3	150	RS3ADICT-ND *NEW!*	.84	.68	.51	RS3ADITR-ND *NEW!*	3,000	279.00/M
		3.0	100	100	5.0	1.3	150	RS3BDICT-ND *NEW!*	.88	.71	.53	RS3BDITR-ND *NEW!*	3,000	293.00/M
		3.0	200	100	5.0	1.3	150	RS3DDICT-ND *NEW!*	.92	.74	.56	RS3DDITR-ND *NEW!*	3,000	306.00/M
		3.0	400	100	5.0	1.3	150	RS3GDICT-ND *NEW!*	.96	.77	.58	RS3GDITR-ND *NEW!*	3,000	319.00/M
		3.0	800	100	5.0	1.3	500	RS3KDICT-ND *NEW!*	.96	.76	.58	RS3KDITR-ND *NEW!*	3,000	377.00/M
		3.0	1000	100	5.0	1.3	500	RS3MDICT-ND *NEW!*	.99	.78	.60	RS3MDITR-ND *NEW!*	3,000	390.00/M

Operating and Storage Temperature: -65°C to +175°C. Reverse Recovery Test @ I_F = 1.0A, V_R = 30V.

Fig. 1 — DO-41

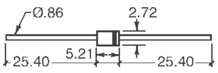


Fig. 2 MELF (DL-41)

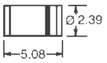


Fig. 3 — DO-201AD

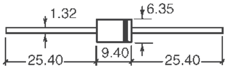


Fig. 4 — R-6

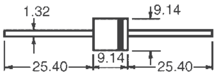


Fig. 5 — TO-220A

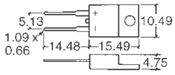


Fig. 6 — TO-220

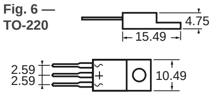


Fig. 7 — SMA

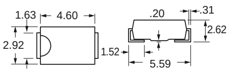


Fig. 8 — SMB

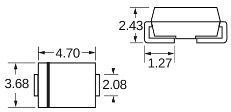
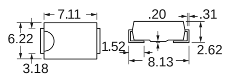


Fig. 9 — SMC



Ultra Fast Switching Rectifiers

Operating Temperature Range: -65°C to +150°C.

Fig.	Pkg.	Max. Avg. Rect. Current (A)	Max. Peak Reverse Voltage (V)	Max. Surge Current 8.3ms (A)	Max. Rev. Current @ 25°C (μA)	Max. Forward Voltage Peak (V)	Max. Rev. Recovery Time (nS)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing
1	DO41	1.0	50	30	5.0	1.0	50	UF1001DICT-ND	.45	.31	.22	UF1001DITR-ND	5,000	74.00/M
			100	30	5.0	1.0	50	UF1002DICT-ND	.39	.29	.21	UF1002DITR-ND	5,000	78.00/M
			200	30	5.0	1.0	50	UF1003DICT-ND	.43	.32	.23	UF1003DITR-ND	5,000	87.00/M
			400	30	5.0	1.3	50	UF1004DICT-ND	.50	.37	.26	UF1004DITR-ND	5,000	100.00/M
			600	30	5.0	1.7	75	UF1005DICT-ND	.44	.34	.25	UF1005DITR-ND	5,000	109.00/M
			800	30	5.0	1.7	75	UF1006DICT-ND	.52	.40	.29	UF1006DITR-ND	5,000	128.00/M
			1000	30	5.0	1.7	75	UF1007DICT-ND	.48	.38	.29	UF1007DITR-ND	5,000	133.00/M
2	D2-PAK	16	200	100	5.0	0.975	25	MURB1620CTDICT-ND *NEW!*	2.30	1.79	1.42	MURB1620CTDITR-ND *NEW!*	800	918.40
3	SMA	1.0	50	30	2.0	0.9	25	ES1ADICT-ND	.68	.54	.41	ES1ADITR-ND	5,000	189.00/M
			100	30	2.0	0.9	25	ES1BDICT-ND	.70	.56	.42	ES1BDITR-ND	5,000	196.00/M
			150	30	5.0	0.98	20	ES1CDICT-ND *NEW!*	.73	.58	.44	ES1CDITR-ND *NEW!*	5,000	203.00/M
			200	30	2.0	0.9	25	ES1DDICT-ND	.60	.48	.36	ES1DDITR-ND	5,000	191.00/M
3	SMA	1.0	50	30	5.0	1.0	50	US1ADICT-ND	.55	.44	.33	US1ADITR-ND	5,000	154.00/M
			100	30	5.0	1.0	50	US1BDICT-ND *NEW!*	.60	.48	.36	US1BDITR-ND *NEW!*	5,000	168.00/M
			200	30	5.0	1.0	50	US1DDICT-ND *NEW!*	.65	.52	.39	US1DDITR-ND *NEW!*	5,000	182.00/M
			400	30	5.0	1.3	50	US1GDICT-ND	.70	.56	.42	US1GDITR-ND	5,000	196.00/M
			600	30	5.0	1.7	75	US1JDICT-ND *NEW!*	.60	.48	.36	US1JDITR-ND *NEW!*	5,000	191.00/M
			800	30	5.0	1.7	75	US1KDICT-ND *NEW!*	.64	.52	.39	US1KDITR-ND *NEW!*	5,000	204.00/M
			1000	30	5.0	1.7	75	US1MDICT-ND	.68	.55	.41	US1MDITR-ND	5,000	217.00/M
3	SMA	2.0	50	50	5.0	0.92	25	ES2AADICT-ND *NEW!*	.64	.52	.39	ES2AADITR-ND *NEW!*	5,000	204.00/M
			100	50	5.0	0.92	25	ES2BADICT-ND *NEW!*	.68	.55	.41	ES2BADITR-ND *NEW!*	5,000	217.00/M
			150	50	5.0	0.92	25	ES2CADICT-ND *NEW!*	.72	.58	.44	ES2CADITR-ND *NEW!*	5,000	230.00/M
			200	50	5.0	0.9	25	ES2DADICT-ND *NEW!*	.76	.61	.46	ES2DADITR-ND *NEW!*	5,000	242.00/M
4	SMB	1.0	200	40	2.0	0.875	25	MURS120DICT-ND *NEW!*	.60	.48	.36	MURS120DITR-ND *NEW!*	3,000	200.00/M
			400	35	5.0	1.25	50	MURS140DICT-ND *NEW!*	.60	.48	.36	MURS140DITR-ND *NEW!*	3,000	200.00/M
			600	35	5.0	1.25	50	MURS160DICT-ND *NEW!*	.64	.52	.39	MURS160DITR-ND *NEW!*	3,000	213.00/M
4	SMB	2.0	50	50	5.0	0.9	25	ES2ADICT-ND	.64	.52	.39	ES2ADITR-ND	3,000	213.00/M
			100	50	5.0	0.9	25	ES2BDICT-ND	.68	.55	.41	ES2BDITR-ND	3,000	226.00/M
			150	50	5.0	0.9	25	ES2CDICT-ND	.72	.58	.44	ES2CDITR-ND	3,000	239.00/M
			200	50	5.0	0.9	25	ES2DDICT-ND	.76	.61	.46	ES2DDITR-ND	3,000	253.00/M
4	SMB	3.0	50	100	10	0.9	25	ES3ABDICT-ND *NEW!*	.89	.71	.54	ES3ABDITR-ND *NEW!*	3,000	351.00/M
			100	100	10	0.9	25	ES3BBDICT-ND *NEW!*	.84	.67	.51	ES3BBDITR-ND *NEW!*	3,000	332.00/M
			150	100	10	0.9	25	ES3CBDICT-ND *NEW!*	.89	.71	.54	ES3CBDITR-ND *NEW!*	3,000	351.00/M
			200	100	10	0.9	25	ES3DBDICT-ND *NEW!*	1.06	.84	.64	ES3DBDITR-ND *NEW!*	3,000	416.00/M
5	SMC	3.0	50	100	10	0.9	25	ES3ADICT-ND	.89	.71	.54	ES3ADITR-ND	3,000	351.00/M
			100	100	10	0.9	25	ES3BDICT-ND	.84	.67	.51	ES3BDITR-ND	3,000	332.00/M
			150	100	10	0.9	25	ES3CDICT-ND	.89	.71	.54	ES3CDITR-ND	3,000	351.00/M
			200	100	10	0.9	25	ES3DDICT-ND	1.06	.84	.64	ES3DDITR-ND	3,000	416.00/M

Fig. 1 — DO-41

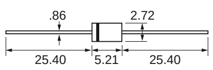


Fig. 2 — D2-PAK

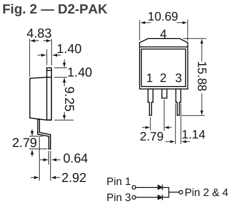


Fig. 3 — SMA

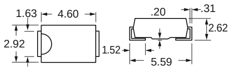


Fig. 4 — SMB

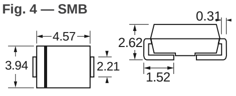
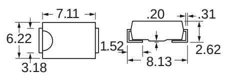


Fig. 5 — SMC



High Speed Switching Rectifiers

Fig.	Peak Rev. Volt. VRWM (V)	Reverse Curr. max. IR (μA)	VR (V)	Forward Volt. max. @ VF (V)	IF (mA)	Capac-itance C max. (pF)	Reverse Recovery Time Trr max. (nS)	Power Dissi-pation Pd (mW)	Digi-Key Part No.	Cut Tape Price Each 10	100	1,000	Tape & Reel* Size	Pricing
1	75	5.0	75	1.0	10	4.0	4.0	500	1N4148DICT-ND	.12	.07	.03	10,000	15.00/M
2	150	0.1	150	1.0	100	1.5	50	500	BAV102DICT-ND *NEW!*	.23	.16	.07	2,500	60.00/M
	200	0.1	200	1.0	100	1.5	50	500	BAV103DICT-ND *NEW!*	.23	.16	.07	2,500	60.00/M
	75	5.0	75	1.0	10	4.0	4.0	500	LL4148DICT-ND	.20	.13	.06	10,000	34.00/M
	50	0.1	50	1.0	200	2.5	4.0	500	LL4150DICT-ND *NEW!*	.20	.13	.06	2,500	47.00/M
	50	0.05	50	1.0	50	2.0	4.0	500	LL4151DICT-ND *NEW!*	.20	.13	.06	2,500	47.00/M
	75	5.0	75	1.0	100	4.0	4.0	500	LL4448DICT-ND *NEW!*	.20	.13	.06	2,500	47.00/M
3	75	2.5	75	1.0	50	2.0	4.0	350	BAL99DICT-ND *NEW!*	.30	.21	.10	3,000	80.00/M
	75	1.0	70	.855	10	2.0	6.0	350	BAS16DICT-ND	.23	.16	.07	3,000	60.00/M
	100	0.1	100	1.0	100	5.0	50	250	BAS19DICT-ND *NEW!*	.29	.20	.09	3,000	81.00/M
	150	0.1	150	1.0	100	5.0	50	250	BAS20DICT-ND *NEW!*	.29	.20	.09	3,000	81.00/M
	200	0.1	250	1.0	100	5.0	50	250	BAS21DICT-ND	.29	.20	.09	3,000	81.00/M
	200	0.1	200	1.0	100	5.0	50	350	BAV23SDICT-ND *NEW!*	.32	.22	.10	3,000	90.00/M
	75	2.5	70	.855	10	1.5	6.0	350	BAV99DICT-ND	.30	.21	.10	3,000	80.00/M
	75	2.5	70	.855	10	2.0	6.0	350	BAW56DICT-ND	.29	.20	.09	3,000	81.00/M
	70	2.5	75	.855	10	1.5	6.0	350	BAV70DICT-ND	.27	.19	.09	3,000	70.00/M
	75	1.0	75	1.0	50	2.0	4.0	350	MMBD914DICT-ND *NEW!*	.23	.16	.07	3,000	60.00/M
	75	2.5	75	1.0	50	2.0	4.0	350	MMBD4148DICT-ND *NEW!*	.23	.16	.07	3,000	60.00/M
	75	2.5	75	1.0	100	4.0	4.0	350	MMBD4448DICT-ND *NEW!*	.23	.16	.07	3,000	60.00/M
	80	1.0	75	1.0	100	3.5	4.0	350	MMBD4448HDICT-ND *NEW!*	.23	.16	.07	3,000	60.00/M
	75	3.0	100	1.25	150	2.0	4.0	350	MMBD7000DICT-ND	.30	.21	.10	3,000	80.00/M
4	75	1.0	75	.855	10	2.0	4.0	200	BAS16WCT-ND	.27	.19	.09	3,000	72.00/M
	100	15	120	1.0	100	5.0	50	200	BAS19WCT-ND	.34	.24	.11	3,000	97.00/M
	150	15	200	1.0	100	5.0	50	200	BAS20WCT-ND	.34	.24	.11	3,000	97.00/M
	200	15	250	1.0	100	5.0	50	200	BAS21WCT-ND	.34	.24	.11	3,000	97.00/M
	75	2.5	75	.855	10	2.0	4.0	200	BAV70WCT-ND	.32	.22	.10	3,000	84.00/M
	75	2.5	75	.855	10	2.0	4.0	200	BAV99WCT-ND	.30	.22	.10	3,000	86.00/M
	75	2.5	75	.855	10	2.0	4.0	200	BAW56WCT-ND	.34	.24	.11	3,000	97.00/M
	75	2.5	75	1.0	100	2.0	4.0	200	MMBD4148WDICT-ND *NEW!*	.33	.23	.11	3,000	88.00/M
	75	2.5	75	1.0	100	4.0	4.0	200	MMBD4448WDICT-ND *NEW!*	.33	.23	.11	3,000	88.00/M
5	75	2.5	75	1.0	50	4.0	4.0	200	MMBD4448DWDICT-ND✦ *NEW!*	.32	.22	.10	3,000	90.00/M
6	75	2.5	75	.855	10	2.0	4.0	400	1N4148WCT-ND	.30	.21	.10	3,000	80.00/M
	75	2.5	75	.855	10	4.0	4.0	350	1N4448WDICT-ND *NEW!*	.30	.21	.10	3,000	80.00/M
	75	2.5	75	1.0	100	4.0	4.0	200	1N4448WSDICT-ND *NEW!*	.30	.21	.10	3,000	80.00/M
	100	1.0	75	1.0	50	2.0	4.0	400	BAV16WDICT-ND *NEW!*	.30	.21	.10	3,000	80.00/M
	100	0.1	150	1.0	100	5.0	50	250	BAV19WDICT-ND *NEW!*	.32	.22	.10	3,000	90.00/M
	150	0.1	150	1.0	100	5.0	50	250	BAV20WDICT-ND *NEW!*	.32	.22	.10	3,000	90.00/M
7	80	5.0	75	.855	10	3.5	4.0	200	1N4448HWSDICT-ND *NEW!*	.30	.21	.10	3,000	80.00/M
	75	1.0	75	.855	10	2.0	4.0	200	1N4148WSCT-ND	.30	.21	.10	3,000	80.00/M
	75	1.0	75	1.0	50	2.0	4.0	200	BAV16WSDICT-ND *NEW!*	.30	.21	.10	3,000	80.00/M
	100	0.1	100	1.0	100	5.0	50	200	BAV19WSDICT-ND *NEW!*	.30	.22	.11	3,000	102.00/M
	150	0.1	150	1.0	100	5.0	50	200	BAV20WSDICT-ND *NEW!*	.30	.22	.11	3,000	102.00/M
	200	0.1	200	1.0	100	5.0	50	250	BAV21WDICT-ND *NEW!*	.32	.22	.10	3,000	90.00/M
	200	0.1	200	1.0	100	5.0	50	200	BAV21WSDICT-ND *NEW!*	.30	.22	.11	3,000	102.00/M

*For Tape and Reel Part No. Change “CT-ND” to “TR-ND”

✦Dual Isolated Single

Fig. 1 **DO-35**

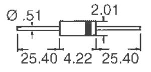


Fig. 2 **MiniMELF**

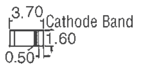
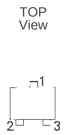
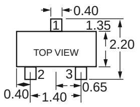


Fig. 3 **SOT-23**



	1	2	3
BAL99	A	—	K
BAS16	K	A	—
BAS19	K	A	—
BAS20	K	A	—
BAS21	K	A	—
BAS31	K/A	A	K
BAV23S	—	A	K
BAV70	K	A	A
BAV99	K/A	A	K
BAW56	A/A	K	K
MMBS914	K	A	—
MMBD4148	K	A	—
MMBD4448	K	A	—
MMBD4448H	K	A	—
MMBD7000	K/A	K	A

Fig. 4 **SOT-323**



	1	2	3
BAS16W	K	A	—
BAS19W	K	A	—
BAS20W	K	A	—
BAS21W	K	A	—
BAV70W	K	A	A
BAV99W	K/A	A	K
BAW56W	A/A	K	K
MMBD4148W	K	A	—
MMBD4448W	K	A	—

Fig. 5 **SOT-363**

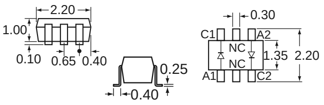


Fig. 6 **SOD-123**

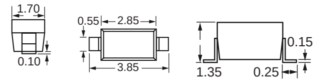
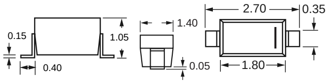
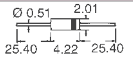
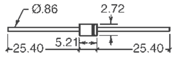
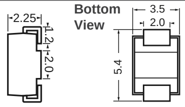
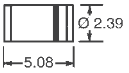
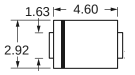
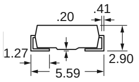
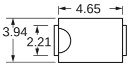
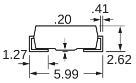


Fig. 7 **SOD-323**



DIODES INCORPORATED

Silicon and Glass Passivated Rectifiers

Max. Avg. Rect. Current (A)	Max. Peak Reverse Voltage (V)	Max. Surge Current 8.3ms (A)	Max. For. Volt. Peak (V)	Digi-Key Part No.	Cut Tape Pricing				Digi-Key Part No.	Tape & Reel		Package
					1	10	100	1,000		Size	Pricing	
0.2	200	—	1.0	BAV20DICT-ND	—	1.80	11.70	48.60	BAV20DITB-ND‡	10,000	31.00/M	**DO-35** 
	250	—	1.0	BAV21DICT-ND	—	1.80	11.70	48.60	BAV21DITB-ND‡	10,000	31.00/M	
1.0	50	30	1.1	1N4001DICT-ND	—	1.36	7.65	27.63	1N4001DITR-ND*	5,000	20.00/M	**DO-41** 
	100	30	1.1	1N4002DICT-ND	—	1.36	7.65	27.63	1N4002DITR-ND*	5,000	20.00/M	
	200	30	1.1	1N4003DICT-ND	—	1.36	7.65	27.63	1N4003DITR-ND*	5,000	20.00/M	
	400	30	1.1	1N4004DICT-ND	—	1.36	7.65	27.63	1N4004DITR-ND*	5,000	20.00/M	
	600	30	1.1	1N4005DICT-ND	—	1.36	7.65	27.63	1N4005DITR-ND*	5,000	20.00/M	
	800	30	1.1	1N4006DICT-ND	—	1.36	7.65	27.63	1N4006DITR-ND*	5,000	20.00/M	
	1000	30	1.1	1N4007DICT-ND	—	1.36	7.65	27.63	1N4007DITR-ND*	5,000	20.00/M	
1.0	50	30	1.0	1N4001GCT-ND	—	2.20	14.30	59.40	1N4001GTR-ND*	5,000	44.00/M	
	100	30	1.0	1N4002GCT-ND	—	2.40	15.60	64.80	1N4002GTR-ND*	5,000	48.00/M	
	200	30	1.0	1N4003GCT-ND	—	2.60	16.90	70.20	1N4003GTR-ND*	5,000	52.00/M	
	400	30	1.0	1N4004GCT-ND	—	2.70	17.55	72.90	1N4004GTR-ND*	5,000	54.00/M	
	600	30	1.0	1N4005GCT-ND	—	2.90	18.85	78.30	1N4005GTR-ND*	5,000	58.00/M	
	800	30	1.0	1N4006GCT-ND	—	2.33	16.12	71.30	1N4006GTR-ND*	5,000	56.00/M	
	1000	30	1.0	1N4007GCT-ND	—	2.48	17.16	75.90	1N4007GTR-ND*	5,000	59.00/M	
1.0	50	30	1.1	S1ABDICT-ND	—	3.13	22.00	100.00	S1ABDITR-ND*	3,000	90.00/M	**SMB** 
	100	30	1.1	S1BBDICT-ND	—	3.25	22.88	104.00	S1BBDITR-ND*	3,000	94.00/M	
	200	30	1.1	S1DBDICT-ND	—	3.38	23.76	108.00	S1DBDITR-ND*	3,000	97.00/M	
	400	30	1.1	S1GBDICT-ND	—	3.50	24.64	112.00	S1GBDITR-ND*	3,000	101.00/M	
	600	30	1.1	S1JBDICT-ND	—	3.63	25.52	116.00	S1JBDITR-ND*	3,000	104.00/M	
	800	30	1.1	S1KBDICT-ND	—	3.00	21.60	108.00	S1KBDITR-ND*	3,000	102.00/M	
	1000	30	1.1	S1MBDICT-ND	—	3.40	24.48	122.40	S1MBDITR-ND*	3,000	116.00/M	
1.0	50	30	1.1	DL4001DICT-ND	—	2.93	20.28	89.70	DL4001DITR-ND*	5,000	70.00/M	**MELF (DL-41)** 
	100	30	1.1	DL4002DICT-ND	—	2.93	20.28	89.70	DL4002DITR-ND*	5,000	70.00/M	
	200	30	1.1	DL4003DICT-ND	—	2.93	20.28	89.70	DL4003DITR-ND*	5,000	70.00/M	
	400	30	1.1	DL4004DICT-ND	—	2.93	20.28	89.70	DL4004DITR-ND*	5,000	70.00/M	
	600	30	1.1	DL4005DICT-ND *NEW!*	.46	3.15	21.84	96.60	DL4005DITR-ND* *NEW!*	5,000	76.00/M	
	800	30	1.1	DL4006DICT-ND *NEW!*	.46	3.15	21.84	96.60	DL4006DITR-ND* *NEW!*	5,000	76.00/M	
	1000	30	1.1	DL4007DICT-ND *NEW!*	.46	3.15	21.84	96.60	DL4007DITR-ND* *NEW!*	5,000	76.00/M	
1.0	50	30	1.0	S1ADICT-ND	—	3.23	22.36	98.90	S1ADITR-ND*	5,000	77.00/M	**SMA** 
	100	30	1.0	S1BDICT-ND	—	3.30	22.88	101.20	S1BDITR-ND*	5,000	79.00/M	
	200	30	1.0	S1DDICT-ND	—	2.81	19.80	90.00	S1DDITR-ND*	5,000	77.00/M	
	400	30	1.0	S1GDICT-ND	—	2.88	20.24	92.00	S1GDITR-ND*	5,000	78.00/M	
	600	30	1.0	S1JDICT-ND	—	3.00	21.12	96.00	S1JDITR-ND*	5,000	82.00/M	
	800	30	1.0	S1KDICT-ND	—	3.44	24.20	110.00	S1KDITR-ND*	5,000	94.00/M	
	1000	30	1.0	S1MDICT-ND	—	3.15	22.68	113.40	S1MDITR-ND*	5,000	101.00/M	
1.5	50	50	1.15	S2AADICT-ND *NEW!*	.39	3.00	21.60	108.00	S2AADITR-ND**NEW!*	5,000	96.00/M	
	100	50	1.15	S2BADICT-ND *NEW!*	.39	3.00	21.60	108.00	S2BADITR-ND**NEW!*	5,000	96.00/M	
	200	50	1.15	S2DADICT-ND *NEW!*	.39	3.00	21.60	108.00	S2DADITR-ND**NEW!*	5,000	96.00/M	
	400	50	1.15	S2GADICT-ND *NEW!*	.39	3.00	21.60	108.00	S2GADITR-ND**NEW!*	5,000	96.00/M	
	600	50	1.15	S2JADICT-ND *NEW!*	.46	3.50	25.20	126.00	S2JADITR-ND**NEW!*	5,000	112.00/M	
	800	50	1.15	S2KADICT-ND *NEW!*	.46	3.50	25.20	126.00	S2KADITR-ND**NEW!*	5,000	112.00/M	
	1000	50	1.15	S2MADICT-ND *NEW!*	.46	3.50	25.20	126.00	S2MADITR-ND**NEW!*	5,000	112.00/M	
1.5	50	30	1.5	S2ADICT-ND	—	3.13	22.00	100.00	S2ADITR-ND*	3,000	90.00/M	**SMB** 
	100	30	1.5	S2BDICT-ND	—	3.13	22.00	100.00	S2BDITR-ND*	3,000	90.00/M	
	200	30	1.5	S2DDICT-ND	—	3.13	22.00	100.00	S2DDITR-ND*	3,000	90.00/M	
	400	30	1.5	S2GDICT-ND	—	3.13	22.00	100.00	S2GDITR-ND*	3,000	90.00/M	
	600	30	1.5	S2JDICT-ND	—	3.00	21.60	108.00	S2JDITR-ND*	3,000	102.00/M	
	800	30	1.5	S2KDICT-ND	—	3.00	21.60	108.00	S2KDITR-ND*	3,000	102.00/M	
	1000	30	1.5	S2MDICT-ND	—	3.00	21.60	108.00	S2MDITR-ND*	3,000	102.00/M	
3.0	50	100	1.15	S3ABDICT-ND *NEW!*	.65	5.20	39.00	208.00	S3ABDITR-ND**NEW!*	3,000	195.00/M	
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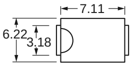
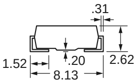
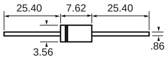
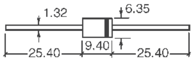
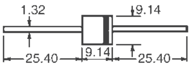
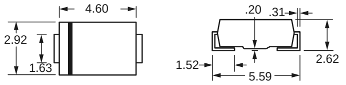
	200	100	1.15	S3DBDICT-ND *NEW!*	.65	5.20	39.00	208.00	S3DBDITR-ND**NEW!*	3,000	195.00/M	
	400	100	1.15	S3GBDICT-ND *NEW!*	.65	5.20	39.00	208.00	S3GBDITR-ND**NEW!*	3,000	195.00/M	
	600	100	1.15	S3JBDICT-ND *NEW!*	.68	5.44	40.80	246.50	S3JBDITR-ND**NEW!*	3,000	226.00/M	
	800	100	1.15	S3KBDICT-ND *NEW!*	.68	5.44	40.80	246.50	S3KBDITR-ND**NEW!*	3,000	226.00/M	
	1000	100	1.15	S3MBDICT-ND *NEW!*	.68	5.44	40.80	246.50	S3MBDITR-ND**NEW!*	3,000	226.00/M	
3.0	50	100	1.15	S3ADICT-ND	—	5.60	42.00	224.00	S3ADITR-ND*	3,000	210.00/M	**SMC** 
	100	100	1.15	S3BDICT-ND	—	5.60	42.00	224.00	S3BDITR-ND*	3,000	210.00/M	
	200	100	1.15	S3DDICT-ND	—	5.60	42.00	224.00	S3DDITR-ND*	3,000	210.00/M	
	400	100	1.15	S3GDICT-ND	—	5.60	42.00	224.00	S3GDITR-ND*	3,000	210.00/M	
	600	100	1.15	S3JDICT-ND	—	5.76	43.20	261.00	S3JDITR-ND*	3,000	239.00/M	
	800	100	1.15	S3KDICT-ND	—	5.76	43.20	261.00	S3KDITR-ND*	3,000	239.00/M	
	1000	100	1.15	S3MDICT-ND	—	5.76	43.20	261.00	S3MDITR-ND*	3,000	239.00/M	
5.0	50	100	1.15	S5ACDICT-ND	.64	5.12	38.40	—	S5ACDITR-ND*	3,000	213.00/M	
	100	100	1.15	S5BCDICT-ND	.68	5.44	40.80	—	S5BCDITR-ND*	3,000	226.00/M	
	200	100	1.15	S5DCDICT-ND	.72	5.76	43.20	—	S5DCDITR-ND*	3,000	239.00/M	
	400	100	1.15	S5GCDICT-ND	.80	6.40	48.00	—	S5GCDITR-ND*	3,000	266.00/M	
	600	100	1.15	S5JCDICT-ND	.84	6.72	50.40	—	S5JCDITR-ND*	3,000	279.00/M	
	800	100	1.15	S5KCDICT-ND	.92	7.36	55.20	—	S5KCDITR-ND*	3,000	306.00/M	
	1000	100	1.15	S5MCDICT-ND	.83	6.50	50.00	—	S5MCDITR-ND*	3,000	325.00/M	
2.0	200	70	1.0	RL203DICT-ND	—	2.90	18.85	78.30	RL203DITR-ND*	4,000	68.00/M	**DO-15** 
	400	70	1.0	RL204DICT-ND	—	2.33	16.12	71.30	RL204DITR-ND*	4,000	62.00/M	
	600	70	1.0	RL205DICT-ND	—	2.40	16.64	73.60	RL205DITR-ND*	4,000	64.00/M	
	800	70	1.0	RL206DICT-ND	—	2.63	18.20	80.50	RL206DITR-ND*	4,000	70.00/M	
	1000	70	1.0	RL207DICT-ND	—	2.70	18.72	82.80	RL207DITR-ND*	4,000	72.00/M	
3.0	50	200	0.95	1N5400DICT-ND	.41	2.78	19.24	—	1N5400DITR-ND*	1,200	85.00/M	**DO-201AD** 
	100	200	0.95	1N5401DICT-ND	.41	2.78	19.24	—	1N5401DITR-ND*	1,200	85.00/M	
	200	200	0.95	1N5402DICT-ND	.41	2.78	19.24	—	1N5402DITR-ND*	1,200	85.00/M	
	400	200	0.95	1N5404DICT-ND	.41	2.78	19.24	—	1N5404DITR-ND*	1,200	85.00/M	
	600	200	0.95	1N5406DICT-ND	.41	2.78	19.24	—	1N5406DITR-ND*	1,200	85.00/M	
	800	200	0.95	1N5407DICT-ND	.41	2.78	19.24	—	1N5407DITR-ND*	1,200	85.00/M	
	1000	200	0.95	1N5408DICT-ND	.41	2.78	19.24	—	1N5408DITR-ND*	1,200	85.00/M	
3.0	50	125	1.0	1N5400GCT-ND	—	3.60	25.92	—	1N5400GTR-ND*	1,200	130.00/M	
	100	125	1.0	1N5401GCT-ND	—	3.70	26.64	—	1N5401GTR-ND*	1,200	133.00/M	
	200	125	1.0	1N5402GCT-ND	—	3.85	27.72	—	1N5402GTR-ND*	1,200	139.00/M	
	400	125	1.0	1N5404GCT-ND	—	4.10	29.52	—	1N5404GTR-ND*	1,200	148.00/M	
	600	125	1.0	1N5406GCT-ND	—	4.45	32.04	—	1N5406GTR-ND*	1,200	160.00/M	
	800	125	1.0	1N5407GCT-ND	—	3.64	27.30	—	1N5407GTR-ND*	1,200	146.00/M	
	1000	125	1.0	1N5408GCT-ND	—	4.04	30.30	—	1N5408GTR-ND*	1,200	162.00/M	
6.0	50	400	0.9	6A05DICT-ND	.48	3.80	28.50	—	6A05DITR-ND*	500	85.50	**R-6** 
	100	400	0.9	6A1DICT-ND	.48	3.80	28.50	—	6A1DITR-ND*	500	85.50	
	200	400	0.9	6A2DICT-ND	.48	3.80	28.50	—	6A2DITR-ND*	500	85.50	
	400	400	0.9	6A4DICT-ND	.48	3.80	28.50	—	6A4DITR-ND*	500	85.50	
	600	400	0.9	6A6DICT-ND	.48	3.80	28.50	—	6A6DITR-ND*	500	85.50	
	800	400	0.9	6A8DICT-ND	.48	3.80	28.50	—	6A8DITR-ND*	500	85.50	
	1000	400	0.9	6A10DICT-ND	.48	3.80	28.50	—	6A10DITR-ND*	500	85.50	

* TR = Tape & Reel ‡ TB = Tape & Box

SMAJ (J-Bend) 400 Watt Surface Mount TVS



Features: • 400 Watts peak pulse power dissipation • 5.0V - 36V Standoff voltages • Glass passivated die construction • Uni- and Bi-directional versions available • Excellent clamping capability • Fast response time • Plastic case material has UL flammability classification rating 94V-0
Mechanical Data: • **Case:** SMA, Transfer molded epoxy • **Terminals:** Solderable per MIL-STD-202, Method 208

UNI-DIRECTIONAL

(Value) Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR)		Max. Reverse Leakage @ Vwm ID (µA)
	Min.	Max.	
5.0	6.40	7.00	800
6.0	6.67	7.37	800
6.5	7.22	7.98	500
7.0	7.78	8.60	200
7.5	8.33	9.21	100
8.0	8.89	9.83	50
8.5	9.44	10.4	10
10	11.1	12.3	5.0
11	12.2	13.5	5.0
12	13.3	14.7	5.0
14	15.6	17.2	5.0
15	16.7	18.5	5.0
17	18.9	20.9	5.0
18	20.0	22.1	5.0

(Value) Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR)		Max. Reverse Leakage @ Vwm ID (µA)
	Min.	Max.	
20	22.2	24.5	5.0
22	24.4	26.9	5.0
24	26.7	29.5	5.0
26	28.9	25.3	5.0
28	31.1	34.4	5.0
30	33.3	36.8	5.0
33	36.7	40.6	5.0
36	40.0	44.2	5.0
43	47.8	52.8	5.0
70	77.8	86.0	5.0
100	111	123	5.0
110	122	135	5.0
120	133	147	5.0
150	167	185	5.0

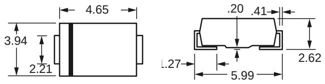
BI-DIRECTIONAL

(Value) Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR)		Max. Reverse Leakage @ Vwm ID (µA)
	Min.	Max.	
5.0	6.40	7.00	800
6.0	6.67	7.37	800
6.5	7.22	7.98	500
7.0	7.78	8.60	200
8.0	8.89	9.83	50
8.5	9.44	10.4	10
10	11.1	12.3	5.0
11	12.2	13.5	5.0
12	13.3	14.7	5.0
13	14.4	15.9	5.0
14	15.6	17.2	5.0
15	16.7	18.5	5.0
16	17.8	19.7	5.0
17	18.9	20.9	5.0

(Value) Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR)		Max. Reverse Leakage @ Vwm ID (µA)
	Min.	Max.	
18	20.0	22.1	5.0
20	22.2	24.5	5.0
22	24.4	26.9	5.0
24	26.7	29.5	5.0
26	28.9	25.3	5.0
28	31.1	34.4	5.0
30	33.3	36.8	5.0
33	36.7	40.6	5.0
36	40.0	44.2	5.0
40	44.4	49.1	5.0
43	47.8	52.8	5.0
75	83.3	92.1	5.0
78	86.7	95.8	5.0

Description	Voltage Range *(Value)* See Chart	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 5,000
400 Watt Uni-Directional	5.0 - 150	SMAJ(Value)ADICT-ND	.68	.55	.41	SMAJ(Value)ADITR-ND	217.00/M
400 Watt Bi-Directional	5.0 - 78	SMAJ(Value)CADICT-ND	.76	.61	.46	SMAJ(Value)CADITR-ND	242.00/M

SMBJ (J-Bend) 600 Watt Surface Mount TVS



Features: • 600 Watts peak pulse power dissipation • 6.5V - 26V standoff voltages • Glass passivated die • Excellent clamping capability • Fast response time • 100% tested at rated peak pulse power **Mechanical Data:** • **Case:** Transfer molded epoxy • **Terminals:** Solderable per MIL-STD-202, Method 208 • **Marking:** Unidirectional — device code number and cathode band; Bidirectional — device code only • **Weight:** 0.1 gram (approx.) • Plastic case material has UL flammability rating 94V-0

UNI-DIRECTIONAL

(Value) Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR)		Max. Reverse Leakage @ Vwm ID (µA)
	Min.	Max.	
5.0	6.40	7.23	800
6.0	6.67	7.67	800
6.5	7.22	9.14	1000
7.0	7.78	8.95	200
7.5	8.33	9.58	100
8.5	9.44	10.82	10
9.0	10.00	11.50	5.0
10	11.1	12.8	5.0
11	12.20	14.40	5.0
12	13.3	15.3	5.0
13	14.4	16.5	5.0
14	15.60	17.90	5.0
15	16.7	19.2	5.0
16	17.80	20.50	5.0
17	18.9	21.7	5.0
18	20.0	24.4	5.0
22	24.40	28.00	5.0
20	22.2	25.5	5.0
24	26.7	30.7	5.0
26	28.9	35.3	5.0

(Value) Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR)		Max. Reverse Leakage @ Vwm ID (µA)
	Min.	Max.	
28	31.10	35.80	5.0
30	33.30	38.30	5.0
33	36.70	42.20	5.0
36	40.00	46.00	5.0
40	44.40	51.10	5.0
43	47.80	54.90	5.0
48	53.30	61.30	5.0
54	60.00	69.00	5.0
58	64.40	74.60	5.0
64	71.10	81.80	5.0
70	77.80	89.50	5.0
78	86.70	99.70	5.0
85	94.40	108.20	5.0
100	111.0	128.00	5.0
110	122.0	140.00	5.0
120	133.0	153.00	5.0
130	144.0	165.50	5.0
150	167.0	192.50	5.0
160	178.0	205.00	5.0
170	189.0	217.50	5.0

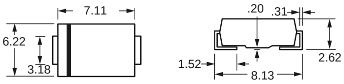
BI-DIRECTIONAL

(Value) Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR)		Max. Reverse Leakage @ Vwm ID (µA)
	Min.	Max.	
5.0	6.40	7.23	800
6.0	6.67	7.67	800
6.5	7.22	9.14	1000
7.0	7.78	8.95	200
7.5	8.33	9.58	100
8.0	8.89	10.23	50
8.5	9.44	10.82	10
9.0	10.00	11.50	5.0
10	11.1	12.8	5.0
11	12.20	14.40	5.0
12	13.3	15.3	5.0
13	14.4	16.5	5.0
14	15.60	17.90	5.0
15	16.7	19.2	5.0
16	17.80	20.50	5.0
17	18.9	21.7	5.0
18	20.0	24.4	5.0
20	22.2	25.5	5.0
22	24.40	28.00	5.0

(Value) Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR)		Max. Reverse Leakage @ Vwm ID (µA)
	Min.	Max.	
24	26.7	30.7	5.0
26	28.9	35.3	5.0
28	31.10	35.80	5.0
30	33.30	38.30	5.0
33	36.70	42.20	5.0
36	40.00	46.00	5.0
40	44.40	51.10	5.0
45	50.00	57.50	5.0
51	56.70	65.20	5.0
54	60.00	69.00	5.0
58	64.40	74.60	5.0
60	66.70	76.70	5.0
64	71.10	81.80	5.0
70	77.80	89.50	5.0
75	83.30	95.80	5.0
78	86.70	99.70	5.0
85	94.40	108.20	5.0
90	100.0	115.50	5.0
100	111.0	128.00	5.0
110	122.0	140.00	5.0
150	167.0	192.50	5.0
160	178.0	205.00	5.0
170	189.0	217.50	5.0

Description	Voltage Range *(Value)* See Chart	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
600 Watt Unidirectional	5.0 - 170	SMBJ(Value)ADICT-ND	.89	.71	.54	SMBJ(Value)ADITR-ND	351.00/M
600 Watt Bidirectional	5.0 - 170	SMBJ(Value)CADICT-ND	.96	.76	.58	SMBJ(Value)CADITR-ND	377.00/M

SMCJ (J-Bend) 1500 Watt Surface Mount TVS



Features: • 1500 Watts peak pulse power dissipation • 5.0V - 36V Standoff voltages • Glass passivated die construction • Uni- and Bi-directional versions available • Excellent clamping capability • Fast response time • Plastic case material has UL flammability classification rating 94V-0
Mechanical Data: • **Case:** SMC, Transfer molded epoxy • **Terminals:** Solderable per MIL-STD-202, Method 208

UNI-DIRECTIONAL

(Value) Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR)		Max. Reverse Leakage @ Vwm ID (µA)
	Min.	Max.	
5.0	6.40	7.25	1000
6.0	6.67	7.67	1000
6.5	7.22	8.30	500
7.5	8.33	9.58	100
8.0	8.89	10.23	50
8.5	9.44	10.82	20
9.0	10.00	11.50	10
10	11.10	12.80	5.0
11	12.20	14.40	5.0
12	13.30	15.30	5.0
13	14.40	16.50	5.0
15	16.70	19.20	5.0
16	17.80	20.50	5.0
17	18.90	21.70	5.0
18	20.00	23.30	5.0
20	22.20	25.50	5.0
22	24.40	28.00	5.0
24	26.70	30.70	5.0
26	28.90	33.20	5.0
28	31.10	35.80	5.0

(Value) Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR)		Max. Reverse Leakage @ Vwm ID (µA)
	Min.	Max.	
30	33.30	38.30	5.0
33	36.70	42.20	5.0
36	40.00	46.00	5.0
40	44.40	51.10	5.0
43	47.80	54.90	5.0
45	50.00	57.50	5.0
54	60.00	69.00	5.0
60	66.70	76.70	5.0
64	71.10	81.80	5.0
70	77.80	89.50	5.0
75	83.30	95.80	5.0
78	86.70	99.70	5.0
85	94.40	108.20	5.0
100	111.00	128.00	5.0
110	122.00	140.50	5.0
130	144.00	165.50	5.0
150	167.00	192.50	5.0
160	178.00	205.00	5.0
170	189.00	217.50	5.0

BI-DIRECTIONAL

(Value) Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR)		Max. Reverse Leakage @ Vwm ID (µA)
	Min.	Max.	
5.0	6.40	7.25	1000
6.0	6.67	7.67	1000
6.5	7.22	8.30	500
7.5	8.33	9.58	100
8.0	8.89	10.23	50
8.5	9.44	10.82	20
9.0	10.00	11.50	10
10	11.10	12.80	5.0
11	12.20	14.40	5.0
12	13.30	15.30	5.0
13	14.40	16.50	5.0
14	15.60	17.90	5.0
15	16.70	19.20	5.0
16	17.80	20.50	5.0
17	18.90	21.70	5.0
18	20.00	23.30	5.0
20	22.20	25.50	5.0

(Value) Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR)		Max. Reverse Leakage @ Vwm ID (µA)
	Min.	Max.	
24	26.70	30.70	5.0
28	31.10	35.80	5.0
30	33.30	38.30	5.0
33	36.70	42.20	5.0
36	40.00	46.00	5.0
40	44.40	51.10	5.0
43	47.80	54.90	5.0
45	50.00	57.50	5.0
48	53.30	61.30	5.0
51	56.70	65.20	5.0
54	60.00	69.00	5.0
58	64.40	74.60	5.0
70	77.80	89.50	5.0
75	83.30	95.80	5.0
78	86.70	99.70	5.0
85	94.40	108.20	5.0
170	189.00	217.50	5.0

Description	Voltage Range *(Value)* See Chart	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
1500 Watt Uni-Directional	5.0 - 170	SMCJ(Value)ADICT-ND	1.25	.99	.76	SMCJ(Value)ADITR-ND	494.00/M
1500 Watt Bi-Directional	5.0 - 170	SMCJ(Value)CADICT-ND	1.39	1.10	.84	SMCJ(Value)CADITR-ND	546.00/M

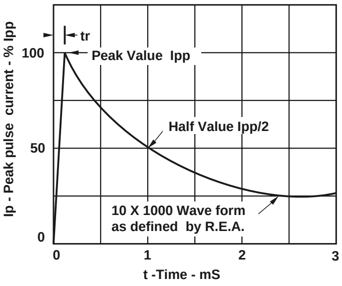
DIODES INCORPORATED

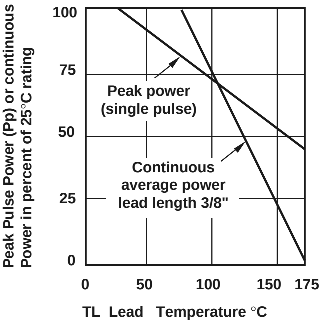
Transient Voltage Suppressors

APPLICATIONS:
These TVS devices afford the circuit designer an economic means to protect voltage sensitive circuit components from the destructive effects of applied transient voltages. Featuring virtually instantaneous response times of one picosecond.

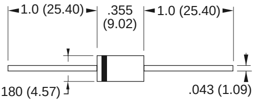
FEATURES:
• 500, 600 and 1500 Watts Peak Pulse Power Dissipation • Fast Response Time – 1 Picosecond • Uni and Bidirectional Units Available • Constructed with Glass Passivated Die.

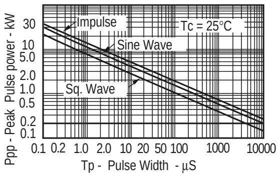
MECHANICAL DATA:
• **Case:** Transfer Molded Epoxy U/L Flammability Rating 94V-0. • **Leads:** Solderable per MIL-STD-202 Method 208. • **Soldering Temperature:** 260°C Maximum, 3/8" (9.53mm) From Body, 10 Seconds. • **Marking:** Type Number and Cathode Band.





500 Watts & 600 Watts



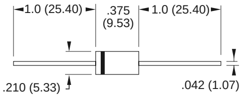


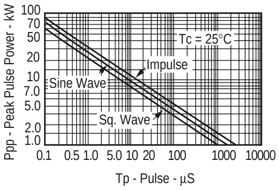
MAXIMUM RATINGS:

- **Peak Pulse Power Dissipation @ 25°C:** 600 Watts.
- **Steady State Power Dissipation @ 75°C Lead Temperature, 3/8" (9.53mm) from Body:** 2.5 Watts.
- **Clamping Time (0 Volt to BV min): Unidirectional –** $< 1x10^{-12}$ Seconds. **Bidirectional –** $< 5x10^{-9}$ Seconds.
- **Storage and Operating Temperature:** -65 to +175°C.

1500 Watts

DO-201 Outline





MAXIMUM RATINGS:

- **Peak Pulse Power Dissipation @ 25°C:** 1500 Watts.
- **Steady State Power Dissipation @ 75°C Lead Temperature, 3/8" (9.53mm) from Body:** 5 Watts.
- **Forward Surge Current, 50ms @ 25°C:** 200 Amperes.
- **Clamping Time (0 Volt to BV min): Unidirectional –** $< 1x10^{-12}$ Seconds. **Bidirectional –** $< 5x10^{-9}$ Seconds.
- **Storage and Operating Temperature:** -65 to +175°C.

Breakdown Voltage (V(BR) @ IT)			IT	Rated Standoff Voltage	Reverse DC Leakage (Current	Digi-Key	Cut Tape Pricing			Digi-Key	Tape & Reel Pricing		Diodes
Min.	Nom.	Max.	(mADC)	(Vwm)	@ Vwm)	Part No.	1	10	100	Part No.	1,000	4,000	Part No.
500 Watts, Unidirectional (D0-15)													
6.4	—	7.00	10	5.0	600 µA	SA5.0ADICT-ND	.47	3.72	27.90	SA5.0ADITR-ND	—	140.00/M	SA5.0ADI
6.67	—	7.37	10	6.0	600 µA	SA6.0ADICT-ND	.47	3.72	27.90	SA6.0ADITR-ND	—	140.00/M	SA6.0ADI
7.22	—	7.98	10	6.5	400 µA	SA6.5ADICT-ND	.47	3.72	27.90	SA6.5ADITR-ND	—	140.00/M	SA6.5ADI
11.1	—	12.3	1	10	3 µA	SA10ADICT-ND	.47	3.72	27.90	SA10ADITR-ND	—	140.00/M	SA10ADI
13.3	—	14.7	1	12	3 µA	SA12ADICT-ND	.47	3.72	27.90	SA12ADITR-ND	—	140.00/M	SA12ADI
16.7	—	18.5	1	15	3 µA	SA15ADICT-ND	.47	3.72	27.90	SA15ADITR-ND	—	140.00/M	SA15ADI
22.2	—	24.5	1	20	3 µA	SA20ADICT-ND	.47	3.72	27.90	SA20ADITR-ND	—	140.00/M	SA20ADI
33.3	—	36.8	1	30	3 µA	SA30ADICT-ND	.47	3.72	27.90	SA30ADITR-ND	—	140.00/M	SA30ADI
500 Watts, Bidirectional (DO-15)													
6.67	—	7.37	10	6.0	600 µA	SA6.0CADICT-ND	.56	4.44	33.30	SA6.0CADITR-ND	—	167.00/M	SA6.0CADI
7.22	—	7.98	10	6.5	400 µA	SA6.5CADICT-ND	.56	4.44	33.30	SA6.5CADITR-ND	—	167.00/M	SA6.5CADI
11.1	—	12.3	1	10	3 µA	SA10CADICT-ND	.56	4.44	33.30	SA10CADITR-ND	—	167.00/M	SA10CADI
13.3	—	14.7	1	12	3 µA	SA12CADICT-ND	.56	4.44	33.30	SA12CADITR-ND	—	167.00/M	SA12CADI
16.7	—	18.5	1	15	3 µA	SA15CADICT-ND	.56	4.44	33.30	SA15CADITR-ND	—	167.00/M	SA15CADI
22.2	—	24.5	1	20	3 µA	SA20CADICT-ND	.56	4.44	33.30	SA20CADITR-ND	—	167.00/M	SA20CADI
33.3	—	36.8	1	30	3 µA	SA30CADICT-ND	.56	4.44	33.30	SA30CADITR-ND	—	167.00/M	SA30CADI
600 Watts, Unidirectional — (for package see drawing)													
6.45	6.8	7.14	10	5.8	1000µA	P6KE6.8ADICT-ND	.47	3.72	27.90	P6KE6.8ADITR-ND	—	140.00/M	P6KE6.8A
7.13	7.5	7.88	10	6.4	500 µA	P6KE7.5ADICT-ND	.47	3.72	27.90	P6KE7.5ADITR-ND	—	140.00/M	P6KE7.5A
7.79	8.2	8.61	10	7.02	200 µA	P6KE8.2ADICT-ND	.47	3.72	27.90	P6KE8.2ADITR-ND	—	140.00/M	P6KE8.2A
9.5	10.0	10.5	1	8.55	10 µA	P6KE10ADICT-ND	.47	3.72	27.90	P6KE10ADITR-ND	—	140.00/M	P6KE10A
11.4	12.0	12.6	1	10.2	5 µA	P6KE12ADICT-ND	.47	3.72	27.90	P6KE12ADITR-ND	—	140.00/M	P6KE12A
14.3	15.0	15.8	1	12.8	5 µA	P6KE15ADICT-ND	.47	3.72	27.90	P6KE15ADITR-ND	—	140.00/M	P6KE15A
19.0	20.0	21.0	1	17.1	5 µA	P6KE20ADICT-ND	.47	3.72	27.90	P6KE20ADITR-ND	—	140.00/M	P6KE20A
22.8	24.0	25.2	1	20.5	5 µA	P6KE24ADICT-ND	.47	3.72	27.90	P6KE24ADITR-ND	—	140.00/M	P6KE24A
25.7	27.0	28.4	1	23.1	5 µA	P6KE27ADICT-ND	.47	3.72	27.90	P6KE27ADITR-ND	—	140.00/M	P6KE27A
28.5	30.0	31.5	1	25.5	5 µA	P6KE30ADICT-ND	.47	3.72	27.90	P6KE30ADITR-ND	—	140.00/M	P6KE30A
31.4	33.0	34.7	1	28.2	5 µA	P6KE33ADICT-ND	.47	3.72	27.90	P6KE33ADITR-ND	—	140.00/M	P6KE33A
48.5	51.0	53.6	1	43.6	5 µA	P6KE51ADICT-ND	.47	3.72	27.90	P6KE51ADITR-ND	—	140.00/M	P6KE51A
64.6	68.0	71.4	1	58.1	5 µA	P6KE68ADICT-ND	.47	3.72	27.90	P6KE68ADITR-ND	—	140.00/M	P6KE68A
600 Watts, Bidirectional — (for package see drawing)													
6.45	6.8	7.14	10	5.8	1000 µA	P6KE6.8CADICT-ND	.56	4.44	33.30	P6KE6.8CADITR-ND	—	167.00/M	P6KE6.8CA
7.13	7.5	7.88	10	6.4	500 µA	P6KE7.5CADICT-ND	.56	4.44	33.30	P6KE7.5CADITR-ND	—	167.00/M	P6KE7.5CA
7.79	8.2	8.61	10	7.02	200 µA	P6KE8.2CADICT-ND	.56	4.44	33.30	P6KE8.2CADITR-ND	—	167.00/M	P6KE8.2CA
9.5	10.0	10.5	1	8.55	10 µA	P6KE10CADICT-ND	.56	4.44	33.30	P6KE10CADITR-ND	—	167.00/M	P6KE10CA
11.4	12.0	12.6	1	10.2	5 µA	P6KE12CADICT-ND	.56	4.44	33.30	P6KE12CADITR-ND	—	167.00/M	P6KE12CA
14.3	15.0	15.8	1	12.8	5 µA	P6KE15CADICT-ND	.56	4.44	33.30	P6KE15CADITR-ND	—	167.00/M	P6KE15CA
19.0	20.0	21.0	1	17.1	5 µA	P6KE20CADICT-ND	.56	4.44	33.30	P6KE20CADITR-ND	—	167.00/M	P6KE20CA
22.8	24.0	25.2	1	20.5	5 µA	P6KE24CADICT-ND	.56	4.44	33.30	P6KE24CADITR-ND	—	167.00/M	P6KE24CA
25.7	27.0	28.4	1	23.1	5 µA	P6KE27CADICT-ND	.56	4.44	33.30	P6KE27CADITR-ND	—	167.00/M	P6KE27CA
28.5	30.0	31.5	1	25.5	5 µA	P6KE30CADICT-ND	.56	4.44	33.30	P6KE30CADITR-ND	—	167.00/M	P6KE30CA
31.4	33.0	34.7	1	28.2	5 µA	P6KE33CADICT-ND	.56	4.44	33.30	P6KE33CADITR-ND	—	167.00/M	P6KE33CA
48.5	51.0	53.6	1	43.6	5 µA	P6KE51CADICT-ND	.56	4.44	33.30	P6KE51CADITR-ND	—	167.00/M	P6KE51CA
64.6	68.0	71.4	1	58.1	5 µA	P6KE68CADICT-ND	.56	4.44	33.30	P6KE68CADITR-ND	—	167.00/M	P6KE68CA
95.0	100.0	105.0	1	85.5	5 µA	P6KE100CADICT-ND	.56	4.44	33.30	P6KE100CADITR-ND	—	167.00/M	P6KE100CA
143.0	150.0	158.0	1	128.0	5 µA	P6KE150CADICT-ND	.56	4.44	33.30	P6KE150CADITR-ND	—	167.00/M	P6KE150CA
1500 Watts, Unidirectional — DO-201 Pkg.													
6.45	6.8	7.14	10	5.8	1000 µA	1.5KE6.8ADICT-ND	.69	5.54	41.52	1.5KE6.8ADITR-ND	251.00	—	1.5KE6.8A
7.13	7.5	7.88	10	6.4	500 µA	1.5KE7.5ADICT-ND	.69	5.54	41.52	1.5KE7.5ADITR-ND	251.00	—	1.5KE7.5A
7.79	8.2	8.61	10	7.02	200 µA	1.5KE8.2ADICT-ND	.69	5.54	41.52	1.5KE8.2ADITR-ND	251.00	—	1.5KE8.2A
9.5	10.0	10.5	1	8.55	10 µA	1.5KE10ADICT-ND	.69	5.54	41.52	1.5KE10ADITR-ND	251.00	—	1.5KE10A
11.4	12.0	12.6	1	10.2	5 µA	1.5KE12ADICT-ND	.69	5.54	41.52	1.5KE12ADITR-ND	251.00	—	1.5KE12A
14.3	15.0	15.8	1	12.8	5 µA	1.5KE15ADICT-ND	.69	5.54	41.52	1.5KE15ADITR-ND	251.00	—	1.5KE15A
19.0	20.0	21.0	1	17.1	5 µA	1.5KE20ADICT-ND	.69	5.54	41.52	1.5KE20ADITR-ND	251.00	—	1.5KE20A
22.8	24.0	25.2	1	20.5	5 µA	1.5KE24ADICT-ND	.69	5.54	41.52	1.5KE24ADITR-ND	251.00	—	1.5KE24A
25.7	27.0	28.4	1	23.1	5 µA	1.5KE27ADICT-ND	.69	5.54	41.52	1.5KE27ADITR-ND	251.00	—	1.5KE27A
28.5	30.0	31.5	1	25.5	5 µA	1.5KE30ADICT-ND	.69	5.54	41.52	1.5KE30ADITR-ND	251.00	—	1.5KE30A
31.4	33.0	34.7	1	28.2	5 µA	1.5KE33ADICT-ND	.69	5.54	41.52	1.5KE33ADITR-ND	251.00	—	1.5KE33A
48.5	51.0	53.6	1	43.6	5 µA	1.5KE51ADICT-ND	.69	5.54	41.52	1.5KE51ADITR-ND	251.00	—	1.5KE51A
64.6	68.0	71.4	1	58.1	5 µA	1.5KE68ADICT-ND	.69	5.54	41.52	1.5KE68ADITR-ND	251.00	—	1.5KE68A
1500 Watts, Bidirectional — DO-201 Pkg.													
6.45	6.8	7.14	10	5.8	1000 µA	1.5KE6.8CADICT-ND	.74	5.95	44.64	1.5KE6.8CADITR-ND	270.00	—	1.5KE6.8CA
7.13	7.5	7.88	10	6.4	500 µA	1.5KE7.5CADICT-ND	.74	5.95	44.64	1.5KE7.5CADITR-ND	270.00	—	1.5KE7.5CA
7.79	8.2	8.61	10	7.02	200 µA	1.5KE8.2CADICT-ND	.74	5.95	44.64	1.5KE8.2CADITR-ND	270.00	—	1.5KE8.2CA
9.5	10.0	10.5	1	8.55	10 µA	1.5KE10CADICT-ND	.74	5.95	44.64	1.5KE10CADITR-ND	270.00	—	1.5KE10CA
11.4	12.0	12.6	1	10.2	5 µA	1.5KE12CADICT-ND	.74	5.95	44.64	1.5KE12CADITR-ND	270.00	—	1.5KE12CA
14.3	15.0	15.8	1	12.8	5 µA	1.5KE15CADICT-ND	.74	5.95	44.64	1.5KE15CADITR-ND	270.00	—	1.5KE15CA
19.0	20.0	21.0	1	17.1	5 µA	1.5KE20CADICT-ND	.74	5.95	44.64	1.5KE20CADITR-ND	270.00	—	1.5KE20CA
22.8	24.0	25.2	1	20.5	5 µA	1.5KE24CADICT-ND	.74	5.95	44.64	1.5KE24CADITR-ND	270.00	—	1.5KE24CA
25.7	27.0	28.4	1	23.1	5 µA	1.5KE27CADICT-ND	.74	5.95	44.64	1.5KE27CADITR-ND	270.00	—	1.5KE27CA
28.5	30.0	31.5	1	25.5	5 µA	1.5KE30CADICT-ND	.74	5.95	44.64	1.5KE30CADITR-ND	270.00	—	1.5KE30CA
31.4	33.0	34.7	1	28.2	5 µA	1.5KE33CADICT-ND	.74	5.95	44.64	1.5KE33CADITR-ND	270.00	—	1.5KE33CA
48.5	51.0	53.6	1	43.6	5 µA	1.5KE51CADICT-ND	.74	5.95	44.64	1.5KE51CADITR-ND	270.00	—	1.5KE51CA
64.6	68.0	71.4	1	58.1	5 µA	1.5KE68CADICT-ND	.74	5.95	44.64	1.5KE68CADITR-ND	270.00	—	1.5KE68CA
95.0	100.0	105.0	1	85.5	5 µA	1.5KE100CADICT-ND	.74	5.95	44.64	1.5KE100CADITR-ND	270.00	—	1.5KE100CA
143.0	150.0	158.0	1	128.0	5 µA	1.5KE150CADICT-ND	.74	5.95	44.64	1.5KE150CADITR-ND	270.00	—	1.5KE150CA

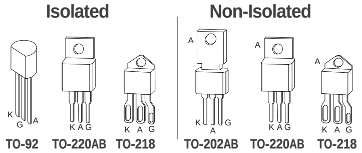
Sensitive Gate (0.8-10 Amps) and Non-Sensitive Gate (1-70 Amps) SCRs

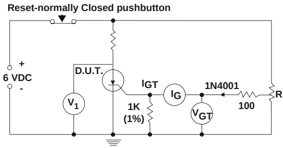
9291B-ND	Teccor Thyristor Product Catalog	$3.00
9292B-ND	Teccor Sidactor Data Book	$2.25

Sensitive Gate Type: The Digi-Key line of sensitive SCR semiconductors are half-wave unidirectional gate-controlled rectifiers (SCR-thyristor) which complement Digi-Key's line of power SCRs. This group of packages offers current ratings from 0.8-10 amps and voltage ratings from 30-600 volts.

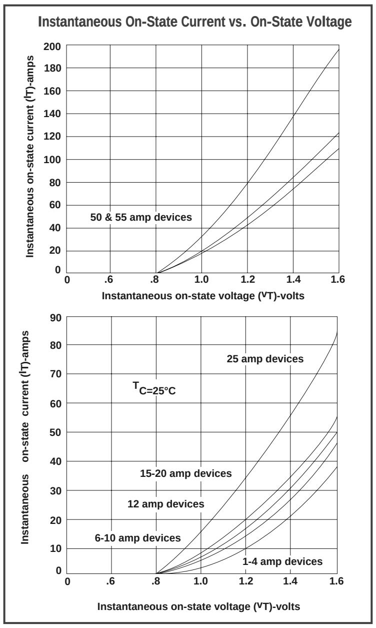
Non-Sensitive Gate Type: The Teccor Electronics line of thyristor SCR semiconductors are half-wave unidirectional gate-controlled rectifiers which complement Digi-Key's line of sensitive gate SCRs. Digi-Key offers devices with current ratings from 1-70 amps and voltage ratings from 100-600 volts with gate sensitivities from 10-50 milliamps.

Electrically Isolated Packages: This group of Teccor sensitive SCRs is available in a choice of 3 different product packages. The TO-220AB and TO-92 are electrically isolated where the case or tab is internally isolated to allow the use of low cost assembly and convenient packaging techniques. **Glass Passivation:** Teccor's line of SCRs features glass passivated junctions to insure long term device reliability and parameter stability. Teccor's glass offers a rugged, reliable barrier against junction contamination. **Features:** • Electrically isolated packages • High voltage capability up to 600 volts • High surge capability up to 100 amps • Glass chip passivation





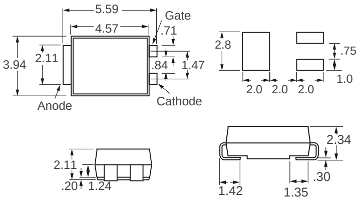
Simple Test Circuit For Gate Trigger Voltage and Current Measurement



I_T RMS (A)	V_{DRM} & V_{RRM} (V)	Package	I_{GT} (mA) Min.	Max.	I_{DRM} & I_{RRM} @25°C (mA)	V_{TM} @25°C (V)	V_{GT} @25°C (V)	$P_{G(AV)}$ (W)	t_{gt} (µsec.)	Digi-Key Part No.	Price Each 1	10	100	500	1,000
SCRs— Sensitive Gate (0.8-10.0 Amp)															
.8	200	TO-92 (Isolated)	—	.200	.001	1.7	0.8	0.1	2.2	EC103B-ND	.50	.44	.40	.33	.29
	400	TO-92 (Isolated)	—	.200	.001	1.7	0.8	0.1	2.2	EC103D-ND	.54	.48	.44	.36	.32
	600	TO-92 (Isolated)	—	.200	.002	1.7	0.8	0.1	2.2	EC103M-ND	.59	.52	.47	.39	.34
	30	TO-92 (Isolated)	—	.200	.001	1.7	0.8	0.1	2.2	2N5060-ND	.59	.52	.47	.39	.34
	200	TO-92 (Isolated)	—	.200	.001	1.7	0.8	0.1	2.2	2N5064-ND	.61	.54	.49	.41	.36
1.5	50	TO-92 (Isolated)	—	.200	.001	1.5	0.8	0.1	2.2	TCR22-2-ND	.47	.42	.38	.32	.28
	100	TO-92 (Isolated)	—	.200	.001	1.5	0.8	0.1	2.2	TCR22-3-ND	.47	.42	.38	.32	.28
	200	TO-92 (Isolated)	—	.200	.001	1.5	0.8	0.1	2.2	TCR22-4-ND	.50	.44	.40	.33	.29
	400	TO-92 (Isolated)	—	.200	.001	1.5	0.8	0.1	2.2	TCR22-6-ND	.54	.48	.44	.36	.32
	600	TO-92 (Isolated)	—	.200	.002	1.5	0.8	0.1	2.2	TCR22-8-ND	.65	.58	.53	.44	.38
3.0	400	TO-220AB (Isolated)	—	.200	.002	1.6	0.8	0.1	2.2	S4003LS2-ND	.99	.88	.80	.66	.58
4.0	100	TO-202AB (Non-Isolated)	—	.200	.002	2.2	0.8	0.1	2.2	T106A1-ND	.61	.54	.49	.41	.36
	200	TO-202AB (Non-Isolated)	—	.200	.002	2.2	0.8	0.1	2.2	T106B1-ND	.63	.56	.51	.42	.37
	400	TO-202AB (Non-Isolated)	—	.200	.002	2.2	0.8	0.1	2.2	T106D1-ND	.70	.62	.56	.47	.41
	600	TO-202AB (Non-Isolated)	—	.200	.002	2.2	0.8	0.1	2.2	T106M1-ND	.77	.68	.62	.51	.45
8.0	400	TO-220AB (Isolated)	—	.200	.005	1.6	0.8	0.1	2.2	S4008LS2-ND	1.19	1.06	.96	.80	.69
	400	TO-202AB (Non-Isolated)	—	.200	.005	1.6	0.8	0.1	2.2	S4008FS21-ND	.92	.82	.74	.62	.54
10.0	400	TO-220AB (Isolated)	—	.200	.005	1.6	0.8	0.1	2.2	S4010LS2-ND	1.31	1.16	1.05	.87	.76
	400	TO-202AB (Non-Isolated)	—	.200	.005	1.6	0.8	0.1	2.2	S4010FS21-ND	1.01	.90	.81	.68	.59
SCRs — Non-Sensitive Gate (1.0-70 Amp)															
1.0	100	TO-92 (Isolated)	1	10	.01	1.6	1.5	0.3	2.0	S101E-ND	.54	.48	.44	.36	.32
	200	TO-92 (Isolated)	1	10	.01	1.6	1.5	0.3	2.0	S201E-ND	.59	.52	.47	.39	.34
	400	TO-92 (Isolated)	1	10	.01	1.6	1.5	0.3	2.0	S401E-ND	.61	.54	.49	.41	.36
	600	TO-92 (Isolated)	1	10	.01	1.6	1.5	0.3	2.0	S601E-ND	.65	.58	.53	.44	.38
6.0	200	TO-220AB (Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S2006L-ND	.97	.86	.78	.65	.56
	400	TO-220AB (Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S4006L-ND	1.15	.92	.83	.69	.60
	600	TO-220AB (Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S6006L-ND	1.10	.98	.89	.74	.64
8.0	200	TO-220AB (Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S2008L-ND	1.08	.96	.87	.72	.63
	400	TO-220AB (Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S4008L-ND	1.15	1.02	.92	.77	.67
	600	TO-220AB (Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S6008L-ND	1.24	1.10	.99	.83	.72
	200	TO-220AB (Non-Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S2008R-ND	.97	.86	.78	.65	.56
	400	TO-220AB (Non-Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S4008R-ND	1.04	.92	.83	.69	.60
	600	TO-220AB (Non-Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S6008R-ND	1.10	.98	.89	.74	.64
10.0	400	TO-220AB (Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S4010L-ND	1.26	1.12	1.01	.84	.73
	600	TO-220AB (Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S6010L-ND	1.35	1.20	1.08	.90	.78
12.0	400	TO-220AB (Non-Isolated)	1	20	.01	1.6	1.5	0.5	2.0	S4012R-ND	1.15	1.02	.92	.77	.67
	600	TO-220AB (Non-Isolated)	1	20	.01	1.6	1.5	0.5	2.0	S6012R-ND	1.22	1.08	.98	.81	.71
15.0	400	TO-220AB (Isolated)	1	30	.01	1.6	1.5	0.6	2.0	S4015L-ND	1.35	1.20	1.08	.90	.78
	600	TO-220AB (Isolated)	1	30	.01	1.6	1.5	0.6	2.0	S6015L-ND	1.44	1.28	1.16	.96	.84
20.0	400	TO-220AB (Isolated)	1	30	.01	1.6	1.5	0.5	2.0	S4020L-ND	1.69	1.50	1.35	1.13	.98
	600	TO-220AB (Isolated)	1	30	.01	1.6	1.5	0.5	2.0	S6020L-ND	1.78	1.58	1.43	1.19	1.03
25.0	400	TO-220AB (Isolated)	1	30	.01	1.6	1.5	0.5	2.0	S4025L-ND	1.82	1.62	1.46	1.22	1.06
	600	TO-220AB (Isolated)	1	30	.01	1.6	1.5	0.5	2.0	S6025L-ND	1.94	1.72	1.55	1.29	1.12
55.0	400	TO-218 (Non-Isolated)	5	40	.01	1.8	1.5	0.8	2.5	S4055W-ND	4.77	4.24	3.82	3.18	2.76
	600	TO-218 (Non-Isolated)	5	40	.01	1.8	1.5	0.8	2.5	S6055W-ND	5.09	4.52	4.07	3.39	2.94
65.0	400	TO-218 (Isolated)	5	50	.02	1.8	2.0	1.0	2.5	S4065J-ND	6.48	5.76	5.19	4.32	3.75
	600	TO-218 (Isolated)	5	50	.02	1.8	2.0	1.0	2.5	S6065J-ND	6.91	6.14	5.53	4.61	4.00
70.0	400	TO-218 (Non-Isolated)	5	50	.02	1.8	2.0	1.0	2.5	S4070W-ND	6.37	5.66	5.10	4.25	3.68
	600	TO-218 (Non-Isolated)	5	50	.02	1.8	2.0	1.0	2.5	S6070W-ND	6.55	5.82	5.24	4.37	3.79

Sensitive Gate Surface Mount SCRs

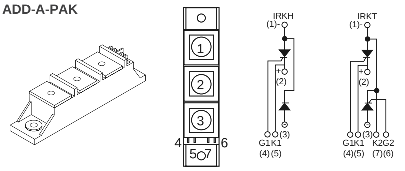
I_T RMS (A)	V_{DRM} & V_{RRM} (V)	Package	I_{GT} (µA)	I_{DRM} & I_{RRM} @25°C (µA)	V_{TM} @25°C (V)	V_{GT} @25°C (V)	I_H (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 2,500
0.8	200	COMPAK	200	2.0	1.7	0.8	5.0	S2SCT-ND	1.25	1.03	.87	S2STR-ND	544.00/M
	400	COMPAK	200	2.0	1.7	0.8	5.0	S4SCT-ND	1.29	1.06	.90	S4STR-ND	561.00/M
	600	COMPAK	200	2.0	1.7	0.8	5.0	S6SCT-ND	1.40	1.16	.98	S6STR-ND	612.00/M
	200	COMPAK	50	2.0	1.7	0.8	5.0	S2S2CT-ND	1.40	1.16	.98	S2S2TR-ND	612.00/M
	400	COMPAK	50	2.0	1.7	0.8	5.0	S4S2CT-ND	1.44	1.19	1.00	S4S2TR-ND	629.00/M
	600	COMPAK	50	2.0	1.7	0.8	5.0	S6S2CT-ND	1.60	1.32	1.11	S6S2TR-ND	697.00/M



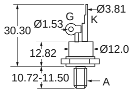
International IOR Rectifier SCRs

V_{DRM}& Volts MIN	IO(RMS) Amps MAX	Package	IT(av) Amps MAX@85	V_{GT} Volts MAX	Igt mA MAX	V_{TM} comp.(a) volts MAX	DV/DT V/us MAX	Digi-Key Part No.	Price Each 1	10	100
1200	95	ADD-A-PAK	95	2.5	150	1.58	500	IRKH91/12-ND	52.22	41.78	33.42
1200	95	ADD-A-PAK	95	2.5	150	1.58	500	IRKT91/12-ND	53.77	43.02	34.41
1000	35	TO-48	16	2	60	1.75	300	16RIA100-ND	17.93	14.34	9.54
600	80	TO-65	50	2.5	100	1.6	500	50RIA60-ND	20.25	16.20	10.77
1200	80	TO-65	50	2.5	100	1.6	500	50RIA120-ND	28.63	22.90	15.23
800	16	SMD-220	10	2	60	1.4	500	16TTS08S-ND	3.05	2.44	1.95
800	25	SMD-220	16	2	45	1.25	500	25TTS08S-ND	3.31	2.65	2.12
800	35	TO-247AC	35	2.5	150	1.85	1000	40TPS08-ND	4.00	3.20	2.30
1200	35	TO-247AC	35	2.5	150	1.85	1000	40TPS12-ND	5.00	4.00	2.53
800	25	TO-220 FULLPAK	16	2	45	1.25	500	25TTS08FP-ND	3.13	2.50	1.60
800	16	TO-220AB	10	2	60	1.4	500	16TTS08-ND	2.84	2.28	1.82
800	25	TO-220AB	16	2	45	1.25	500	25TTS08-ND	2.75	2.20	1.99
1200	16	TO-220AB	10	2	60	1.4	500	16TTS12-ND	2.75	2.20	1.99
1200	25	TO-220AB	16	2	45	1.25	500	25TTS12-ND	3.23	2.58	2.19

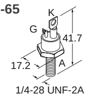
ADD-A-PAK



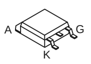
TO-48



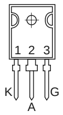
TO-65



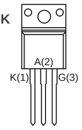
SMD-220



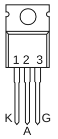
TO-247AC



TO-220 FULLPAK



TO-220 AB



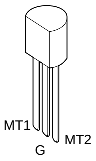
TECCOR ELECTRONICS
An Invensys company

Logic Triacs (1.0-8.0 Amps) and Gated Triacs (1-15 Amps)

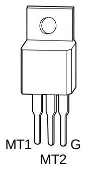
9291B-ND	Teccor Thyristor Product Catalog	**$3.00**
9292B-ND	Teccor Sidactor Data Book	**$2.25**

Isolated

Plastic TO-92

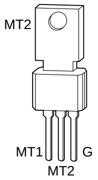


Thermotab TO-220AB

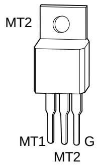


Non-Isolated

TO-202AB

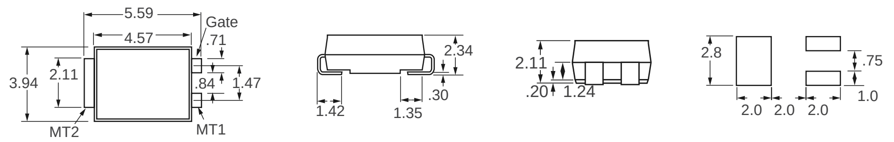


TO-220AB



$I_{T\,RMS}$ (A)	V_{DRM} (V)	Package	I_{GT} (mA)	IDRM @25°C (mA)	VTM @25°C (V)	VGT @25°C (V)	PG (AV) (W)	t_{gt} (μsec.)	Digi-Key Part No.	Price Each 1	10	100	500	1,000
Logic Triacs (1.0-8.0 Amps)														
1.0	200	TO-92 (Isolated)	3	.01	1.6	2.0	0.2	2.5	L201E3-ND	.88	.78	.71	.59	.51
	400	TO-92 (Isolated)	3	.01	1.6	2.0	0.2	2.5	L401E3-ND	.92	.82	.74	.62	.54
	600	TO-92 (Isolated)	3	.01	1.6	2.0	0.2	2.5	L601E3-ND	1.06	.94	.85	.71	.62
	200	TO-92 (Isolated)	5	.01	1.6	2.0	0.2	2.5	L201E5-ND	.83	.74	.67	.56	.49
	400	TO-92 (Isolated)	5	.01	1.6	2.0	0.2	2.5	L401E5-ND	.88	.78	.71	.59	.51
	600	TO-92 (Isolated)	5	.01	1.6	2.0	0.2	2.5	L601E5-ND	1.01	.90	.81	.68	.59
4.0	200	TO-202AB (Non-Isolated)	3	.02	1.6	2.0	0.3	2.5	L2004F31-ND	1.04	.92	.83	.69	.60
	400	TO-202AB (Non-Isolated)	3	.02	1.6	2.0	0.3	2.5	L4004F31-ND	1.08	.96	.87	.72	.63
	600	TO-202AB (Non-Isolated)	3	.01	1.6	2.0	0.3	2.5	L6004F31-ND	1.24	1.10	.99	.83	.72
	200	TO-202AB (Non-Isolated)	5	.02	1.6	2.0	0.3	2.5	L2004F51-ND	.99	.88	.80	.66	.58
	400	TO-202AB (Non-Isolated)	5	.02	1.6	2.0	0.3	2.5	L4004F51-ND	1.04	.92	.83	.69	.60
	600	TO-202AB (Non-Isolated)	5	.01	1.6	2.0	0.3	2.5	L6004F51-ND	1.19	1.06	.96	.80	.69
	200	TO-220AB (Isolated)	3	.01	1.6	2.0	0.3	2.5	L2004L3-ND	1.51	1.34	1.21	1.01	.88
	400	TO-220AB (Isolated)	3	.01	1.6	2.0	0.3	2.5	L4004L3-ND	1.58	1.40	1.26	1.05	.91
	600	TO-220AB (Isolated)	3	.01	1.6	2.0	0.3	2.5	L6004L3-ND	1.80	1.60	1.44	1.20	1.04
8.0	200	TO-220AB (Isolated)	5	.02	1.6	2.0	0.4	2.5	L2008L6-ND	1.62	1.44	1.30	1.08	.94
	400	TO-220AB (Isolated)	5	.05	1.6	2.0	0.4	2.5	L4008L6-ND	1.71	1.52	1.37	1.14	.99
	600	TO-220AB (Isolated)	5	.02	1.6	2.0	0.4	2.5	L6008L6-ND	1.96	1.74	1.57	1.31	1.14
Gated Triacs (1.0-15 Amps)														
1.0	200	TO-92 (Isolated)	10	.02	1.6	2.0	0.2	2.5	Q201E3-ND	.63	.56	.51	.42	.37
	400	TO-92 (Isolated)	10	.02	1.6	2.0	0.2	2.5	Q401E3-ND	.70	.62	.56	.47	.41
	600	TO-92 (Isolated)	10	.02	1.6	2.0	0.2	2.5	Q601E3-ND	.83	.74	.67	.56	.49
4.0	200	TO-220AB (Isolated)	10	.05	1.6	2.0	0.3	2.5	Q2004L3-ND	1.08	.96	.87	.72	.63
	400	TO-220AB (Isolated)	10	.05	1.6	2.0	0.3	2.5	Q4004L3-ND	1.19	1.06	.96	.80	.69
	600	TO-220AB (Isolated)	10	.05	1.6	2.0	0.3	2.5	Q6004L3-ND	1.42	1.26	1.14	.95	.82
	200	TO-202AB (Non-Isolated)	10	.05	1.6	2.0	0.3	2.5	Q2004F31-ND	.95	.84	.76	.63	.55
	400	TO-202AB (Non-Isolated)	10	.05	1.6	2.0	0.3	2.5	Q4004F31-ND	1.04	.92	.83	.69	.60
	600	TO-202AB (Non-Isolated)	10	.05	1.6	2.0	0.3	2.5	Q6004F31-ND	1.24	1.10	.99	.83	.72
8.0	200	TO-220AB (Isolated)	25	.05	1.6	2.5	0.5	3.0	Q2008L4-ND	1.28	1.14	1.03	.86	.75
	400	TO-220AB (Isolated)	25	.05	1.6	2.5	0.5	3.0	Q4008L4-ND	1.42	1.26	1.14	.95	.82
	600	TO-220AB (Isolated)	50	.05	1.6	2.5	0.5	3.0	Q6008L5-ND	1.58	1.40	1.26	1.05	.91
	200	TO-202AB (Non-Isolated)	25	.05	1.6	2.5	0.5	3.0	Q2008F41-ND	1.13	1.00	.90	.75	.65
	400	TO-220AB (Non-Isolated)	25	.05	1.6	2.5	0.5	3.0	Q4008R4-ND	1.31	1.16	1.05	.87	.76
	600	TO-220AB (Non-Isolated)	50	.05	1.6	2.5	0.5	3.0	Q6008R5-ND	1.46	1.30	1.17	.98	.85
10.0	200	TO-220AB (Isolated)	50	.05	1.6	2.5	0.5	3.0	Q2010L5-ND	1.40	1.24	1.12	.93	.81
	400	TO-220AB (Isolated)	50	.05	1.6	2.5	0.5	3.0	Q4010L5-ND	1.55	1.38	1.25	1.04	.90
	600	TO-220AB (Isolated)	50	.05	1.6	2.5	0.5	3.0	Q6010L5-ND	1.82	1.62	1.46	1.22	1.06
	200	TO-220AB (Non-Isolated)	50	.05	1.6	2.5	0.5	3.0	Q2010R5-ND	1.28	1.14	1.03	.86	.75
	400	TO-220AB (Non-Isolated)	50	.05	1.6	2.5	0.5	3.0	Q4010R5-ND	1.42	1.26	1.14	.95	.82
	600	TO-220AB (Non-Isolated)	50	.05	1.6	2.5	0.5	3.0	Q6010R5-ND	1.69	1.50	1.35	1.13	.98
15.0	200	TO-220AB (Isolated)	50	.05	1.6	2.5	0.5	4.0	Q2015L5-ND	1.69	1.50	1.35	1.13	.98
	400	TO-220AB (Isolated)	50	.05	1.6	2.5	0.5	4.0	Q4015L5-ND	1.85	1.64	1.48	1.23	1.07
	600	TO-220AB (Isolated)	50	.05	1.6	2.5	0.5	4.0	Q6015L5-ND	2.18	1.94	1.75	1.46	1.27
	200	TO-220AB (Non-Isolated)	50	.05	1.6	2.5	0.5	4.0	Q2015R5-ND	1.55	1.38	1.25	1.04	.90
	400	TO-220AB (Non-Isolated)	50	.05	1.6	2.5	0.5	4.0	Q4015R5-ND	1.71	1.52	1.37	1.14	.99
	600	TO-220AB (Non-Isolated)	50	.05	1.6	2.5	0.5	4.0	Q6015R5-ND	2.03	1.80	1.62	1.35	1.17

Surface Mount Triacs (0.8-1.0 Amps)

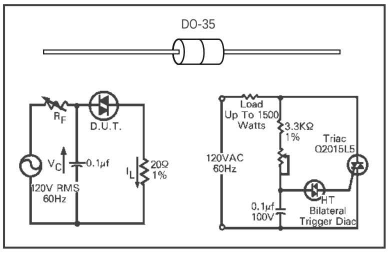


$I_{T\,RMS}$ (A)	V_{DRM} (V)	Package	I_{GT} (mA)	I_{DRM} @25°C (mA)	V_{TM} @25°C (V)	V_{GT} @25°C (V)	I_H (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	250	Digi-Key Part No.	Tape & Reel Pricing 2,500
Surface Mount Triacs														
0.8	400	COMPAK	10	0.02	1.6	2.0	15.0	Q4X3CT-ND	1.13	.93	.79	.67	Q4X3TR-ND	493.00/M
0.8	600	COMPAK	10	0.02	1.6	2.0	15.0	Q6X3CT-ND	1.37	1.12	.95	.81	Q6X3TR-ND	595.00/M
1.0	400	COMPAK	10	0.02	1.6	2.0	15.0	Q4N3CT-ND	1.37	1.12	.95	.81	Q4N3TR-ND	595.00/M
1.0	600	COMPAK	10	0.02	1.6	2.0	15.0	Q6N3CT-ND	1.60	1.32	1.11	.95	Q6N3TR-ND	697.00/M
Sensitive Gate Surface Mount Triacs														
0.8	400	COMPAK	3	0.01	1.6	2.0	5.0	L4X3CT-ND	1.56	1.28	1.08	.92	L4X3TR-ND	680.00/M
0.8	600	COMPAK	3	0.01	1.6	2.0	5.0	L6X3CT-ND	1.52	1.20	1.02	.88	L6X3TR-ND	782.00/M
0.8	400	COMPAK	5	0.01	1.6	2.0	10.0	L4X5CT-ND	1.48	1.22	1.03	.88	L4X5TR-ND	646.00/M
0.8	600	COMPAK	5	0.01	1.6	2.0	10.0	L6X5CT-ND	1.68	1.38	1.17	.99	L6X5TR-ND	731.00/M

TECCOR ELECTRONICS
An Invensys company

Bilateral Trigger Diacs HT-Series

9291B-ND	**Teccor Thyristor Product Catalog**	**$3.00**
9292B-ND	**Teccor Sidactor Data Book**................	**$2.25**



General Description:

The diac semiconductor is a full-wave or bi-directional thyristor. It is triggered from a blocking-to-conduction state for either polarity of applied voltage whenever the amplitude of applied voltage exceeds the breakover voltage rating of the diac.

The Teccor line of diacs features glass passivated junctions to insure long term device reliability and parameter stability. Teccor's glass offers a rugged, reliable barrier against junction contamination.

Specifications:

- Maximum Ratings, Absolute-Maximum Values. Maximum Trigger Firing Capacitance - 0.1µF; Device dissipation (at^{T}A = -40° to +40°C) -250mW; Derate Above +40°C -3.6mW/°C
- Temperature Ranges: Storage -40° to +125°C; Operating (Junction) -40° to +125°C * Thermal Resistance: Junction to Ambient (^{R}()JA) = 278°C/W; Junction to Lead (^{R}()JL) = 100°C/W. Based on Maximum lead temperature of 85°C @ = 250mW.

Pkg.	$V_{(BO)}$ (V) Min.	Max.	$V_{(BO)}$ Symmetry (V)	Dynamic Breakback Voltage (V)	$I_{(BO)}$ (µA)	I_{TRM} (A)	Digi-Key Part No.	Price Each 1	10	100	500	1,000
D0-35	27	37	3	5	50	2.0	HT-32-ND	.27	.24	.22	.18	.16
D0-35	35	45	3	5	50	2.0	HT-40-ND	.23	.20	.18	.15	.13
D0-35	30	40	3	10	50	2.0	HT-35-ND	.25	.22	.20	.17	.15
D0-35	56	70	4	20	50	1.5	HT-60-ND	.34	.30	.27	.23	.20
D0-35	28	36	4	7	50	2.0	HT-5761-ND	.29	.26	.24	.20	.17
D0-35	30	34	2	7	25	2.0	HT-5761A-ND	.34	.30	.27	.23	.20
D0-35	32	40	4	7	50	2.0	HT-5762-ND	.27	.24	.22	.18	.16

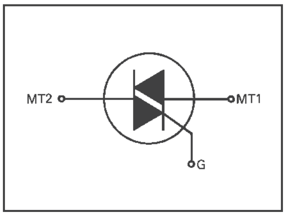
Alternistor Triacs 8 to 40 Amps

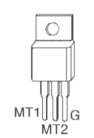
9292B-ND	**Teccor Sidactor Data Book**	**$2.25**
9291B-ND	**Teccor Thyristor Product Catalog**	**$3.00**

General Description:

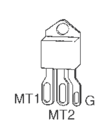
Teccor's Alternistor Triac has been specifically designed for applications which are required to switch highly inductive loads. To accomplish this, a special chip has been designed which effectively offers the same performance as two thyristors (SCRs) wired inverse parallel (back-to-back), hence, the alternistor has better turn-off behavior than a standard triac.

All Alternistors have glass passivated junctions to ensure long term reliability and parameter stability.

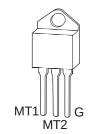




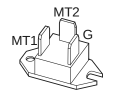
TO-220AB



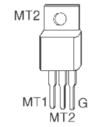
TO-218X



TO-218AC



TO-3 Base



TO-220AB

$I_{T\,RMS}$ (A)	Package	V_{DRM} (V)	I_{GT} (mA)	I_{DRM} @25°C (mA)	V_{TM} @25°C (V)	V_{GT} @25°C (V)	$P_{G\,(AV)}$ (W)	t_{gt} (µsec.)	Digi-Key Part No.	Price Each 1	10	100	500	1,000
8	TO-220AB (Isolated)	400	35	.01	1.6	1.5	0.5	4	Q4008LH4-ND	1.51	1.34	1.21	1.01	.88
	TO-220AB (Isolated)	600	35	.01	1.6	1.5	0.5	4	Q6008LH4-ND	1.69	1.50	1.35	1.13	.98
	TO-220AB (Isolated)	800	35	.01	1.6	1.5	0.5	4	Q8008LH4-ND	2.00	1.78	1.61	1.34	1.16
12	TO-220AB (Isolated)	400	50	.01	1.6	1.5	0.5	4	Q4012LH5-ND	1.76	1.56	1.41	1.17	1.02
	TO-220AB (Isolated)	600	50	.01	1.6	1.5	0.5	4	Q6012LH5-ND	1.94	1.72	1.55	1.29	1.12
	TO-220AB (Isolated)	800	50	.01	1.6	1.5	0.5	4	Q8012LH5-ND	2.32	2.06	1.86	1.55	1.34
15	TO-220AB (Isolated)	200	80	.05	1.6	2.5	0.5	5	Q2015L6-ND	1.91	1.70	1.53	1.28	1.11
	TO-220AB (Isolated)	400	80	.05	1.6	2.5	0.5	5	Q4015L6-ND	2.09	1.86	1.68	1.40	1.21
	TO-220AB (Isolated)	600	80	.05	1.6	2.5	0.5	5	Q6015L6-ND	2.32	2.06	1.86	1.55	1.34
	TO-220AB (Isolated)	800	80	.1	1.6	2.5	0.5	5	Q8015L6-ND	2.77	2.46	2.22	1.85	1.60
	TO-220AB (Non-Isolated)	200	80	.05	1.6	2.5	0.5	5	Q2015R6-ND	1.67	1.48	1.34	1.11	.97
	TO-220AB (Non-Isolated)	400	80	.05	1.6	2.5	0.5	5	Q4015R6-ND	2.57	2.28	2.06	1.71	1.49
	TO-220AB (Non-Isolated)	600	80	.05	1.6	2.5	0.5	5	Q6015R6-ND	2.05	1.82	1.64	1.37	1.19
	TO-220AB (Non-Isolated)	800	80	.1	1.6	2.5	0.5	5	Q8015R6-ND	2.43	2.16	1.95	1.62	1.41
	TO-220AB (Non-Isolated)	200	125	.05	1.6	2.5	0.5	5	Q2015R9-ND	2.18	1.94	1.75	1.46	1.27
25	TO-220AB (Isolated)	200	80	.05	1.7	2.5	0.5	3	Q2025L6-ND	2.81	2.50	2.25	1.88	1.63
	TO-220AB (Isolated)	400	80	.05	1.7	2.5	0.5	3	Q4025L6-ND	3.11	2.76	2.49	2.07	1.80
	TO-220AB (Isolated)	600	80	.05	1.7	2.5	0.5	3	Q6025L6-ND	3.44	3.06	2.76	2.30	1.99
	TO-220AB (Isolated)	800	80	.1	1.8	2.5	0.5	5	Q8025L6-ND	4.07	3.62	3.26	2.72	2.36
	TO-220AB (Non-Isolated)	600	125	.05	1.8	2.5	0.5	5	Q6025R9-ND	5.31	4.72	4.25	3.54	3.07
	TO-220AB (Non-Isolated)	200	80	.01	1.8	2.5	0.5	4	Q2025R6-ND	2.48	2.20	1.98	1.65	1.43
	TO-220AB (Non-Isolated)	400	80	.01	1.8	2.5	0.5	4	Q4025R6-ND	2.72	2.42	2.18	1.82	1.58
	TO-220AB (Non-Isolated)	600	80	.01	1.8	2.5	0.5	4	Q6025R6-ND	3.02	2.68	2.42	2.01	1.75
	TO-220AB (Non-Isolated)	800	80	.1	1.8	2.5	0.5	5	Q8025R6-ND	3.58	3.18	2.87	2.39	2.07
	TO-218AC (Isolated)	200	80	.05	1.8	2.5	0.5	5	Q2025K6-ND	4.86	4.32	3.89	3.24	2.81
	TO-218AC (Isolated)	800	80	.1	1.8	2.5	0.5	5	Q8025K6-ND	7.04	6.26	5.64	4.70	4.07
	TO-218X (Isolated)	200	80	.05	1.8	2.5	0.5	5	Q2025J6-ND	5.38	4.78	4.31	3.59	3.11
	TO-218X (Isolated)	400	80	.05	1.8	2.5	0.5	5	Q4025J6-ND	5.90	5.24	4.72	3.93	3.41
	TO-218X (Isolated)	600	80	.05	1.8	2.5	0.5	5	Q6025J6-ND	6.55	5.82	5.24	4.37	3.79
	TO-218X (Isolated)	800	80	.1	1.8	2.5	0.5	5	Q8025J6-ND	7.79	6.92	6.23	5.19	4.50
	TO-3-BASE (Isolated)	200	80	.01	1.8	2.5	0.5	4	Q2025P-ND	7.18	6.38	5.75	4.79	4.15
	TO-3-BASE (Isolated)	400	80	.01	1.8	2.5	0.5	4	Q4025P-ND	7.90	7.02	6.32	5.27	4.57
	TO-3-BASE (Isolated)	600	80	.01	1.8	2.5	0.5	3	Q6025P-ND	8.75	7.78	7.01	5.84	5.06
	FASTPAK (Isolated)	800	80	.1	1.8	2.5	0.5	5	Q8025P-ND	10.40	9.24	8.32	6.93	6.01
40	TO-218X (Isolated)	200	100	.2	1.8	2.5	0.8	5	Q2040J7-ND	7.16	6.36	5.73	4.77	4.14
	TO-218X (Isolated)	400	100	.2	1.8	2.5	0.8	5	Q4040J7-ND	7.88	7.00	6.30	5.25	4.55
	TO-218X (Isolated)	600	100	.2	1.8	2.5	0.8	5	Q6040J7-ND	8.73	7.76	6.99	5.82	5.05
	TO-218X (Isolated)	800	100	.2	1.8	2.5	0.8	5	Q8040J7-ND	10.37	9.22	8.30	6.92	6.00
	TO-218AC (Isolated)	200	100	.2	1.8	2.5	0.8	5	Q2040K7-ND	6.48	5.76	5.19	4.32	3.75
	TO-218AC (Isolated)	400	100	.2	1.8	2.5	0.8	5	Q4040K7-ND	7.13	6.34	5.71	4.76	4.13
	TO-218AC (Isolated)	600	100	.2	1.8	2.5	0.8	5	Q6040K7-ND	7.92	7.04	6.34	5.28	4.58
	TO-218AC (Isolated)	800	100	.2	1.8	2.5	0.8	5	Q8040K7-ND	9.41	8.36	7.53	6.27	5.44
	TO-3-BASE (Isolated)	200	100	.2	1.8	2.5	0.8	5	Q2040P-ND	9.56	8.50	7.65	6.38	5.53
	TO-3-BASE (Isolated)	400	100	.2	1.8	2.5	0.8	5	Q4040P-ND	10.53	9.36	8.43	7.02	6.09
	TO-3-BASE (Isolated)	600	100	.2	1.8	2.5	0.8	5	Q6040P-ND	11.68	10.38	9.35	7.79	6.75

TECCOR ELECTRONICS
An Invensys company

SIDACtor®

The New Standard In Surge Protection For Electronic Equipment

9291B-ND Teccor Thyristor Product Catalog $3.00
9292B-ND Teccor Sidactor Data Book $2.25

Fig. A
TO-92
(Isolated)

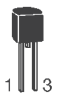


Fig. B
TO-220
No-Ground
(Isolated)

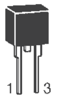


Fig. C
TO-220
(Isolated)

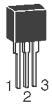


Fig. D
DO-214AA
(Isolated)

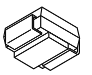


Fig. 1

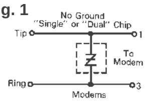


Fig. 2

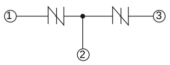
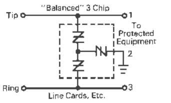
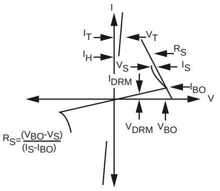


Fig. 3



General Description: SIDACtors® are non-degenerative crowbar/foldback devices that protect telecom circuits from hazardous transient voltages. Connected across tip and ring, the SIDACtor offers the fastest and most reliable overvoltage protection on the market today. In the standby mode, the SIDACtor is transparent to the circuit, due to its high off-state resistance. This equates to a very low leakage current (IDRM), which is especially important during FCC Part 68 testing. Upon application of a voltage exceeding the breakover voltage (VBO), the SIDACtor will switch from its high off-state resistance to essentially a short, protecting your sensitive components from "fast" rising dv/dt's. The SIDACtor will continue to simulate this short until the current flowing through the device is either interrupted or drops below the SIDACtor's minimum holding current (IH), at which time the SIDACtor resets itself.

With the SIDACtor, the design engineer is guaranteed the most cost effective and reliable solution to FCC Part 68, UL 1459, and Bellcore 1089. Because the SIDACtor is a solid state solution, it offers the only technology that can be above the 268V ringing requirement of FCC Part 68 and still protect a 350V rated component. And because the SIDACtor has such a low on-state resistance, the SIDACtor can operate continuously at one full amp and withstand both FCC's 200A 10x160 µs surge without any additional series resistance.



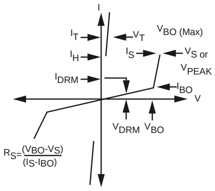


Fig.	Package	V_{BO} (Pins 1 to 3) Min.	Max.	V_{DRM}	IPP(A)	ITS	I_H (mA)	Digi-Key Part No.	Price Each 1	10	100	500	1,000
A,1	TO-92	27	36	±20	50	30	50	P0300EA-ND	.92	.82	.74	.62	.54
		58	70	±50	75	30	150	P0640EA-ND	.92	.82	.74	.62	.54
		60	95	±50	75	30	150	P0900EA-ND	.92	.82	.74	.62	.54
		65	80	±50	75	30	150	P0720EA-ND	.92	.82	.74	.62	.54
		90	125	±75	50	30	150	P1100EA-ND	.92	.82	.74	.62	.54
		120	145	±95	50	30	150	P1300EA-ND	.92	.82	.74	.62	.54
		135	165	±110	50	30	150	P1500EA-ND	.92	.82	.74	.62	.54
		220	300	±180	50	30	150	P2600EA-ND	.92	.82	.74	.62	.54
		275	350	±275	50	30	150	P3100EA-ND	.92	.82	.74	.62	.54
B,1	Modified TO-220	220	250	±175	50	30	150	P2400AA61-ND	2.03	1.80	1.62	1.35	1.17
		270	330	±215	50	30	150	P3000AA61-ND	2.03	1.80	1.62	1.35	1.17
C,2	Modified TO-220	54	72	±20	50	30	50	P0602AA-ND	2.34	2.08	1.88	1.56	1.36
C,2		120	190	±50	100	60	200	P1602AB-ND	2.93	2.60	2.34	1.95	1.69
C,3		140	170	±110	100	60	200	P1553AB-ND	4.07	3.62	3.26	2.72	2.36
C,2		190	250	±75	100	60	200	P2202AB-ND	2.93	2.60	2.34	1.95	1.69
C,3		210	265	±170	100	60	200	P2353AB-ND	4.07	3.62	3.26	2.72	2.36
C,3		240	300	±190	100	60	200	P2703AB-ND	4.07	3.62	3.26	2.72	2.36
C,2		280	320	±110	50	30	150	P3002AB-ND	2.93	2.60	2.34	1.95	1.69
C,3		280	350	±225	100	60	200	P3203AB-ND	4.07	3.62	3.26	2.72	2.36
C,3		300	380	±240	100	60	200	P3403AB-ND	4.07	3.62	3.26	2.72	2.36
C,2		540	660	±215	100	60	200	P6002AB-ND	2.93	2.60	2.34	1.95	1.69

Fig.	Package	V_{BO} Min.	Max.	V_{DRM}	IPP(A)	ITS	I_H (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T & R Pricing 2,500
D,1	DO-214	27	36	±20	50	30	50	P0300SARPCT-ND	2.75	2.20	1.65	P0300SARPTR-ND	650.00/M
		58	70	±50	75	30	150	P0640SARPCT-ND	2.75	2.20	1.65	P0640SARPTR-ND	650.00/M
		65	80	±50	75	30	150	P0720SARPCT-ND	2.75	2.20	1.65	P0720SARPTR-ND	650.00/M
		135	165	±110	50	30	150	P1500SARPCT-ND	2.75	2.20	1.65	P1500SARPTR-ND	650.00/M
		220	300	±180	50	30	150	P2600SARPCT-ND	2.75	2.20	1.65	P2600SARPTR-ND	650.00/M
		275	350	±275	50	30	150	P3100SARPCT-ND	2.75	2.20	1.65	P3100SARPTR-ND	650.00/M

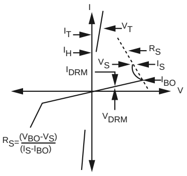
Sidac

General Description: The Sidac is a silicon bilateral voltage triggered switch with greater power-handling capabilities than standard diacs. Upon application of a voltage exceeding the Sidac breakover voltage point, the Sidac switches on through a negative resistance region to a low on-state voltage. Conduction will continue until the current is interrupted or drops below the minimum holding current of the device.

Applications: • High voltage lamp ignitors • Natural gas ignitors • Gas oil ignitors • High voltage power supplies • Xenon ignitors • Over voltage protector • Pulse generators • Fluorescent lighting ignitors • HID lighting ignitors

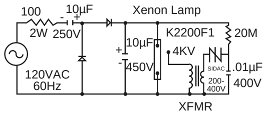
Features: • AC circuit oriented • Glass passivated junctions • High surge current capability

General Notes: • All measurements are made at 60Hz with a resistive load at an ambient temperature of +25°C unless otherwise specified. • Storage temperature range (TS) is -65°C to +150°C. • Junction temperature range (TJ) is -40°C to +110°C. • Lead solder temperature is a maximum of +230°C for 10 seconds maximum; ≥ 1/16" (1.59mm) from case.



9291B-ND Teccor Thyristor Product Catalog $3.00
9292B-ND Teccor Sidactor Data Book $2.25

Fig.	Package	$I_{T(RMS)}$	V_{DRM}	V_{BO} Min.	Max	I_{DRM}	V_{BO}	Digi-Key Part No.	Price Each 1	10	100	500	1,000
1	TO-92	1.0	±90	95	113	5	10	K1050E70-ND	.63	.56	.51	.42	.37
		1.0	±90	104	118	5	10	K1100E70-ND	.63	.56	.51	.42	.37
		1.0	±90	110	125	5	10	K1200E70-ND	.63	.56	.51	.42	.37
		1.0	±90	120	138	5	10	K1300E70-ND	.63	.56	.51	.42	.37
		1.0	±90	130	146	5	10	K1400E70-ND	.68	.60	.54	.45	.39
		1.0	±90	140	170	5	10	K1500E70-ND	.68	.60	.54	.45	.39
2	TO-202AB (Non-Isolated)	1.0	±180	190	215	5	10	K2000F1-ND	.95	.84	.76	.63	.55
		1.0	±180	205	230	5	10	K2200F1-ND	.95	.84	.76	.63	.55
		1.0	±190	220	250	5	10	K2400F1-ND	.99	.88	.80	.66	.58
		1.0	±190	240	280	5	10	K2500F1-ND	.99	.88	.80	.66	.58
		1.0	±190	270	330	5	10	K3000F1-ND	1.10	.98	.89	.74	.64



Example Circuit

Fig. 1

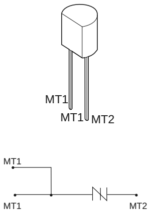
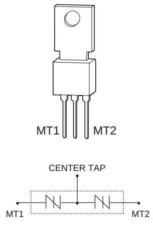


Fig. 2



QUADRAC® Internally Triggered Triacs (4.0-15 Amps)

9291B-ND Teccor Thyristor Product Catalog..................$3.00
9292B-ND Teccor Sidactor Data Book........................$2.25

General Description:

Teccor's QUADRAC® is a triac that includes a diac trigger mounted inside the same package. This device developed by Teccor, saves the user the expense and assembly time of buying a discrete diac and assembling in conjunction with a gated triac.

The QUADRAC® is a bidirectional AC switch and is gate controlled for either polarity of main terminal voltage. Its primary purpose is for AC switching and phase control applications such as speed controls, temperature modulation controls, and lighting controls.

Features:

- Glass passivated junctions • Electrically isolated package
- Internal trigger diac • High surge capability - up to 150 Amps
- High voltage capability - 200 up to 600 volts.

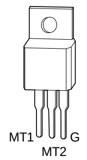
Electrical Isolation:

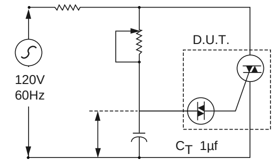
Teccor's isolated TO-220 Quadrac package will withstand a minimum high potential test of 2500VAC (RMS) from leads to case over the operating temperature range of the device.

Electrical Isolation From Leads to Case:

U.L. Recognized File No. 71639

Thermotab TO-220AB



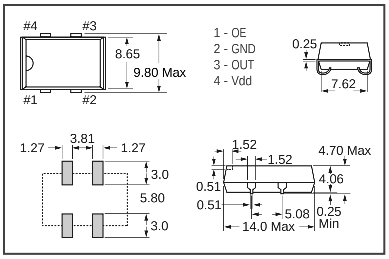


$I_{T\,RMS}$ (A)	V_{DRM} (V)	Package	I_{GTM} (A)	I_{DRM} @25°C (mA)	V_{TM} @25°C (V)	VBO (V) Min.	Max.	I_{BO} (µA)	C (µF)	I_H (mA)	t_{gt} (µsec.)	Digi-Key Part No.	Price Each 1	10	100	500	1,000
4.0	200	TO-220AB (Isolated)	1.2	.05	1.6	30	45	200	0.1	40	3	Q2004LT-ND	1.22	1.08	.98	.81	.71
	400	TO-220AB (Isolated)	1.2	.05	1.6	30	45	200	0.1	40	3	Q4004LT-ND	1.33	1.18	1.07	.89	.77
	600	TO-220AB (Isolated)	1.2	.05	1.6	30	45	200	0.1	40	3	Q6004LT-ND	1.58	1.40	1.26	1.05	.91
8.0	400	TO-220AB (Isolated)	1.5	.05	1.6	30	45	200	0.1	60	3	Q4008LT-ND	1.60	1.42	1.28	1.07	.93
	600	TO-220AB (Isolated)	1.5	.05	1.6	30	45	200	0.1	60	3	Q6008LT-ND	1.89	1.68	1.52	1.26	1.10
15.0	400	TO-220AB (Isolated)	1.5	.05	1.6	30	45	200	0.1	70	3	Q4015LT-ND	1.98	1.76	1.59	1.32	1.15
	600	TO-220AB (Isolated)	1.5	.05	1.6	30	45	200	0.1	70	3	Q6015LT-ND	2.34	2.08	1.88	1.56	1.36

CMX309F Series Oscillators

SPECIFICATIONS:

• **Frequency Stability:** ±100ppm (-10°C to +70°C) • **Operating Temperature Range:** -10°C to +70°C • **Storage Temperature Range:** -55° C to +125°C • **Supply Voltage:** V_{DD}: 5.0V ±0.5V • **Supply Current:** 23mA Max. • **Duty:** TTL Level (1.4V): 45% to 55% • CMOS Level (V_{DD}/2): 40% to 60% • **Output Voltage:** V_{OH}: V_{DD} - 0.4V Min.; V_{OL}: 0.4V Max. • **Output Load:** TTL: 10TTL Max.; CMOS: 50pF Max. • **Rise & Fall Time:** TTL: tr,tf : 8nsec Max.; CMOS: tr,tf : 8nsec Max. • **Start-up Time:** 4msec Max. • **Input (OE) Voltage:** V_{IH}: 2.0V Min.; V_{IL}: 0.8V Max. • **Disable Current:** 12mA Max. • **Aging (first year):** ±5ppm/year Max.

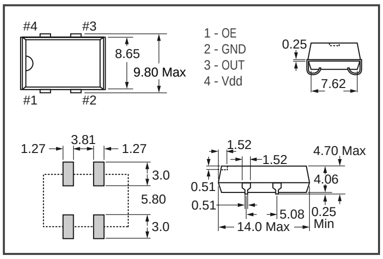


Frequency (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	50	Digi-Key Part No.	T & R Pricing 1,000	Citizen Part No.
1.544	300-7001-1-ND	3.00	2.80	1.80	300-7001-2-ND	1328.00	CMX309FLC1.544MT
1.8432	300-7002-1-ND	3.00	2.80	1.80	300-7002-2-ND	1328.00	CMX309FLC1.8432MT
2.000	300-7003-1-ND	3.00	2.80	1.80	300-7003-2-ND	1328.00	CMX309FLC2.000MT
2.048	300-7004-1-ND	3.00	2.80	1.80	300-7004-2-ND	1328.00	CMX309FLC2.048MT
2.4576	300-7005-1-ND	3.00	2.80	1.80	300-7005-2-ND	1328.00	CMX309FLC2.4576MT
3.072	300-7006-1-ND	3.00	2.80	1.80	300-7006-2-ND	1328.00	CMX309FLC3.072MT
3.579545	300-7007-1-ND	3.00	2.80	1.80	300-7007-2-ND	1328.00	CMX309FLC3.579545MT
3.6864	300-7008-1-ND	3.00	2.80	1.80	300-7008-2-ND	1328.00	CMX309FLC3.6864MT
4.000	300-7009-1-ND	3.00	2.80	1.80	300-7009-2-ND	1328.00	CMX309FLC4.000MT
4.096	300-7010-1-ND	3.00	2.80	1.80	300-7010-2-ND	1328.00	CMX309FLC4.096MT
4.9152	300-7011-1-ND	3.00	2.80	1.80	300-7011-2-ND	1328.00	CMX309FLC4.9152MT
5.000	300-7012-1-ND	3.00	2.80	1.80	300-7012-2-ND	1328.00	CMX309FLC5.000MT
6.000	300-7013-1-ND	3.00	2.80	1.80	300-7013-2-ND	1328.00	CMX309FLC6.000MT
6.144	300-7014-1-ND	3.00	2.80	1.80	300-7014-2-ND	1328.00	CMX309FLC6.144MT
7.3728	300-7015-1-ND	3.00	2.80	1.80	300-7015-2-ND	1328.00	CMX309FLC7.3728MT
8.000	300-7016-1-ND	3.00	2.80	1.80	300-7016-2-ND	1328.00	CMX309FLC8.000MT
8.192	300-7017-1-ND	3.00	2.80	1.80	300-7017-2-ND	1328.00	CMX309FLC8.192MT
9.8304	300-7018-1-ND	3.00	2.80	1.80	300-7018-2-ND	1328.00	CMX309FLC9.8304MT
10.000	300-7019-1-ND	3.00	2.80	1.80	300-7019-2-ND	1328.00	CMX309FLC10.000MT
11.000	300-7021-1-ND	3.00	2.80	1.80	300-7021-2-ND	1328.00	CMX309FLC11.000MT
11.0592	300-7022-1-ND	3.00	2.80	1.80	300-7022-2-ND	1328.00	CMX309FLC11.0592MT
11.2896	300-7023-1-ND	3.00	2.80	1.80	300-7023-2-ND	1328.00	CMX309FLC11.2896MT
12.000	300-7024-1-ND	3.00	2.80	1.80	300-7024-2-ND	1328.00	CMX309FLC12.000MT
12.288	300-7025-1-ND	3.00	2.80	1.80	300-7025-2-ND	1328.00	CMX309FLC12.288MT
12.352	300-7026-1-ND	3.00	2.80	1.80	300-7026-2-ND	1328.00	CMX309FLC12.352MT
13.500	300-7027-1-ND	3.00	2.80	1.80	300-7027-2-ND	1328.00	CMX309FLC13.500MT
14.31818	300-7028-1-ND	3.00	2.80	1.80	300-7028-2-ND	1328.00	CMX309FLC14.31818MT
14.7456	300-7029-1-ND	3.00	2.80	1.80	300-7029-2-ND	1328.00	CMX309FLC14.7456MT
15.360	300-7031-1-ND	3.00	2.80	1.80	300-7031-2-ND	1328.00	CMX309FLC15.360MT
16.000	300-7032-1-ND	3.00	2.80	1.80	300-7032-2-ND	1328.00	CMX309FLC16.000MT
16.384	300-7034-1-ND	3.00	2.80	1.80	300-7034-2-ND	1328.00	CMX309FLC16.384MT
16.6666	300-7035-1-ND	3.00	2.80	1.80	300-7035-2-ND	1328.00	CMX309FLC16.6666MT
17.734475	300-7036-1-ND	3.00	2.80	1.80	300-7036-2-ND	1328.00	CMX309FLC17.734475MT
18.000	300-7037-1-ND	3.00	2.80	1.80	300-7037-2-ND	1328.00	CMX309FLC18.000MT
18.432	300-7038-1-ND	3.00	2.80	1.80	300-7038-2-ND	1328.00	CMX309FLC18.432MT
19.6608	300-7039-1-ND	3.00	2.80	1.80	300-7039-2-ND	1328.00	CMX309FLC19.6608MT
20.000	300-7040-1-ND	3.00	2.80	1.80	300-7040-2-ND	1328.00	CMX309FLC20.000MT
22.1184	300-7041-1-ND	3.00	2.80	1.80	300-7041-2-ND	1328.00	CMX309FLC22.1184MT
24.000	300-7042-1-ND	3.00	2.80	1.80	300-7042-2-ND	1360.00	CMX309FLC24.000MT
24.576	300-7043-1-ND	3.00	2.80	1.80	300-7043-2-ND	1328.00	CMX309FLC24.576MT
25.000	300-7044-1-ND	3.00	2.80	1.80	300-7044-2-ND	1328.00	CMX309FLC25.000MT
25.175	300-7045-1-ND	3.00	2.80	1.80	300-7045-2-ND	1328.00	CMX309FLC25.175MT
27.000	300-7046-1-ND	3.00	2.80	1.80	300-7046-2-ND	1328.00	CMX309FLC27.000MT
28.322	300-7047-1-ND	3.00	2.80	1.80	300-7047-2-ND	1328.00	CMX309FLC28.322MT
28.63636	300-7048-1-ND	3.00	2.80	1.80	300-7048-2-ND	1328.00	CMX309FLC28.63636MT
29.498928	300-7049-1-ND	3.00	2.80	1.80	300-7049-2-ND	1328.00	CMX309FLC29.498928MT
30.000	300-7050-1-ND	3.00	2.80	1.80	300-7050-2-ND	1328.00	CMX309FLC30.000MT

CMX309H Series Oscillators

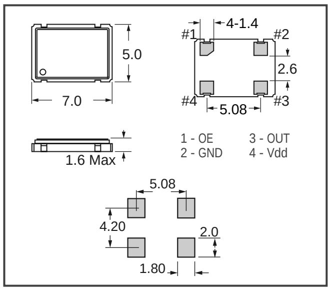
SPECIFICATIONS:

• **Frequency Stability:** ±100ppm (-10°C to +70°C) • **Operating Temperature Range:** -10°C to +70°C • **Storage Temperature Range:** -55° C to +125°C • **Supply Voltage:** V_{DD}: 5.0V ±0.5V • **Supply Current:** 35mA Max. • **Duty:** TTL Level (1.4V): 45% to 55% • CMOS Level (V_{DD}/2): 40% to 60% • **Output Voltage:** V_{OH}: V_{DD} - 0.5V Min.; V_{OL}: 0.5V Max. • **Output Load:** TTL: 10TTL Max.; CMOS: 50pF Max. • **Rise & Fall Time:** TTL: tr,tf : 5nsec Max.; CMOS: tr,tf : 7nsec Max. • **Start-up Time:** 10msec Max. • **Input (OE) Voltage:** V_{IH}: 2.0V Min.; V_{IL}: 0.8V Max. • **Disable Current:** 28mA Max. • **Aging (first year):** ±5ppm/year Max.



Frequency (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	50	Digi-Key Part No.	T & R Pricing 1,000	Citizen Part No.
32.000	300-7101-1-ND	3.00	2.80	1.80	300-7101-2-ND	1328.00	CMX309HWC32.000MT
32.768	300-7102-1-ND	3.00	2.80	1.80	300-7102-2-ND	1328.00	CMX309HWC32.768MT
33.000	300-7103-1-ND	3.00	2.80	1.80	300-7103-2-ND	1328.00	CMX309HWC33.000MT
33.3333	300-7104-1-ND	3.00	2.80	1.80	300-7104-2-ND	1328.00	CMX309HWC33.3333MT
33.8688	300-7105-1-ND	3.00	2.80	1.80	300-7105-2-ND	1328.00	CMX309HWC33.8688MT
40.000	300-7107-1-ND	3.00	2.80	1.80	300-7107-2-ND	1328.00	CMX309HWC40.000MT
44.2368	300-7108-1-ND	3.00	2.80	1.80	300-7108-2-ND	1328.00	CMX309HWC44.2368MT
48.000	300-7109-1-ND	3.00	2.80	1.80	300-7109-2-ND	1328.00	CMX309HWC48.000MT
49.152	300-7110-1-ND	3.00	2.80	1.80	300-7110-2-ND	1328.00	CMX309HWC49.152MT
50.000	300-7111-1-ND	3.19	2.98	1.92	300-7111-2-ND	1411.00	CMX309HWC50.000MT
53.125	300-7112-1-ND	3.00	2.80	1.80	300-7112-2-ND	1328.00	CMX309HWC53.125MT
60.000	300-7113-1-ND	3.00	2.80	1.80	300-7113-2-ND	1328.00	CMX309HWC60.000MT
64.000	300-7114-1-ND	3.00	2.80	1.80	300-7114-2-ND	1328.00	CMX309HWC64.000MT
66.000	300-7115-1-ND	3.00	2.80	1.80	300-7115-2-ND	1328.00	CMX309HWC66.000MT
66.6667	300-7116-1-ND	3.00	2.80	1.80	300-7116-2-ND	1328.00	CMX309HWC66.6667MT

CSX750PCC Series Oscillators



SPECIFICATIONS:

• **Frequency Stability:** ±100ppm (-20°C to +70°C) • **Operating Temperature Range:** -20°C to +70°C • **Storage Temperature Range:** -55° C to +125°C • **Supply Voltage:** V_{DD}: 5.0V ±0.5V • **Supply Current:** 45mA Max. • **Duty:** CMOS Level (V_{DD}/2): 45% to 55% • **Output Voltage:** V_{OH}: V_{DD} - 0.4V Min.; V_{OL}: 0.4V Max. • **Output Load:** CMOS: 25pF Max. • **Rise & Fall Time:** CMOS: tr,tf : 4nsec Max. • **Start-up Time:** 10msec Max. • **Input (OE) Voltage:** V_{IH}: 2.0V Min.; V_{IL}: 0.8V Max. • **Disable Current:** 30mA Max. • **Stand-by Current:** 50µA Max.

Frequency (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	50	Digi-Key Part No.	T & R Pricing 2,000	Citizen Part No.
1.5440	300-8001-1-ND	4.13	3.85	3.30	300-8001-2-ND	1540.00/M	CSX750PCC1.5440MT
1.8432	300-8002-1-ND	4.13	3.85	3.30	300-8002-2-ND	1540.00/M	CSX750PCC1.8432MT
3.6864	300-8003-1-ND	4.13	3.85	3.30	300-8003-2-ND	1540.00/M	CSX750PCC3.6864MT
4.0000	300-8004-1-ND	4.13	3.85	3.30	300-8004-2-ND	1540.00/M	CSX750PCC4.0000MT
6.1760	300-8005-1-ND	4.13	3.85	3.30	300-8005-2-ND	1540.00/M	CSX750PCC6.1760MT
7.3728	300-8006-1-ND	4.13	3.85	3.30	300-8006-2-ND	1540.00/M	CSX750PCC7.3728MT
8.0000	300-8007-1-ND	4.13	3.85	3.30	300-8007-2-ND	1540.00/M	CSX750PCC8.0000MT
10.0000	300-8008-1-ND	4.13	3.85	3.30	300-8008-2-ND	1540.00/M	CSX750PCC10.0000MT
12.0000	300-8009-1-ND	4.13	3.85	3.30	300-8009-2-ND	1540.00/M	CSX750PCC12.0000MT
12.2880	300-8010-1-ND	4.13	3.85	3.30	300-8010-2-ND	1540.00/M	CSX750PCC12.2880MT
12.3520	300-8011-1-ND	4.13	3.85	3.30	300-8011-2-ND	1540.00/M	CSX750PCC12.3520MT
14.31818	300-8012-1-ND	4.13	3.85	3.30	300-8012-2-ND	1540.00/M	CSX750PCC14.31818MT
15.3600	300-8013-1-ND	4.13	3.85	3.30	300-8013-2-ND	1540.00/M	CSX750PCC15.3600MT
16.0000	300-8014-1-ND	4.13	3.85	3.30	300-8014-2-ND	1540.00/M	CSX750PCC16.0000MT
16.3840	300-8015-1-ND	4.13	3.85	3.30	300-8015-2-ND	1540.00/M	CSX750PCC16.3840MT
18.4320	300-8016-1-ND	4.13	3.85	3.30	300-8016-2-ND	1540.00/M	CSX750PCC18.4320MT
19.4400	300-8017-1-ND	4.13	3.85	3.30	300-8017-2-ND	1540.00/M	CSX750PCC19.4400MT
20.0000	300-8018-1-ND	4.13	3.85	3.30	300-8018-2-ND	1540.00/M	CSX750PCC20.0000MT
24.0000	300-8019-1-ND	4.13	3.85	3.30	300-8019-2-ND	1540.00/M	CSX750PCC24.0000MT
24.7040	300-8020-1-ND	4.13	3.85	3.30	300-8020-2-ND	1540.00/M	CSX750PCC24.7040MT
25.0000	300-8021-1-ND	4.13	3.85	3.30	300-8021-2-ND	1540.00/M	CSX750PCC25.0000MT
29.4912	300-8022-1-ND	4.13	3.85	3.30	300-8022-2-ND	1540.00/M	CSX750PCC29.4912MT
30.0000	300-8023-1-ND	4.13	3.85	3.30	300-8023-2-ND	1540.00/M	CSX750PCC30.0000MT
32.0000	300-8024-1-ND	4.13	3.85	3.30	300-8024-2-ND	1540.00/M	CSX750PCC32.0000MT
32.7680	300-8025-1-ND	4.13	3.85	3.30	300-8025-2-ND	1540.00/M	CSX750PCC32.7680MT
33.3330	300-8026-1-ND	4.13	3.85	3.30	300-8026-2-ND	1540.00/M	CSX750PCC33.3330MT
40.0000	300-8027-1-ND	4.13	3.85	3.30	300-8027-2-ND	1540.00/M	CSX750PCC40.0000MT
44.7360	300-8028-1-ND	4.13	3.85	3.30	300-8028-2-ND	1540.00/M	CSX750PCC44.7360MT
45.0000	300-8029-1-ND	4.13	3.85	3.30	300-8029-2-ND	1540.00/M	CSX750PCC45.0000MT
49.1520	300-8030-1-ND	4.13	3.85	3.30	300-8030-2-ND	1540.00/M	CSX750PCC49.1520MT
50.0000	300-8031-1-ND	4.50	4.20	3.60	300-8031-2-ND	1680.00/M	CSX750PCC50.0000MT
51.8400	300-8032-1-ND	4.13	3.85	3.30	300-8032-2-ND	1540.00/M	CSX750PCC51.8400MT
60.0000	300-8033-1-ND	4.13	3.85	3.30	300-8033-2-ND	1540.00/M	CSX750PCC60.0000MT
64.0000	300-8034-1-ND	4.13	3.85	3.30	300-8034-2-ND	1540.00/M	CSX750PCC64.0000MT
66.6666	300-8035-1-ND	4.13	3.85	3.30	300-8035-2-ND	1540.00/M	CSX750PCC66.6666MT
72.0000	300-8036-1-ND	4.13	3.85	3.30	300-8036-2-ND	1540.00/M	CSX750PCC72.0000MT
80.0000	300-8037-1-ND	4.13	3.85	3.30	300-8037-2-ND	1540.00/M	CSX750PCC80.0000MT

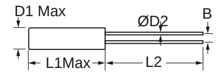
CFS, CFV, and CSA Series Cylinder Type Crystals

SPECIFATIONS: • **Frequency Tolerance:** CFS Series: ±20ppm; CFV & CSA Series: ±30ppm • **Operating Temperature Range:** -10°C to +60°C • **Storage Temperature Range:** -40°C to +85°C • **Drive Level:** CFS & CFV Series: 1µW Max.; CSA Series: 50µW to 100µW • **Insulation Resistance:** 500MΩ Min. • **Aging (first year):** CFS Series: ±3ppm Max.; CFV & CSA Series: ±5ppm Max.

Equivalent Series Resistance (ESR, R1) (ΩMax.) for CSA Series

Frequency	ESR	Mode
3.5MHz ≤ fo < 4MHz	200	Fundamental
4MHz ≤ fo < 6MHz	150	
6MHz ≤ fo < 10MHz	100	
10MHz ≤ fo < 30MHz	50	
30MHz < fo < 36MHz	100	3rd OT
36MHz ≤ fo < 66.6666MHz	80	

Cylinder Type



Series	L1 max.	L2	D1 max.	D2	B
	Dimensions (mm)				
CFS145	5.1	4.3	1.5	0.20	0.45
CFS206	6.2	10	2.1	0.26	0.7
CFS308	8.2	10	3.1	0.35	1.1
CFV206	6.2	10	2.1	0.26	0.7
CSA310	10.5	10	3.2	0.32	1.1
CSA309	9.0	10	3.2	0.32	1.1

Series	Frequency	Load Cap. (pF)	Shunt Cap. (pF)	Digi-Key Part No.	Price Each 1	10	50	Citizen Part No.
CFS145	32.768 KHz	12.5	1.00	300-1003-ND	.95	.81	.68	CFS145-32.768KDZF
CFS206	32.768 KHz	12.5	1.35	300-1002-ND	.42	.36	.24	CFS206-32.768KDZF
CFS308	32.768 KHz	12.5	1.60	300-1001-ND	.42	.36	.24	CFS308-32.768KDZF
CFV206	32.000 KHz	12.5	0.8-1.7	300-3007-ND	1.13	1.02	.73	CFV206-32.000KAZF
	40.000 KHz	12.5	0.8-1.7	300-3015-ND	1.13	1.02	.73	CFV206-40.000KAZF
	60.000 KHz	12.5	0.8-1.7	300-3018-ND	1.13	1.02	.73	CFV206-60.000KAZF
	60.005 KHz	12.5	0.8-1.7	300-3019-ND	1.13	1.02	.73	CFV206-60.005KAZF
	65.536 KHz	12.5	0.8-1.7	300-3020-ND	1.13	1.02	.73	CFV206-65.536KAZF
	75.000 KHz	12.5	0.8-1.7	300-3021-ND	1.13	1.02	.73	CFV206-75.000KAZF
	76.790 KHz	12.5	0.8-1.7	300-3022-ND	1.13	1.02	.73	CFV206-76.790KAZF
	76.800 KHz	12.5	0.8-1.7	300-3023-ND	1.13	1.02	.73	CFV206-76.800KAZF
	76.810 KHz	12.5	0.8-1.7	300-3024-ND	1.13	1.02	.73	CFV206-76.810KAZF
	77.500 KHz	12.5	0.8-1.7	300-3025-ND	1.13	1.02	.73	CFV206-77.500KAZF
	77.503 KHz	12.5	0.8-1.7	300-3026-ND	1.13	1.02	.73	CFV206-77.503KAZF
	96.000 KHz	12.5	0.8-1.7	300-3029-ND	1.13	1.02	.73	CFV206-96.000KAZF
	100.000 KHz	12.5	0.8-1.7	300-3030-ND	1.13	1.02	.73	CFV206-100.000KAZF
CSA310	3.579545 MHz	18.0	5.0	300-1008-ND	.91	.78	.65	CSA310-3.57954MABJ
	3.6864 MHz	18.0	5.0	300-1009-ND	.91	.78	.65	CSA310-3.6864MABJ
	4.000 MHz	18.0	5.0	300-1010-ND	.91	.78	.65	CSA310-4.000MABJ
CSA309	4.096 MHz	18.0	5.0	300-5001-ND	.91	.78	.65	CSA309-4.096MABJ
	4.800 MHz	18.0	5.0	300-5002-ND	.91	.78	.65	CSA309-4.800MABJ
	4.915 MHz	18.0	5.0	300-5003-ND	.91	.78	.65	CSA309-4.915MABJ
	5.120 MHz	18.0	5.0	300-5004-ND	.91	.78	.65	CSA309-5.120MABJ
	5.5296 MHz	18.0	5.0	300-5005-ND	.91	.78	.65	CSA309-5.5296MABJ
	6.000 MHz	18.0	5.0	300-5006-ND	.91	.78	.65	CSA309-6.000MABJ
	6.144 MHz	18.0	5.0	300-5007-ND	.91	.78	.65	CSA309-6.144MABJ
	7.3728 MHz	18.0	5.0	300-5008-ND	.91	.78	.65	CSA309-7.3728MABJ
	7.680 MHz	18.0	5.0	300-5009-ND	.91	.78	.65	CSA309-7.680MABJ
	8.000 MHz	18.0	5.0	300-5010-ND	.91	.78	.65	CSA309-8.000MABJ
	8.000156 MHz	18.0	5.0	300-5011-ND	.91	.78	.65	CSA309-8.000156MABJ
	8.192 MHz	18.0	5.0	300-5012-ND	.91	.78	.65	CSA309-8.192MABJ
	9.216 MHz	18.0	5.0	300-5013-ND	.91	.78	.65	CSA309-9.216MABJ
	9.600 MHz	18.0	5.0	300-5014-ND	.91	.78	.65	CSA309-9.600MABJ
	9.8304 MHz	18.0	5.0	300-5015-ND	.91	.78	.65	CSA309-9.8304MABJ
	10.000 MHz	18.0	5.0	300-5016-ND	.91	.78	.65	CSA309-10.000MABJ
	10.240 MHz	18.0	5.0	300-5017-ND	.91	.78	.65	CSA309-10.240MABJ
	11.000 MHz	18.0	5.0	300-5018-ND	.91	.78	.65	CSA309-11.000MABJ
	11.0592 MHz	18.0	5.0	300-5019-ND	.91	.78	.65	CSA309-11.0592MABJ
	11.2896 MHz	18.0	5.0	300-5020-ND	.91	.78	.65	CSA309-11.2896MABJ
	12.000 MHz	18.0	5.0	300-5021-ND	.91	.78	.65	CSA309-12.000MABJ
	12.288 MHz	18.0	5.0	300-5022-ND	.91	.78	.65	CSA309-12.288MABJ
	12.352 MHz	18.0	5.0	300-5023-ND	.91	.78	.65	CSA309-12.352MABJ
	12.500 MHz	18.0	5.0	300-5024-ND	.91	.78	.65	CSA309-12.500MABJ
	13.500 MHz	18.0	5.0	300-5025-ND	.91	.78	.65	CSA309-13.500MABJ
	14.31818 MHz	18.0	5.0	300-5026-ND	.91	.78	.65	CSA309-14.31818MABJ
	14.7456 MHz	18.0	5.0	300-5027-ND	.91	.78	.65	CSA309-14.7456MABJ
	15.000 MHz	18.0	5.0	300-5028-ND	.91	.78	.65	CSA309-15.000MABJ
	15.360 MHz	18.0	5.0	300-5029-ND	.91	.78	.65	CSA309-15.360MABJ
	16.000 MHz	18.0	5.0	300-5030-ND	.91	.78	.65	CSA309-16.000MABJ
	16.000312 MHz	18.0	5.0	300-5031-ND	.91	.78	.65	CSA309-16.000312MABJ
	16.257 MHz	18.0	5.0	300-5032-ND	.91	.78	.65	CSA309-16.257MABJ
	16.384 MHz	18.0	5.0	300-5033-ND	.91	.78	.65	CSA309-16.384MABJ
	16.667 MHz	18.0	5.0	300-5034-ND	.91	.78	.65	CSA309-16.667MABJ
	16.9344 MHz	18.0	5.0	300-5035-ND	.91	.78	.65	CSA309-16.9344MABJ
	17.734475 MHz	18.0	5.0	300-5036-ND	.91	.78	.65	CSA309-17.734475MABJ
	18.000 MHz	18.0	5.0	300-5037-ND	.91	.78	.65	CSA309-18.000MABJ
	18.432 MHz	18.0	5.0	300-5038-ND	.91	.78	.65	CSA309-18.432MABJ
	18.869 MHz	18.0	5.0	300-5039-ND	.91	.78	.65	CSA309-18.869MABJ
	19.6608 MHz	18.0	5.0	300-5040-ND	.91	.78	.65	CSA309-19.6608MABJ
	20.000 MHz	18.0	5.0	300-5041-ND	.91	.78	.65	CSA309-20.000MABJ
	20.480 MHz	18.0	5.0	300-5042-ND	.91	.78	.65	CSA309-20.480MABJ
	22.1184 MHz	18.0	5.0	300-5043-ND	.91	.78	.65	CSA309-22.1184MABJ
	24.000 MHz	18.0	5.0	300-5044-ND	.91	.78	.65	CSA309-24.000MABJ
	24.576 MHz	18.0	5.0	300-5045-ND	.91	.78	.65	CSA309-24.576MABJ
	25.000 MHz	18.0	5.0	300-5046-ND	.91	.78	.65	CSA309-25.000MABJ
	25.175 MHz	18.0	5.0	300-5047-ND	.91	.78	.65	CSA309-25.175MABJ
	27.000 MHz	18.0	5.0	300-5048-ND	.91	.78	.65	CSA309-27.000MABJ
	28.000 MHz	18.0	5.0	300-5049-ND	.91	.78	.65	CSA309-28.000MABJ
	28.322 MHz	18.0	5.0	300-5050-ND	.91	.78	.65	CSA309-28.322MABJ
	28.63636 MHz	18.0	5.0	300-5051-ND	.91	.78	.65	CSA309-28.63636MABJ
	29.4912 MHz	18.0	5.0	300-5052-ND	.91	.78	.65	CSA309-29.4912MABJ
	30.000 MHz	18.0	5.0	300-5053-ND	.91	.78	.65	CSA309-30.000MABJ
	32.000 MHz	18.0	5.0	300-5054-ND	.91	.78	.65	CSA309-32.000MABJ
	32.768 MHz	18.0	5.0	300-5055-ND	.91	.78	.65	CSA309-32.768MABJ
	33.000 MHz	18.0	5.0	300-5056-ND	.91	.78	.65	CSA309-33.000MABJ
	33.3333 MHz	18.0	5.0	300-5057-ND	.91	.78	.65	CSA309-33.3333MABJ
	33.8688 MHz	18.0	5.0	300-5058-ND	.91	.78	.65	CSA309-33.8688MABJ
	40.000 MHz	18.0	5.0	300-5060-ND	.91	.78	.65	CSA309-40.000MABJ
	48.000 MHz	18.0	5.0	300-5061-ND	.91	.78	.65	CSA309-48.000MABJ
	49.152 MHz	18.0	5.0	300-5062-ND	.91	.78	.65	CSA309-49.152MABJ
	50.000 MHz	18.0	5.0	300-5063-ND	.91	.78	.65	CSA309-50.000MABJ
	53.125 MHz	18.0	5.0	300-5064-ND	.91	.78	.65	CSA309-53.125MABJ
	60.000 MHz	18.0	5.0	300-5065-ND	.91	.78	.65	CSA309-60.000MABJ
	64.000 MHz	18.0	5.0	300-5066-ND	.91	.78	.65	CSA309-64.000MABJ
	66.6666 MHz	18.0	5.0	300-5067-ND	.91	.78	.65	CSA309-66.6666MABJ

CM100S, CM200S, CM201, and CM202 Series Crystals 32.768KHz

SPECIFICATIONS:
• **Frequency Tolerance:** ±20ppm • **Operating Temperature Range:** -40°C to +85°C • **Storage Temperature Range:** -55°C to +125°C • **Equivalent Series Resistance:** 50kΩ Max. • **Load Capacitance:** 12.5pF • **Drive Level:** 1µW Max. • **Insulation Resistance:** 500MΩ Min. • **Aging (first year)** ±3ppm Max.

Fig. 1 - CM100S Series

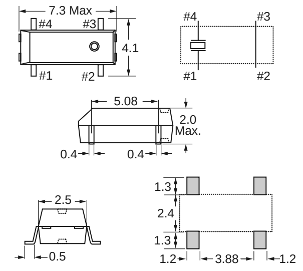


Fig. 2 - CM200S Series

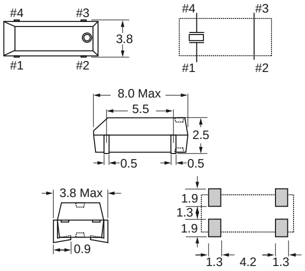


Fig. 3 - CM201 Series

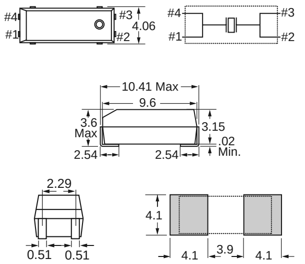


Fig. 4 - CM202 Series

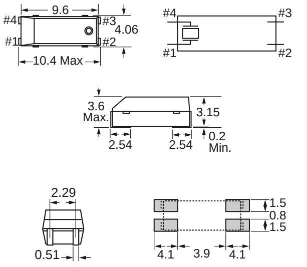
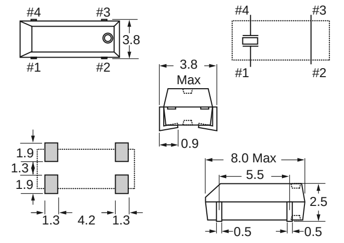


Fig.	Series	Digi-Key Part No.	Cut Tape Price Each 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 2,000	3,000	Citizen Part No.
1	CM100S	300-1007-1-ND	1.58	1.35	1.02	300-1007-2-ND	—	819.23/M	CM100S32.768KDZFT
2	CM200S	300-1004-1-ND	1.19	1.02	.77	300-1004-2-ND	—	618.98/M	CM200S32.768KDZFT
3	CM201	300-1005-1-ND	1.19	1.02	.77	300-1005-2-ND	618.98/M	—	CM201-32.768KDZFT
4	CM202	300-1006-1-ND	1.19	1.02	.77	300-1006-2-ND	618.98/M	—	CM202-32.768KDZFT

CM250S Series Quartz Crystals



SPECIFICATIONS:
- **Frequency Tolerance:** ±50ppm
- **Operating Temperature Range:** -40°C to +85°C
- **Storage Temperature Range:** -55°C to +125°C
- **Load Capacitance:** 12.5pF
- **Shunt Capacitance:** 0.8 to 1.7pF
- **Drive Level:** 1µW Max.
- **Insulation Resistance:** ±500MΩ Min.
- **Aging (first year):** ±5ppm Max.

Frequency	Digi-Key Part No.	Cut Tape Price Each 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 3,000	Citizen Part No.
32.000 KHz	300-2007-1-ND	1.65	1.35	1.20	300-2007-2-ND	864.00/M	CM250S32.000KAZFT
40.000 KHz	300-2015-1-ND	1.65	1.35	1.20	300-2015-2-ND	864.00/M	CM250S40.000KAZFT
60.000 KHz	300-2018-1-ND	1.65	1.35	1.20	300-2018-2-ND	864.00/M	CM250S60.000KAZFT
60.005 KHz	300-2019-1-ND	1.65	1.35	1.20	300-2019-2-ND	864.00/M	CM250S60.005KAZFT
65.536 KHz	300-2020-1-ND	1.65	1.35	1.20	300-2020-2-ND	864.00/M	CM250S65.536KAZFT
75.000 KHz	300-2021-1-ND	1.65	1.35	1.20	300-2021-2-ND	864.00/M	CM250S75.000KAZFT
76.790 KHz	300-2022-1-ND	1.65	1.35	1.20	300-2022-2-ND	864.00/M	CM250S76.790KAZFT
76.800 KHz	300-2023-1-ND	1.65	1.35	1.20	300-2023-2-ND	864.00/M	CM250S76.800KAZFT
76.810 KHz	300-2024-1-ND	1.65	1.35	1.20	300-2024-2-ND	864.00/M	CM250S76.810KAZFT
77.500 KHz	300-2025-1-ND	1.65	1.35	1.20	300-2025-2-ND	864.00/M	CM250S77.500KAZFT
77.503 KHz	300-2026-1-ND	1.65	1.35	1.20	300-2026-2-ND	864.00/M	CM250S77.503KAZFT
96.000 KHz	300-2029-1-ND	1.65	1.35	1.20	300-2029-2-ND	864.00/M	CM250S96.000KAZFT
100.000 KHz	300-2030-1-ND	1.65	1.35	1.20	300-2030-2-ND	864.00/M	CM250S100.000KAZFT
153.600 KHz	300-2031-1-ND	1.65	1.35	1.20	—	—	CM250S153.600KAZFT

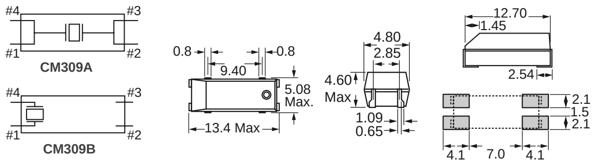
CITIZEN™ CM309 Series Crystals

SPECIFICATIONS:

- **Frequency Tolerance:** ±50ppm
- **Operating Temperature Range:** -40°C to +85°C
- **Storage Temperature Range:** -55°C to +125°C
- **Load Capacitance:** 18pF
- **Shunt Capacitance:** 7.0pF
- **Drive Level:** 50µW to 100µW
- **Insulation Resistance:** 500MΩ Min.
- **Aging (first year):** ±5ppm Max.

Equivalent Series Resistance (ESR, R1)

Frequency	ESR	Mode
3.5MHz ≤ fo < 4MHz	200	Fundamental
4MHz ≤ fo < 6MHz	150	
6MHz ≤ fo < 10MHz	100	
10MHz ≤ fo ≤ 32MHz	50	
30MHz < fo < 36MHz	100	3rd OT
36MHz ≤ fo ≤ 66.6666MHz	80	



	309A Series		309B Series		Cut Tape			Tape & Reel
Frequency (MHz)	Digi-Key Part No.	Citizen Part No.	Digi-Key Part No.	Citizen Part No.	Price Each 1	10	50	Pricing† 1,000
3.579545	300-4001-1-ND	CM309A3.579545MABJT	300-4101-1-ND	CM309B3.579545MABJT	1.40	1.20	.90	700.00
3.6864	300-4002-1-ND	CM309A3.6864MABJT	300-4102-1-ND	CM309B3.6864MABJT	1.40	1.20	.90	700.00
4.000	300-4003-1-ND	CM309A4.000MABJT	300-4103-1-ND	CM309B4.000MABJT	1.40	1.20	.90	700.00
4.096	300-4004-1-ND	CM309A4.096MABJT	300-4104-1-ND	CM309B4.096MABJT	1.40	1.20	.90	700.00
4.800	300-4005-1-ND	CM309A4.800MABJT	300-4105-1-ND	CM309B4.800MABJT	1.40	1.20	.90	700.00
4.915	300-4006-1-ND	CM309A4.915MABJT	300-4106-1-ND	CM309B4.915MABJT	1.40	1.20	.90	700.00
5.120	300-4007-1-ND	CM309A5.120MABJT	300-4107-1-ND	CM309B5.120MABJT	1.40	1.20	.90	700.00
5.5296	300-4008-1-ND	CM309A5.5296MABJT	300-4108-1-ND	CM309B5.5296MABJT	1.40	1.20	.90	700.00
6.000	300-4009-1-ND	CM309A6.000MABJT	300-4109-1-ND	CM309B6.000MABJT	1.40	1.20	.90	700.00
6.144	300-4010-1-ND	CM309A6.144MABJT	300-4110-1-ND	CM309B6.144MABJT	1.40	1.20	.90	700.00
7.3728	300-4011-1-ND	CM309A7.3728MABJT	300-4111-1-ND	CM309B7.3728MABJT	1.40	1.20	.90	700.00
7.680	300-4012-1-ND	CM309A7.680MABJT	300-4112-1-ND	CM309B7.680MABJT	1.40	1.20	.90	700.00
8.000	300-4013-1-ND	CM309A8.000MABJT	300-4113-1-ND	CM309B8.000MABJT	1.40	1.20	.90	700.00
8.000156	300-4014-1-ND	CM309A8.000156MABJT	300-4114-1-ND	CM309B8.000156MABJT	1.40	1.20	.90	700.00
8.192	300-4015-1-ND	CM309A8.192MABJT	300-4115-1-ND	CM309B8.192MABJT	1.40	1.20	.90	700.00
9.216	300-4016-1-ND	CM309A9.216MABJT	300-4116-1-ND	CM309B9.216MABJT	1.40	1.20	.90	700.00
9.600	300-4017-1-ND	CM309A9.600MABJT	300-4117-1-ND	CM309B9.600MABJT	1.40	1.20	.90	700.00
9.8304	300-4018-1-ND	CM309A9.8304MABJT	300-4118-1-ND	CM309B9.8304MABJT	1.40	1.20	.90	700.00
10.000	300-4019-1-ND	CM309A10.000MABJT	300-4119-1-ND	CM309B10.000MABJT	1.40	1.20	.90	700.00
10.240	300-4020-1-ND	CM309A10.240MABJT	300-4120-1-ND	CM309B10.240MABJT	1.40	1.20	.90	700.00
11.000	300-4021-1-ND	CM309A11.000MABJT	300-4121-1-ND	CM309B11.000MABJT	1.40	1.20	.90	700.00
11.0592	300-4022-1-ND	CM309A11.0592MABJT	300-4122-1-ND	CM309B11.0592MABJT	1.40	1.20	.90	700.00
11.2896	300-4023-1-ND	CM309A11.2896MABJT	300-4123-1-ND	CM309B11.2896MABJT	1.40	1.20	.90	700.00
12.000	300-4024-1-ND	CM309A12.000MABJT	300-4124-1-ND	CM309B12.000MABJT	1.40	1.20	.90	700.00
12.288	300-4025-1-ND	CM309A12.288MABJT	300-4125-1-ND	CM309B12.288MABJT	1.40	1.20	.90	700.00
12.352	300-4026-1-ND	CM309A12.352MABJT	300-4126-1-ND	CM309B12.352MABJT	1.40	1.20	.90	700.00
12.500	300-4027-1-ND	CM309A12.500MABJT	300-4127-1-ND	CM309B12.500MABJT	1.40	1.20	.90	700.00
13.500	300-4028-1-ND	CM309A13.500MABJT	300-4128-1-ND	CM309B13.500MABJT	1.40	1.20	.90	700.00
14.31818	300-4029-1-ND	CM309A14.31818MABJT	300-4129-1-ND	CM309B14.31818MABJT	1.40	1.20	.90	700.00
14.7456	300-4030-1-ND	CM309A14.7456MABJT	300-4130-1-ND	CM309B14.7456MABJT	1.40	1.20	.90	700.00
15.000	300-4031-1-ND	CM309A15.000MABJT	300-4131-1-ND	CM309B15.000MABJT	1.40	1.20	.90	700.00
15.360	300-4032-1-ND	CM309A15.360MABJT	300-4132-1-ND	CM309B15.360MABJT	1.40	1.20	.90	700.00
16.000	300-4033-1-ND	CM309A16.000MABJT	300-4133-1-ND	CM309B16.000MABJT	1.40	1.20	.90	700.00
16.000312	300-4034-1-ND	CM309A16.000312MABJT	300-4134-1-ND	CM309B16.000312MABJT	1.40	1.20	.90	700.00
16.257	300-4035-1-ND	CM309A16.257MABJT	300-4135-1-ND	CM309B16.257MABJT	1.40	1.20	.90	700.00
16.384	300-4036-1-ND	CM309A16.384MABJT	300-4136-1-ND	CM309B16.384MABJT	1.40	1.20	.90	700.00
16.667	300-4037-1-ND	CM309A16.667MABJT	300-4137-1-ND	CM309B16.667MABJT	1.40	1.20	.90	700.00
16.9344	300-4038-1-ND	CM309A16.9344MABJT	300-4138-1-ND	CM309B16.9344MABJT	1.40	1.20	.90	700.00
17.734475	300-4039-1-ND	CM309A17.734475MABJT	300-4139-1-ND	CM309B17.734475MABJT	1.40	1.20	.90	700.00
18.000	300-4040-1-ND	CM309A18.000MABJT	300-4140-1-ND	CM309B18.000MABJT	1.40	1.20	.90	700.00
18.432	300-4041-1-ND	CM309A18.432MABJT	300-4141-1-ND	CM309B18.432MABJT	1.40	1.20	.90	700.00
18.869	300-4042-1-ND	CM309A18.869MABJT	300-4142-1-ND	CM309B18.869MABJT	1.40	1.20	.90	700.00
19.6608	300-4043-1-ND	CM309A19.6608MABJT	300-4143-1-ND	CM309B19.6608MABJT	1.40	1.20	.90	700.00
20.000	300-4044-1-ND	CM309A20.000MABJT	300-4144-1-ND	CM309B20.000MABJT	1.40	1.20	.90	700.00
20.480	300-4045-1-ND	CM309A20.480MABJT	300-4145-1-ND	CM309B20.480MABJT	1.40	1.20	.90	700.00
22.1184	300-4046-1-ND	CM309A22.1184MABJT	300-4146-1-ND	CM309B22.1184MABJT	1.40	1.20	.90	700.00
24.000	300-4047-1-ND	CM309A24.000MABJT	300-4147-1-ND	CM309B24.000MABJT	1.40	1.20	.90	700.00
24.576	300-4048-1-ND	CM309A24.576MABJT	300-4148-1-ND	CM309B24.576MABJT	1.40	1.20	.90	700.00
25.000	300-4049-1-ND	CM309A25.000MABJT	300-4149-1-ND	CM309B25.000MABJT	1.40	1.20	.90	700.00
25.175	300-4050-1-ND	CM309A25.175MABJT	300-4150-1-ND	CM309B25.175MABJT	1.40	1.20	.90	700.00
27.000	300-4051-1-ND	CM309A27.000MABJT	300-4151-1-ND	CM309B27.000MABJT	1.40	1.20	.90	700.00
28.000	300-4052-1-ND	CM309A28.000MABJT	300-4152-1-ND	CM309B28.000MABJT	1.40	1.20	.90	700.00
28.322	300-4053-1-ND	CM309A28.322MABJT	300-4153-1-ND	CM309B28.322MABJT	1.40	1.20	.90	700.00
28.63636	300-4054-1-ND	CM309A28.63636MABJT	300-4154-1-ND	CM309B28.63636MABJT	1.40	1.20	.90	700.00
29.4912	300-4055-1-ND	CM309A29.4912MABJT	300-4155-1-ND	CM309B29.4912MABJT	1.40	1.20	.90	700.00
30.000	300-4056-1-ND	CM309A30.000MABJT	300-4156-1-ND	CM309B30.000MABJT	1.40	1.20	.90	700.00
32.000	300-4057-1-ND	CM309A32.000MABJT	300-4157-1-ND	CM309B32.000MABJT	1.40	1.20	.90	700.00
32.768	300-4058-1-ND	CM309A32.768MABJT	300-4158-1-ND	CM309B32.768MABJT	1.40	1.20	.90	700.00
33.000	300-4059-1-ND	CM309A33.000MABJT	300-4159-1-ND	CM309B33.000MABJT	1.40	1.20	.90	700.00
33.3333	300-4060-1-ND	CM309A33.3333MABJT	300-4160-1-ND	CM309B33.3333MABJT	1.40	1.20	.90	700.00
33.8688	300-4061-1-ND	CM309A33.8688MABJT	300-4161-1-ND	CM309B33.8688MABJT	1.40	1.20	.90	700.00
40.000	300-4063-1-ND	CM309A40.000MABJT	300-4163-1-ND	CM309B40.000MABJT	1.40	1.20	.90	700.00
48.000	300-4064-1-ND	CM309A48.000MABJT	300-4164-1-ND	CM309B48.000MABJT	1.40	1.20	.90	700.00
49.152	300-4065-1-ND	CM309A49.152MABJT	300-4165-1-ND	CM309B49.152MABJT	1.40	1.20	.90	700.00
50.000	300-4066-1-ND	CM309A50.000MABJT	300-4166-1-ND	CM309B50.000MABJT	1.40	1.20	.90	700.00
53.125	300-4067-1-ND	CM309A53.125MABJT	300-4167-1-ND	CM309B53.125MABJT	1.40	1.20	.90	700.00
60.000	300-4068-1-ND	CM309A60.000MABJT	300-4168-1-ND	CM309B60.000MABJT	1.40	1.20	.90	700.00
64.000	300-4069-1-ND	CM309A64.000MABJT	300-4169-1-ND	CM309B64.000MABJT	1.40	1.20	.90	700.00
66.6666	300-4070-1-ND	CM309A66.6666MABJT	300-4170-1-ND	CM309B66.6666MABJT	1.40	1.20	.90	700.00

† For Tape & Reel part number, change -1-ND to -2-ND.

CITIZEN™ Quartz Crystals

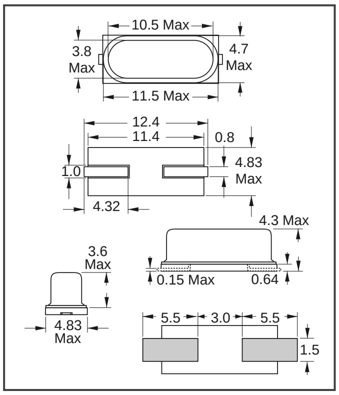
HCM49 Series Surface Mount Crystals

SPECIFICATIONS:

- **Frequency Tolerance:** ±50ppm
- **Operating Temperature Range:** -10°C to +60°C
- **Storage Temperature Range:** -40°C to +85°C
- **Load Capacitance:** 18pfd
- **Shunt Capacitance:** 7.0pF Max.
- **Drive Level:** 100µW
- **Insulation Resistance:** 500MΩ Min.
- **Aging (first year):** ±5ppm Max.

Equivalent Series Resistance (ESR, R1) (Ohm Max.)

Frequency	ESR
3.5MHz ≤ fo < 4.0MHz	200
4.0MHz ≤ fo < 6.0MHz	150
6.0MHz ≤ fo < 10.0MHz	100
10.0MHz ≤ fo < 14.0MHz	80
14.0MHz ≤ fo ≤ 25.0MHz	50



Frequency (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 1,000	Citizen Part No.
3.579545	300-6101-1-ND	1.13	.98	.85	300-6101-2-ND	525.00	HCM49-3.579545MABJT
3.6864	300-6102-1-ND	1.13	.98	.85	300-6102-2-ND	525.00	HCM49-3.6864MABJT
4.000	300-6103-1-ND	1.13	.98	.85	300-6103-2-ND	525.00	HCM49-4.000MABJT
4.032	300-6104-1-ND	1.13	.98	.85	300-6104-2-ND	525.00	HCM49-4.032MABJT
4.096	300-6105-1-ND	1.13	.98	.85	300-6105-2-ND	525.00	HCM49-4.096MABJT
4.194304	300-6106-1-ND	1.13	.98	.85	300-6106-2-ND	525.00	HCM49-4.194304MABJT
4.433619	300-6107-1-ND	1.13	.98	.85	300-6107-2-ND	525.00	HCM49-4.433619MABJT
4.9152	300-6108-1-ND	1.13	.98	.85	300-6108-2-ND	525.00	HCM49-4.9152MABJT
5.000	300-6109-1-ND	1.13	.98	.85	300-6109-2-ND	525.00	HCM49-5.000MABJT
5.0688	300-6110-1-ND	1.13	.98	.85	300-6110-2-ND	525.00	HCM49-5.0688MABJT
5.9904	300-6111-1-ND	1.13	.98	.85	300-6111-2-ND	525.00	HCM49-5.9904MABJT
6.000	300-6112-1-ND	1.13	.98	.85	300-6112-2-ND	525.00	HCM49-6.000MABJT
6.144	300-6113-1-ND	1.13	.98	.85	300-6113-2-ND	525.00	HCM49-6.144MABJT
6.500	300-6114-1-ND	1.13	.98	.85	300-6114-2-ND	525.00	HCM49-6.500MABJT
7.3728	300-6115-1-ND	1.13	.98	.85	300-6115-2-ND	525.00	HCM49-7.3728MABJT
7.680	300-6116-1-ND	1.13	.98	.85	300-6116-2-ND	525.00	HCM49-7.680MABJT
8.000	300-6117-1-ND	1.13	.98	.85	300-6117-2-ND	525.00	HCM49-8.000MABJT
9.000	300-6118-1-ND	1.13	.98	.85	300-6118-2-ND	525.00	HCM49-9.000MABJT
9.8304	300-6120-1-ND	1.13	.98	.85	300-6120-2-ND	525.00	HCM49-9.8304MABJT
10.000	300-6121-1-ND	1.13	.98	.85	300-6121-2-ND	525.00	HCM49-10.000MABJT
10.240	300-6122-1-ND	1.13	.98	.85	300-6122-2-ND	525.00	HCM49-10.240MABJT
11.000	300-6123-1-ND	1.13	.98	.85	300-6123-2-ND	525.00	HCM49-11.000MABJT
11.0592	300-6124-1-ND	1.13	.98	.85	300-6124-2-ND	525.00	HCM49-11.0592MABJT
11.520	300-6125-1-ND	1.13	.98	.85	300-6125-2-ND	525.00	HCM49-11.520MABJT
12.000	300-6127-1-ND	1.13	.98	.85	300-6127-2-ND	525.00	HCM49-12.000MABJT
12.000393	300-6128-1-ND	1.13	.98	.85	300-6128-2-ND	525.00	HCM49-12.000393MABJT
12.288	300-6129-1-ND	1.13	.98	.85	300-6129-2-ND	525.00	HCM49-12.288MABJT
14.31818	300-6130-1-ND	1.13	.98	.85	300-6130-2-ND	525.00	HCM49-14.31818MABJT
14.7456	300-6131-1-ND	1.13	.98	.85	300-6131-2-ND	525.00	HCM49-14.7456MABJT
15.000	300-6132-1-ND	1.13	.98	.85	300-6132-2-ND	525.00	HCM49-15.000MABJT
15.360	300-6133-1-ND	1.13	.98	.85	300-6133-2-ND	525.00	HCM49-15.360MABJT
16.000	300-6134-1-ND	1.13	.98	.85	300-6134-2-ND	525.00	HCM49-16.000MABJT
16.000312	300-6135-1-ND	1.13	.98	.85	300-6135-2-ND	525.00	HCM49-16.000312MABJT
16.257	300-6136-1-ND	1.13	.98	.85	300-6136-2-ND	525.00	HCM49-16.257MABJT
16.384	300-6137-1-ND	1.13	.98	.85	300-6137-2-ND	525.00	HCM49-16.384MABJT
17.734475	300-6138-1-ND	1.13	.98	.85	300-6138-2-ND	525.00	HCM49-17.734475MABJT
18.000	300-6139-1-ND	1.13	.98	.85	300-6139-2-ND	525.00	HCM49-18.000MABJT
18.432	300-6140-1-ND	1.13	.98	.85	300-6140-2-ND	525.00	HCM49-18.432MABJT
19.6608	300-6141-1-ND	1.13	.98	.85	300-6141-2-ND	525.00	HCM49-19.6608MABJT
20.000	300-6142-1-ND	1.13	.98	.85	300-6142-2-ND	525.00	HCM49-20.000MABJT
21.47727	300-6143-1-ND	1.13	.98	.85	300-6143-2-ND	525.00	HCM49-21.47727MABJT
22.1184	300-6144-1-ND	1.13	.98	.85	300-6144-2-ND	525.00	HCM49-22.1184MABJT
24.000	300-6145-1-ND	1.13	.98	.85	300-6145-2-ND	525.00	HCM49-24.000MABJT
24.00014	300-6146-1-ND	1.13	.98	.85	300-6146-2-ND	525.00	HCM49-24.00014MABJT
24.576	300-6147-1-ND	1.13	.98	.85	300-6147-2-ND	525.00	HCM49-24.576MABJT
25.000	300-6148-1-ND	1.13	.98	.85	300-6148-2-ND	525.00	HCM49-25.000MABJT
25.175	300-6149-1-ND	1.13	.98	.85	300-6149-2-ND	525.00	HCM49-25.175MABJT
27.000	300-6150-1-ND	1.13	.98	.85	300-6150-2-ND	525.00	HCM49-27.000MABJT
28.63636	300-6152-1-ND	1.13	.98	.85	300-6152-2-ND	525.00	HCM49-28.63636MABJT
32.000	300-6153-1-ND	1.13	.98	.85	300-6153-2-ND	525.00	HCM49-32.000MABJT
33.8688	300-6156-1-ND	1.13	.98	.85	300-6156-2-ND	525.00	HCM49-33.8688MABJT
40.000	300-6157-1-ND	1.13	.98	.85	300-6157-2-ND	525.00	HCM49-40.000MABJT
48.000	300-6158-1-ND	1.13	.98	.85	300-6158-2-ND	525.00	HCM49-48.000MABJT
49.152	300-6159-1-ND	1.13	.98	.85	300-6159-2-ND	525.00	HCM49-49.152MABJT
50.000	300-6160-1-ND	1.13	.98	.85	300-6160-2-ND	525.00	HCM49-50.000MABJT

HC49US Series Through-Hole Crystals

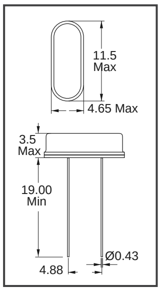
SPECIFICATIONS:

- **Frequency Tolerance:** ±50ppm
- **Operating Temperature Range:** -10°C to +60°C
- **Storage Temperature Range:** -40°C to +85°C
- **Load Capacitance:** 18pfd
- **Shunt Capacitance:** 7.0pF Max.
- **Drive Level:** 100µW
- **Insulation Resistance:** 500MΩ Min.
- **Aging (first year):** ±5ppm Max.

Equivalent Series Resistance (ESR, R1) (Ohm Max.)

Frequency	ESR
3.5MHz ≤ fo < 4.0MHz	200
4.0MHz ≤ fo < 6.0MHz	150

Frequency	ESR
6.0MHz ≤ fo < 10.0MHz	100
10.0MHz ≤ fo < 14.0MHz	80
14.0MHz ≤ fo ≤ 25.0MHz	50



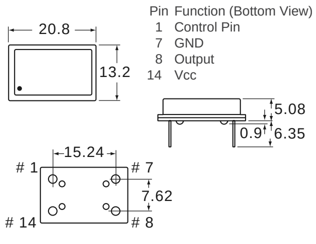
Frequency (MHz)	Digi-Key Part No.	Price Each 1	10	50	Citizen Part No.
3.579545	300-6001-ND	.88	.75	.69	HC49US3.579545MABJ
3.6864	300-6002-ND	.88	.75	.69	HC49US3.6864MABJ
4.000	300-6003-ND	.88	.75	.69	HC49US4.000MABJ
4.032	300-6004-ND	.88	.75	.69	HC49US4.032MABJ
4.096	300-6005-ND	.88	.75	.69	HC49US4.096MABJ
4.194304	300-6006-ND	.88	.75	.69	HC49US4.194304MABJ
4.433619	300-6007-ND	.88	.75	.69	HC49US4.433619MABJ
4.9152	300-6008-ND	.88	.75	.69	HC49US4.9152MABJ
5.000	300-6009-ND	.88	.75	.69	HC49US5.000MABJ
5.0688	300-6010-ND	.88	.75	.69	HC49US5.0688MABJ
5.9904	300-6011-ND	.88	.75	.69	HC49US5.9904MABJ
6.000	300-6012-ND	.88	.75	.69	HC49US6.000MABJ
6.144	300-6013-ND	.88	.75	.69	HC49US6.144MABJ
6.500	300-6014-ND	.88	.75	.69	HC49US6.500MABJ
7.3728	300-6015-ND	.88	.75	.69	HC49US7.3728MABJ
7.680	300-6016-ND	.88	.75	.69	HC49US7.680MABJ
8.000	300-6017-ND	.88	.75	.69	HC49US8.000MABJ
9.000	300-6018-ND	.88	.75	.69	HC49US9.000MABJ
9.216	300-6019-ND	.88	.75	.69	HC49US9.216MABJ
9.8304	300-6020-ND	.88	.75	.69	HC49US9.8304MABJ
10.000	300-6021-ND	.88	.75	.69	HC49US10.000MABJ
10.240	300-6022-ND	.88	.75	.69	HC49US10.240MABJ
11.000	300-6023-ND	.88	.75	.69	HC49US11.00MABJ
11.0592	300-6024-ND	.88	.75	.69	HC49US11.0592MABJ
11.520	300-6025-ND	.88	.75	.69	HC49US11.520MABJ
12.000	300-6027-ND	.88	.75	.69	HC49US12.000MABJ
12.000393	300-6028-ND	.88	.75	.69	HC49US12.000393MABJ
12.288	300-6029-ND	.88	.75	.69	HC49US12.288MABJ
14.31818	300-6030-ND	.88	.75	.69	HC49US14.31818MABJ
14.7456	300-6031-ND	.88	.75	.69	HC49US14.7456MABJ
15.000	300-6032-ND	.88	.75	.69	HC49US15.000MABJ
15.360	300-6033-ND	.88	.75	.69	HC49US15.360MABJ
16.000	300-6034-ND	.88	.75	.69	HC49US16.000MABJ
16.000312	300-6035-ND	.88	.75	.69	HC49US16.000312MABJ
16.257	300-6036-ND	.88	.75	.69	HC49US16.257MABJ
16.384	300-6037-ND	.88	.75	.69	HC49US16.384MABJ
17.734475	300-6038-ND	.88	.75	.69	HC49US17.734475MABJ
18.000	300-6039-ND	.88	.75	.69	HC49US18.000MABJ
18.432	300-6040-ND	.88	.75	.69	HC49US18.432MABJ
19.6608	300-6041-ND	.88	.75	.69	HC49US19.6608MABJ
20.000	300-6042-ND	.88	.75	.69	HC49US20.000MABJ
21.47727	300-6043-ND	.88	.75	.69	HC49US21.47727MABJ
22.1184	300-6044-ND	.88	.75	.69	HC49US22.1184MABJ
24.000	300-6045-ND	.88	.75	.69	HC49US24.000MABJ
24.00014	300-6046-ND	.88	.75	.69	HC49US24.00014MABJ
24.576	300-6047-ND	.88	.75	.69	HC49US24.576MABJ
25.000	300-6048-ND	.88	.75	.69	HC49US25.000MABJ
25.175	300-6049-ND	.88	.75	.69	HC49US25.175MABJ
27.000	300-6050-ND	.88	.75	.69	HC49US27.000MABJ
28.224	300-6051-ND	.88	.75	.69	HC49US28.224MABJ
28.63636	300-6052-ND	.88	.75	.69	HC49US28.63636MABJ
32.000	300-6053-ND	.88	.75	.69	HC49US32.000MABJ
33.8688	300-6056-ND	.88	.75	.69	HC49US33.8688MABJ
40.000	300-6057-ND	.88	.75	.69	HC49US40.000MABJ
48.000	300-6058-ND	.88	.75	.69	HC49US48.000MABJ
50.000	300-6060-ND	.88	.75	.69	HC49US50.000MABJ

NEW! CARDINAL COMPONENTS, INC.

FIPO™ Field Instantly Programmable Oscillators

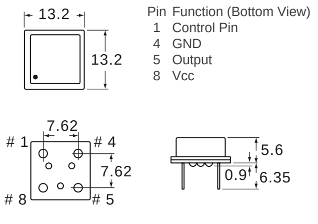
The FIPO system from Cardinal is indispensable for such things as prototypes, early stage design, unexpected design problems, modification, immediate service, a sudden ramp in production and volume production. Cardinal Oscillator Blanks are "Twice Programmable" to correct errors or to reuse the same part for two separate applications with different frequency and/or different output characteristics without having to dispose of the original part. Oscillator Blanks are available in four different package styles: Full Size 14 Pin Dip, Half Size 8 Pin Dip, 5x7 Ceramic SMD, and a Plastic SMD package. Frequency ranges are available from 1MHz to 133MHz in 5V, and 1MHz to 100MHz in 3.3V, and in ±100ppm, 50ppm and ±25ppm frequency stability options.

Fig. 1 (Style 1) Full Size 14 Pin Dip



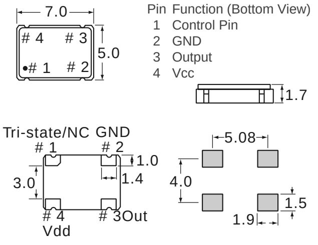
Pin	Function (Bottom View)
1	Control Pin
7	GND
8	Output
14	Vcc

Fig. 2 (Style 4) Half Size 8 Pin Dip



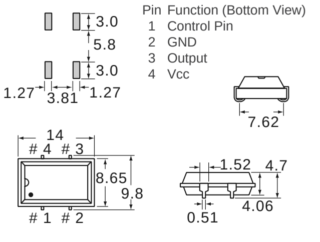
Pin	Function (Bottom View)
1	Control Pin
4	GND
5	Output
8	Vcc

Fig. 3 (Style 7) 5x7 Ceramic Dip



Pin	Function (Bottom View)
1	Control Pin
2	GND
3	Output
4	Vcc

Fig. 4 (Style 8) Plastic SMD



Pin	Function (Bottom View)
1	Control Pin
2	GND
3	Output
4	Vcc

Example Part Number:

CPP □□-□□□□□-ND

#1

	Output
C	CMOS
T	TTL

#2

	Package Style
1	Full Size
4	Half Size
7	5 x 7 Ceramic
8	Plastic SMD

#3

	Voltage
H	5 Volt
L	3.3 Volt

H = 1 thru 133MHz
L = 1 thru 100MHz

#4

	Packaging
T	Tube
Z	Tape & Reel

Package style 1 and 4 available in tube packaging only. Package style 7 and 8 available in tube and tape & reel

#5

	Operating Temp.
0	0°C to 70°C
5	-20°C to 70°C
7	-40°C to 80°C

#6

	Stability
6	±100ppm
P	±50ppm
R	±25ppm

R not available in -40°C to +80°C

#7

	Function
T	Tri-State
P	Power Down

How to Select Base Number:

# 1 = Select Output
# 2 = Select Package Style
# 3 = Select Voltage
# 4 = Select Packaging
# 5 = Select Operating Temperature
# 6 = Select Stability
# 7 = Select Function

Call Digi-Key with your Selected Base Part Number, and a Sales Representative will enter your desired frequency.

Tri-State Mode – The output of the part is weakly pulled low when the control pin goes low. The active circuitry continues to operate, allowing a rapid return to normal operation when the control pin goes high.

Power Down Mode – When the control pin goes low, all active circuitry on the chip within the oscillator is shut down. For reactivation, time in which the part regains its output is minimal.

Digi-Key* Base Part No.	Price Each 1	10	50	100
CPPC1-□T□R□-ND	6.20	5.74	5.12	4.66
CPPC1-□T□□□-ND	5.40	5.00	4.46	4.05
CPPT1-□T□R□-ND	6.20	5.74	5.12	4.66
CPPT1-□T□□□-ND	5.40	5.00	4.46	4.05
CPPC4-□T□R□-ND	6.20	5.74	5.12	4.66
CPPC4-□T□□□-ND	5.40	5.00	4.46	4.05
CPPT4-□T□R□-ND	6.20	5.74	5.12	4.66
CPPT4-□T□□□-ND	5.40	5.00	4.46	4.05

Digi-Key*	Price Each				Tape & Reel Pricing		
Base Part No.	1	10	50	100	100	500	1000
CPPC7-□□□R□-ND	5.76	5.33	4.76	4.31	438.48	1627.78	2930.00
CPPC7-□□□□□-ND	5.00	4.63	4.13	3.75	382.50	1417.80	2550.00
CPPT7-□□□R□-ND	5.76	5.33	4.76	4.31	438.48	1627.78	2930.00
CPPT7-□□□□□-ND	5.00	4.63	4.13	3.75	382.50	1417.80	2550.00
CPPC8-□□□R□-ND	6.20	5.74	5.12	4.66	473.52	1752.83	3160.16
CPPC8-□□□□□-ND	5.40	5.00	4.46	4.05	412.50	1527.78	2750.00
CPPT8-□□□R□-ND	6.20	5.74	5.12	4.66	473.52	1752.83	3160.16
CPPT8-□□□□□-ND	5.40	5.00	4.46	4.05	412.50	1527.78	2750.00

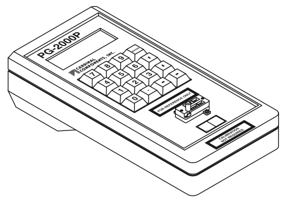
*Programmable parts are non-cancelable and non-returnable!

Stand-Alone Field Oscillator Programmer

Features:

- Create oscillators, at a user specified frequency, within seconds, IN THE FIELD
- No programming skills needed to create finished oscillators from sealed oscillator blanks
- Designed for low-volume program applications such as engineering, field sales, and sample quantity
- Internal frequency reference for single step programming
- Simple User Interface
- Cardinal 4-pin oscillators are easily inserted into a ZIF socket or SMD adapter for quick programming
- Oscillator characteristics are selected via keypad and 4-line LCD display

Stand Alone Programmer



PG-2000P-ND

Description	Digi-Key Part No.	Price Each
Blank Oscillator, Full Size, ±50ppm or ±100ppm	CPPX1-A7BR-ND	4.73
Blank Oscillator, Full Size, ±25ppm	CPPX1-A5BC-ND	5.43
Blank Oscillator, Half Size, ±50ppm or ±100ppm	CPPX4-A7BR-ND	4.73
Blank Oscillator, Half Size, ±25ppm	CPPX4-A5BC-ND	5.43
Blank Oscillator, 5x7 Ceramic SMD, ±50ppm or 100ppm	CPPX7-A7BR-ND	4.38
Blank Oscillator, 5x7 Ceramic SMD, ±25ppm	CPPX7-A5BC-ND	5.04
Blank Oscillator, Plastic SMD, ±50ppm or ±100ppm	CPPX8-A7BR-ND	4.73
Blank Oscillator, Plastic SMD, ±25ppm	CPPX8-A5BC-ND	5.43
SMD Programming Socket for 5x7 Ceramic Oscillators	SC2000-ND	47.38
SMD Programming Socket for Plastic SMD Oscillators	SC2500-ND	88.00
Stand Alone Programmer	PG2000P-ND	1800.00

See Figures Above for Package Specifications

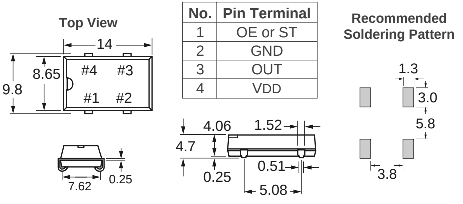
EPSON ELECTRONICS
AMERICA, INC.

SG-8002 Programmable Oscillators

The SG-8002 Series gives you the flexibility to solve many different application problems with a one time programmable device. Programmable Oscillators provide the ability to pick a custom frequency in one of five different packages available in SMD and Thru-Hole styles. These five packages are pin compatible with the Epson SG-615, SG-636, SG-51, SG-531 and SG-710 Oscillators. Frequency ranges are available from 1Mhz to 125Mhz, in ±100ppm and ±50ppm frequency stability options and 3.3 or 5V power supply levels.

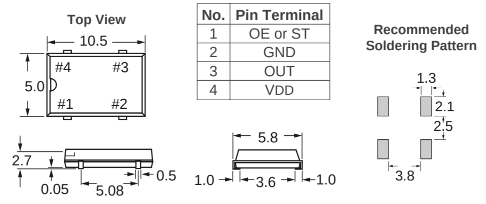
Dim. in mm

SG-615 Package (JA)



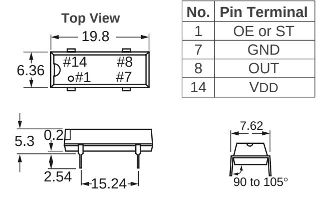
No.	Pin Terminal
1	OE or ST
2	GND
3	OUT
4	VDD

SG-636 Package (JC)



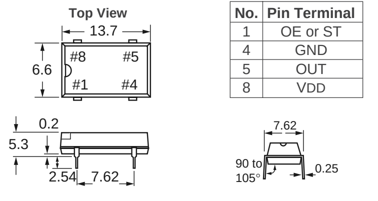
No.	Pin Terminal
1	OE or ST
2	GND
3	OUT
4	VDD

SG-51 Package (DB)



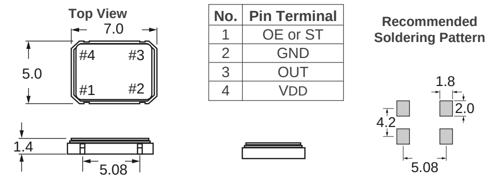
No.	Pin Terminal
1	OE or ST
7	GND
8	OUT
14	VDD

SG-531 Package (DC)



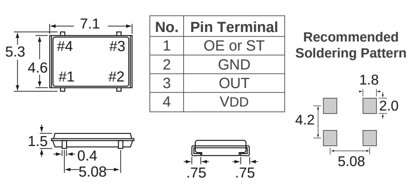
No.	Pin Terminal
1	OE or ST
4	GND
5	OUT
8	VDD

SG-710 Package (CA)



No.	Pin Terminal
1	OE or ST
2	GND
3	OUT
4	VDD

Package (JF) *NEW!*



No.	Pin Terminal
1	OE or ST
2	GND
3	OUT
4	VDD

Example Part Number:

SG-8002 ☐☐ - ☐ ☐ ☐ -ND

How to order:

#1 = Select *Package.*
#2 = Select *Function.*
#3 = Select *Power Supply Duty Level.*
#4 = Select *Frequency Stability and Operating Temperature.*

Call Digi-Key with your Base Part Number and an Operator will enter your desired frequency.

#1	
	Package
JA	SG-615
JC	SG-636
DB	SG-51
DC	SG-531
CA	SG-710
JF	—

#2	
	Function
P	Output Enable
S	Standby

#3		*#4*			
	Power Supply Duty Level		**Frequency Stability**	**Operating Temperature**	**Available Frequency Range**
H	5.0V, CMOS	*B*	±50ppm	-20°C to +70°C	1.00Mhz - 125.00Mhz
		C	±100ppm		
		M†	±100ppm	-40°C to +85°C	1.00Mhz - 55.00Mhz
T	5.0V, TTL	*B*	±50ppm	-20°C to +70°C	1.00Mhz - 125.00Mhz
		C	±100ppm		
		M†	±100ppm	-40°C to +85°C	1.00Mhz - 55.00Mhz
C	3.3V, CMOS	*B*	±50ppm	-20°C to +70°C	1.00Mhz - 106.25Mhz
		C	±100ppm		
		M†	±100ppm	-40°C to +85°C	1.00Mhz - 106.25Mh

† Not available in JC Package

“Parts come marked with Manufacture Date Lot Code only. Marked parts are available as a non-catalog order only.”

One Time Programmable parts are non-cancelable, non-returnable!

Digi-Key* Base Part No.	Price Each 1	10	50	100
SG-8002JA-☐☐☐-ND	3.85	3.30	2.53	2.20
SG-8002JC-☐☐☐-ND	4.38	3.75	2.88	2.50
SG-8002DB-☐☐☐-ND	3.33	2.85	2.19	1.90
SG-8002DC-☐☐☐-ND	3.33	2.85	2.19	1.90
SG-8002CA-☐☐☐-ND	4.73	4.05	3.11	2.70
SG-8002JF-☐☐☐-ND *NEW!*	3.50	3.00	2.30	2.00

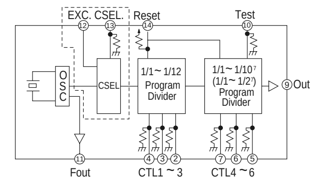
* For complete Base Part Number, substitute the corresponding letter for ☐.

Programmable Crystal Oscillators/Frequency Dividers

Electrical Characteristics:
- **Supply Voltage:** 4.5V~5.5V
- **Operating Temp.:** –10°C to +70°C
- **L. Output Voltage:** VOL = 0.4V.
- **H. Output Voltage:** VOH = VDD –1.0V.
- **L. Output Current:** IOL = 1.6mA.
- **H. Output Current:** IOH = –40µA.
- **Rise Time:** 30 nsec Typ.
- **Fall Time:** 25 nsec Typ.
- **Start-up Time:** 0.2 l sec.

Features: • Provides 57 different frequencies from a single quartz crystal. • Packaged in standard 16-pin DIP containing both IC and quartz crystal. • SPG Series is high precision time-base frequency generators each comprised of a small quartz-crystal element and a CMOS monolithic chip integrated hybrid configuration.

Function Block Diagram

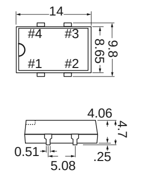

EXC. CSEL.
Reset
Test
⑫
⑬
⑭
⑩
OSC
CSEL
1/1 ~ 1/12 Program Divider
1/1 ~ 1/10⁷ (1/1 ~ 1/2⁷) Program Divider
⑨ Out
⑪
Fout
④ ③ ②
CTL1 ~ 3
⑦ ⑥ ⑤
CTL4 ~ 6

Set Of Output Frequency

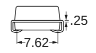
CTL1	CTL2	CTL3	Dividing Ratio	CTL4	CTL5	CTL6	Dividing Ratio
0	0	0	1/1	0	0	0	1/1
0	0	1	1/10	0	0	1	1/10
0	1	0	1/2	0	1	0	$1/10^2$
0	1	1	1/3	0	1	1	$1/10^3$
1	0	0	1/4	1	0	0	$1/10^4$
1	0	1	1/5	1	0	1	$1/10^5$
1	1	0	1/6	1	1	0	$1/10^6$
1	1	1	1/12	1	1	1	$1/10^7$

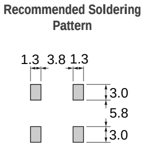
Base Frequency	Digi-Key Part No.	Price Each 1	10	50	100	Epson Part No.
60kHz±5ppm	SE3103-ND	19.20	16.00	11.38	10.24	SPG-8651A
100kHz±5ppm	SE3104-ND	19.20	16.00	11.38	10.24	SPG-8651B

HG-1000 Oscillators



No.	Pin Terminal
1	Ts
2	GND
3	OUT
4	VDD





Specifications:

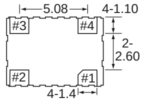
• **Max. Supply Voltage:** -0.5V to +7.0V • **Operating Voltage:** 5.0V ±.25°C • **Storage Temperature:** ±55°C to +125°C • **Operating Temperature:** -40°C to +85°C • **Frequency Tolerance:** ±25ppm @ -40°C to +85°C • **Current Consumption:** 10mA Max. • **Duty:** 40% to 60% @ 1/2 VDD Level • **Output Load Condition:** 15pf Max. • **Output Rise Time:** 8ns Max. • **Output Fall Time:** 8ns Max. • **Oscillation Startup Time:** 4ms max.

Frequency MHz	Digi-Key Part No.	Cut Tape Price Each 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 1,000	Epson Part No.
1.544	SE2861CT-ND	8.73	7.28	5.09	SE2861TR-ND	3850.00	HG-1012JA 1.544M-BX2
16.384	SE2864CT-ND	8.73	7.28	5.09	SE2864TR-ND	3850.00	HG-1012JA 16.38M-BX2
19.440	SE2865CT-ND	8.73	7.28	5.09	SE2865TR-ND	3850.00	HG-1012JA 19.44M-BX2
20.000	SE2866CT-ND	8.73	7.28	5.09	SE2866TR-ND	3850.00	HG-1012JA 20.00M-BX2

EPSON ELECTRONICS AMERICA, INC.

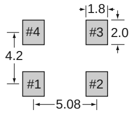
Surface-Mount Quartz Crystal Products

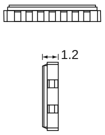
NEW! EG2001CA Series Oscillators



No.	Pin Conn.
1	OE
2	GND
3	Out
4	VDD

Recommended Soldering Pattern

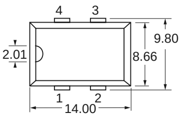




Specifications:
• **Max. Supply Voltage:** -0.5 to +5.5 • **Operating Voltage:** 3.0 to 3.6 • **Storage Temperature:** -55°C to +100°C • **Operating Temperature:** 0°C to +70°C • **Frequency Stability:** ±100ppm @ 0°C to +70°C • **Current Consumption:** 50mA Max. • **Duty:** 45% to 55% @ 50% VDD Level • **Output Load Condition:** 25pF Max. • **Output Rise/Fall Time:** 2ns Max. • **Oscillation Startup Time:** 10ms Max.

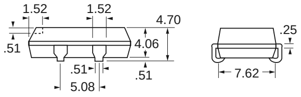
SG-615 Series Oscillators

- SG-615/615P
  (C-MOS, TTL compatible type)
- 615PT
  (TTL compatible type)
- SG-615H/PCV
  (C-MOS compatible type)
- Provided with an OE (Output Enable) function
  (SG-615P/615PT) (Contains internal pull-up resistor.)

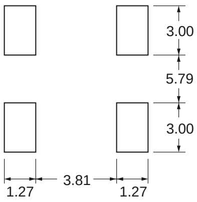


No.	Pin Conn.
1	OE or $\overline{\text{ST}}$
2	GND
3	Out
4	VDD

( ) Indicates P Type



Recommended Soldering Pattern



Specifications:

• **Supply Voltage:** Operating: 5.0±0. 5V; Maximum: –0.3~ +7.0V. • **Temperature Range:** Operating: -40°C to +85°C; Storage: -55°C to +125°C. • **Frequency Stability:** C: ±100ppm, –10°C to +70°C; C: ±200ppm, –40°C to +85°C. • **Current Consumption:** 25mA Max. (SG-615/615P); 35mA Max. (SG-615PT); 32mA Max. (SG-615H). Values are with no load. • **Duty Cycle:** 40~60%, 1.4V or 1/2VDD level. • **Output Voltage:** VDD -0.4V Min. (SG-615/615P), IOH = -400µA; VDD -0.4 Min. (SG-615PT), IOH = -400µA; VDD -0.37V Min. (SG-615H), IOH = 4mA; 0.4V Max. (SG-615/ 615P), IOL = 16mA; 0.4V Max. (SG-615PT), IOL =16mA; 0.37V Max. (SG-615H), IOL = 4mA. • **OE Input Voltage** (SG-615P/ 615PT): 2.0V Min., IOH = IµA (VIH = VDD); 0.8V Max., IIL = 100mA (VIL = GND). • **Rise Time:** 8 nsec Max., 5 nsec Typ. (SG-615/615P); 10 nsec Max., 5 nsec Typ. (SG-615PT); 7 nsec Max., 3.5 nsec Typ. (SG-615H). • **Fall Time:** 8 nsec Max., 5 nsec Typ. (SG-615/615P); 8 nsec Max., 3 nsec Typ. (SG-615PT); 7 nsec Max., 3.5 nsec Typ. (SG-615H). • **Oscillation Start Time:** 4 msec Max., (SG-615/615P); 10 msec Max., (SG-615PT); 10 msec Max., (SG-615H).

‡ Except when otherwise noted.

† **SE3-KIT-ND** ***Digi-Key® SMT Crystal Kit*** 2 each of values denoted (32 total pieces). Notebook style storage case and bin storage guide included **$109.00**

Series	Frequency (MHz)‡	Digi-Key Part No.	Cut Tape Price Each 1	10	50	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	Epson Part No.
EG2001CA	106.25	SE1008CT-ND *NEW!*	14.38	12.94	11.50	10.07	SE1008TR-ND *NEW!*	8050.00	EG2001CA 106.25MPCH3
	125.000	SE1009CT-ND *NEW!*	15.63	14.07	12.50	10.94	SE1009TR-ND *NEW!*	8750.00	EG2001CA 125.00MPCH3
SG-615	6.000	SE2107CT-ND	6.03	5.40	—	4.50	—	—	SG-615-6.0MCQ
SG-615P (OE) (CMOS) (TTL)	1.544	SE2217CT-ND	3.45	2.88	2.00	1.81	SE2217TR-ND	1520.00	SG-615P 1.544MCQ
	1.8432	SE2201CT-ND†	3.45	2.88	2.00	1.81	SE2201TR-ND	1520.00	SG-615P 1.843MCQ
	2.000	SE2202CT-ND†	3.45	2.88	2.00	1.81	SE2202TR-ND	1520.00	SG-615P 2.000MCQ
	2.048	SE2218CT-ND	3.45	2.88	2.00	1.81	SE2218TR-ND	1520.00	SG-615P 2.048MCQ
	2.4576	SE2203CT-ND†	3.45	2.88	2.00	1.81	SE2203TR-ND	1520.00	SG-615P 2.457MCQ
	3.072	SE2219CT-ND	3.45	2.88	2.00	1.81	SE2219TR-ND	1520.00	SG-615P 3.072MCQ
	3.579	SE2222CT-ND	3.45	2.88	2.00	1.81	SE2222TR-ND	1520.00	SG-615P 3.579MCQ
	3.6864	SE2204CT-ND†	3.45	2.88	2.00	1.81	SE2204TR-ND	1520.00	SG-615P 3.686MCQ
	4.000	SE2205CT-ND†	3.45	2.88	2.00	1.81	SE2205TR-ND	1520.00	SG-615P 4.000MCQ
	4.096	SE2223CT-ND	3.45	2.88	2.00	1.81	SE2223TR-ND	1520.00	SG-615P 4.096MCQ
	5.000	SE2224CT-ND	3.45	2.88	2.00	1.81	SE2224TR-ND	1520.00	SG-615P 5.000MCQ
	6.000	SE2207CT-ND†	3.45	2.88	2.00	1.81	SE2207TR-ND	1520.00	SG-615P 6.000MCQ
	6.144	SE2226CT-ND	3.45	2.88	2.00	1.81	SE2226TR-ND	1520.00	SG-615P 6.144MCQ
	7.372	SE2227CT-ND	3.45	2.88	2.00	1.81	SE2227TR-ND	1520.00	SG-615P 7.372MCQ
	8.192	SE2228CT-ND	3.45	2.88	2.00	1.81	SE2228TR-ND	1520.00	SG-615P 8.192MCQ
	9.830	SE2229CT-ND	3.45	2.88	2.00	1.81	SE2229TR-ND	1520.00	SG-615P 9.830MCQ
	10.000	SE2209CT-ND†	3.45	2.88	2.00	1.81	SE2209TR-ND	1520.00	SG-615P 10.000MCQ
	11.059	SE2232CT-ND	3.45	2.88	2.00	1.81	SE2232TR-ND	1520.00	SG-615P 11.059MCQ
	12.000	SE2210CT-ND†	3.45	2.88	2.00	1.81	SE2210TR-ND	1520.00	SG-615P 12.000MCQ
	12.288	SE2233CT-ND	3.45	2.88	2.00	1.81	SE2233TR-ND	1520.00	SG-615P 12.288MCQ
	14.31818	SE2211CT-ND†	3.45	2.88	2.00	1.81	SE2211TR-ND	1520.00	SG-615P 14.318MCQ
	16.000	SE2212CT-ND†	3.45	2.88	2.00	1.81	SE2212TR-ND	1520.00	SG-615P 16.000MCQ
	16.257	SE2236CT-ND	3.45	2.88	2.00	1.81	SE2236TR-ND	1520.00	SG-615P 16.257MCQ
	18.432	SE2213CT-ND†	3.45	2.88	2.00	1.81	SE2213TR-ND	1520.00	SG-615P 18.432MCQ
	18.869	SE2238CT-ND	3.45	2.88	2.00	1.81	SE2238TR-ND	1520.00	SG-615P 18.869MCQ
	19.660	SE2239CT-ND	3.45	2.88	2.00	1.81	SE2239TR-ND	1520.00	SG-615P 19.660MCQ
	20.000	SE2214CT-ND†	3.45	2.88	2.00	1.81	SE2214TR-ND	1520.00	SG-615P 20.000MCQ
	20.480	SE2240CT-ND	3.45	2.88	2.00	1.81	SE2240TR-ND	1520.00	SG-615P 20.480MCQ
	22.118	SE2241CT-ND	3.45	2.88	2.00	1.81	SE2241TR-ND	1520.00	SG-615P 22.118MCQ
	24.000	SE2215CT-ND†	3.45	2.88	2.00	1.81	SE2215TR-ND	1520.00	SG-615P 24.000MCQ
	25.000	SE2242CT-ND	3.45	2.88	2.00	1.81	SE2242TR-ND	1520.00	SG-615P 25.000MCQ
	25.175	SE2216CT-ND†	3.45	2.88	2.00	1.81	SE2216TR-ND	1520.00	SG-615P 25.175MCQ
SG-615PT (OE)	36.000	SE2304CT-ND	6.20	5.55	—	4.63	—	—	SG-615PT36.0000MCQ
SG-615PTJ (TTL)	27.000	SE2326CT-ND	3.45	2.88	2.00	1.81	SE2326TR-ND	1520.00	SG-615PTJ 27.000MCQ
	28.322	SE2327CT-ND	3.45	2.88	2.00	1.81	SE2327TR-ND	1520.00	SG-615PTJ 28.322MCQ
	28.636	SE2328CT-ND	3.45	2.88	2.00	1.81	SE2328TR-ND	1520.00	SG-615PTJ 28.636MCQ
	29.491	SE2329CT-ND	3.45	2.88	2.00	1.81	SE2329TR-ND	1520.00	SG-615PTJ 29.491MCQ
	30.000	SE2330CT-ND	3.45	2.88	2.00	1.81	SE2330TR-ND	1520.00	SG-615PTJ 30.000MCQ
SG-615PH (CMOS)	32.000	SE2337CT-ND	3.45	2.88	2.00	1.81	SE2337TR-ND	1520.00	SG-615PH 32.000MCQ
	32.768	SE2338CT-ND	3.45	2.88	2.00	1.81	SE2338TR-ND	1520.00	SG-615PH 32.768MCQ
	33.000	SE2339CT-ND	3.45	2.88	2.00	1.81	SE2339TR-ND	1520.00	SG-615PH 33.000MCQ
	33.333	SE2340CT-ND	3.45	2.88	2.00	1.81	SE2340TR-ND	1520.00	SG-615PH 33.333MCQ
	36.000	SE2341CT-ND	3.45	2.88	2.00	1.81	SE2341TR-ND	1520.00	SG-615PH 36.000MCQ
	40.000	SE2343CT-ND	3.45	2.88	2.00	1.81	SE2343TR-ND	1520.00	SG-615PH 40.000MCQ
	44.900	SE2344CT-ND	3.45	2.88	2.00	1.81	SE2344TR-ND	1520.00	SG-615PH 44.900MCQ
	48.000	SE2345CT-ND	3.45	2.88	2.00	1.81	SE2345TR-ND	1520.00	SG-615PH 48.000MCQ
	50.000	SE2346CT-ND	3.45	2.88	2.00	1.81	SE2346TR-ND	1520.00	SG-615PH 50.000MCQ
	55.000	SE2347CT-ND	3.45	2.88	2.00	1.81	SE2347TR-ND	1520.00	SG-615PH 55.000MCQ
	60.000	SE2348CT-ND	3.63	3.03	2.13	1.92	SE2348TR-ND	1610.00	SG-615PH 60.000MCQ
	66.000	SE2351CT-ND	3.63	3.03	2.13	1.92	SE2351TR-ND	1610.00	SG-615PH 66.000MCQ
	66.666	SE2352CT-ND	3.63	3.03	2.13	1.92	SE2352TR-ND	1610.00	SG-615PH 66.6660MCQ
SG-615PCV (OE) (CMOS)	50.000	SE3503CT-ND	5.25	4.38	3.10	2.80	SE3503TR-ND	2300.00	SG-615PCV 50.000MCQ
	75.000	SE3511CT-ND	5.85	4.88	3.40	3.10	SE3511TR-ND	2550.00	SG-615PCV 75.000MCQ
	80.000	SE3512CT-ND	5.85	4.88	3.40	3.10	SE3512TR-ND	2550.00	SG-615PCV 80.000MCQ
	90.000	SE3513CT-ND	5.85	4.88	3.40	3.10	SE3513TR-ND	2550.00	SG-615PCV 90.000MCQ
	100.000	SE3514CT-ND	5.85	4.88	3.40	3.10	SE3514TR-ND	2550.00	SG-615PCV 100.000MCQ
	106.250	SE3515CT-ND	6.45	5.38	3.85	3.45	SE3515TR-ND	2900.00	SG-615PCV 106.250MCQ
	120.000	SE3516CT-ND	6.45	5.38	3.85	3.45	SE3516TR-ND	2900.00	SG-615PCV 120.000MCQ

EPSON ELECTRONICS
AMERICA, INC.

CMOS/TTL Oscillators

- High reliability by cylinder type AT Crystal
- Automatic mountable
- Lower current consumption by C-MOS IC
- TTL-10 output load by using C-MOS IC
- DIP 14-PIN plastic package compatible with metal package oscillator
- DIP 8-PIN plastic package compatible with half size metal package oscillator

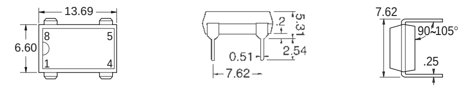
SG-51P, SG-531P, SG-51PH **Specifications: Operating Voltage:** 5.0±0.5V. **Operating Temperature Range:** -10°C to +70°C. **Frequency Stability:** C:±100ppm. **Current Consumption:** 25mA Max. Typ. **Output Voltage:** VDD -0.4V Min., IOH = -400mA; 0.4V Max., IOL = 16mA. **Input Voltage:** VIH 2.0V Min., IOH = ImA (VIH = VDD); VIL 0.8V Max., IIL = -100uA (VIL = GND). **Output Rise Time:** 8 nsec Max., 4 nsec Typ. **Output Fall Time:** 8 nsec Max., 5 nsec Typ. **Oscillation Time:** 4 msec Max., 0.3 msec.

SG-531PCV **Specifications: Operating Voltage:** 2.7V to 5.5V. **Operating Temperature Range:** -10°C to +70°C. **Frequency Stability:** C:±100ppm. **Current Consumption:** 50mA Max. **Output Rise Time:** 4 nsec. **Output Fall Time:** 4 nsec. **Oscillation Start-Up Time:** 10 msec Max.

SG-51KT, SG-531PTJ, SG-51PTJ **Specifications: Operating Voltage:** 5.0±0.5V. **Operating Temp. Range:** 10°C to +70°C. **Frequency Stability:** C:±100ppm. **Current Consumption:** 25mA (32MHz) without load Typ. **Output Voltage:** VDD -0.4V Min., IOH = -400 mA; 0.4V Max., IOL = 16mA. **Input Voltage:** VIH 2.0V Min., IIH = ImA (VIH = VDD); VIL 0.8V Max., IIL = 100uA (VIL = GND). **Output Rise Time:** 10 nsec Max., 5 nsec Typ. **Output Fall Time:** 8 nsec Max., 3 nsec Typ. **Oscillation Time:** 10 msec Max., 5 msec.

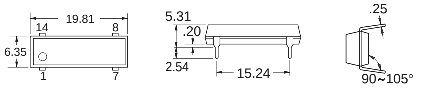
SG-531PH **Specifications: Operating Voltage:** 5.0±0.5V. **Operating Temp. Range:** -10°C to +70°C. **Frequency Stability:** C:±100ppm. **Current Consumption:** 32mA Max. Typ. **Output Voltage:** VDD -0.37V Min., IOH = -4mA; 0.37V Max., IOL = 4mA. **Output Rise Time:** 7 nsec Max., 3.5 nsec Typ. **Output Fall Time:** 7 nsec Max., 3.5 nsec Typ. **Oscillation Time:** 10 msec Max., 3 msec Typ.

SG-531P, SG-531PTJ, SG-531PH, SG-531PCV (Half Size)



Pin	SG-531P, PH, PTJ
1	OE
4	GND
5	Out
8	VDD

SG-51P, SG-51KT, SG-51PTJ, SG-51PH (Full Size)



Pin	SG-51KT
1	NC
7	GND
8	Out
14	VDD

Pin	51P, PH, PTJ
1	OE
7	GND
8	Out
14	VDD

Case	Frequency (MHz)	Digi-Key Part No.	Pricing				Epson Part No.
			1	10	50	100	
SG-531PH (OE) (CMOS)	32.000	SE1111-ND	3.00	25.00	87.00	158.00	SG-531PH 32.000MC
	32.514	SE1112-ND	3.00	25.00	87.00	158.00	SG-531PH 32.514MC
	32.768	SE1113-ND	3.00	25.00	87.00	158.00	SG-531PH 32.768MC
	33.000	SE1114-ND	3.00	25.00	87.00	158.00	SG-531PH 33.000MC
	33.333	SE1115-ND	3.00	25.00	87.00	158.00	SG-531PH 33.333MC
	36.000	SE1116-ND	3.00	25.00	87.00	158.00	SG-531PH 36.000MC
	38.000	SE1117-ND	3.00	25.00	87.00	158.00	SG-531PH 38.000MC
	42.000	SE1119-ND	3.00	25.00	87.00	158.00	SG-531PH 42.000MC
	44.900	SE1120-ND	3.00	25.00	87.00	158.00	SG-531PH 44.900MC
	46.000	SE1121-ND	3.00	25.00	87.00	158.00	SG-531PH 46.000MC
	48.000	SE1122-ND	3.00	25.00	87.00	158.00	SG-531PH 48.000MC
	55.000	SE1124-ND	3.00	25.00	87.00	158.00	SG-531PH 55.000MC
	64.000	SE1126-ND	3.18	26.50	92.50	167.00	SG-531PH 64.000MC
	65.000	SE1127-ND	3.18	26.50	92.50	167.00	SG-531PH 65.000MC
	66.000	SE1128-ND	3.18	26.50	92.50	167.00	SG-531PH 66.000MC
	66.666	SE1129-ND	3.18	26.50	92.50	167.00	SG-531PH 66.6667MC
SG-531P (OE) (CMOS/ TTL)	1.544	SE1216-ND	3.00	25.00	87.00	158.00	SG-531P 1.544MC
	1.8432	SE1201-ND	3.00	25.00	87.00	158.00	SG-531P 1.843MC
	2.000	SE1217-ND	3.00	25.00	87.00	158.00	SG-531P 2.000MC
	2.048	SE1218-ND	3.00	25.00	87.00	158.00	SG-531P 2.048MC
	2.4576	SE1202-ND	3.00	25.00	87.00	158.00	SG-531P 2.457MC
	3.072	SE1219-ND	3.00	25.00	87.00	158.00	SG-531P 3.072MC
	3.088	SE1220-ND	3.00	25.00	87.00	158.00	SG-531P 3.088MC
	3.276	SE1221-ND	3.00	25.00	87.00	158.00	SG-531P 3.276MC
	3.579	SE1222-ND	3.00	25.00	87.00	158.00	SG-531P 3.579MC
	3.686	SE1223-ND	3.00	25.00	87.00	158.00	SG-531P 3.686MC
	4.000	SE1203-ND	3.00	25.00	87.00	158.00	SG-531P 4.000MC
	4.096	SE1224-ND	3.00	25.00	87.00	158.00	SG-531P 4.096MC
	4.9152	SE1204-ND	3.00	25.00	87.00	158.00	SG-531P 4.915MC
	5.000	SE1205-ND	3.00	25.00	87.00	158.00	SG-531P 5.000MC
	5.068	SE1225-ND	3.00	25.00	87.00	158.00	SG-531P 5.068MC
	6.000	SE1206-ND	3.00	25.00	87.00	158.00	SG-531P 6.000MC
	6.144	SE1226-ND	3.00	25.00	87.00	158.00	SG-531P 6.144MC
	7.3728	SE1227-ND	3.00	25.00	87.00	158.00	SG-531P 7.3728MC
	8.000	SE1207-ND	3.00	25.00	87.00	158.00	SG-531P 8.000MC
	8.192	SE1228-ND	3.00	25.00	87.00	158.00	SG-531P 8.192MC
	9.830	SE1229-ND	3.00	25.00	87.00	158.00	SG-531P 9.830MC
	10.000	SE1208-ND	3.00	25.00	87.00	158.00	SG-531P 10.000MC
	10.240	SE1230-ND	3.00	25.00	87.00	158.00	SG-531P 10.240MC
	11.000	SE1231-ND	3.00	25.00	87.00	158.00	SG-531P 11.000MC
	11.059	SE1232-ND	3.00	25.00	87.00	158.00	SG-531P 11.059MC
	12.000	SE1209-ND	3.00	25.00	87.00	158.00	SG-531P 12.000MC
	12.288	SE1233-ND	3.00	25.00	87.00	158.00	SG-531P 12.288MC
	14.31818	SE1210-ND	3.00	25.00	87.00	158.00	SG-531P 14.318MC
	14.745	SE1234-ND	3.00	25.00	87.00	158.00	SG-531P 14.745MC
	15.000	SE1235-ND	3.00	25.00	87.00	158.00	SG-531P 15.000MC
	16.257	SE1236-ND	3.00	25.00	87.00	158.00	SG-531P 16.257MC
	18.000	SE1237-ND	3.00	25.00	87.00	158.00	SG-531P 18.000MC
	18.432	SE1238-ND	3.00	25.00	87.00	158.00	SG-531P 18.432MC
	18.869	SE1239-ND	3.00	25.00	87.00	158.00	SG-531P 18.869MC
	19.660	SE1240-ND	3.00	25.00	87.00	158.00	SG-531P 19.660MC
	20.480	SE1241-ND	3.00	25.00	87.00	158.00	SG-531P 20.480MC
	22.118	SE1242-ND	3.00	25.00	87.00	158.00	SG-531P 22.118MC
	24.000	SE1213-ND	3.00	25.00	87.00	158.00	SG-531P 24.000MC
	25.175	SE1215-ND	3.00	25.00	87.00	158.00	SG-531P 25.175MC
	25.576	SE1243-ND	3.00	25.00	87.00	158.00	SG-531P 25.576MC
SG-531PTJ (OE) (TTL)	27.000	SE1817-ND	3.00	25.00	87.00	158.00	SG-531PTJ 27.000MC
	28.000	SE1818-ND	3.00	25.00	87.00	158.00	SG-531PTJ 28.000MC
	28.322	SE1819-ND	3.00	25.00	87.00	158.00	SG-531PTJ 28.322MC
	28.636	SE1820-ND	3.00	25.00	87.00	158.00	SG-531PTJ 28.636MC
	29.491	SE1821-ND	3.00	25.00	87.00	158.00	SG-531PTJ 29.491MC
	30.000	SE1822-ND	3.00	25.00	87.00	158.00	SG-531PTJ 30.000MC
	32.514	SE1824-ND	3.00	25.00	87.00	158.00	SG-531PTJ 32.514MC
	32.768	SE1825-ND	3.00	25.00	87.00	158.00	SG-531PTJ 32.768MC
	33.000	SE1826-ND	3.00	25.00	87.00	158.00	SG-531PTJ 33.000MC
	33.333	SE1827-ND	3.00	25.00	87.00	158.00	SG-531PTJ 33.3333MC
	36.000	SE1828-ND	3.00	25.00	87.00	158.00	SG-531PTJ 36.000MC
SG-531PCV (OE) (CMOS)	44.900	SE2901-ND	4.80	40.00	142.50	255.00	SG-531PCV 44.900MC
	48.000	SE2902-ND	4.80	40.00	142.50	255.00	SG-531PCV 48.000MC
	50.000	SE2903-ND	4.80	40.00	142.50	255.00	SG-531PCV 50.000MC
	55.000	SE2904-ND	4.80	40.00	142.50	255.00	SG-531PCV 55.000MC
	60.000	SE2905-ND	4.80	40.00	142.50	255.00	SG-531PCV 60.000MC

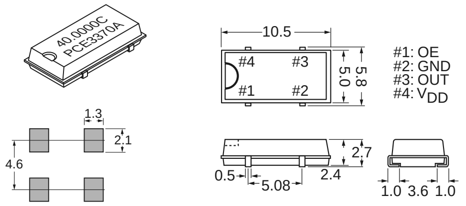
A462-ND	Aries Full-Size Socket for a 4-Pin Oscillator	$.60/1; $12.50/25; $40.48/100
A463-ND	Aries Half-Size Socket for a 4-Pin Oscillator	$.60/1; $12.50/25; $40.48/100

Case	Frequency (MHz)	Digi-Key Part No.	Pricing				Epson Part No.
			1	10	50	100	
SG-531PCV (OE) (CMOS)	64.000	SE2906-ND	4.80	40.00	142.50	255.00	SG-531PCV 64.000MC
	65.000	SE2907-ND	4.80	40.00	142.50	255.00	SG-531PCV 65.000MC
	66.000	SE2908-ND	4.80	40.00	142.50	255.00	SG-531PCV 66.000MC
	66.666	SE2909-ND	4.80	40.00	142.50	255.00	SG-531PCV 66.6667MC
	70.000	SE2910-ND	5.85	48.75	172.50	310.00	SG-531PCV 70.000MC
	75.000	SE2911-ND	5.85	48.75	172.50	310.00	SG-531PCV 75.000MC
	80.000	SE2912-ND	5.85	48.75	172.50	310.00	SG-531PCV 80.000MC
	90.000	SE2913-ND	5.85	48.75	172.50	310.00	SG-531PCV 90.000MC
	100.000	SE2914-ND	5.85	48.75	172.50	310.00	SG-531PCV 100.000MC
	106.250	SE2915-ND	7.95	66.25	232.50	420.00	SG-531PCV 106.250MC
	120.000	SE2916-ND	7.95	66.25	232.50	420.00	SG-531PCV 120.000MC
SG-51KT (TTL)	28.322	SE1602-ND	3.45	28.75	—	230.00	SG-51KT-28.3220MC
SG-51P (OE) (CMOS/ TTL)	1.544	SE1716-ND	3.00	25.00	87.00	158.00	SG-51P 1.544MC
	1.8432	SE1701-ND	3.00	25.00	87.00	158.00	SG-51P 1.843MC
	2.000	SE1717-ND	3.00	25.00	87.00	158.00	SG-51P 2.000MC
	2.048	SE1718-ND	3.00	25.00	87.00	158.00	SG-51P 2.048MC
	3.072	SE1719-ND	3.00	25.00	87.00	158.00	SG-51P 3.072MC
	3.088	SE1720-ND	3.00	25.00	87.00	158.00	SG-51P 3.088MC
	3.276	SE1721-ND	3.00	25.00	87.00	158.00	SG-51P 3.276MC
	3.579	SE1722-ND	3.00	25.00	87.00	158.00	SG-51P 3.579MC
	3.686	SE1723-ND	3.00	25.00	87.00	158.00	SG-51P 3.686MC
	4.000	SE1703-ND	3.00	25.00	87.00	158.00	SG-51P 4.000MC
	4.096	SE1724-ND	3.00	25.00	87.00	158.00	SG-51P 4.096MC
	4.9152	SE1704-ND	3.00	25.00	87.00	158.00	SG-51P 4.915MC
	5.000	SE1705-ND	3.00	25.00	87.00	158.00	SG-51P 5.000MC
	5.068	SE1725-ND	3.00	25.00	87.00	158.00	SG-51P 5.068MC
	6.000	SE1706-ND	3.00	25.00	87.00	158.00	SG-51P 6.000MC
	6.144	SE1726-ND	3.00	25.00	87.00	158.00	SG-51P 6.1448MC
	7.372	SE1727-ND	3.00	25.00	87.00	158.00	SG-51P 7.372MC
	8.000	SE1707-ND	3.00	25.00	87.00	158.00	SG-51P 8.000MC
	8.192	SE1728-ND	3.00	25.00	87.00	158.00	SG-51P 8.192MC
	9.830	SE1729-ND	3.00	25.00	87.00	158.00	SG-51P 9.830MC
	10.000	SE1708-ND	3.00	25.00	87.00	158.00	SG-51P 10.000MC
	10.240	SE1730-ND	3.00	25.00	87.00	158.00	SG-51P 10.240MC
	11.000	SE1731-ND	3.00	25.00	87.00	158.00	SG-51P 11.000MC
	11.059	SE1732-ND	3.00	25.00	87.00	158.00	SG-51P 11.059MC
	12.000	SE1709-ND	3.00	25.00	87.00	158.00	SG-51P 12.000MC
	12.288	SE1733-ND	3.00	25.00	87.00	158.00	SG-51P 12.288MC
	14.31818	SE1710-ND	3.00	25.00	87.00	158.00	SG-51P 14.318MC
	14.745	SE1734-ND	3.00	25.00	87.00	158.00	SG-51P 14.745MC
	15.000	SE1735-ND	3.00	25.00	87.00	158.00	SG-51P 15.000MC
	16.000	SE1711-ND	3.00	25.00	87.00	158.00	SG-51P 16.000MC
	16.257	SE1736-ND	3.00	25.00	87.00	158.00	SG-51PH 16.257MC
	18.000	SE1737-ND	3.00	25.00	87.00	158.00	SG-51P 18.000MC
	18.432	SE1738-ND	3.00	25.00	87.00	158.00	SG-51P 18.432MC
	18.869	SE1739-ND	3.00	25.00	87.00	158.00	SG-51P 18.869MC
	19.660	SE1740-ND	3.00	25.00	87.00	158.00	SG-51P 19.660MC
	20.000	SE1712-ND	3.00	25.00	87.00	158.00	SG-51P 20.000MC
	20.480	SE1741-ND	3.00	25.00	87.00	158.00	SG-51P 20.480MC
	22.118	SE1742-ND	3.00	25.00	87.00	158.00	SG-51P 22.118MC
	24.000	SE1713-ND	3.00	25.00	87.00	158.00	SG-51P 24.000MC
	24.576	SE1743-ND	3.00	25.00	87.00	158.00	SG-51P 24.576MC
	25.000	SE1714-ND	3.00	25.00	87.00	158.00	SG-51P 25.000MC
	25.175	SE1715-ND	3.00	25.00	87.00	158.00	SG-51P 25.175MC
SG-51PTJ (OE) (TTL)	28.000	SE1806-ND	3.00	25.00	87.00	158.00	SG-51PTJ 28.000MC
	28.322	SE1807-ND	3.00	25.00	87.00	158.00	SG-51PTJ 28.322MC
	28.636	SE1808-ND	3.00	25.00	87.00	158.00	SG-51PTJ 28.636MC
	29.491	SE1809-ND	3.00	25.00	87.00	158.00	SG-51PTJ 29.491MC
	30.000	SE1810-ND	3.00	25.00	87.00	158.00	SG-51PTJ 30.000MC
	32.000	SE1811-ND	3.00	25.00	87.00	158.00	SG-51PTJ 32.000MC
	32.514	SE1812-ND	3.00	25.00	87.00	158.00	SG-51PTJ 32.514MC
	32.768	SE1813-ND	3.00	25.00	87.00	158.00	SG-51PTJ 32.768MC
	33.000	SE1814-ND	3.00	25.00	87.00	158.00	SG-51PTJ 33.000MC
	33.333	SE1815-ND	3.00	25.00	87.00	158.00	SG-51PTJ 33.333MC
	36.000	SE1816-ND	3.00	25.00	87.00	158.00	SG-51PTJ 36.000MC
SG-51PH (OE) (CMOS)	32.768	SE1902-ND	3.00	25.00	87.00	158.00	SG-51PH 32.768MC
	33.000	SE1903-ND	3.00	25.00	87.00	158.00	SG-51PH 33.000MC
	33.333	SE1904-ND	3.00	25.00	87.00	158.00	SG-51PH 33.3330MC
	36.000	SE1905-ND	3.00	25.00	87.00	158.00	SG-51PH 36.000MC
	38.000	SE1906-ND	3.00	25.00	87.00	158.00	SG-51PH 38.000MC
	42.000	SE1908-ND	3.00	25.00	87.00	158.00	SG-51PH 42.000MC
	44.900	SE1909-ND	3.00	25.00	87.00	158.00	SG-51PH 44.900MC
	46.000	SE1910-ND	3.00	25.00	87.00	158.00	SG-51PH 46.000MC
	48.000	SE1911-ND	3.00	25.00	87.00	158.00	SG-51PH 48.000MC
	50.000	SE1912-ND	3.00	25.00	87.00	158.00	SG-51PH 50.000MC
	55.000	SE1913-ND	3.00	25.00	87.00	158.00	SG-51PH 55.000MC
	60.000	SE1914-ND	3.18	26.50	92.50	167.00	SG-51PH 60.000MC

EPSON ELECTRONICS AMERICA, INC.

Surface-Mount Quartz Crystal Products

SG636PCE/636PCV Oscillator

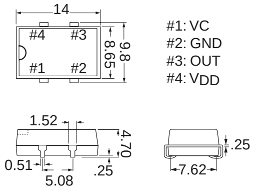


FEATURES:
• 3.3 volt operation, low current consumption. • 45/55% duty cycle. • Small type SMD, thus allowing high density mounting. • Suitable for small handy equipments, especially “Energy Star Computers Program” products.

SPECIFICATIONS:
Max. Supply Voltage: –0.5V to +7.0V. **Operating Voltage:** 3.3V±0.3V, It is possible to work on 2.7 to 5.5 V_{DD}. **Storage Temperature:** –55°C to +100°C, Stored without Tape and Reel. **Operating Temperature:** –10°C to +70°C. **Soldering Condition:** Under 260°C within 10 sec. x 2 times or under 230°C within 3 min. **Frequency Stability:** C: ±100ppm, –10°C to +70°C. **Current Consumption:** 9mA Max., No Load Condition. **Output Disable Current:** 5.0mA Max. **Duty:** 45% to 55%. **High Output Voltage:** V_{DD} –0.4V Max., I_{OH}=–4mA. **Low Output Voltage:** 0.4V Max., I_{OL}=–4mA. **High Input Voltage:** 80% V_{DD} Min., OE Terminal. **Low Input Voltage:** 20% V_{DD} Max., OE Terminal. **Output Rise Time:** 5ns Max., 20% to 80% V_{DD} Level. **Output Fall Time:** 5ns Max., 80% to 20% V_{DD} Level. **Oscillation Start Up Time:** 4ms Max. **Aging:** ±5ppm/year Max. **Shock Resistance:** ±20ppm Max.

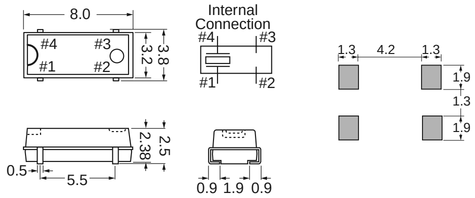
Voltage Controlled Crystal Oscillator (VCXO) VG-1011JA Series

FEATURES:
• Reflowable and high density mounting type SMD. • Using the heat-resisting type AT cut quartz crystal allows almost the same temperature soldering as universal SMD IC. • Using C-MOS IC allows low current consumption and assures high reliability. • Operating Supply Voltage: 5V. Control Voltage: 5V.



SPECIFICATIONS:
Supply Voltage (V_{DD}): –0.5V Min, 7.0V Max, **Control Voltage (VC):** –0.5V Min, 7.0V Max. **Soldering Condition (Tsol):** Under 260°C within 10 sec. x 2 times. **Supply Voltage (V_{DD}):** 4.5V Min, 5.5V Max. **Control Voltage (VC):** 0.5V Min, 4.5V Max. **Operable Temperature (Topr):** –40°C Min, 85°C Max. **Frequency Stability:** AV: Ta=–20 to 70°C, AV: ±20 Max. **Frequency Adjustment Range:** K=±75ppm. **Frequency Control Sensitivity:** VC= 2.5±2.0V, ±10%. **Supply Current:** V_{DD}=5.0V, No Load, 13mA Max. **Start-Up Time:** V_{DD}=4.5V to be 0 sec., 10 msec Max. **Duty:** 1/2 V_{DD} Level, 40% Min, 60% Max. **High Output Voltage:** IOH=-0.8mA, V_{DD}–0.4V. **Low Output Voltage:** IOL=0.8mA, 0.4V Max. **Output Rise Time:** 20% to 80% V_{DD} Level, 3 Typical, 8nS. **Output Fall Time:** 80% to 20% V_{DD} Level 3 Typical, 8nS.

MA-306



SPECIFICATIONS:
Storage Temperature: –55°C to +100°C, Stored as naked product after unpacking. **Operating Temperature:** –20°C to +70°C. **Maximum Drive Level:** 2mW Max., Only crystal oscillation is guaranteed. **Recommended Drive Level:** 10µW to 100µW. **Soldering Condition:** Twice at under 260°C within 10 seconds or under 230°C within 3 minutes. **Frequency Tolerance (standard):** ±100ppm. **Frequency Temperature Characteristics (standard):** ±30ppm, –20°C to +70°C, DL=100µW. **Load Capacitance:** 18pF. **Series Resistance:** 60Ω Max., –20°C to +70°C, DL=100µW. **Shunt Capacitance:** 5pF Max. **Aging:** ±5ppm/Y Max.

	Frequency	Digi-Key	Cut Tape Pricing				Digi-Key	T/R Pricing	Epson
Series	(MHz)	Part No.	1	10	50	100	Part No.	1,000	Part No.
SG636PCE/ SG636PCV	2.4576	SE2801CT-ND	3.90	32.50	114.00	206.00	SE2801TR-ND	1730.00	SG-636PCE 2.457MCQ
	3.6864	SE2806CT-ND	3.90	32.50	114.00	206.00	SE2806TR-ND	1730.00	SG-636PCE 3.6864MCQ
	4.0000	SE2807CT-ND	3.90	32.50	114.00	206.00	SE2807TR-ND	1730.00	SG-636PCE 4.0000MCQ
	4.096	SE2808CT-ND	3.90	32.50	114.00	206.00	SE2808TR-ND	1730.00	SG-636PCE 4.096MCQ
	5.000	SE2810CT-ND	3.90	32.50	114.00	206.00	SE2810TR-ND	1730.00	SG-636PCE 5.000MCQ
	6.000	SE2812CT-ND	3.90	32.50	114.00	206.00	SE2812TR-ND	1730.00	SG-636PCE 6.000MCQ
	7.372	SE2814CT-ND	3.90	32.50	114.00	206.00	SE2814TR-ND	1730.00	SG-636PCE 7.372MCQ
	8.0000	SE2815CT-ND	3.90	32.50	114.00	206.00	SE2815TR-ND	1730.00	SG-636PCE 8.000MCQ
	8.192	SE2816CT-ND	3.90	32.50	114.00	206.00	SE2816TR-ND	1730.00	SG-636PCE 8.192MCQ
	10.000	SE2818CT-ND	3.90	32.50	114.00	206.00	SE2818TR-ND	1730.00	SG-636PCE 10.000MCQ
	10.240	SE2819CT-ND	3.90	32.50	114.00	206.00	SE2819TR-ND	1730.00	SG-636PCE 10.240MCQ
	12.000	SE2822CT-ND	3.90	32.50	114.00	206.00	SE2822TR-ND	1730.00	SG-636PCE 12.000MCQ
	14.3181	SE2824CT-ND	3.90	32.50	114.00	206.00	SE2824TR-ND	1730.00	SG-636PCE 14.318MCQ
	14.7456	SE2825CT-ND	3.90	32.50	114.00	206.00	SE2825TR-ND	1730.00	SG-636PCE 14.745MCQ
	15.000	SE2826CT-ND	3.90	32.50	114.00	206.00	SE2826TR-ND	1730.00	SG-636PCE 15.000MCQ
	16.000	SE2827CT-ND	3.90	32.50	114.00	206.00	SE2827TR-ND	1730.00	SG-636PCE 16.000MCQ
	18.000	SE2829CT-ND	3.90	32.50	114.00	206.00	SE2829TR-ND	1730.00	SG-636PCE 18.000MCQ
	18.432	SE2830CT-ND	3.90	32.50	114.00	206.00	SE2830TR-ND	1730.00	SG-636PCE 18.432MCQ
	20.000	SE2833CT-ND	3.90	32.50	114.00	206.00	SE2833TR-ND	1730.00	SG-636PCE 20.000MCQ
	24.000	SE2836CT-ND	3.90	32.50	114.00	206.00	SE2836TR-ND	1730.00	SG-636PCE 24.000MCQ
	25.000	SE2837CT-ND	3.90	32.50	114.00	206.00	SE2837TR-ND	1730.00	SG-636PCE 25.000MCQ
	25.175	SE2838CT-ND	3.90	32.50	114.00	206.00	SE2838TR-ND	1730.00	SG-636PCE 25.175MCQ
	27.000	SE2839CT-ND	3.90	32.50	114.00	206.00	SE2839TR-ND	1730.00	SG-636PCE 27.000MCQ
	28.636	SE2841CT-ND	3.90	32.50	114.00	206.00	SE2841TR-ND	1730.00	SG-636PCE 28.636MCQ
	29.491	SE2842CT-ND	3.90	32.50	114.00	206.00	SE2842TR-ND	1730.00	SG-636PCE 29.4912MCQ
	30.000	SE2843CT-ND	3.90	32.50	114.00	206.00	SE2843TR-ND	1730.00	SG-636PCE 30.000MCQ
	32.000	SE2844CT-ND	3.90	32.50	114.00	206.00	SE2844TR-ND	1730.00	SG-636PCE 32.000MCQ
	33.000	SE2847CT-ND	3.90	32.50	114.00	206.00	SE2847TR-ND	1730.00	SG-636PCE 33.000MCQ
	33.333	SE2848CT-ND	3.90	32.50	114.00	206.00	SE2848TR-ND	1730.00	SG-636PCE 33.333MCQ
	36.000	SE2849CT-ND	3.90	32.50	114.00	206.00	SE2849TR-ND	1730.00	SG-636PCE 36.000MCQ
	38.000	SE2850CT-ND	3.90	32.50	114.00	206.00	SE2850TR-ND	1730.00	SG-636PCE 38.000MCQ
	40.000	SE2851CT-ND	3.90	32.50	114.00	206.00	SE2851TR-ND	1730.00	SG-636PCE 40.000MCQ
	44.900	SE2852CT-ND	6.15	51.25	180.00	325.00	SE2852TR-ND	2700.00	SG-636PCV 44.900MCQ
	48.000	SE2853CT-ND	6.15	51.25	180.00	325.00	SE2853TR-ND	2700.00	SG-636PCV 48.000MCQ
	50.000	SE2854CT-ND	6.15	51.25	180.00	325.00	SE2854TR-ND	2700.00	SG-636PCV 50.000MCQ
	55.000	SE2855CT-ND	6.15	51.25	180.00	325.00	SE2855TR-ND	2700.00	SG-636PCV 55.000MCQ
	60.000	SE2856CT-ND	6.15	51.25	180.00	325.00	SE2856TR-ND	2700.00	SG-636PCV 60.000MCQ
	66.000	SE2859CT-ND	6.15	51.25	180.00	325.00	SE2859TR-ND	2700.00	SG-636PCV 66.000MCQ
	66.666	SE2860CT-ND	6.15	51.25	180.00	325.00	SE2860TR-ND	2700.00	SG-636PCV 66.6667MCQ
VG1011JA	12.288	SE3601CT-ND	13.68	114.00	405.50	730.00	SE3601TR-ND	6080.00	VG-1011JA 12.28MAVK2
	16.384	SE3603CT-ND	13.68	114.00	405.50	730.00	SE3603TR-ND	6080.00	VG-1011JA 16.38MAVK2
	19.200	SE3605CT-ND	13.68	114.00	405.50	730.00	SE3605TR-ND	6080.00	VG-1011JA 19.20MAVK2
	19.440	SE3606CT-ND	13.68	114.00	405.50	730.00	SE3606TR-ND	6080.00	VG-1011JA 19.44MAVK2
	27.000	SE3607CT-ND	13.68	114.00	405.50	730.00	SE3607TR-ND	6080.00	VG-1011JA 27.00MAVK2
MA-306	18.000	SE2701CT-ND	1.89	15.75	55.50	100.00	SE2701TR-ND	830.00	MA-306 18.000M-CQ
	18.432	SE2702CT-ND	1.89	15.75	55.50	100.00	SE2702TR-ND	830.00	MA-306 18.432M-CQ
	19.660	SE2704CT-ND	1.89	15.75	55.50	100.00	SE2704TR-ND	830.00	MA-306 19.660M-CQ
	20.000	SE2705CT-ND	1.89	15.75	55.50	100.00	SE2705TR-ND	830.00	MA-306 20.000M-CQ
	22.118	SE2707CT-ND	1.89	15.75	55.50	100.00	SE2707TR-ND	830.00	MA-306 22.1180M-CQ
	24.000	SE2708CT-ND	1.89	15.75	55.50	100.00	SE2708TR-ND	830.00	MA-306 24.000M-CQ
	24.576	SE2709CT-ND	1.89	15.75	55.50	100.00	SE2709TR-ND	830.00	MA-306 24.576M-CQ
	25.000	SE2710CT-ND	1.89	15.75	55.50	100.00	SE2710TR-ND	830.00	MA-306 25.000M-CQ
	25.175	SE2711CT-ND	1.89	15.75	55.50	100.00	SE2711TR-ND	830.00	MA-306 25.175M-CQ
	27.000	SE2712CT-ND	1.89	15.75	55.50	100.00	SE2712TR-ND	830.00	MA-306 27.000M-CQ
	28.000	SE2713CT-ND	1.89	15.75	55.50	100.00	SE2713TR-ND	830.00	MA-306 28.000M-CQ
	28.636	SE2715CT-ND	1.89	15.75	55.50	100.00	SE2715TR-ND	830.00	MA-306 28.636M-CQ
	29.491	SE2716CT-ND	1.89	15.75	55.50	100.00	SE2716TR-ND	830.00	MA-306 29.491M-CQ
	32.000	SE2718CT-ND	1.89	15.75	55.50	100.00	SE2718TR-ND	830.00	MA-306 32.000M-CQ
	40.000	SE2725CT-ND	2.04	17.00	60.00	108.00	SE2725TR-ND	900.00	MA-306 40.000M-CQ

EPSON ELECTRONICS AMERICA, INC.

Cylinder-Type Quartz Crystals

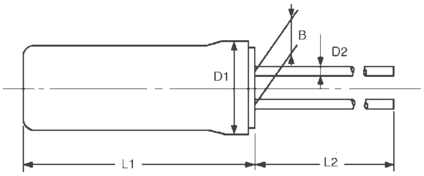
C-Type/C-2-Type

SPECIFICATIONS FOR C-TYPE (Characteristics):

• **Nominal Frequency:** 32.768KHz • **Operating Temperature:** -10°C ~ +60°C • **Maximum Drive Level:** 1.0µW Max. • **Frequency Tolerance (Standard):** ±20ppm • **Load Capacitance:** (SE3201, SE3202, SE3203) 12.5pf; (SE3204) 9pf • **Series Resistance:** C-001R – 35KΩ Max. (18KΩ Typ.); C-002RX and C-004R – 50KΩ Max. (30KΩ Typ.); and C-005R – 50KΩ Max. (37KΩ Typ.)

SPECIFICATIONS FOR C-2-TYPE (Characteristics):

• **Operating Temperature:** -10°C ~ +60°C • **Max. Drive Level:** 1.0µW Max. • **Crystal Load Capacitance/Tolerance:** All parts have 11 pfd. load capacitance, ±100 ppm except: **(SE3307)** C-2 31.200KI-AG, 7 pfd., ±200 ppm; **(SE3311)** C-2 32.560KH-AG, 7pfd., ±190 ppm; **(SE3314)** C-2 38.000KA-P 12.5 pfd., ±20 ppm • **Series Resistance Over 20KHz and Under 99KHz:** 35KΩ ~ 15KΩ • **Series Resistance Over 100KHz and Under 200KHz:** 12KΩ ~ 8KΩ.

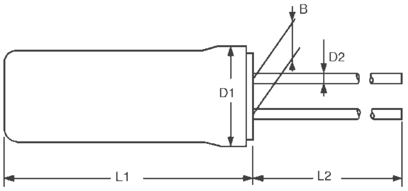


Model	L_1	L_2	D_1	D_2	B
C-2-Type	6.2 MAX	4.0 MIN	ø2.0 MAX	ø0.2	0.6
C-001R	8.0 MAX	9.0 MIN	ø3.1 MAX	ø0.3	1.1
C-002RX	6.0 MAX	4.0 MIN	ø2.0 MAX	ø0.2	0.6
C-004R	5.0 MAX	4.0 MIN	ø1.5 MAX	ø0.18	0.5
C-005R	4.6 MAX	4.0 MIN	ø1.2 MAX	ø0.15	0.3

CA-301 Type

SPECIFICATIONS (Characteristics):

• **Operating Temperature:** -20°C ~ +70°C • **Maximum Drive Level:** 2mW Max. • **Recommended Level:** 10µW ~ 100µW Typ. • **Frequency Tolerance (Standard):** ±30ppm • **Load Capacitance:** 18 pfd • **Series Resistance:** As per table below.



Model	L_1	L_2	D_1	D_2	B
Under 5.3MHz	10.3 MAX	9.0 MIN	ø3.1 MAX	ø0.3	1.1
Over 5.5 MHz	8.9 MAX	9.0 MIN	ø3.1 MAX	ø0.3	1.1

Frequency (MHz)	Series Resistance (Ω)	Mode
Over 4.0MHz Under 5.3MHz	150 Ω MAX.	Fundamental
Over 5.5MHz Under 6.0MHz	100 Ω MAX.	
Over 6.0MHz Under 10.0MHz	80 Ω MAX.	
Over 10.0MHz Under 12.0MHz	60 Ω MAX.	
Over 12.0MHz Under 16.0MHz	50 Ω MAX.	
Over 16.0MHz Under 26.0MHz	40 Ω MAX.	
Over 26.0MHz Under 36.0MHz	100 Ω MAX.	3rd Overtone
Exceeding 36.0MHz Below 60.0MHz	80 Ω MAX.	

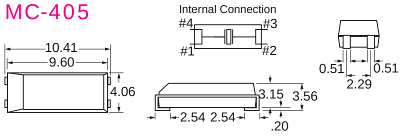
Series	Frequency	Digi-Key Part No.	Pricing 1	10	50	100	1,000	Epson Part No.
C-Type	32.768KHz	SE3201-ND	.42	3.50	12.00	22.00	180.00	C-001R 32.768K-A
	32.768KHz	SE3202-ND	.42	3.50	12.00	22.00	180.00	C-002RX 32.768K-A
	32.768KHz	SE3203-ND	1.38	11.50	41.00	74.00	620.00	C-004R 32.768K-A
	32.768KHz	SE3204-ND	5.64	47.00	166.50	300.00	2500.01	C-005R 32.768K-AC
C-2 Type	20.000KHz	SE3301-ND	1.23	10.25	36.50	66.00	550.00	C-2 20.000K-P
	25.600KHz	SE3302-ND	1.23	10.25	36.50	66.00	550.00	C-2 25.600K-P
	26.667KHz	SE3303-ND	1.23	10.25	36.50	66.00	550.00	C-2 26.667K-P
	28.000KHz	SE3304-ND	1.23	10.25	36.50	66.00	550.00	C-2 28.000K-P
	30.000KHz	SE3305-ND	1.23	10.25	36.50	66.00	550.00	C-2 30.000K-P
	30.760KHz	SE3306-ND	1.23	10.25	36.50	66.00	550.00	C-2 30.760K-P
	31.200KHz	SE3307-ND	1.23	10.25	36.50	66.00	550.00	C-2 31.200KI-AG
	31.250KHz	SE3308-ND	1.23	10.25	36.50	66.00	550.00	C-2 31.250K-P
	31.500KHz	SE3309-ND	1.23	10.25	36.50	66.00	550.00	C-2 31.500K-P
	32.000KHz	SE3310-ND	1.23	10.25	36.50	66.00	550.00	C-2 32.000K-P
	32.560KHz	SE3311-ND	1.23	10.25	36.50	66.00	550.00	C-2 32.560KH-AG
	32.919KHz	SE3312-ND	1.23	10.25	36.50	66.00	550.00	C-2 32.919KC-P
	36.000KHz	SE3313-ND	1.23	10.25	36.50	66.00	550.00	C-2 36.000K-P
	38.000KHz	SE3314-ND	1.35	11.25	36.50	66.00	550.00	C-2 38.000KA-P
	38.400KHz	SE3315-ND	1.23	10.25	36.50	66.00	550.00	C-2 38.400K-P
	40.000KHz	SE3316-ND	1.23	10.25	36.50	66.00	550.00	C-2 40.000K-P
	46.6084KHz	SE3317-ND	1.23	10.25	36.50	66.00	550.00	C-2 46.6084KC-P
	50.000KHz	SE3318-ND	1.23	10.25	36.50	66.00	550.00	C-2 50.000K-P
	59.787KHz	SE3319-ND	1.23	10.25	36.50	66.00	550.00	C-2 59.787KC-P
	60.000KHz	SE3320-ND	1.23	10.25	36.50	66.00	550.00	C-2 60.000K-P
	60.002KHz	SE3321-ND	1.23	10.25	36.50	66.00	550.00	C-2 60.002KC-P
	65.535KHz	SE3322-ND	1.23	10.25	36.50	66.00	550.00	C-2 65.535K-P
	75.000KHz	SE3323-ND	1.23	10.25	36.50	66.00	550.00	C-2 75.000K-P
	76.800KHz	SE3324-ND	1.23	10.25	36.50	66.00	550.00	C-2 76.800K-P
	83.000KHz	SE3330-ND	1.47	12.25	43.50	78.00	650.00	C-2 83.000K-P
	96.000KHz	SE3331-ND	1.47	12.25	43.50	78.00	650.00	C-2 96.000K-P
	100.000KHz	SE3333-ND	1.47	12.25	43.50	78.00	650.00	C-2 100.000K-P
	111.000KHz	SE3334-ND	1.47	12.25	43.50	78.00	650.00	C-2 111.000K-P
	120.000KHz	SE3335-ND	1.47	12.25	43.50	78.00	650.00	C-2 120.000K-P
	120.8475KHz	SE3336-ND	1.47	12.25	43.50	78.00	650.00	C-2 120.847K-P
	131.072KHz	SE3337-ND	1.77	14.75	52.00	94.00	780.00	C-2 131.072K-P
	149.475KHz	SE3338-ND	1.77	14.75	52.00	94.00	780.00	C-2 149.475K-P
CA-301 Type	4.0000MHz	SE3404-ND	1.89	15.75	55.50	100.00	830.00	CA-301 4.000M-C
	4.194304MHz	SE3405-ND	1.89	15.75	55.50	100.00	830.00	CA-301 4.194M-C
	4.433619MHz	SE3406-ND	1.89	15.75	55.50	100.00	830.00	CA-301 4.433M-C
	4.9152MHz	SE3407-ND	1.89	15.75	55.50	100.00	830.00	CA-301 4.915M-C
	5.500MHz	SE3408-ND	1.17	9.75	34.00	62.00	520.00	CA-301 5.500M-C
	6.000MHz	SE3409-ND	1.17	9.75	34.00	62.00	520.00	CA-301 6.000M-C
	6.144MHz	SE3410-ND	1.17	9.75	34.00	62.00	520.00	CA-301 6.144M-C
	6.757MHz	SE3411-ND	1.17	9.75	34.00	62.00	520.00	CA-301 6.757M-C
	7.200MHz	SE3412-ND	1.17	9.75	34.00	62.00	520.00	CA-301 7.200M-C
	7.3728MHz	SE3413-ND	1.17	9.75	34.00	62.00	520.00	CA-301 7.372M-C
	8.000MHz	SE3414-ND	1.17	9.75	34.00	62.00	520.00	CA-301 8.000M-C
	8.388608MHz	SE3415-ND	1.17	9.75	34.00	62.00	520.00	CA-301 8.388M-C
	8.432MHz	SE3416-ND	1.17	9.75	34.00	62.00	520.00	CA-301 8.432M-C
	9.600MHz	SE3418-ND	1.17	9.75	34.00	62.00	520.00	CA-301 9.600M-C
	9.8304MHz	SE3419-ND	1.17	9.75	34.00	62.00	520.00	CA-301 9.830M-C
	10.000MHz	SE3420-ND	1.17	9.75	34.00	62.00	520.00	CA-301 10.000M-C
	10.240MHz	SE3421-ND	1.17	9.75	34.00	62.00	520.00	CA-301 10.240M-C
	10.6244MHz	SE3422-ND	1.17	9.75	34.00	62.00	520.00	CA-301 10.624M-C
	11.0592MHz	SE3423-ND	1.17	9.75	34.00	62.00	520.00	CA-301 11.059M-C
	12.000MHz	SE3424-ND	1.17	9.75	34.00	62.00	520.00	CA-301 12.000M-C
	12.096MHz	SE3425-ND	1.17	9.75	34.00	62.00	520.00	CA-301 12.096M-C
	12.288MHz	SE3426-ND	1.17	9.75	34.00	62.00	520.00	CA-301 12.288M-C
	13.500MHz	SE3427-ND	1.17	9.75	34.00	62.00	520.00	CA-301 13.500M-C
	14.000MHz	SE3428-ND	1.17	9.75	34.00	62.00	520.00	CA-301 14.000M-C
	14.31818MHz	SE3429-ND	1.17	9.75	34.00	62.00	520.00	CA-301 14.318M-C
	14.500MHz	SE3430-ND	1.17	9.75	34.00	62.00	520.00	CA-301 14.500M-C
	14.7456MHz	SE3431-ND	1.17	9.75	34.00	62.00	520.00	CA-301 14.745M-C
	15.000MHz	SE3432-ND	1.17	9.75	34.00	62.00	520.00	CA-301 15.000M-C
	16.000MHz	SE3433-ND	1.17	9.75	34.00	62.00	520.00	CA-301 16.000M-C
	16.257MHz	SE3434-ND	1.17	9.75	34.00	62.00	520.00	CA-301 16.257M-C
	18.000MHz	SE3435-ND	1.17	9.75	34.00	62.00	520.00	CA-301 18.000M-C
	18.432MHz	SE3436-ND	1.17	9.75	34.00	62.00	520.00	CA-301 18.432M-C
	19.6608MHz	SE3437-ND	1.17	9.75	34.00	62.00	520.00	CA-301 19.660M-C
	20.000MHz	SE3438-ND	1.17	9.75	34.00	62.00	520.00	CA-301 20.000M-C
	22.1184MHz	SE3439-ND	1.17	9.75	34.00	62.00	520.00	CA-301 22.118M-C
	24.000MHz	SE3440-ND	1.17	9.75	34.00	62.00	520.00	CA-301 24.000M-C
	25.000MHz	SE3441-ND	1.17	9.75	34.00	62.00	520.00	CA-301 25.000M-C
	25.175MHz	SE3442-ND	1.17	9.75	34.00	62.00	520.00	CA-301 25.175M-C
	27.000MHz	SE3443-ND	1.20	10.00	35.00	63.00	530.00	CA-301 27.000M-C
	28.000MHz	SE3444-ND	1.20	10.00	35.00	63.00	530.00	CA-301 28.000M-C
	28.322MHz	SE3445-ND	1.20	10.00	35.00	63.00	530.00	CA-301 28.322M-C
	32.000MHz	SE3446-ND	1.20	10.00	35.00	63.00	530.00	CA-301 32.000M-C
	32.768MHz	SE3447-ND	1.20	10.00	35.00	63.00	530.00	CA-301 32.768M-C
	33.000MHz	SE3448-ND	1.20	10.00	35.00	63.00	530.00	CA-301 33.000M-C
	33.333MHz	SE3449-ND	1.20	10.00	35.00	63.00	530.00	CA-301 33.333M-C
	36.000MHz	SE3450-ND	1.20	10.00	35.00	63.00	530.00	CA-301 36.000M-C
	40.000MHz	SE3451-ND	1.20	10.00	35.00	63.00	530.00	CA-301 40.000M-C
	46.000MHz	SE3453-ND	1.20	10.00	35.00	63.00	530.00	CA-301 46.000M-C
	49.860MHz	SE3454-ND	1.20	10.00	35.00	63.00	530.00	CA-301 49.860M-C
	50.000MHz	SE3455-ND	1.20	10.00	35.00	63.00	530.00	CA-301 50.000M-C
	55.000MHz	SE3456-ND	1.20	10.00	35.00	63.00	530.00	CA-301 55.000M-C
	60.000MHz	SE3457-ND	1.29	10.75	37.00	67.00	560.00	CA-301 60.000M-C

EPSON ELECTRONICS
AMERICA, INC.

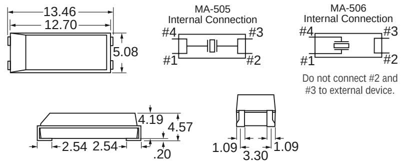
Surface-Mount Quartz Crystal Products

Storage Temperature: –55°C to +125°C.

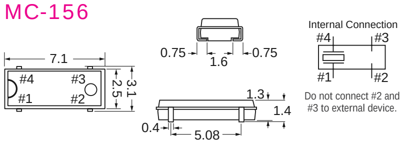
MC-405



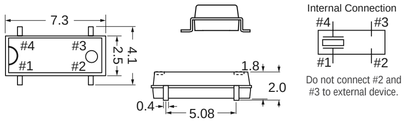
MA-505/MA-506



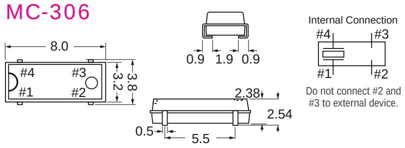
MC-156



MC-206

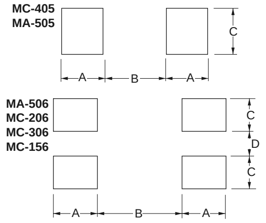


MC-306



Recommended Soldering Pattern

- Capable of withstanding reflow temperatures of 260°C for 20 seconds
- Suitable for use in today's high density surface mount boards



Type	Dimensions (mm) A	B	C	D
MC-405	4.09	3.91	4.09	—
MA-505	4.09	7.01	5.61	—
MA-506	4.09	6.86	2.06	1.52
MC-156	1.2	3.88	1.5	1.0
MC-206	1.2	3.88	1.3	2.4
MC-306	1.3	4.2	1.9	1.3

Series	Frequency (MHz)◊	Digi-Key Part No.	Cut Tape Price Each 1	10	50	100	Digi-Key Part No.	T/R Pricing 1,000	Epson Part No.
MC-405	32.768kHz	SE2405CT-ND	2.04	1.70	1.20	1.08	SE2405TR-ND	900.00	MC-405 32.768K-A2
MA-505	4.000	SE2518CT-ND	2.37	1.98	1.38	1.25	SE2518TR-ND	1050.00	MA-505 4.000M-C0
	4.096	SE2519CT-ND	2.37	1.98	1.38	1.25	SE2519TR-ND	1050.00	MA-505 4.096M-C0
	4.915	SE2520CT-ND	2.37	1.98	1.38	1.25	SE2520TR-ND	1050.00	MA-505 4.915M-C0
	6.000	SE2501CT-ND†	1.56	1.30	.91	.83	SE2501TR-ND	690.00	MA-505 6.000M-C0
	6.144	SE2502CT-ND†	1.56	1.30	.91	.83	SE2502TR-ND	690.00	MA-505 6.144M-C0
	7.3728	SE2503CT-ND†	1.56	1.30	.91	.83	SE2503TR-ND	690.00	MA-505 7.372M-C0
	8.000	SE2504CT-ND†	1.56	1.30	.91	.83	SE2504TR-ND	690.00	MA-505 8.000M-C0
	9.830	SE2524CT-ND	1.56	1.30	.91	.83	SE2524TR-ND	690.00	MA-505 9.830M-C0
	10.000	SE2505CT-ND†	1.56	1.30	.91	.83	SE2505TR-ND	690.00	MA-505 10.000M-C0
	10.240	SE2525CT-ND	1.56	1.30	.91	.83	SE2525TR-ND	690.00	MA-505 10.240M-C0
	11.0592	SE2506CT-ND†	1.56	1.30	.91	.83	SE2506TR-ND	690.00	MA-505 11.059M-C0
	12.000	SE2507CT-ND†	1.56	1.30	.91	.83	SE2507TR-ND	690.00	MA-505 12.000M-C0
	14.318	SE2528CT-ND	1.56	1.30	.91	.83	SE2528TR-ND	690.00	MA-505 14.318M-C0
	14.745	SE2529CT-ND	1.56	1.30	.91	.83	SE2529TR-ND	690.00	MA-505 14.745M-C0
	16.000	SE2508CT-ND†	1.56	1.30	.91	.83	SE2508TR-ND	690.00	MA-505 16.000M-C0
	18.432	SE2533CT-ND	1.56	1.30	.91	.83	SE2533TR-ND	690.00	MA-505 18.432M-C0
	19.660	SE2535CT-ND	1.56	1.30	.91	.83	SE2535TR-ND	690.00	MA-505 19.660M-C0
	20.000	SE2509CT-ND†	1.56	1.30	.91	.83	SE2509TR-ND	690.00	MA-505 20.000M-C0
	24.000	SE2510CT-ND†	1.56	1.30	.91	.83	SE2510TR-ND	690.00	MA-505 24.000M-C0
	24.576	SE2538CT-ND	1.56	1.30	.91	.83	SE2538TR-ND	690.00	MA-505 24.576M-C0
	25.000	SE2539CT-ND	1.56	1.30	.91	.83	SE2539TR-ND	690.00	MA-505 25.000M-C0
	27.000	SE2541CT-ND	1.56	1.30	.91	.83	SE2541TR-ND	690.00	MA-505 27.000M-C0
	28.636	SE2542CT-ND	1.56	1.30	.91	.83	SE2542TR-ND	690.00	MA-505 28.636M-C0
	29.491	SE2543CT-ND	1.56	1.30	.91	.83	SE2543TR-ND	690.00	MA-505 29.491M-C0
	30.000	SE2544CT-ND	1.56	1.30	.91	.83	SE2544TR-ND	690.00	MA-505 30.000M-C0
	32.768	SE2546CT-ND	1.62	1.35	.94	.85	SE2546TR-ND	710.00	MA-505 32.768M-C0
	33.3333	SE2514CT-ND†	1.62	1.35	.94	.85	SE2514TR-ND	710.00	MA-505 33.3330M-C0
	36.000	SE2548CT-ND	1.62	1.35	.94	.85	SE2548TR-ND	710.00	MA-505-36.000M-C0
	40.000	SE2515CT-ND†	1.62	1.35	.94	.85	SE2515TR-ND	710.00	MA-505 40.000M-C0
	60.000	SE2517CT-ND†	1.77	1.48	1.02	.92	SE2517TR-ND	770.00	MA-505-60.00M-C0
	64.000	SE2553CT-ND	1.77	1.48	1.02	.92	SE2553TR-ND	770.00	MA-505-64.000M-C0
MA-506	4.000	SE2618CT-ND	2.37	1.98	1.38	1.25	SE2618TR-ND	1050.00	MA-506 4.000M-C0
	4.096	SE2619CT-ND	2.37	1.98	1.38	1.25	SE2619TR-ND	1050.00	MA-506 4.096M-C0
	4.915	SE2620CT-ND	2.37	1.98	1.38	1.25	SE2620TR-ND	1050.00	MA-506 4.915M-C0
	6.000	SE2601CT-ND•	1.56	1.30	.91	.83	SE2601TR-ND	690.00	MA-506 6.0000M-C0
	6.144	SE2602CT-ND•	1.56	1.30	.91	.83	SE2602TR-ND	690.00	MA-506 6.144M-C0
	7.3728	SE2603CT-ND•	1.56	1.30	.91	.83	SE2603TR-ND	690.00	MA-506 7.372M-C0
	8.000	SE2604CT-ND•	1.56	1.30	.91	.83	SE2604TR-ND	690.00	MA-506 8.000M-C0
	9.830	SE2624CT-ND	1.56	1.30	.91	.83	SE2624TR-ND	690.00	MA-506 9.8300M-C0
	10.000	SE2605CT-ND•	1.56	1.30	.91	.83	SE2605TR-ND	690.00	MA-506 10.000M-C0
	10.240	SE2625CT-ND	1.56	1.30	.91	.83	SE2625TR-ND	690.00	MA-506 10.240M-C0
	11.000	SE2626CT-ND	1.56	1.30	.91	.83	SE2626TR-ND	690.00	MA-506 11.000M-C0
	11.0592	SE2606CT-ND•	1.56	1.30	.91	.83	SE2606TR-ND	690.00	MA-506 11.059M-C0
	12.000	SE2607CT-ND•	1.56	1.30	.91	.83	SE2607TR-ND	690.00	MA-506 12.000M-C0
	12.288	SE2627CT-ND	1.56	1.30	.91	.83	SE2627TR-ND	690.00	MA-506 12.288M-C0
	14.318	SE2628CT-ND	1.56	1.30	.91	.83	SE2628TR-ND	690.00	MA-506 14.318M-C0
	14.745	SE2629CT-ND	1.56	1.30	.91	.83	SE2629TR-ND	690.00	MA-506 14.745M-C0
	15.000	SE2630CT-ND	1.56	1.30	.91	.83	SE2630TR-ND	690.00	MA-506 15.000M-C0
	16.000	SE2608CT-ND•	1.56	1.30	.91	.83	SE2608TR-ND	750.00	MA-506 16.000M-C0
	16.257	SE2631CT-ND	1.56	1.30	.91	.83	SE2631TR-ND	690.00	MA-506 16.257M-C0
	18.000	SE2632CT-ND	1.56	1.30	.91	.83	SE2632TR-ND	690.00	MA-506 18.000M-C0
	18.432	SE2633CT-ND	1.56	1.30	.91	.83	SE2633TR-ND	690.00	MA-506 18.432M-C0
	19.660	SE2635CT-ND	1.56	1.30	.91	.83	SE2635TR-ND	690.00	MA-506 19.660M-C0
	20.000	SE2609CT-ND•	1.56	1.30	.91	.83	SE2609TR-ND	690.00	MA-506 20.000M-C0
	20.480	SE2636CT-ND	1.56	1.30	.91	.83	SE2636TR-ND	690.00	MA-506 20.480M-C0
	22.118	SE2637CT-ND	1.56	1.30	.91	.83	SE2637TR-ND	690.00	MA-506 22.118M-C0
	24.000	SE2610CT-ND•	1.56	1.30	.91	.83	SE2610TR-ND	690.00	MA-506 24.000M-C0
	24.576	SE2638CT-ND	1.56	1.30	.91	.83	SE2638TR-ND	690.00	MA-506 24.576M-C0
	25.000	SE2639CT-ND	1.56	1.30	.91	.83	SE2639TR-ND	690.00	MA-506 25.000M-C0
	27.000	SE2641CT-ND	1.56	1.30	.91	.83	SE2641TR-ND	690.00	MA-506 27.000M-C0
	28.636	SE2642CT-ND	1.56	1.30	.91	.83	SE2642TR-ND	690.00	MA-506 28.636M-C0
	32.000	SE2613CT-ND•	1.62	1.35	.94	.85	SE2613TR-ND	710.00	MA-506 32.000M-C0
	33.000	SE2647CT-ND	1.62	1.35	.94	.85	SE2647TR-ND	710.00	MA-506 33.000M-C0
	40.000	SE2615CT-ND•	1.62	1.35	.94	.85	SE2615TR-ND	710.00	MA-506 40.000M-C0
	48.000	SE2651CT-ND	1.62	1.35	.94	.85	SE2651TR-ND	710.00	MA-506 48.000M-C0
	50.000	SE2616CT-ND•	1.62	1.35	.94	.85	SE2616TR-ND	710.00	MA-506 50.000M-C0
	64.000	SE2653CT-ND	1.77	1.48	1.02	.92	SE2653TR-ND	770.00	MA-506-64.000M-C0
MC-156	32.768KHz	SE2412CT-ND	2.64	2.20	1.56	1.40	SE2412TR-ND	1170.00	MC-156 32.768KA-A2
MC-206	32.768KHz	SE2406CT-ND	1.77	1.48	1.04	.94	SE2406TR-ND	780.00	MC-206 32.768KA-A2
MC-306	32.768KHz	SE2407CT-ND	1.17	.98	.71	.64	SE2407TR-ND	530.00	MC-306 32.768K-A2

Package	MC-405	MA-505	MA-506	MC-156	MC-206	MC-306
Operating Temperature	-40°C to +85°C	-20°C to +70°C	-20°C to +70°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Maximum Drive Level	1.0µW	2mW	2mW	1.0µW	1.0µW	1.0µW
Frequency Tolerance	±20ppm @ 25°C	±50ppm @ 25°C	±50ppm @ 25°C	±20ppm @ 25°C	±20ppm @ 25°C	±20ppm @ 25°C
Load Capacitance	12.5pf	18pf	18pf	12.5pf	12.5pf	12.5pf
Series Resistance	50K Ohm Max.	50 Ohm Max.	50 Ohm Max.	65K Ohm Max.	50K Ohm Max.	50K Ohm Max.
Shunt Capacitance	0.85pf Typ.	5pf Max.	5pf Max.	—	0.9pf max.	0.9pf Max.

◊ Except when otherwise noted.

† **SE1-KIT-ND** ***Digi-Key® SMT Crystal Kit*** 3 each of values denoted (51 total pieces). Notebook style storage case and bin storage guide included. **$89.00**

• **SE2-KIT-ND** ***Digi-Key® SMT Crystal Kit*** 3 each of values denoted (51 total pieces). Notebook style storage case and bin storage guide included. **$89.00**

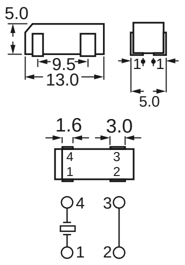
CTS® Reeves ATP-SM Series SMT Crystals

Electrical Specifications:
- **Calibration Tolerance:** ±0.005 ppm @ 25°C
- **Temperature Tolerance:** ±100 ppm
- **Operating Temperature Range:** 0°C to 70°C
- **Drive Level:** 100 Microwatts, typ.
- **Shunt Capacitance:** 7 pF, Max.
- **Aging:** <10 ppm/Yr

Freq. (MHz)	Load Cap.	Digi-Key Part No.	Price Each				CTS Reeves Part No.
			1	10	50	100	
3.579545	18pf	CTX600-ND	2.89	2.51	2.17	1.51	ATP036SM
3.686400	20pf	CTX601-ND	2.89	2.51	2.17	1.51	ATP037SM
4.000000	20pf	CTX602-ND	2.89	2.51	2.17	1.51	ATP040SM
4.915200	20pf	CTX603-ND	2.89	2.51	2.17	1.51	ATP042SM
5.068800	20pf	CTX604-ND	2.89	2.51	2.17	1.51	ATP050SM
6.000000	20pf	CTX605-ND	2.89	2.51	2.17	1.51	ATP060SM
8.000000	20pf	CTX606-ND	2.89	2.51	2.17	1.51	ATP08ASM
9.830400	20pf	CTX607-ND	2.89	2.51	2.17	1.51	ATP098SM
10.000000	Series	CTX608-ND	2.89	2.51	2.17	1.51	ATP100SM
10.000000	20pf	CTX609-ND	2.89	2.51	2.17	1.51	ATP10ASM

Freq. (MHz)	Load Cap.	Digi-Key Part No.	Price Each				CTS Reeves Part No.
			1	10	50	100	
11.05920	20pf	CTX610-ND	2.89	2.51	2.17	1.51	ATP111SM
12.00000	Series	CTX611-ND	2.89	2.51	2.17	1.51	ATP120SM
12.28800	20pf	CTX612-ND	2.89	2.51	2.17	1.51	ATP122SM
14.31818	Series	CTX613-ND	2.89	2.51	2.17	1.51	ATP143SM
15.36000	20pf	CTX614-ND	2.89	2.51	2.17	1.51	ATP153SM
16.00000	Series	CTX615-ND	2.89	2.51	2.17	1.51	ATP160SM
16.00000	20pf	CTX616-ND	2.89	2.51	2.17	1.51	ATP16ASM
20.00000	Series	CTX617-ND	3.15	2.73	2.36	1.64	ATP200SM
20.48000	20pf	CTX618-ND	3.15	2.73	2.48	1.72	ATP204SM
24.57600	Series	CTX619-ND	3.15	2.73	2.48	1.72	ATP245SM

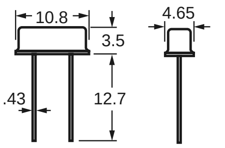
ATP-SM Series



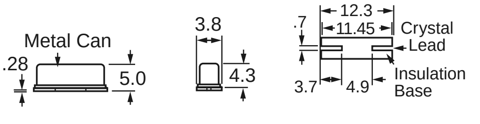
ATS and ATS-SM Series Crystals

Electrical Specifications:
- **Frequency Tolerance:** ±50ppm
- **Shunt Capacitance:** 7.0 pF, Max.
- **Drive Level:** 100 Microwatts
- **Operating Temperature Range:** 0°C to 70°C
- **Operating Mode:** Fundamental

ATS Series



ATS-SM Series



Freq. (MHz)	Load Cap.	Digi-Key Part No.	Price Each				CTS Reeves Part No.
			1	10	50	100	
ATS Series							
3.579545	18pf	CTX400-ND	1.31	1.14	1.03	.72	ATS036
3.686400	20pf	CTX401-ND	1.31	1.14	1.03	.72	ATS037
4.000000	20pf	CTX402-ND	1.31	1.14	1.03	.72	ATS040
4.915200	20pf	CTX403-ND	1.31	1.14	1.03	.72	ATS042
5.068800	20pf	CTX404-ND	1.31	1.14	1.03	.72	ATS050
6.000000	20pf	CTX405-ND	1.31	1.14	1.03	.72	ATS060
8.000000	20pf	CTX406-ND	1.31	1.14	1.03	.72	ATS08A
9.830400	20pf	CTX407-ND	1.31	1.14	1.03	.72	ATS098
10.000000	Series	CTX408-ND	1.31	1.14	1.03	.72	ATS100
11.059200	20pf	CTX409-ND	1.31	1.14	1.03	.72	ATS111
12.000000	Series	CTX410-ND	1.31	1.14	1.03	.72	ATS120
12.288000	20pf	CTX411-ND	1.31	1.14	1.03	.72	ATS122
14.318180	Series	CTX412-ND	1.31	1.14	1.03	.72	ATS143
15.360000	20pf	CTX413-ND	1.31	1.14	1.03	.72	ATS15A
16.000000	Series	CTX414-ND	1.31	1.14	1.03	.72	ATS160
16.000000	20pf	CTX415-ND	1.31	1.14	1.03	.72	ATS16A
20.000000	Series	CTX416-ND	1.31	1.14	1.03	.72	ATS200
20.480000	20pf	CTX417-ND	1.69	1.47	1.33	.92	ATS204
24.576000	Series	CTX418-ND	1.69	1.47	1.33	.92	ATS245
25.000000	Series	CTX419-ND	1.69	1.47	1.33	.92	ATS250
Base Insulator		HC49INS-ND	—	.09	—	.08	700-9001

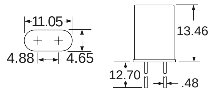
Freq. (MHz)	Load Cap.	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel Pricing 1,000	CTS Reeves Part No.
			1	10	50	100			
ATS-SM Series — Surface Mount									
3.579545	18pf	CTX500-ND	1.50	1.30	1.13	.79	CTX500TR-ND	540.00	ATS036SM-T
3.686400	20pf	CTX501-ND	1.50	1.30	1.13	.79	CTX501TR-ND	540.00	ATS037SM-T
4.000000	20pf	CTX502-ND	1.50	1.30	1.13	.79	CTX502TR-ND	540.00	ATS040SM-T
4.915200	20pf	CTX503-ND	1.50	1.30	1.13	.79	CTX503TR-ND	540.00	ATS042SM-T
5.068800	20pf	CTX504-ND	1.50	1.30	1.13	.79	CTX504TR-ND	540.00	ATS050SM-T
6.000000	20pf	CTX505-ND	1.50	1.30	1.13	.79	CTX505TR-ND	540.00	ATS060SM-T
8.000000	20pf	CTX506-ND	1.50	1.30	1.13	.79	CTX506TR-ND	540.00	ATS08ASM-T
9.830400	20pf	CTX507-ND	1.50	1.30	1.13	.79	CTX507TR-ND	540.00	ATS098SM-T
10.000000	Series	CTX508-ND	1.50	1.30	1.13	.79	CTX508TR-ND	540.00	ATS100SM-T
11.059200	20pf	CTX509-ND	1.50	1.30	1.13	.79	CTX509TR-ND	540.00	ATS111SM-T
12.000000	Series	CTX510-ND	1.50	1.30	1.13	.79	CTX510TR-ND	540.00	ATS120SM-T
12.288000	20pf	CTX511-ND	1.50	1.30	1.13	.79	CTX511TR-ND	540.00	ATS122SM-T
14.318180	Series	CTX512-ND	1.50	1.30	1.13	.79	CTX512TR-ND	540.00	ATS143SM-T
15.360000	20pf	CTX513-ND	1.50	1.30	1.13	.79	CTX513TR-ND	540.00	ATS15ASM-T
16.000000	Series	CTX514-ND	1.50	1.30	1.13	.79	CTX514TR-ND	540.00	ATS160SM-T
20.000000	Series	CTX515-ND	1.50	1.30	1.13	.79	CTX515TR-ND	540.00	ATS200SM-T
20.480000	20pf	CTX516-ND	1.88	1.63	1.43	1.00	CTX516TR-ND	680.00	ATS204SM-T
24.576000	Series	CTX517-ND	1.88	1.63	1.43	1.00	CTX517TR-ND	680.00	ATS245SM-T

Microprocessor Crystals

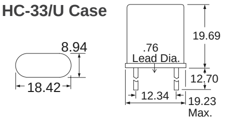
- Frequency Tolerance ±.005% (50PPM) @ 25°C
- ±.005% (50PPM) 0°C to +70°C
- Fully Hermetic Package
- Low Start-Up Resistance

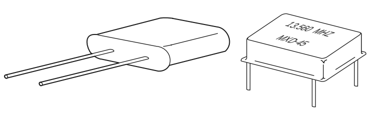
HC-49/U Case

Case Style HC-49 has same dimensions as Solder Welded Case HC-18.



HC-33/U Case





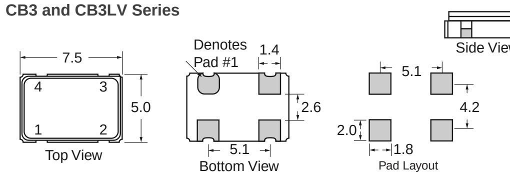
Freq. (MHz)	Case	Load Capacit.	Max. Series Resist.	Digi-Key Part No.	Price Each			Microprocessor	CTS Reeves Part No.
					1	10	100		
1.843200	HC49	13pF	540	CTX067-ND	3.22	2.69	1.97	—	MP018S
2.000000	HC49	20pF	300	CTX068-ND	3.22	2.69	1.97	—	MP020S
2.457600	HC49	32pF	300	CTX069-ND	2.08	1.74	1.27	—	MP024S
3.276800	HC33/51	15pF	100	CTX094-ND	3.92	3.28	2.40	IM6100C, 1CM7205; CDP1802, 1802C, 1804, 1804C; MC6802	MP032
3.579545	HC49	18pF	150	CTX049-ND	.94	.79	.57	MM5369 (Color burst); IM6102; PPS-8; MC6801, 6803, MC6802, 6809; CDP1802, 1802C, 1804, 1804C	MP036S
3.686400	HC49	20pF	150	CTX071-ND	.94	.79	.57	—	MP037
4.000000	HC49	20pF	75	CTX006-ND	.94	.79	.57	MCS-40, 4004, 4040, 4201; MC-6802, 6808, 6809; MK-3870, 3872, 3883, 3876; IM 6102; CDP1802, 1802C, 1804, 1804C	MP040
4.000000	HC49	Series	75	CTX080-ND	.94	.79	.57	Pace; MC6875; Z80, Z80A; TMS9940	MP04A
4.194304	HC49	12pF	75	CTX007-ND	.94	.79	.57	ICM7038, 7213, 7049; CDP1802, 1802C, 1804, 1804C	MP041
4.915200	HC49	20pF	75	CTX050-ND	.94	.79	.57	CDP1802, 1802C, 1804, 1804C	MP042
5.000000	HC49	20pF	50	CTX051-ND	.94	.79	.57	General Purpose; CDP1802, 1802C, 1804, 1804C	MP05A
5.000000	HC49	Series	50	CTX081-ND	.94	.79	.57	CDP1802, 1803, 1802C, 1804, 1804C; TMS 9985, 9940; IM6100A	MP05B
5.068800	HC49	Series	50	CTX052-ND	.94	.79	.57	COM5016, 5016T Dual Brg.	MP050
6.000000	HC49	20pF	50	CTX026-ND	.94	.79	.57	MCS-48, 8035, 8041, 8048, 8741, 8748; IM8048, IM8748; CDP1802, 1802C, 1804, 1804C, MC68A09	MP060
6.144000	HC49	20pF	50	CTX054-ND	.94	.79	.57	MCS-85, 8086; CDP1802, 1802C, 1804, 1804C	MP061
7.372800	HC49	Series	45	CTX074-ND	.94	.79	.57	—	MP073
8.000000	HC49	Series	45	CTX056-ND	.94	.79	.57	8 x 300; MC6875, 68000; Z8000; AMZ8000	MP080
8.000000	HC49	20pF	45	CTX082-ND	.94	.79	.57	IM6100A; CDP1807; Z8; 9940-B; MC68B09	MP080A
9.830400	HC49	20pF	45	CTX084-ND	.94	.79	.57	General Purpose	MP098
10.000000	HC49	Series	35	CTX057-ND	.94	.79	.57	General Purpose	MP100
10.000000	HC49	30pF	35	CTX083-ND	.94	.79	.57	MCS-85, 8085A-2; 9940-10	MP101
10.738635	HC49	32pF	35	CTX085-ND	.94	.79	.57	TI9918A	MP107
11.000000	HC49	18pF	35	CTX086-ND	.94	.79	.57	MCS-48, 8039, 8049	MP110
11.059200	HC49	Series	35	CTX078-ND	.94	.79	.57	—	MP111
12.000000	HC49	Series	35	CTX058-ND	.94	.79	.57	MCS-86, 8086/8284; 8202 Ram Controller; 9940-12	MP120
12.288000	HC49	32pF	35	CTX087-ND	.94	.79	.57	General Purpose	MP122
14.318180	HC49	Series	35	CTX088-ND	.94	.79	.57	General Purpose	MP143
14.745600	HC49	Series	35	CTX089-ND	.94	.79	.57	General Purpose	MP147
15.000000	HC49	Series	35	CTX059-ND	.94	.79	.57	MCS-86, 8086/8284; 8202 Ram Controller	MP150
16.000000	HC49	Series	35	CTX077-ND	.94	.79	.57	General Purpose	MP160
18.432000	HC49	Series	35	CTX061-ND	.94	.79	.57	MCS-80, 8080A/8224	MP184
19.660800	HC49	Series	35	CTX090-ND	.94	.79	.57	General Purpose	MP196
20.000000	HC49	Series	35	CTX062-ND	.94	.79	.57	MCS-80, 8080A/8224	MP200
22.118400	HC49	Series	35	CTX063-ND	1.51	1.26	.92	MCS-80, 8080A/8224	MP221
24.000000	HC49	Series	35	CTX091-ND	1.51	1.26	.92	MCS-86, 8086, 8284	MP240
24.576000	HC49	Series	35	CTX092-ND	1.51	1.26	.92	General Purpose	MP245
25.000000	HC49	Series	35	CTX093-ND	1.51	1.26	.92	8202 Ram Controller	MP250
Base Insulators				HC49INS-ND	—	.09	.08		700-9001

CB3 and CB3LV Series — Surface Mount Clock Oscillator

FEATURES:
• Standard miniature surface mount footprint • PCMCIA Type II and III compatible • CMOS/TTL compatible • 16mm Tape and Reel • Ceramic construction for long-term reliability • Seam welded and shielded with Kovar cover

SPECIFICATIONS:
• **Frequency Stability:** ±50ppm • **Supply Voltage:** CB3: 4.5V Min., 5.5V Max.; CB3LV: 3.0V Min., 3.6V Max. • **Supply Current:** 1.5440MHz to 20.00MHz: CB3 (25mA), CB3LV (12mA); >20.00MHz: CB3 (50mA), CB3LV (40mA) • **Operating Temperature:** 0°C to +70°C • **Rise and Fall Time:** 1.5440MHz to 20.00MHz: 10ns; >20.00MHz to <50MHz: 8ns; >50.00MHz to 80.00MHz: 5ns • **Output Load:** 1.5440MHz to 50.00MHz: 50pf; 50.10MHz to 80.00MHz: 30pf • **Enable Input Voltage:** 2V Min. • **Disable Input Voltage:** 0.8V Max.

CB3 and CB3LV Series



Pad	Function
1	Output Enable
2	Cover/CKT GND
3	Output
4	Vcc

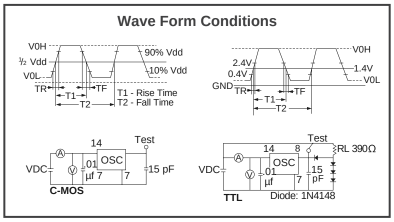
Frequency (MHz)	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel Pricing 1,000	CTS Reeves Part No.
		1	10	50	100			
CB3 SMD Clock Oscillator — 5V								
1.54400	CTX290CT-ND	8.08	7.44	4.27	2.97	CTX290TR-ND	2260.00	CB3-3C-1.5440-T
1.84320	CTX291CT-ND	8.08	7.44	4.27	2.97	CTX291TR-ND	2260.00	CB3-3C-1.8432-T
3.68640	CTX260CT-ND	8.08	7.44	4.27	2.97	CTX260TR-ND	2260.00	CB3-3C-3.6864-T
4.00000	CTX261CT-ND	8.08	7.44	4.27	2.97	CTX261TR-ND	2260.00	CB3-3C-4.0000-T
6.17600	CTX262CT-ND	8.08	7.44	4.27	2.97	CTX262TR-ND	2260.00	CB3-3C-6.1760-T
7.37280	CTX263CT-ND	8.08	7.44	4.27	2.97	CTX263TR-ND	2260.00	CB3-3C-7.3728-T
8.00000	CTX264CT-ND	8.08	7.44	4.27	2.97	CTX264TR-ND	2260.00	CB3-3C-8.0000-T
10.00000	CTX265CT-ND	8.08	7.44	4.27	2.97	CTX265TR-ND	2260.00	CB3-3C-10.0000-T
12.00000	CTX292CT-ND	8.08	7.44	4.27	2.97	CTX292TR-ND	2260.00	CB3-3C-12.0000-T
12.28800	CTX266CT-ND	8.08	7.44	4.27	2.97	CTX266TR-ND	2260.00	CB3-3C-12.2880-T
12.35200	CTX267CT-ND	8.08	7.44	4.27	2.97	CTX267TR-ND	2260.00	CB3-3C-12.3520-T
14.31818	CTX268CT-ND	8.08	7.44	4.27	2.97	CTX268TR-ND	2260.00	CB3-3C-14.31818-T
15.36000	CTX269CT-ND	8.08	7.44	4.27	2.97	CTX269TR-ND	2260.00	CB3-3C-15.3600-T
16.00000	CTX270CT-ND	8.08	7.44	4.27	2.97	CTX270TR-ND	2260.00	CB3-3C-16.0000-T
16.38400	CTX271CT-ND	8.08	7.44	4.27	2.97	CTX271TR-ND	2260.00	CB3-3C-16.3840-T
18.43200	CTX293CT-ND	8.08	7.44	4.27	2.97	CTX293TR-ND	2260.00	CB3-3C-18.4320-T
19.44000	CTX272CT-ND	8.08	7.44	4.27	2.97	CTX272TR-ND	2260.00	CB3-3C-19.4400-T
20.00000	CTX273CT-ND	8.08	7.44	4.27	2.97	CTX273TR-ND	2260.00	CB3-3C-20.0000-T
20.48000	CTX274CT-ND	8.08	7.44	4.27	2.97	CTX274TR-ND	2260.00	CB3-3C-20.4800-T
24.00000	CTX294CT-ND	8.08	7.44	4.27	2.97	CTX294TR-ND	2260.00	CB3-3C-24.0000-T
24.70400	CTX275CT-ND	8.08	7.44	4.27	2.97	CTX275TR-ND	2260.00	CB3-3C-24.7040-T
25.00000	CTX276CT-ND	8.08	7.44	4.27	2.97	CTX276TR-ND	2260.00	CB3-3C-25.0000-T
29.49120	CTX295CT-ND	8.08	7.44	4.27	2.97	CTX295TR-ND	2260.00	CB3-3C-29.4912-T
30.00000	CTX296CT-ND	8.08	7.44	4.27	2.97	CTX296TR-ND	2260.00	CB3-3C-30.0000-T
32.00000	CTX277CT-ND	8.08	7.44	4.27	2.97	CTX277TR-ND	2260.00	CB3-3C-32.0000-T
32.76800	CTX278CT-ND	8.08	7.44	4.27	2.97	CTX278TR-ND	2260.00	CB3-3C-32.7680-T
33.33300	CTX279CT-ND	8.08	7.44	4.27	2.97	CTX279TR-ND	2260.00	CB3-3C-33.3330-T
40.00000	CTX280CT-ND	8.08	7.44	4.27	2.97	CTX280TR-ND	2260.00	CB3-3C-40.0000-T
44.73600	CTX281CT-ND	8.08	7.44	4.27	2.97	CTX281TR-ND	2260.00	CB3-3C-44.7360-T
45.00000	CTX297CT-ND	8.08	7.44	4.27	2.97	CTX297TR-ND	2260.00	CB3-3C-45.0000-T
49.15200	CTX282CT-ND	8.08	7.44	4.27	2.97	CTX282TR-ND	2260.00	CB3-3C-49.1520-T
50.00000	CTX283CT-ND	8.08	7.44	4.27	2.97	CTX283TR-ND	2260.00	CB3-3C-50.0000-T
51.84000	CTX284CT-ND	8.08	7.44	4.27	2.97	CTX284TR-ND	2260.00	CB3-3C-51.8400-T
60.00000	CTX285CT-ND	8.88	8.19	4.59	3.19	CTX285TR-ND	2486.00	CB3-3C-60.0000-T
64.00000	CTX286CT-ND	8.88	8.19	4.59	3.19	CTX286TR-ND	2486.00	CB3-3C-64.0000-T
66.66660	CTX287CT-ND	8.88	8.19	4.59	3.19	CTX287TR-ND	2486.00	CB3-3C-66.6666-T
72.00000	CTX288CT-ND	11.26	10.37	6.03	4.19	CTX288TR-ND	3150.70	CB3-3C-72.0000-T
80.00000	CTX289CT-ND	11.26	10.37	6.03	4.19	CTX289TR-ND	3150.70	CB3-3C-80.0000-T
CB3LV SMD Clock Oscillator — 3.3V								
1.54400	CTX290LVCT-ND	8.08	7.44	4.27	2.97	CTX290LVTR-ND	2260.00	CB3LV-3C-1.5440-T
1.84320	CTX291LVCT-ND	8.08	7.44	4.27	2.97	CTX291LVTR-ND	2260.00	CB3LV-3C-1.8432-T
3.68640	CTX260LVCT-ND	8.08	7.44	4.27	2.97	CTX260LVTR-ND	2260.00	CB3LV-3C-3.6864-T
4.00000	CTX261LVCT-ND	8.08	7.44	4.27	2.97	CTX261LVTR-ND	2260.00	CB3LV-3C-4.0000-T
6.17600	CTX262LVCT-ND	8.08	7.44	4.27	2.97	CTX262LVTR-ND	2260.00	CB3LV-3C-6.1760-T
7.37280	CTX263LVCT-ND	8.08	7.44	4.27	2.97	CTX263LVTR-ND	2260.00	CB3LV-3C-7.3728-T
8.00000	CTX264LVCT-ND	8.08	7.44	4.27	2.97	CTX264LVTR-ND	2260.00	CB3LV-3C-8.0000-T
10.00000	CTX265LVCT-ND	8.08	7.44	4.27	2.97	CTX265LVTR-ND	2260.00	CB3LV-3C-10.0000-T
12.00000	CTX292LVCT-ND	8.08	7.44	4.27	2.97	CTX292LVTR-ND	2260.00	CB3LV-3C-12.0000-T
12.28800	CTX266LVCT-ND	8.08	7.44	4.27	2.97	CTX266LVTR-ND	2260.00	CB3LV-3C-12.2880-T
12.35200	CTX267LVCT-ND	8.08	7.44	4.27	2.97	CTX267LVTR-ND	2260.00	CB3LV-3C-12.3520-T
14.31818	CTX268LVCT-ND	8.08	7.44	4.27	2.97	CTX268LVTR-ND	2260.00	CB3LV-3C-14.31818-T
15.36000	CTX269LVCT-ND	8.08	7.44	4.27	2.97	CTX269LVTR-ND	2260.00	CB3LV-3C-15.3600-T
16.00000	CTX270LVCT-ND	8.08	7.44	4.27	2.97	CTX270LVTR-ND	2260.00	CB3LV-3C-16.0000-T
16.38400	CTX271LVCT-ND	8.08	7.44	4.27	2.97	CTX271LVTR-ND	2260.00	CB3LV-3C-16.3840-T
18.43200	CTX293LVCT-ND	8.08	7.44	4.27	2.97	CTX293LVTR-ND	2260.00	CB3LV-3C-18.4320-T
19.44000	CTX272LVCT-ND	8.08	7.44	4.27	2.97	CTX272LVTR-ND	2260.00	CB3LV-3C-19.4400-T
20.00000	CTX273LVCT-ND	8.08	7.44	4.27	2.97	CTX273LVTR-ND	2260.00	CB3LV-3C-20.0000-T
20.48000	CTX274LVCT-ND	8.08	7.44	4.27	2.97	CTX274LVTR-ND	2260.00	CB3LV-3C-20.4800-T
24.00000	CTX294LVCT-ND	8.08	7.44	4.27	2.97	CTX294LVTR-ND	2260.00	CB3LV-3C-24.0000-T
24.70400	CTX275LVCT-ND	8.08	7.44	4.27	2.97	CTX275LVTR-ND	2260.00	CB3LV-3C-24.7040-T
25.00000	CTX276LVCT-ND	8.08	7.44	4.27	2.97	CTX276LVTR-ND	2260.00	CB3LV-3C-25.0000-T
29.49120	CTX295LVCT-ND	8.08	7.44	4.27	2.97	CTX295LVTR-ND	2260.00	CB3LV-3C-29.4912-T
30.00000	CTX296LVCT-ND	8.08	7.44	4.27	2.97	CTX296LVTR-ND	2260.00	CB3LV-3C-30.0000-T
32.00000	CTX277LVCT-ND	8.08	7.44	4.27	2.97	CTX277LVTR-ND	2260.00	CB3LV-3C-32.0000-T
32.76800	CTX278LVCT-ND	8.08	7.44	4.27	2.97	CTX278LVTR-ND	2260.00	CB3LV-3C-32.7680-T
33.33300	CTX279LVCT-ND	8.08	7.44	4.27	2.97	CTX279LVTR-ND	2260.00	CB3LV-3C-33.3330-T
40.00000	CTX280LVCT-ND	8.08	7.44	4.27	2.97	CTX280LVTR-ND	2260.00	CB3LV-3C-40.0000-T
44.73600	CTX281LVCT-ND	8.08	7.44	4.27	2.97	CTX281LVTR-ND	2260.00	CB3LV-3C-44.7360-T
45.00000	CTX297LVCT-ND	8.08	7.44	4.27	2.97	CTX297LVTR-ND	2260.00	CB3LV-3C-45.0000-T
49.15200	CTX282LVCT-ND	8.08	7.44	4.27	2.97	CTX282LVTR-ND	2260.00	CB3LV-3C-49.1520-T
50.00000	CTX283LVCT-ND	8.08	7.44	4.27	2.97	CTX283LVTR-ND	2260.00	CB3LV-3C-50.0000-T
51.84000	CTX284LVCT-ND	8.08	7.44	4.27	2.97	CTX284LVTR-ND	2260.00	CB3LV-3C-51.8400-T
60.00000	CTX285LVCT-ND	8.88	8.19	4.70	3.27	CTX285LVTR-ND	2486.00	CB3LV-3C-60.0000-T
64.00000	CTX286LVCT-ND	8.88	8.19	4.70	3.27	CTX286LVTR-ND	2486.00	CB3LV-3C-64.0000-T
66.66660	CTX287LVCT-ND	8.88	8.19	4.70	3.27	CTX287LVTR-ND	2486.00	CB3LV-3C-66.6666-T
72.00000	CTX288LVCT-ND	11.26	10.37	5.95	4.14	CTX288LVTR-ND	3150.70	CB3LV-3C-72.0000-T
80.00000	CTX289LVCT-ND	11.26	10.37	5.95	4.14	CTX289LVTR-ND	3150.70	CB3LV-3C-80.0000-T

CTS Reeves MXO45 Clock Oscillators

Tri-State Output

Tri-State Logic uses the two standard logic levels of high (logic 1) and low (logic 0) but has added a third state that is not a logic level but an open circuit condition that effectively disconnects the output from your circuit with a high impedance (floating) state. Thereby enabling the use of numerous oscillators on the same bus line. Also, by using the enable pin to control the output, the crystal is still running even when the output is disabled (stand-by mode), thus eliminating any start-up time for the oscillator.

CTS HCMOS/TTL products utilize an Application Specific Integrated Circuit (ASIC) design strategy. Employing a single design family supporting both HCMOS/TTL applications helps in reducing costs and lead times. Utilizing ASIC technology reduces the number of components inside the XO (crystal oscillator), thus increasing reliability and further reducing cost.



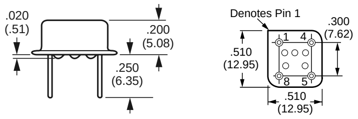
Features:
- C-MOS/TTL compatible
- Drives up to 10 standard TTL loads
- 100 PPM tolerance
- Tri-State output
- Fully hermetic resistance weld package

Standard Output

- Frequency Tolerance: ±100 PPM 0°C to 70°C
- C-MOS compatible
- Fully hermetic resistance weld package
- 8/14-pin compatible
- Drives up to 10 standard TTL Loads
- Input Voltage: +5 V DC ± .5V

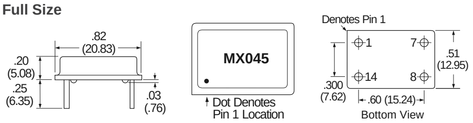
Parameter	Symbol	Condition	Minimum	Typical	Maximum	Units
Supply Voltage	VCC	—	4.5	5.0	5.5	V
Supply Current	ICC — —	1.0->7.0MHz >7.0->25MHz >25->50MHz	— — —	5 15 30	12 25 40	mA mA mA
Output Load	—	—	—	—	10	TTL
Output Current	IOH IOH	VOH = 3.9V VOH = 0.4V	— —	— —	-16 16	mA mA
Symmetry	Duty	1.0->50MHz >50->70MHz	45 40	— —	55 60	% %
Rise & Fall Time	Tr/Tf Tr/Tf	1.0->25MHz >25->70MHz	— —	5 3	8 5	ns ns
Enable Input V	VIH VIL	— —	2.0 —	— —	— 0.8	V V
Enable Input Load	Cin	—	—	—	10	pF
Tri-state Leakage	Iz	VIL = 0.8V	—	—	0.05	mA
Jitter	—	Peak-Peak	—	30	50	ps
Temperature	0-70°C					

Half Size



Pin #1 O/E (Tri-State)
NC (Standard)
Pin #4 Ground
Pin #5 Output
Pin #8 +5 V DC

Full Size



Pin #1 O/E (Tri-State)
NC (Standard)
Pin #7 Ground
Pin #8 Output
Pin #14 +5 V DC

Frequency (MHz)	Digi-Key Part No.	Price Each					CTS Reeves Part No.
		1	10	100	250	500	
Half Size Clock Oscillator with Tri-State Output							
1.00000	CTX180-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-1.000
1.84320	CTX181-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-1.8432
2.00000	CTX182-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-2.000
2.45760	CTX183-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-2.4576
3.68640	CTX184-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-3.6864
4.00000	CTX185-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-4.000
4.91520	CTX186-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-4.9152
5.00000	CTX187-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-5.000
5.06880	CTX188-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-5.0688
6.00000	CTX189-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-6.000
6.14400	CTX190-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-6.144
7.37280	CTX191-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-7.3728
8.00000	CTX192-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-8.000
10.00000	CTX193-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-10.000
12.00000	CTX194-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-12.000
14.31818	CTX195-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-14.31818
16.00000	CTX196-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-16.000
18.43200	CTX197-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-18.432
19.66080	CTX198-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-19.6608
20.00000	CTX199-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-20.000
24.00000	CTX250-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-24.000
25.00000	CTX251-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-25.000
25.17500	CTX252-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-25.175
28.32200	CTX253-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-28.322
32.00000	CTX254-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-32.000
40.00000	CTX255-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-40.000
50.00000	CTX256-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-50.000
64.00000	CTX257-ND	3.64	3.22	2.45	2.17	1.86	MXO45HST-64.000
66.66660	CTX258-ND	3.64	3.22	2.45	2.17	1.86	MXO45HST-66.6666
80.00000	CTX259-ND	5.85	5.18	3.94	3.49	2.99	MXO45HST-80.000
Half Size Clock Oscillator with Standard Output							
1.00000	CTX150-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-1.0000
1.84320	CTX151-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-1.8432
2.00000	CTX152-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-2.0000
2.45760	CTX153-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-2.4576
3.68640	CTX154-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-3.6864
4.00000	CTX155-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-4.0000
4.91520	CTX156-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-4.9152
5.00000	CTX157-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-5.0000
5.06880	CTX158-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-5.0688
6.00000	CTX159-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-6.0000
6.14400	CTX160-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-6.1440
7.37280	CTX161-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-7.3728
8.00000	CTX162-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-8.0000
10.00000	CTX163-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-10.0000
12.00000	CTX164-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-12.0000
14.31818	CTX165-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-14.31818
16.00000	CTX166-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-16.0000
18.43200	CTX167-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-18.4320
19.66080	CTX168-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-19.6608
20.00000	CTX169-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-20.0000
24.00000	CTX170-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-24.0000
25.00000	CTX171-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-25.0000
25.17500	CTX172-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-25.1750
28.32200	CTX173-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-28.3220
32.00000	CTX174-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-32.0000
40.00000	CTX175-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-40.0000
50.00000	CTX176-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-50.0000
64.00000	CTX177-ND	3.64	3.22	2.45	2.17	1.86	MXO45HS-64.0000
66.66660	CTX178-ND	3.64	3.22	2.45	2.17	1.86	MXO45HS-66.6666
80.00000	CTX179-ND	5.85	5.18	3.94	3.49	2.99	MXO45HS-80.0000

Frequency (MHz)	Digi-Key Part No.	Price Each					CTS Reeves Part No.
		1	10	100	250	500	
Full Size Clock Oscillator with Tri-State Output							
1.00000	CTX139-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-1.000
1.84320	CTX140-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-1.8432
2.00000	CTX141-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-2.000
2.45760	CTX142-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-2.4576
3.68640	CTX143-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-3.6864
4.00000	CTX144-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-4.000
4.91520	CTX145-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-4.9152
5.00000	CTX146-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-5.000
5.06880	CTX147-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-5.0688
6.00000	CTX148-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-6.000
6.14400	CTX200-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-6.144
7.37280	CTX201-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-7.3728
8.00000	CTX202-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-8.000
10.00000	CTX203-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-10.000
12.00000	CTX204-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-12.000
14.31818	CTX205-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-14.31818
16.00000	CTX206-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-16.000
18.43200	CTX207-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-18.432
19.66080	CTX208-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-19.6608
20.00000	CTX209-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-20.000
24.00000	CTX210-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-24.000
25.00000	CTX211-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-25.000
25.17500	CTX212-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-25.175
28.32200	CTX213-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-28.322
32.00000	CTX214-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-32.000
40.00000	CTX215-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-40.000
50.00000	CTX216-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-50.000
64.00000	CTX217-ND	3.64	3.22	2.87	2.45	2.17	MXO45T-64.000
66.66660	CTX218-ND	3.64	3.22	2.87	2.45	2.17	MXO45T-66.6666
80.00000	CTX219-ND	5.85	5.18	4.61	3.94	3.49	MXO45T-80.000
Full Size Clock Oscillator with Standard Output							
1.00000	CTX101-ND	2.78	2.47	2.19	1.87	1.66	MXO45-1.0000
1.84320	CTX103-ND	2.78	2.47	2.19	1.87	1.66	MXO45-1.8432
2.00000	CTX104-ND	2.78	2.47	2.19	1.87	1.66	MXO45-2.0000
2.45760	CTX105-ND	2.78	2.47	2.19	1.87	1.66	MXO45-2.4576
3.68640	CTX106-ND	2.78	2.47	2.19	1.87	1.66	MXO45-3.6864
4.00000	CTX107-ND	2.78	2.47	2.19	1.87	1.66	MXO45-4.0000
4.91520	CTX108-ND	2.78	2.47	2.19	1.87	1.66	MXO45-4.9152
5.00000	CTX109-ND	2.78	2.47	2.19	1.87	1.66	MXO45-5.0000
5.06880	CTX110-ND	2.78	2.47	2.19	1.87	1.66	MXO45-5.0688
6.00000	CTX111-ND	2.78	2.47	2.19	1.87	1.66	MXO45-6.0000
6.14400	CTX122-ND	2.78	2.47	2.19	1.87	1.66	MXO45-6.1440
7.37280	CTX123-ND	2.78	2.47	2.19	1.87	1.66	MXO45-7.3728
8.00000	CTX112-ND	2.78	2.47	2.19	1.87	1.66	MXO45-8.0000
10.00000	CTX114-ND	2.78	2.47	2.19	1.87	1.66	MXO45-10.0000
12.00000	CTX131-ND	2.78	2.47	2.19	1.87	1.66	MXO45-12.0000
14.31818	CTX115-ND	2.78	2.47	2.19	1.87	1.66	MXO45-14.31818
16.00000	CTX116-ND	2.78	2.47	2.19	1.87	1.66	MXO45-16.0000
18.43200	CTX118-ND	2.78	2.47	2.19	1.87	1.66	MXO45-18.4320
19.66080	CTX124-ND	2.78	2.47	2.19	1.87	1.66	MXO45-19.6608
20.00000	CTX119-ND	2.78	2.47	2.19	1.87	1.66	MXO45-20.0000
24.00000	CTX125-ND	2.78	2.47	2.19	1.87	1.66	MXO45-24.0000
25.00000	CTX126-ND	2.78	2.47	2.19	1.87	1.66	MXO45-25.0000
25.17500	CTX127-ND	2.78	2.47	2.19	1.87	1.66	MXO45-25.1750
28.32200	CTX128-ND	2.78	2.47	2.19	1.87	1.66	MXO45-28.3220
32.00000	CTX129-ND	2.78	2.47	2.19	1.87	1.66	MXO45-32.0000
40.00000	CTX120-ND	2.78	2.47	2.19	1.87	1.66	MXO45-40.0000
50.00000	CTX121-ND	2.78	2.47	2.19	1.87	1.66	MXO45-50.0000
64.00000	CTX130-ND	3.64	3.22	2.87	2.45	2.18	MXO45-64.0000
66.66660	CTX137-ND	3.64	3.22	2.87	2.45	2.18	MXO45-66.6666
80.00000	CTX138-ND	5.85	5.18	4.61	3.94	3.49	MXO45-80.0000

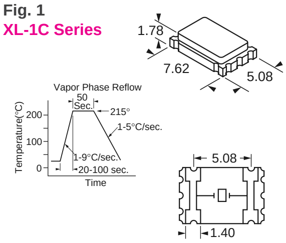
A462-ND	Aries Full-Size Socket for a 4-Pin Oscillator	$.60/1;	$12.50/25;	$40.48/100
A463-ND	Aries Half-Size Socket for a 4-Pin Oscillator	$.60/1;	$12.50/25;	$40.48/100

Connor-Winfield

Surface Mount Crystals and Oscillators

Fig. 1

XL-1C Series

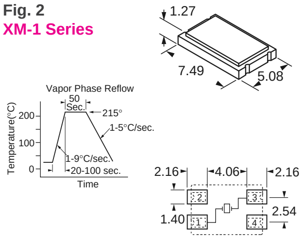


Specifications:

Frequency Tolerance: ±50ppm (@ 25°C)
Temperature Stability: ±50 ppm
Operating Temp,: -10°C to +65°C
Drive Level: .1MW Typical

Fig. 2

XM-1 Series

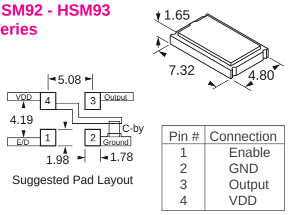


Specifications:

Frequency Tolerance: ±50ppm (@ 25°C)
Temperature Stability: ±50 ppm
Operating Temperature: -10°C to +65°C
Drive Level: .1 MW Typical

Fig. 3

HSM92 - HSM93 Series



Suggested Pad Layout

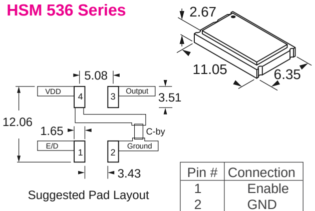
Pin #	Connection
1	Enable
2	GND
3	Output
4	VDD

Specifications:

- **Frequency Stability:** HSM92: ±50ppm; HSM93: ±100ppm.
- **Temperature Range:** 0°C to +70°C.
- **Waveform:** HCMOS Squarewave, Tri-State
- **Output:** Voh: 4.5V Min., Vol: 0.5V Max.
- **Current:** Ioh: 16mA; Iol: 16mA.
- **Rise/Fall Time**: 7ns Max.
- **Duty Cycle**: 45/55 max.
- **Start Up Time**: 10mS Max.
- **Supply Voltage**: +5VDC ±10%.
- **Enable/Disable Time:** 100ns Max.
- **Output Load:** 50pF

Fig. 4

HSM 536 Series



Suggested Pad Layout

Pin #	Connection
1	Enable
2	GND
3	Output
4	VDD

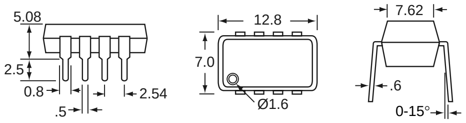
Specifications:

- **Frequency Stability:** ±100ppm.
- **Temperature Range:** 0°C to +70°C.
- **Waveform:** HCMOS Squarewave.
- **Output:** Voh: 4.5V Min., Vol: 0.5V Max.
- **Rise/Fall Time**: 7ns Max.
- **Duty Cycle**: 50/50% ±10%.
- **Start Up Time**: 10mS Max.
- **Supply Voltage**: +5VDC ±10%.
- **Output Load:** 50pF

Fig.	Frequency (MHz)	Load Cap.	Digi-Key Part No.	Price Each 1	10	100	500	Connor-Winfield Part No.
	SMT Quartz Crystals							
1	10.000	16pf	CW401-ND	4.73	3.94	3.15	2.54	XL-1C-10.0000
	12.000	16pf	CW402-ND	4.73	3.94	3.15	2.54	XL-1C-12.0000
	16.000	16pf	CW403-ND	4.73	3.94	3.15	2.54	XL-1C-16.0000
	18.432	16pf	CW404-ND	4.73	3.94	3.15	2.54	XL-1C-18.4320
	20.000	16pf	CW405-ND	4.73	3.94	3.15	2.54	XL-1C-20.0000
	29.4912	16pf	CW407-ND	5.54	4.62	3.69	2.98	XL-1C-29.4912
	40.000	Series	CW408-ND	5.13	4.28	3.42	2.76	XL-1C-40.0000
	44.2368	Series	CW409-ND	5.13	4.28	3.42	2.76	XL-1C-44.2368
	50.000	Series	CW410-ND	5.13	4.28	3.42	2.76	XL-1C-50.0000
2	10.000	16pf	CW421-ND	7.83	6.53	5.22	4.21	XM-1-10.0000
	12.000	16pf	CW422-ND	7.83	6.53	5.22	4.21	XM-1-12.0000
	16.000	16pf	CW423-ND	7.83	6.53	5.22	4.21	XM-1-16.0000
	18.432	16pf	CW424-ND	7.83	6.53	5.22	4.21	XM-1-18.4320
	20.000	16pf	CW425-ND	7.83	6.53	5.22	4.21	XM-1-20.0000
	29.4912	Series	CW427-ND	9.32	7.77	6.21	5.01	XM-1-29.4912
	40.000	Series	CW428-ND	8.51	7.09	5.67	4.57	XM-1-40.0000
	44.2368	Series	CW429-ND	8.51	7.09	5.67	4.57	XM-1-44.2368
	50.000	Series	CW430-ND	8.51	7.09	5.67	4.57	XM-1-50.0000
	SMT Oscillator							
3	4.9152	—	CW301-ND	11.61	9.68	7.74	6.24	HSM93-4.9152
	8.000	—	CW302-ND	11.61	9.68	7.74	6.24	HSM93-8.0000
	10.000	—	CW303-ND	11.61	9.68	7.74	6.24	HSM93-10.0000
	16.000	—	CW304-ND	11.61	9.68	7.74	6.24	HSM93-16.0000
	20.000	—	CW305-ND	11.61	9.68	7.74	6.24	HSM93-20.0000
	25.000	—	CW306-ND	11.61	9.68	7.74	6.24	HSM93-25.0000
	29.4912	—	CW341-ND	12.15	10.13	8.10	6.53	HSM92-29.4912
	32.000	—	CW307-ND	11.61	9.68	7.74	6.24	HSM93-32.0000
	40.000	—	CW308-ND	11.61	9.68	7.74	6.24	HSM93-40.0000
	44.2368	—	CW342-ND	12.15	10.13	8.10	6.53	HSM92-44.2368
	50.000	—	CW309-ND	11.61	9.68	7.74	6.24	HSM93-50.0000
	60.000	—	CW310-ND	13.23	11.03	8.82	7.11	HSM93-60.0000
4	8.000	—	CW320-ND	10.80	9.00	7.20	5.80	HSM536-8.0000
	10.000	—	CW321-ND	10.80	9.00	7.20	5.80	HSM536-10.0000
	18.432	—	CW322-ND	10.80	9.00	7.20	5.80	HSM536-18.4320
	20.000	—	CW323-ND	10.80	9.00	7.20	5.80	HSM536-20.0000
	25.000	—	CW324-ND	10.80	9.00	7.20	5.80	HSM536-25.0000
	32.000	—	CW325-ND	10.80	9.00	7.20	5.80	HSM536-32.0000
	40.000	—	CW326-ND	10.80	9.00	7.20	5.80	HSM536-40.0000
	50.000	—	CW327-ND	10.80	9.00	7.20	5.80	HSM536-50.0000
	60.000	—	CW328-ND	11.07	9.23	7.38	5.95	HSM536-60.0000
	64.000	—	CW329-ND	11.07	9.23	7.38	5.95	HSM536-64.0000
	66.6666	—	CW330-ND	11.07	9.23	7.38	5.95	HSM536-66.6666

ECS INC. INTERNATIONAL

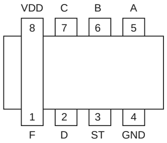
Dual Output Oscillator - ECS-300C Series



Electrical Characteristics:
- **Frequency Stability:** 0.01%
- **Operating Temperature Range:** Ta = -10°C to +70°C
- **Storage Temperature Range:** Ta = -55°C to +125°C
- **Supply Voltage:** 5V ±0.5V; 3-5V ±5V
- **Current Consumption:** 20mA max.
- **Input Current:** 35mA max.
- **Output Load:** 15pF
- **Output Level:** Voh: 4.5V min. Vol: 0.5V max.
- **Output Symmetry:** 40% to 60%
- **Rise Time/Fall Time:** 15nS
- **Start-up Time:** .2mS

SETTING OF DIVIDING OUTPUT

Input Select C	B	A	ST	Output F (Original Frequency)	D (Divided Waveform)
X	**X**	**X**	**L**	**L**	**L**
L	L	L	H	fo clock	fo 1/2 clock
L	L	H	H	fo clock	fo $1/2^2$ clock
L	H	L	H	fo clock	fo $1/2^3$ clock
L	H	H	H	fo clock	fo $1/2^4$ clock
H	L	L	H	fo clock	fo $1/2^5$ clock
H	L	H	H	fo clock	fo $1/2^6$ clock
H	H	L	H	fo clock	fo $1/2^7$ clock
H	H	H	H	fo clock	fo $1/2^6$ clock



Pin	Connection
1	Output
2	Dividing Ratio
3	Standby
4	GND
5	A (Programming)
6	B (Programming)
7	C (Programming)
8	V_{DD} (5V)

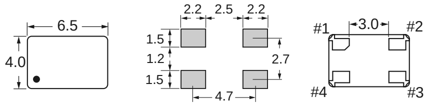
Frequency (MHz)	Digi-Key Part No.	Price Each 1	10	100	500	ECS Part No.
12.000	XC301-ND	5.54	4.62	3.69	2.98	OECS-120-3-C3X1A
12.288	XC302-ND	5.54	4.62	3.69	2.98	OECS-122.8-3-C3X1A
12.800	XC303-ND	5.54	4.62	3.69	2.98	OECS-128-3-C3X1A
14.31818	XC304-ND	5.54	4.62	3.69	2.98	OECS-143-3-C3X1A
14.7456	XC305-ND	5.54	4.62	3.69	2.98	OECS-147.4-3-C3X1A
15.9744	XC306-ND	5.54	4.62	3.69	2.98	OECS-159.7-3-C3X1A
16.000	XC307-ND	5.54	4.62	3.69	2.98	OECS-160-3-C3X1A
16.3840	XC308-ND	5.54	4.62	3.69	2.98	OECS-163.8-3-C3X1A
17.734476	XC309-ND	5.54	4.62	3.69	2.98	OECS-177.3-3-C3X1A
18.432	XC310-ND	5.54	4.62	3.69	2.98	OECS-184-3-C3X1A
19.6608	XC311-ND	5.54	4.62	3.69	2.98	OECS-196.6-3-C3X1A
20.000	XC312-ND	5.54	4.62	3.69	2.98	OECS-200-3-C3X1A
24.000	XC313-ND	5.54	4.62	3.69	2.98	OECS-240-3-C3X1A

ECS INC. INTERNATIONAL

SMD Clock Oscillator - 32.768 KHz

ECS-327SMO Series

Electrical Characteristics:
- **Frequency Stability:**
  - -10°C ~ +60°C: -60ppm min., +30ppm max.;
  - -40°C ~ +85°C: -140ppm min., +30ppm max.
- **Operating Temperature Range:** -40°C ~ +85°C
- **Storage Temperature Range:** -40°C ~ +85°C
- **Input Voltage (Vcc):** +3.3V DC typ.
- **Input Current:** 15µA max. (with 15pF load)
- **Symmetry:** 40% to 60% (at 1/2 Vcc Level and +25°C)
- **Rise and Fall Time:** 200ns
- **"0" Level:** Vcc x 0.1V max.
- **"1" Level:** Vcc x 0.9V min.
- **Load:** 15pF CMOS



Pin	Connection
1	NC
2	GND
3	Output
4	Vcc

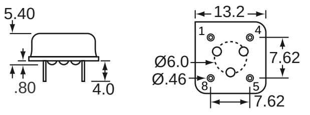
Package Thickness: 2.0mm

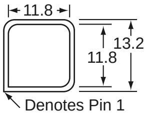
Frequency (KHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	ECS Part No.
32.768	XC777CT-ND	6.74	5.52	4.90	XC777TR-ND	3430.00	ECS-327SMO

ECS INC. INTERNATIONAL Half Size Clock Oscillators

Electrical Characteristics:

- **Frequency Stability:** ±50ppm max.
- **Supply Voltage:** 4.5V min., 5.5V max.
- **Input Current:**
  - 4.000 ~ 25.000MHz: 25mA
  - 25.000+ ~ 50.000MHz: 46mA
  - 50.000+ ~ 80.000MHz: 77mA
- **Output Symmetry @2.5V:**
  - 4.000 ~ 80.000MHz: 45% min., 55% max.
- **Operating Temp.:** -10°C to +70°C
- **Storage Temp.:** -55°C to +125°C
- **Rise Time (0.5V to 4.5V):** 5nS
- **Fall Time (4.5V to 0.5V):** 5nS
- **Output Voltage (4.000 ~ 80.000MHz):**
  - IOL = 16mA: 0.5V max.
  - IOH = 16mA: 4.5V min.
- **Output Current (4.000 ~ 80.000MHz):**
  - VOL = 0.5V: 16mA max.
  - VOH = 4.5V: -16mA max.
- **Output Load:**
  - TTL: 10 TTL max.
  - HCMOS: 50pf
- **Start up Time:** 4.000-80.000MHz: 10mS
- **Output Enable/Disable Time:** 100nS





Pin	Connection
1	Enable/Disable
4	GND (Case)
5	Output
8	+5 VDC

Enable / Disable Function	
INH (Pin 1)	OUTPUT (Pin 5)
OPEN†	ACTIVE
‘1’ Level $V_{IH} \geq 2.2V$	ACTIVE
‘0’ Level $V_{IL} \leq 0.8V$	High Z

† An internal pullup resistor from Pin 1 to Pin 8 allows active output if Pin 1 is left open

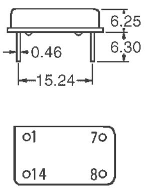
Frequency (MHz)	Digi-Key Part No.	Price Each 1	10	100	500	ECS Part No.
4.000	XC259-ND	2.63	2.37	1.89	1.68	OECS-2200B-040
4.9152	XC260-ND	2.63	2.37	1.89	1.68	OECS-2200B-049
6.000	XC261-ND	2.63	2.37	1.89	1.68	OECS-2200B-060
6.144	XC262-ND	2.63	2.37	1.89	1.68	OECS-2200B-061
7.3728	XC263-ND	2.63	2.37	1.89	1.68	OECS-2200B-073
8.000	XC264-ND	2.63	2.37	1.89	1.68	OECS-2200B-080
9.216	XC265-ND	2.63	2.37	1.89	1.68	OECS-2200B-092.1
9.8304	XC266-ND	2.63	2.37	1.89	1.68	OECS-2200B-098
10.000	XC267-ND	2.63	2.37	1.89	1.68	OECS-2200B-100
11.0592	XC268-ND	2.63	2.37	1.89	1.68	OECS-2200B-110
12.000	XC269-ND	2.63	2.37	1.89	1.68	OECS-2200B-120
14.31818	XC270-ND	2.63	2.37	1.89	1.68	OECS-2200B-143
16.000	XC271-ND	2.63	2.37	1.89	1.68	OECS-2200B-160
18.432	XC272-ND	2.63	2.37	1.89	1.68	OECS-2200B-184
19.6608	XC273-ND	2.63	2.37	1.89	1.68	OECS-2200B-196
20.000	XC274-ND	2.63	2.37	1.89	1.68	OECS-2200B-200
24.000	XC275-ND	2.63	2.37	1.89	1.68	OECS-2200B-240
25.000	XC276-ND	2.63	2.37	1.89	1.68	OECS-2200B-250
28.322	XC277-ND	2.63	2.37	1.89	1.68	OECS-2200B-283
32.000	XC278-ND	2.63	2.37	1.89	1.68	OECS-2200B-320
40.000	XC279-ND	2.63	2.37	1.89	1.68	OECS-2200B-400
48.000	XC280-ND	2.63	2.37	1.89	1.68	OECS-2200B-480
50.000	XC281-ND	2.63	2.37	1.89	1.68	OECS-2200B-500
66.666	XC282-ND	2.63	2.37	1.89	1.68	OECS-2200B-666
80.000	XC283-ND	2.63	2.37	1.89	1.68	OECS-2200B-800

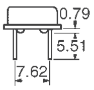
ECS INC. INTERNATIONAL Full Range Quartz Clock Oscillators

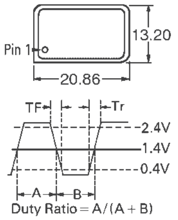
Full Size TTL Clock Oscillators

Electrical Characteristics:

- **Frequency Stability:** ±100ppm max.
- **Supply Voltage:** 4.5V min., 5.5V max.
- **Input Current:**
  - 1.000 ~ 8.000MHz: 15mA
  - 8.000+ ~ 24.000MHz: 30mA
  - 24.000+ ~ 66.666MHz: 70 mA
- **Output Symmetry @ 1.4V:**
  - 1.000 ~ 8.000MHz:
    - 45% min., 55% max.
  - 8.000+ ~66.666MHz:
    - 40% min., 60% max.
- **Operating Temp.:** 0°C to +70°C
- **Storage Temp.:** -55°C to +125C
- **Rise Time:**
  - 1.000 ~ 25.000MHz @ 0.4V to 2.4V: 10nS
  - 25.000+ ~ 66.666MHz @ 0.5V to 2.4V: 5nS
- **Fall Time:**
  - 1.000 ~ 25.000MHz @ 0.4V to 2.4V: 10nS
  - 25.000+ ~ 66.666MHz @ 0.5 to 2.4V: 5nS
- **Output Voltage (IOL = 20mA):**
  - 1.000 ~ 25.000MHz: 0.4V max.
  - 25.000+ ~ 66.666MHz: 0.5V max.
- **Output Voltage**
  - **(IOH = 1mA):** 2.4V min.
- **Output Current:**
  - VOL = 0.5V: 16mA max.
  - VOH = 2.4V: -4mA max.
- **Output Load:**
  - TTL: 10 TTL max.
- **Start up Time:**
  - 1.000~3.500MHz: 20mS
  - 3.500+~4.000MHz: 35mS
  - 4.000+~6.000MHz: 30mS
  - 6.000+~20.000MHz: 20mS
  - 20.000+~66.666MHz: 15mS







Pin	Connection
1	NC
7	Gnd/Case Gnd
8	Output
14	+V dc

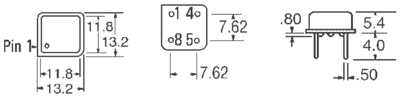
Frequency (MHz)	Digi-Key Part No.	Price Each 1	10	100	500	ECS Part No.
1.000	X101-ND	2.88	2.59	2.07	1.84	OECS-10-1-A101A
1.2288	X102-ND	2.88	2.59	2.07	1.84	OECS-12.2-1-A101A
1.8432	X103-ND	2.88	2.59	2.07	1.84	OECS-18-1-A101A
2.000	X104-ND	2.88	2.59	2.07	1.84	OECS-20-1-A101A
2.4576	X105-ND	2.88	2.59	2.07	1.84	OECS-24-1-A101A
3.579545	XC227-ND	2.88	2.59	2.07	1.84	OECS-35-1-A101A
3.6864	X106-ND	2.88	2.59	2.07	1.84	OECS-36-1-A101A
4.000	X107-ND	2.88	2.59	2.07	1.84	OECS-40-1-A101A
4.9152	X108-ND	2.88	2.59	2.07	1.84	OECS-49-1-A101A
5.000	X109-ND	2.88	2.59	2.07	1.84	OECS-50-1-A101A
5.0688	X110-ND	2.88	2.59	2.07	1.84	OECS-51-1-A101A
6.000	X111-ND	2.88	2.59	2.07	1.84	OECS-60-1-A101A
6.144	X122-ND	2.88	2.59	2.07	1.84	OECS-61-1-A101A
7.3728	X123-ND	2.88	2.59	2.07	1.84	OECS-73-1-A101A
8.000	X112-ND	2.88	2.59	2.07	1.84	OECS-80-1-A101A
9.216	X113-ND	2.88	2.59	2.07	1.84	OECS-92.1-1-A101A
9.8304	X124-ND	2.88	2.59	2.07	1.84	OECS-98.3-1-A101A
10.000	X114-ND	2.88	2.59	2.07	1.84	OECS-100-1-A101A
11.0592	X125-ND	2.88	2.59	2.07	1.84	OECS-110.5-1-A101A
12.000	X126-ND	2.88	2.59	2.07	1.84	OECS-120-1-A101A
14.31818	X115-ND	2.88	2.59	2.07	1.84	OECS-143-1-A101A
14.7456	X127-ND	2.88	2.59	2.07	1.84	OECS-147.4-1-A101A
16.000	X116-ND	2.88	2.59	2.07	1.84	OECS-160-1-A101A
16.257	X128-ND	2.88	2.59	2.07	1.84	OECS-162.5-1-A101A
18.000	X117-ND	2.88	2.59	2.07	1.84	OECS-180-1-A101A
18.432	X118-ND	2.88	2.59	2.07	1.84	OECS-184-1-A101A
19.6608	XC314-ND	2.88	2.59	2.07	1.84	OECS-196.6-1-A101A
20.000	X119-ND	2.88	2.59	2.07	1.84	OECS-200-1-A101A
24.000	X129-ND	2.88	2.59	2.07	1.84	OECS-240-1-A101A
25.000	XC315-ND	2.88	2.59	2.07	1.84	OECS-250-1-A101A
25.175	X130-ND	2.88	2.59	2.07	1.84	OECS-251.7-1-A101A
28.322	X131-ND	2.88	2.59	2.07	1.84	OECS-283.2-1-A101A
30.000	XC316-ND	2.88	2.59	2.07	1.84	OECS-300-1-A101A
32.000	X132-ND	2.88	2.59	2.07	1.84	OECS-320-1-A101A
32.514	X133-ND	2.88	2.59	2.07	1.84	OECS-325.1-1-A101A
35.000	X134-ND	2.88	2.59	2.07	1.84	OECS-350-1-A101A
40.000	X120-ND	2.88	2.59	2.07	1.84	OECS-400-1-A101A
48.000	X135-ND	2.88	2.59	2.07	1.84	OECS-480-1-A101A
50.000	X121-ND	2.88	2.59	2.07	1.84	OECS-500-1-A101A
64.000	X136-ND	2.88	2.59	2.07	1.84	OECS-640-1-A101A
66.666	XC228-ND	2.88	2.59	2.07	1.84	OECS-666-1-A101A

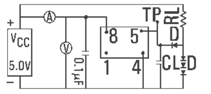
A462-ND	Aries Full-Size Socket for a 4-Pin Oscillator	$.60/1; $12.50/25; $40.48/100
A463-ND	Aries Half-Size Socket for a 4-Pin Oscillator	$.60/1; $12.50/25; $40.48/100

Half Size TTL Clock Oscillators

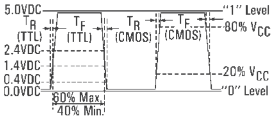
Electrical Characteristics:

- **Frequency Stability:** ±100ppm max.
- **Supply Voltage:** 4.5V min., 5.5V max.
- **Input Current:**
  - 1.000 ~ 25.000MHz: 25mA
  - 25.000+ ~ 50.000MHz: 46mA
  - 50.000+ ~ 66.666MHz: 77mA
- **Output Symmetry @ 2.5V:**
  - 1.000 ~ 66.666MHz: 45% min., 55% max.
- **Operating Temp.:** 0°C to +70°C
- **Storage Temp.:** -55°C to +125C
- **Rise Time (0.5V to 4.5V):** 5nS
- **Fall Time (4.5V to 0.5V):** 5nS
- **Output Voltage**
  - IOL = 16mA: 0.5V max.
  - IOH = -16mA: 4.5V min.
- **Output Current:**
  - VOL = 0.5V: 16mA max.
  - VOH = 4.5V: -16mA max.
- **Output Load:**
  - TTL: 10 TTL max.
  - HCMOS: 50pf
- **Start up Time:** 10mS





R_L = 400Ω
D: Switching Diode 1N4148
C_L = 15pF Max.



Pin	Connection
1	NC
4	GND
5	Output
8	Vcc

Frequency (MHz)	Digi-Key Part No.	Price Each 1	10	100	500	ECS Part No.
1.000	XC229-ND	2.63	2.37	1.89	1.68	OECS-10-2-A401A
1.2288	XC230-ND	2.63	2.37	1.89	1.68	OECS-12.2-2-A401A
1.8432	XC231-ND	2.63	2.37	1.89	1.68	OECS-18-2-A401A
2.000	XC232-ND	2.63	2.37	1.89	1.68	OECS-20-2-A401A
2.4576	XC233-ND	2.63	2.37	1.89	1.68	OECS-24-2-A401A
3.6864	XC234-ND	2.63	2.37	1.89	1.68	OECS-36-2-A401A
3.579545	XC235-ND	2.63	2.37	1.89	1.68	OECS-35-2-A401A
4.000	X202-ND	2.63	2.37	1.89	1.68	OECS-40-2-A401A
4.9152	XC236-ND	2.63	2.37	1.89	1.68	OECS-49-2-A401A
5.000	XC237-ND	2.63	2.37	1.89	1.68	OECS-50-2-A401A
5.0688	XC238-ND	2.63	2.37	1.89	1.68	OECS-51-2-A401A
6.000	XC239-ND	2.63	2.37	1.89	1.68	OECS-60-2-A401A
6.144	XC240-ND	2.63	2.37	1.89	1.68	OECS-61-2-A401A
7.3728	X208-ND	2.63	2.37	1.89	1.68	OECS-73-2-A401A
8.000	X209-ND	2.63	2.37	1.89	1.68	OECS-80-2-A401A
9.216	XC241-ND	2.63	2.37	1.89	1.68	OECS-92.1-2-A401A
9.8304	XC242-ND	2.63	2.37	1.89	1.68	OECS-98.3-2-A401A
10.000	XC243-ND	2.63	2.37	1.89	1.68	OECS-100-2-A401A
11.0592	XC244-ND	2.63	2.37	1.89	1.68	OECS-110.5-2-A401A
12.000	XC245-ND	2.63	2.37	1.89	1.68	OECS-120-2-A401A
14.31818	XC246-ND	2.63	2.37	1.89	1.68	OECS-143-2-A401A
14.7456	XC247-ND	2.63	2.37	1.89	1.68	OECS-147.4-2-A401A
16.000	X216-ND	2.63	2.37	1.89	1.68	OECS-160-2-A401A
16.257	XC248-ND	2.63	2.37	1.89	1.68	OECS-162.5-2-A401A
18.000	XC249-ND	2.63	2.37	1.89	1.68	OECS-180-2-A401A
18.432	XC250-ND	2.63	2.37	1.89	1.68	OECS-184-2-A401A
19.6608	XC251-ND	2.63	2.37	1.89	1.68	OECS-196.6-2-A-401A
20.000	X220-ND	2.63	2.37	1.89	1.68	OECS-200-2-A401A
24.000	X221-ND	2.63	2.37	1.89	1.68	OECS-240-2-A401A
25.000	XC252-ND	2.63	2.37	1.89	1.68	OECS-250-2-A401A
25.175	X222-ND	2.63	2.37	1.89	1.68	OECS-251.7-2-A401A
28.322	X223-ND	2.63	2.37	1.89	1.68	OECS-283.2-2-A401A
30.000	XC253-ND	2.63	2.37	1.89	1.68	OECS-300-2-A401A
32.000	XC254-ND	2.63	2.37	1.89	1.68	OECS-320-2-A401A
32.514	X224-ND	2.63	2.37	1.89	1.68	OECS-325.1-2-A401A
35.000	XC255-ND	2.63	2.37	1.89	1.68	OECS-350-2-A401A
40.000	X225-ND	2.63	2.37	1.89	1.68	OECS-400-2-A401A
48.000	XC256-ND	2.63	2.37	1.89	1.68	OECS-480-2-A401A
50.000	X226-ND	2.63	2.37	1.89	1.68	OECS-500-2-A401A
64.000	XC257-ND	2.63	2.37	1.89	1.68	OECS-640-2-A401A
66.666	XC258-ND	2.63	2.37	1.89	1.68	OECS-666-2-A401A

Surface Mount Oscillators

Electrical Specifications:

	ECS-3953C	ECS-3951C	ECS-3953M	ECS-3951M
Frequency Stability @25°C and over Operating Temp.	±100ppm	±100ppm	±50ppm	±50ppm
Supply Voltage - Min. to Max.	3.0V to 3.6V	4.5V to 5.5V	3.0V to 3.6V	4.5V to 5.5V
Input Current	20.00-32.00MHz - 8mA max. 32.00-50.00MHz - 12mA max. 66.666-80.00MHz - 30mA max.	1.8432 - 20.00MHz - 10mA max. 33.00MHz - 15mA max. 40.00-65.00MHz - 30mA max. 66.666MHz - 50mA max.	1.8432-32.00MHz - 15mA max. 40.00-66.6666MHz - 25mA max. 80.00MHz - 30mA max.	1.8432-33.00MHz - 20mA max. 40.00-66.666MHz - 55mA max.
Output Symmetry @ 1/2 Vcc Level	40% min., 60% max.	40% min., 60% max.	40% min., 60% max.	40% min., 60% max.
Operating Temperature	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C
Storage Temperature	-55°C to +125°C	-55°C to +125°C	-55°C to +125°C	-55°C to +125°C
Rise and Fall Time	15nS	10nS	5nS	Up to 66.666MHz - 15nS 80.000MHz - 5nS
Output Current (IOL) VOL=0.5V/0.33V	4mA	4mA	4mA	4mA
Output Current (IOH) VOL=4.5V/2.97V	-4mA	-4mA	-4mA	-4mA
Output Load HCMOS	15pF	30pF	15pF	30pF
Enable/Disable Time	100nS	100nS	100nS	100nS

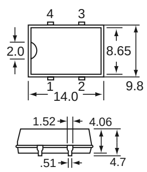
NOTE:

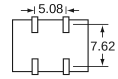
Frequency Stability for ECS-8FM, ECS-3953C, ECS-3953M, ECS-3951C, and ECS-3951M Series inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, and vibration.

NOTE:

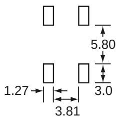
For the Enable/Disable Function in the ECS-8FM, ECS-3953C, ECS-3953M, ECS-3951C, and ECS-3951M Series, an internal pullup resistor from Pin 1 to Pin 4 allows active output if Pin 1 is left open. A 0.01µF bypass capacitor should be placed between V_{DD} (Pin 4) and GND (Pin 2) to minimize power supply line noise.

ECS-8FM Oscillator





Pin	Connection
1	Enable/Disable
2	GND
3	OUT
4	+5V DC

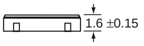


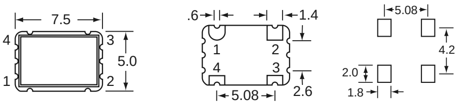
Pad Layout

ELECTRICAL CHARACTERISTICS:

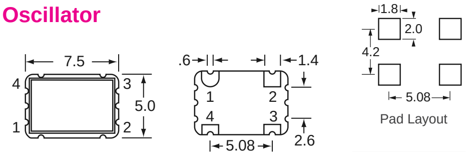
• **Frequency Stability:** ±100ppm @ 25°C and over operating temperature range • **Supply Voltage:** 4.5V min., 5.5V max. • **Input Current:** 1.00 ~ 32.00MHz: 27mA; 32.00+ ~ 50.00MHz: 45mA; 50.00+ ~ 66.666MHz: 60mA • **Output Symmetry @ 2.5V:** 1.00 ~ 50.00MHz: 45% min., 55% max.; 50.00+ ~ 66.666MHz: 40% min., 60% max. • **Operating Temperature:** -10°C to +70°C • **Storage Temp.:** -55°C to +125°C • **Rise Time (0.5V to 4.5V):** 7nS • **Fall Time (4.5V to 0.5V):** 7nS • **Output Voltage:** IOL = 16mA: 0.5V max.; IOH = -16mA: 4.5V min. • **Output Current:** VOL = 0.5V: 16mA max.; VOH = 4.5V: -16mA max. • **Output Load:** TTL: 10 TTL max.; HCMOS: 50pF max. • **Start-up Time:** 10mS max. • **Enable/Disable Time:** 100nS max.

ECS-3953C and ECS3953M 3.3 Volt Oscillator





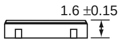
ECS-3951C and ECS-3951M Oscillator



Pad Layout

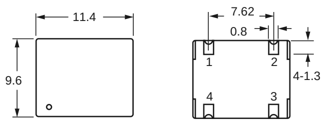
Top View

Bottom View



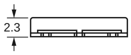
Pin	Connection
1	Enable/Disable
2	GND
3	Output
4	5.0V DC

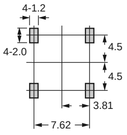
VC-TCXO Oscillator



Top View

Bottom View





Pad Layout

ELECTRICAL CHARACTERISTICS:

- **Frequency Range:** 10,000-19.440MHz
- **Frequency Stability** (@ -30°C to +75°C): 2.5ppm max.
- **Supply Voltage:** +2.85 V min., 3.15 V max.
- **Storage Temperature:** -40°C to +85°C
- **Output Voltage:** 0.8 Vp-p min.
- **Output Load:** 10kΩ ±10%//10pF ±10%
- **Control Voltage:** +1.5V typ.

Pin	Connection
1	Vcontrol
2	GND
3	Output
4	Vcc

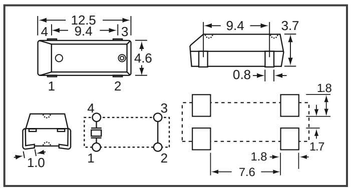
Frequency (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	500	Digi-Key Part No.	Tape & Reel Pricing 500	1,000	ECS Part No.
ECS-8FM Series Oscillators									
1.000	XC703CT-ND	2.97	2.48	1.98	1.82	XC703TR-ND	—	1503.00	ECS-8FM-1.000-TR
1.8432	XC704CT-ND	2.97	2.48	1.98	1.82	XC704TR-ND	—	1503.00	ECS-8FM-1.8432-TR
2.000	XC705CT-ND	2.97	2.48	1.98	1.82	XC705TR-ND	—	1503.00	ECS-8FM-2.000-TR
2.4576	XC706CT-ND	2.97	2.48	1.98	1.82	XC706TR-ND	—	1503.00	ECS-8FM-2.4576-TR
3.579545	XC707CT-ND	2.97	2.48	1.98	1.82	XC707TR-ND	—	1503.00	ECS-8FM-3.579545-TR
3.6864	XC708CT-ND	2.97	2.48	1.98	1.82	XC708TR-ND	—	1503.00	ECS-8FM-3.6864-TR
4.000	XC635CT-ND	3.30	2.97	2.48	1.98	XC635TR-ND	—	1503.00	ECS-8FM-4.000-TR
4.9152	XC636CT-ND	3.30	2.97	2.48	1.98	XC636TR-ND	—	1503.00	ECS-8FM-4.9152-TR
6.000	XC637CT-ND	3.30	2.97	2.48	1.98	XC637TR-ND	—	1503.00	ECS-8FM-6.000-TR
7.3728	XC709CT-ND	2.97	2.48	1.98	1.82	XC709TR-ND	—	1503.00	ECS-8FM-7.3728-TR
8.000	XC638CT-ND	3.30	2.97	2.48	1.98	XC638TR-ND	—	1503.00	ECS-8FM-8.000-TR
9.8304	XC710CT-ND	2.97	2.48	1.98	1.82	XC710TR-ND	—	1503.00	ECS-8FM-9.8304-TR
10.000	XC639CT-ND	3.30	2.97	2.48	1.98	XC639TR-ND	—	1503.00	ECS-8FM-10.000-TR
11.0592	XC711CT-ND	2.97	2.48	1.98	1.82	XC711TR-ND	—	1503.00	ECS-8FM-11.0592-TR
12.000	XC640CT-ND	3.30	2.97	2.48	1.98	XC640TR-ND	—	1503.00	ECS-8FM-12.000-TR
12.288	XC712CT-ND	2.97	2.48	1.98	1.82	XC712TR-ND	—	1503.00	ECS-8FM-12.288-TR
14.31818	XC641CT-ND	3.30	2.97	2.48	1.98	XC641TR-ND	—	1503.00	ECS-8FM-14.31818-TR
16.000	XC642CT-ND	3.30	2.97	2.48	1.98	XC642TR-ND	—	1503.00	ECS-8FM-16.000-TR
18.432	XC643CT-ND	3.30	2.97	2.48	1.98	XC643TR-ND	—	1503.00	ECS-8FM-18.432-TR
19.6608	XC713CT-ND	2.97	2.48	1.98	1.82	XC713TR-ND	—	1503.00	ECS-8FM-19.6608-TR
20.000	XC644CT-ND	3.30	2.97	2.48	1.98	XC644TR-ND	—	1503.00	ECS-8FM-20.000-TR
24.000	XC645CT-ND	3.30	2.97	2.48	1.98	XC645TR-ND	—	1503.00	ECS-8FM-24.000-TR
25.000	XC714CT-ND	2.97	2.48	1.98	1.82	XC714TR-ND	—	1503.00	ECS-8FM-25.000-TR
25.175	XC646CT-ND	3.30	2.97	2.48	1.98	XC646TR-ND	—	1503.00	ECS-8FM-25.175-TR
28.322	XC647CT-ND	3.30	2.97	2.48	1.98	XC647TR-ND	—	1503.00	ECS-8FM-28.322-TR
32.000	XC648CT-ND	3.30	2.97	2.48	1.98	XC648TR-ND	—	1503.00	ECS-8FM-32.000-TR
32.514	XC649CT-ND	3.30	2.97	2.48	1.98	XC649TR-ND	—	1503.00	ECS-8FM-32.514-TR
40.000	XC650CT-ND	3.30	2.97	2.48	1.98	XC650TR-ND	—	1503.00	ECS-8FM-40.000-TR
48.000	XC651CT-ND	3.30	2.97	2.48	1.98	XC651TR-ND	—	1503.00	ECS-8FM-48.000-TR
50.000	XC652CT-ND	3.30	2.97	2.48	1.98	XC652TR-ND	—	1503.00	ECS-8FM-50.000-TR
66.666	XC715CT-ND	2.97	2.48	1.98	1.82	XC715TR-ND	—	1503.00	ECS-8FM-66.666-TR
ECS-3953C Series Oscillators									
20.000	XC721CT-ND	5.25	4.73	3.94	3.15	XC721TR-ND	—	2625.00	OECS-3953C-200-TR
24.000	XC722CT-ND	5.25	4.73	3.94	3.15	XC722TR-ND	—	2625.00	OECS-3953C-240-TR
25.000	XC723CT-ND	5.25	4.73	3.94	3.15	XC723TR-ND	—	2625.00	OECS-3953C-250-TR
32.000	XC724CT-ND	5.25	4.73	3.94	3.15	XC724TR-ND	—	2625.00	OECS-3953C-320-TR
40.000	XC725CT-ND	5.25	4.73	3.94	3.15	XC725TR-ND	—	2625.00	OECS-3953C-400-TR
50.000	XC726CT-ND	5.25	4.73	3.94	3.15	XC726TR-ND	—	2625.00	OECS-3953C-500-TR
66.666	XC727CT-ND	5.25	4.73	3.94	3.15	XC727TR-ND	—	2625.00	OECS-3953C-666-TR
80.000	XC728CT-ND	5.25	4.73	3.94	3.15	XC728TR-ND	—	2625.00	OECS-3953C-800-TR
ECS-3953M Series Oscillators									
1.8432	XC284CT-ND	5.25	4.73	3.94	3.15	XC284TR-ND	—	2625.00	ECS-3953M-018-B-TR
3.6864	XC285CT-ND	5.25	4.73	3.94	3.15	XC285TR-ND	—	2625.00	ECS-3953M-036-B-TR
4.000	XC286CT-ND	5.25	4.73	3.94	3.15	XC286TR-ND	—	2625.00	ECS-3953M-040-B-TR
8.000	XC287CT-ND	5.25	4.73	3.94	3.15	XC287TR-ND	—	2625.00	ECS-3953M-080-B-TR
10.000	XC288CT-ND	5.25	4.73	3.94	3.15	XC288TR-ND	—	2625.00	ECS-3953M-100-B-TR
12.000	XC289CT-ND	5.25	4.73	3.94	3.15	XC289TR-ND	—	2625.00	ECS-3953M-120-B-TR
16.000	XC290CT-ND	5.25	4.73	3.94	3.15	XC290TR-ND	—	2625.00	ECS-3953M-160-B-TR
20.000	XC790CT-ND	5.25	4.73	3.94	3.15	XC790TR-ND	—	2625.00	ECS-3953M-200-B-TR
24.000	XC791CT-ND	5.25	4.73	3.94	3.15	XC791TR-ND	—	2625.00	ECS-3953M-240-B-TR
25.000	XC792CT-ND	5.25	4.73	3.94	3.15	XC792TR-ND	—	2625.00	ECS-3953M-250-B-TR
32.000	XC793CT-ND	5.25	4.73	3.94	3.15	XC793TR-ND	—	2625.00	ECS-3953M-320-B-TR
40.000	XC794CT-ND	5.25	4.73	3.94	3.15	XC794TR-ND	—	2625.00	ECS-3953M-400-B-TR
50.000	XC795CT-ND	5.25	4.73	3.94	3.15	XC795TR-ND	—	2625.00	ECS-3953M-500-B-TR
66.666	XC796CT-ND	5.25	4.73	3.94	3.15	XC796TR-ND	—	2625.00	ECS-3953M-666-B-TR
80.000	XC797CT-ND	5.25	4.73	3.94	3.15	XC797TR-ND	—	2625.00	ECS-3953M-800-B-TR
ECS-3951M Series Oscillators									
1.8432	XC780CT-ND	5.25	4.73	3.94	3.15	XC780TR-ND	—	2625.00	ECS-3951M-018-B-TR
3.6864	XC781CT-ND	5.25	4.73	3.94	3.15	XC781TR-ND	—	2625.00	ECS-3951M-036-B-TR
12.000	XC782CT-ND	5.25	4.73	3.94	3.15	XC782TR-ND	—	2625.00	ECS-3951M-120-B-TR
16.000	XC783CT-ND	5.25	4.73	3.94	3.15	XC783TR-ND	—	2625.00	ECS-3951M-160-B-TR
20.000	XC784CT-ND	5.25	4.73	3.94	3.15	XC784TR-ND	—	2625.00	ECS-3951M-200-B-TR
33.000	XC785CT-ND	5.25	4.73	3.94	3.15	XC785TR-ND	—	2625.00	ECS-3951M-330-B-TR
40.000	XC786CT-ND	5.25	4.73	3.94	3.15	XC786TR-ND	—	2625.00	ECS-3951M-400-B-TR
50.000	XC787CT-ND	5.25	4.73	3.94	3.15	XC787TR-ND	—	2625.00	ECS-3951M-500-B-TR
65.000	XC788CT-ND	5.25	4.73	3.94	3.15	XC788TR-ND	—	2625.00	ECS-3951M-650-B-TR
66.666	XC789CT-ND	5.25	4.73	3.94	3.15	XC789TR-ND	—	2625.00	ECS-3951M-666-B-TR
ECS-3951C Series Oscillators									
1.8432	XC653CT-ND	5.25	4.73	3.94	3.15	XC653TR-ND	—	2625.00	ECS-3951C-018-TR
3.6864	XC654CT-ND	5.25	4.73	3.94	3.15	XC654TR-ND	—	2625.00	ECS-3951C-036-TR
12.000	XC655CT-ND	5.25	4.73	3.94	3.15	XC655TR-ND	—	2625.00	ECS-3951C-120-TR
16.000	XC656CT-ND	5.25	4.73	3.94	3.15	XC656TR-ND	—	2625.00	ECS-3951C-160-TR
20.000	XC657CT-ND	5.25	4.73	3.94	3.15	XC657TR-ND	—	2625.00	ECS-3951C-200-TR
33.000	XC658CT-ND	5.25	4.73	3.94	3.15	XC658TR-ND	—	2625.00	ECS-3951C-330-TR
40.000	XC659CT-ND	5.25	4.73	3.94	3.15	XC659TR-ND	—	2625.00	ECS-3951C-400-TR
50.000	XC660CT-ND	5.25	4.73	3.94	3.15	XC660TR-ND	—	2625.00	ECS-3951C-500-TR
65.000	XC661CT-ND	5.25	4.73	3.94	3.15	XC661TR-ND	—	2625.00	ECS-3951C-650-TR
66.666	XC662CT-ND	5.25	4.73	3.94	3.15	XC662TR-ND	—	2625.00	ECS-3951C-666-TR1
VC-TXO Series Oscillators									
10.000	X493CT-ND	15.13	12.38	11.00	—	X493TR-ND	4950.00	7700.00	VC-TXO-39SM-100
12.800	X489CT-ND	15.13	12.38	11.00	—	X489TR-ND	4950.00	7700.00	VC-TXO-39SM-128
13.000	X490CT-ND	15.13	12.38	11.00	—	X490TR-ND	4950.00	7700.00	VC-TXO-39SM-130
16.800	X491CT-ND	15.13	12.38	11.00	—	X491TR-ND	4950.00	7700.00	VC-TXO-39SM-168
19.440	X492CT-ND	15.13	12.38	11.00	—	X492TR-ND	4950.00	7700.00	VC-TXO-39SM-194.4

ECS INC. INTERNATIONAL SMT Low Profile Quartz Crystals

ECX-3S

The ECX-3S Series has a special high temperature seal which is able to withstand SMD soldering techniques. Housing for this crystal is made from the same rugged thermoplastic that is standard for integrated circuits.

ELECTRICAL CHARACTERISTICS: • **Frequency Tolerance:** ±50 ppm @ +25°C and over operating temp. range • **Shunt Capacitance:** 7.0pF • **Drive Level:** 0.1mW • **Operating Temperature:** -10°C to +70°C • **Storage Temp.:** -40°C to +85°C • **Mode of Operation:** Fundamental

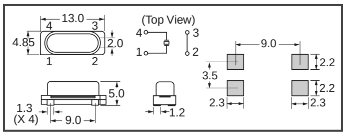


Freq. (MHz)	Load Cap.	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	T&R Pricing 1,000	ECS Part No.
			1	10	100			
3.579545	17pF	XC501CT-ND•	2.03	1.69	1.35	XC501TR-ND	1012.50	ECS-35-17-7S
3.579545	Series	XC529CT-ND	2.03	1.69	1.35	XC529TR-ND	1012.50	ECS-35-S-7S
3.6864	Series	XC502CT-ND•	2.03	1.69	1.35	XC502TR-ND	1012.50	ECS-36-S-7S
3.6864	20pF	XC503CT-ND•	2.03	1.69	1.35	XC503TR-ND	1012.50	ECS-36-20-7S
4.000	Series	XC504CT-ND•	2.03	1.69	1.35	XC504TR-ND	1012.50	ECS-40-S-7S
4.000	20pF	XC505CT-ND•	2.03	1.69	1.35	XC505TR-ND	1012.50	ECS-40-20-7S
4.096	16pF	XC500CT-ND	2.03	1.69	1.35	XC500TR-ND	1125.00	ECS-41-16-7S
4.194304	12pF	XC530CT-ND	2.03	1.69	1.35	XC530TR-ND	1012.50	ECS-42-12-7S
4.433618	20pF	XC506CT-ND•	2.03	1.69	1.35	XC506TR-ND	1012.50	ECS-44-20-7S
4.9152	Series	XC507CT-ND•	2.03	1.69	1.35	XC507TR-ND	1012.50	ECS-49-S-7S
4.9152	20pF	XC508CT-ND•	2.03	1.69	1.35	XC508TR-ND	1012.50	ECS-49-20-7S
5.000	20pF	XC499CT-ND	2.03	1.69	1.35	XC499TR-ND	1125.00	ECS-50-20-7S
6.000	32pF	XC498CT-ND	2.03	1.69	1.35	XC498TR-ND	1125.00	ECS-60-32-7S
6.000	Series	XC497CT-ND	2.03	1.69	1.35	XC497TR-ND	1125.00	ECS-60-S-7S
6.144	32pF	XC509CT-ND•	2.03	1.69	1.35	XC509TR-ND	1012.50	ECS-61-32-7S
6.5536	12pF	XC496CT-ND	2.03	1.69	1.35	XC496TR-ND	1125.00	ECS-65-12-7S
7.3728	20pF	XC536CT-ND	2.03	1.69	1.35	XC536TR-ND	1012.50	ECS-73-20-7S
7.3728	Series	XC510CT-ND•	2.03	1.69	1.35	XC510TR-ND	1012.50	ECS-73-S-7S
8.000	Series	XC511CT-ND•	2.03	1.69	1.35	XC511TR-ND	1012.50	ECS-80-S-7S
8.000	16pF	XC495CT-ND	2.03	1.69	1.35	XC495TR-ND	1125.00	ECS-80-16-7S
9.8304	Series	XC512CT-ND•	2.03	1.69	1.35	XC512TR-ND	1012.50	ECS-98.3-S-7S
9.8304	20pF	XC513CT-ND•	2.03	1.69	1.35	XC513TR-ND	1012.50	ECS-98.3-20-7S
10.000	Series	XC514CT-ND•	2.03	1.69	1.35	XC514TR-ND	1012.50	ECS-100-S-7S
11.0592	Series	XC515CT-ND•	2.03	1.69	1.35	XC515TR-ND	1012.50	ECS-110.5-S-7S
11.0592	20pF	XC516CT-ND•	2.03	1.69	1.35	XC516TR-ND	1012.50	ECS-110.5-20-7S
12.000	18pF	XC548CT-ND	2.03	1.69	1.35	XC548TR-ND	1012.50	ECS-120-18-7S
12.000	Series	XC517CT-ND•	2.03	1.69	1.35	XC517TR-ND	1012.50	ECS-120-S-7S
12.000	32pF	XC494CT-ND	2.03	1.69	1.35	XC494TR-ND	1125.00	ECS-120-32-7S
12.288	Series	XC518CT-ND•	2.03	1.69	1.35	XC518TR-ND	1012.50	ECS-122.8-S-7S
12.288	20pF	XC493CT-ND	2.03	1.69	1.35	XC493TR-ND	1125.00	ECS-122.8-20-7S
14.31818	Series	XC519CT-ND•	2.03	1.69	1.35	XC519TR-ND	1012.50	ECS-143-S-7S
14.31818	20pF	XC492CT-ND	2.03	1.69	1.35	XC492TR-ND	1125.00	ECS-143-20-7S
14.7456	Series	XC520CT-ND•	2.03	1.69	1.35	XC520TR-ND	1012.50	ECS-147.4-S-7S
14.7456	20pF	XC491CT-ND	2.03	1.69	1.35	XC491TR-ND	1125.00	ECS-147.4-20-7S
16.000	20pF	XC550CT-ND	2.03	1.69	1.35	XC550TR-ND	1012.50	ECS-160-20-7S
16.000	Series	XC521CT-ND•	2.03	1.69	1.35	XC521TR-ND	1012.50	ECS-160-S-7S
18.432	Series	XC522CT-ND•	2.03	1.69	1.35	XC522TR-ND	1012.50	ECS-184-S-7S
19.6608	Series	XC523CT-ND•	2.03	1.69	1.35	XC523TR-ND	1012.50	ECS-196.6-S-7S
19.6608	20pF	XC490CT-ND	2.03	1.69	1.35	XC490TR-ND	1125.00	ECS-196.6-20-7S
20.000	Series	XC524CT-ND•	2.03	1.69	1.35	XC524TR-ND	1012.50	ECS-200-S-7S
20.000	16pF	XC489CT-ND	2.03	1.69	1.35	XC489TR-ND	1125.00	ECS-200-16-7S
20.000	20pF	XC525CT-ND•	2.03	1.69	1.35	XC525TR-ND	1012.50	ECS-200-20-7S
23.592	Series	XC559CT-ND	2.03	1.69	1.35	XC559TR-ND	1012.50	ECS-235.92-S-7S
24.000	Series	XC526CT-ND•	2.03	1.69	1.35	XC526TR-ND	1012.50	ECS-240-S-7S
24.000	20pF	XC527CT-ND•	2.03	1.69	1.35	XC527TR-ND	1012.50	ECS-240-20-7S
24.000	16pF	XC528CT-ND	2.03	1.69	1.35	XC528TR-ND	1012.50	ECS-240-16-7S

• **XC-KIT-ND** ***Digi-Key® SMT Low Profile Quartz Crystal Kit*** 3 each of values denoted (81 total pieces). Notebook style storage case and bin storage guide included. **$169.00**

CSM-4A

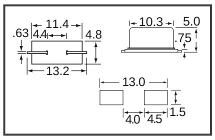
ELECTRICAL CHARACTERISTICS: • **Freq. Tolerance:** ±50ppm @ +25°C and over operating temperature range • **Shunt Capacitance:** 7.0pF • **Drive Level:** 0.1mW • **Operating Temp.:** -10°C to +70°C • **Storage Temp.:** -40°C to +85°C • **Mode of Operation:** Fundamental. The CSM-4A is also pin-out compatible with the Epson MA-506.



Freq. (MHz)	Load Cap.	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	T&R Pricing 1,000	ECS Part No.
			1	10	100			
3.579545	17pF	XC747CT-ND	1.35	1.24	1.02	XC747TR-ND	675.00	ECS-35-17-28A
3.6864	20pF	XC748CT-ND	1.35	1.24	1.02	XC748TR-ND	675.00	ECS-36-20-28A
4.000	20pF	XC749CT-ND	1.35	1.24	1.02	XC749TR-ND	675.00	ECS-40-20-28A
4.9152	20pF	XC751CT-ND	1.35	1.24	1.02	XC751TR-ND	675.00	ECS-49-20-28A
5.000	20pF	XC750CT-ND	1.35	1.24	1.02	XC750TR-ND	675.00	ECS-50-20-28A
6.000	32pF	XC752CT-ND	1.35	1.24	1.02	XC752TR-ND	675.00	ECS-60-32-28A
7.3728	20pF	XC753CT-ND	1.35	1.24	1.02	XC753TR-ND	675.00	ECS-73-20-28A
8.000	16pF	XC754CT-ND	1.35	1.24	1.02	XC754TR-ND	675.00	ECS-80-16-28A
9.8304	20pF	XC778CT-ND	1.35	1.24	1.02	XC778TR-ND	675.00	ECS-98.3-20-28A
10.000	Series	XC755CT-ND	1.35	1.24	1.02	XC755TR-ND	675.00	ECS-100-S-28A
10.000	20pF	XC756CT-ND	1.35	1.24	1.02	XC756TR-ND	675.00	ECS-100-20-28A
11.0592	Series	XC757CT-ND	1.35	1.24	1.02	XC757TR-ND	675.00	ECS-110.5-S-28A
11.0592	20pF	XC758CT-ND	1.35	1.24	1.02	XC758TR-ND	675.00	ECS-110.5-20-28A
12.000	Series	XC760CT-ND	1.35	1.24	1.02	XC760TR-ND	675.00	ECS-120-S-28A
12.000	18pF	XC759CT-ND	1.35	1.24	1.02	XC759TR-ND	675.00	ECS-120-18-28A
12.000	32pF	XC761CT-ND	1.35	1.24	1.02	XC761TR-ND	675.00	ECS-120-32-28A
12.288	20pF	XC762CT-ND	1.35	1.24	1.02	XC762TR-ND	675.00	ECS-122.8-20-28A
14.31818	Series	XC764CT-ND	1.35	1.24	1.02	XC764TR-ND	675.00	ECS-143-S-28A
14.31818	20pF	XC763CT-ND	1.35	1.24	1.02	XC763TR-ND	675.00	ECS-143-20-28A
14.7456	Series	XC765CT-ND	1.35	1.24	1.02	XC765TR-ND	675.00	ECS-147.4-S-28A
14.7456	20pF	XC766CT-ND	1.35	1.24	1.02	XC766TR-ND	675.00	ECS-147.4-20-28A
16.000	Series	XC768CT-ND	1.35	1.24	1.02	XC768TR-ND	675.00	ECS-160-S-28A
16.000	20pF	XC767CT-ND	1.35	1.24	1.02	XC767TR-ND	675.00	ECS-160-20-28A
18.432	Series	XC769CT-ND	1.35	1.24	1.02	XC769TR-ND	675.00	ECS-184-S-28A
18.432	20pF	XC770CT-ND	1.35	1.24	1.02	XC770TR-ND	675.00	ECS-184-20-28A
20.000	Series	XC771CT-ND	1.35	1.24	1.02	XC771TR-ND	675.00	ECS-200-S-28A
20.000	20pF	XC772CT-ND	1.35	1.24	1.02	XC772TR-ND	675.00	ECS-200-20-28A
24.000	Series	XC773CT-ND	1.35	1.24	1.02	XC773TR-ND	675.00	ECS-240-S-28A
24.000	20pF	XC774CT-ND	1.35	1.24	1.02	XC774TR-ND	675.00	ECS-240-20-28A
24.576	20pF	XC775CT-ND	1.35	1.24	1.02	XC775TR-ND	675.00	ECS-245.7-20-28A
25.000	20pF	XC776CT-ND	1.35	1.24	1.02	XC776TR-ND	675.00	ECS-250-20-28A-F

CSM-7 Case — HC-49USMD

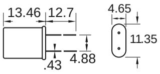
ELECTRICAL CHARACTERISTICS: • **Frequency Tolerance:** ±50ppm @ +25°C and over operating temperature range • **Frequency Stability** (Extended Temp. Version)**:** ±100ppm, -40°C to +85°C • **Shunt Capacitance:** 7.0pF • **Drive Level:** 0.5mW • **Operating Temperature:** -10°C to +70°C (Extended Temperature Version: -40°C to +85°C) • **Storage Temperature:** -30°C to +85°C (Extended Temp. Version: -55°C to +125°C) • **Aging Characteristics (first year):** ±5.0ppm @ 25°C • **Mode of Operation:** Fundamental



Freq. (MHz)	Load Cap.	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	T&R Pricing 1,000	ECS Part No.
			1	10	100			
CSM-7 Case								
3.579545	17pF	XC560CT-ND	1.00	.84	.67	XC560TR-ND	499.50	ECS-35-17-5P
3.579545	Series	XC663CT-ND	1.00	.84	.67	XC663TR-ND	555.00	ECS-35-S-5P
3.6864	Series	XC561CT-ND	1.00	.84	.67	XC561TR-ND	499.50	ECS-36-S-5P
3.6864	20pF	XC562CT-ND	1.00	.84	.67	XC562TR-ND	499.50	ECS-36-20-5P
4.000	Series	XC563CT-ND	1.00	.84	.67	XC563TR-ND	499.50	ECS-40-S-5P
4.000	20pF	XC564CT-ND	1.00	.84	.67	XC564TR-ND	499.50	ECS-40-20-5P
4.032	20pF	XC664CT-ND	1.00	.84	.67	XC664TR-ND	555.00	ECS-40.3-20-5P
4.032	Series	XC665CT-ND	1.00	.84	.67	XC665TR-ND	555.00	ECS-40.3-S-5P
4.096	20pF	XC666CT-ND	1.00	.84	.67	XC666TR-ND	555.00	ECS-41-20-5P
4.194304	12pF	XC667CT-ND	1.00	.84	.67	XC667TR-ND	555.00	ECS-42-12-5P
4.194304	16pF	XC668CT-ND	1.00	.84	.67	XC668TR-ND	555.00	ECS-42-16-5P
4.433618	20pF	XC669CT-ND	1.00	.84	.67	XC669TR-ND	555.00	ECS-44-20-5P
4.9152	Series	XC565CT-ND	1.00	.84	.67	XC565TR-ND	499.50	ECS-49-S-5P
4.9152	20pF	XC566CT-ND	1.00	.84	.67	XC566TR-ND	499.50	ECS-49-20-5P
5.000	Series	XC670CT-ND	1.00	.84	.67	XC670TR-ND	555.00	ECS-50-S-5P
5.000	20pF	XC671CT-ND	1.00	.84	.67	XC671TR-ND	555.00	ECS-50-20-5P
5.0688	Series	XC672CT-ND	1.00	.84	.67	XC672TR-ND	555.00	ECS-51-S-5P
5.0688	20pF	XC673CT-ND	1.00	.84	.67	XC673TR-ND	555.00	ECS-51-20-5P
5.185	Series	XC674CT-ND	1.00	.84	.67	XC674TR-ND	555.00	ECS-52-S-5P
5.185	32pF	XC675CT-ND	1.00	.84	.67	XC675TR-ND	555.00	ECS-52-32-5P
5.9904	Series	XC676CT-ND	1.00	.84	.67	XC676TR-ND	555.00	ECS-59-S-5P
5.9904	20pF	XC677CT-ND	1.00	.84	.67	XC677TR-ND	555.00	ECS-59-20-5P
6.000	Series	XC678CT-ND	1.00	.84	.67	XC678TR-ND	555.00	ECS-60-S-5P
6.000	32pF	XC679CT-ND	1.00	.84	.67	XC679TR-ND	555.00	ECS-60-32-5P
6.144	32pF	XC567CT-ND	1.00	.84	.67	XC567TR-ND	499.50	ECS-61-32-5P
7.3728	Series	XC568CT-ND	1.00	.84	.67	XC568TR-ND	499.50	ECS-73-S-5P
7.3728	20pF	XC680CT-ND	1.00	.84	.67	XC680TR-ND	555.00	ECS-73-20-5P
8.000	Series	XC569CT-ND	1.00	.84	.67	XC569TR-ND	499.50	ECS-80-S-5P
8.000	18pF	XC681CT-ND	1.00	.84	.67	XC681TR-ND	555.00	ECS-80-18-5P
8.000	32pF	XC682CT-ND	1.00	.84	.67	XC682TR-ND	555.00	ECS-80-32-5P
9.216	Series	XC683CT-ND	1.00	.84	.67	XC683TR-ND	555.00	ECS-92.1-S-5P
9.216	20pF	XC684CT-ND	1.00	.84	.67	XC684TR-ND	555.00	ECS-92.1-20-5P
9.8304	Series	XC570CT-ND	1.00	.84	.67	XC570TR-ND	499.50	ECS-98.3-S-5P
9.8304	20pF	XC571CT-ND	1.00	.84	.67	XC571TR-ND	499.50	ECS-98.3-20-5P
10.000	Series	XC572CT-ND	1.00	.84	.67	XC572TR-ND	499.50	ECS-100-S-5P
10.000	18pF	XC716CT-ND	1.00	.84	.67	XC716TR-ND	499.50	ECS-100-18-5P
11.000	Series	XC685CT-ND	1.00	.84	.67	XC685TR-ND	555.00	ECS-110-S-5P
11.0592	Series	XC573CT-ND	1.00	.84	.67	XC573TR-ND	499.50	ECS-110.5-S-5P
11.0592	20pF	XC574CT-ND	1.00	.84	.67	XC574TR-ND	499.50	ECS-110.5-20-5P
11.0592	32pF	XC686CT-ND	1.00	.84	.67	XC686TR-ND	555.00	ECS-110.5-32-5P
12.000	Series	XC575CT-ND	1.00	.84	.67	XC575TR-ND	499.50	ECS-120-S-5P
12.000	18pF	XC717CT-ND	1.00	.84	.67	XC717TR-ND	499.50	ECS-120-18-5P
12.000	32pF	XC687CT-ND	1.00	.84	.67	XC687TR-ND	555.00	ECS-120-32-5P
12.000393	18pF	XC688CT-ND	1.00	.84	.67	XC688TR-ND	555.00	ECS-120.003-18-5P
12.288	Series	XC689CT-ND	1.00	.84	.67	XC689TR-ND	555.00	ECS-122.8-S-5P
12.288	20pF	XC690CT-ND	1.00	.84	.67	XC690TR-ND	555.00	ECS-122.8-20-5P
14.31818	Series	XC576CT-ND	1.00	.84	.67	XC576TR-ND	499.50	ECS-143-S-5P
14.31818	20pF	XC718CT-ND	1.00	.84	.67	XC718TR-ND	499.50	ECS-143-20-5P
14.7456	Series	XC691CT-ND	1.00	.84	.67	XC691TR-ND	555.00	ECS-147.4-S-5P
14.7456	20pF	XC692CT-ND	1.00	.84	.67	XC692TR-ND	555.00	ECS-147.4-20-5P
15.000	Series	XC693CT-ND	1.00	.84	.67	XC693TR-ND	555.00	ECS-150-S-5P
16.000	Series	XC577CT-ND	1.00	.84	.67	XC577TR-ND	499.50	ECS-160-S-5P
16.000	20pF	XC694CT-ND	1.00	.84	.67	XC694TR-ND	555.00	ECS-160-20-5P
16.000312	18pF	XC695CT-ND	1.00	.84	.67	XC695TR-ND	555.00	ECS-160.003-18-5P
16.257	20pF	XC696CT-ND	1.00	.84	.67	XC696TR-ND	555.00	ECS-162.5-20-5P
16.257	Series	XC697CT-ND	1.00	.84	.67	XC697TR-ND	555.00	ECS-162.5-S-5P
18.000	Series	XC698CT-ND	1.00	.84	.67	XC698TR-ND	555.00	ECS-180-S-5P
18.432	Series	XC578CT-ND	1.00	.84	.67	XC578TR-ND	499.50	ECS-184-S-5P
18.432	18pF	XC699CT-ND	1.00	.84	.67	XC699TR-ND	555.00	ECS-184-18-5P
18.432	20pF	XC700CT-ND	1.00	.84	.67	XC700TR-ND	555.00	ECS-184-20-5P
19.6608	Series	XC579CT-ND	1.00	.84	.67	XC579TR-ND	499.50	ECS-196.6-S-5P
19.6608	20pF	XC701CT-ND	1.00	.84	.67	XC701TR-ND	555.00	ECS-196.6-20-5P
20.000	Series	XC580CT-ND	1.00	.84	.67	XC580TR-ND	499.50	ECS-200-S-5P
20.000	16pF	XC719CT-ND	1.00	.84	.67	XC719TR-ND	499.50	ECS-200-16-5P
20.000	20pF	XC581CT-ND	1.00	.84	.67	XC581TR-ND	499.50	ECS-200-20-5P
20.480	20pF	XC743CT-ND	1.00	.84	.67	XC743TR-ND	499.50	ECS-204.8-20-5P
24.000	Series	XC720CT-ND	1.00	.84	.67	XC720TR-ND	499.50	ECS-240-S-5P
24.000	20pF	XC582CT-ND	1.00	.84	.67	XC582TR-ND	499.50	ECS-240-20-5P
24.000	16pF	XC583CT-ND	1.00	.84	.67	XC583TR-ND	499.50	ECS-240-16-5P
24.00014	18pF	XC702CT-ND	1.00	.84	.67	XC702TR-ND	555.00	ECS-240.001-18-5P
24.576	20pF	XC744CT-ND	1.00	.84	.67	XC744TR-ND	499.50	ECS-245.7-20-5P
25.000	18pF	XC745CT-ND	1.00	.84	.67	XC745TR-ND	499.50	ECS-250-18-5P-F
CSM-7 Case Industrial Temperature Range								
3.579545	17pF	XC730CT-ND	1.32	1.11	.89	XC730TR-ND	661.50	ECS-35-17-5PDN
3.6864	20pF	XC731CT-ND	1.32	1.11	.89	XC731TR-ND	661.50	ECS-36-20-5PDN
4.000	20pF	XC732CT-ND	1.32	1.11	.89	XC732TR-ND	661.50	ECS-40-20-5PDN
6.000	32pF	XC733CT-ND	1.32	1.11	.89	XC733TR-ND	661.50	ECS-60-32-5PDN
7.3728	20pF	XC734CT-ND	1.32	1.11	.89	XC734TR-ND	661.50	ECS-73-20-5PDN
8.000	18pF	XC735CT-ND	1.32	1.11	.89	XC735TR-ND	661.50	ECS-80-18-5PDN
12.000	20pF	XC736CT-ND	1.32	1.11	.89	XC736TR-ND	661.50	ECS-120-20-5PDN
14.31818	20pF	XC737CT-ND	1.32	1.11	.89	XC737TR-ND	661.50	ECS-143-20-5PDN
16.000	20pF	XC738CT-ND	1.32	1.11	.89	XC738TR-ND	661.50	ECS-160-20-5PDN
18.4320	20pF	XC739CT-ND	1.32	1.11	.89	XC739TR-ND	661.50	ECS-184-20-5PDN
19.6608	20pF	XC740CT-ND	1.32	1.11	.89	XC740TR-ND	661.50	ECS-196-20-5PDN
20.000	20pF	XC741CT-ND	1.32	1.11	.89	XC741TR-ND	661.50	ECS-200-20-5PDN
24.000	20pF	XC742CT-ND	1.32	1.11	.89	XC742TR-ND	661.50	ECS-240-20-5PDN

Quartz Crystals

9256B-ND	ECS Crystal/Oscillator Databook	**$2.95**



Electrical Characteristics: • **Frequency Tolerance:** ±50ppm @ +25°C and over operating temperature range • **Shunt Capacitance:** 7.0pF • **Drive Level:** 1.0mW • **Operating Temp.:** -10°C to +70°C • **Storage Temperature:** -40°C to +85°C • **Aging Characteristics (first year):** ±5.0ppm @ +25°C

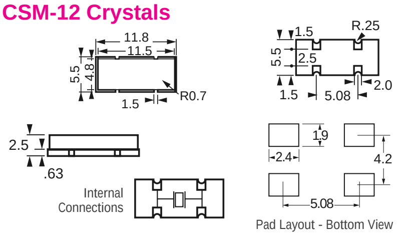
Series resonance appears resistive in the circuit and impedance at fs is at its minimum value. Unless load capacitance is specified, all crystals are manufactured at series resonance. When a crystal is operating at parallel resonance (fL) it will look inductive in a circuit. Crystal frequency varies depending on the value of load capacitance. The load capacitance is the dynamic capacitance of the total circuit as measured or computed across the crystal terminals. Always specify the load capacitance if the crystal will be operated in the parallel mode.

Frequency (MHz)	Load Cap.	Digi-Key Part No.	Price Each 1	10	100	500	ECS Part No.
HC-49/UA							
1.000	13pF	X066B-ND*	17.88	14.85	8.09	7.54	ECS-10-13-1H
1.8432	13pF	X067-ND	2.83	2.35	1.88	1.45	ECS-18-13-1
1.8432	Series	X002-ND	3.02	2.52	2.00	1.55	ECS-18-S-1
2.000	20pF	X068-ND	2.57	2.14	1.70	1.32	ECS-20-20-1
2.000	Series	X004-ND	2.73	2.27	1.81	1.40	ECS-20-S-1
2.048	12pF	X098-ND	2.73	2.27	1.81	1.40	ECS-20.48-12-1
2.4576	32pF	X069-ND	2.57	2.14	1.70	1.32	ECS-24-32-1
2.500	Series	X070-ND	2.57	2.14	1.70	1.32	ECS-25-S-1
3.000	Series	X009-ND	3.02	2.52	2.00	1.55	ECS-30-S-1
3.2768	17pF	X022-ND	1.37	1.14	.91	.70	ECS-32-17-1
3.579545	17pF	X049-ND	.64	.58	.52	.46	ECS-35-17-1
3.579545	Series	X011-ND	.64	.58	.52	.46	ECS-35-S-1
3.6864	17-18pF	X071-ND	.64	.58	.52	.46	ECS-36-18-1
3.6864	Series	X080-ND	.64	.58	.52	.46	ECS-36-S-1
3.932160	17pF	X013-ND	.64	.58	.52	.46	ECS-39-17-1
4.000	20pF	X006-ND	.64	.58	.52	.46	ECS-40-20-1
4.000	Series	X081-ND	.64	.58	.52	.46	ECS-40-S-1
4.032	20pF	X072-ND	.64	.58	.52	.46	ECS-40.3-20-1
4.032	Series	X015-ND	.64	.58	.52	.46	ECS-40.3-S-1
4.096	20pF	X082-ND	.64	.58	.52	.46	ECS-41-20-1
4.194304	12pF	X007-ND	.64	.58	.52	.46	ECS-42-12-1
4.433618	20pF	X083-ND	.64	.58	.52	.46	ECS-44-20-1
4.9152	Series	X050-ND	.64	.58	.52	.46	ECS-49-S-1
4.9152	20pF	X084-ND	.64	.58	.52	.46	ECS-49-20-1
5.000	Series	X099-ND	.64	.58	.52	.46	ECS-50-S-1
5.000	20pF	X051-ND	.64	.58	.52	.46	ECS-50-20-1
5.0688	Series	X052-ND	.64	.58	.52	.46	ECS-51-S-1
5.0688	20pF	X085-ND	.64	.58	.52	.46	ECS-51-20-1
5.185	Series	X053-ND	.64	.58	.52	.46	ECS-52-S-1
5.185	32pF	X016-ND	.64	.58	.52	.46	ECS-52-32-1
5.9904	Series	X073-ND	.64	.58	.52	.46	ECS-59-S-1
5.9904	20pF	X017-ND	.64	.58	.52	.46	ECS-59.9-20-1
6.000	Series	X026-ND	.64	.58	.52	.46	ECS-60-S-1
6.000	32pF	X086-ND	.64	.58	.52	.46	ECS-60-32-1
6.144	32pF	X054-ND	.64	.58	.52	.46	ECS-61-32-1
6.5536	12pF	X018-ND	.64	.58	.52	.46	ECS-65-12-1
7.3728	Series	X074-ND	.64	.58	.52	.46	ECS-73-S-1
7.3728	20pF	X019-ND	.64	.58	.52	.46	ECS-73-20-1
7.680	20pF	X020-ND	.64	.58	.52	.46	ECS-76.8-20-1
8.000	Series	X056-ND	.64	.58	.52	.46	ECS-80-S-1
8.000	18pF	X100-ND	.64	.58	.52	.46	ECS-80-18-1
8.000	20pF	X021-ND	.64	.58	.52	.46	ECS-80-20-1
8.000	32pF	X137-ND	.64	.58	.52	.46	ECS-80-32-1
9.216	Series	X075-ND	.64	.58	.52	.46	ECS-92.1-S-1
9.216	20pF	X138-ND	.64	.58	.52	.46	ECS-92.1-20-1
9.8304	20pF	X087-ND	.64	.58	.52	.46	ECS-98.3-20-1
9.8304	Series	X023-ND	.64	.58	.52	.46	ECS-98.3-S-1
10.000	Series	X057-ND	.64	.58	.52	.46	ECS-100-S-1
10.738635	Series	X024-ND	.64	.58	.52	.46	ECS-107.3-S-1
11.000	Series	X088-ND	.64	.58	.52	.46	ECS-110-S-1
11.046	Series	X025-ND	.64	.58	.52	.46	ECS-110.4-S-1
11.0592	Series	X078-ND	.64	.58	.52	.46	ECS-110.5-S-1
11.0592	20pF	X089-ND	.64	.58	.52	.46	ECS-110.5-20-1
11.0592	32pF	X139-ND	.64	.58	.52	.46	ECS-110.5-32-1
11.228	Series	X028-ND	.64	.58	.52	.46	ECS-112.2-S-1
11.52	Series	X140-ND	.64	.58	.52	.46	ECS-115.2-S-1
11.98135	Series	X029-ND	.64	.58	.52	.46	ECS-119.8-S-1
12.000	Series	X058-ND	.64	.58	.52	.46	ECS-120-S-1
12.000	32pF	X030-ND	.64	.58	.52	.46	ECS-120-32-1
12.000393	18pF	X147-ND	.64	.58	.52	.46	ECS-120.003-18-1
12.096	Series	X031-ND	.64	.58	.52	.46	ECS-121-S-1
12.288	Series	X090-ND	.64	.58	.52	.46	ECS-122.8-S-1
12.288	20pF	X141-ND	.64	.58	.52	.46	ECS-122.8-20-1
13.5168	Series	X032-ND	.64	.58	.52	.46	ECS-135-S-1
14.31818	Series	X091-ND	.64	.58	.52	.46	ECS-143-S-1
14.690	Series	X033-ND	.64	.58	.52	.46	ECS-146-S-1
14.7456	Series	X092-ND	.64	.58	.52	.46	ECS-147.4-S-1
14.7456	20pF	X142-ND	.64	.58	.52	.46	ECS-147.4-20-1
15.000	Series	X059-ND	.64	.58	.52	.46	ECS-150-S-1
16.000	Series	X077-ND	.64	.58	.52	.46	ECS-160-S-1
16.000	20pF	X143-ND	.64	.58	.52	.46	ECS-160-20-1
16.000312	18pF	X148-ND	.64	.58	.52	.46	ECS-160.003-18-1
18.000	Series	X060-ND	.64	.58	.52	.46	ECS-180-S-1
18.000	20pF	X144-ND	.64	.58	.52	.46	ECS-180-20-1
18.432	Series	X061-ND	.64	.58	.52	.46	ECS-184-S-1
18.432	18pF	X145-ND	.64	.58	.52	.46	ECS-184-18-1
18.432	20pF	X146-ND	.64	.58	.52	.46	ECS-184-20-1
19.6608	Series	X094-ND	.64	.58	.52	.46	ECS-196.6-S-1
19.6608	20pF	X035-ND	.64	.58	.52	.46	ECS-196.6-20-1
20.000	Series	X062-ND	.64	.58	.52	.46	ECS-200-S-1
20.000	20pF	X036-ND	.64	.58	.52	.46	ECS-200-20-1
22.1184	Series	X063-ND	.64	.58	.52	.46	ECS-221-S-1
24.000	20pF	X037-ND	.64	.58	.52	.46	ECS-240-20-1
24.000	Series	X095-ND	.64	.58	.52	.46	ECS-240-S-1F
24.00014	18pF	X149-ND	.64	.58	.52	.46	ECS-240.001-18-1
35.2512	18pF	X151-ND	.80	.72	.58	.52	ECS-352.5-18-1
38.000530	18pF	X150-ND	.80	.72	.58	.52	ECS-380.005-18-1
40.32	18pF	X152-ND	.80	.72	.58	.52	ECS-403.2-18-1
48.000	Series	X065-ND	.64	.58	.52	.46	ECS-480-S-1
49.860	20pF	X038-ND	.64	.58	.52	.46	ECS-498.6-20-1
Base Insulator		HC49INS-ND	—	.09	.08	.06	700-9001

***** 1.0 Frequency (#*X066B-ND*): 100ppm @ +25°C; ±100ppm from 0°C to +60°C.

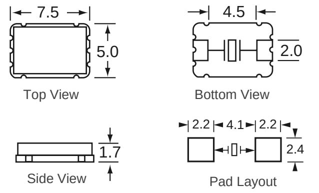
SMT Quartz Crystals

CSM-12 Crystals



ELECTRICAL CHARACTERISTICS:
- **Frequency Tolerance:** ±50 ppm @ 25°C and over operating temperature range • **Shunt Capacitance:** 7.0pF • **Drive Level:** 0.5mW • **Operating Temp.:** -10°C to +70°C • **Storage Temp.:** -40°C to +85°C • **Aging Characteristics (first year):** ±5.0ppm @ 25°C • **Mode of Operation:** Fundamental

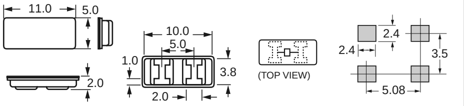
CSM-8 Crystals



ELECTRICAL CHARACTERISTICS:
- **Frequency Tolerance:** ±50ppm @ 25°C and over operating temp. range • **Shunt Capacitance:** 5.0pF • **Drive Level:** 0.5mW • **Operating Temp.:** -10°C to +70°C • **Storage Temp.:** -40°C to +85°C • **Aging Characteristics (first year):** ±5.0ppm @ 25°C

ECX-19A Crystals

ELECTRICAL CHARACTERISTICS: • **Frequency Tolerance:** ±50 ppm @ 25°C and over operating temp. range • **Shunt Capacitance:** 7.0pF • **Drive Level:** 0.5mW • **Operating Temp.:** -10°C to +70°C • **Storage Temp.:** -30°C to +85°C • **Aging Characteristics (first year):** ±5.0ppm @ 25°C



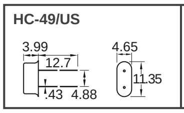
Frequency (MHz)	Load Cap.	Max. ESR (Ω)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	500	Digi-Key Part No.	Tape & Reel Pricing 1,000	ECS Part No.
CSM-12 Series Crystals										
3.579545	17pf	—	XC584CT-ND	1.95	1.76	1.47	1.17	XC584TR-ND	975.00	ECS-35-17-18-TR
3.6864	Series	200	XC585CT-ND	1.95	1.76	1.47	1.17	XC585TR-ND	975.00	ECS-36-S-18-TR
3.6864	20pf	—	XC586CT-ND	1.95	1.76	1.47	1.17	XC586TR-ND	975.00	ECS-36-20-18-TR
4.000	20pf	—	XC587CT-ND	1.95	1.76	1.47	1.17	XC587TR-ND	975.00	ECS-40-20-18-TR
4.000	Series	200	XC588CT-ND	1.95	1.76	1.47	1.17	XC588TR-ND	975.00	ECS-40-S-18-TR
4.9152	20pf	—	XC589CT-ND	1.95	1.76	1.47	1.17	XC589TR-ND	975.00	ECS-49-20-18-TR
4.9152	Series	150	XC590CT-ND	1.95	1.76	1.47	1.17	XC590TR-ND	975.00	ECS-49-S-18-TR
6.144	32pf	—	XC591CT-ND	1.95	1.76	1.47	1.17	XC591TR-ND	975.00	ECS-61-32-18-TR
7.3728	Series	100	XC592CT-ND	1.95	1.76	1.47	1.17	XC592TR-ND	975.00	ECS-73-S-18-TR
8.000	Series	100	XC593CT-ND	1.95	1.76	1.47	1.17	XC593TR-ND	975.00	ECS-80-S-18-TR
9.8304	Series	100	XC594CT-ND	1.95	1.76	1.47	1.17	XC594TR-ND	975.00	ECS-98.3-S-18-TR
9.8304	20pf	—	XC595CT-ND	1.95	1.76	1.47	1.17	XC595TR-ND	975.00	ECS-98.3-20-18-TR
10.000	Series	80	XC596CT-ND	1.95	1.76	1.47	1.17	XC596TR-ND	975.00	ECS-100-S-18-TR
11.0592	Series	80	XC597CT-ND	1.95	1.76	1.47	1.17	XC597TR-ND	975.00	ECS-110.5-S-18-TR
11.0592	20pf	—	XC598CT-ND	1.95	1.76	1.47	1.17	XC598TR-ND	975.00	ECS-110.5-20-18-TR
12.000	Series	80	XC599CT-ND	1.95	1.76	1.47	1.17	XC599TR-ND	975.00	ECS-120-S-18-TR
14.31818	Series	50	XC600CT-ND	1.95	1.76	1.47	1.17	XC600TR-ND	975.00	ECS-143-S-18-TR
16.000	Series	50	XC601CT-ND	1.95	1.76	1.47	1.17	XC601TR-ND	975.00	ECS-160-S-18-TR
18.432	Series	50	XC602CT-ND	1.95	1.76	1.47	1.17	XC602TR-ND	975.00	ECS-184-S-18-TR
19.6608	Series	50	XC603CT-ND	1.95	1.76	1.47	1.17	XC603TR-ND	975.00	ECS-196.6-S-18-TR
20.000	Series	50	XC604CT-ND	1.95	1.76	1.47	1.17	XC604TR-ND	975.00	ECS-200-S-18-TR
20.000	20pf	—	XC605CT-ND	1.95	1.76	1.47	1.17	XC605TR-ND	975.00	ECS-200-20-18-TR
24.000	20pf	—	XC606CT-ND	1.95	1.76	1.47	1.17	XC606TR-ND	975.00	ECS-240-20-18-TR
24.000	16pf	—	XC607CT-ND	1.95	1.76	1.47	1.17	XC607TR-ND	975.00	ECS-240-16-18-TR
CSM-8 Series Crystals										
9.8304	Series	60	XC608CT-ND	3.30	2.97	2.48	1.98	XC608TR-ND	1650.00	ECS-98.3-S-20A-TR
9.8304	20pf	—	XC609CT-ND	3.30	2.97	2.48	1.98	XC609TR-ND	1650.00	ECS-98.3-20-20A-TR
10.000	Series	60	XC610CT-ND	3.30	2.97	2.48	1.98	XC610TR-ND	1650.00	ECS-100-S-20A-TR
11.0592	Series	60	XC611CT-ND	3.30	2.97	2.48	1.98	XC611TR-ND	1650.00	ECS-110.5-S-20A-TR
11.0592	20pf	—	XC612CT-ND	3.30	2.97	2.48	1.98	XC612TR-ND	1650.00	ECS-110.5-20-20A-TR
12.000	Series	60	XC613CT-ND	3.30	2.97	2.48	1.98	XC613TR-ND	1650.00	ECS-120-S-20A-TR
14.31818	Series	60	XC614CT-ND	3.30	2.97	2.48	1.98	XC614TR-ND	1650.00	ECS-143-S-20A-TR
14.7456	Series	60	XC615CT-ND	3.30	2.97	2.48	1.98	XC615TR-ND	1650.00	ECS-147.4-S-20A-TR
16.000	Series	40	XC616CT-ND	3.30	2.97	2.48	1.98	XC616TR-ND	1650.00	ECS-160-S-20A-TR
18.432	Series	40	XC617CT-ND	3.30	2.97	2.48	1.98	XC617TR-ND	1650.00	ECS-184-S-20A-TR
19.6608	Series	40	XC618CT-ND	3.30	2.97	2.48	1.98	XC618TR-ND	1650.00	ECS-196.6-S-20A-TR
20.000	Series	40	XC619CT-ND	3.30	2.97	2.48	1.98	XC619TR-ND	1650.00	ECS-200-S-20A-TR
20.000	20pf	—	XC620CT-ND	3.30	2.97	2.48	1.98	XC620TR-ND	1650.00	ECS-200-20-20A-TR
24.000	Series	40	XC621CT-ND	3.30	2.97	2.48	1.98	XC621TR-ND	1650.00	ECS-240-S-20A-TR
24.000	20pf	—	XC622CT-ND	3.30	2.97	2.48	1.98	XC622TR-ND	1650.00	ECS-240-20-20A-TR
24.00014	Series	40	XC623CT-ND	3.30	2.97	2.48	1.98	XC623TR-ND	1650.00	ECS-240.0014-S-20A-TR
30.000	Series	40	XC624CT-ND*	3.30	2.97	2.48	1.98	XC624TR-ND*	1650.00	ECS-300-S-20A-TR
32.000	Series	40	XC625CT-ND*	3.30	2.97	2.48	1.98	XC625TR-ND*	1650.00	ECS-320-S-20A-TR
33.000	Series	40	XC626CT-ND*	3.30	2.97	2.48	1.98	XC626TR-ND*	1650.00	ECS-330-S-20A-TR
36.000	Series	40	XC627CT-ND*	3.30	2.97	2.48	1.98	XC627TR-ND*	1650.00	ECS-360-S-20A-TR
40.000	Series	40	XC628CT-ND*	3.30	2.97	2.48	1.98	XC628TR-ND*	1650.00	ECS-400-S-20A-TR
40.320	Series	40	XC629CT-ND*	3.30	2.97	2.48	1.98	XC629TR-ND*	1650.00	ECS-403.2-S-20A-TR
30.000	Series	40	XC630CT-ND	3.30	2.97	2.48	1.98	XC630TR-ND	1650.00	ECS-300-S-20A-F-TR
32.000	Series	40	XC631CT-ND	3.30	2.97	2.48	1.98	XC631TR-ND	1650.00	ECS-320-S-20A-F-TR
35.2512	Series	40	XC632CT-ND	3.30	2.97	2.48	1.98	XC632TR-ND	1650.00	ECS-352.512-S-20A-F-TR
36.000	Series	40	XC633CT-ND	3.30	2.97	2.48	1.98	XC633TR-ND	1650.00	ECS-360-S-20A-F-TR
40.000	Series	40	XC634CT-ND	3.30	2.97	2.48	1.98	XC634TR-ND	1650.00	ECS-400-S-20A-F-TR
ECX-19A Series Crystals										
3.579545	17pF	—	XC850CT-ND	3.30	2.97	2.48	1.98	XC850TR-ND	1650.00	ECS-35-17-19A
3.6864	20pF	—	XC851CT-ND	3.30	2.97	2.48	1.98	XC851TR-ND	1650.00	ECS-36-20-19A
4.000	20pF	—	XC852CT-ND	3.30	2.97	2.48	1.98	XC852TR-ND	1650.00	ECS-40-20-19A
4.9152	20pF	—	XC853CT-ND	3.30	2.97	2.48	1.98	XC853TR-ND	1650.00	ECS-49-20-19A
6.144	32pF	—	XC854CT-ND	3.30	2.97	2.48	1.98	XC854TR-ND	1650.00	ECS-61-32-19A
7.3728	20pF	—	XC855CT-ND	3.30	2.97	2.48	1.98	XC855TR-ND	1650.00	ECS-73-20-19A
8.000	20pF	—	XC856CT-ND	3.30	2.97	2.48	1.98	XC856TR-ND	1650.00	ECS-80-20-19A
9.8304	20pF	—	XC857CT-ND	3.30	2.97	2.48	1.98	XC857TR-ND	1650.00	ECS-98.3-20-19A
10.000	Series	—	XC858CT-ND	3.30	2.97	2.48	1.98	XC858TR-ND	1650.00	ECS-100-S-19A
11.0592	20pF	—	XC859CT-ND	3.30	2.97	2.48	1.98	XC859TR-ND	1650.00	ECS-110.5-20-19A
12.000	Series	—	XC860CT-ND	3.30	2.97	2.48	1.98	XC860TR-ND	1650.00	ECS-120-S-19A
12.000	20pF	—	XC861CT-ND	3.30	2.97	2.48	1.98	XC861TR-ND	1650.00	ECS-120-20-19A
14.31818	Series	—	XC862CT-ND	3.30	2.97	2.48	1.98	XC862TR-ND	1650.00	ECS-143-S-19A
14.31818	20pF	—	XC863CT-ND	3.30	2.97	2.48	1.98	XC863TR-ND	1650.00	ECS-143-20-19A
16.000	Series	—	XC864CT-ND	3.30	2.97	2.48	1.98	XC864TR-ND	1650.00	ECS-160-S-19A
18.432	Series	—	XC865CT-ND	3.30	2.97	2.48	1.98	XC865TR-ND	1650.00	ECS-184-S-19A
19.6608	Series	—	XC866CT-ND	3.30	2.97	2.48	1.98	XC866TR-ND	1650.00	ECS-196.6-S-19A
20.000	Series	—	XC867CT-ND	3.30	2.97	2.48	1.98	XC867TR-ND	1650.00	ECS-200-S-19A
20.000	20pF	—	XC868CT-ND	3.30	2.97	2.48	1.98	XC868TR-ND	1650.00	ECS-200-20-19A
24.000	20pF	—	XC869CT-ND	3.30	2.97	2.48	1.98	XC869TR-ND	1650.00	ECS-240-20-19A
24.000	Series	—	XC870CT-ND	3.30	2.97	2.48	1.98	XC870TR-ND	1650.00	ECS-240-S-19A

* 3rd Overtone

ECS INC. INTERNATIONAL Quartz Crystals

ELECTRICAL CHARACTERISTICS: • **Frequency Tolerance:** ±50ppm @ +25°C and over operating temp. range • **Frequency Stability (Extended Temp. Version):** ±100ppm from -40°C to +85°C • **Shunt Capacitance:** 7.0pF • **Drive Level:** 0.5mW • **Operating Temp.:** -10°C to +70°C (Extended Temperature Version: -40°C to +85°C) • **Storage Temp.:** -40°C to +85°C (Extended Temp. Version: -55°C to +125°C) • **Aging Characteristics (first year):** ±5.0ppm @ +25°C • **Mode of Operation:** Fundamental

HC-49/US



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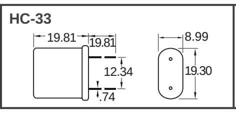
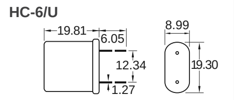


HC-6/U

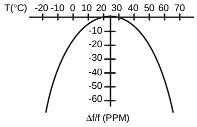


Frequency (MHz)	Load Cap.	Digi-Key Part No.	Price Each 1	10	100	500	ECS Part No.
HC-49/US							
3.579545	17pF	X079-ND	.80	.72	.58	.52	ECS-35-17-4
3.579545	Series	X153-ND	.80	.72	.58	.52	ECS-35-S-4
3.6864	18pF	X402-ND	.80	.72	.58	.52	ECS-36-18-4
3.6864	Series	X403-ND	.80	.72	.58	.52	ECS-36-S-4
4.000	Series	X404-ND	.80	.72	.58	.52	ECS-40-S-4
4.000	20pF	X405-ND	.80	.72	.58	.52	ECS-40-20-4
4.032	20pF	X154-ND	.80	.72	.58	.52	ECS-40.3-20-4
4.032	Series	X155-ND	.80	.72	.58	.52	ECS-40.3-S-4
4.096	20pF	X156-ND	.80	.72	.58	.52	ECS-41-20-4
4.194304	12pF	X406-ND	.80	.72	.58	.52	ECS-42-12-4
4.194304	16pF	X157-ND	.80	.72	.58	.52	ECS-42-16-4
4.433618	20pF	X407-ND	.80	.72	.58	.52	ECS-44-20-4
4.9152	Series	X408-ND	.80	.72	.58	.52	ECS-49-S-4
4.9152	20pF	X409-ND	.80	.72	.58	.52	ECS-49-20-4
5.000	20pF	X410-ND	.80	.72	.58	.52	ECS-50-20-4
5.000	Series	X158-ND	.80	.72	.58	.52	ECS-50-S-4
5.0688	20pF	X411-ND	.80	.72	.58	.52	ECS-51-20-4
5.0688	Series	X159-ND	.80	.72	.58	.52	ECS-51-S-4
5.185	32pF	X064-ND	1.04	.87	.69	.54	ECS-52-32-4
5.185	Series	X160-ND	.80	.72	.58	.52	ECS-52-S-4
5.9904	Series	X161-ND	.80	.72	.58	.52	ECS-59-S-4
5.9904	20pF	X162-ND	.80	.72	.58	.52	ECS-59.9-20-4
6.000	Series	X412-ND	.80	.72	.58	.52	ECS-60-S-4
6.000	32pF	X413-ND	.80	.72	.58	.52	ECS-60-32-4
6.144	32pF	X414-ND	.80	.72	.58	.52	ECS-61-32-4
6.500	20pF	X415-ND	.80	.72	.58	.52	ECS-65-20-4
7.3728	20pF	X076-ND	1.04	.87	.69	.54	ECS-73-20-4
7.3728	Series	X416-ND	.80	.72	.58	.52	ECS-73-S-4
7.68	20pF	X163-ND	.80	.72	.58	.52	ECS-76.8-20-4
8.000	18pF	X164-ND	.80	.72	.58	.52	ECS-80-18-4
8.000	20pF	X165-ND	.80	.72	.58	.52	ECS-80-20-4
8.000	32pF	X166-ND	.80	.72	.58	.52	ECS-80-32-4
8.000	Series	X417-ND	.80	.72	.58	.52	ECS-80-S-4
8.500	Series	X418-ND	.80	.72	.58	.52	ECS-85-S-4
9.000	Series	X419-ND	.80	.72	.58	.52	ECS-90-S-4
9.216	Series	X167-ND	.80	.72	.58	.52	ECS-92.1-S-4
9.216	20pF	X168-ND	.80	.72	.58	.52	ECS-92.1-20-4
9.545	Series	X420-ND	.80	.72	.58	.52	ECS-95.4-S-4
9.8304	20pF	X169-ND	.80	.72	.58	.52	ECS-98.3-20-4
9.8304	Series	X421-ND	.80	.72	.58	.52	ECS-98.3-S-4
10.000	Series	X422-ND	.80	.72	.58	.52	ECS-100-S-4
10.000	18pF	X443-ND	.80	.72	.58	.52	ECS-100-18-4
10.738635	Series	X423-ND	.80	.72	.58	.52	ECS-107.3-S-4
11.000	Series	X424-ND	.80	.72	.58	.52	ECS-110-S-4
11.0592	Series	X425-ND	.80	.72	.58	.52	ECS-110.5-S-4
11.0592	20pF	X426-ND	.80	.72	.58	.52	ECS-110.5-20-4
11.0592	32pF	X170-ND	.80	.72	.58	.52	ECS-110.5-32-4
11.520	Series	X171-ND	.80	.72	.58	.52	ECS-115.2-S-4
11.98135	Series	X427-ND	.80	.72	.58	.52	ECS-119.8-S-4
12.000	20pF	X227-ND	.80	.72	.58	.52	ECS-120-20-4
12.000	32pF	X172-ND	.80	.72	.58	.52	ECS-120-32-4
12.000	Series	X428-ND	.80	.72	.58	.52	ECS-120-S-4
12.000393	18pF	X173-ND	.80	.72	.58	.52	ECS-120.003-18-4
12.096	Series	X429-ND	.80	.72	.58	.52	ECS-121-S-4
12.288	20pF	X228-ND	.80	.72	.58	.52	ECS-122.8-20-4
12.288	Series	X174-ND	.80	.72	.58	.52	ECS-122.8-S-4
12.960	18pF	X097-ND	1.04	.87	.69	.54	ECS-129.6-18-4
14.31818	Series	X430-ND	.80	.72	.58	.52	ECS-143-S-4
14.31818	20pF	X444-ND	.80	.72	.58	.52	ECS-143-20-4
14.7456	Series	X431-ND	.80	.72	.58	.52	ECS-147.4-S-4
14.7456	20pF	X175-ND	.80	.72	.58	.52	ECS-147.4-20-4
15.000	Series	X432-ND	.80	.72	.58	.52	ECS-150-S-4
15.360	20pF	X096-ND	1.04	.87	.69	.54	ECS-153-20-4
16.000	Series	X433-ND	.80	.72	.58	.52	ECS-160-S-4
16.000	20pF	X176-ND	.80	.72	.58	.52	ECS-160-20-4
16.000312	18pF	X177-ND	.80	.72	.58	.52	ECS-160.003-18-4
16.257	20pF	X039-ND	1.04	.87	.69	.54	ECS-162.5-20-4
16.257	Series	X434-ND	.80	.72	.58	.52	ECS-162.5-S-4
18.000	Series	X435-ND	.80	.72	.58	.52	ECS-180-S-4
18.000	20pF	X178-ND	.80	.72	.58	.52	ECS-180-20-4
18.432	Series	X436-ND	.80	.72	.58	.52	ECS-184-S-4
18.432	18pF	X179-ND	.80	.72	.58	.52	ECS-184-18-4
18.432	20pF	X180-ND	.80	.72	.58	.52	ECS-184-20-4
19.6608	Series	X437-ND	.80	.72	.58	.52	ECS-196.6-S-4
19.6608	20pF	X181-ND	.80	.72	.58	.52	ECS-196.6-20-4
20.000	Series	X438-ND	.80	.72	.58	.52	ECS-200-S-4
20.000	20pF	X439-ND	.80	.72	.58	.52	ECS-200-20-4
21.47727	Series	X044-ND	1.04	.87	.69	.54	ECS-214.7-S-4
22.1184	Series	X182-ND	.80	.72	.58	.52	ECS-221-S-4
24.000	Series	X440-ND	.80	.72	.58	.52	ECS-240-S-4
24.000	16pF	X441-ND	.80	.72	.58	.52	ECS-240-16-4
24.000	20pF	X442-ND	.80	.72	.58	.52	ECS-240-20-4
24.00014	18pF	X183-ND	.80	.72	.58	.52	ECS-240.001-18-4
20.480	20pF	X229-ND	.80	.72	.58	.52	ECS-204.8-20-4
24.576	20pF	X230-ND	.80	.72	.58	.52	ECS-245.7-20-4
25.000	18pF	X231-ND	.80	.72	.58	.52	ECS-250-18-4F
HC-49/US Industrial Temperature Range							
3.579545	17pF	X184-ND	.98	.88	.71	.63	ECS-35-17-4DN
3.6864	20pF	X185-ND	.98	.88	.71	.63	ECS-36-20-4DN
4.000	20pF	X186-ND	.98	.88	.71	.63	ECS-40-20-4DN
6.000	32pF	X187-ND	.98	.88	.71	.63	ECS-60-32-4DN
7.3728	20pF	X188-ND	.98	.88	.71	.63	ECS-73-20-4DN
8.000	18pF	X189-ND	.98	.88	.71	.63	ECS-80-18-4DN
12.000	20pF	X190-ND	.98	.88	.71	.63	ECS-120-20-4DN
14.31818	20pF	X191-ND	.98	.88	.71	.63	ECS-143-20-4DN
16.000	20pF	X192-ND	.98	.88	.71	.63	ECS-160-20-4DN
18.4320	20pF	X193-ND	.98	.88	.71	.63	ECS-184-20-4DN
19.6608	20pF	X194-ND	.98	.88	.71	.63	ECS-196-20-4DN
20.000	20pF	X195-ND	.98	.88	.71	.63	ECS-200-20-4DN
24.000	20pF	X196-ND	.98	.88	.71	.63	ECS-240-20-4DN
HC-33							
2.4576	Series	X043-ND	6.34	5.27	4.20	3.24	ECS-24-S-2
2.94912	32pF	X014-ND	1.37	1.14	.91	.70	ECS-29.4-32-2P
3.000	32pF	X048-ND	4.39	3.65	2.91	2.25	ECS-30-32-2
HC-6/U							
2.560	32pF	X003-ND	1.24	1.03	.82	.64	ECS-25.6-32-2P
3.640	32pF	X008-ND	1.24	1.03	.82	.64	ECS-36.4-32-2P
3.700	32pF	X012-ND	1.24	1.03	.82	.64	ECS-37-32-2P
4.433	32pF	X034-ND	1.24	1.03	.82	.64	ECS-44-32-2P
Base Insulator		HC49INS-ND	—	.09	.08	.06	700-9001

ECS INC. INTERNATIONAL Quartz Crystals – 32.768KHz and 1.000MHz

Parabolic Temperature Curve

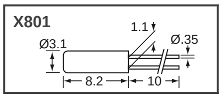
To determine frequency stability, use parabolic curvature. For example: What is the stability at 45°C?
(1) Change in T (°C) = 45 - 25 = 20°C
(2) Change in frequency
= 0.04 PPM x $(\Delta T)^2$
= 0.04 PPM x $(20)^2$
= -16.0 PPM



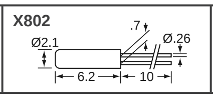
Cylinder Type

	X801-ND	X802-ND	X803-ND	X804-ND
Frequency	32.768KHz	32.768KHz	32.768KHz	1.00MHz
Frequency Tolerance @ 25°C	±20ppm	±20ppm	±20ppm	±3000ppm
Load Capacitance	12.5pf	12.5pf	8.0pf	8.0pf
Equivalent Series Resistance	35K Ohm	35K Ohm	40K Ohm	3K Ohm
Shunt Capacitance	1.6pF Typ.	1.35pF Typ.	1.00pF Typ.	0.4pF Typ.
Operating Temperature Range	-10°C to +60°C	-10°C to +60°C	-10°C to +60°C	-10°C to +60°C
Storage Temperature Range	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-30°C to +70°C

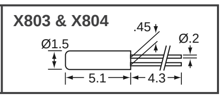
X801



X802



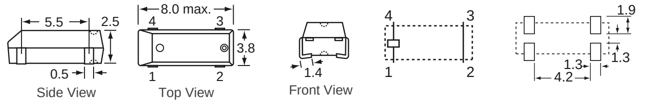
X803 & X804



Drive Level	Digi-Key Part No.	Price Each 1	10	100	500	ECS Part No.
1µW	X801-ND	.30	.27	.22	.20	ECS-3X8
1µW	X802-ND	.30	.27	.22	.20	ECS-.327-12-13
1µW	X803-ND	2.63	2.37	1.89	1.68	ECS-.327-8-14
1.0µW	X804-ND	7.18	6.46	5.17	4.60	ECS-10-8-14

ECX-306 Series — SMT

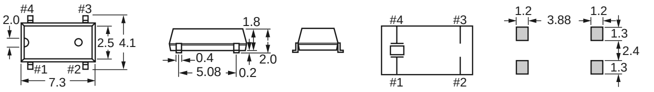
Specifications: • **Frequency:** 32.768KHz • **Frequency Tolerance @ 25°C:** ±20ppm • **Equivalent Series Resistance:** 50KΩ max. • **Shunt Capacitance:** 1.3pF typ. • **Drive Level:** 1µW max. • **Calibration Tolerance:** ±20 ppm @ 25°C • **Temperature Coefficient:** -0.040 ppm/°C^2 max. • **Operating Temperature Range:** -40°C to +85°C Max. • **Storage Temperature Range:** -55°C to +125°C • **Q Factor:** 50,000 min. • **Turnover Temperature:** +25°C (±5°C) • **Insulation Resistance:** 500MΩ min./DC 100V • **Motional Capacitance:** 0.003pF typ. • **Aging (first year):** ±3 ppm max. @ +25°C



Load Cap.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No	Tape & Reel Size	Pricing
6pF	XC746CT-ND	1.08	.90	.72	XC746TR-ND	3,000	560.00/M
12.5pF	XC488CT-ND	1.08	.90	.72	XC488TR-ND	3,000	560.00/M

ECX-3TA Series — SMT

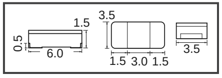
Specifications • **Frequency:** 32.768KHz • **Freq. Tolerance @ 25°C:** ±20ppm • **Equivalent Series Resistance:** 50KΩ max. • **Shunt Capacitance:** 2.0pF typ. • **Operating Temperature Range:** -40°C to +85°C • **Storage Temp. Range:** -55°C to +125°C



Load Cap.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No	Tape & Reel Pricing 3,000
12.5pF	X488CT-ND	1.62	1.35	1.08	X488TR-ND	840.00/M

ECS INC. INTERNATIONAL SMT Ultra-Low Profile Quartz Crystals

ELECTRICAL CHARACTERISTICS: • **Mode:** Fundamental • **Drive Level:** 10 µW • **Frequency Tolerance:** ±50 ppm@25°C and over operating temp. range • **Frequency Stability:** ±50 ppm • **Operating Temp. Range:** -10°C to +70°C



Frequency (MHz)	Load Cap.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	ECS Part No.
15.000	Series	XC801CT-ND	3.91	3.56	3.16	ECS-150-S-15
18.000	Series	XC804CT-ND	3.91	3.56	3.16	ECS-180-S-15
24.000	Series	XC808CT-ND	3.91	3.56	3.16	ECS-240-S-1

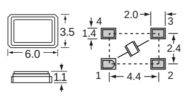
SMT Low Profile Quartz Crystals

ECX-64 1.1mm

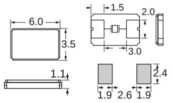
ELECTRICAL CHARACTERISTICS:

• **Freq. Tolerance:** ±50ppm @ +25°C and over operating temp. range • **Shunt Capacitance:** 7.0pF • **Drive Level:** 0.1mW • **Operating Temp.:** -10°C to +70°C • **Storage Temp.:** -40°C to +85°C • **Aging Characteristics (first year):** ±2.0 ppm @ 25°C • **Max. ESR:** 40Ω • **Mode of Operation:** Fundamental

ECX-64B (23B)



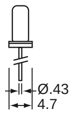
ECX-64A (23A)

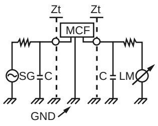


Freq. (MHz)	Load Cap.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	T&R Digi-Key Part No.	T&R Pricing 1,000	ECS Part No.
ECX-64B								
14.31818	20pF	XC809CT-ND	3.75	3.38	2.82	XC809TR-ND	1875.00	ECS-143-20-23B-TR
14.31818	Series	XC810CT-ND	3.75	3.38	2.82	XC810TR-ND	1875.00	ECS-143-S-23B-TR
14.7456	20pF	XC811CT-ND	3.75	3.38	2.82	XC811TR-ND	1875.00	ECS-147-20-23B-TR
16.000	20pF	XC812CT-ND	3.75	3.38	2.82	XC812TR-ND	1875.00	ECS-160-20-23B-TR
16.000	Series	XC813CT-ND	3.75	3.38	2.82	XC813TR-ND	1875.00	ECS-160-S-23B-TR
18.432	20pF	XC814CT-ND	3.75	3.38	2.82	XC814TR-ND	1875.00	ECS-184-20-23B-TR
18.432	Series	XC815CT-ND	3.75	3.38	2.82	XC815TR-ND	1875.00	ECS-184-S-23B-TR
19.6608	20pF	XC816CT-ND	3.75	3.38	2.82	XC816TR-ND	1875.00	ECS-196-20-23B-TR
19.6608	Series	XC817CT-ND	3.75	3.38	2.82	XC817TR-ND	1875.00	ECS-196-S-23B-TR
20.000	20pF	XC818CT-ND	3.75	3.38	2.82	XC818TR-ND	1875.00	ECS-200-20-23B-TR
20.000	Series	XC819CT-ND	3.75	3.38	2.82	XC819TR-ND	1875.00	ECS-200-S-23B-TR
24.000	Series	XC820CT-ND	3.75	3.38	2.82	XC820TR-ND	1875.00	ECS-240-S-23B-TR
ECX-64A								
14.31818	20pF	XC821CT-ND	3.30	2.97	2.48	XC821TR-ND	1650.00	ECS-143-20-23A-TR
14.31818	Series	XC822CT-ND	3.30	2.97	2.48	XC822TR-ND	1650.00	ECS-143-S-23A-TR
14.7456	20pF	XC823CT-ND	3.30	2.97	2.48	XC823TR-ND	1650.00	ECS-147-20-23A-TR
16.000	20pF	XC824CT-ND	3.30	2.97	2.48	XC824TR-ND	1650.00	ECS-160-20-23A-TR
16.000	Series	XC825CT-ND	3.30	2.97	2.48	XC825TR-ND	1650.00	ECS-160-S-23A-TR
18.432	20pF	XC826CT-ND	3.30	2.97	2.48	XC826TR-ND	1650.00	ECS-184-20-23A-TR
18.432	Series	XC827CT-ND	3.30	2.97	2.48	XC827TR-ND	1650.00	ECS-184-S-23A-TR
19.6608	20pF	XC828CT-ND	3.30	2.97	2.48	XC828TR-ND	1650.00	ECS-196-20-23A-TR
19.6608	Series	XC829CT-ND	3.30	2.97	2.48	XC829TR-ND	1650.00	ECS-196-S-23A-TR
20.000	20pF	XC830CT-ND	3.30	2.97	2.48	XC830TR-ND	1650.00	ECS-200-20-23A-TR
20.000	Series	XC831CT-ND	3.30	2.97	2.48	XC831TR-ND	1650.00	ECS-200-S-23A-TR
24.000	Series	XC832CT-ND	3.30	2.97	2.48	XC832TR-ND	1650.00	ECS-240-S-23A-TR

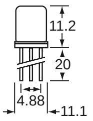
Monolithic Crystal Filters - "10.7MHz"

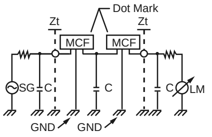
12.5KHz Channel Spacing: • **Operating Temp. Range:** -20°C to +70°C • **Pass Bandwidth:** 3dB ±3.75KHz min. • **Stop Bandwidth:** 20dB ±18KHz for Model 10.7-7.5A; 40dB ±14KHz for Model 10.7-7.5B
25KHz Channel Spacing: • **Operating Temp. Range:** -20°C to +70°C • **Pass Bandwidth:** 3dB ±7.5KHz min. • **Stop Bandwidth:** 18dB ±25KHz for Model 10.7-15A; 40dB ±25KHz for Model 10.7-15B
50KHz Channel Spacing: • **Operating Temperature Range:** -20°C to +70°C • **Pass Bandwidth:** 3dB ±15KHz min. • **Stop Bandwidth:** 15dB ±50KHz for Model 10.7-30A; 30dB ±40KHz for Model 10.7-30B





2-Pole MCF Test Circuit
Zt: Terminating Impedance





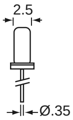
4-Pole MCF Test Circuit
Zt: Terminating Impedance

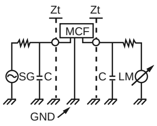
No. of Pole	Ripple (Max.)	Insert. Loss	Term. Impedance OHMS//pf	Digi-Key Part No.	Price Each 1	10	100	500	ECS Part No.
12.5KHz Channel Spacing									
2	0.5dB	1.5dB	1.8K//5	X701-ND	5.53	4.59	3.66	2.83	ECS-10.7-7.5A
4	1dB	2.5dB	1.8K//4	X702-ND†	12.51	10.40	8.28	6.40	ECS-10.7-7.5B
25KHz Channel Spacing									
2	0.5dB	2.0dB	3K//2	X703-ND	3.41	2.84	2.26	1.75	ECS-10.7-15A
4	1dB	2.5dB	3K//2	X704-ND†	6.66	5.54	4.41	3.41	ECS-10.7-15B
50KHz Channel Spacing									
2	0.5dB	1.5dB	5K//0	X705-ND	4.23	3.51	2.80	2.16	ECS-10.7-30A
4	1dB	2.5dB	5.5K//-1	X706-ND†	8.78	7.29	5.81	4.49	ECS-10.7-30B

† Package is HC-49/U x 2

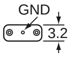
Monolithic Crystal Filters - "21.4MHz"

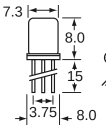
12.5KHz Channel Spacing: • **Operating Temp. Range:** -20°C to +70°C • **Pass Bandwidth:** 3dB ±3.75KHz min. • **Stop Bandwidth:** 18dB ±12.5KHz for Model 21K-7.5A; 35dB ±12.5KHz for Model 21K7.5B
25KHz Channel Spacing: • **Operating Temperature Range:** -20°C to +70°C • **Pass Bandwidth:** 3dB ±7.5KHz min. • **Stop Bandwidth:** 18dB ±25KHz for Model 21K15A; 40dB ±25KHz for Model 21K15B
50KHz Channel Spacing: • **Operating Temperature Range:** -20°C to +70°C • **Pass Bandwidth:** 3dB ±15KHz min. • **Stop Bandwidth:** 15dB ±45KHz for Model 21K30A; 40dB ±50KHz for Model 21K30B

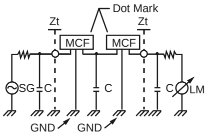




2-Pole MCF Test Circuit
Zt: Terminating Impedance







4-Pole MCF Test Circuit
Zt: Terminating Impedance

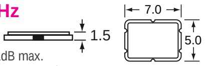
No. of Pole	Ripple (Max.)	Insert. Loss	Term. Impedance OHMS//pf	Digi-Key Part No.	Price Each 1	10	100	500	ECS Part No.
12.5KHz Channel Spacing									
2	0.5dB	2.0dB	1.5K//6	X707-ND	4.39	3.65	2.91	2.25	ECS-21K7.5A
4	1dB	2.5dB	850//5	X708-ND†	10.24	8.51	6.78	5.23	ECS-21K7.5B
25KHz Channel Spacing									
2	0.5dB	1.5dB	1.5K//3	X709-ND	4.39	3.65	2.91	2.25	ECS-21K15A
4	1dB	2dB	1.5K//2	X710-ND†	10.24	8.51	6.78	5.23	ECS-21K15B
50KHz Channel Spacinzg									
2	0.5dB	1.5dB	1.5K//1	X711-ND	4.39	3.65	2.91	2.25	ECS-21K30A
4	1dB	2dB	1.8K//0.5	X712-ND†	10.24	8.51	6.78	5.23	ECS-21K30B

† Package is UM-1 x 2

SMD Monolithic Crystal Filters

No. of Pole	Term. Impedance OHMS//pf	Digi-Key Part No.	Cut Tape Price Each 1	10	100	T & R Digi-Key Part No.	T & R Pricing 1,000	ECS Part No.
2	1500//2.5	X713CT-ND	21.94	18.23	14.52	X713TR-ND	5950.00	96SMF21A15-TR
2	1100//0	X714CT-ND	27.30	22.68	18.06	X714TR-ND	7350.00	96SMF45A30-TR

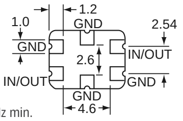
21.4MHz



- **Ripple:** 1dB max.
- **Insertion Loss:** 2.5dB
- **Operating Temperature:** -30°C to +85°C
- **Fo:** 21.4MHz
- **Pass Bandwidth:** 3dB ±7.5KHz min.
- **Stop Bandwidth:** 10dB ±25KHz

45MHz

- **Ripple:** 1dB max.
- **Insertion Loss:** 3dB
- **Operating Temp.:** -30°C to +85°C
- **Fo:** 45.0MHz
- **Pass Bandwidth:** 3dB ±15KHz min.
- **Stop Bandwidth:** 15dB ±60KHz



Ceramic Resonators

ZTT and SR1-B Series:

• Frequency Accuracy: ±0.5% • Stability in Temperature: -20°C to +80°C, ±0.3% • Aging for Ten Years: ±0.3% • Built-in Capacitance: 30pf ±20%

ZTA, ZTB and SR1-A Series:

• Frequency Accuracy: ±0.5% • Stability in Temperature: -20°C to +80°C, ±0.3% • Aging for Ten Years: ±0.5% • Operating Temperature: -20°C to +80°C

Series	Fig.	Frequency	Digi-Key Part No.	Price Each 1	10	100	ECS Part No.
ZTT Series with Caps	1	3.58MHz	X901-ND	.68	.57	.45	ZTT-3.58MG
		4.00MHz	X902-ND	.68	.57	.45	ZTT-4.00MG
		4.19MHz	X903-ND	.81	.68	.54	ZTT-4.19MG
		6.00MHz	X904-ND	.68	.57	.45	ZTT-6.00MT
		8.00MHz	X905-ND	.70	.59	.47	ZTT-8.00MT
		10.00MHz	X906-ND	.70	.59	.47	ZTT-10.00MT
		12.00MHz	X907-ND	.81	.68	.54	ZTT-12.00MT
		16.00MHz	X908-ND	.81	.68	.54	ZTT-16.00MX
		20.00MHz	X909-ND	.81	.68	.54	ZTT-20.00MX
ZTA Series without Caps	2	3.58MHz	X910-ND	.54	.45	.36	ZTA-3.58MG
		4.00MHz	X911-ND	.54	.45	.36	ZTA-4.00MG
		4.19MHz	X912-ND	.68	.57	.45	ZTA-4.19MG
	3	6.00MHz	X913-ND	.54	.45	.36	ZTA-6.00MT
		8.00MHz	X914-ND	.59	.50	.40	ZTA-8.00MT
		10.00MHz	X915-ND	.59	.50	.40	ZTA-10.00MT
		12.00MHz	X916-ND	.68	.57	.45	ZTA-12.00MT
		16.00MHz	X917-ND	.68	.57	.45	ZTA-16.00MX011
		20.00MHz	X918-ND	.68	.57	.45	ZTA-20.00MX011
ZTB Series without Caps	4	200KHz	X919-ND	.84	.70	.56	ZTB200D
		400KHz	X920-ND	.68	.57	.45	ZTB400D
		455KHz	X921-ND	.68	.57	.45	ZTB455E
		500KHz	X922-ND	.68	.57	.45	ZTB500E
		540KHz	X923-ND	.68	.57	.45	ZTB540P
		640KHz	X924-ND	.68	.57	.45	ZTB640P
		800KHz	X925-ND	.68	.57	.45	ZTB800J
		1000KHz	X926-ND	.68	.57	.45	ZTB1000J

Fig. 1

Dim. in ( ) is for Freq. Range 3.58-4.19

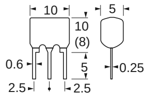


Fig. 2

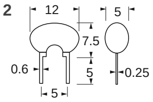


Fig. 3

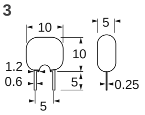
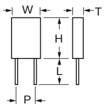
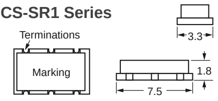


Fig. 4

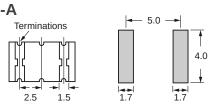


Frequency Range	Dimensions W	T	H	P	L
200	13.5	3.8	14.7	10.0	8.0
400	7.9	3.6	9.3	5.0	4.0
455-640	7.0	3.5	9.0	5.0	4.0
800-1000	5.2	2.8	6.0	2.5	3.5

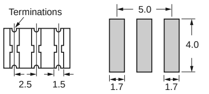
ECS-SR1 Series



SR1-A



SR1-B



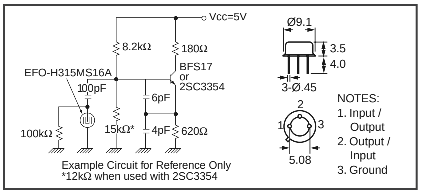
Series	Fig.	Freq.	Internal Cap. C1 & C2	Digi-Key Part No.	Cut Tape Price Each 1	10	100	T & R Digi-Key Part No.	T & R Pricing 2,500	ECS Part No.
ECS-SR1-A Series	1	3.58	—	X932CT-ND	.70	.60	.47	X932TR-ND	280.00/M	ECS-SR1-3.58-A
		4.000	—	X933CT-ND	.70	.60	.47	X933TR-ND	280.00/M	ECS-SR1-4.00-A
		4.19	—	X934CT-ND	.70	.60	.47	X934TR-ND	280.00/M	ECS-SR1-4.19-A
		6.000	—	X935CT-ND	.70	.60	.47	X935TR-ND	280.00/M	ECS-SR1-6.00-A
		8.000	—	X936CT-ND	.70	.60	.47	X936TR-ND	280.00/M	ECS-SR1-8.00-A
ECS-SR1-B Series	2	3.58	30 pF	X927CT-ND	.77	.66	.52	X927TR-ND	308.00/M	ECS-SR1-3.58-B
		4.000	30 pF	X928CT-ND	.77	.66	.52	X928TR-ND	308.00/M	ECS-SR1-4.00-B
		4.19	30 pF	X929CT-ND	.77	.66	.52	X929TR-ND	308.00/M	ECS-SR1-4.19-B
		6.000	30 pF	X930CT-ND	.77	.66	.52	X930TR-ND	308.00/M	ECS-SR1-6.00-B
		8.000	30 pF	X931CT-ND	.77	.66	.52	X931TR-ND	308.00/M	ECS-SR1-8.00-B

Panasonic

SAW Resonators

Capable of fundamental wave oscillation, and it is particularly suited for simplification, size reduction and stabilization of the circuit, compared with conventional LC oscillation and quartz crystal oscillation.

Features: • Capable of fundamental oscillation • Superior temperature characteristics. • Suited for simplification, size reduction and stabilization of the circuit. **Recommended Applications:** • Oscillation circuit for remote control (garage door opener, security system). • Various kinds of local oscillation circuit. **Characteristics:** • Operating Temperature: -20 to 80° C. • Maximum Frequency Drift: -150 to 50 ppm/°C (-20 to 80° C). **1 Port Type:** • Resonant Resist. (Ω); 30 max. • Cap. (pF); 2.0 ± 0.5. **2 Port Type:** • Insertion Loss (dB); 15 max. • Loaded Q; 7000 min. (5000 min. for 418.00 and 433.92 frequency). • Cap. (pF); 1.3 ± 0.3. • Phase Shift; 180°.

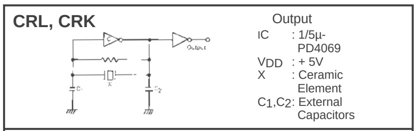


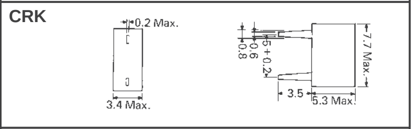
Resonant Frequency (MHz)	Digi-Key Part No.	Pricing 1	10	100	Panasonic Part No.
1 Port Type					
224.50 ±0.25	PX224S1-ND	6.87	58.86	461.07	EFO-H224MS12
315.00 ±0.25	PX315S1-ND	6.87	58.86	461.07	EFO-H315MS16
418.00 ±0.25	PX418S1-ND	6.87	58.86	461.07	EFO-H418MS12
433.92 ±0.25	PX434S1-ND	6.87	58.86	461.07	EFO-H434MS12
Center Frequency (MHz)	**Digi-Key Part No.**	**Pricing 1**	**10**	**100**	**Panasonic Part No.**
2 Port Type					
224.50 ±0.25	PX224S2-ND	6.87	58.86	461.07	EFO-H224MS03
315.00 ±0.25	PX315S2-ND	6.87	58.86	461.07	EFO-H315MS03
418.00 ±0.25	PX418S2-ND	6.87	58.86	461.07	EFO-H418MS03
433.92 ±0.25	PX434S2-ND	6.87	58.86	461.07	EFO-H434MS03

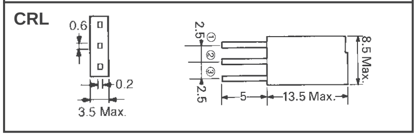
TOKO

Ceramic Resonators

TOKO ceramic resonators utilize the piezoelectric principle converting a mechanical force (stress) into an electrical signal or converting an electrical signal into a mechanical force. The ceramic resonator is a thin section of piezoelectric ceramic material, such as quartz, whose sides are metallized into a corresponding pair of electrodes and upon the application of current produce a lengthwise vibration.



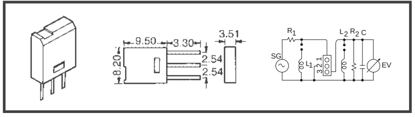




External Osc. Freq.	Capacitor C1(pF)C2		Digi-Key Part No.	Pricing 1	10	100	Toko Part No.
CRL Type							
220KHz ±3%	300	300	TK9920-ND	2.84	24.89	177.75	CRL220
262KHz ±3%	300	300	TK9921-ND	2.84	24.89	177.75	CRL262
CRK Type							
400KHz ±1%	560	200	TK9940-ND	1.46	12.78	91.25	CRK400
455KHz ±1%	560	200	TK9942-ND	1.46	12.78	91.25	CRK455
480KHz ±1%	560	200	TK9943-ND	1.46	12.78	91.25	CRK480
500KHz ±1%	560	200	TK9944-ND	1.46	12.78	91.25	CRK500

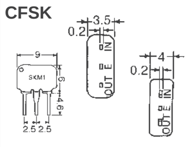
AM Ceramic Filters "455KHz"

Center Frequency: 455 6 2kHz; **Insertion Loss:** 6dB; **Attn. within 100KHz:** 30dB.

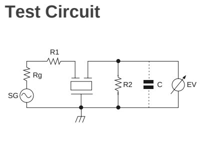


Bw. –6dB (KHz)	Sel. Fo ± –9KHz (dB)	I/O Imp. (Ohms)	Digi-Key Part No.	Pricing 1	10	100	Toko Part No.
CFM2 Type							
4	18	1K:1.5K	TK2330-ND	2.65	23.21	165.75	HCFM2-455A
6	16	1.5K:2K	TK2331-ND	2.65	23.21	165.75	HCFM2-455B
8	12	2K:2K	TK2332-ND	2.65	23.21	165.75	HCFM2-455C
10	9	2K:2K	TK2333-ND	2.89	25.27	180.50	HCFM2-455D
12	6	2.5K:2.5K	TK2334-ND	2.89	25.27	180.50	HCFM2-455E

FM Ceramic Filters "10.7MHz"



Impedance 330Ω

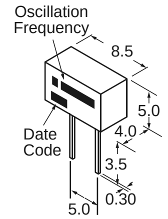


Bw @3dB (KHz)	Ins. Loss (Max.)	Spurious Response (9-12 MHz)	Digi-Key Part No.	Pricing 1	10	100	Toko Part No.
CFSK Type							
280	6dB	30dB	TK2304-ND	.86	7.56	54.00	SK107M1N-A0-10
230	6dB	35dB	TK2306-ND	.86	7.56	54.00	SK107M2N-A0-00
180	7dB	40dB	TK2307-ND	.98	8.58	73.50	SK107M3N-A0-20
150	10dB	40dB	TK2308-ND	.72	6.27	49.23	SK107M4N-A0-10
110	10dB	30dB	TK2309-ND	.90	7.88	61.88	SK107M5N-A0-10
330	6dB	30dB	TK2310-ND	.93	7.02	41.26	SK107MON-AO-10
360	5dB	30dB	TK2311-ND	1.85	14.80	123.58	SK107MAN-AO-10

Panasonic

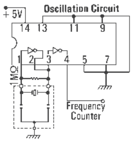
Ceramic Resonators

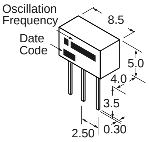
EFO-MN



EFO-MC

Built-In Capacitors Type: • Includes two capacitors, constructing Colpitts oscillation circuits. High accuracy and stable characteristics will be realized with the selected capacitors encased, small in size due to the new design of construction.

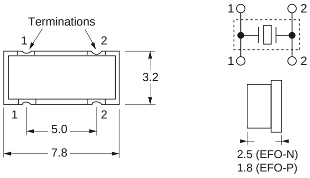




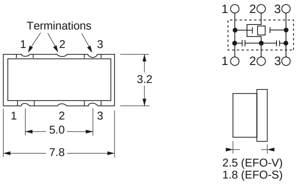
Type EFO-N, EFO-P, EFO-V, EFO-S:

Features: • Constructed with ceramic package • High reliability against soldering heat and mechanical stress • Moisture-proof sealing • Stable against solvent cleaning • Designed for reflow soldering • Flat-bottom plate for better mountings • Type EFO-V contributes simplification of oscillation circuits and reduces the numbers of circuit parts. **Applications:** • Clock generator for various microprocessers • Carrier between telecommunication equipments (telephone to telephone, personal computer to printer, etc.).

Type EFO-N, EFO-P Surface Mount



Type EFO-V, EFO-S Surface Mount



Osc. Freq.	Digi-Key Part No.	Pricing 1	10	100	1,000	5,000	Panasonic Part No.
Ceramic Resonators							
3.00MHz	PX300MN-ND	1.04	8.91	69.80	424.00	396.00/M	EFO-MN3004A4
3.58MHz	PX358MN-ND	.94	8.07	63.22	384.00	359.00/M	EFO-MN3584A4
4.00MHz	PX400MN-ND	.94	8.07	63.22	384.00	359.00/M	EFO-MN4004A4
5.00MHz	PX500MN-ND	.94	8.07	63.22	384.00	359.00/M	EFO-MN5004A4
6.00MHz	PX600MN-ND	1.04	8.91	69.80	424.00	396.00/M	EFO-MN6004A4
8.00MHz	PX800MN-ND	1.04	8.91	69.80	424.00	396.00/M	EFO-MN8004A4
10.00MHz	PX1000MN-ND	1.14	9.81	76.85	467.00	436.00/M	EFO-MN1005B4
12.00MHz	PX1200MN-ND	1.14	9.81	76.85	467.00	436.00/M	EFO-MN1205B4
Ceramic Resonators With Built-In Capacitor							
3.00MHz	PX300GC-ND	.86	7.35	57.58	350.00	327.00/M	EFO-GC3004A4
5.00MHz	PX500-ND	.72	6.21	48.64	296.00	276.00/M	EFO-EC5004A4
6.00MHz	PX600-ND	.80	6.86	53.77	327.00	305.00/M	EFO-EC6004A4
2.00MHz	PX200MC-ND	1.03	8.79	68.86	419.00	391.00/M	EFO-MC2004A4
3.00MHz	PX300MC-ND	1.04	8.91	69.80	424.00	396.00/M	EFO-MC3004A4
3.58MHz	PX358MC-ND	.94	8.07	63.22	384.00	359.00/M	EFO-MC3584A4
4.00MHz	PX400MC-ND	.94	8.07	63.22	384.00	359.00/M	EFO-MC4004A4
5.00MHz	PX500MC-ND	.94	8.07	63.22	384.00	359.00/M	EFO-MC5004A4
6.00MHz	PX600MC-ND	1.04	8.91	69.80	424.00	396.00/M	EFO-MC6004A4
8.00MHz	PX800MC-ND	1.04	8.91	69.80	424.00	396.00/M	EFO-MC8004A4
10.00MHz	PX1000MC-ND	1.14	9.81	76.85	467.00	436.00/M	EFO-MC1005B4
12.00MHz	PX1200MC-ND	1.14	9.81	76.85	467.00	436.00/M	EFO-MC1205B4

Osc. Freq.	Digi-Key Part No.	Cut Tape Pricing 1	10	100	500	Digi-Key Part No.	Tape & Reel Pricing 2,500	5,000	Panasonic Part No.
Type N Surface Mount-General Purpose									
3.58MHz	PX358ECT-ND	1.70	14.59	114.32	511.00	—	—	—	EFO-N3584E5
4.00MHz	PX400ECT-ND	1.40	12.00	94.00	420.00	PX400ETR-ND	571.00/M	533.00/M	EFO-N4004E5
4.19MHz	PX419ECT-ND	1.40	12.00	94.00	420.00	—	—	—	EFO-N4194E5
5.00MHz	PX500ECT-ND	1.40	12.00	94.00	420.00	—	—	—	EFO-N5004E5
6.00MHz	PX600ECT-ND	1.75	15.04	117.83	526.50	—	—	—	EFO-N6004E5
8.00MHz	PX800ECT-ND	1.75	15.04	117.83	526.50	PX800ETR-ND	716.00/M	669.00/M	EFO-N8004E5
Type P Surface Mount-General Purpose Lo-Profile									
3.58MHz	PX358PCT-ND	1.58	13.50	105.75	472.50	PX358PTR-ND	642.86/M	599.99/M	EFO-P3584E5
4.00MHz	PX400PCT-ND	1.58	13.50	105.75	472.50	PX400PTR-ND	642.86/M	599.99/M	EFO-P4004E5
4.19MHz	PX419PCT-ND	1.58	13.50	105.75	472.50	PX419PTR-ND	642.86/M	599.99/M	EFO-P4194E5
5.00MHz	PX500PCT-ND	1.61	13.77	107.87	481.95	PX500PTR-ND	655.72/M	611.99/M	EFO-P5004E5
6.00MHz	PX600PCT-ND	1.61	13.77	107.87	481.95	PX600PTR-ND	655.72/M	611.99/M	EFO-P6004E5
8.00MHz	PX800PCT-ND	1.61	13.77	107.87	481.95	PX800PTR-ND	655.72/M	611.99/M	EFO-P8004E5
Type V Surface Mount With Built-In Capacitor									
5.00MHz	PX500NCT-ND	1.75	15.04	117.83	526.50	—	—	—	EFO-V5004E5
6.00MHz	PX600NCT-ND	1.46	12.51	98.00	438.00	PX600NTR-ND	596.00/M	556.00/M	EFO-V6004E5
Type S Surface Mount With Built-In Capacitor Lo-Profile									
3.58MHZ	PX358SCT-ND	1.61	13.77	107.87	481.95	PX358STR-ND	655.72/M	611.99/M	EFO-S3584E5
4.00MHz	PX400SCT-ND	1.61	13.77	107.87	481.95	PX400STR-ND	655.72/M	611.99/M	EFO-S4004E5
4.19MHz	PX419SCT-ND	1.61	13.77	107.87	481.95	PX419STR-ND	655.72/M	611.99/M	EFO-S4194E5
5.00MHz	PX500SCT-ND	1.64	14.04	109.98	491.40	PX500STR-ND	668.58/M	623.99/M	EFO-S5004E5
6.00MHz	PX600SCT-ND	1.64	14.04	109.98	491.40	PX600STR-ND	668.58/M	623.99/M	EFO-S6004E5
8.00MHz	PX800SCT-ND	1.64	14.04	109.98	491.40	PX800STR-ND	668.58/M	623.99/M	EFO-S8004E5

Panasonic Surface Mount Inductors

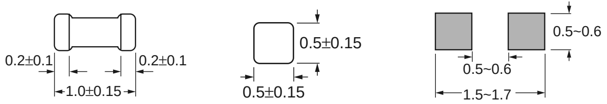
These are wire wound type chip inductors that can accommodate automatic and high-density mounting in electronic circuits.

Features:

- Very thin wires are wound on a high magnetic effect drum core, resulting in high Q and excellent frequency characteristics.
- High reliability because the coil is molded by heat-resistant epoxy resin.
- Flow and reflow soldering is possible due to adoption of metal terminals.

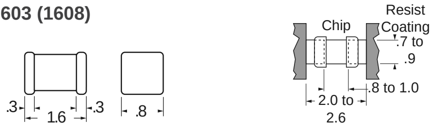
Size / Classification	Square Type 0402 (1005)	0603 (1608)	0805 (2012)	1008 (2520)	1210 (3225)	1812 (4532)
Air Core	ELJRF	ELJRE	ELJND	ELJNC	ELJNA	—
Regular	—	—	ELJFD	ELJFC	ELJFA	ELJFB
Magnetic Shield	—	—	—	ELJSC	ELJSA	—
High Power	—	ELJPE	—	ELJPC	ELJPA	—
Low DC Resistance	—	—	—	—	ELJEA	—

Fig. 1 - 0402 (1005)



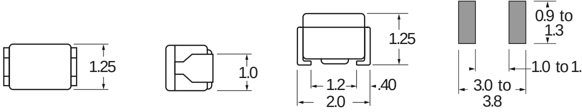
RF Type (Non-winding design)**:** • High Q • High self-resonant frequency • Non Polarity

Fig. 2 - 0603 (1608)



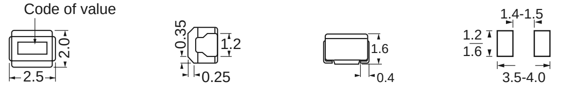
RE Type (Non-winding design)**:** • Small size • High self-resonant frequency • Tight tolerance
PE Type (Non-winding design): • Small size • High self-resonant frequency

Fig. 3 - 0805 (2012)



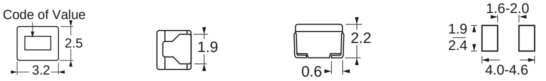
ND Type: • High Q • High self-resonant frequency **FD Type:** • High Q • Standard version of ND Type

Fig. 4 - 1008 (2520)



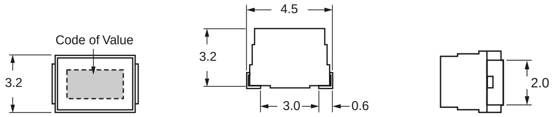
NC Type: • Low inductance, tight tolerance and small size • Suitable for high-frequency circuits •Coreless type • L is stable with respect to temperature and humidity **FC/SC Type:** • Smallest of the coil type inductors • Suitable for a variety of small processing circuits • SC type is equipped with a magnetic shield function **PC Type:** • High rated DC current • Low DC resistanc • Suitable for power circuits

Fig. 5 - 1210 (3225)



FA Type: • Chip inductor for general use • Compact size with a wide inductance range **NA Type:** • Coreless Type • L is stable with respect to temperature and humidity suitable for high-frequency circuits **SA Type:** • Use of ferrite resin giving it an additional function of magnetic shield • Compact size with high inductance **PA Type:** • High power • High rated DC current • Suitable for power line as choke coil **EA Type:** • Low DC resistance

Fig. 6 - 1812 (4532)



FB Type: Chip inductor for general use • High inductance

Inductance	Tolerance	Q Min	Q Typ @ 800 MHz	L,Q Test freq (MHz)	S.R.F. Min (MHz)	RDC Max (Ohm)	IDC Max (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T/R Pricing 10,000	Panasonic Part No.
Fig. 1, 0402 (1005) — Type RF														
1.0nH	±0.3nH	8	21	100	6000	0.05	400	PCD1264CT-ND†	.71	.59	.46	PCD1264TR-ND	249.00/M	ELJ-RF1N0DF
1.2nH	±0.3nH	8	21	100	6000	0.06	400	PCD1265CT-ND†	.71	.59	.46	PCD1265TR-ND	249.00/M	ELJ-RF1N2DF
1.5nH	±0.3nH	8	21	100	6000	0.07	400	PCD1266CT-ND†	.71	.59	.46	PCD1266TR-ND	249.00/M	ELJ-RF1N5DF
1.8nH	±0.3nH	8	21	100	6000	0.08	400	PCD1267CT-ND†	.71	.59	.46	PCD1267TR-ND	249.00/M	ELJ-RF1N8DF
2.2nH	±0.3nH	8	21	100	6000	0.09	400	PCD1268CT-ND†	.71	.59	.46	PCD1268TR-ND	249.00/M	ELJ-RF2N2DF
2.7nH	±0.3nH	8	21	100	5500	0.10	400	PCD1269CT-ND†	.71	.59	.46	PCD1269TR-ND	249.00/M	ELJ-RF2N7DF
3.3nH	±0.3nH	7	21	100	5500	0.12	400	PCD1270CT-ND†	.71	.59	.46	PCD1270TR-ND	249.00/M	ELJ-RF3N3DF
3.9nH	±0.3nH	7	20	100	5200	0.15	360	PCD1271CT-ND†	.71	.59	.46	PCD1271TR-ND	249.00/M	ELJ-RF3N9DF
4.7nH	±0.3nH	7	20	100	4800	0.17	360	PCD1272CT-ND†	.71	.59	.46	PCD1272TR-ND	249.00/M	ELJ-RF4N7DF
5.6nH	±0.3nH	7	20	100	4600	0.19	340	PCD1273CT-ND†	.71	.59	.46	PCD1273TR-ND	249.00/M	ELJ-RF5N6DF
6.8nH	5%	7	19	100	4000	0.30	320	PCD1274CT-ND†	.71	.59	.46	PCD1274TR-ND	249.00/M	ELJ-RF6N8JF
8.2nH	5%	7	19	100	3500	0.35	320	PCD1275CT-ND†	.71	.59	.46	PCD1275TR-ND	249.00/M	ELJ-RF8N2JF
10.0nH	5%	7	19	100	2800	0.41	320	PCD1276CT-ND†	.71	.59	.46	PCD1276TR-ND	249.00/M	ELJ-RF10NJF
12.0nH	5%	7	19	100	2800	0.45	320	PCD1277CT-ND†	.71	.59	.46	PCD1277TR-ND	249.00/M	ELJ-RF12NJF
15.0nH	5%	7	19	100	2500	0.60	240	PCD1278CT-ND†	.71	.59	.46	PCD1278TR-ND	249.00/M	ELJ-RF15NJF
18.0nH	5%	7	19	100	2200	0.70	240	PCD1279CT-ND†	.71	.59	.46	PCD1279TR-ND	249.00/M	ELJ-RF18NJF
22.0nH	5%	7	19	100	2000	0.80	200	PCD1280CT-ND†	.71	.59	.46	PCD1280TR-ND	249.00/M	ELJ-RF22NJF
27.0nH	5%	7	19	100	1800	1.20	200	PCD1281CT-ND†	.71	.59	.46	PCD1281TR-ND	249.00/M	ELJ-RF27NJF
33.0nH	5%	7	18	100	1800	1.40	170	PCD1282CT-ND†	.71	.59	.46	PCD1282TR-ND	249.00/M	ELJ-RF33NJF
39.0nH	5%	7	18	100	1800	1.70	150	PCD1283CT-ND†	.71	.59	.46	PCD1283TR-ND	249.00/M	ELJ-RF39NJF
47.0nH	5%	7	—	100	1800	2.10	140	PCD1326CT-ND	.81	.67	.53	PCD1326TR-ND	285.00/M	ELJ-RF47NJF
56.0nH	5%	7	—	100	1500	2.50	130	PCD1327CT-ND	1.03	.86	.67	PCD1327TR-ND	365.00/M	ELJ-RF56NJF
68.0nH	5%	7	—	100	1500	4.00	120	PCD1328CT-ND	1.03	.86	.67	PCD1328TR-ND	365.00/M	ELJ-RF68NJF
82.0nH	5%	7	—	100	1400	4.50	110	PCD1329CT-ND	1.03	.86	.67	PCD1329TR-ND	365.00/M	ELJ-RF82NJF
100.0nH	5%	7	—	100	1200	5.50	90	PCD1330CT-ND	1.03	.86	.67	PCD1330TR-ND	365.00/M	ELJ-RFR10JF
† **PCD3-KIT-ND** ***Digi-Key® RF Surface Mount Inductors Kit*** 10 each of values denoted (200 total pieces)........ **$69.95**														
NEW! Fig. 1, 0402 (1005) — Type PF NEW!														
2.2nH	±0.3nH	7	—	100	5300	0.04	1900	PCD1539CT-ND	.97	.80	.63	PCD1539TR-ND	342.00/M	ELJ-PF2N2DF
2.7nH	±0.3nH	7	—	100	5300	0.05	1800	PCD1540CT-ND	.97	.80	.63	PCD1540TR-ND	342.00/M	ELJ-PF2N7DF
3.3nH	±0.3nH	7	—	100	5000	0.07	1500	PCD1541CT-ND	.97	.80	.63	PCD1541TR-ND	342.00/M	ELJ-PF3N3DF
3.9nH	±0.3nH	7	—	100	4800	0.08	1400	PCD1542CT-ND	.97	.80	.63	PCD1542TR-ND	342.00/M	ELJ-PF3N9DF
4.7nH	±0.3nH	7	—	100	4600	0.10	1300	PCD1543CT-ND	.97	.80	.63	PCD1543TR-ND	342.00/M	ELJ-PF4N7DF
5.6nH	±0.3nH	7	—	100	4200	0.12	1200	PCD1544CT-ND	.97	.80	.63	PCD1544TR-ND	342.00/M	ELJ-PF5N6DF
6.8nH	5%	7	—	100	4000	0.16	1100	PCD1545CT-ND	.97	.80	.63	PCD1545TR-ND	342.00/M	ELJ-PF6N8JF
8.2nH	5%	7	—	100	3700	0.21	900	PCD1546CT-ND	.97	.80	.63	PCD1546TR-ND	342.00/M	ELJ-PF8N2JF
10.0nH	5%	7	—	100	3200	0.26	750	PCD1547CT-ND	.97	.80	.63	PCD1547TR-ND	342.00/M	ELJ-PF10NJF
Inductance	**Tolerance**	**Q Min**	**Q Typ @ 800 MHz**	**L,Q Test freq (MHz)**	**S.R.F. Min (MHz)**	**RDC Max (Ohm)**	**IDC Max (mA)**	**Digi-Key Part No.**	**Cut Tape Price Each 1**	**10**	**100**	**Digi-Key Part No.**	**T/R Pricing 3,000**	**Panasonic Part No.**
Fig. 2, 0603 (1608) — Type RE (2% Tolerance)														
1.5nH	±0.2nH	8	47	100	6000	0.07	500	PCD1284CT-ND	1.03	.86	.67	PCD1284TR-ND	364.50/M	ELJ-RE1N5ZF2
1.8nH	±0.2nH	8	45	100	6000	0.08	500	PCD1285CT-ND	1.03	.86	.67	PCD1285TR-ND	364.50/M	ELJ-RE1N8ZF2
2.2nH	±0.2nH	8	35	100	6000	0.09	500	PCD1286CT-ND	1.03	.86	.67	PCD1286TR-ND	364.50/M	ELJ-RE2N2ZF2
2.7nH	±0.2nH	8	35	100	6000	0.10	500	PCD1287CT-ND	1.03	.86	.67	PCD1287TR-ND	364.50/M	ELJ-RE2N7ZF2
3.3nH	±0.2nH	9	35	100	5500	0.12	500	PCD1288CT-ND	1.03	.86	.67	PCD1288TR-ND	364.50/M	ELJ-RE3N3ZF2
3.9nH	±0.2nH	9	36	100	5500	0.15	450	PCD1289CT-ND	1.03	.86	.67	PCD1289TR-ND	364.50/M	ELJ-RE3N9ZF2
4.7nH	±0.2nH	9	36	100	4800	0.17	450	PCD1290CT-ND	1.03	.86	.67	PCD1290TR-ND	364.50/M	ELJ-RE4N7ZF2
5.6nH	±0.2nH	9	36	100	4600	0.18	430	PCD1291CT-ND	1.03	.86	.67	PCD1291TR-ND	364.50/M	ELJ-RE5N6ZF2
6.8nH	±0.2nH	9	36	100	3550	0.20	430	PCD1292CT-ND	1.03	.86	.67	PCD1292TR-ND	364.50/M	ELJ-RE6N8ZF2
8.2nH	±0.2nH	9	36	100	3500	0.28	400	PCD1293CT-ND	1.03	.86	.67	PCD1293TR-ND	364.50/M	ELJ-RE8N2ZF2
10nH	2%	10	37	100	2800	0.32	400	PCD1294CT-ND	1.03	.86	.67	PCD1294TR-ND	364.50/M	ELJ-RE10NGF2
12nH	2%	10	37	100	2800	0.35	400	PCD1295CT-ND	1.03	.86	.67	PCD1295TR-ND	364.50/M	ELJ-RE12NGF2
15nH	2%	10	38	100	2500	0.41	350	PCD1296CT-ND	1.03	.86	.67	PCD1296TR-ND	364.50/M	ELJ-RE15NGF2
18nH	2%	10	39	100	2300	0.45	350	PCD1297CT-ND	1.03	.86	.67	PCD1297TR-ND	364.50/M	ELJ-RE18NGF2
22nH	2%	10	40	100	2000	0.50	300	PCD1298CT-ND	1.03	.86	.67	PCD1298TR-ND	364.50/M	ELJ-RE22NGF2
27nH	2%	10	41	100	2000	0.55	300	PCD1299CT-ND	1.03	.86	.67	PCD1299TR-ND	364.50/M	ELJ-RE27NGF2

(Continued)

Inductance	Tolerance	Q Min	Q Typ @ 800 MHz	L,Q Test freq (MHz)	S.R.F. Min (MHz)	RDC Max (Ohm)	IDC Max (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T/R Pricing 3,000	Panasonic Part No.
Fig. 2, 0603 (1608) — Type RE (2% Tolerance)														
33nH	2%	10	40	100	1800	0.60	300	PCD1300CT-ND	1.03	.86	.67	PCD1300TR-ND	364.50/M	ELJ-RE33NGF2
39nH	2%	11	39	100	1800	0.80	300	PCD1301CT-ND	1.03	.86	.67	PCD1301TR-ND	364.50/M	ELJ-RE39NGF2
47nH	2%	11	38	100	1800	0.95	250	PCD1302CT-ND	1.03	.86	.67	PCD1302TR-ND	364.50/M	ELJ-RE47NGF2
56nH	2%	12	35	100	1800	1.2	250	PCD1303CT-ND	1.03	.86	.67	PCD1303TR-ND	364.50/M	ELJ-RE56NGF3
68nH	2%	12	35	100	1500	1.3	250	PCD1304CT-ND	1.03	.86	.67	PCD1304TR-ND	364.50/M	ELJ-RE68NGF3
82nH	2%	12	33	100	1500	1.5	250	PCD1305CT-ND	1.03	.86	.67	PCD1305TR-ND	364.50/M	ELJ-RE82NGF3
100nH	2%	12	30	100	1300	1.8	200	PCD1306CT-ND	1.03	.86	.67	PCD1306TR-ND	364.50/M	ELJ-RER10GF3
PCD4-KIT-ND ***Digi-Key® RE (2% Tol.) Surface Mount Inductors Kit*** 10 each of all 23 values (230 total) **$79.95**														
Fig. 2, 0603 (1608) — Type RE (5% Tolerance)														
1.5nH	±0.3nH	8	47	100	6000	0.07	500	PCD1196CT-ND‡	.62	.52	.41	PCD1196TR-ND	219.00/M	ELJ-RE1N5DF2
1.8nH	±0.3nH	8	45	100	6000	0.08	500	PCD1197CT-ND‡	.62	.52	.41	PCD1197TR-ND	219.00/M	ELJ-RE1N8DF2
2.2nH	±0.3nH	8	35	100	6000	0.09	500	PCD1143CT-ND‡	.62	.52	.41	PCD1143TR-ND	219.00/M	ELJ-RE2N2DF2
2.7nH	±0.3nH	8	35	100	6000	0.10	500	PCD1144CT-ND‡	.62	.52	.41	PCD1144TR-ND	219.00/M	ELJ-RE2N7DF2
3.3nH	±0.3nH	9	35	100	5500	0.12	500	PCD1145CT-ND‡	.62	.52	.41	PCD1145TR-ND	219.00/M	ELJ-RE3N3DF2
3.9nH	5%	9	36	100	5500	0.15	450	PCD1146CT-ND‡	.62	.52	.41	PCD1146TR-ND	219.00/M	ELJ-RE3N9JF2
4.7nH	5%	9	36	100	4800	0.17	450	PCD1147CT-ND‡	.62	.52	.41	PCD1147TR-ND	219.00/M	ELJ-RE4N7JF2
5.6nH	5%	9	36	100	4600	0.18	430	PCD1148CT-ND‡	.62	.52	.41	PCD1148TR-ND	219.00/M	ELJ-RE5N6JF2
6.8nH	5%	9	36	100	3550	0.20	430	PCD1149CT-ND‡	.62	.52	.41	PCD1149TR-ND	219.00/M	ELJ-RE6N8JF2
8.2nH	5%	9	36	100	3500	0.28	400	PCD1150CT-ND‡	.62	.52	.41	PCD1150TR-ND	219.00/M	ELJ-RE8N2JF2
10nH	5%	10	37	100	2800	0.32	400	PCD1151CT-ND‡	.62	.52	.41	PCD1151TR-ND	219.00/M	ELJ-RE10NJF2
12nH	5%	10	37	100	2800	0.35	400	PCD1152CT-ND‡	.62	.52	.41	PCD1152TR-ND	219.00/M	ELJ-RE12NJF2
15nH	5%	10	38	100	2500	0.41	350	PCD1153CT-ND‡	.62	.52	.41	PCD1153TR-ND	219.00/M	ELJ-RE15NJF2
18nH	5%	10	39	100	2300	0.45	350	PCD1154CT-ND‡	.62	.52	.41	PCD1154TR-ND	219.00/M	ELJ-RE18NJF2
22nH	5%	10	40	100	2000	0.50	300	PCD1155CT-ND‡	.62	.52	.41	PCD1155TR-ND	219.00/M	ELJ-RE22NJF2
27nH	5%	10	41	100	2000	0.55	300	PCD1156CT-ND‡	.62	.52	.41	PCD1156TR-ND	219.00/M	ELJ-RE27NJF2
33nH	5%	10	40	100	1800	0.60	300	PCD1157CT-ND‡	.62	.52	.41	PCD1157TR-ND	219.00/M	ELJ-RE33NJF2
39nH	5%	11	39	100	1800	0.80	300	PCD1158CT-ND‡	.62	.52	.41	PCD1158TR-ND	219.00/M	ELJ-RE39NJF2
47nH	5%	11	38	100	1800	0.95	250	PCD1159CT-ND‡	.62	.52	.41	PCD1159TR-ND	219.00/M	ELJ-RE47NJF2
56nH	5%	12	35	100	1800	1.20	250	PCD1198CT-ND‡	.62	.52	.41	PCD1198TR-ND	219.00/M	ELJ-RE56NJF3
68nH	5%	12	35	100	1500	1.30	250	PCD1199CT-ND‡	.62	.52	.41	PCD1199TR-ND	219.00/M	ELJ-RE68NJF3
82nH	5%	12	33	100	1500	1.50	250	PCD1200CT-ND‡	.62	.52	.41	PCD1200TR-ND	219.00/M	ELJ-RE82NJF3
100nH	5%	12	30	100	1300	1.80	200	PCD1201CT-ND‡	.62	.52	.41	PCD1201TR-ND	219.00/M	ELJ-RER10JF3
120nH	5%	5	25	25.2	1200	3.00	130	PCD1322CT-ND	1.25	1.03	.81	PCD1322TR-ND	440.00/M	ELJ-RER12JF3
150nH	5%	5	22	25.2	1100	4.50	100	PCD1323CT-ND	1.25	1.03	.81	PCD1323TR-ND	440.00/M	ELJ-RER15JF3
180nH	5%	4	20	25.2	1000	6.50	80	PCD1324CT-ND	1.25	1.03	.81	PCD1324TR-ND	440.00/M	ELJ-RER18JF3
220nH	5%	4	—	25.2	900	7.50	70	PCD1325CT-ND	1.25	1.03	.81	PCD1325TR-ND	440.00/M	ELJ-RER22JF3
‡ **PCD1-KIT-ND** ***Digi-Key® RE (5% Tol.) Surface Mount Inductors Kit*** 10 Each of Denoted Values (230 Total Pieces) **$69.95**														
Fig. 2, 0603 (1608) — Type PE														
2.2nH	10%	8	—	100	6000	0.030	2.1	PCD1404CT-ND	.71	.59	.47	PCD1404TR-ND	252.00/M	ELJ-PE2N2KF
2.7nH	10%	8	—	100	5500	0.030	2.1	PCD1405CT-ND	.71	.59	.47	PCD1405TR-ND	252.00/M	ELJ-PE2N7KF
3.3nH	10%	8	—	100	5500	0.040	2.1	PCD1406CT-ND	.71	.59	.47	PCD1406TR-ND	252.00/M	ELJ-PE3N3KF
3.9nH	10%	9	—	100	5200	0.040	2.1	PCD1407CT-ND	.71	.59	.47	PCD1407TR-ND	252.00/M	ELJ-PE3N9KF
4.7nH	10%	9	—	100	4800	0.050	2.1	PCD1408CT-ND	.71	.59	.47	PCD1408TR-ND	252.00/M	ELJ-PE4N7KF
5.6nH	10%	9	—	100	4600	0.055	2.1	PCD1409CT-ND	.71	.59	.47	PCD1409TR-ND	252.00/M	ELJ-PE5N6KF
6.8nH	10%	9	—	100	4000	0.055	1.9	PCD1410CT-ND	.71	.59	.47	PCD1410TR-ND	252.00/M	ELJ-PE6N8KF
8.2nH	10%	9	—	100	3500	0.060	1.7	PCD1411CT-ND	.71	.59	.47	PCD1411TR-ND	252.00/M	ELJ-PE8N2KF
10nH	10%	9	—	100	2800	0.065	1.4	PCD1412CT-ND	.71	.59	.47	PCD1412TR-ND	252.00/M	ELJ-PE10NKF
12nH	10%	9	—	100	2500	0.080	1.3	PCD1413CT-ND	.71	.59	.47	PCD1413TR-ND	252.00/M	ELJ-PE12NKF
15nH	10%	9	—	100	2200	0.100	0.9	PCD1414CT-ND	.71	.59	.47	PCD1414TR-ND	252.00/M	ELJ-PE15NKF
18nH	10%	9	—	100	2000	0.120	0.8	PCD1415CT-ND	.71	.59	.47	PCD1415TR-ND	252.00/M	ELJ-PE18NKF
22nH	10%	9	—	100	1800	0.150	0.7	PCD1416CT-ND	.71	.59	.47	PCD1416TR-ND	252.00/M	ELJ-PE22NKF
NEW! Fig. 2, 0603 (1608) — Type NJ NEW!														
6.8nH	±0.5nH	35	—	250	6000	0.08	700	PCD1503CT-ND	.73	.60	.48	PCD1503TR-ND	256.50/M	ELJ-NJ6N8EF2
8.2nH	±0.5nH	35	—	250	6000	0.10	630	PCD1504CT-ND	.73	.60	.48	PCD1504TR-ND	256.50/M	ELJ-NJ8N2EF2
10nH	5%	35	—	250	6000	0.10	630	PCD1505CT-ND	.73	.60	.48	PCD1505TR-ND	256.50/M	ELJ-NJ10NJF2
12nH	5%	35	—	250	6000	0.13	550	PCD1506CT-ND	.73	.60	.48	PCD1506TR-ND	256.50/M	ELJ-NJ12NJF2
15nH	5%	40	—	250	5000	0.13	550	PCD1507CT-ND	.73	.60	.48	PCD1507TR-ND	256.50/M	ELJ-NJ15NJF2
18nH	5%	40	—	250	5000	0.15	510	PCD1508CT-ND	.73	.60	.48	PCD1508TR-ND	256.50/M	ELJ-NJ18NJF2
22nH	5%	40	—	250	4600	0.17	480	PCD1509CT-ND	.73	.60	.48	PCD1509TR-ND	256.50/M	ELJ-NJ22NJF2
27nH	5%	40	—	250	3800	0.20	440	PCD1510CT-ND	.73	.60	.48	PCD1510TR-ND	256.50/M	ELJ-NJ27NJF2
33nH	5%	40	—	250	3500	0.23	420	PCD1511CT-ND	.73	.60	.48	PCD1511TR-ND	256.50/M	ELJ-NJ33NJF2
39nH	5%	40	—	250	3200	0.25	400	PCD1512CT-ND	.73	.60	.48	PCD1512TR-ND	256.50/M	ELJ-NJ39NJF2
47nH	5%	38	—	200	3000	0.28	380	PCD1513CT-ND	.73	.60	.48	PCD1513TR-ND	256.50/M	ELJ-NJ47NJF2
56nH	5%	38	—	200	2700	0.30	360	PCD1514CT-ND	.73	.60	.48	PCD1514TR-ND	256.50/M	ELJ-NJ56NJF2
68nH	5%	38	—	200	2300	0.35	340	PCD1515CT-ND	.73	.60	.48	PCD1515TR-ND	256.50/M	ELJ-NJ68NJF2
82nH	5%	34	—	150	2200	0.48	290	PCD1516CT-ND	.73	.60	.48	PCD1516TR-ND	256.50/M	ELJ-NJ82NJF2
100nH	5%	34	—	150	2000	0.62	250	PCD1517CT-ND	.73	.60	.48	PCD1517TR-ND	256.50/M	ELJ-NJR10JF2
120nH	5%	32	—	150	1700	0.90	210	PCD1518CT-ND	.73	.60	.48	PCD1518TR-ND	256.50/M	ELJ-NJR12JF2
150nH	5%	32	—	150	1400	1.30	160	PCD1519CT-ND	.73	.60	.48	PCD1519TR-ND	256.50/M	ELJ-NJR15JF2
180nH	5%	25	—	100	1300	2.00	140	PCD1520CT-ND	.73	.60	.48	PCD1520TR-ND	256.50/M	ELJ-NJR18JF2
220nH	5%	25	—	100	1200	2.20	120	PCD1521CT-ND	.73	.60	.48	PCD1521TR-ND	256.50/M	ELJ-NJR22JF2
Fig. 2, 0805 (2012) — Type ND														
10nH	10%	10	48	100	3300	0.14	540	PCD1160CT-ND	1.32	1.09	.86	PCD1160TR-ND	465.00/M	ELJ-ND10NKF
12nH	10%	10	53	100	3300	0.18	535	PCD1161CT-ND	1.32	1.09	.86	PCD1161TR-ND	465.00/M	ELJ-ND12NKF
12nH	5%	10	53	100	3300	0.18	535	PCD1185CT-ND	1.40	1.16	.91	PCD1185TR-ND	494.00/M	ELJ-ND12NJF
15nH	10%	12	55	100	3000	0.18	520	PCD1162CT-ND	1.32	1.09	.86	PCD1162TR-ND	465.00/M	ELJ-ND15NKF
18nH	10%	12	55	100	3000	0.22	480	PCD1163CT-ND	1.32	1.09	.86	PCD1163TR-ND	465.00/M	ELJ-ND18NKF
22nH	10%	15	55	100	2600	0.22	465	PCD1164CT-ND	1.32	1.09	.86	PCD1164TR-ND	465.00/M	ELJ-ND22NKF
27nH	10%	15	57	100	2500	0.26	455	PCD1165CT-ND	1.32	1.09	.86	PCD1165TR-ND	465.00/M	ELJ-ND27NKF
33nH	10%	15	58	100	2050	0.30	395	PCD1166CT-ND	1.32	1.09	.86	PCD1166TR-ND	465.00/M	ELJ-ND33NKF
39nH	5%	15	55	100	2000	0.31	390	PCD1167CT-ND	1.40	1.16	.91	PCD1167TR-ND	494.00/M	ELJ-ND39NJF
47nH	5%	15	50	100	1650	0.35	385	PCD1168CT-ND	1.40	1.16	.91	PCD1168TR-ND	494.00/M	ELJ-ND47NJF
56nH	5%	15	45	100	1550	0.39	360	PCD1169CT-ND	1.40	1.16	.91	PCD1169TR-ND	494.00/M	ELJ-ND56NJF
68nH	5%	15	44	100	1450	0.44	340	PCD1170CT-ND	1.40	1.16	.91	PCD1170TR-ND	494.00/M	ELJ-ND68NJF
82nH	5%	15	40	100	1100	0.48	330	PCD1171CT-ND	1.40	1.16	.91	PCD1171TR-ND	494.00/M	ELJ-ND82NJF
100nH	5%	8	35	25.2	800	0.66	285	PCD1172CT-ND	1.40	1.16	.91	PCD1172TR-ND	494.00/M	ELJ-NDR10JF
120nH	5%	8	—	25.2	600	0.76	275	PCD1173CT-ND	1.40	1.16	.91	PCD1173TR-ND	494.00/M	ELJ-NDR12JF
150nH	5%	10	—	25.2	600	1.13	230	PCD1174CT-ND	1.40	1.16	.91	PCD1174TR-ND	494.00/M	ELJ-NDR15JF
180nH	5%	10	—	25.2	600	1.24	195	PCD1175CT-ND	1.40	1.16	.91	PCD1175TR-ND	494.00/M	ELJ-NDR18JF
220nH	5%	10	—	25.2	500	1.41	170	PCD1176CT-ND	1.40	1.16	.91	PCD1176TR-ND	494.00/M	ELJ-NDR22JF
270nH	5%	10	—	25.2	300	1.50	165	PCD1177CT-ND	1.40	1.16	.91	PCD1177TR-ND	494.00/M	ELJ-NDR27JF
330nH	5%	10	—	25.2	200	1.66	160	PCD1178CT-ND	1.40	1.16	.91	PCD1178TR-ND	494.00/M	ELJ-NDR33JF
390nH	5%	10	—	25.2	150	1.82	150	PCD1179CT-ND	1.40	1.16	.91	PCD1179TR-ND	494.00/M	ELJ-NDR39JF
470nH	5%	10	—	25.2	150	1.97	145	PCD1180CT-ND	1.40	1.16	.91	PCD1180TR-ND	494.00/M	ELJ-NDR47JF
560nH	5%	10	—	25.2	100	2.07	140	PCD1181CT-ND	1.40	1.16	.91	PCD1181TR-ND	494.00/M	ELJ-NDR56JF
680nH	5%	10	—	25.2	100	2.32	130	PCD1182CT-ND	1.40	1.16	.91	PCD1182TR-ND	494.00/M	ELJ-NDR68JF
820nH	5%	10	—	25.2	80	2.60	125	PCD1183CT-ND	1.40	1.16	.91	PCD1183TR-ND	494.00/M	ELJ-NDR82JF
1000nH	5%	8	—	7.96	80	2.98	120	PCD1184CT-ND	1.40	1.16	.91	PCD1184TR-ND	494.00/M	ELJ-ND1R0JF
PCD2-KIT-ND ***Digi-Key® ND Surface Mount Inductors Kit*** 10 Each of 25 Values (PCD1185CT-ND Not Included) (250 Total Pieces) **$99.95**														
Fig. 3, 0805 (2012) — Type FD														
0.82uH	10%	8	—	25.2	370	1.36	190	PCD1186CT-ND	1.76	1.46	1.15	PCD1186TR-ND	623.00/M	ELJ-FDR82KF
1.0uH	10%	15	—	7.96	300	1.56	160	PCD1187CT-ND	1.76	1.46	1.15	PCD1187TR-ND	623.00/M	ELJ-FD1R0KF
1.2uH	10%	15	—	7.96	200	1.60	155	PCD1188CT-ND	1.76	1.46	1.15	PCD1188TR-ND	623.00/M	ELJ-FD1R2KF
1.5uH	10%	15	—	7.96	100	1.85	150	PCD1189CT-ND	1.76	1.46	1.15	PCD1189TR-ND	623.00/M	ELJ-FD1R5KF

(Continued)

Inductance	Tolerance	Q Min	Q Typ @ 800 MHz	L, Q Test freq (MHz)	S.R.F. Min (MHz)	RDC Max (Ohm)	IDC Max (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T/R Pricing 3,000	Panasonic Part No.
Fig. 3, 0805 (2012) — Type FD														
1.8uH	10%	15	—	7.96	80	1.95	145	PCD1190CT-ND	1.76	1.46	1.15	PCD1190TR-ND	623.00/M	ELJ-FD1R8KF
2.2uH	10%	15	—	7.96	70	2.27	145	PCD1191CT-ND	1.76	1.46	1.15	PCD1191TR-ND	623.00/M	ELJ-FD2R2KF
2.7uH	10%	15	—	7.96	60	2.53	140	PCD1192CT-ND	1.76	1.46	1.15	PCD1192TR-ND	623.00/M	ELJ-FD2R7KF
3.3uH	10%	15	—	7.96	50	2.84	140	PCD1193CT-ND	1.76	1.46	1.15	PCD1193TR-ND	623.00/M	ELJ-FD3R3KF
3.9uH	10%	15	—	7.96	40	2.92	130	PCD1194CT-ND	1.76	1.46	1.15	PCD1194TR-ND	623.00/M	ELJ-FD3R9KF
4.7uH	10%	15	—	7.96	30	3.38	130	PCD1195CT-ND	1.76	1.46	1.15	PCD1195TR-ND	623.00/M	ELJ-FD4R7KF
Inductance	Tolerance	Q Min	Q Typ @ 800 MHz	L, Q Test freq (MHz)	S.R.F. Min (MHz)	RDC Max (Ohm)	IDC Max (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T/R Pricing 2,000	Panasonic Part No.
Fig. 4, 1008 (2520) — Type NC														
10nH	10%	10	—	100	2500	0.32	280	PCD1037CT-ND	1.01	.83	.66	PCD1037TR-ND	356.00/M	ELJ-NC10NKF
12nH	10%	10	—	100	2200	0.34	270	PCD1038CT-ND	1.01	.83	.66	PCD1038TR-ND	356.00/M	ELJ-NC12NKF
15nH	10%	10	—	100	1800	0.38	255	PCD1039CT-ND	1.01	.83	.66	PCD1039TR-ND	356.00/M	ELJ-NC15NKF
18nH	10%	10	—	100	1550	0.40	250	PCD1040CT-ND	1.01	.83	.66	PCD1040TR-ND	356.00/M	ELJ-NC18NKF
22nH	10%	15	—	100	1350	0.43	240	PCD1041CT-ND	1.01	.83	.66	PCD1041TR-ND	356.00/M	ELJ-NC22NKF
27nH	10%	15	—	100	1150	0.47	230	PCD1042CT-ND	1.01	.83	.66	PCD1042TR-ND	356.00/M	ELJ-NC27NKF
33nH	10%	15	—	100	1000	0.51	220	PCD1043CT-ND	1.01	.83	.66	PCD1043TR-ND	356.00/M	ELJ-NC33NKF
39nH	10%	15	—	100	890	0.55	215	PCD1044CT-ND	1.01	.83	.66	PCD1044TR-ND	356.00/M	ELJ-NC39NKF
47nH	10%	15	—	100	770	0.59	205	PCD1045CT-ND	1.01	.83	.66	PCD1045TR-ND	356.00/M	ELJ-NC47NKF
56nH	10%	15	—	100	670	0.63	200	PCD1046CT-ND	1.01	.83	.66	PCD1046TR-ND	356.00/M	ELJ-NC56NKF
68nH	10%	15	—	100	590	0.68	190	PCD1047CT-ND	1.01	.83	.66	PCD1047TR-ND	356.00/M	ELJ-NC68NKF
82nH	10%	15	—	100	520	0.73	185	PCD1048CT-ND	1.01	.83	.66	PCD1048TR-ND	356.00/M	ELJ-NC82NKF
100nH	10%	10	—	25.2	460	0.80	175	PCD1049CT-ND	1.01	.83	.66	PCD1049TR-ND	356.00/M	ELJ-NCR10KF
120nH	10%	10	—	25.2	400	0.87	170	PCD1050CT-ND	1.01	.83	.66	PCD1050TR-ND	356.00/M	ELJ-NCR12KF
150nH	10%	10	—	25.2	340	0.98	160	PCD1051CT-ND	1.01	.83	.66	PCD1051TR-ND	356.00/M	ELJ-NCR15KF
180nH	10%	10	—	25.2	300	1.05	155	PCD1052CT-ND	1.01	.83	.66	PCD1052TR-ND	356.00/M	ELJ-NCR18KF
33nH	5%	15	—	100	1000	0.51	220	PCD1202CT-ND	1.13	.93	.73	PCD1202TR-ND	398.00/M	ELJ-NC33NJF
39nH	5%	15	—	100	890	0.55	215	PCD1203CT-ND	1.13	.93	.73	PCD1203TR-ND	398.00/M	ELJ-NC39NJF
47nH	5%	15	—	100	770	0.59	205	PCD1204CT-ND	1.13	.93	.73	PCD1204TR-ND	398.00/M	ELJ-NC47NJF
56nH	5%	15	—	100	670	0.63	200	PCD1205CT-ND	1.13	.93	.73	PCD1205TR-ND	398.00/M	ELJ-NC56NJF
68nH	5%	15	—	100	590	0.68	190	PCD1206CT-ND	1.13	.93	.73	PCD1206TR-ND	398.00/M	ELJ-NC68NJF
82nH	5%	15	—	100	520	0.73	185	PCD1207CT-ND	1.13	.93	.73	PCD1207TR-ND	398.00/M	ELJ-NC82NJF
100nH	5%	10	—	25.2	460	0.80	175	PCD1208CT-ND	1.13	.93	.73	PCD1208TR-ND	398.00/M	ELJ-NCR10JF
120nH	5%	10	—	25.2	400	0.87	170	PCD1209CT-ND	1.13	.93	.73	PCD1209TR-ND	398.00/M	ELJ-NCR12JF
150nH	5%	10	—	25.2	340	0.98	160	PCD1210CT-ND	1.13	.93	.73	PCD1210TR-ND	398.00/M	ELJ-NCR15JF
180nH	5%	10	—	25.2	300	1.05	155	PCD1211CT-ND	1.13	.93	.73	PCD1211TR-ND	398.00/M	ELJ-NCR18JF
220nH	5%	10	—	25.2	260	1.15	145	PCD1212CT-ND	1.13	.93	.73	PCD1212TR-ND	398.00/M	ELJ-NCR22JF
270nH	5%	10	—	25.2	230	1.25	140	PCD1213CT-ND	1.13	.93	.73	PCD1213TR-ND	398.00/M	ELJ-NCR27JF
330nH	5%	10	—	25.2	200	1.37	135	PCD1214CT-ND	1.13	.93	.73	PCD1214TR-ND	398.00/M	ELJ-NCR33JF
390nH	5%	10	—	25.2	180	1.47	130	PCD1215CT-ND	1.13	.93	.73	PCD1215TR-ND	398.00/M	ELJ-NCR39JF
470nH	5%	10	—	25.2	160	1.58	125	PCD1216CT-ND	1.13	.93	.73	PCD1216TR-ND	398.00/M	ELJ-NCR47JF
560nH	5%	10	—	25.2	145	1.70	120	PCD1217CT-ND	1.13	.93	.73	PCD1217TR-ND	398.00/M	ELJ-NCR56JF
680nH	5%	10	—	25.2	130	1.85	110	PCD1218CT-ND	1.13	.93	.73	PCD1218TR-ND	398.00/M	ELJ-NCR68JF
820nH	5%	10	—	25.2	100	2.10	100	PCD1219CT-ND	1.13	.93	.73	PCD1219TR-ND	398.00/M	ELJ-NCR82JF
Fig. 4, 1008 (2520) — Type FC														
0.22uH	20%	25	—	25.2	230	0.7	190	PCD1053CT-ND	.77	.64	.51	PCD1053TR-ND	273.00/M	ELJ-FCR22MF
0.27uH	20%	25	—	25.2	210	0.75	180	PCD1054CT-ND	.77	.64	.51	PCD1054TR-ND	273.00/M	ELJ-FCR27MF
0.33uH	20%	25	—	25.2	190	0.85	170	PCD1055CT-ND	.77	.64	.51	PCD1055TR-ND	273.00/M	ELJ-FCR33MF
0.39uH	20%	25	—	25.2	175	0.95	160	PCD1056CT-ND	.77	.64	.51	PCD1056TR-ND	273.00/M	ELJ-FCR39MF
0.47uH	20%	25	—	25.2	160	1.0	155	PCD1057CT-ND	.77	.64	.51	PCD1057TR-ND	273.00/M	ELJ-FCR47MF
0.56uH	20%	25	—	25.2	150	1.1	150	PCD1058CT-ND	.77	.64	.51	PCD1058TR-ND	273.00/M	ELJ-FCR56MF
0.68uH	20%	25	—	25.2	135	1.25	140	PCD1059CT-ND	.77	.64	.51	PCD1059TR-ND	273.00/M	ELJ-FCR68MF
0.82uH	20%	25	—	25.2	125	1.4	130	PCD1060CT-ND	.77	.64	.51	PCD1060TR-ND	273.00/M	ELJ-FCR82MF
1.0uH	10%	25	—	7.96	115	0.65	195	PCD1061CT-ND	.77	.64	.51	PCD1061TR-ND	273.00/M	ELJ-FC1R0KF
1.2uH	10%	25	—	7.96	100	0.75	180	PCD1062CT-ND	.77	.64	.51	PCD1062TR-ND	273.00/M	ELJ-FC1R2KF
1.5uH	10%	25	—	7.96	90	0.85	170	PCD1063CT-ND	.77	.64	.51	PCD1063TR-ND	273.00/M	ELJ-FC1R5KF
1.8uH	10%	25	—	7.96	85	0.95	160	PCD1064CT-ND	.77	.64	.51	PCD1064TR-ND	273.00/M	ELJ-FC1R8KF
2.2uH	10%	25	—	7.96	80	1.05	155	PCD1065CT-ND	.77	.64	.51	PCD1065TR-ND	273.00/M	ELJ-FC2R2KF
2.7uH	10%	25	—	7.96	75	1.2	145	PCD1066CT-ND	.77	.64	.51	PCD1066TR-ND	273.00/M	ELJ-FC2R7KF
3.3uH	10%	25	—	7.96	65	1.3	135	PCD1067CT-ND	.77	.64	.51	PCD1067TR-ND	273.00/M	ELJ-FC3R3KF
3.9uH	10%	25	—	7.96	60	1.4	130	PCD1068CT-ND	.77	.64	.51	PCD1068TR-ND	273.00/M	ELJ-FC3R9KF
4.7uH	10%	25	—	7.96	55	1.55	125	PCD1069CT-ND	.77	.64	.51	PCD1069TR-ND	273.00/M	ELJ-FC4R7KF
5.6uH	10%	25	—	7.96	50	1.75	120	PCD1070CT-ND	.77	.64	.51	PCD1070TR-ND	273.00/M	ELJ-FC5R6KF
6.8uH	10%	25	—	7.96	45	1.95	115	PCD1071CT-ND	.77	.64	.51	PCD1071TR-ND	273.00/M	ELJ-FC6R8KF
8.2uH	10%	25	—	7.96	40	2.2	105	PCD1072CT-ND	.77	.64	.51	PCD1072TR-ND	273.00/M	ELJ-FC8R2KF
10uH	10%	25	—	2.52	32	3.5	80	PCD1073CT-ND	.77	.64	.51	PCD1073TR-ND	273.00/M	ELJ-FC100KF
12uH	10%	25	—	2.52	30	3.8	75	PCD1074CT-ND	.77	.64	.51	PCD1074TR-ND	273.00/M	ELJ-FC120KF
15uH	10%	25	—	2.52	28	4.4	70	PCD1075CT-ND	.77	.64	.51	PCD1075TR-ND	273.00/M	ELJ-FC150KF
18uH	10%	25	—	2.52	25	5.0	65	PCD1076CT-ND	.77	.64	.51	PCD1076TR-ND	273.00/M	ELJ-FC180KF
22uH	10%	25	—	2.52	22	5.8	60	PCD1077CT-ND	.77	.64	.51	PCD1077TR-ND	273.00/M	ELJ-FC220KF
0.22uH	10%	25	—	25.2	230	0.70	190	PCD1220CT-ND	.86	.71	.56	PCD1220TR-ND	303.00/M	ELJ-FCR22KF
0.27uH	10%	25	—	25.2	210	0.75	180	PCD1221CT-ND	.86	.71	.56	PCD1221TR-ND	303.00/M	ELJ-FCR27KF
0.33uH	10%	25	—	25.2	190	0.85	170	PCD1222CT-ND	.86	.71	.56	PCD1222TR-ND	303.00/M	ELJ-FCR33KF
0.39uH	10%	25	—	25.2	175	0.95	160	PCD1223CT-ND	.86	.71	.56	PCD1223TR-ND	303.00/M	ELJ-FCR39KF
0.47uH	10%	25	—	25.2	160	1.00	155	PCD1224CT-ND	.86	.71	.56	PCD1224TR-ND	303.00/M	ELJ-FCR47KF
0.56uH	10%	25	—	25.2	150	1.10	150	PCD1225CT-ND	.86	.71	.56	PCD1225TR-ND	303.00/M	ELJ-FCR56KF
0.68uH	10%	25	—	25.2	135	1.25	140	PCD1226CT-ND	.86	.71	.56	PCD1226TR-ND	303.00/M	ELJ-FCR68KF
0.82uH	10%	25	—	25.2	125	1.40	130	PCD1227CT-ND	.86	.71	.56	PCD1227TR-ND	303.00/M	ELJ-FCR82KF
1.0uH	5%	25	—	7.96	115	0.65	195	PCD1228CT-ND	.86	.71	.56	PCD1228TR-ND	303.00/M	ELJ-FC1R0JF
1.2uH	5%	25	—	7.96	100	0.75	180	PCD1229CT-ND	.86	.71	.56	PCD1229TR-ND	303.00/M	ELJ-FC1R2JF
1.5uH	5%	25	—	7.96	90	0.85	170	PCD1230CT-ND	.86	.71	.56	PCD1230TR-ND	303.00/M	ELJ-FC1R5JF
1.8uH	5%	25	—	7.96	85	0.95	160	PCD1231CT-ND	.86	.71	.56	PCD1231TR-ND	303.00/M	ELJ-FC1R8JF
2.2uH	5%	25	—	7.96	80	1.05	155	PCD1232CT-ND	.86	.71	.56	PCD1232TR-ND	303.00/M	ELJ-FC2R2JF
2.7uH	5%	25	—	7.96	75	1.20	145	PCD1233CT-ND	.86	.71	.56	PCD1233TR-ND	303.00/M	ELJ-FC2R7JF
3.3uH	5%	25	—	7.96	65	1.30	135	PCD1234CT-ND	.86	.71	.56	PCD1234TR-ND	303.00/M	ELJ-FC3R3JF
3.9uH	5%	25	—	7.96	60	1.40	130	PCD1235CT-ND	.86	.71	.56	PCD1235TR-ND	303.00/M	ELJ-FC3R9JF
4.7uH	5%	25	—	7.96	55	1.55	125	PCD1236CT-ND	.86	.71	.56	PCD1236TR-ND	303.00/M	ELJ-FC4R7JF
5.6uH	5%	25	—	7.96	50	1.75	120	PCD1237CT-ND	.86	.71	.56	PCD1237TR-ND	303.00/M	ELJ-FC5R6JF
6.8uH	5%	25	—	7.96	45	1.95	115	PCD1238CT-ND	.86	.71	.56	PCD1238TR-ND	303.00/M	ELJ-FC6R8JF
8.2uH	5%	25	—	7.96	40	2.2	105	PCD1239CT-ND	.86	.71	.56	PCD1239TR-ND	303.00/M	ELJ-FC8R2JF
10uH	5%	25	—	2.52	32	3.5	80	PCD1240CT-ND	.86	.71	.56	PCD1240TR-ND	303.00/M	ELJ-FC100JF
12uH	5%	25	—	2.52	30	3.8	75	PCD1241CT-ND	.86	.71	.56	PCD1241TR-ND	303.00/M	ELJ-FC120JF
15uH	5%	25	—	2.52	28	4.4	70	PCD1242CT-ND	.86	.71	.56	PCD1242TR-ND	303.00/M	ELJ-FC150JF
18uH	5%	25	—	2.52	25	5.0	65	PCD1243CT-ND	.86	.71	.56	PCD1243TR-ND	303.00/M	ELJ-FC180JF
22uH	5%	25	—	2.52	22	5.8	60	PCD1244CT-ND	.86	.71	.56	PCD1244TR-ND	303.00/M	ELJ-FC220JF
27uH	5%	20	—	2.52	21	6.3	115	PCD1245CT-ND	.86	.71	.56	PCD1245TR-ND	303.00/M	ELJ-FC270JF
33uH	5%	20	—	2.52	20	7.1	110	PCD1246CT-ND	.86	.71	.56	PCD1246TR-ND	303.00/M	ELJ-FC330JF
39uH	5%	20	—	2.52	18	9.5	90	PCD1247CT-ND	.86	.71	.56	PCD1247TR-ND	303.00/M	ELJ-FC390JF
47uH	5%	20	—	2.52	17	11.00	80	PCD1248CT-ND	.86	.71	.56	PCD1248TR-ND	303.00/M	ELJ-FC470JF
56uH	5%	20	—	2.52	16	12.1	75	PCD1249CT-ND	.86	.71	.56	PCD1249TR-ND	303.00/M	ELJ-FC560JF
68uH	5%	20	—	2.52	15	16.6	70	PCD1250CT-ND	.86	.71	.56	PCD1250TR-ND	303.00/M	ELJ-FC680JF
82uH	5%	20	—	2.52	13	19.0	65	PCD1251CT-ND	.86	.71	.56	PCD1251TR-ND	303.00/M	ELJ-FC820JF
100uH	5%	15	—	0.796	12	21.0	60	PCD1252CT-ND	.86	.71	.56	PCD1252TR-ND	303.00/M	ELJ-FC101JF
Fig. 4, 1008 (2520) — Type SC														
27uH	10%	40	—	2.52	20	4.5	18	PCD1078CT-ND	.85	.71	.56	PCD1078TR-ND	302.00/M	ELJ-SC270KF
33uH	10%	40	—	2.52	18	5.2	14	PCD1079CT-ND	.85	.71	.56	PCD1079TR-ND	302.00/M	ELJ-SC330KF

(Continued)

Panasonic Surface Mount Inductors, *(Cont.)*

Inductance	Tolerance	Q Min	Q Typ @ 800 MHz	L,Q Test freq (MHz)	S.R.F. Min (MHz)	RDC Max (Ohm)	IDC Max (mA)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	T/R Pricing 2,000	Panasonic Part No.
									1	10	100			
Fig. 4, 1008 (2520) — Type SC														
39uH	10%	40	—	2.52	15	5.7	13	PCD1080CT-ND	.85	.71	.56	PCD1080TR-ND	302.00/M	ELJ-SC390KF
47uH	10%	40	—	2.52	14	6.6	12	PCD1081CT-ND	.85	.71	.56	PCD1081TR-ND	302.00/M	ELJ-SC470KF
56uH	10%	40	—	2.52	13	7.1	10	PCD1082CT-ND	.85	.71	.56	PCD1082TR-ND	302.00/M	ELJ-SC560KF
68uH	10%	25	—	2.52	13	6.5	17	PCD1083CT-ND	.85	.71	.56	PCD1083TR-ND	302.00/M	ELJ-SC680KF
82uH	10%	25	—	2.52	13	7.4	14	PCD1084CT-ND	.85	.71	.56	PCD1084TR-ND	302.00/M	ELJ-SC820KF
100uH	10%	25	—	0.796	12	8.4	10	PCD1085CT-ND	.85	.71	.56	PCD1085TR-ND	302.00/M	ELJ-SC101KF
Fig. 4, 1008 (2520) — Type PC														
1.0uH	20%	10	—	7.96	95	0.45	475	PCD1086CT-ND	.86	.72	.56	PCD1086TR-ND	305.00/M	ELJ-PC1R0MF
1.5uH	20%	10	—	7.96	85	0.55	435	PCD1087CT-ND	.86	.72	.56	PCD1087TR-ND	305.00/M	ELJ-PC1R5MF
2.2uH	20%	10	—	7.96	65	0.65	390	PCD1088CT-ND	.86	.72	.56	PCD1088TR-ND	305.00/M	ELJ-PC2R2MF
3.3uH	20%	8	—	7.96	55	0.85	340	PCD1089CT-ND	.86	.72	.56	PCD1089TR-ND	305.00/M	ELJ-PC3R3MF
4.7uH	20%	8	—	7.96	43	1.2	285	PCD1090CT-ND	.86	.72	.56	PCD1090TR-ND	305.00/M	ELJ-PC4R7MF
6.8uH	10%	8	—	7.96	39	1.3	275	PCD1091CT-ND	.86	.72	.56	PCD1091TR-ND	305.00/M	ELJ-PC6R8KF
10uH	10%	20	—	2.52	32	2.2	210	PCD1092CT-ND	.86	.72	.56	PCD1092TR-ND	305.00/M	ELJ-PC100KF
12uH	10%	20	—	2.52	25	2.7	195	PCD1093CT-ND	.86	.72	.56	PCD1093TR-ND	305.00/M	ELJ-PC120KF
15uH	10%	20	—	2.52	21	3.2	175	PCD1094CT-ND	.86	.72	.56	PCD1094TR-ND	305.00/M	ELJ-PC150KF
22uH	10%	20	—	2.52	18	4.0	160	PCD1095CT-ND	.86	.72	.56	PCD1095TR-ND	305.00/M	ELJ-PC220KF
33uH	10%	20	—	2.52	16	6.5	120	PCD1096CT-ND	.86	.72	.56	PCD1096TR-ND	305.00/M	ELJ-PC330KF
Fig. 5, 1210 (3225) — Type FA														
0.22uH	20%	25	—	25.2	230	0.29	360	PCD1000CT-ND	.62	.52	.41	PCD1000TR-ND	219.00/M	ELJ-FAR22MF2
0.27uH	20%	25	—	25.2	210	0.32	345	PCD1001CT-ND	.62	.52	.41	PCD1001TR-ND	219.00/M	ELJ-FAR27MF2
0.33uH	20%	25	—	25.2	190	0.35	330	PCD1002CT-ND	.62	.52	.41	PCD1002TR-ND	219.00/M	ELJ-FAR33MF2
0.39uH	20%	25	—	25.2	175	0.39	305	PCD1003CT-ND	.62	.52	.41	PCD1003TR-ND	219.00/M	ELJ-FAR39MF2
0.47uH	20%	25	—	25.2	160	0.44	290	PCD1004CT-ND	.62	.52	.41	PCD1004TR-ND	219.00/M	ELJ-FAR47MF2
0.56uH	20%	25	—	25.2	150	0.49	275	PCD1005CT-ND	.62	.52	.41	PCD1005TR-ND	219.00/M	ELJ-FAR56MF2
0.68uH	20%	25	—	25.2	135	0.55	260	PCD1006CT-ND	.62	.52	.41	PCD1006TR-ND	219.00/M	ELJ-FAR68MF2
0.82uH	20%	25	—	25.2	125	0.61	245	PCD1007CT-ND	.62	.52	.41	PCD1007TR-ND	219.00/M	ELJ-FAR82MF2
1.0uH	10%	30	—	7.96	115	0.69	230	PCD1008CT-ND	.62	.52	.41	PCD1008TR-ND	219.00/M	ELJ-FA1R0KF2
1.2uH	10%	30	—	7.96	100	0.75	215	PCD1009CT-ND	.62	.52	.41	PCD1009TR-ND	219.00/M	ELJ-FA1R2KF2
1.5uH	10%	30	—	7.96	90	0.75	210	PCD1010CT-ND	.62	.52	.41	PCD1010TR-ND	219.00/M	ELJ-FA1R5KF
1.8uH	10%	30	—	7.96	85	0.82	200	PCD1011CT-ND	.62	.52	.41	PCD1011TR-ND	219.00/M	ELJ-FA1R8KF
2.2uH	10%	30	—	7.96	80	0.95	190	PCD1012CT-ND	.62	.52	.41	PCD1012TR-ND	219.00/M	ELJ-FA2R2KF
2.7uH	10%	30	—	7.96	75	1.1	180	PCD1013CT-ND	.62	.52	.41	PCD1013TR-ND	219.00/M	ELJ-FA2R7KF
3.3uH	10%	30	—	7.96	65	1.2	180	PCD1014CT-ND	.62	.52	.41	PCD1014TR-ND	219.00/M	ELJ-FA3R3KF
3.9uH	10%	30	—	7.96	60	1.3	175	PCD1015CT-ND	.62	.52	.41	PCD1015TR-ND	219.00/M	ELJ-FA3R9KF
4.7uH	10%	30	—	7.96	55	1.5	165	PCD1016CT-ND	.62	.52	.41	PCD1016TR-ND	219.00/M	ELJ-FA4R7KF
5.6uH	10%	30	—	7.96	50	1.6	160	PCD1261CT-ND	.62	.52	.41	PCD1261TR-ND	219.00/M	ELJ-FA5R6KF
6.8uH	10%	30	—	7.96	45	1.8	150	PCD1262CT-ND	.62	.52	.41	PCD1262TR-ND	219.00/M	ELJ-FA6R8KF
8.2uH	10%	30	—	7.96	40	2.0	140	PCD1263CT-ND	.62	.52	.41	PCD1263TR-ND	219.00/M	ELJ-FA8R2KF
10uH	10%	30	—	2.52	36	2.1	140	PCD1020CT-ND	.62	.52	.41	PCD1020TR-ND	219.00/M	ELJ-FA100KF
12uH	10%	30	—	2.52	33	2.5	125	PCD1021CT-ND	.62	.52	.41	PCD1021TR-ND	219.00/M	ELJ-FA120KF
15uH	10%	30	—	2.52	30	2.8	120	PCD1022CT-ND	.62	.52	.41	PCD1022TR-ND	219.00/M	ELJ-FA150KF
18uH	10%	30	—	2.52	27	3.3	110	PCD1023CT-ND	.62	.52	.41	PCD1023TR-ND	219.00/M	ELJ-FA180KF
22uH	10%	30	—	2.52	25	3.7	105	PCD1024CT-ND	.62	.52	.41	PCD1024TR-ND	219.00/M	ELJ-FA220KF
27uH	10%	30	—	2.52	22	5.0	90	PCD1025CT-ND	.62	.52	.41	PCD1025TR-ND	219.00/M	ELJ-FA270KF
33uH	10%	30	—	2.52	20	5.6	85	PCD1026CT-ND	.62	.52	.41	PCD1026TR-ND	219.00/M	ELJ-FA330KF
39uH	10%	30	—	2.52	20	6.4	80	PCD1027CT-ND	.62	.52	.41	PCD1027TR-ND	219.00/M	ELJ-FA390KF
47uH	10%	30	—	2.52	15	7.0	75	PCD1028CT-ND	.62	.52	.41	PCD1028TR-ND	219.00/M	ELJ-FA470KF
56uH	10%	30	—	2.52	15	8.0	70	PCD1029CT-ND	.62	.52	.41	PCD1029TR-ND	219.00/M	ELJ-FA560KF
68uH	10%	30	—	2.52	15	9.0	65	PCD1030CT-ND	.62	.52	.41	PCD1030TR-ND	219.00/M	ELJ-FA680KF
82uH	10%	30	—	2.52	11	10.0	60	PCD1031CT-ND	.62	.52	.41	PCD1031TR-ND	219.00/M	ELJ-FA820KF
100uH	10%	20	—	0.796	10	10.0	60	PCD1032CT-ND	.62	.52	.41	PCD1032TR-ND	219.00/M	ELJ-FA101KF
120uH	10%	20	—	0.796	10	11.0	55	PCD1033CT-ND	.62	.52	.41	PCD1033TR-ND	219.00/M	ELJ-FA121KF
150uH	10%	20	—	0.796	8.0	15.0	50	PCD1034CT-ND	.62	.52	.41	PCD1034TR-ND	219.00/M	ELJ-FA151KF
180uH	10%	20	—	0.796	7.0	17.0	50	PCD1035CT-ND	.62	.52	.41	PCD1035TR-ND	219.00/M	ELJ-FA181KF
220uH	10%	20	—	0.796	7.0	21.0	45	PCD1036CT-ND	.62	.52	.41	PCD1036TR-ND	219.00/M	ELJ-FA221KF
Fig 5, 1210 (3225) — Type NA														
0.047uH	20%	10	—	100	680	0.20	450	PCD1115CT-ND	.70	.58	.46	PCD1115TR-ND	248.00/M	ELJ-NA47NMF
0.056uH	20%	10	—	100	600	0.22	420	PCD1116CT-ND	.70	.58	.46	PCD1116TR-ND	248.00/M	ELJ-NA56NMF
0.068uH	20%	10	—	100	540	0.25	400	PCD1117CT-ND	.70	.58	.46	PCD1117TR-ND	248.00/M	ELJ-NA68NMF
0.082uH	20%	10	—	100	500	0.27	380	PCD1118CT-ND	.70	.58	.46	PCD1118TR-ND	248.00/M	ELJ-NA82NMF
0.10uH	20%	10	—	100	450	0.30	360	PCD1119CT-ND	.70	.58	.46	PCD1119TR-ND	248.00/M	ELJ-NAR10MF
0.12uH	20%	10	—	25.2	400	0.67	240	PCD1120CT-ND	.70	.58	.46	PCD1120TR-ND	248.00/M	ELJ-NAR12MF
0.15uH	20%	10	—	25.2	350	0.72	230	PCD1121CT-ND	.70	.58	.46	PCD1121TR-ND	248.00/M	ELJ-NAR15MF
0.18uH	20%	10	—	25.2	320	0.81	220	PCD1122CT-ND	.70	.58	.46	PCD1122TR-ND	248.00/M	ELJ-NAR18MF
0.22uH	10%	10	—	1.0, 25.2	280	0.90	210	PCD1123CT-ND	.70	.58	.46	PCD1123TR-ND	248.00/M	ELJ-NAR22KF
0.27uH	10%	10	—	1.0, 25.2	250	1.0	200	PCD1124CT-ND	.70	.58	.46	PCD1124TR-ND	248.00/M	ELJ-NAR27KF
0.33uH	10%	10	—	1.0, 25.2	220	1.1	190	PCD1125CT-ND	.70	.58	.46	PCD1125TR-ND	248.00/M	ELJ-NAR33KF
0.39uH	10%	10	—	1.0, 25.2	200	1.2	180	PCD1126CT-ND	.70	.58	.46	PCD1126TR-ND	248.00/M	ELJ-NAR39KF
0.47uH	10%	10	—	1.0, 25.2	180	1.4	175	PCD1127CT-ND	.70	.58	.46	PCD1127TR-ND	248.00/M	ELJ-NAR47KF
0.56uH	10%	10	—	1.0, 25.2	160	1.5	170	PCD1128CT-ND	.70	.58	.46	PCD1128TR-ND	248.00/M	ELJ-NAR56KF
0.68uH	10%	10	—	1.0, 25.2	150	1.7	155	PCD1129CT-ND	.70	.58	.46	PCD1129TR-ND	248.00/M	ELJ-NAR68KF
0.82uH	10%	10	—	1.0, 25.2	135	1.9	145	PCD1130CT-ND	.70	.58	.46	PCD1130TR-ND	248.00/M	ELJ-NAR82KF
1.0uH	5%	13	—	1.0, 7.96	120	2.1	125	PCD1131CT-ND	.70	.58	.46	PCD1131TR-ND	248.00/M	ELJ-NA1ROJF
1.2uH	5%	13	—	1.0, 7.96	110	2.3	120	PCD1132CT-ND	.70	.58	.46	PCD1132TR-ND	248.00/M	ELJ-NA1R2JF
1.5uH	5%	13	—	1.0, 7.96	95	2.7	115	PCD1133CT-ND	.70	.58	.46	PCD1133TR-ND	248.00/M	ELJ-NA1R5JF
1.8uH	5%	13	—	1.0, 7.96	85	3.0	110	PCD1134CT-ND	.70	.58	.46	PCD1134TR-ND	248.00/M	ELJ-NA1R8JF
2.2uH	5%	13	—	1.0, 7.96	80	3.2	110	PCD1135CT-ND	.70	.58	.46	PCD1135TR-ND	248.00/M	ELJ-NA2R2JF
2.7uH	5%	13	—	1.0, 7.96	70	3.6	105	PCD1136CT-ND	.70	.58	.46	PCD1136TR-ND	248.00/M	ELJ-NA2R7JF
3.3uH	5%	13	—	1.0, 7.96	62	4.2	100	PCD1137CT-ND	.70	.58	.46	PCD1137TR-ND	248.00/M	ELJ-NA3R3JF
3.9uH	5%	13	—	1.0, 7.96	57	4.4	95	PCD1138CT-ND	.70	.58	.46	PCD1138TR-ND	248.00/M	ELJ-NA3R9JF
4.7uH	5%	13	—	1.0, 7.96	52	7.7	70	PCD1139CT-ND	.70	.58	.46	PCD1139TR-ND	248.00/M	ELJ-NA4R7JF
5.6uH	5%	13	—	1.0, 7.96	46	8.7	65	PCD1140CT-ND	.70	.58	.46	PCD1140TR-ND	248.00/M	ELJ-NA5R6JF
6.8uH	5%	13	—	1.0, 7.96	42	10.0	60	PCD1141CT-ND	.70	.58	.46	PCD1141TR-ND	248.00/M	ELJ-NA6R8JF
8.2uH	5%	13	—	1.0, 7.96	38	11.0	60	PCD1142CT-ND	.70	.58	.46	PCD1142TR-ND	248.00/M	ELJ-NA8R2JF
Fig. 5, 1210 (3225) — Type SA														
10uH	10%	40	—	1.0, 5.0	30	1.8	18	PCD1097CT-ND	.70	.58	.46	PCD1097TR-ND	248.00/M	ELJ-SA100KF
12uH	10%	40	—	1.0, 5.0	28	2.0	17	PCD1098CT-ND	.70	.58	.46	PCD1098TR-ND	248.00/M	ELJ-SA120KF
15uH	10%	40	—	1.0, 5.0	25	2.2	15	PCD1099CT-ND	.70	.58	.46	PCD1099TR-ND	248.00/M	ELJ-SA150KF
18uH	10%	40	—	1.0, 5.0	23	2.5	13	PCD1100CT-ND	.70	.58	.46	PCD1100TR-ND	248.00/M	ELJ-SA180KF
22uH	10%	40	—	1.0, 5.0	20	2.8	12	PCD1101CT-ND	.70	.58	.46	PCD1101TR-ND	248.00/M	ELJ-SA220KF
27uH	10%	40	—	1.0, 5.0	18	3.2	10	PCD1102CT-ND	.70	.58	.46	PCD1102TR-ND	248.00/M	ELJ-SA270KF
33uH	10%	40	—	1.0, 5.0	17	3.5	10	PCD1103CT-ND	.70	.58	.46	PCD1103TR-ND	248.00/M	ELJ-SA330KF
39uH	10%	40	—	1.0, 5.0	15	3.8	9.0	PCD1104CT-ND	.70	.58	.46	PCD1104TR-ND	248.00/M	ELJ-SA390KF
47uH	10%	40	—	1.0, 5.0	14	4.0	8.0	PCD1105CT-ND	.70	.58	.46	PCD1105TR-ND	248.00/M	ELJ-SA470KF
56uH	10%	40	—	1.0, 5.0	13	4.5	7.0	PCD1106CT-ND	.70	.58	.46	PCD1106TR-ND	248.00/M	ELJ-SA560KF
68uH	10%	40	—	1.0, 1.5	12	5.0	6.0	PCD1107CT-ND	.70	.58	.46	PCD1107TR-ND	248.00/M	ELJ-SA680KF
82uH	10%	40	—	1.0, 1.5	11	6.0	6.0	PCD1108CT-ND	.70	.58	.46	PCD1108TR-ND	248.00/M	ELJ-SA820KF
100uH	10%	40	—	1.0, 1.5	10	7.0	5.0	PCD1109CT-ND	.70	.58	.46	PCD1109TR-ND	248.00/M	ELJ-SA101KF
120uH	10%	40	—	1.0, 1.5	9.0	8.0	5.0	PCD1110CT-ND	.70	.58	.46	PCD1110TR-ND	248.00/M	ELJ-SA121KF
150uH	10%	40	—	0.1, 1.5	5.0	9.0	5.0	PCD1111CT-ND	.70	.58	.46	PCD1111TR-ND	248.00/M	ELJ-SA151KF
180uH	10%	40	—	0.1, 1.5	5.0	11.0	5.0	PCD1112CT-ND	.70	.58	.46	PCD1112TR-ND	248.00/M	ELJ-SA181KF
220uH	10%	40	—	0.1, 1.5	4.0	12.0	5.0	PCD1113CT-ND	.70	.58	.46	PCD1113TR-ND	248.00/M	ELJ-SA221KF
270uH	10%	40	—	0.1, 1.5	4.0	14.0	5.0	PCD1114CT-ND	.70	.58	.46	PCD1114TR-ND	248.00/M	ELJ-SA271KF

(Continued)

Panasonic Surface Mount Inductors, *(Cont.)*

Inductance	Tolerance	Q Min	Q Typ @ 800 MHz	L,Q Test freq (MHz)	S.R.F. Min (MHz)	RDC Max (Ohm)	IDC Max (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T/R Pricing 2,000	Panasonic Part No.
Fig. 5, 1210 (3225) — Type EA														
1.0uH	20%	7	—	7.96	100	0.09	500	PCD1417CT-ND	.74	.61	.48	PCD1417TR-ND	260.00/M	ELJ-EA1R0MF
1.5uH	20%	7	—	7.96	80	0.10	390	PCD1418CT-ND	.74	.61	.48	PCD1418TR-ND	260.00/M	ELJ-EA1R5MF
2.2uH	20%	7	—	7.96	65	0.13	350	PCD1419CT-ND	.74	.61	.48	PCD1419TR-ND	260.00/M	ELJ-EA2R2MF
3.3uH	20%	7	—	7.96	50	0.16	270	PCD1420CT-ND	.74	.61	.48	PCD1420TR-ND	260.00/M	ELJ-EA3R3MF
4.7uH	20%	7	—	7.96	46	0.18	240	PCD1421CT-ND	.74	.61	.48	PCD1421TR-ND	260.00/M	ELJ-EA4R7MF
6.8uH	20%	7	—	7.96	36	0.25	200	PCD1422CT-ND	.74	.61	.48	PCD1422TR-ND	260.00/M	ELJ-EA6R8MF
10uH	10%	10	—	2.52	29	0.34	160	PCD1423CT-ND	.74	.61	.48	PCD1423TR-ND	260.00/M	ELJ-EA100KF
15uH	10%	10	—	2.52	25	0.42	145	PCD1424CT-ND	.74	.61	.48	PCD1424TR-ND	260.00/M	ELJ-EA150KF
22uH	10%	10	—	2.52	18	0.65	115	PCD1425CT-ND	.74	.61	.48	PCD1425TR-ND	260.00/M	ELJ-EA220KF
33uH	10%	10	—	2.52	16	0.91	95	PCD1426CT-ND	.74	.61	.48	PCD1426TR-ND	260.00/M	ELF-EA330KF
47uH	10%	10	—	2.52	13	1.30	80	PCD1427CT-ND	.74	.61	.48	PCD1427TR-ND	260.00/M	ELJ-EA470KF
68uH	10%	10	—	2.52	10	1.95	60	PCD1428CT-ND	.74	.61	.48	PCD1428TR-ND	260.00/M	ELJ-EA680KF
100uH	10%	20	—	0.796	8.0	3.12	50	PCD1429CT-ND	.74	.61	.48	PCD1429TR-ND	260.00/M	ELJ-EA101KF
150uH	10%	20	—	0.796	7.0	4.03	45	PCD1430CT-ND	.74	.61	.48	PCD1430TR-ND	260.00/M	ELJ-EA151KF
220uH	10%	20	—	0.796	5.0	7.15	35	PCD1431CT-ND	.74	.61	.48	PCD1431TR-ND	260.00/M	ELJ-EA221KF
330uH	10%	20	—	0.796	4.0	9.23	30	PCD1432CT-ND	.74	.61	.48	PCD1432TR-ND	260.00/M	ELJ-EA331KF
Fig. 5, 1210 (3225) — Type PA														
1.0uH	20%	7	—	7.96	150	0.15	600	PCD1478CT-ND	.67	.55	.44	PCD1478TR-ND	235.00/M	ELJ-PA1R0MF
1.5uH	20%	7	—	7.96	110	0.18	550	PCD1479CT-ND	.67	.55	.44	PCD1479TR-ND	235.00/M	ELJ-PA1R5MF
2.2uH	20%	7	—	7.96	80	0.23	500	PCD1480CT-ND	.67	.55	.44	PCD1480TR-ND	235.00/M	ELJ-PA2R2MF
3.3uH	20%	7	—	7.96	58	0.28	400	PCD1481CT-ND	.67	.55	.44	PCD1481TR-ND	235.00/M	ELJ-PA3R3MF
4.7uH	20%	7	—	7.96	46	0.34	350	PCD1482CT-ND	.67	.55	.44	PCD1482TR-ND	235.00/M	ELJ-PA4R7MF
6.8uH	20%	7	—	7.96	38	0.42	300	PCD1483CT-ND	.67	.55	.44	PCD1483TR-ND	235.00/M	ELJ-PA6R8MF
10uH	10%	15	—	2.52	23	0.50	240	PCD1484CT-ND	.67	.55	.44	PCD1484TR-ND	235.00/M	ELJ-PA100KF
12uH	10%	15	—	2.52	21	0.60	230	PCD1485CT-ND	.67	.55	.44	PCD1485TR-ND	235.00/M	ELJ-PA120KF
15uH	10%	15	—	2.52	18	0.74	220	PCD1486CT-ND	.67	.55	.44	PCD1486TR-ND	235.00/M	ELJ-PA150KF
18uH	10%	15	—	2.52	17	0.90	205	PCD1487CT-ND	.67	.55	.44	PCD1487TR-ND	235.00/M	ELJ-PA180KF
22uH	10%	15	—	2.52	15	1.15	185	PCD1488CT-ND	.67	.55	.44	PCD1488TR-ND	235.00/M	ELJ-PA220KF
27uH	10%	15	—	2.52	13	1.45	165	PCD1489CT-ND	.67	.55	.44	PCD1489TR-ND	235.00/M	ELJ-PA270KF
33uH	10%	15	—	2.52	12	1.65	155	PCD1490CT-ND	.67	.55	.44	PCD1490TR-ND	235.00/M	ELJ-PA330KF
39uH	10%	15	—	2.52	11	1.90	145	PCD1491CT-ND	.67	.55	.44	PCD1491TR-ND	235.00/M	ELJ-PA390KF
47uH	10%	15	—	2.52	9.5	2.25	135	PCD1492CT-ND	.67	.55	.44	PCD1492TR-ND	235.00/M	ELJ-PA470KF
56uH	10%	15	—	2.52	8.5	3.30	110	PCD1493CT-ND	.67	.55	.44	PCD1493TR-ND	235.00/M	ELJ-PA560KF
68uH	10%	15	—	2.52	7.5	3.70	105	PCD1494CT-ND	.67	.55	.44	PCD1494TR-ND	235.00/M	ELJ-PA680KF
82uH	10%	15	—	2.52	7.0	4.20	100	PCD1495CT-ND	.67	.55	.44	PCD1495TR-ND	235.00/M	ELJ-PA820KF
100uH	10%	20	—	0.796	6.5	5.00	90	PCD1496CT-ND	.67	.55	.44	PCD1496TR-ND	235.00/M	ELJ-PA101KF
120uH	10%	20	—	0.796	6.0	7.00	75	PCD1497CT-ND	.67	.55	.44	PCD1497TR-ND	235.00/M	ELJ-PA121KF
150uH	10%	20	—	0.796	5.5	8.00	70	PCD1498CT-ND	.67	.55	.44	PCD1498TR-ND	235.00/M	ELJ-PA151KF
180uH	10%	20	—	0.796	5.0	9.50	65	PCD1499CT-ND	.67	.55	.44	PCD1499TR-ND	235.00/M	ELJ-PA181KF
220uH	10%	20	—	0.796	4.0	11.0	60	PCD1500CT-ND	.67	.55	.44	PCD1500TR-ND	235.00/M	ELJ-PA221KF
270uH	10%	20	—	0.796	3.5	14.5	55	PCD1501CT-ND	.67	.55	.44	PCD1501TR-ND	235.00/M	ELJ-PA271KF
330uH	10%	20	—	0.796	3.0	16.0	50	PCD1502CT-ND	.67	.55	.44	PCD1502TR-ND	235.00/M	ELJ-PA331KF
Fig. 6, 1812 (4532) — Type FB														
Inductance	**Tolerance**	**Q Min**	**Q Typ @ 800 MHz**	**L,Q Test freq (MHz)**	**S.R.F. Min (MHz)**	**RDC Max (Ohm)**	**IDC Max (mA)**	**Digi-Key Part No.**	**Cut Tape Price Each 1**	**10**	**100**	**Digi-Key Part No.**	**T/R Pricing 500**	**Panasonic Part No.**
.22uH	20%	30	—	25.2	230	0.30	700	PCD1433CT-ND	.68	.57	.45	PCD1433TR-ND	180.00	ELJ-FBR22MF
.27uH	20%	30	—	25.2	200	0.32	650	PCD1434CT-ND	.68	.57	.45	PCD1434TR-ND	180.00	ELJ-FBR27MF
.33uH	20%	30	—	25.2	180	0.35	630	PCD1435CT-ND	.68	.57	.45	PCD1435TR-ND	180.00	ELJ-FBR33MF
.39uH	20%	30	—	25.2	155	0.37	620	PCD1436CT-ND	.68	.57	.45	PCD1436TR-ND	180.00	ELJ-FBR39MF
.47uH	20%	30	—	25.2	135	0.40	580	PCD1437CT-ND	.68	.57	.45	PCD1437TR-ND	180.00	ELJ-FBR47MF
.56uH	20%	30	—	25.2	120	0.42	560	PCD1438CT-ND	.68	.57	.45	PCD1438TR-ND	180.00	ELJ-FBR56MF
.68uH	20%	30	—	25.2	105	0.48	530	PCD1439CT-ND	.68	.57	.45	PCD1439TR-ND	180.00	ELJ-FBR68MF
.82uH	20%	30	—	25.2	90	0.50	500	PCD1440CT-ND	.68	.57	.45	PCD1440TR-ND	180.00	ELJ-FBR82MF
1.0uH	10%	30	—	25.2	80	0.52	470	PCD1441CT-ND	.71	.59	.47	PCD1441TR-ND	189.00	ELJ-FB1R0KF
1.2uH	10%	30	—	25.2	70	0.55	460	PCD1442CT-ND	.71	.59	.47	PCD1442TR-ND	189.00	ELJ-FB1R2KF
1.5uH	10%	30	—	25.2	60	0.61	430	PCD1443CT-ND	.71	.59	.47	PCD1443TR-ND	189.00	ELJ-FB1R5KF
1.8uH	10%	30	—	25.2	50	0.61	410	PCD1444CT-ND	.71	.59	.47	PCD1444TR-ND	189.00	ELJ-FB1R8KF
2.2uH	10%	30	—	7.96	45	0.61	410	PCD1445CT-ND	.71	.59	.47	PCD1445TR-ND	189.00	ELJ-FB2R2KF
2.7uH	10%	50	—	7.96	43	0.61	400	PCD1446CT-ND	.71	.59	.47	PCD1446TR-ND	189.00	ELJ-FB2R7KF
3.3uH	10%	50	—	7.96	39	0.66	380	PCD1447CT-ND	.71	.59	.47	PCD1447TR-ND	189.00	ELJ-FB3R3KF
3.9uH	10%	50	—	7.96	36	0.74	360	PCD1448CT-ND	.71	.59	.47	PCD1448TR-ND	189.00	ELJ-FB3R9KF
4.7uH	10%	50	—	5.0	33	0.81	350	PCD1449CT-ND	.71	.59	.47	PCD1449TR-ND	189.00	ELJ-FB4R7KF
5.6uH	10%	50	—	5.0	30	0.88	330	PCD1450CT-ND	.71	.59	.47	PCD1450TR-ND	189.00	ELJ-FB5R6KF
6.8uH	10%	50	—	5.0	26	1.0	310	PCD1451CT-ND	.71	.59	.47	PCD1451TR-ND	189.00	ELJ-FB6R8KF
8.2uH	10%	50	—	5.0	24	1.6	250	PCD1452CT-ND	.71	.59	.47	PCD1452TR-ND	189.00	ELJ-FB8R2KF
10uH	5%	50	—	5.0	22	1.8	235	PCD1453CT-ND	.74	.61	.48	PCD1453TR-ND	195.50	ELJ-FB100JF
12uH	5%	50	—	5.0	20	1.9	225	PCD1454CT-ND	.74	.61	.48	PCD1454TR-ND	195.50	ELJ-FB120JF
15uH	5%	50	—	5.0	18	2.1	215	PCD1455CT-ND	.74	.61	.48	PCD1455TR-ND	195.50	ELJ-FB150JF
18uH	5%	50	—	5.0	16	2.3	205	PCD1456CT-ND	.74	.61	.48	PCD1456TR-ND	195.50	ELJ-FB180JF
22uH	5%	50	—	2.52	15	2.6	195	PCD1457CT-ND	.74	.61	.48	PCD1457TR-ND	195.50	ELJ-FB220JF
27uH	5%	50	—	2.52	13	2.9	185	PCD1458CT-ND	.74	.61	.48	PCD1458TR-ND	195.50	ELJ-FB270JF
33uH	5%	50	—	2.52	12	3.1	175	PCD1459CT-ND	.74	.61	.48	PCD1459TR-ND	195.50	ELJ-FB330JF
39uH	5%	50	—	2.52	10	3.6	165	PCD1460CT-ND	.74	.61	.48	PCD1460TR-ND	195.50	ELJ-FB390JF
47uH	5%	50	—	2.52	9.7	4.2	130	PCD1461CT-ND	.74	.61	.48	PCD1461TR-ND	195.50	ELJ-FB470JF
56uH	5%	40	—	2.52	9.0	4.7	125	PCD1462CT-ND	.74	.61	.48	PCD1462TR-ND	195.50	ELJ-FB560JF
68uH	5%	40	—	2.52	8.2	5.3	115	PCD1463CT-ND	.74	.61	.48	PCD1463TR-ND	195.50	ELJ-FB680JF
82uH	5%	40	—	2.52	7.5	5.9	110	PCD1464CT-ND	.74	.61	.48	PCD1464TR-ND	195.50	ELJ-FB820JF
100uH	5%	40	—	2.52	6.7	8.8	105	PCD1465CT-ND	.74	.61	.48	PCD1465TR-ND	195.50	ELJ-FB101JF
120uH	5%	40	—	1.5	6.1	10	100	PCD1466CT-ND	.74	.61	.48	PCD1466TR-ND	195.50	ELJ-FB121JF
150uH	5%	40	—	1.5	5.5	11	95	PCD1467CT-ND	.74	.61	.48	PCD1467TR-ND	195.50	ELJ-FB151JF
180uH	5%	40	—	1.5	5.1	13	85	PCD1468CT-ND	.74	.61	.48	PCD1468TR-ND	195.50	ELJ-FB181JF
220uH	5%	40	—	0.796	4.5	13	85	PCD1469CT-ND	.74	.61	.48	PCD1469TR-ND	195.50	ELJ-FB221JF
270uH	5%	40	—	0.796	4.1	14	80	PCD1470CT-ND	.74	.61	.48	PCD1470TR-ND	195.50	ELJ-FB271JF
330uH	5%	40	—	0.796	3.7	16	75	PCD1471CT-ND	.74	.61	.48	PCD1471TR-ND	195.50	ELJ-FB331JF
390uH	5%	40	—	0.796	3.3	19	70	PCD1472CT-ND	.74	.61	.48	PCD1472TR-ND	195.50	ELJ-FB391JF
470uH	5%	30	—	0.796	3.3	31	55	PCD1473CT-ND	.74	.61	.48	PCD1473TR-ND	195.50	ELJ-FB471JF
560uH	5%	30	—	0.796	2.7	35	50	PCD1474CT-ND	.74	.61	.48	PCD1474TR-ND	195.50	ELJ-FB561JF
680uH	5%	30	—	0.796	2.5	39	50	PCD1475CT-ND	.74	.61	.48	PCD1475TR-ND	195.50	ELJ-FB681JF
820uH	5%	30	—	0.796	2.4	45	45	PCD1476CT-ND	.74	.61	.48	PCD1476TR-ND	195.50	ELJ-FB821JF
1000uH	5%	30	—	0.796	2.1	53	40	PCD1477CT-ND	.74	.61	.48	PCD1477TR-ND	195.50	ELJ-FB102JF
NEW! Fig. 6, 1812 (4532) — Type PB NEW!														
10uH	10%	10	—	2.52	19	0.65	360	PCD1522CT-ND	.97	.80	.63	PCD1522TR-ND	256.50	ELJ-PB100KF
12uH	10%	10	—	2.52	17	0.70	340	PCD1523CT-ND	.97	.80	.63	PCD1523TR-ND	256.50	ELJ-PB120KF
15uH	10%	10	—	2.52	15	0.80	320	PCD1524CT-ND	.97	.80	.63	PCD1524TR-ND	256.50	ELJ-PB150KF
18uH	10%	10	—	2.52	14	0.90	310	PCD1525CT-ND	.97	.80	.63	PCD1525TR-ND	256.50	ELJ-PB180KF
22uH	10%	10	—	2.52	13	1.00	300	PCD1526CT-ND	.97	.80	.63	PCD1526TR-ND	256.50	ELJ-PB220KF
27uH	10%	10	—	2.52	11	1.20	270	PCD1527CT-ND	.97	.80	.63	PCD1527TR-ND	256.50	ELJ-PB270KF
33uH	10%	10	—	2.52	10	1.40	250	PCD1528CT-ND	.97	.80	.63	PCD1528TR-ND	256.50	ELJ-PB330KF
39uH	10%	10	—	2.52	9.5	1.60	230	PCD1529CT-ND	.97	.80	.63	PCD1529TR-ND	256.50	ELJ-PB390KF
47uH	10%	10	—	2.52	8.5	1.90	210	PCD1530CT-ND	.97	.80	.63	PCD1530TR-ND	256.50	ELJ-PB470KF
56uH	10%	10	—	2.52	8	2.20	190	PCD1531CT-ND	.97	.80	.63	PCD1531TR-ND	256.50	ELJ-PB560KF
68uH	10%	10	—	2.52	7	2.60	170	PCD1532CT-ND	.97	.80	.63	PCD1532TR-ND	256.50	ELJ-PB680KF
82uH	10%	10	—	2.52	6.5	3.50	160	PCD1533CT-ND	.97	.80	.63	PCD1533TR-ND	256.50	ELJ-PB820KF
100uH	10%	20	—	0.796	6	4.00	150	PCD1534CT-ND	.97	.80	.63	PCD1534TR-ND	256.50	ELJ-PB101KF
120uH	10%	20	—	0.796	5.5	4.50	130	PCD1535CT-ND	.97	.80	.63	PCD1535TR-ND	256.50	ELJ-PB121KF
150uH	10%	20	—	0.796	5	6.50	120	PCD1536CT-ND	.97	.80	.63	PCD1536TR-ND	256.50	ELJ-PB151KF
180uH	10%	20	—	0.796	4.5	7.50	110	PCD1537CT-ND	.97	.80	.63	PCD1537TR-ND	256.50	ELJ-PB181KF
220uH	10%	20	—	0.796	4	9.00	90	PCD1538CT-ND	.97	.80	.63	PCD1538TR-ND	256.50	ELJ-PB221KF

Panasonic

Voltage Step-Up Coil

High inductance Voltage Step-up coil chip series for piezo-electric buzzer and DC-DC circuit of EL

Features: • Small and thin • High inductance

Recommended Applications: • Watches, Toys, Camera, Electronic thermometers, Pagers, PHS, Portable telephones

Operating Temperature: -20°C to +85°C (-20°C to +105°C for the 5KT Type).

Fig. 1

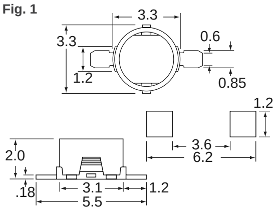


Fig. 2 *NEW!*

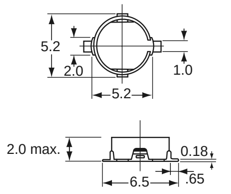


Fig. 3 *NEW!*

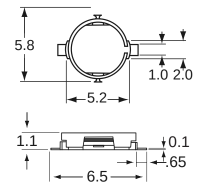


Fig.	Induc-tance (µH)	Tolerance (%)	Rated Current mA	DCR Ohm ±15%	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing	Panasonic Part No.
3KN Type												
1	560	—	45	15	PCD1397CT-ND	2.14	1.77	1.39	PCD1397TR-ND	1,000	756.00	ELT-3KN128B
	1.0	—	30	35	PCD1398CT-ND	2.14	1.77	1.39	PCD1398TR-ND	1,000	756.00	ELT-3KN104B
	1.0	—	40	23	PCD1399CT-ND	2.14	1.77	1.39	PCD1399TR-ND	1,000	756.00	ELT-3KN121B
	1.0	—	30	25	PCD1400CT-ND	2.14	1.77	1.39	PCD1400TR-ND	1,000	756.00	ELT-3KN123B
	2.0	—	20	44	PCD1401CT-ND	2.14	1.77	1.39	PCD1401TR-ND	1,000	756.00	ELT-3KN131B
	2.5	—	20	64	PCD1402CT-ND	2.14	1.77	1.39	PCD1402TR-ND	1,000	756.00	ELT-3KN118B
	4.0	—	15	85	PCD1403CT-ND	2.14	1.77	1.39	PCD1403TR-ND	1,000	756.00	ELT-3KN124B
NEW! 5KN Type NEW!												
2	220.0	±10	100	2.4	PCD1550CT-ND	2.58	2.13	1.68	PCD1550TR-ND	4,000	912.00/M	ELT-5KN127C
	560.0	±10	60	6.0	PCD1551CT-ND	2.58	2.13	1.68	PCD1551TR-ND	4,000	912.00/M	ELT-5KN118C
	390	±10	120	2.8	PCD1552CT-ND	2.58	2.13	1.68	PCD1552TR-ND	4,000	912.00/M	ELT-5KN131C
	1000	±10	55	11.5	PCD1553CT-ND	2.58	2.13	1.68	PCD1553TR-ND	4,000	912.00/M	ELT-5KN134C
	1500	±10	40	20.0	PCD1554CT-ND	2.58	2.13	1.68	PCD1554TR-ND	4,000	912.00/M	ELT-5KN135C
	2700	±10	35	33.0	PCD1555CT-ND	2.58	2.13	1.68	PCD1555TR-ND	4,000	912.00/M	ELT-5KN120C
NEW! 5KT Type NEW!												
3	3.3	±20	1000	0.17	PCD1556CT-ND	2.83	2.33	1.83	PCD1556TR-ND	5,000	998.00/M	ELT-5KT3R3M
	4.7	±20	950	0.20	PCD1557CT-ND	2.83	2.33	1.83	PCD1557TR-ND	5,000	998.00/M	ELT-5KT4R7M
	6.8	±20	760	0.30	PCD1558CT-ND	2.83	2.33	1.83	PCD1558TR-ND	5,000	998.00/M	ELT-5KT6R8M
	10.0	±20	680	0.36	PCD1559CT-ND	2.83	2.33	1.83	PCD1559TR-ND	5,000	998.00/M	ELT-5KT100M
	15.0	±15	510	0.58	PCD1560CT-ND	2.83	2.33	1.83	PCD1560TR-ND	5,000	998.00/M	ELT-5KT150L
	22.0	±15	420	0.90	PCD1561CT-ND	2.83	2.33	1.83	PCD1561TR-ND	5,000	998.00/M	ELT-5KT220L
	33.0	±15	360	1.20	PCD1562CT-ND	2.83	2.33	1.83	PCD1562TR-ND	5,000	998.00/M	ELT-5KT330L
	47.0	±15	300	1.70	PCD1563CT-ND	2.83	2.33	1.83	PCD1563TR-ND	5,000	998.00/M	ELT-5KT470L
	68.0	±15	260	2.60	PCD1564CT-ND	2.83	2.33	1.83	PCD1564TR-ND	5,000	998.00/M	ELT-5KT680L
	100.0	±15	190	4.30	PCD1565CT-ND	2.83	2.33	1.83	PCD1565TR-ND	5,000	998.00/M	ELT-5KT101L

Panasonic

SMD Power Choke Coils

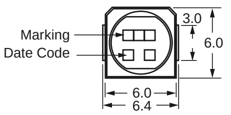
ELL6RH and ELL6SH Types

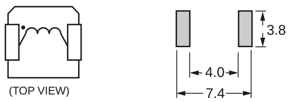
Magnetic Shielded Series

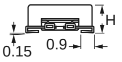
Features:
- Thin type (ELL6RH – 2.5mm height, ELL6SH – 3.0mm height)
- Higher reliability in mounting by separated user terminal and internal connection
- High current

Recommended Applications:
- Video, audio, mobile communications, electric battery driving equipment
- Choke coils for chopper circuit, and decoupling choke in DC/DC convertor circuit

Cautions for Use:
- DC/DC convertor — Chopper type: 1W maximum
- Operating Temperature: 105°C maximum (including self-temperature rise)







Type	Height
ELL6RH	2.5±0.3mm
ELL6SH	3.0±0.3mm

Series	Inductance at 100kHz Tol. ±20%	DCR at 20°C Tol. ±20%	Rated Current* (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	Panasonic Part No.
ELL6RH	1.0µH	0.019Ω	3000	PCD1337CT-ND	1.76	1.45	1.14	PCD1337TR-ND	622.00	ELL-6RH1R0M
	1.5µH	0.024Ω	2400	PCD1338CT-ND	1.76	1.45	1.14	PCD1338TR-ND	622.00	ELL-6RH1R5M
	2.7µH	0.039Ω	1800	PCD1339CT-ND	1.76	1.45	1.14	PCD1339TR-ND	622.00	ELL-6RH2R7M
	3.3µH	0.044Ω	1600	PCD1340CT-ND	1.76	1.45	1.14	PCD1340TR-ND	622.00	ELL-6RH3R3M
	5.1µH	0.056Ω	1550	PCD1341CT-ND	1.76	1.45	1.14	PCD1341TR-ND	622.00	ELL-6RH5R1M
	6.2µH	0.062Ω	1400	PCD1342CT-ND	1.76	1.45	1.14	PCD1342TR-ND	622.00	ELL-6RH6R2M
	7.5µH	0.080Ω	1250	PCD1343CT-ND	1.76	1.45	1.14	PCD1343TR-ND	622.00	ELL-6RH7R5M
	8.2µH	0.087Ω	1200	PCD1344CT-ND	1.76	1.45	1.14	PCD1344TR-ND	622.00	ELL-6RH8R2M
	10µH	0.095Ω	1100	PCD1345CT-ND	1.76	1.45	1.14	PCD1345TR-ND	622.00	ELL-6RH100M
	12µH	0.13Ω	1000	PCD1346CT-ND	1.76	1.45	1.14	PCD1346TR-ND	622.00	ELL-6RH120M
	15µH	0.15Ω	850	PCD1347CT-ND	1.76	1.45	1.14	PCD1347TR-ND	622.00	ELL-6RH150M
	18µH	0.17Ω	800	PCD1348CT-ND	1.76	1.45	1.14	PCD1348TR-ND	622.00	ELL-6RH180M
	22µH	0.22Ω	700	PCD1349CT-ND	1.76	1.45	1.14	PCD1349TR-ND	622.00	ELL-6RH220M
	27µH	0.26Ω	650	PCD1350CT-ND	1.76	1.45	1.14	PCD1350TR-ND	622.00	ELL-6RH270M
	33µH	0.38Ω	600	PCD1351CT-ND	1.76	1.45	1.14	PCD1351TR-ND	622.00	ELL-6RH330M
	39µH	0.41Ω	550	PCD1352CT-ND	1.76	1.45	1.14	PCD1352TR-ND	622.00	ELL-6RH390M
	47µH	0.48Ω	500	PCD1353CT-ND	1.76	1.45	1.14	PCD1353TR-ND	622.00	ELL-6RH470M
	56µH	0.54Ω	450	PCD1354CT-ND	1.76	1.45	1.14	PCD1354TR-ND	622.00	ELL-6RH560M
	68µH	0.77Ω	400	PCD1355CT-ND	1.76	1.45	1.14	PCD1355TR-ND	622.00	ELL-6RH680M
	82µH	0.87Ω	350	PCD1356CT-ND	1.76	1.45	1.14	PCD1356TR-ND	622.00	ELL-6RH820M
	100µH	1.00Ω	300	PCD1357CT-ND	1.76	1.45	1.14	PCD1357TR-ND	622.00	ELL-6RH101M
	120µH	1.50Ω	280	PCD1358CT-ND	1.76	1.45	1.14	PCD1358TR-ND	622.00	ELL-6RH121M
	150µH	1.80Ω	250	PCD1359CT-ND	1.76	1.45	1.14	PCD1359TR-ND	622.00	ELL-6RH151M
	180µH	2.00Ω	230	PCD1360CT-ND	1.76	1.45	1.14	PCD1360TR-ND	622.00	ELL-6RH181M
	220µH	2.30Ω	200	PCD1361CT-ND	1.76	1.45	1.14	PCD1361TR-ND	622.00	ELL-6RH221M
ELL6SH	1.0µH	0.019Ω	3400	PCD1362CT-ND	1.76	1.45	1.14	PCD1362TR-ND	622.00	ELL-6SH1R0M
	1.5µH	0.024Ω	3200	PCD1363CT-ND	1.76	1.45	1.14	PCD1363TR-ND	622.00	ELL-6SH1R5M
	2.7µH	0.031Ω	2400	PCD1364CT-ND	1.76	1.45	1.14	PCD1364TR-ND	622.00	ELL-6SH2R7M
	3.3µH	0.034Ω	2200	PCD1365CT-ND	1.76	1.45	1.14	PCD1365TR-ND	622.00	ELL-6SH3R3M
	4.7µH	0.042Ω	2000	PCD1366CT-ND	1.76	1.45	1.14	PCD1366TR-ND	622.00	ELL-6SH4R7M
	5.6µH	0.049Ω	1800	PCD1367CT-ND	1.76	1.45	1.14	PCD1367TR-ND	622.00	ELL-6SH5R6M
	6.8µH	0.052Ω	1500	PCD1368CT-ND	1.76	1.45	1.14	PCD1368TR-ND	622.00	ELL-6SH6R8M
	8.2µH	0.061Ω	1400	PCD1369CT-ND	1.76	1.45	1.14	PCD1369TR-ND	622.00	ELL-6SH8R2M
	10µH	0.065Ω	1300	PCD1370CT-ND	1.76	1.45	1.14	PCD1370TR-ND	622.00	ELL-6SH100M
	12µH	0.071Ω	1200	PCD1371CT-ND	1.76	1.45	1.14	PCD1371TR-ND	622.00	ELL-6SH120M
	15µH	0.096Ω	1100	PCD1372CT-ND	1.76	1.45	1.14	PCD1372TR-ND	622.00	ELL-6SH150M
	18µH	0.13Ω	1000	PCD1373CT-ND	1.76	1.45	1.14	PCD1373TR-ND	622.00	ELL-6SH180M
	22µH	0.14Ω	900	PCD1374CT-ND	1.76	1.45	1.14	PCD1374TR-ND	622.00	ELL-6SH220M
	27µH	0.16Ω	800	PCD1375CT-ND	1.76	1.45	1.14	PCD1375TR-ND	622.00	ELL-6SH270M
	33µH	0.18Ω	700	PCD1376CT-ND	1.76	1.45	1.14	PCD1376TR-ND	622.00	ELL-6SH330M
	39µH	0.24Ω	650	PCD1377CT-ND	1.76	1.45	1.14	PCD1377TR-ND	622.00	ELL-6SH390M
	47µH	0.27Ω	600	PCD1378CT-ND	1.76	1.45	1.14	PCD1378TR-ND	622.00	ELL-6SH470M
	56µH	0.29Ω	550	PCD1379CT-ND	1.76	1.45	1.14	PCD1379TR-ND	622.00	ELL-6SH560M
	68µH	0.52Ω	500	PCD1380CT-ND	1.76	1.45	1.14	PCD1380TR-ND	622.00	ELL-6SH680M
	82µH	0.60Ω	450	PCD1381CT-ND	1.76	1.45	1.14	PCD1381TR-ND	622.00	ELL-6SH820M
	100µH	0.68Ω	400	PCD1382CT-ND	1.76	1.45	1.14	PCD1382TR-ND	622.00	ELL-6SH101M
	120µH	0.75Ω	370	PCD1383CT-ND	1.76	1.45	1.14	PCD1383TR-ND	622.00	ELL-6SH121M
	150µH	0.86Ω	350	PCD1384CT-ND	1.76	1.45	1.14	PCD1384TR-ND	622.00	ELL-6SH151M
	180µH	1.30Ω	300	PCD1385CT-ND	1.76	1.45	1.14	PCD1385TR-ND	622.00	ELL-6SH181M
	220µH	1.40Ω	280	PCD1386CT-ND	1.76	1.45	1.14	PCD1386TR-ND	622.00	ELL-6SH221M
	270µH	2.40Ω	260	PCD1387CT-ND	1.76	1.45	1.14	PCD1387TR-ND	622.00	ELL-6SH271M
	330µH	2.70Ω	240	PCD1388CT-ND	1.76	1.45	1.14	PCD1388TR-ND	622.00	ELL-6SH331M
	390µH	2.80Ω	210	PCD1389CT-ND	1.76	1.45	1.14	PCD1389TR-ND	622.00	ELL-6SH391M
	470µH	3.20Ω	200	PCD1390CT-ND	1.76	1.45	1.14	PCD1390TR-ND	622.00	ELL-6SH471M
	560µH	3.70Ω	180	PCD1391CT-ND	1.76	1.45	1.14	PCD1391TR-ND	622.00	ELL-6SH561M

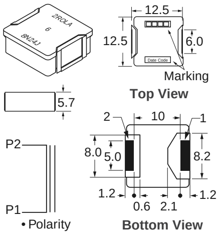
* Rated Current: This indicates the value of current when the inductance is 80% more than nominal value and temperature rising Δt=45°C lower at D.C. superposition (at 20°C).

Panasonic SMD Power Choke Coils

PCC-N6 Type — Thin, Compact and High Power

Features:
- High power type
- Thin type (5.7mm height)
- Low leakage flux

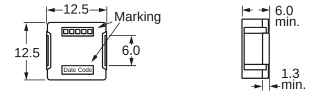
Recommended Applications:
- DC/DC converter for driving PC at high speed
- Thin type on-board power supply module for exchanger (10~40W)



Series	Inductance Initial at 25°C (100 KHz) L_0 (µH)	Inductance At Flat Point at 25°C (100 KHz) L_1 (µH)	Saturation Current At 25°C I sat (A) min.	Saturation Current At 100°C I sat (A) min.	Heat Rating Current ∆T=40K(°C) I_0 (A) Ref. Only	DC Resistance At 20°C DCR (mΩ) max.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	Panasonic Part No.
HL	2.3±30%	1.2±30%	14.3	11.7	14.2	2.24	PCD1307CT-ND	5.78	4.95	3.30	PCD1307TR-ND	1113.75	ETQ-P6F1R2HFA
	3.5±30%	2.0±30%	10.7	8.7	12.5	3.30	PCD1308CT-ND	5.78	4.95	3.30	PCD1308TR-ND	1113.75	ETQ-P6F2R0HFA
	4.8±25%	3.2±25%	8.6	7.1	10.8	4.92	PCD1309CT-ND	5.78	4.95	3.30	PCD1309TR-ND	1113.75	ETQ-P6F3R2HFA
	6.6±25%	4.6±25%	7.3	6.0	9.3	6.48	PCD1310CT-ND	5.78	4.95	3.30	PCD1310TR-ND	1113.75	ETQ-P6F4R6HFA
	8.3±25%	6.4±25%	6.2	5.2	7.9	8.64	PCD1311CT-ND	5.78	4.95	3.30	PCD1311TR-ND	1113.75	ETQ-P6F6R4HFA
	10.4±25%	8.2±25%	5.6	4.7	7.2	10.9	PCD1312CT-ND	5.78	4.95	3.30	PCD1312TR-ND	1113.75	ETQ-P6F8R2HFA
	12.5±25%	10.2±25%	4.7	4.0	6.5	13.3	PCD1313CT-ND	5.78	4.95	3.30	PCD1313TR-ND	1113.75	ETQ-P6F102HFA
SP	1.9±30%	1.0±30%	19.4	15.4	14.2	2.24	PCD1314CT-ND	5.78	4.95	3.30	PCD1314TR-ND	1113.75	ETQ-P6F1R0SFA
	2.8±30%	1.6±30%	14.9	12.2	12.5	3.30	PCD1315CT-ND	5.78	4.95	3.30	PCD1315TR-ND	1113.75	ETQ-P6F1R6SFA
	3.6±30%	2.5±30%	11.3	9.3	10.8	4.92	PCD1316CT-ND	5.78	4.95	3.30	PCD1316TR-ND	1113.75	ETQ-P6F2R5SFA
	4.9±30%	3.5±30%	9.5	8.0	9.3	6.48	PCD1392CT-ND	5.78	4.95	3.30	PCD1392TR-ND	1113.75	ETQ-P6F3R5SFA
LB	1.8±30%	0.8±30%	25.2	20.0	14.2	2.24	PCD1317CT-ND	5.78	4.95	3.30	PCD1317TR-ND	1113.75	ETQ-P6F0R8LFA
	2.5±30%	1.3±30%	18.6	15.8	12.5	3.30	PCD1318CT-ND	5.78	4.95	3.30	PCD1318TR-ND	1113.75	ETQ-P6F1R3LFA
	3.1±30%	2.0±30%	15.1	12.1	10.8	4.92	PCD1319CT-ND	5.78	4.95	3.30	PCD1319TR-ND	1113.75	ETQ-P6F2R0LFA
	4.1±30%	2.9±30%	12.0	10.0	9.3	6.48	PCD1320CT-ND	5.78	4.95	3.30	PCD1320TR-ND	1113.75	ETQ-P6F2R9LFA
	5.0±20%	4.1±20%	10.8	8.7	7.9	8.64	PCD1321CT-ND	5.78	4.95	3.30	PCD1321TR-ND	1113.75	ETQ-P6F4R1LFA

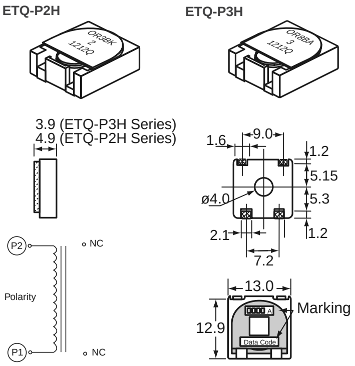
N6B Type — High Rated Current, Low Profile and Low Loss

Applications:
- DC/DC converter for cpu in PC or video game machine
- Thin type on-board power supply for switchboards



Inductance (at 20°C) (Tol. = ±20%) L1 (µH)	L1 Meas. Current	L2 (µH)	L2 Meas. Current	DC Resistance (at 20°C) DCR (mΩ) Max.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	Panasonic Part No
0.58	at 19A	0.54	at 27A	1.44	PCD1393CT-ND	7.25	6.22	4.15	PCD1393TR-ND	1398.60	ETQ-P6F0R6BFA
1.06	at 16A	0.99	at 22A	2.24	PCD1394CT-ND	7.25	6.22	4.15	PCD1394TR-ND	1398.60	ETQ-P6F1R1BFA
1.71	at 14A	1.50	at 20A	3.30	PCD1395CT-ND	7.25	6.22	4.15	PCD1395TR-ND	1398.60	ETQ-P6F1R8BFA
2.45	at 12A	2.17	at 17A	4.92	PCD1396CT-ND	7.25	6.22	4.15	PCD1396TR-ND	1398.60	ETQ-P6F2R5BFA

NEW! PCC-NX1/NX2 Type — Small and Ultra Thin, High Current and Low Loss



Features: • High Power: 1 sat(<29A) • High Inductance: 0.7-2.5 µH • Low Resistance: 1.3-5.0mΩ • Small Mount Area: 13.0-12.8 • Height: ETQ-P3H: 3.9mm, ETQ-P2H: 4.9mm

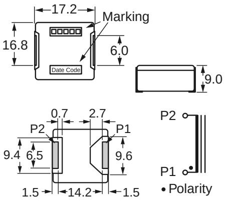
Applications: • PC High speed of CPU: Notebook PC

Series	Inductance (at 20°C) (Tol. = ±20%) L1 (µH)	L1 Meas. Current	L2* (µH)	L2* Meas. Current	DC Resist. (at 20°C) DCR (mΩ) Max.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	Panasonic Part No
ETQ-P2H	0.33±20%	23A	0.30	32A	0.89	PCD1566CT-ND	7.32	6.27	4.18	PCD1566TR-ND	1410.75	ETQ-P2H0R3BFK
	0.69±20%	21A	0.59	29A	1.30	PCD1567CT-ND	7.32	6.27	4.18	PCD1567TR-ND	1410.75	ETQ-P2H0R7BFA
	1.22±20%	16A	1.04	22A	2.27	PCD1568CT-ND	7.32	6.27	4.18	PCD1568TR-ND	1410.75	ETQ-P2H1R2BFA
	1.83±20%	14A	1.49	20A	3.48	PCD1569CT-ND	7.32	6.27	4.18	PCD1569TR-ND	1410.75	ETQ-P2H1R8BFA
	2.61±20%	12A	2.12	17A	4.98	PCD1570CT-ND	7.32	6.27	4.18	PCD1570TR-ND	1410.75	ETQ-P2H2R6BFA
ETQ-P3H	0.80±25%	16A	0.71	22A	2.59	PCD1571CT-ND	7.32	6.27	4.18	PCD1571TR-ND	1410.75	ETQ-P3H0R8BFA
	1.43±25%	12A	1.25	17A	4.52	PCD1572CT-ND	7.32	6.27	4.18	PCD1572TR-ND	1410.75	ETQ-P3H1R4BFA

* Reference only

PCC-S1 Type — High Inductance and High Current

Features: • High inductance • High current.
Recommended Applications: • DC/DC converter • Computer network • Telcom base station



Series	Inductance Initial at 25°C (100 KHz) L_0 (µH)	Inductance At Flat Point at 25°C (100 KHz) L_1 (µH)	Saturation Current At 25°C I sat (A) min.	Saturation Current At 100°C I sat (A) min.	Heat Rating Current ∆T=40K(°C) I_0 (A) Ref. Only	DC Resistance At 20°C DCR (mΩ) max.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 250	Panasonic Part No.
HL	2.9±30%	1.2±30%	21.4	18.0	22.6	1.00	PCD1331CT-ND	11.56	7.71	6.40	PCD1331TR-ND	1300.32	ETQ-PAF1R2HFA
	4.6±30%	2.7±30%	15.5	12.5	17.5	1.56	PCD1332CT-ND	11.56	7.71	6.40	PCD1332TR-ND	1300.32	ETQ-PAF2R7HFA
	6.8±30%	4.8±30%	10.6	9.0	14.4	2.29	PCD1333CT-ND	11.56	7.71	6.40	PCD1333TR-ND	1300.32	ETQ-PAF4R8HFA
	9.7±30%	7.2±30%	8.6	7.3	12.0	3.31	PCD1334CT-ND	11.56	7.71	6.40	PCD1334TR-ND	1300.32	ETQ-PAF7R2HFA
EX	1.9±30%	0.7±30%	50.4	42.3	22.6	1.00	PCD1335CT-ND	11.56	7.71	6.40	PCD1335TR-ND	1300.32	ETQ-PAF0R7EFA
	2.9±30%	1.3±30%	36.7	30.0	17.5	1.56	PCD1336CT-ND	11.56	7.71	6.40	PCD1336TR-ND	1300.32	ETQ-PAF1R3EFA

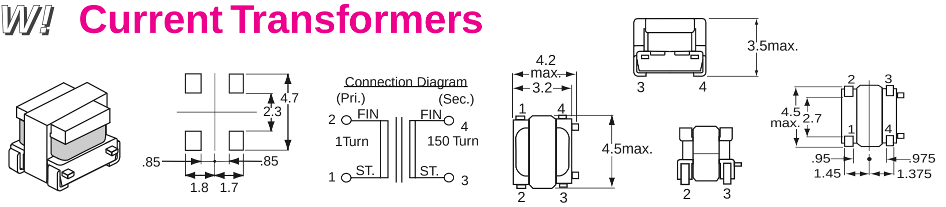
Panasonic NEW! Current Transformers

Transformer for over current detection of switching power supply.

Features:
- Small and low profile
- Low-loss
- Capable of automatic mounting

Recommended Applications:
- On-board power supply
- Power module

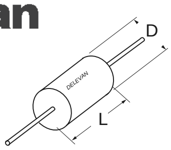
Performance Characteristics:
- Operating Temperature: -40°C to 115°C
- Frequency Range: f = 200 kHz to 500 kHz, Duty = 30% to 50%
- Dielectric Withstanding Voltage: P:S - AC 500 V[rms], 1 min.



Inductance Term 3~4 ±50%	DCR (@20°C) Term 1~2 ±Max.	DCR (@20°C) Term 3~4 ±20%	Turns Ratio ±5%	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	Panasonic Part No.
2.6mH	0.003Ω	17Ω	0.0064	PCD1548CT-ND	4.85	3.23	2.69	PCD1548TR-ND	1090.13	ETJ-04K1AZ
1.18mH	0.003Ω	11.3Ω	0.0096	PCD1549CT-ND	4.85	3.23	2.69	PCD1549TR-ND	1090.13	ETJ-04K2AZ

API Delevan

Coils and Inductors



Series 1025
Molded Unshielded RF Coils

Dimensions L	Dimensions D	Lead Size AWG #24 (TWC)	Lead Length
.250” (6.35mm)	.095” (2.41mm)	.020” (.51mm)	1.5” (38.10mm)

Induct. (µH)	Q Min.	Test Freq. (MHz)	Max. Current Rating (mA)	Digi-Key Part No.	Price Each 1	10	100	API Delevan Part No.
Series 1025 Phenolic Core (LT4K)								
.10	40	25.0	1380	DN2594-ND	.63	.54	.36	1025-94K
.12	40	25.0	1300	DN2596-ND	.63	.54	.36	1025-96K
.33	30	25.0	830	DN2508-ND	.63	.54	.36	1025-08K
.39	30	25.0	710	DN2510-ND	.63	.54	.36	1025-10K
.47	30	25.0	660	DN2512-ND	.63	.54	.36	1025-12K
.56	30	25.0	550	DN2514-ND	.63	.54	.36	1025-14K
.68	28	25.0	500	DN2516-ND	.63	.54	.36	1025-16K
.82	28	25.0	420	DN2518-ND	.63	.54	.36	1025-18K
1.0	25	25.0	390	DN2520-ND	.63	.54	.36	1025-20K
Series 1025 Iron Core (LT10K)								
1.2	25	7.9	620	DN2522-ND	.77	.66	.44	1025-22K
1.5	28	7.9	560	DN2524-ND	.77	.66	.44	1025-24K
1.8	30	7.9	480	DN2526-ND	.77	.66	.44	1025-26K
2.2	30	7.9	415	DN2528-ND	.77	.66	.44	1025-28K
2.7	37	7.9	355	DN2530-ND	.77	.66	.44	1025-30K
3.3	45	7.9	285	DN2532-ND	.77	.66	.44	1025-32K
3.9	45	7.9	263	DN2534-ND	.77	.66	.44	1025-34K
4.7	45	7.9	239	DN2536-ND	.77	.66	.44	1025-36K
5.6	50	7.9	195	DN2538-ND	.77	.66	.44	1025-38K
6.8	50	7.9	185	DN2540-ND	.77	.66	.44	1025-40K
8.2	55	7.9	160	DN2542-ND	.77	.66	.44	1025-42K
10.0	55	7.9	144	DN2544-ND	.77	.66	.44	1025-44K
12.0	45	2.5	160	DN2546-ND	.77	.66	.44	1025-46K
15.0	45	2.5	157	DN2548-ND	.77	.66	.44	1025-48K
18.0	50	2.5	149	DN2550-ND	.77	.66	.44	1025-50K
22.0	50	2.5	144	DN2552-ND	.77	.66	.44	1025-52K
27.0	50	2.5	140	DN2554-ND	.77	.66	.44	1025-54K
Series 1025 Ferrite (LT10K)								
33.0	45	2.5	130	DN2556-ND	.84	.72	.48	1025-56K
39.0	45	2.5	125	DN2558-ND	.84	.72	.48	1025-58K
47.0	45	2.5	110	DN2560-ND	.84	.72	.48	1025-60K
56.0	45	2.5	100	DN2562-ND	.84	.72	.48	1025-62K
68.0	50	2.5	92	DN2564-ND	.84	.72	.48	1025-64K
82.0	50	2.5	88	DN2566-ND	.98	.84	.56	1025-66K
100.0	50	2.5	84	DN2568-ND	.98	.84	.56	1025-68K
120.0	30	.79	66	DN2570-ND	.98	.84	.56	1025-70K
150.0	30	.79	61	DN2572-ND	.98	.84	.56	1025-72K
180.0	30	.79	57	DN2574-ND	.98	.84	.56	1025-74K
220.0	30	.79	52	DN2576-ND	.98	.84	.56	1025-76K
270.0	30	.79	47	DN2578-ND	1.05	.90	.60	1025-78K
330.0	30	.79	45	DN2580-ND	1.05	.90	.60	1025-80K
390.0	30	.79	40	DN2582-ND	1.05	.90	.60	1025-82K
470.0	30	.79	36	DN2584-ND	1.05	.90	.60	1025-84K
560.0	30	.79	35	DN2586-ND	1.05	.90	.60	1025-86K
680.0	30	.79	30	DN2588-ND	1.05	.90	.60	1025-88K
820.0	30	.79	29	DN2590-ND	1.16	.99	.66	1025-90K
1000.0	30	.79	28	DN2592-ND	1.16	.99	.66	1025-92K

Series 1641
Molded Shielded RF Coils

Dimensions L	Dimensions D	Lead Size AWG #22 (TWC)	Lead Length
.410” (10.41mm)	.162” (4.11mm)	.025” (.64mm)	1.44” (36.58mm)

Induct. (µH)	Q Min.	Test Freq. (MHz)	Max. Current Rating (mA)	Digi-Key Part No.	Price Each 1	10	100	API Delevan Part No.
Series 1641 Phenolic Core Iron Sleeve (LT10K)								
.10	50	25.0	1830	DN41101-ND	1.16	.99	.66	1641-101K
.12	51	25.0	1570	DN41121-ND	1.16	.99	.66	1641-121K
.15	51	25.0	1500	DN41151-ND	1.16	.99	.66	1641-151K
.18	50	25.0	1330	DN41181-ND	1.16	.99	.66	1641-181K
.22	49	25.0	1120	DN41221-ND	1.16	.99	.66	1641-221K
.27	47	25.0	870	DN41271-ND	1.16	.99	.66	1641-271K
.33	46	25.0	800	DN41331-ND	1.16	.99	.66	1641-331K
.39	44	25.0	680	DN41391-ND	1.16	.99	.66	1641-391K
.47	44	25.0	580	DN41471-ND	1.16	.99	.66	1641-471K
.56	43	25.0	505	DN41561-ND	1.16	.99	.66	1641-561K
Series 1641 Phenolic Core Iron Sleeve (LT10K)								
.68	42	25.0	430	DN41681-ND	1.16	.99	.66	1641-681K
.82	40	25.0	375	DN41821-ND	1.16	.99	.66	1641-821K
Series 1641 Iron Core Iron Sleeve (LT10K)								
1.0	44	25.0	1090	DN41102-ND	1.33	1.14	.76	1641-102K
1.2	44	7.9	900	DN41122-ND	1.33	1.14	.76	1641-122K
1.5	44	7.9	835	DN41152-ND	1.33	1.14	.76	1641-152K
1.8	44	7.9	775	DN41182-ND	1.33	1.14	.76	1641-182K
2.2	44	7.9	665	DN41222-ND	1.33	1.14	.76	1641-222K
2.7	44	7.9	545	DN41272-ND	1.33	1.14	.76	1641-272K
3.3	44	7.9	490	DN41332-ND	1.33	1.14	.76	1641-332K
3.9	44	7.9	455	DN41392-ND	1.33	1.14	.76	1641-392K
4.7	44	7.9	390	DN41472-ND	1.33	1.14	.76	1641-472K
5.6	44	7.9	340	DN41562-ND	1.33	1.14	.76	1641-562K
6.8	50	7.9	285	DN41682-ND	1.33	1.14	.76	1641-682K
8.2	50	7.9	250	DN41822-ND	1.33	1.14	.76	1641-822K
10.0	50	7.9	228	DN41103-ND	1.33	1.14	.76	1641-103K
12.0	55	2.5	205	DN41123-ND	1.33	1.14	.76	1641-123K
Series 1641 Ferrite Core Ferrite Sleeve (LT10K)								
15.0	45	2.5	325	DN41153-ND	1.33	1.14	.76	1641-153K
18.0	45	2.5	305	DN41183-ND	1.33	1.14	.76	1641-183K
22.0	45	2.5	295	DN41223-ND	1.33	1.14	.76	1641-223K
27.0	45	2.5	265	DN41273-ND	1.33	1.14	.76	1641-273K
33.0	45	2.5	248	DN41333-ND	1.33	1.14	.76	1641-333K
39.0	50	2.5	209	DN41393-ND	1.33	1.14	.76	1641-393K
47.0	50	2.5	200	DN41473-ND	1.33	1.14	.76	1641-473K
56.0	50	2.5	194	DN41563-ND	1.33	1.14	.76	1641-563K
68.0	50	2.5	176	DN41683-ND	1.33	1.14	.76	1641-683K
82.0	50	2.5	186	DN41823-ND	1.33	1.14	.76	1641-823K
100.0	50	2.5	164	DN41104-ND	1.33	1.14	.76	1641-104K
120.0	55	.79	153	DN41124-ND	1.33	1.14	.76	1641-124K
150.0	55	.79	143	DN41154-ND	1.33	1.14	.76	1641-154K
180.0	55	.79	138	DN41184-ND	1.33	1.14	.76	1641-184K
220.0	55	.79	130	DN41224-ND	1.33	1.14	.76	1641-224K
270.0	55	.79	120	DN41274-ND	1.33	1.14	.76	1641-274K
330.0	55	.79	115	DN41334-ND	1.33	1.14	.76	1641-334K
390.0	60	.79	107	DN41394-ND	1.33	1.14	.76	1641-394K
470.0	60	.79	94	DN41474-ND	1.40	1.20	.80	1641-474K
560.0	60	.79	90	DN41564-ND	1.40	1.20	.80	1641-564K
680.0	60	.79	84	DN41684-ND	1.40	1.20	.80	1641-684K
820.0	60	.79	80	DN41824-ND	1.40	1.20	.80	1641-824K
1000.0	60	.79	70	DN41105-ND	1.40	1.20	.80	1641-105K

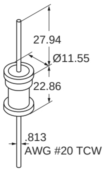
Series 2474
Power Inductors

Mechanical Configuration: Units are axial leaded for printed circuit mounting, encapsulated in an epoxy molded case. High resistivity ferrite core, allows for high inductance with low DC resistance. **Operating Temperature:** -55°C to +125°C. **Current Rating:** 40°C Rise over 85°C Ambient. **Power Dissipation at 85°C:** .50 Watts. **Inductance:** Measured at 1 V with no DC current

Dimensions L	Dimensions D	Lead Size AWG #20 (TWC)	Lead Length
.740” (18.80mm)	.240” (6.10mm)	.032” (.81mm)	1.44” (36.58mm)

Induct. (µH)	Max. DC Resist. (Ohms)	Max. Current Rating (Amps)	Digi-Key Part No.	Price Each 1	10	100	API Delevan Part No.
Series 2474 Ferrite Core							
1.0	0.009	6.27	DN7401-ND	2.33	2.00	1.34	2474-01L
1.2	0.010	5.95	DN7402-ND	2.33	2.00	1.34	2474-02L
1.5	0.011	5.67	DN7403-ND	2.33	2.00	1.34	2474-03L
1.8	0.012	5.43	DN7404-ND	2.33	2.00	1.34	2474-04L
2.2	0.013	5.22	DN7405-ND	2.33	2.00	1.34	2474-05L
2.7	0.014	5.03	DN7406-ND	2.33	2.00	1.34	2474-06L
3.3	0.016	4.70	DN7407-ND	2.33	2.00	1.34	2474-07L
3.9	0.017	4.56	DN7408-ND	2.33	2.00	1.34	2474-08L
4.7	0.022	4.01	DN7409-ND	2.33	2.00	1.34	2474-09L
5.6	0.024	3.84	DN7410-ND	2.33	2.00	1.34	2474-10L
6.8	0.026	3.69	DN7411-ND	2.33	2.00	1.34	2474-11L
8.2	0.028	3.55	DN7412-ND	2.33	2.00	1.34	2474-12L
10.0	0.033	3.27	DN7413-ND	2.76	2.37	1.58	2474-13L
12.0	0.037	3.09	DN7414-ND	2.76	2.37	1.58	2474-14L
15.0	0.040	2.97	DN7415-ND	2.76	2.37	1.58	2474-15L
18.0	0.044	2.84	DN7416-ND	2.76	2.37	1.58	2474-16L
22.0	0.050	2.66	DN7417-ND	2.76	2.37	1.58	2474-17L
27.0	0.070	2.25	DN7418-ND	2.76	2.37	1.58	2474-18L
33.0	0.075	2.17	DN7419-ND	2.76	2.37	1.58	2474-19L
39.0	0.084	2.05	DN7420-ND	2.76	2.37	1.58	2474-20L
47.0	0.104	1.84	DN7421-ND	2.76	2.37	1.58	2474-21L
56.0	0.130	1.65	DN7422-ND	2.76	2.37	1.58	2474-22L
68.0	0.145	1.56	DN7423-ND	2.76	2.37	1.58	2474-23L
82.0	0.152	1.53	DN7424-ND	2.76	2.37	1.58	2474-24L
100.0	0.208	1.30	DN7425-ND	2.94	2.52	1.68	2474-25L
120.0	0.283	1.12	DN7426-ND	2.94	2.52	1.68	2474-26L
150.0	0.330	1.04	DN7427-ND	2.94	2.52	1.68	2474-27L
180.0	0.362	0.99	DN7428-ND	2.94	2.52	1.68	2474-28L
220.0	0.505	0.84	DN7429-ND	2.94	2.52	1.68	2474-29L
270.0	0.557	0.80	DN7430-ND	2.94	2.52	1.68	2474-30L
330.0	0.650	0.74	DN7431-ND	2.94	2.52	1.68	2474-31L
390.0	0.770	0.68	DN7432-ND	2.94	2.52	1.68	2474-32L
470.0	1.03	0.59	DN7433-ND	2.94	2.52	1.68	2474-33L
560.0	1.14	0.56	DN7434-ND	2.94	2.52	1.68	2474-34L
680.0	1.50	0.49	DN7435-ND	2.94	2.52	1.68	2474-35L
820.0	1.98	0.42	DN7436-ND	2.94	2.52	1.68	2474-36L
1000.0	2.30	0.39	DN7437-ND	3.12	2.68	1.79	2474-37L
1200.0	2.55	0.37	DN7438-ND	3.12	2.68	1.79	2474-38L
1500.0	3.00	0.34	DN7439-ND	3.12	2.68	1.79	2474-39L
1800.0	4.00	0.30	DN7440-ND	3.12	2.68	1.79	2474-40L
2200.0	4.40	0.28	DN7441-ND	3.12	2.68	1.79	2474-41L
2700.0	5.80	0.25	DN7442-ND	3.12	2.68	1.79	2474-42L
3300.0	6.56	0.23	DN7443-ND	3.12	2.68	1.79	2474-43L
3900.0	8.63	0.20	DN7444-ND	3.12	2.68	1.79	2474-44L
4700.0	10.1	0.19	DN7445-ND	3.12	2.68	1.79	2474-45L
5600.0	11.2	0.18	DN7446-ND	3.12	2.68	1.79	2474-46L
6800.0	15.0	0.15	DN7447-ND	3.12	2.68	1.79	2474-47L
8200.0	20.8	0.13	DN7448-ND	3.12	2.68	1.79	2474-48L
10000.0	23.4	0.12	DN7449-ND	3.34	2.87	1.91	2474-49L
12000.0	26.0	0.12	DN7450-ND	3.34	2.87	1.91	2474-50L
15000.0	36.0	0.10	DN7451-ND	3.34	2.87	1.91	2474-51L
18000.0	40.0	0.09	DN7452-ND	3.34	2.87	1.91	2474-52L

Series 4590
High Current Filter Inductors

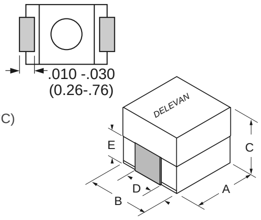


Mechanical Configuration:
Ferrite Bobbin protected with a flame retardant polyolefin sleeve.

Nom. Induct. ±10% (µH)	Max. DC Resist. (Ohms)	Max. Current Rating (Amps)	Digi-Key Part No.	Price Each 1	10	100	API Delevan Part No.
3.9	0.007	9.75	DN4495-ND	1.82	1.57	1.05	4590-392K
4.7	0.008	9.11	DN4496-ND	1.82	1.57	1.05	4590-472K
5.6	0.011	7.77	DN4497-ND	1.82	1.57	1.05	4590-562K
6.8	0.011	7.60	DN4498-ND	1.82	1.57	1.05	4590-682K
8.2	0.013	7.15	DN4499-ND	1.82	1.57	1.05	4590-822K
10.0	0.016	6.44	DN4500-ND	2.08	1.79	1.19	4590-103K
12.0	0.018	6.07	DN4501-ND	2.08	1.79	1.19	4590-123K
15.0	0.020	5.76	DN4502-ND	2.08	1.79	1.19	4590-153K
18.0	0.020	5.49	DN4503-ND	2.08	1.79	1.19	4590-183K
22.0	0.024	5.26	DN4504-ND	2.08	1.79	1.19	4590-223K
27.0	0.025	5.15	DN4505-ND	2.08	1.79	1.19	4590-273K
33.0	0.028	4.87	DN4506-ND	2.08	1.79	1.19	4590-333K
39.0	0.028	4.87	DN4507-ND	2.08	1.79	1.19	4590-393K
47.0	0.034	4.45	DN4508-ND	2.08	1.79	1.19	4590-473K
56.0	0.043	3.93	DN4509-ND	2.08	1.79	1.19	4590-563K
68.0	0.059	3.35	DN4510-ND	2.08	1.79	1.19	4590-683K
82.0	0.066	3.17	DN4511-ND	2.08	1.79	1.19	4590-823K
100	0.084	2.81	DN4512-ND	2.08	1.79	1.19	4590-104K
120	0.113	2.43	DN4513-ND	2.08	1.79	1.19	4590-124K
150	0.129	2.27	DN4514-ND	2.08	1.79	1.19	4590-154K
180	0.150	2.10	DN4515-ND	2.08	1.79	1.19	4590-184K
220	0.162	2.02	DN4516-ND	2.08	1.79	1.19	4590-224K
270	0.226	1.71	DN4517-ND	2.08	1.79	1.19	4590-274K
330	0.257	1.61	DN4518-ND	2.08	1.79	1.19	4590-334K
390	0.288	1.52	DN4519-ND	2.08	1.79	1.19	4590-394K
470	0.393	1.30	DN4520-ND	2.08	1.79	1.19	4590-474K
560	0.504	1.15	DN4521-ND	2.08	1.79	1.19	4590-564K
680	0.570	1.08	DN4522-ND	2.08	1.79	1.19	4590-684K
820	0.643	1.01	DN4523-ND	2.08	1.79	1.19	4590-824K
1000	0.844	0.89	DN4524-ND	2.08	1.79	1.19	4590-105K
1200	0.977	0.82	DN4525-ND	1.97	1.70	1.13	4590-125K
1500	1.18	0.75	DN4526-ND	1.97	1.70	1.13	4590-155K
1800	1.50	0.66	DN4527-ND	1.97	1.70	1.13	4590-185K
2200	1.76	0.61	DN4528-ND	1.97	1.70	1.13	4590-225K
2700	2.13	0.56	DN4529-ND	1.97	1.70	1.13	4590-275K
3300	2.53	0.51	DN4530-ND	1.97	1.70	1.13	4590-335K
3900	2.84	0.48	DN4531-ND	1.97	1.70	1.13	4590-395K
4700	3.79	0.41	DN4532-ND	1.82	1.57	1.05	4590-475K
5600	4.24	0.39	DN4533-ND	1.82	1.57	1.05	4590-565K
6800	5.75	0.34	DN4534-ND	1.82	1.57	1.05	4590-685K
8200	6.44	0.32	DN4535-ND	1.82	1.57	1.05	4590-825K
10000	7.30	0.30	DN4536-ND	1.82	1.57	1.05	4590-106K
12000	9.34	0.26	DN4537-ND	1.82	1.57	1.05	4590-126K
15000	10.7	0.25	DN4538-ND	1.82	1.57	1.05	4590-156K
18000	14.8	0.21	DN4539-ND	1.82	1.57	1.05	4590-186K
22000	18.0	0.19	DN4540-ND	1.82	1.57	1.05	4590-226K
27000	22.7	0.17	DN4541-ND	1.82	1.57	1.05	4590-276K
33000	25.7	0.16	DN4542-ND	1.99	1.71	1.14	4590-336K
39000	29.7	0.15	DN4543-ND	1.99	1.71	1.14	4590-396K
47000	33.7	0.14	DN4544-ND	1.99	1.71	1.14	4590-476K
56000	38.0	0.13	DN4545-ND	1.99	1.71	1.14	4590-566K
68000	52.8	0.11	DN4546-ND	1.99	1.71	1.14	4590-686K
82000	67.3	0.10	DN4547-ND	1.99	1.71	1.14	4590-826K
100000	76.0	0.09	DN4548-ND	1.99	1.71	1.14	4590-107K

API Delevan Inductors

Series 1008 Unshielded Surface Mount Inductors



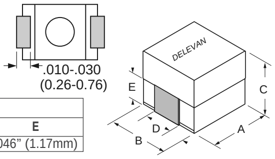
Operating Temperature Range: -67°F to +257°F (-55°C to +125°C)

Dimensions – Inch (mm)				
A	B	C	D	E
.100" (2.54mm)	.080" (2.03mm)	.080" (2.03mm)	.055" (1.40mm)	.046" (1.17mm)

Induct. (µH)	Test Freq. (MHz)	Q Min.	Current Rating Max.(mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	API Delevan Part No.
Series 1008 Phenolic Core — K Tolerance, ±10%										
.010	50.0	40	1562	DN08100CT-ND	1.61	1.38	.92	DN08100TR-ND	368.00	1008-100K
.012	50.0	40	1450	DN08120CT-ND	1.61	1.38	.92	DN08120TR-ND	368.00	1008-120K
.015	50.0	40	1381	DN08150CT-ND	1.61	1.38	.92	DN08150TR-ND	368.00	1008-150K
.018	50.0	40	1320	DN08180CT-ND	1.61	1.38	.92	DN08180TR-ND	368.00	1008-180K
.022	50.0	35	1235	DN08220CT-ND	1.61	1.38	.92	DN08220TR-ND	368.00	1008-220K
.027	50.0	35	1164	DN08270CT-ND	1.61	1.38	.92	DN08270TR-ND	368.00	1008-270K
.033	50.0	30	1105	DN08330CT-ND	1.61	1.38	.92	DN08330TR-ND	368.00	1008-330K
.039	50.0	30	1053	DN08390CT-ND	1.61	1.38	.92	DN08390TR-ND	368.00	1008-390K
.047	50.0	30	1108	DN08470CT-ND	1.61	1.38	.92	DN08470TR-ND	368.00	1008-470K
.056	50.0	25	847	DN08560CT-ND	1.61	1.38	.92	DN08560TR-ND	368.00	1008-560K
.068	50.0	25	823	DN08680CT-ND	1.61	1.38	.92	DN08680TR-ND	368.00	1008-680K
.082	50.0	25	801	DN08820CT-ND	1.61	1.38	.92	DN08820TR-ND	368.00	1008-820K
.100	25.0	15	728	DN08101CT-ND	1.61	1.38	.92	DN08101TR-ND	368.00	1008-101K
.12	25.0	40	1225	DN08121CT-ND	1.61	1.38	.92	DN08121TR-ND	368.00	1008-121K
.15	25.0	40	1168	DN08151CT-ND	1.61	1.38	.92	DN08151TR-ND	368.00	1008-151K
.18	25.0	40	1119	DN08181CT-ND	1.61	1.38	.92	DN08181TR-ND	368.00	1008-181K
.22	25.0	40	1055	DN08221CT-ND	1.61	1.38	.92	DN08221TR-ND	368.00	1008-221K
.27	25.0	40	1000	DN08271CT-ND	1.61	1.38	.92	DN08271TR-ND	368.00	1008-271K
.33	25.0	40	954	DN08331CT-ND	1.61	1.38	.92	DN08331TR-ND	368.00	1008-331K
.39	25.0	40	913	DN08391CT-ND	1.61	1.38	.92	DN08391TR-ND	368.00	1008-391K
.47	25.0	40	846	DN08471CT-ND	1.61	1.38	.92	DN08471TR-ND	368.00	1008-471K
.56	25.0	40	808	DN08561CT-ND	1.61	1.38	.92	DN08681TR-ND	368.00	1008-561K
.68	25.0	40	760	DN08681CT-ND	1.61	1.38	.92	DN08681TR-ND	368.00	1008-681K
.82	25.0	40	708	DN08821CT-ND	1.61	1.38	.92	DN08821TR-ND	368.00	1008-821K
Series 1008 Phenolic Core — J Tolerance, ±5%										
1.0	7.9	30	685	DN08102JCT-ND	1.61	1.38	.92	DN08102JTR-ND	368.00	1008-102J
1.2	7.9	30	591	DN08122JCT-ND	1.93	1.65	1.10	DN08122JTR-ND	440.00	1008-122J
1.5	7.9	30	548	DN08152JCT-ND	1.93	1.65	1.10	DN08152JTR-ND	440.00	1008-152J
1.8	7.9	30	457	DN08182JCT-ND	1.93	1.65	1.10	DN08182JTR-ND	440.00	1008-182J
2.2	7.9	30	433	DN08222JCT-ND	1.93	1.65	1.10	DN08222JTR-ND	440.00	1008-222J
2.7	7.9	30	413	DN08272JCT-ND	1.93	1.65	1.10	DN08272JTR-ND	440.00	1008-272J
3.3	7.9	30	398	DN08332JCT-ND	1.93	1.65	1.10	DN08332JTR-ND	440.00	1008-332J
3.9	7.9	30	354	DN08392JCT-ND	1.93	1.65	1.10	DN08392JTR-ND	440.00	1008-392J
4.7	7.9	30	334	DN08472JCT-ND	1.93	1.65	1.10	DN08472JTR-ND	440.00	1008-472J
5.6	7.9	30	312	DN08562JCT-ND	1.93	1.65	1.10	DN08562JTR-ND	440.00	1008-562J
6.8	7.9	30	274	DN08682JCT-ND	1.93	1.65	1.10	DN08682JTR-ND	440.00	1008-682J
8.2	7.9	30	264	DN08822JCT-ND	1.93	1.65	1.10	DN08822JTR-ND	440.00	1008-822J
10.0	7.9	30	245	DN08103JCT-ND	1.93	1.65	1.10	DN08103JTR-ND	440.00	1008-103J
12.0	2.5	30	207	DN08123JCT-ND	1.93	1.65	1.10	DN08123JTR-ND	440.00	1008-123J
15.0	2.5	30	194	DN08153JCT-ND	1.93	1.65	1.10	DN08153JTR-ND	440.00	1008-153J
18.0	2.5	30	173	DN08183JCT-ND	1.93	1.65	1.10	DN08183JTR-ND	440.00	1008-183J
22.0	2.5	30	158	DN08223JCT-ND	1.93	1.65	1.10	DN08223JTR-ND	440.00	1008-223J
27.0	2.5	30	146	DN08273JCT-ND	1.93	1.65	1.10	DN08273JTR-ND	440.00	1008-273J
33.0	2.5	30	135	DN08333JCT-ND	1.93	1.65	1.10	DN08333JTR-ND	440.00	1008-333J
39.0	2.5	30	125	DN08393JCT-ND	1.93	1.65	1.10	DN08393JTR-ND	440.00	1008-393J
47.0	2.5	30	120	DN08473JCT-ND	1.93	1.65	1.10	DN08473JTR-ND	440.00	1008-473J

1008KIT-ND (API Delevan Part No. 1008KIT)
Series 1008 Inductor Kit. 5 each of 54 values (0.0018µH to 47.0µH), 270 total pieces **$95.95**

Series S1008 Shielded Surface Mount Inductors

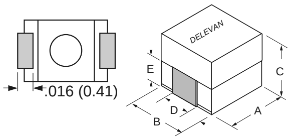


Dimensions – Inch (mm)				
A	B	C	D	E
.100" (2.54mm)	.080" (2.03mm)	.080" (2.03mm)	.055" (1.40mm)	.046" (1.17mm)

Induct. (µH)	Test Freq. (MHz)	Q Min.	Current Rating Max.(mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	API Delevan Part No.
Series S1008 Ferrite Core, ±10%										
.10	25	40	1120	DN1001CT-ND	1.72	1.47	.98	DN1001TR-ND	392.00	S1008-101K
.15	25	40	1015	DN1003CT-ND	1.72	1.47	.98	DN1003TR-ND	392.00	S1008-151K
.18	25	40	970	DN1004CT-ND	1.72	1.47	.98	DN1004TR-ND	392.00	S1008-181K
.22	25	40	930	DN1005CT-ND	1.72	1.47	.98	DN1005TR-ND	392.00	S1008-221K
.27	25	40	900	DN1006CT-ND	1.72	1.47	.98	DN1006TR-ND	392.00	S1008-271K
.33	25	40	865	DN1007CT-ND	1.72	1.47	.98	DN1007TR-ND	392.00	S1008-331K
.39	25	40	840	DN1008CT-ND	1.72	1.47	.98	DN1008TR-ND	392.00	S1008-391K
.47	25	40	815	DN1009CT-ND	1.72	1.47	.98	DN1009TR-ND	392.00	S1008-471K
.56	25	40	790	DN1010CT-ND	1.72	1.47	.98	DN1010TR-ND	392.00	S1008-561K
.62	25	40	770	DN1011CT-ND	1.72	1.47	.98	DN1011TR-ND	392.00	S1008-621K
.68	25	40	750	DN1012CT-ND	1.72	1.47	.98	DN1012TR-ND	392.00	S1008-681K
.75	25	40	735	DN1013CT-ND	1.72	1.47	.98	DN1013TR-ND	392.00	S1008-751K
.82	25	40	715	DN1014CT-ND	1.72	1.47	.98	DN1014TR-ND	392.00	S1008-821K
.91	25	40	685	DN1015CT-ND	1.72	1.47	.98	DN1015TR-ND	392.00	S1008-911K
1.0	7.9	30	670	DN1016CT-ND	1.72	1.47	.98	DN1016TR-ND	392.00	S1008-102K
1.2	7.9	30	625	DN1017CT-ND	1.72	1.47	.98	DN1017TR-ND	392.00	S1008-122K
1.5	7.9	30	545	DN1018CT-ND	1.72	1.47	.98	DN1018TR-ND	392.00	S1008-152K
1.8	7.9	30	435	DN1019CT-ND	1.72	1.47	.98	DN1019TR-ND	392.00	S1008-182K
2.2	7.9	30	375	DN1020CT-ND	1.72	1.47	.98	DN1020TR-ND	392.00	S1008-222K
2.7	7.9	30	365	DN1021CT-ND	1.72	1.47	.98	DN1021TR-ND	392.00	S1008-272K
3.3	7.9	30	355	DN1022CT-ND	1.72	1.47	.98	DN1022TR-ND	392.00	S1008-332K
3.9	7.9	30	335	DN1023CT-ND	1.72	1.47	.98	DN1023TR-ND	392.00	S1008-392K
4.7	7.9	30	305	DN1024CT-ND	1.72	1.47	.98	DN1024TR-ND	392.00	S1008-472K
5.6	7.9	30	295	DN1025CT-ND	1.72	1.47	.98	DN1025TR-ND	392.00	S1008-562K
6.8	7.9	30	250	DN1026CT-ND	1.72	1.47	.98	DN1026TR-ND	392.00	S1008-682K
8.2	7.9	30	240	DN1027CT-ND	1.72	1.47	.98	DN1027TR-ND	392.00	S1008-822K
10.0	7.9	30	230	DN1028CT-ND	1.72	1.47	.98	DN1028TR-ND	392.00	S1008-103K
12.0	2.5	30	220	DN1029CT-ND	1.72	1.47	.98	DN1029TR-ND	392.00	S1008-123K
15.0	2.5	30	210	DN1030CT-ND	1.72	1.47	.98	DN1030TR-ND	392.00	S1008-153K
18.0	2.5	30	200	DN1031CT-ND	1.72	1.47	.98	DN1031TR-ND	392.00	S1008-183K
22.0	2.5	30	170	DN1032CT-ND	1.72	1.47	.98	DN1032TR-ND	392.00	S1008-223K
27.0	2.5	30	160	DN1033CT-ND	1.72	1.47	.98	DN1033TR-ND	392.00	S1008-273K
33.0	2.5	30	125	DN1034CT-ND	1.72	1.47	.98	DN1034TR-ND	392.00	S1008-333K
47.0	2.5	30	110	DN1036CT-ND	1.72	1.47	.98	DN1036TR-ND	392.00	S1008-473K

S1008KIT-ND (API Delevan Part No. S1008KIT)
Series S1008 Inductor Kit. 5 each of 36 values (0.1µH to 47.0µH), 180 total pieces.................. **$95.95**

Series 1210 Unshielded Surface Mount Inductors



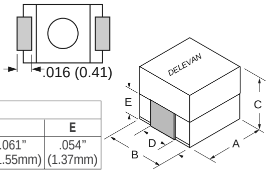
Operating Temperature Range:
-67°F to +257°F (-55°C to +125°C)

Min to Max Dimensions				
A	B	C (over terminals)	D	E
.118" – .138" (3.00mm – 3.51mm)	.085" – .105" (2.16mm – 2.67mm)	.081" – .101" (2.06mm – 2.57mm)	.041" – .061" (1.04mm – 1.55mm)	.054" (1.37mm)

Induct. (µH)	Test Freq. (MHz)	Q Min.	Current Rating Max.(mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	API Delevan Part No.
Series 1210 Phenolic Core, ±10%										
.010	50.0	30	966	DN10100CT-ND	.84	.72	.48	DN10100TR-ND	192.00	1210-100K
.012	50.0	30	931	DN10120CT-ND	.84	.72	.48	DN10120TR-ND	192.00	1210-120K
.015	50.0	30	871	DN10150CT-ND	.84	.72	.48	DN10150TR-ND	192.00	1210-150K
.018	50.0	30	821	DN10180CT-ND	.84	.72	.48	DN10180TR-ND	192.00	1210-180K
.022	50.0	30	779	DN10220CT-ND	.84	.72	.48	DN10220TR-ND	192.00	1210-220K
.027	50.0	30	743	DN10270CT-ND	.84	.72	.48	DN10270TR-ND	192.00	1210-270K
.033	50.0	30	711	DN10330CT-ND	.84	.72	.48	DN10330TR-ND	192.00	1210-330K
.039	50.0	30	670	DN10390CT-ND	.84	.72	.48	DN10390TR-ND	192.00	1210-390K
.047	50.0	30	636	DN10470CT-ND	.84	.72	.48	DN10470TR-ND	192.00	1210-470K
.056	50.0	30	606	DN10560CT-ND	.84	.72	.48	DN10560TR-ND	192.00	1210-560K
.068	50.0	30	580	DN10680CT-ND	.74	.63	.42	DN10680TR-ND	168.00	1210-680K
.082	50.0	30	551	DN10820CT-ND	.84	.72	.48	DN10820TR-ND	192.00	1210-820K
Series 1210 Iron Core, ±10%										
.10	25.0	30	1018	DN10101CT-ND	.95	.81	.54	DN10101TR-ND	216.00	1210-101K
.12	25.0	30	971	DN10121CT-ND	.95	.81	.54	DN10121TR-ND	216.00	1210-121K
.15	25.0	30	910	DN10151CT-ND	.95	.81	.54	DN10151TR-ND	216.00	1210-151K
.18	25.0	30	860	DN10181CT-ND	.95	.81	.54	DN10181TR-ND	216.00	1210-181K
.22	25.0	30	805	DN10221CT-ND	.95	.81	.54	DN10221TR-ND	216.00	1210-221K
.27	25.0	30	759	DN10271CT-ND	.95	.81	.54	DN10271TR-ND	216.00	1210-271K
.33	25.0	30	720	DN10331CT-ND	.95	.81	.54	DN10331TR-ND	216.00	1210-331K
.39	25.0	30	679	DN10391CT-ND	.95	.81	.54	DN10391TR-ND	216.00	1210-391K
.47	25.0	30	644	DN10471CT-ND	.95	.81	.54	DN10471TR-ND	216.00	1210-471K
.56	25.0	30	614	DN10561CT-ND	.95	.81	.54	DN10561TR-ND	216.00	1210-561K
.68	25.0	30	588	DN10681CT-ND	.95	.81	.54	DN10681TR-ND	216.00	1210-681K
.82	25.0	30	556	DN10821CT-ND	.95	.81	.54	DN10821TR-ND	216.00	1210-821K
Series 1210 Ferrite Core, ±5%										
1.0	7.9	30	515	DN10102JCT-ND	.98	.84	.56	DN10102JTR-ND	224.00	1210-102J
1.2	7.9	30	497	DN10122JCT-ND	.98	.84	.56	DN10122JTR-ND	224.00	1210-122J
1.5	7.9	30	467	DN10152JCT-ND	.98	.84	.56	DN10152JTR-ND	224.00	1210-152J
1.8	7.9	30	454	DN10182JCT-ND	.98	.84	.56	DN10182JTR-ND	224.00	1210-182J
2.2	7.9	30	431	DN10222JCT-ND	.98	.84	.56	DN10222JTR-ND	224.00	1210-222J
2.7	7.9	30	411	DN10272JCT-ND	.98	.84	.56	DN10272JTR-ND	224.00	1210-272J
3.3	7.9	30	393	DN10332JCT-ND	.98	.84	.56	DN10332JTR-ND	224.00	1210-332J
3.9	7.9	30	378	DN10392JCT-ND	.98	.84	.56	DN10392JTR-ND	224.00	1210-392J
4.7	7.9	30	352	DN10472JCT-ND	.98	.84	.56	DN10472JTR-ND	224.00	1210-472J
5.6	7.9	30	341	DN10562JCT-ND	.98	.84	.56	DN10562JTR-ND	224.00	1210-562J
6.8	7.9	30	321	DN10682JCT-ND	.98	.84	.56	DN10682JTR-ND	224.00	1210-682J
8.2	7.9	30	305	DN10822JCT-ND	.98	.84	.56	DN10822JTR-ND	224.00	1210-822J
10.0	7.9	30	297	DN10103JCT-ND	1.02	.87	.58	DN10103JTR-ND	232.00	1210-103J
12.0	2.5	30	272	DN10123JCT-ND	1.02	.87	.58	DN10123JTR-ND	232.00	1210-123J
15.0	2.5	30	257	DN10153JCT-ND	1.02	.87	.58	DN10153JTR-ND	232.00	1210-153J
18.0	2.5	30	237	DN10183JCT-ND	1.02	.87	.58	DN10183JTR-ND	232.00	1210-183J
22.0	2.5	30	224	DN10223JCT-ND	1.02	.87	.58	DN10223JTR-ND	232.00	1210-223J
27.0	2.5	30	193	DN10273JCT-ND	1.02	.87	.58	DN10273JTR-ND	232.00	1210-273J
33.0	2.5	30	182	DN10333JCT-ND	1.02	.87	.58	DN10333JTR-ND	232.00	1210-333J
39.0	2.5	30	170	DN10393JCT-ND	1.02	.87	.58	DN10393JTR-ND	232.00	1210-393J
47.0	2.5	30	163	DN10473JCT-ND	1.02	.87	.58	DN10473JTR-ND	232.00	1210-473J
56.0	2.5	30	152	DN10563JCT-ND	1.02	.87	.58	DN10563JTR-ND	232.00	1210-563J
68.0	2.5	30	144	DN10683JCT-ND	1.02	.87	.58	DN10683JTR-ND	232.00	1210-683J
82.0	2.5	30	136	DN10823JCT-ND	1.02	.87	.58	DN10823JTR-ND	232.00	1210-823J
100.0	2.5	30	120	DN10104JCT-ND	1.02	.87	.58	DN10104JTR-ND	232.00	1210-104J

1210KIT-ND (API Delevan Part No. 1210KIT)
Series 1210 Inductor Kit. 5 each of 58 values (0.0018µH to 100.0µH), 290 total pieces **$95.95**

Series S1210 Shielded Surface Mount Inductors



Min to Max Dimensions				
A	B	C (over terminals)	D	E
.118" – .138" (3.00mm–3.51mm)	.085" – .105" (2.16mm–2.67mm)	.081" – .101" (2.06mm–2.57mm)	.041" – .061" (1.04mm–1.55mm)	.054" (1.37mm)

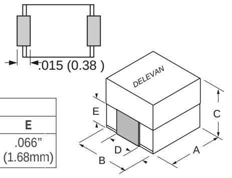
Induct. (µH)	Test Freq. (MHz)	Q Min.	Current Rating Max.(mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	API Delevan Part No.
Series S1210 Iron Core, ±10%										
.10	25	40	1175	DN1050CT-ND	1.09	.93	.62	DN1050TR-ND	248.00	S1210-101K
.12	25	40	1104	DN1051CT-ND	1.09	.93	.62	DN1051TR-ND	248.00	S1210-121K
.15	25	40	1017	DN1052CT-ND	1.09	.93	.62	DN1052TR-ND	248.00	S1210-151K
.18	25	40	971	DN1053CT-ND	1.09	.93	.62	DN1053TR-ND	248.00	S1210-181K
.22	25	40	910	DN1054CT-ND	1.09	.93	.62	DN1054TR-ND	248.00	S1210-221K

(Continued)

Induct. (µH)	Test Freq. (MHz)	Q Min.	Current Rating Max.(mA)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing	API Delevan Part No.
					1	10	100		500	
.27	25	40	860	DN1055CT-ND	1.09	.93	.62	DN1055TR-ND	248.00	S1210-271K
.33	25	40	831	DN1056CT-ND	1.09	.93	.62	DN1056TR-ND	248.00	S1210-331K
.39	25	40	720	DN1057CT-ND	1.09	.93	.62	DN1057TR-ND	248.00	S1210-391K
.47	25	40	679	DN1058CT-ND	1.09	.93	.62	DN1058TR-ND	248.00	S1210-471K
.56	25	40	644	DN1059CT-ND	1.09	.93	.62	DN1059TR-ND	248.00	S1210-561K
.68	25	40	614	DN1060CT-ND	1.09	.93	.62	DN1060TR-ND	248.00	S1210-681K
.82	25	40	588	DN1061CT-ND	1.09	.93	.62	DN1061TR-ND	248.00	S1210-821K
Series S1210 Ferrite Core, ±10%										
1.0	7.9	40	679	DN1062CT-ND	1.02	.87	.58	DN1062TR-ND	232.00	S1210-102K
1.2	7.9	40	650	DN1063CT-ND	1.02	.87	.58	DN1063TR-ND	232.00	S1210-122K
1.5	7.9	40	603	DN1064CT-ND	1.02	.87	.58	DN1064TR-ND	232.00	S1210-152K
1.8	7.9	40	564	DN1065CT-ND	1.02	.87	.58	DN1065TR-ND	232.00	S1210-182K
2.2	7.9	40	533	DN1066CT-ND	1.02	.87	.58	DN1066TR-ND	232.00	S1210-222K
2.7	7.9	40	526	DN1067CT-ND	1.02	.87	.58	DN1067TR-ND	232.00	S1210-272K
3.3	7.9	40	509	DN1068CT-ND	1.02	.87	.58	DN1068TR-ND	232.00	S1210-332K
3.9	7.9	40	500	DN1069CT-ND	1.02	.87	.58	DN1069TR-ND	232.00	S1210-392K
4.7	7.9	40	455	DN1070CT-ND	1.02	.87	.58	DN1070TR-ND	232.00	S1210-472K
5.6	7.9	40	399	DN1071CT-ND	1.02	.87	.58	DN1071TR-ND	232.00	S1210-562K
6.8	7.9	40	372	DN1072CT-ND	1.02	.87	.58	DN1072TR-ND	232.00	S1210-682K
8.2	7.9	40	349	DN1073CT-ND	1.02	.87	.58	DN1073TR-ND	232.00	S1210-822K
10.0	2.5	40	330	DN1074CT-ND	1.02	.87	.58	DN1074TR-ND	232.00	S1210-103K
12.0	2.5	40	314	DN1075CT-ND	1.02	.87	.58	DN1075TR-ND	232.00	S1210-123K
15.0	2.5	40	288	DN1076CT-ND	1.02	.87	.58	DN1076TR-ND	232.00	S1210-153K
22.0	2.5	40	262	DN1078CT-ND	1.02	.87	.58	DN1078TR-ND	232.00	S1210-223K
27.0	2.5	40	228	DN1079CT-ND	1.02	.87	.58	DN1079TR-ND	232.00	S1210-273K
33.0	2.5	40	215	DN1080CT-ND	1.02	.87	.58	DN1080TR-ND	232.00	S1210-333K
39.0	2.5	40	204	DN1081CT-ND	1.02	.87	.58	DN1081TR-ND	232.00	S1210-393K
47.0	2.5	40	194	DN1082CT-ND	1.02	.87	.58	DN1082TR-ND	232.00	S1210-473K
56.0	2.5	40	181	DN1083CT-ND	1.02	.87	.58	DN1083TR-ND	232.00	S1210-563K
68.0	2.5	40	172	DN1084CT-ND	1.02	.87	.58	DN1084TR-ND	232.00	S1210-683K
82.0	2.5	40	156	DN1085CT-ND	1.02	.87	.58	DN1085TR-ND	232.00	S1210-823K
100.0	2.5	40	144	DN1086CT-ND	1.02	.87	.58	DN1086TR-ND	232.00	S1210-104K

S1210KIT-ND (API Delevan Part No. S1210KIT)
Series S1210 Inductor Kit. 5 each of 37 values (0.10µH to 100.0µH), 185 total pieces................**$95.95**

Series 1812 Unshielded Surface Mount Inductors



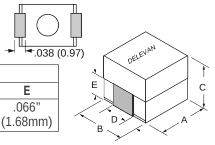
Operating Temperature Range: -67°F to +257°F (-55°C to +125°C)

Min to Max Dimensions				
A	B	C (over terminals)	D	E
.166”–.190” (4.22mm–4.83mm)	.118”–.134” (3.00mm–3.40mm)	.118”–.134” (3.00mm–3.40mm)	.054”–.078” (1.37mm–1.98mm)	.066” (1.68mm)

Induct. (µH)	Test Freq. (MHz)	Q Min.	Current Rating Max.(mA)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing	API Delevan Part No.
					1	10	100		500	
Series 1812 Iron Core, ±10%										
.10	25.0	30	818	DN12101CT-ND	.70	.60	.40	DN12101TR-ND	160.00	1812-101K
.12	25.0	30	818	DN12121CT-ND	.70	.60	.40	DN12121TR-ND	160.00	1812-121K
.15	25.0	30	818	DN12151CT-ND	.70	.60	.40	DN12151TR-ND	160.00	1812-151K
.18	25.0	30	757	DN12181CT-ND	.70	.60	.40	DN12181TR-ND	160.00	1812-181K
.22	25.0	30	708	DN12221CT-ND	.70	.60	.40	DN12221TR-ND	160.00	1812-221K
.27	25.0	30	668	DN12271CT-ND	.70	.60	.40	DN12271TR-ND	160.00	1812-271K
.33	25.0	30	604	DN12331CT-ND	.70	.60	.40	DN12331TR-ND	160.00	1812-331K
.39	25.0	30	535	DN12391CT-ND	.70	.60	.40	DN12391TR-ND	160.00	1812-391K
.47	25.0	30	501	DN12471CT-ND	.70	.60	.40	DN12471TR-ND	160.00	1812-471K
.56	25.0	30	409	DN12561CT-ND	.70	.60	.40	DN12561TR-ND	160.00	1812-561K
.68	25.0	30	379	DN12681CT-ND	.70	.60	.40	DN12681TR-ND	160.00	1812-681K
.82	25.0	30	354	DN12821CT-ND	.70	.60	.40	DN12821TR-ND	160.00	1812-821K
Series 1812 Ferrite Core — J Tolerance, ±5%										
1.0	7.9	50	634	DN12102JCT-ND	.70	.60	.40	DN12102JTR-ND	160.00	1812-102J
1.2	7.9	50	604	DN12122JCT-ND	.70	.60	.40	DN12122JTR-ND	160.00	1812-122J
1.5	7.9	50	578	DN12152JCT-ND	.70	.60	.40	DN12152JTR-ND	160.00	1812-152J
1.8	7.9	50	556	DN12182JCT-ND	.70	.60	.40	DN12182JTR-ND	160.00	1812-182J
2.2	7.9	50	535	DN12222JCT-ND	.70	.60	.40	DN12222JTR-ND	160.00	1812-222J
2.7	7.9	50	517	DN12272JCT-ND	.70	.60	.40	DN12272JTR-ND	160.00	1812-272J
3.3	7.9	50	501	DN12332JCT-ND	.70	.60	.40	DN12332JTR-ND	160.00	1812-332J
3.9	7.9	50	472	DN12392JCT-ND	.70	.60	.40	DN12392JTR-ND	160.00	1812-392J
4.7	7.9	50	448	DN12472JCT-ND	.70	.60	.40	DN12472JTR-ND	160.00	1812-472J
5.6	7.9	50	427	DN12562JCT-ND	.70	.60	.40	DN12562JTR-ND	160.00	1812-562J
6.8	7.9	50	409	DN12682JCT-ND	.70	.60	.40	DN12682JTR-ND	160.00	1812-682J
8.2	7.9	50	375	DN12822JCT-ND	.70	.60	.40	DN12822JTR-ND	160.00	1812-822J
10.0	7.9	50	354	DN12103JCT-ND	.70	.60	.40	DN12103JTR-ND	160.00	1812-103J
12.0	2.5	50	317	DN12123JCT-ND	.70	.60	.40	DN12123JTR-ND	160.00	1812-123J
15.0	2.5	50	283	DN12153JCT-ND	.70	.60	.40	DN12153JTR-ND	160.00	1812-153J
18.0	2.5	50	268	DN12183JCT-ND	.70	.60	.40	DN12183JTR-ND	160.00	1812-183J
22.0	2.5	50	250	DN12223JCT-ND	.70	.60	.40	DN12223JTR-ND	160.00	1812-223J
27.0	2.5	50	236	DN12273JCT-ND	.70	.60	.40	DN12273JTR-ND	160.00	1812-273J
33.0	2.5	50	224	DN12333JCT-ND	.70	.60	.40	DN12333JTR-ND	160.00	1812-333J
39.0	2.5	50	211	DN12393JCT-ND	.70	.60	.40	DN12393JTR-ND	160.00	1812-393J
47.0	2.5	50	200	DN12473JCT-ND	.70	.60	.40	DN12473JTR-ND	160.00	1812-473J
56.0	2.5	50	191	DN12563JCT-ND	.70	.60	.40	DN12563JTR-ND	160.00	1812-563J
68.0	2.5	50	183	DN12683JCT-ND	.70	.60	.40	DN12683JTR-ND	160.00	1812-683J
82.0	2.5	50	169	DN12823JCT-ND	.70	.60	.40	DN12823JTR-ND	160.00	1812-823J
100.0	2.5	50	158	DN12104JCT-ND	.70	.60	.40	DN12104JTR-ND	160.00	1812-104J
120.0	0.79	40	158	DN12124JCT-ND	.70	.60	.40	DN12124JTR-ND	160.00	1812-124J
150.0	0.79	40	149	DN12154JCT-ND	.70	.60	.40	DN12154JTR-ND	160.00	1812-154J
180.0	0.79	40	145	DN12184JCT-ND	.70	.60	.40	DN12184JTR-ND	160.00	1812-184J
220.0	0.79	40	142	DN12224JCT-ND	1.16	.99	.66	DN12224JTR-ND	264.00	1812-224J
270.0	0.79	40	129	DN12274JCT-ND	1.16	.99	.66	DN12274JTR-ND	264.00	1812-274J
330.0	0.79	40	120	DN12334JCT-ND	1.16	.99	.66	DN12334JTR-ND	264.00	1812-334J
390.0	0.79	40	100	DN12394JCT-ND	1.16	.99	.66	DN12394JTR-ND	264.00	1812-394J
470.0	0.79	40	88	DN12474JCT-ND	1.16	.99	.66	DN12474JTR-ND	264.00	1812-474J
560.0	0.79	30	82	DN12564JCT-ND	1.16	.99	.66	DN12564JTR-ND	264.00	1812-564J
680.0	0.79	30	82	DN12684JCT-ND	1.16	.99	.66	DN12684JTR-ND	264.00	1812-684J
820.0	0.79	30	67	DN12824JCT-ND	1.16	.99	.66	DN12824JTR-ND	264.00	1812-824J
1000.0	0.79	30	55	DN12105JCT-ND	1.16	.99	.66	DN12105JTR-ND	264.00	1812-105J

1812KIT-ND (API Delevan Part No. 1812KIT)
Series 1812 Inductor Kit. 5 each of 61 values (0.010µH to 1000.0µH), 305 total pieces................**$95.95**

Series S1812 Shielded Surface Mount Inductors

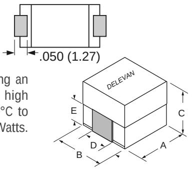


Min to Max Dimensions				
A	B	C (over terminals)	D	E
.166”–.190” (4.22mm–4.83mm)	.118”–.134” (3.00mm–3.40mm)	.118”–.134” (3.00mm–3.40mm)	.054”–.078” (1.37mm–1.98mm)	.066” (1.68mm)

Induct. (µH)	Test Freq. (MHz)	Q Min.	Current Rating Max.(mA)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing	API Delevan Part No.
					1	10	100		500	
Series S1812 Iron Core, ±20%										
.10	25	50	1490	DN1100CT-ND	1.26	1.08	.72	DN1100TR-ND	288.00	S1812-101M
.12	25	50	1412	DN1101CT-ND	1.26	1.08	.72	DN1101TR-ND	288.00	S1812-121M
.15	25	50	1347	DN1102CT-ND	1.26	1.08	.72	DN1102TR-ND	288.00	S1812-151M
.18	25	50	1290	DN1103CT-ND	1.26	1.08	.72	DN1103TR-ND	288.00	S1812-181M
.47	25	40	802	DN1108CT-ND	1.26	1.08	.72	DN1108TR-ND	288.00	S1812-471M
.56	25	40	735	DN1109CT-ND	1.26	1.08	.72	DN1109TR-ND	288.00	S1812-561M
.82	25	40	614	DN1111CT-ND	1.26	1.08	.72	DN1111TR-ND	288.00	S1812-821M
Series S1812 Ferrite Core, ±10%										
1.0	7.9	40	755	DN1112CT-ND	1.30	1.11	.74	DN1112TR-ND	296.00	S1812-102K
1.2	7.9	40	725	DN1113CT-ND	1.30	1.11	.74	DN1113TR-ND	296.00	S1812-122K
1.5	7.9	40	706	DN1114CT-ND	1.30	1.11	.74	DN1114TR-ND	296.00	S1812-152K
1.8	7.9	40	681	DN1115CT-ND	1.30	1.11	.74	DN1115TR-ND	296.00	S1812-182K
2.2	7.9	40	658	DN1116CT-ND	1.30	1.11	.74	DN1116TR-ND	296.00	S1812-222K
2.7	7.9	40	638	DN1117CT-ND	1.30	1.11	.74	DN1117TR-ND	296.00	S1812-272K
3.3	7.9	40	534	DN1118CT-ND	1.30	1.11	.74	DN1118TR-ND	296.00	S1812-332K
3.9	7.9	40	487	DN1119CT-ND	1.30	1.11	.74	DN1119TR-ND	296.00	S1812-392K
4.7	7.9	40	471	DN1120CT-ND	1.30	1.11	.74	DN1120TR-ND	296.00	S1812-472K
5.6	7.9	40	447	DN1121CT-ND	1.30	1.11	.74	DN1121TR-ND	296.00	S1812-562K
6.8	7.9	40	408	DN1122CT-ND	1.30	1.11	.74	DN1122TR-ND	296.00	S1812-682K
8.2	7.9	40	372	DN1123CT-ND	1.30	1.11	.74	DN1123TR-ND	296.00	S1812-822K
10.0	2.5	50	333	DN1124CT-ND	1.30	1.11	.74	DN1124TR-ND	296.00	S1812-103K
12.0	2.5	50	315	DN1125CT-ND	1.30	1.11	.74	DN1125TR-ND	296.00	S1812-123K
15.0	2.5	50	301	DN1126CT-ND	1.30	1.11	.74	DN1126TR-ND	296.00	S1812-153K
18.0	2.5	50	288	DN1127CT-ND	1.30	1.11	.74	DN1127TR-ND	296.00	S1812-183K
22.0	2.5	50	277	DN1128CT-ND	1.30	1.11	.74	DN1128TR-ND	296.00	S1812-223K
27.0	2.5	50	267	DN1129CT-ND	1.30	1.11	.74	DN1129TR-ND	296.00	S1812-273K
33.0	2.5	50	258	DN1130CT-ND	1.30	1.11	.74	DN1130TR-ND	296.00	S1812-333K
39.0	2.5	50	250	DN1131CT-ND	1.30	1.11	.74	DN1131TR-ND	296.00	S1812-393K
47.0	2.5	50	242	DN1132CT-ND	1.30	1.11	.74	DN1132TR-ND	296.00	S1812-473K
56.0	2.5	50	235	DN1133CT-ND	1.30	1.11	.74	DN1133TR-ND	296.00	S1812-563K
68.0	2.5	50	215	DN1134CT-ND	1.30	1.11	.74	DN1134TR-ND	296.00	S1812-683K
82.0	2.5	50	196	DN1135CT-ND	1.30	1.11	.74	DN1135TR-ND	296.00	S1812-823K
100.0	.79	40	169	DN1136CT-ND	1.30	1.11	.74	DN1136TR-ND	296.00	S1812-104K
120.0	.79	40	163	DN1137CT-ND	1.30	1.11	.74	DN1137TR-ND	296.00	S1812-124K
150.0	.79	40	158	DN1138CT-ND	1.30	1.11	.74	DN1138TR-ND	296.00	S1812-154K
180.0	.79	40	153	DN1139CT-ND	1.30	1.11	.74	DN1139TR-ND	296.00	S1812-184K
220.0	.79	40	149	DN1140CT-ND	1.54	1.32	.88	DN1140TR-ND	352.00	S1812-224K
270.0	.79	40	135	DN1141CT-ND	1.54	1.32	.88	DN1141TR-ND	352.00	S1812-274K
330.0	.79	40	129	DN1142CT-ND	1.54	1.32	.88	DN1142TR-ND	352.00	S1812-334K
390.0	.79	40	105	DN1143CT-ND	1.54	1.32	.88	DN1143TR-ND	352.00	S1812-394K
470.0	.79	40	91	DN1144CT-ND	1.54	1.32	.88	DN1144TR-ND	352.00	S1812-474K
560.0	.79	40	84	DN1145CT-ND	1.54	1.32	.88	DN1145TR-ND	352.00	S1812-564K
680.0	.79	40	79	DN1146CT-ND	1.54	1.32	.88	DN1146TR-ND	352.00	S1812-684K
820.0	.79	40	71	DN1147CT-ND	1.54	1.32	.88	DN1147TR-ND	352.00	S1812-824K
1000.0	.25	40	60	DN1148CT-ND	1.54	1.32	.88	DN1148TR-ND	352.00	S1812-105K

S1812KIT-ND (API Delevan Part No. S1812KIT)
Series S1812 Inductor Kit. 5 each of 49 values (0.10µH to 1000.0µH), 245 total pieces................**$95.95**

Series 4922 High Current Surface Mount Power Inductors



Mechanical Configuration: Units are encapsulated in a Surface Mount package, using an epoxy molded case. Leads are pre-tinned. A high resistivity ferrite core allows for high inductance with low DC resistance. Standard tolerance ±15%. **Operating Temp.:** -55°C to +125°C. **Current Rating:** 40°C rise over 85°C ambient. **Power Dissipation at 85°C**: .55 Watts. **Inductance:** Measured at 1V with no DC current

Min to Max Dimensions				
A	B	C (Over Terminals)	D	E (Min.)
.500” (12.70mm)	.240” (6.10mm)	.220” (5.59mm)	.065” (1.66mm)	.100” (2.54mm)

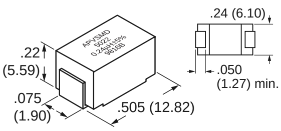
Ind. @ 1 khz (µH)	Max. DC Resist. (Ohms)	Rated Current (Max. Amps)	Incre-mental Current (Amps)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing	API Delevan Part No.
					1	10	100		800	
Series 4922 Ferrite Core, ±15%										
0.22	0.0080	7.00	7.00	DN2193CT-ND	2.24	1.92	1.28	DN2193TR-ND	819.20	4922-221L
0.27	0.0085	6.75	6.75	DN2194CT-ND	2.24	1.92	1.28	DN2194TR-ND	819.20	4922-271L
0.33	0.0090	6.50	6.50	DN2195CT-ND	2.24	1.92	1.28	DN2195TR-ND	819.20	4922-331L
0.39	0.0095	6.25	6.25	DN2196CT-ND	2.24	1.92	1.28	DN2196TR-ND	819.20	4922-391L
0.47	0.0100	6.00	6.00	DN2197CT-ND	2.24	1.92	1.28	DN2197TR-ND	819.20	4922-471L
0.56	0.0105	5.80	5.80	DN2198CT-ND	2.24	1.92	1.28	DN2198TR-ND	819.20	4922-561L
0.68	0.0110	5.70	5.70	DN2199CT-ND	2.24	1.92	1.28	DN2199TR-ND	819.20	4922-681L
0.82	0.0120	5.60	5.60	DN2200CT-ND	2.24	1.92	1.28	DN2200TR-ND	819.20	4922-821L
1.0	0.013	5.50	5.50	DN2201CT-ND	2.24	1.92	1.28	DN2201TR-ND	819.20	4922-01L
1.2	0.018	4.69	4.69	DN2202CT-ND	2.24	1.92	1.28	DN2202TR-ND	819.20	4922-02L
1.5	0.020	4.45	4.45	DN2203CT-ND	2.24	1.92	1.28	DN2203TR-ND	819.20	4922-03L
1.8	0.021	4.34	4.34	DN2204CT-ND	2.24	1.92	1.28	DN2204TR-ND	819.20	4922-04L
2.2	0.029	3.70	3.70	DN2205CT-ND	2.24	1.92	1.28	DN2205TR-ND	819.20	4922-05L
2.7	0.034	3.41	3.41	DN2206CT-ND	2.24	1.92	1.28	DN2206TR-ND	819.20	4922-06L
3.3	0.038	3.23	3.23	DN2207CT-ND	2.24	1.92	1.28	DN2207TR-ND	819.20	4922-07L
3.9	0.042	3.07	3.07	DN2208CT-ND	2.24	1.92	1.28	DN2208TR-ND	819.20	4922-08L
4.7	0.047	2.90	2.90	DN2209CT-ND	2.24	1.92	1.28	DN2209TR-ND	819.20	4922-09L
5.6	0.051	2.79	2.79	DN2210CT-ND	2.38	2.04	1.36	DN2210TR-ND	870.40	4922-10L
6.8	0.058	2.61	2.61	DN2211CT-ND	2.38	2.04	1.36	DN2211TR-ND	870.40	4922-11L
8.2	0.063	2.51	2.51	DN2212CT-ND	2.38	2.04	1.36	DN2212TR-ND	870.40	4922-12L

(Continued)

API Delevan Inductors *(Cont.)*

Ind. @ 1 khz (µH)	Max. DC Resist. (Ohms)	Rated Current (Max. Amps)	Incremental Current (Amps)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 800	API Delevan Part No.
10.0	0.071	2.36	2.36	DN2213CT-ND	2.38	2.04	1.36	DN2213TR-ND	870.40	4922-13L
12.0	0.079	2.24	2.24	DN2214CT-ND	2.38	2.04	1.36	DN2214TR-ND	870.40	4922-14L
15.0	0.089	2.11	2.11	DN2215CT-ND	2.38	2.04	1.36	DN2215TR-ND	870.40	4922-15L
18.0	0.119	1.82	1.82	DN2216CT-ND	2.38	2.04	1.36	DN2216TR-ND	870.40	4922-16L
22.0	0.152	1.61	1.61	DN2217CT-ND	2.56	2.19	1.46	DN2217TR-ND	934.40	4922-17L
27.0	0.179	1.48	1.48	DN2218CT-ND	2.56	2.19	1.46	DN2218TR-ND	934.40	4922-18L
33.0	0.222	1.33	1.33	DN2219CT-ND	2.56	2.19	1.46	DN2219TR-ND	934.40	4922-19L
39.0	0.315	1.12	1.12	DN2220CT-ND	2.56	2.19	1.46	DN2220TR-ND	934.40	4922-20L
47.0	0.362	1.04	1.04	DN2221CT-ND	2.56	2.19	1.46	DN2221TR-ND	934.40	4922-21L
56.0	0.397	1.00	1.00	DN2222CT-ND	2.56	2.19	1.46	DN2222TR-ND	934.40	4922-22L
68.0	0.418	0.97	0.97	DN2223CT-ND	2.56	2.19	1.46	DN2223TR-ND	934.40	4922-23L
82.0	0.604	0.81	0.81	DN2224CT-ND	2.73	2.34	1.56	DN2224TR-ND	998.40	4922-24L
100	0.672	0.76	0.76	DN2225CT-ND	2.73	2.34	1.56	DN2225TR-ND	998.40	4922-25L
120	0.735	0.73	0.73	DN2226CT-ND	2.73	2.34	1.56	DN2226TR-ND	998.40	4922-26L
150	0.998	0.63	0.63	DN2227CT-ND	2.73	2.34	1.56	DN2227TR-ND	998.40	4922-27L
180	1.37	0.53	0.53	DN2228CT-ND	2.73	2.34	1.56	DN2228TR-ND	998.40	4922-28L
220	1.58	0.50	0.50	DN2229CT-ND	2.73	2.34	1.56	DN2229TR-ND	998.40	4922-29L
270	1.77	0.47	0.47	DN2230CT-ND	2.73	2.34	1.56	DN2230TR-ND	998.40	4922-30L
330	2.51	0.39	0.39	DN2231CT-ND	2.73	2.34	1.56	DN2231TR-ND	998.40	4922-31L
390	2.73	0.38	0.38	DN2232CT-ND	2.73	2.34	1.56	DN2232TR-ND	998.40	4922-32L
470	3.25	0.35	0.35	DN2233CT-ND	2.73	2.34	1.56	DN2233TR-ND	998.40	4922-33L
560	3.75	0.33	0.33	DN2234CT-ND	2.80	2.40	1.60	DN2234TR-ND	1024.00	4922-34L
680	4.31	0.30	0.30	DN2235CT-ND	2.80	2.40	1.60	DN2235TR-ND	1024.00	4922-35L
820	6.04	0.26	0.26	DN2236CT-ND	2.80	2.40	1.60	DN2236TR-ND	1024.00	4922-36L
1000	6.90	0.24	0.24	DN2237CT-ND	2.80	2.40	1.60	DN2237TR-ND	1024.00	4922-37L
1200	10.00	0.20	0.20	DN2238CT-ND	2.80	2.40	1.60	DN2238TR-ND	1024.00	4922-38L
1500	12.50	0.178	0.178	DN2239CT-ND	2.80	2.40	1.60	DN2239TR-ND	1024.00	4922-39L
1800	16.00	0.157	0.157	DN2333CT-ND	2.80	2.40	1.60	DN2333TR-ND	1024.00	4922-40L
2200	20.00	0.141	0.141	DN2334CT-ND	2.80	2.40	1.60	DN2334TR-ND	1024.00	4922-41L
2700	23.00	0.131	0.131	DN2335CT-ND	2.80	2.40	1.60	DN2335TR-ND	1024.00	4922-42L
3300	25.00	0.126	0.126	DN2336CT-ND	2.80	2.40	1.60	DN2336TR-ND	1024.00	4922-43L
3900	33.00	0.110	0.110	DN2337CT-ND	2.80	2.40	1.60	DN2337TR-ND	1024.00	4922-44L
4700	37.00	0.103	0.103	DN2338CT-ND	2.80	2.40	1.60	DN2338TR-ND	1024.00	4922-45L
5600	40.00	0.100	0.100	DN2339CT-ND	2.80	2.40	1.60	DN2339TR-ND	1024.00	4922-46L
6800	62.00	0.080	0.080	DN2340CT-ND	2.94	2.52	1.68	DN2340TR-ND	1075.20	4922-47L
8200	66.00	0.077	0.077	DN2341CT-ND	2.94	2.52	1.68	DN2341TR-ND	1075.20	4922-48L
10000	74.00	0.071	0.071	DN2342CT-ND	2.94	2.52	1.68	DN2342TR-ND	1075.20	4922-49L
12000	93.00	0.065	0.065	DN2343CT-ND	2.94	2.52	1.68	DN2343TR-ND	1075.20	4922-50L
15000	105.00	0.061	0.061	DN2344CT-ND	2.94	2.52	1.68	DN2344TR-ND	1075.20	4922-51L
18000	143.00	0.052	0.052	DN2345CT-ND	3.29	2.82	1.88	DN2345TR-ND	1203.20	4922-52L
22000	160.00	0.050	0.050	DN2346CT-ND	3.29	2.82	1.88	DN2346TR-ND	1203.20	4922-53L

Series 5022 Surface Mount Inductors

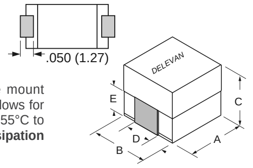


Mechanical Configuration: Units are encapsulated in a Surface Mount package, using an epoxy molded case. **Operating Temperature:** -55°C to +125°C. **Current Rating at 90°C Ambient:** 35°C rise. **Maximum Power Dissipation at 90°C**: 0.405 Watts. **Weight Max.:** 1.5 grams

Ind. (µH) ± 5%	Q Min.	Test Freq. (MHz)	DC Resist. Max. (Ohms)	Curr. Rating Max. (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 800	API Delevan Part No.
Series 5022 Phenolic Core											
0.15	50	25.0	0.030	3500	DN2240CT-ND	2.73	2.34	1.56	DN2240TR-ND	998.40	5022-151J
0.16	50	25.0	0.040	3025	DN2241CT-ND	2.73	2.34	1.56	DN2241TR-ND	998.40	5022-161J
0.18	50	25.0	0.043	2915	DN2242CT-ND	2.73	2.34	1.56	DN2242TR-ND	998.40	5022-181J
0.20	50	25.0	0.047	2790	DN2243CT-ND	2.73	2.34	1.56	DN2243TR-ND	998.40	5022-201J
0.22	50	25.0	0.055	2580	DN2244CT-ND	2.73	2.34	1.56	DN2244TR-ND	998.40	5022-221J
0.24	45	25.0	0.060	2470	DN2245CT-ND	2.10	1.80	1.20	DN2245TR-ND	768.00	5022-241J
0.27	45	25.0	0.070	2285	DN2246CT-ND	2.10	1.80	1.20	DN2246TR-ND	768.00	5022-271J
0.30	45	25.0	0.080	2140	DN2247CT-ND	2.10	1.80	1.20	DN2247TR-ND	768.00	5022-301J
0.33	45	25.0	0.090	2015	DN2248CT-ND	2.10	1.80	1.20	DN2248TR-ND	768.00	5022-331J
0.36	45	25.0	0.098	1935	DN2249CT-ND	2.10	1.80	1.20	DN2249TR-ND	768.00	5022-361J
0.39	45	25.0	0.100	1915	DN2250CT-ND	2.10	1.80	1.20	DN2250TR-ND	768.00	5022-391J
0.43	45	25.0	0.110	1825	DN2251CT-ND	2.10	1.80	1.20	DN2251TR-ND	768.00	5022-431J
0.47	45	25.0	0.120	1750	DN2252CT-ND	2.10	1.80	1.20	DN2252TR-ND	768.00	5022-471J
0.51	45	25.0	0.130	1680	DN2253CT-ND	2.10	1.80	1.20	DN2253TR-ND	768.00	5022-511J
0.56	50	25.0	0.135	1645	DN2254CT-ND	2.10	1.80	1.20	DN2254TR-ND	768.00	5022-561J
0.62	50	25.0	0.140	1615	DN2255CT-ND	2.10	1.80	1.20	DN2255TR-ND	768.00	5022-621J
0.68	50	25.0	0.150	1555	DN2256CT-ND	2.10	1.80	1.20	DN2256TR-ND	768.00	5022-681J
0.75	50	25.0	0.180	1425	DN2257CT-ND	2.10	1.80	1.20	DN2257TR-ND	768.00	5022-751J
0.82	50	25.0	0.220	1300	DN2258CT-ND	2.10	1.80	1.20	DN2258TR-ND	768.00	5022-821J
0.91	50	25.0	0.240	1240	DN2259CT-ND	2.10	1.80	1.20	DN2259TR-ND	768.00	5022-911J
1.00	50	25.0	0.290	1125	DN2260CT-ND	2.10	1.80	1.20	DN2260TR-ND	768.00	5022-102J
1.10	33	7.9	0.420	930	DN2261CT-ND	2.10	1.80	1.20	DN2261TR-ND	768.00	5022-112J
1.20	33	7.9	0.420	930	DN2262CT-ND	2.10	1.80	1.20	DN2262TR-ND	768.00	5022-122J
1.30	33	7.9	0.480	875	DN2263CT-ND	2.10	1.80	1.20	DN2263TR-ND	768.00	5022-132J
1.50	33	7.9	0.500	855	DN2264CT-ND	2.10	1.80	1.20	DN2264TR-ND	768.00	5022-152J
1.60	33	7.9	0.600	780	DN2265CT-ND	2.10	1.80	1.20	DN2265TR-ND	768.00	5022-162J
1.80	33	7.9	0.650	755	DN2266CT-ND	2.10	1.80	1.20	DN2266TR-ND	768.00	5022-182J
2.00	33	7.9	0.800	675	DN2267CT-ND	2.10	1.80	1.20	DN2267TR-ND	768.00	5022-202J
2.20	33	7.9	0.950	620	DN2268CT-ND	2.10	1.80	1.20	DN2268TR-ND	768.00	5022-222J
2.40	33	7.9	1.100	575	DN2269CT-ND	2.10	1.80	1.20	DN2269TR-ND	768.00	5022-242J
2.70	33	7.9	1.200	550	DN2270CT-ND	2.10	1.80	1.20	DN2270TR-ND	768.00	5022-272J
3.00	33	7.9	1.800	455	DN2271CT-ND	2.10	1.80	1.20	DN2271TR-ND	768.00	5022-302J
3.30	33	7.9	2.000	430	DN2272CT-ND	2.10	1.80	1.20	DN2272TR-ND	768.00	5022-332J
3.60	33	7.9	2.150	415	DN2273CT-ND	2.10	1.80	1.20	DN2273TR-ND	768.00	5022-362J
3.90	33	7.9	2.300	395	DN2274CT-ND	2.10	1.80	1.20	DN2274TR-ND	768.00	5022-392J
4.30	33	7.9	2.400	390	DN2275CT-ND	2.10	1.80	1.20	DN2275TR-ND	768.00	5022-432J
4.70	33	7.9	2.600	375	DN2276CT-ND	2.10	1.80	1.20	DN2276TR-ND	768.00	5022-472J

Ind. (µH) ± 5%	Q Min.	Test Freq. (MHz)	DC Resist. Max. (Ohms)	Curr. Rating Max. (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 800	API Delevan Part No.
Series 5022 Iron Core											
5.10	35	7.9	0.300	1040	DN2277CT-ND	2.31	1.98	1.32	DN2277TR-ND	844.80	5022-512J
5.60	45	7.9	0.300	1030	DN2278CT-ND	2.31	1.98	1.32	DN2278TR-ND	844.80	5022-562J
6.20	45	7.9	0.470	830	DN2279CT-ND	2.31	1.98	1.32	DN2279TR-ND	844.80	5022-622J
6.80	50	7.9	0.500	820	DN2280CT-ND	2.31	1.98	1.32	DN2280TR-ND	844.80	5022-682J
7.50	50	7.9	0.550	765	DN2281CT-ND	2.31	1.98	1.32	DN2281TR-ND	844.80	5022-752J
8.20	50	7.9	0.600	748	DN2282CT-ND	2.31	1.98	1.32	DN2282TR-ND	844.80	5022-822J
9.10	55	7.9	0.800	638	DN2283CT-ND	2.31	1.98	1.32	DN2283TR-ND	844.80	5022-912J
10.0	55	7.9	0.900	610	DN2284CT-ND	2.31	1.98	1.32	DN2284TR-ND	844.80	5022-103J
11.0	60	2.5	1.050	565	DN2285CT-ND	2.31	1.98	1.32	DN2285TR-ND	844.80	5022-113J
12.0	65	2.5	1.100	555	DN2286CT-ND	2.31	1.98	1.32	DN2286TR-ND	844.80	5022-123J
13.0	65	2.5	1.200	520	DN2287CT-ND	2.31	1.98	1.32	DN2287TR-ND	844.80	5022-133J
15.0	65	2.5	1.400	495	DN2288CT-ND	2.31	1.98	1.32	DN2288TR-ND	844.80	5022-153J
16.0	70	2.5	1.800	420	DN2289CT-ND	2.31	1.98	1.32	DN2289TR-ND	844.80	5022-163J
18.0	75	2.5	2.250	388	DN2290CT-ND	2.31	1.98	1.32	DN2290TR-ND	844.80	5022-183J
20.0	75	2.5	2.500	372	DN2291CT-ND	2.31	1.98	1.32	DN2291TR-ND	844.80	5022-203J
22.0	75	2.5	2.500	368	DN2292CT-ND	2.31	1.98	1.32	DN2292TR-ND	844.80	5022-223J
24.0	60	2.5	2.500	368	DN2293CT-ND	2.31	1.98	1.32	DN2293TR-ND	844.80	5022-243J
27.0	60	2.5	2.600	360	DN2294CT-ND	2.31	1.98	1.32	DN2294TR-ND	844.80	5022-273J
30.0	65	2.5	2.800	348	DN2295CT-ND	2.31	1.98	1.32	DN2295TR-ND	844.80	5022-303J
33.0	65	2.5	3.000	337	DN2296CT-ND	2.31	1.98	1.32	DN2296TR-ND	844.80	5022-333J
36.0	60	2.5	2.500	368	DN2297CT-ND	2.31	1.98	1.32	DN2297TR-ND	844.80	5022-363J
39.0	60	2.5	2.600	361	DN2298CT-ND	2.31	1.98	1.32	DN2298TR-ND	844.80	5022-393J
43.0	60	2.5	2.700	353	DN2299CT-ND	2.31	1.98	1.32	DN2299TR-ND	844.80	5022-433J
47.0	55	2.5	2.750	351	DN2300CT-ND	2.31	1.98	1.32	DN2300TR-ND	844.80	5022-473J
51.0	55	2.5	2.850	344	DN2301CT-ND	2.31	1.98	1.32	DN2301TR-ND	844.80	5022-513J
56.0	55	2.5	3.000	335	DN2302CT-ND	2.31	1.98	1.32	DN2302TR-ND	844.80	5022-563J
62.0	55	2.5	3.150	328	DN2303CT-ND	2.31	1.98	1.32	DN2303TR-ND	844.80	5022-623J
68.0	55	2.5	3.300	320	DN2304CT-ND	2.31	1.98	1.32	DN2304TR-ND	844.80	5022-683J
75.0	55	2.5	3.700	302	DN2305CT-ND	2.31	1.98	1.32	DN2305TR-ND	844.80	5022-753J
82.0	50	2.5	3.900	295	DN2306CT-ND	2.31	1.98	1.32	DN2306TR-ND	844.80	5022-823J
91.0	50	2.5	4.300	280	DN2307CT-ND	2.31	1.98	1.32	DN2307TR-ND	844.80	5022-913J
100.0	50	2.5	4.500	275	DN2308CT-ND	2.31	1.98	1.32	DN2308TR-ND	844.80	5022-104J
110.0	60	0.79	4.900	262	DN2309CT-ND	2.31	1.98	1.32	DN2309TR-ND	844.80	5022-114J
120.0	65	0.79	5.200	255	DN2310CT-ND	2.31	1.98	1.32	DN2310TR-ND	844.80	5022-124J
130.0	65	0.79	5.450	250	DN2311CT-ND	2.31	1.98	1.32	DN2311TR-ND	844.80	5022-134J
150.0	65	0.79	6.050	237	DN2312CT-ND	2.31	1.98	1.32	DN2312TR-ND	844.80	5022-154J
160.0	65	0.79	6.400	230	DN2313CT-ND	2.31	1.98	1.32	DN2313TR-ND	844.80	5022-164J
180.0	65	0.79	6.750	244	DN2314CT-ND	2.31	1.98	1.32	DN2314TR-ND	844.80	5022-184J
200.0	65	0.79	7.100	219	DN2315CT-ND	2.31	1.98	1.32	DN2315TR-ND	844.80	5022-204J
220.0	65	0.79	7.450	213	DN2316CT-ND	2.31	1.98	1.32	DN2316TR-ND	844.80	5022-224J
240.0	65	0.79	7.800	210	DN2317CT-ND	2.31	1.98	1.32	DN2317TR-ND	844.80	5022-244J
270.0	65	0.79	11.000	182	DN2318CT-ND	2.49	2.13	1.42	DN2318TR-ND	908.80	5022-274J
300.0	65	0.79	11.500	178	DN2319CT-ND	2.49	2.13	1.42	DN2319TR-ND	908.80	5022-304J
330.0	65	0.79	12.000	173	DN2320CT-ND	2.49	2.13	1.42	DN2320TR-ND	908.80	5022-334J
360.0	65	0.79	12.500	171	DN2321CT-ND	2.49	2.13	1.42	DN2321TR-ND	908.80	5022-364J
390.0	65	0.79	16.300	149	DN2322CT-ND	2.49	2.13	1.42	DN2322TR-ND	908.80	5022-394J
430.0	65	0.79	17.100	147	DN2323CT-ND	2.49	2.13	1.42	DN2323TR-ND	908.80	5022-434J
470.0	65	0.79	17.900	143	DN2324CT-ND	2.49	2.13	1.42	DN2324TR-ND	908.80	5022-474J
510.0	65	0.79	18.800	139	DN2325CT-ND	2.49	2.13	1.42	DN2325TR-ND	908.80	5022-514J
560.0	65	0.79	19.500	136	DN2326CT-ND	2.49	2.13	1.42	DN2326TR-ND	908.80	5022-564J
620.0	65	0.79	25.900	119	DN2327CT-ND	2.49	2.13	1.42	DN2327TR-ND	908.80	5022-624J
680.0	65	0.79	27.200	116	DN2328CT-ND	2.49	2.13	1.42	DN2328TR-ND	908.80	5022-684J
750.0	65	0.79	28.600	112	DN2329CT-ND	2.49	2.13	1.42	DN2329TR-ND	908.80	5022-754J
820.0	65	0.79	30.000	110	DN2330CT-ND	2.49	2.13	1.42	DN2330TR-ND	908.80	5022-824J
910.0	65	0.79	31.500	107	DN2331CT-ND	2.49	2.13	1.42	DN2331TR-ND	908.80	5022-914J
1000.0	65	0.79	33.000	105	DN2332CT-ND	2.49	2.13	1.42	DN2332TR-ND	908.80	5022-105J

Series 8532 Surface Mount Power Inductors



Mechanical Configuration: Units are encapsulated in a surface mount package, using an epoxy molded case. High resistivity ferrite core, allows for high inductance with low DC resistance. **Operating Temperature:** -55°C to +125°C **Current Rating:** 40°C rise over 85°C ambient **Power Dissipation at 85°C**: .50 Watts **Inductance:** Measured at 1 V with no DC current

Min to Max Dimensions				
A	B	C (over terminals)	D	E
.840" – .860" (21.34mm – 21.84mm)	.310" to .330" (7.87mm – 8.38mm)	.266" to .286" (6.76mm – 7.26mm)	.070" to .110" (1.78mm – 2.79mm)	.20" (Ref. Only) 5.08mm (Ref. Only)

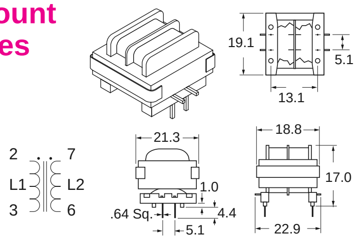
Induct. @ 1 kHz (µH)±15%	Max DC Resist. (Ohms)	Current Rating Max. (A)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 480	API Delevan Part No.
Series 8532 Ferrite Core, ±15%									
1.0	0.009	6.27	DN3201CT-ND	3.01	2.58	1.72	DN3201TR-ND	660.48	8532-01LTR
1.2	0.010	5.95	DN3202CT-ND	3.01	2.58	1.72	DN3202TR-ND	660.48	8532-02LTR
1.5	0.011	5.67	DN3203CT-ND	3.01	2.58	1.72	DN3203TR-ND	660.48	8532-03LTR
1.8	0.012	5.43	DN3204CT-ND	3.01	2.58	1.72	DN3204TR-ND	660.48	8532-04LTR
2.2	0.013	5.22	DN3205CT-ND	3.01	2.58	1.72	DN3205TR-ND	660.48	8532-05LTR
2.7	0.014	5.03	DN3206CT-ND	3.01	2.58	1.72	DN3206TR-ND	660.48	8532-06LTR
3.3	0.016	4.70	DN3207CT-ND	3.01	2.58	1.72	DN3207TR-ND	660.48	8532-07LTR
3.9	0.017	4.56	DN3208CT-ND	3.01	2.58	1.72	DN3208TR-ND	660.48	8532-08LTR
4.7	0.022	4.01	DN3209CT-ND	3.01	2.58	1.72	DN3209TR-ND	660.48	8532-09LTR
5.6	0.024	3.84	DN3210CT-ND	3.01	2.58	1.72	DN3210TR-ND	660.48	8532-10LTR
6.8	0.026	3.69	DN3211CT-ND	3.01	2.58	1.72	DN3211TR-ND	660.48	8532-11LTR
8.2	0.028	3.55	DN3212CT-ND	3.01	2.58	1.72	DN3212TR-ND	660.48	8532-12LTR
10.0	0.033	3.27	DN3213CT-ND	3.36	2.88	1.92	DN3213TR-ND	737.28	8532-13LTR
12.0	0.037	3.09	DN3214CT-ND	3.36	2.88	1.92	DN3214TR-ND	737.28	8532-14LTR
15.0	0.040	2.97	DN3215CT-ND	3.36	2.88	1.92	DN3215TR-ND	737.28	8532-15LTR
18.0	0.044	2.84	DN3216CT-ND	3.36	2.88	1.92	DN3216TR-ND	737.28	8532-16LTR
22.0	0.050	2.66	DN3217CT-ND	3.36	2.88	1.92	DN3217TR-ND	737.28	8532-17LTR
27.0	0.070	2.25	DN3218CT-ND	3.36	2.88	1.92	DN3218TR-ND	737.28	8532-18LTR
33.0	0.075	2.17	DN3219CT-ND	3.36	2.88	1.92	DN3219TR-ND	737.28	8532-19LTR
39.0	0.084	2.05	DN3220CT-ND	3.36	2.88	1.92	DN3220TR-ND	737.28	8532-20LTR
47.0	0.104	1.84	DN3221CT-ND	3.36	2.88	1.92	DN3221TR-ND	737.28	8532-21LTR
56.0	0.130	1.65	DN3222CT-ND	3.36	2.88	1.92	DN3222TR-ND	737.28	8532-22LTR
68.0	0.145	1.56	DN3223CT-ND	3.36	2.88	1.92	DN3223TR-ND	737.28	8532-23LTR
82.0	0.152	1.53	DN3224CT-ND	3.36	2.88	1.92	DN3224TR-ND	737.28	8532-24LTR
100.0	0.208	1.30	DN3225CT-ND	3.54	3.03	2.02	DN3225TR-ND	775.68	8532-25LTR

(Continued)

API Delevan Inductors *(Cont.)*

Induct. @ 1 kHz (µH)±15%	Max DC Resist. (Ohms)	Current Rating Max.(A)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 480	API Delevan Part No.
120.0	0.283	1.12	DN3226CT-ND	3.54	3.03	2.02	DN3226TR-ND	775.68	8532-26LTR
150.0	0.330	1.04	DN3227CT-ND	3.54	3.03	2.02	DN3227TR-ND	775.68	8532-27LTR
180.0	0.362	0.99	DN3228CT-ND	3.54	3.03	2.02	DN3228TR-ND	775.68	8532-28LTR
220.0	0.505	0.84	DN3229CT-ND	3.54	3.03	2.02	DN3229TR-ND	775.68	8532-29LTR
270.0	0.557	0.80	DN3230CT-ND	3.54	3.03	2.02	DN3230TR-ND	775.68	8532-30LTR
390.0	0.770	0.68	DN3232CT-ND	3.54	3.03	2.02	DN3232TR-ND	775.68	8532-32LTR
470.0	1.03	0.59	DN3233CT-ND	3.54	3.03	2.02	DN3233TR-ND	775.68	8532-33LTR
560.0	1.14	0.56	DN3234CT-ND	3.54	3.03	2.02	DN3234TR-ND	775.68	8532-34LTR
680.0	1.50	0.49	DN3235CT-ND	3.54	3.03	2.02	DN3235TR-ND	775.68	8532-35LTR
820.0	1.98	0.42	DN3236CT-ND	3.54	3.03	2.02	DN3236TR-ND	775.68	8532-36LTR
1000.0	2.30	0.39	DN3237CT-ND	3.75	3.21	2.14	DN3237TR-ND	821.76	8532-37LTR
1200.0	2.55	0.37	DN3238CT-ND	3.75	3.21	2.14	DN3238TR-ND	821.76	8532-38LTR
1500.0	3.00	0.34	DN3239CT-ND	3.75	3.21	2.14	DN3239TR-ND	821.76	8532-39LTR
1800.0	4.00	0.30	DN3240CT-ND	3.75	3.21	2.14	DN3240TR-ND	821.76	8532-40LTR
2200.0	4.40	0.28	DN3241CT-ND	3.75	3.21	2.14	DN3241TR-ND	821.76	8532-41LTR
2700.0	5.80	0.25	DN3242CT-ND	3.75	3.21	2.14	DN3242TR-ND	821.76	8532-42LTR
3300.0	6.56	0.23	DN3243CT-ND	3.75	3.21	2.14	DN3243TR-ND	821.76	8532-43LTR
3900.0	8.63	0.20	DN3244CT-ND	3.75	3.21	2.14	DN3244TR-ND	821.76	8532-44LTR
4700.0	10.1	0.19	DN3245CT-ND	3.75	3.21	2.14	DN3245TR-ND	821.76	8532-45LTR
5600.0	11.2	0.18	DN3246CT-ND	3.75	3.21	2.14	DN3246TR-ND	821.76	8532-46LTR
6800.0	15.0	0.15	DN3247CT-ND	3.75	3.21	2.14	DN3247TR-ND	821.76	8532-47LTR
8200.0	20.8	0.13	DN3248CT-ND	3.75	3.21	2.14	DN3248TR-ND	821.76	8532-48LTR
10000.0	23.4	0.12	DN3249CT-ND	3.75	3.21	2.14	DN3249TR-ND	821.76	8532-49LTR
12000.0	26.0	0.12	DN3250CT-ND	3.75	3.21	2.14	DN3250TR-ND	821.76	8532-50LTR
15000.0	36.0	0.10	DN3251CT-ND	3.75	3.21	2.14	DN3251TR-ND	821.76	8532-51LTR
18000.0	40.0	0.09	DN3252CT-ND	3.75	3.21	2.14	DN3252TR-ND	821.76	8532-52LTR

Series CM9900 PC Mount Common Mode Chokes



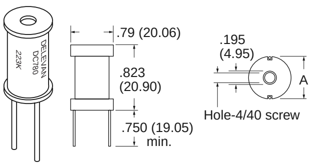
- **Operating Temperature Range:** -55°C to +125°C
- **Current Rating at 80°C Ambient:** 40°C rise
- **Mechanical Configuration:** Tape wrapped winding sections; varnish impregnated assembly

NOTES:

(1) Inductance in table is for either L1 or L2
(2) Leakage inductance tested at L1 with L2 shorted or at L2 with L1 shorted
(3) Windings balanced within 1%

Inductance (µH) L1 or L2	Current Rating Max. (Amps)	Digi-Key Part No.	Price Each 1	10	100	API Delevan Part No.
47	3.5	DN4600-ND	3.61	3.09	2.06	CM9900-473
56	3.5	DN4601-ND	3.61	3.09	2.06	CM9900-563
68	3.5	DN4602-ND	3.61	3.09	2.06	CM9900-683
82	2.8	DN4603-ND	3.61	3.09	2.06	CM9900-823
100	2.8	DN4604-ND	3.61	3.09	2.06	CM9900-104
120	2.8	DN4605-ND	3.61	3.09	2.06	CM9900-124
150	2.8	DN4606-ND	3.61	3.09	2.06	CM9900-154
180	2.2	DN4607-ND	3.61	3.09	2.06	CM9900-184
220	2.2	DN4608-ND	3.61	3.09	2.06	CM9900-224
270	2.2	DN4609-ND	3.61	3.09	2.06	CM9900-274
330	1.7	DN4610-ND	3.61	3.09	2.06	CM9900-334
470	1.4	DN4611-ND	3.61	3.09	2.06	CM9900-474
560	1.4	DN4612-ND	3.61	3.09	2.06	CM9900-564
680	1.1	DN4613-ND	3.61	3.09	2.06	CM9900-684
820	1.1	DN4614-ND	3.61	3.09	2.06	CM9900-824
1000	.88	DN4615-ND	3.61	3.09	2.06	CM9900-105
1200	.88	DN4616-ND	3.61	3.09	2.06	CM9900-125
1500	.70	DN4617-ND	3.61	3.09	2.06	CM9900-155
1800	.70	DN4618-ND	3.61	3.09	2.06	CM9900-185
2200	.55	DN4619-ND	3.61	3.09	2.06	CM9900-225
2700	.55	DN4620-ND	3.61	3.09	2.06	CM9900-275
3300	.55	DN4621-ND	3.61	3.09	2.06	CM9900-335

Series DC780 High Current Power Line Chokes

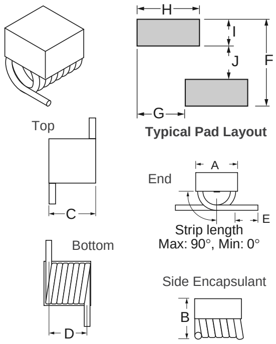


Mechanical Configuration: Ferrite Bobbin protected with a flame retardant polyolefin sleeve. Center hole allows for mechanical mounting. Insulated bobbins. **Operating Temperature:** -55°C to +125°C, -55°C to +80°C @ full rated current.

Nom. Induct. (µH)	Max. DCR (Ohms)	Max. Rated Current (A DC)	Dimension Inch (mm) A	Digi-Key Part No.	Price Each 1	10	50	API Delevan Part No.
Series DC780, ±15%								
1.0	0.003	11.4	.620 (15.748)	DN2400-ND	5.17	4.70	4.52	DC780-102L
1.2	0.003	11.4	.620 (15.748)	DN2401-ND	5.17	4.70	4.52	DC780-122L
1.5	0.003	11.4	.620 (15.748)	DN2402-ND	5.17	4.70	4.52	DC780-152L
1.8	0.003	11.4	.620 (15.748)	DN2403-ND	5.17	4.70	4.52	DC780-182L
2.2	0.004	11.4	.620 (15.748)	DN2404-ND	5.17	4.70	4.52	DC780-222L
2.7	0.005	11.4	.620 (15.748)	DN2405-ND	5.17	4.70	4.52	DC780-272L
3.3	0.005	11.4	.620 (15.748)	DN2406-ND	5.17	4.70	4.52	DC780-332L
3.9	0.005	11.4	.620 (15.748)	DN2407-ND	5.17	4.70	4.52	DC780-392L
4.7	0.005	11.4	.620 (15.748)	DN2408-ND	5.17	4.70	4.52	DC780-472L
5.6	0.006	11.4	.620 (15.748)	DN2409-ND	5.17	4.70	4.52	DC780-562L
6.8	0.007	11.4	.620 (15.748)	DN2410-ND	5.17	4.70	4.52	DC780-682L
8.2	0.007	11.4	.620 (15.748)	DN2411-ND	5.17	4.70	4.52	DC780-822L
Series DC780, ±10%								
10.0	0.009	11.4	.620 (15.748)	DN2412-ND	6.05	5.50	5.28	DC780-103K
12.0	0.009	11.4	.620 (15.748)	DN2413-ND	6.05	5.50	5.28	DC780-123K
15.0	0.013	9.0	.625 (15.875)	DN2414-ND	6.05	5.50	5.28	DC780-153K
18.0	0.018	7.2	.630 (16.002)	DN2415-ND	6.05	5.50	5.28	DC780-183K
22.0	0.019	7.2	.630 (16.002)	DN2416-ND	6.05	5.50	5.28	DC780-223K
27.0	0.026	5.5	.546 (13.868)	DN2417-ND	6.05	5.50	5.28	DC780-273K
33.0	0.029	5.5	.546 (13.868)	DN2418-ND	6.05	5.50	5.28	DC780-333K
39.0	0.030	5.5	.594 (15.087)	DN2419-ND	6.05	5.50	5.28	DC780-393K
47.0	0.035	5.5	.625 (15.875)	DN2420-ND	6.05	5.50	5.28	DC780-473K
56.0	0.039	5.5	.625 (15.875)	DN2421-ND	6.05	5.50	5.28	DC780-563K
68.0	0.053	4.8	.656 (16.662)	DN2422-ND	6.05	5.50	5.28	DC780-683K
82.0	0.060	4.8	.656 (16.662)	DN2423-ND	6.05	5.50	5.28	DC780-823K
100	0.080	4.0	.593 (15.062)	DN2424-ND	6.05	5.50	5.28	DC780-104K
120	0.090	4.0	.593 (15.062)	DN2425-ND	6.05	5.50	5.28	DC780-124K
150	0.098	4.0	.593 (15.062)	DN2426-ND	6.05	5.50	5.28	DC780-154K
180	0.110	4.0	.593 (15.062)	DN2427-ND	7.70	7.00	6.72	DC780-184K
220	0.150	2.8	.593 (15.062)	DN2428-ND	7.70	7.00	6.72	DC780-224K
270	0.213	2.0	.562 (14.274)	DN2429-ND	7.70	7.00	6.72	DC780-274K
330	0.305	1.6	.590 (14.986)	DN2430-ND	7.70	7.00	6.72	DC780-334K
390	0.320	1.6	.590 (14.986)	DN2431-ND	7.70	7.00	6.72	DC780-394K
470	0.355	1.6	.590 (14.986)	DN2432-ND	7.70	7.00	6.72	DC780-474K
560	0.388	1.6	.590 (14.986)	DN2433-ND	7.70	7.00	6.72	DC780-564K
680	0.430	1.6	.590 (14.986)	DN2434-ND	7.70	7.00	6.72	DC780-684K
820	0.590	1.3	.590 (14.986)	DN2435-ND	7.70	7.00	6.72	DC780-824K
1000	0.818	1.0	.590 (14.986)	DN2436-ND	7.70	7.00	6.72	DC780-105K
1200	1.140	0.8	.590 (14.986)	DN2437-ND	7.70	7.00	6.72	DC780-125K
1500	1.260	0.8	.590 (14.986)	DN2438-ND	7.70	7.00	6.72	DC780-155K
1800	1.390	0.8	.590 (14.986)	DN2439-ND	7.70	7.00	6.72	DC780-185K
2200	1.540	0.8	.590 (14.986)	DN2440-ND	7.70	7.00	6.72	DC780-225K

Series 4426 Surface Mount Air Core Inductors

High Q, wire wound air cores over a wide frequency range. Flat cap top is suitable for automatic placement.

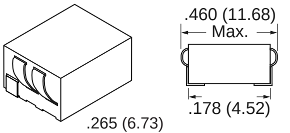


	Size A (inch)	Size A (mm)	Size B (inch)	Size B (mm)
A Max	.120	3.05	.120	3.05
B Max	.125	3.18	.125	3.18
C Max	.145	3.68	.270	6.86
D	.115±.010	2.92±.25	.230±.010	5.84±.25
E	.05±.015	1.27±.38	.05±.015	1.27±.38
F	.165	4.19	.285	7.23
G	.110	2.79	.110	2.79
H	.130	3.30	.130	3.30
I	.050	1.27	.050	1.27
J	.065	1.65	.185	4.69

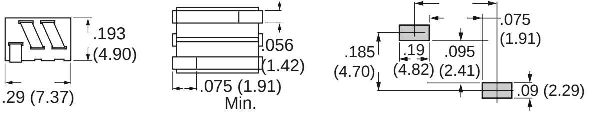
Size Code	Induct. (nH)	Turns	Q Min.	Digi-Key Part No.	Price Each 1	10	50	100	API Delevan Part No.
Series 4426 Air Core Inductors									
A	2.5±10%	1	145	DN4001-ND	1.16	1.05	1.01	.97	4426-1
	5.0±10%	2	140	DN4002-ND	1.16	1.05	1.01	.97	4426-2
	8.0±5%	3	140	DN4003-ND	1.16	1.05	1.01	.97	4426-3
	12.5±5%	4	137	DN4004-ND	1.16	1.05	1.01	.97	4426-4
	18.5±5%	5	132	DN4005-ND	1.16	1.05	1.01	.97	4426-5
B	17.5±5%	6	100	DN4006-ND	1.16	1.05	1.01	.97	4426-6
	22.0±5%	7	102	DN4007-ND	1.16	1.05	1.01	.97	4426-7
	28.0±5%	8	105	DN4008-ND	1.16	1.05	1.01	.97	4426-8
	35.5±5%	9	112	DN4009-ND	1.16	1.05	1.01	.97	4426-9
	43.0±5%	10	106	DN4010-ND	1.16	1.05	1.01	.97	4426-10

4426KIT-ND (API Delevan Part No. 4426KIT)
Series 4426 Inductor Kit. 5 each of 10 values (2.5nH to 43nH), 50 total pieces........................**$25.50**

Series SMB 2.5 Surface Mount Shield Beads



Operating Temperature Range: –40°C to +125°C



API Delevan Part Number	Turns	Minimum Impedance (Ohms) 10 MHz	100 MHz	150 MHz	220 MHz	Idc Max. (Amps)	DCR Max. (Ohms)
SMB2.5-1	2 1/2	210	385	400	375	9.5	0.005
SMB2.5-2	2 1/2	NA	490	635	650	9.5	0.005

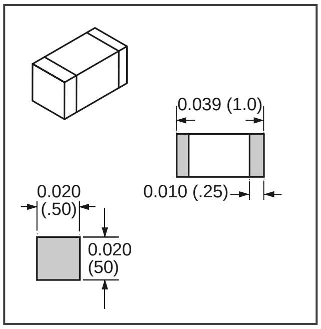
Digi-Key Part No.	Cut Tape Price Each 10	50	100	Digi-Key Part No.	Tape & Reel Pricing 700	API Delevan Part No.
DN4700CT-ND	.77	.66	.44	DN4700TR-ND	246.40	SMB2.5-1
DN4701CT-ND	.77	.66	.44	DN4701TR-ND	246.40	SMB2.5-2

JARO Components, Inc.

High Frequency Chip Inductors

The HFI series is designed for high frequency application up to 6GHz due to its low inductance. The total of three compact sizes are available (1.6 x 0.8 x 0.8mm, 2.0 x 1.2 x 0.9 mm, and 1.0 x 0.5 x 0.5 mm) according to inductance requirement (from 1.2nH to 100nH at 100 MHz). For high frequency application including cellular phones, pagers, PDAs, computer communications, etc.,

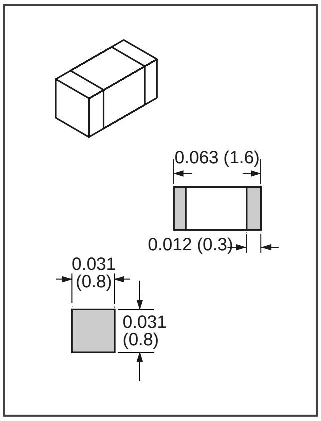
HFI-100505 Series
0402 Pkg



Note: Test Frequency 800 MHz

Induct. (nH)	Q Min.	SRF (MHz)	DCR (Max. Ω)	Current Rating (mA)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	T&R Pricing 4,000	Jaro Part No.
						10	100	500			
1.0	21	6000	0.05	400	334-1081-1-ND	.90	.81	.40	334-1081-2-ND	240.00/M	HFI-100505-1N0S
1.2	21	6000	0.06	400	334-1082-1-ND	.90	.81	.40	334-1082-2-ND	240.00/M	HFI-100505-1N2S
1.5	21	6000	0.07	400	334-1083-1-ND	.90	.81	.40	334-1083-2-ND	240.00/M	HFI-100505-1N5S
1.8	21	6000	0.08	400	334-1084-1-ND	.90	.81	.40	334-1084-2-ND	240.00/M	HFI-100505-1N8S
2.2	21	6000	0.09	400	334-1085-1-ND	.90	.81	.40	334-1085-2-ND	240.00/M	HFI-100505-2N2S
2.7	21	5500	0.10	400	334-1086-1-ND	.90	.81	.40	334-1086-2-ND	240.00/M	HFI-100505-2N7S
3.3	21	5500	0.12	400	334-1087-1-ND	.90	.81	.40	334-1087-2-ND	240.00/M	HFI-100505-3N3S
3.9	20	5200	0.15	360	334-1088-1-ND	.90	.81	.40	334-1088-2-ND	240.00/M	HFI-100505-3N9S
4.7	20	4800	0.17	360	334-1089-1-ND	.90	.81	.40	334-1089-2-ND	240.00/M	HFI-100505-4N7S
5.6	20	4600	0.19	340	334-1090-1-ND	.90	.81	.40	334-1090-2-ND	240.00/M	HFI-100505-5N6S
6.8	19	4000	0.30	320	334-1091-1-ND	.90	.81	.40	334-1091-2-ND	240.00/M	HFI-100505-6N8J
8.2	19	3500	0.35	320	334-1092-1-ND	.90	.81	.40	334-1092-2-ND	240.00/M	HFI-100505-8N2J
10	19	2800	0.41	320	334-1093-1-ND	.90	.81	.40	334-1093-2-ND	240.00/M	HFI-100505-10NJ
12	19	2800	0.45	320	334-1094-1-ND	.90	.81	.40	334-1094-2-ND	240.00/M	HFI-100505-12NJ
15	19	2500	0.60	240	334-1095-1-ND	.90	.81	.40	334-1095-2-ND	240.00/M	HFI-100505-15NJ
22	19	2000	0.80	200	334-1096-1-ND	.90	.81	.40	334-1096-2-ND	240.00/M	HFI-100505-22NJ
27	19	1800	1.20	200	334-1097-1-ND	.90	.81	.40	334-1097-2-ND	240.00/M	HFI-100505-27NJ
33	18	1800	1.40	170	334-1098-1-ND	.90	.81	.40	334-1098-2-ND	240.00/M	HFI-100505-33NJ
39	18	1800	1.70	150	334-1099-1-ND	.90	.81	.40	334-1099-2-ND	240.00/M	HFI-100505-39NJ

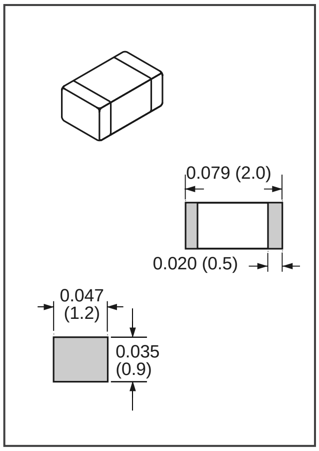
HFI-160808 Series
0603 Pkg



Note: Test Frequency 100 MHz

Induct. (nH)	Q Min.	SRF (MHz)	DCR (Max.Ω)	Current Rating (mA)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	T&R Pricing 4,000	Jaro Part No.
						10	100	500			
1.2	10	6000	0.10	300	334-1000-1-ND	.57	.51	.25	334-1000-2-ND	174.75/M	HFI-160808-1N2S
1.5	10	6000	0.10	300	334-1001-1-ND	.57	.51	.25	334-1001-2-ND	174.75/M	HFI-160808-1N5S
1.8	10	6000	0.12	300	334-1002-1-ND	.57	.51	.25	334-1002-2-ND	174.75/M	HFI-160808-1N8S
2.2	10	6000	0.16	300	334-1003-1-ND	.57	.51	.25	334-1003-2-ND	174.75/M	HFI-160808-2N2S
2.7	10	6000	0.20	300	334-1004-1-ND	.57	.51	.25	334-1004-2-ND	174.75/M	HFI-160808-2N7S
3.3	10	5700	0.22	300	334-1005-1-ND	.57	.51	.25	334-1005-2-ND	174.75/M	HFI-160808-3N3J
3.9	10	5600	0.25	300	334-1006-1-ND	.57	.51	.25	334-1006-2-ND	174.75/M	HFI-160808-3N9J
4.7	10	4800	0.28	300	334-1007-1-ND	.57	.51	.25	334-1007-2-ND	174.75/M	HFI-160808-4N7J
5.6	10	4350	0.29	300	334-1008-1-ND	.57	.51	.25	334-1008-2-ND	174.75/M	HFI-160808-5N6J
6.8	11	3750	0.30	300	334-1009-1-ND	.57	.51	.25	334-1009-2-ND	174.75/M	HFI-160808-6N8J
8.2	11	3300	0.33	300	334-1010-1-ND	.57	.51	.25	334-1010-2-ND	174.75/M	HFI-160808-8N2J
10	11	2850	0.35	300	334-1011-1-ND	.57	.51	.25	334-1011-2-ND	174.75/M	HFI-160808-10NJ
12	11	2700	0.40	300	334-1012-1-ND	.57	.51	.25	334-1012-2-ND	174.75/M	HFI-160808-12NJ
15	11	2400	0.45	300	334-1013-1-ND	.57	.51	.25	334-1013-2-ND	174.75/M	HFI-160808-15NJ
18	11	2050	0.50	300	334-1014-1-ND	.57	.51	.25	334-1014-2-ND	174.75/M	HFI-160808-18NJ
22	14	1850	0.55	300	334-1015-1-ND	.57	.51	.25	334-1015-2-ND	174.75/M	HFI-160808-22NJ
27	14	1750	0.60	300	334-1016-1-ND	.57	.51	.25	334-1016-2-ND	174.75/M	HFI-160808-27NJ
33	14	1500	0.65	300	334-1017-1-ND	.57	.51	.25	334-1017-2-ND	174.75/M	HFI-160808-33NJ
39	14	1350	0.70	300	334-1018-1-ND	.57	.51	.25	334-1018-2-ND	174.75/M	HFI-160808-39NJ
47	14	1200	0.90	300	334-1019-1-ND	.57	.51	.25	334-1019-2-ND	174.75/M	HFI-160808-47NJ
56	15	1100	1.00	300	334-1020-1-ND	.57	.51	.25	334-1020-2-ND	174.75/M	HFI-160808-56NJ
68	18	1050	1.00	300	334-1021-1-ND	.57	.51	.25	334-1021-2-ND	174.75/M	HFI-160808-68NJ
82	18	1025	1.00	300	334-1022-1-ND	.57	.51	.25	334-1022-2-ND	174.75/M	HFI-160808-82NJ
100	18	1000	1.00	300	334-1023-1-ND	.75	.67	.33	334-1023-2-ND	233.00/M	HFI-160808-R10J
120	16	800	1.20	300	334-1024-1-ND	.75	.67	.33	334-1024-2-ND	233.00/M	HFI-160808-R12J
150	13	800	1.20	300	334-1025-1-ND	.75	.67	.33	334-1025-2-ND	233.00/M	HFI-160808-R15J
180	13	700	1.30	300	334-1026-1-ND	.75	.67	.33	334-1026-2-ND	233.00/M	HFI-160808-R18J
220	12	600	1.50	300	334-1027-1-ND	.75	.67	.33	334-1027-2-ND	233.00/M	HFI-160808-R22J

HFI-201209 Series
0805 Pkg



Note: Test Frequency 100 MHz

Induct. (nH)	Q Min.	SRF (MHz)	DCR (Max.Ω)	Current Rating (mA)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	T&R Pricing 4,000	Jaro Part No.
						10	100	500			
1.5	13	6000	0.10	300	334-1050-1-ND	.57	.51	.25	334-1050-2-ND	174.75/M	HFI-201209-1N5S
1.8	13	6000	0.10	300	334-1051-1-ND	.57	.51	.25	334-1051-2-ND	174.75/M	HFI-201209-1N8S
2.2	13	6000	0.10	300	334-1051-1-ND	.57	.51	.25	334-1051-2-ND	174.75/M	HFI-201209-2N2S
2.7	12	6000	0.10	300	334-1053-1-ND	.57	.51	.25	334-1053-2-ND	174.75/M	HFI-201209-2N7S
3.3	13	6000	0.13	300	334-1054-1-ND	.57	.51	.25	334-1054-2-ND	174.75/M	HFI-201209-3N3J
3.9	15	5400	0.15	300	334-1055-1-ND	.57	.51	.25	334-1055-2-ND	174.75/M	HFI-201209-3N9J
4.7	15	4500	0.20	300	334-1056-1-ND	.57	.51	.25	334-1056-2-ND	174.75/M	HFI-201209-4N7J
5.6	15	4000	0.23	300	334-1057-1-ND	.57	.51	.25	334-1057-2-ND	174.75/M	HFI-201209-5N6J
6.8	15	3650	0.25	300	334-1058-1-ND	.57	.51	.25	334-1058-2-ND	174.75/M	HFI-201209-6N8J
8.2	15	3000	0.28	300	334-1059-1-ND	.57	.51	.25	334-1059-2-ND	174.75/M	HFI-201209-8N2J
10	16	2500	0.30	300	334-1060-1-ND	.57	.51	.25	334-1060-2-ND	174.75/M	HFI-201209-10NJ
12	16	2450	0.35	300	334-1061-1-ND	.57	.51	.25	334-1061-2-ND	174.75/M	HFI-201209-12NJ
15	17	2000	0.40	300	334-1062-1-ND	.57	.51	.25	334-1062-2-ND	174.75/M	HFI-201209-15NJ
18	17	1750	0.45	300	334-1063-1-ND	.57	.51	.25	334-1063-2-ND	174.75/M	HFI-201209-18NJ
22	17	1700	0.50	300	334-1064-1-ND	.57	.51	.25	334-1064-2-ND	174.75/M	HFI-201209-22NJ
27	18	1550	0.55	300	334-1065-1-ND	.57	.51	.25	334-1065-2-ND	174.75/M	HFI-201209-27NJ
33	18	1350	0.60	300	334-1066-1-ND	.57	.51	.25	334-1066-2-ND	174.75/M	HFI-201209-33NJ
39	18	1300	0.65	300	334-1067-1-ND	.57	.51	.25	334-1067-2-ND	174.75/M	HFI-201209-39NJ
47	18	1200	0.70	300	334-1068-1-ND	.57	.51	.25	334-1068-2-ND	174.75/M	HFI-201209-47NJ
56	19	1150	0.75	300	334-1069-1-ND	.57	.51	.25	334-1069-2-ND	174.75/M	HFI-201209-56NJ
68	19	1000	0.85	300	334-1070-1-ND	.57	.51	.25	334-1070-2-ND	174.75/M	HFI-201209-68NJ
82	20	850	0.90	300	334-1071-1-ND	.57	.51	.25	334-1071-2-ND	174.75/M	HFI-201209-82NJ
100	18	730	1.00	300	334-1072-1-ND	.57	.51	.25	334-1072-2-ND	174.75/M	HFI-201209-R10J
120 at 50 MHz	19	650	1.30	250	334-1073-1-ND	.75	.67	.33	334-1073-2-ND	233.00/M	HFI-201209-R12J
150 at 50 MHz	21	700	1.00	300	334-1074-1-ND	.75	.67	.33	334-1074-2-ND	233.00/M	HFI-201209-R15J
180 at 50 MHz	22	600	1.10	300	334-1075-1-ND	.75	.67	.33	334-1075-2-ND	233.00/M	HFI-201209-R18J
220 at 50 MHz	19	550	1.20	300	334-1076-1-ND	.75	.67	.33	334-1076-2-ND	233.00/M	HFI-201209-R22J
270 at 50 MHz	19	480	1.30	300	334-1077-1-ND	.75	.67	.33	334-1077-2-ND	233.00/M	HFI-201209-R27J
330 at 50 MHz	22	400	1.40	300	334-1078-1-ND	.75	.67	.33	334-1078-2-ND	233.00/M	HFI-201209-R33J
390 at 50 MHz	17	400	1.30	300	334-1079-1-ND	.75	.67	.33	334-1079-2-ND	233.00/M	HFI-201209-R39J
470 at 50 MHz	17	350	1.50	300	334-1080-1-ND	.75	.67	.33	334-1080-2-ND	233.00/M	HFI-201209-R47J

TOKO

9139B-ND Toko Coils & Filter Book **$9.95**

Surface Mount Inductors

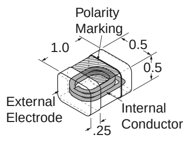
LL1005F Type, LL1608FH Type, LL1608F Type, LL2012F Type, PTL1608F Type, PTL2012F Type

FEATURES:

LL1005F – World's Smallest Chip Inductor. For reflow soldering • Temperature Coefficient: +250ppm/°C max. • Temperature Range: -40°C - +100°C. Miniature size (1.0mm x 0.5mm). **LL1608F & LL2012F** – For Reflow Soldering • Temperature Coefficient: +250ppm/°C max. • Temperature Range: -40°C +100°C • Features: Laminated ceramic allows high SRF.

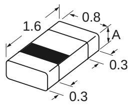
The **PTL1608** and **PTL2012 Series** is a photolithographically etched single layer ceramic chip inductor providing high SRF, excellent Q, and superior temperature stability. Highly stable and specifically designed for critical tolerance inductor needs. Solves the tight tolerance needs of GaAs matching and VCO circuits. **Tolerance:** C=±0.2nH, S=±0.3nH, T=3%

LL1005F



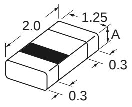
0402 Package

LL1608F, LL1608FH, PTL1608F



0603 Package

LL2012F, PTL2012F



0805 Package

Dim. A (mm)	Lo (nH)	Tol.	Q (typ)	SRF MHz (typ)	IDC mA (Max)	Digi-Key Part No.	Cut Tape Price Each			★Tape & Reel Pricing	Toko Part No.
							10	100	500		
LL1005F											
0.50	1.0	±0.3nH	30	>6000	300	TKS2580CT-ND	.62	.58	.29	1430.00/10000	LL1005-FH1N0S
0.50	1.2	±0.3nH	30	>6000	300	TKS2581CT-ND	.54	.51	.26	1430.00/10000	LL1005-FH1N2S
0.50	1.5	±0.3nH	30	>6000	300	TKS2582CT-ND	.54	.51	.26	1430.00/10000	LL1005-FH1N5S
0.50	1.8	±0.3nH	30	>6000	300	TKS2583CT-ND	.54	.51	.26	1430.00/10000	LL1005-FH1N8S
0.50	2.2	±0.3nH	30	>6000	300	TKS2584CT-ND	.54	.51	.26	1430.00/10000	LL1005-FH2N2S
0.50	2.7	±0.3nH	30	5500	300	TKS2585CT-ND	.54	.51	.26	1430.00/10000	LL1005-FH2N7S
0.50	3.3	±10%	28	5000	300	TKS2586CT-ND	.54	.51	.26	1430.00/10000	LL1005-FH3N3K
0.50	3.9	±10%	30	4700	300	TKS2587CT-ND	.54	.51	.26	1430.00/10000	LL1005-FH3N9K
0.50	4.7	±10%	28	4300	300	TKS2588CT-ND	.54	.51	.26	1430.00/10000	LL1005-FH4N7K
0.50	5.6	±10%	28	4000	300	TKS2589CT-ND	.54	.51	.26	1430.00/10000	LL1005-FH5N6K
0.50	6.8	±10%	28	3650	300	TKS2590CT-ND	.54	.51	.26	1430.00/10000	LL1005-FH6N8K
0.50	8.2	±10%	28	3200	300	TKS2591CT-ND	.54	.51	.26	1430.00/10000	LL1005-FH8N2K
0.50	10.0	±10%	23	2800	300	TKS2592CT-ND	.54	.51	.26	1430.00/10000	LL1005-FH10NK
0.50	12.0	±10%	24	2700	300	TKS2593CT-ND	.54	.51	.26	1430.00/10000	LL1005-FH12NK
0.50	15.0	±10%	25	2200	300	TKS2594CT-ND	.54	.51	.26	1430.00/10000	LL1005-FH15NK
0.50	18.0	±10%	17	2000	300	TKS2595CT-ND	.54	.51	.26	1430.00/10000	LL1005-FH18NK
0.50	22.0	±10%	23	1800	300	TKS2596CT-ND	.54	.51	.26	1430.00/10000	LL1005-FH22NK
0.50	27.0	±10%	20	1600	300	TKS2597CT-ND	.54	.51	.26	1430.00/10000	LL1005-FH27NK
TK10-KIT-ND (SPK-LL1005FH-5%) LL1005-FH Chip Inductor Kit - 10 each of 25 values (250 parts), 1.0nH-47nH $40.50											
LL1608F											
0.80	1.5	±0.3nH	60	>6000	300	TKS2353CT-ND	.59	.53	.26	732.00/4000	LL1608-F1N5S
0.80	1.8	±0.3nH	37	>6000	300	TKS2354CT-ND	.59	.53	.26	732.00/4000	LL1608-F1N8S
0.80	2.2	±0.3nH	35	>6000	300	TKS2355CT-ND	.59	.53	.26	732.00/4000	LL1608-F2N2S
0.80	2.7	±0.3nH	30	>6000	300	TKS2356CT-ND	.59	.53	.26	732.00/4000	LL1608-F2N7S
0.80	3.3	±10%	30	5500	300	TKS2357CT-ND	.59	.53	.26	728.00/4000	LL1608-F3N3K
0.80	3.9	±10%	31	5700	300	TKS2340CT-ND	.59	.53	.26	728.00/4000	LL1608-F3N9K
0.80	4.7	±10%	31	4800	300	TKS2341CT-ND	.59	.53	.26	728.00/4000	LL1608-F4N7K
0.80	5.6	±10%	27	4600	300	TKS2342CT-ND	.59	.53	.26	728.00/4000	LL1608-F5N6K
0.80	6.8	±10%	27	3550	300	TKS2343CT-ND	.59	.53	.26	728.00/4000	LL1608-F6N8K
0.80	8.2	±10%	26	3500	300	TKS2344CT-ND	.59	.53	.26	728.00/4000	LL1608-F8N2K
0.80	10.0	±10%	26	2750	300	TKS2345CT-ND	.59	.53	.26	728.00/4000	LL1608-F10NK
0.80	12.0	±10%	24	2750	300	TKS2346CT-ND	.59	.53	.26	728.00/4000	LL1608-F12NK
0.80	15.0	±10%	24	2300	300	TKS2347CT-ND	.59	.53	.26	728.00/4000	LL1608-F15NK
0.80	18.0	±10%	24	2300	300	TKS2348CT-ND	.59	.53	.26	728.00/4000	LL1608-F18NK
0.80	22.0	±10%	25	2000	300	TKS2349CT-ND	.59	.53	.26	728.00/4000	LL1608-F22NK
0.80	27.0	±10%	25	1750	300	TKS2350CT-ND	.59	.53	.26	728.00/4000	LL1608-F27NK
0.80	33.0	±10%	24	1500	300	TKS2351CT-ND	.59	.53	.26	728.00/4000	LL1608-F33NK
0.80	39.0	±10%	20	1300	300	TKS2352CT-ND	.59	.53	.26	728.00/4000	LL1608-F39NK
0.80	47.0	±10%	18	1200	300	TKS2381CT-ND	.59	.55	.28	872.00/4000	LL1608-F47NK
0.80	56.0	±10%	14	1100	300	TKS2382CT-ND	.59	.55	.28	872.00/4000	LL1608-F56NK
0.80	82.0	±10%	18	900	300	TKS2384CT-ND	.59	.55	.28	872.00/4000	LL1608-F82NK
0.80	100.0	±10%	3	830	300	TKS2385CT-ND	.59	.55	.28	872.00/4000	LL1608-FR10K
LL1608FH											
0.80	1.2	±0.3nH	13	>6000	1000	TKS3700CT-ND	.59	.53	.26	728.00/4000	LL1608-FH1N2S
0.80	1.5	±0.3nH	13	>6000	1000	TKS3701CT-ND	.59	.53	.26	728.00/4000	LL1608-FH1N5S
0.80	1.8	±0.3nH	12	>6000	1000	TKS3702CT-ND	.59	.53	.26	728.00/4000	LL1608-FH1N8S
0.80	2.2	±0.3nH	12	>6000	1000	TKS3703CT-ND	.59	.53	.26	728.00/4000	LL1608-FH2N2S
0.80	2.7	±0.3nH	12	>6000	1000	TKS3704CT-ND	.59	.53	.26	728.00/4000	LL1608-FH2N7S
0.80	3.3	±0.3nH	12	5900	1000	TKS3705CT-ND	.63	.57	.28	784.00/4000	LL1608-FH3N3S
0.80	3.9	±0.3nH	13	5600	1000	TKS3706CT-ND	.63	.57	.28	784.00/4000	LL1608-FH3N9S
0.80	4.7	±0.3nH	12	4800	1000	TKS3707CT-ND	.63	.57	.28	784.00/4000	LL1608-FH4N7S
0.80	5.6	±0.3nH	12	4350	600	TKS3708CT-ND	.63	.57	.28	784.00/4000	LL1608-FH5N6S
0.80	6.8	±5%	12	3750	600	TKS3709CT-ND	.63	.57	.28	784.00/4000	LL1608-FH6N8J
0.80	8.2	±5%	13	3300	600	TKS3710CT-ND	.63	.57	.28	784.00/4000	LL1608-FH8N2J
0.80	10.0	±5%	13	2850	600	TKS3711CT-ND	.63	.57	.28	784.00/4000	LL1608-FH10NJ
0.80	12.0	±5%	15	2500	600	TKS3712CT-ND	.63	.57	.28	784.00/4000	LL1608-FH12NJ
0.80	15.0	±5%	15	2150	600	TKS3713CT-ND	.63	.57	.28	784.00/4000	LL1608-FH15NJ
0.80	18.0	±5%	16	2050	600	TKS3714CT-ND	.63	.57	.28	784.00/4000	LL1608-FH18NJ
0.80	22.0	±5%	17	1850	600	TKS3715CT-ND	.63	.57	.28	784.00/4000	LL1608-FH22NJ
0.80	27.0	±5%	17	1750	600	TKS3716CT-ND	.63	.57	.28	784.00/4000	LL1608-FH27NJ
0.80	33.0	±5%	18	1500	600	TKS3717CT-ND	.63	.57	.28	784.00/4000	LL1608-FH33NJ
0.80	39.0	±5%	17	1350	500	TKS3718CT-ND	.63	.57	.28	784.00/4000	LL1608-FH39NJ
0.80	47.0	±5%	17	1200	500	TKS3719CT-ND	.63	.57	.28	784.00/4000	LL1608-FH47NJ
0.80	56.0	±5%	17	1100	500	TKS3720CT-ND	.63	.57	.28	784.00/4000	LL1608-FH56NJ
0.80	68.0	±5%	18	1000	400	TKS3721CT-ND	.63	.57	.28	784.00/4000	LL1608-FH68NJ
0.80	82.0	±5%	18	900	400	TKS3722CT-ND	.63	.57	.28	784.00/4000	LL1608-FH82NJ
0.80	100	±5%	18	830	400	TKS3723CT-ND	.63	.57	.28	784.00/4000	LL1608-FHR10J
LL2012F											
0.60	1.8	±0.3nH	42	6000	300	TKS2360CT-ND	.71	.63	.31	876.00/4000	LL2012-F1N8S
0.60	2.2	±0.3nH	44	6000	300	TKS2361CT-ND	.71	.63	.31	876.00/4000	LL2012-F2N2S
0.60	2.7	±0.3nH	32	6000	300	TKS2362CT-ND	.71	.63	.31	876.00/4000	LL2012-F2N7S
0.60	3.3	±10%	36	6000	300	TKS2363CT-ND	.71	.63	.31	876.00/4000	LL2012-F3N3K
0.60	3.9	±10%	46	5400	300	TKS2364CT-ND	.71	.63	.31	876.00/4000	LL2012-F3N9K
0.60	4.7	±10%	45	4500	300	TKS2365CT-ND	.71	.63	.31	876.00/4000	LL2012-F4N7K
0.60	5.6	±10%	47	4000	300	TKS2366CT-ND	.71	.63	.31	876.00/4000	LL2012-F5N6K
0.60	6.8	±10%	44	3650	300	TKS2367CT-ND	.71	.63	.31	876.00/4000	LL2012-F6N8K
0.60	8.2	±10%	46	3000	300	TKS2368CT-ND	.71	.63	.31	876.00/4000	LL2012-F8N2K
0.85	10.0	±10%	40	2500	300	TKS2369CT-ND	.71	.63	.31	876.00/4000	LL2012-F10NK
0.85	12.0	±10%	40	2450	300	TKS2370CT-ND	.71	.63	.31	876.00/4000	LL2012-F12NK
0.85	15.0	±10%	43	2000	300	TKS2371CT-ND	.71	.63	.31	876.00/4000	LL2012-F15NK
0.85	18.0	±10%	42	1750	300	TKS2372CT-ND	.71	.63	.31	876.00/4000	LL2012-F18NK
0.85	22.0	±10%	42	1700	300	TKS2373CT-ND	.71	.63	.31	876.00/4000	LL2012-F22NK
0.85	33.0	±10%	44	1350	300	TKS2375CT-ND	.71	.63	.31	876.00/4000	LL2012-F33NK
0.85	39.0	±10%	39	1300	300	TKS2376CT-ND	.71	.63	.31	876.00/4000	LL2012-F39NK
1.00	47.0	±10%	36	1200	300	TKS2377CT-ND	.71	.63	.31	657.00/3000	LL2012-F47NK
1.00	56.0	±10%	36	1150	300	TKS2378CT-ND	.71	.63	.31	657.00/3000	LL2012-F56NK
1.00	68.0	±10%	35	1000	300	TKS2379CT-ND	.71	.63	.31	657.00/3000	LL2012-F68NK
1.00	82.0	±10%	25	850	300	TKS2380CT-ND	.71	.63	.31	657.00/3000	LL2012-F82NK
1.00	100.0	±10%	18	730	300	TKS2386CT-ND	.71	.66	.33	789.00/3000	LL2012-FR10K
1.10	120.0	±10%	19	650	250	TKS2387CT-ND	.71	.66	.33	789.00/3000	LL2012-FR12K
1.10	150.0	±10%	20	550	250	TKS2388CT-ND	.71	.66	.33	789.00/3000	LL2012-FR15K
1.10	180.0	±10%	20	500	250	TKS2389CT-ND	.71	.66	.33	789.00/3000	LL2012-FR18K
1.10	220.0	±10%	20	450	200	TKS2390CT-ND	.71	.66	.33	789.00/3000	LL2012-FR22K
1.10	270.0	±10%	20	400	200	TKS2391CT-ND	.71	.66	.33	789.00/3000	LL2012-FR27K
1.10	330.0	±10%	20	380	150	TKS2392CT-ND	.71	.66	.33	789.00/3000	LL2012-FR33K
1.10	390.0	±10%	20	330	150	TKS2393CT-ND	.71	.66	.33	789.00/3000	LL2012-FR39K
1.10	470.0	±10%	19	300	100	TKS2394CT-ND	.71	.66	.33	789.00/3000	LL2012-FR47K
PTL1608F											
0.50	1.0	±0.2nH	11	12500	1000	TKS2900CT-ND	.68	.61	.30	1260.00/6000	PTL1608-F1N0C
0.50	1.2	±0.2nH	10	11500	900	TKS2901CT-ND	.68	.61	.30	1260.00/6000	PTL1608-F1N2C
0.50	1.5	±0.2nH	9	10000	800	TKS2902CT-ND	.68	.61	.30	1260.00/6000	PTL1608-F1N5C
0.50	1.8	±0.2nH	10	9250	700	TKS2903CT-ND	.68	.61	.30	1260.00/6000	PTL1608-F1N8C
0.50	2.2	±0.2nH	9	8400	650	TKS2904CT-ND	.68	.61	.30	1260.00/6000	PTL1608-F2N2C
0.50	2.7	±0.2nH	10	7400	600	TKS2905CT-ND	.68	.61	.30	1260.00/6000	PTL1608-F2N7C
0.50	3.3	±0.2nH	9	6600	500	TKS2906CT-ND	.68	.61	.30	1260.00/6000	PTL1608-F3N3C
0.50	3.9	±0.2nH	9	5850	500	TKS2907CT-ND	.68	.61	.30	1260.00/6000	PTL1608-F3N9C
0.50	4.7	±0.2nH	10	5200	450	TKS2908CT-ND	.68	.61	.30	1260.00/6000	PTL1608-F4N7C
0.50	5.6	±0.2nH	10	4700	400	TKS2909CT-ND	.68	.61	.30	1260.00/6000	PTL1608-F5N6C
0.50	6.8	±0.3nH	9	4200	350	TKS2910CT-ND	.68	.61	.30	1260.00/6000	PTL1608-F6N8S
0.50	8.2	±0.3nH	9	3750	300	TKS2911CT-ND	.68	.61	.30	1260.00/6000	PTL1608-F8N2S
0.50	10	3%	9	3250	250	TKS2912CT-ND	.68	.61	.30	1260.00/6000	PTL1608-F10NT
0.50	12	3%	8	3100	200	TKS2913CT-ND	.68	.61	.30	1260.00/6000	PTL1608-F12NT
0.50	15	3%	8	2650	200	TKS2914CT-ND	.68	.61	.30	1260.00/6000	PTL1608-F15NT
0.50	18	3%	8	2400	180	TKS2915CT-ND	.68	.61	.30	1260.00/6000	PTL1608-F18NT
0.50	27	3%	8	1950	150	TKS2917CT-ND	.68	.61	.30	—	PTL1608-F27NT
PTL2012F											
0.50	1.0	±0.2nH	11	10000	1300	TKS2950CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F1N0C
0.50	1.2	±0.2nH	10	9000	1100	TKS2951CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F1N2C
0.50	1.5	±0.2nH	8	8500	800	TKS2952CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F1N5C
0.50	1.8	±0.2nH	9	8000	800	TKS2953CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F1N8C
0.50	2.2	±0.2nH	10	7000	750	TKS2954CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F2N2C
0.50	2.7	±0.2nH	10	6000	750	TKS2955CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F2N7C
0.50	3.3	±0.2nH	10	5300	650	TKS2956CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F3N3C
0.50	3.9	±0.2nH	10	4800	600	TKS2957CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F3N9C
0.50	4.7	±0.2nH	10	4350	550	TKS2958CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F4N7C
0.50	5.6	±0.2nH	10	4000	500	TKS2959CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F5N6C
0.50	6.8	±0.3nH	10	3600	450	TKS2960CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F6N8S
0.50	8.2	±0.3nH	10	3250	400	TKS2961CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F8N2S
0.50	10	3%	11	2850	350	TKS2962CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F10NT
0.50	12	3%	12	2500	350	TKS2963CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F12NT
0.50	15	3%	12	2250	300	TKS2964CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F15NT
0.50	18	3%	12	2000	300	TKS2965CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F18NT
0.50	22	3%	12	1800	250	TKS2966CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F22NT
0.50	27	3%	12	1650	200	TKS2967CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F27NT
0.50	33	3%	11	1450	200	TKS2968CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F33NT
0.50	39	3%	11	1350	180	TKS2969CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F39NT
0.50	47	3%	11	1180	130	TKS2970CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F47NT
0.50	56	3%	11	1070	120	TKS2971CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F56NT
0.50	68	3%	11	950	100	TKS2972CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F68NT
0.50	82	3%	11	900	90	TKS2973CT-ND	.89	.80	.39	1650.00/6000	PTL2012-F82NT
0.50	100	3%	11	800	90	TKS2974CT-ND	.89	.80	.39	—	PTL2012-FR10T
TK14-KIT-ND (SPK-PTL2012F-97) PTL2012-F - Chip Inductor Kit, Up to 3% Tolerance - 10 each of 24 values (240 parts), 1.0nH-82nH............. $49.00											

★ For Tape & Reel part number, change CT-ND to TR-ND.

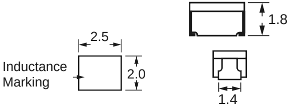
9139B-ND	Toko Coils & Filter Book	**$9.95**

Surface Mount Inductors

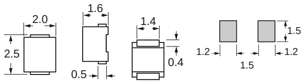
FSLU Type, FSLM Type, 3DF Type, 5CA Type, 5CB Type, 5CD Type

Features: FSLU – Conforms to EIA Standard 1008 footprint. • Typical max Q: 40-50. • Proprietary wire-wound structure with welded terminations offers high reliability. • Operating Temperature Range: -40°C - +85°C. • Superior solderability and high heat-resistance for flow and reflow soldering. **FSLM** – Ferrite core wirewound inductor conforms to EIA Standard 1008 footprint. Proprietary welded termination offers superior reliability and high heat-resistance for flow and reflow soldering capability. Recommended for general signal conditioning, RF or IF filtering applications and as matching elements. **5CB** – For reflow soldering type. Small size. Capacitor cannot be inserted. Adjustable type. **5CD** – For reflow soldering type. Small size. One capacitor can be inserted. Adjustable type. Most suitable for use in small size radios and thin type portable equipment.

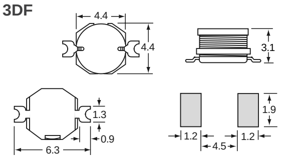
FSLU 1008 Package



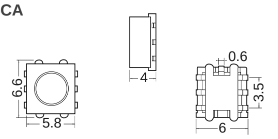
FSLM 1008 Package



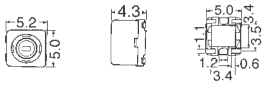
3DF



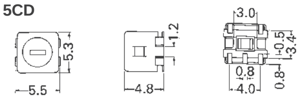
5CA



5CB



5CD



TK9990-ND	Ceramic Tuning Driver (5CB, 5CE, 5CCE) (Requires Holder TK9999-ND, below)	**$41.66**
TK9993-ND	Ceramic Tuning Driver (5CD) (Requires Holder TK9999-ND, below)	**$31.84**
TK9994-ND	Ceramic Tuning Driver (5CCD) (Requires Holder TK9999-ND, below)	**$69.64**
TK9999-ND	Ceramic Driver Holder	**$4.93**

L Nom.	Tol.	Q Min.	Freq.	Rated DC Current	Digi-Key Part No.	Cut Tape Price Each 1	10	100	★Tape & Reel Pricing	Toko Part No.
FSLU Type										
.010µH	±10%	15	100MHz	730mA	TKS2649CT-ND	1.28	1.00	.86	798.00/2000	FSLU2520-10NK
.012µH	±10%	15	100MHz	690mA	TKS2650CT-ND	1.28	1.00	.86	798.00/2000	FSLU2520-12NK
.015µH	±10%	15	100MHz	660mA	TKS2651CT-ND	1.28	1.00	.86	798.00/2000	FSLU2520-15NK
.018µH	±10%	15	100MHz	600mA	TKS2652CT-ND	1.28	1.00	.86	792.00/2000	FSLU2520-18NK
.022µH	±10%	15	100MHz	550mA	TKS2653CT-ND	1.28	1.00	.86	798.00/2000	FSLU2520-22NK
.027µH	±10%	15	100MHz	520mA	TKS2654CT-ND	1.28	1.00	.86	798.00/2000	FSLU2520-27NK
.033µH	±10%	20	100MHz	480mA	TKS2655CT-ND	1.28	1.00	.86	798.00/2000	FSLU2520-33NK
.039µH	±10%	20	100MHz	460mA	TKS2656CT-ND	1.28	1.00	.86	798.00/2000	FSLU2520-39NK
.047µH	±10%	20	100MHz	440mA	TKS2657CT-ND	1.28	1.00	.86	798.00/2000	FSLU2520-47NK
.056µH	±10%	20	100MHz	420mA	TKS2658CT-ND	1.28	1.00	.86	798.00/2000	FSLU2520-56NK
.068µH	±10%	20	100MHz	400mA	TKS2659CT-ND	1.28	1.00	.86	798.00/2000	FSLU2520-68NK
.082µH	±10%	20	100MHz	390mA	TKS2660CT-ND	1.28	1.00	.86	798.00/2000	FSLU2520-82NK
0.1µH	±10%	30	25.2MHz	540mA	TKS2661CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-R10K
.12µH	±10%	30	25.2MHz	500mA	TKS2662CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-R12K
.15µH	±10%	30	25.2MHz	480mA	TKS2663CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-R15K
.18µH	±10%	30	25.2MHz	430mA	TKS2664CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-R18K
.22µH	±10%	30	25.2MHz	420mA	TKS2665CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-R22K
.27µH	±10%	30	25.2MHz	410mA	TKS2666CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-R27K
.33µH	±10%	30	25.2MHz	380mA	TKS2667CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-R33K
.39µH	±10%	30	25.2MHz	360mA	TKS2668CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-R39K
.47µH	±10%	30	25.2MHz	350mA	TKS2669CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-R47K
.68µH	±10%	30	25.2MHz	320mA	TKS2671CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-R68K
.82µH	±10%	30	25.2MHz	290mA	TKS2672CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-R82K
1.0µH	±5%	25	7.96MHz	250mA	TKS2620CT-ND	1.19	.93	.80	852.00/2000	FSLU2520-1R0J
1.2µH	±5%	25	7.96MHz	235mA	TKS2621CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-1R2J
1.5µH	±5%	25	7.96MHz	230mA	TKS2622CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-1R5J
1.8µH	±5%	25	7.96MHz	220mA	TKS2623CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-1R8J
2.2µH	±5%	25	7.96MHz	210mA	TKS2624CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-2R2J
2.7µH	±5%	25	7.96MHz	200mA	TKS2625CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-2R7J
3.3µH	±5%	25	7.96MHz	190mA	TKS2626CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-3R3J
3.9µH	±5%	25	7.96MHz	185mA	TKS2627CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-3R9J
4.7µH	±5%	25	7.96MHz	180mA	TKS2628CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-4R7J
5.6µH	±5%	20	7.96MHz	175mA	TKS2629CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-5R6J
6.8µH	±5%	20	7.96MHz	165mA	TKS2630CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-6R8J
8.2µH	±5%	20	7.96MHz	160mA	TKS2631CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-8R2J
10µH	±5%	20	2.52MHz	155mA	TKS2632CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-100J
12µH	±5%	20	2.52MHz	150mA	TKS2633CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-120J
15µH	±5%	20	2.52MHz	145mA	TKS2634CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-150J
18µH	±5%	20	2.52MHz	135mA	TKS2635CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-180J
22µH	±5%	20	2.52MHz	125mA	TKS2636CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-220J
27µH	±5%	20	2.52MHz	120mA	TKS2637CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-270J
33µH	±5%	20	2.52MHz	115mA	TKS2638CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-330J
39µH	±5%	20	2.52MHz	90mA	TKS2639CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-390J
47µH	±5%	20	2.52MHz	80mA	TKS2640CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-470J
56µH	±5%	20	2.52MHz	75mA	TKS2641CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-560J
68µH	±5%	20	2.52MHz	70mA	TKS2642CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-680J
82µH	±5%	20	2.52MHz	65mA	TKS2643CT-ND	1.28	1.00	.86	—	FSLU2520-820J
100µH	±5%	15	0.796MHz	60mA	TKS2644CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-101J
120µH	±5%	15	0.796MHz	52mA	TKS2645CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-121J
150µH	±5%	15	0.796MHz	50mA	TKS2646CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-151J
180µH	±5%	15	0.796MHz	48mA	TKS2647CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-181J
220µH	±5%	15	0.796MHz	45mA	TKS2648CT-ND	1.28	1.00	.86	852.00/2000	FSLU2520-221J
FSLM Type										
0.10µH	±5%	30	25.2MHz	570mA	TKS3600CT-ND	.68	.60	.54	372.00/2000	FSLM2520-R10J
0.12µH	±5%	30	25.2MHz	550mA	TKS3601CT-ND	.68	.60	.54	372.00/2000	FSLM2520-R12J
0.15µH	±5%	30	25.2MHz	500mA	TKS3602CT-ND	.68	.60	.54	372.00/2000	FSLM2520-R15J
0.18µH	±5%	30	25.2MHz	460mA	TKS3603CT-ND	.68	.60	.54	372.00/2000	FSLM2520-R18J
022µH	±5%	30	25.2MHz	430mA	TKS3604CT-ND	.68	.60	.54	372.00/2000	FSLM2520-R22J
0.27µH	±5%	30	25.2MHz	420mA	TKS3605CT-ND	.68	.60	.54	372.00/2000	FSLM2520-R27J
0.33µH	±5%	30	25.2MHz	400mA	TKS3606CT-ND	.68	.60	.54	372.00/2000	FSLM2520-R33J
0.47µH	±5%	30	25.2MHz	350mA	TKS3607CT-ND	.68	.60	.54	372.00/2000	FSLM2520-R47J
0.56µH	±5%	30	25.2MHz	330mA	TKS3608CT-ND	.68	.60	.54	372.00/2000	FSLM2520-R56J
0.68µH	±5%	30	25.2MHz	320mA	TKS3609CT-ND	.68	.60	.54	372.00/2000	FSLM2520-R68J
0.82µH	±5%	30	25.2MHz	290mA	TKS3610CT-ND	.68	.60	.54	372.00/2000	FSLM2520-R82J
1.0µH	±5%	30	7.96MHz	250mA	TKS3611CT-ND	.68	.60	.54	372.00/2000	FSLM2520-1R0J
1.2µH	±5%	30	7.96MHz	240mA	TKS3612CT-ND	.68	.60	.54	372.00/2000	FSLM2520-1R2J
1.5µH	±5%	30	7.96MHz	230mA	TKS3613CT-ND	.68	.60	.54	372.00/2000	FSLM2520-1R5J
1.8µH	±5%	30	7.96MHz	220mA	TKS3614CT-ND	.68	.60	.54	372.00/2000	FSLM2520-1R8J
2.2µH	±5%	30	7.96MHz	210mA	TKS3615CT-ND	.68	.60	.54	372.00/2000	FSLM2520-2R2J
2.7µH	±5%	30	7.96MHz	200mA	TKS3616CT-ND	.68	.60	.54	372.00/2000	FSLM2520-2R7J
3.3µH	±5%	30	7.96MHz	190mA	TKS3617CT-ND	.68	.60	.54	372.00/2000	FSLM2520-3R3J
3.9µH	±5%	30	7.96MHz	185mA	TKS3618CT-ND	.68	.60	.54	372.00/2000	FSLM2520-3R9J
4.7µH	±5%	30	7.96MHz	180mA	TKS3619CT-ND	.68	.60	.54	372.00/2000	FSLM2520-4R7J
5.6µH	±5%	30	7.96MHz	170mA	TKS3620CT-ND	.68	.60	.54	372.00/2000	FSLM2520-5R6J
6.8µH	±5%	30	7.96MHz	165mA	TKS3621CT-ND	.68	.60	.54	372.00/2000	FSLM2520-6R8J
8.2µH	±5%	30	7.96MHz	160mA	TKS3622CT-ND	.68	.60	.54	372.00/2000	FSLM2520-8R2J
10µH	±5%	25	2.52MHz	155mA	TKS3623CT-ND	.68	.60	.54	372.00/2000	FSLM2520-100J
12µH	±5%	25	2.52MHz	150mA	TKS3624CT-ND	.68	.60	.54	372.00/2000	FSLM2520-120J
15µH	±5%	25	2.52MHz	140mA	TKS3625CT-ND	.68	.60	.54	372.00/2000	FSLM2520-150J
18µH	±5%	25	2.52MHz	130mA	TKS3626CT-ND	.68	.60	.54	372.00/2000	FSLM2520-180J
22µH	±5%	25	2.52MHz	125mA	TKS3627CT-ND	.68	.60	.54	372.00/2000	FSLM2520-220J
27µH	±5%	25	2.52MHz	115mA	TKS3628CT-ND	.68	.60	.54	372.00/2000	FSLM2520-270J
33µH	±5%	25	2.52MHz	110mA	TKS3629CT-ND	.68	.60	.54	372.00/2000	FSLM2520-330J
39µH	±5%	25	2.52MHz	85mA	TKS3630CT-ND	.68	.60	.54	372.00/2000	FSLM2520-390J
47µH	±5%	25	2.52MHz	80mA	TKS3631CT-ND	.68	.60	.54	372.00/2000	FSLM2520-470J
56µH	±5%	25	2.52MHz	75mA	TKS3632CT-ND	.68	.60	.54	372.00/2000	FSLM2520-560J
68µH	±5%	25	2.52MHz	70mA	TKS3633CT-ND	.68	.60	.54	372.00/2000	FSLM2520-680J
82µH	±5%	25	2.52MHz	65mA	TKS3634CT-ND	.68	.60	.54	372.00/2000	FSLM2520-820J
100µH	±5%	15	0.796MHz	60mA	TKS3635CT-ND	.68	.60	.54	372.00/2000	FSLM2520-101J
120µH	±5%	15	0.796MHz	55mA	TKS3636CT-ND	.68	.60	.54	372.00/2000	FSLM2520-121J
150µH	±5%	15	0.796MHz	50mA	TKS3637CT-ND	.68	.60	.54	372.00/2000	FSLM2520-151J
180µH	±5%	15	0.796MHz	47mA	TKS3638CT-ND	.68	.60	.54	372.00/2000	FSLM2520-181J
220µH	±5%	15	0.796MHz	44mA	TKS3639CT-ND	.68	.60	.54	372.00/2000	FSLM2520-221J
3DF Type										
95µH	—	—	100KHz	21mA	TKS1200-ND	.85	.78	.59	—	682AE-014=P3
5CA Type										
.05mH	—	20	2.52MHz	—	TKS2320CT-ND	2.32	2.11	1.61	—	395AN-0103IB
.55mH	—	50	796KHz	—	TKS2324CT-ND	2.32	2.11	1.61	—	395AN-0147IB
1.2 mH	—	70	252 KHz	54mA	TKS2318-ND	2.57	2.34	1.78	—	395GN-0091IB=P3
110 µH	—	68	796 KHz	—	TKS2319-ND	2.57	2.34	1.78	—	395KN-0369AQ=P3
5CB Type										
.22µH	± 2%	58	100MHz	200mA	TKS2102CT-ND	2.80	2.55	1.94	—	5CB-1319Z
5CD Type										
33.0µH	± 4%	40	2.52MHz	111mA	TKS2219CT-ND	2.80	2.55	1.94	—	303AN-1118
68.0µH	± 4%	25	2.52MHz	15mA	TKS2223CT-ND	2.80	2.55	1.94	—	303LN-1122
220µH	± 4%	30	796KHz	8mA	TKS2229CT-ND	2.80	2.55	1.94	—	303LN-1128
390µH	± 4%	30	796KHz	6mA	TKS2232CT-ND	2.80	2.55	1.94	—	303LN-1131
470µH	± 4%	30	796KHz	5mA	TKS2233CT-ND	2.80	2.55	1.94	—	303LN-1132

* For Tape & Reel Part No., change CT to TR.

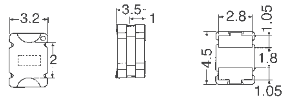
9139B-ND Toko Coils & Filter Book **$9.95**

Surface Mount Inductors

43FS Type, 5CCD Type, 5CE Type, 5CT Type, 5CCE Type

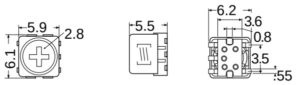
FEATURES: 43FS – For reflow soldering type. Small size. **5CT** – For reflow soldering type. Small size. One capacitor can be inserted. Bias oscillator coil. DC-DC connector transformer most suitable for use in portable equipment.

43FS



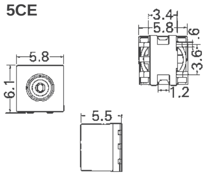
Tape & Reel quantity is 500 pieces.

5CCD



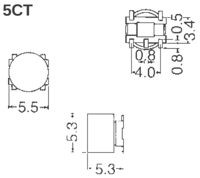
Tape & Reel quantity is 1000 pieces.

5CE



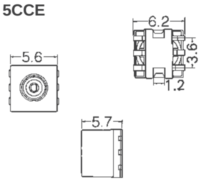
Tape & Reel pricing not available.

5CT



Tape & Reel pricing not available.

5CCE



Tape & Reel quantity is 750 pieces.

TK9990-ND	Ceramic Tuning Driver (5CB, 5CE, 5CCE) (Requires Holder TK9999-ND, below)	**$41.66**
TK9993-ND	Ceramic Tuning Driver (5CD) (Requires Holder TK9999-ND, below)	**$31.84**
TK9994-ND	Ceramic Tuning Driver (5CCD) (Requires Holder TK9999-ND, below)	**$69.64**
TK9999-ND	Ceramic Driver Holder	**$4.93**

L Nom.	Q Min.	Rated DC Freq.	Current	Digi-Key Part No.	Cut Tape Pricing 1	10	100	★Tape & Reel Pricing	Toko Part No.
43FS Type									
.22µH ± 20%	22	25.2MHz	190mA	TKS1205CT-ND	1.50	11.52	86.40	—	300NS-R22M
.27µH ± 20%	22	25.2MHz	170mA	TKS1206CT-ND	1.50	11.52	86.40	306.72/500	300NS-R27M
.56µH ± 20%	19	25.2MHz	145mA	TKS1210CT-ND	1.50	11.52	86.40	306.72/500	300NS-R56M
.68µH ± 20%	18	25.2MHz	140mA	TKS1211CT-ND	1.50	11.52	86.40	—	300NS-R68M
.82µH ± 20%	17	25.2MHz	135mA	TKS1212CT-ND	1.50	11.52	86.40	—	300NS-R82M
1.0µH ± 10%	50	7.96MHz	250mA	TKS1213CT-ND	1.51	11.60	87.00	304.50/500	300LS-1R0K
1.2µH ± 10%	50	7.96MHz	240mA	TKS1214CT-ND	1.51	11.60	87.00	304.50/500	300LS-1R2K
1.5µH ± 10%	50	7.96MHz	230mA	TKS1215CT-ND	1.51	11.60	87.00	304.50/500	300LS-1R5K
1.8µH ± 10%	50	7.96MHz	220mA	TKS1216CT-ND	1.51	11.60	87.00	304.50/500	300LS-1R8K
2.2µH ± 10%	50	7.96MHz	200mA	TKS1217CT-ND	1.51	11.60	87.00	304.50/500	300LS-2R2K
2.7µH ± 10%	50	7.96MHz	190mA	TKS1218CT-ND	1.51	11.60	87.00	304.50/500	300LS-2R7K
3.3µH ± 10%	50	7.96MHz	180mA	TKS1219CT-ND	1.51	11.60	87.00	304.50/500	300LS-3R3K
3.9µH ± 10%	50	7.96MHz	160mA	TKS1220CT-ND	1.51	11.60	87.00	304.50/500	300LS-3R9K
4.7µH ± 10%	50	7.96MHz	160mA	TKS1221CT-ND	1.51	11.60	87.00	304.50/500	300LS-4R7K
5.6µH ± 10%	50	7.96MHz	150mA	TKS1222CT-ND	1.51	11.60	87.00	304.50/500	300LS-5R6K
6.8µH ± 10%	50	7.96MHz	150mA	TKS1223CT-ND	1.51	11.60	87.00	304.50/500	300LS-6R8K
8.2µH ± 10%	50	7.96MHz	150mA	TKS1224CT-ND	1.51	11.60	87.00	304.50/500	300LS-8R2K
10.0µH ± 10%	50	7.96MHz	145mA	TKS1225CT-ND	1.51	11.60	87.00	304.50/500	300LS-100K
15.0µH ± 10%	50	2.52MHz	130mA	TKS1227CT-ND	1.51	11.60	87.00	304.50/500	300LS-150K
18.0µH ± 10%	50	2.52MHz	125mA	TKS1228CT-ND	1.51	11.60	87.00	304.50/500	300LS-180K
22.0µH ± 10%	50	2.52MHz	115mA	TKS1229CT-ND	1.51	11.60	87.00	304.50/500	300LS-220K
27.0µH ± 10%	50	2.52MHz	105mA	TKS1230CT-ND	1.51	11.60	87.00	304.50/500	300LS-270K
33.0µH ± 10%	50	2.52MHz	100mA	TKS1231CT-ND	1.51	11.60	87.00	304.50/500	300LS-330K
39.0µH ± 10%	50	2.52MHz	95mA	TKS1232CT-ND	1.51	11.60	87.00	304.50/500	300LS-390K
47.0µH ± 10%	50	2.52MHz	85mA	TKS1233CT-ND	1.51	11.60	87.00	304.50/500	300LS-470K
56.0µH ± 10%	50	2.52MHz	85mA	TKS1234CT-ND	1.51	11.60	87.00	304.50/500	300LS-560K
68.0µH ± 10%	50	2.52MHz	75mA	TKS1235CT-ND	1.51	11.60	87.00	304.50/500	300LS-680K
82.0µH ± 10%	50	2.52MHz	75mA	TKS1236CT-ND	1.51	11.60	87.00	304.50/500	300LS-820K
100µH ± 5%	50	2.52MHz	70mA	TKS1237CT-ND	1.60	12.28	92.10	322.35/500	300LS-101J
120µH ± 5%	50	796KHz	70mA	TKS1238CT-ND	1.60	12.28	92.10	322.35/500	300HS-121J
150µH ± 5%	50	796KHz	65mA	TKS1239CT-ND	1.60	12.28	92.10	322.35/500	300HS-151J
180µH ± 5%	50	796KHz	60mA	TKS1240CT-ND	1.60	12.28	92.10	322.35/500	300HS-181J
220µH ± 5%	50	796KHz	60mA	TKS1241CT-ND	1.60	12.28	92.10	322.35/500	300HS-221J
270µH ± 5%	50	796KHz	55mA	TKS1242CT-ND	1.60	12.28	92.10	322.35/500	300HS-271J
330µH ± 5%	50	796KHz	50mA	TKS1243CT-ND	1.60	12.28	92.10	322.35/500	300HS-331J
390µH ± 5%	50	796KHz	50mA	TKS1244CT-ND	1.60	12.28	92.10	322.35/500	300HS-391J
470µH ± 5%	50	796KHz	45mA	TKS1245CT-ND	1.60	12.28	92.10	322.35/500	300HS-471J
560µH ± 5%	50	796KHz	45mA	TKS1246CT-ND	1.60	12.28	92.10	322.35/500	300SS-561J
680µH ± 5%	50	796KHz	40mA	TKS1247CT-ND	1.60	12.28	92.10	322.35/500	300SS-681J
820µH ± 5%	50	796KHz	50mA	TKS1248CT-ND	1.60	12.28	92.10	322.35/500	300SS-821J
1000µH ± 5%	50	796KHz	40mA	TKS1249CT-ND	1.60	12.28	92.10	322.35/500	300SS-102J
5CCD Type									
1.8µH ± 3%	45	7.96MHz	—	TKS2245CT-ND	3.34	25.68	192.60	1168.00/1000	614BN-9018Z
2.2µH ± 3%	45	7.96MHz	—	TKS2246CT-ND	3.34	25.68	192.60	1168.00/1000	614BN-9022Z
2.7µH ± 3%	50	7.96MHz	—	TKS2247CT-ND	3.34	25.68	192.60	1168.00/1000	614BN-9027IB
3.3µH ± 3%	55	7.96MHz	—	TKS2248CT-ND	3.34	25.68	192.60	1168.00/1000	614BN-9033Z
3.9µH ± 3%	55	7.96MHz	—	TKS2249CT-ND	3.34	25.68	192.60	1168.00/1000	614BN-9039Z
4.7µH ± 3%	55	7.96MHz	—	TKS2250CT-ND	3.34	25.68	192.60	1168.00/1000	614BN-9047Z
5.6µH ± 3%	65	7.96MHz	—	TKS2251CT-ND	3.34	25.68	192.60	1168.00/1000	614BN-9056Z
6.8µH ± 3%	65	7.96MHz	—	TKS2252CT-ND	3.34	25.68	192.60	1168.00/1000	614BN-9068Z
8.2µH ± 3%	65	7.96MHz	—	TKS2253CT-ND	3.34	25.68	192.60	1168.00/1000	614BN-9082Z
10.0µH ± 3%	45	2.52MHz	—	TKS2254CT-ND	3.34	25.68	192.60	1168.00/1000	614BN-9100Z
18.0µH ± 3%	45	2.52MHz	—	TKS2257CT-ND	3.34	25.68	192.60	1168.00/1000	614BN-9180Z
22.0µH ± 3%	45	2.52MHz	—	TKS2258CT-ND	3.34	25.68	192.60	1168.00/1000	614BN-9220Z
39.0µH ± 3%	45	2.52MHz	—	TKS2261CT-ND	3.34	25.68	192.60	1168.00/1000	614BN-9390Z
47.0µH ± 3%	45	2.52MHz	—	TKS2262CT-ND	3.34	25.68	192.60	1168.00/1000	614BN-9470Z
68.0µH ± 3%	30	2.52MHz	—	TKS2264CT-ND	3.34	25.68	192.60	1168.00/1000	614AN-9680Z
82.0µH ± 3%	30	2.52MHz	—	TKS2265CT-ND	3.34	25.68	192.60	1168.00/1000	614AN-9820Z
100µH ± 3%	45	796KHz	—	TKS2266CT-ND	3.34	25.68	192.60	1168.00/1000	614AN-9101Z
120µH ± 3%	45	796KHz	—	TKS2267CT-ND	3.34	25.68	192.60	1168.00/1000	614AN-9121Z
150µH ± 3%	45	796KHz	—	TKS2268CT-ND	3.34	25.68	192.60	1168.00/1000	614AN-9151Z
180µH ± 3%	45	796KHz	—	TKS2269CT-ND	3.34	25.68	192.60	1168.00/1000	614AN-9181Z
220µH ± 3%	45	796KHz	—	TKS2270CT-ND	3.34	25.68	192.60	1168.00/1000	614AN-9221Z
270µH ± 3%	45	796KHz	—	TKS2271CT-ND	3.34	25.68	192.60	1168.00/1000	614AN-9271Z
330µH ± 3%	45	796KHz	—	TKS2272CT-ND	3.34	25.68	192.60	1168.00/1000	614AN-9331Z
390µH ± 3%	45	796KHz	—	TKS2273CT-ND	3.34	25.68	192.60	1168.00/1000	614AN-9391Z
560µH ± 3%	45	796KHz	—	TKS2275CT-ND	3.34	25.68	192.60	1168.00/1000	614AN-9561Z
680µH ± 3%	45	796KHz	—	TKS2276CT-ND	3.34	25.68	192.60	1168.00/1000	614AN-9681Z
820µH ± 3%	45	796KHz	—	TKS2277CT-ND	3.34	25.68	192.60	1168.00/1000	614AN-9821Z
1000µH ± 3%	30	252KHz	—	TKS2278CT-ND	3.34	25.68	192.60	1168.00/1000	614AN-9102Z
1200µH ± 3%	30	252KHz	—	TKS2279CT-ND	3.34	25.68	192.60	—	614AN-9122Z
1300µH ± 3%	30	252KHz	—	TKS2280CT-ND	3.34	25.68	192.60	1168.00/1000	614AN-9132Z
5CE Type									
330nH ± 5%	60	273MHz	—	TKS2409CT-ND	6.02	48.12	360.90	—	432AN-1058Z
5CT Type									
.05mH ± 20%	25	2.52MHz	460mA	TKS2301CT-ND	3.73	29.80	223.50	—	312AN-1031Z

L Nom.	Q Min.	Freq.	Digi-Key Part No.	Cut Tape Pricing 1	10	100	★Tape & Reel Pricing	Toko Part No.
5CCE Type								
68nH ± 5%	60	100MHz	TKS2420CT-ND	5.45	43.60	327.00	1978.50/750	A638AN-0150Z
82nH ± 5%	63	100MHz	TKS2421CT-ND	5.45	43.60	327.00	1978.50/750	A638AN-0151Z
100nH ± 5%	65	100MHz	TKS2422CT-ND	5.45	43.60	327.00	1978.50/750	A638AN-0152Z
120nH ± 5%	68	100MHz	TKS2423CT-ND	5.45	43.60	327.00	1978.50/750	A638AN-0153Z
150nH ± 5%	63	100MHz	TKS2424CT-ND	5.45	43.60	327.00	1978.50/750	A638AN-0154Z
180nH ± 5%	73	100MHz	TKS2425CT-ND	5.45	43.60	327.00	1978.50/750	A638AN-0155Z
220nH ± 5%	60	100MHz	TKS2426CT-ND	5.45	43.60	327.00	1978.50/750	A638AN-0156Z
270nH ± 5%	72	100MHz	TKS2427CT-ND	5.45	43.60	327.00	1978.50/750	A638AN-0157Z
330nH ± 5%	75	100MHz	TKS2428CT-ND	5.45	43.60	327.00	1978.50/750	A638AN-0158Z
390nH ± 5%	68	100MHz	TKS2429CT-ND	5.45	43.60	327.00	1978.50/750	A638AN-0159Z
470nH ± 5%	67	100MHz	TKS2430CT-ND	5.45	43.60	327.00	1978.50/750	A638AN-0160Z
560nH ± 5%	68	100MHz	TKS2431CT-ND	5.45	43.60	327.00	1978.50/750	A638AN-0161Z
680nH ± 5%	50	30MHz	TKS2432CT-ND	5.45	43.60	327.00	1978.50/750	A638AN-0162Z
820nH ± 5%	48	30MHz	TKS2433CT-ND	5.45	43.60	327.00	1978.50/750	A638AN-0163Z
1000nH ± 5%	50	30MHz	TKS2434CT-ND	5.45	43.60	327.00	1978.50/750	A638AN-0164Z
1200nH ± 5%	48	30MHz	TKS2435CT-ND	5.45	43.60	327.00	1978.50/750	A638AN-0165Z
1500nH ± 5%	48	30MHz	TKS2436CT-ND	5.45	43.60	327.00	1978.50/750	A638AN-0166Z
1800nH ± 5%	47	30MHz	TKS2437CT-ND	5.45	43.60	327.00	1978.50/750	A638AN-0167Z
2200nH ± 5%	47	30MHz	TKS2438CT-ND	5.45	43.60	327.00	1978.50/750	A638AN-0168Z

★ For Tape & Reel Part No., change CT to TR.

9139B-ND Toko Coils & Filter Book **$9.95**

Fixed Surface Mount Inductors

32CS, 33CS, 36CS, D73C, D73F, D75C, D75F, D52FU, D62CB, D10F, D32FU, and D124C Types

Features:

32CS: • For dip-soldering type • Very small

33CS, 36CS: • High current • High Q for reflow soldering

D73F/C, D75F/C: • Miniature surface mount type • Low profile (3.2 or 4.8mm height) • Available in magnetically shielded or unshielded versions • Operating Temperature: -40°C to +80°C • Step up/Step down inductor for up to 4W DC/DC converter circuit • Current limiting inductor for DC/AC inverter circuit

D52FU: • Low profile (2.2mm typ. height) and 5mm square • Ideal for IC inverter EL lamp driver applications • Magnetically shielded version • Available on tape and reel for auto-insertion • Suitable for reflow soldering

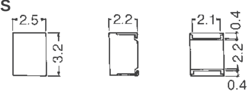
D62CB (with Ferrite Shield): • Low profile (2.5mm max.) • Ideal for a variety of DC-DC converter inductor applications • Magnetically shielded

D10F: • Low profile SMD type (5mm high) • Suitable for large current • Suitable for reflow soldering

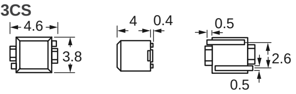
D32FU: • Low profile (2.2mm max.) and 3.5mm square • Ideal for IC inverter EL lamp driver applications • Available on tape and reel for auto-insertion • Suitable for reflow soldering

D124C: • Low profile (4.5mm max.) • Suitable for large currents

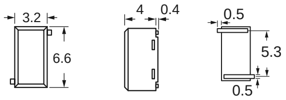
32CS



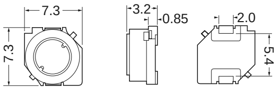
33CS



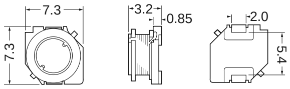
36CS



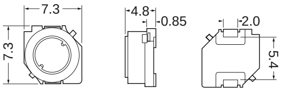
D73C



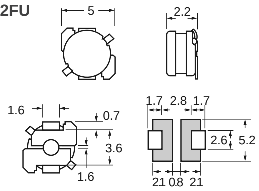
D73F



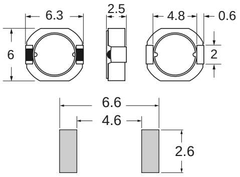
D75C/F



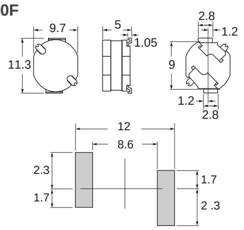
D52FU



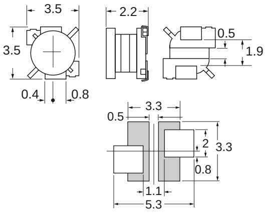
D62CB



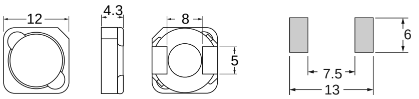
D10F



D32FU



D124C



Induct. L Nom.	L Tol. (%)	Q Min.	Test Freq.	Rated DC Current	Digi-Key Part No.	Cut Tape Price Each 1	10	100	★Tape & Reel Pricing	Toko Part No.
32CS Type										
12nH	±20	19	100MHz	490mA	TKS1002CT-ND	1.50	1.16	.87	786.00/1500	380NB-12NM
15nH	±20	20	100MHz	470mA	TKS1003CT-ND	1.50	1.16	.87	786.00/1500	380NB-15NM
18nH	±20	20	100MHz	450mA	TKS1004CT-ND	1.50	1.16	.87	786.00/1500	380NB-18NM
22nH	±20	21	100MHz	430mA	TKS1005CT-ND	1.50	1.16	.87	786.00/1500	380NB-22NM
27nH	±20	22	100MHz	410mA	TKS1006CT-ND	1.50	1.16	.87	786.00/1500	380NB-27NM
33nH	±20	22	100MHz	390mA	TKS1007CT-ND	1.50	1.16	.87	786.00/1500	380NB-33NM
47nH	±20	24	100MHz	360mA	TKS1009CT-ND	1.50	1.16	.87	786.00/1500	380NB-47NM
56nH	±20	25	100MHz	340mA	TKS1010CT-ND	1.50	1.16	.87	786.00/1500	380NB-56NM
68nH	±20	26	100MHz	320mA	TKS1011CT-ND	1.50	1.16	.87	786.00/1500	380NB-68NM
82nH	±20	27	100MHz	300mA	TKS1012CT-ND	1.50	1.16	.87	786.00/1500	380NB-82NM
.10µH	±20	27	100MHz	300mA	TKS1013CT-ND	1.50	1.16	.87	786.00/1500	380NB-R10M
.12µH	±20	18	25.2MHz	240mA	TKS1014CT-ND	1.50	1.16	.87	786.00/1500	380NB-R12M
.15µH	±20	17	25.2MHz	230mA	TKS1015CT-ND	1.50	1.16	.87	786.00/1500	380NB-R15M
.18µH	±20	16	25.2MHz	220mA	TKS1016CT-ND	1.50	1.16	.87	786.00/1500	380NB-R18M
.22µH	±20	15	25.2MHz	200mA	TKS1017CT-ND	1.50	1.16	.87	786.00/1500	380NB-R22M
.33µH	±20	15	25.2MHz	180mA	TKS1019CT-ND	1.50	1.16	.87	786.00/1500	380NB-R33M
.47µH	±20	13	25.2MHz	170mA	TKS1021CT-ND	1.50	1.16	.87	786.00/1500	380NB-R47M
.56µH	±20	12	25.2MHz	160mA	TKS1022CT-ND	1.50	1.16	.87	786.00/1500	380NB-R56M
.68µH	±20	12	25.2MHz	150mA	TKS1023CT-ND	1.50	1.16	.87	786.00/1500	380NB-R68M
.82µH	±20	12	25.2MHz	140mA	TKS1024CT-ND	1.50	1.16	.87	786.00/1500	380NB-R82M
1.0µH	±10	30	7.96MHz	235mA	TKS1025CT-ND	1.50	1.16	.87	786.00/1500	380LB-1R0K
1.2µH	±10	30	7.96MHz	225mA	TKS1026CT-ND	1.50	1.16	.87	786.00/1500	380LB-1R2K
1.5µH	±10	30	7.96MHz	200mA	TKS1027CT-ND	1.50	1.16	.87	786.00/1500	380LB-1R5K
1.8µH	±10	30	7.96MHz	190mA	TKS1028CT-ND	1.50	1.16	.87	786.00/1500	380LB-1R8K
2.2µH	±10	30	7.96MHz	180mA	TKS1029CT-ND	1.50	1.16	.87	786.00/1500	380LB-2R2K
2.7µH	±10	30	7.96MHz	178mA	TKS1030CT-ND	1.50	1.16	.87	786.00/1500	380LB-2R7K
3.3µH	±10	30	7.96MHz	175mA	TKS1031CT-ND	1.50	1.16	.87	786.00/1500	380LB-3R3K
3.9µH	±10	30	7.96MHz	170mA	TKS1032CT-ND	1.50	1.16	.87	786.00/1500	380LB-3R9K
4.7µH	±10	30	7.96MHz	160mA	TKS1033CT-ND	1.50	1.16	.87	786.00/1500	380LB-4R7K
5.6µH	±10	30	7.96MHz	127mA	TKS1034CT-ND	1.50	1.16	.87	786.00/1500	380LB-5R6K
6.8µH	±10	30	7.96MHz	125mA	TKS1035CT-ND	1.50	1.16	.87	786.00/1500	380LB-6R8K
8.2µH	±10	30	7.96MHz	120mA	TKS1036CT-ND	1.50	1.16	.87	786.00/1500	380LB-8R2K
10µH	±5	30	2.52MHz	118mA	TKS1037CT-ND	1.50	1.16	.87	786.00/1500	380KB-100J
15µH	±5	30	2.52MHz	85.0mA	TKS1039CT-ND	1.50	1.16	.87	786.00/1500	380KB-150J
18µH	±5	30	2.52MHz	80.0mA	TKS1040CT-ND	1.50	1.16	.87	786.00/1500	380KB-180J
22µH	±5	30	2.52MHz	73.3mA	TKS1041CT-ND	1.50	1.16	.87	786.00/1500	380KB-220J
27µH	±5	30	2.52MHz	68.2mA	TKS1042CT-ND	1.50	1.16	.87	786.00/1500	380KB-270J
33µH	±5	30	2.52MHz	61.7mA	TKS1043CT-ND	1.50	1.16	.87	786.00/1500	380KB-330J
39µH	±5	30	2.52MHz	56.7mA	TKS1044CT-ND	1.50	1.16	.87	786.00/1500	380KB-390J
47µH	±5	30	2.52MHz	51.7mA	TKS1045CT-ND	1.50	1.16	.87	786.00/1500	380KB-470J
56µH	±5	30	2.52MHz	43.3mA	TKS1046CT-ND	1.50	1.16	.87	786.00/1500	380KB-560J
68µH	±5	30	2.52MHz	42.5mA	TKS1047CT-ND	1.50	1.16	.87	786.00/1500	380KB-680J
82µH	±5	30	2.52MHz	37.5mA	TKS1048CT-ND	1.50	1.16	.87	786.00/1500	380KB-820J
100µH	±5	18	.796MHz	37.3mA	TKS1049CT-ND	1.50	1.16	.87	786.00/1500	380HB-101J
120µH	±5	18	.796MHz	35.0mA	TKS1050CT-ND	1.50	1.16	.87	786.00/1500	380HB-121J
150µH	±5	18	.796MHz	32.0mA	TKS1051CT-ND	1.50	1.16	.87	786.00/1500	380HB-151J
180µH	±5	18	.796MHz	31.0mA	TKS1052CT-ND	1.50	1.16	.87	786.00/1500	380HB-181J
220µH	±5	18	.796MHz	30.0mA	TKS1053CT-ND	1.50	1.16	.87	786.00/1500	380HB-221J
33CS Type										
6.8nH	±10	70	150MHz	1000mA	TKS2673CT-ND	1.01	.78	.59	710.00/2000	Y655LY-01K
10.5nH	±10	75	150MHz	1000mA	TKS2674CT-ND	1.01	.78	.59	—	Y655LY-02K
15.3nH	±10	75	150MHz	1000mA	TKS2675CT-ND	1.01	.78	.59	710.00/2000	Y655LY-03K
36CS Type										
22nH	±10	85	150MHz	1000mA	TKS2677CT-ND	1.01	.78	.59	710.00/2000	656LZ-05K
27.5nH	±10	85	150MHz	1000mA	TKS2678CT-ND	1.01	.78	.59	710.00/2000	656LZ-06K
33.1nH	±10	85	150MHz	1000mA	TKS2679CT-ND	1.01	.78	.59	—	656LZ-07K
41.1nH	±10	85	150MHz	1000mA	TKS2680CT-ND	1.01	.78	.59	710.00/2000	656LZ-08K
49.8nH	±10	85	150MHz	1000mA	TKS2681CT-ND	1.01	.78	.59	710.00/2000	656LZ-09K

TK11-KIT-ND (SPK-3336CS-1993)

33/36CS Air Coil Kit - 10 each of 9 values (90 parts), 6.8nH - 49.8nH $49.00

Induct. L Nom.	L Tolerance (%)	Test Frequency	Rated DC Current	Digi-Key Part No.	Cut Tape Price Each 1	10	100	★Tape & Reel Pricing	Toko Part No.
D73C Type, with Ferrite Shield									
1.0µH	±20	100KHz	3.12A	TKS2501CT-ND	2.55	1.97	1.48	884.00/1000	636CY-1R0M
1.5µH	±20	100KHz	2.85A	TKS2502CT-ND	2.55	1.97	1.48	884.00/1000	636CY-1R5M
2.2µH	±20	100KHz	2.66A	TKS2503CT-ND	2.55	1.97	1.48	884.00/1000	636CY-2R2M
3.3µH	±20	100KHz	2.26A	TKS2504CT-ND	2.55	1.97	1.48	884.00/1000	636CY-3R3M
4.7µH	±20	100KHz	1.96A	TKS2505CT-ND	2.55	1.97	1.48	884.00/1000	636CY-4R7M
6.8µH	±20	100KHz	1.76A	TKS2506CT-ND	2.55	1.97	1.48	884.00/1000	636CY-6R8M
10µH	±20	100KHz	1.34A	TKS2507CT-ND	2.55	1.97	1.48	884.00/1000	636CY-100M
12µH	±20	100KHz	1.23A	TKS2508CT-ND	2.55	1.97	1.48	884.00/1000	636CY-120M
15µH	±20	100KHz	1.09A	TKS2509CT-ND	2.55	1.97	1.48	884.00/1000	636CY-150M
18µH	±20	100KHz	.99A	TKS2539CT-ND	2.55	1.97	1.48	894.00/1000	636CY-180M
22µH	±20	100KHz	.90A	TKS2540CT-ND	2.55	1.97	1.48	894.00/1000	636CY-220M
27µH	±20	100KHz	.81A	TKS2541CT-ND	2.55	1.97	1.48	894.00/1000	636CY-270M
33µH	±20	100KHz	.72A	TKS2542CT-ND	2.55	1.97	1.48	894.00/1000	636CY-330M
47µH	±20	100KHz	.60A	TKS2544CT-ND	2.55	1.97	1.48	894.00/1000	636CY-470M
68µH	±20	100KHz	.50A	TKS2546CT-ND	2.55	1.97	1.48	894.00/1000	636CY-680M
82µH	±20	100KHz	.46A	TKS2547CT-ND	2.55	1.97	1.48	894.00/1000	636CY-820M
100µH	±20	100KHz	.41A	TKS2548CT-ND	2.55	1.97	1.48	894.00/1000	636CY-101M

(Continued)

Fixed Surface Mount Inductors *(Cont.)*

Induct. L Nom.	L Tolerance (%)	Test Frequency	Rated DC Current	Digi-Key Part No.	Cut Tape Price Each 1	10	100	★Tape & Reel Pricing	Toko Part No.
D73F Type, Unshielded									
1.0µH	±20	100KHz	2.88A	TKS2520CT-ND	2.27	1.75	1.32	795.00/1000	636FY-1R0M
1.5µH	±20	100KHz	2.67A	TKS2521CT-ND	2.27	1.75	1.32	795.00/1000	636FY-1R5M
2.2µH	±20	100KHz	2.40A	TKS2522CT-ND	2.27	1.75	1.32	795.00/1000	636FY-2R2M
3.3µH	±20	100KHz	2.08A	TKS2523CT-ND	2.27	1.75	1.32	795.00/1000	636FY-3R3M
4.7µH	±20	100KHz	1.92A	TKS2524CT-ND	2.27	1.75	1.32	795.00/1000	636FY-4R7M
10µH	±20	100KHz	1.41A	TKS2526CT-ND	2.27	1.75	1.32	795.00/1000	636FY-100M
18µH	±20	100KHz	1.00A	TKS2529CT-ND	2.27	1.75	1.32	795.00/1000	636FY-180M
22µH	±20	100KHz	.93A	TKS2530CT-ND	2.27	1.75	1.32	795.00/1000	636FY-220M
47µH	±20	100KHz	.59A	TKS2534CT-ND	2.27	1.75	1.32	795.00/1000	636FY-470M
68µH	±20	100KHz	.49A	TKS2536CT-ND	2.27	1.75	1.32	795.00/1000	636FY-680M
82µH	±20	100KHz	.44A	TKS2537CT-ND	2.27	1.75	1.32	—	636FY-820M
100µH	±20	100KHz	.38A	TKS2538CT-ND	2.27	1.75	1.32	795.00/1000	636FY-101M
D75C Type, with Ferrite Shield									
100µH	± 20	100KHz	0.5A	TKS2559CT-ND	2.55	1.97	1.48	889.00/1000	646CY-101M
120µH	± 20	100KHz	0.47A	TKS2560CT-ND	2.55	1.97	1.48	889.00/1000	646CY-121M
150µH	± 20	100KHz	0.4A	TKS2561CT-ND	2.55	1.97	1.48	889.00/1000	646CY-151M
180µH	± 20	100KHz	0.39A	TKS2562CT-ND	2.55	1.97	1.48	889.00/1000	646CY-181M
220µH	± 20	100KHz	0.33A	TKS2563CT-ND	2.55	1.97	1.48	889.00/1000	646CY-221M
270µH	± 20	100KHz	0.31A	TKS2564CT-ND	2.55	1.97	1.48	889.00/1000	646CY-271M
330µH	± 20	100KHz	0.27A	TKS2565CT-ND	2.55	1.97	1.48	889.00/1000	646CY-331M
470µH	± 20	100KHz	0.25A	TKS2567CT-ND	2.55	1.97	1.48	889.00/1000	646CY-471M
560µH	± 20	100KHz	0.22A	TKS2568CT-ND	2.55	1.97	1.48	889.00/1000	646CY-561M
D75F Type, Unshielded									
100µH	± 20	100KHz	0.51A	TKS2550CT-ND	2.27	1.75	1.32	791.00/1000	646FY-101M
120µH	± 10	100KHz	0.42A	TKS2551CT-ND	2.27	1.75	1.32	—	646FY-121K
150µH	±10	100KHz	0.37A	TKS2552CT-ND	2.27	1.75	1.32	791.00/1000	646FY-151K
180µH	±10	100KHz	0.35A	TKS2553CT-ND	2.27	1.75	1.32	791.00/1000	646FY-181K
220µH	±10	100KHz	0.29A	TKS2554CT-ND	2.27	1.75	1.32	791.00/1000	646FY-221K
270µH	±10	100KHz	0.28A	TKS2555CT-ND	2.27	1.75	1.32	791.00/1000	646FY-271K
330µH	±10	100KHz	0.23A	TKS2556CT-ND	2.27	1.75	1.32	791.00/1000	646FY-331K
390µH	±10	100KHz	0.215A	TKS2557CT-ND	2.27	1.75	1.32	791.00/1000	646FY-391K
470µH	±10	100KHz	0.195A	TKS2558CT-ND	2.27	1.75	1.32	791.00/1000	646FY-471K

Indct. L Nom.	L Tol. (%)	SRF† (MHz)	DC Resistance (Ω)	Rated DC Current	Digi-Key Part No.	Cut Tape Price Each 1	10	100	★Tape & Reel Pricing	Toko Part No.
D52FU Type										
470µH	±20	5.17	6.78	140mA	TKS3500CT-ND	.72	.63	.58	716.00/2000	875FU-471M
560µH	±20	4.83	9.43	125mA	TKS3501CT-ND	.72	.63	.58	716.00/2000	875FU-561M
680µH	±20	4.27	10.79	115mA	TKS3502CT-ND	.72	.63	.58	716.00/2000	875FU-681M
820µH	±20	3.94	12.35	105mA	TKS3503CT-ND	.72	.63	.58	716.00/2000	875FU-821M
1000µH	±20	3.61	16.32	95mA	TKS3504CT-ND	.72	.63	.58	716.00/2000	875FU-102M
1200µH	±20	3.17	18.64	88mA	TKS3505CT-ND	.72	.63	.58	716.00/2000	875FU-122M
1500µH	±20	2.65	22.19	83mA	TKS3506CT-ND	.72	.63	.58	716.00/2000	875FU-152M
1800µH	±20	2.51	27.73	74mA	TKS3507CT-ND	.72	.63	.58	716.00/2000	875FU-182M
2200µH	±20	2.38	32.13	64mA	TKS3508CT-ND	.72	.63	.58	716.00/2000	875FU-222M
2700µH	±20	2.11	37.61	61mA	TKS3509CT-ND	.72	.63	.58	716.00/2000	875FU-272M
3200µH	±20	1.97	51.89	50mA	TKS3510CT-ND	.72	.63	.58	716.00/2000	875FU-332M
3900µH	±20	1.81	58.84	50mA	TKS3511CT-ND	.72	.63	.58	716.00/2000	875FU-392M
4700µH	±20	1.63	80.21	42mA	TKS3512CT-ND	.72	.63	.58	716.00/2000	875FU-472M
5600µH	±20	1.46	92.12	40mA	TKS3513CT-ND	.72	.63	.58	716.00/2000	875FU-562M
6800µH	±20	1.33	106.41	37mA	TKS3514CT-ND	.72	.63	.58	716.00/2000	875FU-682M

TK15-KIT-ND (SPK-D52FU-1998)
D52FU Series Fixed Inductor Kit - 3 each of 22 values (66 parts), 100µH-6800µH $49.00

Induct. L (µH)	L Tol. (%)	DC Resistance (mΩ)	Max. DC Current	Digi-Key Part No.	Cut Tape Price Each 1	10	100	★Tape & Reel Pricing	Toko Part No.
D62CB Type									
1.0	±20	11	3.48A	TKS5510CT-ND	1.33	1.03	.77	699.00/1500	A920CY-1R0M
1.5	±20	14	2.83A	TKS5511CT-ND	1.33	1.03	.77	699.00/1500	A920CY-1R5M
2.0	±20	17	2.44A	TKS5512CT-ND	1.33	1.03	.77	699.00/1500	A920CY-2R0M
3.3	±20	24	1.89A	TKS5513CT-ND	1.33	1.03	.77	699.00/1500	A920CY-3R3M
4.3	±20	31	1.65A	TKS5514CT-ND	1.33	1.03	.77	699.00/1500	A920CY-4R3M
6.2	±20	43	1.37A	TKS5515CT-ND	1.33	1.03	.77	699.00/1500	A920CY-6R2M
10.0	±20	64	1.07A	TKS5516CT-ND	1.33	1.03	.77	699.00/1500	A920CY-100M
12.0	±20	75	0.97A	TKS5517CT-ND	1.33	1.03	.77	699.00/1500	A920CY-120M
15.0	±20	87	0.87A	TKS5518CT-ND	1.33	1.03	.77	699.00/1500	A920CY-150M
18.0	±20	110	0.79A	TKS5519CT-ND	1.33	1.03	.77	699.00/1500	A920CY-180M
22.0	±20	130	0.71A	TKS5520CT-ND	1.33	1.03	.77	699.00/1500	A920CY-220M
27.0	±20	170	0.64A	TKS5521CT-ND	1.33	1.03	.77	699.00/1500	A920CY-270M
33.0	±20	195	0.58A	TKS5522CT-ND	1.33	1.03	.77	699.00/1500	A920CY-330M
39.0	±20	245	0.53A	TKS5523CT-ND	1.33	1.03	.77	699.00/1500	A920CY-390M
47.0	±20	290	0.48A	TKS5524CT-ND	1.33	1.03	.77	699.00/1500	A920CY-470M
56.0	±20	345	0.44A	TKS5525CT-ND	1.33	1.03	.77	699.00/1500	A920CY-560M
68.0	±20	400	0.40A	TKS5526CT-ND	1.33	1.03	.77	699.00/1500	A920CY-680M
82.0	±20	465	0.36A	TKS5527CT-ND	1.33	1.03	.77	699.00/1500	A920CY-820M

TK18-KIT-ND (SPK-D62CB-1999)
D62CB Series Fixed Inductor Kit - 3 each of 18 values (54 parts), 1.0µH - 82.0µH $58.80

Induct. L (µH)	L Tol. (%)	Test Freq.	DC Resistance (Ω)	Max. DC Current	Digi-Key Part No.	Cut Tape Price Each 1	10	100	★Tape & Reel Pricing	Toko Part No.
D10F Type										
10	±20	100KHz	0.047	2.60A	TKS5460CT-ND	2.20	1.70	1.28	451.50/500	A814AY-100M
12	±20	100KHz	0.050	2.48A	TKS5461CT-ND	2.20	1.70	1.28	451.50/500	A814AY-120M
15	±20	100KHz	0.058	2.27A	TKS5462CT-ND	2.20	1.70	1.28	451.50/500	A814AY-150M
18	±20	100KHz	0.067	2.15A	TKS5463CT-ND	2.20	1.70	1.28	451.50/500	A814AY-180M
22	±20	100KHz	0.075	2.00A	TKS5464CT-ND	2.20	1.70	1.28	451.50/500	A814AY-220M
27	±20	100KHz	0.087	1.84A	TKS5465CT-ND	2.20	1.70	1.28	451.50/500	A814AY-270M
33	±20	100KHz	0.095	1.72A	TKS5466CT-ND	2.20	1.70	1.28	451.50/500	A814AY-330M
39	±20	100KHz	0.12	1.58A	TKS5467CT-ND	2.20	1.70	1.28	451.50/500	A814AY-390M
47	±10	100KHz	0.15	1.44A	TKS5468CT-ND	2.20	1.70	1.28	451.50/500	A814AY-470K
56	±10	100KHz	0.18	1.28A	TKS5469CT-ND	2.20	1.70	1.28	451.50/500	A814AY-560K
68	±10	100KHz	0.20	1.20A	TKS5470CT-ND	2.20	1.70	1.28	451.50/500	A814AY-680K
82	±10	100KHz	0.23	1.09A	TKS5471CT-ND	2.20	1.70	1.28	451.50/500	A814AY-820K
100	±10	100KHz	0.27	1.05A	TKS5472CT-ND	2.20	1.70	1.28	451.50/500	A814AY-101K
120	±10	100KHz	0.33	0.92A	TKS5473CT-ND	2.20	1.70	1.28	451.50/500	A814AY-121K
150	±10	100KHz	0.40	0.80A	TKS5474CT-ND	2.20	1.70	1.28	451.50/500	A814AY-151K
180	±10	100KHz	0.53	0.73A	TKS5475CT-ND	2.20	1.70	1.28	451.50/500	A814AY-181K
220	±10	100KHz	0.60	0.69A	TKS5476CT-ND	2.20	1.70	1.28	451.50/500	A814AY-221K
270	±10	100KHz	0.84	0.60A	TKS5477CT-ND	2.20	1.70	1.28	451.50/500	A814AY-271K
330	±10	100KHz	1.00	0.53A	TKS5478CT-ND	2.20	1.70	1.28	451.50/500	A814AY-331K
390	±10	100KHz	1.09	0.49A	TKS5479CT-ND	2.20	1.70	1.28	451.50/500	A814AY-391K
470	±10	100KHz	1.25	0.46A	TKS5480CT-ND	2.20	1.70	1.28	451.50/500	A814AY-471K
560	±10	100KHz	1.63	0.41A	TKS5481CT-ND	2.20	1.70	1.28	451.50/500	A814AY-561K
680	±10	100KHz	1.90	0.38A	TKS5482CT-ND	2.20	1.70	1.28	451.50/500	A814AY-681K
820	±10	100KHz	2.44	0.34A	TKS5483CT-ND	2.20	1.70	1.28	451.50/500	A814AY-821K
1000	±10	100KHz	2.80	0.31A	TKS5484CT-ND	2.20	1.70	1.28	451.50/500	A814AY-102K
1200	±10	100KHz	3.67	0.27A	TKS5485CT-ND	2.20	1.70	1.28	451.50/500	A814AY-122K
1500	±10	100KHz	4.37	0.25A	TKS5486CT-ND	2.20	1.70	1.28	451.50/500	A814AY-152K

Induct. L (mH)	L Tol. (%)	DC Resistance (Ω)	Max. DC Current	Digi-Key Part No.	Cut Tape Price Each 1	10	100	★Tape & Reel Pricing	Toko Part No.
D32FU Type									
0.33	±20	9.7	109mA	TKS5530CT-ND	.97	.75	.57	680.00/2000	887FU-331M
0.39	±20	12	98mA	TKS5531CT-ND	.97	.75	.57	680.00/2000	887FU-391M
0.47	±20	14	90mA	TKS5532CT-ND	.97	.75	.57	680.00/2000	887FU-471M
0.56	±20	18	81mA	TKS5533CT-ND	.97	.75	.57	680.00/2000	887FU-561M
0.68	±20	20	74mA	TKS5534CT-ND	.97	.75	.57	680.00/2000	887FU-681M
0.82	±20	30	71mA	TKS5535CT-ND	.97	.75	.57	680.00/2000	887FU-821M
1.0	±20	34	66mA	TKS5536CT-ND	.97	.75	.57	680.00/2000	887FU-102M
1.2	±20	35	57mA	TKS5537CT-ND	.97	.75	.57	680.00/2000	887FU-122M
1.5	±20	56	52mA	TKS5538CT-ND	.97	.75	.57	680.00/2000	887FU-152M
1.8	±20	59	46mA	TKS5539CT-ND	.97	.75	.57	680.00/2000	887FU-182M
2.2	±20	67	43mA	TKS5540CT-ND	.97	.75	.57	680.00/2000	887FU-222M
2.5	±20	81	42mA	TKS5541CT-ND	.97	.75	.57	680.00/2000	887FU-252M
2.7	±20	93	38mA	TKS5542CT-ND	.97	.75	.57	680.00/2000	887FU-272M
3.3	±20	113	36mA	TKS5543CT-ND	.97	.75	.57	680.00/2000	887FU-332M

TK19-KIT-ND (SPK-D32FU-1999)
D32FU Series Fixed Inductor Kit - 3 each of 14 values (42 parts), 0.33mH - 3.3mH $52.27

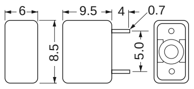
Induct. L (µH)	L Tol. (%)	Test Freq.	DC Resistance (Ω)	Max. DC Current	Digi-Key Part No.	Cut Tape Price Each 1	10	100	★Tape & Reel Pricing	Toko Part No.
D124C Type										
3.3	±20	100KHz	13.5 (9.70)	6.2A	TKS5490CT-ND	2.33	1.80	1.35	477.00/500	892NAS-3R3M
4.7	±20	100KHz	15.5 (11.8)	5.6A	TKS5491CT-ND	2.33	1.80	1.35	477.00/500	892NAS-4R7M
6.2	±20	100KHz	17.0 (13.5)	5.1A	TKS5492CT-ND	2.33	1.80	1.35	477.00/500	892NAS-6R2M
8.2	±20	100KHz	19.0 (15.3)	4.4A	TKS5493CT-ND	2.33	1.80	1.35	477.00/500	892NAS-8R2M
10.0	±20	100KHz	22.5 (18.0)	4.2A	TKS5494CT-ND	2.33	1.80	1.35	477.00/500	892NAS-100M
15.0	±20	100KHz	35.5 (29.6)	3.2A	TKS5495CT-ND	2.33	1.80	1.35	477.00/500	892NAS-150M
18.0	±20	100KHz	42.0 (34.4)	3.0A	TKS5496CT-ND	2.33	1.80	1.35	477.00/500	892NAS-180M
22.0	±20	100KHz	45.0 (37.4)	2.5A	TKS5497CT-ND	2.33	1.80	1.35	477.00/500	892NBS-220M
33.0	±20	100KHz	56.0 (45.7)	1.9A	TKS5498CT-ND	2.33	1.80	1.35	477.00/500	892NCS-330M
47.0	±20	100KHz	94.5 (77.7)	1.7A	TKS5499CT-ND	2.33	1.80	1.35	477.00/500	892NBS-470M
68.0	±20	100KHz	170 (133)	1.4A	TKS5500CT-ND	2.33	1.80	1.35	477.00/500	892NBF-680M
82.0	±20	100KHz	190 (148)	1.3A	TKS5501CT-ND	2.33	1.80	1.35	477.00/500	892NCF-820M
100.0	±20	100KHz	210 (167)	1.1A	TKS5502CT-ND	2.33	1.80	1.35	477.00/500	892NCF-101M

TK17-KIT-ND (SPK-D124C-1999)
D124C Series Fixed Inductor Kit - 3 each of 13 values (39 parts), 3.3µH - 100.0µH $66.97

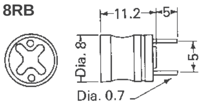
★ For Tape & Reel part number, change CT-ND to TR-ND. † Self Resonance Frequency (MHz)

TOKO Fixed Inductors

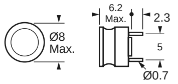
7BA



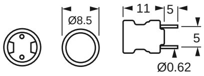
8RB



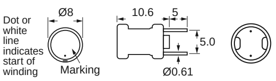
8RBS Low Profile



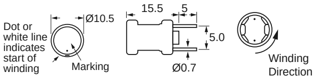
8RHB



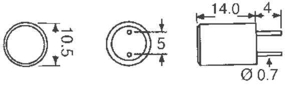
8RHB2



10RHB2



10RB



L.	Test	Q.	Rated DC	Digi-Key	Price Each				Toko
Nom.	Freq.	Min.	Current	Part No.	1	10	100	500	Part No.
7BA Type									
1.1µH	7.96MHz	30	30mA	TK4201-ND	1.23	1.00	.49	.42	144LY-1R1K
1.3µH	7.96MHz	30	30mA	TK4203-ND	1.23	1.00	.49	.42	144LY-1R3K
1.6µH	7.96MHz	30	30mA	TK4205-ND	1.23	1.00	.49	.42	144LY-1R6K
3.0µH	7.96MHz	30	30mA	TK4211-ND	1.23	1.00	.49	.42	144LY-3R0K
3.3µH	7.96MHz	30	30mA	TK4212-ND	1.23	1.00	.49	.42	144LY-3R3K
3.6µH	7.96MHz	30	30mA	TK4213-ND	1.23	1.00	.49	.42	144LY-3R6K
3.9µH	7.96MHz	30	30mA	TK4214-ND	1.23	1.00	.49	.42	144LY-3R9K
5.1µH	7.96MHz	30	30mA	TK4217-ND	1.23	1.00	.49	.42	144LY-5R1K
6.2µH	7.96MHz	30	30mA	TK4219-ND	1.23	1.00	.49	.42	144LY-6R2K
8.2µH	7.96MHz	30	30mA	TK4222-ND	1.23	1.00	.49	.42	144LY-8R2K
10µH	7.96MHz	30	30mA	TK4224-ND	1.23	1.00	.49	.42	144LY-100J
15µH	2.52MHz	30	30mA	TK4228-ND	1.23	1.00	.49	.42	144LY-150J
20µH	2.52MHz	30	30mA	TK4231-ND	1.23	1.00	.49	.42	144LY-200J
33µH	2.52MHz	30	30mA	TK4236-ND	1.23	1.00	.49	.42	144LY-330J
47µH	2.52MHz	30	30mA	TK4251-ND	1.23	1.00	.49	.42	144HY-470J
51µH	2.52MHz	30	30mA	TK4252-ND	1.23	1.00	.49	.42	144HY-510J
62µH	2.52MHz	30	30mA	TK4254-ND	1.23	1.00	.49	.42	144HY-620J
100µH	2.52MHz	30	30mA	TK4259-ND	1.23	1.00	.49	.42	144HY-101J
200µH	796KHz	30	30mA	TK4266-ND	1.23	1.00	.49	.42	144HY-201J
330µH	796KHz	30	30mA	TK4271-ND	1.23	1.00	.49	.42	144HY-331J
360µH	796KHz	30	30mA	TK4272-ND	1.23	1.00	.49	.42	144HY-361J
390µH	796KHz	30	30mA	TK4273-ND	1.23	1.00	.49	.42	144HY-391J
430µH	796KHz	30	30mA	TK4274-ND	1.23	1.00	.49	.42	144HY-431J
470µH	796KHz	30	30mA	TK4275-ND	1.23	1.00	.49	.42	144HY-471J
510µH	796KHz	30	30mA	TK4276-ND	1.23	1.00	.49	.42	144HY-511J
620µH	796KHz	30	30mA	TK4278-ND	1.23	1.00	.49	.42	144HY-621J
1000µH	796KHz	30	30mA	TK4283-ND	1.23	1.00	.49	.42	144HY-102J
8RB Type									
.10mH	796KHz	80	200mA	TK4300-ND	2.05	1.67	.82	.69	187LY-101J
.12mH	796KHz	80	200mA	TK4301-ND	2.05	1.67	.82	.69	187LY-121J
.15mH	796KHz	80	200mA	TK4302-ND	2.05	1.67	.82	.69	187LY-151J
.18mH	796KHz	80	200mA	TK4303-ND	2.05	1.67	.82	.69	187LY-181J
.22mH	796KHz	80	200mA	TK4304-ND	2.05	1.67	.82	.69	187LY-221J
.27mH	796KHz	80	200mA	TK4305-ND	2.05	1.67	.82	.69	187LY-271J
.33mH	796KHz	80	200mA	TK4306-ND	2.05	1.67	.82	.69	187LY-331J
.39mH	796KHz	80	200mA	TK4307-ND	2.05	1.67	.82	.69	187LY-391J
.47mH	796KHz	80	200mA	TK4308-ND	2.05	1.67	.82	.69	187LY-471J
.56mH	796KHz	80	200mA	TK4309-ND	2.05	1.67	.82	.69	187LY-561J
.68mH	796KHz	80	200mA	TK4310-ND	2.05	1.67	.82	.69	187LY-681J
.82mH	796KHz	80	200mA	TK4311-ND	2.05	1.67	.82	.69	187LY-821J
1.0mH	252KHz	80	150mA	TK4312-ND	2.05	1.67	.82	.69	187LY-102J
1.2mH	252KHz	90	150mA	TK4313-ND	2.05	1.67	.82	.69	187LY-122J
1.5mH	252KHz	90	150mA	TK4314-ND	2.05	1.67	.82	.69	187LY-152J
2.2mH	252KHz	90	100mA	TK4316-ND	2.05	1.67	.82	.69	187LY-222J
2.7mH	252KHz	90	100mA	TK4317-ND	2.05	1.67	.82	.69	187LY-272J
3.3mH	252KHz	90	100mA	TK4318-ND	2.05	1.67	.82	.69	187LY-332J
3.9mH	252KHz	90	50mA	TK4319-ND	2.05	1.67	.82	.69	187LY-392J
4.7mH	252KHz	90	50mA	TK4320-ND	2.05	1.67	.82	.69	187LY-472J
5.6mH	252KHz	90	50mA	TK4321-ND	2.05	1.67	.82	.69	187LY-562J
6.8mH	252KHz	90	50mA	TK4322-ND	2.05	1.67	.82	.69	187LY-682J
8.2mH	252KHz	90	50mA	TK4323-ND	2.05	1.67	.82	.69	187LY-822J
10mH	79.6KHz	100	40mA	TK4324-ND	2.05	1.67	.82	.69	187LY-103J
12mH	79.6KHz	100	40mA	TK4325-ND	2.05	1.67	.82	.69	187LY-123J
15mH	79.6KHz	100	40mA	TK4326-ND	2.05	1.67	.82	.69	187LY-153J
18mH	79.6KHz	100	30mA	TK4327-ND	2.05	1.67	.82	.69	187LY-183J
27mH	79.6KHz	100	30mA	TK4329-ND	2.05	1.67	.82	.69	187LY-273J
33mH	79.6KHz	100	30mA	TK4330-ND	2.05	1.67	.82	.69	187LY-333J
8RBS Type Low Profile									
.10mH	796kHz	60	200mA	TK4333-ND	2.61	2.07	1.18	1.01	262LY-101K
.12mH	796kHz	60	200mA	TK4381-ND	2.61	2.07	1.18	1.01	262LY-121K
.47mH	796kHz	60	100mA	TK4388-ND	2.61	2.07	1.18	1.01	262LY-471K
1.0mH	252kHz	80	50mA	TK4392-ND	2.61	2.07	1.18	1.01	262LY-102K
1.5mH	252kHz	80	50mA	TK4394-ND	2.61	2.07	1.18	1.01	262LY-152K
2.2mH	252kHz	80	50mA	TK4396-ND	2.61	2.07	1.18	1.01	262LY-222K
4.7mH	252kHz	80	40mA	TK4340-ND	2.61	2.07	1.18	1.01	262LY-472K
8.2mH	252kHz	80	30mA	TK4337-ND	2.61	2.07	1.18	1.01	262LY-822K
10.0mH	79.6kHz	60	20mA	TK4336-ND	2.61	2.07	1.18	1.01	262LY-103K
15.0mH	79.6kHz	60	20mA	TK4334-ND	2.61	2.07	1.18	1.01	262LY-153K

L.	Test	Q.	Rated DC	Digi-Key	Price Each				Toko
Nom.	Freq.	Min.	Current	Part No.	1	10	100	500	Part No.
8RHB Type									
1.0µH	7.96MHz	20	10A	TK4430-ND	2.42	1.97	.97	.82	622LY-1R0M
1.5µH	7.96MHz	20	8.5A	TK4431-ND	2.42	1.97	.97	.82	622LY-1R5M
2.2µH	7.96MHz	20	6.5A	TK4432-ND	2.42	1.97	.97	.82	622LY-2R2M
3.3µH	7.96MHz	20	5.5A	TK4433-ND	2.42	1.97	.97	.82	622LY-3R3M
4.7µH	7.96MHz	20	4.3A	TK4434-ND	2.42	1.97	.97	.82	622LY-4R7M
6.8µH	7.96MHz	20	3.7A	TK4435-ND	2.42	1.97	.97	.82	622LY-6R8M
10µH	2.52MHz	50	3.0A	TK4436-ND	2.42	1.97	.97	.82	622LY-100K
12µH	2.52MHz	50	2.6A	TK4437-ND	2.42	1.97	.97	.82	622LY-120K
15µH	2.52MHz	50	2.3A	TK4438-ND	2.42	1.97	.97	.82	622LY-150K
18µH	2.52MHz	40	2.2A	TK4439-ND	2.42	1.97	.97	.82	622LY-180K
22µH	2.52MHz	40	2.0A	TK4440-ND	2.42	1.97	.97	.82	622LY-220K
27µH	2.52MHz	40	1.7A	TK4441-ND	2.42	1.97	.97	.82	622LY-270K
33µH	2.52MHz	30	1.6A	TK4442-ND	2.42	1.97	.97	.82	622LY-330K
39µH	2.52MHz	30	1.5A	TK4443-ND	2.42	1.97	.97	.82	622LY-390K
47µH	2.52MHz	30	1.4A	TK4444-ND	2.42	1.97	.97	.82	622LY-470K
56µH	2.52MHz	30	1.3A	TK4445-ND	2.42	1.97	.97	.82	622LY-560K
68µH	2.52MHz	30	1.2A	TK4446-ND	2.42	1.97	.97	.82	622LY-680K
82µH	2.52MHz	30	1.1A	TK4447-ND	2.42	1.97	.97	.82	622LY-820K
100µH	0.796MHz	20	0.91A	TK4448-ND	2.42	1.97	.97	.82	622LY-101K
120µH	0.796MHz	20	0.84A	TK4449-ND	2.42	1.97	.97	.82	622LY-121K
150µH	0.796MHz	20	0.75A	TK4450-ND	2.42	1.97	.97	.82	622LY-151K
180µH	0.796MHz	20	0.69A	TK4451-ND	2.42	1.97	.97	.82	622LY-181K
220µH	0.796MHz	20	0.64A	TK4452-ND	2.42	1.97	.97	.82	622LY-221K
270µH	0.796MHz	20	0.57A	TK4453-ND	2.42	1.97	.97	.82	622LY-271K
330µH	0.796MHz	20	0.54A	TK4454-ND	2.42	1.97	.97	.82	622LY-331K
390µH	0.796MHz	20	0.48A	TK4455-ND	2.42	1.97	.97	.82	622LY-391K
470µH	0.796MHz	20	0.46A	TK4456-ND	2.42	1.97	.97	.82	622LY-471K
560µH	0.796MHz	20	0.41A	TK4457-ND	2.42	1.97	.97	.82	622LY-561K
680µH	0.796MHz	20	0.38A	TK4458-ND	2.42	1.97	.97	.82	622LY-681K
820µH	0.796MHz	20	0.35A	TK4459-ND	2.42	1.97	.97	.82	622LY-821K
1000µH	0.252MHz	50	0.29A	TK4460-ND	2.42	1.97	.97	.82	622LY-102K

L.	Test		Rated DC	Digi-Key	Price Each				Toko
Nom.	Freq.	SRF	Current	Part No.	1	10	100	500	Part No.
8RHB2 Type									
1.0µH	1kHz	150MHz	3.71A	TK4461-ND	2.41	1.87	.98	.82	822MY-1R0M
1.5µH	1kHz	130MHz	3.32A	TK4462-ND	2.41	1.87	.98	.82	822MY-1R5M
2.2µH	1kHz	100MHz	3.15A	TK4463-ND	2.41	1.87	.98	.82	822MY-2R2M
3.3µH	1kHz	79MHz	2.66A	TK4464-ND	2.41	1.87	.98	.82	822MY-3R3M
4.7µH	1kHz	51MHz	2.27A	TK4465-ND	2.41	1.87	.98	.82	822MY-4R7M
6.8µH	1kHz	29MHz	2.10A	TK4466-ND	2.41	1.87	.98	.82	822MY-6R8M
10µH	1kHz	14MHz	1.96A	TK4467-ND	2.41	1.87	.98	.82	822MY-100K
12µH	1kHz	13MHz	1.82A	TK4468-ND	2.41	1.87	.98	.82	822MY-120K
15µH	1kHz	12MHz	1.75A	TK4469-ND	2.41	1.87	.98	.82	822MY-150K
18µH	1kHz	11MHz	1.54A	TK4470-ND	2.41	1.87	.98	.82	822MY-180K
22µH	1kHz	9.2MHz	1.29A	TK4471-ND	2.41	1.87	.98	.82	822MY-220K
27µH	1kHz	8.5MHz	1.22A	TK4472-ND	2.41	1.87	.98	.82	822MY-270K
33µH	1kHz	7.8MHz	1.17A	TK4473-ND	2.41	1.87	.98	.82	822MY-330K
39µH	1kHz	6.9MHz	1.14A	TK4474-ND	2.41	1.87	.98	.82	822MY-390K
47µH	1kHz	6.5MHz	0.79A	TK4475-ND	2.41	1.87	.98	.82	822MY-470K
56µH	1kHz	5.4MHz	0.76A	TK4476-ND	2.41	1.87	.98	.82	822MY-560K
68µH	1kHz	4.9MHz	0.70A	TK4477-ND	2.41	1.87	.98	.82	822MY-680K
82µH	1kHz	4.1MHz	0.67A	TK4478-ND	2.41	1.87	.98	.82	822MY-820K
100µH	1kHz	3.7MHz	0.58A	TK4479-ND	2.41	1.87	.98	.82	822MY-101K
120µH	1kHz	3.4MHz	0.56A	TK4480-ND	2.41	1.87	.98	.82	822MY-121K
150µH	1kHz	3.2MHz	0.42A	TK4481-ND	2.41	1.87	.98	.82	822MY-151K
180µH	1kHz	2.8MHz	0.40A	TK4482-ND	2.41	1.87	.98	.82	822MY-181K
220µH	1kHz	2.7MHz	0.38A	TK4483-ND	2.41	1.87	.98	.82	822MY-221K
270µH	1kHz	2.4MHz	0.35A	TK4484-ND	2.41	1.87	.98	.82	822MY-271K
330µH	1kHz	2.3MHz	0.33A	TK4485-ND	2.41	1.87	.98	.82	822MY-331K
390µH	1kHz	2.1MHz	0.28A	TK4486-ND	2.41	1.87	.98	.82	822MY-391K
470µH	1kHz	1.9MHz	0.25A	TK4487-ND	2.41	1.87	.98	.82	822MY-471K
560µH	1kHz	1.8MHz	0.23A	TK4488-ND	2.41	1.87	.98	.82	822MY-561K
680µH	1kHz	1.6MHz	0.21A	TK4489-ND	2.41	1.87	.98	.82	822MY-681K
820µH	1kHz	1.5MHz	0.18A	TK4490-ND	2.41	1.87	.98	.82	822MY-821K
1000µH	1kHz	1.3MHz	0.16A	TK4491-ND	2.41	1.87	.98	.82	822MY-102K
10RHB2 Type									
10µH	1kHz	44.0MHz	2.20A	TK5152-ND	5.06	3.49	2.05	1.72	824MY-100K
12µH	1kHz	33.0MHz	2.00A	TK5153-ND	5.06	3.49	2.05	1.72	824MY-120K
15µH	1kHz	25.0MHz	1.93A	TK5154-ND	5.06	3.49	2.05	1.72	824MY-150K
18µH	1kHz	16.0MHz	1.77A	TK5155-ND	5.06	3.49	2.05	1.72	824MY-180K
22µH	1kHz	12.0MHz	1.72A	TK5156-ND	5.06	3.49	2.05	1.72	824MY-220K
27µH	1kHz	8.30MHz	1.56A	TK5157-ND	5.06	3.49	2.05	1.72	824MY-270K
33µH	1kHz	5.90MHz	1.49A	TK5158-ND	5.06	3.49	2.05	1.72	824MY-330K
39µH	1kHz	4.90MHz	1.40A	TK5159-ND	5.06	3.49	2.05	1.72	824MY-390K
47µH	1kHz	4.10MHz	1.29A	TK5160-ND	5.06	3.49	2.05	1.72	824MY-470K
56µH	1kHz	4.00MHz	1.25A	TK5161-ND	5.06	3.49	2.05	1.72	824MY-560K
68µH	1kHz	3.90MHz	1.24A	TK5162-ND	5.06	3.49	2.05	1.72	824MY-680K
82µH	1kHz	3.60MHz	1.04A	TK5163-ND	5.06	3.49	2.05	1.72	824MY-820K
100µH	1kHz	2.80MHz	1.02A	TK5164-ND	5.06	3.49	2.05	1.72	824MY-101K
120µH	1kHz	2.60MHz	0.94A	TK5165-ND	5.06	3.49	2.05	1.72	824MY-121K

(Continued)

TOKO Fixed Inductors *(Cont.)*

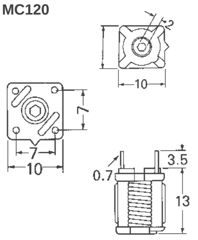
L. Nom.	Test Freq.	SRF	Rated DC Current	Digi-Key Part No.	Price Each 1	10	100	500	Toko Part No.
150µH	1kHz	2.20MHz	0.92A	TK5166-ND	5.06	3.49	2.05	1.72	824MY-151K
180µH	1kHz	2.10MHz	0.85A	TK5167-ND	5.06	3.49	2.05	1.72	824MY-181K
220µH	1kHz	1.90MHz	0.82A	TK5168-ND	5.06	3.49	2.05	1.72	824MY-221K
270µH	1kHz	1.60MHz	0.60A	TK5169-ND	5.06	3.49	2.05	1.72	824MY-271K
330µH	1kHz	1.50MHz	0.56A	TK5170-ND	5.06	3.49	2.05	1.72	824MY-331K
390µH	1kHz	1.40MHz	0.52A	TK5171-ND	5.06	3.49	2.05	1.72	824MY-391K
470µH	1kHz	1.30MHz	0.48A	TK5172-ND	5.06	3.49	2.05	1.72	824MY-471K
560µH	1kHz	1.20MHz	0.45A	TK5173-ND	5.06	3.49	2.05	1.72	824MY-561K
680µH	1kHz	1.10MHz	0.44A	TK5174-ND	5.06	3.49	2.05	1.72	824MY-681K
820µH	1kHz	1.00MHz	0.40A	TK5175-ND	5.06	3.49	2.05	1.72	824MY-821K
1000µH	1kHz	0.87MHz	0.31A	TK5176-ND	5.06	3.49	2.05	1.72	824MY-102K
1200µH	1kHz	0.83MHz	0.28A	TK5177-ND	5.06	3.49	2.05	1.72	824MY-122K
1500µH	1kHz	0.77MHz	0.27A	TK5178-ND	5.06	3.49	2.05	1.72	824MY-152K
1800µH	1kHz	0.71MHz	0.24A	TK5179-ND	5.06	3.49	2.05	1.72	824MY-182K
2200µH	1kHz	0.66MHz	0.24A	TK5180-ND	5.06	3.49	2.05	1.72	824MY-222K
2700µH	1kHz	0.61MHz	0.19A	TK5181-ND	5.06	3.49	2.05	1.72	824MY-272K
3300µH	1kHz	0.52MHz	0.18A	TK5182-ND	5.06	3.49	2.05	1.72	824MY-332K
3900µH	1kHz	0.48MHz	0.16A	TK5183-ND	5.06	3.49	2.05	1.72	824MY-392K

L. Nom.	Test Freq.	Q. Min.	Rated DC Current	Digi-Key Part No.	Price Each 1	10	100	500	Toko Part No.
10RB Type									
1.0mH	50KHz	70	90mA	TK4400-ND	3.75	3.06	1.51	1.27	181LY-102J
2.2mH	50KHz	70	60mA	TK4404-ND	3.75	3.06	1.51	1.27	181LY-222J
3.3mH	50KHz	100	50mA	TK4406-ND	3.75	3.06	1.51	1.27	181LY-332J
4.7mH	50KHz	100	40mA	TK4408-ND	3.75	3.06	1.51	1.27	181LY-472J
5.6mH	50KHz	100	40mA	TK4409-ND	3.75	3.06	1.51	1.27	181LY-562J
6.8mH	50KHz	100	35mA	TK4410-ND	3.75	3.06	1.51	1.27	181LY-682J
8.2mH	50KHz	100	30mA	TK4411-ND	3.75	3.06	1.51	1.27	181LY-822J
10.0mH	50KHz	100	25mA	TK4412-ND	3.75	3.06	1.51	1.27	181LY-103J
18mH	50KHz	100	22mA	TK4415-ND	3.75	3.06	1.51	1.27	181LY-183J
22mH	50KHz	100	21mA	TK4416-ND	3.75	3.06	1.51	1.27	181LY-223J
33mH	50KHz	100	18mA	TK4418-ND	3.75	3.06	1.51	1.27	181LY-333J
39mH	50KHz	100	15mA	TK4420-ND	3.75	3.06	1.51	1.27	181LY-393J
47mH	50KHz	100	13mA	TK4421-ND	3.75	3.06	1.51	1.27	181LY-473J
100mH	50KHz	100	9mA	TK4425-ND	3.75	3.06	1.51	1.27	181LY-104J
120mH	50KHz	100	8mA	TK4426-ND	3.75	3.06	1.51	1.27	181LY-124J

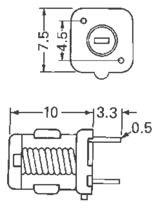
TOKO Molded Coils

9139B-ND	Toko Coils & Filter Book	$9.95

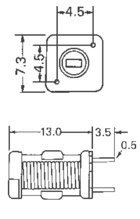
MC120



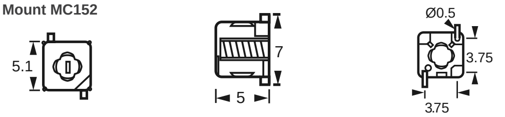
MC122



MC134



Surface Mount MC152



TK9001-ND	Plastic Tuning Tool (MC120)	$1.01
TK9003-ND	Plastic Tuning Tool (MC122, MC134)	$.76
TK9992-ND	Ceramic Tuning Driver (MC122, MC134) (Requires Holder TK9999-ND, below)	$23.71
TK9995-ND	Ceramic Tuning Driver (MC152) (Requires Holder TK9999-ND, below)	$44.85
TK9996-ND	Ceramic Tuning Driver (MC120) (Requires Holder TK9999-ND, below)	$31.39
TK9999-ND	Ceramic Driver Holder	$4.93

Turns/ Color	L Nom.	Freq.	Q.	Digi-Key Part No.	Price Each 1	10	100	500	Toko Part No.
MC120 with Case									
1 1/2 BRW	.0393µH	100MHz	80	TK2701-ND	1.74	1.52	.66	.49	E526HNA-100294
2 1/2 RED	.065µH	100MHz	90	TK2702-ND	1.74	1.52	.66	.49	E526HNA-100295
3 1/2 ORG	.0994µH	100MHz	100	TK2703-ND	1.74	1.52	.66	.49	E526HNA-100296
4 1/2 YEL	.141µH	100MHz	100	TK2704-ND	1.74	1.52	.66	.49	E526HNA-100297
5 1/2 GRN	.169µH	50MHz	80	TK2705-ND	1.74	1.52	.66	.49	E526HNA-100298
6 1/2 BLU	.211µH	50MHz	80	TK2706-ND	1.74	1.52	.66	.49	E526HNA-100299
7 1/2 VIO	.241µH	50MHz	80	TK2707-ND	1.74	1.52	.66	.49	E526HNA-100300
8 1/2 GRY	.29µH	50MHz	80	TK2708-ND	1.74	1.52	.66	.49	E526HNA-100301
9 1/2 WHT	.338µH	50MHz	80	TK2709-ND	1.74	1.52	.66	.49	E526HNA-100079
1 1/2 BRW	.0367µH	100MHz	80	TK2710-ND	1.74	1.52	.66	.49	E526HNA-100310
2 1/2 RED	.0583µH	100MHz	90	TK2711-ND	1.74	1.52	.66	.49	E526HNA-100311
3 1/2 ORG	.0845µH	100MHz	100	TK2712-ND	1.74	1.52	.66	.49	E526HNA-100312
4 1/2 YEL	.108µH	100MHz	110	TK2713-ND	1.74	1.52	.66	.49	E526HNA-100313
5 1/2 GRN	.137µH	100MHz	110	TK2714-ND	1.74	1.52	.66	.49	E526HNA-100314
MC120 without Case									
1 1/2 BRW	.0461µH	100MHz	120	TK2715-ND	1.42	1.24	.54	.40	E526HN-100302
2 1/2 RED	.0845µH	100MHz	130	TK2716-ND	1.42	1.24	.54	.40	E526HN-100303
3 1/2 ORG	.13µH	100MHz	130	TK2717-ND	1.42	1.24	.54	.40	E526HN-100304
4 1/2 YEL	.195µH	100MHz	140	TK2718-ND	1.42	1.24	.54	.40	E526HN-100305
5 1/2 GRN	.241µH	50MHz	100	TK2719-ND	1.42	1.24	.54	.40	E526HN-100306
6 1/2 BLU	.317µH	50MHz	100	TK2720-ND	1.42	1.24	.54	.40	E526HN-100307
7 1/2 VIO	.358µH	50MHz	100	TK2721-ND	1.42	1.24	.54	.40	E526HN-100308
8 1/2 GRY	.441µH	50MHz	100	TK2722-ND	1.42	1.24	.54	.40	E526HN-100309
9 1/2 WHT	.534µH	50MHz	100	TK2723-ND	1.42	1.24	.54	.40	E526HN-100109
1 1/2 BRW	.0437µH	100MHz	100	TK2724-ND	1.42	1.24	.54	.40	E526HN-100315
2 1/2 RED	.0745µH	100MHz	150	TK2725-ND	1.42	1.24	.54	.40	E526HN-100316
3 1/2 ORG	.118µH	100MHz	170	TK2726-ND	1.42	1.24	.54	.40	E526HN-100317
4 1/2 YEL	.154µH	100MHz	180	TK2727-ND	1.42	1.24	.54	.40	E526HN-100318
5 1/2 GRN	.211µH	100MHz	190	TK2728-ND	1.42	1.24	.54	.40	E526HN-100319
MC122 with Case									
1 1/2 WHT	.0323µH	100MHz	80	TK2801-ND	1.94	1.70	.73	.55	E528SNAS-100072
2 1/2 RED	.0523µH	100MHz	80	TK2802-ND	1.94	1.70	.73	.55	E528SNAS-100073
3 1/2 ORG	.078µH	100MHz	90	TK2803-ND	1.94	1.70	.73	.55	E528SNAS-100074
4 1/2 YEL	.108µH	100MHz	90	TK2804-ND	1.94	1.70	.73	.55	E528SNAS-100075
5 1/2 GRN	.149µH	100MHz	90	TK2805-ND	1.94	1.70	.73	.55	E528SNAS-100076
3 1/2 ORG	.078µH	57MHz	70	TK2806-ND	1.94	1.70	.73	.55	E528DNAS-100077
4 1/2 YEL	.103µH	57MHz	70	TK2807-ND	1.94	1.70	.73	.55	E528DNAS-100078
5 1/2 GRN	.132µH	57MHz	70	TK2808-ND	1.94	1.70	.73	.55	E528DNAS-100079
6 1/2 BLU	.159µH	57MHz	70	TK2809-ND	1.94	1.70	.73	.55	E528DNAS-100080
7 1/2 VIO	.203µH	57MHz	70	TK2810-ND	1.94	1.70	.73	.55	E528DNAS-100081
8 1/2 WHT	.226µH	45MHz	60	TK2811-ND	1.94	1.70	.73	.55	E528DNAS-100082
9 1/2 RED	.25µH	45MHz	60	TK2812-ND	1.94	1.70	.73	.55	E528DNAS-100083
10 1/2 ORG	.291µH	45MHz	60	TK2813-ND	1.94	1.70	.73	.55	E528DNAS-100084
MC122 without Case									
1 1/2 WHT	.0352µH	100MHz	90	TK2814-ND	1.74	1.52	.66	.49	E528SN-100059
2 1/2 RED	.0604µH	100MHz	110	TK2815-ND	1.74	1.52	.66	.49	E528SN-100060
3 1/2 ORG	.0957µH	100MHz	120	TK2816-ND	1.74	1.52	.66	.49	E528SN-100061
4 1/2 YEL	.137µH	100MHz	120	TK2817-ND	1.74	1.52	.66	.49	E528SN-100062
5 1/2 GRN	.195µH	100MHz	110	TK2818-ND	1.74	1.52	.66	.49	E528SN-100063
3 1/2 ORG	.0918µH	57MHz	100	TK2819-ND	1.74	1.52	.66	.49	E528SN-100064
4 1/2 YEL	.130µH	57MHz	100	TK2820-ND	1.74	1.52	.66	.49	E528SN-100065
5 1/2 GRN	.177µH	57MHz	100	TK2821-ND	1.74	1.52	.66	.49	E528SN-100066
6 1/2 BLU	.214µH	57MHz	100	TK2822-ND	1.74	1.52	.66	.49	E528SN-100067
7 1/2 VIO	.289µH	57MHz	90	TK2823-ND	1.74	1.52	.66	.49	E528SN-100068
9 1/2 RED	.379µH	45MHz	80	TK2825-ND	1.74	1.52	.66	.49	E528SN-100070
10 1/2 ORG	.447µH	45MHz	70	TK2826-ND	1.74	1.52	.66	.49	E528SN-100071
MC134 with Case									
10 1/2 BLK	.260µH	50MHz	50	TK3001-ND	1.54	1.35	.58	.44	E540SNA-10005
11 1/2 BRW	.294µH	50MHz	50	TK3002-ND	1.54	1.35	.58	.44	E540SNA-11003
12 1/2 RED	.317µH	50MHz	60	TK3003-ND	1.54	1.35	.58	.44	E540SNA-12003
13 1/2 ORG	.350µH	50MHz	60	TK3004-ND	1.54	1.35	.58	.44	E540SNA-13003
14 1/2 YEL	.383µH	50MHz	55	TK3005-ND	1.54	1.35	.58	.44	E540SNA-14002
15 1/2 GRN	.422µH	50MHz	80	TK3006-ND	1.54	1.35	.58	.44	E540SNA-15002
MC134 without Case									
10 1/2 BLK	.398µH	50MHz	80	TK3007-ND	1.30	1.14	.49	.37	E540SN-10004
11 1/2 BRW	.451µH	50MHz	80	TK3008-ND	1.30	1.14	.49	.37	E540SN-11002
12 1/2 RED	.483µH	50MHz	80	TK3009-ND	1.30	1.14	.49	.37	E540SN-12002
13 1/2 ORG	.545µH	50MHz	80	TK3010-ND	1.30	1.14	.49	.37	E540SN-13002
14 1/2 YEL	.603µH	50MHz	80	TK3011-ND	1.30	1.14	.49	.37	E540SN-14001
15 1/2 GRN	.685µH	50MHz	80	TK3012-ND	1.30	1.14	.49	.37	E540SN-15001

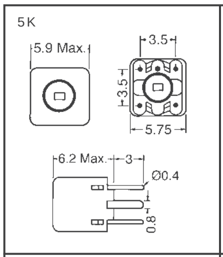
* Not recommended for new applications.

Turns/ Color	L Nom.	Freq.	Q.	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	T & R Pricing 1,500	Toko Part No.
MC152 Ferrite Core — Surface Mount										
1 1/2 WHT	.032µH	100MHz	90	TKS2700CT-ND	1.73	15.20	115.14	TKS2700TR-ND	1026.00	E558CN-100020
3 1/2 ORG	.068µH	100MHz	110	TKS2702CT-ND	1.73	15.20	115.14	TKS2702TR-ND	1026.00	E558CN-100022
4 1/2 YEL	.090µH	100MHz	115	TKS2703CT-ND	1.73	15.20	115.14	TKS2703TR-ND	1026.00	E558CN-100023
5 1/2 WHT	.112µH	100MHz	120	TKS2704CT-ND	1.73	15.20	115.14	TKS2704TR-ND	1026.00	E558CN-100024
6 1/2 BLU	.142µH	100MHz	120	TKS2705CT-ND	1.73	15.20	115.14	TKS2705TR-ND	1026.00	E558CN-100025
MC152 Air Core — Surface Mount										
1 1/2 WHT	.029µH	100MHz	85	TKS2706CT-ND	1.48	13.04	98.78	—	—	E558HN-100096
2 1/2 VIO	.046µH	100MHz	100	TKS2707CT-ND	1.48	13.04	98.78	TKS2707TR-ND	880.50	E558HN-100097
4 1/2 YEL	.073µH	100MHz	105	TKS2709CT-ND	1.48	13.04	98.78	TKS2709TR-ND	880.50	E558HN-100099
5 1/2 WHT	.091µH	100MHz	120	TKS2710CT-ND	1.48	13.04	98.78	—	—	E558HN-100100
6 1/2 BLU	.111µH	100MHz	120	TKS2711CT-ND	1.48	13.04	98.78	—	—	E558HN-100101
MC152 Brass Core — Surface Mount										
2 1/2 VIO	.038µH	100MHz	63	TKS2713CT-ND	2.28	20.08	152.11	TKS2713TR-ND	1356.00	E558AN-100041
3 1/2 ORG	.048µH	100MHz	56	TKS2714CT-ND	2.28	20.08	152.11	TKS2714TR-ND	1356.00	E558AN-100042
5 1/2 WHT	.072µH	100MHz	50	TKS2716CT-ND	2.28	20.08	152.11	—	—	E558AN-100044
6 1/2 BLU	.084µH	100MHz	50	TKS2717CT-ND	2.28	20.08	152.11	—	—	E558AN-100045

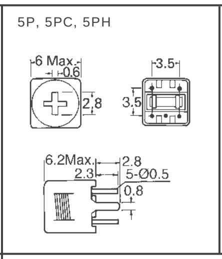
TOKO Coils

9139B-ND	Toko Coils & Filter Book	**$9.95**

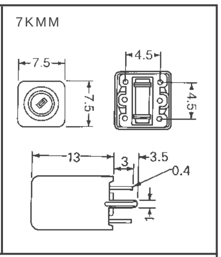
5K



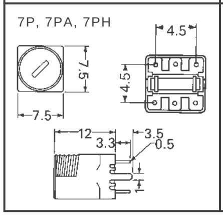
5P, 5PC, 5PH



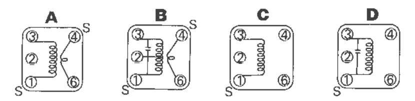
7KMM



7P, 7PA, 7PH



Diagrams



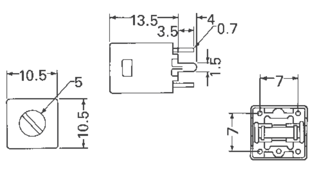
TK9001-ND	Plastic Tuning Tool (10NSF)	**$1.01**
TK9002-ND	Plastic Tuning Tool (7P, 7PA, 7PH, 10EZ, 10EZC, 10EZH, 10EZHC, 10PA)	**$2.52**
TK9003-ND	Plastic Tuning Tool (7KMM, 10K, 10KC, 12VXA)	**$.76**
TK9990-ND	Ceramic Tuning Driver (5K) (Requires Holder TK9999-ND, below)	**$41.66**
TK9991-ND	Ceramic Tuning Driver (7KMM, 10K, 10KC, 12VXA) Requires Holder TK9999-ND, below)	**$23.71**
TK9993-ND	Ceramic Tuning Driver (7P, 7PA, 7PH, 10EZ, 10EZC, 10EZH, 10EZHC, 10PA) (Requires Holder TK9999-ND, below)	**$31.84**
TK9998-ND	Ceramic Tuning Driver (5P, 5PC, 5PH) (Requires Holder TK9999-ND, below)	**$54.46**
TK9999-ND	Ceramic Driver Holder	**$4.93**

Diagram	L Nom.	Freq.	Q.	Digi-Key Part No.	Pricing 1	10	100	500	Toko Part No.
5K Type									
C	.08µH	75.0MHz	45	TK5001-ND*	4.30	39.44	322.65	967.95	294SN-T1008Z
C	.10µH	75.0MHz	45	TK5002-ND*	4.30	39.44	322.65	967.95	294SN-T1009Z
C	.15µH	75.0MHz	45	TK5003-ND*	4.30	39.44	322.65	967.95	294SN-T1010Z
C	.22µH	45.0MHz	45	TK5004-ND*	4.30	39.44	322.65	967.95	294SN-T1011Z
C	.33µH	45.0MHz	45	TK5005-ND*	4.30	39.44	322.65	967.95	294SN-T1012Z
C	.47µH	45.0MHz	45	TK5006-ND*	4.30	39.44	322.65	967.95	294SN-T1013Z
C	.68µH	45.0MHz	45	TK5007-ND*	4.30	39.44	322.65	967.95	294SN-T1014Z
C	1.00µH	30.0MHz	45	TK5008-ND*	4.30	39.44	322.65	967.95	294SN-T1015Z
5P Type									
C	33µH	2.52MHz	40	TK5110-ND*	3.14	28.82	235.80	707.40	5PNR-T1005Z
C	39µH	2.52MHz	40	TK5111-ND*	3.14	28.82	235.80	707.40	5PNR-T1006Z
C	47µH	2.52MHz	40	TK5112-ND*	3.14	28.82	235.80	707.40	5PNR-T1007Z
C	68µH	2.52MHz	40	TK5114-ND*	3.14	28.82	235.80	707.40	5PNR-T1009Z
C	82µH	2.52MHz	40	TK5115-ND*	3.14	28.82	235.80	707.40	5PNR-T1010Z
C	100µH	.796MHz	40	TK5116-ND*	3.14	28.82	235.80	707.40	5PNR-T1011Z
C	120µH	.796MHz	40	TK5117-ND*	3.14	28.82	235.80	707.40	5PNR-T1012Z
C	150µH	.796MHz	40	TK5118-ND*	3.14	28.82	235.80	707.40	5PNR-T1013Z
C	270µH	.796MHz	40	TK5121-ND*	3.14	28.82	235.80	707.40	5PNR-T1016Z
C	390µH	.796MHz	40	TK5123-ND*	3.14	28.82	235.80	707.40	5PNR-T1018Z
C	470µH	.796MHz	40	TK5124-ND*	3.14	28.82	235.80	707.40	5PNR-T1019Z
C	560µH	.796MHz	40	TK5125-ND*	3.14	28.82	235.80	707.40	5PNR-T1020Z
C	680µH	.796MHz	40	TK5126-ND*	3.14	28.82	235.80	707.40	5PNR-T1021Z
5PC Type									
D	680µH	455KHz	50	TK5128-ND	4.30	39.44	322.65	967.95	5PLC-1521Z
D	680µH	455KHz	85	TK5129-ND	4.30	39.44	322.65	967.95	5PLC-1055Z
5PH Type									
C	1.0µH	7.96MHz	55	TK5130-ND*	3.29	30.20	247.05	741.15	332PN-T1012Z
C	1.2µH	7.96MHz	55	TK5131-ND*	3.29	30.20	247.05	741.15	332PN-T1013Z
C	1.5µH	7.96MHz	55	TK5132-ND*	3.29	30.20	247.05	741.15	332PN-T1014Z
C	1.8µH	7.96MHz	55	TK5133-ND*	3.29	30.20	247.05	741.15	332PN-T1015Z
C	2.2µH	7.96MHz	55	TK5134-ND*	3.29	30.20	247.05	741.15	332PN-T1016Z
C	2.7µH	7.96MHz	55	TK5135-ND*	3.29	30.20	247.05	741.15	332PN-T1017Z
C	3.3µH	7.96MHz	55	TK5136-ND*	3.29	30.20	247.05	741.15	332PN-T1018Z
C	3.9µH	7.96MHz	55	TK5137-ND*	3.29	30.20	247.05	741.15	332PN-T1019Z
C	4.7µH	7.96MHz	55	TK5138-ND*	3.29	30.20	247.05	741.15	332PN-T1020Z
C	5.6µH	7.96MHz	55	TK5139-ND*	3.29	30.20	247.05	741.15	332PN-T1021Z
C	6.8µH	7.96MHz	55	TK5140-ND*	3.29	30.20	247.05	741.15	332PN-T1022Z
C	8.2µH	7.96MHz	55	TK5141-ND*	3.29	30.20	247.05	741.15	332PN-T1023Z
C	10.0µH	2.52MHz	55	TK5142-ND*	3.29	30.20	247.05	741.15	332PN-T1024Z
C	12.0µH	2.52MHz	55	TK5143-ND*	3.29	30.20	247.05	741.15	332PN-T1025Z
C	15.0µH	2.52MHz	55	TK5144-ND*	3.29	30.20	247.05	741.15	332PN-T1026Z
C	18.0µH	2.52MHz	55	TK5145-ND*	3.29	30.20	247.05	741.15	332PN-T1027Z
C	22.0µH	2.52MHz	55	TK5146-ND*	3.29	30.20	247.05	741.15	332PN-T1028Z
***TK4-KIT-ND**	5mm Standard Coil Kit (2 each of values denoted above)								**$63.00**
7KMM Type									
C	0.1µH	50.0MHz	35	TK3101-ND	2.74	25.08	205.20	615.60	292KNAS-T1028Z
C	0.15µH	50.0MHz	35	TK3102-ND	2.74	25.08	205.20	615.60	292KNAS-T1030Z
C	0.22µH	50.0MHz	50	TK3103-ND	2.74	25.08	205.20	615.60	292KNAS-T1032Z
C	0.33µH	50.0MHz	50	TK3104-ND	2.74	25.08	205.20	615.60	292KNAS-T1034Z
C	0.47µH	50.0MHz	50	TK3105-ND	2.74	25.08	205.20	615.60	292KNAS-T1036Z
C	0.68µH	50.0MHz	50	TK3106-ND	2.74	25.08	205.20	615.60	292KNAS-T1038Z
C	1.0µH	7.96MHz	40	TK3107-ND	2.74	25.08	205.20	615.60	292CNS-T1040Z
C	1.5µH	7.96MHz	40	TK3108-ND	2.74	25.08	205.20	615.60	292CNS-T1042Z
C	2.2µH	7.96MHz	40	TK3109-ND	2.74	25.08	205.20	615.60	292CNS-T1044Z
C	3.3µH	7.96MHz	40	TK3110-ND	2.74	25.08	205.20	615.60	292CNS-T1046Z
C	4.7µH	7.96MHz	40	TK3111-ND	2.74	25.08	205.20	615.60	292CNS-T1048Z
C	6.8µH	7.96MHz	40	TK3112-ND	2.74	25.08	205.20	615.60	292CNS-T1050Z
C	10.0µH	2.52MHz	35	TK3113-ND	2.74	25.08	205.20	615.60	F292CNS-T1052Z
C	15.0µH	2.52MHz	35	TK3114-ND*	2.74	25.08	205.20	615.60	F292CNS-T1054Z
C	6.6µH	4.0MHz	85	TK3115-ND	2.74	25.08	205.20	615.60	MF292CNS-T1082Z
C	0.12µH	50.0MHz	35	TK3116-ND	2.74	25.08	205.20	615.60	292KNAS-T1029Z
C	0.18µH	50.0MHz	35	TK3117-ND	2.74	25.08	205.20	615.60	292KNAS-T1031Z
C	0.27µH	50.0MHz	50	TK3118-ND	2.74	25.08	205.20	615.60	292KNAS-T1033Z
C	0.39µH	50.0MHz	50	TK3119-ND	2.74	25.08	205.20	615.60	292KNAS-T1035Z
C	0.56µH	50.0MHz	50	TK3120-ND	2.74	25.08	205.20	615.60	292KNAS-T1037Z
C	0.82µH	50.0MHz	50	TK3121-ND	2.74	25.08	205.20	615.60	292KNAS-T1039Z
C	1.2µH	7.96MHz	40	TK3122-ND	2.74	25.08	205.20	615.60	292CNS-T1041Z
C	1.8µH	7.96MHz	40	TK3123-ND	2.74	25.08	205.20	615.60	292CNS-T1043Z
C	2.7µH	7.96MHz	40	TK3124-ND	2.74	25.08	205.20	615.60	292CNS-T1045Z
C	3.9µH	7.96MHz	40	TK3125-ND	2.74	25.08	205.20	615.60	292CNS-T1047Z
C	5.6µH	7.96MHz	40	TK3126-ND	2.74	25.08	205.20	615.60	292CNS-T1049Z
C	8.2µH	7.96MHz	40	TK3127-ND	2.74	25.08	205.20	615.60	292CNS-T1051Z
C	12.0µH	2.52MHz	35	TK3128-ND	2.74	25.08	205.20	615.60	F292CNS-T1053Z
C	22.0µH	2.52MHz	35	TK3130-ND*	2.74	25.08	205.20	615.60	F292CNS-T1056Z
C	33.0µH	2.52MHz	35	TK3132-ND*	2.74	25.08	205.20	615.60	F292CNS-T1058Z
C	47.0µH	2.52MHz	35	TK3134-ND*	2.74	25.08	205.20	615.60	F292CNS-T1060Z
C	56.0µH	2.52MHz	35	TK3135-ND*	2.74	25.08	205.20	615.60	F292CNS-T1061Z
C	68.0µH	2.52MHz	35	TK3136-ND*	2.74	25.08	205.20	615.60	F292CNS-T1062Z
C	82.0µH	2.52MHz	35	TK3137-ND*	2.74	25.08	205.20	615.60	F292CNS-T1063Z
7KMM High Frequency Type									
C	0.08µH	80.0MHz	50	TK3138-ND*	2.74	25.08	205.20	615.60	292SNS-T1365Z
C	0.10µH	80.0MHz	50	TK3139-ND*	2.74	25.08	205.20	615.60	292SNS-T1366Z
C	0.15µH	80.0MHz	60	TK3140-ND*	2.74	25.08	205.20	615.60	292SNS-T1367Z
C	0.22µH	80.0MHz	60	TK3141-ND*	2.74	25.08	205.20	615.60	292SNS-T1368Z
C	0.33µH	80.0MHz	60	TK3142-ND*	2.74	25.08	205.20	615.60	292SNS-T1369Z
C	0.47µH	50.0MHz	60	TK3143-ND*	2.74	25.08	205.20	615.60	292SNS-T1370Z
C	0.68µH	50.0MHz	60	TK3144-ND*	2.74	25.08	205.20	615.60	292SNS-T1371Z
C	1.00µH	7.96MHz	40	TK3145-ND*	2.74	25.08	205.20	615.60	292KNS-T1372Z
C	1.50µH	7.96MHz	40	TK3146-ND*	2.74	25.08	205.20	615.60	292KNS-T1373Z
C	2.20µH	7.96MHz	40	TK3147-ND*	2.74	25.08	205.20	615.60	292KNS-T1374Z
C	3.30µH	7.96MHz	40	TK3148-ND*	2.74	25.08	205.20	615.60	292KNS-T1375Z
C	4.70µH	7.96MHz	40	TK3149-ND*	2.74	25.08	205.20	615.60	292KNS-T1376Z
C	10.0µH	7.96MHz	40	TK3152-ND*	2.74	25.08	205.20	615.60	292KNS-T1378Z
7P Type									
C	100µH	796KHz	80	TK2417-ND*	2.14	19.58	161.98	489.50	A7BRS-T1040Z
C	120µH	796KHz	80	TK2418-ND*	2.14	19.58	161.98	489.50	A7BRS-T1041Z
C	180µH	796KHz	80	TK2420-ND*	2.14	19.58	161.98	489.50	A7BRS-T1043Z
C	220µH	796KHz	80	TK2421-ND*	2.14	19.58	161.98	489.50	A7BRS-T104
C	270µH	796KHz	80	TK2422-ND*	2.14	19.58	161.98	489.50	A7BRS-T1045Z
C	330µH	796KHz	80	TK2423-ND*	2.14	19.58	161.98	489.50	A7BRS-T1046Z
—	1.25µH	450KHz	100	TK2426-ND	2.14	19.58	161.98	489.50	7NRES-T1099AAG
B	.679µH	455KHz	70	TK2501-ND	2.41	22.11	182.91	552.75	A7LC-T1153N
D	680µH	455KHz	70	TK2502-ND	2.41	22.11	182.91	552.75	A7LC-T1001Z
7PA Type									
C	1.0mH	252KHz	60	TK3201-ND	3.04	27.89	228.15	684.45	126ANS-T1094Z
C	1.2mH	252KHz	60	TK3202-ND	3.04	27.89	228.15	684.45	126ANS-T1095Z
C	1.5mH	252KHz	60	TK3203-ND	3.04	27.89	228.15	684.45	126ANS-T1096Z
C	1.8mH	252KHz	60	TK3204-ND	3.04	27.89	228.15	684.45	126ANS-T1097Z
C	2.2mH	252KHz	60	TK3205-ND	3.04	27.89	228.15	684.45	126ANS-T1098Z
C	2.7mH	252KHz	60	TK3206-ND	3.04	27.89	228.15	684.45	126ANS-T1099Z
C	3.3mH	252KHz	60	TK3207-ND	3.04	27.89	228.15	684.45	126ANS-T1100Z
C	4.7mH	252KHz	60	TK3209-ND	3.04	27.89	228.15	684.45	126ANS-T1102Z
C	5.6mH	252KHz	60	TK3210-ND	3.04	27.89	228.15	684.45	126ANS-T1103Z
C	6.8mH	252KHz	60	TK3211-ND	3.04	27.89	228.15	684.45	126ANS-T1104Z
C	8.2mH	252KHz	60	TK3212-ND	3.04	27.89	228.15	684.45	126ANS-T1105Z
C	10.0mH	79.6KHz	60	TK3213-ND	3.04	27.89	228.15	684.45	126ANS-T1106Z
C	12.0mH	79.6KHz	60	TK3214-ND	3.04	27.89	228.15	684.45	126ANS-T1107Z
C	15.0mH	79.6KHz	60	TK3215-ND	3.04	27.89	228.15	684.45	126ANS-T1108Z
C	18.0mH	79.6KHz	60	TK3216-ND	3.04	27.89	228.15	684.45	126ANS-T1109Z
C	22.0mH	79.6KHz	60	TK3217-ND	3.04	27.89	228.15	684.45	126ANS-T1110Z
C	5mH	252KHz	70	TK3218-ND	3.04	27.89	228.15	684.45	126LNS-6285Z
7PH Type									
C	4.7µH	7.96MHz	80	TK2401-ND*	2.41	22.11	182.91	552.75	A119ANS-T1029Z
C	5.6µH	7.96MHz	80	TK2402-ND*	2.41	22.11	182.91	552.75	A119ANS-T1030Z
C	6.8µH	7.96MHz	80	TK2403-ND*	2.41	22.11	182.91	552.75	A119ANS-T1031Z
C	8.2µH	7.96MHz	80	TK2404-ND*	2.41	22.11	182.91	552.75	A119ANS-T1032Z
C	10.0µH	2.52MHz	80	TK2405-ND*	2.41	22.11	182.91	552.75	A119ANS-T1033Z
C	12.0µH	2.52MHz	80	TK2406-ND*	2.41	22.11	182.91	552.75	A119ANS-T1034Z
C	15.0µH	2.52MHz	80	TK2407-ND*	2.41	22.11	182.91	552.75	A119ANS-T1035Z
C	18.0µH	2.52MHz	80	TK2408-ND*	2.41	22.11	182.91	552.75	A119ANS-T1036Z
C	22.0µH	2.52MHz	80	TK2409-ND*	2.41	22.11	182.91	552.75	A119ANS-T1037Z
C	27.0µH	2.52MHz	80	TK2410-ND*	2.41	22.11	182.91	552.75	A119ANS-T1038Z
C	33.0µH	2.52MHz	80	TK2411-ND*	2.41	22.11	182.91	552.75	A119ANS-T1039Z
C	39.0µH	2.52MHz	80	TK2412-ND*	2.41	22.11	182.91	552.75	A119ANS-T1040Z
C	47.0µH	2.52MHz	80	TK2413-ND*	2.41	22.11	182.91	552.75	A119ANS-T1041Z
C	56.0µH	2.52MHz	80	TK2414-ND*	2.41	22.11	182.91	552.75	A119ANS-T1042Z
C	68.0µH	2.52MHz	80	TK2415-ND*	2.41	22.11	182.91	552.75	A119ANS-T1043Z
C	82.0µH	2.52MHz	80	TK2416-ND*	2.41	22.11	182.91	552.75	A119ANS-T1044Z
C	10.7µH	2.52MHz	95	TK2427-ND	2.41	22.11	182.91	552.75	A119ANS-17152Z
—	10.7µH	2.52MHz	90	TK2428-ND	2.41	22.11	182.91	552.75	A119ANS-17153Y
C	11.8µH	2.52MHz	114	TK2429-ND	2.41	22.11	182.91	552.75	A119AN-T1018Z
—	10.9µH	4.4MHz	80	TK2430-ND	2.41	22.11	182.91	552.75	119LNS-A3753GO
A	12.5µH	4.4MHz	90	TK2431-ND	2.41	22.11	182.91	552.75	119LNS-A4451DY
***TK1-KIT-ND**	7mm Standard Coil Kit (2 each of values denoted above)								**$56.70**

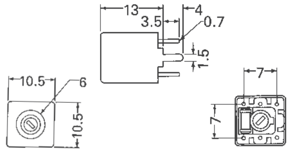
TOKO Coils

9139B-ND	Toko Coils & Filter Book	$9.95

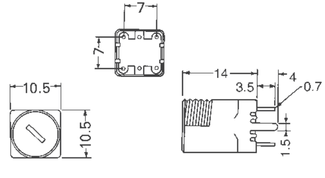
10EZ, 10EZC, 10EZH, 10EZHC



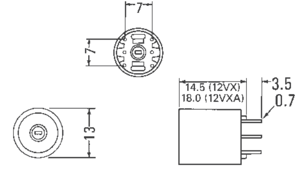
10K, 10KC

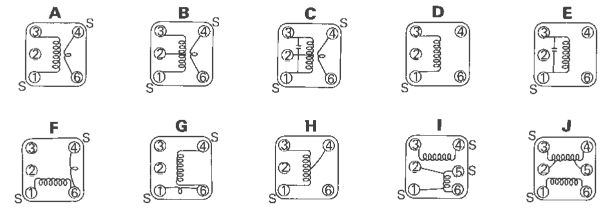


10PA



12VXA



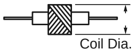


TK9001-ND	Plastic Tuning Tool (10NSF)	$1.01
TK9002-ND	Plastic Tuning Tool (7P, 7PA, 7PH, 10EZ, 10EZC, 10EZH, 10EZHC, 10PA)	$2.52
TK9003-ND	Plastic Tuning Tool (7KMM, 10K, 10KC, 12VXA)	$.76
TK9990-ND	Ceramic Tuning Driver (5K) (Requires Holder TK9999-ND, below)	$41.66
TK9991-ND	Ceramic Tuning Driver (7KMM, 10K, 10KC, 12VXA) Requires Holder TK9999-ND, below)	$23.71
TK9993-ND	Ceramic Tuning Driver (7P, 7PA, 7PH, 10EZ, 10EZC, 10EZH, 10EZHC, 10PA) (Requires Holder TK9999-ND, below)	$31.84
TK9998-ND	Ceramic Tuning Driver (5P, 5PC, 5PH) (Requires Holder TK9999-ND, below)	$54.46
TK9999-ND	Ceramic Driver Holder	$4.93

Dia-	L			Digi-Key	Pricing				Toko
gram	Nom.	Freq.	Q.	Part No.	1	10	100	500	Part No.
10EZ Type									
B	.63mH	200KHz	95	TK1201-ND	1.99	18.26	149.40	448.20	RAN-10A6729EK
B	.63mH	200KHz	95	TK1202-ND	1.99	18.26	149.40	448.20	RAN-10A6845EK
D	100µH	796KHz	100	TK1219-ND	1.99	18.26	149.40	448.20	RWRS-T1015Z
D	120µH	796KHz	100	TK1220-ND	1.99	18.26	149.40	448.20	RWRS-T1016Z
D	150µH	796KHz	100	TK1221-ND	1.99	18.26	149.40	448.20	RWRS-T1017Z
D	180µH	796KHz	100	TK1222-ND	1.99	18.26	149.40	448.20	RWRS-T1018Z
D	220µH	796KHz	100	TK1223-ND	1.99	18.26	149.40	448.20	RWRS-T1019Z
D	270µH	796KHz	100	TK1224-ND	1.99	18.26	149.40	448.20	RWRS-T1020Z
D	470µH	796KHz	100	TK1227-ND	1.99	18.26	149.40	448.20	RWRS-T1023Z
D	560µH	796KHz	100	TK1228-ND	1.99	18.26	149.40	448.20	RWRS-T1024Z
D	680µH	796KHz	100	TK1229-ND	1.99	18.26	149.40	448.20	RWRS-T1025Z
D	820µH	796KHz	100	TK1230-ND	1.99	18.26	149.40	448.20	RWRS-T1026Z
D	1000µH	252KHz	50	TK1231-ND	1.99	18.26	149.40	448.20	RUNS-T1027Z
D	1200µH	252KHz	50	TK1232-ND	1.99	18.26	149.40	448.20	RUNS-T1028Z
10EZC Type									
C	815µH	455KHz	50	TK1236-ND	2.26	20.74	169.65	508.95	RLCS-A9195N
C	.64mH	455KHz	110	TK1301-ND	2.26	20.74	169.65	508.95	RMC-202313NO
E	.64mH	455KHz	110	TK1302-ND	2.26	20.74	169.65	508.95	RMC-2A6597HM
E	.64mH	455KHz	110	TK1303-ND	2.26	20.74	169.65	508.95	RMC-2A7287HM
C	.64mH	455KHz	110	TK1304-ND	2.26	20.74	169.65	508.95	RMC-402503NO
C	.64mH	455KHz	110	TK1305-ND	2.26	20.74	169.65	508.95	RMC-502182NO
C	.64mH	455KHz	110	TK1306-ND	2.26	20.74	169.65	508.95	RMC-502503NO
10EZH Type									
D	4.7µH	7.96MHz	100	TK1203-ND	2.16	19.80	162.00	486.00	154ANS-T1005Z
D	5.6µH	7.96MHz	100	TK1204-ND	2.16	19.80	162.00	486.00	154ANS-T1006Z
D	6.8µH	7.96MHz	100	TK1205-ND	2.16	19.80	162.00	486.00	154ANS-T1007Z
D	8.2µH	7.96MHz	100	TK1206-ND	2.16	19.80	162.00	486.00	154ANS-T1008Z
D	10µH	2.52MHz	60	TK1207-ND	2.16	19.80	162.00	486.00	154ANS-T1009Z
D	12µH	2.52MHz	60	TK1208-ND	2.16	19.80	162.00	486.00	154ANS-T1010Z
D	15.0µH	2.52MHz	60	TK1209-ND	2.16	19.80	162.00	486.00	154ANS-T1011Z
D	18.0µH	2.52MHz	60	TK1210-ND	2.16	19.80	162.00	486.00	154ANS-T1012Z
D	22.0µH	2.52MHz	60	TK1211-ND	2.16	19.80	162.00	486.00	154ANS-T1013Z
D	27.0µH	2.52MHz	60	TK1212-ND	2.16	19.80	162.00	486.00	154ANS-T1014Z
D	33.0µH	2.52MHz	60	TK1213-ND	2.16	19.80	162.00	486.00	154ANS-T1015Z
D	39.0µH	2.52MHz	60	TK1214-ND	2.16	19.80	162.00	486.00	154ANS-T1016Z
D	47.0µH	2.52MHz	60	TK1215-ND	2.16	19.80	162.00	486.00	154ANS-T1017Z
D	56.0µH	2.52MHz	60	TK1216-ND	2.16	19.80	162.00	486.00	154ANS-T1018Z
D	68.0µH	2.52MHz	60	TK1217-ND	2.16	19.80	162.00	486.00	154ANS-T1019Z
D	82.0µH	2.52MHz	60	TK1218-ND	2.16	19.80	162.00	486.00	154ANS-T1020Z
10EZHC Type									
E	2.7µH	10.7MHz	98	TK1241-ND	2.41	22.11	180.90	542.70	154AC-T1038Z
C	8.2µH	10.7MHz	110	TK1237-ND	2.41	22.11	180.90	542.70	154AC-470072NO
C	27.0µH	10.7MHz	110	TK1238-ND	2.41	22.11	180.90	542.70	154AC-7A5681EK
C	47.0µH	10.7MHz	120	TK1239-ND	2.41	22.11	180.90	542.70	154FC-560061NO
C	68.0µH	10.7MHz	60	TK1240-ND	2.41	22.11	180.90	542.70	154PC-470033NO
10K Type									
D	0.08µH	75MHz	50	TK1401-ND	2.21	20.30	166.05	498.15	BTKENS-T1043Z
D	0.10µH	75MHz	60	TK1402-ND	2.21	20.30	166.05	498.15	BTKENS-T1044Z
A	0.12µH	72MHz	80	TK1403-ND	2.21	20.30	166.05	498.15	KEN-K4857DZ
D	0.15µH	75MHz	60	TK1404-ND	2.21	20.30	166.05	498.15	BTKENS-T1045Z
D	0.22µH	75MHz	60	TK1405-ND	2.21	20.30	166.05	498.15	BTKENS-T1046Z
D	0.33µH	45MHz	60	TK1406-ND	2.21	20.30	166.05	498.15	BTKXNS-T1047Z
A	0.41µH	49MHz	75	TK1407-ND	2.21	20.30	166.05	498.15	KEN-K4028DZ
D	0.47µH	45MHz	70	TK1408-ND	2.21	20.30	166.05	498.15	BTKXNS-T1048Z
D	0.68µH	45MHz	70	TK1409-ND	2.21	20.30	166.05	498.15	BTKXNS-T1049Z
A	0.79µH	27MHz	55	TK1410-ND	2.21	20.30	166.05	498.15	KXNA-K4434DZ
D	1.0µH	25.2MHz	80	TK1411-ND	2.21	20.30	166.05	498.15	BTKXNS-T1050Z
D	1.5µH	7.96MHz	60	TK1412-ND	2.21	20.30	166.05	498.15	BTKANS-9449HM
D	2.2µH	7.96MHz	60	TK1413-ND	2.21	20.30	166.05	498.15	BTKANS-9447HM
D	3.3µH	7.96MHz	70	TK1414-ND	2.21	20.30	166.05	498.15	BTKANS-9445HM
D	4.7µH	7.96MHz	70	TK1415-ND	2.21	20.30	166.05	498.15	BTKANS-9443HM
D	6.8µH	7.96MHz	70	TK1416-ND	2.21	20.30	166.05	498.15	BTKANS-9441HM
D	10µH	7.96MHz	70	TK1417-ND	2.21	20.30	166.05	498.15	BTKANS-9439HM
F	0.16µH	27MHz	65	TK1418-ND	2.21	20.30	166.05	498.15	KXN-K4636BJF
G	0.34µH	49MHz	95	TK1419-ND	2.21	20.30	166.05	498.15	BKEN-K4635BJE
H	1.0µH	7.96MHz	60	TK1420-ND	2.21	20.30	166.05	498.15	BKAN-K5552AXX
H	66µH	2.52MHz	60	TK1421-ND	2.21	20.30	166.05	498.15	BKANS-K4087HUx
—	2.2µH	7.96MHz	54	TK1422-ND	2.21	20.30	166.05	498.15	TKANAS-T1390ADP
10KC Type									
E	2.7µH	10.7MHz	100	TK1501-ND	2.50	22.88	187.20	561.60	KACS-K586HM
10PA Type									
D	1.35mH	200KHz	70	TK1701-ND	3.14	28.82	235.80	707.40	CAN-1A901HM
D	15.8mH	40KHz	58	TK1702-ND	3.14	28.82	235.80	707.40	CLN-2A900HM
D	1.0mH	252KHz	80	TK1703-ND	3.14	28.82	235.80	707.40	CLNS-T1018Z
D	1.2mH	252KHz	80	TK1704-ND	3.14	28.82	235.80	707.40	CLNS-T1019Z
D	1.5mH	252KHz	80	TK1705-ND	3.14	28.82	235.80	707.40	CLNS-T1020Z
D	1.8mH	252KHz	80	TK1706-ND	3.14	28.82	235.80	707.40	CLNS-T1021Z
D	2.2mH	252KHz	80	TK1707-ND	3.14	28.82	235.80	707.40	CLNS-T1022Z
D	2.7mH	252KHz	80	TK1708-ND	3.14	28.82	235.80	707.40	CLNS-T1023Z
D	3.3mH	252KHz	80	TK1709-ND	3.14	28.82	235.80	707.40	CLNS-T1024Z
D	3.9mH	252KHz	80	TK1710-ND	3.14	28.82	235.80	707.40	CLNS-T1025Z
D	4.7mH	252KHz	80	TK1711-ND	3.14	28.82	235.80	707.40	CLNS-T1026Z
D	5.6mH	252KHz	80	TK1712-ND	3.14	28.82	235.80	707.40	CLNS-T1027Z
D	6.8mH	252KHz	80	TK1713-ND	3.14	28.82	235.80	707.40	CLNS-T1028Z
D	8.2mH	252KHz	80	TK1714-ND	3.14	28.82	235.80	707.40	CLNS-T1029Z
D	10.0mH	79.6KHz	70	TK1715-ND	3.14	28.82	235.80	707.40	CLNS-T1030Z
D	12.0mH	79.6KHz	70	TK1716-ND	3.14	28.82	235.80	707.40	CLNS-T1031Z
D	15.0mH	79.6KHz	70	TK1717-ND	3.14	28.82	235.80	707.40	CLNS-T1032Z
D	18.0mH	79.6KHz	70	TK1718-ND	3.14	28.82	235.80	707.40	CLNS-T1033Z
D	22.0mH	79.6KHz	70	TK1719-ND	3.14	28.82	235.80	707.40	CLNS-T1034Z
D	27.0mH	79.6KHz	70	TK1720-ND	3.14	28.82	235.80	707.40	CLNS-T1035Z
D	33.0mH	79.6KHz	70	TK1721-ND	3.14	28.82	235.80	707.40	CLNS-T1036Z
D	39.0mH	79.6KHz	70	TK1722-ND	3.14	28.82	235.80	707.40	CLNS-T1037Z
D	47.0mH	79.6KHz	70	TK1723-ND	3.14	28.82	235.80	707.40	CLNS-T1038Z
D	56.0mH	79.6KHz	70	TK1724-ND	3.14	28.82	235.80	707.40	CLNS-T1039Z
D	800µH	55KHz	50	TK1725-ND	3.14	28.82	235.80	707.40	CLN-T1069Z
12VXA Type									
I	49.1µH	125KHz	25	TK1901-ND	4.18	38.28	313.20	939.60	707VX-A042YUK
I	101µH	50KHz	25	TK1902-ND	4.18	38.28	313.20	939.60	707VX-A043YUK
B	217µH	100KHz	20	TK1903-ND	4.18	38.28	313.20	939.60	707VX-T1002N
A	1.0mH	252KHz	25	TK2001-ND	4.18	38.28	313.20	939.60	707VX-A062AO
J	.419mH	20KHz	30	TK2002-ND	4.18	38.28	313.20	939.60	707VX-A055YSU

J.W.Miller
MAGNETICS

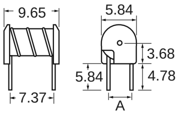
Coiled RF Chokes



L (µH) 5%	Q Min.	Test Freq. (MHz)	I, dc Max. (mA)	Coil Dia. In. (mm)	Digi-Key Part No.	Price Each 1	Price Each 100	J.W. Miller Part No.
Iron Core								
1.0†	41	25	2041	.165 (4.19)	M7010-ND	1.03	.75	70F106AI
2.2††	43	7.9	1132	.16 (4.06)	M72R2-ND	1.25	.92	70F226AI
3.3††	40	7.9	912	.15 (3.81)	M73R3-ND	1.25	.92	70F336AI
4.7††	43	7.9	661	.15 (3.81)	M74R7-ND	1.25	.92	70F476AI
6.8††	40	7.9	566	.15 (3.81)	M76R8-ND	1.25	.92	70F686AI
10††	36	7.9	277	.16 (4.06)	M7100-ND	1.52	1.11	70F105AI
22	51	2.5	229	.165 (4.19)	M7220-ND	1.52	1.11	70F225AI
33	50	2.5	208	.17 (4.32)	M7330-ND	1.52	1.11	70F335AI
47	44	2.5	188	.175 (4.44)	M7470-ND	1.52	1.11	70F475AI
68	42	2.5	169	.18 (4.57)	M7680-ND	1.52	1.11	70F685AI
100	25	2.5	139	.165 (4.19)	M7101-ND	1.65	1.21	70F104AI
220	46	.79	114	.17 (4.32)	M7221-ND	1.65	1.21	70F224AI
330	41	.79	103	.175 (4.44)	M7331-ND	1.65	1.21	70F334AI
470	35	.79	95	.185 (4.70)	M7471-ND	1.65	1.21	70F474AI
680	37	.79	87	.2 (5.08)	M7681-ND	1.74	1.27	70F684AI
1000	30	.79	79	.225 (5.71)	M7102-ND	1.74	1.27	70F103AI
2200	40	.25	57	.24 (6.10)	M7222-ND	1.80	1.32	70F223AI
3300	52	.25	53	.26 (6.60)	M7332-ND	1.80	1.32	70F333AI
4700	49	.25	48	.285 (7.24)	M7472-ND	1.95	1.43	70F473AI
6800	51	.25	43	.31 (7.87)	M7682-ND	1.95	1.43	70F683AI
10,000	41	.25	38	.335 (8.51)	M7103-ND	1.85	1.36	70F102AI
22,000	50	.079	41	.33 (8.38)	M7223-ND	3.26	2.39	70F222AI
Ferrite Core								
33,000	61	.079	43	.353 (8.97)	M7333-ND	4.51	3.31	70F332AF
47,000	57	.079	38	.384 (9.75)	M7473-ND	4.51	3.31	70F472AF
68,000	57	.079	34	.415 (10.54)	M7683-ND	4.51	3.31	70F682AF
100,000	48	.079	29	.446 (11.33)	M7104-ND	3.10	2.27	70F101AF
220,000	51	.025	39	.54 (13.72)	M7224-ND	3.38	2.48	70F221AF
330,000	54	.025	34	.58 (14.73)	M7334-ND	3.76	2.76	70F331AF
470,000	55	.025	30	.615 (15.62)	M7474-ND	3.76	2.76	70F471AF

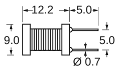
† 20%; †† 10% tolerance.

Molded Polypropylene RF Chokes



L (µH)	Dim. A (mm)	Q Min.	I, dc Max. (mA)	Digi-Key Part No.	Price Each 1	Price Each 100	J.W.Miller Part No.
Hollow Core							
.032	3.76	105	1000	M7501-ND	1.35	.99	75F238MPC
.049	3.76	104	1000	M7503-ND	1.35	.99	75F518MPC
.142	3.76	90	1000	M7505-ND	1.35	.99	75F157MPC
.275	3.89	92	500	M7506-ND	1.35	.99	75F277MPC
.364	4.01	93	500	M7507-ND	1.35	.99	75F397MPC
.57	4.04	92	500	M7509-ND	1.35	.99	75F597MPC

Radial Lead High Current RF Chokes



L (µH)	Q Min.	Test Freq. (MHz)	I, dc Max. (A)	R,dc Max. Ohms	Digi-Key Part No.	Price Each 1	Price Each 100	J.W.Miller Part No.
1.0†	20	7.96	10	.013	M6001-ND	1.93	1.42	6000-1R0M
1.5†	20	7.96	8.5	.016	M6002-ND	1.93	1.42	6000-1R5M
2.2†	20	7.96	6.5	.021	M6003-ND	1.93	1.42	6000-2R2M
3.3†	20	7.96	5.5	.025	M6004-ND	1.93	1.42	6000-3R3M
4.7†	20	7.96	4.6	.030	M6005-ND	1.93	1.42	6000-4R7M
6.8†	20	7.96	4.1	.035	M6006-ND	1.93	1.42	6000-6R8M
10††	50	2.52	3.4	.045	M6007-ND	1.93	1.42	6000-100K
12††	50	2.52	3.1	.050	M6008-ND	1.93	1.42	6000-120K
15††	50	2.52	2.9	.056	M6009-ND	1.93	1.42	6000-150K
18††	40	2.52	2.66	.061	M6010-ND	1.93	1.42	6000-180K
22††	40	2.52	2.4	.070	M6011-ND	1.93	1.42	6000-220K
27††	40	2.52	2.22	.080	M6012-ND	1.93	1.42	6000-270K
33††	30	2.52	2.05	.090	M6013-ND	1.93	1.42	6000-330K
39††	30	2.52	1.85	.10	M6014-ND	1.93	1.42	6000-390K
47††	30	2.52	1.77	.16	M6015-ND	1.93	1.42	6000-470K
56††	30	2.52	1.48	.18	M6016-ND	1.93	1.42	6000-560K
68††	30	2.52	1.36	.21	M6017-ND	1.93	1.42	6000-680K
82††	30	2.52	1.3	.23	M6018-ND	1.93	1.42	6000-820K
100††	20	.796	1.4	.28	M6019-ND	1.93	1.42	6000-101K
120††	20	.796	1.25	.32	M6020-ND	1.93	1.42	6000-121K
150††	20	.796	1.15	.37	M6021-ND	1.93	1.42	6000-151K
180††	20	.796	1.08	.58	M6022-ND	1.93	1.42	6000-181K
220††	20	.796	1.0	.65	M6023-ND	1.93	1.42	6000-221K
270††	20	.796	.90	.75	M6024-ND	1.93	1.42	6000-271K
330††	20	.796	.78	.85	M6025-ND	1.93	1.42	6000-331K
390††	20	.796	.74	1.0	M6026-ND	1.93	1.42	6000-391K
470††	20	.796	.68	1.1	M6027-ND	1.93	1.42	6000-471K
560††	20	.796	.64	1.4	M6028-ND	1.93	1.42	6000-561K
680††	20	.796	.59	1.6	M6029-ND	1.93	1.42	6000-681K
820††	20	.796	.56	1.8	M6030-ND	1.93	1.42	6000-821K
1000††	50	.252	.51	2.9	M6031-ND	1.93	1.42	6000-102K

Parts finished with VWI Rated Sleeving.
† 20%; †† 10% tolerance.

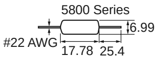
Molded RF Chokes

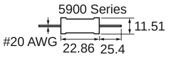
9230 Series Dimensions: Form Length: 6.35mm; Form Diameter: 2.41mm; Lead Length: 38.10mm; Leads: 24 AWG. Tolerance: ±10%.

9250 Series Dimensions: Form Length: 10.41mm; Form Diameter: 4.11mm; Lead Length: 36.53mm; Leads: 22 AWG. Tolerance: ±10%.

L (µH)	Q Min.	Test Freq. (MHz)	I, dc Max. (mA)	Coil Dia. In. (mm)	Digi-Key Part No.	Price Each 1	Price Each 100	J.W. Miller Part No.
Phenolic Core								
0.1	40	25.0	1100	.095 (2.41)	M9R10-ND	1.06	.77	9230-94
0.15	38	25.0	1100	.095 (2.41)	M9R15-ND	1.06	.77	9230-00
0.22	33	25.0	935	.095 (2.41)	M9R22-ND	1.06	.77	9230-04
0.33	30	25.0	780	.095 (2.41)	M9R33-ND	1.06	.77	9230-08
0.39	30	25.0	640	.095 (2.41)	M9R39-ND	1.06	.77	9230-10
0.47	30	25.0	590	.095 (2.41)	M9R47-ND	1.06	.77	9230-12
0.68	28	25.0	450	.095 (2.41)	M9R68-ND	1.06	.77	9230-16
0.82	28	25.0	380	.095 (2.41)	M9R82-ND	1.06	.77	9230-18
1.0	25	25.0	350	.095 (2.41)	M9010-ND	1.06	.77	9230-20
Iron Core								
2.2	30	7.9	550	.095 (2.41)	M92R2-ND	1.44	1.06	9230-28
3.3	45	7.9	380	.095 (2.41)	M93R3-ND	1.44	1.06	9230-32
4.7	45	7.9	320	.095 (2.41)	M94R7-ND	1.44	1.06	9230-36
6.8	50	7.9	245	.095 (2.41)	M96R8-ND	1.62	1.19	9230-40
10.0	55	7.9	180	.095 (2.41)	M9100-ND	1.62	1.19	9230-44
22.0	50	2.5	190	.095 (2.41)	M9220-ND	1.65	1.21	9230-52
Ferrite Core								
33.0	45	2.5	187	.095 (2.41)	M9330-ND	1.76	1.29	9230-56
47.0	45	2.5	165	.095 (2.41)	M9470-ND	1.76	1.29	9230-60
68.0	50	2.5	135	.095 (2.41)	M9680-ND	1.76	1.29	9230-64
100.0	50	2.5	125	.095 (2.41)	M9101-ND	1.76	1.29	9230-68
220.0	30	0.79	73	.095 (2.41)	M9221-ND	1.87	1.37	9230-76
330.0	30	0.79	62	.095 (2.41)	M9331-ND	1.87	1.37	9230-80
470.0	30	0.79	50	.095 (2.41)	M9471-ND	1.94	1.42	9230-84
680.0	30	0.79	42	.095 (2.41)	M9681-ND	1.94	1.42	9230-88
1000.0	30	0.79	38	.095 (2.41)	M9102-ND	1.94	1.42	9230-92
Phenolic Core (Shielded)								
0.1	50	25.0	1790	.162 (4.11)	M9201-ND	2.76	2.03	9250-101
0.12	51	25.0	1530	.162 (4.11)	M9202-ND	2.76	2.03	9250-121
0.15	51	25.0	1470	.162 (4.11)	M9203-ND	2.76	2.03	9250-151
0.18	50	25.0	1300	.162 (4.11)	M9204-ND	2.76	2.03	9250-181
0.22	49	25.0	1100	.162 (4.11)	M9205-ND	2.76	2.03	9250-221
0.27	47	25.0	855	.162 (4.11)	M9206-ND	2.76	2.03	9250-271
0.33	46	25.0	780	.162 (4.11)	M9207-ND	2.76	2.03	9250-331
0.39	44	25.0	670	.162 (4.11)	M9208-ND	2.76	2.03	9250-391
0.47	44	25.0	565	.162 (4.11)	M9209-ND	2.76	2.03	9250-471
0.56	43	25.0	490	.162 (4.11)	M9210-ND	2.76	2.03	9250-561
0.68	42	25.0	420	.162 (4.11)	M9211-ND	2.76	2.03	9250-681
0.82	40	25.0	370	.162 (4.11)	M9212-ND	2.76	2.03	9250-821
Iron Core (Shielded)								
1.0	44	25.0	1070	.162 (4.11)	M9213-ND	2.89	2.12	9250-102
1.2	44	7.9	895	.162 (4.11)	M9214-ND	2.89	2.12	9250-122
1.5	44	7.9	815	.162 (4.11)	M9215-ND	2.89	2.12	9250-152
1.8	44	7.9	775	.162 (4.11)	M9216-ND	2.89	2.12	9250-182
2.2	44	7.9	650	.162 (4.11)	M9217-ND	2.89	2.12	9250-222
2.7	44	7.9	535	.162 (4.11)	M9218-ND	2.89	2.12	9250-272
3.3	44	7.9	480	.162 (4.11)	M9219-ND	2.89	2.12	9250-332
3.9	44	7.9	450	.162 (4.11)	M9222-ND	2.89	2.12	9250-392
4.7	44	7.9	380	.162 (4.11)	M9223-ND	2.89	2.12	9250-472
5.6	44	7.9	335	.162 (4.11)	M9224-ND	2.89	2.12	9250-562
6.8	50	7.9	280	.162 (4.11)	M9225-ND	2.89	2.12	9250-682
8.2	50	7.9	250	.162 (4.11)	M9226-ND	2.89	2.12	9250-822
10.0	50	7.9	220	.162 (4.11)	M9227-ND	2.89	2.12	9250-103
12.0	55	2.5	200	.162 (4.11)	M9228-ND	2.89	2.12	9250-123
Ferrite Core (Shielded)								
15.0	45	2.5	315	.162 (4.11)	M9229-ND	2.89	2.12	9250-153
18.0	45	2.5	300	.162 (4.11)	M9230-ND	2.89	2.12	9250-183
22.0	45	2.5	290	.162 (4.11)	M9231-ND	2.89	2.12	9250-223
27.0	45	2.5	260	.162 (4.11)	M9232-ND	3.18	2.33	9250-273
33.0	45	2.5	240	.162 (4.11)	M9233-ND	3.18	2.33	9250-333
39.0	50	2.5	205	.162 (4.11)	M9234-ND	3.18	2.33	9250-393
47.0	50	2.5	195	.162 (4.11)	M9235-ND	3.18	2.33	9250-473
56.0	50	2.5	190	.162 (4.11)	M9236-ND	3.18	2.33	9250-563
68.0	50	2.5	170	.162 (4.11)	M9237-ND	3.18	2.33	9250-683
82.0	50	2.5	180	.162 (4.11)	M9238-ND	3.48	2.55	9250-823
100	50	2.5	160	.162 (4.11)	M9239-ND	3.48	2.55	9250-104
120	55	.79	150	.162 (4.11)	M9240-ND	3.48	2.55	9250-124
150	55	.79	140	.162 (4.11)	M9241-ND	3.48	2.55	9250-154
180	55	.79	135	.162 (4.11)	M9242-ND	3.48	2.55	9250-184
220	55	.79	125	.162 (4.11)	M9243-ND	3.48	2.55	9250-224
270	55	.79	115	.162 (4.11)	M9244-ND	3.48	2.55	9250-274
330	55	.79	110	.162 (4.11)	M9245-ND	3.48	2.55	9250-334
390	60	.79	105	.162 (4.11)	M9246-ND	3.48	2.55	9250-394
470	60	.79	92	.162 (4.11)	M9247-ND	3.48	2.55	9250-474
560	60	.79	90	.162 (4.11)	M9248-ND	3.48	2.55	9250-564
680	60	.79	80	.162 (4.11)	M9249-ND	3.48	2.55	9250-684
820	60	.79	80	.162 (4.11)	M9250-ND	3.48	2.55	9250-824
1,000	60	.79	70	.162 (4.11)	M9251-ND	3.48	2.55	9250-105
1,200	45	.25	60	.162 (4.11)	M9252-ND	3.98	2.92	9250-125
1,500	45	.25	55	.162 (4.11)	M9253-ND	3.98	2.92	9250-155
1,800	45	.25	50	.162 (4.11)	M9254-ND	3.98	2.92	9250-185
2,200	45	.25	50	.162 (4.11)	M9255-ND	3.98	2.92	9250-225
2,700	45	.25	40	.162 (4.11)	M9256-ND	3.98	2.92	9250-275
3,300	45	.25	40	.162 (4.11)	M9257-ND	3.98	2.92	9250-335
3,900	45	.25	35	.162 (4.11)	M9258-ND	3.98	2.92	9250-395
4,700	45	.25	31	.162 (4.11)	M9259-ND	4.29	3.15	9250-475
5,600	44	.25	28	.162 (4.11)	M9260-ND	4.29	3.15	9250-565
6,800	40	.25	27	.162 (4.11)	M9261-ND	4.29	3.15	9250-685
8,200	40	.25	26	.162 (4.11)	M9262-ND	4.29	3.15	9250-825
10,000	40	.25	24	.162 (4.11)	M9263-ND	4.29	3.15	9250-106
12,000	30	.079	23	.162 (4.11)	M9264-ND	4.76	3.49	9250-126
15,000	30	.079	22	.162 (4.11)	M9265-ND	4.76	3.49	9250-156
18,000	30	.079	21	.162 (4.11)	M9266-ND	4.76	3.49	9250-186
22,000	27	.079	17	.162 (4.11)	M9267-ND	4.76	3.49	9250-226
27,000	27	.079	16	.162 (4.11)	M9268-ND	4.76	3.49	9250-276
33,000	27	.079	15	.162 (4.11)	M9269-ND	4.76	3.49	9250-336
39,000	27	.079	15	.162 (4.11)	M9270-ND	4.76	3.49	9250-396
47,000	23	.079	13	.162 (4.11)	M9271-ND	4.76	3.49	9250-476
56,000	23	.079	13	.162 (4.11)	M9272-ND	4.76	3.49	9250-566
68,000	23	.079	12	.162 (4.11)	M9273-ND	5.64	4.13	9250-686
82,000	21	.079	11	.162 (4.11)	M9274-ND	5.64	4.13	9250-826
100,000	18	.079	11	.162 (4.11)	M9275-ND	5.64	4.13	9250-107

Filter and Miniature High Current Chokes





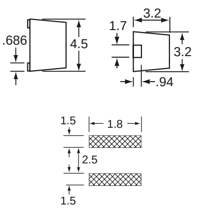
Inductance ± 15% @ 1 KHz. Coils finished with sleeving VW1 Rated. Leads No. 20 tinned copper 1" long min. Ambient Temp.: -55°C to +125°C.

L (µH) @ 0 DC	Max. DCR Ω @ +20°C	Rated Current Amp	Digi-Key Part No.	Price Each 1	Price Each 100	J.W.Miller Part No.
5800 Series						
3.9	.019	1.28	M5801-ND	1.88	1.38	5800-3R9
4.7	.022	1.28	M5802-ND	1.88	1.38	5800-4R7
5.6	.024	1.28	M5803-ND	1.88	1.38	5800-5R6
6.8	.026	1.28	M5804-ND	1.88	1.38	5800-6R8
8.2	.028	1.28	M5805-ND	1.88	1.38	5800-8R2
10	.033	1.28	M5806-ND	1.88	1.38	5800-100
12	.037	1.28	M5807-ND	1.88	1.38	5800-120
15	.040	1.28	M5808-ND	1.88	1.38	5800-150
18	.044	1.28	M5809-ND	1.88	1.38	5800-180
22	.050	1.28	M5810-ND	1.88	1.38	5800-220
27	.058	1.28	M5811-ND	1.88	1.38	5800-270
33	.075	1.008	M5812-ND	1.88	1.38	5800-330
39	.094	0.804	M5813-ND	1.88	1.38	5800-390
47	.109	0.804	M5814-ND	1.88	1.38	5800-470
56	.140	0.804	M5815-ND	1.88	1.38	5800-560
68	.145	0.804	M5816-ND	1.88	1.38	5800-680
82	.152	0.804	M5817-ND	1.88	1.38	5800-820
100	.208	0.632	M5818-ND	1.88	1.38	5800-101
120	.283	0.508	M5819-ND	1.88	1.38	5800-121
150	.340	0.508	M5820-ND	1.88	1.38	5800-151
180	.362	0.508	M5821-ND	1.88	1.38	5800-181
220	.430	0.508	M5822-ND	1.88	1.38	5800-221
270	.557	0.400	M5823-ND	1.88	1.38	5800-271
330	.665	0.400	M5824-ND	1.88	1.38	5800-331
390	.772	0.400	M5825-ND	1.88	1.38	5800-391
470	1.15	0.315	M5826-ND	1.88	1.38	5800-471
560	1.27	0.315	M5827-ND	1.88	1.38	5800-561
680	1.61	0.250	M5828-ND	1.88	1.38	5800-681
820	1.96	0.200	M5829-ND	1.88	1.38	5800-821
1000	2.30	0.200	M5830-ND	1.88	1.38	5800-102
1200	2.65	0.200	M5831-ND	1.88	1.38	5800-122
1500	3.45	0.158	M5832-ND	1.88	1.38	5800-152
1800	4.03	0.158	M5833-ND	1.88	1.38	5800-182
2200	4.48	0.158	M5834-ND	1.88	1.38	5800-222
2700	5.90	0.125	M5835-ND	1.88	1.38	5800-272
3300	6.56	0.125	M5836-ND	1.88	1.38	5800-332
3900	8.63	0.100	M5837-ND	1.88	1.38	5800-392
4700	10.5	0.100	M5838-ND	1.88	1.38	5800-472
5600	13.9	0.082	M5839-ND	1.88	1.38	5800-562
6800	16.3	0.082	M5840-ND	1.88	1.38	5800-682
8200	20.8	0.065	M5841-ND	1.88	1.38	5800-822
10000	26.4	0.050	M5842-ND	1.88	1.38	5800-103
12000	29.9	0.050	M5843-ND	1.88	1.38	5800-123
15000	42.5	0.039	M5844-ND	1.88	1.38	5800-153
18000	48.3	0.039	M5845-ND	1.88	1.38	5800-183
5900 Series						
3.9	.007	4.0	M5901-ND	3.82	2.80	5900-3R9
4.7	.008	4.0	M5902-ND	3.82	2.80	5900-4R7
5.6	.011	4.0	M5903-ND	3.82	2.80	5900-5R6
6.8	.011	4.0	M5904-ND	3.82	2.80	5900-6R8
8.2	.013	4.0	M5905-ND	3.82	2.80	5900-8R2
10	.017	4.0	M5906-ND	3.82	2.80	5900-100
12	.019	4.0	M5907-ND	3.82	2.80	5900-120
18	.023	4.0	M5909-ND	3.82	2.80	5900-180
22	.026	4.0	M5910-ND	3.82	2.80	5900-220
33	.032	4.0	M5912-ND	3.82	2.80	5900-330
39	.033	4.0	M5913-ND	3.82	2.80	5900-390
47	.035	4.0	M5914-ND	3.82	2.80	5900-470
56	.037	3.2	M5915-ND	3.82	2.80	5900-560
68	.047	2.5	M5916-ND	3.82	2.80	5900-680
82	.060	2.0	M5917-ND	3.82	2.80	5900-820
100	.090	1.6	M5918-ND	3.82	2.80	5900-101
150	.129	1.6	M5920-ND	3.82	2.80	5900-151
180	.150	1.6	M5921-ND	3.82	2.80	5900-181
220	.162	1.6	M5922-ND	3.82	2.80	5900-221
330	.212	1.6	M5924-ND	3.82	2.80	5900-331
390	.281	1.6	M5925-ND	3.82	2.80	5900-391
470	.380	1.2	M5926-ND	3.82	2.80	5900-471
560	.420	1.0	M5927-ND	3.82	2.80	5900-561
680	.548	1.0	M5928-ND	3.82	2.80	5900-681
1000	.844	0.8	M5930-ND	3.82	2.80	5900-102
1200	1.04	0.6	M5931-ND	3.82	2.80	5900-122
1500	1.18	0.6	M5932-ND	3.82	2.80	5900-152
1800	1.56	0.6	M5933-ND	3.82	2.80	5900-182
2200	2.00	0.5	M5934-ND	3.82	2.80	5900-222
2700	2.06	0.4	M5935-ND	3.82	2.80	5900-272
3900	2.75	0.4	M5937-ND	3.82	2.80	5900-392
4700	3.19	0.4	M5938-ND	3.82	2.80	5900-472
5600	3.92	0.315	M5939-ND	3.82	2.80	5900-562
10000	7.30	0.250	M5942-ND	5.88	4.31	5900-103
12000	9.21	0.200	M5943-ND	5.88	4.31	5900-123
22000	21.8	0.125	M5946-ND	5.88	4.31	5900-223
27000	22.7	0.125	M5947-ND	5.88	4.31	5900-273
68000	57.3	0.082	M5952-ND	5.88	4.31	5900-683
82000	79.3	0.065	M5953-ND	5.88	4.31	5900-823
100000	89.7	0.065	M5954-ND	5.88	4.31	5900-104

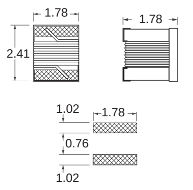
J.W.Miller
MAGNETICS

Surface Mount Chip Inductors

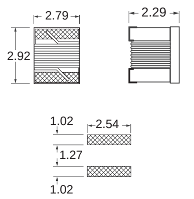
PM40 (1812) Series



PM0805 Series



PM1008 Series



L (µH)	Tol. %	Q Min.	Test Freq. MHz	R,dc Max. Ohms	I,dc Max. mA	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel Pricing* 500	J.W.Miller Part No.
PM40 (1812) Series											
0.10	20	28	25.2	0.44	450	M1101CT-ND	.75	.68	.57	112.50	PM40-R10M
0.12	20	30	25.2	0.22	450	M1102CT-ND	.75	.68	.57	112.50	PM40-R12M
0.15	20	30	25.2	0.25	450	M1103CT-ND	.75	.68	.57	112.50	PM40-R15M
0.18	20	30	25.2	0.28	450	M1104CT-ND	.75	.68	.57	112.50	PM40-R18M
0.22	20	30	25.2	0.32	450	M1105CT-ND	.75	.68	.57	112.50	PM40-R22M
0.27	20	30	25.2	0.36	450	M1106CT-ND	.75	.68	.57	112.50	PM40-R27M
0.33	20	30	25.2	0.40	450	M1107CT-ND	.75	.68	.57	112.50	PM40-R33M
0.39	20	30	25.2	0.45	450	M1108CT-ND	.75	.68	.57	112.50	PM40-R39M
0.47	20	30	25.2	0.50	450	M1109CT-ND	.75	.68	.57	112.50	PM40-R47M
0.56	20	30	25.2	0.55	450	M1110CT-ND	.75	.68	.57	112.50	PM40-R56M
0.68	20	30	25.2	0.60	450	M1111CT-ND	.75	.68	.57	112.50	PM40-R68M
0.82	20	30	25.2	0.67	450	M1112CT-ND	.75	.68	.57	112.50	PM40-R82M
1.0	10	50	7.96	0.50	450	M1113CT-ND	.75	.68	.57	112.50	PM40-1R0K
1.2	10	50	7.96	0.55	430	M1114CT-ND	.75	.68	.57	112.50	PM40-1R2K
1.5	10	50	7.96	0.60	410	M1115CT-ND	.75	.68	.57	112.50	PM40-1R5K
1.8	10	50	7.96	0.65	390	M1116CT-ND	.75	.68	.57	112.50	PM40-1R8K
2.2	10	50	7.96	0.70	380	M1117CT-ND	.75	.68	.57	112.50	PM40-2R2K
2.7	10	50	7.96	0.75	370	M1118CT-ND	.75	.68	.57	112.50	PM40-2R7K
3.3	10	50	7.96	0.80	355	M1119CT-ND	.75	.68	.57	112.50	PM40-3R3K
3.9	10	50	7.96	0.90	330	M1120CT-ND	.75	.68	.57	112.50	PM40-3R9K
4.7	10	50	7.96	1.0	315	M1121CT-ND	.75	.68	.57	112.50	PM40-4R7K
5.6	10	50	7.96	1.1	300	M1122CT-ND	.75	.68	.57	112.50	PM40-5R6K
6.8	10	50	7.96	1.2	285	M1123CT-ND	.75	.68	.57	112.50	PM40-6R8K
8.2	10	50	7.96	1.4	270	M1124CT-ND	.75	.68	.57	112.50	PM40-8R2K
10	10	50	2.52	1.6	250	M1125CT-ND	.75	.68	.57	112.50	PM40-100K
12	10	50	2.52	2.0	225	M1126CT-ND	.75	.68	.57	112.50	PM40-120K
15	10	50	2.52	2.5	200	M1127CT-ND	.75	.68	.57	112.50	PM40-150K
18	10	50	2.52	2.8	190	M1128CT-ND	.75	.68	.57	112.50	PM40-180K
22	10	50	2.52	3.2	180	M1129CT-ND	.75	.68	.57	112.50	PM40-220K
27	10	50	2.52	3.6	170	M1130CT-ND	.75	.68	.57	112.50	PM40-270K
33	10	50	2.52	4.0	160	M1131CT-ND	.75	.68	.57	112.50	PM40-330K
39	10	50	2.52	4.5	150	M1132CT-ND	.75	.68	.57	112.50	PM40-390K
47	10	50	2.52	5.0	140	M1133CT-ND	.75	.68	.57	112.50	PM40-470K
56	10	50	2.52	5.5	135	M1134CT-ND	1.25	1.13	.94	186.75	PM40-560K
68	10	50	2.52	6.0	130	M1135CT-ND	1.25	1.13	.94	186.75	PM40-680K
82	10	50	2.52	7.0	120	M1136CT-ND	1.25	1.13	.94	186.75	PM40-820K
100	10	40	0.796	8.0	110	M1137CT-ND	1.25	1.13	.94	186.75	PM40-101K
120	10	40	0.796	8.0	110	M1138CT-ND	1.25	1.13	.94	186.75	PM40-121K
150	10	40	0.796	9.0	105	M1139CT-ND	1.25	1.13	.94	186.75	PM40-151K
180	10	40	0.796	9.5	102	M1140CT-ND	1.25	1.13	.94	186.75	PM40-181K
220	10	40	0.796	10	100	M1141CT-ND	1.25	1.13	.94	186.75	PM40-221K
270	10	30	0.796	18	92	M1142CT-ND	1.25	1.13	.94	186.75	PM40-271K
330	10	30	0.796	20	85	M1143CT-ND	1.25	1.13	.94	186.75	PM40-331K
390	10	30	0.796	23	80	M1144CT-ND	1.25	1.13	.94	186.75	PM40-391K
470	10	30	0.796	26	62	M1145CT-ND	1.25	1.13	.94	186.75	PM40-471K
560	10	30	0.796	30	50	M1146CT-ND	1.25	1.13	.94	186.75	PM40-561K
680	10	30	0.796	40	50	M1147CT-ND	1.25	1.13	.94	186.75	PM40-681K
820	10	30	0.796	45	30	M1148CT-ND	1.25	1.13	.94	186.75	PM40-821K
1000	10	30	0.796	50	30	M1149CT-ND	1.25	1.13	.94	186.75	PM40-102K

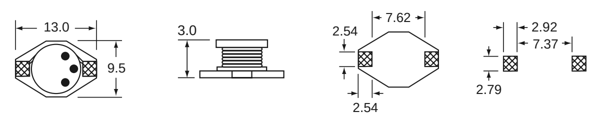
L	Tol. %	Q Min.	L Test Freq. MHz	R,dc Max. Ohms	I,dc Max. mA	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel Pricing* 3,000	J.W.Miller Part No.
PM0805 Series											
2.2nH	20	15	250	0.08	600	M1150CT-ND	.83	.75	.62	248.00/M	PM0805-2N2M
3.3nH	20	50	250	0.08	600	M1151CT-ND	.83	.75	.62	248.00/M	PM0805-3N3M
6.8nH	20	50	250	0.11	600	M1152CT-ND	.83	.75	.62	248.00/M	PM0805-6N8M
8.2nH	20	50	250	0.12	600	M1153CT-ND	.83	.75	.62	248.00/M	PM0805-8N2M
12nH	20	50	250	0.15	600	M1154CT-ND	.83	.75	.62	248.00/M	PM0805-12NM
15nH	20	50	250	0.17	600	M1155CT-ND	.83	.75	.62	248.00/M	PM0805-15NM
18nH	20	50	250	0.20	600	M1156CT-ND	.83	.75	.62	248.00/M	PM0805-18NM
22nH	20	55	250	0.22	500	M1157CT-ND	.83	.75	.62	248.00/M	PM0805-22NM
27nH	20	55	250	0.25	500	M1158CT-ND	.83	.75	.62	248.00/M	PM0805-27NM
33nH	20	60	250	0.27	500	M1159CT-ND	.83	.75	.62	248.00/M	PM0805-33NM
39nH	20	60	250	0.29	500	M1160CT-ND	.83	.75	.62	248.00/M	PM0805-39NM
47nH	20	60	200	0.31	500	M1161CT-ND	.83	.75	.62	248.00/M	PM0805-47NM
.056µH	10	60	200	0.34	500	M1162CT-ND	.83	.75	.62	248.00/M	PM0805-56NK
.068µH	10	60	200	0.38	500	M1163CT-ND	.83	.75	.62	248.00/M	PM0805-68NK
.082µH	10	65	150	0.42	400	M1164CT-ND	.83	.75	.62	248.00/M	PM0805-82NK
.10µH	10	65	150	0.46	400	M1165CT-ND	.83	.75	.62	248.00/M	PM0805-R10K
.12µH	10	50	150	0.51	400	M1166CT-ND	.83	.75	.62	248.00/M	PM0805-R12K
.15µH	10	50	100	0.56	400	M1167CT-ND	.83	.75	.62	248.00/M	PM0805-R15K
.18µH	10	50	100	0.64	400	M1168CT-ND	.83	.75	.62	248.00/M	PM0805-R18K
.22µH	10	50	100	0.70	400	M1169CT-ND	.83	.75	.62	248.00/M	PM0805-R22K
.27µH	10	40	100	1.1	280	M1170CT-ND	.83	.75	.62	248.00/M	PM0805-R27K
.33µH	10	40	100	1.2	260	M1171CT-ND	.83	.75	.62	248.00/M	PM0805-R33K
.39µH	10	40	100	1.5	200	M1172CT-ND	.83	.75	.62	248.00/M	PM0805-R39K
.47µH	10	40	100	2.5	170	M1173CT-ND	.83	.75	.62	248.00/M	PM0805-R47K
.56µH	10	40	50	3.5	170	M1174CT-ND	.83	.75	.62	248.00/M	PM0805-R56K
.68µH	10	30	50	4.0	170	M1175CT-ND	.83	.75	.62	248.00/M	PM0805-R68K

L	Tol. %	Q Min.	L Test Freq. MHz	R,dc Max. Ohms	I,dc Max. mA	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel Pricing* 2,000	J.W.Miller Part No.
PM1008 Series											
10nH	20	50	50	0.08	1000	M1176CT-ND	.70	.63	.53	210.00/M	PM1008-10NM
12nH	20	50	50	0.09	1000	M1177CT-ND	.70	.63	.53	210.00/M	PM1008-12NM
15nH	20	50	50	0.10	1000	M1178CT-ND	.70	.63	.53	210.00/M	PM1008-15NM
18nH	20	50	50	0.11	1000	M1179CT-ND	.70	.63	.53	210.00/M	PM1008-18NM
22nH	20	55	50	0.12	1000	M1180CT-ND	.70	.63	.53	210.00/M	PM1008-22NM
27nH	20	55	50	0.13	1000	M1181CT-ND	.70	.63	.53	210.00/M	PM1008-27NM
33nH	20	60	50	0.14	1000	M1182CT-ND	.70	.63	.53	210.00/M	PM1008-33NM
39nH	20	60	50	0.15	1000	M1183CT-ND	.70	.63	.53	210.00/M	PM1008-39NM
47nH	20	65	50	0.16	1000	M1184CT-ND	.70	.63	.53	210.00/M	PM1008-47NM
56nH	10	65	50	0.18	1000	M1185CT-ND	.70	.63	.53	210.00/M	PM1008-56NK
68nH	10	65	50	0.20	1000	M1186CT-ND	.70	.63	.53	210.00/M	PM1008-68NK
82nH	10	60	50	0.22	1000	M1187CT-ND	.70	.63	.53	210.00/M	PM1008-82NK
.10µH	10	60	25	0.56	650	M1188CT-ND	.70	.63	.53	210.00/M	PM1008-R10K
.12µH	10	60	25	0.68	650	M1189CT-ND	.70	.63	.53	210.00/M	PM1008-R12K
.15µH	10	45	25	0.70	580	M1190CT-ND	.70	.63	.53	210.00/M	PM1008-R15K
.18µH	10	45	25	0.77	620	M1191CT-ND	.70	.63	.53	210.00/M	PM1008-R18K
.22µH	10	45	25	0.84	500	M1192CT-ND	.70	.63	.53	210.00/M	PM1008-R22K
.27µH	10	45	25	0.91	500	M1193CT-ND	.70	.63	.53	210.00/M	PM1008-R27K
.33µH	10	45	25	1.05	450	M1194CT-ND	.70	.63	.53	210.00/M	PM1008-R33K
.39µH	10	45	25	1.12	470	M1195CT-ND	.70	.63	.53	210.00/M	PM1008-R39K
.47µH	10	45	25	1.19	470	M1196CT-ND	.70	.63	.53	210.00/M	PM1008-R47K
.56µH	10	45	25	1.33	400	M1197CT-ND	.70	.63	.53	210.00/M	PM1008-R56K
.68µH	10	45	25	1.47	400	M1198CT-ND	.70	.63	.53	210.00/M	PM1008-R68K
.82µH	10	45	25	1.61	400	M1199CT-ND	.70	.63	.53	210.00/M	PM1008-R82K
1.0µH	10	35	25	1.75	370	M1200CT-ND	.70	.63	.53	210.00/M	PM1008-1R0K
1.2µH	10	35	7.9	2.00	340	M1201CT-ND	.70	.63	.53	210.00/M	PM1008-1R2K
1.5µH	10	28	7.9	2.30	330	M1202CT-ND	.70	.63	.53	210.00/M	PM1008-1R5K
1.8µH	10	28	7.9	2.60	300	M1203CT-ND	.70	.63	.53	210.00/M	PM1008-1R8K
2.2µH	10	28	7.9	2.80	290	M1204CT-ND	.70	.63	.53	210.00/M	PM1008-2R2K
2.7µH	10	22	7.9	3.20	290	M1205CT-ND	.70	.63	.53	210.00/M	PM1008-2R7K
3.3µH	10	22	7.9	3.40	290	M1206CT-ND	.70	.63	.53	210.00/M	PM1008-3R3K
3.9µH	10	20	7.9	3.60	260	M1207CT-ND	.70	.63	.53	210.00/M	PM1008-3R9K
4.7µH	10	20	7.9	4.00	260	M1208CT-ND	.70	.63	.53	210.00/M	PM1008-4R7K

* For Tape and Reel part number, change CT-ND to TR-ND.

Surface Mount Power Inductors —

PM3308 Series

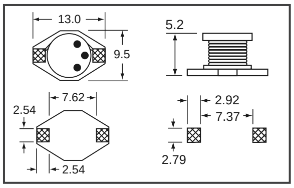


L ±20% (µH)	R, dc Max. Ohms	I, sat. Amp	I, rms Amp	Digi-Key Part No.*	Cut Tape Price Each 1	10	100	Tape & Reel Pricing* 1,000	J.W.Miller Part No.
10	0.11	2.4	2.0	M9719CT-ND	3.00	2.70	2.25	900.00	PM3308-100M
15	0.15	2.0	1.5	M9720CT-ND	3.00	2.70	2.25	900.00	PM3308-150M
22	0.23	1.6	1.3	M9721CT-ND	3.00	2.70	2.25	900.00	PM3308-220M
33	0.30	1.4	1.1	M9722CT-ND	3.00	2.70	2.25	900.00	PM3308-330M
47	0.39	1.0	0.8	M9723CT-ND	3.00	2.70	2.25	900.00	PM3308-470M
68	0.66	0.9	0.7	M9724CT-ND	3.00	2.70	2.25	900.00	PM3308-680M
100	0.84	0.7	0.6	M9725CT-ND	3.00	2.70	2.25	900.00	PM3308-101M
150	1.2	0.6	0.5	M9726CT-ND	3.00	2.70	2.25	900.00	PM3308-151M
220	1.9	0.5	0.4	M9727CT-ND	3.00	2.70	2.25	900.00	PM3308-221M
330	2.7	0.4	0.3	M9728CT-ND	3.00	2.70	2.25	900.00	PM3308-331M
470	4.0	0.3	0.2	M9729CT-ND	3.00	2.70	2.25	900.00	PM3308-471M
680	5.3	0.2	0.1	M9730CT-ND	3.00	2.70	2.25	900.00	PM3308-681M
1000	8.4	0.1	0.05	M9731CT-ND	3.00	2.70	2.25	900.00	PM3308-102M

* For Tape and Reel part number, change CT-ND to TR-ND.

J.W.Miller
MAGNETICS

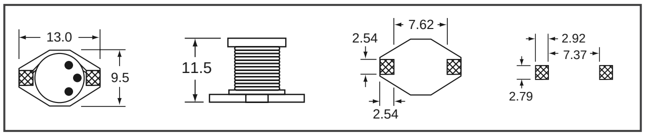
Surface Mount Power Inductors — PM3316 Series



L ±20% (uH)	R, dc Max. Ohms	I, sat. Amp	I, rms Amp	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel Pricing* 500	J.W.Miller Part No.
1.0	0.009	9.0	6.8	M9700CT-ND	3.10	2.79	2.33	775.00	PM3316-1R0M
1.5	0.010	8.0	6.4	M9701CT-ND	3.10	2.79	2.33	775.00	PM3316-1R5M
2.2	0.012	7.0	6.1	M9702CT-ND	3.10	2.79	2.33	775.00	PM3316-2R2M
3.3	0.015	6.4	5.4	M9703CT-ND	3.10	2.79	2.33	775.00	PM3316-3R3M
4.7	0.018	5.4	4.8	M9704CT-ND	3.10	2.79	2.33	775.00	PM3316-4R7M
6.8	0.027	4.6	4.4	M9705CT-ND	3.10	2.79	2.33	775.00	PM3316-6R8M
10	0.038	3.8	3.9	M9706CT-ND	3.10	2.79	2.33	775.00	PM3316-100M
15	0.046	3.0	3.1	M9707CT-ND	3.10	2.79	2.33	775.00	PM3316-150M
22	0.085	2.6	2.7	M9708CT-ND	3.10	2.79	2.33	775.00	PM3316-220M
33	0.10	2.0	2.1	M9709CT-ND	3.10	2.79	2.33	775.00	PM3316-330M
47	0.14	1.6	1.8	M9710CT-ND	3.10	2.79	2.33	775.00	PM3316-470M
68	0.20	1.4	1.5	M9711CT-ND	3.10	2.79	2.33	775.00	PM3316-680M
100	0.28	1.2	1.3	M9712CT-ND	3.10	2.79	2.33	775.00	PM3316-101M
150	0.40	1.0	1.0	M9713CT-ND	3.10	2.79	2.33	775.00	PM3316-151M
220	0.61	0.8	0.8	M9714CT-ND	3.10	2.79	2.33	775.00	PM3316-221M
330	1.02	0.6	0.6	M9715CT-ND	3.10	2.79	2.33	775.00	PM3316-331M
470	1.27	0.5	0.5	M9716CT-ND	3.10	2.79	2.33	775.00	PM3316-471M
680	2.02	0.4	0.4	M9717CT-ND	3.10	2.79	2.33	775.00	PM3316-681M
1000	3.00	0.3	0.3	M9718CT-ND	3.10	2.79	2.33	775.00	PM3316-102M

* For Tape and Reel part number, change CT-ND to TR-ND.

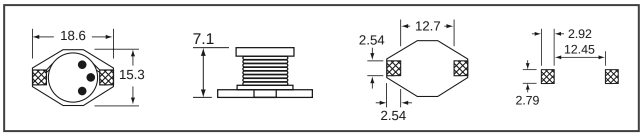
Surface Mount Power Inductors — PM3340 Series



L ±20% (uH)	R, dc Max. Ohms	I, sat. Amp	I, rms Amp	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel Pricing*	J.W.Miller Part No.
10	0.033	8.0	3.5	M9732CT-ND	3.95	3.56	2.97	296.25/250	PM3340-100M
15	0.042	7.0	3.0	M9733CT-ND	3.95	3.56	2.97	266.63/225	PM3340-150M
22	0.054	5.5	2.5	M9734CT-ND	3.95	3.56	2.97	266.63/225	PM3340-220M
33	0.08	4.0	2.0	M9735CT-ND	3.95	3.56	2.97	296.25/250	PM3340-330M
47	0.1	3.8	1.6	M9736CT-ND	3.95	3.56	2.97	266.63/225	PM3340-470M
68	0.17	3.0	1.2	M9737CT-ND	3.95	3.56	2.97	296.25/250	PM3340-680M
100	0.22	2.5	1.2	M9738CT-ND	3.95	3.56	2.97	266.63/225	PM3340-101M
150	0.34	2.0	0.9	M9739CT-ND	3.95	3.56	2.97	266.63/225	PM3340-151M
220	0.44	1.6	0.7	M9740CT-ND	3.95	3.56	2.97	266.63/225	PM3340-221M
330	0.7	1.2	0.6	M9741CT-ND	3.95	3.56	2.97	266.63/225	PM3340-331M
470	0.95	1.0	0.3	M9742CT-ND	3.95	3.56	2.97	266.63/225	PM3340-471M
680	1.2	1.0	0.2	M9743CT-ND	3.95	3.56	2.97	266.63/225	PM3340-681M
1000	2.0	0.8	0.1	M9744CT-ND	3.95	3.56	2.97	266.63/225	PM3340-102M

* For Tape and Reel part number, change CT-ND to TR-ND.

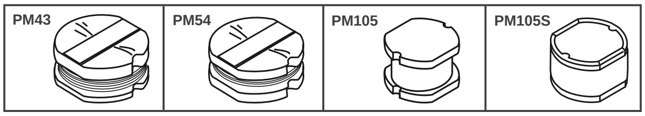
Surface Mount Power Inductors — PM5022 Series

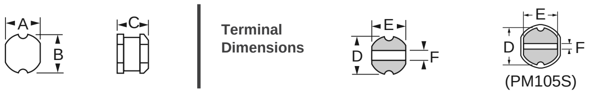


L ±20% (uH)	R, dc Max. Ohms	I, sat. Amp	I, rms Amp	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel Pricing* 250	J.W.Miller Part No.
1.0	0.011	20	8.6	M9745CT-ND	5.45	4.91	4.09	408.75	PM5022-1R0M
2.2	0.014	16	7.1	M9747CT-ND	5.45	4.91	4.09	408.75	PM5022-2R2M
3.3	0.016	14	6.2	M9748CT-ND	5.45	4.91	4.09	408.75	PM5022-3R3M
5.6	0.022	12	5.3	M9746CT-ND	5.45	4.91	4.09	408.75	PM5022-5R6M
10	0.032	10	4.3	M9751CT-ND	5.45	4.91	4.09	408.75	PM5022-100M
15	0.036	8	4.0	M9752CT-ND	5.45	4.91	4.09	408.75	PM5022-150M
22	0.047	7	3.5	M9753CT-ND	5.45	4.91	4.09	408.75	PM5022-220M
33	0.066	5.5	3.0	M9754CT-ND	5.45	4.91	4.09	408.75	PM5022-330M
47	0.087	4.5	2.6	M9755CT-ND	5.45	4.91	4.09	408.75	PM5022-470M
68	0.13	3.5	2.3	M9756CT-ND	5.45	4.91	4.09	408.75	PM5022-680M
100	0.19	3.0	1.8	M9757CT-ND	5.45	4.91	4.09	408.75	PM5022-101M
150	0.25	2.6	1.5	M9758CT-ND	5.45	4.91	4.09	408.75	PM5022-151M
220	0.38	2.4	1.2	M9759CT-ND	5.45	4.91	4.09	408.75	PM5022-221M
330	0.56	1.9	1.0	M9760CT-ND	5.45	4.91	4.09	408.75	PM5022-331M
470	0.85	1.4	0.82	M9761CT-ND	5.45	4.91	4.09	408.75	PM5022-471M
680	1.2	1.2	0.72	M9762CT-ND	5.45	4.91	4.09	408.75	PM5022-681M
1000	1.8	1.0	0.56	M9763CT-ND	5.45	4.91	4.09	408.75	PM5022-102M

* For Tape and Reel part number, change CT-ND to TR-ND.

Surface Mount Power Inductors





Series	Dimensions (mm) A	B	C	D Typ.	E Typ.	F Typ.
PM43	4.0 ± 0.3	4.5 ± 0.3	3.2 ± 0.3	4.5	4.0	1.2
PM54	5.2 ± 0.3	5.8 ± 0.3	4.5 ± 0.3	5.8	5.2	1.3
PM105	9.0 ± 0.4	10.0 ± 0.4	5.4 ± 0.4	10.0	9.0	2.1
PM105S	9.2 ± 0.4	10.0 ± 0.4	5.0 ± 0.5	7.8	7.0	1.6

L (µH)	Tol. %	Test Freq	Max. DCR Ohms	Rated I Amps	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T & R Pricing 1,500	J.W.Miller Part No.
PM43 Series											
10	20	2.5MHz	0.182	1.04	M3100CT-ND	2.38	2.15	1.77	M3100TR-ND	714.00/M	PM43-100M
12	20	2.5MHz	0.210	0.97	M3120CT-ND	2.38	2.15	1.77	M3120TR-ND	714.00/M	PM43-120M
15	20	2.5MHz	0.235	0.85	M3150CT-ND	2.38	2.15	1.77	M3150TR-ND	714.00/M	PM43-150M
18	20	2.5MHz	0.338	0.74	M3180CT-ND	2.38	2.15	1.77	M3180TR-ND	714.00/M	PM43-180M
22	20	2.5MHz	0.378	0.68	M3220CT-ND	2.38	2.15	1.77	M3220TR-ND	714.00/M	PM43-220M
27	20	2.5MHz	0.522	0.62	M3327CT-ND	2.38	2.15	1.77	M3327TR-ND	714.00/M	PM43-270M
33	10	2.5MHz	0.540	0.56	M3330CT-ND	2.38	2.15	1.77	M3330TR-ND	714.00/M	PM43-330K
39	10	2.5MHz	0.587	0.52	M3390CT-ND	2.38	2.15	1.77	M3390TR-ND	714.00/M	PM43-390K
47	10	2.5MHz	0.844	0.44	M3470CT-ND	2.38	2.15	1.77	M3470TR-ND	714.00/M	PM43-470K
56	10	2.5MHz	0.937	0.42	M3560CT-ND	2.38	2.15	1.77	M3560TR-ND	714.00/M	PM43-560K
68	10	2.5MHz	1.117	0.37	M3680CT-ND	2.38	2.15	1.77	M3680TR-ND	714.00/M	PM43-680K
PM54 Series											
10	20	2.5MHz	0.10	1.44	M4100CT-ND	2.38	2.15	1.77	M4100TR-ND	714.00/M	PM54-100M
12	20	2.5MHz	0.12	1.40	M4120CT-ND	2.38	2.15	1.77	M4120TR-ND	714.00/M	PM54-120M
15	20	2.5MHz	0.14	1.30	M4150CT-ND	2.38	2.15	1.77	M4150TR-ND	714.00/M	PM54-150M
18	20	2.5MHz	0.15	1.23	M4180CT-ND	2.38	2.15	1.77	M4180TR-ND	714.00/M	PM54-180M
22	20	2.5MHz	0.18	1.11	M4220CT-ND	2.38	2.15	1.77	M4220TR-ND	714.00/M	PM54-220M
27	20	2.5MHz	0.20	0.97	M4270CT-ND	2.38	2.15	1.77	M4270TR-ND	714.00/M	PM54-270M
33	15	2.5MHz	0.23	0.88	M4330CT-ND	2.38	2.15	1.77	M4330TR-ND	714.00/M	PM54-330L
39	15	2.5MHz	0.32	0.80	M4390CT-ND	2.38	2.15	1.77	M4390TR-ND	714.00/M	PM54-390L
47	15	2.5MHz	0.37	0.72	M4470CT-ND	2.38	2.15	1.77	M4470TR-ND	714.00/M	PM54-470L
56	10	2.5MHz	0.42	0.68	M4560CT-ND	2.38	2.15	1.77	M4560TR-ND	714.00/M	PM54-560K
68	10	2.5MHz	0.46	0.61	M4680CT-ND	2.38	2.15	1.77	M4680TR-ND	714.00/M	PM54-680K
82	10	2.5MHz	0.60	0.58	M4820CT-ND	2.38	2.15	1.77	M4820TR-ND	714.00/M	PM54-820K
100	10	1KHz	0.70	0.52	M4101CT-ND	2.38	2.15	1.77	M4101TR-ND	714.00/M	PM54-101K
120	10	1KHz	0.93	0.48	M4121CT-ND	2.38	2.15	1.77	M4121TR-ND	714.00/M	PM54-121K
150	10	1KHz	1.10	0.40	M4151CT-ND	2.38	2.15	1.77	M4151TR-ND	714.00/M	PM54-151K
180	10	1KHz	1.38	0.38	M4181CT-ND	2.38	2.15	1.77	M4181TR-ND	714.00/M	PM54-181K
220	10	1KHz	1.57	0.35	M4221CT-ND	2.38	2.15	1.77	M4221TR-ND	714.00/M	PM54-221K

L (µH)	Tol. %	Test Freq	Max. DCR Ohms	Rated I Amps	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T & R Pricing 500	J.W.Miller Part No.
PM105 Series											
10	20	2.5MHz	0.06	2.60	M1001CT-ND	3.50	3.15	2.59	M1001TR-ND	525.00	PM105-100M
12	20	2.5MHz	0.07	2.45	M1002CT-ND	3.50	3.15	2.59	M1002TR-ND	525.00	PM105-120M
15	20	2.5MHz	0.08	2.27	M1003CT-ND	3.50	3.15	2.59	M1003TR-ND	525.00	PM105-150M
18	20	2.5MHz	0.09	2.15	M1004CT-ND	3.50	3.15	2.59	M1004TR-ND	525.00	PM105-180M
22	20	2.5MHz	0.10	1.95	M1005CT-ND	3.50	3.15	2.59	M1005TR-ND	525.00	PM105-220M
27	20	2.5MHz	0.11	1.76	M1006CT-ND	3.50	3.15	2.59	M1006TR-ND	525.00	PM105-270M
33	20	2.5MHz	0.12	1.50	M1007CT-ND	3.50	3.15	2.59	M1007TR-ND	525.00	PM105-330M
39	20	2.5MHz	0.14	1.37	M1008CT-ND	3.50	3.15	2.59	M1008TR-ND	525.00	PM105-390M
47	10	2.5MHz	0.17	1.28	M1009CT-ND	3.50	3.15	2.59	M1009TR-ND	525.00	PM105-470K
56	10	2.5MHz	0.19	1.17	M1010CT-ND	3.50	3.15	2.59	M1010TR-ND	525.00	PM105-560K
68	10	2.5MHz	0.22	1.11	M1011CT-ND	3.50	3.15	2.59	M1011TR-ND	525.00	PM105-680K
82	10	2.5MHz	0.25	1.00	M1012CT-ND	3.50	3.15	2.59	M1012TR-ND	525.00	PM105-820K
100	10	1kHz	0.35	0.97	M1013CT-ND	3.50	3.15	2.59	M1013TR-ND	525.00	PM105-101K
120	10	1kHz	0.40	0.89	M1014CT-ND	3.50	3.15	2.59	M1014TR-ND	525.00	PM105-121K
150	10	1kHz	0.47	0.78	M1015CT-ND	3.50	3.15	2.59	M1015TR-ND	525.00	PM105-151K
180	10	1kHz	0.63	0.72	M1016CT-ND	3.50	3.15	2.59	M1016TR-ND	525.00	PM105-181K
220	10	1kHz	0.73	0.66	M1017CT-ND	3.50	3.15	2.59	M1017TR-ND	525.00	PM105-221K
270	10	1kHz	0.97	0.57	M1018CT-ND	3.50	3.15	2.59	M1018TR-ND	525.00	PM105-271K
330	10	1kHz	1.15	0.52	M1019CT-ND	3.50	3.15	2.59	M1019TR-ND	525.00	PM105-331K
390	10	1kHz	1.30	0.48	M1020CT-ND	3.50	3.15	2.59	M1020TR-ND	525.00	PM105-391K
470	10	1kHz	1.48	0.42	M1021CT-ND	3.50	3.15	2.59	M1021TR-ND	525.00	PM105-471K
560	10	1kHz	1.90	0.33	M1022CT-ND	3.50	3.15	2.59	M1022TR-ND	525.00	PM105-561K
680	10	1kHz	2.25	0.28	M1023CT-ND	3.50	3.15	2.59	M1023TR-ND	525.00	PM105-681K
820	10	1kHz	2.55	0.24	M1024CT-ND	3.50	3.15	2.59	M1024TR-ND	525.00	PM105-821K
PM105S (Shielded) Series											
10	20	2.5MHz	0.06	2.53	M1025CT-ND	4.40	3.96	3.26	M1025TR-ND	660.00	PM105S-100M
12	20	2.5MHz	0.06	2.31	M1026CT-ND	4.40	3.96	3.26	M1026TR-ND	660.00	PM105S-120M
15	20	2.5MHz	0.07	2.06	M1027CT-ND	4.40	3.96	3.26	M1027TR-ND	660.00	PM105S-150M
18	20	2.5MHz	0.08	1.89	M1028CT-ND	4.40	3.96	3.26	M1028TR-ND	660.00	PM105S-180M
22	20	2.5MHz	0.09	1.71	M1029CT-ND	4.40	3.96	3.26	M1029TR-ND	660.00	PM105S-220M
27	20	2.5MHz	0.11	1.54	M1030CT-ND	4.40	3.96	3.26	M1030TR-ND	660.00	PM105S-270M
33	20	2.5MHz	0.12	1.39	M1031CT-ND	4.40	3.96	3.26	M1031TR-ND	660.00	PM105S-330M
39	20	2.5MHz	0.16	1.28	M1032CT-ND	4.40	3.96	3.26	M1032TR-ND	660.00	PM105S-390M
47	20	2.5MHz	0.18	1.17	M1033CT-ND	4.40	3.96	3.26	M1033TR-ND	660.00	PM105S-470M
56	20	2.5MHz	0.19	1.07	M1034CT-ND	4.40	3.96	3.26	M1034TR-ND	660.00	PM105S-560M
68	20	2.5MHz	0.22	0.97	M1035CT-ND	4.40	3.96	3.26	M1035TR-ND	660.00	PM105S-680M
82	20	2.5MHz	0.28	0.88	M1036CT-ND	4.40	3.96	3.26	M1036TR-ND	660.00	PM105S-820M
100	20	1kHz	0.35	0.80	M1037CT-ND	4.40	3.96	3.26	M1037TR-ND	660.00	PM105S-101M
120	20	1kHz	0.38	0.73	M1038CT-ND	4.40	3.96	3.26	M1038TR-ND	660.00	PM105S-121M
150	20	1kHz	0.45	0.65	M1039CT-ND	4.40	3.96	3.26	M1039TR-ND	660.00	PM105S-151M
180	20	1kHz	0.62	0.60	M1040CT-ND	4.40	3.96	3.26	M1040TR-ND	660.00	PM105S-181M
220	20	1kHz	0.69	0.54	M1041CT-ND	4.40	3.96	3.26	M1041TR-ND	660.00	PM105S-221M
270	20	1kHz	.78	0.49	M1042CT-ND	4.40	3.96	3.26	M1042TR-ND	660.00	PM105S-271M
330	20	1kHz	1.03	0.44	M1043CT-ND	4.40	3.96	3.26	M1043TR-ND	660.00	PM105S-331M
390	20	1kHz	1.18	0.41	M1044CT-ND	4.40	3.96	3.26	M1044TR-ND	660.00	PM105S-391M
470	20	1kHz	1.60	0.37	M1045CT-ND	4.40	3.96	3.26	M1045TR-ND	660.00	PM105S-471M

J.W.Miller
MAGNETICS

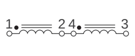
Surface Mount Dual Toroid Inductors

The PM3602 and PM3604 Series are versatile surface mount coils that can provide different functions in a single package. A bifilar method is used in the winding of these coils. The user can utilize these coils in four different ways, depending on the external connection chosen:

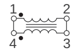
(1) Parallel Connection:	Doubles the current capacity
(2) Series Connection:	4 times the parallel inductance
(3) Dual Inductor:	Creates two differential mode inductors
(4) 1:1 Ratio Transformer:	For isolation and some flyback applications

Features:
• Toroidal core design to minimize RFI radiation • Low loss core material • Encapsulated in case for pick and place capability • Reflow soldering • Hi-pot 500V • Operating ambient temperature: -40°C to +85°C

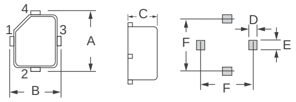
Typical Applications:
• Switching power supplies • Converters • Data communications • Processor/controller circuits • Personal computers • Filters



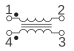
Series Mode



Parallel Mode



Series or parallel connections are made at the circuit level (not an internal connection of the device.



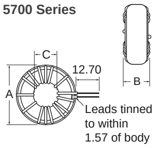
1:1 Transformer/
Dual Differential Mode

Part #	Dimensions (mm) A	B	C	D	E	F
PM3602	0.452	0.354	0.225	0.10	0.10	0.385
PM3604	0.550	0.452	0.265	0.16	0.10	0.500

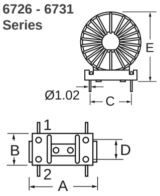
Parallel L ±20% µH	Parallel I,dc Max. Amps	Parallel L ±20% @ I,dc µH	Parallel R,dc Max. Ohms	Series L ±20% µH	Series I,dc Max. Amps	Series L ±20% @ I,dc µH	Series R,dc Max. Ohms	Digi-Key Part No.	Price Each 1	100	500	J.W.Miller Part No.
PM3602 Series												
5	2.41	3.8	0.023	20	1.20	15.2	0.092	M1209-ND	1.71	1.44	1.25	PM3602-5
8	1.90	6.1	0.037	32	0.95	23.2	0.15	M1210-ND	1.71	1.44	1.25	PM3602-8
10	1.83	7.4	0.040	40	0.92	29.6	0.16	M1211-ND	1.71	1.44	1.25	PM3602-10
15	1.45	11.1	0.063	60	0.73	44.4	0.25	M1212-ND	1.71	1.44	1.25	PM3602-15
20	1.25	15.2	0.086	80	0.63	60.8	0.34	M1213-ND	1.71	1.44	1.25	PM3602-20
25	1.17	18.5	0.098	100	0.59	74.0	0.39	M1214-ND	1.71	1.44	1.25	PM3602-25
33	0.98	24.8	0.14	132	0.49	99.2	0.56	M1215-ND	1.71	1.44	1.25	PM3602-33
50	0.78	37.5	0.22	200	0.38	150.0	0.88	M1216-ND	1.71	1.44	1.25	PM3602-50
68	0.72	49.6	0.26	272	0.36	198.4	1.04	M1217-ND	1.71	1.44	1.25	PM3602-68
100	0.58	74.0	0.40	400	0.29	296.0	1.60	M1218-ND	2.46	2.05	1.78	PM3602-100
150	0.47	111.0	0.60	600	0.24	444.0	2.40	M1219-ND	2.46	2.05	1.78	PM3602-150
200	0.40	150.0	0.84	800	0.20	600.0	3.36	M1220-ND	2.46	2.05	1.78	PM3602-200
250	0.33	192.5	1.19	1000	0.17	770.0	4.76	M1221-ND	2.46	2.05	1.78	PM3602-250
300	0.32	225.0	1.31	1200	0.16	900.0	5.24	M1222-ND	2.46	2.05	1.78	PM3602-300
PM3604 Series												
5	3.30	3.8	0.019	20	1.65	15.2	0.076	M1223-ND	1.81	1.52	1.32	PM3604-5
8	3.00	5.8	0.024	32	1.50	23.2	0.096	M1224-ND	1.81	1.52	1.32	PM3604-8
10	2.70	7.3	0.028	40	1.35	29.2	0.11	M1225-ND	1.81	1.52	1.32	PM3604-10
15	2.20	11.0	0.041	60	1.10	44.0	0.16	M1226-ND	1.81	1.52	1.32	PM3604-15
20	2.02	14.2	0.049	80	1.01	56.8	0.20	M1227-ND	1.81	1.52	1.32	PM3604-20
25	1.91	17.0	0.054	100	0.96	68.0	0.22	M1228-ND	1.81	1.52	1.32	PM3604-25
33	1.60	23.1	0.078	132	0.80	92.4	0.31	M1229-ND	1.81	1.52	1.32	PM3604-33
50	1.28	35.5	0.12	200	0.64	142.0	0.48	M1230-ND	1.81	1.52	1.32	PM3604-50
68	1.19	46.2	0.14	272	0.60	184.8	0.56	M1231-ND	1.81	1.52	1.32	PM3604-68
100	0.98	68.0	0.21	400	0.49	272.0	0.84	M1232-ND	2.45	2.05	1.78	PM3604-100
150	0.78	103.5	0.32	600	0.39	414.0	1.28	M1233-ND	2.45	2.05	1.78	PM3604-150
200	0.65	140.0	0.47	800	0.33	560.0	1.88	M1234-ND	2.45	2.05	1.78	PM3604-200
250	0.60	172.5	0.53	1000	0.30	690.0	2.12	M1235-ND	2.45	2.05	1.78	PM3604-250
300	0.52	213.0	0.73	1200	0.26	852.0	2.92	M1236-ND	2.45	2.05	1.78	PM3604-300

High Current Toroid Inductors

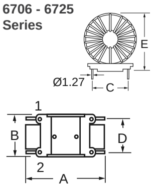
5700 Series



**6701 - 6705 &
6726 - 6731
Series**



**6706 - 6725
Series**

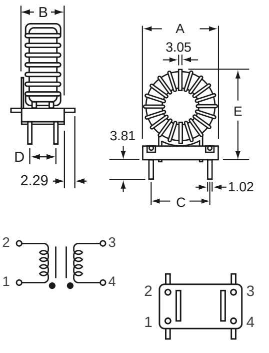


L (µH) ±15%	I,dc Max. Amps	R,dc Max. Ohms	Dimensions (mm) A Max.	B Max.	C Min.	Lead Ø Nom. (mm)	Digi-Key Part No.	Price Each 1	100	J.W. Miller Part No.
5700 Series										
10	11.00	.008	22.23	11.10	4.75	1.63	M5701-ND	7.75	5.70	5701
25	5.50	.014	22.23	11.10	4.75	1.02	M5702-ND	7.75	5.70	5702
125	2.75	.12	22.23	11.10	4.75	.51	M5703-ND	7.75	5.70	5703
275	2.00	.24	22.23	11.10	4.75	.41	M5704-ND	7.75	5.70	5704
450	1.50	.49	22.23	11.10	4.75	.30	M5705-ND	7.75	5.70	5705
25	9.00	.012	28.58	14.27	7.92	1.63	M5706-ND	8.36	6.15	5706
75	5.00	.04	28.58	14.27	7.92	.91	M5707-ND	8.36	6.15	5707
400	2.25	.33	28.58	14.27	7.92	.46	M5708-ND	8.36	6.15	5708
800	1.75	.64	28.58	14.27	7.92	.38	M5709-ND	8.36	6.15	5709
1000	1.50	.98	28.58	14.27	7.92	.30	M5710-ND	8.36	6.15	5710
50	9.50	.012	31.75	15.88	9.52	1.63	M5711-ND	9.54	7.02	5711
150	4.75	.046	31.75	15.88	9.52	.91	M5712-ND	9.54	7.02	5712
700	2.25	.42	31.75	15.88	9.52	.46	M5713-ND	9.54	7.02	5713
1250	1.75	.85	31.75	15.88	9.52	.38	M5714-ND	9.54	7.02	5714
1600	1.50	1.27	31.75	15.88	9.52	.30	M5715-ND	9.54	7.02	5715
125	7.75	.032	46.02	19.05	19.05	1.63	M5716-ND	11.93	8.78	5716
500	4.00	.15	46.02	19.05	19.05	.81	M5717-ND	11.93	8.78	5717
1100	2.50	.33	46.02	19.05	19.05	.64	M5718-ND	11.93	8.78	5718
2250	1.75	.92	46.02	19.05	19.05	.46	M5719-ND	11.93	8.78	5719
4500	1.25	2.64	46.02	19.05	19.05	.30	M5720-ND	11.93	8.78	5720
250	8.00	.041	53.98	23.80	15.88	1.57	M5721-ND	16.73	12.30	5721
900	3.75	.175	53.98	23.80	15.88	.81	M5722-ND	16.73	12.30	5722
1800	2.50	.55	53.98	23.80	15.88	.58	M5723-ND	16.73	12.30	5723
4000	1.75	1.16	53.98	23.80	15.88	.46	M5724-ND	17.90	13.17	5724
8000	1.00	3.34	53.98	23.80	15.88	.30	M5725-ND	17.90	13.17	5725
25	2.50	.040	13.97	5.59	3.81	.51	M5726-ND	7.75	5.70	5726
35	2.50	.035	17.78	8.13	3.81	.64	M5727-ND	7.75	5.70	5727
50	2.50	.060	19.05	8.13	3.81	.51	M5728-ND	7.75	5.70	5728
100	2.50	.080	21.59	9.14	5.08	.51	M5729-ND	7.75	5.70	5729
70	3.00	.050	21.59	9.14	5.08	.64	M5730-ND	7.75	5.70	5730
40	4.00	.025	21.59	9.14	5.08	.81	M5731-ND	7.75	5.70	5731

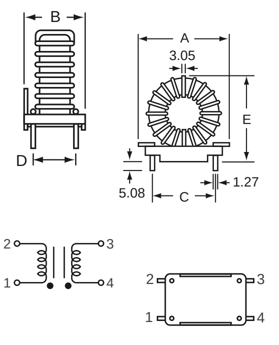
L (µH) ±15%	I,dc Max. Amps	R,dc Max. Ohms	Dimensions (mm) A Max.	B Max.	C ± .38	D ± .38	E Max.	Digi-Key Part No.	Price Each 1	100	J.W. Miller Part No.
6700 Series											
10	11.00	.008	22.23	10.77	15.24	6.35	25.40	M5732-ND	10.00	7.35	6701
25	5.50	.014	22.23	10.79	15.24	6.35	25.40	M5733-ND	10.00	7.35	6702
125	2.75	.12	22.23	10.79	15.24	6.35	25.40	M5734-ND	10.00	7.35	6703
275	2.00	.24	22.23	10.79	15.24	6.35	25.40	M5735-ND	10.00	7.35	6704
450	1.50	.49	22.23	10.79	15.24	6.35	25.40	M5736-ND	10.81	7.95	6705
25	9.00	.012	28.58	15.24	20.32	10.16	31.75	M5737-ND	10.81	7.95	6706
75	5.00	.04	28.58	15.24	20.32	10.16	31.75	M5738-ND	10.81	7.95	6707
400	2.25	.33	28.58	15.24	20.32	10.16	31.75	M5739-ND	10.81	7.95	6708
1000	1.50	.98	28.58	15.24	20.32	10.16	31.75	M5741-ND	10.81	7.95	6710
50	9.50	.012	31.75	20.32	22.86	15.24	34.93	M5742-ND	11.83	8.70	6711
150	4.75	.046	31.75	20.32	22.86	15.24	34.93	M5743-ND	11.83	8.70	6712
700	2.25	.42	31.75	20.32	22.86	15.24	34.93	M5744-ND	11.83	8.70	6713
1250	1.75	.85	31.75	20.32	22.86	15.24	34.93	M5745-ND	11.83	8.70	6714
1600	1.50	1.27	31.75	20.32	22.86	15.24	34.93	M5746-ND	11.83	8.70	6715
125	7.75	.032	46.02	22.86	30.48	17.78	49.53	M5747-ND	13.97	10.28	6716
500	4.00	.15	46.02	22.86	30.48	17.78	49.53	M5748-ND	13.97	10.28	6717
1100	2.50	.33	46.02	22.86	30.48	17.78	49.53	M5749-ND	13.97	10.28	6718
2250	1.75	.92	46.02	22.86	30.48	17.78	49.53	M5750-ND	13.97	10.28	6719
4500	1.25	2.64	46.02	22.86	30.48	17.78	49.53	M5751-ND	15.40	11.33	6720
250	8.00	.041	53.98	27.94	38.10	22.86	57.15	M5752-ND	16.47	12.12	6721
900	3.75	.175	53.98	27.94	38.10	22.86	57.15	M5753-ND	19.02	13.99	6722
1800	2.50	.55	53.98	27.94	38.10	22.86	57.15	M5754-ND	19.02	13.99	6723
4000	1.75	1.16	53.98	27.94	38.10	22.86	57.15	M5755-ND	19.02	13.99	6724
8000	1.00	3.34	53.98	27.94	38.10	22.86	57.15	M5756-ND	19.02	13.99	6725
25	2.50	.040	13.97	10.79	15.24	6.35	25.40	M5757-ND	10.91	8.03	6726
35	2.50	.035	17.78	10.79	15.24	6.35	25.40	M5758-ND	10.91	8.03	6727
50	2.50	.060	19.05	10.79	15.24	6.35	25.40	M5759-ND	10.91	8.03	6728
100	2.50	.080	21.59	10.79	15.24	6.35	25.40	M5760-ND	10.91	8.03	6729
70	3.00	.050	21.59	10.79	15.24	6.35	25.40	M5761-ND	10.91	8.03	6730
40	4.00	.025	21.59	10.79	15.24	6.35	25.40	M5762-ND	10.91	8.03	6731

Common Mode Choke with Header — 8100 Series

8101-8103 Series



8104-8121 Series

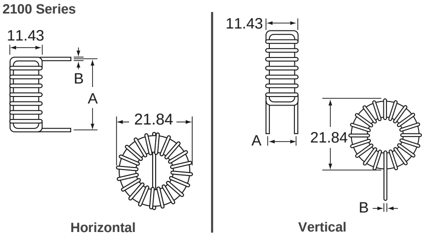


L (mH) Min. @ 1KHz	I Max. (A)	R,dc Max. Ohms	Dimensions (mm) A Max.	B ±0.01	C ±0.015	D ±0.015	E Max.	Digi-Key Part No.	Price Each 1	100	J.W. Miller Part No.
4	1.7	0.173	19.30	10.79	15.24	6.35	22.86	M9836-ND	6.07	4.47	8101
2.5	2.4	0.09	19.30	10.79	15.24	6.35	22.86	M9837-ND	6.07	4.47	8102
1	4.8	0.022	19.30	10.79	15.24	6.35	22.86	M9838-ND	6.07	4.47	8103
10	2.4	0.17	30.48	15.24	20.32	10.16	30.48	M9839-ND	9.54	7.02	8104
7	2.8	0.12	30.48	15.24	20.32	10.16	30.48	M9840-ND	9.54	7.02	8105
5	3.7	0.07	30.48	15.24	20.32	10.16	30.48	M9841-ND	9.54	7.02	8106
2	6.6	0.022	30.48	15.24	20.32	10.16	30.48	M9842-ND	9.54	7.02	8107
1	10	0.01	30.48	15.24	20.32	10.16	30.48	M9843-ND	9.54	7.02	8108
30	2.3	0.33	34.29	20.32	22.86	15.24	36.83	M9844-ND	14.33	10.54	8109
20	2.9	0.21	34.29	20.32	22.86	15.24	36.83	M9845-ND	14.33	10.54	8110
12	4	0.11	34.29	20.32	22.86	15.24	36.83	M9846-ND	14.33	10.54	8111
8	5.6	0.055	34.29	20.32	22.86	15.24	36.83	M9847-ND	14.33	10.54	8112
5	8.9	0.022	36.83	20.32	22.86	15.24	38.10	M9848-ND	14.33	10.54	8113
2.5	12.5	0.011	36.83	20.32	22.86	15.24	38.10	M9849-ND	14.33	10.54	8114
1.2	16	0.006	38.10	20.32	22.86	15.24	38.86	M9850-ND	14.33	10.54	8115
50	2.3	0.45	39.37	20.32	22.86	15.24	41.91	M9851-ND	19.07	14.03	8116
36	2.9	0.3	39.37	20.32	22.86	15.24	41.91	M9852-ND	19.07	14.03	8117
7.3	9.3	0.032	41.91	20.32	22.86	15.24	41.91	M9853-ND	19.07	14.03	8118
4	14.5	0.012	43.18	22.86	30.48	17.78	41.91	M9854-ND	19.07	14.03	8119
2.4	17	0.008	43.18	22.86	30.48	17.78	41.91	M9855-ND	19.07	14.03	8120
1	20	0.007	43.18	22.86	30.48	17.78	41.91	M9856-ND	19.07	14.03	8121

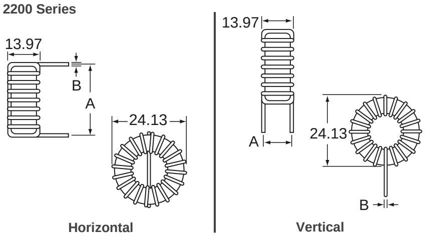
J.W.Miller
MAGNETICS

High Current Toroid Inductor

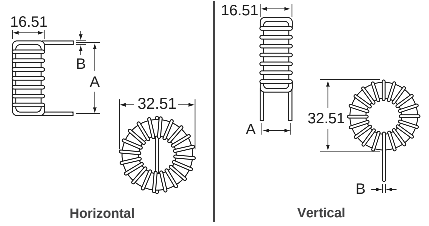
2100 Series



2200 Series



2300 Series



L (uH) ±15% @ 1KHz	I, dc (A)	L (uH) ±15% @ I Rated	R,dc Max. Ohms	Dimensions (mm) A Max.	Dimensions (mm) B Min.	Digi-Key Part No.	Price Each 1	Price Each 100	J.W. Miller Part No.
2100 Series — Horizontal									
10	10.8	6.3	0.006	19.56	1.35	M9764-ND	3.10	2.28	2101-H
12	10.3	7.4	0.007	19.56	1.35	M9765-ND	3.10	2.28	2102-H
15	7.7	10.2	0.012	19.30	1.07	M9766-ND	3.10	2.28	2103-H
18	7.4	11.9	0.013	19.30	1.07	M9767-ND	3.10	2.28	2104-H
22	7.0	14.2	0.015	19.30	1.07	M9768-ND	3.10	2.28	2105-H
27	5.3	19.1	0.026	19.05	0.86	M9769-ND	3.10	2.28	2106-H
33	5.0	22.8	0.029	19.05	0.86	M9770-ND	3.10	2.28	2107-H
39	4.8	26.4	0.032	19.05	0.86	M9771-ND	3.10	2.28	2108-H
47	3.6	34.7	0.055	19.05	0.69	M9772-ND	3.10	2.28	2109-H
56	3.4	40.6	0.060	19.05	0.69	M9773-ND	3.10	2.28	2110-H
68	3.3	48.3	0.067	19.05	0.69	M9774-ND	3.10	2.28	2111-H
100	2.4	75.2	0.13	18.80	0.56	M9775-ND	3.10	2.28	2112-H
120	2.2	88.5	0.15	18.80	0.56	M9776-ND	3.10	2.28	2113-H
150	3.4	84.3	0.062	20.07	0.86	M9777-ND	3.10	2.28	2114-H
180	2.6	113.1	0.11	19.56	0.69	M9778-ND	3.10	2.28	2115-H
220	2.4	134.4	0.12	19.56	0.69	M9779-ND	3.10	2.28	2116-H
270	1.8	181.6	0.21	19.30	0.56	M9780-ND	3.51	2.58	2117-H
330	1.7	216.3	0.23	19.30	0.56	M9781-ND	3.51	2.58	2118-H
390	1.7	250.1	0.25	19.30	0.56	M9782-ND	3.51	2.58	2119-H
470	1.6	293.8	0.28	19.30	0.56	M9783-ND	3.51	2.58	2120-H
560	1.5	341.5	0.30	20.07	0.56	M9784-ND	3.51	2.58	2121-H
680	1.4	403.2	0.33	20.07	0.56	M9785-ND	3.51	2.58	2122-H
820	1.4	472.8	0.37	20.07	0.56	M9786-ND	3.51	2.58	2123-H
1000	1.3	559.2	0.40	20.57	0.56	M9787-ND	3.51	2.58	2124-H
2200 Series — Horizontal									
10	12.5	6.7	0.007	22.35	1.35	M9788-ND	3.92	2.88	2201-H
12	12.0	7.9	0.008	22.35	1.35	M9789-ND	3.92	2.88	2202-H
15	11.3	9.6	0.008	22.35	1.35	M9790-ND	3.92	2.88	2203-H
18	10.8	11.3	0.009	22.35	1.35	M9791-ND	3.92	2.88	2204-H
22	10.3	13.4	0.010	22.35	1.35	M9792-ND	3.92	2.88	2205-H
27	9.8	16.0	0.011	22.35	1.35	M9793-ND	3.92	2.88	2206-H
33	7.4	21.6	0.020	22.10	1.07	M9794-ND	3.92	2.88	2207-H
39	7.1	25.0	0.022	22.10	1.07	M9795-ND	3.92	2.88	2208-H
47	6.7	29.3	0.024	22.10	1.07	M9796-ND	3.92	2.88	2209-H
56	6.4	34.1	0.026	22.10	1.07	M9797-ND	3.92	2.88	2210-H
68	4.9	45.7	0.046	21.84	0.86	M9798-ND	3.92	2.88	2211-H
100	4.4	64.0	0.056	21.84	0.86	M9799-ND	3.92	2.88	2212-H
120	3.3	84.4	0.098	21.84	0.69	M9800-ND	3.92	2.88	2213-H
150	3.1	102.7	0.11	21.84	0.69	M9801-ND	3.92	2.88	2214-H
180	3.8	105.9	0.075	22.86	0.86	M9802-ND	3.92	2.88	2215-H
220	3.6	125.6	0.083	22.86	0.86	M9803-ND	3.92	2.88	2216-H
270	3.4	149.4	0.092	22.86	0.86	M9804-ND	4.32	3.18	2217-H
330	3.3	176.8	0.10	22.86	0.86	M9805-ND	4.32	3.18	2218-H
390	2.5	235.3	0.18	22.35	0.69	M9806-ND	4.32	3.18	2219-H
470	2.3	275.9	0.19	22.35	0.69	M9807-ND	4.32	3.18	2220-H
560	2.2	320.1	0.21	22.35	0.69	M9808-ND	4.32	3.18	2221-H
680	2.1	377.2	0.23	23.11	0.69	M9809-ND	4.32	3.18	2222-H
820	2.0	441.5	0.26	23.11	0.69	M9810-ND	4.32	3.18	2223-H
1000	1.9	521.3	0.28	23.11	0.69	M9811-ND	4.32	3.18	2224-H
2300 Series — Horizontal									
10	20.0	6.7	0.005	29.97	1.68	M9812-ND	4.73	3.48	2301-H
12	19.1	7.8	0.005	29.97	1.68	M9813-ND	4.73	3.48	2302-H
15	18.0	9.5	0.006	29.97	1.68	M9814-ND	4.73	3.48	2303-H
18	17.2	11.1	0.006	29.97	1.68	M9815-ND	4.73	3.48	2304-H
22	16.4	13.2	0.007	29.97	1.68	M9816-ND	4.73	3.48	2305-H
27	15.6	15.7	0.008	29.97	1.68	M9817-ND	4.73	3.48	2306-H
33	11.7	21.3	0.013	28.96	1.35	M9818-ND	4.73	3.48	2307-H
39	11.2	24.7	0.014	28.96	1.35	M9819-ND	4.73	3.48	2308-H
47	10.7	29.0	0.016	28.96	1.35	M9820-ND	4.73	3.48	2309-H
56	10.2	33.7	0.017	28.96	1.35	M9821-ND	4.73	3.48	2310-H
68	7.7	45.2	0.030	28.70	1.07	M9822-ND	4.73	3.48	2311-H
100	7.0	63.1	0.037	28.70	1.07	M9823-ND	4.73	3.48	2312-H
120	6.7	73.9	0.040	28.70	1.07	M9824-ND	4.73	3.48	2313-H
150	5.0	101.4	0.071	28.45	0.86	M9825-ND	4.73	3.48	2314-H
180	4.8	118.9	0.078	28.45	0.86	M9826-ND	4.73	3.48	2315-H
220	5.8	123.8	0.054	29.72	1.07	M9827-ND	5.15	3.79	2316-H
270	5.5	147.2	0.060	29.72	1.07	M9828-ND	5.15	3.79	2317-H
330	5.2	174.1	0.067	29.72	1.07	M9829-ND	5.15	3.79	2318-H
390	5.0	200.2	0.072	29.72	1.07	M9830-ND	5.15	3.79	2319-H
470	3.8	271.4	0.13	29.46	0.86	M9831-ND	5.15	3.79	2320-H
560	3.6	314.8	0.14	29.46	0.86	M9832-ND	5.15	3.79	2321-H
680	3.4	370.7	0.15	29.46	0.86	M9833-ND	5.15	3.79	2322-H
820	2.6	500.9	0.27	28.96	0.69	M9834-ND	5.15	3.79	2323-H
1000	2.4	593.6	0.30	28.96	0.69	M9835-ND	5.15	3.79	2324-H

L (uH) ±15% @ 1KHz	I, dc (A)	L (uH) ±15% @ I Rated	R,dc Max. Ohms	Dimensions (mm) A Max.	Dimensions (mm) B Min.	Digi-Key Part No.	Price Each 1	Price Each 100	J.W. Miller Part No.
2100 Series — Vertical									
10	10.8	6.3	0.006	8.64	1.35	M9857-ND	3.10	2.28	2101-V
12	10.3	7.4	0.007	8.64	1.35	M9858-ND	3.10	2.28	2102-V
15	7.7	10.2	0.012	8.38	1.07	M9859-ND	3.10	2.28	2103-V
18	7.4	11.9	0.013	8.38	1.07	M9860-ND	3.10	2.28	2104-V
22	7.0	14.2	0.015	8.38	1.07	M9861-ND	3.10	2.28	2105-V
27	5.3	19.1	0.026	8.13	0.86	M9862-ND	3.10	2.28	2106-V
33	5.0	22.8	0.029	8.13	0.86	M9863-ND	3.10	2.28	2107-V
39	4.8	26.4	0.032	8.13	0.86	M9864-ND	3.10	2.28	2108-V
47	3.6	34.7	0.055	7.87	0.69	M9865-ND	3.10	2.28	2109-V
56	3.4	40.6	0.060	7.87	0.69	M9866-ND	3.10	2.28	2110-V
68	3.3	48.3	0.067	7.87	0.69	M9867-ND	3.10	2.28	2111-V
100	2.4	75.2	0.13	7.87	0.56	M9868-ND	3.10	2.28	2112-V
120	2.2	88.5	0.15	7.87	0.56	M9869-ND	3.10	2.28	2113-V
150	3.4	84.3	0.062	8.89	0.86	M9870-ND	3.10	2.28	2114-V
180	2.6	113.1	0.11	8.64	0.69	M9871-ND	3.10	2.28	2115-V
220	2.4	134.4	0.12	8.64	0.69	M9872-ND	3.10	2.28	2116-V
270	1.8	181.6	0.21	8.38	0.56	M9873-ND	3.51	2.58	2117-V
330	1.7	216.3	0.23	8.38	0.56	M9874-ND	3.51	2.58	2118-V
390	1.7	250.1	0.25	8.38	0.56	M9875-ND	3.51	2.58	2119-V
470	1.6	293.8	0.28	8.89	0.56	M9876-ND	3.51	2.58	2120-V
560	1.5	341.5	0.30	8.89	0.56	M9877-ND	3.51	2.58	2121-V
680	1.4	403.2	0.33	8.89	0.56	M9878-ND	3.51	2.58	2122-V
820	1.4	472.8	0.37	8.89	0.56	M9879-ND	3.51	2.58	2123-V
1000	1.3	559.2	0.40	9.40	0.56	M9880-ND	3.51	2.58	2124-V
2200 Series — Vertical									
10	12.5	6.7	0.007	11.68	1.35	M9881-ND	3.92	2.88	2201-V
12	12.0	7.9	0.008	11.68	1.35	M9882-ND	3.92	2.88	2202-V
15	11.3	9.6	0.008	11.68	1.35	M9883-ND	3.92	2.88	2203-V
18	10.8	11.3	0.009	11.68	1.35	M9884-ND	3.92	2.88	2204-V
22	10.3	13.4	0.010	11.68	1.35	M9885-ND	3.92	2.88	2205-V
27	9.8	16.0	0.011	11.68	1.35	M9886-ND	3.92	2.88	2206-V
33	7.4	21.6	0.020	11.43	1.07	M9887-ND	3.92	2.88	2207-V
39	7.1	25.0	0.022	11.43	1.07	M9888-ND	3.92	2.88	2208-V
47	6.7	29.3	0.024	11.43	1.07	M9889-ND	3.92	2.88	2209-V
56	6.4	34.1	0.026	11.43	1.07	M9890-ND	3.92	2.88	2210-V
68	4.9	45.7	0.046	11.18	0.86	M9891-ND	3.92	2.88	2211-V
100	4.4	64.0	0.056	11.18	0.86	M9892-ND	3.92	2.88	2212-V
120	3.3	84.4	0.098	11.18	0.69	M9893-ND	3.92	2.88	2213-V
150	3.1	102.7	0.11	11.18	0.69	M9894-ND	3.92	2.88	2214-V
180	3.8	105.9	0.075	12.19	0.86	M9895-ND	3.92	2.88	2215-V
220	3.6	125.6	0.083	12.19	0.86	M9896-ND	3.92	2.88	2216-V
270	3.4	149.4	0.092	12.19	0.86	M9897-ND	4.32	3.18	2217-V
330	3.3	176.8	0.10	12.19	0.86	M9898-ND	4.32	3.18	2218-V
390	2.5	235.3	0.18	11.68	0.69	M9899-ND	4.32	3.18	2219-V
470	2.3	275.9	0.19	11.68	0.69	M9900-ND	4.32	3.18	2220-V
560	2.2	320.1	0.21	11.68	0.69	M9901-ND	4.32	3.18	2221-V
680	2.1	377.2	0.23	12.45	0.69	M9902-ND	4.32	3.18	2222-V
820	2.0	441.5	0.26	12.45	0.69	M9903-ND	4.32	3.18	2223-V
1000	1.9	521.3	0.28	12.45	0.69	M9904-ND	4.32	3.18	2224-V
2300 Series — Vertical									
10	20.0	6.7	0.005	14.22	1.68	M9905-ND	4.73	3.48	2301-V
12	19.1	7.8	0.005	14.22	1.68	M9906-ND	4.73	3.48	2302-V
15	18.0	9.5	0.006	14.22	1.68	M9907-ND	4.73	3.48	2303-V
18	17.2	11.1	0.006	14.22	1.68	M9908-ND	4.73	3.48	2304-V
22	16.4	13.2	0.007	14.22	1.68	M9909-ND	4.73	3.48	2305-V
27	15.6	15.7	0.008	14.22	1.68	M9910-ND	4.73	3.48	2306-V
33	11.7	21.3	0.013	13.46	1.35	M9911-ND	4.73	3.48	2307-V
39	11.2	24.7	0.014	13.46	1.35	M9912-ND	4.73	3.48	2308-V
47	10.7	29.0	0.016	13.46	1.35	M9913-ND	4.73	3.48	2309-V
56	10.2	33.7	0.017	13.46	1.35	M9914-ND	4.73	3.48	2310-V
68	7.7	45.2	0.030	13.21	1.07	M9915-ND	4.73	3.48	2311-V
100	7.0	63.1	0.037	13.21	1.07	M9916-ND	4.73	3.48	2312-V
120	6.7	73.9	0.040	13.21	1.07	M9917-ND	4.73	3.48	2313-V
150	5.0	101.4	0.071	12.95	0.86	M9918-ND	4.73	3.48	2314-V
180	4.8	118.9	0.078	12.95	0.86	M9919-ND	4.73	3.48	2315-V
220	5.8	123.8	0.054	14.22	1.07	M9920-ND	5.15	3.79	2316-V
270	5.5	147.2	0.060	14.22	1.07	M9921-ND	5.15	3.79	2317-V
330	5.2	174.1	0.067	14.22	1.07	M9922-ND	5.15	3.79	2318-V
390	5.0	200.2	0.072	14.22	1.07	M9923-ND	5.15	3.79	2319-V
470	3.8	271.4	0.13	13.72	0.86	M9924-ND	5.15	3.79	2320-V
560	3.6	314.8	0.14	13.72	0.86	M9925-ND	5.15	3.79	2321-V
680	3.4	370.7	0.15	13.72	0.86	M9926-ND	5.15	3.79	2322-V
820	2.6	500.9	0.27	13.46	0.69	M9927-ND	5.15	3.79	2323-V
1000	2.4	593.6	0.30	13.46	0.69	M9928-ND	5.15	3.79	2324-V

J.W.Miller
MAGNETICS

Epoxy Conformal Coated Inductors

Form Length: .300" (7.62mm)

Lead Length: 2.62" (66.55mm)

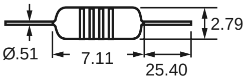
Form Diameter: .120" (3.05mm)

Leads: .022"Ø (.56mm Ø)

L± 10% µH	Q Min.	Test Freq. MHz	I, dc Max. mA	Digi-Key Part No.	Price Each 1	100	J.W. Miller Part No.
Core							
.10	40	25.0	1100	M8001-ND	.89	.65	8230-94
.12	40	25.0	1100	M8002-ND	.89	.65	8230-96
.15	38	25.0	1100	M8003-ND	.89	.65	8230-00
.18	35	25.0	1010	M8004-ND	.89	.65	8230-02
.22	33	25.0	935	M8005-ND	.89	.65	8230-04
.27	33	25.0	875	M8006-ND	.89	.65	8230-06
.33	30	25.0	780	M8007-ND	.89	.65	8230-08
.39	30	25.0	640	M8008-ND	.89	.65	8230-10
.47	30	25.0	590	M8009-ND	.89	.65	8230-12
.56	30	25.0	495	M8010-ND	.89	.65	8230-14
.68	28	25.0	450	M8011-ND	.89	.65	8230-16
.82	28	25.0	380	M8012-ND	.89	.65	8230-18
1.00	25	25.0	350	M8013-ND	.89	.65	8230-20
Iron Core							
1.20	25	7.9	825	M8014-ND	1.13	.83	8230-22
1.50	28	7.9	745	M8015-ND	1.13	.83	8230-24
1.80	30	7.9	640	M8016-ND	1.13	.83	8230-26
2.20	30	7.9	550	M8017-ND	1.13	.83	8230-28
2.70	37	7.9	495	M8018-ND	1.13	.83	8230-30
3.30	45	7.9	380	M8019-ND	1.13	.83	8230-32
3.90	45	7.9	350	M8020-ND	1.13	.83	8230-34
4.70	45	7.9	320	M8021-ND	1.13	.83	8230-36
5.60	50	7.9	260	M8022-ND	1.44	1.06	8230-38
6.80	50	7.9	245	M8023-ND	1.44	1.06	8230-40
8.20	55	7.9	210	M8024-ND	1.44	1.06	8230-42
10.00	55	7.9	180	M8025-ND	1.44	1.06	8230-44
12.00	45	2.5	210	M8026-ND	1.52	1.11	8230-46
15.00	45	2.5	205	M8027-ND	1.52	1.11	8230-48
18.00	50	2.5	195	M8028-ND	1.52	1.11	8230-50
22.00	50	2.5	190	M8029-ND	1.52	1.11	8230-52
27.00	50	2.5	185	M8030-ND	1.52	1.11	8230-54
Ferrite Core							
33.00	45	2.5	187	M8031-ND	1.59	1.17	8230-56
39.00	45	2.5	180	M8032-ND	1.59	1.17	8230-58
47.00	45	2.5	165	M8033-ND	1.59	1.17	8230-60
56.00	45	2.5	145	M8034-ND	1.59	1.17	8230-62
68.00	50	2.5	135	M8035-ND	1.59	1.17	8230-64
82.00	50	2.5	130	M8036-ND	1.59	1.17	8230-66
100.00	50	2.5	125	M8037-ND	1.59	1.17	8230-68
120.00	30	.79	97	M8038-ND	1.65	1.21	8230-70
150.00	30	.79	85	M8039-ND	1.65	1.21	8230-72
180.00	30	.79	79	M8040-ND	1.65	1.21	8230-74
220.00	30	.79	73	M8041-ND	1.65	1.21	8230-76
270.00	30	.79	65	M8042-ND	1.65	1.21	8230-78
330.00	30	.79	62	M8043-ND	1.65	1.21	8230-80
390.00	30	.79	55	M8044-ND	1.65	1.21	8230-82
470.00	30	.79	50	M8045-ND	1.74	1.27	8230-84
560.00	30	.79	48	M8046-ND	1.74	1.27	8230-86
680.00	30	.79	42	M8047-ND	1.74	1.27	8230-88
820.00	30	.79	40	M8048-ND	1.74	1.27	8230-90
1,000.00	30	.79	38	M8049-ND	1.74	1.27	8230-92

J.W.Miller
MAGNETICS

High Quality Epoxy Conformal Coated Inductors



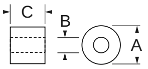
Operating Temp.: -20°C to +105°C
Working Voltage: 250 VDC max.
Material: coating-epoxy leads-tinned copper
Core Material: Ferrite.

L± 20% µH	Q Min.	Test Freq. MHz	I, dc Max. mA	Digi-Key Part No.	Price Each 1	100	J.W. Miller Part No.
.10	40	25.0	500	M7801-ND	.55	.40	78FR10M
.12	40	25.0	500	M7802-ND	.55	.40	78FR12M
.15	40	25.0	500	M7803-ND	.55	.40	78FR15M
.18	40	25.0	450	M7804-ND	.55	.40	78FR18M
.22*	40	25.0	1025	M7805-ND	.55	.40	78FR22K
.27*	40	25.0	950	M7806-ND	.55	.40	78FR27K
.33*	40	25.0	815	M7807-ND	.55	.40	78FR33K
.39*	40	25.0	700	M7808-ND	.55	.40	78FR39K
.47*	40	25.0	650	M7809-ND	.55	.40	78FR47K
.56*	40	25.0	545	M7810-ND	.55	.40	78FR56K
.68*	40	25.0	495	M7811-ND	.55	.40	78FR68K
.82*	40	25.0	415	M7812-ND	.55	.40	78FR82K
1.0*	40	25.0	385	M7813-ND	.55	.40	78F1R0K
1.2*	40	7.9	590	M7814-ND	.55	.40	78F1R2K
1.5*	45	7.9	535	M7815-ND	.55	.40	78F1R5K
1.8*	50	7.9	455	M7816-ND	.55	.40	78F1R8K
2.2*	50	7.9	395	M7817-ND	.55	.40	78F2R2K
2.7*	50	7.9	355	M7818-ND	.55	.40	78F2R7K
3.3†	50	7.9	270	M7819-ND	.55	.40	78F3R3J
3.9†	45	7.9	250	M7820-ND	.55	.40	78F3R9J
4.7†	45	7.9	230	M7821-ND	.55	.40	78F4R7J
5.6†	45	7.9	185	M7822-ND	.55	.40	78F5R6J
6.8†	40	7.9	175	M7823-ND	.55	.40	78F6R8J
8.2†	40	7.9	155	M7824-ND	.55	.40	78F8R2J
10†	40	2.5	130	M7825-ND	.55	.40	78F100J
12†	45	2.5	155	M7826-ND	.55	.40	78F120J
15†	50	2.5	150	M7827-ND	.55	.40	78F150J
18†	50	2.5	145	M7828-ND	.55	.40	78F180J
22†	50	2.5	140	M7829-ND	.55	.40	78F220J
27†	50	2.5	135	M7830-ND	.55	.40	78F270J
33†	50	2.5	193	M7831-ND	.55	.40	78F330J
39†	50	2.5	185	M7832-ND	.55	.40	78F390J
47†	60	2.5	167	M7833-ND	.55	.40	78F470J
56†	60	2.5	150	M7834-ND	.55	.40	78F560J
68†	60	2.5	137	M7835-ND	.55	.40	78F680J
82†	60	2.5	132	M7836-ND	.55	.40	78F820J
100†	60	2.5	125	M7837-ND	.55	.40	78F101J
120†	60	0.79	100	M7838-ND	.55	.40	78F121J
150†	60	0.79	90	M7839-ND	.55	.40	78F151J
180†	60	0.79	84	M7840-ND	.55	.40	78F181J
220†	60	0.79	76	M7841-ND	.55	.40	78F221J
270†	60	0.79	70	M7842-ND	.55	.40	78F271J
330†	60	0.79	65	M7843-ND	.55	.40	78F331J
390†	60	0.79	60	M7844-ND	.55	.40	78F391J
470†	60	0.79	53	M7845-ND	.55	.40	78F471J
560†	60	0.79	51	M7846-ND	.55	.40	78F561J
680†	60	0.79	45	M7847-ND	.55	.40	78F681J
820†	60	0.79	43	M7848-ND	.55	.40	78F821J
1000†	60	0.79	41	M7849-ND	.55	.40	78F102J

* Rated at L ± 10% µH. † Rated at L ± 5% µH.

J.W.Miller
MAGNETICS

Ferrite Beads



The addition of a Ferrite Bead to a piece of wire causes the impedance of the lead to increase and acts like a small RF choke at high frequencies. It is possible to dissipate high frequency parasitic signals and attenuate undesirable frequencies that travel on DC circuits by the use of beads.

Freq. Range	Dimensions (mm) A	B	C	Digi-Key Part No.	Pricing 1	100	J.W.Miller Part No.
0-40 MHz	1.32	.69	2.16	M2301-ND	.49	36.00	FB73-085
40-200 MHz	3.30	1.19	5.74	M2302-ND	.25	18.00	FB43-226
0-40 MHz	3.30	1.19	5.74	M2303-ND	.36	27.00	FB73-226
40-200 MHz	3.30	1.19	3.00	M2304-ND	.12	9.00	FB43-110
200+ MHz	3.30	1.19	3.00	M2305-ND	.25	18.00	FB64-110
0-40 MHz	3.30	1.19	3.00	M2306-ND	.25	18.00	FB73-110
40-200MHz	4.83	1.45	10.72	M2307-ND	.36	27.00	FB43-422
0-40 MHz	4.83	1.45	10.72	M2308-ND	.36	27.00	FB73-422
40-200 MHz	7.39	2.26	7.29	M2309-ND	.36	27.00	FB43-287
0-40 MHz	7.39	2.26	7.29	M2310-ND	.49	36.00	FB73-287

Wide-Band Chokes

Fig. 1

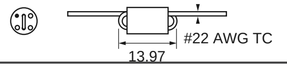


Fig. 2

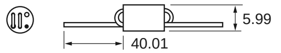


Fig. 3

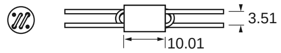
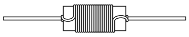


Fig.	No. of Turns	Min. Z (Ω)	Freq. (MHz)	Digi-Key Part No.	Price Each 1	100	J.W.Miller Part No.
1	1 1/2	300	120	M2093-ND	1.37	1.01	FB20009-3B
1	1 1/2	350	250	M2194-ND	1.25	.92	FB20019-4B
2	2 1/2	600	50	M2103-ND	1.25	.92	FB20010-3B
2	2 1/2	700	180	M2204-ND	1.25	.92	FB20020-4B
3	2 x 1 1/2	700	50	M2113-ND	1.37	1.01	FB20011-3B
3	2 x 1 1/2	800	110	M2214-ND	1.25	.92	FB20021-4B

Hash Choke



Dimensions: Form Length: 31.75mm; Lead Length: 31.75mm

L (µH)	R, dc Max. (Ω)	I, dc Max. (A)	Coil Dia. Max. (mm)	Digi-Key Part No.	Price Each 1	100	J.W. Miller Part No.
Ferrite Core							
4	.012	8	9.65	M5230-ND	2.39	1.75	5230
40	.082	3	7.87	M5240-ND	2.39	1.75	5240
68	.054	5	14.22	M5248-ND	2.88	2.11	5248
100	.216	2	9.65	M5250-ND	2.88	2.11	5250
125	.08	3.5	12.70	M5252-ND	3.18	2.33	5252
250	.17	2.5	11.18	M5254-ND	3.18	2.33	5254
500	.26	2	14.22	M5256-ND	3.18	2.33	5256
1000	.55	1	12.70	M5258-ND	3.27	2.40	5258

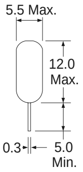
TOKO

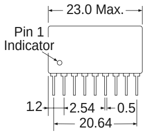
Active Filters

Toko's OpAmp based Hybrid Active Filters for Low Distortion/Low Noise performance and high reliability. Toko offers 3KHz Low pass filters and 300Hz to 3KHz Band Pass Filter. The THB227 is the most suited for analog audio applications.

Band Pass Frequency	Digi-Key Part No.	Price Each 1	10	50	Toko Part No.
300Hz - 3KHz	TK5428-ND	24.48	18.19	15.74	THB227

Combination Filter



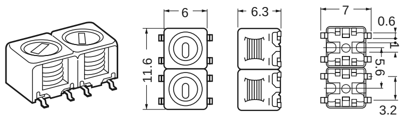


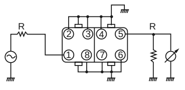
Pin No.
1 BPF OUTPUT
2 Vc
3 BPF INPUT
4 OP AMP + INPUT
5 OP AMP - INPUT
6 OP AMP OUTPUT
7 LPF OUTPUT
8 LPF INPUT
9 GND

TOKO Helical Filters

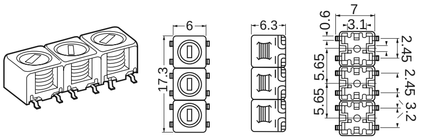
Examples of Connection Diagrams — Bottom View

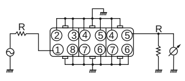
5CHW Type – Surface Mount



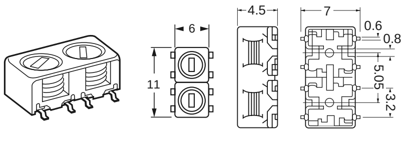


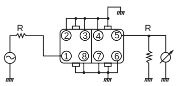
5CHT Type – Surface Mount



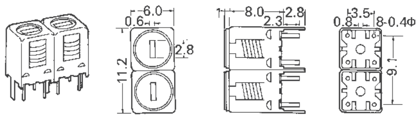


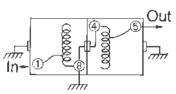
5CHLW Type – Surface Mount



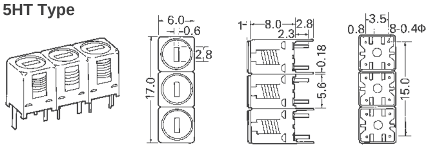


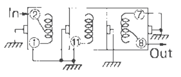
5HW Type



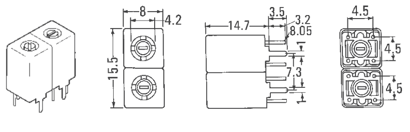


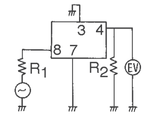
5HT Type



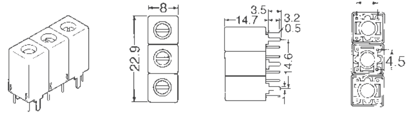


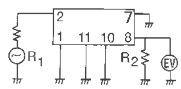
7HW Type



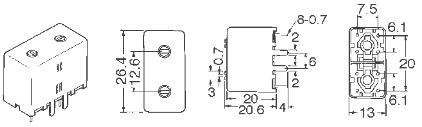


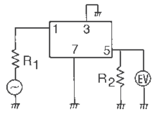
7HT Type



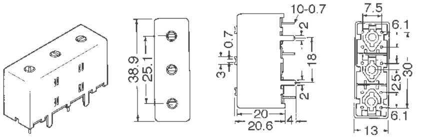


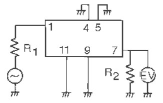
CBW Type





CBT Type





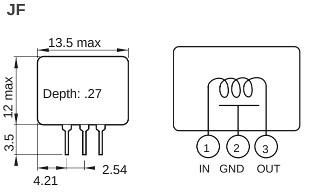
Test /Bw Freq./Min. (MHz)/(MHz)	Selectivity (Min.) dB (MHz) dB (MHz)	Ripple/ Loss dB / dB	Digi-Key Part No.	Cut Tape Pricing 1	10	Digi-Key Part No.	Tape & Reel Pricing	Toko Part No.
5CHW TYPE – Surface Mount								
420 / 10	20 (+50) 14 (–50)	0.5 / 3.0	TKS5440CT-ND	11.62	89.58	TKS5440TR-ND	3348.75/750	492S-1051A
427 / 10	20 (+50) 14 (–50)	0.5 / 3.0	TKS5441CT-ND	11.62	89.58	TKS5441TR-ND	3348.75/750	492S-1053A
435 / 10	20 (+50) 14 (–50)	0.5 / 3.5	TKS5442CT-ND	11.62	89.58	TKS5442TR-ND	3348.75/750	492S-1055A
450 / 10	17 (+50) 12 (–50)	0.5 / 3.5	TKS5443CT-ND	11.62	89.58	TKS5443TR-ND	3348.75/750	492S-1057A
456 / 10	16 (+50) 12 (–50)	0.5 / 3.5	TKS5444CT-ND	11.62	89.58	TKS5444TR-ND	3348.75/750	492S-1059A
463.5 / 10	16 (+50) 12 (–50)	0.5 / 3.5	TKS5445CT-ND	11.62	89.58	TKS5445TR-ND	3348.75/750	492S-1061A
470 / 10	15 (+50) 12 (–50)	0.5 / 3.5	TKS5446CT-ND	11.62	89.58	TKS5446TR-ND	3348.75/750	492S-1063A
5CHT TYPE – Surface Mount								
395 / 10	33 (+50) 33 (–50)	0.5 / 4.5	TKS5448CT-ND	17.16	132.28	TKS5448TR-ND	4946.25/750	493S-1066A
420 / 10	30 (+50) 30 (–50)	0.5 / 4.5	TKS5449CT-ND	17.16	132.28	TKS5449TR-ND	4946.25/750	493S-1067A
425 / 10	30 (+50) 30 (–50)	0.5 / 4.5	TKS5450CT-ND	17.16	132.28	TKS5450TR-ND	4946.25/750	493S-1068A
430 / 10	30 (+50) 30 (–50)	0.5 / 4.5	TKS5451CT-ND	17.16	132.28	TKS5451TR-ND	4946.25/750	493S-1069A
440 / 10	27 (+50) 27 (–50)	0.5 / 4.5	TKS5452CT-ND	17.16	132.28	TKS5452TR-ND	4946.25/750	493S-1071A
452 / 10	27 (+50) 27 (–50)	0.5 / 4.5	TKS5453CT-ND	17.16	132.28	TKS5453TR-ND	4946.25/750	493S-1073A
460 / 10	27 (+50) 27 (–50)	0.5 / 4.5	TKS5454CT-ND	17.16	132.28	TKS5454TR-ND	4946.25/750	493S-1075A
5CHLW TYPE – Surface Mount								
836 / 23	14 (+100) 22 (–100)	1.5 / 4.0	TKS5432CT-ND	13.17	104.23	—	—	477MS-1093A
850 / 25	17 (+100) 25 (–100)	1.0 / 2.5	TKS5433CT-ND	13.17	104.23	—	—	477MS-1032A
870 / 25	18 (+100) 25 (–100)	1.0 / 2.5	TKS5434CT-ND	13.17	104.23	—	—	477MS-1033A
881 / 23	12 (+100) 19 (–100)	1.0 / 3.5	TKS5435CT-ND	13.17	104.23	—	—	477MS-1094A
902.5 / 25	18 (+100) 24 (–100)	1.0 / 2.5	TKS5436CT-ND	13.17	104.23	TKS5436TR-ND	3801.00/1000	477MS-1034A
915 / 25	18 (+100) 25 (–100)	1.0 / 2.5	TKS5437CT-ND	13.17	104.23	TKS5437TR-ND	3801.00/1000	477MS-1035A
933 / 25	18 (+100) 25 (–100)	1.0 / 2.5	TKS5438CT-ND	13.17	104.23	TKS5438TR-ND	3801.00/1000	477MS-1036A
947.5 / 25	18 (+100) 25 (–100)	1.0 / 2.5	TKS5439CT-ND	13.17	104.23	TKS5439TR-ND	3801.00/1000	477MS-1037A

Test / Bw Freq. / Min. (MHz) / (MHz)	Selectivity (Min.) dB (MHz) dB (MHz)	Ripple/ Loss dB / dB	Digi-Key Part No.	Pricing 1	10	50	Toko Part No.
5HW Type							
365 / 6	20 (–50) 25 (+50)	1.0 / 4.5	TK5414-ND	12.18	96.41	412.26	5HW-35045A-365
475 / 8	18 (–50) 22 (+50)	1.0 / 4.5	TK5415-ND	12.18	96.41	412.26	5HW-44545A-475
530 / 10	16 (–50) 20 (+50)	1.0 / 4.5	TK5416-ND	12.18	96.41	412.26	5HW-51035A-530
670 / 14	23 (–100) 26 (+100)	1.0 / 3.5	TK5418-ND	12.18	96.41	412.26	5HW-68050A-700
820 / 16	22 (–100) 24 (+100)	1.0 / 3.5	TK5419-ND	12.18	96.41	412.26	5HW-78045A-820
914 / 18	19 (–100) 24 (+100)	1.0 / 3.5	TK5420-ND	12.18	96.41	412.26	5HW-88560A-914
1010 / 16	14 (–100) 18 (+100)	1.0 / 3.5	TK5421-ND	12.18	96.41	412.26	5HW-100090A-1010
1305 / 25	18 (–100) 20 (+100)	1.0 / 3.5	TK5423-ND	12.18	96.41	412.26	5HW-125055F-1305
425 / 7	20 (–50) 25 (+50)	1.0 / 4.5	TK5424-ND	12.18	96.41	412.26	5HW-39545A-425
5HT Type							
360 / 16	33 (+50) 25 (–50)	1.0 / 4.0	TK5401-ND	13.51	106.93	457.28	5HT-36020AS-360
440 / 14	28 (+50) 25 (–50)	1.0 / 4.0	TK5403-ND	13.51	106.93	457.28	5HT-44020AS-440
480 / 14	26 (+50) 22 (–50)	1.0 / 4.0	TK5404-ND	13.51	106.93	457.28	5HT-48030AS-480
515 / 16	25 (+50) 20 (–50)	1.0 / 4.0	TK5405-ND	13.51	106.93	457.28	5HT-51535AS-515
590 / 12	34 (+50) 25 (–50)	1.0 / 4.0	TK5406-ND	13.51	106.93	457.28	5HT-59065F-590
655 / 12	30 (+50) 26 (–50)	1.0 / 4.0	TK5407-ND	13.51	106.93	457.28	5HT-65550F-655
735 / 15	28 (+50) 24 (–50)	1.0 / 4.0	TK5408-ND	13.51	106.93	457.28	5HT-73565F-735
830 / 15	26 (+50) 22 (–50)	1.0 / 4.0	TK5409-ND	13.51	106.93	457.28	5HT-83050F-830
945 / 15	22 (+50) 18 (–50)	1.0 / 4.0	TK5410-ND	13.51	106.93	457.28	5HT-94535F-945
1010 / 15	18 (+50) 14 (–50)	1.0 / 4.0	TK5411-ND	13.51	106.93	457.28	5HT-101045F-1010
1090 / 15	17 (+50) 15 (–50)	1.0 / 4.0	TK5412-ND	13.51	106.93	457.28	5HT-109065F-1090
1230 / 15	20 (+50) 16 (–50)	1.0 / 4.5	TK5413-ND	13.51	106.93	457.28	5HT-123080C-1230
7HW Type							
405 / 9	20 (–10) 15 (+10)	1.5 / 3.5	TK3301-ND	10.30	79.37	348.56	252MXPR-2535A
435 / 10.5	17 (–5) 14 (+15)	1.5 / 3.0	TK3302-ND	10.30	79.37	348.56	252MXPR-2537A
453 / 11.5	16 (–3) 13 (+7)	1.5 / 2.5	TK3303-ND	10.30	79.37	348.56	252MXPR-2767A
462 / 12	14 (–2) 11 (+8)	1.5 / 2.5	TK3304-ND	10.30	79.37	348.56	252MXPR-2689A
480 / 12.5	14 (–10) 11 (+10)	1.5 / 2.5	TK3305-ND	10.30	79.37	348.56	252MXPR-2765A
550 / 7	23 (–10) 20 (+15)	1.5 / 3.5	TK3307-ND	10.30	79.37	348.56	252HXPK-2736F
600 / 8	23 (–5) 21 (+15)	1.5 / 3.5	TK3308-ND	10.30	79.37	348.56	252HXPK-2733F
640 / 9	29 (–25) 27 (+5)	1.5 / 3.5	TK3309-ND	10.30	79.37	348.56	252HXPK-2708F
715 / 11	26 (–25) 24 (+10)	1.5 / 3.0	TK3310-ND	10.30	79.37	348.56	252HXPK-2702F
830 / 13.5	20 (–35) 18 (+10)	1.5 / 3.0	TK3311-ND	10.30	79.37	348.56	252HXPK-2774F
870 / 14	19 (–30) 16 (+15)	1.5 / 3.0	TK3312-ND	10.30	79.37	348.56	252HXPK-2770F
910 / 15	18 (–25) 15 (+10)	1.5 / 3.0	TK3313-ND	10.30	79.37	348.56	252HXPK-2737F
7HT Type							
904 / 8	40 (–60) 30 (+60)	1.0 / 5.0	TK3401-ND	12.64	97.42	427.86	302HXPK-1278B
880 / 20	16 (–40) 10 (+40)	2.0 / 3.0	TK3404-ND	12.64	97.42	427.86	302HXPK-1339D1
835 / 23	33 (–75) 10 (+35)	0.5 / 3.0	TK3403-ND	12.64	97.42	427.86	302HXPK-1328D1
510 / 35	10 (–50) 9 (+50)	1.0 / 1.5	TK3405-ND	12.64	97.42	427.86	302MXPR-1225G
1015 / 20	20 (–40) 16 (+40)	2.0 / 4.0	TK3406-ND	12.64	97.42	427.86	302HXPK-1271B
813 / 17	23 (–50) 16 (+50)	0.5 / 3.0	TK3409-ND	12.64	97.42	427.86	302HXPK-1341D1
456 / 4.5	29 (–20) 22 (+20)	0.5 / 5.0	TK3410-ND	12.64	97.42	427.86	302HXPK-1035D
433 / 7.2	23 (–15) 17 (+15)	0.5 / 5.0	TK3411-ND	12.64	97.42	427.86	302HXPK-1354D1
CBW Type							
220 / 2.0	20 (–15) 18 (+15)	0.5 / 3.0	TK3601-ND	27.12	209.01	917.96	271MT-1166A
138 / 2.2	20 (–15) 18 (+10)	1.0 / 2.5	TK3606-ND	27.12	209.01	917.96	271MT-1134A
167 / 2.4	19 (–10) 17 (+10)	1.0 / 2.5	TK3605-ND	27.12	209.01	917.96	271MT-1136A
176 / 2.6	16 (–10) 15 (+10)	1.0 / 2.5	TK3604-ND	27.12	209.01	917.96	271MT-1142A
187 / 2.8	15 (–10) 14 (+10)	1.0 / 2.5	TK3603-ND	27.12	209.01	917.96	271MT-1143A
216 / 3.0	15 (–10) 14 (+10)	1.0 / 3.0	TK3602-ND	27.12	209.01	917.96	271MT-1145A
CBT Type							
145 / 2.8	25 (–6) 25 (+6)	0.5 / 8.0	TK3506-ND	26.89	207.27	910.33	272MT-1006A
145 / 1.2	30 (–6) 30 (+6)	0.5 / 8.0	TK3504-ND	26.89	207.27	910.33	272MT-1008A
170 / 1.5	25 (–6) 25 (+6)	0.5 / 8.0	TK3502-ND	26.89	207.27	910.33	272MT-1013A
170 / 1.0	25 (–5) 25 (+5)	0.5 / 8.0	TK3505-ND	26.89	207.27	910.33	272MT-1007A
180 / 1.0	31 (–5) 30 (+5)	0.5 / 9.0	TK3503-ND	26.89	207.27	910.33	272MT-1009A
223 / 2.6	28 (–10) 40 (+20)	0.5 / 6.0	TK3501-ND	26.89	207.27	910.33	272MT-1080A

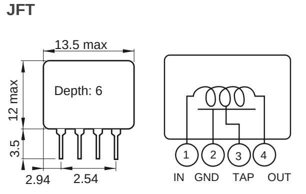
TOKO

Delay Lines 4NS Rise Time

JF



JFT



JF/JFT Features:
• Temperature Coefficient: ±200ppm/°C (typ.) • Waveform Distortion: Less than ±15% • Peak Pulse Voltage: 50V • Insulation Resistance: 100MΩ min., at 50V DC: • Compact single-in-line • High impedance, long delay time • Output available from intermediate tap

Total Delay Time	Tap Delay	Digi-Key Part No.	Pricing 1	10	100	Toko Part No.
250ns ± 7%	—	TK5311-ND	10.46	83.65	697.05	JF3250G
300ns ± 7%	—	TK5312-ND	10.46	83.65	697.05	JF3300G
300ns ± 7%	150 ± 12	TK5321-ND	16.80	126.03	667.96	JF4T300I

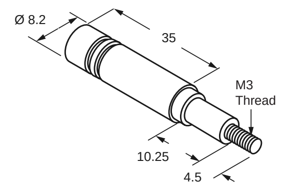
Helical Antenna for Cordless Phones

The HEA Series is a helical antenna suitable for 900 MHz cordless phones and other wireless applications. The antenna features a flexible elastomer cover.

SPECIFICATIONS:

Electrical Characteristics: • Range of Resonant Frequency: In accordance with individual specifications • Input Impedance: 50Ω Nominal • VSWR: 2Max. • Insulation Resistance: 500MΩ, min./500VDC • Dielectric Strength: 1500VAC, 1 Minute • Wavelength: 1/4 **Mechanical Characteristics:** • Mounted strength of connector: Axial direction: 49N (5kg), min.; Rotational: 49N-cm (5kg-cm), min. • Bending: 1mm, max. **Environmental Characteristics:** • Temp. Cycling: -10°C/65°C, at 3 hr per cycle (no electrical or mechanical defect to be detected.) • Operating Temp. Range: -20°C to 60°C • Storage Temperature: -30°C to 80°C

TK5201

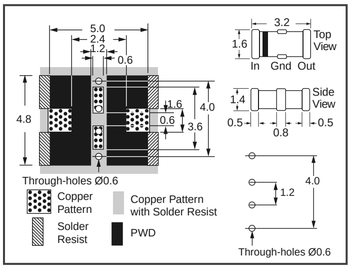


TK5201-ND Wedge Mount (HEA-101-EZ-170-00)..$3.16

Chip Low Pass Filter

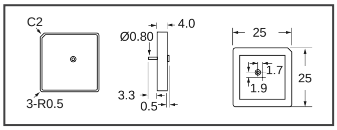
Toko's LTF is a chip multilayer low pass filter. It is an ultra compact solution, ideal for keeping unwanted harmonics of the PA and LO out of the system. Toko's proprietary ceramic multilayer material is utilized for excellent performance and exceptional reliability. Specific parts have been designed for most common systems, such as cellular, ISM-900, PDC-1.5, PCS-1900, DCS-1800, DECT, PHS, and ISM-2.4.

FEATURES: • **Insertion Loss:** 0.6dBmax (0.35dB typ) • **Bandwidth VSWR:** 1.5 max (1.15 typ) • **Attenuation:** @ 2 x (fo ± BW): 25dB min • **Impedance:** 50Ω



Nominal Fo MHz	Bandwidth MHz	Power Capacity	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Toko Part No.
836.5	25	2 W max	TKS3000CT-ND	2.26	1.50	1.13	LTF3216L-FR80GL
902.5	25	2 W max	TKS3001CT-ND	2.26	1.50	1.13	LTF3216L-FR90GL
1441	24	3 W max	TKS3005CT-ND	2.26	1.50	1.13	LTF3216L-F1R4GL
1489	24	3 W max	TKS3006CT-ND	2.26	1.50	1.13	LTF3216L-F1R4AL

Dielectric Patch Antenna



The DAK Series is a miniature dielectric antenna element for Global Positioning Systems (GPS). This patch antenna has excellent stability and sensitivity through the use of high performance proprietary ceramic material well suited for GPS frequencies.

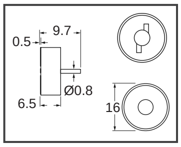
FEATURES: • One quarter the size of traditional antenna elements without loss of sensitivity • Excellent temperature stability via use of low temperature coefficient dielectric ceramics • Silver plated electrode allows very good high frequency characteristics **SPECIFICTIONS:** • Center Frequency: 1580.5 MHz (Center frequency is shifted 5MHz down when covered with a radome.) • Bandwidth: 9 MHz min. • Impedance: 50Ω • Gain @ Zenith: +5 dBi typical • Gain @ 10° Elevation: -1 dBi typical • Temperature Coefficient: 20 ppm/°C max. (-40°C to 105°C)

TK5150-ND (DAK1575MS50T)...$17.33

Dielectric Antenna Element

The DAC Series is a miniature dielectric antenna element for 2.4 GHz wireless LAN systems. This antenna has vertical polarization characteristics. The proprietary ceramic dielectric material provides excellent stability and sensitivity. It is mountable in Type II extended PCMCIA cards.

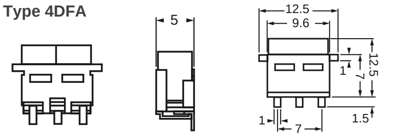
FEATURES: • Vertical polarization reception • Low profile (6.5mm max.) • Omni-directional in azimuth • Low interference design • Central feeding point terminal • Wide bandwidth • Light weight **SPECIFICATIONS:** • Center Frequency: 2450 MHz • Receiving Bandwidth: ±50 MHz min. • Impedance: 50Ω • Peak Gain: 2.15 dBi (0dBi typ.) max. • Operating Temp.: -10°C to 60°C • Storage Temp.: -20°C to 85°C • Weight: 4g



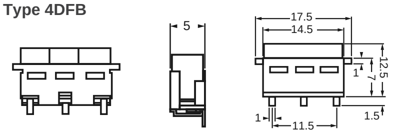
TK5151-ND (DAC2450CT1T)...$16.75

Dielectric Filters

Type 4DFA



Type 4DFB



Applications: • Cellular - AMPS/TDMA/CDMA • RF Data • Cordless Phone • ISM • Pager • SMR • GPS • Ardis **Temperature Range:** -25°C to +85°C

Center Freq. MHz	Bandwidth (fo ± MHz)	I.L (dB max.)	Selectivity dB min. @ MHz	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	1,000	Toko Part No.
Type 4DFA (2 Pole SMD Type)											
881.5	±12.5	2.0	18(*f*o ± 77.5)	TKS2601CT-ND	12.48	98.80	722.80	—	—	—	4DFA-881E-10
902.5	±12.5	2.5	18(*f*o ± 77.5)	TKS2602CT-ND	12.48	98.80	722.80	TKS2602TR-ND	2780.00	3510.00	4DFA-902E-10
947.5	±12.5	2.5	18(*f*o ± 77.5)	TKS2603CT-ND	12.48	98.80	722.80	TKS2603TR-ND	2780.00	3510.00	4DFA-947E-10
904.0	±1.0	3.8	21,30(*f*o +21.5, +44)	TKS2604CT-ND	12.48	98.80	722.80	TKS2604TR-ND	2780.00	3510.00	4DFA-904A-10
926.5	±1.0	3.8	21,30(*f*o -21.5, -44)	TKS2605CT-ND	12.48	98.80	722.80	—	—	—	4DFA-926A-11
915.0	±13.0	2.2	18(*f*o ±77.5)	TKS2606CT-ND	12.48	98.80	722.80	TKS2606TR-ND	2780.00	3510.00	4DFA-915E-10
1227.0	±5.0	2.0	7,30(*f*o ±35, 140)	TKS2607CT-ND	12.48	98.80	722.80	TKS2607TR-ND	2780.00	3510.00	4DFA-1227B-10
1575.4	±5.0	2.0: 1.4 typ	7,30(*f*o ±35, 140)	TKS2608CT-ND	12.48	98.80	722.80	TKS2608TR-ND	2780.00	3510.00	4DFA-1575B-10
1575.4	±5.0	1.2: 0.7 typ	17,20(*f*o +140, -140)	TKS2609CT-ND	12.48	98.80	722.80	TKS2609TR-ND	2780.00	3510.00	4DFA-1575B-12
2450.0	±50.0	2.0	22(*f*o -280)	TKS2610CT-ND	13.92	110.20	806.20	TKS2610TR-ND	3095.00	3910.00	4DFA-2450T-10
Type 4DFB (3 Pole SMD Type)											
860.5	±10.0	2.5	15,35(*f*o ±35,80)	TKS2612CT-ND	18.77	148.58	1086.98	TKS2612TR-ND	4180.00	5280.00	4DFB-860D-10
915.0	±13.0	2.7	12(*f*o ±32.5)	TKS2617CT-ND	18.77	148.58	1086.98	TKS2617TR-ND	4180.00	5280.00	4DFB-915E-10
2450.0	±50.0	2.2	28(*f*o -280)	TKS2618CT-ND	20.88	165.30	1209.30	TKS2618TR-ND	4645.00	5870.00	4DFB-2450T-10

TOKO

Balun Transformers

Toko's high quality balun (balanced/unbalanced) transformers are precisely wound round a double ferrite core. Toko's baluns are ideally suited for designing double balanced mixers, directional couplers, signal splitters, signal distributors, and impedance matching circuits.

9179B-ND Toko Application Notes for 458DB-456DB...**$1.95**
9180B-ND Toko Application Notes for 458DS-456DS...**$1.95**

Fig. 1

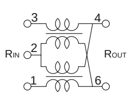


Fig. 2

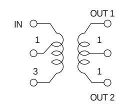
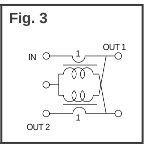
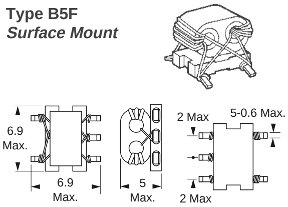


Fig. 3



Type B5F
Surface Mount



Type B7T
Leaded

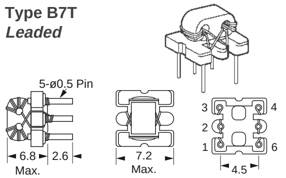
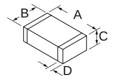


Fig.	Winding	Operating Frequency Range	Insertion Loss	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	Toko Part No.
Type B5F – Surface Mount										
1	n = 1	50MHz~400MHz	10dB max.	TKS2514CT-ND	2.89	2.58	1.87	TKS2514TR-ND	1061.00	458DB-1012
1	n = 4	6MHz~600MHz	2.5dB max.	TKS2512CT-ND	2.89	2.58	1.87	TKS2512TR-ND	1061.00	458DB-1008
1	n = 5	5MHz~500MHz	2dB max.	TKS2513CT-ND	2.89	2.58	1.87	TKS2513TR-ND	1061.00	458DB-1011
1	n = 2	400MHz~1.3GHz	4dB max.	TKS2511CT-ND	2.89	2.58	1.87	—	—	458DB-1005
2	—	20MHz~600MHz	IN to OUT-1,2 4.5dB max; OUT-1 to OUT-2 (ISOLATION) 10dBN min.	TKS2518CT-ND	2.89	2.58	1.87	TKS2518TR-ND	1061.00	458DS-1014
3	n = 4	6MHz~600MHz	IN to OUT-1 1.3dB max.; IN to OUT-2 11dB ~ 14dB	TKS2519CT-ND	2.89	2.58	1.87	TKS2519TR-ND	1061.00	458PS-1015
3	n = 6	6MHz~600MHz	IN to OUT-1 0.8dB max; IN to OUT-2 15db ~ 17dB	TKS2517CT-ND	2.89	2.58	1.87	TKS2517TR-ND	1061.00	458PS-1007
Type B7T – Leaded										
1	n = 5	5MHz~500 MHz	2dB max.	TK2513-ND	2.94	2.33	1.37	—	—	456DB-1007
2	—	20MHz~600MHz	IN to OUT-1,2 4.5dB max; OUT-1 to OUT-2 (ISOLATION) 10dBN min.	TK2518-ND	2.94	2.33	1.37	—	—	456DS-1012
3	n = 6	6MHz~600MHz	IN to OUT-1 0.8dB max; IN to OUT-2 15db ~ 17dB	TK2516-ND	2.94	2.33	1.37	—	—	456PS-1011

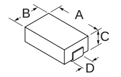
Steward

Surface Mount EMI Suppression Ferrite Chips

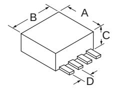
1 -- Single Line



2 -- Single Line Surface Mount



3 -- Multiline



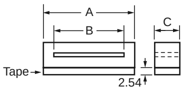
Features: • Small footprint permits use in densely populated surface mount designs. • Economical component for applications requiring discrete signal filtering.
Applications • Filtering of power input pins of oscillators and logic devices using high speed clocks. • Filtering of low frequency input/output signals entering/exiting shielded enclosures. • High frequency filtering of medium speed clocks and video signals. • Preventing oscillations in high frequency amplifiers.

Fig.	Size Code	Dimensions (mm)				Current Rating (mA)	Impedance @ 100 MHz	Digi-Key Part No.	Cut Tape Pricing			Digi-Key Part No.	Tape & Reel Pricing			Steward Part No.
		A	B	C	D				10	50	100					
1	0805	2.00	1.32	.90	0.46	3000	31	240-1007-1-ND	2.44	9.77	15.65	240-1007-2-ND	200.32/4000	499.55/12000	3912.50/100000	HI0805Q310R-00
						500	600	240-1018-1-ND	1.72	6.86	11.00	240-1018-2-ND	140.80/4000	351.12/12000	2750.00/100000	HZ0805E601R-00
						200	150	240-1021-1-ND	1.72	6.86	11.00	240-1021-2-ND	132.00/3000	211.20/6000	351.12/12000	LI0805H151R-00
						800	120	240-1041-1-ND	1.72	6.86	11.00	240-1041-2-ND	140.80/4000	351.12/12000	2750.00/100000	LI0805H121R-00
						500	40	240-1024-1-ND	1.72	6.86	11.00	240-1024-2-ND	176.00/5000	292.60/10000	2750.00/100000	LI0805H400R-00
						1500	11	240-1034-1-ND	1.72	6.86	11.00	240-1034-2-ND	140.80/4000	351.12/12000	2750.00/100000	MI0805K110R-00
						1500	40	240-1035-1-ND	1.72	6.86	11.00	240-1035-2-ND	140.80/4000	351.12/12000	2750.00/100000	MI0805K400R-00
1	1206	3.20	1.60	1.10	0.46	3000	100	240-1008-1-ND	2.73	10.92	17.50	240-1008-2-ND	210.00/3000	558.60/12000	4462.50/102000	HI1206N101R-00
						3000	50	240-1009-1-ND	2.73	10.92	17.50	240-1009-2-ND	210.00/3000	558.60/12000	4462.50/102000	Hi1206T500R-00
						3000	80	240-1010-1-ND	2.73	10.92	17.50	240-1010-2-ND	210.00/3000	336.00/6000	558.60/12000	HI1206N800R-00
						200	600	240-1019-1-ND	1.72	6.86	11.00	240-1019-2-ND	132.00/3000	211.20/6000	351.12/12000	HZ1206E601R-00
						200	90	240-1026-1-ND	1.99	7.96	12.75	240-1026-2-ND	153.00/3000	244.80/6000	406.98/12000	LI1206H900R-00
						500	26	240-1027-1-ND	1.72	6.86	11.00	240-1027-2-ND	132.00/3000	211.20/6000	351.12/12000	LI1206K260R-00
						1500	31	240-1036-1-ND	2.20	8.80	14.10	240-1036-2-ND	169.20/3000	450.07/12000	3595.50/102000	MI1206K310R-00
						1500	90	240-1037-1-ND	2.20	8.80	14.10	240-1037-2-ND	169.20/3000	450.07/12000	3595.50/102000	MI1206K900R-00
1	1210	3.20	2.50	1.30	0.46	400	60	240-1029-1-ND	3.85	15.38	24.65	240-1029-2-ND	295.80/3000	786.83/12000	6285.75/102000	LI1210E600R-00
						1500	60	240-1038-1-ND	2.88	11.51	18.45	240-1038-2-ND	221.40/3000	588.92/12000	4704.75/102000	MI1210K600R-00
1	1806	4.50	1.60	1.60	0.46	6000	60	240-1012-1-ND	4.98	19.91	31.90	240-1012-2-ND	255.20/2000	423.63/4000	574.20/6000	HI1806T600R
						300	150	240-1030-1-ND	3.73	14.91	23.90	240-1030-2-ND	191.20/2000	317.39/4000	430.20/6000	LI1806C151R-00
						500	100	240-1031-1-ND	3.73	14.91	23.90	240-1031-2-ND	191.20/2000	317.39/4000	430.20/6000	LI1806E101R
						500	80	240-1032-1-ND	3.73	14.91	23.90	240-1032-2-ND	382.40/5000	635.74/10000	5975.00/100000	LI1806E800R
						1000	80	240-1039-1-ND	3.34	13.35	21.40	240-1039-2-ND	342.40/5000	569.24/10000	5350.00/100000	MI1806J800R
1	1812	4.50	3.20	1.50	0.46	6000	80	240-1013-1-ND	5.83	23.34	37.40	240-1013-2-ND	374.00/2500	598.40/5000	994.84/10000	HI1812T800R
						300	120	240-1033-1-ND	6.22	24.90	39.90	240-1033-2-ND	399.00/2500	638.40/5000	1061.34/10000	LI1812D121R-00
						1500	120	240-1040-1-ND	7.80	31.20	50.00	240-1040-2-ND	500.00/2500	800.00/5000	1330.00/10000	MI1812K121R
1	2220	5.59	5.08	3.30	.76	4000	170	240-1014-1-ND	7.81	32.53	50.09	240-1014-2-ND	520.40/2000	863.86/4000	1170.90/6000	HI2220P171R
						4000	250	240-1015-1-ND	9.26	38.58	59.41	240-1015-2-ND	617.20/2000	1024.55/4000	1388.70/6000	HI2220P251R
						4000	600	240-1016-1-ND	11.45	47.70	73.46	240-1016-2-ND	763.20/2000	1266.91/4000	1717.20/6000	HI2220P601R

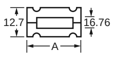
Fig.	Dimensions (mm)				# of Lines	Impedance	Digi-Key Part No.	Cut Tape Pricing			Digi-Key Part No.	Tape & Reel Pricing			Steward Part No.
	A	B	C	D				10	50	100					
2	8.51	3.05	2.54	1.47	3000	100	240-1001-1-ND	3.19	12.74	20.48	240-1001-2-ND	204.75/2500	341.25/5000	605.15/10000	28F0121-1SR
	4.06	3.05	2.54	1.47	3000	56	240-1002-1-ND	3.14	12.54	20.16	240-1002-2-ND	201.60/2500	336.00/5000	595.84/10000	28F0121-0SR
3	4.83	2.92	4.50	1.27	3	83	240-1003-1-ND	12.97	54.05	83.24	240-1003-2-ND	486.45/900	778.32/1800	969.01/2700	29F0318-0SR
	8.33	6.35	10.87	2.54	3	200	240-1004-1-ND	12.41	51.70	79.62	240-1004-2-ND	279.18/450	372.24/900	463.44/1350	29F0330-2SR
	6.10	4.19	4.50	1.27	4	119	240-1005-1-ND	14.35	59.80	92.09	240-1005-2-ND	538.20/900	861.12/1800	1072.09/2700	29F0418-1SR
	10.87	6.35	10.87	2.54	4	200	240-1006-1-ND	17.91	74.63	114.92	240-1006-2-ND	402.98/450	671.63/900	805.95/1350	29F0430-2SR

Ribbon Cable Ferrites

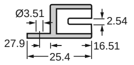
Solid Ferrite



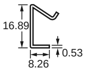
Split Ferrite



Plastic Mounting Clip



Metal Clip



Ribbon Cable Solids: Rectangular shaped solid ferrites for ribbon cable, flat cable and flex cable. Note: Ribbon cable must be slid through the solid ferrite before ends are connected.

Vinyl Dipped Ribbon Cable Solid: Rectangular shaped solid ferrite for ribbon cable, flat cable and flex cable. The ferrite is vinyl dipped to protect it from chipping and keep it from damaging other components.

Ribbon Cable Clip-On with Plastic Mounting Kit: Split ferrites for ribbon cable press fit into the plastic clamp ends protecting the ferrite and providing for secure retention. The plastic mounting clamps are designed to be attached with rivets, screws, nylon or other hardware.

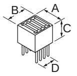
Ribbon Cable Clip-On with Metal Clips: Split ferrites for ribbon cable clamp together with metal clips providing for secure retention of the two halves of ferrite.

Max # Cond.	Dimensions (mm)			Typical Impedance @ 100 MHz	Digi-Key Part No.	Pricing			Steward Part No.
	A	B	C			1	10	50	
Ribbon Cable Ferrites Solid									
10	22.35	14.00	19.05	171Ω	240-2082-ND	.84	6.92	29.83	28R0880-000
20	38.35	26.67	25.40	231Ω	240-2084-ND	2.20	18.26	78.73	28R1517-000
26	45.21	34.54	28.45	293Ω	240-2086-ND	2.95	24.42	105.28	28R1775-000
34	55.12	43.69	25.40	309Ω	240-2090-ND	3.32	27.50	118.55	28R2170-000
34	55.12	43.69	12.70	176Ω	240-2092-ND	1.75	14.54	62.68	28R2170-100
40	63.50	52.07	28.45	295Ω	240-2088-ND	4.30	35.60	153.44	28R1779-000
50	80.01	68.58	12.70	93Ω	240-2094-ND	1.94	16.04	69.15	28R3149-000
Vinyl Dipped Ribbon Cable Ferrites Solid									
10	25.40	14.00	22.86	171Ω	240-2083-ND	5.36	44.37	191.25	28R0880-00V
26	48.26	34.54	30.48	293Ω	240-2087-ND	8.93	73.95	318.75	28R1775-00V
34	58.42	43.69	27.94	309Ω	240-2091-ND	10.15	84.10	362.50	28R2170-00V
34	58.42	43.69	15.24	176Ω	240-2093-ND	11.06	91.64	395.00	28R2170-10V

Max # Cond.	Dimensions (mm)			Typical Impedance @ 100 MHz	Digi-Key Part No.	Pricing			Steward Part No.
	A	B	C			2	10	50	
*Ribbon Cable Split Ferrite with Plastic Clip **									
26	44.96	34.29	12.70	366Ω	240-2103-ND	3.78	15.68	67.58	28S2022-0P0
40	63.50	52.07	12.70	278Ω	240-2097-ND	5.10	21.14	91.14	28S2001-0P0
50	76.20	65.28	12.70	263Ω	240-2099-ND	5.94	24.59	106.01	28S2011-0P0
60	88.90	78.23	12.70	263Ω	240-2101-ND	6.86	28.41	122.45	28S2012-0P0
*Ribbon Cable Split Ferrite with Metal Clip **									
20	38.10	26.67	12.70	245Ω	240-2104-ND	2.92	12.08	52.08	28S2023-0M0
26	44.96	34.29	12.70	366Ω	240-2102-ND	3.63	15.03	64.79	28S2022-0M0
40	63.50	52.07	12.70	278Ω	240-2096-ND	4.95	20.50	88.35	28S2001-0M0
50	76.20	65.28	12.70	263Ω	240-2098-ND	5.80	24.02	103.54	28S2011-0M0
60	88.90	78.23	12.70	263Ω	240-2100-ND	6.70	27.76	119.65	28S2012-0M0

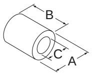
* Note: Requires 2 pieces per unit.

Through-Hole Suppression Ferrite Chips



No. of Lines	Dimensions (mm)					Impe- dance	Digi-Key Part No.	Pricing		Steward Part No.
	A	B	C	D	E			1	10	
4	10.87	10.87	10.13	7.62	2.54	342	240-2001-ND	.74	6.14	29F0428-0T0
4	10.87	5.49	10.01	2.54	2.54	285	240-2002-ND	.51	4.21	29F0429-0T0
5	13.41	10.87	10.13	7.62	2.54	342	240-2003-ND	.78	6.48	29F0528-0T0

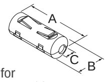
Tubular Bead

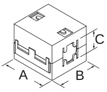


A solid ferrite EMI tubular bead for use in high volume applications where a plastic snap on a case is not required. Can be used in high volume over-mold applications where it is desired to have the filter molded in the same material as the connector backshell; or can be covered with heat shrink and shrunk in place.

Dimensions (mm)			Typical Impedance @ 100 MHz	Digi-Key Part No.	Pricing			Steward Part No.
A	B	C			1	10	50	
Tubular Bead								
14.27	28.58	6.35	295Ω	240-2078-ND	.48	3.94	16.98	28B0562-200
17.42	28.58	9.52	219Ω	240-2079-ND	.62	5.12	22.09	28B0686-200
18.67	28.58	10.16	221Ω	240-2080-ND	.73	6.01	25.93	28B0735-000
25.91	28.58	12.70	256Ω	240-2081-ND	2.12	17.55	75.64	28B1020-100
9.52	14.48	5.08	112Ω	240-2067-ND	.25	2.08	8.95	28B0375-100

Clamp-On Ferrites





Commonly called “bisected” or “split” components, clip on parts are generally associated with after market retrofit applications or for use in gaining compliance during the testing of a product. These parts provide excellent common mode EMI suppression in round cable applications and for use with network cables.

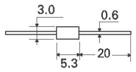
Cylinder Snap: A tube ferrite snap-on assembly designed for wires or small diameter cable.
Box Snap: A box shaped clip on ferrite assembly.

Color	Dimensions (mm)			Typ. Impedance @ 100 MHz	Digi-Key Part No.	Pricing			Steward Part No.
	A	B	C			1	10	50	
Cylinder Snap									
White	29.3	12.8	5.3	131Ω	240-2068-ND	.87	7.23	31.18	28A0392-0A0
Black	29.3	12.8	5.3	131Ω	240-2070-ND	.87	7.23	31.18	28A0392-0A2
White	40.38	19.18	9.02	199Ω	240-2065-ND	1.90	15.76	67.93	28A0640-0A0
Black	40.38	19.18	9.02	199Ω	240-2066-ND	1.90	15.76	67.93	28A0640-0A2
Box Snap									
White	32.5	17.9	7.0	151Ω	240-2074-ND	2.05	16.97	73.16	28A2025-0A0
Black	32.5	17.9	7.0	151Ω	240-2075-ND	2.05	16.97	73.16	28A2025-0A2
White	32.5	21.5	10.0	209Ω	240-2076-ND	2.48	20.56	88.60	28A2029-0A0
Black	32.5	21.5	10.0	209Ω	240-2077-ND	2.48	20.56	88.60	28A2029-0A2
White	32.5	29.0	13.0	234Ω	240-2072-ND	3.99	33.02	142.33	28A2024-0A0
Black	32.5	29.0	13.0	234Ω	240-2073-ND	3.99	33.02	142.33	28A2024-0A2

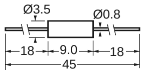
Panasonic EMI Bead Cores (For Electromagnetic Interference)

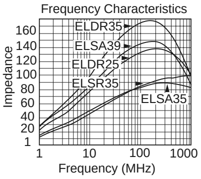
SPECIFICATIONS: • **DC Resistance:** 10mΩ maximum • **Insulation Resistance:** 10MΩ min.

ELSA-35

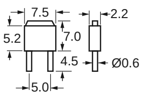


ELSA-39





ELDR-25



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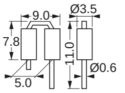
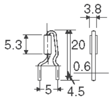


ELSR-35



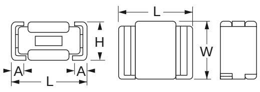
Description	Imped.*	Digi-Key Part No.	Pricing 10	100	1,000	2,000	Panasonic Part No.
Radial Dual Type (Tape & Box)	140 min.	P9817TB-ND	—	—	88.00	—	EXC-ELDR35V
Radial Dual Type (Bulk)	140 min.	P9817BK-ND	1.79	14.58	—	—	EXC-ELDR35C
Axial Single Type (Tape & Box)	110 min.	P9818TB-ND	—	—	58.00	—	EXC-ELSA39V
Axial Single Type (Bulk)	110 min.	P9818BK-ND	1.27	10.34	—	—	EXC-ELSA39
Radial Dual Type (Tape & Box)	100 min.	P9819TB-ND	—	—	—	82.00/M	EXC-ELDR25V
Radial Dual Type (Bulk)	100 min.	P9819BK-ND	1.79	14.58	118.00	—	EXC-ELDR25C
Axial Single Type (Tape & Box)	60 min.	P9820TB-ND	—	—	58.00	—	EXC-ELSA35V
Axial Lead Type (Bulk)	60 min.	P9820BK-ND	1.27	8.78	—	—	EXC-ELSA35
Radial Single Type (Tape & Box)	60 min.	P9821TB-ND	—	—	58.00	—	EXC-ELSR35T
Radial Form Type (Bulk)	60 min.	P9821BK-ND	1.27	8.78	—	—	EXC-ELSR35S

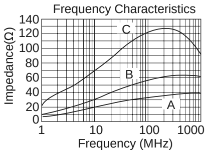
* Ω at 100MHz.

Panasonic Surface Mount Bead Cores

SPECIFICATIONS:

- **Tolerance:** ±25%
- **Test Frequency:** 100MHz
- **Rated Current:** 2 (A)
- **Flow/ Reflow Soldering**





Dia.	Imp. (ohm)	Dimensions (mm) L	W	H	A	Digi-Key Part No.	Cut Tape Price Each 10	100	Digi-Key Part No.	Tape & Reel Pricing 2,000	10,000	Panasonic Part No.
A	25	3.2	1.6	1.6	0.5	P9810CT-ND	.41	.31	P9810TR-ND	173.00/M	160.00/M	EXC-CL3216U1
B	45	3.2	2.5	1.6	0.5	P9811CT-ND	.53	.39	P9811TR-ND	221.00/M	205.00/M	EXC-CL3225U1
C	115	4.5	3.2	1.8	0.5	P9812CT-ND	.62	.46	P9812TR-ND	—	240.00/M	EXC-CL4532U1

Panasonic Surface Mount Bead Cores

0804 (0402x4)

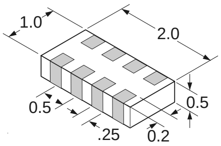
FEATURES: .02 inch (0.51mm) height, lightweight (typically only 5mg), narrow pitch, compatible with SSOP pitch

EXC-28BB Series: Suitable for high speed signals (over 50Mhz), excellent cross talk characteristics (100Mhz: <-25dB)

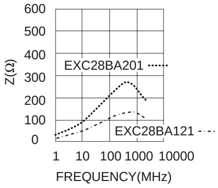
Applications: PC, LCD, DSC, Printer, PDA, MD, CD, NAVI

EXC-28BA Series: Suitable for ring suppression while maintaining wave form, excellent cross talk characteristics (100Mhz: <-30dB)

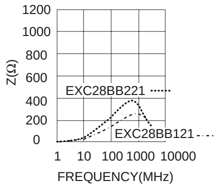
Applications: HDD, E-IDE (Ultra DMA 33), DVD, CD-ROM, CD-R, CDR-RW



EXC-28BA



EXC-28BB



Imp. 100 MHz (Ω)±25%	I (mA)	Rdc (Ω)	Digi-Key Part No.	Cut Tape Price Each 10	100	500	Digi-Key Part No.	T & R Pricing 4,000	Panasonic Part No.
120	100	0.5	P10751CT-ND	.71	.52	.38	P10751TR-ND	298.00/M	EXC-28BB121U
220	100	0.7	P10752CT-ND	.71	.52	.38	P10752TR-ND	298.00/M	EXC-28BB221U
120	100	0.5	P10753CT-ND	.71	.52	.38	P10753TR-ND	298.00/M	EXC-28BA121U
200	100	0.7	P10754CT-ND	.71	.52	.38	P10754TR-ND	298.00/M	EXC-28BA221U

Panasonic Surface Mount Bead Cores 0603

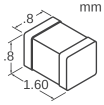
FEATURES:

EXC-3BB Series • High impedance for high speed signal line • Increase the A characteristics sharply above 40MHz and is applicable for radiated noise in the 100MHz to 300MHz range

EXC-3BP Series • Reduced DC resistance for EMI suppression. • High current rating. • Effective noise suppression at high frequency, up to 2GHz.

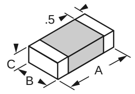
APPLICATIONS: Clock line, signal line, I/O interface circuit

Dim. in mm



Imp. 100 MHz (Ω)±25%	I (mA)	Rdc (Ω)	Digi-Key Part No.	Cut Tape Price Each 10	100	500	Digi-Key Part No.	T & R Pricing 4,000	Panasonic Part No.
220	150	0.5	P10188CT-ND	.16	.11	.07	P10188TR-ND	45.00/M	EXC-3BB221H
600	100	0.8	P10189CT-ND	.16	.11	.07	P10189TR-ND	45.00/M	EXC-3BB601H
1000	50	1	P10190CT-ND	.16	.11	.07	P10190TR-ND	45.00/M	EXC-3BB102H
60	1000	0.07	P10749CT-ND	.18	.13	.09	P10749TR-ND	66.00/M	EXC-3BP600H
120	500	0.1	P10750CT-ND	.18	.13	.09	P10750TR-ND	66.00/M	EXC-3BP121H

Panasonic Surface Mount Bead Cores High Current



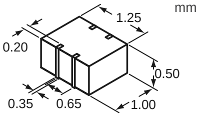
FEATURES:
Super small, high self-resonant frequency and excellent tolerance.

SPECIFICATIONS:
- **Tolerance:** ±25%
- **Test Frequency:** 100Mhz

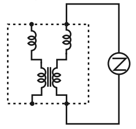
Size	Imp (Ω)	I (A)	Rdc Max. (mΩ)	Dim. (mm) A	B	C	Digi-Key Part No.	Cut Tape Price Each 10	100	500	Digi-Key Part No.	T & R Pricing 3,000	4,000	Panasonic Part No.
0603	27	4	6	1.6	.8	.8	P10436CT-ND	.27	.19	.13	P10436TR-ND	—	87.00/M	EXC-ML16A270U
0805	39	4	8	2.0	1.2	.9	P10191CT-ND	.27	.19	.13	P10191TR-ND	—	87.00/M	EXC-ML20A390U
1206	68	3	12	3.2	1.6	.9	P10437CT-ND	.26	.19	.14	P10437TR-ND	102.00/M	—	EXC-ML32A680U
1806	91	3	16	4.5	1.6	.9	P10438CT-ND	.27	.19	.13	P10438TR-ND	101.00/M	—	EXC-ML45A910U

Panasonic *NEW!* Surface Mount 2 Mode Noise Filters EXC-24CB Series

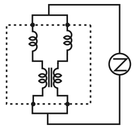
Dim. in mm



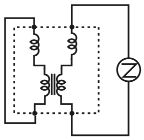
Open mode



Common mode



Normal mode

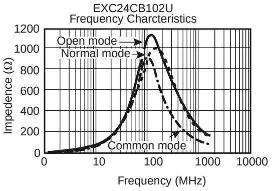


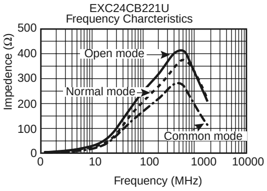
FEATURES:

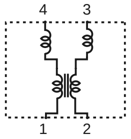
- Acoustic quality improvement of mobile phone and portable audio equipment
- Effectively suppresses both common mode noise and normal mode noise
- Small size and light weight

APPLICATIONS:

- Receiver line, microphone line and headset of mobile phone. (GSM, TDMA, PDC, etc.)
- Small digital equipment such as personal computers, printer, HDD, DVD-ROM, CD-ROM and LCD
- Digital audio and video equipment such as PDA, DSC, DVC, CD Player, DVD Player and MD Player





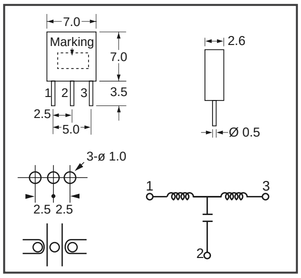


Impedance (Open Mode) @ 100MHz (Ω)	Tolerance (%)	Rated Voltage (VDC)	Rated Current (mA DC)	DC Resistance Max. (Ω)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 4,000	Panasonic Part No.
1000	±25	5	50	1.5	P11169CT-ND	.67	.50	.37	P11169TR-ND	210.00/M	EXC-24CB102U
220	±25	5	100	0.7	P11170CT-ND	.67	.50	.37	P11170TR-ND	210.00/M	EXC-24CB221U

Panasonic Filters

Digital Noise Filters

(ELKT Type)



Useful EMI noise filter when signal and noise frequency are close in frequency. T type radial lead EMI filter consisting of one capacitor and two inductors.

FEATURES: • Flat response at signal frequency and sharp noise attenuation characteristics • Minimal distortion of pulse signal wave form and excellent noise attenuation toward high frequency noise (good EMI filter for analog signal line such as video signal) **APPLICATIONS:** • Reduction of EMI noise on the signal line, I/O line and DC line circuit within OA, AV, communication equipment

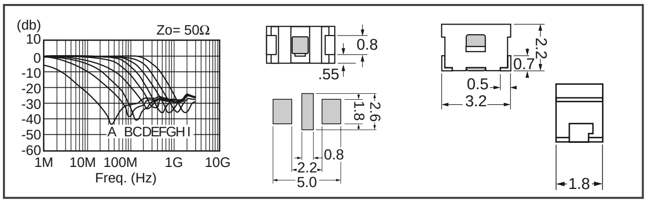
Replaces ELK-A series

Cut-off Freq.	Imped. Zo(Ω)	Rated Curr.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Box Pricing 1,000	Panasonic Part No.
2 MHz	15	100mA	P11086CT-ND	1.44	1.35	.97	P11086TB-ND	557.00	ELK-TT103EA
6 MHz	150	60mA	P11087CT-ND	1.44	1.35	.97	P11087TB-ND	557.00	ELK-TT331IA
10 MHz	100	90mA	P11088CT-ND	1.44	1.35	.97	P11088TB-ND	557.00	ELK-TT331FA
10 MHz	300	60mA	P11089CT-ND	1.44	1.35	.97	P11089TB-ND	557.00	ELK-TT101IA
15 MHz	50	120 mA	P11090CT-ND	1.44	1.35	.97	P11090TB-ND	556.88	ELK-TT391CA
15 MHz	200	90 mA	P11091CT-ND	1.44	1.35	.97	P11091TB-ND	557.00	ELK-TT101GA
20 MHz	100	100 mA	P11092CT-ND	1.44	1.35	.97	P11092TB-ND	557.00	ELK-TT151EA
20 MHz	300	90mA	P11093CT-ND	1.44	1.35	.97	P11093TB-ND	557.00	ELK-TT470GA
20 MHz	550	60mA	P11094CT-ND	1.44	1.35	.97	P11094TB-ND	557.00	ELK-TT330IA
25 MHz	75	120 mA	P11095CT-ND	1.44	1.35	.97	P11095TB-ND	557.00	ELK-TT181CA
30 MHz	90	120mA	P11096CT-ND	1.44	1.35	.97	P11096TB-ND	557.00	ELK-TT121CA
35 MHz	100	120mA	P11097CT-ND	1.44	1.35	.97	P11097TB-ND	557.00	ELK-TT820CA
35 MHz	300	90mA	P11098CT-ND	1.44	1.35	.97	P11098TB-ND	557.00	ELK-TT270FA
40 MHz	550	90mA	P11099CT-ND	1.44	1.35	.97	P11099TB-ND	557.00	ELK-TT150GA
50 MHz	100	130mA	P11100CT-ND	1.44	1.35	.97	P11100TB-ND	557.00	ELK-TT560BA
55 MHz	300	100mA	P11101CT-ND	1.44	1.35	.97	P11101TB-ND	557.00	ELK-TT180EA
60 MHz	550	90mA	P11102CT-ND	1.44	1.35	.97	P11102TB-ND	557.00	ELK-TT100FA

SMT Digital Noise Filters

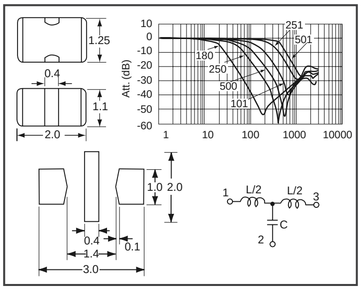
Series K: Type E

High performance noise filter for digital signal processing circuits. Wide attenuation band by low pass "T" filter constitution. **FEATURES:** • Wide attenuation band in noise signal • Minimal rounding of waveforms of the signal • High rated DC current: 2.0A • Rated Voltage VDC (V): 50 • DCR (DC Resistance Ω): 0.02 • High magnetic shielding characteristics • Selection for: high current in small size. **APPLICATIONS:** • Office automated equipment • TVs, VTRs • Communication equipment



Dia-meter	Cut-off Fre-quency	Imped-ance ZO.(Ω)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 2,000	6,000	Panasonic Part No.
I	380	84	P9870CT-ND	.94	.71	.52	P9870TR-ND	296.00/M	285.00/M	ELK-E100FA
H	257	56	P9871CT-ND	.94	.71	.52	P9871TR-ND	296.00/M	285.00/M	ELK-E220FA
G	175	39	P9872CT-ND	.94	.71	.52	P9872TR-ND	296.00/M	285.00/M	ELK-E470FA
F	120	26	P9873CT-ND	.94	.71	.52	P9873TR-ND	296.00/M	285.00/M	ELK-E101FA
E	81	18	P9874CT-ND	.94	.71	.52	P9874TR-ND	296.00/M	285.00/M	ELK-E221FA
D	55	12	P9875CT-ND	.94	.71	.52	P9875TR-ND	296.00/M	285.00/M	ELK-E471FA
C	38	8	P9876CT-ND	.94	.71	.52	P9876TR-ND	296.00/M	285.00/M	ELK-E102FA
B	26	6	P9877CT-ND	.94	.71	.52	P9877TR-ND	296.00/M	285.00/M	ELK-E222FA
A	12	3	P9878CT-ND	.94	.71	.52	P9878TR-ND	296.00/M	285.00/M	ELK-E103FA

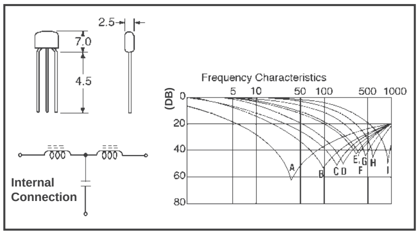
NEW! Digital Noise Filters (ELKD Type)



FEATURES: • Small size, applicable for high density mounting on the PCB • Applicable from 10 MHz to 500 MHz (fc) with 6 numbers • Small distortion of pulse signal and good noise reduction (Low inductance and resister type coil) **APPLICATIONS:** • Note PC • Communication equipment within busline and interface line • DigitalTV • DVD • Game machine • Display and PPC within video signal line and control signal line. **SPECIFICATIONS:** • Rated Current: 0.1A max. • Rated Voltage: 10V max. • Rdc: 1Ω typ. • Operating Temperature: -20°C to +85°C.

L (1~3) ±30%	C (1~2) ±30%	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Box Pricing 3,000	Panasonic Part No.
1.4 µH	200pF	P11347CT-ND	1.06	.79	.59	P11347TR-ND	333.00/M	ELK-D180FB
0.55 µH	90pF	P11348CT-ND	1.06	.79	.59	P11348TR-ND	333.00/M	ELK-D250FB
0.25 µH	90pF	P11349CT-ND	1.06	.79	.59	P11349TR-ND	333.00/M	ELK-D500FB
0.25 µH	25pF	P11350CT-ND	1.06	.79	.59	P11350TR-ND	333.00/M	ELK-D101FB
0.045 µH	25pF	P11351CT-ND	1.06	.79	.59	P11351TR-ND	333.00/M	ELK-D251FB
0.045 µH	8pF	P11352CT-ND	1.06	.79	.59	P11352TR-ND	333.00/M	ELK-D501FB

EMI Filters (For Electromagnetic Interference)

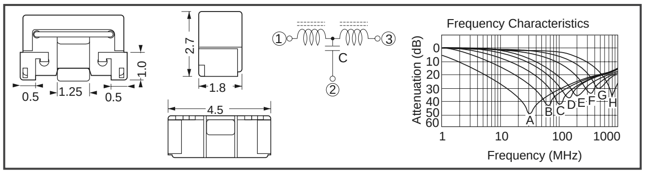


APPLICATIONS: • Communication equipment, cordless phones, auto. phones • Digital audio & video equip. • Electronic auto. equip. such as engine controls, panels and audio systems • Electric musical instruments, and other digital devices **SPECIFICATIONS:** • Rated Voltage (Max): P9801-P9807: 50; P9808-P9809: 16 • Tolerance: ±10% (+20% to -30% on P9808 & P9809) • Characteristic: P9801-P9807: Y5P; P9808-P9809: Y5S • Rated Current (Max.): 5A

Dia.	Cap. (pF)	25dB AH. Freq. (MHz)	15dB AH. Freq. (MHz)	Digi-Key Part No.	Cut Tape Price Each 10	100	Digi-Key Part No.	Tape & Box Pricing 2,000	Panasonic Part No.
I	22	800~1000	600~1000	P9801CT-ND	.30	.24	P9801TB-ND	134.00/M	EXC-EMT220BT
H	47	450~700	400~1000	P9802CT-ND	.30	.24	P9802TB-ND	134.00/M	EXC-EMT470BT
G	100	350~550	250~900	P9803CT-ND	.30	.24	P9803TB-ND	134.00/M	EXC-EMT101BT
F	220	250~400	150~500	P9804CT-ND	.30	.24	P9804TB-ND	134.00/M	EXC-EMT221BT
E	270	250~400	150~500	P9805CT-ND	.30	.24	P9805TB-ND	134.00/M	EXC-EMT271BT
D	470	150~350	70~500	P9806CT-ND	.30	.24	P9806TB-ND	134.00/M	EXC-EMT471BT
C	1000	100~250	50~400	P9807CT-ND	.30	.24	P9807TB-ND	134.00/M	EXC-EMT102BT
B	2200	50~200	30~400	P9808CT-ND	.30	.24	P9808TB-ND	134.00/M	EXC-EMT222DT
A	10,000	25~120	15~400	P9809CT-ND	.30	.24	P9809TB-ND	134.00/M	EXC-EMT103DT

SMT EMI Filters

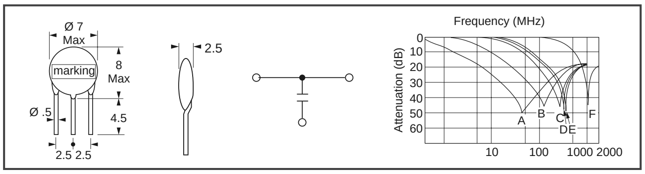
SPECIFICATIONS: • 50 Volts (DC) • 2A Max



Dia.	Cap. (pF)	25dB Freq. (MHz)	15dB Freq. (MHz)	Digi-Key Part No.	Cut Tape Price Each 10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	Panasonic Part No.
H	22	800~1000	600~1000	P9825CT-ND	.69	.51	P9825TR-ND	289.00	EXC-CET220U
G	47	450~550	350~1000	P9826CT-ND	.69	.51	P9826TR-ND	289.00	EXC-CET470U
F	100	300~450	200~900	P9827CT-ND	.69	.51	P9827TR-ND	289.00	EXC-CET101U
E	270	200~300	80~700	P9828CT-ND	.69	.51	P9828TR-ND	289.00	EXC-CET271U
D	470	100~220	50~700	P9829CT-ND	.69	.51	P9829TR-ND	289.00	EXC-CET471U
C	1000	65~200	30~700	P9830CT-ND	.69	.51	P9830TR-ND	289.00	EXC-CET102U
B	2200	35~180	15~700	P9831CT-ND	.69	.51	P9831TR-ND	289.00	EXC-CET222U
A	10000	15~120	5~700	P9832CT-ND	.69	.51	P9832TR-ND	289.00	EXC-CET103U

EMI Filters (EXC-ECT Type)

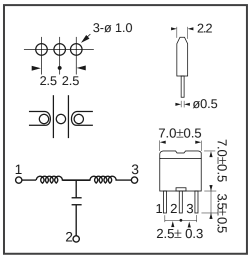
FEATURES: • EMI 3 Lead Capacitors are connected as T circuit and have good noise filtering characteristic for high frequency. **APPLICATIONS:** • Digital equipment • Communication equipment. **SPECIFICATIONS:** • Dielectric Withstanding Voltage: P9833-P9841: 125; P9842: 62.5 • Tolerance: P9833-P9840: ±20; P9841-P9842; ± 80/20 • Characteristic: P9833-P9840: YB; P9841: YF; P9842: V.



Dia.	Cap. (pF)	Voltage (DC)	Digi-Key Part No.	Cut Tape Price Each 10	100	Digi-Key Part No.	Tape & Box Pricing 2,000	Panasonic Part No.
F	22	50	P9833CT-ND	.17	.14	P9833TB-ND	74.00/M	EXC-ECT220MBT
E	220	50	P9836CT-ND	.17	.14	—	—	EXC-ECT221MBT
D	270	50	P9837CT-ND	.17	.14	P9837TB-ND	74.00/M	EXC-ECT271MBT

Digital Noise Filters (ELKA Type)

These filters are used to suppress spurious noise generated by digital equipment and to prevent external noise from being mixed in with the signal. **FEATURES:** • In case of type ELKA, thin design with terminal pitch of 2.5 mm can allow being automatically mounted (product thickness 2.2 mm) • Has wide attenuation bands in high freq. • Minimal rounding of waveforms for the required signal • Optimum pulse response can be established for digital circuit • Effective in preventing noise interference generated in TV broadcast bands. **APPLICATIONS:** • OA equip., personal computers, printers • AV equip. such as digital TV's and VCR's • Digital devices for telephones, measuring equip., medical equipment and electronic musical instruments.



Cut-off Freq.	Imped. Zo(Ω)	Rated Curr.	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
22 MHz	300	55mA	P9854-ND	1.06	.92	.75	.43	ELK-AH470GB

Panasonic Line Filters

V Series (290, 450, 650, 850 Types)
H Series (200, 270, 400, 600 Types)
F Series (23F, 25F Types)
N Series (15N, 18N, 20N Types)

These line filters can suppress conductive noise ranging from low to high frequencies generated at power supply circuits various electronic equipment.

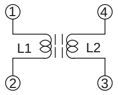
General Features: • These line filters are excellent in high frequency characteristics due to low stray capacitance realized by section windings. • Comply with all safety standards. **Applications:** • Video and audio equipment, office equipment, other electronic devices. **Specifications:** • Operating Temperature: -20°C ~ 105°C • F & N-series Operating Temperature: -20°C ~ 115°C • Rated Voltage: Less than AC250Vrms • Rated Current: Less than AC5Arms • F-series Rated Current: Less than AC3 Arms • Dielectric Strength: AC2KV 1 min.

V & H Series Features: • By using an unseparated closed magnetic circuit core, high inductance is obtained despite small size and distribution of inductance is reduced. • Leakage flux is greatly decreased.

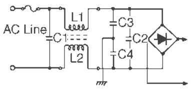
F Series Features: • F-series line filters are low profile 14mm for 23F, 15mm for 25F • Suitable for reducing both common mode and normal mode noise.

N Series Features: • Closed shape core, narrow inductance distribution, high inductance and small leakage flux • Suitable for automated production.

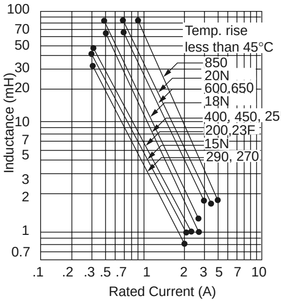
Standard Circuit Diag.



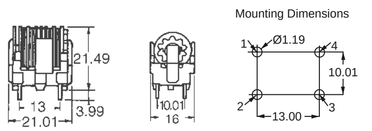
Circuit Example



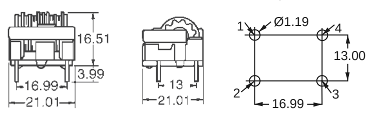
Current vs Inductance (reference only)



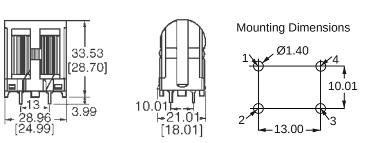
290 Type



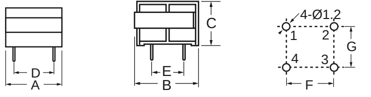
270 Type



450, 650 Type Dim.: shown in [ ] are for 450 type.

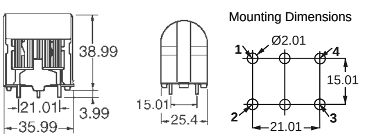


23F, 25F Types

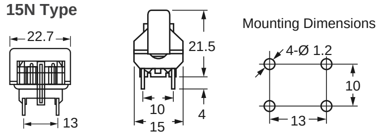


Type	A Max.	B Max.	C Max.	D	E	F	G
23F	24	23	14	16±0.5	10±0.5	16±0.1	10±0.1
25F	28	25	15	21±0.5	11±0.5	21±0.1	11±0.1

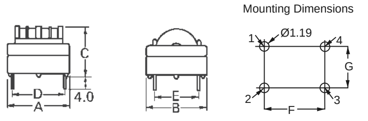
850 Type



15N Type

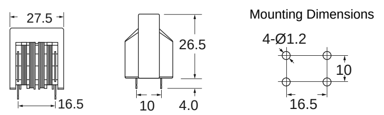


200, 400, 600 Type

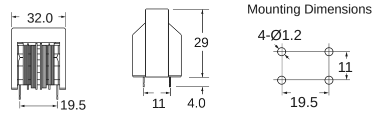


Type	A	B	C	D	E	F	G
200	19.99	21.01	19.99	13.00	10.01	13.00	10.01
400	24.00	24.99	19.51	21.01	15.01	21.01	15.01
600	28.50	29.01	22.50	24.00	19.99	24.00	19.99

18N Type



20N Type



Type	Inductance mH min.	Rated Current A rms	Digi-Key Part No.	Pricing 1	10	100	1,000	Panasonic Part No.
			V Series					
290	0.82	2.0	PLK1000-ND	3.36	28.80	240.00	1433.00	ELF-18D290B
	2.2	1.3	PLK1001-ND	3.36	28.80	240.00	1433.00	ELF-18D290T
	3.3	1.1	PLK1002-ND	3.36	28.80	240.00	1433.00	ELF-18D290S
	10.0	0.6	PLK1003-ND	3.36	28.80	240.00	1433.00	ELF-18D290G
	22.0	0.4	PLK1004-ND	3.36	28.80	240.00	1433.00	ELF-18D290C
	33.0	0.3	PLK1005-ND	3.36	28.80	240.00	1433.00	ELF-18D290H
450	2.7	2.0	PLK1006-ND	5.86	50.19	418.25	2497.00	ELF-18D450A
	18.0	0.8	PLK1007-ND	5.68	48.69	405.75	2422.00	ELF-18D450B
650	1.5	3.1	PLK1008-ND	6.61	56.67	472.25	2819.00	ELF-18D650M
	3.3	2.4	PLK1009-ND	6.61	56.67	472.25	2819.00	ELF-18D650B
	8.2	1.7	PLK1010-ND	6.61	56.67	472.25	2819.00	ELF-18D650C
	22.0	1.0	PLK1011-ND	6.61	56.67	472.25	2819.00	ELF-18D650L
	47.0	0.7	PLK1012-ND	6.61	56.67	472.25	2819.00	ELF-18D650U
	2.2	2.8	PLK1037-ND	6.61	56.67	472.25	2819.00	ELF-18D656A
	12.0	1.6	PLK1038-ND	6.61	56.67	472.25	2819.00	ELF-18D656J
850	1.5	5.0	PLK1013-ND	9.82	84.18	701.50	4188.00	ELF-18D850M
	3.3	4.2	PLK1014-ND	9.82	84.18	701.50	4188.00	ELF-18D850B
	4.7	3.5	PLK1015-ND	9.82	84.18	701.50	4188.00	ELF-18D850Y
	10.0	2.5	PLK1016-ND	9.82	84.18	701.50	4188.00	ELF-18D850W
	22.0	1.8	PLK1018-ND	9.82	84.18	701.50	4188.00	ELF-18D860C
	56.0	1.1	PLK1017-ND	9.82	84.18	701.50	4188.00	ELF-18D850T
			H Series					
200	1.5	1.6	PLK1019-ND	3.84	32.88	274.00	1636.00	ELF-18D217
	3.9	1.0	PLK1020-ND	3.84	32.88	274.00	1636.00	ELF-18D216
	22.0	0.4	PLK1021-ND	3.84	32.88	274.00	1636.00	ELF-18D218
	1.0	2.1	PLK1022-ND	3.84	32.88	274.00	1636.00	ELF-18D212F
	2.2	1.5	PLK1023-ND	3.84	32.88	274.00	1636.00	ELF-18D228F
	33.0	0.4	PLK1024-ND	3.84	32.88	274.00	1636.00	ELF-18D221F
270	6.8	0.7	PLK1025-ND	3.36	28.80	240.00	1433.00	ELF-18D270A
400	1.5	2.4	PLK1026-ND	4.55	39.03	325.25	1942.00	ELF-18D419
	2.2	2.0	PLK1027-ND	4.55	39.03	325.25	1942.00	ELF-18D416
	12.0	0.9	PLK1028-ND	4.55	39.03	325.25	1942.00	ELF-18D430
	33.0	0.5	PLK1029-ND	4.55	39.03	325.25	1942.00	ELF-18D428
	2.2	2.2	PLK1030-ND	4.55	39.03	325.25	1942.00	ELF-18D435F
	10.0	1.0	PLK1031-ND	4.55	39.03	325.25	1942.00	ELF-18D431F
600	1.0	3.4	PLK1032-ND	7.19	61.62	513.50	3066.00	ELF-18D608
	3.3	2.5	PLK1033-ND	5.75	49.29	410.75	2452.00	ELF-18D605
	22.0	1.0	PLK1034-ND	5.75	49.29	410.75	2452.00	ELF-18D612
	2.2	2.8	PLK1035-ND	5.75	49.29	410.75	2452.00	ELF-18D617F
	33.0	0.8	PLK1036-ND	5.75	49.29	410.75	2452.00	ELF-18D624F
			F Series					
23F	50.0	0.3	PLK1039-ND	9.85	84.39	703.25	4198.00	ELF-23F003A
	30.0	0.4	PLK1040-ND	9.85	84.39	703.25	4198.00	ELF-23F004A
	20.0	0.5	PLK1041-ND	9.85	84.39	703.25	4198.00	ELF-23F005A
	14.0	0.6	PLK1042-ND	9.85	84.39	703.25	4198.00	ELF-23F006A
	10.0	0.7	PLK1043-ND	9.85	84.39	703.25	4198.00	ELF-23F007A
	8.0	0.8	PLK1044-ND	9.85	84.39	703.25	4198.00	ELF-23F008A
	6.0	0.9	PLK1045-ND	9.85	84.39	703.25	4198.00	ELF-23F009A
	5.0	1.0	PLK1046-ND	9.85	84.39	703.25	4198.00	ELF-23F010A
	3.5	1.2	PLK1047-ND	9.85	84.39	703.25	4198.00	ELF-23F012A
	2.0	1.6	PLK1048-ND	9.85	84.39	703.25	4198.00	ELF-23F016A
	1.5	1.8	PLK1049-ND	9.85	84.39	703.25	4198.00	ELF-23F018A
	1.2	2.0	PLK1050-ND	9.85	84.39	703.25	4198.00	ELF-23F020A
	1.0	2.2	PLK1051-ND	9.85	84.39	703.25	4198.00	ELF-23F022A

Type	Inductance mH min.	Rated Current A rms	Digi-Key Part No.	Pricing 1	10	100	1,000	Panasonic Part No.
25F	28.0	0.6	PLK1052-ND	11.49	98.46	820.50	4898.00	ELF-25F106A
	20.0	0.7	PLK1053-ND	11.49	98.46	820.50	4898.00	ELF-25F107A
	15.0	0.8	PLK1054-ND	11.49	98.46	820.50	4898.00	ELF-25F108A
	12.0	0.9	PLK1055-ND	11.49	98.46	820.50	4898.00	ELF-25F109A
	10.0	1.0	PLK1056-ND	11.49	98.46	820.50	4898.00	ELF-25F110A
	7.0	1.2	PLK1057-ND	11.49	98.46	820.50	4898.00	ELF-25F112A
	5.0	1.4	PLK1058-ND	11.49	98.46	820.50	4898.00	ELF-25F114A
	4.0	1.6	PLK1059-ND	11.49	98.46	820.50	4898.00	ELF-25F116A
	3.0	1.8	PLK1060-ND	11.49	98.46	820.50	4898.00	ELF-25F118A
	2.0	2.0	PLK1061-ND	11.49	98.46	820.50	4898.00	ELF-25F020A
	1.6	2.2	PLK1062-ND	11.49	98.46	820.50	4898.00	ELF-25F022A
	1.3	2.5	PLK1063-ND	11.49	98.46	820.50	4898.00	ELF-25F025A
			N Series					
15N	104.0	0.2	PLK1064-ND	2.42	20.76	173.00	1033.00	ELF-15N002A
	43.0	0.3	PLK1065-ND	2.42	20.76	173.00	1033.00	ELF-15N003A
	26.0	0.4	PLK1066-ND	2.42	20.76	173.00	1033.00	ELF-15N004A
	19.0	0.5	PLK1067-ND	2.42	20.76	173.00	1033.00	ELF-15N005A
	12.0	0.6	PLK1068-ND	2.42	20.76	173.00	1033.00	ELF-15N006A
	10.0	0.7	PLK1069-ND	2.42	20.76	173.00	1033.00	ELF-15N007A
	6.8	0.8	PLK1070-ND	2.42	20.76	173.00	1033.00	ELF-15N008A
	5.3	1.0	PLK1071-ND	2.42	20.76	173.00	1033.00	ELF-15N010A
	4.0	1.1	PLK1072-ND	2.42	20.76	173.00	1033.00	ELF-15N011A
	2.7	1.3	PLK1073-ND	2.42	20.76	173.00	1033.00	ELF-15N013A
	2.1	1.5	PLK1074-ND	2.42	20.76	173.00	1033.00	ELF-15N015A
	1.7	1.7	PLK1075-ND	2.42	20.76	173.00	1033.00	ELF-15N017A
	1.0	2.2	PLK1076-ND	2.42	20.76	173.00	1033.00	ELF-15N022A
	0.6	3.0	PLK1077-ND	2.42	20.76	173.00	1033.00	ELF-15N030A
18N	80.0	0.4	PLK1078-ND	4.67	40.05	333.75	1993.00	ELF-18N004A
	50.0	0.5	PLK1079-ND	4.67	40.05	333.75	1993.00	ELF-18N005A
	35.0	0.6	PLK1080-ND	4.67	40.05	333.75	1993.00	ELF-18N006A
	20.0	0.8	PLK1081-ND	4.67	40.05	333.75	1993.00	ELF-18N008A
	15.0	1.0	PLK1082-ND	4.67	40.05	333.75	1993.00	ELF-18N010A
	9.5	1.2	PLK1083-ND	4.67	40.05	333.75	1993.00	ELF-18N012A
	6.0	1.6	PLK1084-ND	4.67	40.05	333.75	1993.00	ELF-18N016A
	4.2	2.0	PLK1085-ND	4.67	40.05	333.75	1993.00	ELF-18N020A
	2.4	2.5	PLK1086-ND	4.67	40.05	333.75	1993.00	ELF-18N025A
	1.4	3.2	PLK1087-ND	4.67	40.05	333.75	1993.00	ELF-18N032A
20N	69.0	0.6	PLK1088-ND	5.11	43.77	364.75	2178.00	ELF-20N006A
	43.0	0.8	PLK1089-ND	5.11	43.77	364.75	2178.00	ELF-20N008A
	28.0	1.0	PLK1090-ND	5.11	43.77	364.75	2178.00	ELF-20N010A
	18.0	1.3	PLK1091-ND	5.11	43.77	364.75	2178.00	ELF-20N013A
	14.0	1.5	PLK1092-ND	5.11	43.77	364.75	2178.00	ELF-20N015A
	12.0	1.6	PLK1093-ND	5.11	43.77	364.75	2178.00	ELF-20N016A
	7.5	1.8	PLK1094-ND	5.11	43.77	364.75	2178.00	ELF-20N018A
	7.0	2.0	PLK1095-ND	5.11	43.77	364.75	2178.00	ELF-20N020A
	6.2	2.2	PLK1096-ND	5.11	43.77	364.75	2178.00	ELF-20N022A
	4.9	2.4	PLK1097-ND	5.11	43.77	364.75	2178.00	ELF-20N024A
	4.7	2.7	PLK1098-ND	5.11	43.77	364.75	2178.00	ELF-20N027A
	2.9	3.0	PLK1099-ND	5.11	43.77	364.75	2178.00	ELF-20N030A
	2.0	3.5	PLK1100-ND	5.11	43.77	364.75	2178.00	ELF-20N035A
	1.5	4.0	PLK1101-ND	5.11	43.77	364.75	2178.00	ELF-20N040A

Power Entry Modules

C Series: The C series is a two-function power entry module combining a DPST switch and an IEC 320 power line connector. **EC Series:** This series of filtered power entry modules provides the highest attenuation of any standard filter available in a package size limited by the dimensions of the integral IEC connector. These filters combine high common-mode inductance with high differential-mode capacitance and minimal parasitic elements, for effective attenuation of line-to-ground and line-to-line noise across the frequency range. **ED Series:** These filtered power entry modules are more effective than general purpose filters in applications where line-to-line and low frequency line-to-ground noise must be controlled. **EEA Series:** A new design in both the internal structure and manufacturing process makes this series cost effective and compact. **EF Series:** This rugged international series of filtered power entry modules incorporates the special IEC power line connector. They are UL recognized, CSA certified, and VDE and SEV approved. Models with F suffix are SEMKO approved and comply with BSI standards. **GG Series:** The GG series power entry modules combine the functions of a general purpose RFI filter with IEC power cord connector and single or dual metric fusing, in the smallest possible panel space. **H Series:** The H series was developed specifically for health care applications. These products are suitable for uses in both patient care equipment and nonpatient care equipment. Their extremely low leakage current allows compliance with UL544 and CSA 22.2 health care specifications. **J Series:** The most widely accepted of all the power entry modules, the J series combines an IEC connector, 2 voltage, or 4 voltage selection, and a North American fuseholder. **P Series:** This series of power entry modules offers full flexibility of design in the most compact package. As the first 10 Amp module to provide all five power entry functions in one compact design, the "Chameleon" readily adapts to its environment and the needs of international markets. • Snap-in or flange mounting • IEC power line connector • Both North American and European fusing capabilities • Two voltage selection • Optional DPST on/off switch • Filtering options for general purpose and medical applications. **LA Series:** A multi-function power entry connector with a choice of filtering capabilities. The series features an IEC line connector, selectable North American or dual European fusing capabilities, DPST on/off switch, and 120/240 voltage selection. The filtered LA units provide a one piece solution to all power entry needs and provide a filtering solution for almost any RFI problem. Their vertical design is flange mounted and will meet requirements for worldwide markets. **M Series:** This series of power entry modules offers the most choices of power entry components and filtering options to fit a specific need. **SR Series:** The SR series includes a full line of popular AC receptacles. These male and female power line connectors include snap-in and flange mounted models. All have complete safety agency approvals for worldwide usage.

Part Numbering System for P Series (Figure 4A & 4B)

	Mounting Style	Extender Options	Switch Options	Voltage Select	Fuse Options	Filter Type	Filter Current	Shield Options
P								
	E = Mtg. Ears (horiz) S = Snap-in	0 = None C = FN260 J = J Series L = L Series	0 = Blank S = DPST	0 = Single AC volt. S = Dual AC volt. select (SMPS) X = Dual AC volt. select (series/parallel)	D = Dual fuse S = Single fuse	0 = No filter B = Intercon. block H = Medical Filter S = Gen. purpose	0 = No filter or Intercon. block 3 = 3 amps 6 = 6 amps X = 10 amps	0 = No shield A = Filter shield B = Complete shield

Fig.	Rated Cur. 120V (Amps)	Dimensions (mm) Termination	A	B	C	D	E	F	Digi-Key Part No.	Pricing 1	25	100	CII Tech. Part No.
NEW! Series C - Power Entry Modules NEW!													
1	10	Faston, Straight	31.24	24.64	41.17	26.92	38.74	—	CCM1647-ND*	8.14	142.50	473.10	10CS1
NEW! Series EC - Power Entry Modules NEW!													
2	3	Faston, Straight	66.50	30.20	20.60	40.01	50.30	—	CCM1623-ND	21.34	373.50	1240.02	3EC1
2	6	Faston, Straight	66.50	30.20	20.60	40.01	50.30	—	CCM1611-ND	21.34	373.50	1240.02	6EC1
2	10	Faston, Straight	66.50	30.20	20.60	40.01	50.30	—	CCM1646-ND	22.48	393.50	1306.42	10EC1
Series ED — Power Entry Modules													
2	3	Faston, Straight	55.88	20.57	—	—	—	—	CCM1204-ND	15.71	275.00	913.00	3ED1
	6	Faston, Straight	55.88	20.57	—	—	—	—	CCM1205-ND	15.71	275.00	913.00	6ED1
	10	Faston, Straight	66.55	20.57	—	—	—	—	CCM1206-ND	16.20	283.50	941.22	10ED1
	3	Wire Lead, Straight	39.37	20.57	—	—	—	—	CCM1214-ND	15.71	275.00	913.00	3ED8
	6	Wire Lead, Straight	39.37	20.57	—	—	—	—	CCM1215-ND	15.71	275.00	913.00	6ED8
	6	Wire Lead, Straight	50.29	20.57	—	—	—	—	CCM1218-ND	19.94	349.00	1158.68	6ED8C
	10	Faston, Straight	66.55	20.57	—	—	—	—	CCM1219-ND	21.43	375.00	1245.00	10ED1C
NEW! Series EEA - Power Entry Modules NEW!													
2	3	Faston, Straight	54.60	28.70	20.60	40.01	50.30	—	CCM1622-ND	9.71	170.00	564.40	3EEA1
2	6	Faston, Straight	54.60	28.70	20.60	40.01	50.30	—	CCM1610-ND	9.06	158.50	526.22	6EEA1
2	10	Faston, Straight	54.60	28.70	20.60	40.01	50.30	—	CCM1645-ND	9.86	172.50	572.70	10EEA1
Series EF - Power Entry Modules													
2	1	Faston, Straight	55.88	20.57	—	—	—	—	CCM1100-ND	13.09	229.00	760.28	1EF1F
	3	Faston, Straight	55.88	20.57	—	—	—	—	CCM1101-ND	13.09	229.00	760.28	3EF1F
	6	Faston, Straight	55.88	20.57	—	—	—	—	CCM1102-ND	13.09	229.00	760.28	6EF1F
	10	Faston, Straight	66.55	20.57	—	—	—	—	CCM1103-ND	13.43	235.00	780.20	10EF1F
	3	Faston, Straight	55.90	30.20	20.60	40.01	50.30	—	CCM1621-ND *NEW!*	14.94	261.50	868.18	3EF1
	6	Faston, Straight	55.90	30.20	20.60	40.01	50.30	—	CCM1609-ND *NEW!*	14.94	261.50	868.18	6EF1
	15	Faston, Straight	66.50	30.20	20.60	40.01	50.30	—	CCM1636-ND *NEW!*	19.34	338.50	1123.82	15EF1F
NEW! Series GG - Power Entry Modules With Fusehloders NEW!													
3	6	Faston, Straight	42.20	28.70	32.80	33.30	44.70	—	CCM1620-ND	14.29	250.00	830.00	6EGG1-1
	6	Faston, Straight	42.20	28.70	32.80	33.30	44.70	—	CCM1650-ND†	17.00	297.50	987.70	6EGG1-2
NEW! Series H - Power Entry Modules NEW!													
2	6	Faston, Straight	55.90	30.20	20.60	40.01	50.30	—	CCM1607-ND	15.60	273.00	906.36	6EH4
Series P, Chameleon — For General or Medical Applications (See chart for part number break down)													
4A	10	Faston	31.50	49.02	58.67	26.92	55.91	—	CCM1372-ND*	15.57	272.50	904.70	PS0SXS000
	10	Faston	31.50	49.02	58.67	26.92	55.91	—	CCM1373-ND*	12.14	212.50	705.50	PS000S000
	10	Faston	31.50	54.10	58.67	26.92	55.91	—	CCM1374-ND	18.57	325.00	1079.00	PS0S0SBX0
	3	Faston	31.50	54.10	58.67	28.50	55.91	—	CCM1376-ND	23.14	405.00	1344.60	PS000SS3B
	3	Faston	31.50	54.10	58.67	26.92	55.91	—	CCM1377-ND	22.71	397.50	1319.70	PS0SXSS30
	6	Faston	31.50	54.10	58.67	26.92	55.91	—	CCM1378-ND	21.43	375.00	1245.00	PS0SXSS60
	10	Faston	31.50	54.10	58.67	26.92	55.91	—	CCM1379-ND	26.28	460.00	1527.20	PS0S0SSXA
	10	Faston	31.50	54.10	58.67	26.92	55.91	—	CCM1380-ND	24.57	430.00	1427.60	PS000SSXB
	6	Faston	31.50	54.10	58.67	26.92	55.91	—	CCM1381-ND	21.43	375.00	1245.00	PS0SXDS60
	6	Faston	31.50	54.10	58.67	26.92	55.91	—	CCM1382-ND	23.57	412.50	1369.50	PS0S0SS6A
	6	Faston	31.50	54.10	58.67	26.92	55.91	—	CCM1600-ND *NEW!*	21.43	375.00	1245.00	PS0S0SS60
4B	10	Faston	50.29	49.02	58.67	28.50	55.91	40.01	CCM1375-ND*	16.57	290.00	962.80	PE0SSS000
	6	Faston	50.29	54.10	58.67	28.50	55.91	40.01	CCM1383-ND	22.43	392.50	1303.10	PE0SSSS60
	10	Faston	50.29	54.10	58.67	28.50	55.91	40.01	CCM1384-ND	25.14	440.00	1460.80	PE0SSSSX0
	10	Faston	50.29	54.10	58.67	28.50	55.91	40.01	CCM1385-ND	23.71	415.00	1377.80	PE0S0SS30

* Unfiltered † Utilizes 2 5x20 fuses

Fig.	Rated Cur. 120V (Amps)	RFI Filter Type	Avail. Voltage Select. Pos.	DPST On/Off Switch	Dimensions (mm) A	B	C	D	Digi-Key Part No.	Pricing 1	25	100	CII Tech. Part No.
Series J — Power Entry Modules													
5	6	Unfiltered	4	—	68.07	38.61	29.72	31.24	CCM1200-ND	15.37	269.00	893.08	6VJ1
	6	Gen. Purpose	4	—	69.85	47.50	29.732	40.13	CCM1201-ND	27.74	485.50	1611.86	6J4
NEW! Series LA - Power Entry Modules NEW!													
6	5	Gen. Purpose	2	—	50.50	39.90	65.79	61.21	CCM1614-ND	51.94	909.00	3017.88	5EFLA2S
Series M — Power Entry Modules													
7	6	Unfiltered	1	yes	105.92	91.95	36.83	—	CCM1001-ND	19.88	348.00	1155.36	6VM1S
	6	Unfiltered	2	yes	118.11	104.14	36.83	—	CCM1003-ND	23.20	406.00	1347.92	6VM2S
	6	Unfiltered	4	yes	118.11	104.14	36.83	—	CCM10305-ND	23.20	406.00	1347.92	6VM4S
	5	Medical	1	yes	105.92	91.95	55.63	—	CCM1011-ND	29.48	516.00	1713.12	5EHM1S
	5	Medical	4	no	98.55	84.33	55.63	—	CCM1012-ND	28.63	501.00	1663.32	5EHM4
	5	Gen. Purpose	1	no	86.11	72.14	55.63	—	CCM1020-ND	24.86	435.00	1444.20	5EFM1
	5	Gen. Purpose	1	yes	105.92	91.95	55.63	—	CCM1021-ND	29.00	507.50	1684.90	5EFM1S
	5	Gen. Purpose	4	yes	118.11	104.14	55.63	—	CCM1023-ND	32.31	565.50	1877.46	5EFM4S

Fig.	Rated Cur. 120V (Amps)	Output Terminals	Mounting Style	Input Config.	Dimensions (mm) A	B	C	D	Digi-Key Part No.	Pricing 1	25	100	CII Tech. Part No.
Series SR — AC Connector													
8	15@125V	PC Terminals	Flange	Male	50.01	40.01	28.19	26.70	CCM1400-ND	3.06	53.50	177.62	6ESRM-P
	15@125V	Quick Disconnect	Flange	Male	50.22	40.01	22.76	31.09	CCM1401-ND	2.23	39.00	129.48	6ESRM-3
	15@125V	Quick Disconnect	Snap-In	Male	30.40	—	22.66	30.61	CCM1402-ND	2.34	41.00	136.12	6ESRMC2
	15@125V	Quick Disconnect	Snap-In	Female	35.31	—	28.19	35.71	CCM1403-ND	2.71	47.50	157.70	6ESRFC3
	15@125V	Quick Disconnect	Flange	Female	50.01	40.01	29.31	35.71	CCM1404-ND	2.71	47.50	157.70	6ESRF-3

Fig. 1

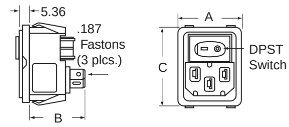


Fig. 2

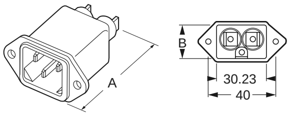


Fig. 3

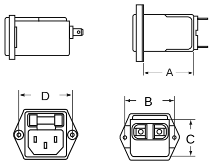


Fig. 4A See chart for part number break down.

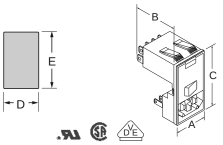


Fig. 4B See chart for part number break down.

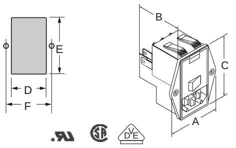


Fig. 5

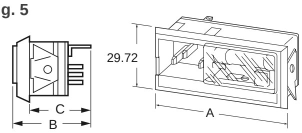


Fig. 6

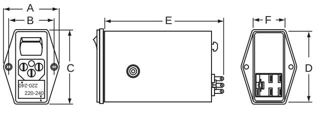
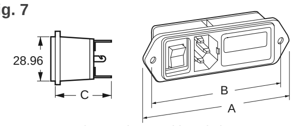
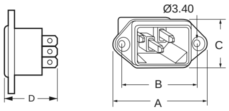


Fig. 7



Note: Picture shown with switch.

Fig. 8



Note: Picture shown with mounting flange.

RF Line Filters

B Series: These general purpose common-mode RFI power line filters effectively provide RFI control of line-to-ground noise in a small size at a low cost. **EP Series:** The EP/VP series of RFI filters has been developed to reduce conducted noise to acceptable limits for equipment that must comply with requirements of CISPAR in Europe and the FCC specifications in the USA. **H Series:** The H series filters were developed specifically for health care applications. These products are suitable for uses in both patient care equipment and nonpatient care equipment. Extremely low leakage current allows compliance with UL544 and CSA 22.2 health care specifications. **HT Series:** This series of power line filters provides superior common-mode and premium differential-mode attenuation to RFI noise on the frequency range from 10KHz to 30MHz, for IEC601 and UL544 patient-connected equipment, as well as all other electronic equipment that cannot tolerate any leakage current. **K Series:** These power line filters are general purpose common-mode and differential-mode filters. They are effective in the control of line-to-line as well as line-to-ground RFI interference. They are particularly suited in applications where pulsed, continuous and/or intermittent RFI interference is present. **MV Series:** This series answers the need for a medical filter to help equipment comply with increasing noise sources in medical applications while still meeting leakage current requirements of UL2601. **Q Series:** A series of RFI power line filters that has been developed specifically for switching power supplies and is designed to be all the line filtering needed to control conducted emissions all the way down to 10KHz. **R Series:** These dual T section RFI power line filters provide premium performance at a moderate cost. They are well suited for impedance loads where noisy RFI environments are present. They control pulsed, continuous and/or intermittent interference, insuring protection of your equipment from power noise in addition to protecting the line from equipment noise. **S Series:** The S series of RFI power line filters combines successful line-to-ground interference rejection filters with additional circuitry designed to reduce line-to-line noise and transients. **SK Series:** This series of RFI power line filters was designed to reduce conducted noise to acceptable limits for equipment that must comply with the FCC specifications in the USA and CISPAR specifications in Europe. **T Series:** These RFI power line filters provide superior common-mode and premium differential-mode attenuation, exceeded only by that of Q series filters. **U Series:** The U series was designed to meet the RFI needs created by power factor corrected power supplies. This high performance filter offers a high impedance circuit to mismatch the power supply's impedance characteristics. **V and W Series:** These RFI power line filters will protect equipment from malfunctions due to conducted interference coming into the equipment from the line, especially line-to-line noise and transients. The W series has a two-stage construction that provides excellent suppression at high frequency. **EDP Series:** These RFI power line filters provide enhanced differential-mode performance for applications requiring more line-to-line protection. **EOP Series:** A general purpose filter which is effective in removing both common and differential-mode noise for susceptibility applications. **X Series:** This series was designed to bring most digital equipment (including switching power supplies) into compliance with FCC Part 15J, Class B conducted emission limits. **Z Series:** A design that brings most digital equipment (including switching power supplies) into compliance with EN55022 Level B, (as well as FCC Part 15J, Class B) conducted emission limits. **N Series:** The N series RFI filters are designed to provide superior common-mode attenuation for most digital electronic equipment (particularly switching power supplies) over the frequency range of 10KHz to 30MHz.

Fig.	Rated Cur. 120 V (Amps)	Dim. (mm) Termination	A	B	C	D	Digi-Key Part No.	Pricing 1	25	100	CII Tech. Part No.
Series B — Line Filter											
1	1	Faston	57.15	46.23	16.76	53.98	CCM1300-ND	13.26	232.00	770.24	1VB1
	2	Faston	57.15	46.23	16.76	53.98	CCM1301-ND	11.91	208.50	692.22	2VB1
	3	Faston	66.29	46.23	19.81	53.98	CCM1302-ND	13.77	241.00	800.12	3VB1
	5	Faston	66.29	46.23	19.81	53.98	CCM1303-ND	12.77	223.50	742.02	5VB1
	10	Faston	66.29	46.23	29.46	53.98	CCM1304-ND	14.26	249.50	828.34	10VB1
	20	Faston	85.30	52.60	29.50	60.33	CCM1634-ND *NEW!*	22.08	386.50	1283.18	20EB1
	20	Faston	85.34	52.58	29.46	60.33	CCM1305-ND	22.08	386.50	1283.18	20VB1
10	1	Wire Lead	24.38	46.23	16.76	53.98	CCM1310-ND	14.11	247.00	820.04	1VB3
	2	Wire Lead	24.38	46.23	16.76	53.98	CCM1311-ND	12.86	225.00	747.00	2VB3
	3	Wire Lead	33.53	46.23	19.81	53.98	CCM1312-ND	14.68	257.00	853.24	3VB3
	5	Wire Lead	33.53	46.23	19.81	53.98	CCM1313-ND	13.51	236.50	785.18	5VB3
	10	Wire Lead	33.53	46.23	29.46	53.98	CCM1314-ND	14.91	261.00	866.52	10VB3
4	20	Screw	87.88	52.58	29.46	60.33	CCM1321-ND	26.03	455.50	1512.26	20VB6
Series EDP — For General Purpose Application											
6	1	PCB	36.58	31.50	24.13	—	CCM1364-ND	16.91	296.00	982.72	1EDP
	3	PCB	36.58	31.50	24.13	—	CCM1365-ND	15.80	276.50	917.98	3EDP
Series EOP — For General Purpose Application											
6	1	PCB	36.58	31.50	19.81	—	CCM1366-ND	13.97	244.50	811.74	1EOP
	3	PCB	36.58	31.50	19.81	—	CCM1367-ND	12.77	223.50	742.02	3EOP
NEW! Series EP — Line Filter For Switching Power Supply Noise Suppression NEW!											
2	3	Faston	97.80	52.60	45.20	74.63	CCM1619-ND	32.71	572.50	1900.70	3EP1
	10	Faston	168.10	52.60	70.60	142.88	CCM1644-ND	74.08	1296.50	4304.38	10EP1
Series EXP — For Emission Control Applications											
5	3	PCB	66.29	28.70	41.15	—	CCM-ND	21.14	370.00	1228.40	3EXP
	6	PCB	66.29	28.70	44.45	—	CCM1371-ND	34.23	599.00	1988.68	6EXP
Series EZP — For Emission Control Applications											
5	2	PCB	66.29	28.70	44.45	—	CCM1368-ND	26.34	461.00	1530.52	2EZP
	3	PCB	66.29	28.70	44.45	—	CCM1369-ND	27.06	473.50	1572.02	3EZP
NEW! Series H — Line Filter For Healthcare Equipment NEW!											
1	6	Faston	57.20	46.10	16.70	53.98	CCM1608-ND	13.00	227.50	755.30	6EH1
NEW! Series HT — High Performance Line Filter For Medical Equipment NEW!											
2	6	Faston	90.40	54.60	46.00	74.63	CCM1606-ND	43.97	769.50	2554.74	6EHT1
NEW! Series K — Line Filter NEW!											
1	2	Faston	78.70	52.60	23.10	60.33	CCM1627-ND	15.26	267.00	886.44	2VK1
	3	Faston	78.70	52.60	29.50	60.33	CCM1618-ND	18.11	317.00	1052.44	3VK1
	5	Faston	78.70	52.60	29.50	60.33	CCM1613-ND	15.51	271.50	901.38	5VK1
	10	Faston	85.10	52.60	29.50	60.33	CCM1641-ND	16.37	286.50	951.18	10VK1
	20	Faston	85.10	65.00	38.90	74.63	CCM1632-ND	24.68	432.00	1434.24	20VK1
	20	Faston	85.10	65.00	38.90	74.63	CCM1633-ND	24.68	432.00	1434.24	20EK1
4	20	Stud	87.90	65.00	38.90	74.63	CCM1631-ND	28.54	499.50	1658.34	20VK6
	30	Stud	135.60	85.90	38.90	95.25	CCM1625-ND	53.48	936.00	3107.52	30VK6
10	2	Wire Lead	46.00	52.60	23.10	60.33	CCM1626-ND	16.46	288.00	956.16	2VK3
	5	Wire Lead	46.00	52.60	29.50	60.33	CCM1612-ND	17.48	306.00	1015.92	5VK3
NEW! Series MV — Multipurpose Line Filter For Medical Applications NEW!											
2	10	Faston	98.00	52.80	38.90	74.63	CCM1642-ND	38.26	669.50	2222.74	10MV1
NEW! Series N - High Performance Line Filter for Switching Power Supplies NEW!											
2	10	Faston	119.10	57.70	45.70	103.20	CCM1649-ND	80.48	1408.50	4676.22	10VN1
NEW! Series Q — Line Filters For Switching Power Supply Emissions Down to 10kHz NEW!											
2	3	Faston	97.80	52.60	45.20	74.63	CCM1651-ND	49.71	870.00	2888.40	3EQ1
	6	Faston	126.50	57.70	45.70	103.20	CCM1605-ND	73.88	1293.00	4292.76	6EQ1
Series R — Line Filter, 2 Stage											
2	2	Faston	85.09	45.97	29.46	60.33	CCM1331-ND	21.91	383.50	1273.22	2VR1
	3	Faston	97.79	52.58	29.46	74.63	CCM1332-ND	23.51	411.50	1366.18	3VR1
	5	Faston	97.79	52.58	29.46	74.63	CCM1333-ND	22.11	387.00	1284.84	5VR1
	10	Faston	97.79	52.58	38.86	74.63	CCM1334-ND	23.20	406.00	1347.92	10VR1
	20	Faston	132.84	85.60	38.86	95.25	CCM1335-ND	56.28	985.00	3270.20	20VR1
	10	Screw Lug	100.58	52.58	38.86	74.63	CCM1360-ND	27.51	481.50	1598.58	10VR6
9	2	Wire Lead	52.58	45.97	29.46	60.33	CCM1341-ND	24.23	424.00	1407.68	2VR3
	5	Wire Lead	65.02	52.58	29.46	74.63	CCM1343-ND	24.43	427.50	1419.30	5VR3
	10	Wire Lead	65.02	52.58	38.86	74.63	CCM1344-ND	24.00	420.00	1394.40	10VR3
NEW! Series S — Line Filter For Emission Control NEW!											
2	3	Faston	85.30	46.20	29.50	60.33	CCM1617-ND	28.80	504.00	1673.28	3VS1
	6	Faston	98.00	52.80	38.90	74.63	CCM1603-ND	28.80	504.00	1673.28	6VS1
	10	Faston	98.00	52.80	38.90	74.63	CCM1640-ND	33.91	593.50	1970.42	10VS1
	20	Faston	132.80	85.90	38.90	95.25	CCM1648-ND	74.97	1312.00	4355.84	20VS1
NEW! Series SK — Line Filter - High Performance K Series NEW!											
2	20	Stud	127.30	57.20	45.20	103.20	CCM1630-ND	54.57	955.00	3170.60	20VSK6
7	30	Stud	125.00	79.25	69.85	87.30	CCM1624-ND	65.63	1148.50	3813.02	30VSK6
	40	Stud	152.40	79.25	55.40	88.90	CCM1615-ND	72.68	1272.00	4223.04	40VSK6
NEW! Series T — High Performance Line Filter For Switching Power Supplies NEW!											
2	6	Faston	90.40	54.60	46.00	74.63	CCM1604-ND	44.23	774.00	2569.68	6ET1
	10	Faston	119.10	57.70	45.70	103.20	CCM1643-ND	63.88	1118.00	3711.76	10ET1
	10	Faston	119.10	57.70	45.70	103.20	CCM1639-ND	63.88	1118.00	3711.76	10VT1
3	15	Faston	138.40	79.20	55.40	88.90	CCM1635-ND	84.05	1471.00	4883.72	15ET1
Series U — For Power Factor Corrected Power Supplies											
8	6.5	6EUP PCB	119.38	63.75	30.99	—	CCM1362-ND	69.17	1210.50	4018.86	6EUP
2	6.5	6EU1 Faston	125.73	57.66	45.72	103.12	CCM1363-ND	56.25	984.50	3268.54	6EU1
NEW! Series V — Line Filter For Emission Control NEW!											
2	6	Faston	98.00	52.80	38.90	74.63	CCM1602-ND	32.54	569.50	1890.74	6VV1
	10	Faston	98.00	52.80	38.90	74.63	CCM1638-ND	36.71	642.50	2133.10	10VV1
3	20	Faston	132.80	85.90	38.90	95.25	CCM1629-ND	78.42	1372.50	4556.70	20VV1
NEW! Series W — Line Filter For Emission Control, 2 Stage NEW!											
2	3	Faston	85.30	46.20	32.50	60.33	CCM1616-ND	34.28	600.00	1992.00	3VW1
	6	Faston	98.00	52.80	38.90	74.63	CCM1601-ND	34.28	600.00	1992.00	6VW1
	10	Faston	98.00	52.80	38.90	74.63	CCM1637-ND	39.34	688.50	2285.82	10VW1
3	20	Faston	132.80	85.90	38.90	95.25	CCM1628-ND	80.17	1403.00	4657.96	20VW1

Fig. 1

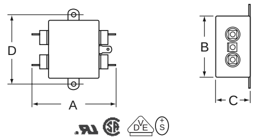


Fig. 2

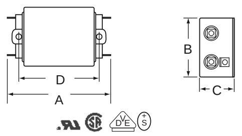


Fig. 3

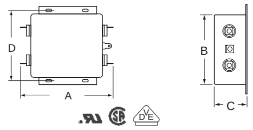


Fig. 4

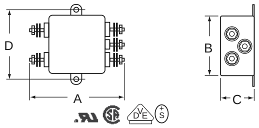


Fig. 5

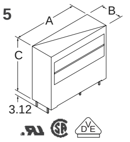


Fig. 6

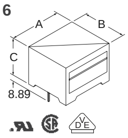


Fig. 7

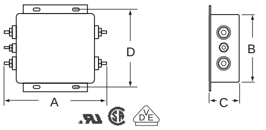


Fig. 8

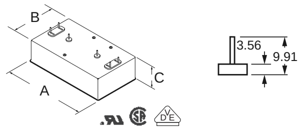


Fig. 9

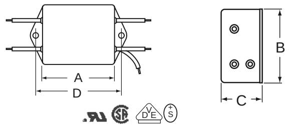
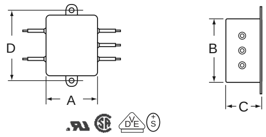


Fig. 10



PREO
A DIVISION OF EASTEK INTERNATIONAL

NEW! Power Line EMI Filters

The EB series are general purpose EMI filters, which suppress high frequency conducted noise both into and out of the equipment through the power lines. The compact and low cost designs make these a good choice for cleaning up noisy power lines.

The EK series are general purpose EMI filters with enhanced differential mode performance. They are effective in suppressing both common mode and differential mode noise. This series is a very good choice when it is required to comply with basic EMI emission regulations, such as FCC-A and VDE-A.

The ER series are high performance EMI filters with multi-stage design for both common mode and differential mode noise suppression. This series is most useful when attenuation is required for compliance with stringent EMI emission regulations such as FCC-B and VDE-B.

The HB series are general purpose EMI filters specially designed for medical and dental equipment, both patient care and nonpatient categories. The leakage current in this series is extremely low to satisfy the stringent leakage current limit imposed by safety regulations for medical and dental equipment, such as UL544 and IEC601.

Fig. 1

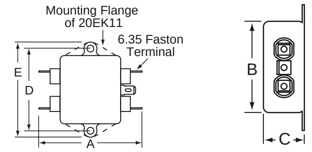


Fig. 4

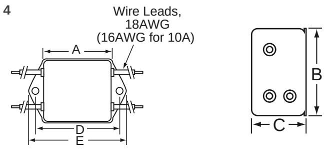


Fig. 7

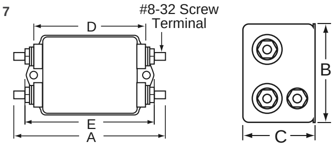


Fig. 2

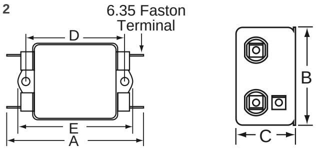


Fig. 5

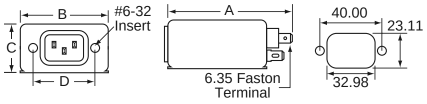


Fig. 8

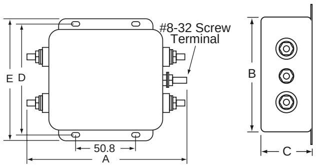


Fig. 3

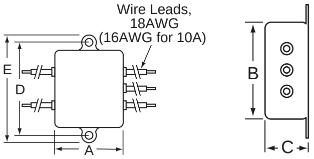


Fig. 6

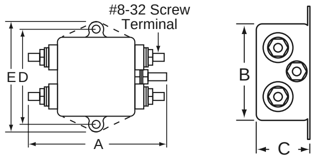


Fig. 9

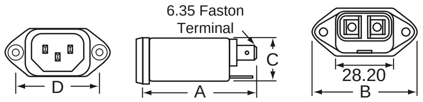


Fig.	Rated Amps	Termination	Dimensions (mm) A	B	C	D	E	Digi-Key Part No.	Price Each 1	25	50	Eastek Part No.
					Series EB							
1	2A	Faston	57.2	46.2	16.8	54.0	64.3	364-1000-ND	7.64	5.73	5.10	02EB11
1	3A	Faston	66.3	46.2	19.8	54.0	64.3	364-1001-ND	8.83	6.62	5.89	03EB11
1	6A	Faston	66.3	46.2	19.8	54.0	64.3	364-1002-ND	8.18	6.13	5.45	06EB11
1	10A	Faston	66.3	46.2	29.5	54.0	64.3	364-1008-ND	9.21	6.91	6.14	10EB11
1	20A	Faston	85.3	52.6	29.5	60.3	71.4	364-1003-ND	14.85	11.14	9.90	20EB11
3	2A	Wire	24.4	46.2	16.8	54.0	64.3	364-1004-ND	8.40	6.30	5.60	02EB33
3	3A	Wire	33.5	46.2	19.8	54.0	64.3	364-1005-ND	9.58	7.19	6.39	03EB33
3	6A	Wire	33.5	46.2	19.8	54.0	64.3	364-1006-ND	8.83	6.62	5.89	06EB33
3	10A	Wire	33.5	46.2	29.5	54.0	64.3	364-1007-ND	9.74	7.31	6.49	10EB33
6	10A	Screw	69.1	46.2	29.5	54.0	64.3	364-1009-ND	11.78	8.84	7.85	10EB66
6	20A	Screw	87.9	52.6	29.5	60.3	71.4	364-1010-ND	17.50	13.13	11.67	20EB66
8	30A	Screw	135.6	85.9	38.9	95.2	106.7	364-1011-ND	33.42	25.07	22.28	30EB66
9	1A	IEC320/Faston	54.5	50.3	20.8	40.0	—	364-1012-ND	8.16	6.12	5.44	01EBM1
9	3A	IEC320/Faston	54.5	50.3	20.8	40.0	—	364-1013-ND	6.93	5.20	4.62	03EBM1
9	6A	IEC320/Faston	54.5	50.3	20.8	40.0	—	364-1014-ND	6.86	5.15	4.58	06EBM1
9	10A	IEC320/Faston	54.5	50.3	20.8	40.0	—	364-1015-ND	7.00	5.25	4.66	10EBM1
					Series EK							
1	2A	Faston	78.7	52.6	23.1	60.3	71.4	364-1016-ND	9.76	7.32	6.51	02EK11
1	3A	Faston	78.7	52.6	29.5	60.3	71.4	364-1017-ND	11.62	8.72	7.75	03EK11
1	6A	Faston	78.7	52.6	29.5	60.3	71.4	364-1018-ND	9.94	7.45	6.63	06EK11
1	10A	Faston	85.1	52.6	29.5	60.3	71.4	364-1019-ND	10.69	8.02	7.13	10EK11
1	20A	Faston	85.1	65.0	38.9	74.6	85.1	364-1020-ND	16.61	12.46	11.07	20EK11
3	2A	Wire	46.0	52.6	23.1	60.3	71.4	364-1021-ND	10.75	8.06	7.17	02EK33
3	3A	Wire	46.0	52.6	29.5	60.3	71.4	364-1022-ND	12.22	9.16	8.14	03EK33
3	6A	Wire	46.0	52.6	29.5	60.3	71.4	364-1023-ND	11.42	8.57	7.62	06EK33
3	10A	Wire	52.6	52.6	29.5	60.3	71.4	364-1024-ND	11.25	8.43	7.50	10EK33
5	3A	IEC320/Faston	81.5	57.2	32.5	40.0	—	364-1025-ND	13.15	9.86	8.76	03EKM1
5	6A	IEC320/Faston	81.5	57.2	32.5	40.0	—	364-1026-ND	12.14	9.10	8.09	06EKM1
5	10A	IEC320/Faston	94.2	57.2	32.5	40.0	—	364-1027-ND	13.48	10.11	8.99	10EKM1
6	10A	Screw	87.9	52.6	29.5	60.3	71.4	364-1028-ND	13.20	9.90	8.80	10EK66
6	20A	Screw	87.9	65.0	38.9	74.6	85.1	364-1029-ND	19.21	14.40	12.80	20EK66
8	30A	Screw	135.6	85.9	38.9	95.2	106.7	364-1030-ND	35.98	26.98	23.98	30EK66
					Series ER							
2	2A	Faston	85.1	46.0	29.5	60.3	70.6	364-1031-ND	14.75	11.06	9.83	02ER11
2	3A	Faston	97.8	52.6	29.5	74.6	85.1	364-1032-ND	15.82	11.87	10.55	03ER11
2	6A	Faston	97.8	52.6	29.5	74.6	85.1	364-1033-ND	14.87	11.15	9.91	06ER11
2	10A	Faston	97.8	52.6	38.9	74.6	85.1	364-1034-ND	15.60	11.70	10.40	10ER11
2	20A	Faston	132.8	85.6	38.9	95.2	106.7	364-1035-ND	37.88	28.41	25.25	20ER11
4	2A	Wire	52.6	46.0	29.5	60.3	70.6	364-1036-ND	16.28	12.21	10.85	02ER33
4	3A	Wire	65.0	52.6	29.5	74.6	85.1	364-1037-ND	16.87	12.65	11.25	03ER33
4	6A	Wire	65.0	52.6	29.5	74.6	85.1	364-1038-ND	16.43	12.33	10.96	06ER33
4	10A	Wire	65.0	52.6	38.9	74.6	85.1	364-1039-ND	16.16	12.12	10.77	10ER33
5	3A	IEC320/Faston	110.0	57.2	32.5	40.0	—	364-1040-ND	18.26	13.69	12.17	03ERM1
5	6A	IEC320/Faston	110.0	57.2	32.5	40.0	—	364-1041-ND	17.23	12.92	11.48	06ERM1
5	10A	IEC320/Faston	110.0	57.2	38.9	40.0	—	364-1042-ND	18.53	13.90	12.36	10ERM1
7	10A	Screw	100.6	52.6	38.9	74.6	85.1	364-1043-ND	18.51	13.88	12.34	10ER66
8	20A	Screw	135.6	85.6	38.9	95.2	106.7	364-1044-ND	38.87	29.15	25.91	20ER66
8	30A	Screw	151.1	79.2	55.4	88.9	100.6	364-1045-ND	66.00	49.50	44.00	30ER66
					Series HB							
1	6A	Faston	66.3	46.2	19.8	54.0	64.3	364-1046-ND	8.34	6.25	5.56	06HB11
3	6A	Wire	33.5	46.2	19.8	54.0	64.3	364-1047-ND	9.48	7.11	6.32	06HB33
9	6A	IEC320/Faston	54.5	50.3	20.8	40.0	—	364-1048-ND	10.30	7.72	6.86	06HBM1

BEYSCHLAG
CENTRALAB
COMPONENTS

SAL-A 123

Axial Solid AL Electrolytic Capacitors

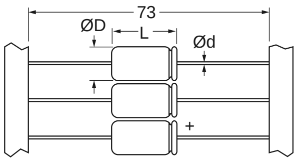
FEATURES:

- Polarized aluminum electrolytic capacitors, solid electrolyte MnO2
- Axial leads, aluminum case, ceramic seal, blue insulation sleeve.
- SAL-A: standard version
- Extremely long useful life: 20,000 hours at 125°C
- Extended usable temperature range up to 200°C
- Excellent low temperature impedance and ESR behavior
- Charge and discharge proof, application with 0 Ω resistance allowed
- Reverse DC voltage up to 0.3 x U_R allowed
- AC voltage up to 0.8 x U_R allowed
- Advanced technology to achieve high reliability and high stability

APPLICATIONS:

- EDP, telecommunications, general industrial, automotive, military and space
- Smoothing, filtering, buffering, timing
- For power supplies, DC/DC converters

Dimensions in mm.



Form BA: Taped in box (ammopack)

DESCRIPTION	VALUE
Case sizes ($\varnothing D_{nom}$ x L_{nom} in mm)	6.7 x 15.3 to 12.9 x 32.0
Rated capacitance range (E6 Series), C_R	1.5 to 2200 µF
Tolerance on C_R	±20%
Rated voltage range, U_R	6.3 to 40V
Category temperature range	-55°C to +125°C
Usable temperature range	-80°C to +200°C
Endurance test at 155 and 125°C	5000 and 8000 hours
Useful life at 40°C, I_R applied	450,000 hours
Shelf life at 0 V, 125°C	500 hours
Based on sectional specification	IEC 384-4/CECC 30300
Detail specification	IEC384-4-2/CECC 30302
Climatic category IEC 68 (DIN 40040; NF C20-600)	55/125/56 (FKD; 434)
Approvals	CNET LNZ 44-04 COS-C (PTT) Gam-t-1 (MIL) CECC 30302-003

WV	Cap	Leakage		Ripple	Dimensions (mm)			Digi-Key	Cut Tape Pricing		Digi-Key	Tape & Box Pricing				BC Components
(VDC)	(µF)	Curr(µA)	tan δ	Curr(mA)	L	D	d	Part No.	1	10	Part No.	100	500	1,000	5,000	Part No.
6.3	47	15	0.180	58	15.3	6.7	0.6	4264PHCT-ND	3.69	33.83	4264PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 13479
	68	21	0.180	83	15.3	6.7	0.6	4265PHCT-ND	3.69	33.83	4265PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 13689
	150	47	0.180	160	20.4	7.6	0.6	4266PHCT-ND	3.85	35.26	4266PHTB-ND	301.27	1231.53	1913.42	1805.64/M	2222 123 13151
	330	104	0.180	330	23.3	9.3	0.6	4267PHCT-ND	4.11	37.68	4267PHTB-ND	321.95	1316.07	2044.77	1929.58/M	2222 123 13331
	680	214	0.180	680	32	10.3	0.6	4268PHCT-ND	4.49	41.11	4268PHTB-ND	351.33	1436.15	2231.33	2105.64/M	2222 123 13681
	1000	315	0.180	940	32	12.9	0.6	4269PHCT-ND	5.17	47.41	4269PHTB-ND	405.14	1656.13	2573.12	2428.17/M	2222 123 13102
	1500	473	0.180	1220	32	12.9	0.6	4270PHCT-ND	6.01	55.11	4270PHTB-ND	470.94	1925.11	2991.03	2822.54/M	2222 123 13152
10	33	17	0.180	63	15.3	6.7	0.6	4271PHCT-ND	3.69	33.83	4271PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 14339
	47	24	0.180	83	15.3	6.7	0.6	4272PHCT-ND	3.69	33.83	4272PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 14479
	68	34	0.180	110	20.4	7.6	0.6	4273PHCT-ND	3.85	35.26	4273PHTB-ND	301.27	1231.53	1913.42	1805.64/M	2222 123 14689
	100	50	0.180	160	20.4	7.6	0.6	4274PHCT-ND	3.85	35.26	4274PHTB-ND	301.27	1231.53	1913.42	1805.64/M	2222 123 14101
	150	75	0.180	240	23.3	9.3	0.6	4275PHCT-ND	4.13	37.87	4275PHTB-ND	323.60	1322.79	2055.21	1939.44/M	2222 123 14151
	220	110	0.180	350	23.3	9.3	0.6	4276PHCT-ND	4.13	37.87	4276PHTB-ND	323.60	1322.79	2055.21	1939.44/M	2222 123 14221
	330	165	0.180	490	32	10.3	0.8	4277PHCT-ND	4.46	40.92	4277PHTB-ND	349.68	1429.42	2220.88	2095.78/M	2222 123 14331
	470	235	0.180	570	32	10.3	0.8	4278PHCT-ND	4.49	41.11	4278PHTB-ND	351.33	1436.15	2231.33	2105.64/M	2222 123 14471
	680	340	0.180	760	32	12.9	0.8	4279PHCT-ND	5.17	47.41	4279PHTB-ND	405.14	1656.13	2573.12	2428.17/M	2222 123 14681
	1000	500	0.180	1000	32	12.9	0.8	4280PHCT-ND	6.01	55.11	4280PHTB-ND	470.94	1925.11	2991.03	2822.54/M	2222 123 14102
16	10	16	0.140	31	15.3	6.7	0.6	4281PHCT-ND	3.69	33.83	4281PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 15109
	15	24	0.140	47	15.3	6.7	0.6	4282PHCT-ND	3.69	33.83	4282PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 15159
	22	35	0.140	63	15.3	6.7	0.6	4283PHCT-ND	3.69	33.83	4283PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 15229
	33	55	0.140	89	20.4	7.6	0.6	4284PHCT-ND	3.85	35.26	4284PHTB-ND	301.27	1231.53	1913.42	1805.64/M	2222 123 15339
	47	75	0.140	120	20.4	7.6	0.6	4285PHCT-ND	3.85	35.26	4285PHTB-ND	301.27	1231.53	1913.42	1805.64/M	2222 123 15479
	68	110	0.140	180	20.4	7.6	0.6	4286PHCT-ND	3.85	35.26	4286PHTB-ND	301.27	1231.53	1913.42	1805.64/M	2222 123 15689
	100	160	0.140	260	23.3	9.3	0.6	4287PHCT-ND	4.13	37.87	4287PHTB-ND	323.60	1322.79	2055.21	1939.44/M	2222 123 15101
	150	240	0.160	310	23.3	9.3	0.6	4288PHCT-ND	4.13	37.87	4288PHTB-ND	323.60	1322.79	2055.21	1939.44/M	2222 123 15151
	220	350	0.160	420	32	10.3	0.8	4289PHCT-ND	4.44	40.73	4289PHTB-ND	348.04	1422.70	2210.44	2085.92/M	2222 123 15221
	330	500	0.160	510	32	10.3	0.8	4290PHCT-ND	4.44	40.73	4290PHTB-ND	348.04	1422.70	2210.44	2085.92/M	2222 123 15331
	470	750	0.160	680	32	12.9	0.8	4291PHCT-ND	5.19	47.60	4291PHTB-ND	406.79	1662.86	2583.57	2438.03/M	2222 123 15471
	680	870	0.160	850	32	12.9	0.8	4292PHCT-ND	6.01	55.11	4292PHTB-ND	470.94	1925.11	2991.03	2822.54/M	2222 123 15681
25	10	25	0.140	43	15.3	6.7	0.6	4293PHCT-ND	3.69	33.83	4293PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 16109
	15	35	0.140	60	15.3	6.7	0.6	4294PHCT-ND	3.69	33.83	4294PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 16159
	22	55	0.140	88	20.4	7.6	0.6	4295PHCT-ND	3.85	35.26	4295PHTB-ND	301.27	1231.53	1913.42	1805.64/M	2222 123 16229
	33	85	0.140	130	20.4	7.6	0.6	4296PHCT-ND	3.85	35.26	4296PHTB-ND	301.27	1231.53	1913.42	1805.64/M	2222 123 16339
	47	100	0.140	160	20.4	7.6	0.6	4297PHCT-ND	3.85	35.26	4297PHTB-ND	301.27	1231.53	1913.42	1805.64/M	2222 123 16479
	68	170	0.140	230	23.3	9.3	0.6	4298PHCT-ND	4.11	37.68	4298PHTB-ND	321.95	1316.07	2044.77	1929.58/M	2222 123 16689
	100	250	0.160	250	23.3	9.3	0.6	4299PHCT-ND	4.13	37.87	4299PHTB-ND	323.60	1322.79	2055.21	1939.44/M	2222 123 16101
	150	400	0.160	350	32	10.3	0.8	4300PHCT-ND	4.42	40.51	4300PHTB-ND	346.16	1415.02	2198.50	2074.65/M	2222 123 16151
	220	550	0.160	460	32	12.9	0.8	4301PHCT-ND	5.15	47.19	4301PHTB-ND	403.26	1648.45	2561.18	2416.90/M	2222 123 16221
	330	800	0.160	600	32	12.9	0.8	4302PHCT-ND	5.95	54.51	4302PHTB-ND	465.77	1903.98	2958.19	2791.55/M	2222 123 16331
35	1.0	5.0	0.120	4.0	15.3	6.7	0.6	4303PHCT-ND	3.67	33.63	4303PHTB-ND	287.41	1174.86	1825.36	1722.54/M	2222 123 10108
	1.5	5.0	0.120	7.0	15.3	6.7	0.6	4304PHCT-ND	3.67	33.63	4304PHTB-ND	287.41	1174.86	1825.36	1722.54/M	2222 123 10158
	2.2	5.0	0.120	10	15.3	6.7	0.6	4305PHCT-ND	3.67	33.63	4305PHTB-ND	287.41	1174.86	1825.36	1722.54/M	2222 123 10228
	3.3	7.0	0.120	14	15.3	6.7	0.6	4306PHCT-ND	3.69	33.83	4306PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 10338
	4.7	10	0.120	20	15.3	6.7	0.6	4307PHCT-ND	3.69	33.83	4307PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 10478
	6.8	15	0.120	27	15.3	6.7	0.6	4308PHCT-ND	3.69	33.83	4308PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 10688
	10	20	0.120	37	20.4	7.6	0.6	4309PHCT-ND	3.85	35.26	4309PHTB-ND	301.27	1231.53	1913.42	1805.64/M	2222 123 10109
	15	30	0.120	53	20.4	7.6	0.6	4310PHCT-ND	3.85	35.26	4310PHTB-ND	301.27	1231.53	1913.42	1805.64/M	2222 123 10159
	22	45	0.120	78	20.4	7.6	0.6	4311PHCT-ND	3.89	35.64	4311PHTB-ND	304.56	1244.98	1934.32	1825.36/M	2222 123 10229
	33	65	0.120	120	23.3	9.3	0.6	4312PHCT-ND	4.13	37.87	4312PHTB-ND	323.60	1322.79	2055.21	1939.44/M	2222 123 10339
	47	95	0.120	140	23.3	9.3	0.6	4313PHCT-ND	4.11	37.68	4313PHTB-ND	321.95	1316.07	2044.77	1929.58/M	2222 123 10479
	68	135	0.160	170	32	10.3	0.8	4314PHCT-ND	4.42	40.51	4314PHTB-ND	346.16	1415.02	2198.50	2074.65/M	2222 123 10689
	100	200	0.160	220	32	12.9	0.8	4315PHCT-ND	5.17	47.41	4315PHTB-ND	405.14	1656.13	2573.12	2428.17/M	2222 123 10101
	150	300	0.160	290	32	12.9	0.8	4316PHCT-ND	6.01	55.11	4316PHTB-ND	470.94	1925.11	2991.03	2822.54/M	2222 123 10151
40	2.2	9.0	0.120	11	15.3	6.7	0.6	4317PHCT-ND	3.74	34.24	4317PHTB-ND	292.58	1195.99	1858.20	1753.52/M	2222 123 17228
	3.3	13	0.120	16	15.3	6.7	0.6	4318PHCT-ND	3.74	34.24	4318PHTB-ND	292.58	1195.99	1858.20	1753.52/M	2222 123 17338
	4.7	19	0.120	22	15.3	6.7	0.6	4319PHCT-ND	3.74	34.24	4319PHTB-ND	292.58	1195.99	1858.20	1753.52/M	2222 123 17478
	6.8	27	0.120	28	15.3	6.7	0.6	4320PHCT-ND	3.74	34.24	4320PHTB-ND	292.58	1195.99	1858.20	1753.52/M	2222 123 17688
	10	40	0.120	41	20.4	7.6	0.6	4321PHCT-ND	3.89	35.64	4321PHTB-ND	304.56	1244.98	1934.32	1825.36/M	2222 123 17109
	15	60	0.120	61	20.4	7.6	0.6	4322PHCT-ND	3.91	35.86	4322PHTB-ND	306.44	1252.67	1946.26	1836.62/M	2222 123 17159
	22	90	0.120	89	23.3	9.3	0.6	4323PHCT-ND	4.18	38.28	4323PHTB-ND	327.12	1337.20	2077.60	1960.57/M	2222 123 17229
	33	130	0.120	120	23.3	9.3	0.6	4324PHCT-ND	4.18	38.28	4324PHTB-ND	327.12	1337.20	2077.60	1960.57/M	2222 123 17339
	47	190	0.120	160	32	10.3	0.8	4325PHCT-ND	4.49	41.11	4325PHTB-ND	351.33	1436.15	2231.33	2105.64/M	2222 123 17479
	68	270	0.160	170	32	10.3	0.8	4326PHCT-ND	4.49	41.11	4326PHTB-ND	351.33	1436.15	2231.33	2105.64/M	2222 123 17689
	100	400	0.160	220	32	12.9	0.8	4327PHCT-ND	5.24	48.02	4327PHTB-ND	410.31	1677.27	2605.96	2459.16/M	2222 123 17101

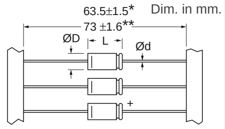
BEYSCHLAG
CENTRALAB
COMPONENTS

ASM 021

Axial Standard Miniature Electrolytic Capacitors

FEATURES: • Polarized aluminum electrolytic capacitors, non-solid • Axial leads, cylindrical aluminum case, insulated with a blue sleeve • Charge and discharge proof • Case Ø10mm x 30mm to 21mm x 40 mm with pressure relief • Taped versions up to case Ø15mm x 30 mm available for automatic insertion • Miniaturized, high CV-product per unit volume

APPLICATIONS: • General purpose, industrial, automotive, audio-video • Coupling, decoupling, smoothing, filtering, buffering and timing • Portable and mobile equipment (small size, low mass) • Low mounting height boards, vibration and shock resistant.



Case size 10 x 30 and above are bulk
Form BA: Taped in box (ammopack)
*Case ØD x L =
4.5 x 10 to 8 x 11 mm
**Case ØD x L =
6.5 x 18 to 10 x 25 mm

DESCRIPTION	VALUE	
Case sizes ($ØD_{nom}$ x L_{nom} in mm)	4.5 x 10 to 10 x 25	10 x 30 to 21 x 40
Rated capacitance range, C_R	0.47 to 15,000 µF	
Tolerance on C_R	±20%	
Rated voltage range, U_R	6.3 to 100V	
Category temperature range	–40°C to +85°C	
Endurance test at 85°C: U_R = 6.3 to 25 V U_R = 40 to 100 V	1,000 hours 2,000 hours	5,000 hours 5,000 hours
Useful life at 85°C	2,500 hours	8,000 hours
Useful life at 40°C, 1.4 x I_R applied	70,000 hours	200,000 hours
Shelf life at 0 V, 85°C	500 hours	500 hours
Based on sectional specification: U_R = 6.3 to 25 V U_R = 40 to 100 V	IEC 384-4/CECC 30300 GP grade LL grade	IEC384-4/CECC 30300 LL grade LL grade
Climatic category IEC 68 (DIN 40040)	40/085/56 (GPF)	

WV (VDC)	Cap (µF)	Leakage Curr(µA)	tan δ	Ripple Curr(mA)	Dimensions (mm)			Digi-Key	Pricing*			Digi-Key	Pricing*				BC Components
					L	D	d	Part No.	1	10	100	Part No.	500	1,000	5,000	10,000	Part No.
6.3	470	22	0.250	260	11	8	0.6	4000PHCT-ND	.47	3.99	31.26	4000PHTB-ND	127.76	198.51	187.33/M	172.73/M	2222 021 33471
	1000	42	0.250	440	18	8	0.8	4001PHCT-ND	.53	4.50	35.25	4001PHTB-ND	144.10	223.88	211.27/M	194.81/M	2222 021 33102
	2200	87	0.290	710	25	10	0.8	4002PHCT-ND	.89	7.65	59.93	4002PHTB-ND	244.96	380.60	359.16/M	331.17/M	2222 021 90589
10	100	10	0.200	100	10	4.5	0.6	4003PHCT-ND	.32	2.76	21.62	4003PHTB-ND	—	137.31	129.58/M	119.48/M	2222 021 34101
	220	17	0.200	160	10	6	0.6	4004PHCT-ND	.36	3.12	24.44	4004PHTB-ND	—	155.22	146.48/M	135.07/M	2222 021 34221
	330	24	0.200	230	11	8	0.6	4005PHCT-ND	.47	3.99	31.26	4005PHTB-ND	127.76	198.51	187.33/M	172.73/M	2222 021 34331
	470	32	0.200	310	18	6.5	0.8	4006PHCT-ND	.49	4.17	32.67	4006PHTB-ND	—	207.46	195.78/M	180.52/M	2222 021 34471
	680	45	0.200	400	18	8	0.8	4007PHCT-ND	.53	4.50	35.25	4007PHTB-ND	144.10	223.88	211.27/M	194.81/M	2222 021 34681
	1000	64	0.200	550	18	10	0.8	4008PHCT-ND	.65	5.55	43.48	4008PHTB-ND	177.72	276.12	260.57/M	240.26/M	2222 021 34102
	1500	94	0.230	690	25	10	0.8	4009PHCT-ND	.85	7.29	57.11	4009PHTB-ND	233.43	362.68	342.26/M	315.59/M	2222 021 90525
	1500	94	0.230	740	30	10	0.8	4010PHBK-ND	1.21	10.35	81.08	—	331.42	514.92	485.92/M	448.06/M	2222 021 14152
	2200	136	0.250	800	30	12.5	0.8	4011PHBK-ND	1.35	11.55	90.48	—	369.84	574.62	542.26/M	500.00/M	2222 021 14222
	3300	202	0.270	1000	30	12.5	0.8	4012PHBK-ND	1.38	11.82	92.59	—	378.49	588.06	554.93/M	511.69/M	2222 021 14332
	4700	286	0.290	1180	30	15	0.8	4013PHBK-ND	1.58	13.56	106.22	—	434.21	674.62	636.62/M	587.02/M	2222 021 14472
	6800	412	0.340	1480	30	18	0.8	4014PHBK-ND	1.84	15.75	123.38	—	504.33	783.58	739.44/M	681.82/M	2222 021 14682
	10000	604	0.400	1860	40	18	0.8	4015PHBK-ND	2.33	19.98	156.51	—	639.78	994.02	938.03/M	864.94/M	2222 021 14103
	15000	904	0.500	2250	40	21	0.8	4016PHBK-ND	2.94	25.20	197.40	—	806.93	1253.73	1183.10/M	1090.91/M	2222 021 14153
16	68	11	0.160	90	10	4.5	0.6	4017PHCT-ND	.32	2.76	21.62	4017PHTB-ND	—	137.31	129.58/M	119.48/M	2222 021 35689
	150	18	0.160	140	10	6	0.6	4018PHCT-ND	.36	3.12	24.44	4018PHTB-ND	—	155.22	146.48/M	135.07/M	2222 021 35151
	220	25	0.160	210	11	8	0.6	4019PHCT-ND	.47	3.99	31.26	4019PHTB-ND	127.76	198.51	187.33/M	172.73/M	2222 021 35221
	330	36	0.160	290	18	6.5	0.8	4020PHCT-ND	.47	3.99	31.26	4020PHTB-ND	—	198.51	187.33/M	172.73/M	2222 021 35331
	470	49	0.160	380	18	8	0.8	4021PHCT-ND	.55	4.68	36.66	4021PHTB-ND	149.86	232.83	219.72/M	202.60/M	2222 021 35471
	680	69	0.160	500	18	10	0.8	4022PHCT-ND	.67	5.70	44.65	4022PHTB-ND	182.52	283.58	267.61/M	246.76/M	2222 021 35681
	1000	100	0.160	660	25	10	0.8	4023PHCT-ND	.85	7.29	57.11	4023PHTB-ND	233.43	362.68	342.26/M	315.59/M	2222 021 90518
	1000	100	0.160	700	30	10	0.8	4024PHBK-ND	1.21	10.41	81.55	—	333.34	517.91	488.74/M	450.65/M	2222 021 15102
	1500	148	0.190	740	30	12.5	0.8	4025PHBK-ND	1.35	11.61	90.95	—	371.77	577.61	545.07/M	502.60/M	2222 021 15152
	2200	216	0.210	890	30	12.5	0.8	4026PHBK-ND	1.37	11.76	92.12	—	376.57	585.07	552.12/M	509.09/M	2222 021 15222
	3300	321	0.230	1130	30	15	0.8	4027PHBK-ND	1.58	13.56	106.22	—	434.21	674.62	636.62/M	587.02/M	2222 021 15332
	4700	455	0.250	1410	30	18	0.8	4028PHBK-ND	1.83	15.72	123.14	—	503.37	782.09	738.03/M	680.52/M	2222 021 15472
	6800	656	0.300	1780	40	18	0.8	4029PHBK-ND	2.31	19.83	155.34	—	634.98	986.56	930.99/M	858.45/M	2222 021 15682
	10000	964	0.360	2170	40	21	0.8	4030PHBK-ND	2.89	24.78	194.11	—	793.48	1232.83	1163.38/M	1072.73/M	2222 021 15103
25	47	11	0.140	80	10	4.5	0.6	4031PHCT-ND	.32	2.76	21.62	4031PHTB-ND	—	137.31	129.58/M	119.48/M	2222 021 36479
	100	19	0.140	150	10	6.0	0.6	4032PHCT-ND	.36	3.12	24.44	4032PHTB-ND	—	155.22	146.48/M	135.07/M	2222 021 36101
	150	27	0.140	190	11	8.0	0.6	4033PHCT-ND	.47	3.99	31.26	4033PHTB-ND	127.76	198.51	187.33/M	172.73/M	2222 021 90535
	150	27	0.140	210	18	6.5	0.8	4034PHCT-ND	.47	3.99	31.26	4034PHTB-ND	—	198.51	187.33/M	172.73/M	2222 021 36151
	220	37	0.140	250	18	6.5	0.8	4035PHCT-ND	.47	3.99	31.26	4035PHTB-ND	—	198.51	187.33/M	172.73/M	2222 021 36221
	330	54	0.140	340	18	8.0	0.8	4036PHCT-ND	.53	4.50	35.25	4036PHTB-ND	144.10	223.88	211.27/M	194.81/M	2222 021 36331
	470	75	0.140	450	18	10	0.8	4037PHCT-ND	.65	5.55	43.48	4037PHTB-ND	177.72	276.12	260.57/M	240.26/M	2222 021 36471
	680	106	0.140	560	25	10	0.8	4038PHCT-ND	.85	7.29	57.11	4038PHTB-ND	233.43	362.68	342.26/M	315.59/M	2222 021 90528
	680	106	0.140	640	30	10	0.8	4039PHBK-ND	1.21	10.41	81.55	—	333.34	517.91	488.74/M	450.65/M	2222 021 16681
	1000	154	0.140	720	30	12.5	0.8	4040PHBK-ND	1.36	11.67	91.42	—	373.69	580.59	547.89/M	505.20/M	2222 021 16102
	1500	229	0.170	790	30	12.5	0.8	4041PHBK-ND	1.37	11.76	92.12	—	376.57	585.07	552.12/M	509.09/M	2222 021 16152
	2200	334	0.190	1030	30	15	0.8	4042PHBK-ND	1.58	13.56	106.22	—	434.21	674.62	636.62/M	587.02/M	2222 021 16222
	3300	499	0.210	1310	30	18	0.8	4043PHBK-ND	1.85	15.84	124.08	—	507.22	788.06	743.67/M	685.72/M	2222 021 16332
	4700	709	0.230	1680	40	18	0.8	4044PHBK-ND	2.33	19.95	156.28	—	638.82	992.53	936.62/M	863.64/M	2222 021 16472
	6800	1024	0.280	2070	40	21	0.8	4045PHBK-ND	2.92	24.99	195.76	—	800.21	1243.28	1173.24/M	1081.82/M	2222 021 16682
40	22	9.0	0.110	60	10	4.5	0.6	4046PHCT-ND	.32	2.76	21.62	4046PHTB-ND	—	137.31	129.58/M	119.48/M	2222 021 37229
	47	15	0.110	110	10	6.0	0.6	4047PHCT-ND	.36	3.12	24.44	4047PHTB-ND	—	155.22	146.48/M	135.07/M	2222 021 37479
	100	28	0.110	170	11	8.0	0.6	4048PHCT-ND	.47	3.99	31.26	4048PHTB-ND	127.76	198.51	187.33/M	172.73/M	2222 021 90538
	100	28	0.110	190	18	6.5	0.8	4049PHCT-ND	.47	3.99	31.26	4049PHTB-ND	—	198.51	187.33/M	172.73/M	2222 021 37101
	150	40	0.110	250	18	8	0.8	4050PHCT-ND	.49	4.17	32.67	4050PHTB-ND	133.53	207.46	195.78/M	180.52/M	2222 021 37151
	220	57	0.110	330	18	10	0.8	4051PHCT-ND	.65	5.55	43.48	4051PHTB-ND	177.72	276.12	260.57/M	240.26/M	2222 021 37221
	330	83	0.110	430	25	10	0.8	4052PHCT-ND	.83	7.08	55.46	4052PHTB-ND	226.71	352.24	332.40/M	306.50/M	2222 021 37331
	470	117	0.110	520	25	10	0.8	4053PHCT-ND	.85	7.29	57.11	4053PHTB-ND	233.43	362.68	342.26/M	315.59/M	2222 021 90515
	470	117	0.120	570	30	10	0.8	4054PHBK-ND	1.22	10.44	81.78	—	334.30	519.40	490.14/M	451.95/M	2222 021 17471
	680	167	0.120	620	30	12.5	0.8	4055PHBK-ND	1.36	11.67	91.42	—	373.69	580.59	547.89/M	505.20/M	2222 021 17681
	1000	244	0.120	770	30	12.5	0.8	4056PHBK-ND	1.41	12.09	94.71	—	387.14	601.49	567.61/M	523.38/M	2222 021 17102
	1500	364	0.150	930	30	15	0.8	4057PHBK-ND	1.60	13.74	107.63	—	439.97	683.58	645.07/M	594.81/M	2222 021 17152
	2200	532	0.170	1200	30	18	0.8	4058PHBK-ND	2.14	18.30	143.35	—	585.99	910.44	859.16/M	792.21/M	2222 021 17222
	3300	796	0.190	1550	40	18	0.8	4059PHBK-ND	2.43	20.85	163.33	—	667.64	1037.31	978.88/M	902.60/M	2222 021 17332
	4700	1132	0.210	1880	40	21	0.8	4060PHBK-ND	2.99	25.62	200.69	—	820.38	1274.62	1202.82/M	1109.09/M	2222 021 17472
63	0.47	4.2	0.090	8.0	10	4.5	0.6	4061PHCT-ND	.28	2.40	18.80	4061PHTB-ND	—	119.40	112.68/M	103.90/M	2222 021 38477
	1.0	4.4	0.090	12	10	4.5	0.6	4062PHCT-ND	.28	2.40	18.80	4062PHTB-ND	—	119.40	112.68/M	103.90/M	2222 021 38108
	2.2	4.8	0.090	21	10	4.5	0.6	4063PHCT-ND	.28	2.40	18.80	4063PHTB-ND	—	119.40	112.68/M	103.90/M	2222 021 38228
	3.3	5.2	0.090	25	10	4.5	0.6	4064PHCT-ND	.28	2.40	18.80	4064PHTB-ND	—	119.40	112.68/M	103.90/M	2222 021 38338
	4.7	5.8	0.090	31	10	4.5	0.6	4065PHCT-ND	.28	2.40	18.80	4065PHTB-ND	—	119.40	112.68/M	103.90/M	2222 021 38478
	10	7.8	0.080	50	10	4.5	0.6	4066PHCT-ND	.28	2.40	18.80	4066PHTB-ND	—	119.40	112.68/M	103.90/M	2222 021 38109
	15	9.5	0.080	55	10	4.5	0.6	4067PHCT-ND	.32	2.76	21.62	4067PHTB-ND	—	137.31	129.58/M	119.48/M	2222 021 38159
	22	12	0.080	90	10	6.0	0.6	4068PHCT-ND	.32	2.76	21.62	4068PHTB-ND	—	137.31	129.58/M	119.48/M	2222 021 38229
	33	16	0.080	100	10	6.0	0.6	4069PHCT-ND	.36	3.12	24.44	4069PHTB-ND	—	155.22	146.48/M	135.07/M	2222 021 38339
	47	22	0.080	140	11	8.0	0.6	4070PHCT-ND	.49	4.17	32.67	4070PHTB-ND	133.53	207.46	195.78/M	180.52/M	2222 021 90542
	47	22	0.080	150	18	6.5	0.8	4071PHCT-ND	.42	3.63	28.44	4071PHTB-ND	—	180.60	170.43/M	157.15/M	2222 021 38479
	68	30	0.080	160	11	8.0	0.6	4072PHCT-ND	.49	4.17	32.67	4072PHTB-ND	133.53	207.46	195.78/M	180.52/M	2222 021 90545
	68	30	0.080	170	18	6.5	0.8	4073PHCT-ND	.49	4.17	32.67	4073PHTB-ND	—	207.46	195.78/M	180.52/M	2222 021 38689
	100	42	0.080	250	18	8.0	0.8	4074PHCT-ND	.55	4.68	36.66	4074PHTB-ND	149.86	232.83	219.72/M	202.60/M	2222 021 38101
	150	61	0.080	320	18	10	0.8	4075PHCT-ND	.67	5.70	44.65	4075PHTB-ND	182.52	283.58	267.61/M	246.76/M	2222 021 38151
	220	88	0.080	430	25	10	0.8	4076PHCT-ND	.87	7.44	58.28	4076PHTB-ND	238.24	370.15	349.30/M	322.08/M	2222 021 90512
	220	88	0.080	480	30	10	0.8	4077PHBK-ND	1.20	10.32	80.84	—	330.46	513.43	484.51/M	446.76/M	2222 021 18221
	330	129	0.080	530	30	12.5	0.8	4078PHBK-ND	1.34	11.46	89.77	—	366.96	570.15	538.03/M	496.11/M	2222 021 18331
	470	182	0.080	630	30	12.5	0.8	4079PHBK-ND	1.37	11.73	91.89	—	375.61	583.58	550.71/M	507.80/M	2222 021 18471
	680	261	0.080	830	30	15	0.8	4080PHBK-ND	1.55	13.32	104.34	—	426.52	662.68	625.36/M	576.63/M	2222 021 18681
	1000	382	0.080	1120	30	18	0.8	4081PHBK-ND	1.80	15.45	121.03	—	494.73	768.65	725.36/M	668.84/M	2222 021 18102
	1500	571	0.110	1350	40	18	0.8	4082PHBK-ND	2.31	19.80	155.10	—	634.02	985.07	929.58/M	857.15/M	2222 021 18152
	2200	836	0.130	1780	40	21	0.8	4083PHBK-ND	2.87	24.57	192.47	—	786.76	1222.38	1153.52/M	1063.64/M	2222 021 18222
100	1.0	4.6	0.080	14	10	4.5	0.6	4084PHCT-ND	.30	2.61	20.45	4084PHTB-ND	—	129.85	122.54/M	112.99/M	2222 021 39108
	2.2	5.3	0.080	20	10	4.5	0.6	4085PHCT-ND	.30	2.61	20.45	4085PHTB-ND	—	129.85	122.54/M	112.99/M	2222 021 39228
	4.7	7.0	0.080	30	10	4.5	0.6	4086PHCT-ND	.34	2.94	23.03	4086PHTB-ND	—	146.27	138.03/M	127.28/M	2222 021 39478
	10	10	0.080	65	10	6.0	0.6	4087PHCT-ND	.34	2.94	23.03	4087PHTB-ND	—	146.27	138.03/M	127.28/M	2222 021 39109
	15	13	0.080	77	11	8.0	0.6	4088PHCT-ND	.47	3.99	31.26	4088PHTB-ND	127.76	198.51	187.33/M	172.73/M	2222 021 90548
	15	13	0.080	85	18	6.5	0.8	4089PHCT-ND	.42	3.63	28.44	4089PHTB-ND	—	180.60	170.43/M	157.15/M	2222 021 39159
	22	17	0.080	95	11	8.0	0.6	4090PHCT-ND	.49	4.17	32.67	4090PHTB-ND	133.53	207.46	195.78/M	180.52/M	2222 021 90552
	22	17	0.080	100	18	6.5	0.8	4091PHCT-ND	.44	3.81	29.85	4091PHTB-ND	—	189.55	178.88/M	164.94/M	2222 021 39229
	33	24	0.080	120	18	6.5	0.8	4092PHCT-ND	.49	4.17	32.67	4092PHTB-ND	—	207.46	195.78/M	180.52/M	2222 021 39339
	47	32	0.080	160	18	8.0	0.8	4093PHCT-ND	.57	4.86	38.07	4093PHTB-ND	155.62	241.79	228.17/M	210.39/M	2222 021 39479
	68	45	0.080	220	18	10	0.8	4094PHCT-ND	.69	5.91	46.30	4094PHTB-ND	189.25	294.03	277.47/M	255.85/M	2222 021 39689
	100	64	0.080	300	25	10	0.8	4095PHCT-ND	.91	7.80	61.10	4095PHTB-ND	249.77	388.06	366.20/M	337.67/M	2222 021 90532
	100	64	0.070	360	30	10	0.8	4096PHBK-ND	1.21	10.41	81.55	—	333.34	517.91	488.74/M	450.65/M	2222 021 19101
	150	94	0.070	420	30	12.5	0.8	4097PHBK-ND	1.38	11.82	92.59	—	378.49	588.06	554.93/M	511.69/M	2222 021 19151
	220	136	0.080	460	30	12.5	0.8	4098PHBK-ND	1.40	11.97	93.77	—	383.29	595.52	561.98/M	518.19/M	2222 021 19221
	330	202	0.090	580	30	15	0.8	4099PHBK-ND	1.60	13.74	107.63	—	439.97	683.58	645.07/M	594.81/M	2222 021 19331
	470	286	0.090	740	30	18	0.8	4100PHBK-ND	1.88	16.14	126.43	—	516.82	802.98	757.75/M	698.71/M	2222 021 19471
	680	412	0.090	1050	40	18	0.8	4101PHBK-ND	2.38	20.43	160.04	—	654.19	1016.41	959.16/M	884.42/M	2222 021 19681
	1000	604	0.100	1260	40	21	0.8	4102PHBK-ND	2.99	25.62	200.69	—	820.38	1274.62	1202.82/M	1109.09/M	2222 021 19102

* “CT” stands for Cut Tape; “TB” stands for Tape and Box; “BK” stands for Bulk.

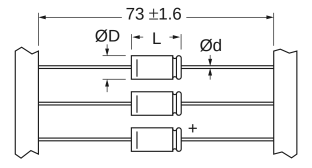
BEYSCHLAG
CENTRALAB
COMPONENTS

AHT 118 Axial High Temperature Electrolytic Capacitors

FEATURES:
- Polarized aluminum electrolytic capacitors, non-solid
- Axial leads, cylindrical aluminum case, insulated with a blue sleeve
- Case Ø10mm x 30mm to 21mm x 40 mm with pressure relief
- Taped versions up to case Ø15mm x 30 mm available for automatic insertion
- Charge and discharge proof
- Extra long useful life: 4,000 hours at 125°C, high reliability
- Extended temperature range: 125°C (usable up to 150°C)
- Miniaturized, high CV-product per unit volume

APPLICATIONS:
- Automotive, industrial and telecommunication
- Smoothing, filtering, coupling, decoupling, timing
- For use after very long storage (10 years) without voltage applied
- Portable and mobile equipment (small size, low mass)
- Low mounting height boards, vibration and shock resistant
- Outdoor applications, e.g. aerial amplifiers

Dimensions in mm.



Case size 10mm x 30mm and above are bulk
Form BA: Taped in box (ammopack)
Case ØD x L = 6.5mm x 18mm to 10mm x 25mm

DESCRIPTION	VALUE	
Case sizes ($ØD_{nom}$ x L_{nom} in mm)	6.5 x 18 to 10 x 25	10 x 30 to 21 x 40
Rated capacitance range, C_R	1 to 10,000 µF	
Tolerance on C_R	±20%	
Rated voltage range, U_R	6.3 to 200V	
Category temperature range	-40°C to +125°C	-55°C to +125°C
Endurance test at 150°C, with no I_R applied	500 hours	1,000 hours
Endurance test at 125°C	2,000 hours	3,000 hours
Useful life at 125°C	4,000 hours	4,000 hours
Useful life at 40°C, 1.8 x I_R applied	500,000 hours	500,000 hours
Shelf life at 0 V, 125°C U_R = 6.3 to 63V U_R = 100 and 200 V	500 hours 100 hours	
Based on sectional specification	IEC 384-4/CECC 30300, LL grade	
Climatic category IEC 68 (DIN 40040)	40/125/56 (GKD)	55/125/56 (FKD)

WV	Cap	Leakage		Ripple	Dimensions (mm)			Digi-Key	Pricing*			Digi-Key	Pricing*				BC Components
(VDC)	(µF)	Curr(µA)	tan δ	Curr(mA)	L	D	d	Part No.	1	10	100	Part No.	500	1,000	5,000	10,000	Part No.
6.3	1000	42	0.500	251	18	10	0.8	4103PHCT-ND	1.86	15.96	125.02	4103PHTB-ND	511.06	794.03	749.30/M	690.91/M	2222 118 33102
	1500	61	0.500	352	25	10	0.8	4104PHCT-ND	2.10	18.00	141.00	4104PHTB-ND	576.38	895.52	845.07/M	779.22/M	2222 118 90503
10	220	20	0.350	109	18	6.5	0.8	4105PHCT-ND	1.56	13.35	104.58	4105PHTB-ND	—	664.18	626.76/M	577.93/M	2222 118 34221
	330	24	0.350	150	18	8.0	0.8	4106PHCT-ND	1.63	14.01	109.75	4106PHTB-ND	448.62	697.01	657.75/M	606.50/M	2222 118 34331
	470	32	0.350	179	18	8.0	0.8	4107PHCT-ND	1.63	14.01	109.75	4107PHTB-ND	448.62	697.01	657.75/M	606.50/M	2222 118 34471
	1000	64	0.350	343	25	10	0.8	4108PHCT-ND	1.98	16.98	133.01	4108PHTB-ND	543.72	844.77	797.19/M	735.07/M	2222 118 90505
	1000	64	0.320	409	30	10	0.8	4109PHBK-ND	1.21	10.41	81.55	—	333.34	517.91	488.74/M	450.65/M	2222 118 14102
	1500	94	0.320	590	30	12.5	0.8	4110PHBK-ND	1.34	11.52	90.24	—	368.88	573.13	540.85/M	498.71/M	2222 118 14152
	2200	136	0.400	634	30	12.5	0.8	4111PHBK-ND	1.37	11.76	92.12	—	376.57	585.07	552.12/M	509.09/M	2222 118 14222
	3300	202	0.400	826	30	15	0.8	4112PHBK-ND	1.58	13.53	105.99	—	433.25	673.13	635.21/M	585.72/M	2222 118 14332
	4700	286	0.460	1035	30	18	0.8	4113PHBK-ND	1.83	15.66	122.67	—	501.45	779.10	735.21/M	677.93/M	2222 118 14472
	6800	412	0.530	1395	40	18	0.8	4114PHBK-ND	2.30	19.74	154.63	—	632.10	982.08	926.76/M	854.55/M	2222 118 14682
	10000	604	0.530	1674	40	21	0.8	4115PHBK-ND	2.89	24.78	194.11	—	793.48	1232.83	1163.38/M	1072.73/M	2222 118 14103
16	220	25	0.250	145	18	8.0	0.8	4116PHCT-ND	1.70	14.55	113.98	4116PHTB-ND	465.91	723.88	683.10/M	629.87/M	2222 118 35221
	330	36	0.250	204	18	10	0.8	4117PHCT-ND	1.88	16.11	126.20	4117PHTB-ND	515.86	801.49	756.34/M	697.41/M	2222 118 35331
	470	49	0.250	243	18	10	0.8	4118PHCT-ND	1.86	15.96	125.02	4118PHTB-ND	511.06	794.03	749.30/M	690.91/M	2222 118 35471
	680	69	0.220	389	30	10	0.8	4119PHBK-ND	1.21	10.41	81.55	—	333.34	517.91	488.74/M	450.65/M	2222 118 15681
	1000	100	0.220	557	30	12.5	0.8	4120PHBK-ND	1.36	11.67	91.42	—	373.69	580.59	547.89/M	505.20/M	2222 118 15102
	1500	148	0.290	609	30	12.5	0.8	4121PHBK-ND	1.38	11.79	92.36	—	377.53	586.56	553.52/M	510.39/M	2222 118 15152
	2200	215	0.290	790	30	15	0.8	4122PHBK-ND	1.58	13.56	106.22	—	434.21	674.62	636.62/M	587.02/M	2222 118 15222
	3300	321	0.340	1008	30	18	0.8	4123PHBK-ND	1.85	15.87	124.32	—	508.18	789.55	745.07/M	687.02/M	2222 118 15332
	4700	455	0.340	1363	40	18	0.8	4124PHBK-ND	2.33	19.95	156.28	—	638.82	992.53	936.62/M	863.64/M	2222 118 15472
	6800	657	0.380	1627	40	21	0.8	4125PHBK-ND	2.92	24.99	195.76	—	800.21	1243.28	1173.24/M	1081.82/M	2222 118 15682
25	100	20	0.180	102	18	6.5	0.8	4126PHCT-ND	1.56	13.35	104.58	4126PHTB-ND	—	664.18	626.76/M	577.93/M	2222 118 36101
	220	37	0.180	196	18	10	0.8	4127PHCT-ND	1.90	16.26	127.37	4127PHTB-ND	520.66	808.95	763.38/M	703.90/M	2222 118 36221
	330	54	0.180	274	25	10	0.8	4128PHCT-ND	2.12	18.18	142.41	4128PHTB-ND	582.14	904.47	853.52/M	787.02/M	2222 118 36331
	470	75	0.180	327	25	10	0.8	4129PHCT-ND	2.32	19.92	156.04	4129PHTB-ND	637.86	991.04	935.21/M	862.34/M	2222 118 90509
	470	75	0.180	366	30	10	0.8	4130PHBK-ND	1.22	10.47	82.02	—	335.26	520.89	491.55/M	453.25/M	2222 118 16471
	680	106	0.180	515	30	12.5	0.8	4131PHBK-ND	1.37	11.70	91.65	—	374.65	582.09	549.30/M	506.50/M	2222 118 16681
	1000	154	0.240	531	30	12.5	0.8	4132PHBK-ND	1.42	12.15	95.18	—	389.06	604.47	570.43/M	525.98/M	2222 118 16102
	1500	229	0.250	691	30	15	0.8	4133PHBK-ND	1.65	14.10	110.45	—	451.50	701.49	661.98/M	610.39/M	2222 118 16152
	2200	334	0.260	919	30	18	0.8	4134PHBK-ND	1.89	16.17	126.67	—	517.78	804.47	759.16/M	700.00/M	2222 118 16222
	3300	499	0.260	1280	40	18	0.8	4135PHBK-ND	2.43	20.85	163.33	—	667.64	1037.31	978.88/M	902.60/M	2222 118 16332
	4700	709	0.280	1464	40	21	0.8	4136PHBK-ND	3.01	25.83	202.34	—	827.11	1285.07	1212.68/M	1118.19/M	2222 118 16472
40	47	20	0.110	89.8	18	6.5	0.8	4137PHCT-ND	1.63	14.01	109.75	4137PHTB-ND	—	697.01	657.75/M	606.50/M	2222 118 37479
	100	28	0.110	147	18	8.0	0.8	4138PHCT-ND	1.72	14.73	115.39	4138PHTB-ND	471.67	732.83	691.55/M	637.67/M	2222 118 37101
	150	40	0.110	207	18	10	0.8	4139PHCT-ND	2.08	17.85	139.83	4139PHTB-ND	571.58	888.06	838.03/M	772.73/M	2222 118 37151
	220	57	0.110	287	25	10	0.8	4140PHCT-ND	2.30	19.74	154.63	4140PHTB-ND	632.10	982.08	926.76/M	854.55/M	2222 118 90512
	220	57	0.100	338	30	10	0.8	4141PHBK-ND	1.21	10.35	81.08	—	331.42	514.92	485.92/M	448.06/M	2222 118 17221
	330	83	0.100	484	30	12.5	0.8	4142PHBK-ND	1.37	11.70	91.65	—	374.65	582.09	549.30/M	506.50/M	2222 118 17331
	470	117	0.110	522	30	12.5	0.8	4143PHBK-ND	1.38	11.85	92.83	—	379.45	589.55	556.34/M	512.99/M	2222 118 17471
	680	167	0.110	695	30	15	0.8	4144PHBK-ND	1.58	13.56	106.22	—	434.21	674.62	636.62/M	587.02/M	2222 118 17681
	1000	244	0.130	852	30	18	0.8	4145PHBK-ND	1.84	15.78	123.61	—	505.29	785.07	740.85/M	683.12/M	2222 118 17102
	1500	364	0.130	1196	40	18	0.8	4146PHBK-ND	2.38	20.37	159.57	—	652.27	1013.43	956.34/M	881.82/M	2222 118 17152
	2200	532	0.150	1403	40	21	0.8	4147PHBK-ND	2.94	25.20	197.40	—	806.93	1253.73	1183.10/M	1090.91/M	2222 118 17222
63	1.0	20	0.070	16.4	18	6.5	0.8	4148PHCT-ND	1.63	14.01	109.75	4148PHTB-ND	—	697.01	657.75/M	606.50/M	2222 118 38108
	2.2	20	0.070	24.3	18	6.5	0.8	4149PHCT-ND	1.63	14.01	109.75	4149PHTB-ND	—	697.01	657.75/M	606.50/M	2222 118 38228
	4.7	20	0.070	35.6	18	6.5	0.8	4150PHCT-ND	1.63	14.01	109.75	4150PHTB-ND	—	697.01	657.75/M	606.50/M	2222 118 38478
	10	20	0.070	51.9	18	6.5	0.8	4151PHCT-ND	1.63	14.01	109.75	4151PHTB-ND	—	697.01	657.75/M	606.50/M	2222 118 38109
	22	20	0.070	77	18	6.5	0.8	4152PHCT-ND	1.68	14.37	112.57	4152PHTB-ND	—	714.92	674.65/M	622.08/M	2222 118 38229
	47	22	0.070	126	18	8.0	0.8	4153PHCT-ND	1.78	15.24	119.38	4153PHTB-ND	488.00	758.21	715.50/M	659.74/M	2222 118 38479
	100	42	0.070	243	25	10	0.8	4154PHCT-ND	2.08	17.85	139.83	4154PHTB-ND	571.58	888.06	838.03/M	772.73/M	2222 118 90514
	100	42	0.070	262	30	10	0.8	4155PHBK-ND	1.22	10.44	81.78	—	334.30	519.40	490.14/M	451.95/M	2222 118 18101
	150	61	0.070	415	30	12.5	0.8	4156PHBK-ND	1.38	11.82	92.59	—	378.49	588.06	554.93/M	511.69/M	2222 118 18151
	220	87	0.080	454	30	12.5	0.8	4157PHBK-ND	1.40	12.03	94.24	—	385.21	598.50	564.79/M	520.78/M	2222 118 18221
	330	129	0.090	544	30	15	0.8	4158PHBK-ND	1.61	13.83	108.34	—	442.85	688.06	649.30/M	598.71/M	2222 118 18331
	470	182	0.090	695	30	18	0.8	4159PHBK-ND	1.88	16.14	126.43	—	516.82	802.98	757.75/M	698.71/M	2222 118 18471
	680	261	0.090	971	40	18	0.8	4160PHBK-ND	2.38	20.43	160.04	—	654.19	1016.41	959.16/M	884.42/M	2222 118 18681
	1000	383	0.100	1161	40	21	0.8	4161PHBK-ND	2.99	25.62	200.69	—	820.38	1274.62	1202.82/M	1109.09/M	2222 118 18102
100	4.7	20	0.070	36	18	6.5	0.8	4162PHCT-ND	1.63	14.01	109.75	4162PHTB-ND	—	697.01	657.75/M	606.50/M	2222 118 39478
	10	20	0.070	52	18	6.5	0.8	4163PHCT-ND	1.68	14.37	112.57	4163PHTB-ND	—	714.92	674.65/M	622.08/M	2222 118 39109
	22	20	0.070	91	18	8.0	0.8	4164PHCT-ND	1.82	15.60	122.20	4164PHTB-ND	499.53	776.12	732.40/M	675.33/M	2222 118 39229
	33	24	0.070	140	25	10	0.8	4165PHCT-ND	2.16	18.51	145.00	4165PHTB-ND	592.71	920.89	869.02/M	801.30/M	2222 118 39339
	47	33	0.070	170	25	10	0.8	4166PHCT-ND	2.36	20.25	158.63	4166PHTB-ND	648.43	1007.46	950.71/M	876.63/M	2222 118 90536
	47	33	0.080	178	30	10	0.8	4167PHBK-ND	1.23	10.53	82.49	—	337.18	523.88	494.37/M	455.85/M	2222 118 19479
	68	45	0.080	278	30	12.5	0.8	4168PHBK-ND	1.36	11.67	91.42	—	373.69	580.59	547.89/M	505.20/M	2222 118 19689
	100	64	0.090	303	30	12.5	0.8	4169PHBK-ND	1.40	12.03	94.24	—	385.21	598.50	564.79/M	520.78/M	2222 118 19101
	150	94	0.100	368	30	15	0.8	4170PHBK-ND	1.61	13.83	108.34	—	442.85	688.06	649.30/M	598.71/M	2222 118 19151
	220	136	0.100	481	30	18	0.8	4171PHBK-ND	1.89	16.17	126.67	—	517.78	804.47	759.16/M	700.00/M	2222 118 19221
	330	202	0.100	694	40	18	0.8	4172PHBK-ND	2.41	20.67	161.92	—	661.88	1028.35	970.43/M	894.81/M	2222 118 19331
	470	286	0.100	833	40	21	0.8	4173PHBK-ND	3.01	25.83	202.34	—	827.11	1285.07	1212.68/M	1118.19/M	2222 118 19471
200	2.2	20	0.060	27	18	6.5	0.8	4174PHCT-ND	1.78	15.24	119.38	4174PHTB-ND	—	758.21	715.50/M	659.74/M	2222 118 90538
	4.7	20	0.060	46	18	8.0	0.8	4175PHCT-ND	1.92	16.47	129.02	4175PHTB-ND	527.39	819.40	773.24/M	712.99/M	2222 118 90541
	10	20	0.060	85	25	10	0.8	4176PHCT-ND	2.65	22.68	177.66	4176PHTB-ND	726.24	1128.35	1064.79/M	981.82/M	2222 118 90543
	15	22	0.046	129	30	10	0.8	4177PHBK-ND	1.23	10.50	82.25	—	336.22	522.39	492.96/M	454.55/M	2222 118 92159
	22	31	0.046	198	30	12.5	0.8	4178PHBK-ND	1.36	11.64	91.18	—	372.73	579.10	546.48/M	503.90/M	2222 118 92229
	33	44	0.046	242	30	15	0.8	4179PHBK-ND	1.54	13.23	103.64	—	423.64	658.21	621.13/M	572.73/M	2222 118 92339
	47	61	0.046	317	30	18	0.8	4180PHBK-ND	1.78	15.24	119.38	—	488.00	758.21	715.50/M	659.74/M	2222 118 92479
	68	86	0.046	428	40	18	0.8	4181PHBK-ND	2.19	18.75	146.88	—	600.40	932.83	880.29/M	811.69/M	2222 118 92689
	100	124	0.046	551	40	21	0.8	4182PHBK-ND	2.70	23.10	180.95	—	739.69	1149.25	1084.51/M	1000.00/M	2222 118 92101

* “CT” stands for Cut Tape; “TB” stands for Tape and Box; “BK” stands for Bulk.

AML 138 Axial Miniature Long-Life Electrolytic Capacitors

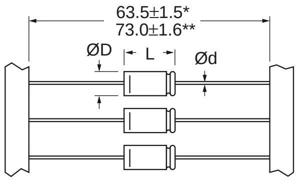
FEATURES:

- Polarized aluminum electrolytic capacitors, non-solid • Axial leads, cylindrical aluminum case, insulated with a blue sleeve (case Ø6.3mm x 12.7mm and 7.7mm x 12.7 mm are molded with flame retardant plastic material) • Case Ø10mm x 30mm to 21mm x 40mm with pressure relief • Taped versions up to case Ø15mm x 30 mm available for automatic insertion • Charge and discharge proof • Long useful life: 2,000 to 10,000 hours at 105°C, high reliability • High ripple current capability • Miniaturized, high CV-product per unit volume

APPLICATIONS:

- Industrial, automotive, EDP and telecommunication • Smoothing, filtering, buffering in SMPS; coupling, decoupling, timing • Portable and mobile equipment (small size, low mass) • Standby applications • Low mounting height boards • Vibration and shock resistant

Dimension in mm.



Case size 10mm x 30mm and above are bulk
Form BA: Taped in box (ammopack)
*Case ØD x L = 6.3mm x 12.7mm and 7.7mm x 12.7 mm
**Case ØD x L = 6.5mm x 18mm and 10mm x 25 mm

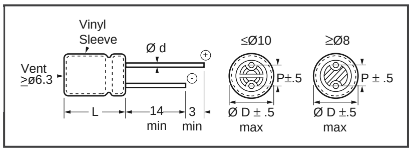
DESCRIPTION	VALUE	
Case sizes ($ØD_{nom}$ x L_{nom} in mm)	6.3 x 2.7 to 10 x 25	10 x 30 to 21 x 40
Rated capacitance range, C_R	1.0 to 15,000 µF	
Tolerance on C_R	±20%	
Rated voltage range, U_R	6.3 to 100V	
Category temperature range	-40°C to +105°C	
Endurance test at 105°C	1,000 hours	5,000 hours
Useful life at 105°C	2,000 hours	10,000 hours
Useful life at 40°C, I_R applied	1.3 x I_R applied: 200,000 hours	1.8 x I_R applied: 500,000 hours
Shelf life at 0 V, 105°C	500 hours	
Based on sectional specification	IEC 384-4/CECC 30300	
Climatic category IEC 68 (DIN 40040)	40/105/56 (GMF)	

WV (VDC)	Cap (µF)	Leakage Curr(µA)	tan δ	Ripple Curr(mA)	Dimensions (mm)			Digi-Key Part No.	Pricing*			Digi-Key Part No.	Pricing*		BC Components Part No.
					L	D	d		1	10	100		500	1,000	
6.3	100	16	0.240	99	12.7	6.3	0.6	4183PHCT-ND	.83	7.08	55.46	4183PHTB-ND	—	352.24	2222 138 33101
	220	31	0.240	160	12.7	7.7	0.6	4184PHCT-ND	.85	7.29	57.11	4184PHTB-ND	233.43	362.68	2222 138 33221
	470	22	0.240	250	18	6.5	0.8	4185PHCT-ND	.89	7.65	59.93	4185PHTB-ND	—	380.60	2222 138 33471
	1000	42	0.240	430	18	10	0.8	4186PHCT-ND	1.35	11.61	90.95	4186PHTB-ND	371.77	577.61	2222 138 33102
	2200	87	0.290	640	25	10	0.8	4187PHCT-ND	1.49	12.81	100.35	4187PHTB-ND	410.19	637.31	2222 138 33222
10	150	33	0.200	140	12.7	7.7	0.6	4188PHCT-ND	.85	7.29	57.11	4188PHTB-ND	233.43	362.68	2222 138 34151
	220	17	0.200	190	18	6.5	0.8	4189PHCT-ND	.87	7.44	58.28	4189PHTB-ND	—	370.15	2222 138 34221
	470	32	0.200	300	18	8.0	0.8	4190PHCT-ND	.91	7.80	61.10	4190PHTB-ND	249.77	388.06	2222 138 34471
	1000	64	0.200	520	25	10	0.8	4191PHCT-ND	1.31	11.25	88.13	4191PHTB-ND	360.24	559.70	2222 138 34102
	1500	94	0.260	560	30	10	0.8	4192PHBK-ND	1.23	10.56	82.72	—	338.14	525.37	2222 138 14152
	2200	140	0.270	750	30	12.5	0.8	4193PHBK-ND	1.37	11.76	92.12	—	376.57	585.07	2222 138 14222
	3300	200	0.280	990	30	15	0.8	4194PHBK-ND	1.57	13.44	105.28	—	430.36	668.65	2222 138 14332
	4700	290	0.310	1200	30	18	0.8	4195PHBK-ND	1.81	15.54	121.73	—	497.61	773.13	2222 138 14472
	6800	410	0.320	1700	40	18	0.8	4196PHBK-ND	2.29	19.65	153.93	—	629.22	977.61	2222 138 14682
	10000	600	0.370	1900	40	18	0.8	4197PHBK-ND	2.47	21.21	166.15	—	679.17	1055.22	2222 138 14103
	15000	900	0.510	2200	40	21	0.8	4198PHBK-ND	3.09	26.46	207.27	—	847.28	1316.41	2222 138 14153
16	22	10	0.120	58	12.7	6.3	0.6	4199PHCT-ND	.83	7.08	55.46	4199PHTB-ND	—	352.24	2222 138 35229
	47	18	0.160	83	12.7	6.3	0.6	4200PHCT-ND	.83	7.08	55.46	4200PHTB-ND	—	352.24	2222 138 35479
	100	35	0.160	130	12.7	7.7	0.6	4201PHCT-ND	.85	7.29	57.11	4201PHTB-ND	233.43	362.68	2222 138 35101
	220	25	0.160	230	18	8.0	0.8	4202PHCT-ND	.91	7.80	61.10	4202PHTB-ND	249.77	388.06	2222 138 35221
	470	49	0.160	360	18	10	0.8	4203PHCT-ND	1.25	10.74	84.13	4203PHTB-ND	343.91	534.33	2222 138 35471
	1000	100	0.190	530	30	10	0.8	4204PHBK-ND	1.23	10.53	82.49	—	337.18	523.88	2222 138 15102
	1500	150	0.190	730	30	12.5	0.8	4205PHBK-ND	1.37	11.73	91.89	—	375.61	583.58	2222 138 15152
	2200	210	0.210	950	30	15	0.8	4206PHBK-ND	1.56	13.38	104.81	—	428.44	665.67	2222 138 15222
	3300	320	0.230	1200	30	18	0.8	4207PHBK-ND	1.82	15.60	122.20	—	499.53	776.12	2222 138 15332
	4700	450	0.280	1400	30	18	0.8	4208PHBK-ND	1.91	16.35	128.08	—	523.55	813.43	2222 138 15472
	6800	660	0.280	1800	40	18	0.8	4209PHBK-ND	2.45	21.00	164.50	—	672.44	1044.77	2222 138 15682
	10000	960	0.350	2100	40	21	0.8	4210PHBK-ND	3.06	26.25	205.63	—	840.56	1305.96	2222 138 15103
25	10	8.0	0.090	46	12.7	6.3	0.6	4211PHCT-ND	.83	7.08	55.46	4211PHTB-ND	—	352.24	2222 138 36109
	22	14	0.140	61	12.7	6.3	0.6	4212PHCT-ND	.83	7.08	55.46	4212PHTB-ND	—	352.24	2222 138 36229
	33	20	0.140	74	12.7	6.3	0.6	4213PHCT-ND	.83	7.08	55.46	4213PHTB-ND	—	352.24	2222 138 36339
	47	27	0.140	96	12.7	7.7	0.6	4214PHCT-ND	.85	7.29	57.11	4214PHTB-ND	233.43	362.68	2222 138 36479
	100	19	0.130	160	18	6.5	0.8	4215PHCT-ND	.87	7.44	58.28	4215PHTB-ND	—	370.15	2222 138 36101
	220	37	0.130	270	18	10	0.8	4216PHCT-ND	1.25	10.74	84.13	4216PHTB-ND	343.91	534.33	2222 138 36221
	470	75	0.130	440	25	10	0.8	4217PHCT-ND	1.31	11.25	88.13	4217PHTB-ND	360.24	559.70	2222 138 36471
	680	110	0.140	500	30	10	0.8	4218PHBK-ND	1.23	10.56	82.72	—	338.14	525.37	2222 138 16681
	1000	150	0.140	670	30	12.5	0.8	4219PHBK-ND	1.38	11.79	92.36	—	377.53	586.56	2222 138 16102
	1500	230	0.150	890	30	15	0.8	4220PHBK-ND	1.58	13.50	105.75	—	432.29	671.64	2222 138 16152
	2200	330	0.160	1200	30	18	0.8	4221PHBK-ND	1.83	15.69	122.91	—	502.41	780.59	2222 138 16222
	3300	500	0.170	1600	40	18	0.8	4222PHBK-ND	2.33	19.98	156.51	—	639.78	994.02	2222 138 16332
	4700	710	0.200	1800	40	18	0.8	4223PHBK-ND	2.47	21.21	166.15	—	679.17	1055.22	2222 138 16472
	6800	1000	0.260	2100	40	21	0.8	4224PHBK-ND	3.19	27.30	213.85	—	874.18	1358.20	2222 138 16682
40	33	29	0.110	91	12.7	7.7	0.6	4225PHCT-ND	.85	7.29	57.11	4225PHTB-ND	233.43	362.68	2222 138 37339
	47	15	0.100	120	18	6.5	0.8	4226PHCT-ND	.87	7.44	58.28	4226PHTB-ND	—	370.15	2222 138 37479
	100	28	0.100	180	18	8.0	0.8	4227PHCT-ND	.91	7.80	61.10	4227PHTB-ND	249.77	388.06	2222 138 37101
	220	57	0.100	350	25	10	0.8	4228PHCT-ND	1.31	11.25	88.13	4228PHTB-ND	360.24	559.70	2222 138 37221
	330	83	0.100	410	30	10	0.8	4229PHBK-ND	1.23	10.50	82.25	—	336.22	522.39	2222 138 17331
	470	120	0.100	550	30	12.5	0.8	4230PHBK-ND	1.36	11.64	91.18	—	372.73	579.10	2222 138 17471
	680	170	0.110	650	30	12.5	0.8	4231PHBK-ND	1.40	12.00	94.00	—	384.25	597.01	2222 138 17681
	1000	240	0.110	840	30	15	0.8	4232PHBK-ND	1.62	13.86	108.57	—	443.81	689.55	2222 138 17102
	1500	360	0.120	1100	30	18	0.8	4233PHBK-ND	1.90	16.29	127.61	—	521.62	810.44	2222 138 17152
	2200	530	0.130	1500	40	18	0.8	4234PHBK-ND	2.42	20.76	162.62	—	664.76	1032.83	2222 138 17222
	3300	800	0.150	1700	40	21	0.8	4235PHBK-ND	3.06	26.25	205.63	—	840.56	1305.96	2222 138 17332
50	10	13	0.090	51	12.7	6.3	0.6	4236PHCT-ND	.83	7.08	55.46	4236PHTB-ND	—	352.24	2222 138 31109
	22	25	0.090	82	12.7	7.7	0.6	4237PHCT-ND	.85	7.29	57.11	4237PHTB-ND	233.43	362.68	2222 138 31229
	100	34	0.080	230	18	10	0.8	4238PHCT-ND	1.13	9.69	75.91	4238PHTB-ND	310.29	482.09	2222 138 31101
63	4.7	9.0	0.090	35	12.7	6.3	0.6	4239PHCT-ND	.83	7.08	55.46	4239PHTB-ND	—	352.24	2222 138 38478
	10	16	0.080	59	12.7	7.7	0.6	4240PHCT-ND	.85	7.29	57.11	4240PHTB-ND	233.43	362.68	2222 138 38109
	22	12	0.070	100	18	6.5	0.8	4241PHCT-ND	.87	7.44	58.28	4241PHTB-ND	—	370.15	2222 138 38229
	47	22	0.070	150	18	8.0	0.8	4242PHCT-ND	.91	7.80	61.10	4242PHTB-ND	249.77	388.06	2222 138 38479
	100	42	0.070	280	25	10	0.8	4243PHCT-ND	1.31	11.25	88.13	4243PHTB-ND	360.24	559.70	2222 138 38101
	150	61	0.110	340	30	10	0.8	4244PHBK-ND	1.21	10.41	81.55	—	333.34	517.91	2222 138 18151
	220	88	0.110	470	30	12.5	0.8	4245PHBK-ND	1.34	11.52	90.24	—	368.88	573.13	2222 138 18221
	330	130	0.120	570	30	12.5	0.8	4246PHBK-ND	1.39	11.91	93.30	—	381.37	592.53	2222 138 18331
	470	180	0.120	730	30	15	0.8	4247PHBK-ND	1.59	13.65	106.93	—	437.09	679.10	2222 138 18471
	680	260	0.120	930	30	18	0.8	4248PHBK-ND	1.85	15.87	124.32	—	508.18	789.55	2222 138 18681
	1000	380	0.120	1300	40	18	0.8	4249PHBK-ND	2.35	20.16	157.92	—	645.55	1002.98	2222 138 18102
	1500	570	0.130	1600	40	21	0.8	4250PHBK-ND	2.96	25.41	199.05	—	813.66	1264.17	2222 138 18152
100	1.0	5.0	0.090	16	12.7	6.3	0.6	4251PHCT-ND	.83	7.08	55.46	4251PHTB-ND	—	352.24	2222 138 39108
	2.2	7.0	0.090	24	12.7	6.3	0.6	4252PHCT-ND	.83	7.08	55.46	4252PHTB-ND	—	352.24	2222 138 39228
	4.7	12	0.080	40	12.7	7.7	0.6	4253PHCT-ND	.85	7.29	57.11	4253PHTB-ND	233.43	362.68	2222 138 39478
	10	10	0.070	67	18	6.5	0.8	4254PHCT-ND	.87	7.44	58.28	4254PHTB-ND	—	370.15	2222 138 39109
	22	17	0.070	100	18	8.0	0.8	4255PHCT-ND	.91	7.80	61.10	4255PHTB-ND	249.77	388.06	2222 138 39229
	47	32	0.070	190	25	10	0.8	4256PHCT-ND	1.31	11.25	88.13	4256PHTB-ND	360.24	559.70	2222 138 39479
	68	45	0.070	220	30	10	0.8	4257PHBK-ND	1.22	10.44	81.78	—	334.30	519.40	2222 138 19689
	100	64	0.070	290	30	12.5	0.8	4258PHBK-ND	1.35	11.58	90.71	—	370.81	576.12	2222 138 19101
	150	94	0.070	390	30	15	0.8	4259PHBK-ND	1.54	13.17	103.17	—	421.72	655.22	2222 138 19151
	220	140	0.070	470	30	15	0.8	4260PHBK-ND	1.62	13.89	108.81	—	444.77	691.04	2222 138 19221
	330	200	0.080	620	30	18	0.8	4261PHBK-ND	1.91	16.35	128.08	—	523.55	813.43	2222 138 19331
	470	290	0.080	840	40	18	0.8	4262PHBK-ND	2.41	20.64	161.68	—	660.92	1026.86	2222 138 19471
	680	410	0.090	1100	40	21	0.8	4263PHBK-ND	3.01	25.83	202.34	—	827.11	1285.07	2222 138 19681

* "CT" stands for Cut Tape; "TB" stands for Tape and Box; "BK" stands for Bulk.

Panasonic® M Series Radial Lead Aluminum Electrolytic Capacitors

PANASONIC M SERIES
CROSS REFERENCES
Nichicon: VR; **Chemicon:** SMG;
Marcon: DSM; **Rubycon:** YK;
Elna: RE3; **Nitsuko:** MK;
Sanyo: HC/HPC



FEATURES:

- Miniaturized size version for general purpose use
- Life: 2000 hours at +85°C
- Vent construction for ≥ϕ6.3 mm products

SPECIFICATIONS:

Operating Temperature Range	-40°C to +85°C	-25°C to +85°C
Rated Working Voltage Range	6.3 to 100 V DC	160 to 450 V DC
Nominal Capacitance Range	0.33 to 22000 µF	1 to 470 µF

Capacitance Tolerance: ±20% (120 Hz, +20°C)

Leakage Current	I≤ 0.03 CV or 4 (µA) after 1 minute I≤ 0.01 CV or 3 (µA) after 2 minutes Whichever is greater measured with rated working voltage at +20°C.	I≤ 0.06 CV + 10 (µA) after 2 minutes application of rated working voltage at +20°C.

tan δ: (at 120 Hz, +20°C)

W.V.	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
tan δ	0.28	0.24	0.20	0.16	0.14	0.12	0.11	0.10	0.16	0.18	0.18	0.20	0.20	0.20

For capacitance value > 1000 µF, add 0.02 per every 1000 µF.

Low Temperature Characteristics: Impedance ratio max. at 120 Hz

W.V.	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
-25°C/+20°C	5	4	3	2	2	2	2	2	2	2	3	5	6	6
-40°C/+20°C	12	10	8	5	4	3	3	3	—	—	—	—	—	—

For capacitance value >1000 µF, add 0.5 per every 1000 µF for -25°C/+20°C.
add 1.0 per every 1000 µF for -40°C/+20°C.

Ripple Current: 120 Hz, +85°C

Frequency (Hz)	50/60	120	1k	10k
Correction Factor (Multiplier)	0.7	1	1.3	1.7

Endurance:

Test Conditions		**Post Test Requirements at +20°C**	
Duration	2000 Hours	**Leakage Current**	≤ initial specified value
Ambient Temperature	+85°C	**Capacitance Change**	±20% of initial measured value
Applied Voltage	Rated DC Working Voltage	**tan δ**	≤ 150% initial specified value

Shelf Life:

Test Conditions		**Post Test Requirements at +20°C**	
Duration	1000 Hours	**Leakage Current**	≤ initial specified value
Ambient Temperature	+85°C	**Capacitance Change**	±20% of initial measured value
Applied Voltage	—	**tan δ**	≤ 150% initial specified value

WV (VDC)	**Cap (µF)**	**Leakage Current (µA)**	**tan δ max.**	**Ripple Current (mA) rms**	**Dimensions (mm) øD**	**L**	**P**	**ød**	**Digi-Key Part No.**	**Pricing 1**	**10**	**100**	**500**	**1,000**	**5,000**	**Panasonic Part No.**
6.3	100	6.3	0.28	130	5	11	2.0	0.5	P5111-ND	.21	1.33	8.99	30.45	46.00	39.00/M	ECA-0JM101
	220	13.8	0.28	240	5	11	2.0	0.5	P5112-ND	.28	1.79	12.09	40.95	62.00	53.00/M	ECA-0JM221
	330	20.7	0.28	300	6.3	11.2	2.5	0.5	P5113-ND	.29	1.99	14.03	48.45	77.00	66.00/M	ECA-0JM331
	470	29.6	0.28	380	6.3	11.2	2.5	0.5	P5114-ND	.35	2.34	16.50	57.00	90.00	78.00/M	ECA-0JM471
	1000	63.0	0.28	580	8	11.5	3.5	0.6	P5115-ND	.41	3.01	21.50	77.40	120.00	112.00/M	ECA-0JM102
	2200	138.6	0.30	890	10	16	5.0	0.6	P5116-ND	.66	4.83	34.50	124.20	193.00	179.00/M	ECA-0JM222
	3300	207.9	0.32	1020	10	20	5.0	0.6	P5117-ND	.81	6.05	44.42	160.65	255.00	246.00/M	ECA-0JM332
	4700	296.1	0.34	1170	12.5	20	5.0	0.6	P5118-ND	1.13	8.38	61.57	222.70	354.00	341.00/M	ECA-0JM472
	6800	428.4	0.38	1270	12.5	25	5.0	0.6	P5119-ND	1.42	10.68	80.10	284.80	473.00	456.00/M	ECA-0JM682
	10000	630.0	0.46	1450	16	25	7.5	0.8	P5120-ND	2.03	15.24	114.30	406.40	676.00	650.00/M	ECA-0JM103
	15000	945.0	0.56	1700	16	31.5	7.5	0.8	P5121-ND	2.54	19.24	145.20	544.50	944.00	915.00/M	ECA-0JM153
	22000	1386.0	0.70	1900	18	35.5	7.5	0.8	P5122-ND	3.64	27.53	207.80	779.25	1351.00	1309.00/M	ECA-0JM223
10	100	10.0	0.24	150	5	11	2.0	0.5	P5123-ND	.23	1.47	9.92	33.60	51.00	43.00/M	ECA-1AM101
	220	22.0	0.24	250	6.3	11.2	2.5	0.5	P5124-ND	.32	2.02	13.64	46.20	70.00	59.00/M	ECA-1AM221
	330	33.0	0.24	330	6.3	11.2	2.5	0.5	P5125-ND	.35	2.34	16.50	57.00	90.00	78.00/M	ECA-1AM331
	470	47.0	0.24	400	8	11.5	3.5	0.6	P5126-ND	.41	2.81	19.80	68.40	108.00	94.00/M	ECA-1AM471
	1000	100.0	0.24	630	10	12.5	5.0	0.6	P5127-ND	.52	3.85	27.50	99.00	154.00	143.00/M	ECA-1AM102
	2200	220.0	0.26	920	10	20	5.0	0.6	P5128-ND	.76	5.63	41.36	149.60	238.00	229.00/M	ECA-1AM222
	3300	330.0	0.28	1090	12.5	20	5.0	0.6	P5129-ND	1.08	8.00	58.75	212.50	338.00	325.00/M	ECA-1AM332
	4700	470.0	0.30	1200	12.5	25	5.0	0.6	P5130-ND	1.34	10.05	75.38	268.00	446.00	429.00/M	ECA-1AM472
	6800	680.0	0.34	1400	16	25	7.5	0.8	P5131-ND	1.88	14.13	105.98	376.80	626.00	603.00/M	ECA-1AM682
	10000	1000.0	0.42	1600	16	31.5	7.5	0.8	P5132-ND	2.27	17.17	129.60	486.00	842.00	816.00/M	ECA-1AM103
	15000	1500.0	0.52	1850	18	35.5	7.5	0.8	P5133-ND	3.50	26.50	200.00	750.00	1300.00	1260.00/M	ECA-1AM153
16	10	3.0	0.20	30	5	11	2.0	0.5	P5134-ND	.21	1.33	8.99	30.45	46.00	39.00/M	ECA-1CM100
	22	3.5	0.20	75	5	11	2.0	0.5	P5135-ND	.21	1.33	8.99	30.45	46.00	39.00/M	ECA-1CM220
	33	5.2	0.20	110	5	11	2.0	0.5	P5136-ND	.21	1.33	8.99	30.45	46.00	39.00/M	ECA-1CM330
	47	7.5	0.20	130	5	11	2.0	0.5	P5137-ND	.21	1.33	8.99	30.45	46.00	39.00/M	ECA-1CM470
	100	16.0	0.20	180	5	11	2.0	0.5	P5138-ND	.28	1.79	12.09	40.95	62.00	53.00/M	ECA-1CM101
	220	35.2	0.20	280	6.3	11.2	2.5	0.5	P5139-ND	.35	2.34	16.50	57.00	90.00	78.00/M	ECA-1CM221
	330	52.8	0.20	350	8	11.5	3.5	0.6	P5140-ND	.41	2.81	19.80	68.40	108.00	94.00/M	ECA-1CM331
	470	75.2	0.20	440	8	11.5	3.5	0.6	P5141-ND	.41	3.01	21.50	77.40	120.00	112.00/M	ECA-1CM471
	1000	160.0	0.20	680	10	16	5.0	0.6	P5142-ND	.65	4.76	34.00	122.40	190.00	177.00/M	ECA-1CM102
	2200	352.0	0.22	1000	12.5	20	5.0	0.6	P5143-ND	1.13	8.38	61.57	222.70	354.00	341.00/M	ECA-1CM222
	3300	528.0	0.24	1200	12.5	25	5.0	0.6	P5144-ND	1.45	10.86	81.45	289.60	481.00	463.00/M	ECA-1CM332
	4700	752.0	0.26	1360	16	25	7.5	0.8	P5145-ND	1.98	14.88	111.60	396.80	660.00	635.00/M	ECA-1CM472
	6800	1088.0	0.30	1600	16	31.5	7.5	0.8	P5146-ND	2.32	17.54	132.40	496.50	861.00	834.00/M	ECA-1CM682
	10000	1600.0	0.38	1800	18	35.5	7.5	0.8	P5147-ND	3.46	26.18	197.60	741.00	1284.00	1245.00/M	ECA-1CM103
25	10	3.0	0.16	50	5	11	2.0	0.5	P5148-ND	.21	1.33	8.99	30.45	46.00	39.00/M	ECA-1EM100
	22	5.5	0.16	90	5	11	2.0	0.5	P5149-ND	.21	1.33	8.99	30.45	46.00	39.00/M	ECA-1EM220
	33	8.2	0.16	110	5	11	2.0	0.5	P5150-ND	.21	1.33	8.99	30.45	46.00	39.00/M	ECA-1EM330
	47	11.7	0.16	130	5	11	2.0	0.5	P5151-ND	.23	1.47	9.92	33.60	51.00	43.00/M	ECA-1EM470
	100	25.0	0.16	180	6.3	11.2	2.5	0.5	P5152-ND	.32	2.02	13.64	46.20	70.00	59.00/M	ECA-1EM101
	220	55.0	0.16	310	8	11.5	3.5	0.6	P5153-ND	.41	2.81	19.80	68.40	108.00	94.00/M	ECA-1EM221
	330	82.5	0.16	390	8	11.5	3.5	0.6	P5154-ND	.41	3.01	21.50	77.40	120.00	112.00/M	ECA-1EM331
	470	117.5	0.16	480	10	12.5	5.0	0.6	P5155-ND	.55	4.06	29.00	104.40	162.00	151.00/M	ECA-1EM471
	1000	250.0	0.16	850	10	20	5.0	0.6	P5156-ND	.80	5.95	43.71	158.10	251.00	242.00/M	ECA-1EM102
	2200	550.0	0.18	1200	12.5	25	5.0	0.6	P5157-ND	1.38	10.38	77.85	276.80	460.00	443.00/M	ECA-1EM222
	3300	825.0	0.20	1300	16	25	7.5	0.8	P5158-ND	1.95	14.64	109.80	390.40	649.00	625.00/M	ECA-1EM332
	4700	1175.0	0.22	1500	16	31.5	7.5	0.8	P5159-ND	2.46	18.66	140.80	528.00	915.00	887.00/M	ECA-1EM472
	6800	1700.0	0.26	1750	18	35.5	7.5	0.8	P5160-ND	3.62	27.37	206.60	774.75	1343.00	1302.00/M	ECA-1EM682

(Continued)

WV (VDC)	Cap (µF)	Leakage Current (µA)	tan δ max.	Ripple Current (mA) rms	Dimensions (mm)				Digi-Key Part No.	Pricing						Panasonic Part No.
					øD	L	P	ød		1	10	100	500	1,000	5,000	
35	10	3.5	0.14	60	5	11	2.0	0.5	P5161-ND	.21	1.33	8.99	30.45	46.00	39.00/M	ECA-1VM100
	22	7.7	0.14	95	5	11	2.0	0.5	P5162-ND	.21	1.33	8.99	30.45	46.00	39.00/M	ECA-1VM220
	33	11.5	0.14	110	5	11	2.0	0.5	P5163-ND	.23	1.47	9.92	33.60	51.00	43.00/M	ECA-1VM330
	47	16.4	0.14	130	5	11	2.0	0.5	P5164-ND	.28	1.79	12.09	40.95	62.00	53.00/M	ECA-1VM470
	100	35.0	0.14	210	6.3	11.2	2.5	0.5	P5165-ND	.35	2.34	16.50	57.00	90.00	78.00/M	ECA-1VM101
	220	77.0	0.14	350	8	11.5	3.5	0.6	P5166-ND	.41	3.01	21.50	77.40	120.00	112.00/M	ECA-1VM221
	330	115.5	0.14	440	10	12.5	5.0	0.6	P5167-ND	.55	4.06	29.00	104.40	162.00	151.00/M	ECA-1VM331
	470	164.5	0.14	550	10	16	5.0	0.6	P5168-ND	.68	5.04	36.00	129.60	202.00	187.00/M	ECA-1VM471
	1000	350.0	0.14	900	12.5	20	5.0	0.6	P5169-ND	1.25	9.28	68.15	246.50	392.00	377.00/M	ECA-1VM102
	2200	770.0	0.16	1250	16	25	7.5	0.8	P5170-ND	2.05	15.39	115.43	410.40	682.00	657.00/M	ECA-1VM222
	3300	1155.0	0.18	1400	16	31.5	7.5	0.8	P5171-ND	2.51	18.97	143.20	537.00	931.00	902.00/M	ECA-1VM332
	4700	1645.0	0.20	1600	18	35.5	7.5	0.8	P5172-ND	3.76	28.49	215.00	806.25	1398.00	1355.00/M	ECA-1VM472
50	0.33	3.0	0.12	4.4	5	11	2.0	0.5	P5349-ND*	.21	1.33	8.99	30.45	46.00	39.00/M	ECA-1HMR33
	0.47	3.0	0.12	5	5	11	2.0	0.5	P5173-ND*	.21	1.33	8.99	30.45	46.00	39.00/M	ECA-1HMR47
	1.0	3.0	0.12	10	5	11	2.0	0.5	P5174-ND*	.21	1.33	8.99	30.45	46.00	39.00/M	ECA-1HM010
	2.2	3.0	0.12	20	5	11	2.0	0.5	P5175-ND*	.21	1.33	8.99	30.45	46.00	39.00/M	ECA-1HM2R2
	3.3	3.0	0.12	35	5	11	2.0	0.5	P5176-ND*	.21	1.33	8.99	30.45	46.00	39.00/M	ECA-1HM3R3
	4.7	3.0	0.12	45	5	11	2.0	0.5	P5177-ND*	.21	1.33	8.99	30.45	46.00	39.00/M	ECA-1HM4R7
	10	5.0	0.12	65	5	11	2.0	0.5	P5178-ND*	.21	1.33	8.99	30.45	46.00	39.00/M	ECA-1HM100
	22	11.0	0.12	100	5	11	2.0	0.5	P5179-ND*	.23	1.47	9.92	33.60	51.00	43.00/M	ECA-1HM220
	33	16.5	0.12	110	5	11	2.0	0.5	P5180-ND*	.28	1.79	12.09	40.95	62.00	53.00/M	ECA-1HM330
	47	23.5	0.12	130	6.3	11.2	2.5	0.5	P5181-ND*	.34	2.16	14.57	49.35	75.00	63.00/M	ECA-1HM470
	100	50.0	0.12	250	8	11.5	3.5	0.6	P5182-ND*	.41	2.81	19.80	68.40	108.00	94.00/M	ECA-1HM101
	220	110.0	0.12	400	10	12.5	5.0	0.6	P5183-ND*	.55	4.06	29.00	104.40	162.00	151.00/M	ECA-1HM221
	330	165.0	0.12	500	10	16	5.0	0.6	P5184-ND*	.67	4.99	36.66	132.60	211.00	203.00/M	ECA-1HM331
	470	235.0	0.12	650	10	20	5.0	0.6	P5185-ND*	.86	6.40	47.00	170.00	270.00	260.00/M	ECA-1HM471
	1000	500.0	0.12	1050	12.5	25	5.0	0.6	P5186-ND*	1.52	11.40	85.50	304.00	505.00	486.00/M	ECA-1HM102
	2200	1100.0	0.14	1300	16	31.5	7.5	0.8	P5187-ND*	2.51	19.00	143.40	537.75	932.00	903.00/M	ECA-1HM222
	3300	1650.0	0.16	1500	18	35.5	7.5	0.8	P5188-ND*	3.96	30.00	226.40	849.00	1472.00	1426.00/M	ECA-1HM332
63	10	6.3	0.11	70	5	11	2.0	0.5	P5189-ND	.24	1.52	10.23	34.65	53.00	45.00/M	ECA-1JM100
	22	13.8	0.11	105	5	11	2.0	0.5	P5190-ND	.28	1.79	12.09	40.95	62.00	53.00/M	ECA-1JM220
	33	20.7	0.11	130	6.3	11.2	2.5	0.5	P5191-ND	.28	1.91	13.48	46.55	74.00	64.00/M	ECA-1JM330
	47	29.6	0.11	160	6.3	11.2	2.5	0.5	P5192-ND	.37	2.54	17.88	61.75	98.00	85.00/M	ECA-1JM470
	100	63.0	0.11	270	8	11.5	3.5	0.6	P5193-ND	.43	3.15	22.50	81.00	126.00	117.00/M	ECA-1JM101
	220	138.6	0.11	450	10	16	5.0	0.6	P5194-ND	.65	4.86	35.72	129.20	205.00	198.00/M	ECA-1JM221
	330	207.9	0.11	550	10	20	5.0	0.6	P5195-ND	.86	6.40	47.00	170.00	270.00	260.00/M	ECA-1JM331
	470	296.1	0.11	750	12.5	20	5.0	0.6	P5196-ND	1.22	9.18	68.85	244.80	407.00	392.00/M	ECA-1JM471
	1000	630.0	0.11	1100	16	25	7.5	0.8	P5197-ND	2.26	16.92	126.90	451.20	750.00	722.00/M	ECA-1JM102
	2200	1386.0	0.13	1400	18	35.5	7.5	0.8	P5198-ND	3.94	29.81	225.00	843.75	1463.00	1418.00/M	ECA-1JM222
100	0.47	3.0	0.10	10	5	11	2.0	0.5	P5199-ND	.24	1.52	10.23	34.65	53.00	45.00/M	ECA-2AMR47
	1.0	3.0	0.10	20	5	11	2.0	0.5	P5305-ND	.24	1.52	10.23	34.65	53.00	45.00/M	ECA-2AM010
	2.2	3.0	0.10	30	5	11	2.0	0.5	P5306-ND	.25	1.61	10.85	36.75	56.00	47.00/M	ECA-2AM2R2
	3.3	3.3	0.10	40	5	11	2.0	0.5	P5307-ND	.25	1.61	10.85	36.75	56.00	47.00/M	ECA-2AM3R3
	4.7	4.7	0.10	50	5	11	2.0	0.5	P5308-ND	.25	1.61	10.85	36.75	56.00	47.00/M	ECA-2AM4R7
	10	10.0	0.10	70	5	11	2.0	0.5	P5309-ND	.35	2.21	14.88	50.40	77.00	65.00/M	ECA-2AM100
	22	22.0	0.10	115	6.3	11.2	2.5	0.5	P5310-ND	.40	2.69	18.98	65.55	104.00	90.00/M	ECA-2AM220
	33	33.0	0.10	145	8	11.5	3.5	0.6	P5311-ND	.49	3.35	23.65	81.70	129.00	112.00/M	ECA-2AM330
	47	47.0	0.10	180	8	11.5	3.5	0.6	P5312-ND	.50	3.71	26.50	95.40	148.00	138.00/M	ECA-2AM470
	100	100.0	0.10	350	10	16	5.0	0.6	P5313-ND	.80	5.95	43.71	158.10	251.00	242.00/M	ECA-2AM101
	220	220.0	0.10	550	12.5	20	5.0	0.6	P5314-ND	1.35	10.14	76.05	270.40	450.00	433.00/M	ECA-2AM221
	330	330.0	0.10	700	12.5	25	5.0	0.6	P5315-ND	1.85	13.89	104.18	370.40	616.00	593.00/M	ECA-2AM331
	470	470.0	0.10	900	16	25	7.5	0.8	P5316-ND	2.41	18.26	137.80	516.75	896.00	868.00/M	ECA-2AM471
	1000	1000.0	0.10	1300	18	35.5	7.5	0.8	P5317-ND	4.56	34.53	260.60	977.25	1694.00	1642.00/M	ECA-2AM102
160	1.0	19.6	0.16	36	6.3	11.2	2.5	0.5	P5318-ND	.44	3.00	21.18	73.15	116.00	100.00/M	ECA-2CM010
	2.2	31.1	0.16	53	6.3	11.2	2.5	0.5	P5319-ND	.46	3.12	22.00	76.00	120.00	104.00/M	ECA-2CM2R2
	3.3	41.6	0.16	66	6.3	11.2	2.5	0.5	P5320-ND	.40	2.94	21.00	75.60	118.00	109.00/M	ECA-2CM3R3
	4.7	55.1	0.16	78	6.3	11.2	2.5	0.5	P5321-ND	.43	3.15	22.50	81.00	126.00	117.00/M	ECA-2CM4R7
	10	103.0	0.16	105	10	12.5	5.0	0.6	P5322-ND	.57	4.20	30.00	108.00	168.00	156.00/M	ECA-2CM100
	22	221.0	0.16	175	10	16	5.0	0.6	P5323-ND	.72	5.38	39.48	142.80	227.00	218.00/M	ECA-2CM220
	33	326.0	0.16	235	10	20	5.0	0.6	P5324-ND	1.03	7.65	56.17	203.15	323.00	311.00/M	ECA-2CM330
	47	461.0	0.16	320	12.5	20	5.0	0.6	P5325-ND	1.34	10.02	75.15	267.20	444.00	428.00/M	ECA-2CM470
	100	970.0	0.16	515	12.5	25	5.0	0.6	P5326-ND	2.00	15.03	112.73	400.80	666.00	641.00/M	ECA-2CM101
	220	2122.0	0.16	830	16	31.5	7.5	0.8	P5327-ND	2.92	22.07	166.60	624.75	1083.00	1050.00/M	ECA-2CM221
	330	3178.0	0.16	1090	18	31.5	7.5	0.8	P5328-ND	4.07	30.79	232.40	871.50	1511.00	1464.00/M	ECA-2CM331
	470	4522.0	0.16	1440	18	40	7.5	0.8	P5329-ND	5.24	39.70	299.60	1123.50	1947.00	1887.00/M	ECA-2CM471
250	1.0	25.0	0.18	34	6.3	11.2	2.5	0.5	P5330-ND	.40	2.94	21.00	75.60	118.00	109.00/M	ECA-2EM010
	2.2	43.0	0.18	50	6.3	11.2	2.5	0.5	P5331-ND	.41	3.01	21.50	77.40	120.00	112.00/M	ECA-2EM2R2
	3.3	59.5	0.18	72	8	11.5	3.5	0.6	P5332-ND	.51	3.78	27.00	97.20	151.00	140.00/M	ECA-2EM3R3
	4.7	80.5	0.18	86	8	11.5	3.5	0.6	P5333-ND	.59	4.34	31.00	111.60	174.00	161.00/M	ECA-2EM4R7
	10	160.0	0.18	110	10	16	5.0	0.6	P5334-ND	.71	5.31	39.01	141.10	224.00	216.00/M	ECA-2EM100
	22	340.0	0.18	180	10	20	5.0	0.6	P5335-ND	1.14	8.51	62.51	226.10	359.00	346.00/M	ECA-2EM220
	33	505.0	0.18	250	12.5	20	5.0	0.6	P5336-ND	1.39	10.41	78.08	277.60	462.00	444.00/M	ECA-2EM330
	47	715.0	0.18	350	12.5	25	5.0	0.6	P5337-ND	2.01	15.09	113.18	402.40	669.00	644.00/M	ECA-2EM470
	100	1510.0	0.18	530	16	31.5	7.5	0.8	P5338-ND	3.01	22.76	171.80	644.25	1117.00	1082.00/M	ECA-2EM101
	220	3310.0	0.18	930	18	40	7.5	0.8	P5339-ND	5.26	39.86	300.80	1128.00	1955.00	1895.00/M	ECA-2EM221
450	1.0	37.0	0.20	37	8	11.5	3.5	0.6	P5340-ND	.62	4.55	32.50	117.00	182.00	169.00/M	ECA-2WM010
	2.2	69.4	0.20	44	10	12.5	5.0	0.6	P5341-ND	.69	5.08	36.25	130.50	203.00	189.00/M	ECA-2WM2R2
	3.3	99.1	0.20	60	10	16	5.0	0.6	P5342-ND	.83	6.14	45.12	163.20	259.00	250.00/M	ECA-2WM3R3
	4.7	136.0	0.20	79	10	20	5.0	0.6	P5343-ND	1.19	8.86	65.10	235.45	374.00	360.00/M	ECA-2WM4R7
	10	280.0	0.20	130	12.5	20	5.0	0.6	P5344-ND	1.62	12.12	90.90	323.20	537.00	517.00/M	ECA-2WM100
	22	604.0	0.20	210	16	25	7.5	0.8	P5345-ND	2.19	16.56	125.00	468.75	813.00	788.00/M	ECA-2WM220
	33	901.0	0.20	285	16	31.5	7.5	0.8	P5346-ND	2.95	22.34	168.60	632.25	1096.00	1062.00/M	ECA-2WM330

*** M-KIT-ND** ***Digi-Key® M Series Capacitors Kit*** 10 each of values denoted. 170 total pieces. Included notebook style storage case and bin storage guide.. **$69.95**

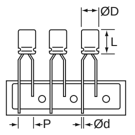
Panasonic® M Series Radial Lead Aluminum Electrolytic Capacitors

Ammo Box Packaging

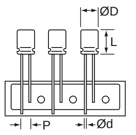
PANASONIC M SERIES CROSS REFERENCES
Nichicon: VR; **Chemicon:** SMG;
Marcon: DSM; **Rubycon:** YK; **Elna:** RE3;
Nitsuko: MK; **Sanyo:** HC/HPC

FEATURES: • Miniaturized size version for general purpose use • Life: 2000 hours at +85°C • Vent construction for ≥Ø6.3 mm products

5-8 mm



10, 12.5 mm



SPECIFICATIONS:

Operating Temperature Range	-40°C to +85°C	-25°C to +85°C
Rated Working Voltage Range	6.3 to 50 V DC	160 to 450 V DC
Nominal Capacitance Range	0.47 to 2200 µF	1 to 470 µF

Capacitance Tolerance: ±20% (120 Hz, +20°C)

Leakage Current	I≤ 0.03 CV or 4 (µA) after 1 minute I≤ 0.01 CV or 3 (µA) after 2 minutes Whichever is greater measured with rated working voltage at +20°C.	I≤ 0.06 CV + 10 (µA) after 2 minutes application of rated working voltage at +20°C.

tan δ: (at 120 Hz, +20°C)

W.V.	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
tan δ	0.28	0.24	0.20	0.16	0.14	0.12	0.11	0.10	0.16	0.18	0.18	0.20	0.20	0.20

For capacitance value > 1000 µF, add 0.02 per every 1000 µF.

Low Temperature Characteristics: Impedance ratio max. at 120 Hz

W.V.	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
-25°C/+20°C	5	4	3	2	2	2	2	2	2	2	3	5	6	6
-40°C/+20°C	12	10	8	5	4	3	3	3	—	—	—	—	—	—

For capacitance value >1000 µF, add 0.5 per every 1000 µF for -25°C/+20°C.
add 1.0 per every 1000 µF for -40°C/+20°C.

Ripple Current: 120 Hz, +85°C

Frequency (Hz)	50/60	120	1k	10k
Correction Factor (Multiplier)	0.7	1	1.3	1.7

Endurance:

Test Conditions		**Post Test Requirements at +20°C**	
Duration	2000 Hours	**Leakage Current**	≤ initial specified value
Ambient Temperature	+85°C	**Capacitance Change**	±20% of initial measured value
Applied Voltage	Rated DC Working Voltage	**tan δ**	≤ 150% initial specified value

Shelf Life:

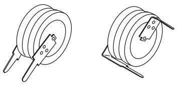
Test Conditions		**Post Test Requirements at +20°C**	
Duration	1000 Hours	**Leakage Current**	≤ initial specified value
Ambient Temperature	+85°C	**Capacitance Change**	±20% of initial measured value
Applied Voltage	—	**tan δ**	≤ 150% initial specified value

WV (VDC)	**Cap (µF)**	**Leakage Current (µA)**	**tan δ max.**	**Ripple Current (mA) rms**	**Dimensions (mm)**				**Digi-Key Part No.**	**Pricing**			**Panasonic Part No.**
					ØD	**L**	**P**	**Ød**		**500**	**1,000**	**2,000**	
6.3	220	13.8	0.28	240	5	11	5.0	0.5	P10357TB-ND	—	—	58.00/M	ECA-0JM221B
	220	13.8	0.28	240	5	11	2.5	0.5	P10401TB-ND	—	—	58.00/M	ECA-0JM221I
	470	29.6	0.28	380	6.3	11.2	5.0	0.5	P10358TB-ND	—	—	84.00/M	ECA-0JM471B
	470	29.6	0.28	380	6.3	11.2	2.5	0.5	P10402TB-ND	—	—	84.00/M	ECA-0JM471I
	1000	63	0.28	580	8	11.5	5.0	0.6	P10359TB-ND	—	122.00	—	ECA-0JM102B
	1000	63	0.28	580	8	11.5	3.5	0.6	P10403TB-ND	—	102.00	—	ECA-0JM102BJ
	2200	138.6	0.3	890	10	16	5.0	0.6	P10360TB-ND	115.00	—	179.00/M	ECA-0JM222B
	3300	207.9	0.32	1020	10	20	5.0	0.6	P10361TB-ND	149.50	—	238.00/M	ECA-0JM332B
	4700	296.1	0.34	1170	12.5	20	5.0	0.6	P10362TB-ND	205.00	—	325.00/M	ECA-0JM472B
10	100	10	0.24	150	5	11	5.0	0.5	P10363TB-ND	—	—	50.00/M	ECA-1AM101B
	100	10	0.24	150	5	11	2.5	0.5	P10404TB-ND	—	—	50.00/M	ECA-1AM101I
	220	22	0.24	250	5	11	5.0	0.5	P10364TB-ND	—	—	66.00/M	ECA-1AM221B
	220	22	0.24	250	5	11	2.5	0.5	P10405TB-ND	—	—	66.00/M	ECA-1AM221I
	330	33	0.24	330	6.3	11.2	5.0	0.5	P10365TB-ND	—	—	84.00/M	ECA-1AM331B
	330	33	0.24	330	6.3	11.2	2.5	0.5	P10406TB-ND	—	—	84.00/M	ECA-1AM331I
	470	47	0.24	400	8	11.5	5.0	0.6	P10366TB-ND	—	101.00	—	ECA-1AM471B
	470	47	0.24	400	8	11.5	3.5	0.6	P10407TB-ND	—	101.00	—	ECA-1AM471BJ
	1000	100	0.24	630	10	12.5	5.0	0.6	P10367TB-ND	92.00	—	143.00/M	ECA-1AM102B
	2200	220	0.26	920	10	20	5.0	0.6	P10368TB-ND	139.50	—	221.00/M	ECA-1AM222B
16	100	16	0.2	180	5	11	5.0	0.5	P10369TB-ND	—	—	58.00/M	ECA-1CM101B
	100	16	0.2	180	5	11	2.5	0.5	P10408TB-ND	—	—	58.00/M	ECA-1CM101I
	220	35.2	0.2	280	6.3	11.2	5.0	0.5	P10370TB-ND	—	—	84.00/M	ECA-1CM221B
	220	35.2	0.2	280	6.3	11.2	2.5	0.5	P10409TB-ND	—	—	84.00/M	ECA-1CM221I
	330	52.8	0.3	350	8	11.5	5.0	0.6	P10371TB-ND	—	101.00	—	ECA-1CM331B
	330	52.8	0.3	350	8	11.5	3.5	0.6	P10410TB-ND	—	101.00	—	ECA-1CM331BJ
	470	75.2	0.2	440	8	11.5	5.0	0.6	P10372TB-ND	—	122.00	—	ECA-1CM471B
	470	75.2	0.2	440	8	11.5	3.5	0.6	P10411TB-ND	—	122.00	—	ECA-1CM471BJ
	1000	160	0.2	680	10	16	5.0	0.6	P10373TB-ND	113.50	—	176.00/M	ECA-1CM102B
	2200	352	0.22	1000	12.5	20	5.0	0.6	P10374TB-ND	205.00	—	325.00/M	ECA-1CM222B
25	47	11.7	0.16	130	5	11	5.0	0.5	P10375TB-ND	—	—	50.00/M	ECA-1EM470B
	47	11.7	0.16	130	5	11	2.5	0.5	P10412TB-ND	—	—	50.00/M	ECA-1EM470I
	100	25	0.16	180	6.3	11.2	5.0	0.5	P10376TB-ND	—	—	66.00/M	ECA-1EM101B
	100	25	0.16	180	6.3	11.2	2.5	0.5	P10413TB-ND	—	—	66.00/M	ECA-1EM101I
	220	55	0.16	310	8	11.5	5.0	0.6	P10377TB-ND	—	101.00	—	ECA-1EM221B
	220	55	0.16	310	8	11.5	3.5	0.6	P10414TB-ND	—	101.00	—	ECA-1EM221BJ
	330	82.5	0.16	390	8	11.5	5.0	0.6	P10378TB-ND	—	122.00	—	ECA-1EM331B
	330	82.5	0.16	390	8	11.5	3.5	0.6	P10415TB-ND	—	122.00	—	ECA-1EM331BJ
	470	117.5	0.16	480	10	12.5	5.0	0.6	P10379TB-ND	97.00	—	151.00/M	ECA-1EM471B
	1000	250	0.16	850	10	20	5.0	0.6	P10380TB-ND	148.00	—	235.00/M	ECA-1EM102B
35	33	11.5	0.14	110	5	11	5.0	0.5	P10381TB-ND	—	—	50.00/M	ECA-1VM330B
	33	11.5	0.14	110	5	11	2.5	0.5	P10416TB-ND	—	—	50.00/M	ECA-1VM330I
	47	16.4	0.14	130	5	11	5.0	0.5	P10382TB-ND	—	—	58.00/M	ECA-1VM470B
	47	16.4	0.14	130	5	11	2.5	0.5	P10417TB-ND	—	—	58.00/M	ECA-1VM470I
	100	35	0.14	210	6.3	11.2	5.0	0.5	P10383TB-ND	—	—	84.00/M	ECA-1VM101B
	100	35	0.14	210	6.3	11.2	2.5	0.5	P10418TB-ND	—	—	84.00/M	ECA-1VM101I
	220	77	0.14	350	8	11.5	5.0	0.6	P10384TB-ND	—	122.00	—	ECA-1VM221B
	220	77	0.14	350	8	11.5	3.5	0.6	P10419TB-ND	—	122.00	—	ECA-1VM221BJ
	330	115.5	0.14	440	10	12.5	5.0	0.6	P10385TB-ND	97.00	—	151.00/M	ECA-1VM331B
	470	164.5	0.14	550	10	16	5.0	0.6	P10386TB-ND	120.50	—	188.00/M	ECA-1VM471B
	1000	350	0.14	900	12.5	20	5.0	0.6	P10387TB-ND	225.50	—	358.00/M	ECA-1VM102B
50	0.47	3	0.12	5	5	11	5.0	0.5	P10388TB-ND	—	—	45.00/M	ECA-1HMR47B
	0.47	3	0.12	5	5	11	2.5	0.5	P10420TB-ND	—	—	45.00/M	ECA-1HMR47I
	1	3	0.12	10	5	11	5.0	0.5	P10389TB-ND	—	—	45.00/M	ECA-1HM010B
	1	3	0.12	10	5	11	2.5	0.5	P10421TB-ND	—	—	45.00/M	ECA-1HM010I
	2.2	3	0.12	20	5	11	5.0	0.5	P10390TB-ND	—	—	45.00/M	ECA-1HM2R2B
	2.2	3	0.12	20	5	11	2.5	0.5	P10422TB-ND	—	—	45.00/M	ECA-1HM2R2I
	3.3	3	0.12	35	5	11	5.0	0.5	P10391TB-ND	—	—	45.00/M	ECA-1HM3R3B
	3.3	3	0.12	35	5	11	2.5	0.5	P10423TB-ND	—	—	45.00/M	ECA-1HM3R3I
	4.7	3	0.12	45	5	11	5.0	0.5	P10392TB-ND	—	—	45.00/M	ECA-1HM4R7B
	4.7	3	0.12	45	5	11	2.5	0.5	P10424TB-ND	—	—	45.00/M	ECA-1HM4R7I
	10	5	0.12	65	5	11	5.0	0.5	P10393TB-ND	—	—	45.00/M	ECA-1HM100B
	10	5	0.12	65	5	11	2.5	0.5	P10425TB-ND	—	—	45.00/M	ECA-1HM100I
	22	11	0.12	100	5	11	5.0	0.5	P10394TB-ND	—	—	50.00/M	ECA-1HM220B
	22	11	0.12	100	5	11	2.5	0.5	P10426TB-ND	—	—	50.00/M	ECA-1HM220I
	33	16.5	0.12	110	5	11	5.0	0.5	P10395TB-ND	—	—	58.00/M	ECA-1HM330B
	33	16.5	0.12	110	5	11	2.5	0.5	P10427TB-ND	—	—	58.00/M	ECA-1HM330I
	47	23.5	0.12	130	6.3	11.2	5.0	0.5	P10396TB-ND	—	—	70.00/M	ECA-1HM470B
	47	23.5	0.12	130	6.3	11.2	2.5	0.5	P10428TB-ND	—	—	70.00/M	ECA-1HM470I
	100	50	0.12	250	8	11.5	5.0	0.6	P10397TB-ND	—	101.00	—	ECA-1HM101B
	100	50	0.12	250	8	11.5	3.5	0.6	P10429TB-ND	—	101.00	—	ECA-1HM101BJ
	220	11	0.12	400	10	12.5	5.0	0.6	P10398TB-ND	97.00	—	151.00/M	ECA-1HM221B
	330	165	0.12	500	10	16	5.0	0.6	P10399TB-ND	130.50	—	203.00/M	ECA-1HM331B
	470	235	0.12	650	10	20	5.0	0.6	P10400TB-ND	158.00	—	251.00/M	ECA-1HM471B

Panasonic

SG Series Gold Capacitors

Electric Double Layer Capacitors



Specifications:

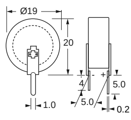
Operating Temp. Range:	-25 to +70°C
Rated Working Voltage:	5.5V DC
Nom. Capacitance Range:	0.022F to 1.0F (+20°C)
Capacitance Tolerance:	-20% to +80%

Temperature Characteristics:

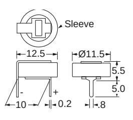
Capacitance Change -25°C & 70°C:	≤±30% at 20°C
Internal Resistance −25°C:	≤5X at 20°C
Inflow Current at 70°C:	≤4X at 20°C

Load Life Characteristics:
(after 1000 hrs. with rated voltage of 5.5V DC applied at 70°C.)

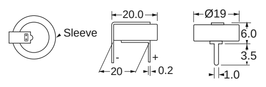
Capacitance Change:	≤±30% of initial measured value
Internal Resistance:	≤4X of initial specified value
Inflow Current:	≤2X of initial specified value



Case Code: A



Case Code: B

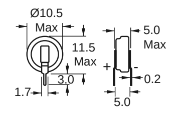


Case Code: C

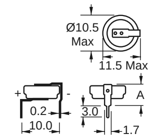
Case Code	WV DC	Nom. Cap. (F)	Internal Resist. Ω (1KHz)	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
Vertical									
A	5.5	0.47	30	P6974-ND	6.64	5.69	4.46	2.86	EEC-S5R5V474
A	5.5	1.0	30	P6975-ND	6.64	5.69	4.46	2.86	EEC-S5R5V105
C	5.5	1.5	30	P11343-ND	7.64	6.56	5.14	3.29	EEC-S5R5V155
Horizontal									
B	5.5	0.047	120	P6977-ND	2.48	2.13	1.67	1.07	EEC-S5R5H473
C	5.5	0.47	30	P6980-ND	6.64	5.69	4.46	2.86	EEC-S5R5H474
C	5.5	1.0	30	P6981-ND	6.64	5.69	4.46	2.86	EEC-S5R5H105
C	5.5	1.5	30	P11342-ND	7.64	6.56	5.14	3.29	EEC-S5R5H155

SD Series Gold Capacitors

Electric Double Layer Capacitors



Vertical



Horizontal

Features: • 30% smaller than SG series • Terminal solderability 95% • Longer life than a secondary battery • Best choice for µA range IC memory back-up

Specifications:

Operating Temperature Range:	-25 to +70°C
Rated Working Voltage:	5.5V DC
Capacitance Tolerance:	-20% to +80%

Temperature Characteristics:

Capacitance Change -25°C & 70°C:	≤±30% at 20°C
Internal Resistance −25°C:	≤5X at 20°C

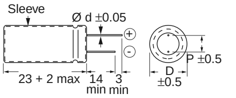
Endurance:
(after 1000 hrs. w/ rated volt. of 5.5V DC applied at 70°C.)

Capacitance Change:	±30% of initial measured value
Internal Resistance:	≤ 4 times the initial specified value

WV DC	Nom. Cap. (F)	Internal Resist. Ω (1KHz)	Dim. A mm (max.)	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
Vertical									
5.5	0.022	≤150	—	P10789-ND	2.70	2.32	1.82	1.16	EEC-S0HD223V
5.5	0.047	≤120	—	P10790-ND	2.89	2.49	1.95	1.25	EEC-S0HD473V
5.5	0.10	≤75	—	P10791-ND	2.89	2.49	1.95	1.25	EEC-S0HD104V
5.5	0.22	≤75	—	P10792-ND	3.16	2.72	2.13	1.36	EEC-S0HD224V
5.5	0.33	≤75	—	P11065-ND	2.91	2.50	1.96	1.25	EEC-S0HD334V
Horizontal									
5.5	0.022	≤150	5.5	P10785-ND	2.70	2.32	1.82	1.16	EEC-S0HD223H
5.5	0.047	≤120	5.5	P10786-ND	2.89	2.49	1.95	1.25	EEC-S0HD473H
5.5	0.10	≤75	5.5	P10787-ND	2.89	2.49	1.95	1.25	EEC-S0HD104H
5.5	0.22	≤75	6.0	P10788-ND	3.16	2.72	2.13	1.36	EEC-S0HD224H
5.5	0.33	≤75	6.5	P11064-ND	2.91	2.50	1.96	1.25	EEC-S0HD334H

HW Series Gold Capacitors

Electric Double Layer Capacitors



Specifications:

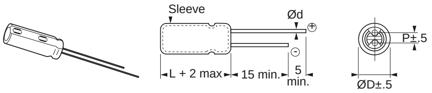
Operating Temperature Range:	-25°C to +60°C
Rated Working Voltage:	2.3V DC
Terminal Polarity:	(—) Negative
Capacitance Range:	40°F to 70°F
Self Discharge:	0.2 V.DC or Less

øD	L	ød	P	WV DC	Nom. Cap. (F)	Internal Resist. Ω (1KHz)	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
12.5	23	0.8	5.0	2.3	4.7	0.3	P11344-ND	5.88	5.04	3.95	2.53	EEC-HW0D475
12.5	35	0.8	5.0	2.3	10.0	0.2	P11345-ND	7.06	6.05	4.74	3.04	EEC-HW0D106
18.0	35	0.8	7.5	2.3	22.0	0.1	P11346-ND	11.76	10.08	7.90	5.06	EEC-HW0D226
18.0	40	0.8	7.5	2.3	50.0	0.1	P11066-ND	24.77	21.24	16.64	10.65	EEC-HW0D506

Warning: If the voltage balance beaks down, an over voltage condition could result. To prevent this from occurring, add a voltage dividing resistor in parallel with each capacitor, allowing for the capacitor's leakage current.

AL Series Gold Capacitors

Electric Double Layer Capacitors



Specifications:

Operating Temp. Range:	-25 to +70°C
Rated Working Voltage:	2.5V DC
Nom. Capacitance Range:	0.22F to 10F (+20°C)
Capacitance Tolerance:	-20% to +80%

Temperature Characteristics:

Capacitance Change -25°C & 70°C:	≤±30% at 20°C
Internal Resistance −40°C:	≤3X at 20°C
Inflow Current at 70°C:	≤3X at 20°C

Load Life Characteristics:
(after 1000 hrs. with rated voltage of 2.5V DC applied at 70°C.)

Capacitance Change:	≤±30% of initial measured value
Internal Resistance:	≤2X of initial specified value
Inflow Current:	≤2X of initial specified value

Shelf Life: The capacitor shall meet the limits for "High Temperature Loading" after 1,000 hours exposure at +70°C with no voltage applied.

Loading with Moisture: The capacitor shall meet the limits for "High Temperature Loading" after 500 hours exposure at +55°C/90 to 95%RH with 2.5V DC applied.

WV DC	Capacitance (F)	Inflow Current* (mA)	Internal Resist. Ω (1KHz)	Dimensions (mm) øD	L	ød	P	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
2.5	1.0	0.18	1.0	8.0	22	0.7	3.5	P6963-ND	4.15	3.56	2.79	1.79	EEC-A0EL105
2.5	3.3	0.30	0.3	12.5	23	0.8	5.0	P6966-ND	5.22	4.48	3.51	2.25	EEC-A0EL335
2.5	4.7	0.44	0.2	12.5	35	0.8	5.0	P6967-ND	6.11	5.24	4.11	2.63	EEC-A0EL475
2.5	10	0.60	0.1	18.0	35	0.8	7.5	P6969-ND	8.71	7.47	5.85	3.75	EEC-A0EL106

* Inflow current is measured after 90 minutes application of rated working voltage. In use, current will decrease to several µA level after approx. 10 hrs. application of rated working voltage.

NF Series Gold Capacitors

Wet Type Electric Double Layer Capacitors

Gold capacitors provide super large capacitance by unique electrode and miniaturization technology meeting the trend of compactness. Suitable for a memory back-up for CMOS type RAM in microcomputers.

Specifications:

	P6951-P6955	P6956
Operating Temp. Range:	−25° ~ +70°C	−25° ~ +70°C
Surge Voltage:	6.3 VDC	6.3 VDC
Capacitance Tolerance:	−20 ~ +80%	−20 ~ +40%

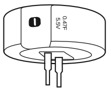
Temperature Characteristics:

	P6951-P6955	P6956
Capacitance Change:	±30% at 20°C	±30% at 20°C
Internal Resistance −25°C:	less than 5x at 20°C	less than 3x at 20°C
Leakage Current at 70°C:	less than 4x at 20°C	less than 3x at 20°C

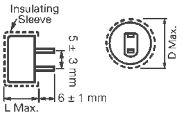
Load Life Char.: (after 1000 hrs. with rated voltage applied at 70°C.)

	P6951-P6955	P6956
Capacitance Change:	±30%	±30%
Internal Resistance:	less than 4x	less than 2x
Leakage Current:	less than 2x	less than 2x

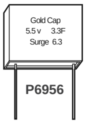
Features:
- A long period memory backup is available by excellent self-discharging characteristics.
- Low profile design is 9.5 mm maximum in height and has a standardized 5 mm terminal spacing.
- Superior to primary or second-ary batteries in operating temperature range, charge/ discharge characteristics, long time reliability and performance stability.



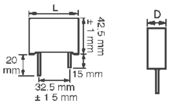
P6950-P6955



Features:
- Can be added in most typical microcomputer circuits.
- Memory backup from a second up to a month.
- Minimum self-discharging.
- High reliability, and more convenience than batteries.
- Cubic shape design. Compact design allows maximum density, easy mounting on PC Board.
- Very good stability over repeated charge/discharge cycles.



Dimensions (mm)

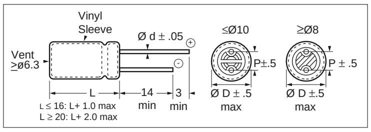


WV DC	Cap. Farads	Capacitance Range	Inflow Current* µA (30 min.)	Internal Resist. V (1KHz)	Dim. (mm) L	D	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
5.5	0.047	0.0376 ~ 0.0846	69	120	7.5	13.5	P6951-ND	2.91	2.50	1.96	1.25	EEC-F5R5U473
5.5	0.1	0.08 ~ 0.18	100	75	7.5	13.5	P6952-ND	3.12	2.68	2.10	1.34	EEC-F5R5U104
5.5	0.47	0.376 ~ 0.846	216	30	8.0	21.5	P6954-ND	7.11	6.10	4.78	3.06	EEC-F5R5U474
5.5	1.0	0.8 ~ 1.8	315	30	8.0	21.5	P6955-ND	7.11	6.10	4.78	3.06	EEC-F5R5U105
5.5	1.5	1.2 ~ 2.7	385	30	8.0	21.5	P11063-ND	8.08	6.93	5.43	3.48	EEC-F5R5U155
5.5	3.3	2.64 ~ 4.62	440*	2.5	42.5	15.0	P6956-ND	13.90	11.91	9.33	5.97	EEC-W5R5D335

* Inflow current after 60 minutes.

Panasonic® NHG Series Radial Lead Aluminum Electrolytic Capacitors

Panasonic NHG Series Cross References:
Nippon Chemicon: KMG; **Nichicon:** VZ;
Elna: RJ4; **Rubycon:** YXA



FEATURES:

- Compact size (same case size with series M)
- Life: 1000 ~ 2000 hours at +105°C

SPECIFICATIONS:

Operating Temperature Range	-55°C to +105°C	-25°C to +105°C
Rated Working Voltage Range	6.3 to 100 VDC	160 to 450 VDC
Nominal Capacitance Range	0.1 to 22000 µF	1.0 to 330 µF

Capacitance Tolerance: ±20% (120 Hz, +20°C)

Leakage Current	I ≤ 0.01 CV µA or 3µA, whichever is greater after 2 minutes application of rated working voltage at +20°C.	I ≤ 0.06 CV + 10µA after 2 minutes application of rated working voltage at +20°C.

tan δ: (at 120 Hz, +20°C)

W.V.	6.3	10	16	25	35	50	63	100	160	250	450
tan δ max.	0.28	0.24	0.20	0.16	0.14	0.12	0.10	0.08	0.15	0.15	0.24

For capacitance value > 1000 µF, add 0.02 per every 1000 µF.

Ripple Current: 120 Hz, +105°C

W.V. (V.DC)	**Cap (µF)**	**Frequency (Hz)**				
		60	**120**	**1k**	**10k**	**100k**
6.3 ~ 100	**~ 33**	0.75	1	1.55	1.80	2.00
	47 ~ 470	0.80	1	1.35	1.50	1.50
	1000 ~	0.85	1	1.10	1.15	1.15
160 ~ 450	**1.0 ~ 330**	0.80	1	1.35	1.50	1.50

Endurance:

Test Conditions		**Post Test Requirements at +20°C**	
Duration	2000 Hours*	**Leakage Current**	≤ initial specified value
Ambient Temperature	+105°C	**Capacitance Change**	±20% of initial measured value
Applied Voltage	Rated DC Working Voltage	**tan δ**	≤ 200% initial specified value

* 1000 Hours for ≤ Ø8mm products.

Shelf Life:

Test Conditions		**Post Test Requirements at +20°C**	
Duration	1000 Hours	**Leakage Current**	≤ initial specified value
Ambient Temperature	+105°C	**Capacitance Change**	±20% of initial measured value
Applied Voltage	—	**tan δ**	≤ 200% initial specified value

WV (VDC)	**Cap µF**	**D.C.L. (+20°C) (µA) max.**	**tan δ max.**	**Ripple Current (mA) rms**	**Dimensions (mm)**				**Digi-Key Part No.**	**Pricing**						**Panasonic Part No.**
					øD	**L**	**P**	**ød**		**1**	**10**	**100**	**500**	**1,000**	**5,000**	
6.3	100	6.3	0.28	91	5	11	2.0	0.5	P5505-ND	.33	2.07	13.95	47.25	72.00	61.00/M	ECA-0JHG101
	220	13.8	0.28	140	5	11	2.0	0.5	P5506-ND	.32	2.15	15.13	52.25	83.00	72.00/M	ECA-0JHG221
	330	20.7	0.28	190	6.3	11.2	2.5	0.5	P5507-ND	.40	2.73	19.25	66.50	105.00	91.00/M	ECA-0JHG331
	470	29.6	0.28	230	6.3	11.2	2.5	0.5	P5508-ND	.40	2.94	21.00	75.60	118.00	109.00/M	ECA-0JHG471
	1000	63.0	0.28	380	8	11.5	3.5	0.6	P5509-ND	.57	4.24	30.25	108.90	169.00	157.00/M	ECA-0JHG102
	2200	138.6	0.30	710	10	16	5.0	0.6	P5510-ND	.83	6.18	45.36	164.05	261.00	251.00/M	ECA-0JHG222
	3300	207.9	0.32	840	10	20	5.0	0.6	P5511-ND	1.13	8.42	61.81	223.55	355.00	342.00/M	ECA-0JHG332
	4700	296.1	0.34	1090	12.5	20	5.0	0.6	P5512-ND	1.28	9.63	72.23	256.80	427.00	411.00/M	ECA-0JHG472
	6800	428.4	0.38	1350	12.5	25	5.0	0.6	P5513-ND	1.74	13.08	98.10	348.80	580.00	558.00/M	ECA-0JHG682
	10000	630.0	0.46	1650	16	25	7.5	0.8	P5514-ND	2.18	16.54	124.80	468.00	811.00	786.00/M	ECA-0JHG103
	15000	945.0	0.56	2010	16	31.5	7.5	0.8	P5515-ND	3.12	23.64	178.40	669.00	1160.00	1124.00/M	ECA-0JHG153
	22000	1386.0	0.70	2350	18	35.5	7.5	0.8	P5516-ND	4.47	33.84	255.40	957.75	1660.00	1609.00/M	ECA-0JHG223
10	100	10.0	0.24	110	5	11	2.0	0.5	P5517-ND	.28	1.87	13.20	45.60	72.00	62.00/M	ECA-1AHG101
	220	22.0	0.24	170	6.3	11.2	2.5	0.5	P5518-ND	.36	2.46	17.33	59.85	95.00	82.00/M	ECA-1AHG221
	330	33.0	0.24	200	6.3	11.2	2.5	0.5	P5519-ND	.40	2.94	21.00	75.60	118.00	109.00/M	ECA-1AHG331
	470	47.0	0.24	250	8	11.5	3.5	0.6	P5520-ND	.48	3.50	25.00	90.00	140.00	130.00/M	ECA-1AHG471
	1000	100.0	0.24	460	10	12.5	5.0	0.6	P5521-ND	.66	4.90	35.96	130.05	207.00	199.00/M	ECA-1AHG102
	2200	220.0	0.26	760	10	20	5.0	0.6	P5522-ND	1.06	7.87	57.81	209.10	332.00	320.00/M	ECA-1AHG222
	3300	330.0	0.28	1000	12.5	20	5.0	0.6	P5523-ND	1.22	9.18	68.85	244.80	407.00	392.00/M	ECA-1AHG332
	4700	470.0	0.30	1260	12.5	25	5.0	0.6	P5524-ND	1.66	12.42	93.15	331.20	551.00	530.00/M	ECA-1AHG472
	6800	680.0	0.34	1570	16	25	7.5	0.8	P5525-ND	2.32	17.37	130.28	463.20	770.00	741.00/M	ECA-1AHG682
	10000	1000.0	0.42	1890	16	31.5	7.5	0.8	P5526-ND	2.78	21.07	159.00	596.25	1034.00	1002.00/M	ECA-1AHG103
	15000	1500.0	0.52	2180	18	35.5	7.5	0.8	P5527-ND	4.30	32.57	245.80	921.75	1598.00	1549.00/M	ECA-1AHG153
16	47	7.5	0.20	77	5	11	2.0	0.5	P5528-ND	.33	2.07	13.95	47.25	72.00	61.00/M	ECA-1CHG470
	100	16.0	0.20	110	5	11	2.0	0.5	P5529-ND	.32	2.15	15.13	52.25	83.00	72.00/M	ECA-1CHG101
	220	35.2	0.20	180	6.3	11.2	2.5	0.5	P5530-ND	.40	2.94	21.00	75.60	118.00	109.00/M	ECA-1CHG221
	330	52.8	0.20	260	8	11.5	3.5	0.6	P5531-ND	.48	3.50	25.00	90.00	140.00	130.00/M	ECA-1CHG331
	470	75.2	0.20	310	8	11.5	3.5	0.6	P5532-ND	.58	4.27	30.50	109.80	171.00	159.00/M	ECA-1CHG471
	1000	160.0	0.20	560	10	16	5.0	0.6	P5533-ND	.82	6.08	44.65	161.50	257.00	247.00/M	ECA-1CHG102
	2200	352.0	0.22	920	12.5	20	5.0	0.6	P5534-ND	1.28	9.63	72.23	256.80	427.00	411.00/M	ECA-1CHG222
	3300	528.0	0.24	1170	12.5	25	5.0	0.6	P5535-ND	1.78	13.38	100.35	356.80	593.00	571.00/M	ECA-1CHG332
	4700	752.0	0.26	1480	16	25	7.5	0.8	P5536-ND	2.13	16.14	121.80	456.75	792.00	767.00/M	ECA-1CHG472
	6800	1088.0	0.30	1780	16	31.5	7.5	0.8	P5537-ND	2.90	21.97	165.80	621.75	1078.00	1045.00/M	ECA-1CHG682
	10000	1600.0	0.38	2060	18	35.5	7.5	0.8	P5538-ND	4.25	32.17	242.80	910.50	1578.00	1530.00/M	ECA-1CHG103
25	47	11.7	0.16	91	5	11	2.0	0.5	P5539-ND	.28	1.87	13.20	45.60	72.00	62.00/M	ECA-1EHG470
	100	25.0	0.16	130	6.3	11.2	2.5	0.5	P5540-ND	.36	2.46	17.33	59.85	95.00	82.00/M	ECA-1EHG101
	220	55.0	0.16	230	8	11.5	3.5	0.6	P5541-ND	.48	3.50	25.00	90.00	140.00	130.00/M	ECA-1EHG221
	330	82.5	0.16	310	8	11.5	3.5	0.6	P5542-ND	.58	4.27	30.50	109.80	171.00	159.00/M	ECA-1EHG331
	470	117.5	0.16	380	10	12.5	5.0	0.6	P5543-ND	.70	5.18	38.07	137.70	219.00	211.00/M	ECA-1EHG471
	1000	250.0	0.16	680	10	20	5.0	0.6	P5544-ND	1.12	8.35	61.34	221.85	352.00	339.00/M	ECA-1EHG102
	2200	550.0	0.18	1090	12.5	25	5.0	0.6	P5545-ND	1.69	12.69	95.18	338.40	563.00	541.00/M	ECA-1EHG222
	3300	825.0	0.20	1400	16	25	7.5	0.8	P5546-ND	2.10	15.90	120.00	450.00	780.00	756.00/M	ECA-1EHG332
	4700	1175.0	0.22	1750	16	31.5	7.5	0.8	P5547-ND	3.08	23.29	175.80	659.25	1143.00	1108.00/M	ECA-1EHG472
	6800	1700.0	0.26	2040	18	35.5	7.5	0.8	P5548-ND	4.44	33.63	253.80	951.75	1650.00	1599.00/M	ECA-1EHG682
35	33	11.5	0.14	75	5	11	2.0	0.5	P5549-ND	.28	1.87	13.20	45.60	72.00	62.00/M	ECA-1VHG330
	47	16.4	0.14	90	5	11	2.0	0.5	P5550-ND	.32	2.15	15.13	52.25	83.00	72.00/M	ECA-1VHG470
	100	35.0	0.14	150	6.3	11.2	2.5	0.5	P5551-ND	.40	2.94	21.00	75.60	118.00	109.00/M	ECA-1VHG101
	220	77.0	0.14	270	8	11.5	3.5	0.6	P5552-ND	.58	4.27	30.50	109.80	171.00	159.00/M	ECA-1VHG221
	330	115.5	0.14	350	10	12.5	5.0	0.6	P5553-ND	.70	5.18	38.07	137.70	219.00	211.00/M	ECA-1VHG331
	470	164.5	0.14	460	10	16	5.0	0.6	P5554-ND	.86	6.43	47.24	170.85	271.00	261.00/M	ECA-1VHG471
	1000	350.0	0.14	810	12.5	20	5.0	0.6	P5555-ND	1.42	10.65	79.88	284.00	472.00	454.00/M	ECA-1VHG102
	2200	770.0	0.16	1260	16	25	7.5	0.8	P5556-ND	2.20	16.67	125.80	471.75	818.00	793.00/M	ECA-1VHG222
	3300	1155.0	0.18	1610	16	31.5	7.5	0.8	P5557-ND	3.13	23.72	179.00	671.25	1164.00	1128.00/M	ECA-1VHG332
	4700	1645.0	0.20	1910	18	35.5	7.5	0.8	P5558-ND	4.70	35.59	268.60	1007.25	1746.00	1692.00/M	ECA-1VHG472
50	0.1	3.0	0.12	1.1	5	11	2.0	0.5	P5559-ND*	.32	2.02	13.64	46.20	70.00	59.00/M	ECA-1HHG0R1
	0.22	3.0	0.12	2.3	5	11	2.0	0.5	P5560-ND*	.32	2.02	13.64	46.20	70.00	59.00/M	ECA-1HHGR22
	0.33	3.0	0.12	3.5	5	11	2.0	0.5	P5561-ND*	.32	2.02	13.64	46.20	70.00	59.00/M	ECA-1HHGR33
	0.47	3.0	0.12	5	5	11	2.0	0.5	P5562-ND*	.32	2.02	13.64	46.20	70.00	59.00/M	ECA-1HHGR47
	1.0	3.0	0.12	10	5	11	2.0	0.5	P5563-ND*	.32	2.02	13.64	46.20	70.00	59.00/M	ECA-1HHG010
	2.2	3.0	0.12	18	5	11	2.0	0.5	P5564-ND*	.32	2.02	13.64	46.20	70.00	59.00/M	ECA-1HHG2R2
	3.3	3.0	0.12	22	5	11	2.0	0.5	P5565-ND*	.32	2.02	13.64	46.20	70.00	59.00/M	ECA-1HHG3R3
	4.7	3.0	0.12	26	5	11	2.0	0.5	P5566-ND*	.32	2.02	13.64	46.20	70.00	59.00/M	ECA-1HHG4R7
	10	5.0	0.12	39	5	11	2.0	0.5	P5567-ND*	.33	2.07	13.95	47.25	72.00	61.00/M	ECA-1HHG100
	22	11.0	0.12	65	5	11	2.0	0.5	P5568-ND*	.28	1.87	13.20	45.60	72.00	62.00/M	ECA-1HHG220
	33	16.5	0.12	90	5	11	2.0	0.5	P5569-ND*	.32	2.15	15.13	52.25	83.00	72.00/M	ECA-1HHG330
	47	23.5	0.12	110	6.3	11.2	2.5	0.5	P5570-ND*	.37	2.54	17.88	61.75	98.00	85.00/M	ECA-1HHG470
	100	50.0	0.12	180	8	11.5	3.5	0.6	P5571-ND*	.48	3.50	25.00	90.00	140.00	130.00/M	ECA-1HHG101
	220	110.0	0.12	330	10	12.5	5.0	0.6	P5572-ND*	.70	5.18	38.07	137.70	219.00	211.00/M	ECA-1HHG221
	330	165.0	0.12	410	10	16	5.0	0.6	P5573-ND*	.93	6.94	51.00	184.45	293.00	282.00/M	ECA-1HHG331
	470	235.0	0.12	530	10	20	5.0	0.6	P5574-ND*	1.20	8.93	65.57	237.15	377.00	363.00/M	ECA-1HHG471
	1000	500.0	0.12	950	12.5	25	5.0	0.6	P5575-ND*	1.87	14.01	105.08	373.60	621.00	598.00/M	ECA-1HHG102
	2200	1100.0	0.14	1470	16	31.5	7.5	0.8	P5576-ND*	3.13	23.72	179.00	671.25	1164.00	1128.00/M	ECA-1HHG222
	3300	1650.0	0.16	1770	18	35.5	7.5	0.8	P5577-ND	4.81	36.38	274.60	1029.75	1785.00	1730.00/M	ECA-1HHG332

(Continued)

Panasonic NHG Series Radial Lead Aluminum Electrolytic Capacitors *(Cont.)*

WV (VDC)	Cap µF	D.C.L. (±20°C) (µA) max.	tan δ max.	Ripple Current (mA) rms	Dimensions (mm) øD	L	P	ød	Digi-Key Part No.	Pricing 1	10	100	500	1,000	5,000	Panasonic Part No.
63	10	6.3	0.10	46	5	11	2.0	0.5	P5578-ND	.30	2.03	14.30	49.40	78.00	68.00/M	ECA-1JHG100
	22	13.8	0.10	71	5	11	2.0	0.5	P5579-ND	.32	2.15	15.13	52.25	83.00	72.00/M	ECA-1JHG220
	33	20.7	0.10	100	6.3	11.2	2.5	0.5	P5580-ND	.40	2.73	19.25	66.50	105.00	91.00/M	ECA-1JHG330
	47	29.6	0.10	120	6.3	11.2	2.5	0.5	P5581-ND	.43	3.15	22.50	81.00	126.00	117.00/M	ECA-1JHG470
	100	63.0	0.10	215	10	12.5	5.0	0.6	P5582-ND	.61	4.48	32.00	115.20	179.00	166.00/M	ECA-1JHG101
	220	138.6	0.10	335	10	16	5.0	0.6	P5583-ND	.92	6.82	50.06	181.05	288.00	277.00/M	ECA-1JHG221
	330	207.9	0.10	510	10	20	5.0	0.6	P5584-ND	1.21	8.99	66.04	238.85	379.00	365.00/M	ECA-1JHG331
	470	296.1	0.10	640	12.5	20	5.0	0.6	P5585-ND	1.50	11.25	84.38	300.00	499.00	480.00/M	ECA-1JHG471
	1000	630.0	0.10	930	16	25	7.5	0.8	P5586-ND	2.43	18.36	138.60	519.75	901.00	873.00/M	ECA-1JHG102
	2200	1386.0	0.12	1610	18	35.5	7.5	0.8	P5587-ND	4.92	37.26	281.20	1054.50	1828.00	1772.00/M	ECA-1JHG222
100	0.47	3.0	0.08	9	5	11	2.0	0.5	P5588-ND	.29	1.99	14.03	48.45	77.00	66.00/M	ECA-2AHGR47
	1.0	3.0	0.08	14	5	11	2.0	0.5	P5589-ND	.29	1.99	14.03	48.45	77.00	66.00/M	ECA-2AHG010
	2.2	3.0	0.08	21	5	11	2.0	0.5	P5590-ND	.30	2.07	14.58	50.35	80.00	69.00/M	ECA-2AHG2R2
	3.3	3.3	0.08	31	5	11	2.0	0.5	P5591-ND	.30	2.07	14.58	50.35	80.00	69.00/M	ECA-2AHG3R3
	4.7	4.7	0.08	38	5	11	2.0	0.5	P5592-ND	.30	2.07	14.58	50.35	80.00	69.00/M	ECA-2AHG4R7
	10	10.0	0.08	54	6.3	11.2	2.5	0.5	P5593-ND	.40	2.69	18.98	65.55	104.00	90.00/M	ECA-2AHG100
	22	22.0	0.08	93	6.3	11.2	2.5	0.5	P5594-ND	.46	3.36	24.00	86.40	134.00	125.00/M	ECA-2AHG220
	33	33.0	0.08	130	8	11.5	3.5	0.6	P5595-ND	.57	4.24	30.25	108.90	169.00	157.00/M	ECA-2AHG330
	47	47.0	0.08	165	10	12.5	5.0	0.6	P5596-ND	.70	5.18	37.00	133.20	207.00	192.00/M	ECA-2AHG470
	100	100.0	0.08	265	10	20	5.0	0.6	P5597-ND	1.11	8.29	60.87	220.15	350.00	337.00/M	ECA-2AHG101
	220	220.0	0.08	440	12.5	25	5.0	0.6	P5598-ND	1.68	12.60	94.50	336.00	559.00	538.00/M	ECA-2AHG221
	330	330.0	0.08	540	16	25	7.5	0.8	P5599-ND	2.30	17.28	129.60	460.80	766.00	737.00/M	ECA-2AHG331
	470	470.0	0.08	715	16	25	7.5	0.8	P5850-ND	2.92	22.10	166.80	625.50	1084.00	1051.00/M	ECA-2AHG471
	1000	1000.0	0.08	985	18	35.5	7.5	0.8	P5851-ND	5.93	44.89	338.80	1270.50	2202.00	2134.00/M	ECA-2AHG102
160	1.0	19.6	0.15	17	6.3	11.2	2.5	0.5	P5852-ND	.47	3.43	24.50	88.20	137.00	127.00/M	ECA-2CHG010
	2.2	31.1	0.15	25	6.3	11.2	2.5	0.5	P5853-ND	.52	3.85	27.50	99.00	154.00	143.00/M	ECA-2CHG2R2
	3.3	41.6	0.15	36	6.3	11.2	2.5	0.5	P5854-ND	.56	4.13	29.50	106.20	165.00	153.00/M	ECA-2CHG3R3
	4.7	55.1	0.15	43	6.3	11.2	2.5	0.5	P5855-ND	.61	4.52	32.25	116.10	181.00	168.00/M	ECA-2CHG4R7
	10	106.0	0.15	70	10	12.5	5.0	0.6	P5856-ND	.72	5.38	39.48	142.80	227.00	218.00/M	ECA-2CHG100
	22	221.0	0.15	130	10	20	5.0	0.6	P5857-ND	1.01	7.52	55.23	199.75	317.00	306.00/M	ECA-2CHG220
	33	326.0	0.15	180	10	20	5.0	0.6	P5858-ND	1.16	8.73	65.48	232.80	387.00	372.00/M	ECA-2CHG330
	47	461.0	0.15	220	12.5	20	5.0	0.6	P5859-ND	1.52	11.40	85.50	304.00	505.00	486.00/M	ECA-2CHG470
	100	970.0	0.15	335	16	25	7.5	0.8	P5860-ND	2.24	16.83	126.23	448.80	746.00	718.00/M	ECA-2CHG101
	220	2122.0	0.15	540	16	31.5	7.5	0.8	P5861-ND	3.35	25.33	191.20	717.00	1243.00	1205.00/M	ECA-2CHG221
	330	3178.0	0.15	705	18	31.5	7.5	0.8	P5862-ND	5.03	38.05	287.20	1077.00	1867.00	1809.00/M	ECA-2CHG331
250	1.0	25.0	0.15	17	6.3	11.2	2.5	0.5	P5863-ND	.56	4.10	29.25	105.30	164.00	152.00/M	ECA-2EHG010
	2.2	43.0	0.15	29	6.3	11.2	2.5	0.5	P5864-ND	.58	4.27	30.50	109.80	171.00	159.00/M	ECA-2EHG2R2
	3.3	59.5	0.15	42	8	11.5	3.5	0.6	P5865-ND	.65	4.86	35.72	129.20	205.00	198.00/M	ECA-2EHG3R3
	4.7	80.5	0.15	50	8	11.5	3.5	0.6	P5866-ND	.75	5.57	40.89	147.90	235.00	226.00/M	ECA-2EHG4R7
	10	160.0	0.15	88	10	16	5.0	0.6	P5867-ND	1.00	7.46	54.76	198.05	315.00	303.00/M	ECA-2EHG100
	22	340.0	0.15	155	12.5	20	5.0	0.6	P5868-ND	1.34	10.02	75.15	267.20	444.00	428.00/M	ECA-2EHG220
	33	505.0	0.15	190	12.5	20	5.0	0.6	P5869-ND	1.62	12.18	91.35	324.80	540.00	520.00/M	ECA-2EHG330
	47	715.0	0.15	230	12.5	25	5.0	0.6	P5870-ND	2.13	15.99	119.93	426.40	709.00	682.00/M	ECA-2EHG470
	100	1510.0	0.15	365	16	31.5	7.5	0.8	P5871-ND	3.26	24.65	186.00	697.50	1209.00	1172.00/M	ECA-2EHG101
450	1.0	37.0	0.20	18	8	11.5	3.5	0.6	P5872-ND	.78	5.79	42.54	153.85	244.00	235.00/M	ECA-2WHG010
	2.2	69.4	0.20	29	10	12.5	5.0	0.6	P5873-ND	.87	6.46	47.47	171.70	273.00	263.00/M	ECA-2WHG2R2
	3.3	99.1	0.20	41	10	16	5.0	0.6	P5874-ND	1.14	8.51	62.51	226.10	359.00	346.00/M	ECA-2WHG3R3
	4.7	136.0	0.20	49	10	20	5.0	0.6	P5875-ND	1.48	11.10	83.25	296.00	492.00	474.00/M	ECA-2WHG4R7
	10	280.0	0.20	75	12.5	20	5.0	0.6	P5876-ND	2.02	15.15	113.63	404.00	672.00	646.00/M	ECA-2WHG100
	22	604.0	0.20	115	16	25	7.5	0.8	P5877-ND	2.73	20.70	156.20	585.75	1015.00	984.00/M	ECA-2WHG220
	33	901.0	0.20	155	16	31.5	7.5	0.8	P5878-ND	3.68	27.88	210.40	789.00	1368.00	1326.00/M	ECA-2WHG330

* **NHG-KIT-ND** ***Digi-Key® NHG Series Capacitors Kit*** 10 each of values denoted. 180 total pieces. Included notebook style storage case and bin storage guide **$69.95**

Panasonic Z Series Miniature Aluminum Electrolytic Capacitors

±20%, Low Leakage, Low Impedance

SPECIFICATIONS:

• **Operating Temperature:** -40°C to +85°C • **Rated Working Voltage:** 6.3 to 50VDC • **Rated Capacitance:** 0.1 to 2200µF • **Capacitance Tolerance:** ±20% • **Leakage Current:** I = 0.002CV + 1 (mA) max.; Where, I: DC leakage current (µA) C: rated capacitance (µF), V: DC rated working voltage (V). Leakage current is measured after 2-minute application of the rated DC working voltage. • **Surge Voltage:** The listed surge voltage is applied to the capacitor in series with 1,000 ohms resistor at a cycle of 0.5 minute “ON” and 4.5 minute “OFF” repeating 1,000 times at 25°C ±10°C. After the test, the capacitor should meet the following limits:

Working Voltage	Surge Voltage
10 V DC	13 V DC
16	20
25	32
50	63

Capacitance change	Within ±10% of the initial measured value
tan ∂	Less than 150% of the initial specified value
DC leakage current	Less than the initial specified value

• **tan ∂. (Dissipation Factor) Max.**

Working Voltage	tan ∂	D.F.
10V DC	0.17	17
16	0.13	13
25	0.10	10
50	0.08	8

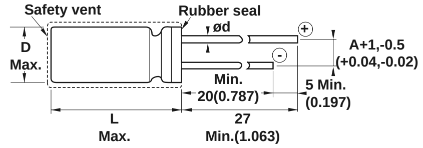
0.06 for 1µF or less.

• **Low Temperature Stability:** Maximum impedance ratio against +20°C at 120Hz

Working Voltage	-25°C to +20°C	-40°C to +20°C
10V	2	4
16	2	3
25	1.5	2
50	1.5	2

• **Load Life:** After 2,000 hour application of DC working voltage at +85°C with specified RMS ripple current, the measurements should meet the following requirements:

Capacitance change	Within ±20% of the initial measured value
tan ∂	Less than 200% of the initial specified value
DC leakage current	Less than the initial specified value



PANASONIC Z CROSS REFERENCES

IC: RLR
Sprague: 30D
UCC: SX

Panasonic/Matsushita Electric has announced a change in the Corporate Trademark. Present trademark: ▲ New trademark: Ⓜ

Not recommended for new designs.

Rating WV DC	Cap. µF	Dimensions mm (inch) D	L	A	d	Max. RMS Ripple Current (mA) @ 120 Hz, 85°C	Max. Leakage Current µA	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
10	2200	16.0 (.630)	31.5 (1.299)	7.5 (.295)	0.8 (.032)	850	45.0	P6614-ND	1.43	1.08	.81	.48	ECE-A10Z2200
16	10	5.0 (.197)	11 (0.433)	2.0 (.079)	0.5 (.020)	40	1.4	P6616-ND	.32	.22	.16	.09	ECE-A16Z10
	220	10.0 (.394)	16 (0.630)	5.0 (.197)	0.6 (.024)	320	8.1	P6621-ND	.59	.44	.33	.19	ECE-A16Z220
25	220	12.5 (.492)	20 (0.827)	5.0 (.197)	0.6 (0.24)	400	12.0	P6634-ND	.81	.61	.45	.26	ECE-A25Z220
50	0.47	5.0 (.197)	11.2 (0.433)	2.0 (.079)	0.5 (.020)	10	1.1	P6642-ND	.32	.22	.16	.09	ECE-A50ZR47
	0.68	5.0 (.197)	11.5 (0.433)	2.0 (.079)	0.5 (.020)	10	1.1	P6643-ND	.32	.22	.16	.09	ECE-A50ZR68
	3.3	5.0 (.197)	11 (0.433)	2.0 (.079)	0.5 (.020)	25	1.4	P6647-ND	.32	.22	.16	.09	ECE-A50Z3R3
	4.7	6.3 (.248)	11 (0.433)	2.5 (.098)	0.6 (.024)	35	1.5	P6648-ND	.36	.27	.19	.11	ECE-A50Z4R7
	330	16.0 (.630)	31.5 (1.299)	7.5 (.295)	0.8 (.032)	650	34.0	P6656-ND	1.69	1.27	.96	.57	ECE-A50Z330

Panasonic® FC Series Radial Lead Aluminum Electrolytic Capacitors

FEATURES:
- Low impedance • Long life: 1000 ~ 5000 hours at +105°C

SPECIFICATIONS:
• **Operating Temperature Range:** -55 to +105°C • **Rated Working Voltage Range:** 6.3 to 100V DC • **Nominal Capacitance Range:** 1.0 to 15000µF • **Capacitance Tolerance:** ±20% (120Hz, +20°C) • **Leakage Current:** I ≤ 0.01CV or 3 (µA) whichever is greater measured after 2 minutes application of rated working voltage at +20°C

- **tan** δ (120 Hz, +20°C)

Working volt. (V)	6.3	10	16	25	35	50	63	100
tan δ max.	0.22	0.19	0.16	0.14	0.12	0.10	0.08	0.07

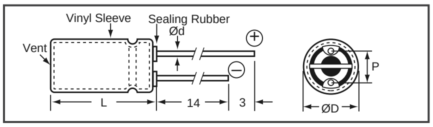
For capacitance value > 1000µF, add 0.02 per every 1000µF.

- **Impedance at High Frequency:** Refer to standard product table (100kHz, +20°C)
- **Ripple Current:** Refer to standard product table (100kHz, +105°C)

Endurance:
Test Conditions — Duration: 1000 hours (for Ø4 ~ Ø6.3mm), 2000 hours (for Ø8mm), 3000 hours (for Ø10mm), 5000 hours (for Ø12.5mm~) • **Ambient Temperature:** +105°C ±2°C • **Applied Voltage:** DC voltage with maximum permissible ripple current specified at +105°C (the sum of the DC voltage and super-imposed peak AC voltage for maximum permissible ripple current should be equal to rated DC working voltage.)
Post Test Requirements at +20°C — Leakage Current: ≤ Initial specified value • **Capacitance change:** ±20% of initial measured value • **tan** δ: ≤ 200% of initial specified value
Shelf Life:
Test Conditions — Duration: 1000 hours • **Ambient Temperature:** +105°C ±2°C • **Applied Voltage:** (none)
Post Test Requirements at +20°C — Leakage Current: ≤ Initial specified value • **Capacitance change:** ±20% of initial measured value • **tan** δ: ≤ 200% of initial specified value
• **Body Color:** Black Blue • **Marking Color:** Gold

Frequency Correction Factor for Ripple Current

W.V. (V DC)	Frequency (Hz) / Cap. (µF)	60	120	1K	10K	100K
6.3 ~ 100	1.0 ~ 330	0.55	0.65	0.85	0.90	1.00
	390 ~ 1000	0.70	0.75	0.90	0.95	1.00
	1200 ~ 2200	0.75	0.80	0.90	0.95	1.00
	2700 ~ 15000	0.80	0.85	0.95	1.00	1.00



W.V. (V)	Cap. (µF)	Dimensions (mm)				Leakage Current (+20°C) (2 min) (µA) Max	Impedance (100kHz) (+20°C) (Ω) Max	Ripple Current (+105°C) (mA) rms max.	Life Time (hours)	Digi-Key Part No.	Price Each				Panasonic Part No.
		ØD	L	P	Ød						1	10	100	1,000	
6.3	68	4	11	1.5	0.45	4.28	1.30	120	1000	P11165-ND	.44	.30	.22	.12	EEU-FC0J680
	100	5	11	2.0	0.5	6.3	0.80	175	1000	P10195-ND	.46	.32	.22	.12	EEU-FC0J101
	150	5	15	2.0	0.5	9.4	0.50	235	1000	P10196-ND	.47	.32	.23	.13	EEU-FC0J151
	220	6.3	11.2	2.0	0.50	13.86	0.350	290	1000	P11166-ND	.51	.35	.25	.14	EEU-FC0J221
	330	6.3	11.2	2.5	0.5	20.7	0.35	290	1000	P10197-ND	.42	.32	.23	.13	EEU-FC0J331S
	330	6.3	15	2.5	0.50	20.79	0.250	400	1000	P11167-ND	.60	.41	.29	.16	EEU-FC0J331
	390	8	11.5	3.5	0.60	24.57	0.117	555	2000	P11168-ND	.76	.52	.37	.20	EEU-FC0J391
	470	8	11.5	3.5	0.60	29.61	0.117	555	2000	P11169-ND	.76	.52	.37	.20	EEU-FC0J471
	560	8	11.5	3.5	0.60	35.28	0.117	555	2000	P11170-ND	.76	.52	.37	.20	EEU-FC0J561
	820	10	12.5	5.0	0.60	51.66	0.090	755	3000	P11171-ND	1.01	.69	.49	.27	EEU-FC0J821
	820	8	15	3.5	0.6	51.6	0.085	730	2000	P10198-ND	.69	.52	.38	.22	EEU-FC0J821L
	1000	10	12.5	5.0	0.6	63.0	0.090	755	3000	P10199-ND	.76	.57	.42	.24	EEU-FC0J102
	1200	10	16	5.0	0.6	75.6	0.068	1050	3000	P10201-ND	.83	.62	.46	.27	EEU-FC0J122
	1200	8	20	3.5	0.6	75.6	0.065	995	2000	P10200-ND	.78	.58	.43	.25	EEU-FC0J122L
	1500	12.5	15	5.0	0.6	94.5	0.065	1205	5000	P10203-ND	1.13	.85	.62	.36	EEU-FC0J152S
	1500	10	20	5.0	0.6	94.5	0.052	1220	3000	P10202-ND	.99	.74	.55	.32	EEU-FC0J152
	1800	10	25	5.0	0.60	113.4	0.045	1440	3000	P11172-ND	1.43	.98	.69	.38	EEU-FC0J182
	2200	16	15	7.5	0.8	138.6	0.043	1690	5000	P10205-ND	1.48	1.11	.84	.50	EEU-FC0J222S
	2200	10	25	5.0	0.6	138.6	0.045	1440	3000	P10204-ND	1.07	.80	.59	.34	EEU-FC0J222
	2700	16	15	7.5	0.80	170.1	0.043	1690	5000	P11175-ND	2.13	1.45	1.02	.56	EEU-FC0J272S
	2700	12.5	20	5.0	0.60	170.1	0.038	1655	5000	P11174-ND	1.86	1.26	.89	.49	EEU-FC0J272
	2700	10	30	5.0	0.60	170.1	0.035	1815	3000	P11173-ND	1.67	1.14	.81	.44	EEU-FC0J272L
	3300	18	15	7.5	0.8	207.9	0.038	2000	5000	P10207-ND	1.97	1.48	1.11	.66	EEU-FC0J332S
	3300	12.5	20	5.0	0.6	207.9	0.038	1655	5000	P10206-ND	1.29	.97	.73	.43	EEU-FC0J332
	3900	12.5	25	5.0	0.6	245.7	0.030	1945	5000	P10208-ND	1.57	1.18	.89	.53	EEU-FC0J392
	4700	16	20	7.5	0.8	296.1	0.029	2205	5000	P10210-ND	1.88	1.41	1.06	.63	EEU-FC0J472S
	4700	12.5	30	5.0	0.8	296.1	0.025	2310	5000	P10209-ND	1.72	1.30	.97	.58	EEU-FC0J472
	5600	16	20	7.5	0.80	352.8	0.029	2205	5000	P11176-ND	2.70	1.83	1.29	.71	EEU-FC0J562
	5600	12.5	35	5.0	0.8	352.8	0.022	2510	5000	P10211-ND	1.97	1.48	1.11	.66	EEU-FC0J562L
	6800	18	20	7.5	0.8	428.4	0.028	2490	5000	P10214-ND	2.23	1.70	1.28	.83	EEU-FC0J682S
	6800	16	25	7.5	0.8	428.4	0.022	2555	5000	P10213-ND	2.37	1.78	1.34	.79	EEU-FC0J682
	6800	12.5	40	5.0	0.8	428.4	0.018	2655	5000	P10212-ND	2.24	1.68	1.26	.75	EEU-FC0J682L
	8200	16	31.5	7.5	0.80	516.6	0.018	3010	5000	P11177-ND	4.15	2.82	1.99	1.09	EEU-FC0J822
	10000	18	25	7.5	0.8	630.0	0.020	2740	5000	P10216-ND	2.75	2.08	1.57	1.03	EEU-FC0J103S
	10000	16	35.5	7.5	0.8	630.0	0.016	3150	5000	P10215-ND	2.75	2.08	1.57	1.03	EEU-FC0J103
	12000	18	31.5	7.5	0.80	756.0	0.016	3635	5000	P11178-ND	5.19	3.53	2.49	1.36	EEU-FC0J123
	12000	16	40	7.5	0.80	756.0	0.015	3360	5000	P11179-ND	5.30	3.60	2.54	1.39	EEU-FC0J123L
	15000	18	35.5	7.5	0.8	945.0	0.015	3680	5000	P10217-ND	3.57	2.71	2.05	1.33	EEU-FC0J153
10	47	4	11	1.5	0.45	4.7	1.30	120	1000	P11180-ND	.44	.30	.22	.12	EEU-FC1A470
	82	5	11	2.0	0.5	8.2	0.80	175	1000	P10218-ND	.46	.32	.22	.12	EEU-FC1A820
	100	5	11	2.0	0.50	10.0	0.80	175	1000	P11181-ND	.47	.32	.23	.13	EEU-FC1A101S
	100	5	15	2.0	0.5	10.0	0.50	235	1000	P10219-ND	.47	.32	.23	.13	EEU-FC1A101
	180	6.3	11.2	2.5	0.50	18.0	0.35	290	1000	P11182-ND	.51	.35	.25	.14	EEU-FC1A181
	220	6.3	11.2	2.5	0.5	22.0	0.35	290	1000	P10220-ND	.42	.32	.23	.13	EEU-FC1A221S
	220	6.3	15	2.5	0.50	22.0	0.25	400	1000	P11183-ND	.60	.41	.29	.16	EEU-FC1A221
	330	8	11.5	3.5	0.60	33.0	0.117	555	2000	P11184-ND	.76	.52	.37	.20	EEU-FC1A331
	390	8	11.5	3.5	0.60	39.0	0.117	555	2000	P11185-ND	.76	.52	.37	.20	EEU-FC1A391
	470	8	11.5	3.5	0.6	47.0	0.117	555	2000	P10221-ND	.63	.47	.33	.19	EEU-FC1A471
	560	10	12.5	5.0	0.60	56.0	0.09	755	3000	P11186-ND	1.01	.69	.49	.27	EEU-FC1A561
	680	10	12.5	5.0	0.6	68.0	0.090	755	3000	P10223-ND	.76	.57	.42	.24	EEU-FC1A681
	680	8	15	3.5	0.6	68.0	0.085	730	2000	P10222-ND	.69	.52	.38	.22	EEU-FC1A681L
	820	10	16	5.0	0.60	82.0	0.068	1050	3000	P11187-ND	1.11	.76	.54	.29	EEU-FC1A821
	1000	10	16	5.0	0.6	100.0	0.068	1050	3000	P10225-ND	.83	.62	.46	.27	EEU-FC1A102
	1000	8	20	3.5	0.6	82.0	0.065	995	2000	P10224-ND	.78	.58	.43	.25	EEU-FC1A102L
	1200	12.5	15	5.0	0.6	120.0	0.065	1205	5000	P10227-ND	1.13	.85	.62	.36	EEU-FC1A122S
	1200	10	20	5.0	0.6	120.0	0.052	1220	3000	P10226-ND	.99	.74	.55	.32	EEU-FC1A122
	1500	10	25	5.0	0.6	150.0	0.045	1440	3000	P10228-ND	1.07	.80	.59	.34	EEU-FC1A152
	1800	16	15	7.5	0.8	180.0	0.043	1690	5000	P10229-ND	1.48	1.11	.84	.50	EEU-FC1A182S
	1800	12.5	20	5.0	0.60	180.0	0.038	1655	5000	P11188-ND	1.86	1.26	.89	.49	EEU-FC1A182
	2200	12.5	20	5.0	0.6	220.0	0.038	1655	5000	P10230-ND	1.29	.97	.73	.43	EEU-FC1A222
	2200	10	30	5.0	0.60	220.0	0.035	1815	3000	P11189-ND	1.67	1.14	.81	.44	EEU-FC1A222L
	2700	18	15	7.5	0.8	270.0	0.038	2000	5000	P10232-ND	1.97	1.48	1.11	.66	EEU-FC1A272S
	2700	12.5	25	5.0	0.6	270.0	0.030	1945	5000	P10231-ND	1.57	1.18	.89	.53	EEU-FC1A272
	3300	16	20	7.5	0.8	330.0	0.029	2205	5000	P10234-ND	1.88	1.41	1.06	.63	EEU-FC1A332S
	3300	12.5	30	5.0	0.8	330.0	0.025	2310	5000	P10233-ND	1.72	1.30	.97	.58	EEU-FC1A332
	3900	16	20	7.5	0.80	390.0	0.029	2205	5000	P11190-ND	2.83	1.92	1.36	.74	EEU-FC1A392
	3900	12.5	35	5.0	0.8	390.0	0.022	2510	5000	P10235-ND	1.97	1.48	1.11	.66	EEU-FC1A392L
	4700	16	25	7.5	0.8	470.0	0.022	2555	5000	P10237-ND	2.37	1.78	1.34	.79	EEU-FC1A472
	4700	12.5	40	5.0	0.8	470.0	0.018	2655	5000	P10236-ND	2.24	1.68	1.26	.75	EEU-FC1A472L
	5600	18	20	7.5	0.8	560.0	0.028	2490	5000	P10238-ND	2.23	1.70	1.28	.83	EEU-FC1A562S
	5600	16	25	7.5	0.80	560.0	0.022	2555	5000	P11191-ND	3.41	2.32	1.64	.89	EEU-FC1A562
	6800	18	25	7.5	0.8	680.0	0.020	2740	5000	P10240-ND	2.65	2.01	1.52	.99	EEU-FC1A682S
	6800	16	31.5	7.5	0.8	680.0	0.018	3010	5000	P10239-ND	2.52	1.92	1.45	.94	EEU-FC1A682
	8200	18	31.5	7.5	0.80	820.0	0.016	3635	5000	P11193-ND	5.19	3.53	2.49	1.36	EEU-FC1A822
	8200	16	35.5	7.5	0.80	820.0	0.016	3150	5000	P11192-ND	4.51	3.07	2.16	1.18	EEU-FC1A822L
	10000	18	35.5	7.5	0.8	1000.0	0.015	3680	5000	P10241-ND	3.57	2.71	2.05	1.33	EEU-FC1A103
	12000	18	40	7.5	0.80	1200.0	0.014	3735	5000	P11194-ND	6.72	4.56	3.22	1.76	EEU-FC1A123
16	39	4	11	1.5	0.45	6.24	1.30	120	1000	P11195-ND	.44	.30	.22	.12	EEU-FC1C390
	47	5	11	2.0	0.50	7.52	0.80	175	1000	P11196-ND	.46	.32	.22	.12	EEU-FC1C470
	56	5	11	2.0	0.50	8.96	0.80	175	1000	P11197-ND	.46	.32	.22	.12	EEU-FC1C560
	68	5	11	2.0	0.5	10.8	0.80	175	1000	P10242-ND	.46	.32	.22	.12	EEU-FC1C680
	82	5	15	2.0	0.5	13.1	0.50	235	1000	P10243-ND	.47	.32	.23	.13	EEU-FC1C820
	100	6.3	11.2	2.5	0.50	16.0	0.35	290	1000	P11198-ND	.51	.35	.25	.14	EEU-FC1C101
	120	6.3	11.2	2.5	0.5	19.2	0.35	290	1000	P10244-ND	.42	.32	.23	.13	EEU-FC1C121
	180	6.3	15	2.5	0.5	28.8	0.25	400	1000	P10245-ND	.49	.37	.26	.15	EEU-FC1C181
	220	8	11.5	3.5	0.60	35.2	0.117	555	2000	P11199-ND	.76	.52	.37	.20	EEU-FC1C221
	270	8	11.5	3.5	0.60	43.2	0.117	555	2000	P11200-ND	.76	.52	.37	.20	EEU-FC1C271
	330	8	11.5	3.5	0.6	52.8	0.117	555	2000	P10246-ND	.63	.47	.33	.19	EEU-FC1C331
	390	10	12.5	5.0	0.60	62.4	0.09	755	3000	P11201-ND	1.01	.69	.49	.27	EEU-FC1C391

(Continued)

Panasonic FC Series Radial Lead Aluminum Electrolytic Capacitors *(Cont.)*

W.V. (V)	Cap. (µF)	Dimensions (mm) ØD	L	P	Ød	Leakage Current (+20°C) (2 min) (µA) Max	Impedance (100kHz) (+20°C) (Ω) Max	Ripple Current (+105°C) (mA) rms max.	Life Time (hours)	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
16	470	10	12.5	5.0	0.6	75.2	0.090	755	3000	P10248-ND	.76	.57	.42	.24	EEU-FC1C471
	470	8	15	3.5	0.6	75.2	0.085	730	2000	P10247-ND	.69	.52	.38	.22	EEU-FC1C471L
	560	10	16	5.0	0.60	89.6	0.068	1050	3000	P11202-ND	1.11	.76	.54	.29	EEU-FC1C561
	680	10	16	5.0	0.6	108.8	0.068	1050	3000	P10250-ND	.83	.62	.46	.27	EEU-FC1C681
	680	8	20	3.5	0.6	108.8	0.065	995	2000	P10249-ND	.78	.58	.43	.25	EEU-FC1C681L
	820	12.5	15	5.0	0.6	131.2	0.065	1205	5000	P10252-ND	1.13	.85	.62	.36	EEU-FC1C821S
	820	10	20	5.0	0.6	131.2	0.052	1220	3000	P10251-ND	.99	.74	.55	.32	EEU-FC1C821
	1000	10	20	5.0	0.60	160.0	0.052	1220	3000	P11203-ND	1.37	.93	.66	.36	EEU-FC1C102S
	1000	10	25	5.0	0.6	160.0	0.045	1440	3000	P10253-ND	1.07	.80	.59	.34	EEU-FC1C102
	1200	16	15	7.5	0.80	192.0	0.043	1690	5000	P11205-ND	2.13	1.45	1.02	.56	EEU-FC1C122S
	1200	10	25	5.0	0.60	192.0	0.045	1440	3000	P11204-ND	1.43	.98	.69	.38	EEU-FC1C122
	1500	16	15	7.5	0.80	240.0	0.043	1690	5000	P11206-ND	2.19	1.49	1.05	.58	EEU-FC1C152S
	1500	12.5	20	5.0	0.6	240.0	0.038	1655	5000	P10254-ND	1.29	.97	.73	.43	EEU-FC1C152
	1500	10.0	30	5.0	0.6	240.0	0.035	1815	3000	P10255-ND	1.25	.94	.69	.40	EEU-FC1C152L
	1800	18	15	7.5	0.8	288.0	0.038	2000	5000	P10256-ND	1.97	1.48	1.11	.66	EEU-FC1C182S
	1800	12.5	25	5.0	0.60	288.0	0.03	1945	5000	P11207-ND	2.25	1.53	1.08	.59	EEU-FC1C182
	2200	16	20	7.5	0.8	352.0	0.029	2205	5000	P10258-ND	1.88	1.41	1.06	.63	EEU-FC1C222S
	2200	12.5	25	5.0	0.6	352.0	0.030	1945	5000	P10257-ND	1.57	1.18	.89	.53	EEU-FC1C222
	2700	16	20	7.5	0.80	432.0	0.029	2205	5000	P11208-ND	2.70	1.83	1.29	.71	EEU-FC1C272
	2700	12.5	30	5.0	0.8	432.0	0.025	2310	5000	P10259-ND	1.72	1.30	.97	.58	EEU-FC1C272L
	3300	18	20	7.5	0.8	528.0	0.028	2490	5000	P10261-ND	2.23	1.70	1.28	.83	EEU-FC1C332S
	3300	12.5	35	5.0	0.8	528.0	0.022	2510	5000	P10260-ND	1.97	1.48	1.11	.66	EEU-FC1C332
	3900	18	20	7.5	0.80	624.0	0.028	2490	5000	P11209-ND	3.67	2.49	1.76	.96	EEU-FC1C392S
	3900	16	25	7.5	0.8	624.0	0.022	2555	5000	P10262-ND	2.37	1.78	1.34	.79	EEU-FC1C392
	4700	18	25	7.5	0.8	752.0	0.020	2740	5000	P10264-ND	2.65	2.01	1.52	.99	EEU-FC1C472S
	4700	16	31.5	7.5	0.8	752.0	0.018	3010	5000	P10263-ND	2.52	1.92	1.45	.94	EEU-FC1C472
	5600	18	31.5	7.5	0.80	896.0	0.016	3635	5000	P11210-ND	5.19	3.53	2.49	1.36	EEU-FC1C562
	5600	16	35.5	7.5	0.8	896.0	0.016	3150	5000	P10265-ND	2.75	2.08	1.57	1.03	EEU-FC1C562L
	6800	16	40	7.5	0.80	1088.0	0.015	3360	5000	P11211-ND	5.14	3.49	2.46	1.35	EEU-FC1C682
	8200	18	35.5	7.5	0.8	1312.0	0.015	3680	5000	P10266-ND	3.57	2.71	2.05	1.33	EEU-FC1C822
25	10	4	7	1.5	0.45	2.5	2	65	1000	P11212-ND	.43	.29	.21	.12	EEA-FC1E100
	22	5	7	2	0.45	5.5	0.95	120	1000	P11213-ND	.44	.30	.22	.12	EEA-FC1E220
	27	4	11	1.5	0.45	6.75	1.3	120	1000	P11214-ND	.44	.30	.22	.12	EEU-FC1E270
	39	5	11	2	0.50	9.75	0.8	175	1000	P11215-ND	.46	.32	.22	.12	EEU-FC1E390
	47	5	11	2.0	0.5	11.7	0.80	175	1000	P10267-ND	.46	.32	.22	.12	EEU-FC1E470
	56	5	15	2.0	0.5	14.0	0.50	235	1000	P10268-ND	.47	.32	.23	.13	EEU-FC1E560
	82	6.3	11.2	2.5	0.50	20.5	0.35	290	1000	P11216-ND	.51	.35	.25	.14	EEU-FC1E820
	100	6.3	11.2	2.5	0.5	25.0	0.35	290	1000	P10269-ND	.35	.26	.19	.11	EEU-FC1E101S
	120	6.3	15	2.5	0.5	30.0	0.25	400	1000	P10270-ND	.49	.37	.26	.15	EEU-FC1E121
	180	8	11.5	3.5	0.60	45.0	0.117	555	2000	P11217-ND	.76	.52	.37	.20	EEU-FC1E181
	220	8	11.5	3.5	0.6	55.0	0.117	555	2000	P10271-ND	.63	.47	.33	.19	EEU-FC1E221
	270	10	12.5	5	0.60	67.5	0.09	755	3000	P11218-ND	1.01	.69	.49	.27	EEU-FC1E271
	330	10	12.5	5.0	0.6	82.5	0.090	755	3000	P10273-ND	.76	.57	.42	.24	EEU-FC1E331
	330	8	15	3.5	0.6	82.5	0.085	730	2000	P10272-ND	.69	.52	.38	.22	EEU-FC1E331L
	390	10	16	5	0.60	97.5	0.068	1050	3000	P11219-ND	1.11	.76	.54	.29	EEU-FC1E391
	470	10	16	5.0	0.6	117.5	0.068	1050	3000	P10275-ND	.83	.62	.46	.27	EEU-FC1E471
	470	8	20	3.5	0.6	117.5	0.065	995	2000	P10274-ND	.78	.58	.43	.25	EEU-FC1E471L
	560	12.5	15	5.0	0.6	140.0	0.065	1205	5000	P10276-ND	1.13	.85	.62	.36	EEU-FC1E561S
	560	10	20	5	0.60	140.0	0.052	1220	3000	P11220-ND	1.32	.90	.64	.35	EEU-FC1E561
	680	10	20	5.0	0.6	170.0	0.052	1220	3000	P10277-ND	.99	.74	.55	.32	EEU-FC1E681
	820	12.5	20	5	0.60	205.0	0.038	1655	5000	P11222-ND	1.86	1.26	.89	.49	EEU-FC1E821S
	820	10	25	5	0.60	205.0	0.045	1440	3000	P11221-ND	1.43	.98	.69	.38	EEU-FC1E821
	1000	16	15	7.5	0.8	250.0	0.043	1690	5000	P10279-ND	1.48	1.11	.84	.50	EEU-FC1E102S
	1000	12.5	20	5.0	0.6	250.0	0.038	1655	5000	P10278-ND	1.29	.97	.73	.43	EEU-FC1E102
	1000	10	30	5	0.60	250.0	0.035	1815	3000	P11223-ND	1.67	1.14	.81	.44	EEU-FC1E102L
	1200	18	15	7.5	0.8	300.0	0.038	2000	5000	P10280-ND	1.97	1.48	1.11	.66	EEU-FC1E122S
	1200	12.5	25	5	0.60	300.0	0.03	1945	5000	P11224-ND	2.25	1.53	1.08	.59	EEU-FC1E122
	1500	16	20	7.5	0.8	375.0	0.029	2205	5000	P10282-ND	1.88	1.41	1.06	.63	EEU-FC1E152S
	1500	12.5	25	5.0	0.6	375.0	0.030	1945	5000	P10281-ND	1.57	1.18	.89	.53	EEU-FC1E152
	1800	16	20	7.5	0.80	450.0	0.029	2205	5000	P11225-ND	2.70	1.83	1.29	.71	EEU-FC1E182
	1800	12.5	30	5.0	0.8	450.0	0.025	2310	5000	P10283-ND	1.72	1.30	.97	.58	EEU-FC1E182L
	2200	18	20	7.5	0.8	550.0	0.028	2490	5000	P10285-ND	2.23	1.70	1.28	.83	EEU-FC1E222S
	2200	12.5	35	5.0	0.8	550.0	0.022	2510	5000	P10284-ND	1.97	1.48	1.11	.66	EEU-FC1E222
	2700	16	25	7.5	0.8	675.0	0.022	2555	5000	P10286-ND	2.37	1.78	1.34	.79	EEU-FC1E272
	3300	18	25	7.5	0.8	825.0	0.020	2740	5000	P10288-ND	2.65	2.01	1.52	.99	EEU-FC1E332S
	3300	16	31.5	7.5	0.8	825.0	0.018	3010	5000	P10287-ND	2.52	1.92	1.45	.94	EEU-FC1E332
	3900	18	31.5	7.5	0.80	975.0	0.016	3635	5000	P11227-ND	5.19	3.53	2.49	1.36	EEU-FC1E392
	3900	16	35.5	7.5	0.80	975.0	0.016	3150	5000	P11226-ND	4.51	3.07	2.16	1.18	EEU-FC1E392L
	4700	18	35.5	7.5	0.8	1175.0	0.015	3680	5000	P10289-ND	3.57	2.71	2.05	1.33	EEU-FC1E472
	5600	18	40	7.5	0.80	1400.0	0.014	3735	5000	P11228-ND	6.72	4.56	3.22	1.76	EEU-FC1E562
35	18	4	11	1.5	0.45	6.3	1.3	120	1000	P11229-ND	.44	.30	.22	.12	EEU-FC1V180
	22	5	11	2	0.50	7.7	0.8	175	1000	P11230-ND	.46	.32	.22	.12	EEU-FC1V220
	27	5	11	2	0.50	9.45	0.8	175	1000	P11231-ND	.46	.32	.22	.12	EEU-FC1V270
	33	5	11	2.0	0.5	11.5	0.80	175	1000	P10290-ND	.46	.32	.22	.12	EEU-FC1V330
	39	5	15	2.0	0.5	13.6	0.50	235	1000	P10291-ND	.47	.32	.23	.13	EEU-FC1V390
	47	6.3	11.2	2.5	0.50	16.45	0.35	290	1000	P11232-ND	.51	.35	.25	.14	EEU-FC1V470
	56	6.3	11.2	2.5	0.50	19.6	0.35	290	1000	P11233-ND	.51	.35	.25	.14	EEU-FC1V560
	68	6.3	11.2	2.5	0.5	23.8	0.35	290	1000	P10292-ND	.42	.32	.23	.13	EEU-FC1V680
	82	6.3	15	2.5	0.5	28.7	0.25	400	1000	P10293-ND	.49	.37	.26	.15	EEU-FC1V820
	100	8	11.5	3.5	0.6	35.0	0.117	555	2000	P10294-ND	.63	.47	.33	.19	EEU-FC1V101
	120	8	11.5	3.5	0.60	42.0	0.117	555	2000	P11234-ND	.76	.52	.37	.20	EEU-FC1V121
	150	8	11.5	3.5	0.6	52.5	0.117	555	2000	P10295-ND	.63	.47	.33	.19	EEU-FC1V151
	180	10	12.5	5	0.60	63.0	0.09	755	3000	P11235-ND	1.01	.69	.49	.27	EEU-FC1V181
	220	10	12.5	5.0	0.6	77.0	0.090	755	3000	P10297-ND	.76	.57	.42	.24	EEU-FC1V221
	220	8	15	3.5	0.6	77.0	0.085	730	2000	P10296-ND	.69	.52	.38	.22	EEU-FC1V221L
	270	10	16	5	0.60	94.5	0.068	1050	3000	P11236-ND	1.11	.76	.54	.29	EEU-FC1V271
	390	12.5	15	5.0	0.6	136.5	0.065	1205	5000	P10300-ND	1.13	.85	.62	.36	EEU-FC1V391S
	330	10	16	5.0	0.6	115.5	0.068	1050	3000	P10299-ND	.83	.62	.46	.27	EEU-FC1V331
	330	8	20	3.5	0.6	115.5	0.065	995	2000	P10298-ND	.78	.58	.43	.25	EEU-FC1V331L
	390	10	20	5	0.60	136.5	0.052	1220	3000	P11237-ND	1.32	.90	.64	.35	EEU-FC1V391
	470	10	20	5.0	0.6	164.5	0.052	1220	3000	P10301-ND	.99	.74	.55	.32	EEU-FC1V471
	560	12.5	20	5	0.60	196.0	0.038	1655	5000	P11239-ND	1.86	1.26	.89	.49	EEU-FC1V561S
	560	10	25	5	0.60	196.0	0.045	1440	3000	P11238-ND	1.43	.98	.69	.38	EEU-FC1V561
	680	16	15	7.5	0.8	238.0	0.043	1690	5000	P10303-ND	1.48	1.11	.84	.50	EEU-FC1V681S
	680	12.5	20	5.0	0.6	238.0	0.038	1655	5000	P10302-ND	1.29	.97	.73	.43	EEU-FC1V681
	680	10	30	5	0.60	238.0	0.035	1815	3000	P11240-ND	1.67	1.14	.81	.44	EEU-FC1V681L
	820	18	15	7.5	0.8	287.0	0.038	2000	5000	P10304-ND	1.97	1.48	1.11	.66	EEU-FC1V821
	820	12.5	25	5	0.60	287.0	0.03	1945	5000	P11241-ND	2.25	1.53	1.08	.59	EEU-FC1V821L
	1000	16	20	7.5	0.8	350.0	0.029	2205	5000	P10876-ND	1.89	1.42	1.07	.63	EEU-FC1V102S
	1000	12.5	25	5.0	0.6	350.0	0.030	1945	5000	P10305-ND	1.57	1.18	.89	.53	EEU-FC1V102
	1200	16	20	7.5	0.80	420.0	0.029	2205	5000	P11242-ND	2.70	1.83	1.29	.71	EEU-FC1V122
	1200	12.5	30	5.0	0.8	420.0	0.025	2310	5000	P10306-ND	1.72	1.30	.97	.58	EEU-FC1V122L
	1500	18	20	7.5	0.80	525.0	0.028	2490	5000	P11243-ND	3.67	2.49	1.76	.96	EEU-FC1V152S
	1500	16	25	7.5	0.8	525.0	0.022	2555	5000	P10308-ND	2.37	1.78	1.34	.79	EEU-FC1V152
	1500	12.5	35	5.0	0.8	525.0	0.022	2510	5000	P10307-ND	1.97	1.48	1.11	.66	EEU-FC1V152L
	1800	18	20	7.5	0.80	630.0	0.028	2490	5000	P11246-ND	3.67	2.49	1.76	.96	EEU-FC1V182S
	1800	16	25	7.5	0.80	630.0	0.022	2555	5000	P11245-ND	3.41	2.32	1.64	.89	EEU-FC1V182
	1800	12.5	40	5	0.80	630.0	0.018	2655	5000	P11244-ND	3.22	2.19	1.54	.84	EEU-FC1V182L

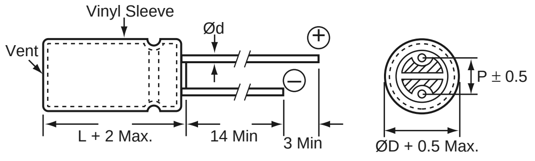
(Continued)

W.V. (V)	Cap. (µF)	Dimensions (mm)				Leakage Current (+20°C) (2 min) (µA) Max	Impedance (100kHz) (+20°C) (Ω) Max	Ripple Current (+105°C) (mA) rms max.	Life Time (hours)	Digi-Key Part No.	Price Each				Panasonic Part No.
		ØD	L	P	Ød						1	10	100	1,000	
35	2200	18	25	7.5	0.8	770.0	0.020	2740	5000	P10310-ND	2.65	2.01	1.52	.99	EEU-FC1V222S
	2200	16	31.5	7.5	0.8	770.0	0.018	3010	5000	P10309-ND	2.52	1.92	1.45	.94	EEU-FC1V222
	2700	18	31.5	7.5	0.80	945.0	0.016	3635	5000	P11248-ND	5.19	3.53	2.49	1.36	EEU-FC1V272
	2700	16	35.5	7.5	0.80	945.0	0.016	3150	5000	P11247-ND	4.51	3.07	2.16	1.18	EEU-FC1V272L
	3300	18	35.5	7.5	0.8	1155.0	0.015	3680	5000	P10311-ND	3.57	2.71	2.05	1.33	EEU-FC1V332
	3900	18	40	7.5	0.80	1365.0	0.014	3735	5000	P11249-ND	6.72	4.56	3.22	1.76	EEU-FC1V392
50	1.0	5	11	2.0	0.5	0.5	2.40	20	1000	P10312-ND	.46	.32	.22	.12	EEU-FC1H1R0
	2.2	5	11	2.0	0.5	1.1	1.30	45	1000	P10313-ND	.46	.32	.22	.12	EEU-FC1H2R2
	3.3	5	11	2.0	0.5	1.6	1.30	65	1000	P10314-ND	.46	.32	.22	.12	EEU-FC1H3R3
	4.7	5	11	2.0	0.5	2.3	1.30	95	1000	P10315-ND	.46	.32	.22	.12	EEU-FC1H4R7
	10	4	11	1.5	0.45	5.0	2.5	90	1000	P11250-ND	.44	.30	.22	.12	EEU-FC1H100
	10	5	11	2.0	0.5	5.0	1.30	125	1000	P10316-ND	.46	.32	.22	.12	EEU-FC1H100L
	15	5	11	2.0	0.5	7.5	1.30	145	1000	P10317-ND	.46	.32	.22	.12	EEU-FC1H150
	18	5	11	2	0.50	9.0	1.3	155	1000	P11251-ND	.46	.32	.22	.12	EEU-FC1H180
	22	5	11	2.0	0.5	11.0	1.30	155	1000	P10318-ND	.46	.32	.22	.12	EEU-FC1H220
	27	5	15	2.0	0.5	13.5	0.90	215	1000	P10319-ND	.47	.32	.23	.13	EEU-FC1H270
	33	6.3	11.2	2.5	0.5	16.5	0.60	260	1000	P10320-ND	.42	.32	.23	.13	EEU-FC1H330
	47	6.3	11.2	2.5	0.5	23.5	0.60	260	1000	P10321-ND	.42	.32	.23	.13	EEU-FC1H470
	56	6.3	15	2.5	0.5	28.0	0.40	360	1000	P10322-ND	.49	.37	.26	.15	EEU-FC1H560
	68	8	11.5	3.5	0.60	34.0	0.234	485	2000	P11252-ND	.76	.52	.37	.20	EEU-FC1H680
	82	8	11.5	3.5	0.60	41.0	0.234	485	2000	P11253-ND	.76	.52	.37	.20	EEU-FC1H820
	100	10	12.5	5.0	0.6	50.0	0.162	615	3000	P10323-ND	.76	.57	.42	.24	EEU-FC1H101
	120	10	12.5	5	0.60	60.0	0.162	615	3000	P11255-ND	1.01	.69	.49	.27	EEU-FC1H121
	120	8	15	3.5	0.60	60.0	0.155	635	2000	P11254-ND	.92	.63	.44	.24	EEU-FC1H121L
	150	10	16	5	0.60	75.0	0.119	850	3000	P11256-ND	1.11	.76	.54	.29	EEU-FC1H151
	180	8	20	3.5	0.6	90.0	0.120	860	2000	P10324-ND	.78	.58	.43	.25	EEU-FC1H181L
	220	12.5	15	5.0	0.6	110.0	0.110	1150	5000	P10326-ND	1.13	.85	.62	.36	EEU-FC1H221S
	220	10	20	5.0	0.6	110.0	0.090	1030	3000	P10325-ND	.99	.74	.55	.32	EEU-FC1H221
	270	10	25	5	0.60	135.0	0.082	1200	3000	P11257-ND	1.43	.98	.69	.38	EEU-FC1H271
	330	12.5	20	5	0.60	165.0	0.063	1480	5000	P11258-ND	1.86	1.26	.89	.49	EEU-FC1H331
	390	16	15	7.5	0.8	195.0	0.080	1610	5000	P10327-ND	1.48	1.11	.84	.50	EEU-FC1H391S
	390	12.5	20	5	0.60	195.0	0.063	1480	5000	P11259-ND	1.86	1.26	.89	.49	EEU-FC1H391
	470	12.5	25	5.0	0.6	235.0	0.050	1832	5000	P10328-ND	1.57	1.18	.89	.53	EEU-FC1H471
	470	10	30	5	0.60	235.0	0.06	1610	3000	P11260-ND	1.67	1.14	.81	.44	EEU-FC1H471L
	560	18	15	7.5	0.8	280.0	0.068	1900	5000	P10329-ND	1.97	1.48	1.11	.66	EEU-FC1H561S
	560	12.5	25	5	0.60	280.0	0.05	1832	5000	P11261-ND	2.25	1.53	1.08	.59	EEU-FC1H561
	680	16	20	7.5	0.8	340.0	0.048	1835	5000	P10331-ND	1.88	1.41	1.06	.63	EEU-FC1H681
	680	12.5	30	5.0	0.8	340.0	0.040	2215	5000	P10330-ND	1.72	1.30	.97	.58	EEU-FC1H681L
	820	18	20	7.5	0.80	410.0	0.042	2420	5000	P11262-ND	3.67	2.49	1.76	.96	EEU-FC1H821
	820	12.5	35	5.0	0.8	410.0	0.034	2285	5000	P10332-ND	1.97	1.48	1.11	.66	EEU-FC1H821L
	1000	16	25	7.5	0.8	500.0	0.034	2235	5000	P10333-ND	2.37	1.78	1.34	.79	EEU-FC1H102
	1000	12.5	40	5	0.80	500.0	0.03	2590	5000	P11263-ND	3.22	2.19	1.54	.84	EEU-FC1H102L
	1200	18	25	7.5	0.80	600.0	0.029	2610	5000	P11265-ND	4.35	2.96	2.09	1.14	EEU-FC1H122S
	1200	16	31.5	7.5	0.80	600.0	0.028	2700	5000	P11264-ND	4.15	2.82	1.99	1.09	EEU-FC1H122
	1500	16	35.5	7.5	0.8	750.0	0.025	2790	5000	P10334-ND	2.75	2.08	1.57	1.03	EEU-FC1H152L
	1800	18	31.5	7.5	0.80	900.0	0.025	3000	5000	P11267-ND	5.19	3.53	2.49	1.36	EEU-FC1H182
	1800	16	40	7.5	0.80	900.0	0.023	2845	5000	P11266-ND	5.14	3.49	2.46	1.35	EEU-FC1H182L
	2200	18	35.5	7.5	0.8	1100.0	0.023	3100	5000	P10335-ND	3.57	2.71	2.05	1.33	EEU-FC1H222
63	6.8	4	11	1.5	0.45	4.284	3.5	80	1000	P11268-ND	.44	.30	.22	.12	EEU-FC1J6R8
	12	5	11	2.0	0.5	7.5	2.00	145	1000	P10336-ND	.46	.32	.22	.12	EEU-FC1J120
	18	5	15	2.0	0.5	11.3	1.30	200	1000	P10337-ND	.47	.32	.23	.13	EEU-FC1J180
	22	6.3	11.2	2.5	0.5	13.8	1.00	240	1000	P10338-ND	.42	.32	.23	.13	EEU-FC1J220
	33	6.3	11.2	2.5	0.5	20.7	1.000	240	1000	P10764-ND	.43	.32	.23	.13	EEU-FC1J330
	39	6.3	15	2.5	0.5	24.5	0.70	330	1000	P10339-ND	.49	.37	.26	.15	EEU-FC1J390
	47	8	11.5	3.5	0.6	29.6	0.342	405	2000	P10340-ND	.63	.47	.33	.19	EEU-FC1J470
	68	8	11.5	3.5	0.6	42.8	0.342	405	2000	P10341-ND	.63	.47	.33	.19	EEU-FC1J680
	56	8	11.5	3.5	0.60	35.28	0.342	405	2000	P11269-ND	.76	.52	.37	.20	EEU-FC1J560
	82	10	12.5	5	0.60	51.66	0.256	535	3000	P11270-ND	1.01	.69	.49	.27	EEU-FC1J820
	100	10	12.5	5.0	0.6	63.0	0.256	535	3000	P10343-ND	.76	.57	.42	.24	EEU-FC1J101
	100	8	15	3.5	0.6	63.0	0.230	535	2000	P10342-ND	.69	.52	.38	.22	EEU-FC1J101L
	120	10	16	5	0.60	75.6	0.194	600	3000	P11271-ND	1.11	.76	.54	.29	EEU-FC1J121
	150	8	20	3.5	0.6	94.5	0.178	690	2000	P10344-ND	.78	.58	.43	.25	EEU-FC1J151
	180	12.5	15	5.0	0.6	113.4	0.150	1020	5000	P10345-ND	1.13	.85	.62	.36	EEU-FC1J181S
	180	10	20	5	0.60	113.4	0.147	885	3000	P11272-ND	1.32	.90	.64	.35	EEU-FC1J181
	220	12.5	20	5.0	0.6	138.6	0.085	1285	5000	P10347-ND	1.29	.97	.73	.43	EEU-FC1J221S
	220	10	25	5.0	0.6	138.6	0.130	1050	3000	P10346-ND	.87	.65	.48	.28	EEU-FC1J221
	270	16	15	7.5	0.8	170.1	0.090	1410	5000	P10348-ND	1.48	1.11	.84	.50	EEU-FC1J271
	330	12.5	20	5.0	0.6	207.9	0.085	1285	5000	P10349-ND	1.29	.97	.73	.43	EEU-FC1J331
	330	10	30	5	0.60	207.9	0.09	1300	3000	P11273-ND	1.67	1.14	.81	.44	EEU-FC1J331L
	390	18	15	7.5	0.8	245.7	0.086	1690	5000	P10350-ND	1.97	1.48	1.11	.66	EEU-FC1J391S
	390	12.5	25	5	0.60	245.7	0.07	1720	5000	P11274-ND	2.25	1.53	1.08	.59	EEU-FC1J391
	470	16	20	7.5	0.8	296.1	0.059	1765	5000	P10352-ND	1.88	1.41	1.06	.63	EEU-FC1J471
	470	12.5	30	5.0	0.8	296.1	0.055	2090	5000	P10351-ND	1.72	1.30	.97	.58	EEU-FC1J471L
	560	16	25	7.5	0.8	352.8	0.05	2160	5000	P11275-ND	3.41	2.32	1.64	.89	EEU-FC1J561
	680	18	20	7.5	0.80	428.4	0.055	2290	5000	P11276-ND	3.67	2.49	1.76	.96	EEU-FC1J681S
	680	16	25	7.5	0.8	428.4	0.050	2160	5000	P10354-ND	2.37	1.78	1.34	.79	EEU-FC1J681
	680	12.5	35	5.0	0.8	428.4	0.047	2265	5000	P10353-ND	1.97	1.48	1.11	.66	EEU-FC1J681L
	820	18	25	7.5	0.80	516.6	0.043	2585	5000	P11279-ND	4.35	2.96	2.09	1.14	EEU-FC1J821S
	820	16	31.5	7.5	0.80	516.6	0.043	2670	5000	P11278-ND	4.15	2.82	1.99	1.09	EEU-FC1J821
	820	12.5	40	5	0.80	516.6	0.042	2560	5000	P11277-ND	3.22	2.19	1.54	.84	EEU-FC1J821L
	1000	16	31.5	7.5	0.80	630.0	0.043	2670	5000	P11280-ND	4.27	2.90	2.05	1.12	EEU-FC1J102U
	1000	16	35.5	7.5	0.8	630.0	0.036	2770	5000	P10355-ND	2.75	2.08	1.57	1.03	EEU-FC1J102
	1200	18	31.5	7.5	0.80	756.0	0.032	2950	5000	P11282-ND	5.14	3.49	2.46	1.35	EEU-FC1J122L
	1200	16	40	7.5	0.80	756.0	0.03	2825	5000	P11281-ND	5.19	3.53	2.49	1.36	EEU-FC1J122
	1500	18	35.5	7.5	0.8	945.0	0.030	3095	5000	P10356-ND	3.57	2.71	2.05	1.33	EEU-FC1J152
	1800	18	40	7.5	0.80	1134.0	0.025	3205	5000	P11283-ND	6.72	4.56	3.22	1.76	EEU-FC1J182
100	1.0	5	11	2.0	0.5	1.0	7.500	15	1000	P10765-ND	.34	.25	.18	.10	EEU-FC2A1R0
	2.2	5	11	2.0	0.5	2.2	5.400	35	1000	P10766-ND	.42	.31	.22	.13	EEU-FC2A2R2
	3.3	5	11	2.0	0.5	3.3	4.400	50	1000	P10767-ND	.42	.31	.22	.13	EEU-FC2A3R3
	4.7	5	11	2.0	0.5	4.7	4.400	65	1000	P10768-ND	.42	.31	.22	.13	EEU-FC2A4R7
	10	6.3	11.2	2.5	0.5	10.0	1.800	114	1000	P10769-ND	.47	.35	.25	.14	EEU-FC2A100
	22	8	11.5	3.5	0.6	22.0	0.680	260	2000	P10770-ND	.70	.52	.37	.21	EEU-FC2A220
	33	10	12.5	5.0	0.6	33.0	0.530	306	3000	P10771-ND	.83	.63	.46	.27	EEU-FC2A330
	33	8	15	3.5	0.6	33.0	0.450	340	2000	P10772-ND	.76	.57	.42	.24	EEU-FC2A330L
	47	10	20	5.0	0.6	47.0	0.240	463	3000	P10773-ND	1.10	.82	.60	.35	EEU-FC2A470
	68	10	25	5.0	0.6	68.0	0.210	599	3000	P10774-ND	1.18	.88	.65	.38	EEU-FC2A680L
	100	12.5	20	5.0	0.6	100.0	0.180	671	5000	P10776-ND	1.44	1.08	.81	.48	EEU-FC2A101
	100	10	30	5.0	0.6	100.0	0.150	698	3000	P10775-ND	1.30	.98	.74	.44	EEU-FC2A101L
	150	18	15	7.5	0.8	150.0	0.120	917	5000	P10778-ND	2.19	1.65	1.24	.73	EEU-FC2A151S
	150	12.5	25	5.0	0.6	150.0	0.110	807	5000	P10777-ND	1.50	1.13	.85	.50	EEU-FC2A151
	220	16	25	7.5	0.8	220.0	0.089	1170	5000	P10780-ND	2.30	1.75	1.32	.86	EEU-FC2A221
	220	12.5	35	5.0	0.8	220.0	0.087	1040	5000	P10779-ND	2.19	1.65	1.24	.73	EEU-FC2A221L
	270	12.5	40	5.0	0.8	270.0	0.072	1130	5000	P10781-ND	2.18	1.65	1.25	.81	EEU-FC2A271L
	330	18	25	7.5	0.8	330.0	0.070	1420	5000	P10783-ND	2.95	2.24	1.69	1.10	EEU-FC2A331S
	330	16	31.5	7.5	0.8	330.0	0.062	1520	5000	P10782-ND	2.80	2.13	1.61	1.05	EEU-FC2A331
	390	16	35.5	7.5	0.8	390.0	0.053	1730	5000	P10784-ND	3.05	2.32	1.75	1.14	EEU-FC2A391L
	470	16	40	7.5	0.8	470.0	0.047	1920	5000	P10874-ND	3.48	2.64	1.99	1.30	EEU-FC2A471
	680	18	40	7.5	0.8	680.0	0.036	2300	5000	P10875-ND	4.54	3.44	2.60	1.69	EEU-FC2A681

Panasonic® EB Series

Radial Lead Type Capacitor for High Ripple Long Life Applications (High Voltage)

FEATURES: • High Ripple (High Frequency) • Life Time: 105°C 5000 hours
MAIN APPLICATION: • Electronic Ballast, Power supply
SPECIFICATIONS:
Operating Temperature Range: -25 to +105°C
Rated Working Voltage Range: 160 to 450 V.DC
Nominal Capacitance Range: 10 to 330 µF
Capacitance Tolerance: ±20% (120 Hz, +20°C)
Leakage Current: I ≤0.06 CV + 10 (µA) after 2 minutes application of rated working voltage at +20°C.



Working Voltage:	160	200	250	350	400	450
Dissipation Factor-max. (at 120 Hz, +20°C):	0.15	0.15	0.15	0.20	0.24	0.24
Temperature Char. Z(-25°C)/Z (+20°C): (Impedance ratio at 120Hz)	3	3	3	6	6	6

Ripple Current Frequency Multiplier:

W.V.	Frequency (Hz)			
	120	1k	10k ~ 30k	30k ~ 100k
160 ~ 250	0.55	0.85	0.90	1.00
350 ~ 450	0.50	0.80	0.90	1.00

Endurance:

Test Conditions		Post Test Requirements at +20°C	
Duration	5000 Hours	DC Leakage Current	≤initial specified value
Ambient Temperature	+105°C	Capacitance Change	±20% of initial measured value
Applied Voltage	≤Rated DC Working Voltage	Dissipation Factor	≤ 200% initial specified value

Shelf Life:

Test Conditions		Post Test Requirements at +20°C	
Duration	1000 Hours	DC Leakage Current	≤ initial specified value
Ambient Temperature	+105°C	Capacitance Change	±20% of initial measured value
Applied Voltage	—	Dissipation Factor	≤ 200% initial specified value

WV (VDC)	Cap (µF)	D.C.L. (+20°C/2mm) (µA) max.	DF (120Hz/20°C) max.	Ripple Current (100kHz/+105°C) (mA) rms max.	Dimensions (mm)				Digi-Key Part No.	Pricing						Panasonic Part No.
					øD	L	P	ød		1	10	100	1,000	5,000	10,000	
160	22	221.2	0.15	470	10	20	5.0	0.6	P5900-ND	1.03	8.85	69.33	440.00	415.00/M	383.00/M	EEU-EB2C220
	33	326.8	0.15	470	10	20	5.0	0.6	P5901-ND	1.27	10.92	85.54	543.00	513.00/M	473.00/M	EEU-EB2C330
	47	461.2	0.15	600	12.5	20	5.0	0.6	P5902-ND	1.67	14.31	112.10	712.00	672.00/M	619.00/M	EEU-EB2C470
	68	662.8	0.15	750	12.5	25	5.0	0.6	P5903-ND	2.06	17.67	138.42	879.00	830.00/M	765.00/M	EEU-EB2C680
	68	662.8	0.15	750	16	20	7.5	0.8	P5904-ND	2.27	19.47	152.52	969.00	914.00/M	843.00/M	EEU-EB2C680S
	100	970.0	0.15	1060	16	25	7.5	0.8	P5905-ND	2.46	21.06	164.97	1048.00	989.00/M	912.00/M	EEU-EB2C101
	100	970.0	0.15	1060	18	20	7.5	0.8	P5906-ND	2.78	23.79	186.36	1184.00	1117.00/M	1030.00/M	EEU-EB2C101S
	150	1450.0	0.15	1280	16	31.5	7.5	0.8	P5907-ND	3.15	27.00	211.50	1343.00	1268.00/M	1169.00/M	EEU-EB2C151
	150	1450.0	0.15	1280	18	25	7.5	0.8	P5908-ND	3.47	29.70	232.65	1478.00	1394.00/M	1286.00/M	EEU-EB2C151S
	220	2122.0	0.15	1280	16	31.5	7.5	0.8	P5909-ND	3.84	32.91	257.80	1637.00	1545.00/M	1425.00/M	EEU-EB2C221
	220	2122.0	0.15	1280	18	25	7.5	0.8	P5910-ND	4.13	35.43	277.54	1763.00	1663.00/M	1534.00/M	EEU-EB2C221S
	330	3178.0	0.15	1690	18	31.5	7.5	0.8	P5911-ND	4.63	39.66	310.67	1973.00	1862.00/M	1717.00/M	EEU-EB2C331
200	22	274.0	0.15	470	10	20	5.0	0.6	P5912-ND	1.22	10.44	81.78	519.00	490.00/M	452.00/M	EEU-EB2D220
	33	406.0	0.15	600	12.5	20	5.0	0.6	P5913-ND	1.53	13.08	102.46	651.00	614.00/M	566.00/M	EEU-EB2D330
	47	574.0	0.15	600	12.5	20	5.0	0.6	P5914-ND	1.84	15.81	123.85	787.00	742.00/M	684.00/M	EEU-EB2D470
	68	826.0	0.15	750	12.5	25	5.0	0.6	P5915-ND	2.54	21.75	170.38	1082.00	1021.00/M	942.00/M	EEU-EB2D680
	68	826.0	0.15	750	16	20	7.5	0.8	P5916-ND	2.79	23.91	187.30	1190.00	1123.00/M	1035.00/M	EEU-EB2D680S
	100	1210.0	0.15	1060	16	25	7.5	0.8	P5917-ND	3.22	27.57	215.97	1372.00	1294.00/M	1194.00/M	EEU-EB2D101
	100	1210.0	0.15	1060	18	20	7.5	0.8	P5918-ND	3.54	30.36	237.82	1510.00	1425.00/M	1314.00/M	EEU-EB2D101S
	150	1810.0	0.15	1280	16	31.5	7.5	0.8	P5919-ND	3.82	32.73	256.39	1628.00	1537.00/M	1417.00/M	EEU-EB2D151
	150	1810.0	0.15	1280	18	25	7.5	0.8	P5920-ND	4.20	36.03	282.24	1793.00	1692.00/M	1560.00/M	EEU-EB2D151S
	220	2650.0	0.15	1690	18	31.5	7.5	0.8	P5921-ND	5.19	44.49	348.51	2213.00	2089.00/M	1926.00/M	EEU-EB2D221
250	22	340.0	0.15	560	12.5	20	5.0	0.6	P5922-ND	1.46	12.54	98.23	624.00	589.00/M	543.00/M	EEU-EB2E220
	33	505.0	0.15	560	12.5	20	5.0	0.6	P5923-ND	1.78	15.24	119.38	758.00	715.00/M	660.00/M	EEU-EB2E330
	47	715.0	0.15	710	12.5	25	5.0	0.6	P5924-ND	2.34	20.04	156.98	997.00	941.00/M	868.00/M	EEU-EB2E470
	47	715.0	0.15	710	16	20	7.5	0.8	P5925-ND	2.57	21.99	172.26	1094.00	1032.00/M	952.00/M	EEU-EB2E470S
	68	1030.0	0.15	990	16	25	7.5	0.8	P5926-ND	3.08	26.40	206.80	1313.00	1239.00/M	1143.00/M	EEU-EB2E680
	68	1030.0	0.15	990	18	20	7.5	0.8	P5927-ND	3.39	29.04	227.48	1445.00	1363.00/M	1257.00/M	EEU-EB2E680S
	100	1510.0	0.15	1200	16	31.5	7.5	0.8	P5928-ND	3.82	32.73	256.39	1628.00	1537.00/M	1417.00/M	EEU-EB2E101
	100	1510.0	0.15	1200	18	25	7.5	0.8	P5929-ND	4.20	36.03	282.24	1793.00	1692.00/M	1560.00/M	EEU-EB2E101S
	150	2260.0	0.15	1470	18	31.5	7.5	0.8	P5930-ND	4.63	39.66	310.67	1973.00	1862.00/M	1717.00/M	EEU-EB2E151
350	10	220.0	0.20	270	10	20	5.0	0.6	P5931-ND	1.40	11.97	93.77	596.00	562.00/M	518.00/M	EEU-EB2V100
	22	472.0	0.20	350	12.5	20	5.0	0.6	P5932-ND	1.84	15.81	123.85	787.00	742.00/M	684.00/M	EEU-EB2V220
	33	703.0	0.20	480	16	20	7.5	0.8	P5933-ND	2.90	24.87	194.82	1237.00	1168.00/M	1077.00/M	EEU-EB2V330S
	47	997.0	0.20	640	16	25	7.5	0.8	P5934-ND	3.58	30.72	240.64	1528.00	1442.00/M	1330.00/M	EEU-EB2V470
	47	997.0	0.20	640	18	20	7.5	0.8	P5935-ND	3.94	33.75	264.38	1679.00	1585.00/M	1461.00/M	EEU-EB2V470S
	68	1438.0	0.20	780	16	31.5	7.5	0.8	P5936-ND	4.19	35.94	281.53	1788.00	1687.00/M	1556.00/M	EEU-EB2V680
	68	1438.0	0.20	780	18	25	7.5	0.8	P5937-ND	4.61	39.54	309.73	1967.00	1856.00/M	1712.00/M	EEU-EB2V680S
	100	2110.0	0.20	970	18	31.5	7.5	0.8	P5938-ND	5.99	51.30	401.85	2552.00	2408.00/M	2221.00/M	EEU-EB2V101
400	10	250.0	0.24	250	10	20	5.0	0.6	P5939-ND	1.54	13.20	103.40	657.00	620.00/M	571.00/M	EEU-EB2G100
	22	538.0	0.24	410	12.5	25	5.0	0.6	P5940-ND	2.41	20.64	161.68	1027.00	969.00/M	894.00/M	EEU-EB2G220
	22	538.0	0.24	410	16	20	7.5	0.8	P5941-ND	2.65	22.71	177.90	1130.00	1066.00/M	983.00/M	EEU-EB2G220S
	33	802.0	0.24	600	16	25	7.5	0.8	P5942-ND	3.58	30.72	240.64	1528.00	1442.00/M	1330.00/M	EEU-EB2G330
	33	802.0	0.24	600	18	20	7.5	0.8	P5943-ND	3.94	33.75	264.38	1679.00	1585.00/M	1461.00/M	EEU-EB2G330S
	47	1138.0	0.24	730	16	31.5	7.5	0.8	P5944-ND	4.55	39.03	305.74	1942.00	1832.00/M	1690.00/M	EEU-EB2G470
	47	1138.0	0.24	730	18	25	7.5	0.8	P5945-ND	5.01	42.90	336.05	2134.00	2014.00/M	1857.00/M	EEU-EB2G470S
450	10	280.0	0.24	310	12.5	20	5.0	0.6	P5946-ND	2.04	17.49	137.01	870.00	821.00/M	757.00/M	EEU-EB2W100
	22	604.0	0.24	560	16	25	7.5	0.8	P5947-ND	3.43	29.37	230.07	1461.00	1379.00/M	1271.00/M	EEU-EB2W220
	22	604.0	0.24	560	18	20	7.5	0.8	P5948-ND	3.78	32.37	253.57	1610.00	1520.00/M	1401.00/M	EEU-EB2W220S
	33	901.0	0.24	680	16	31.5	7.5	0.8	P5949-ND	4.24	36.30	284.35	1806.00	1704.00/M	1571.00/M	EEU-EB2W330
	33	901.0	0.24	680	18	25	7.5	0.8	P5950-ND	4.67	39.99	313.26	1990.00	1877.00/M	1731.00/M	EEU-EB2W330S
	47	1279.0	0.24	850	18	31.5	7.5	0.8	P5951-ND	5.55	47.55	372.48	2366.00	2232.00/M	2058.00/M	EEU-EB2W470

Panasonic® Bi-Polar Series SU Capacitors

FEATURES:

- Ideal for circuits where polarity is not constant or reverse voltage is applied when switches are turned on or off.
- Life: 2000 hours at +85°C.

SPECIFICATIONS:

Operating Temp. Range: –40°C to +85°C.

Capacitance Tolerance: ±20% (120Hz, +20°C).

Leakage Current: I ≤ 0.03CV + 3(µA) after 5 minutes application of rated working voltage at +20°C.

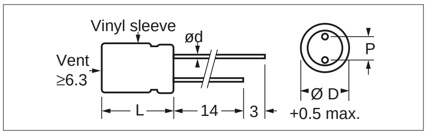
Low Temperature Characteristics: Impedance ratio max. at 120Hz. Following specified values.

Working Volt.		6.3V	10V	16V	25V	35V	50V
Impedance	-25°C/+20°C	4	3	2	2	2	2
	-40°C/+20°C	8	6	4	4	4	3

ENDURANCE:

Test Conditions: Duration: 2000 hours. Ambient Temperature: +85°C. Applied Voltage: Rated DC working voltage to each polarity for 1000 hours.

Post Test Requirements: +20°C. Leakage Current: ≤Initial specified value. Capacitance Change: ±20% of initial measured value. tan ∂: ≤150% of initial specified value.



SHELF LIFE:

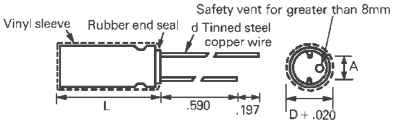
Test Conditions: Duration: 1000 hours. Ambient Temperature: +85°C. Applied Voltage: none

Post Test Requirements (+20°C): Same limits for "Endurance".

WV	Cap. (µF)	D.C.L. (+20°C/5min.) [µA] max.	tan δ (120Hz/+20°C) (max.)	Ripple Current (mA) rms	Dimensions D	L	P	d	Digi-Key Part No.	Pricing 1	10	100	1,000	5,000	10,000	Panasonic Part No.
6.3	33	9.2	0.30	80	5	11	2.0	0.5	P1141-ND	.37	2.54	17.88	98.00	85.00/M	81.00/M	ECE-A0JN330U
	47	11.8	0.30	90	5	11	2.0	0.5	P1142-ND	.40	2.73	19.25	105.00	91.00/M	88.00/M	ECE-A0JN470U
	100	21.9	0.30	130	6.3	11.2	2.5	0.5	P1143-ND	.44	3.22	23.00	129.00	120.00/M	115.00/M	ECE-A0JN101U
	220	44.5	0.30	200	8	11.5	3.5	0.6	P1144-ND	.54	3.96	28.25	158.00	147.00/M	141.00/M	ECE-A0JN221U
	330	65.3	0.30	250	8	11.5	3.5	0.6	P1145-ND	.67	4.97	35.50	199.00	185.00/M	178.00/M	ECE-A0JN331U
	470	91.8	0.30	310	10	12.5	5.0	0.6	P1146-ND	.88	6.56	48.18	277.00	267.00/M	256.00/M	ECE-A0JN471X
	1000	192.0	0.30	430	10	20	5.0	0.6	P1147-ND	1.23	9.15	67.21	386.00	372.00/M	358.00/M	ECE-A0JN102U
	2200	418.8	0.30	660	12.5	25	5.0	0.6	P1148-ND	1.64	12.33	92.48	547.00	526.00/M	514.00/M	ECE-A0JN222U
	3300	626.7	0.30	760	16	25	7.5	0.8	P1149-ND	2.21	16.59	124.43	735.00	708.00/M	691.00/M	ECE-A0JN332U
	4700	891.3	0.30	1170	16	31.5	7.5	0.8	P1150-ND	2.75	20.83	157.20	1022.00	990.00/M	967.00/M	ECE-A0JN472U
	6800	1288.2	0.30	1450	18	35.5	7.5	0.8	P1151-ND	3.75	28.41	214.40	1394.00	1351.00/M	1319.00/M	ECE-A0JN682U
10	22	9.6	0.25	60	5	11	2.0	0.5	P1152-ND	.37	2.54	17.88	98.00	85.00/M	81.00/M	ECE-A1AN220U
	33	12.9	0.25	80	5	11	2.0	0.5	P1153-ND	.40	2.73	19.25	105.00	91.00/M	88.00/M	ECE-A1AN330U
	47	17.1	0.25	90	5	11	2.0	0.5	P1154-ND	.47	3.16	22.28	122.00	105.00/M	101.00/M	ECE-A1AN470U
	100	33.0	0.25	130	6.3	11.2	2.5	0.5	P1155-ND	.84	6.27	46.06	265.00	255.00/M	245.00/M	ECE-A1AN101U
	100	33.0	0.25	130	6.3	11.2	2.5	0.5	P1370-ND *NEW!*	.84	6.27	46.06	265.00	255.00/M	245.00/M	ECE-A1AN101X
	220	69.0	0.25	200	8	11.5	3.5	0.6	P1156-ND	.66	4.83	34.50	193.00	179.00/M	173.00/M	ECE-A1AN221U
	330	102.0	0.25	280	10	16	5.0	0.6	P1157-ND	.81	6.02	44.18	254.00	244.00/M	235.00/M	ECE-A1AN331U
	470	144.0	0.25	340	10	16	5.0	0.6	P1158-ND	1.15	8.54	62.75	360.00	347.00/M	334.00/M	ECE-N1AN471U
	1000	303.0	0.25	470	12.5	20	5.0	0.6	P1159-ND	1.46	10.98	82.35	487.00	468.00/M	458.00/M	ECE-A1AN102X
	2200	663.0	0.25	690	16	25	7.5	0.8	P1160-ND	2.14	16.08	120.60	713.00	686.00/M	670.00/M	ECE-A1AN222U
	3300	993.0	0.25	1090	16	31.5	7.5	0.8	P1161-ND	2.68	20.33	153.40	997.00	966.00/M	943.00/M	ECE-A1AN332U
	4700	1413.0	0.25	1200	18	35.5	7.5	0.8	P1162-ND	3.75	28.41	214.40	1394.00	1351.00/M	1319.00/M	ECE-A1AN472U
16	10	7.8	0.20	40	5	11	2.0	0.5	P1163-ND	.37	2.54	17.88	98.00	85.00/M	81.00/M	ECE-A1CN100U
	22	13.5	0.20	60	5	11	2.0	0.5	P1164-ND	.40	2.73	19.25	105.00	91.00/M	88.00/M	ECE-A1CN220U
	33	18.8	0.20	80	5	11	2.0	0.5	P1165-ND	.39	2.87	20.50	115.00	107.00/M	103.00/M	ECE-A1CN330U
	47	25.5	0.20	100	6.3	11.2	2.5	0.5	P1166-ND	.49	3.64	26.00	146.00	135.00/M	130.00/M	ECE-A1CN470U
	100	51.0	0.20	180	8	11.5	3.5	0.6	P1167-ND	.66	4.83	34.50	193.00	179.00/M	173.00/M	ECE-A1CN101U
	220	108.6	0.20	260	10	12.5	5.0	0.6	P1168-ND	.81	6.02	44.18	254.00	244.00/M	235.00/M	ECE-A1CN221X
	330	161.4	0.20	330	10	16	5.0	0.6	P1169-ND	1.08	8.00	58.75	338.00	325.00/M	313.00/M	ECE-A1CN331U
	470	228.6	0.20	380	10	20	5.0	0.6	P1170-ND	1.36	10.17	76.28	451.00	434.00/M	424.00/M	ECE-A1CN471U
	1000	483.0	0.20	560	12.5	25	5.0	0.6	P1171-ND	1.92	14.43	108.23	640.00	616.00/M	601.00/M	ECE-A1CN102U
	2200	1059.0	0.20	750	16	31.5	7.5	0.8	P1172-ND	2.57	19.42	146.60	953.00	924.00/M	902.00/M	ECE-A1CN222U
	3300	1587.0	0.20	900	18	35.5	7.5	0.8	P1173-ND	3.75	28.41	214.40	1394.00	1351.00/M	1319.00/M	ECE-A1CN332U
25	3.3	5.4	0.15	20	5	11	2.0	0.5	P1174-ND	.37	2.54	17.88	98.00	85.00/M	81.00/M	ECE-A1EN3R3U
	4.7	6.5	0.15	25	5	11	2.0	0.5	P1175-ND	.37	2.54	17.88	98.00	85.00/M	81.00/M	ECE-A1EN4R7U
	10	10.5	0.15	45	5	11	2.0	0.5	P1176-ND	.40	2.73	19.25	105.00	91.00/M	88.00/M	ECE-A1EN100U
	22	19.5	0.15	60	5	11	2.0	0.5	P1177-ND	.47	3.16	22.28	122.00	105.00/M	101.00/M	ECE-A1EN220X
	33	27.7	0.15	90	6.3	11.2	2.5	0.5	P1178-ND	.50	3.71	26.50	148.00	138.00/M	133.00/M	ECE-A1EN330U
	47	38.2	0.15	110	6.3	11.2	2.5	0.5	P1179-ND	.64	4.69	33.50	188.00	174.00/M	168.00/M	ECE-A1EN470U
	100	78.0	0.15	180	8	11.5	3.5	0.6	P1180-ND	.77	5.70	41.83	240.00	231.00/M	223.00/M	ECE-A1EN101U
	220	168.0	0.15	320	10	16	5.0	0.6	P1181-ND	1.00	7.46	54.76	315.00	303.00/M	291.00/M	ECE-A1EN221U
	330	250.5	0.15	350	12.5	20	5.0	0.6	P1182-ND	1.25	9.39	70.43	416.00	401.00/M	391.00/M	ECE-A1EN331U
	470	355.5	0.15	430	12.5	20	5.0	0.6	P1183-ND	1.79	13.41	100.58	595.00	572.00/M	559.00/M	ECE-A1EN471U
	1000	753.0	0.15	680	16	25	7.5	0.8	P1184-ND	2.50	18.92	142.80	928.00	900.00/M	878.00/M	ECE-A1EN102U
	2200	1653.0	0.15	900	18	35.5	7.5	0.8	P1185-ND	3.87	29.34	221.40	1439.00	1395.00/M	1362.00/M	ECE-A1EN222U
35	4.7	7.9	0.15	30	5	11	2.0	0.5	P1186-ND	.40	2.69	18.98	104.00	90.00/M	86.00/M	ECE-A1VN4R7U
	10	13.5	0.15	43	5	11	2.0	0.5	P1187-ND	.47	3.16	22.28	122.00	105.00/M	101.00/M	ECE-A1VN100U
	22	26.1	0.15	80	6.3	11.2	2.5	0.5	P1188-ND	.51	3.78	27.00	151.00	140.00/M	135.00/M	ECE-A1VN220U
	33	37.6	0.15	100	8	11.5	3.5	0.6	P1189-ND	.66	4.83	34.50	193.00	179.00/M	173.00/M	ECE-A1VN330U
	47	52.3	0.15	120	8	11.5	3.5	0.6	P1190-ND	.77	5.70	41.83	240.00	231.00/M	223.00/M	ECE-A1VN470U
	100	108.0	0.15	230	10	16	5.0	0.6	P1191-ND	1.00	7.46	54.76	315.00	303.00/M	291.00/M	ECE-A1VN101U
	220	234.0	0.15	360	12.5	20	5.0	0.6	P1192-ND	1.28	9.63	72.23	427.00	411.00/M	401.00/M	ECE-A1VN221U
	330	349.5	0.15	450	12.5	20	5.0	0.6	P1193-ND	1.64	12.33	92.48	547.00	526.00/M	514.00/M	ECE-A1VN331U
	470	496.5	0.15	590	12.5	25	5.0	0.6	P1194-ND	2.06	15.61	117.80	766.00	742.00/M	724.00/M	ECE-A1VN471U
50	0.47	3.7	0.15	10	5	11	2.0	0.5	P1195-ND	.37	2.54	17.88	98.00	85.00/M	81.00/M	ECE-A1HNR47U
	1	4.5	0.15	10	5	11	2.0	0.5	P1196-ND	.37	2.54	17.88	98.00	85.00/M	81.00/M	ECE-A1HN010U
	2.2	6.3	0.15	18	5	11	2.0	0.5	P1197-ND	.40	2.73	19.25	105.00	91.00/M	88.00/M	ECE-A1HN2R2U
	3.3	7.9	0.15	25	5	11	2.0	0.5	P1198-ND	.43	2.89	20.35	111.00	96.00/M	93.00/M	ECE-A1HN3R3U
	4.7	10.0	0.15	30	5	11	2.0	0.5	P1199-ND	.44	3.00	21.18	116.00	100.00/M	96.00/M	ECE-A1HN4R7U
	10	18.0	0.15	50	6.3	11.2	2.5	0.5	P1280-ND	.50	3.71	26.50	148.00	138.00/M	133.00/M	ECE-A1HN100U
	22	36.0	0.15	90	8	11.5	3.5	0.6	P1281-ND	.67	4.97	35.50	199.00	185.00/M	178.00/M	ECE-A1HN220U
	33	52.5	0.15	110	8	11.5	3.5	0.6	P1282-ND	.77	5.70	41.83	240.00	231.00/M	223.00/M	ECE-A1HN330U
	47	73.5	0.15	140	10	12.5	5.0	0.6	P1283-ND	1.04	7.74	56.87	327.00	315.00/M	303.00/M	ECE-A1HN470U
	100	153.0	0.15	250	10	20	5.0	0.6	P1284-ND	1.32	9.90	74.25	439.00	422.00/M	413.00/M	ECE-A1HN101U
	220	333.0	0.15	360	12.5	25	5.0	0.6	P1285-ND	1.79	13.41	100.58	595.00	572.00/M	559.00/M	ECE-A1HN221U
	330	498.0	0.15	450	16	25	7.5	0.8	P1286-ND	2.06	15.61	117.80	766.00	742.00/M	724.00/M	ECE-A1HN331U
	470	708.0	0.15	590	16	31.5	7.5	0.8	P1287-ND	2.94	22.23	167.80	1091.00	1057.00/M	1032.00/M	ECE-A1HN471U

Panasonic® Bi-Polar Aluminum Electrolytic Capacitors

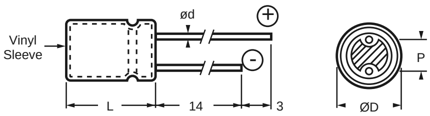
This bi-polar miniature aluminum electrolytic capacitor is ideal for reversal circuit of DC voltage. This series is the miniaturized case size and expanded products range from previous series. **FEATURES:** • Close capacitance tolerance (±20%). • Compact size. • Stable characteristics at −40°C ~ +85°C. **SPECIFICATIONS:** • Operating temperature range: −40°C ~ +85°C • Rated DC working voltage range: 6.3 ~ 50V DC • Rated capacitance range: 0.47 ~ 1000 µF • Capacitance tolerance: ±20% • DC leakage current: I = 0.03 CV +3 (µA) (After 5 minutes application of DC working voltage at +20°C) • tan δ: max. at 120 Hz/20°C



WV	Cap. (µF)	Max. Leakage (µA)	tan d (120Hz/20°C)	Ripple Current (mA) rms	Dimensions D	L	A	d	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
6.3	33	9.3	0.30	60	5	11	2	0.5	P1100-ND	.28	.24	.19	.12	ECE-A0JN330S
	47	11.9	0.30	100	6.3	11.2	2.5	0.6	P1101-ND	.47	.41	.32	.21	ECE-A0JN470S
	330	65.4	0.30	320	10	16	5	0.6	P1104-ND	.88	.76	.59	.38	ECE-A0JN331S
	470	91.9	0.30	380	10	20	5	0.6	P1105-ND	1.09	.94	.74	.47	ECE-A0JN471S
	1000	192.0	0.30	530	12.5	25	5	0.6	P1106-ND	1.49	1.28	1.01	.64	ECE-A0JN102S
10	22	9.6	0.25	60	5	11	2	0.5	P1107-ND	.28	.24	.19	.12	ECE-A1AN220S
	47	17.7	0.25	100	6.3	11.2	2.5	0.6	P1109-ND	.49	.42	.33	.21	ECE-A1AN470S
	100	33.0	0.25	160	10	12.5	5	0.6	P1110-ND	.62	.54	.42	.27	ECE-A1AN101S
	220	69.0	0.25	250	10	16	5	0.6	P1111-ND	.91	.79	.62	.39	ECE-A1AN221S
	330	102.0	0.25	340	10	20	5	0.6	P1112-ND	.95	.82	.64	.41	ECE-A1AN331S
	1000	303.0	0.25	580	16	25	7.5	0.8	P1114-ND	1.66	1.43	1.12	.71	ECE-A1AN102S
16	22	13.6	0.20	70	6.3	11.2	2.5	0.6	P1116-ND	.47	.40	.32	.20	ECE-A1CN220S
	33	18.9	0.20	90	6.3	11.2	2.5	0.6	P1117-ND	.50	.43	.34	.22	ECE-A1CN330S
	47	25.6	0.20	110	8	11.5	3.5	0.6	P1118-ND	.55	.47	.37	.24	ECE-A1CN470S
	330	161.4	0.20	405	12.5	20	5	0.6	P1121-ND*	1.29	1.11	.87	.55	ECE-A1CN331S
25	220	168.0	0.15	400	12.5	25	5	0.6	P1130-ND*	1.24	1.07	.84	.53	ECE-A1EN221S
50	1.0	4.5	0.15	10	5	11	2	0.5	P1132-ND*	.28	.24	.19	.12	ECE-A1HN010S
	33	52.5	0.15	140	10	16	5	0.6	P1138-ND*	.52	.49	.44	.38	ECE-A1HN330S

P1141-KIT-ND** ***Digi-Key® Bi-Polar Capacitors Kit 10 each of parts listed above. Notebook style storage case and bin storage guide included..**$89.95**

KS Capacitors



Body dia. D	3	4	5	6.3	8
Lead dia. d	0.4	0.45	0.45	0.45	0.45
Lead space P	1.0	1.5	2.0	2.5	2.5

Features:
- Low profile 5mm height for Ø3 ~ Ø8 mm

Specifications:
- **Operating Temperature Range:** -40°C to +85°C
- **Rated Working Voltage Range:** 4 to 50V DC
- **Nominal Capacitance Range:** 0.1 to 330µF
- **Capacitance Tolerance:** ±20% (120Hz, +20°C)
- **Leakage Current:** I ≤ 0.01CV or 3 (µA), whichever is greater measured after 2 minutes application of rated working voltage at +20°C
- **tan δ:** (120Hz, +20°C)

Working voltage (V)	4	6.3	10	16	25	35	50
tan δ max.	0.35	0.24	0.20	0.16	0.14	0.12	0.10

- **Characteristics at Low Temperature:** Impedance ratio max. at 120Hz

Working voltage (V)	4	6.3	10	16	25	35	50
-25°C/+25°C	7	4	3	2	2	2	2
-40°C/+20°C	15	8	6	4	4	3	3

Endurance:
- **Test Conditions — Duration:** 1000 hours
- **Ambient Temperature:** +85°C
- **Applied Voltage:** Rated DC working voltage
- **Post Test Requirements at +20°C — Leakage Current:** ≤ Initial specified value
- **Capacitance Change:** ±20% of initial measured value (4V: ±30%)
- **tan δ:** ≤ 200% of initial specified value

Shelf Life:
- **Test Conditions — Duration:** 1000 hours
- **Ambient Temperature:** +85°C
- **Applied voltage:** (None).
- **Post Test Requirements at +20°C — Leakage Current:** ≤ Initial specified value
- **Capacitance Change:** ±20% of initial measured value (4V: ±30%)
- **tan δ:** ≤ 200% of initial specified value

Panasonic KS Cross Reference:
Nippon Chemi-Con: SRE, Nichicon: MA, Elna: RC3, Rubycon: MS5, Marcon: LSM

Recommended Applications:
AV (TV, Audio, Video), Office, Home Appliance

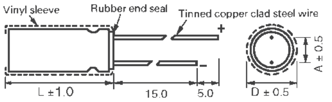
W.V (VDC)	Cap. (µF)	D.C.L. (+20°C/2 min)	tan d (120Hz/+20°C)	Ripple Current	Dimensions(mm) ØD	L	P	Digi-Key Part No.	Price Each 10	100	1,000	Panasonic Part No.
4	22	3.0	0.35	19	3	5	1.0	P950-ND	.21	.17	.09	ECE-A0GKK220
	33	3.0	0.35	26	4	5	1.5	P951-ND	.16	.12	.07	ECE-A0GKS330
	47	3.0	0.35	34	4	5	1.5	P952-ND	.16	.12	.07	ECE-A0GKS470
	100	4.0	0.35	61	5	5	2.0	P953-ND	.18	.14	.08	ECE-A0GKS101
	220	8.8	0.35	82	6.3	5	2.5	P954-ND	.22	.17	.10	ECE-A0GKS221
6.3	22	3.0	0.24	29	4	5	1.5	P955-ND	.16	.12	.07	ECEA0JKS220
	33	3.0	0.24	38	5	5	2.0	P956-ND	.18	.14	.08	ECE-A0JKS330
	47	3.0	0.24	46	5	5	2.0	P957-ND	.18	.14	.08	ECE-A0JKS470
	100	6.3	0.24	71	6.3	5	2.5	P958-ND	.22	.17	.10	ECE-A0JKS101
	330	20.7	0.24	130	8	5	2.5	P959-ND	.34	.27	.15	ECE-A0JKS331
10	22	3.0	0.20	35	5	5	2.0	P960-ND	.18	.14	.08	ECE-A1AKS220
	33	3.3	0.20	43	5	5	2.0	P961-ND	.18	.14	.08	ECE-A1AKS330
	47	4.7	0.20	65	6.3	5	2.5	P962-ND	.22	.17	.10	ECE-A1AKS470
	100	10.0	0.20	80	6.3	5	2.5	P963-ND	.22	.17	.10	ECE-A1AKS101
	220	22.0	0.20	120	8	5	2.5	P964-ND	.39	.30	.17	ECE-A1AKS221
16	10	3.0	0.16	20	3	5	1.0	P965-ND	.21	.17	.09	ECE-A1CKK100
	10	3.0	0.16	28	4	5	1.5	P966-ND	.16	.12	.07	ECE-A1CKS100
	22	3.5	0.16	39	5	5	2.0	P967-ND	.18	.14	.08	ECE-A1CKS220
	33	5.2	0.16	60	6.3	5	2.5	P968-ND	.22	.17	.10	ECE-A1CKS330
	47	7.5	0.16	70	6.3	5	2.5	P969-ND	.22	.17	.10	ECE-A1CKS470
	100	16.0	0.16	91	8	5	2.5	P970-ND	.37	.29	.16	ECE-A1CKS101
25	2.2	3.0	0.14	8	3	5	1.0	P971-ND	.21	.17	.09	ECE-A1EKK2R2
	3.3	3.0	0.14	10	3	5	1.0	P972-ND	.21	.17	.09	ECE-A1EKK3R3
	4.7	3.0	0.14	12	3	5	1.0	P973-ND	.21	.17	.09	ECE-A1EKK4R7
	4.7	3.0	0.14	22	4	5	1.5	P974-ND	.16	.12	.07	ECE-A1EKS4R7
	10	3.0	0.14	28	5	5	2.0	P975-ND	.18	.14	.08	ECE-A1EKS100
	22	5.5	0.14	55	6.3	5	2.5	P976-ND	.22	.17	.10	ECE-A1EKS220
	33	8.2	0.14	65	6.3	5	2.5	P977-ND	.22	.17	.10	ECE-A1EKS330
35	3.3	3.0	0.12	16	4	5	1.5	P978-ND	.16	.12	.07	ECE-A1VKS3R3
	4.7	3.0	0.12	22	4	5	1.5	P979-ND	.16	.12	.07	ECE-A1VKS4R7
	10	3.5	0.12	30	5	5	2.0	P980-ND	.18	.14	.08	ECE-A1VKS100
	22	7.7	0.12	60	6.3	5	2.5	P981-ND	.22	.17	.10	ECE-A1VKS220
	33	11.6	0.12	65	8	5	2.5	P982-ND	.37	.29	.16	ECE-A1VKS330
	47	16.4	0.12	85	8	5	2.5	P983-ND	.38	.30	.17	ECE-A1VKS470
50	0.1	3.0	0.10	1	4	5	1.5	P984-ND	.16	.12	.07	ECE-A1HKS0R1
	0.1	3.0	0.10	1	3	5	1.0	P985-ND	.26	.20	.11	ECE-A1HKK0R1
	0.22	3.0	0.10	2	4	5	1.5	P986-ND	.16	.12	.07	ECE-A1HKSR22
	0.22	3.0	0.10	2	3	5	1.0	P987-ND	.26	.20	.11	ECE-A1HKKR22
	0.33	3.0	0.10	3	4	5	1.5	P988-ND	.16	.12	.07	ECE-A1HKSR33
	0.33	3.0	0.10	3	3	5	1.0	P989-ND	.26	.20	.11	ECE-A1HKKR33
	0.47	3.0	0.10	5	4	5	1.5	P990-ND	.16	.12	.07	ECE-A1HKSR47
	0.47	3.0	0.10	5	3	5	1.0	P991-ND	.26	.20	.11	ECE-A1HKKR47
	1.0	3.0	0.10	8	3	5	1.0	P992-ND	.26	.20	.11	ECE-A1HKK010
	1.0	3.0	0.10	10	4	5	1.5	P993-ND	.16	.12	.07	ECE-A1HKS010
	2.2	3.0	0.10	16	4	5	1.5	P994-ND	.16	.12	.07	ECE-A1HKS2R2
	3.3	3.0	0.10	16	4	5	1.5	P995-ND	.16	.12	.07	ECE-A1HKS3R3
	4.7	3.0	0.10	23	5	5	2.0	P996-ND	.18	.14	.08	ECE-A1HKS4R7
	10	5.0	0.10	35	6.3	5	2.5	P997-ND	.22	.17	.10	ECE-A1HKS100
	22	11.0	0.10	60	8	5	2.5	P998-ND	.31	.25	.14	ECE-A1HKS220

Panasonic® KA-Series Miniature Aluminum Electrolytic Capacitors

Rating		Dimensions (mm)			Digi-Key	Pricing						Panasonic
WV DC	µF	D	L	A	Part No.	1	10	100	500	1,000	5,000	Part No.
6.3	22	4.0	7.0	1.5	P800-ND	.26	1.66	11.16	37.80	58.00	49.00/M	ECE-A0JKA220
	33	4.0	7.0	1.5	P801-ND	.28	1.79	12.09	40.95	62.00	53.00/M	ECE-A0JKA330
	47	4.0	7.0	1.5	P802-ND	.29	1.84	12.40	42.00	64.00	54.00/M	ECE-A0JKA470
	100	5.0	7.0	2.0	P803-ND*	.34	2.16	14.57	49.35	75.00	63.00/M	ECE-A0JKA101
	220	6.3	7.0	2.5	P829-ND	.34	2.30	16.23	56.05	89.00	77.00/M	ECE-A0JKA221
	330	8.0	7.0	3.5	P830-ND	.40	2.98	21.25	76.50	119.00	111.00/M	ECE-A0JKA331
10	22	4.0	7.0	1.5	P804-ND	.28	1.79	12.09	40.95	62.00	53.00/M	ECE-A1AKA220
	33	4.0	7.0	1.5	P805-ND	.29	1.84	12.40	42.00	64.00	54.00/M	ECE-A1AKA330
	47	5.0	7.0	2.0	P806-ND	.31	1.98	13.33	45.15	69.00	58.00/M	ECE-A1AKA470
	100	6.3	7.0	2.5	P831-ND	.30	2.07	14.58	50.35	80.00	69.00/M	ECE-A1AKA101
	220	8.0	7.0	3.5	P832-ND	.40	2.98	21.25	76.50	119.00	111.00/M	ECE-A1AKA221
16	10	4.0	7.0	1.5	P807-ND	.26	1.66	11.16	37.80	58.00	49.00/M	ECE-A1CKA100
	22	4.0	7.0	1.5	P808-ND	.28	1.79	12.09	40.95	62.00	53.00/M	ECE-A1CKA220
	33	5.0	7.0	2.0	P809-ND*	.34	2.16	14.57	49.35	75.00	63.00/M	ECE-A1CKA330
	47	5.0	7.0	2.0	P810-ND*	.34	2.16	14.57	49.35	75.00	63.00/M	ECE-A1CKA470
	100	6.3	7.0	2.5	P833-ND	.34	2.30	16.23	56.05	89.00	77.00/M	ECE-A1CKA101
25	4.7	4.0	7.0	1.5	P812-ND*	.26	1.66	11.16	37.80	58.00	49.00/M	ECE-A1EKA4R7
	10	4.0	7.0	1.5	P813-ND	.28	1.79	12.09	40.95	62.00	53.00/M	ECE-A1EKA100
	22	5.0	7.0	2.0	P814-ND	.31	1.98	13.33	45.15	69.00	58.00/M	ECE-A1EKA220
	33	6.3	7.0	2.5	P815-ND	.30	2.07	14.58	50.35	80.00	69.00/M	ECE-A1EKA330
	47	6.3	7.0	2.5	P834-ND	.34	2.30	16.23	56.05	89.00	77.00/M	ECE-A1EKA470
35	4.7	4.0	7.0	1.5	P817-ND*	.26	1.66	11.16	37.80	58.00	49.00/M	ECE-A1VKA4R7
	10	5.0	7.0	2.0	P818-ND*	.31	1.98	13.33	45.15	69.00	58.00/M	ECE-A1VKA100
	22	6.3	7.0	2.5	P819-ND*	.30	2.07	14.58	50.35	80.00	69.00/M	ECE-A1VKA220
	33	6.3	7.0	2.5	P835-ND	.34	2.30	16.23	56.05	89.00	77.00/M	ECE-A1VKA330
	47	8.0	7.0	3.5	P836-ND	.40	2.98	21.25	76.50	119.00	111.00/M	ECE-A1VKA470
50	0.1	4.0	7.0	1.5	P820-ND*	.26	1.66	11.16	37.80	58.00	49.00/M	ECE-A1HKA0R1
	0.22	4.0	7.0	1.5	P821-ND*	.26	1.66	11.16	37.80	58.00	49.00/M	ECE-A1HKAR22
	0.33	4.0	7.0	1.5	P822-ND*	.26	1.66	11.16	37.80	58.00	49.00/M	ECE-A1HKAR33
	0.47	4.0	7.0	1.5	P823-ND*	.26	1.66	11.16	37.80	58.00	49.00/M	ECE-A1HKAR47
	1.0	4.0	7.0	1.5	P824-ND*	.26	1.66	11.16	37.80	58.00	49.00/M	ECE-A1HKA010
	2.2	4.0	7.0	1.5	P825-ND*	.26	1.66	11.16	37.80	58.00	49.00/M	ECE-A1HKA2R2
	3.3	4.0	7.0	1.5	P826-ND*	.26	1.66	11.16	37.80	58.00	49.00/M	ECE-A1HKA3R3
	4.7	4.0	7.0	1.5	P827-ND*	.28	1.79	12.09	40.95	62.00	53.00/M	ECE-A1HKA4R7
	10	5.0	7.0	2.0	P828-ND*	.34	2.16	14.57	49.35	75.00	63.00/M	ECE-A1HKA100
	22	6.3	7.0	2.5	P837-ND	.34	2.30	16.23	56.05	89.00	77.00/M	ECE-A1HKA220
	33	8.0	7.0	3.5	P838-ND	.40	2.98	21.25	76.50	119.00	111.00/M	ECE-A1HKA330

*** P835-KIT-ND** ***Digi-Key® KA-Series Capacitors Kit*** 10 each of parts indicated. (160 total pieces) Notebook style storage case **$29.95**

The KA-Series is a tantalum substitute for many applications.



- **Operating Temperature Range:** –40°C to +85°C.
- **Rated DC Voltage Range:** 6.3 to 63VDC.
- **Rated Capacitance Range:** 1.0 to 100µF.
- **Capacitance Tolerance:** ±020%.
- **tan ∂:** Max. at 120Hz.

W.V.	6.3	10	16	25	35	50	63
tan	0.24	0.2	0.16	0.14	0.12	0.10	0.08

- **DC Leakage Current, Max.:** After 5 minutes application of the DC working voltage, I=0.01 C V or 3µA, whichever is greater.
- **Load Life:** 1,000 hours application of the rated DC working voltage at +85°C, the capacitor shall meet the following limits:

Capacitance Change	Within ±20% of the initial measured value
tan δ	Less than 200% of the initial specified value
DC Leakage Current	Less than the initial specified value

- **Stability at Low and High Temperature:** Impedance ratio at 120Hz –25/20°C, –40/20°C.

W.V.	6.3	10	16	25	35	50
–25/20°C	4	3	2	2	2	2
–40/20°C	8	6	4	4	3	3

- **Shelf Life:** After 1,000 hours storage without load at +85°C, the capacitor shall meet the above "Load life."
- **Others shall be in accordance with JIS-C-5141 (1976).**

PANASONIC K CROSS REFERENCES:

Elna: RC2, **IC:** RSS, **Marcon:** SSM, **Nichicon:** SR/SA, **Rubycon:** MS7, **UCC:** SRG/SRA

Panasonic® KG-Series Miniature Aluminum Electrolytic Capacitors 105°C

Rating		Size	Digi-Key	Pricing						Panasonic
WV/DC	µF	Code	Part No.	1	10	100	500	1,000	5,000	Part No.
6.3	22	A	P900-ND	.30	2.03	14.30	49.40	78.00	68.00/M	ECE-A0JKG220
	33	B	P901-ND	.32	2.15	15.13	52.25	83.00	72.00/M	ECE-A0JKG330
	47	B	P902-ND	.33	2.22	15.68	54.15	86.00	74.00/M	ECE-A0JKG470
	68	C	P903-ND	.36	2.46	17.33	59.85	95.00	82.00/M	ECE-A0JKG680
	100	C	P904-ND•	.42	2.85	20.08	69.35	110.00	95.00/M	ECE-A0JKG101
	220	D	P941-ND	.62	4.55	32.50	117.00	182.00	169.00/M	ECE-A0JKG221
10	22	A	P905-ND	.32	2.15	15.13	52.25	83.00	72.00/M	ECE-A1AKG220
	33	B	P906-ND	.35	2.34	16.50	57.00	90.00	78.00/M	ECE-A1AKG330
	47	C	P907-ND	.37	2.50	17.60	60.80	96.00	83.00/M	ECE-A1AKG470
	68	C	P908-ND	.42	2.85	20.08	69.35	110.00	95.00/M	ECE-A1AKG680
	100	C	P942-ND	.42	3.08	22.00	79.20	123.00	114.00/M	ECE-A1AKG101
16	6.8	A	P909-ND	.30	2.03	14.30	49.40	78.00	68.00/M	ECE-A1CKG6R8
	10	A	P910-ND	.32	2.15	15.13	52.25	83.00	72.00/M	ECE-A1CKG100
	15	A	P911-ND	.32	2.15	15.13	52.25	83.00	72.00/M	ECE-A1CKG150
	22	B	P912-ND	.35	2.34	16.50	57.00	90.00	78.00/M	ECE-A1CKG220
	33	C	P913-ND•	.39	2.61	18.43	63.65	101.00	87.00/M	ECE-A1CKG330
	47	C	P914-ND•	.40	2.73	19.25	66.50	105.00	91.00/M	ECE-A1CKG470
	68	D	P943-ND	.62	4.55	32.50	117.00	182.00	169.00/M	ECE-A1CKG680
	100	D	P944-ND	.62	4.55	32.50	117.00	182.00	169.00/M	ECE-A1CKG101
25	6.8	A	P915-ND•	.32	2.15	15.13	52.25	83.00	72.00/M	ECE-A1EKG6R8
	10	A	P916-ND•	.32	2.15	15.13	52.25	83.00	72.00/M	ECE-A1EKG100
	15	B	P917-ND	.35	2.38	16.78	57.95	92.00	79.00/M	ECE-A1EKG150
	22	B	P918-ND•	.36	2.46	17.33	59.85	95.00	82.00/M	ECE-A1EKG220
	33	C	P919-ND	.44	3.00	21.18	73.15	116.00	100.00/M	ECE-A1EKG330
	47	D	P945-ND	.62	4.55	32.50	117.00	182.00	169.00/M	ECE-A1EKG470
	68	D	P946-ND	.62	4.55	32.50	117.00	182.00	169.00/M	ECE-A1EKG680
35	4.7	A	P920-ND•	.32	2.15	15.13	52.25	83.00	72.00/M	ECE-A1VKG4R7
	6.8	A	P921-ND	.32	2.15	15.13	52.25	83.00	72.00/M	ECE-A1VKG6R8
	10	B	P922-ND•	.34	2.30	16.23	56.05	89.00	77.00/M	ECE-A1VKG100
	15	C	P923-ND	.44	3.00	21.18	73.15	116.00	100.00/M	ECE-A1VKG150
	22	C	P924-ND•	.45	3.04	21.45	74.10	117.00	101.00/M	ECE-A1VKG220
	33	D	P947-ND	.62	4.55	32.50	117.00	182.00	169.00/M	ECE-A1VKG330
	47	D	P948-ND	.62	4.55	32.50	117.00	182.00	169.00/M	ECE-A1VKG470
50	0.1	A	P925-ND•	.30	2.03	14.30	49.40	78.00	68.00/M	ECE-A1HKG0R1
	0.15	A	P926-ND	.30	2.03	14.30	49.40	78.00	68.00/M	ECE-A1HKGR15
	0.22	A	P927-ND•	.30	2.03	14.30	49.40	78.00	68.00/M	ECE-A1HKGR22
	0.33	A	P928-ND•	.30	2.03	14.30	49.40	78.00	68.00/M	ECE-A1HKGR33
	0.47	A	P929-ND•	.30	2.03	14.30	49.40	78.00	68.00/M	ECE-A1HKGR47
	0.68	A	P930-ND	.30	2.03	14.30	49.40	78.00	68.00/M	ECE-A1HKGR68
	1	A	P931-ND•	.30	2.03	14.30	49.40	78.00	68.00/M	ECE-A1HKG010
	1.5	A	P932-ND	.30	2.03	14.30	49.40	78.00	68.00/M	ECE-A1HKG1R5
	2.2	A	P933-ND•	.30	2.03	14.30	49.40	78.00	68.00/M	ECE-A1HKG2R2
	3.3	A	P934-ND•	.32	2.15	15.13	52.25	83.00	72.00/M	ECE-A1HKG3R3
	4.7	A	P935-ND•	.32	2.15	15.13	52.25	83.00	72.00/M	ECE-A1HKG4R7
	6.8	B	P936-ND	.35	2.38	16.78	57.95	92.00	79.00/M	ECE-A1HKG6R8
	10	C	P937-ND•	.45	3.04	21.45	74.10	117.00	101.00/M	ECE-A1HKG100
	15	C	P938-ND	.46	3.12	22.00	76.00	120.00	104.00/M	ECE-A1HKG150
	22	D	P939-ND	.62	4.55	32.50	117.00	182.00	169.00/M	ECE-A1HKG220
	33	D	P940-ND	.62	4.55	32.50	117.00	182.00	169.00/M	ECE-A1HKG330

• **P900-KIT-ND** ***Digi-Key® KG-Series Capacitors Kit*** 10 each of parts indicated. (180 pieces total) Notebook style storage case........... **$34.95**

The KG-Series is a tantalum substitute for many applications.

Features: • Height is 7mm. • Anti-solvent in Freon.

Operating Temperature Range: –55°C to +105°C.

Capacitance Tolerance: ±20% at 120Hz, +20°C.

DC Leakage Current: I◀0.01CV or 3[µA] after 2 min. (whichever is greater).

tan δ (120Hz/120°C):

W.V.	6.3	10	16	25	35	50
tan δ (max.)	0.22	0.19	0.16	0.14	0.12	0.10

Low Temperature Impedance Stability at 120Hz:

W.V.	6.3	10	16	25	35	50
Z(−25°C)/Z(+20°C)	3	2	2	2	2	2
Z(−40°C)/Z(+20°C)	6	5	3	3	3	3
Z(−55°C)/Z(+20°C)	8	6	4	4	4	4

Load Life: After 1,000 hours application of DC rated working voltage at +105°C, the capacitor shall meet the following limits.

Capacitance change: < ±20% of the initial measured value.

tan ∂: < 200% of the initial specified value.

DC leakage current: < the initial specified value.

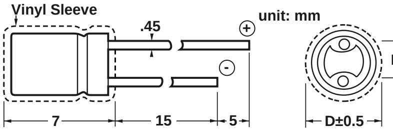
Anti-solvent: Can withstand circuit-board cleaning within 5 minutes in Freon TE, TES, or TP-35 at +40°C by dipping, steaming, or ultrasonic.

unit: in (mm)

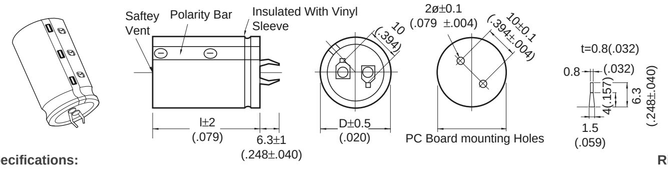
Size Code	Body Dia. D	x	Body Length L
A	.157 (4)	x	.276 (7)
B	.197 (5)	x	.276 (7)
C	.248 (6.3)	x	.276 (7)
D	.315 (8)	x	.276 (7)

(mm)

Body Dia. ØD	4	5	6.3	8
Lead Space P	1.5	2	2.5	3.5



Panasonic® TS-Series Large Aluminum Electrolytic Capacitors



CROSS REFERENCES

PANASONIC TSU
Elna: LP; **Marcon:** FTW/FHW; **Nichicon:** UB/PS;
Rubycon: LP/RP; **Sprague:** 80D; **UCC:** NMA.

PANASONIC TSUP
Matsushita: TSUP; **Nichichemi:** SMH; **Nichicon:** LQ;
Rubycon: USP; **Marcon:** DWF & CEFHW; **UCC:** SMH;
Sprague: 82D; **ICI:** LPR/LUG; **Mepco:** 3487.

PANASONIC TSNH
Elna: LPS/LPJ; **Marcon:** FTU/FHU; **Nichicon:** GH/GL/GM;
Rubycon: XLP/XRP; **Sprague:** 81D; **UCC:** KM.

PANASONIC TSHA
Matsushita: TSHA; **Nichichemi:** KMH; **Nichicon:** GQ;
Rubycon: MXP; **Marcon:** DUF & CEFHU; **UCC:** KMH;
Sprague: 81D; **Mepco:** 3488.

Specifications:

- **TSW Series: Standard Type** (16 ~ 250V/ –40 ~ +85°C/220 ~ 15,000µF)
- **TSU Series: Miniaturized Type** (16 ~ 250V/ –40 ~ +85°C/220 ~ 47,000µF)
  (400 ~ 450V/ –25 ~+ 85°C/68~330uF)
- **TSUP Series: Large Can Type** (16 ~ 250V/ –40 ~ +85°C/180 ~ 68,000µF)
- **TSNH Series: 105°C Type** (16 ~ 100V/ –40° ~ +105°C/470 ~ 33,000µF)
- **TSHA Series: Large Can Type** (10 ~ 250V/ –40 ~ +105°C/180 ~ 68,000µF)
- **TSHB Series: Large Can Type** (200 ~ 450V/ –40 ~ +105°C/82 ~ 2,200µF)

- **Capacitance Tolerance (at 120Hz):**

Type:	TSW	TSU	TSUP	TSNH	TSHA	TSHB
Tol.:	–10 ~ +30%	±20%	±20%	±20%	±20%	±20%

Surge Voltage & Surge Voltage Test: The DC surge voltage is the maximum voltage to which the capacitor should be subjected. The surge voltage listed below is applied in series with a 1,000 ohm resistor at a cycle of 0.5 minutes "ON" and 4.5 minutes "OFF", repeated 1,000 times at 25°C.

Rated DC Voltage:	16	25	35	50	63	100	200	250	400	450
Surge Voltage:	20	32	44	63	79	125	250	300	450	500

After the test, the capacitor shall meet the following limits: Capacitance change of ±20% of initial measured value; DC leakage current less than initial limits; and D.F. less than 150% of initial limits.

Ripple Voltage: The sum of the DC voltage plus the AC peak ripple voltage shall not exceed the rated DC voltage and there shall be no application of reversed voltage.

Ripple Current (mA):

Frequency (Hz):	50Hz	60Hz	120Hz	500Hz	1KHz	10 ~ 50KHz
16V ~ 100V:	0.93	0.95	1.0	1.05	1.06	1.15
160V ~ 450V:	0.75	0.8	1.0	1.2	1.25	1.4

D.C. Leakage Current: Measurements shall be made at rated working voltage at 20°C. The voltage shall be applied to the capacitor for a minimum period of 5 minutes before reading the leakage current. Maximum leakage current shall not exceed the value given by the following formula: 16 ~ 100V: in case of C X V = 100,000µFV I = 0.01CVµA max. in case of C X V = 100,000µFV I = 3 v C x VµA max. 160 ~ 450V: 1 = 3 v C x VµA max. where I = leakage current in mA, C = rated capacitance in µF V = DC rated WV in volts.

Load Life Test: The capacitor shall be subjected to application of the DC rated voltage with full rated ripple current in the specified ambient temperature for the specified life period. The capacitor shall then be removed from the test chamber and stabilized at room temperature. After reaching temperature stability; the capacitor shall not exceed the following specified values listed: Capacitance change within ±20% of the initial measured value. D.F. 150% of the initial limits. DC leakage current ≤5 initial limits.

W.V. DC	Cap. (µF)	Max. DC (mA) Leakage Current	85° (rms) Ripple Current (120Hz) A	Dimensions (mm)		Digi-Key Part No.	Price Each				Panasonic Part No.
				D	L		1	10	50	200	
TSW General Purpose +85°C (Not recommended for new design. Use TSU/TSUP series)											
35	1000	0.35	1.35	22	25	P6511-ND	1.90	1.53	1.26	.82	ECE-T35R102SW
TSU General Purpose +85°C, 2000 Hour Life											
16	4700	0.75	2.0	22	25	P6445-ND	2.54	2.04	1.68	1.09	ECE-S1CU472D
	6800	0.98	2.3	22	31.5	P6446-ND	3.13	2.51	2.06	1.35	ECE-S1CU682E
	10000	1.20	3.0	22	40	P6447-ND	3.13	2.57	2.16	1.51	ECE-S1CU103G
	22000	1.77	4.6	25	50	P6420-ND	5.19	4.26	3.58	2.50	ECE-S1CU223N
	33000	2.17	5.2	30	50	P6421-ND	6.13	5.20	4.49	3.37	ECE-S1CU333U
	47000	2.6	5.4	35	51	P6422-ND	7.92	6.71	5.79	4.35	ECE-S1CU473Z
25	3300	0.82	2.0	22	25	P6448-ND	3.11	2.49	2.05	1.34	ECE-S1EU332D
	4700	1.02	2.0	22	31.5	P6449-ND	3.09	2.48	2.04	1.33	ECE-S1EU472E
	6800	1.23	2.9	22	40	P6475-ND	3.12	2.56	2.15	1.50	ECE-S1EU682G
	10000	1.6	3.4	25	40	P6480-ND	3.85	3.16	2.65	1.85	ECE-S1EU103M
	22000	2.22	5.3	30	50	P6423-ND	6.24	5.28	4.56	3.42	ECE-S1EU223U
	33000	2.72	5.8	35	51	P6424-ND	8.42	7.13	6.16	4.62	ECE-S1EU333Z
35	2200	0.77	1.8	22	25	P6481-ND	3.22	2.58	2.12	1.38	ECE-S1VU222D
	3300	1.01	2.2	22	40	P6482-ND	3.26	2.61	2.14	1.40	ECE-S1VU332E
	4700	1.21	2.5	22	40	P6483-ND	3.45	2.77	2.27	1.48	ECE-S1VU472G
	6800	1.46	3.0	25	40	P6484-ND	3.85	3.16	2.65	1.85	ECE-S1VU682M
	10000	1.77	3.8	30	40	P6485-ND	4.85	3.98	3.34	2.33	ECE-S1VU103T
	15000	2.17	4.7	30	50	P6425-ND	5.58	4.72	4.08	3.06	ECE-S1VU153U
	22000	2.63	5.1	35	51	P6426-ND	7.76	6.57	5.68	4.26	ECE-S1VU223Z
50	2200	0.99	1.9	22	31.5	P6486-ND	3.19	2.56	2.10	1.37	ECE-S1HU222E
	3300	1.21	2.2	22	40	P6487-ND	3.46	2.78	2.28	1.49	ECE-S1HU332G
	4700	1.45	2.7	25	40	P6488-ND	3.76	3.09	2.60	1.81	ECE-S1HU472M
	6800	1.74	3.3	30	40	P6489-ND	5.04	4.13	3.47	2.42	ECE-S1HU682T
	10000	2.12	4.3	30	50	P6427-ND	5.78	4.89	4.23	3.17	ECE-S1HU103U
	15000	2.59	4.7	35	51	P6428-ND	7.72	6.66	5.85	4.61	ECE-S1HU153Z
63	1000	0.63	1.5	22	25	P6490-ND	3.28	2.63	2.16	1.41	ECE-S1JU102D
	2200	1.11	1.9	22	40	P6491-ND	3.27	2.68	2.25	1.57	ECE-S1JU222G
	3300	1.36	2.4	25	40	P6492-ND	4.20	3.45	2.90	2.02	ECE-S1JU332M
	4700	1.63	2.9	25	50	P6493-ND	5.29	4.34	3.65	2.54	ECE-S1JU472N
	6800	1.96	3.8	30	50	P6494-ND	6.00	5.08	4.39	3.29	ECE-S1JU682U
	10000	2.38	4.2	35	51	P6495-ND	7.78	6.71	5.90	4.64	ECE-S1JU103Z
100	470	0.47	1.2	22	25	P6496-ND	3.14	2.57	2.16	1.51	ECE-S2AU471D
	680	0.68	1.4	22	31.5	P6497-ND	3.22	2.58	2.12	1.38	ECE-S2AU681E
	1000	1.00	1.5	22	40	P6498-ND	3.90	3.20	2.69	1.87	ECE-S2AU102G
	2200	1.40	2.3	25	50	P6499-ND	5.47	4.63	4.00	3.00	ECE-S2AU222N
	3300	1.72	3.0	30	50	P6429-ND	7.65	6.48	5.59	4.20	ECE-S2AU332U
	4700	2.05	3.4	35	51	P6430-ND	9.25	7.98	7.01	5.52	ECE-S2AU472Z
200	220	0.62	1.15	22	31.5	P6540-ND	3.21	2.57	2.11	1.38	ECE-S2DU221E
	470	0.91	1.7	25	40	P6542-ND	4.02	3.30	2.77	1.93	ECE-S2DU471M
	680	1.10	2.15	30	40	P6544-ND	5.46	4.48	3.76	2.62	ECE-S2DU681T
	1000	1.34	2.8	35	40	P6546-ND	6.24	5.28	4.56	3.42	ECE-S2DU102Y
250	220	0.70	1.15	22	40	P6548-ND	3.30	2.71	2.28	1.59	ECE-S2EU221G
	330	0.86	1.4	25	40	P6549-ND	4.27	3.51	2.95	2.05	ECE-S2EU331M
	470	1.02	1.7	30	40	P6551-ND	5.73	4.70	3.95	2.75	ECE-S2EU471T
	680	1.23	2.15	30	50	P6553-ND	6.24	5.28	4.56	3.42	ECE-S2EU681U
	1000	1.5	2.8	35	51	P6431-ND	8.09	6.85	5.92	4.44	ECE-S2EU102Z
400	68	0.49	.44	25	25	P6432-ND	3.09	2.54	2.13	1.49	ECE-S2GU680J
	100	0.6	.59	25	31.5	P6433-ND	3.73	3.06	2.57	1.79	ECE-S2GU101K
	100	0.60	.59	22	40	P6533-ND	3.57	2.93	2.46	1.71	ECE-S2GU101G
	220	0.88	.95	30	40	P6435-ND	5.41	4.58	3.96	2.97	ECE-S2GU221T
450	47	0.43	.37	25	25	P6438-ND	3.12	2.56	2.15	1.50	ECE-S2WU470J
	68	0.52	.48	25	31.5	P6439-ND	3.62	2.97	2.50	1.74	ECE-S2WU680K
	100	0.63	.66	30	31.5	P6440-ND	4.84	3.97	3.33	2.32	ECE-S2WU101R
	220	0.94	1.2	35	40	P6442-ND	6.94	5.88	5.08	3.81	ECE-S2WU221Y
	330	1.15	1.4	35	51	P6443-ND	8.30	7.16	6.29	4.95	ECE-S2WU331Z
TSUP Miniaturized Size General Purpose +85°C, 3000 Hour Life†											
16	6800	0.98	3.15	20	25	P6858-ND	3.59	2.95	2.48	1.73	ECO-S1CP682AA
	8200	1.08	3.47	20	30	P6859-ND	3.75	3.08	2.59	1.80	ECO-S1CP822AA
	10000	1.20	3.78	20	35	P6860-ND	3.98	3.27	2.75	1.91	ECO-S1CP103AA
	10000	1.20	3.78	25	25	P6861-ND	3.97	3.18	2.61	1.70	ECO-S1CP103CA
	12000	1.31	4.52	20	35	P6862-ND	4.60	3.77	3.17	2.21	ECO-S1CP123AA
	12000	1.31	4.52	25	25	P6863-ND	3.82	3.14	2.64	1.84	ECO-S1CP123CA
	15000	1.46	5.26	20	40	P6864-ND	5.05	4.14	3.48	2.43	ECO-S1CP153AA
	15000	1.46	5.26	25	30	P6865-ND	4.28	3.51	2.95	2.06	ECO-S1CP153CA
	18000	1.60	5.57	22	40	P6866-ND	4.60	3.77	3.17	2.21	ECO-S1CP183BA
	18000	1.60	5.57	25	30	P6867-ND	4.81	3.94	3.31	2.31	ECO-S1CP183CA
	22000	1.77	6.10	22	45	P6868-ND	5.21	4.28	3.59	2.50	ECO-S1CP223BA
	22000	1.77	6.10	30	30	P6869-ND	5.83	4.78	4.02	2.80	ECO-S1CP223DA
	27000	1.97	6.31	25	45	P6870-ND	6.11	5.01	4.21	2.94	ECO-S1CP273CA
	27000	1.97	6.31	30	35	P6871-ND	6.60	5.42	4.55	3.17	ECO-S1CP273DA
	33000	2.17	6.84	25	50	P6872-ND	6.08	5.15	4.45	3.34	ECO-S1CP333CA
16	33000	2.17	6.84	35	30	P6873-ND	6.67	5.65	4.88	3.66	ECO-S1CP333EA
	39000	2.36	6.94	30	45	P6874-ND	6.99	5.92	5.11	3.84	ECO-S1CP393DA
	39000	2.36	6.94	35	35	P6875-ND	7.13	6.04	5.21	3.91	ECO-S1CP393EA
	47000	2.60	7.47	30	50	P6876-ND	8.04	6.80	5.88	4.41	ECO-S1CP473DA
	47000	2.60	7.47	35	40	P6877-ND	8.21	6.95	6.00	4.50	ECO-S1CP473EA
	56000	2.83	8.73	35	45	P6878-ND	9.32	7.89	6.82	5.11	ECO-S1CP563EA
	68000	3.12	9.05	35	50	P6879-ND	9.81	8.46	7.44	5.85	ECO-S1CP683EA
25	4700	1.02	3.05	20	25	P6880-ND	3.59	2.94	2.47	1.72	ECO-S1EP472AA
	5600	1.12	3.36	20	30	P6881-ND	3.80	3.12	2.62	1.83	ECO-S1EP562AA
	6800	1.23	3.47	20	35	P6882-ND	4.07	3.34	2.81	1.96	ECO-S1EP682AA
	6800	1.23	3.47	25	25	P6883-ND	3.83	3.06	2.52	1.64	ECO-S1EP682CA
	8200	1.35	3.57	20	40	P6884-ND	4.36	3.57	3.00	2.09	ECO-S1EP822AA
	8200	1.35	3.57	25	25	P6885-ND	3.62	2.97	2.50	1.74	ECO-S1EP822CA
	10000	1.50	3.78	22	35	P6886-ND	3.78	3.10	2.61	1.82	ECO-S1EP103BA
	10000	1.50	3.78	30	25	P6887-ND	4.36	3.57	3.00	2.09	ECO-S1EP103DA
	12000	1.64	4.10	22	40	P6888-ND	4.36	3.57	3.00	2.09	ECO-S1EP123BA
	12000	1.64	4.10	30	30	P6889-ND	4.93	4.04	3.40	2.37	ECO-S1EP123DA
	15000	1.83	4.63	22	50	P6890-ND	5.13	4.21	3.54	2.46	ECO-S1EP153BA
	15000	1.83	4.63	30	30	P6891-ND	5.67	4.65	3.91	2.72	ECO-S1EP153DA
	18000	2.01	5.47	25	45	P6892-ND	5.95	4.88	4.10	2.86	ECO-S1EP183CA
	18000	2.01	5.47	30	35	P6893-ND	6.40	5.25	4.41	3.07	ECO-S1EP183DA
	22000	2.22	6.10	25	50	P6894-ND	6.89	5.65	4.75	3.31	ECO-S1EP223CA
	22000	2.22	6.10	30	40	P6895-ND	6.26	5.30	4.58	3.43	ECO-S1EP223DA
	27000	2.46	6.21	30	45	P6896-ND	6.99	5.92	5.11	3.84	ECO-S1EP273DA
	27000	2.46	6.21	35	35	P6897-ND	7.16	6.06	5.24	3.93	ECO-S1EP273EA
	33000	2.72	6.84	30	50	P6898-ND	8.28	7.01	6.05	4.54	ECO-S1EP333DA
	33000	2.72	6.84	35	40	P6899-ND	8.45	7.16	6.18	4.64	ECO-S1EP333EA
	39000	2.96	7.36	35	45	P6900-ND	8.84	7.62	6.70	5.27	ECO-S1EP393EA
	47000	3.25	8.00	35	50	P6901-ND	10.22	8.81	7.75	6.09	ECO-S1EP473EA
35	3300	1.01	2.73	20	25	P6902-ND	3.69	3.03	2.55	1.77	ECO-S1VP332AA
	3900	1.10	2.94	20	30	P6903-ND	3.74	3.07	2.58	1.80	ECO-S1VP392AA
	4700	1.21	3.26	20	35	P6904-ND	3.82	3.14	2.64	1.84	ECO-S1VP472AA
	4700	1.21	3.26	25	25	P6905-ND	3.59	2.87	2.36	1.54	ECO-S1VP472CA
	5600	1.32	3.36	20	40	P6906-ND	4.19	3.44	2.89	2.02	ECO-S1VP562AA
	5600	1.32	3.36	25	25	P6907-ND	3.97	3.18	2.61	1.70	ECO-S1VP562CA
	6800	1.46	3.68	22	35	P6908-ND	3.58	2.94	2.47	1.72	ECO-S1VP682BA
	6800	1.46	3.68	25	30	P6909-ND	3.74	3.07	2.58	1.80	ECO-S1VP682CA
	8200	1.60	4.00	22	40	P6910-ND	4.11	3.37	2.83	1.97	ECO-S1VP822BA
	8200	1.60	4.00	25	35	P6911-ND	4.31	3.54	2.97	2.07	ECO-S1VP822CA
	10000	1.77	4.42	22	45	P6913-ND	4.68	3.84	3.23	2.25	ECO-S1VP103BA
	10000	1.77	4.42	35	25	P6914-ND	5.37	4.41	3.71	2.58	ECO-S1VP103EA
	12000	1.94	5.05	25	45	P6915-ND	5.54	4.55	3.82	2.66	ECO-S1VP123CA
	12000	1.94	5.05	35	30	P6916-ND	6.19	5.08	4.27	2.98	ECO-S1VP123EA
	15000	2.17	5.57	25	50	P6917-ND	6.65	5.45	4.58	3.19	ECO-S1VP153CA
	15000	2.17	5.57	35	30	P6918-ND	6.22	5.27	4.55	3.41	ECO-S1VP153EA
	18000	2.38	5.68	30	45	P6919-ND	6.74	5.71	4.93	3.70	ECO-S1VP183DA
	18000	2.38	5.68	35	35	P6920-ND	6.88	5.83	5.04	3.78	ECO-S1VP183EA
	22000	2.63	6.10	30	50	P6921-ND	8.28	7.01	6.05	4.54	ECO-S1VP223DA
	22000	2.63	6.10	35	40	P6922-ND	8.42	7.13	6.16	4.62	ECO-S1VP223EA
	27000	2.91	6.84	35	45	P6923-ND	9.12	7.86	6.91	5.44	ECO-S1VP273EA
	33000	3.22	7.15	35	50	P6924-ND	11.45	9.87	8.68	6.83	ECO-S1VP333EA
50	2200	0.99	2.26	20	25	P6925-ND	3.83	3.15	2.64	1.84	ECO-S1HP222AA
	2700	1.10	2.52	20	30	P6926-ND	4.14	3.40	2.86	1.99	ECO-S1HP272AA
	3300	1.21	2.73	20	35	P6927-ND	4.46	3.66	3.08	2.14	ECO-S1HP332AA
	3300	1.21	2.73	25	25	P6928-ND	3.64	2.99	2.51	1.75	ECO-S1HP332CA
	3900	1.32	2.75	20	40	P6929-ND	4.78	3.92	3.30	2.30	ECO-S1HP392AA
	3900	1.32	2.75	25	25	P6930-ND	3.97	3.26	2.74	1.91	ECO-S1HP392CA
	4700	1.45	3.03	22	35	P6931-ND	4.17	3.42	2.88	2.00	ECO-S1HP472BA
	4700	1.45	3.03	30	25	P6932-ND	4.78	3.92	3.30	2.30	ECO-S1HP472DA
	5600	1.58	3.42	22	40	P6933-ND	4.67	3.83	3.22	2.24	ECO-S1HP562BA
	5600	1.58	3.42	30	30	P6934-ND	5.28	4.33	3.64	2.54	ECO-S1HP562DA
	6800	1.74	3.85	22	50	P6935-ND	5.36	4.40	3.69	2.57	ECO-S1HP682BA
	6800	1.74	3.85	30	30	P6936-ND	5.97	4.90	4.12	2.87	ECO-S1HP682DA
	8200	1.92	4.41	25	45	P6937-ND	6.22	5.10	4.28	2.99	ECO-S1HP822CA
	8200	1.92	4.41	30	35	P6938-ND	6.70	5.50	4.62	3.22	ECO-S1HP822DA
	10000	2.12	4.97	25	50	P6939-ND	6.17	5.23	4.51	3.39	ECO-S1HP103CA
	10000	2.12	4.97	35	30	P6940-ND	6.80	5.76	4.97	3.73	ECO-S1HP103EA
	12000	2.32	5.58	30	45	P6941-ND	7.43	6.29	5.43	4.07	ECO-S1HP123DA
	12000	2.32	5.58	35	35	P6942-ND	7.60	6.43	5.56	4.17	ECO-S1HP123EA
	15000	2.59	6.44	30	50	P6943-ND	9.13	7.73	6.68	5.01	ECO-S1HP153DA
	15000	2.59	6.44	35	40	P6944-ND	9.31	7.88	6.81	5.11	ECO-S1HP153EA
	18000	2.84	6.94	35	45	P6945-ND	10.14	8.75	7.69	6.05	ECO-S1HP183EA
	22000	3.15	7.57	35	50	P6946-ND	12.35	10.65	9.36	7.36	ECO-S1HP223EA

(Continued)

W.V. DC	Cap. (µF)	Max. DC (mA) Leakage Current	85° (rms) Ripple Current (120Hz) A	Dimensions (mm) D	L	Digi-Key Part No.	Price Each 1	10	50	200	Panasonic Part No.
TSUP Miniaturized Size General Purpose +85°C, 3000 Hour Life† (cont.)											
100	1000	0.94	1.96	20	35	P6947-ND	4.67	3.83	3.22	2.24	ECO-S2AP102AA
	1000	0.94	1.96	25	25	P6948-ND	4.72	3.87	3.25	2.27	ECO-S2AP102CA
	1200	1.03	2.31	20	40	P6949-ND	6.13	5.03	4.23	2.95	ECO-S2AP122AA
	1200	1.03	2.31	25	30	P6990-ND	4.87	3.99	3.36	2.34	ECO-S2AP122CA
	1500	1.16	2.57	22	40	P6991-ND	5.44	4.46	3.75	2.61	ECO-S2AP152BA
	1500	1.16	2.57	30	25	P6992-ND	6.05	4.96	4.17	2.91	ECO-S2AP152DA
	1800	1.27	2.84	22	45	P6993-ND	6.05	4.96	4.17	2.91	ECO-S2AP182BA
	1800	1.27	2.84	30	30	P6101-ND	6.66	5.47	4.59	3.20	ECO-S2AP182DA
	2200	1.40	3.14	22	50	P6102-ND	6.79	5.57	4.68	3.26	ECO-S2AP222BA
	2200	1.40	3.14	30	30	P6103-ND	6.31	5.34	4.61	3.46	ECO-S2AP222DA
	2700	1.55	3.71	25	45	P6104-ND	6.80	5.76	4.97	3.73	ECO-S2AP272CA
	2700	1.55	3.71	30	35	P6105-ND	7.21	6.11	5.28	3.96	ECO-S2AP272DA
	3300	1.72	4.06	25	50	P6106-ND	7.91	6.70	5.79	4.34	ECO-S2AP332CA
	3300	1.72	4.06	30	40	P6107-ND	8.33	7.05	6.09	4.57	ECO-S2AP332DA
	3900	1.87	4.54	30	45	P6108-ND	9.41	7.97	6.88	5.16	ECO-S2AP392DA
	3900	1.87	4.54	35	35	P6109-ND	9.59	8.12	7.01	5.26	ECO-S2AP392EA
	4700	2.05	5.13	30	50	P6110-ND	9.92	8.56	7.52	5.92	ECO-S2AP472DA
	4700	2.05	5.13	35	40	P6111-ND	10.08	8.69	7.64	6.01	ECO-S2AP472EA
	5600	2.24	5.75	35	45	P6112-ND	11.85	10.21	8.98	7.06	ECO-S2AP562EA
	6800	2.47	6.60	35	50	P6113-ND	12.81	11.29	10.13	8.39	ECO-S2AP682EA
200	270	0.69	1.41	20	30	P6114-ND	4.21	3.45	2.90	2.02	ECO-S2DP271AA
	270	0.69	1.41	22	25	P6115-ND	3.66	2.94	2.41	1.58	ECO-S2DP271BA
	330	0.77	1.56	20	35	P6116-ND	4.50	3.69	3.10	2.16	ECO-S2DP331AA
	330	0.77	1.56	25	25	P6117-ND	3.68	3.02	2.54	1.77	ECO-S2DP331CA
	390	0.83	1.68	22	30	P6118-ND	3.81	3.12	2.63	1.83	ECO-S2DP391BA
	390	0.83	1.68	25	25	P6119-ND	4.01	3.29	2.76	1.93	ECO-S2DP391CA
	470	0.91	1.85	22	35	P6120-ND	4.17	3.42	2.88	2.00	ECO-S2DP471BA
	470	0.91	1.85	30	25	P6121-ND	4.78	3.92	3.30	2.30	ECO-S2DP471DA
	560	1.00	2.43	22	40	P6122-ND	4.70	3.86	3.24	2.26	ECO-S2DP561BA
	560	1.00	2.43	30	25	P6123-ND	5.31	4.36	3.66	2.55	ECO-S2DP561DA
	680	1.10	2.68	22	45	P6124-ND	5.36	4.40	3.69	2.57	ECO-S2DP681BA
	680	1.10	2.68	30	30	P6125-ND	5.97	4.90	4.12	2.87	ECO-S2DP681DA
	820	1.21	2.93	25	45	P6126-ND	6.17	5.06	4.26	2.97	ECO-S2DP821CA
	820	1.21	2.93	35	25	P6127-ND	6.91	5.67	4.76	3.32	ECO-S2DP821EA
	1000	1.34	3.25	25	50	P6128-ND	6.17	5.23	4.51	3.39	ECO-S2DP102CA
	1000	1.34	3.25	35	30	P6129-ND	6.80	5.76	4.97	3.73	ECO-S2DP102EA
	1200	1.46	3.50	30	45	P6130-ND	7.18	6.08	5.25	3.94	ECO-S2DP122DA
	1200	1.46	3.50	35	35	P6131-ND	7.36	6.23	5.38	4.04	ECO-S2DP122EA
	1500	1.64	3.87	30	50	P6132-ND	8.68	7.35	6.35	4.76	ECO-S2DP152DA
	1500	1.64	3.87	35	40	P6133-ND	8.85	7.50	6.47	4.86	ECO-S2DP152EA
	1800	1.80	4.32	35	45	P6134-ND	9.23	7.96	7.00	5.51	ECO-S2DP182EA
	2200	1.98	4.92	35	50	P6135-ND	11.03	9.51	8.36	6.57	ECO-S2DP222EA
400	68	0.49	0.76	20	30	P6136-ND	4.25	3.49	2.93	2.05	ECO-S2GP680AA
	68	0.49	0.76	22	25	P6137-ND	3.80	3.04	2.50	1.63	ECO-S2GP680BA
	82	0.54	0.83	20	30	P6138-ND	4.58	3.76	3.16	2.20	ECO-S2GP820AA
	82	0.54	0.83	22	25	P6139-ND	3.56	2.92	2.45	1.71	ECO-S2GP820BA
	100	0.60	0.92	20	35	P6140-ND	4.90	4.02	3.38	2.36	ECO-S2GP101AA
	100	0.60	0.92	25	25	P6141-ND	4.09	3.36	2.82	1.97	ECO-S2GP101CA
	120	0.65	1.02	20	40	P6142-ND	5.31	4.36	3.66	2.55	ECO-S2GP121AA
	120	0.65	1.02	25	30	P6143-ND	4.50	3.69	3.10	2.16	ECO-S2GP121CA
	150	0.73	1.16	22	40	P6144-ND	4.82	3.96	3.33	2.32	ECO-S2GP151BA
	150	0.73	1.16	30	25	P6145-ND	5.44	4.46	3.75	2.61	ECO-S2GP151DA
	180	0.80	1.44	22	45	P6146-ND	5.48	4.50	3.78	2.63	ECO-S2GP181BA
	180	0.80	1.44	30	30	P6147-ND	6.09	5.00	4.20	2.93	ECO-S2GP181DA
	220	0.88	1.49	22	50	P6148-ND	6.30	5.16	4.34	3.02	ECO-S2GP221BA
	220	0.88	1.49	30	30	P6149-ND	6.91	5.67	4.76	3.32	ECO-S2GP221DA
	270	0.98	1.67	25	45	P6150-ND	6.38	5.40	4.67	3.50	ECO-S2GP271CA
	270	0.98	1.67	35	30	P6151-ND	7.01	5.93	5.13	3.85	ECO-S2GP271EA
	330	1.08	1.90	30	40	P6152-ND	7.46	6.32	5.46	4.09	ECO-S2GP331DA
	330	1.08	1.90	35	35	P6153-ND	7.64	6.47	5.59	4.19	ECO-S2GP331EA
	390	1.18	2.13	30	45	P6154-ND	8.61	7.29	6.30	4.72	ECO-S2GP391DA
	390	1.18	2.13	35	40	P6155-ND	8.78	7.44	6.42	4.82	ECO-S2GP391EA
	470	1.30	2.39	35	45	P6156-ND	9.20	7.93	6.97	5.48	ECO-S2GP471EA
	560	1.41	2.69	35	50	P6157-ND	10.78	9.29	8.17	6.43	ECO-S2GP561EA
TSNH Long Life and High RIpple Current +105°C, 2000 Hour Life											
16	4700	0.75	2.0*	22	31.5	P6450-ND	3.10	2.49	2.04	1.33	ECE-S1CG472E
	6800	0.98	2.4*	22	40	P6451-ND	3.07	2.52	2.12	1.48	ECE-S1CG682G
	10000	1.2	2.9*	25	40	P6452-ND	3.61	2.96	2.49	1.74	ECE-S1CG103M
	15000	1.46	3.5*	25	50	P6453-ND	4.51	3.70	3.11	2.17	ECE-S1CG153N
	22000	1.77	4.2*	30	50	P6454-ND	5.38	4.56	3.94	2.96	ECE-S1CG223U
	33000	2.17	4.8*	35	51	P6455-ND	7.85	6.64	5.74	4.31	ECE-S1CG333Z
25	3300	.86	1.7*	22	31.5	P6456-ND	3.07	2.46	2.02	1.32	ECE-S1EG332E
	4700	1.02	2.2*	22	40	P6457-ND	3.31	2.65	2.18	1.42	ECE-S1EG472G
	6800	1.23	2.6*	25	40	P6458-ND	3.79	3.11	2.61	1.82	ECE-S1EG682M
	10000	1.50	3.1*	25	50	P6459-ND	4.69	3.85	3.24	2.25	ECE-S1EG103N
	22000	2.22	4.0*	35	51	P6461-ND	8.16	6.91	5.96	4.47	ECE-S1EG223Z
35	2200	.77	1.6*	22	31.5	P6462-ND	2.91	2.33	1.92	1.25	ECE-S1VG222E
	2200	.77	1.6*	25	25	P6589-ND	2.97	2.38	1.96	1.28	ECE-S1VG222J
	3300	1.01	1.8*	22	40	P6463-ND	3.31	2.65	2.18	1.42	ECE-S1VG332G
	4700	1.21	2.3*	25	40	P6464-ND	3.40	2.79	2.35	1.64	ECE-S1VG472M
	6800	1.46	2.9*	25	50	P6465-ND	4.17	3.42	2.87	2.00	ECE-S1VG682N
	10000	1.77	3.5*	30	50	P6466-ND	5.64	4.63	3.89	2.71	ECE-S1VG103U
	15000	2.17	3.9*	35	51	P6467-ND	6.92	5.86	5.06	3.80	ECE-S1VG153Z
50	2200	0.99	1.9	22	40	P6469-ND	3.27	2.62	2.16	1.41	ECE-S1HG222G
	3300	1.21	2.3	25	40	P6470-ND	3.50	2.88	2.42	1.68	ECE-S1HG332M
	4700	1.45	2.8	25	50	P6471-ND	4.26	3.49	2.94	2.05	ECE-S1HG472N
	6800	1.74	3.2	30	50	P6472-ND	5.82	4.78	4.01	2.80	ECE-S1HG682U
	10000	2.12	3.7	35	51	P6473-ND	6.61	5.60	4.84	3.63	ECE-S1HG103Z
63	1000	0.63	1.3	22	31.5	P6534-ND	3.02	2.42	1.99	1.30	ECE-S1JG102E
	2200	1.11	2.0	25	40	P6535-ND	3.50	2.88	2.42	1.68	ECE-S1JG222M
	3300	1.36	2.5	25	50	P6536-ND	4.51	3.70	3.11	2.17	ECE-S1JG332N
	4700	1.63	2.9	30	50	P6537-ND	5.99	4.92	4.13	2.88	ECE-S1JG472U
	6800	1.96	3.3	35	51	P6538-ND	7.08	5.99	5.18	3.88	ECE-S1JG682Z
100	470	0.47	1.2	22	31.5	P6474-ND	3.31	2.65	2.18	1.42	ECE-S2AG471E
	680	0.68	1.4	22	40	P6539-ND	3.32	2.73	2.29	1.60	ECE-S2AG681G
	1000	1.0	1.7	25	40	P6476-ND	4.12	3.38	2.84	1.98	ECE-S2AG102M
	2200	1.4	2.6	30	50	P6478-ND	6.92	5.86	5.06	3.80	ECE-S1AG222U
	3300	1.72	2.0	35	51	P6479-ND	8.33	7.18	6.31	4.97	ECE-S2AG332Z
200	220	0.62	1.0	22	40	P6554-ND	3.10	2.55	2.14	1.49	ECE-S2DG221G
	330	0.77	1.2	25	40	P6555-ND	3.79	3.11	2.61	1.82	ECE-S2DG331M
	470	0.91	1.4	25	50	P6556-ND	4.51	3.70	3.11	2.17	ECE-S2DG471N
	680	1.1	1.7	30	50	P6557-ND	5.85	4.80	4.03	2.81	ECE-S2DG681U
250	100	0.47	.72	22	31.5	P6579-ND	3.06	2.45	2.02	1.32	ECE-S2EG101E
	220	0.7	1.05	25	40	P6580-ND	3.87	3.18	2.67	1.86	ECE-S2EG221M
	330	0.86	1.25	25	50	P6581-ND	4.87	4.00	3.36	2.34	ECE-S2EG331N
	470	1.02	1.45	30	50	P6582-ND	5.26	4.46	3.85	2.89	ECE-S2EG471U
	680	1.23	1.8	35	51	P6583-ND	6.71	5.68	4.91	3.68	ECE-S2EG681Z

W.V. DC	Cap. (µF)	Max. DC (mA) Leakage Current	105° (rms) Ripple Current (120Hz) A	Dimensions (mm) D	L	Digi-Key Part No.	Price Each 1	10	50	200	Panasonic Part No.
400	47	0.41	.47	22	31.5	P6584-ND	3.48	2.79	2.29	1.50	ECE-S2GG470E
	68	0.49	.56	22	40	P6585-ND	3.25	2.67	2.24	1.56	ECE-S2GG680G
	100	0.6	.69	25	40	P6586-ND	3.86	3.17	2.67	1.86	ECE-S2GG101M
	220	0.88	1.0	30	50	P6587-ND	6.00	5.08	4.39	3.29	ECE-S2GG221U
	330	1.08	1.2	35	51	P6588-ND	7.65	6.60	5.80	4.56	ECE-S2GG331Z
TSHA Miniaturized Size, Long Life and High Ripple Current +105°C, 3000 Hour Life†											
16	6800	0.98	2.20	20	30	P6434-ND	3.81	3.13	2.63	1.83	ECO-S1CA682AA
	6800	0.98	2.20	22	25	P6436-ND	3.73	2.99	2.46	1.61	ECO-S1CA682BA
	8200	1.08	2.40	20	35	P6437-ND	4.15	3.41	2.86	2.00	ECO-S1CA822AA
	8200	1.08	2.40	22	30	P6441-ND	3.83	3.06	2.52	1.64	ECO-S1CA822BA
	10000	1.20	2.60	20	40	P6444-ND	4.60	3.77	3.17	2.21	ECO-S1CA103AA
	10000	1.20	2.60	25	25	P6460-ND	3.78	3.10	2.61	1.82	ECO-S1CA103CA
	12000	1.31	2.90	22	35	P6468-ND	3.82	3.14	2.64	1.84	ECO-S1CA123BA
	12000	1.31	2.90	30	25	P6477-ND	4.43	3.64	3.06	2.13	ECO-S1CA123DA
	15000	1.46	3.20	30	30	P6541-ND	4.89	4.01	3.37	2.35	ECO-S1CA153DA
	18000	1.60	3.50	22	45	P6543-ND	4.72	3.87	3.26	2.27	ECO-S1CA183BA
	18000	1.60	3.50	35	25	P6545-ND	5.74	4.71	3.96	2.76	ECO-S1CA183EA
	22000	1.77	3.80	25	45	P6547-ND	5.46	4.48	3.76	2.62	ECO-S1CA223CA
	22000	1.77	3.80	35	30	P6550-ND	6.19	5.08	4.27	2.98	ECO-S1CA223EA
	27000	1.97	4.20	25	50	P6552-ND	6.32	5.18	4.35	3.03	ECO-S1CA273CA
	27000	1.97	4.20	35	30	P6558-ND	7.05	5.79	4.86	3.39	ECO-S1CA273EA
	33000	2.17	4.70	30	45	P6559-ND	6.33	5.36	4.63	3.47	ECO-S1CA333DA
	33000	2.17	4.70	35	35	P6560-ND	6.50	5.50	4.75	3.57	ECO-S1CA333EA
	39000	2.36	5.10	30	50	P6561-ND	7.16	6.06	5.24	3.93	ECO-S1CA393DA
	39000	2.36	5.10	35	40	P6562-ND	7.33	6.21	5.36	4.02	ECO-S1CA393EA
	47000	2.60	5.50	35	45	P6563-ND	8.28	7.01	6.05	4.54	ECO-S1CA473EA
	56000	2.83	6.00	35	50	P6999-ND	9.57	8.10	7.00	5.25	ECO-S1CA563EA
25	4700	1.02	2.00	20	30	P6998-ND	3.95	3.24	2.72	1.90	ECO-S1EA472AA
	4700	1.02	2.00	22	25	P6566-ND	3.71	2.97	2.44	1.59	ECO-S1EA472BA
	5600	1.12	2.20	20	35	P6567-ND	4.20	3.45	2.90	2.02	ECO-S1EA562AA
	5600	1.12	2.20	22	30	P6997-ND	3.76	3.01	2.47	1.61	ECO-S1EA562BA
	6800	1.23	2.40	20	40	P6569-ND	4.26	3.50	2.94	2.05	ECO-S1EA682AA
	6800	1.23	2.40	25	25	P6570-ND	3.64	2.99	2.51	1.75	ECO-S1EA682CA
	8200	1.35	2.70	22	35	P6571-ND	3.76	3.09	2.59	1.81	ECO-S1EA822BA
	8200	1.35	2.70	30	25	P6572-ND	4.37	3.59	3.02	2.10	ECO-S1EA822DA
	10000	1.50	3.00	22	40	P6573-ND	4.17	3.42	2.88	2.00	ECO-S1EA103BA
	10000	1.50	3.00	30	30	P6574-ND	4.78	3.92	3.30	2.30	ECO-S1EA103DA
	12000	1.64	3.20	22	45	P6575-ND	4.74	3.89	3.27	2.28	ECO-S1EA123BA
	12000	1.64	3.20	35	25	P6576-ND	5.76	4.73	3.97	2.77	ECO-S1EA123EA
	15000	1.83	3.60	25	45	P6577-ND	5.52	4.53	3.80	2.65	ECO-S1EA153CA
	15000	1.83	3.60	35	30	P6578-ND	6.26	5.13	4.31	3.00	ECO-S1EA153EA
	18000	2.01	3.90	25	50	P6996-ND	6.26	5.13	4.31	3.00	ECO-S1EA183CA
	18000	2.01	3.90	35	35	P6590-ND	6.99	5.73	4.82	3.36	ECO-S1EA183EA
	22000	2.22	4.30	30	45	P6591-ND	6.28	5.32	4.59	3.44	ECO-S1EA223DA
	22000	2.22	4.30	35	35	P6592-ND	6.45	5.46	4.72	3.54	ECO-S1EA223EA
	27000	2.46	4.80	35	45	P6593-ND	7.39	6.26	5.40	4.05	ECO-S1EA273EA
	33000	2.72	5.50	35	50	P6594-ND	8.78	7.44	6.42	4.82	ECO-S1EA333EA
35	3300	1.01	1.90	20	30	P6595-ND	3.99	3.27	2.75	1.92	ECO-S1VA332AA
	3300	1.01	1.90	22	25	P6596-ND	3.59	2.87	2.36	1.54	ECO-S1VA332BA
	3900	1.10	2.00	20	35	P6597-ND	4.09	3.36	2.82	1.97	ECO-S1VA392AA
	3900	1.10	2.00	22	30	P6598-ND	3.73	2.99	2.46	1.61	ECO-S1VA392BA
	4700	1.21	2.20	20	40	P6599-ND	4.29	3.52	2.96	2.06	ECO-S1VA472AA
	4700	1.21	2.20	25	25	P6600-ND	3.66	3.01	2.53	1.76	ECO-S1VA472CA
	5600	1.32	2.40	22	35	P6658-ND	3.74	3.07	2.58	1.80	ECO-S1VA562BA
	5600	1.32	2.40	30	25	P6659-ND	4.36	3.57	3.00	2.09	ECO-S1VA562DA
	6800	1.46	2.60	22	40	P6660-ND	4.11	3.37	2.83	1.97	ECO-S1VA682BA
	6800	1.46	2.60	30	30	P6661-ND	4.72	3.87	3.26	2.27	ECO-S1VA682DA
	8200	1.60	2.90	22	50	P6662-ND	4.60	3.77	3.17	2.21	ECO-S1VA822BA
	8200	1.60	2.90	35	25	P6663-ND	5.62	4.61	3.88	2.70	ECO-S1VA822EA
	10000	1.77	3.20	25	45	P6664-ND	5.34	4.38	3.68	2.56	ECO-S1VA103CA
	10000	1.77	3.20	35	30	P6665-ND	6.07	4.98	4.19	2.92	ECO-S1VA103EA
	12000	1.94	3.50	25	50	P6666-ND	6.15	5.05	4.24	2.96	ECO-S1VA123CA
	12000	1.94	3.50	35	30	P6667-ND	6.89	5.65	4.75	3.31	ECO-S1VA123EA
	15000	2.17	3.90	30	45	P6668-ND	6.22	5.27	4.55	3.41	ECO-S1VA153DA
	15000	2.17	3.90	35	35	P6669-ND	6.40	5.42	4.68	3.51	ECO-S1VA153EA
	18000	2.38	4.30	35	40	P6670-ND	7.26	6.15	5.31	3.99	ECO-S1VA183EA
	22000	2.63	5.00	35	50	P6671-ND	8.59	7.27	6.28	4.71	ECO-S1VA223EA
50	1800	0.90	1.50	20	30	P6672-ND	4.40	3.61	3.03	2.11	ECO-S1HA182AA
	1800	0.90	1.50	22	25	P6673-ND	3.87	3.10	2.55	1.66	ECO-S1HA182BA
	2200	0.99	1.70	20	35	P6674-ND	3.69	3.03	2.55	1.77	ECO-S1HA222AA
	2200	0.99	1.70	22	30	P6675-ND	3.73	2.99	2.46	1.61	ECO-S1HA222BA
	2700	1.10	1.80	20	40	P6676-ND	4.11	3.38	2.84	1.98	ECO-S1HA272AA
	2700	1.10	1.80	25	25	P6677-ND	3.58	2.94	2.47	1.72	ECO-S1HA272CA
	3300	1.21	2.00	22	35	P6678-ND	3.62	2.97	2.50	1.74	ECO-S1HA332BA
	3300	1.21	2.00	25	30	P6679-ND	3.82	3.14	2.64	1.84	ECO-S1HA332CA
	3900	1.32	2.20	22	40	P6680-ND	3.99	3.27	2.75	1.92	ECO-S1HA392BA
	3900	1.32	2.20	30	25	P6681-ND	4.60	3.77	3.17	2.21	ECO-S1HA392DA
	4700	1.45	2.50	22	45	P6682-ND	4.43	3.64	3.06	2.13	ECO-S1HA472BA
	4700	1.45	2.50	35	25	P6683-ND	5.46	4.48	3.76	2.62	ECO-S1HA472EA
	5600	1.58	2.80	22	50	P6684-ND	5.01	4.11	3.46	2.41	ECO-S1HA562BA
	5600	1.58	2.80	35	30	P6685-ND	6.03	4.95	4.16	2.90	ECO-S1HA562EA
	6800	1.74	3.30	25	50	P6686-ND	5.83	4.78	4.02	2.80	ECO-S1HA682CA
	6800	1.74	3.30	35	30	P6687-ND	6.56	5.38	4.52	3.15	ECO-S1HA682EA
	8200	1.92	3.60	30	45	P6688-ND	6.89	5.65	4.75	3.31	ECO-S1HA822DA
	8200	1.92	3.60	35	35	P6689-ND	6.05	5.12	4.42	3.32	ECO-S1HA822EA
	10000	2.12	4.00	30	50	P6690-ND	6.81	5.77	4.98	3.74	ECO-S1HA103DA
	10000	2.12	4.00	35	40	P6691-ND	6.99	5.92	5.11	3.84	ECO-S1HA103EA
	12000	2.32	4.50	35	45	P6692-ND	7.89	6.68	5.77	4.33	ECO-S1HA123EA
	15000	2.59	4.80	35	50	P6693-ND	9.39	7.95	6.87	5.15	ECO-S1HA153EA
100	560	0.70	1.10	20	30	P6694-ND	4.31	3.54	2.97	2.07	ECO-S2AA561AA
	560	0.70	1.10	22	25	P6695-ND	3.66	3.01	2.53	1.76	ECO-S2AA561BA
	820	0.85	1.40	20	35	P6696-ND	4.68	3.84	3.23	2.25	ECO-S2AA821AA
	820	0.85	1.40	25	25	P6697-ND	3.86	3.17	2.67	1.86	ECO-S2AA821CA
	1000	0.94	1.70	20	40	P6698-ND	4.89	4.01	3.37	2.35	ECO-S2AA102AA
	1000	0.94	1.70	25	30	P6699-ND	4.28	3.51	2.95	2.06	ECO-S2AA102CA
	1200	1.03	1.80	22	40	P6700-ND	4.74	3.89	3.27	2.28	ECO-S2AA122BA
	1200	1.03	1.80	30	25	P6701-ND	5.36	4.40	3.69	2.57	ECO-S2AA122DA
	1500	1.16	2.10	22	45	P6702-ND	5.89	4.83	4.06	2.83	ECO-S2AA152BA
	1500	1.16	2.10	35	25	P6712-ND	6.70	5.50	4.62	3.22	ECO-S2AA152EA
	1800	1.27	2.30	25	45	P6728-ND	6.54	5.36	4.51	3.14	ECO-S2AA182CA
	1800	1.27	2.30	35	30	P6806-ND	6.45	5.46	4.72	3.54	ECO-S2AA182EA
	2200	1.40	2.60	25	50	P6994-ND	6.25	5.29	4.57	3.43	ECO-S2AA222CA
	2200	1.40	2.60	35	30	P6995-ND	7.14	6.05	5.23	3.92	ECO-S2AA222EA
	2700	1.55	2.90	30	45	P6807-ND	8.10	6.86	5.92	4.44	ECO-S2AA272DA
	2700	1.55	2.90	35	35	P6808-ND	8.30	7.02	6.07	4.55	ECO-S2AA272EA
	3300	1.72	3.20	30	50	P6809-ND	9.15	7.75	6.69	5.02	ECO-S2AA332DA
	3300	1.72	3.20	35	40	P6810-ND	9.60	8.13	7.02	5.27	ECO-S2AA332EA
	3900	1.87	3.60	35	45	P6811-ND	9.74	8.40	7.38	5.81	ECO-S2AA392EA
	4700	2.05	3.80	35	50	P6812-ND	11.16	9.62	8.46	6.65	ECO-S2AA472EA

(Continued)

* Ripple Current at 105°C.   † 2000 hour life for can sizes of 20mm diameter or length.

Panasonic® TS-Series Large Aluminum Electrolytic Capacitors *(Cont.)*

W.V. DC	Cap. (µF)	Max. DC (mA) Leakage Current	105° (rms) Ripple Current (120Hz) A	Dimensions (mm)		Digi-Key Part No.	Price Each				Panasonic Part No.
				D	L		1	10	50	200	
TSHA Miniaturized Size, Long Life and High Ripple Current +105°C, 3000 Hour Life† (Cont.)											
200	220	0.62	1.00	20	30	P6813-ND	3.75	3.08	2.59	1.80	ECO-S2DA221AA
	220	0.62	1.00	22	25	P6814-ND	3.97	3.18	2.61	1.70	ECO-S2DA221BA
	270	0.69	1.10	20	35	P6815-ND	4.46	3.66	3.08	2.14	ECO-S2DA271AA
	270	0.69	1.10	25	25	P6816-ND	3.95	3.24	2.72	1.90	ECO-S2DA271CA
	330	0.77	1.20	20	40	P6817-ND	4.82	3.96	3.33	2.32	ECO-S2DA331AA
	330	0.77	1.20	25	25	P6818-ND	4.23	3.47	2.92	2.03	ECO-S2DA331CA
	390	0.83	1.30	22	35	P6819-ND	4.36	3.57	3.00	2.09	ECO-S2DA391BA
	390	0.83	1.30	30	25	P6820-ND	4.97	4.08	3.43	2.39	ECO-S2DA391DA
	470	0.91	1.40	22	40	P6821-ND	4.84	3.97	3.34	2.33	ECO-S2DA471BA
	470	0.91	1.40	30	25	P6822-ND	5.46	4.48	3.76	2.62	ECO-S2DA471DA
	560	1.00	1.50	22	45	P6823-ND	5.50	4.51	3.79	2.64	ECO-S2DA561BA
	560	1.00	1.50	30	30	P6824-ND	6.11	5.01	4.21	2.94	ECO-S2DA561DA
	680	1.10	1.70	25	40	P6825-ND	6.28	5.15	4.33	3.02	ECO-S2DA681CA
	680	1.10	1.70	30	30	P6826-ND	6.76	5.55	4.66	3.25	ECO-S2DA681DA
	820	1.21	2.00	25	50	P6829-ND	6.05	5.12	4.42	3.32	ECO-S2DA821CA
	820	1.21	2.00	35	30	P6830-ND	6.67	5.65	4.88	3.66	ECO-S2DA821EA
	1000	1.34	2.20	30	45	P6831-ND	7.13	6.04	5.21	3.91	ECO-S2DA102DA
	1000	1.34	2.20	35	35	P6832-ND	7.30	6.18	5.34	4.01	ECO-S2DA102EA
	1200	1.46	2.30	30	50	P6833-ND	8.35	7.07	6.11	4.58	ECO-S2DA122DA
	1200	1.46	2.30	35	40	P6834-ND	8.52	7.21	6.23	4.67	ECO-S2DA122EA
	1500	1.64	2.50	35	50	P6835-ND	9.15	7.89	6.94	5.46	ECO-S2DA152EA
400	56	0.44	0.51	20	30	P6836-ND	4.42	3.62	3.05	2.12	ECO-S2GA560AA
	56	0.44	0.51	22	25	P6837-ND	3.64	2.99	2.51	1.75	ECO-S2GA560BA
	68	0.49	0.56	20	35	P6838-ND	4.78	3.92	3.30	2.30	ECO-S2GA680AA
	68	0.49	0.56	25	25	P6839-ND	3.97	3.26	2.74	1.91	ECO-S2GA680CA
	82	0.54	0.64	20	40	P6840-ND	4.99	4.09	3.44	2.40	ECO-S2GA820AA
	82	0.54	0.64	25	25	P6841-ND	4.17	3.42	2.88	2.00	ECO-S2GA820CA
	100	0.60	0.69	22	35	P6842-ND	4.34	3.56	2.99	2.08	ECO-S2GA101BA
	100	0.60	0.69	25	30	P6843-ND	4.54	3.72	3.13	2.18	ECO-S2GA101CA
	120	0.65	0.75	22	40	P6844-ND	4.95	4.06	3.41	2.38	ECO-S2GA121BA
	120	0.65	0.75	30	25	P6845-ND	5.56	4.56	3.83	2.67	ECO-S2GA121DA
	150	0.73	0.82	22	50	P6846-ND	5.81	4.77	4.01	2.79	ECO-S2GA151BA
	150	0.73	0.82	30	30	P6847-ND	6.42	5.27	4.43	3.08	ECO-S2GA151DA
	180	0.80	0.90	25	45	P6848-ND	6.75	5.53	4.65	3.24	ECO-S2GA181CA
	180	0.80	0.90	35	25	P6849-ND	6.38	5.40	4.67	3.50	ECO-S2GA181EA
	220	0.88	1.00	25	50	P6850-ND	6.80	5.76	4.97	3.73	ECO-S2GA221CA
	220	0.88	1.00	35	30	P6851-ND	7.43	6.29	5.43	4.07	ECO-S2GA221EA
	270	0.98	1.10	30	45	P6852-ND	8.12	6.88	5.94	4.46	ECO-S2GA271DA
	270	0.98	1.10	35	35	P6853-ND	8.30	7.02	6.07	4.55	ECO-S2GA271EA
	330	1.08	1.20	30	50	P6854-ND	9.48	8.03	6.93	5.20	ECO-S2GA331DA
	330	1.08	1.20	35	40	P6855-ND	9.65	8.17	7.06	5.30	ECO-S2GA331EA
	390	1.18	1.30	35	45	P6856-ND	9.92	8.56	7.52	5.92	ECO-S2GA391EA
	470	1.30	1.40	35	50	P6857-ND	11.47	9.89	8.69	6.84	ECO-S2GA471EA
TSHB Compact Size, Long Life and High Ripple Current +105°C, 3000 Hour Life											
200	390	0.83	1.30	22	30	P10106-ND	4.83	3.97	3.33	2.32	ECO-S2DB391BA
	390	0.83	1.30	25	25	P10107-ND	5.07	4.16	3.49	2.43	ECO-S2DB391CA
	470	0.91	1.40	22	35	P10108-ND	5.39	4.42	3.71	2.59	ECO-S2DB471BA
	470	0.91	1.40	25	30	P10109-ND	5.62	4.61	3.87	2.70	ECO-S2DB471CA
	560	1.00	1.50	30	25	P10110-ND	6.79	5.57	4.68	3.26	ECO-S2DB561DA
	820	1.21	2.00	25	45	P10111-ND	6.72	5.69	4.92	3.69	ECO-S2DB821CA
	820	1.21	2.00	35	25	P10112-ND	7.42	6.28	5.43	4.07	ECO-S2DB821EA
	1000	1.34	2.20	25	50	P10113-ND	6.86	5.81	5.02	3.77	ECO-S2DB102CA
	1000	1.34	2.20	35	30	P10114-ND	7.56	6.40	5.53	4.15	ECO-S2DB102EA
	1200	1.46	2.30	30	40	P10115-ND	7.98	6.76	5.84	4.38	ECO-S2DB122DA

† 2000 hour life for can sizes of 20mm diameter or length.

W.V. DC	Cap. (µF)	Max. DC (mA) Leakage Current	105° (rms) Ripple Current (120Hz) A	Dimensions (mm)		Digi-Key Part No.	Price Each				Panasonic Part No.
				D	L		1	10	50	200	
200	1200	1.46	2.30	35	35	P10116-ND	8.17	6.92	5.98	4.49	ECO-S2DB122EA
	1500	1.64	2.50	30	50	P10117-ND	9.64	8.16	7.05	5.29	ECO-S2DB152DA
	1500	1.64	2.50	35	40	P10118-ND	9.84	8.33	7.19	5.40	ECO-S2DB152EA
	1800	1.80	2.70	35	45	P10119-ND	10.26	8.84	7.77	6.12	ECO-S2DB182EA
	2200	1.98	2.90	35	50	P10120-ND	12.25	10.56	9.29	7.30	ECO-S2DB222EA
250	330	0.86	1.20	25	30	P10121-ND	5.82	4.78	4.01	2.80	ECO-S2EB331CA
	390	0.93	1.30	30	25	P10122-ND	6.96	5.71	4.80	3.34	ECO-S2EB391DA
	470	1.02	1.40	22	50	P10123-ND	7.13	5.85	4.91	3.42	ECO-S2EB471BA
	470	1.02	1.40	30	30	P10124-ND	6.55	5.54	4.79	3.59	ECO-S2EB471DA
	560	1.12	1.50	25	45	P10125-ND	6.93	5.87	5.07	3.81	ECO-S2EB561CA
	560	1.12	1.50	35	25	P10126-ND	7.64	6.47	5.59	4.19	ECO-S2EB561EA
	680	1.23	1.70	25	50	P10127-ND	8.17	6.92	5.98	4.49	ECO-S2EB681CA
	680	1.23	1.70	35	30	P10128-ND	8.37	7.09	6.12	4.59	ECO-S2EB681EA
	820	1.35	2.00	30	45	P10129-ND	9.49	8.03	6.94	5.21	ECO-S2EB821DA
	820	1.35	2.00	35	35	P10130-ND	9.68	8.20	7.08	5.31	ECO-S2EB821EA
	1000	1.50	2.20	30	50	P10131-ND	9.61	8.13	7.03	5.27	ECO-S2EB102DA
	1000	1.50	2.20	35	40	P10132-ND	9.80	8.30	7.17	5.38	ECO-S2EB102EA
	1200	1.64	2.30	35	45	P10133-ND	10.08	8.69	7.64	6.01	ECO-S2EB122EA
	1500	1.83	2.50	35	50	P10134-ND	12.18	10.50	9.23	7.26	ECO-S2EB152EA
400	82	0.54	0.64	22	30	P10135-ND	4.40	3.61	3.04	2.12	ECO-S2GB820BA
	100	0.60	0.69	22	30	P10136-ND	4.82	3.95	3.32	2.32	ECO-S2GB101BA
	100	0.60	0.69	25	25	P10137-ND	5.05	4.14	3.48	2.43	ECO-S2GB101CA
	120	0.65	0.75	22	35	P10138-ND	5.50	4.51	3.79	2.64	ECO-S2GB121BA
	120	0.65	0.75	25	30	P10139-ND	5.73	4.70	3.95	2.75	ECO-S2GB121CA
	150	0.73	0.82	22	40	P10140-ND	6.45	5.29	4.45	3.10	ECO-S2GB151BA
	150	0.73	0.82	30	25	P10141-ND	7.13	5.85	4.91	3.42	ECO-S2GB151DA
	180	0.80	0.90	22	45	P10142-ND	6.39	5.41	4.68	3.51	ECO-S2GB181BA
	180	0.80	0.90	30	30	P10143-ND	6.86	5.81	5.02	3.77	ECO-S2GB181DA
	220	0.88	1.00	25	45	P10144-ND	7.56	6.40	5.53	4.15	ECO-S2GB221CA
	220	0.88	1.00	35	25	P10145-ND	8.25	6.99	6.03	4.53	ECO-S2GB221EA
	270	0.98	1.10	25	50	P10146-ND	9.02	7.64	6.60	4.95	ECO-S2GB271CA
	270	0.98	1.10	35	30	P10147-ND	9.22	7.81	6.74	5.06	ECO-S2GB271EA
	330	1.08	1.20	30	45	P10148-ND	9.52	8.21	7.22	5.68	ECO-S2GB331DA
	330	1.08	1.20	35	35	P10149-ND	9.70	8.36	7.35	5.78	ECO-S2GB331EA
	390	1.18	1.30	30	50	P10150-ND	10.30	8.88	7.80	6.14	ECO-S2GB391DA
	390	1.18	1.30	35	40	P10151-ND	11.03	9.51	8.36	6.58	ECO-S2GB391EA
	470	1.30	1.40	35	45	P10152-ND	12.75	10.99	9.66	7.60	ECO-S2GB471EA
	560	1.30	1.40	35	50	P10153-ND	12.65	11.15	10.01	8.29	ECO-S2GB561EA
450	82	0.57	0.56	22	30	P10154-ND	4.54	3.72	3.13	2.18	ECO-S2WB820BA
	100	0.63	0.64	22	35	P10155-ND	5.19	4.25	3.57	2.49	ECO-S2WB101BA
	100	0.63	0.64	25	30	P10156-ND	5.41	4.44	3.73	2.60	ECO-S2WB101CA
	120	0.69	0.72	22	40	P10157-ND	5.86	4.81	4.04	2.82	ECO-S2WB121BA
	120	0.69	0.72	25	35	P10158-ND	6.09	5.00	4.20	2.93	ECO-S2WB121CA
	150	0.77	0.79	22	50	P10159-ND	6.68	5.48	4.60	3.21	ECO-S2WB151BA
	150	0.77	0.79	30	30	P10160-ND	6.28	5.32	4.59	3.44	ECO-S2WB151DA
	180	0.85	0.87	25	45	P10161-ND	6.55	5.54	4.79	3.59	ECO-S2WB181CA
	180	0.85	0.87	30	35	P10162-ND	7.01	5.94	5.13	3.85	ECO-S2WB181DA
	220	0.94	1.00	25	50	P10163-ND	7.64	6.47	5.59	4.19	ECO-S2WB221CA
	220	0.94	1.00	30	40	P10164-ND	8.10	6.86	5.92	4.44	ECO-S2WB221DA
	270	1.04	1.19	30	45	P10165-ND	9.30	7.87	6.80	5.10	ECO-S2WB271DA
	270	1.04	1.19	35	35	P10166-ND	9.49	8.03	6.94	5.21	ECO-S2WB271EA
	330	1.15	1.38	30	50	P10167-ND	10.15	8.75	7.70	6.05	ECO-S2WB331DA
	330	1.15	1.38	35	40	P10168-ND	10.33	8.91	7.83	6.16	ECO-S2WB331EA
	390	1.25	1.55	35	45	P10169-ND	12.08	10.41	9.15	7.20	ECO-S2WB391EA
	470	1.37	1.74	35	50	P10170-ND	12.55	11.06	9.93	8.22	ECO-S2WB471EA

Panasonic® AA-Series Computer Grade Capacitors

Features:

- Standard 10-32, high post screw threads (included)
- High ripple current capability with low ESR

Specifications:

- Working Voltage Range: 10 ~ 450VDC • Capacitance Tolerance: -10/+50% • Operating Temperature Range: -40 / +85°C • Rated Endurance: +85°C for 3000 hours
- DC Leakage Current: $3\sqrt{CV}$ (µA) or 5mA maximum after 5 minutes at 20°C

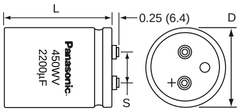
Rated Voltage:	25	40	50	100	250	350	450
Surge Voltage:	32	50	63	125	300	400	500

Ripple Current Frequency Correction Factors

Frequency (Hz):	50	60	100~ 120	300~ 360	1k	10k~ 50k~
25~100 WV:	0.9	0.95	1.0	1.05	1.08	1.15
250~450 WV:	0.75	0.8	1.0	1.2	1.25	1.4

CROSS REFERENCES

Sprague: 36D, 36DX, 36DE
Mallory: CGS, CGH
GE: 23A, 23M **UCC:** 36DA
Philips: 3186 **CDE:** DCMX

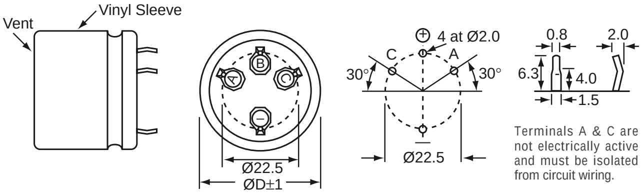


Ripple Current Temperature Correction Factors

Max Temperature	85°C	70°C	60°C	≤45°C
G-AA	1.0	1.6	2.0	2.2

WV DC	Cap (µF)	120Hz, 20°C ESR (Ω)	120Hz, 85°C R.C. (A)	DImensions – In. (mm)			Digi-Key Part No.	Price Each				Panasonic Part No.
				D	L	S		1	10	50	200	
25	12000	0.042	5.13	1.375 (35)	2.125 (54)	0.500 (12.7)	P10072-ND	19.38	17.53	16.03	13.79	EEG-AA1E123CCE
	22000	0.023	6.05	2.000 (51)	2.125 (54)	0.875 (22.2)	P10073-ND	21.83	19.74	18.06	15.53	EEG-AA1E223FCE
	47000	0.010	12.72	2.000 (51)	3.125 (79)	0.875 (22.2)	P10074-ND	22.85	21.34	19.97	17.90	EEG-AA1E473FGE
	68000	0.009	17.14	2.000 (51)	3.625 (92)	0.875 (22.2)	P10075-ND	25.17	23.51	21.99	19.72	EEG-AA1E683FHE
40	6000	0.073	6.06	1.375 (35)	3.125 (79)	0.500 (12.7)	P10076-ND	19.40	17.55	16.05	13.81	EEG-AA1G602CGE
	13000	0.034	11.76	2.000 (51)	4.125 (105)	0.875 (22.2)	P10077-ND	20.36	19.01	17.79	15.95	EEG-AA1G133FKE
	22000	0.020	13.06	2.000 (51)	3.125 (79)	0.875 (22.2)	P10078-ND	22.03	20.58	19.25	17.26	EEG-AA1G223FGE
50	4100	0.107	5.40	1.375 (35)	3.125 (79)	0.500 (12.7)	P10079-ND	19.48	17.62	16.12	13.86	EEG-AA1H412CGE
	6800	0.065	6.42	1.375 (35)	3.125 (79)	0.500 (12.7)	P10080-ND	20.43	18.48	16.90	14.54	EEG-AA1H682CGE
	10000	0.044	8.79	1.375 (35)	4.125 (105)	0.500 (12.7)	P10081-ND	21.30	19.27	17.63	15.16	EEG-AA1H103CKE
	15000	0.029	11.35	2.000 (51)	4.125 (105)	0.875 (22.2)	P10082-ND	22.08	20.62	19.29	17.29	EEG-AA1H153FKE
	20000	0.022	14.15	2.000 (51)	4.125 (105)	0.875 (22.2)	P10083-ND	23.71	22.14	20.72	18.57	EEG-AA1H203FKE
100	2500	0.117	4.12	1.375 (35)	2.125 (54)	0.500 (12.7)	P10084-ND	21.00	19.00	17.38	14.95	EEG-AA2A252CCE
	4000	0.073	6.53	2.000 (51)	2.125 (54)	0.875 (22.2)	P10085-ND	20.97	19.59	18.33	16.43	EEG-AA2A402FCE
	10000	0.029	8.16	2.000 (51)	3.625 (92)	0.875 (22.2)	P10086-ND	27.58	25.75	24.09	21.60	EEG-AA2A103FHE
	18000	0.016	12.85	2.500 (64)	4.125 (105)	1.125 (28.6)	P10087-ND	37.77	35.28	33.00	29.59	EEG-AA2A183GKE
250	550	0.401	2.91	1.375 (35)	4.125 (105)	0.500 (12.7)	P10088-ND	20.58	18.61	17.03	14.65	EEG-AA2E551CKE
	1200	0.184	4.18	2.000 (51)	2.125 (54)	0.875 (22.2)	P10089-ND	20.73	19.36	18.11	16.24	EEG-AA2E122FCE
	6000	0.036	13.20	3.000 (76)	3.125 (79)	1.250 (31.8)	P10090-ND	48.42	45.21	42.30	37.92	EEG-AA2E602HGE
	10000	0.022	17.75	3.000 (76)	4.625 (117)	1.250 (31.8)	P10091-ND	66.35	61.95	57.96	51.96	EEG-AA2E103HLE
350	1000	0.221	4.11	2.000 (51)	2.625 (67)	0.875 (22.2)	P10092-ND	30.25	28.25	26.43	23.69	EEG-AA2V102FEE
	5600	0.039	10.06	3.000 (76)	4.625 (117)	1.250 (31.8)	P10093-ND	79.53	74.26	69.47	62.28	EEG-AA2V562HLE
450	450	0.491	2.93	2.000 (51)	3.125 (79)	0.875 (22.2)	P10094-ND	27.46	25.65	24.00	21.51	EEG-AA2W451FGE
	1000	0.221	5.85	2.000 (51)	3.625 (92)	0.875 (22.2)	P10095-ND	36.14	33.75	31.57	28.31	EEG-AA2W102FHE
	1800	0.122	7.47	2.000 (51)	5.625 (143)	0.875 (22.2)	P10096-ND	49.63	46.35	43.36	38.87	EEG-AA2W182FPE
	1800	0.122	9.46	3.000 (76)	5.625 (143)	1.250 (31.8)	P10097-ND	58.53	54.65	51.13	45.84	EEG-AA2W182HPE
	2200	0.100	9.27	2.500 (64)	4.125 (105)	1.125 (28.6)	P10098-ND	57.62	53.81	50.34	45.13	EEG-AA2W222GKE
	2400	0.092	7.74	3.000 (76)	5.125 (130)	1.250 (31.8)	P10099-ND	62.46	58.32	54.56	48.92	EEG-AA2W242HNE
	3100	0.071	11.18	2.500 (64)	5.625 (143)	1.125 (28.6)	P10100-ND	72.35	67.56	63.20	56.66	EEG-AA2W312GPE
	3600	0.061	12.07	3.000 (76)	4.625 (117)	1.250 (31.8)	P10101-ND	84.96	79.33	74.21	66.54	EEG-AA2W362HLE
Mounting Clamp, 1.375" (34.9mm) diameter with 2 tabs							P10102-ND	2.57	2.06	1.69	1.11	MC36B2
Mounting Clamp, 2.000" (50.8mm) diameter with 3 tabs							P10103-ND	3.07	2.46	2.02	1.32	MC51B3
Mounting Clamp, 2.500" (63.5mm) diameter with 3 tabs							P10104-ND	3.34	2.67	2.20	1.43	MC64B3
Mounting Clamp, 3.000" (76.2mm) diameter with 3 tabs							P10105-ND	3.14	2.58	2.17	1.51	MC77B3

Panasonic T-UP Series Snap-In Capacitors



Terminals A & C are not electrically active and must be isolated from circuit wiring.

FEATURES:

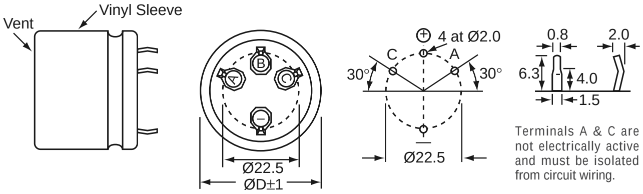
• 4 terminal mounting provides stability and keyed polarity • Replaces T-U series with higher capacitance and ripple current per case size • General purpose rated at 85°C, 3000 hour endurance • 35 and 40 mm diameter case sizes up to 80 mm in length • Top vent construction

Rated Working Voltage	16 ~ 250 VDC	350 ~ 450 VDC
Operating Temperature	-40 ~ +85°C	-25 ~ +85°C
Nominal Capacitance	1500 ~ 120000µF	470 ~ 1800µF
Endurance	2000 hours at +85°C with maximum specified ripple current	

Rated DC Voltage:	16	25	35	50	63	80	100	200	250	350	400	450
Surge Voltage:	20	32	44	63	79	100	125	250	300	400	450	500

Cap (µF)	Size (mm) D X L	Max. 85°C Ripple (Arms) 120 Hz	10k~50kHz	Max. 20°C 120Hz ESR (Ω)	Digi-Key Part No.	Price Each 1	10	50	Panasonic Part No.
16WV DC									
68000	35 x 50	9.05	10.41	0.018	P10000-ND	9.13	7.87	6.92	ECE-T1CP683EA
82000	35 x 60	9.94	11.43	0.018	P10001-ND	10.76	9.28	8.16	ECE-T1CP823EA
82000	40 x 50	10.29	11.83	0.019	P10003-ND	10.93	9.42	8.28	ECE-T1CP823FA
100000	35 x 80	11.00	12.65	0.019	P10002-ND	12.33	10.87	9.75	ECE-T1CP104EA
100000	40 x 60	11.36	13.06	0.020	P10004-ND	11.71	10.32	9.26	ECE-T1CP104FA
120000	40 x 80	12.42	14.28	0.018	P10005-ND	14.36	12.65	11.35	ECE-T1CP124FA
25WV DC									
47000	35 x 50	8.00	9.20	0.017	P10006-ND	9.05	7.80	6.86	ECE-T1EP473EA
56000	35 x 60	8.64	9.94	0.017	P10007-ND	10.61	9.14	8.04	ECE-T1EP563EA
56000	40 x 50	8.96	10.30	0.018	P10009-ND	10.77	9.29	8.16	ECE-T1EP563FA
68000	35 x 80	9.44	10.86	0.017	P10008-ND	12.08	10.65	9.55	ECE-T1EP683EA
68000	40 x 60	9.76	11.22	0.018	P10010-ND	11.48	10.12	9.08	ECE-T1EP683FA
100000	40 x 80	11.68	13.43	0.018	P10011-ND	14.72	13.31	12.18	ECE-T1EP104FA
35WV DC									
33000	35 x 50	7.15	8.22	0.018	P10012-ND	9.89	8.52	7.49	ECE-T1VP333EA
39000	35 x 60	7.94	9.13	0.015	P10013-ND	11.22	9.67	8.50	ECE-T1VP393EA
39000	40 x 50	7.79	8.96	0.017	P10015-ND	10.79	9.51	8.53	ECE-T1VP393FA
47000	35 x 80	9.53	10.96	0.015	P10014-ND	12.79	11.27	10.11	ECE-T1VP473EA
47000	40 x 60	8.58	9.87	0.017	P10016-ND	12.11	10.68	9.58	ECE-T1VP473FA
56000	40 x 80	10.17	11.70	0.017	P10017-ND	14.82	13.06	11.72	ECE-T1VP563FA
50WV DC									
22000	35 x 50	7.57	8.71	0.023	P10018-ND	10.74	9.26	8.14	ECE-T1HP223EA
27000	35 x 60	8.31	9.56	0.018	P10019-ND	11.72	10.11	8.88	ECE-T1HP273EA
27000	40 x 50	8.12	9.34	0.021	P10021-ND	11.24	9.90	8.89	ECE-T1HP273FA
33000	35 x 80	9.23	10.51	0.015	P10020-ND	13.52	11.92	10.70	ECE-T1HP333EA
33000	40 x 60	8.86	10.19	0.018	P10022-ND	12.80	11.28	10.12	ECE-T1HP333FA
39000	40 x 80	9.79	11.26	0.015	P10023-ND	15.61	13.76	12.35	ECE-T1HP393FA
63WV DC									
12000	35 x 50	7.15	8.22	0.035	P10024-ND	8.40	7.24	6.37	ECE-T1JP123EA
15000	35 x 60	7.71	8.87	0.028	P10025-ND	10.08	8.69	7.64	ECE-T1JP153EA
15000	40 x 50	7.53	8.66	0.033	P10027-ND	10.85	9.35	8.22	ECE-T1JP153FA
18000	35 x 80	9.41	10.82	0.023	P10026-ND	11.28	9.94	8.92	ECE-T1JP183EA
18000	40 x 60	8.28	9.52	0.028	P10028-ND	10.80	9.51	8.54	ECE-T1JP183FA
22000	40 x 80	9.97	11.47	0.023	P10029-ND	13.32	11.74	10.54	ECE-T1JP223FA
80WV DC									
8200	35 x 50	5.83	6.70	0.051	P10030-ND	9.24	7.97	7.00	ECE-T1KP822EA
10000	35 x 60	6.38	7.34	0.041	P10031-ND	11.14	9.60	8.44	ECE-T1KP103EA
10000	40 x 50	6.56	7.54	0.041	P10033-ND	10.65	9.38	8.42	ECE-T1KP103FA
12000	35 x 80	6.92	7.96	0.035	P10032-ND	12.42	10.95	9.82	ECE-T1KP123EA
12000	40 x 60	7.29	8.38	0.035	P10034-ND	11.99	10.57	9.48	ECE-T1KP123FA
15000	40 x 80	8.93	10.27	0.028	P10035-ND	14.94	13.16	11.81	ECE-T1KP153FA
100WV DC									
6800	35 x 50	6.60	7.59	0.049	P10036-ND	11.17	9.85	8.84	ECE-T2AP682EA
8200	35 x 60	7.05	8.12	0.040	P10037-ND	12.38	10.91	9.79	ECE-T2AP822EA
8200	40 x 50	7.28	8.37	0.040	P10039-ND	13.19	11.62	10.43	ECE-T2AP822FA
10000	35 x 80	7.74	8.90	0.033	P10038-ND	14.25	12.89	11.79	ECE-T2AP103EA
10000	40 x 60	7.97	9.17	0.033	P10040-ND	15.25	13.44	12.06	ECE-T2AP103FA
12000	40 x 80	8.65	9.95	0.026	P10041-ND	16.75	15.15	13.86	ECE-T2AP123FA
200WV DC									
2200	35 x 50	4.92	6.89	0.113	P10042-ND	9.99	8.61	7.57	ECE-T2DP222EA
2700	35 x 60	5.41	7.57	0.092	P10043-ND	10.46	9.02	7.93	ECE-T2DP272EA
2700	40 x 50	5.41	7.57	0.092	P10045-ND	10.54	9.29	8.34	ECE-T2DP272FA
3300	35 x 80	5.90	8.26	0.075	P10044-ND	12.54	11.05	9.92	ECE-T2DP332EA
3300	40 x 60	5.90	8.26	0.075	P10046-ND	11.38	10.03	9.00	ECE-T2DP332FA
3900	40 x 80	6.40	8.96	0.064	P10047-ND	14.49	12.77	11.46	ECE-T2DP392FA
250WV DC									
1500	35 x 50	4.04	5.66	0.166	P10048-ND	10.34	8.92	7.84	ECE-T2EP152EA
1800	35 x 60	4.49	6.29	0.138	P10049-ND	11.37	9.80	8.62	ECE-T2EP182EA
1800	40 x 50	4.49	6.29	0.138	P10051-ND	11.50	9.91	8.71	ECE-T2EP182FA
2200	35 x 80	4.94	6.92	0.113	P10050-ND	12.79	11.27	10.11	ECE-T2EP222EA
2200	40 x 60	4.94	6.92	0.113	P10052-ND	12.36	10.90	9.78	ECE-T2EP222FA
2700	40 x 80	5.39	7.55	0.092	P10053-ND	15.18	13.38	12.01	ECE-T2EP272FA
350WV DC									
680	35 x 50	2.96	4.14	0.366	P10054-ND	10.29	8.87	7.80	ECE-T2VP681EA
1000	35 x 60	3.19	4.47	0.249	P10055-ND	12.02	10.59	9.51	ECE-T2VP102EA
1000	40 x 50	3.19	4.47	0.249	P10057-ND	12.07	10.64	9.55	ECE-T2VP102FA
1200	35 x 80	3.64	5.10	0.207	P10056-ND	15.09	13.30	11.93	ECE-T2VP122EA
1200	40 x 60	3.64	5.10	0.207	P10058-ND	13.61	11.99	10.76	ECE-T2VP122FA
1800	40 x 80	4.10	5.74	0.136	P10059-ND	18.32	16.57	15.16	ECE-T2VP182FA
400WV DC									
560	35 x 50	2.69	3.77	0.444	P10060-ND	10.12	8.72	7.67	ECE-T2GP561EA
680	35 x 60	2.93	4.10	0.366	P10061-ND	10.80	9.51	8.54	ECE-T2GP681EA
820	40 x 50	3.18	4.45	0.303	P10063-ND	11.92	10.50	9.43	ECE-T2GP821FA
1000	35 x 80	3.42	4.79	0.249	P10062-ND	14.97	13.19	11.84	ECE-T2GP102EA
1000	40 x 60	3.42	4.79	0.249	P10064-ND	13.49	11.89	10.67	ECE-T2GP102FA
1500	40 x 80	3.91	5.47	0.166	P10065-ND	18.67	16.89	15.45	ECE-T2GP152FA
450WV DC									
470	35 x 50	2.53	3.54	0.529	P10066-ND	11.11	9.58	8.42	ECE-T2WP471EA
560	35 x 60	2.76	3.86	0.444	P10067-ND	11.59	9.99	8.78	ECE-T2WP561EA
680	40 x 50	2.99	4.19	0.366	P10069-ND	13.16	11.60	10.41	ECE-T2WP681FA
820	35 x 80	3.22	4.51	0.303	P10068-ND	14.89	13.47	12.32	ECE-T2WP821EA
820	40 x 60	3.22	4.51	0.303	P10070-ND	14.96	13.18	11.83	ECE-T2WP821FA
1200	40 x 80	3.45	4.83	0.207	P10071-ND	18.17	16.97	15.88	ECE-T2WP122FA

Panasonic T-HA Series Snap-In Capacitors



Terminals A & C are not electrically active and must be isolated from circuit wiring.

FEATURES:

• 4 terminal mounting provides stability and keyed polarity • Replaces T-NHE series with higher capacitance and ripple current per case size • Industrial grade with 3000 hour endurance at 105° C • 35 and 40 mm diameter case sizes up to 80 mm in length • Top vent construction

Rated Working Voltage	16 ~ 250 VDC	350 ~ 450 VDC
Operating Temperature	-40 ~ +105°C	-25 ~ +105°C
Nominal Capacitance	1200 ~ 120000µF	470 ~ 1500µF
Endurance	2000 hours at +105°C with maximum specified ripple current	

Rated DC Voltage:	16	25	35	50	63	80	100	200	250	350	400	450
Surge Voltage:	20	32	44	63	79	100	125	250	300	400	450	500

Cap (µF)	Size (mm) D X L	Max. 85°C Ripple (Arms) 120 Hz	10k~50kHz	Max. 20°C 120Hz ESR (Ω)	Digi-Key Part No.	Price Each 1	10	50	Panasonic Part No.
16WV DC									
56000	35 x 50	6.00	6.90	0.018	P10612-ND	11.68	10.07	8.85	ECE-T1CA563EA
68000	35 x 60	6.62	7.61	0.017	P10613-ND	11.79	10.39	9.32	ECE-T1CA683EA
68000	40 x 50	7.29	8.38	0.019	P10614-ND	11.85	10.44	9.37	ECE-T1CA683FA
82000	40 x 60	7.29	8.38	0.017	P10615-ND	13.41	11.82	10.61	ECE-T1CA823FA
100000	35 x 80	8.03	9.23	0.015	P10616-ND	14.05	12.38	11.11	ECE-T1CA104EA
120000	40 x 80	8.79	10.11	0.014	P10617-ND	14.35	12.98	11.87	ECE-T1CA124FA
25WV DC									
33000	35 x 50	5.50	6.33	0.020	P10618-ND	10.94	9.43	8.29	ECE-T1EA333EA
47000	35 x 60	6.56	7.54	0.017	P10619-ND	11.73	10.34	9.28	ECE-T1EA473EA
47000	40 x 50	6.47	7.44	0.019	P10620-ND	11.81	10.41	9.34	ECE-T1EA473FA
56000	35 x 80	7.25	8.34	0.017	P10621-ND	12.54	11.05	9.92	ECE-T1EA563EA
56000	40 x 60	7.17	8.25	0.015	P10622-ND	13.29	11.71	10.51	ECE-T1EA563FA
82000	40 x 80	8.68	9.98	0.014	P10623-ND	14.18	12.83	11.74	ECE-T1EA823FA
35WV DC									
22000	35 x 50	5.00	5.75	0.026	P10624-ND	11.21	9.67	8.50	ECE-T1VA223EA
27000	35 x 60	5.53	6.36	0.021	P10625-ND	11.28	9.94	8.92	ECE-T1VA273EA
27000	40 x 50	5.44	6.26	0.025	P10626-ND	11.37	10.02	9.00	ECE-T1VA273FA
33000	40 x 60	6.61	7.60	0.020	P10627-ND	12.87	11.34	10.18	ECE-T1VA333FA
39000	35 x 80	6.52	7.50	0.015	P10628-ND	13.24	11.67	10.47	ECE-T1VA393EA
47000	40 x 80	7.79	8.96	0.014	P10629-ND	15.07	13.28	11.92	ECE-T1VA473FA
50WV DC									
15000	35 x 50	4.80	5.52	0.033	P10630-ND	11.29	9.73	8.56	ECE-T1HA153EA
18000	35 x 60	5.27	6.06	0.028	P10631-ND	11.28	9.94	8.92	ECE-T1HA183EA
22000	40 x 50	5.15	5.92	0.026	P10632-ND	12.43	10.96	9.83	ECE-T1HA223FA
27000	35 x 80	6.16	7.08	0.018	P10633-ND	14.42	12.71	11.40	ECE-T1HA273EA
27000	40 x 60	6.05	6.96	0.021	P10634-ND	14.30	12.60	11.31	ECE-T1HA273FA
39000	40 x 80	7.55	8.68	0.015	P10635-ND	16.57	14.99	13.71	ECE-T1HA393FA
63WV DC									
12000	35 x 50	4.40	5.06	0.035	P10636-ND	10.64	9.37	8.41	ECE-T1JA123EA
15000	35 x 60	4.92	5.66	0.028	P10637-ND	12.22	10.77	9.66	ECE-T1JA153EA
15000	40 x 50	4.80	5.52	0.033	P10638-ND	12.26	10.80	9.70	ECE-T1JA153FA
18000	35 x 80	5.79	6.66	0.023	P10639-ND	13.11	11.56	10.37	ECE-T1JA183EA
18000	40 x 60	5.39	6.20	0.028	P10640-ND	13.90	12.25	10.99	ECE-T1JA183FA
27000	40 x 80	6.59	7.58	0.018	P10641-ND	15.16	13.71	12.54	ECE-T1JA273FA
80WV DC									
6800	35 x 50	3.90	4.49	0.061	P10642-ND	10.54	9.29	8.34	ECE-T1KA682EA
8200	35 x 60	4.39	5.05	0.051	P10643-ND	11.98	10.56	9.47	ECE-T1KA822EA
8200	40 x 50	4.29	4.93	0.051	P10644-ND	12.01	10.58	9.50	ECE-T1KA822FA
10000	35 x 80	4.88	5.61	0.041	P10645-ND	12.94	11.40	10.23	ECE-T1KA103EA
10000	40 x 60	4.73	5.44	0.041	P10646-ND	13.72	12.09	10.85	ECE-T1KA103FA
15000	40 x 80	5.97	6.87	0.028	P10647-ND	14.93	13.51	12.36	ECE-T1KA153FA
100WV DC									
4700	35 x 50	3.80	4.37	0.071	P10648-ND	11.24	9.90	8.89	ECE-T2AA472EA
5600	35 x 60	4.06	4.67	0.059	P10649-ND	13.21	11.64	10.45	ECE-T2AA562EA
6800	40 x 50	4.57	5.26	0.049	P10650-ND	14.17	12.49	11.20	ECE-T2AA682FA
8200	35 x 80	5.15	5.92	0.040	P10651-ND	15.26	13.45	12.07	ECE-T2AA822EA
8200	40 x 60	5.02	5.77	0.040	P10652-ND	14.71	13.31	12.17	ECE-T2AA822FA
12000	40 x 80	6.44	7.41	0.028	P10653-ND	18.02	16.30	14.91	ECE-T2AA123FA
200WV DC									
2200	35 x 50	2.90	4.06	0.113	P10654-ND	11.30	9.96	8.94	ECE-T2DA222EA
2700	35 x 60	3.65	5.11	0.092	P10655-ND	12.88	11.35	10.19	ECE-T2DA272EA
2700	40 x 50	3.55	4.97	0.092	P10656-ND	13.08	11.52	10.34	ECE-T2DA272FA
3300	35 x 80	4.52	6.33	0.075	P10657-ND	13.95	12.30	11.04	ECE-T2DA332EA
3300	40 x 60	4.40	6.16	0.075	P10658-ND	14.43	12.72	11.41	ECE-T2DA332FA
4700	40 x 80	5.76	8.06	0.053	P10659-ND	16.00	14.47	13.24	ECE-T2DA472FA
250WV DC									
1200	35 x 50	2.30	3.22	0.207	P10660-ND	11.44	10.08	9.05	ECE-T2EA122EA
1500	35 x 60	2.57	3.60	0.166	P10661-ND	13.18	11.62	10.43	ECE-T2EA152EA
1800	40 x 50	3.15	4.41	0.138	P10662-ND	14.74	12.99	11.66	ECE-T2EA182FA
2200	35 x 80	3.75	5.25	0.113	P10663-ND	14.26	12.90	11.80	ECE-T2EA222EA
2200	40 x 60	3.68	5.15	0.113	P10664-ND	14.72	13.31	12.18	ECE-T2EA222FA
3300	40 x 80	4.68	5.80	0.075	P10665-ND	16.97	15.85	14.83	ECE-T2EA332FA
350WV DC									
680	35 x 50	2.15	3.01	0.366	P10666-ND	11.80	10.40	9.33	ECE-T2VA681EA
820	35 x 60	2.65	3.71	0.303	P10667-ND	12.95	11.41	10.24	ECE-T2VA821EA
820	40 x 50	2.65	3.71	0.303	P10668-ND	13.62	12.00	10.77	ECE-T2VA821FA
1200	35 x 80	3.22	4.51	0.207	P10669-ND	15.13	13.69	12.52	ECE-T2VA122EA
1200	40 x 60	3.22	4.51	0.207	P10670-ND	15.02	13.59	12.43	ECE-T2VA122FA
1500	40 x 80	3.75	5.25	0.166	P10671-ND	17.39	15.73	14.39	ECE-T2VA152FA
400WV DC									
560	35 x 50	1.80	2.52	0.444	P10672-ND	11.95	10.53	9.45	ECE-T2GA561EA
680	40 x 50	2.17	3.04	0.366	P10673-ND	13.87	12.23	10.97	ECE-T2GA681FA
820	35 x 60	2.44	3.42	0.303	P10674-ND	14.63	12.89	11.57	ECE-T2GA821EA
1000	35 x 80	3.00	4.20	0.249	P10675-ND	15.51	14.03	12.84	ECE-T2GA102EA
1000	40 x 60	3.00	4.20	0.249	P10676-ND	15.37	13.90	12.71	ECE-T2GA102FA
1200	40 x 80	3.30	4.62	0.207	P10677-ND	17.37	15.71	14.37	ECE-T2GA122FA
450WV DC									
470	35 x 50	1.74	2.44	0.529	P10678-ND	12.65	11.15	10.01	ECE-T2WA471EA
560	35 x 60	2.15	3.01	0.444	P10679-ND	13.88	12.23	10.98	ECE-T2WA561EA
560	40 x 50	2.10	2.94	0.444	P10680-ND	14.61	12.87	11.55	ECE-T2WA561FA
680	40 x 60	2.50	3.78	0.303	P10681-ND	14.53	13.14	12.02	ECE-T2WA681FA
820	35 x 80	2.70	3.50	0.303	P10682-ND	16.45	14.88	13.61	ECE-T2WA821EA
1000	40 x 80	3.50	4.90	0.249	P10683-ND	18.64	16.86	15.42	ECE-T2WA102FA

VV/TA/HD/VA/VS/HA/HB/FC/FK/EB Series Aluminum Electrolytic Capacitors, Surface Mount Type

FEATURES:

- Surface Mount Type • High CV Volumetric Efficiency • Tape and Reel Packaging for Automatic Placement • Anti-solvent: Freon-TE, TES, TP-35

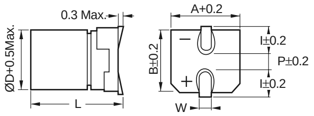
SPECIFICATIONS:

- **Operating Temperature Range:** TA Series: -40°C to +125°C, HD/VV/HA/HB/FC Series: -40°C to +105°C, VA/VS/VS-BP Series -40 to +85°C, EB Series -20 to +105°C, FK Series: -55 to +105°C
- **Capacitance Tolerance:** ±20% (120Hz, +20°C)
- **Leakage Current:** I ≤ 0.01CV or 3(µA) whichever is greater measured after a 2 min. application of rated working voltage at +20°C, EB Series: I ≤ 0.06CV +10(µA) after 2 minutes applicaton of rated working voltage at +20°C

- **Low Temperature Characteristics:** Impedance ratio (120Hz) ≤ Following specified values.

Impedance 120Hz	Series	Working Voltage								
		4.0V	6.3V	10V	16V	25V	35V	50V	63V	100V
-25°C/+20°C	VV/VA/VS	7	4	3	2	2	2	2	3	3
-40°C/+20°C		15	8	6	4	4	3	3	4	4
-25°C/+20°C	TA	—	—	8	8	4	3	3	—	—
-40°C/+20°C		—	—	14	12	10	8	8	—	—
-25°C/+20°C	HD	—	—	6	2	2	2	2	—	—
-40°C/+20°C		—	—	12	5	3	3	3	—	—
-25°C/+20°C	HA	—	4	3	2	2	2	2	3	3
-40°C/+20°C		—	8	6	4	4	3	3	4	4
-25°C/+20°C	HB	7	4	3	2	2	2	2	—	—
-40°C/+20°C		15	8	6	4	4	3	3	—	—
-25°C/+20°C	FC	—	2	2	2	2	2	2	2	2
-40°C/+20°C		—	3	3	3	3	3	3	3	3
-25°C/+20°C	FK	—	2	2	2	2	2	—	—	—
-40°C/+20°C		—	3	3	3	3	3	—	—	—
-55°C/+20°C		—	4	4	4	3	3	—	—	—

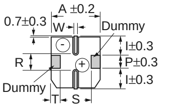
Impedance 120Hz	Series	Working Voltage					
		160V	200V	250V	350V	400V	450V
-25°C/+20°C	EB	2	2	3	5	6	6



Series	Case Code	Dimensions						
		D	L	A	B	I	W	P
VV	B	4	5.4	4.3	4.3	1.8	0.65±0.1	1.0
TA	E	8.0	6.2	8.3	9.5 max.	3.4	0.65±0.1	2.2
	F	8.0	10.2	8.3	10.0 max.	3.4	0.90±0.2	3.1
	G	10.0	10.2	10.3	12.0 max.	3.5	0.90±0.2	4.6
HD	B	4.0	5.8	4.3	5.5 max.	1.8	0.65±0.1	1.0
	C	5.0	5.8	5.3	6.5 max.	2.2	0.65±0.1	1.5
	D	6.3	5.8	6.6	7.8 max.	2.6	0.65±0.1	1.8
	E	8.0	6.2	8.3	9.5 max.	3.4	0.65±0.1	2.2
	F	8.0	10.2	8.3	10.0 max.	3.4	0.90±0.2	3.1
	G	10.0	10.2	10.3	12.0 max.	3.5	0.90±0.2	4.6
VA	B	4.0	5.7	4.3	4.3 max.	1.8	0.65±0.1	1.0
	C	5.0	5.7	5.3	5.3 max.	2.2	0.65±0.1	1.5
	D	6.3	5.7	6.6	6.6 max.	2.4	0.65±0.1	2.2
VS	A	3.0	5.4	3.3	4.5 max.	1.5	0.55±0.1	0.6
	B	4.0	5.4	4.3	5.5 max.	1.8	0.65±0.1	1.0
	C	5.0	5.4	5.3	6.5 max.	2.2	0.65±0.1	1.5
	D	6.3	5.4	6.6	7.8 max.	2.6	0.65±0.1	1.8
	D2	6.3	5.7	6.6	7.8 max.	2.6	0.65±0.1	1.8
	D8	6.3	7.9	6.6	7.8 max.	2.6	0.65±0.1	1.8
	E	8.0	6.2	8.3	9.5 max.	3.4	0.65±0.1	2.2
	F	8.0	10.2	8.3	10.0 max.	3.4	0.90±0.2	3.1
	G	10.0	10.2	10.3	12.0 max.	3.5	0.90±0.2	4.6

Series	Case Code	Dimensions						
		D	L	A	B	I	W	P
HA	B	4.0	5.4	4.3	5.5 max.	1.8	0.65±0.1	1.0
	C	5.0	5.4	5.3	6.5 max.	2.2	0.65±0.1	1.5
	D	6.3	5.4	6.6	7.8 max.	2.6	0.65±0.1	1.8
	D8	6.3	7.9	6.6	7.8 max.	2.6	0.65±0.1	1.8
	E	8.0	6.2	8.3	9.5 max.	3.4	0.65±0.1	2.2
	F	8.0	10.2	8.3	10.0 max.	3.4	0.90±0.2	3.1
	G	10.0	10.2	10.3	12.0 max.	3.5	0.90±0.2	4.6
HB	B	4.0	5.8	4.3	5.5 max.	1.8	0.65±0.1	1.0
	C	5.0	5.8	5.3	6.5 max.	2.2	0.65±0.1	1.5
	D	6.3	5.8	6.6	7.8 max.	2.6	0.65±0.1	1.8
FC	B	4.0	5.4	4.3	5.5 max.	1.8	0.65±0.1	1.0
	C	5.0	5.4	5.3	6.5 max.	2.2	0.65±0.1	1.5
	D	6.3	5.4	6.6	7.8 max.	2.6	0.65±0.1	1.8
	E	8.0	6.2	8.3	9.5 max.	3.4	0.65±0.1	2.2
	F	8.0	10.2	8.3	10.0 max.	3.4	0.90±0.2	3.1
	G	10.0	10.2	10.3	12.0 max.	3.5	0.90±0.2	4.6
	H16	12.5	16.5	13.5	15.0 max.	4.7	0.90±0.3	4.4
	J16	16	16.5	17.0	19.0 max.	5.5	1.2±0.3	6.7
	K16	18	16.5	19.0	21.0 max.	6.5	1.2±0.3	6.7
	K21	18	21.5	19.0	21.0 max.	6.5	1.2±0.3	6.7
FK	B	4	5.8	4.3	5.5	1.8	0.65±0.1	1.0
	C	5	5.8	5.3	6.5	2.2	0.65±0.1	1.5
	D	6.3	5.8	6.6	7.8	2.6	0.65±0.1	1.8
	E	8	6.2	8.3	9.5	3.4	0.65±0.1	2.2
	F	8	10.2	8.3	10.0	3.4	0.90±0.2	3.1
	G	10	10.2	10.3	12.0	3.5	0.90±0.2	4.6
EB	G13	10	13.5	10.3	12.0 max.	3.5	0.90±0.2	4.6
	G17	10	17.5	10.3	12.0 max.	3.5	0.90±0.2	4.6
	H16	12.5	16.5	13.5	15.0 max.	4.7	0.90±0.3	4.4
	J16	16	16.5	17.0	19.0 max.	5.5	1.2±0.3	6.7
	J21	16	21.5	17.0	19.0 max.	5.5	1.2±0.3	6.7
	K16	18	16.5	19.0	21.0 max.	6.5	1.2±0.3	6.7
	K21	18	21.5	19.0	21.0 max.	6.5	1.2±0.3	6.7
VS-BIPOLAR	B	4.0	5.4	4.3	5.5 max.	1.8	0.65±0.1	1.0
	C	5.0	5.4	5.3	6.5 max	2.2	0.65±0.1	1.5
	D	6.3	5.4	6.6	7.8 max.	2.6	0.65±0.1	1.8

Land/Pad dimensions as mounting guideline.



Series FC
Case Sizes J and K

Case Code	R	S	T
J16	5.0	12.0	2.5
K16	5.0	14.0	3.5
K21	5.0	14.0	3.5

Rated W.V. (VDC)	Nom. Cap (µF)	tan δ ≤ spec. values (120Hz, +20°C)	Impe-dance (ohms)	Max. Leak. Current (µA)	Size Code	Max. Ripple Cur. 120Hz, 105°C (mA rms)	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel		Panasonic Part No.
								10	25	100	500		Size	Pricing	
VV Series: –40°C to +105°C (2000 Hour Life) - NOT RECOMMENDED FOR NEW DESIGN															
50	0.15	0.12	—	3.0	B	1.5	PCE1010CT-ND	.34	—	.30	.23	PCE1010TR-ND	2,000	148.00/M	ECE-V1HVR15SR
	0.22	0.12	—	3.0	B	2.3	PCE1012CT-ND	.34	—	.30	.23	PCE1012TR-ND	2,000	148.00/M	ECE-V1HVR22SR
TA Automotive Series: –40°C to +125°C (1000 Hour Life)															
10	100	0.32	—	10.0	E	62	PCE3143CT-ND	1.35	—	1.25	.96	PCE3143TR-ND	1,000	575.00	EEV-TA1A101P
	220	0.32	—	22.0	F	93	PCE3144CT-ND	1.77	—	1.65	—	PCE3144TR-ND	500	404.00	EEV-TA1A221P
	330	0.32	—	33.0	G	118	PCE3145CT-ND	2.57	—	2.39	—	PCE3145TR-ND	500	586.50	EEV-TA1A331P
16	100	0.24	—	16.0	F	89	PCE3146CT-ND	1.77	—	1.65	—	PCE3146TR-ND	500	404.00	EEV-TA1C101P
	220	0.24	—	35.2	G	113	PCE3147CT-ND	2.57	—	2.39	—	PCE3147TR-ND	500	586.50	EEV-TA1C221P
25	47	0.21	—	11.8	E	56	PCE3148CT-ND	1.35	—	1.25	.96	PCE3148TR-ND	1,000	575.00	EEV-TA1E470P
	100	0.21	—	25.0	F	84	PCE3149CT-ND	1.77	—	1.65	—	PCE3149TR-ND	500	404.00	EEV-TA1E101P
35	33	0.18	—	11.6	E	53	PCE3150CT-ND	1.35	—	1.25	.96	PCE3150TR-ND	1,000	575.00	EEV-TA1V330P
	47	0.18	—	16.5	F	79	PCE3151CT-ND	1.77	—	1.65	—	PCE3151TR-ND	500	404.00	EEV-TA1V470P
	100	0.18	—	3.5	G	101	PCE3152CT-ND	2.57	—	2.39	—	PCE3152TR-ND	500	586.50	EEV-TA1V101P
50	10	0.18	—	5.0	E	25	PCE3153CT-ND	1.35	—	1.25	.96	PCE3153TR-ND	1,000	575.00	EEV-TA1H100P
	22	0.18	—	11.0	E	50	PCE3154CT-ND	1.35	—	1.25	.96	PCE3154TR-ND	1,000	575.00	EEV-TA1H220P
	33	0.18	—	16.5	F	74	PCE3155CT-ND	1.77	—	1.65	—	PCE3155TR-ND	500	404.00	EEV-TA1H330P
	47	0.18	—	23.5	G	94	PCE3156CT-ND	2.57	—	2.39	—	PCE3156TR-ND	500	586.50	EEV-TA1H470P
HD Series: –40°C to +105°C (5000 Hour Life)															
10	100	—	2.0	10.0	E	62	PCE3364CT-ND	.64	—	.59	.46	PCE3364TR-ND	1,000	273.00	EEV-HD1A101P
	220	—	1.5	22.0	F	93	PCE3365CT-ND	.89	—	.77	—	PCE3365TR-ND	500	188.00	EEV-HD1A221P
	330	—	0.8	33.0	G	118	PCE3366CT-ND	1.10	—	.95	—	PCE3366TR-ND	500	234.00	EEV-HD1A331P
16	10	—	12.0	3.0	B	20	PCE3338CT-ND	.29	—	.27	.21	PCE3338TR-ND	2,000	125.00/M	EEV-HD1C100R
	22	—	7.2	3.5	C	33	PCE3339CT-ND	.35	—	.32	.25	PCE3339TR-ND	1,000	147.00	EEV-HD1C220R
	47	—	4.0	7.5	D	55	PCE3340CT-ND	.40	—	.37	.28	PCE3340TR-ND	1,000	168.00	EEV-HD1C470P
	100	—	1.5	16.0	F	89	PCE3367CT-ND	.89	—	.77	—	PCE3367TR-ND	500	188.00	EEV-HD1C101P
	220	—	0.8	35.2	G	113	PCE3368CT-ND	1.10	—	.95	—	PCE3368TR-ND	500	234.00	EEV-HD1C221P
25	33	—	4.0	8.3	D	52	PCE3341CT-ND	.40	—	.37	.28	PCE3341TR-ND	1,000	168.00	EEV-HD1E330P
	47	—	2.0	11.8	E	56	PCE3369CT-ND	.64	—	.59	.46	PCE3369TR-ND	1,000	273.00	EEV-HD1E470P
	100	—	1.5	25.0	F	84	PCE3370CT-ND	.89	—	.77	—	PCE3370TR-ND	500	188.00	EEV-HD1E101P
35	4.7	—	12.0	3.0	B	17	PCE3342CT-ND	.29	—	.27	.21	PCE3342TR-ND	2,000	125.00/M	EEV-HD1V4R7R
	10	—	7.2	3.5	C	28	PCE3343CT-ND	.35	—	.32	.25	PCE3343TR-ND	1,000	147.00	EEV-HD1V100R
	22	—	4.0	7.7	D	47	PCE3344CT-ND	.40	—	.37	.28	PCE3344TR-ND	1,000	168.00	EEV-HD1V220P
	33	—	2.0	11.6	E	53	PCE3371CT-ND	.64	—	.59	.46	PCE3371TR-ND	1,000	273.00	EEV-HD1V330P
	47	—	1.5	16.5	F	79	PCE3372CT-ND	.89	—	.77	—	PCE3372TR-ND	500	188.00	EEV-HD1V470P
	100	—	0.8	35.0	G	101	PCE3373CT-ND	1.10	—	.95	—	PCE3373TR-ND	500	234.00	EEV-HD1V101P
50	0.47	—	12.0	3.0	B	5	PCE3345CT-ND	.29	—	.27	.21	PCE3345TR-ND	2,000	125.00/M	EEV-HD1HR47R
	1.0	—	12.0	3.0	B	7	PCE3346CT-ND	.29	—	.27	.21	PCE3346TR-ND	2,000	125.00/M	EEV-HD1H1R0R
	2.2	—	12.0	3.0	B	12	PCE3347CT-ND	.29	—	.27	.21	PCE3347TR-ND	2,000	125.00/M	EEV-HD1H2R2R
	3.3	—	12.0	3.0	B	16	PCE3348CT-ND	.27	—	.26	.20	PCE3348TR-ND	2,000	116.00/M	EEV-HD1H3R3R
	4.7	—	7.2	3.0	C	21	PCE3349CT-ND	.35	—	.32	.25	PCE3349TR-ND	1,000	147.00	EEV-HD1H4R7R
	10	—	4.0	5.0	D	33	PCE3350CT-ND	.40	—	.37	.28	PCE3350TR-ND	1,000	168.00	EEV-HD1H100P
	22	—	2.0	11.0	E	50	PCE3374CT-ND	.64	—	.59	.46	PCE3374TR-ND	1,000	273.00	EEV-HD1H220P
	33	—	1.5	16.5	F	74	PCE3375CT-ND	.89	—	.77	—	PCE3375TR-ND	500	188.00	EEV-HD1H330P
	47	—	0.8	23.5	G	94	PCE3376CT-ND	1.10	—	.95	—	PCE3376TR-ND	500	234.00	EEV-HD1H470P
VA General Purpose Series: –40°C to +85°C (1000 Hour Life)															
4.0	33	0.35	—	3.0	B	26	PCE2023CT-ND	.31	—	.27	.21	PCE2023TR-ND	2,000	123.00/M	ECE-V0GA330R
	47	0.35	—	3.0	B	34	PCE2024CT-ND	.31	—	.27	.21	PCE2024TR-ND	2,000	123.00/M	ECE-V0GA470R
	220	0.35	—	8.8	D	82	PCE2026CT-ND	.42	—	.36	.28	PCE2026TR-ND	1,000	165.00	ECE-V0GA221P
6.3	33	0.26	—	3.0	C	38	PCE2001CT-ND	.45	—	.39	.30	—	—	—	ECE-V0JA330P

(Continued)

Rated W.V. (VDC)	Nom. Cap (µF)	tan δ ≤ spec. values (120Hz, +20°C)	Impedance (ohms)	Max. Leak. Current (µA)	Size Code	Max. Ripple Cur. 120Hz, 105°C (mA rms)	Digi-Key Part No.	Cut Tape Price Each 10	25	100	500	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing	Panasonic Part No.
10	47	0.20	—	4.7	D	65	PCE2006CT-ND	.43	—	.37	.29	PCE2006TR-ND	1,000	170.00	ECE-V1AA470P
	100	0.20	—	10.0	D	73	PCE2039CT-ND	.41	—	.35	.27	—	—	—	ECE-V1AA101UP
25	4.7	0.14	—	3.0	B	22	PCE2011CT-ND	.31	—	.27	.21	PCE2011TR-ND	2,000	123.00/M	ECE-V1EA4R7R
35	10	0.12	—	3.5	C	30	PCE2016CT-ND†	.36	—	.31	.24	PCE2016TR-ND	1,000	143.00	ECE-V1VA100P
50	0.1	0.12	—	3.0	B	1	PCE2018CT-ND†	.31	—	.27	.21	PCE2018TR-ND	2,000	123.00/M	ECE-V1HA0R1R
	0.15	0.12	—	3.0	B	1.5	PCE2028CT-ND	.32	—	.28	.22	PCE2028TR-ND	2,000	128.00/M	ECE-V1HAR15R
	0.33	0.12	—	3.0	B	3	PCE2020CT-ND†	.31	—	.27	.21	—	—	—	ECE-V1HAR33R
	0.68	0.12	—	3.0	B	7	PCE2052CT-ND	.30	—	.26	.20	PCE2052TR-ND	2,000	120.00/M	ECE-V1HAR68R
	1	0.12	—	3.0	B	10	PCE2022CT-ND†	.31	—	.27	.21	PCE2022TR-ND	2,000	123.00/M	ECE-V1HA010R
	2.2	0.12	—	3.0	B	16	PCE2029CT-ND	.31	—	.27	.21	PCE2029TR-ND	2,000	123.00/M	ECE-V1HA2R2R
	4.7	0.12	—	3.0	C	16	PCE2031CT-ND	.36	—	.31	.24	—	—	—	ECE-V1HA4R7P
VS General Purpose Low Profile Series: –40°C to +85°C (2000 Hour Life)															
4	22	0.37	—	3.0	A	19	PCE3051CT-ND	.33	—	.31	.24	PCE3051TR-ND	2,000	141.00/M	ECE-V0GS220SR
	33	0.35	—	3.0	B	26	PCE3052CT-ND	.28	—	.26	.20	PCE3052TR-ND	2,000	120.00/M	ECE-V0GA330SR
	47	0.35	—	3.0	B	34	PCE3053CT-ND	.28	—	.26	.20	PCE3053TR-ND	2,000	120.00/M	ECE-V0GA470SR
	100	0.35	—	4.0	C	61	PCE3054CT-ND	.36	—	.31	.24	PCE3054TR-ND	1,000	141.00	ECE-V0GA101SR
	220	0.35	—	8.8	D	82	PCE3055CT-ND	.41	—	.36	.28	PCE3055TR-ND	1,000	164.00	ECE-V0GA221SP
6.3	22	0.35	—	3.0	A	20	PCE3308CT-ND	.33	—	.31	.24	PCE3308TR-ND	2,000	141.00/M	ECE-V0JS220WR
	22	0.26	—	3.0	B	29	PCE3056CT-ND	.28	—	.26	.20	PCE3056TR-ND	2,000	120.00/M	ECE-V0JA220SR
	47	0.35	—	3.0	B	36	PCE3309CT-ND	.21	—	.19	.15	PCE3309TR-ND	2,000	87.00/M	ECE-V0JA470WR
	47	0.26	—	3.0	C	46	PCE3057CT-ND	.36	—	.31	.24	PCE3057TR-ND	1,000	141.00	ECE-V0JA470SR
	100	0.26	—	6.3	D	71	PCE3058CT-ND	.41	—	.36	.28	PCE3058TR-ND	1,000	164.00	ECE-V0JA101SP
	220	0.35	—	13.8	D	74	PCE3310CT-ND	.32	—	.30	.23	PCE3310TR-ND	1,000	136.00	ECE-V0JA221WP
	330	0.26	—	20.8	D8	150	PCE3351CT-ND	.39	—	.37	.28	PCE3351TR-ND	900	150.30	ECE-V0JA331XP
	330	0.35	—	20.8	E	300	PCE2034CT-ND	.59	—	.52	.40	PCE2034TR-ND	1,000	236.00	ECE-V0JA331P
	470	0.35	—	29.6	F	380	PCE2035CT-ND	.75	—	.65	—	PCE2035TR-ND	500	160.00	ECE-V0JA471P
	680	0.26	—	42.8	G	550	PCE2036CT-ND	1.68	—	1.46	—	—	—	—	ECE-V0JA681P
	1000	0.35	—	63.0	F	500	PCE3173CT-ND	.59	—	.51	—	PCE3173TR-ND	500	124.50	ECE-V0JA102UP
	1000	0.35	—	63.0	G	700	PCE2038CT-ND	.95	—	.83	—	PCE2038TR-ND	500	202.50	ECE-V0JA102P
	1500	0.35	—	94.5	G	750	PCE3174CT-ND	.74	—	.65	—	PCE3174TR-ND	500	157.50	ECE-V0JA152P
10	33	0.30	—	3.3	B	29	PCE3175CT-ND	.31	—	.29	.22	PCE3175TR-ND	2,000	132.00/M	ECE-V1AA330WR
	33	0.20	—	3.3	C	43	PCE3059CT-ND	.31	—	.27	.21	PCE3059TR-ND	1,000	123.00	ECE-V1AA330SR
	47	0.20	—	4.7	D	65	PCE3060CT-ND	.36	—	.31	.24	PCE3060TR-ND	1,000	143.00	ECE-V1AA470SP
	100	0.30	—	10.0	C	50	PCE3311CT-ND	.24	—	.22	.17	PCE3311TR-ND	1,000	101.00	ECE-V1AA101WR
	100	0.20	—	10.0	D	70	PCE3176CT-ND	.39	—	.36	.28	PCE3176TR-ND	1,000	164.00	ECE-V1AA101SP
	220	0.20	—	22.0	D8	150	PCE3352CT-ND	.39	—	.37	.28	PCE3352TR-ND	900	150.30	ECE-V1AA221XP
	220	0.26	—	22.0	E	250	PCE2040CT-ND	.59	—	.52	.40	PCE2040TR-ND	1,000	236.00	ECE-V1AA221P
	330	0.26	—	33.0	F	330	PCE2041CT-ND	.75	—	.65	—	PCE2041TR-ND	500	160.00	ECE-V1AA331P
	470	0.26	—	47.0	G	400	PCE2042CT-ND	.83	—	.72	—	PCE2042TR-ND	500	175.50	ECE-V1AA471P
	470	0.26	—	47.0	F	330	PCE3177CT-ND	.75	—	.65	—	PCE3177TR-ND	500	160.00	ECE-V1AA471UP
	1000	0.26	—	100.0	G	580	PCE3178CT-ND	.95	—	.83	—	PCE3178TR-ND	500	202.50	ECE-V1AA102P
16	10	0.18	—	3.0	A	20	PCE3061CT-ND	.33	—	.31	.24	PCE3061TR-ND	2,000	141.00/M	ECE-V1CS100SR
	10	0.16	—	3.0	B	28	PCE3062CT-ND	.28	—	.26	.20	PCE3062TR-ND	2,000	120.00/M	ECE-V1CA100SR
	22	0.26	—	3.5	B	28	PCE3179CT-ND	.31	—	.29	.22	PCE3179TR-ND	2,000	132.00/M	ECE-V1CA220WR
	22	0.16	—	3.5	C	39	PCE3063CT-ND	.36	—	.31	.24	PCE3063TR-ND	1,000	141.00	ECE-V1CA220SR
	33	0.26	—	5.3	C	35	PCE3180CT-ND	.36	—	.33	.26	PCE3180TR-ND	1,000	152.00	ECE-V1CA330WR
	47	0.26	—	7.5	C	39	PCE3181CT-ND	.36	—	.33	.26	PCE3181TR-ND	1,000	152.00	ECE-V1CA470WR
	47	0.16	—	7.5	D	70	PCE3064CT-ND	.41	—	.36	.28	PCE3064TR-ND	1,000	164.00	ECE-V1CA470SP
	100	0.26	—	16.0	D	70	PCE3182CT-ND	.47	—	.44	.34	PCE3182TR-ND	1,000	200.00	ECE-V1CA101WP
	100	0.20	—	16.0	E	200	PCE2043CT-ND	.59	—	.52	.40	PCE2043TR-ND	1,000	236.00	ECE-V1CA101P
	220	0.16	—	35.2	D8	150	PCE3353CT-ND	.39	—	.37	.28	PCE3353TR-ND	900	150.30	ECE-V1CA221XP
	220	0.20	—	35.2	E	200	PCE3275CT-ND	.55	—	.51	.39	PCE3275TR-ND	1,000	234.00	ECE-V1CA221UP
	220	0.20	—	35.2	F	280	PCE2044CT-ND	.75	—	.65	—	PCE2044TR-ND	500	160.00	ECE-V1CA221P
	330	0.20	—	52.8	F	320	PCE3183CT-ND	.67	—	.58	—	PCE3183TR-ND	500	142.50	ECE-V1CA331UP
	330	0.20	—	52.8	G	380	PCE2045CT-ND	.95	—	.83	—	PCE2045TR-ND	500	202.50	ECE-V1CA331P
	470	0.20	—	75.2	F	350	PCE3184CT-ND	.59	—	.51	—	PCE3184TR-ND	500	124.50	ECE-V1CA471UP
	470	0.20	—	75.2	G	420	PCE2046CT-ND	.95	—	.83	—	PCE2046TR-ND	500	202.50	ECE-V1CA471P
25	4.7	0.16	—	3.0	A	12	PCE3065CT-ND	.33	—	.31	.24	PCE3065TR-ND	2,000	141.00/M	ECE-V1ES4R7SR
	4.7	0.14	—	3.0	B	22	PCE3066CT-ND	.28	—	.26	.20	PCE3066TR-ND	2,000	120.00/M	ECE-V1EA4R7SR
	10	0.14	—	3.0	C	28	PCE3067CT-ND	.36	—	.31	.24	PCE3067TR-ND	1,000	141.00	ECE-V1EA100SR
	22	0.14	—	5.5	D	55	PCE3068CT-ND	.41	—	.36	.28	PCE3068TR-ND	1,000	164.00	ECE-V1EA220SP
	33	0.20	—	8.2	C	42	PCE3276CT-ND	.24	—	.22	.17	PCE3276TR-ND	1,000	101.00	ECE-V1EA330WR
	33	0.14	—	8.3	D	65	PCE3069CT-ND	.41	—	.36	.28	PCE3069TR-ND	1,000	164.00	ECE-V1EA330SP
	47	0.16	—	11.8	D2	70	PCE3185CT-ND	.42	—	.39	.30	PCE3185TR-ND	1,000	179.00	ECE-V1EA470UP
	100	0.14	—	25.0	D8	150	PCE3354CT-ND	.39	—	.37	.28	PCE3354TR-ND	900	150.30	ECE-V1EA101XP
	100	0.16	—	25.0	E	91	PCE3186CT-ND	.49	—	.46	.35	PCE3186TR-ND	1,000	211.00	ECE-V1EA101UP
	100	0.16	—	25.0	F	180	PCE2047CT-ND	.75	—	.65	—	PCE2047TR-ND	500	160.00	ECE-V1EA101P
	220	0.16	—	55.0	F	140	PCE3187CT-ND	.66	—	.57	—	PCE3187TR-ND	500	139.00	ECE-V1EA221UP
	220	0.16	—	55.0	G	310	PCE2048CT-ND	.83	—	.72	—	PCE2048TR-ND	500	175.50	ECE-V1EA221P
	330	0.16	—	82.5	F	270	PCE3188CT-ND	.59	—	.51	—	PCE3188TR-ND	500	124.50	ECE-V1EA331UP
	470	0.16	—	117.5	G	380	PCE3189CT-ND	.74	—	.65	—	PCE3189TR-ND	500	157.50	ECE-V1EA471P
35	2.2	0.14	—	3.0	A	8	PCE3070CT-ND	.29	—	.27	.21	PCE3070TR-ND	2,000	123.00/M	ECE-V1VS2R2SR
	3.3	0.14	—	3.0	A	10	PCE3071CT-ND	.29	—	.27	.21	PCE3071TR-ND	2,000	123.00/M	ECE-V1VS3R3SR
	4.7	0.12	—	3.0	B	22	PCE3072CT-ND	.28	—	.26	.20	PCE3072TR-ND	2,000	120.00/M	ECE-V1VA4R7SR
	10	0.16	—	3.5	B	22	PCE3277CT-ND	.21	—	.19	.15	PCE3277TR-ND	2,000	87.00/M	ECE-V1VA100WR
	10	0.12	—	3.5	C	30	PCE3073CT-ND	.36	—	.31	.24	PCE3073TR-ND	1,000	141.00	ECE-V1VA100SR
	22	0.16	—	7.7	C	36	PCE3278CT-ND	.24	—	.22	.17	PCE3278TR-ND	1,000	101.00	ECE-V1VA220WR
	22	0.12	—	7.7	D	60	PCE3074CT-ND	.41	—	.36	.28	PCE3074TR-ND	1,000	164.00	ECE-V1VA220SP
	33	0.16	—	11.5	D	60	PCE3279CT-ND	.32	—	.30	.23	PCE3279TR-ND	1,000	136.00	ECE-V1VA330WP
	33	0.14	—	11.6	D2	65	PCE3190CT-ND	.42	—	.39	.30	PCE3190TR-ND	1,000	179.00	ECE-V1VA330UP
	33	0.14	—	11.6	E	130	PCE2049CT-ND	.59	—	.52	.40	PCE2049TR-ND	1,000	236.00	ECE-V1VA330P
	47	0.16	—	16.4	D	70	PCE3280CT-ND	.32	—	.30	.23	PCE3280TR-ND	1,000	136.00	ECE-V1VA470WP
	47	0.14	—	16.5	E	165	PCE2050CT-ND	.59	—	.52	.40	PCE2050TR-ND	1,000	236.00	ECE-V1VA470P
	100	0.12	—	35.0	D8	130	PCE3355CT-ND	.39	—	.37	.28	PCE3355TR-ND	900	150.30	ECE-V1VA101XP
	100	0.14	—	35.0	F	140	PCE3191CT-ND	.67	—	.58	—	PCE3191TR-ND	500	142.50	ECE-V1VA101UP
	100	0.14	—	35.0	G	210	PCE2051CT-ND	.95	—	.83	—	PCE2051TR-ND	500	202.50	ECE-V1VA101P
	220	0.14	—	77.0	F	200	PCE3192CT-ND	.59	—	.51	—	PCE3192TR-ND	500	124.50	ECE-V1VA221UP
	330	0.14	—	115.5	G	350	PCE3193CT-ND	.83	—	.72	—	PCE3193TR-ND	500	177.00	ECE-V1VA331P
50	0.1	0.14	—	3.0	A	1	PCE3075CT-ND	.33	—	.31	.24	PCE3075TR-ND	2,000	141.00/M	ECE-V1HS0R1SR
	0.1	0.12	—	3.0	B	1	PCE3076CT-ND	.25	—	.23	.18	PCE3076TR-ND	2,000	105.00/M	ECE-V1HA0R1SR
	0.22	0.14	—	3.0	A	2	PCE3077CT-ND	.33	—	.31	.24	PCE3077TR-ND	2,000	141.00/M	ECE-V1HSR22SR
	0.22	0.12	—	3.0	B	2	PCE3078CT-ND	.29	—	.26	.20	PCE3078TR-ND	2,000	120.00/M	ECE-V1HAR22SR
	0.33	0.14	—	3.0	A	3	PCE3079CT-ND	.33	—	.31	.24	PCE3079TR-ND	2,000	141.00/M	ECE-V1HSR33SR
	0.33	0.12	—	3.0	B	3	PCE3080CT-ND	.28	—	.26	.20	PCE3080TR-ND	2,000	120.00/M	ECE-V1HAR33SR
	0.47	0.14	—	3.0	A	5	PCE3081CT-ND	.33	—	.31	.24	PCE3081TR-ND	2,000	141.00/M	ECE-V1HSR47SR

(Continued)

Rated W.V. (VDC)	Nom. Cap (µF)	tan δ ≤ spec. values (120Hz, +20°C)	Impedance (ohms)	Max. Leak. Current (µA)	Size Code	Max. Ripple Cur. 120Hz, 105°C (mA rms)	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel		Panasonic Part No.
								10	25	100	500		Size	Pricing	
50	0.47	0.12	—	3.0	B	5	PCE3082CT-ND	.28	—	.26	.20	PCE3082TR-ND	2,000	120.00/M	ECE-V1HAR47SR
	1	0.14	—	3.0	A	8	PCE3083CT-ND	.29	—	.27	.21	PCE3083TR-ND	2,000	123.00/M	ECE-V1HS010SR
	1	0.12	—	3.0	B	10	PCE3084CT-ND	.28	—	.26	.20	PCE3084TR-ND	2,000	120.00/M	ECE-V1HA010SR
	2.2	0.14	—	3.0	A	10	PCE3085CT-ND	.41	—	.38	.30	PCE3085TR-ND	2,000	175.00/M	ECE-V1HS2R2SR
	2.2	0.12	—	3.0	B	16	PCE3086CT-ND	.28	—	.26	.20	PCE3086TR-ND	2,000	120.00/M	ECE-V1HA2R2SR
	3.3	0.12	—	3.0	B	16	PCE3087CT-ND	.28	—	.26	.20	PCE3087TR-ND	2,000	120.00/M	ECE-V1HA3R3SR
	4.7	0.14	—	3.0	B	18	PCE3281CT-ND	.21	—	.19	.15	PCE3281TR-ND	2,000	87.00/M	ECE-V1HA4R7WR
	4.7	0.12	—	3.0	C	23	PCE3088CT-ND	.36	—	.31	.24	PCE3088TR-ND	1,000	141.00	ECE-V1HA4R7SR
	10	0.14	—	5.0	C	27	PCE3282CT-ND	.24	—	.22	.17	PCE3282TR-ND	1,000	101.00	ECE-V1HA100WR
	10	0.12	—	5.0	D	35	PCE3089CT-ND	.41	—	.36	.28	PCE3089TR-ND	1,000	164.00	ECE-V1HA100SP
	22	0.14	—	11.0	D	40	PCE3283CT-ND	.32	—	.30	.23	PCE3283TR-ND	1,000	136.00	ECE-V1HA220WP
	22	0.12	—	11.0	D2	60	PCE3194CT-ND	.42	—	.39	.30	PCE3194TR-ND	1,000	179.00	ECE-V1HA220UP
	22	0.12	—	11.0	E	120	PCE2053CT-ND	.59	—	.52	.40	PCE2053TR-ND	1,000	236.00	ECE-V1HA220P
	33	0.12	—	16.5	D8	85	PCE3356CT-ND	.39	—	.37	.28	PCE3356TR-ND	900	150.30	ECE-V1HA330XP
	33	0.12	—	16.5	E	65	PCE3195CT-ND	.49	—	.46	.35	PCE3195TR-ND	1,000	211.00	ECE-V1HA330UP
	33	0.12	—	16.5	F	110	PCE2054CT-ND	.75	—	.65	—	PCE2054TR-ND	500	160.00	ECE-V1HA330P
	47	0.12	—	23.5	D8	90	PCE3357CT-ND	.39	—	.37	.28	PCE3357TR-ND	900	150.30	ECE-V1HA470XP
	47	0.12	—	23.5	F	110	PCE3196CT-ND	.67	—	.58	—	PCE3196TR-ND	500	142.50	ECE-V1HA470UP
	47	0.12	—	23.5	G	130	PCE2055CT-ND	.95	—	.83	—	PCE2055TR-ND	500	202.50	ECE-V1HA470P
	100	0.12	—	50.0	F	200	PCE3197CT-ND	.59	—	.51	—	PCE3197TR-ND	500	124.50	ECE-V1HA101UP
	220	0.12	—	110.0	G	300	PCE3198CT-ND	.74	—	.65	—	PCE3198TR-ND	500	157.50	ECE-V1HA221P
63	10	0.18	—	6.3	E	35	PCE3199CT-ND	.49	—	.45	.35	PCE3199TR-ND	1,000	208.00	ECE-V1JA100P
	22	0.18	—	13.9	E	40	PCE3284CT-ND	.49	—	.45	.35	PCE3284TR-ND	1,000	207.00	ECE-V1JA220UP
	22	0.18	—	13.9	F	40	PCE3200CT-ND	.67	—	.58	—	PCE3200TR-ND	500	141.50	ECE-V1JA220P
	33	0.18	—	20.8	F	45	PCE3201CT-ND	.67	—	.58	—	PCE3201TR-ND	500	141.50	ECE-V1JA330P
	47	0.18	—	29.6	F	45	PCE3202CT-ND	.67	—	.58	—	PCE3202TR-ND	500	141.50	ECE-V1JA470P
	100	0.18	—	63.0	G	60	PCE3203CT-ND	.84	—	.73	—	PCE3203TR-ND	500	178.50	ECE-V1JA101P
100	3.3	0.18	—	3.3	E	50	PCE3204CT-ND	.49	—	.45	.35	PCE3204TR-ND	1,000	208.00	ECE-V2AA3R3P
	4.7	0.18	—	4.7	E	50	PCE3285CT-ND	.49	—	.45	.35	PCE3285TR-ND	1,000	207.00	ECE-V2AA4R7UP
	4.7	0.18	—	4.7	F	80	PCE3205CT-ND	.67	—	.58	—	PCE3205TR-ND	500	141.50	ECE-V2AA4R7P
	10	0.18	—	10.0	E	50	PCE3286CT-ND	.49	—	.45	.35	PCE3286TR-ND	1,000	207.00	ECE-V2AA100UP
	10	0.18	—	10.0	F	85	PCE3206CT-ND	.67	—	.58	—	PCE3206TR-ND	500	141.50	ECE-V2AA100P
	22	0.18	—	22.0	Fß	70	PCE3287CT-ND	.62	—	.58	—	PCE3287TR-ND	500	141.50	ECE-V2AA220UP
	22	0.18	—	22.0	G	85	PCE3207CT-ND	.84	—	.73	—	PCE3207TR-ND	500	178.50	ECE-V2AA220P
	33	0.18	—	33.0	G	90	PCE3208CT-ND	.84	—	.73	—	PCE3208TR-ND	500	178.50	ECE-V2AA330P
HA Long Life Series: –40°C to +105°C (1000 Hour Life)															
6.3	22	0.30	—	3.0	B	29	PCE3000CT-ND	.33	—	.30	.23	PCE3000TR-ND	2,000	138.00/M	EEV-HA0J220R
	47	0.35	—	3.0	B	36	PCE3288CT-ND	.24	—	.22	.17	PCE3288TR-ND	2,000	101.00/M	EEV-HA0J470WR
	47	0.30	—	3.0	C	46	PCE3001CT-ND	.39	—	.36	.28	PCE3001TR-ND	1,000	164.00	EEV-HA0J470R
	100	0.35	—	6.3	C	47	PCE3289CT-ND	.27	—	.26	.20	PCE3289TR-ND	1,000	116.00	EEV-HA0J101WR
	100	0.30	—	6.3	D	71	PCE3002CT-ND	.47	—	.41	.32	PCE3002TR-ND	1,000	188.00	EEV-HA0J101P
	220	0.35	—	13.8	D	74	PCE3290CT-ND	.37	—	.34	.27	PCE3290TR-ND	1,000	157.00	EEV-HA0J221WP
	330	0.30	—	20.8	D8	105	PCE3358CT-ND	.45	—	.42	.32	PCE3358TR-ND	900	171.00	EEV-HA0J331XP
	1000	0.35	—	63.0	F	300	PCE3209CT-ND	.76	—	.66	—	PCE3209TR-ND	500	161.00	EEV-HA0J102UP
	1500	0.35	—	94.5	G	480	PCE3210CT-ND	.96	—	.83	—	PCE3210TR-ND	500	203.00	EEV-HA0J152P
10	33	0.30	—	3.3	B	29	PCE3291CT-ND	.24	—	.22	.17	PCE3291TR-ND	2,000	101.00/M	EEV-HA1A330WR
	33	0.22	—	3.3	C	43	PCE3003CT-ND	.39	—	.36	.28	PCE3003TR-ND	1,000	164.00	EEV-HA1A330R
	100	0.30	—	10.0	D	71	PCE3211CT-ND	.35	—	.32	.25	PCE3211TR-ND	1,000	147.00	EEV-HA1A101WP
	220	0.22	—	22.0	D8	105	PCE3359CT-ND	.45	—	.42	.32	PCE3359TR-ND	900	171.00	EEV-HA1A221XP
	470	0.26	—	47.0	F	200	PCE3212CT-ND	.69	—	.60	—	PCE3212TR-ND	500	145.50	EEV-HA1A471UP
	1000	0.26	—	100.0	G	580	PCE3292CT-ND	.79	—	.73	—	PCE3292TR-ND	500	179.00	EEV-HA1A102P
16	10	0.16	—	3.0	B	28	PCE3004CT-ND	.33	—	.30	.23	PCE3004TR-ND	2,000	138.00/M	EEV-HA1C100R
	22	0.26	—	3.5	B	28	PCE3293CT-ND	.24	—	.22	.17	PCE3293TR-ND	2,000	101.00/M	EEV-HA1C220WR
	22	0.16	—	3.5	C	39	PCE3005CT-ND	.39	—	.36	.28	PCE3005TR-ND	1,000	164.00	EEV-HA1C220R
	47	0.26	—	7.5	C	39	PCE3294CT-ND	.27	—	.26	.20	PCE3294TR-ND	1,000	116.00	EEV-HA1C470WR
	47	0.16	—	7.5	D	70	PCE3006CT-ND	.47	—	.41	.32	PCE3006TR-ND	1,000	188.00	EEV-HA1C470P
	100	0.26	—	16.0	D	70	PCE3295CT-ND	.36	—	.34	.26	PCE3295TR-ND	1,000	153.00	EEV-HA1C101WP
	220	0.16	—	35.2	D8	105	PCE3360CT-ND	.45	—	.42	.32	PCE3360TR-ND	900	171.00	EEV-HA1C221XP
	220	0.20	—	35.2	F	150	PCE3213CT-ND	.69	—	.60	—	PCE3213TR-ND	500	145.50	EEV-HA1C221UP
	330	0.20	—	52.8	F	170	PCE3214CT-ND	.69	—	.60	—	PCE3214TR-ND	500	145.50	EEV-HA1C331UP
	470	0.20	—	75.2	F	190	PCE3215CT-ND	.76	—	.66	—	PCE3215TR-ND	500	161.00	EEV-HA1C471UP
	470	0.20	—	75.2	G	340	PCE3216CT-ND	1.10	—	.95	—	PCE3216TR-ND	500	233.00	EEV-HA1C471P
25	4.7	0.14	—	3.0	B	22	PCE3007CT-ND	.33	—	.30	.23	PCE3007TR-ND	2,000	138.00/M	EEV-HA1E4R7R
	10	0.14	—	3.0	C	28	PCE3008CT-ND	.39	—	.36	.28	PCE3008TR-ND	1,000	164.00	EEV-HA1E100R
	22	0.14	—	5.5	D	55	PCE3009CT-ND	.47	—	.41	.32	PCE3009TR-ND	1,000	188.00	EEV-HA1E220P
	33	0.20	—	8.2	C	42	PCE3296CT-ND	.27	—	.26	.20	PCE3296TR-ND	1,000	116.00	EEV-HA1E330WR
	33	0.14	—	8.3	D	65	PCE3010CT-ND	.47	—	.41	.32	PCE3010TR-ND	1,000	188.00	EEV-HA1E330P
	47	0.20	—	11.7	D	70	PCE3297CT-ND	.37	—	.34	.27	PCE3297TR-ND	1,000	157.00	EEV-HA1E470WP
	47	0.16	—	11.8	F	91	PCE3217CT-ND	.64	—	.59	.46	PCE3217TR-ND	1,000	272.00	EEV-HA1E470P
	100	0.16	—	25.0	E	91	PCE3298CT-ND	.44	—	.41	.32	PCE3298TR-ND	1,000	189.00	EEV-HA1E101UP
	100	0.16	—	25.0	F	130	PCE3218CT-ND	.87	—	.76	—	PCE3218TR-ND	500	185.00	EEV-HA1E101P
	220	0.16	—	55.0	F	160	PCE3219CT-ND	.76	—	.66	—	PCE3219TR-ND	500	161.00	EEV-HA1E221UP
	330	0.16	—	82.5	F	180	PCE3220CT-ND	.76	—	.66	—	PCE3220TR-ND	500	161.00	EEV-HA1E331UP
	470	0.16	—	117.5	G	360	PCE3221CT-ND	.96	—	.83	—	PCE3221TR-ND	500	203.00	EEV-HA1E471P
35	4.7	0.12	—	3.0	B	22	PCE3011CT-ND	.33	—	.30	.23	PCE3011TR-ND	2,000	138.00/M	EEV-HA1V4R7R
	10	0.16	—	3.5	B	22	PCE3299CT-ND	.24	—	.22	.17	PCE3299TR-ND	2,000	101.00/M	EEV-HA1V100WR
	10	0.12	—	3.5	C	30	PCE3012CT-ND	.39	—	.36	.28	PCE3012TR-ND	1,000	164.00	EEV-HA1V100R
	22	0.16	—	7.7	C	35	PCE3300CT-ND	.27	—	.26	.20	PCE3300TR-ND	1,000	116.00	EEV-HA1V220WR
	22	0.12	—	7.7	D	60	PCE3013CT-ND	.47	—	.41	.32	PCE3013TR-ND	1,000	188.00	EEV-HA1V220P
	33	0.16	—	11.5	D	42	PCE3301CT-ND	.37	—	.34	.27	PCE3301TR-ND	1,000	157.00	EEV-HA1V330WP
	33	0.14	—	11.6	E	84	PCE3222CT-ND	.64	—	.59	.46	PCE3222TR-ND	1,000	272.00	EEV-HA1V330P
	47	0.14	—	16.5	E	84	PCE3302CT-ND	.44	—	.41	.32	PCE3302TR-ND	1,000	189.00	EEV-HA1V470UP
	47	0.14	—	16.5	F	98	PCE3223CT-ND	.87	—	.76	—	PCE3223TR-ND	500	185.00	EEV-HA1V470P
	100	0.12	—	35.0	D8	84	PCE3361CT-ND	.45	—	.42	.32	PCE3361TR-ND	900	171.00	EEV-HA1V101XP
	100	0.14	—	35.0	F	120	PCE3224CT-ND	.69	—	.60	—	PCE3224TR-ND	500	145.50	EEV-HA1V101UP
	220	0.14	—	77.0	F	170	PCE3225CT-ND	.76	—	.66	—	PCE3225TR-ND	500	161.00	EEV-HA1V221UP
	220	0.14	—	77.0	G	210	PCE3226CT-ND	1.10	—	.95	—	PCE3226TR-ND	500	233.00	EEV-HA1V221P
	330	0.14	—	115.5	G	250	PCE3227CT-ND	.96	—	.83	—	PCE3227TR-ND	500	203.00	EEV-HA1V331P
50	0.1	0.12	—	3.0	B	1	PCE3014CT-ND	.33	—	.30	.23	PCE3014TR-ND	2,000	138.00/M	EEV-HA1HR10 R
	0.22	0.12	—	3.0	B	2	PCE3015CT-ND	.33	—	.30	.23	PCE3015TR-ND	2,000	138.00/M	EEV-HA1HR22R
	0.33	0.12	—	3.0	B	3	PCE3016CT-ND	.33	—	.30	.23	PCE3016TR-ND	2,000	138.00/M	EEV-HA1HR33R
	0.47	0.12	—	3.0	B	5	PCE3017CT-ND	.33	—	.30	.23	PCE3017TR-ND	2,000	138.00/M	EEV-HA1HR47R
	1.0	0.12	—	3.0	B	10	PCE3018CT-ND	.33	—	.30	.23	PCE3018TR-ND	2,000	138.00/M	EEV-HA1H010R
	2.2	0.12	—	3.0	B	16	PCE3019CT-ND	.33	—	.30	.23	PCE3019TR-ND	2,000	138.00/M	EEV-HA1H2R2R
	3.3	0.12	—	3.0	B	16	PCE3020CT-ND	.33	—	.30	.23	PCE3020TR-ND	2,000	138.00/M	EEV-HA1H3R3R

(Continued)

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Panasonic® VV/TA/HD/VA/VS/HA/HB/FC/FK/EB Series Aluminum Electrolytic Capacitors, Surface Mount Type *(Cont.)*

Rated W.V. (VDC)	Nom. Cap (μF)	tan δ ≤ spec. values (120Hz, +20°C)	Impe-dance (ohms)	Max. Leak. Current (μA)	Size Code	Max. Ripple Cur. 120Hz, 105°C (mA rms)	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel		Panasonic Part No.
								10	25	100	500		Size	Pricing	
50	4.7	0.12	—	3.0	C	23	PCE3021CT-ND	.39	—	.36	.28	PCE3021TR-ND	1,000	164.00	EEV-HA1H4R7R
	10	0.12	—	5.0	D	35	PCE3022CT-ND	.47	—	.41	.32	PCE3022TR-ND	1,000	188.00	EEV-HA1H100P
	22	0.12	—	11.0	E	70	PCE3228CT-ND	.64	—	.59	.46	PCE3228TR-ND	1,000	272.00	EEV-HA1H220P
	33	0.12	—	16.5	D8	60	PCE3362CT-ND	.45	—	.42	.32	PCE3362TR-ND	900	171.00	EEV-HA1H33Ĭ0XP
	33	0.12	—	16.5	E	70	PCE3303CT-ND	.44	—	.41	.32	PCE3303TR-ND	1,000	189.00	EEV-HA1H330UP
	33	0.12	—	16.5	F	91	PCE3229CT-ND	.87	—	.76	—	PCE3229TR-ND	500	185.00	EEV-HA1H330P
	47	0.12	—	23.5	D8	63	PCE3363CT-ND	.45	—	.42	.32	PCE3363TR-ND	900	171.00	EEV-HA1H470XP
	47	0.12	—	23.5	F	95	PCE3230CT-ND	.69	—	.60	—	PCE3230TR-ND	500	145.50	EEV-HA1H470UP
	100	0.12	—	50.0	F	110	PCE3231CT-ND	.76	—	.66	—	PCE3231TR-ND	500	161.00	EEV-HA1H101UP
	100	0.12	—	50.0	G	120	PCE3232CT-ND	1.10	—	.95	—	PCE3232TR-ND	500	233.00	EEV-HA1H101P
	220	0.12	—	110.0	G	150	PCE3233CT-ND	.96	—	.83	—	PCE3233TR-ND	500	203.00	EEV-HA1H221P
63	10	0.18	—	6.3	E	25	PCE3234CT-ND	.56	—	.52	.40	PCE3234TR-ND	1,000	241.00	EEV-HA1J100P
	22	0.18	—	13.9	E	30	PCE3304CT-ND	.56	—	.52	.40	PCE3304TR-ND	1,000	239.00	EEV-HA1J220UP
	22	0.18	—	13.9	F	30	PCE3235CT-ND	.77	—	.66	—	PCE3235TR-ND	500	162.50	EEV-HA1J220P
	33	0.18	—	20.8	G	45	PCE3236CT-ND	.97	—	.84	—	PCE3236TR-ND	500	205.50	EEV-HA1J330P
	47	0.18	—	29.7	E	50	PCE3305CT-ND	.63	—	.59	—	PCE3305TR-ND	500	143.50	EEV-HA1J470UP
	47	0.18	—	29.6	G	50	PCE3237CT-ND	.97	—	.84	—	PCE3237TR-ND	500	205.50	EEV-HA1J470P
100	3.3	0.18	—	3.3	E	30	PCE3238CT-ND	.56	—	.52	.40	PCE3238TR-ND	1,000	241.00	EEV-HA2A3R3P
	4.7	0.18	—	4.7	E	30	PCE3306CT-ND	.56	—	.52	.40	PCE3306TR-ND	1,000	239.00	EEV-HA2A4R7UP
	4.7	0.18	—	4.7	F	50	PCE3239CT-ND	.77	—	.66	—	PCE3239TR-ND	500	162.50	EEV-HA2A4R7P
	10	0.18	—	10.0	F	55	PCE3240CT-ND	.77	—	.66	—	PCE3240TR-ND	500	162.50	EEV-HA2A100P
	22	0.18	—	22.0	E	55	PCE3307CT-ND	.72	—	.67	—	PCE3307TR-ND	500	163.00	EEV-HA2A220UP
	22	0.18	—	22.0	G	60	PCE3241CT-ND	.97	—	.84	—	PCE3241TR-ND	500	205.50	EEV-HA2A220P
	33	0.18	—	33.0	G	65	PCE3242CT-ND	.97	—	.84	—	PCE3242TR-ND	500	205.50	EEV-HA2A330P
HB Long Life High Reliability Series: –40°C to +105°C (2000 Hour Life)															
4	47	0.50	—	3.0	B	34	PCE3023CT-ND	.37	—	.34	.26	PCE3023TR-ND	2,000	156.00/M	EEV-HB0G470R
	100	0.50	—	4.0	C	61	PCE3024CT-ND	.44	—	.41	.32	PCE3024TR-ND	1,000	188.00	EEV-HB0G101R
	220	0.50	—	8.8	D	82	PCE3025CT-ND	.53	—	.46	.35	PCE3025TR-ND	1,000	211.00	EEV-HB0G221P
6.3	22	0.30	—	3.0	B	26	PCE3026CT-ND	.37	—	.34	.26	PCE3026TR-ND	2,000	156.00/M	EEV-HB0J220R
	33	0.30	—	3.0	B	29	PCE3027CT-ND	.37	—	.34	.26	PCE3027TR-ND	2,000	156.00/M	EEV-HB0J330R
	47	0.30	—	3.0	C	46	PCE3028CT-ND	.44	—	.41	.32	PCE3028TR-ND	1,000	188.00	EEV-HB0J470R
	100	0.30	—	6.3	D	71	PCE3029CT-ND	.53	—	.46	.35	PCE3029TR-ND	1,000	211.00	EEV-HB0J101P
10	33	0.22	—	3.3	C	43	PCE3030CT-ND	.44	—	.41	.32	PCE3030TR-ND	1,000	188.00	EEV-HB1A330R
16	10	0.16	—	3.0	B	28	PCE3031CT-ND	.37	—	.34	.26	PCE3031TR-ND	2,000	156.00/M	EEV-HB1C100R
	22	0.16	—	3.5	C	39	PCE3032CT-ND	.44	—	.41	.32	PCE3032TR-ND	1,000	188.00	EEV-HB1C220R
	47	0.16	—	7.5	D	70	PCE3033CT-ND	.53	—	.46	.35	PCE3033TR-ND	1,000	211.00	EEV-HB1C470P
25	4.7	0.14	—	3.0	B	22	PCE3034CT-ND	.37	—	.34	.26	PCE3034TR-ND	2,000	156.00/M	EEV-HB1E4R7R
	6.8	0.14	—	3.0	B	25	PCE3035CT-ND	.34	—	.32	.25	PCE3035TR-ND	2,000	146.00/M	EEV-HB1E6R8R
	10	0.14	—	3.0	C	28	PCE3036CT-ND	.61	—	.56	.43	PCE3036TR-ND	1,000	259.00	EEV-HB1E100R
	22	0.14	—	5.5	D	55	PCE3037CT-ND	.75	—	.65	.50	PCE3037TR-ND	1,000	301.00	EEV-HB1E220P
	33	0.14	—	8.3	D	65	PCE3038CT-ND	.53	—	.46	.35	PCE3038TR-ND	1,000	211.00	EEV-HB1E330P
35	10	0.12	—	3.5	C	28	PCE3039CT-ND	.44	—	.41	.32	PCE3039TR-ND	1,000	188.00	EEV-HB1V100R
	22	0.12	—	7.7	D	55	PCE3040CT-ND	.53	—	.46	.35	PCE3040TR-ND	1,000	211.00	EEV-HB1V220P
50	0.1	0.12	—	3.0	B	1	PCE3041CT-ND	.37	—	.34	.26	PCE3041TR-ND	2,000	156.00/M	EEV-HB1HR10R
	0.22	0.12	—	3.0	B	2	PCE3042CT-ND	.37	—	.34	.26	PCE3042TR-ND	2,000	156.00/M	EEV-HB1HR22R
	0.33	0.12	—	3.0	B	3	PCE3043CT-ND	.37	—	.34	.26	PCE3043TR-ND	2,000	156.00/M	EEV-HB1HR33R
	0.47	0.12	—	3.0	B	5	PCE3044CT-ND	.37	—	.34	.26	PCE3044TR-ND	2,000	156.00/M	EEV-HB1HR47R
	1	0.12	—	3.0	B	10	PCE3045CT-ND	.37	—	.34	.26	PCE3045TR-ND	2,000	156.00/M	EEV-HB1H1R0R
	2.2	0.12	—	3.0	B	16	PCE3046CT-ND	.37	—	.34	.26	PCE3046TR-ND	2,000	156.00/M	EEV-HB1H2R2R
	3.3	0.12	—	3.0	B	16	PCE3047CT-ND	.37	—	.34	.26	PCE3047TR-ND	2,000	156.00/M	EEV-HB1H3R3R
	4.7	0.12	—	3.0	C	23	PCE3048CT-ND	.37	—	.35	.27	PCE3048TR-ND	1,000	158.00	EEV-HB1H4R7R
	6.8	0.12	—	3.4	C	23	PCE3049CT-ND	.37	—	.35	.27	PCE3049TR-ND	1,000	158.00	EEV-HB1H6R8R
	10.0	0.12	—	5.0	D	35	PCE3050CT-ND	.53	—	.46	.35	PCE3050TR-ND	1,000	211.00	EEV-HB1H100P
FC Low Impedance High Reliability Series: –40°C to +105°C (1000 Hour Life; 5000 Hours for Case Sizes H, J, and K)															
6.3	22	0.26	3.00	3.0	B	60	PCE3090CT-ND	.41	—	.39	.30	PCE3090TR-ND	2,000	176.00/M	EEV-FC0J220R
	47	0.26	1.80	3.0	C	95	PCE3091CT-ND	.49	—	.45	.35	PCE3091TR-ND	1,000	208.00	EEV-FC0J470R
	68	0.26	1.00	4.3	D	140	PCE3092CT-ND	.55	—	.52	.40	PCE3092TR-ND	1,000	236.00	EEV-FC0J680P
	100	0.26	1.00	6.3	D	140	PCE3093CT-ND	.55	—	.52	.40	PCE3093TR-ND	1,000	236.00	EEV-FC0J101P
	220	0.26	0.40	13.9	E	230	PCE3094CT-ND	.80	—	.74	—	PCE3094TR-ND	1,000	341.00	EEV-FC0J221P
	330	0.26	0.30	20.8	F	450	PCE3095CT-ND	1.10	—	.95	—	PCE3095TR-ND	500	233.00	EEV-FC0J331P
	1000	0.26	0.15	63.0	G	670	PCE3243CT-ND	1.38	—	1.20	—	PCE3243TR-ND	500	293.50	EEV-FC0J102P
	1500	0.26	0.15	94.5	G	670	PCE3244CT-ND	1.21	—	1.05	—	PCE3244TR-ND	500	257.00	EEV-FC0J152P
10	33	0.19	1.80	3.3	C	95	PCE3096CT-ND	.49	—	.45	.35	PCE3096TR-ND	1,000	208.00	EEV-FC1A330R
	100	0.19	0.40	10.0	E	230	PCE3097CT-ND	.80	—	.74	.57	PCE3097TR-ND	1,000	341.00	EEV-FC1A101P
	150	0.19	0.40	15.0	E	230	PCE3098CT-ND	.80	—	.74	.57	PCE3098TR-ND	1,000	341.00	EEV-FC1A151P
	220	0.19	0.30	22.0	F	450	PCE3099CT-ND	1.10	—	.95	—	PCE3099TR-ND	500	233.00	EEV-FC1A221P
	470	0.19	0.15	47.0	G	670	PCE3100CT-ND	1.38	—	1.20	—	PCE3100TR-ND	500	293.50	EEV-FC1A471P
	1000	0.22	0.15	100.0	G	670	PCE3245CT-ND	1.10	—	.95	—	PCE3245TR-ND	500	233.00	EEV-FC1A102P
	1000	0.19	0.065	100.0	H16	1205	PCE3312CT-ND	1.69	1.57	—	—	PCE3312TR-ND	150	108.36	EEV-FC1A102LQ
	2200	0.21	0.043	220.0	J16	1690	PCE3313CT-ND	2.06	1.91	—	—	PCE3313TR-ND	125	110.04	EEV-FC1A222N
	3300	0.23	0.038	330.0	K16	2000	PCE3314CT-ND	2.49	2.31	—	—	PCE3314TR-ND	125	132.93	EEV-FC1A332N
	4700	0.25	0.028	470.0	K21	2490	PCE3315CT-ND	2.96	2.75	—	—	PCE3315TR-ND	75	95.13	EEV-FC1A472N
	6800	0.29	0.028	680.0	K21	2490	PCE3316CT-ND	2.96	2.75	—	—	PCE3316TR-ND	75	95.13	EEV-FC1A682N
16	10	0.16	3.00	3.0	B	60	PCE3101CT-ND	.41	—	.39	.30	PCE3101TR-ND	2,000	176.00/M	EEV-FC1C100R
	22	0.16	1.80	3.5	C	95	PCE3102CT-ND	.49	—	.45	.35	PCE3102TR-ND	1,000	208.00	EEV-FC1C220R
	47	0.16	1.00	7.5	D	140	PCE3103CT-ND	.55	—	.52	.40	PCE3103TR-ND	1,000	236.00	EEV-FC1C470P
	68	0.16	0.40	10.9	E	230	PCE3104CT-ND	.80	—	.74	.57	PCE3104TR-ND	1,000	341.00	EEV-FC1C680P
	100	0.16	0.40	16.0	E	230	PCE3105CT-ND	.80	—	.74	.57	PCE3105TR-ND	1,000	341.00	EEV-FC1C101P
	220	0.16	0.15	35.2	G	670	PCE3106CT-ND	1.38	—	1.20	—	PCE3106TR-ND	500	293.50	EEV-FC1C221P
	330	0.16	0.15	52.8	G	670	PCE3107CT-ND	1.38	—	1.20	—	PCE3107TR-ND	500	293.50	EEV-FC1C331P
	470	0.16	0.15	75.2	G	670	PCE3246CT-ND	1.10	—	.95	—	PCE3246TR-ND	500	233.00	EEV-FC1C471P
	1000	0.16	0.043	160.0	J16	1690	PCE3317CT-ND	2.06	1.91	—	—	PCE3317TR-ND	125	110.04	EEV-FC1C102N
	2200	0.18	0.038	352.0	K16	2000	PCE3318CT-ND	2.49	2.31	—	—	PCE3318TR-ND	125	132.93	EEV-FC1C222N
	3300	0.20	0.028	528.0	K21	2490	PCE3319CT-ND	2.97	2.76	—	—	PCE3319TR-ND	75	95.38	EEV-FC1C332N
25	6.8	0.14	3.00	3.0	B	60	PCE3108CT-ND	.41	—	.39	.30	PCE3108TR-ND	2,000	176.00/M	EEV-FC1E6R8R
	22	0.14	1.00	5.5	D	140	PCE3109CT-ND	.55	—	.52	.40	PCE3109TR-ND	1,000	236.00	EEV-FC1E220P
	33	0.14	1.00	8.2	D	140	PCE3110CT-ND	.55	—	.52	.40	PCE3110TR-ND	1,000	236.00	EEV-FC1E330P
	47	0.14	0.40	11.8	E	230	PCE3111CT-ND	.80	—	.74	.57	PCE3111TR-ND	1,000	341.00	EEV-FC1E470P
	68	0.14	0.30	17.0	F	450	PCE3112CT-ND	1.10	—	.95	—	PCE3112TR-ND	500	233.00	EEV-FC1E680P
	100	0.14	0.30	25.0	F	450	PCE3247CT-ND	1.10	—	.95	—	PCE3247TR-ND	500	233.00	EEV-FC1E101P
	330	0.14	0.15	82.5	G	670	PCE3248CT-ND	1.10	—	.95	—	PCE3248TR-ND	500	233.00	EEV-FC1E331P
	470	0.14	0.15	117.5	G	670	PCE3249CT-ND	1.21	—	1.05	—	PCE3249TR-ND	500	257.00	EEV-FC1E471P
	470	0.14	0.065	118.0	H16	1205	PCE3320CT-ND	1.69	1.57	—	—	PCE3320TR-ND	150	108.36	EEV-FC1E471LQ

(Continued)

Rated W.V. (VDC)	Nom. Cap (µF)	tan δ ≤ spec. values (120Hz, +20°C)	Impedance (ohms)	Max. Leak. Current (µA)	Size Code	Max. Ripple Cur. 120Hz, 105°C (mA rms)	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel		Panasonic Part No.
								10	25	100	500		Size	Pricing	
35	1.0	0.12	3.00	3.0	B	50	PCE3113CT-ND	.41	—	.39	.30	PCE3113TR-ND	2,000	176.00/M	EEV-FC1V1R0R
	2.2	0.12	3.00	3.0	B	50	PCE3114CT-ND	.41	—	.39	.30	PCE3114TR-ND	2,000	176.00/M	EEV-FC1V2R2R
	3.3	0.12	3.00	3.0	B	50	PCE3115CT-ND	.41	—	.39	.30	PCE3115TR-ND	2,000	176.00/M	EEV-FC1V3R3R
	4.7	0.12	3.00	3.0	B	60	PCE3116CT-ND	.41	—	.39	.30	PCE3116TR-ND	2,000	176.00/M	EEV-FC1V4R7R
	6.8	0.12	1.80	3.0	C	95	PCE3117CT-ND	.49	—	.45	.35	PCE3117TR-ND	1,000	208.00	EEV-FC1V6R8R
	10	0.12	1.80	3.5	C	95	PCE3118CT-ND	.49	—	.45	.35	PCE3118TR-ND	1,000	208.00	EEV-FC1V100R
	22	0.12	1.00	7.7	D	140	PCE3119CT-ND	.55	—	.52	.40	PCE3119TR-ND	1,000	236.00	EEV-FC1V220P
	33	0.12	0.40	11.6	E	230	PCE3120CT-ND	.80	—	.74	.57	PCE3120TR-ND	1,000	341.00	EEV-FC1V330P
	47	0.12	0.40	16.5	E	230	PCE3121CT-ND	.80	—	.74	.57	PCE3121TR-ND	1,000	341.00	EEV-FC1V470P
	100	0.12	0.15	35.0	G	670	PCE3122CT-ND	1.38	—	1.20	—	PCE3122TR-ND	500	293.50	EEV-FC1V101P
	220	0.12	0.15	77.0	G	670	PCE3250CT-ND	1.10	—	.95	—	PCE3250TR-ND	500	233.00	EEV-FC1V221P
	330	0.12	0.15	115.5	G	670	PCE3251CT-ND	1.21	—	1.05	—	PCE3251TR-ND	500	257.00	EEV-FC1V331P
	330	0.12	0.065	116.0	H16	1205	PCE3321CT-ND	1.69	1.57	—	—	PCE3321TR-ND	150	108.36	EEV-FC1V331LQ
	470	0.12	0.043	165.0	J16	1690	PCE3322CT-ND	2.06	1.91	—	—	PCE3322TR-ND	125	110.04	EEV-FC1V471N
	1000	0.12	0.038	350.0	K16	2000	PCE3323CT-ND	2.49	2.31	—	—	PCE3323TR-ND	125	132.93	EEV-FC1V102N
	2200	0.14	0.028	770.0	K21	2490	PCE3324CT-ND	2.97	2.76	—	—	PCE3324TR-ND	75	95.38	EEV-FC1V222N
50	1	0.12	5.00	3.0	B	30	PCE3252CT-ND	.41	—	.39	.30	PCE3252TR-ND	2,000	176.00/M	EEV-FC1H1R0R
	2.2	0.12	5.00	3.0	B	30	PCE3253CT-ND	.41	—	.39	.30	PCE3253TR-ND	2,000	176.00/M	EEV-FC1H2R2R
	3.3	0.12	5.00	3.0	B	30	PCE3254CT-ND	.41	—	.39	.30	PCE3254TR-ND	2,000	176.00/M	EEV-FC1H3R3R
	4.7	0.12	3.00	3.0	C	50	PCE3255CT-ND	.49	—	.45	.35	PCE3255TR-ND	1,000	208.00	EEV-FC1H4R7R
	10	0.12	2.00	5.0	D	70	PCE3256CT-ND	.55	—	.52	.40	PCE3256TR-ND	1,000	236.00	EEV-FC1H100P
	22	0.12	0.70	11.0	E	120	PCE3257CT-ND	.80	—	.74	.57	PCE3257TR-ND	1,000	341.00	EEV-FC1H220P
	33	0.12	0.60	16.5	F	300	PCE3258CT-ND	1.10	—	.95	—	PCE3258TR-ND	500	233.00	EEV-FC1H330P
	47	0.12	0.30	23.5	G	500	PCE3259CT-ND	1.38	—	1.20	—	PCE3259TR-ND	500	293.50	EEV-FC1H470P
	100	0.12	0.30	50.0	G	500	PCE3260CT-ND	1.10	—	.95	—	PCE3260TR-ND	500	233.00	EEV-FC1H101P
	220	0.12	0.30	110.0	G	500	PCE3261CT-ND	1.21	—	1.05	—	PCE3261TR-ND	500	257.00	EEV-FC1H221P
	220	0.10	0.110	110.0	H16	1150	PCE3325CT-ND	1.69	1.57	—	—	PCE3325TR-ND	150	108.36	EEV-FC1H221LQ
	330	0.10	0.080	165.0	J16	1610	PCE3326CT-ND	2.06	1.91	—	—	PCE3326TR-ND	125	110.04	EEV-FC1H331N
	470	0.10	0.068	235.0	K16	1900	PCE3327CT-ND	2.49	2.31	—	—	PCE3327TR-ND	125	132.93	EEV-FC1H471N
	1000	0.10	0.042	500.0	K21	2420	PCE3328CT-ND	2.97	2.76	—	—	PCE3328TR-ND	75	95.38	EEV-FC1H102N
63	100	0.08	0.150	63.0	H16	1020	PCE3329CT-ND	1.69	1.57	—	—	PCE3329TR-ND	150	108.36	EEV-FC1J101Q
	220	0.08	0.090	139.0	J16	1410	PCE3330CT-ND	2.06	1.91	—	—	PCE3330TR-ND	125	110.04	EEV-FC1J221N
	330	0.08	0.086	208.0	K16	1690	PCE3331CT-ND	2.49	2.31	—	—	PCE3331TR-ND	125	132.93	EEV-FC1J331N
	470	0.08	0.055	296.0	K21	2290	PCE3332CT-ND	2.97	2.76	—	—	PCE3332TR-ND	75	95.38	EEV-FC1J471N
100	47	0.07	0.300	47.0	H16	511	PCE3333CT-ND	1.69	1.57	—	—	PCE3333TR-ND	150	108.36	EEV-FC2A470Q
	68	0.07	0.300	68.0	H16	511	PCE3334CT-ND	1.69	1.57	—	—	PCE3334TR-ND	150	108.36	EEV-FC2A680Q
	100	0.07	0.180	100.0	J16	793	PCE3335CT-ND	2.06	1.91	—	—	PCE3335TR-ND	125	110.04	EEV-FC2A101N
	220	0.07	0.155	220.0	K16	917	PCE3336CT-ND	2.49	2.31	—	—	PCE3336TR-ND	125	132.93	EEV-FC2A221N
	330	0.07	0.083	330.0	K21	1230	PCE3337CT-ND	2.97	2.76	—	—	PCE3337TR-ND	75	95.38	EEV-FC2A331N
FK Series: Low Impedence (40-60% lower than FC), High Reliability, Life Time 2000 hrs. at 105°C -55°C to +105°C															
6.3	22	—	1.35	3.0	B	90	PCE3377CT-ND	.35	—	.32	.25	PCE3377TR-ND	2,000	147.00/M	EEV-FK0J220R
	47	—	1.35	3.0	B	90	PCE3378CT-ND	.35	—	.32	.25	PCE3378TR-ND	2,000	147.00/M	EEV-FK0J470UR
	47	—	0.7	3.0	C	160	PCE3379CT-ND	.40	—	.37	.29	PCE3379TR-ND	1,000	170.00	EEV-FK0J470R
	100	—	0.7	6.3	C	160	PCE3380CT-ND	.40	—	.37	.29	PCE3380TR-ND	1,000	170.00	EEV-FK0J101UR
	100	—	0.36	6.3	D	240	PCE3381CT-ND	.46	—	.42	.33	PCE3381TR-ND	1,000	194.00	EEV-FK0J101P
	220	—	0.36	13.9	D	240	PCE3382CT-ND	.46	—	.42	.33	PCE3382TR-ND	1,000	194.00	EEV-FK0J221P
	330	—	0.26	20.8	E	300	PCE3383CT-ND	.74	—	.69	.53	PCE3383TR-ND	1,000	317.00	EEV-FK0J331P
	470	—	0.16	29.6	F	600	PCE3384CT-ND	.97	—	.85	—	PCE3384TR-ND	500	207.00	EEV-FK0J471P
	1000	—	0.16	63.0	F	600	PCE3385CT-ND	.97	—	.85	—	PCE3385TR-ND	500	207.00	EEV-FK0J102P
	1500	—	0.08	94.5	G	850	PCE3386CT-ND	1.21	—	1.05	—	PCE3386TR-ND	500	258.00	EEV-FK0J152P
10	22	—	1.35	3.0	B	90	PCE3387CT-ND	.35	—	.32	.25	PCE3387TR-ND	2,000	294.00	EEV-FK1A220R
	33	—	1.35	3.3	B	90	PCE3388CT-ND	.35	—	.32	.25	PCE3388TR-ND	2,000	294.00	EEV-FK1A330UR
	33	—	0.7	3.3	C	160	PCE3389CT-ND	.40	—	.37	.29	PCE3389TR-ND	1,000	170.00	EEV-FK1A330R
	220	—	0.26	22.0	E	300	PCE3390CT-ND	.74	—	.69	.53	PCE3390TR-ND	1,000	317.00	EEV-FK1A221P
	330	—	0.16	33.0	F	600	PCE3391CT-ND	.97	—	.85	—	PCE3391TR-ND	500	207.00	EEV-FK1A331P
	470	—	0.16	47.0	F	600	PCE3392CT-ND	.97	—	.85	—	PCE3392TR-ND	500	207.00	EEV-FK1A471P
	1000	—	0.08	100.0	G	850	PCE3393CT-ND	1.21	—	1.05	—	PCE3393TR-ND	500	258.00	EEV-FK1A102P
16	10	—	1.35	3.0	B	90	PCE3394CT-ND	.35	—	.32	.25	PCE3394TR-ND	2,000	147.00/M	EEV-FK1C100R
	22	—	1.35	3.5	B	90	PCE3395CT-ND	.35	—	.32	.25	PCE3395TR-ND	2,000	147.00/M	EEV-FK1C220UR
	22	—	0.7	3.5	C	160	PCE3396CT-ND	.40	—	.37	.29	PCE3396TR-ND	1,000	170.00	EEV-FK1C220R
	47	—	0.7	7.5	C	160	PCE3397CT-ND	.40	—	.37	.29	PCE3397TR-ND	1,000	170.00	EEV-FK1C470UR
	47	—	0.36	7.5	D	240	PCE3398CT-ND	.46	—	.42	.33	PCE3398TR-ND	1,000	194.00	EEV-FK1C470P
	100	—	0.36	16.0	D	240	PCE3399CT-ND	.46	—	.42	.33	PCE3399TR-ND	1,000	194.00	EEV-FK1C101P
	220	—	0.26	35.2	E	300	PCE3400CT-ND	.74	—	.69	.53	PCE3400TR-ND	1,000	317.00	EEV-FK1C221P
	330	—	0.16	52.8	F	600	PCE3401CT-ND	.97	—	.85	—	PCE3401TR-ND	500	207.00	EEV-FK1C331P
	470	—	0.16	75.2	F	600	PCE3402CT-ND	.97	—	.85	—	PCE3402TR-ND	500	207.00	EEV-FK1C471P
25	10	—	1.35	3.0	B	90	PCE3403CT-ND	.35	—	.32	.25	PCE3403TR-ND	2,000	147.00/M	EEV-FK1E100R
	22	—	0.7	5.5	C	160	PCE3404CT-ND	.40	—	.37	.29	PCE3404TR-ND	1,000	170.00	EEV-FK1E220R
	33	—	0.7	8.3	C	160	PCE3405CT-ND	.40	—	.37	.29	PCE3405TR-ND	1,000	170.00	EEV-FK1E330UR
	33	—	0.36	8.3	D	240	PCE3406CT-ND	.46	—	.42	.33	PCE3406TR-ND	1,000	194.00	EEV-FK1E330P
	47	—	0.36	11.8	D	240	PCE3407CT-ND	.46	—	.42	.33	PCE3407TR-ND	1,000	194.00	EEV-FK1E470P
	100	—	0.26	25.0	E	300	PCE3408CT-ND	.74	—	.69	.53	PCE3408TR-ND	1,000	317.00	EEV-FK1E101P
	220	—	0.16	55.0	F	600	PCE3409CT-ND	.97	—	.85	—	PCE3409TR-ND	500	207.00	EEV-FK1E221P
	330	—	0.16	82.5	F	600	PCE3410CT-ND	.97	—	.85	—	PCE3410TR-ND	500	207.00	EEV-FK1E331P
	470	—	0.08	117.5	G	850	PCE3411CT-ND	1.21	—	1.05	—	PCE3411TR-ND	500	258.00	EEV-FK1E471P
35	4.7	—	1.35	3.0	B	90	PCE3412CT-ND	.35	—	.32	.25	PCE3412TR-ND	2,000	147.00/M	EEV-FK1V4R7R
	10	—	1.35	3.5	B	90	PCE3413CT-ND	.35	—	.32	.25	PCE3413TR-ND	2,000	147.00/M	EEV-FK1V100UR
	10	—	0.7	3.5	C	160	PCE3414CT-ND	.40	—	.37	.29	PCE3414TR-ND	1,000	170.00	EEV-FK1V100R
	22	—	0.7	7.7	C	160	PCE3415CT-ND	.40	—	.37	.29	PCE3415TR-ND	1,000	170.00	EEV-FK1V220R
	33	—	0.36	11.6	D	240	PCE3416CT-ND	.46	—	.42	.33	PCE3416TR-ND	1,000	194.00	EEV-FK1V330P
	47	—	0.36	16.5	D	240	PCE3417CT-ND	.46	—	.42	.33	PCE3417TR-ND	1,000	194.00	EEV-FK1V470P
	100	—	0.16	35.0	F	600	PCE3418CT-ND	.97	—	.85	—	PCE3418TR-ND	500	207.00	EEV-FK1V101P
	220	—	0.16	77.0	F	600	PCE3419CT-ND	.97	—	.85	—	PCE3419TR-ND	500	207.00	EEV-FK1V221P
	330	—	0.08	115.5	G	850	PCE3420CT-ND	1.21	—	1.05	—	PCE3420TR-ND	500	258.00	EEV-FK1V331P
EB Long Life, High Ripple Series: -20°C to +105°C															
160	10	0.15	—	16.0	G13	70	PCE3421CT-ND	1.12	1.04	—	—	PCE3421TR-ND	250	119.75	EEV-EB2C100Q
	33	0.15	—	52.8	H16	470	PCE3422CT-ND	1.85	1.72	—	—	PCE3422TR-ND	150	118.65	EEV-EB2C330SQ
	47	0.15	—	75.2	J16	600	PCE3423CT-ND	2.26	2.10	—	—	PCE3423TR-ND	125	120.75	EEV-EB2C470SN
	68	0.15	—	108.8	J21	750	PCE3424CT-ND	2.72	2.53	—	—	PCE3424TR-ND	75	87.30	EEV-EB2C680N
	68	0.15	—	108.8	K16	750	PCE3425CT-ND	2.72	2.53	—	—	PCE3425TR-ND	125	145.50	EEV-EB2C680SN
	100	0.15	—	160.0	K21	1060	PCE3426CT-ND	2.85	2.65	—	—	PCE3426TR-ND	75	91.50	EEV-EB2C101N
200	22	0.15	—	44.0	H16	470	PCE3427CT-ND	1.85	1.72	—	—	PCE3427TR-ND	150	118.65	EEV-EB2D220SQ
	33	0.15	—	66.0	J16	600	PCE3428CT-ND	2.26	2.10	—	—	PCE3428TR-ND	125	120.75	EEV-EB2D330SN
	47	0.15	—	94.0	K16	600	PCE3429CT-ND	2.72	2.53	—	—	PCE3429TR-ND	125	145.50	EEV-EB2D470SN
	68	0.15	—	136.0	J21	750	PCE3430CT-ND	2.72	2.53	—	—	PCE3430TR-ND	75	87.30	EEV-EB2D680N
	100	0.15	—	200.0	K21	1060	PCE3431CT-ND	3.25	3.02	—	—	PCE3431TR-ND	75	104.33	EEV-EB2D101N

Rated W.V. (VDC)	Nom. Cap (µF)	tan δ ≤ spec. values (120Hz, +20°C)	Impe-dance (ohms)	Max. Leak. Current (µA)	Size Code	Max. Ripple Cur. 120Hz, 105°C (mA rms)	Digi-Key Part No.	Cut Tape Price Each 10	25	100	500	Digi-Key Part No.	Tape & Reel Size	Pricing	Panasonic Part No.
250	10	0.15	—	25.0	G17	88	PCE3432CT-ND	1.29	1.20	—	—	PCE3432TR-ND	200	110.60	EEV-EB2E100Q
	22	0.15	—	55.0	J16	560	PCE3433CT-ND	2.26	2.10	—	—	PCE3433TR-ND	125	120.75	EEV-EB2E220SN
	33	0.15	—	82.5	K16	560	PCE3434CT-ND	2.72	2.53	—	—	PCE3434TR-ND	125	145.50	EEV-EB2E330SN
	47	0.15	—	117.5	J21	710	PCE3435CT-ND	2.72	2.53	—	—	PCE3435TR-ND	75	87.30	EEV-EB2E470N
	68	0.15	—	170.0	K21	990	PCE3436CT-ND	3.25	3.02	—	—	PCE3436TR-ND	75	104.33	EEV-EB2E680N
350	10	0.20	—	35.0	J16	270	PCE3437CT-ND	2.26	2.10	—	—	PCE3437TR-ND	125	120.75	EEV-EB2V100SN
	22	0.20	—	77.0	K16	350	PCE3438CT-ND	2.72	2.53	—	—	PCE3438TR-ND	125	145.50	EEV-EB2V220SN
	33	0.20	—	115.5	J21	480	PCE3439CT-ND	2.72	2.53	—	—	PCE3439TR-ND	75	87.30	EEV-EB2V330N
	47	0.20	—	164.5	K21	670	PCE3440CT-ND	3.25	3.02	—	—	PCE3440TR-ND	75	104.33	EEV-EB2V470N
400	3.3	0.24	—	13.2	G13	40	PCE3441CT-ND	1.12	1.04	—	—	PCE3441TR-ND	250	119.75	EEV-EB2G3R3Q
	4.7	0.24	—	18.8	G17	50	PCE3442CT-ND	1.29	1.20	—	—	PCE3442TR-ND	200	110.60	EEV-EB2G4R7Q
	10	0.24	—	40.0	J16	250	PCE3443CT-ND	2.26	2.10	—	—	PCE3443TR-ND	125	120.75	EEV-EB2G100SN
	22	0.24	—	88.0	J21	410	PCE3444CT-ND	2.72	2.53	—	—	PCE3444TR-ND	75	87.30	EEV-EB2G220N
	33	0.24	—	132.0	K21	600	PCE3445CT-ND	3.25	3.02	—	—	PCE3445TR-ND	75	104.33	EEV-EB2G330N
450	2.2	0.24	—	9.9	G13	29	PCE3446CT-ND	1.12	1.04	—	—	PCE3446TR-ND	250	119.75	EEV-EB2W2R2Q
	3.3	0.24	—	14.9	G17	41	PCE3447CT-ND	1.29	1.20	—	—	PCE3447TR-ND	200	110.60	EEV-EB2W3R3Q
	4.7	0.24	—	21.2	H16	49	PCE3448CT-ND	1.85	1.72	—	—	PCE3448TR-ND	150	118.65	EEV-EB2W4R7SQ
	10	0.24	—	45.0	K16	310	PCE3449CT-ND	2.72	2.53	—	—	PCE3449TR-ND	125	145.50	EEV-EB2W100SN
	22	0.24	—	99.0	K21	560	PCE3450CT-ND	3.25	3.02	—	—	PCE3450TR-ND	75	104.33	EEV-EB2W220N
VS BI-POLAR General Purpose Series: –40°C to +85°C (1000 Hour Life)															
6.3	22	0.52	—	6.0	C	29	PCE3123CT-ND	.50	—	.47	.36	PCE3123TR-ND	1,000	214.00	ECE-V0JA220NR
	47	0.52	—	6.0	D	46	PCE3124CT-ND	.57	—	.53	.41	PCE3124TR-ND	1,000	242.00	ECE-V0JA470NP
10	10	0.40	—	6.0	B	25	PCE3125CT-ND	.43	—	.40	.31	PCE3125TR-ND	2,000	182.00/M	ECE-V1AA100NR
	33	0.40	—	6.6	D	43	PCE3126CT-ND	.57	—	.53	.41	PCE3126TR-ND	1,000	242.00	ECE-V1AA330NP
16	4.7	0.32	—	6.0	B	20	PCE3127CT-ND	.43	—	.40	.31	PCE3127TR-ND	2,000	182.00/M	ECE-V1CA4R7NR
	10	0.32	—	6.0	C	25	PCE3128CT-ND	.50	—	.47	.36	PCE3128TR-ND	1,000	214.00	ECE-V1CA100NR
	22	0.32	—	7.0	D	39	PCE3129CT-ND	.57	—	.53	.41	PCE3129TR-ND	1,000	242.00	ECE-V1CA220NP
25	3.3	0.28	—	6.0	B	12	PCE3130CT-ND	.43	—	.40	.31	PCE3130TR-ND	2,000	182.00/M	ECE-V1EA3R3NR
	4.7	0.28	—	6.0	C	21	PCE3131CT-ND	.50	—	.47	.36	PCE3131TR-ND	1,000	214.00	ECE-V1EA4R7NR
	10	0.28	—	6.0	D	28	PCE3132CT-ND	.57	—	.53	.41	PCE3132TR-ND	1,000	242.00	ECE-V1EA100NP
35	2.2	0.24	—	6.0	B	12	PCE3133CT-ND	.43	—	.40	.31	PCE3133TR-ND	2,000	182.00/M	ECE-V1VA2R2NR
	4.7	0.24	—	6.0	C	22	PCE3134CT-ND	.50	—	.47	.36	PCE3134TR-ND	1,000	214.00	ECE-V1VA4R7NR
	10	0.24	—	7.0	D	30	PCE3135CT-ND	.57	—	.53	.41	PCE3135TR-ND	1,000	242.00	ECE-V1VA100NP
50	0.22	0.24	—	6.0	B	2	PCE3136CT-ND	.43	—	.40	.31	PCE3136TR-ND	2,000	182.00/M	ECE-V1HAR22NR
	0.33	0.24	—	6.0	B	3	PCE3137CT-ND	.43	—	.40	.31	PCE3137TR-ND	2,000	182.00/M	ECE-V1HAR33NR
	0.47	0.24	—	6.0	B	5	PCE3138CT-ND	.43	—	.40	.31	PCE3138TR-ND	2,000	182.00/M	ECE-V1HAR47NR
	1	0.24	—	6.0	B	10	PCE3139CT-ND	.43	—	.40	.31	PCE3139TR-ND	2,000	182.00/M	ECE-V1HA010NR
	2.2	0.24	—	6.0	C	16	PCE3140CT-ND	.50	—	.47	.36	PCE3140TR-ND	1,000	214.00	ECE-V1HA2R2NR
	3.3	0.24	—	6.0	C	21	PCE3141CT-ND	.56	—	.52	.40	PCE3141TR-ND	1,000	239.00	ECE-V1HA3R3NP
	4.7	0.24	—	6.0	D	31	PCE3142CT-ND	.57	—	.53	.41	PCE3142TR-ND	1,000	242.00	ECE-V1HA4R7NP

BEYSCHLAG CENTRALAB COMPONENTS

NEW! 085 CS Series Aluminum Electrolytic Capacitors, Surface Mount (Chip) Standard

FEATURES:

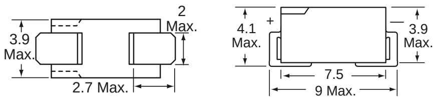
- Polarized aluminum electrolytic capacitors, non-solid electrolyte, self-healing
- SMD-version, rectangular case, insulated
- Miniaturized, high CV per unit volume, low height
- Flexible terminals, reflow and wave solderable
- Charge and discharge proof
- Supplied in blister tape on reel

SPECIFICATIONS:

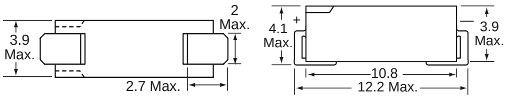
- Tolerance: ±20%
- Temperature Range: -40°C to +85°C
- Useful life at 85°C: 1500 hours

Case Code	Case Size (mm) L	W	H
A	8.8	3.7	3.9
B	11.9	3.7	3.9

Case A



Case B



Voltage	Nom. Cap (µF)	Max. Leak. Current (µA)	Case Code	Max. Ripple Current 100Hz, 85°C (mA)	Digi-Key Part No.	Cut Tape Price Each 10	100	500	Digi-Key Part No.	Tape & Reel Pricing 2000	BC Components Part No.
6.3	10	4	A	11	BC1169CT-ND	1.19	.86	.60	BC1169TR-ND	394.50/M	2222 085 63109
6.3	22	6	B	20	BC1170CT-ND	1.19	.86	.60	BC1170TR-ND	394.50/M	2222 085 63229
16	4.7	5	A	9	BC1171CT-ND	1.19	.86	.60	BC1171TR-ND	394.50/M	2222 085 65478
16	10	6	B	16	BC1172CT-ND	1.19	.86	.60	BC1172TR-ND	394.50/M	2222 085 65109
25	3.3	5	A	8	BC1173CT-ND	1.19	.86	.60	BC1173TR-ND	394.50/M	2222 085 66338
40	2.2	5	A	7	BC1174CT-ND	1.19	.86	.60	BC1174TR-ND	394.50/M	2222 085 67228
40	4.7	7	B	13	BC1175CT-ND	1.19	.86	.60	BC1175TR-ND	394.50/M	2222 085 67478
63	1.0	4	A	6	BC1176CT-ND	1.19	.86	.60	BC1176TR-ND	394.50/M	2222 085 68108

BEYSCHLAG CENTRALAB COMPONENTS

NEW! 139 CLL Series Aluminum Electrolytic Capacitors, Surface Mount (Chip) Long Life

FEATURES:

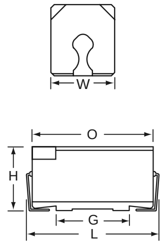
- Polarized aluminum electrolytic capacitors, non-solid electrolyte, self-healing
- SMD-version, fully molded, insulated
- Flexible terminals, reflow and wave solderable
- Compact, rectangular shape
- Charge and discharge proof, no-peak current limitation
- Supplied in blister tape on reel

SPECIFICATIONS:

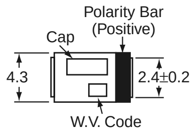
- Tolerance: ±20%
- Temperature Range: -55°C to +105°C
- Useful life at 105°C: 2000 hours

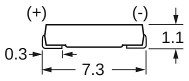
Nominal Case Size L x W x H (mm)	Dimensions (mm) Case Code	L (max.)	W (max.)	H (max.)	O (max.)	G (max.)
14.3 x 6.2 x 6.9	2	14.5	6.3	7.05	13.0	7.5
14.3 x 7.6 x 8.2	3	14.5	7.7	8.35	13.0	7.5

Voltage	Nom. Cap (µF)	Max. Leak. Current (µA)	Case Code	Max. Ripple Current 100Hz, 105°C (mA)	Digi-Key Part No.	Cut Tape Price Each 10	100	500	Digi-Key Part No.	Tape & Reel Pricing 700	BC Components Part No.
6.3	100	16	2	79	BC1177CT-ND	1.35	.98	.68	BC1177TR-ND	315.00	2222 139 63101
6.3	220	32	3	120	BC1178CT-ND	1.58	1.14	.79	BC1178TR-ND	367.50	2222 139 63221
16	47	18	2	66	BC1179CT-ND	1.35	.98	.68	BC1179TR-ND	315.00	2222 139 65479
16	100	35	3	100	BC1180CT-ND	1.58	1.14	.79	BC1180TR-ND	367.50	2222 139 65101
25	22	14	2	48	BC1181CT-ND	1.35	.98	.68	BC1181TR-ND	315.00	2222 139 66229
25	47	27	3	79	BC1182CT-ND	1.58	1.14	.79	BC1182TR-ND	367.50	2222 139 66479
40	33	29	3	75	BC1183CT-ND	1.58	1.14	.79	BC1183TR-ND	367.50	2222 139 67339
50	22	25	3	67	BC1184CT-ND	1.58	1.14	.79	BC1184TR-ND	367.50	2222 139 61229
63	4.7	9	2	28	BC1185CT-ND	1.35	.98	.68	BC1185TR-ND	315.00	2222 139 68478
63	10	16	3	48	BC1186CT-ND	1.58	1.14	.79	BC1186TR-ND	367.50	2222 139 68109
100	4.7	12	3	33	BC1187CT-ND	1.58	1.14	.79	BC1187TR-ND	367.50	2222 139 69478



Panasonic® FD Series Speciality Polymer Aluminum Electrolytic Chip Capacitors, Surface Mount



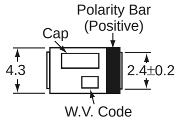


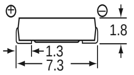
FEATURES: • Low profile type (1.1mm Height) • Low impedance at high frequency (10kHz-10MHz) as low as ceramic capacitors (reduced ESR due to applying specialty polymer with high conductivity) • Excellent noise-absorbent characteristics • Surface mount (reflow soldering method avail.) • Very stable capacitance, impedance and ESR against temp. • Excellent endurance character due to adoption of solid electrolyte

SPECIFICATIONS: • **Operating Temp. Range:** -40 to +105°C • **Capacitance Tolerance:** +20% (120Hz/+20°C) • **DC Leakage Current:** I ≤ 0.04 CV or 3 (μA) after 2 minutes (whichever is the greater) (2 W.V. to 4 W.V : I ≤ 0.06 CV) • **Dissipation Factor:** ≤0.06 (120Hz/+20°C) • **Surge Voltage:** Rated Working Voltage x 1.25 (15 to 35°C) • **Endurance:** After applying rated working voltage for 1000 hours at +105±2°C, and then being stabilized at +20°C, capacitor shall meet the following limits: Capacitance change (±10% of initial measured value). tan (≤initial specified value). DC leakage current (≤initial specified value). • **Moisture Resitance:** (After storing for 500 hours at +60°C, 90% R.H.) Capacitance Change +40%, -20% of initial measured value (4 W.V.: +60%, -20%; 6.3 W.V.: +50%, -20%). D.F.≤200% initial specified value. DC leakage current (≤initial specified value).

W.V.	Cap. (μF)	Impedance (400kHz/+20°C)	Ripple Current (100kHz/+20 to +105°C)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,500	Panasonic Part No.
4	39	0.05	1.6	PCE3451CT-ND	2.83	2.36	2.05	PCE3451TR-ND	943.00/M	EEF-FD0G390R
6.3	33	0.06	1.6	PCE3452CT-ND	2.83	2.36	2.05	PCE3452TR-ND	943.00/M	EEF-FD0J330R
8	22	0.09	1.6	PCE3453CT-ND	2.83	2.36	2.05	PCE3453TR-ND	943.00/M	EEF-FD0K220R

Panasonic® CD Series Speciality Polymer Aluminum Electrolytic Chip Capacitors, Surface Mount





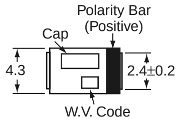
FEATURES: • Low profile type (1.8mm Height) of D size • Low impedance at high frequency (10kHz-10MHz) as low as ceramic capacitors (reduced ESR due to an applying speciality polymer with high conductivity) • Excellent noise-absorbent characteristics • Surface mount (reflow soldering method avail.) • Very stable capacitance, impedance and ESR against temp. • Excellent endurance characteristics due to adoption of solid electrolyte

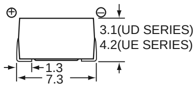
SPECIFICATIONS: • **Operating Temperature Range:** –40°C ~ +105°C • **Capacitance Tolerance:** ±20% (120Hz/+20°C) • **DC Leakage Current:** I≤ 0.04CV or 3μA after 2 minutes (whichever is greater) • **Dissipation Factor:** ≤0.06 (120Hz/+20°C) • **Surge Voltage:** Rated Working Voltage x 1.25 • **Endurance:** After applying rated working voltage for 1000 hours at +105°C, and then being stabilized at +20°C, capacitor shall meet following limits: Capacitance Change (±10% of initial measured value) DF and DC leakage current (initial specified value) • **Moisture Resistance:** (After storing for 500 hours at +60°C, 90-95% R.H.) Capacitance Change (+40%, of initial measured value, -20% (6.3V: +50%, -20%). DF ≤200% initial specified value. DC leakage current (initial specified value).

W.V.	Cap. (μF)	Impedance (400kHz/+20°C)	Ripple Current * (100kHz/+20~+100°C)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,500	Panasonic Part No.
2.0	100	0.04Ω	1.6 Ar.m.s	PCE3271CT-ND	3.23	2.70	2.34	PCE3271TR-ND	1077.00/M	EEF-CD0D101R
2.5	82	0.04Ω	1.6 Ar.m.s	PCE3272CT-ND	3.23	2.70	2.34	PCE3272TR-ND	1077.00/M	EEF-CD0E820R
4.0	56	0.04Ω	1.6 Ar.m.s	PCE3274CT-ND	3.13	2.61	2.27	PCE3274TR-ND	1044.00/M	EEF-CD0G560R
6.3	10	0.13Ω	1 Ar.m.s	PCE3157CT-ND	2.72	2.27	1.97	PCE3157TR-ND	906.00/M	EEF-CD0J100R
	22	0.09Ω	1.3 Ar.m.s	PCE3158CT-ND	2.97	2.48	2.15	PCE3158TR-ND	990.00/M	EEF-CD0J220R
	33	0.06Ω	1.6 Ar.m.s	PCE3159CT-ND	3.21	2.68	2.33	PCE3159TR-ND	1071.00/M	EEF-CD0J330R
	47	0.05Ω	1.6 Ar.m.s	PCE3160CT-ND	3.46	2.89	2.50	PCE3160TR-ND	1154.00/M	EEF-CD0J470R
8	8.2	0.14Ω	1 Ar.m.s	PCE3161CT-ND	2.72	2.27	1.97	PCE3161TR-ND	906.00/M	EEF-CD0K8R2R
	15	0.11Ω	1.3 Ar.m.s	PCE3162CT-ND	2.97	2.48	2.15	PCE3162TR-ND	990.00/M	EEF-CD0K150R
	22	0.09Ω	1.6 Ar.m.s	PCE3163CT-ND	3.21	2.68	2.33	PCE3163TR-ND	1071.00/M	EEF-CD0K220R
	33	0.06Ω	1.6 Ar.m.s	PCE3164CT-ND	3.46	2.89	2.50	PCE3164TR-ND	1154.00/M	EEF-CD0K330R
12.5	4.7	0.18Ω	1 Ar.m.s	PCE3165CT-ND	2.72	2.27	1.97	PCE3165TR-ND	906.00/M	EEF-CD1B4R7R
	10	0.13Ω	1 Ar.m.s	PCE3166CT-ND	2.97	2.48	2.15	PCE3166TR-ND	990.00/M	EEF-CD1B100R
	15	0.11Ω	1.3 Ar.m.s	PCE3167CT-ND	3.21	2.68	2.33	PCE3167TR-ND	1071.00/M	EEF-CD1B150R
	22	0.09Ω	1.6 Ar.m.s	PCE3168CT-ND	3.46	2.89	2.50	PCE3168TR-ND	1154.00/M	EEF-CD1B220R
16	2.2	0.38Ω	1 Ar.m.s	PCE3169CT-ND	2.72	2.27	1.97	PCE3169TR-ND	906.00/M	EEF-CD1C2R2R
	4.7	0.18Ω	1 Ar.m.s	PCE3170CT-ND	2.97	2.48	2.15	PCE3170TR-ND	990.00/M	EEF-CD1C4R7R
	6.8	0.15Ω	1 Ar.m.s	PCE3171CT-ND	3.21	2.68	2.33	PCE3171TR-ND	1071.00/M	EEF-CD1C6R8R
	8.2	0.14Ω	1 Ar.m.s	PCE3172CT-ND	3.46	2.89	2.50	PCE3172TR-ND	1154.00/M	EEF-CD1C8R2R

*Must be corrected for frequency using the Frequency Correction Factor (Sinewave current, Ambient temperature: Room temperature to 100°C): 10k(0.6), 20k(0.7), 50k(0.8), 100k(1.0), 250k(1.1), 500k(1.2), & 1M(1.3).

Panasonic® UD/UE Series Speciality Polymer Aluminum Electrolytic Chip Capacitors, Surface Mount





FEATURES: • Low impedance at high frequency (10kHz to 10MHz) as low as ceramic capacitors (Reduced ESR due to applying speciality polymer with high conductivity) • Stable temperature characteristics: capacitance, impedance and ESR • Excellent noise-absorbent characteristics • Voltage derating not necessary • Excellent endurance characteristics due to adoption of solid electrolyte

SPECIFICATIONS: • **Operating Temp. Range:** –40°C ~ +105°C • **Capacitance Tolerance:** ±20% (120Hz/+20°C) • **DC Leakage Current:** I≤ 0.06CV after 2 minutes • **Dissipation Factor:** ≤0.1 (120Hz/+20°C) • **Surge Voltage:** Rated Working Voltage x 1.25 • **Endurance:** After applying rated working voltage for 1000 hours at +105°C, and then being stabilized at +20°C, capacitor shall meet following limits: Capacitance Change (±10% of initial measured value). DF (initial specified value). DC leakage current (initial specified value). • **Moisture Resistance:** (After storing for 500 hours at +60°C, 90% R.H.) Capacitance Change (*2V:* +70%, -20%, *4V:* +60%, -20%, *6.3V:* +50%, -20% of initial measured value). DF ≤200% initial specified value. DC leakage current (initial specified value).

W.V.	Cap. (μF)	E.S.R. (100KHz/ +20°C)	Ripple Current (100KHz/ 105°C)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 2,000	Panasonic Part No.
UD Series										
2	180	.018Ω	2A	PCE3262CT-ND	6.62	5.52	4.78	PCE3262TR-ND	2205.00/M	EEF-UD0D181R
2.5	150	.018Ω	2A	PCE3273CT-ND	6.62	5.52	4.78	PCE3273TR-ND	2205.00/M	EEF-UD0E151R
4	120	.018Ω	2A	PCE3263CT-ND	5.88	4.91	4.25	PCE3263TR-ND	1961.00/M	EEF-UD0G121R
6.3	100	.018Ω	2A	PCE3264CT-ND	5.88	4.91	4.25	PCE3264TR-ND	1961.00/M	EEF-UD0J101R
8	68	.021Ω	1.8A	PCE3265CT-ND	5.88	4.91	4.25	PCE3265TR-ND	1961.00/M	EEF-UD0K680R
UE Series										
2	270	.015Ω	3A	PCE3266CT-ND	8.32	6.94	6.01	PCE3266TR-ND	2774.00/M	EEF-UE0D271R
2.5	220	.015Ω	3A	PCE3267CT-ND	8.32	6.94	6.01	PCE3267TR-ND	2774.00/M	EEF-UE0E221R
4	180	.015Ω	3A	PCE3268CT-ND	7.42	6.18	5.36	PCE3268TR-ND	2472.00/M	EEF-UE0G181R
6.3	150	.015Ω	3A	PCE3269CT-ND	7.42	6.18	5.36	PCE3269TR-ND	2472.00/M	EEF-UE0J151R
8	100	.015Ω	3A	PCE3270CT-ND	7.42	6.18	5.36	PCE3270TR-ND	2472.00/M	EEF-UE0K101R

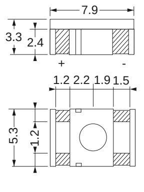
Panasonic® SP/CB Series Speciality Polymer Aluminum Electrolytic Capacitors, Surface Mount

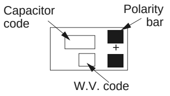
FEATURES:

• Excellent noise-absorbent characteristics • Surface mountable (Flow and reflow soldering method available) • Very stable capacitance, impedance and ESR against temperature • Excellent endurance characteristics due to an adoption of solid electrolyte

SPECIFICATIONS:

• **Operating Temperature Range:** –40°C to +105°C • **Capacitance Tolerance:** ±20% (120Hz, +20°C) • **Leakage Current:** 1≤ 0.04 CV or 3μA after 2 min. • **Dissipation Factor:** ≤0.06 (120kHz/+20°C) • **Permissible Current Between Terminals with Same Polarity:** 2A DC max (This shall be applicable only when each terminal is landed individually as shown in Fig. 2.) • **Surge Voltage:** Rated working voltage x 1.25 • **Endurance:** After applying rated working voltage for 1000 hours at +105°C, and then being stabilized at +20°C, capacitor shall meet the following limits: Capacitance Change (±10% of initial measured value); tan, Impedance and DC Leakage Current (Initial specified value).





Rated W.V. (VDC)	Nom. Cap. (μF)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000	6,000	12,000	Panasonic Part No.
6.3	10	PCS1100BCT-ND	2.41	2.01	1.74	PCS1100BTR-ND	804.00/M	754.00/M	699.00/M	ECG-C0JB100R
6.3	22	PCS1220JBCT-ND	2.92	2.44	2.11	PCS1220JBTR-ND	976.00/M	914.00/M	848.00/M	ECG-C0JB220R
6.3	33	PCS1330BCT-ND	3.56	2.97	2.57	PCS1330BTR-ND	1188.00/M	1113.00/M	1033.00/M	ECG-C0JB330R
8	8.2	PCS18R2BCT-ND	2.41	2.01	1.74	PCS18R2BTR-ND	804.00/M	754.00/M	699.00/M	ECG-C0KB8R2R
8	15	PCS1150BCT-ND	2.92	2.44	2.11	PCS1150BTR-ND	976.00/M	914.00/M	848.00/M	ECG-C0KB150R
8	22	PCS1220BCT-ND	3.56	2.97	2.57	PCS1220BTR-ND	1188.00/M	1113.00/M	1033.00/M	ECG-C0KB220R
12.5	4.7	—	—	—	—	PCE2101TR-ND	1354.00/M	1268.00/M	1177.00/M	ECG-C1BA4R7R
16	4.7	PCS34R7BCT-ND	2.41	2.01	1.74	PCS34R7BTR-ND	804.00/M	754.00/M	699.00/M	ECG-C1CB4R7R
16	6.8	PCS36R8BCT-ND	2.92	2.44	2.11	PCS36R8BTR-ND	976.00/M	914.00/M	848.00/M	ECG-C1CB6R8R
16	2.7	PCE2102BK-ND*	2.70	2.26	2.03	—	—	—	—	ECG-C1CA2R7R

*Bulk

Panasonic EF Series

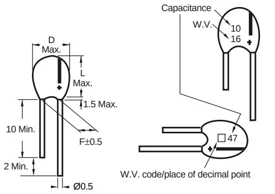
Resin Dipped Solid Tantalum Capacitors

Specifications:

- Operating Temperature Range: -55°C to +105°C (4 to 6.3V, -55°C to +85°C)
- Rated Working Voltage Range: 6.3 to 50 WV DC
- Rated Capacitance Range: .1 to 330 µF
- Capacitance Tolerance: As Specified
- Leakage Current: I = 0.008 CV or 0.05 µA whichever is greater; I in µA, C in µF, V in volts
- Leads are not less than 0.394" in length

Surge Voltage:

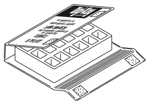
Working Voltage	Surge Voltage
3.15V, DC	4V, DC
6.3	8
10	13
16	20
25	32
35	44
50	63



PANASONIC EF CROSS REFERENCES
Sprague: 196D; **Kemet:** T350/T360; **Mepco:** 49GS; **NEC:** DN; **Nichicon:** 599; **Hitachi:** TSD-3; **Matsuo:** 202; **AVX:** Tap.

Panasonic Tantalum Capacitors

Assortment of 15 Popular Values — Panasonic Quality



Digi-Key® EF-Series Capacitors Kit

F-KIT-ND
ONLY

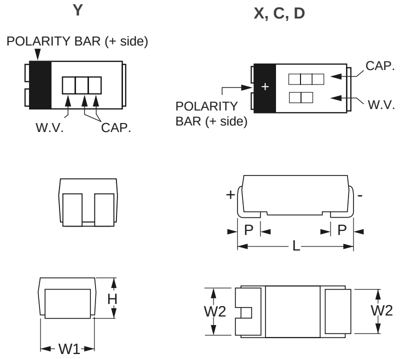
$39.95

180 TANTALUM CAPACITORS. Price includes notebook style storage case and bin storage guide for easy storage and quick access.

Voltage Volt. DC	Cap. (µF)	Cap. Tol. (%)	Dimensions (mm)			Digi-Key Part No.	Pricing						Panasonic Part No.
			D	L	F		1	10	100	1,000	5,000	10,000	
6.3	4.7	±10	3.5	5.5	2.5	P2011-ND	.49	4.17	32.67	207.00	193.00/M	181.00/M	ECS-F0JE475K
	6.8	±10	3.5	5.5	2.5	P2012-ND	.53	4.53	35.49	225.00	210.00/M	196.00/M	ECS-F0JE685K
	10	±10	3.7	6.5	2.5	P2013-ND	.60	5.16	40.42	257.00	239.00/M	223.00/M	ECS-F0JE106K
	15	±10	4.0	7.0	2.5	P2014-ND	.69	5.91	46.30	294.00	274.00/M	256.00/M	ECS-F0JE156K
	22	±10	4.5	7.0	2.5	P2015-ND	.81	6.96	54.52	346.00	322.00/M	301.00/M	ECS-F0JE226K
	33	±10	4.7	8.0	2.5	P2016-ND	.97	8.31	65.10	413.00	385.00/M	360.00/M	ECS-F0JE336K
	47	±20	5.2	8.5	2.5	P2017-ND	1.25	10.74	84.13	534.00	497.00/M	465.00/M	ECS-F0JE476
	68	±20	5.5	9.5	2.5	P2018-ND	1.87	16.05	125.73	799.00	743.00/M	695.00/M	ECS-F0JE686
	100	±20	6.0	11.0	2.5	P2019-ND	2.85	24.42	191.29	1215.00	1131.00/M	1057.00/M	ECS-F0JE107
	150	±20	7.5	12.5	5.0	P2020-ND	6.46	55.38	433.81	2755.00	2564.00/M	2397.00/M	ECS-F0JE157
10	2.2	±10	3.3	5.5	2.5	P2022-ND	.43	3.66	28.67	182.00	169.00/M	158.00/M	ECS-F1AE225K
	3.3	±10	3.5	5.5	2.5	P2023-ND	.49	4.17	32.67	207.00	193.00/M	181.00/M	ECS-F1AE335K
	4.7	±10	3.5	5.5	2.5	P2024-ND	.53	4.53	35.49	225.00	210.00/M	196.00/M	ECS-F1AE475K
	6.8	±10	3.7	6.5	2.5	P2025-ND	.60	5.16	40.42	257.00	239.00/M	223.00/M	ECS-F1AE685K
	10	±10	4.0	7.0	2.5	P2026-ND	.74	6.33	49.59	315.00	293.00/M	274.00/M	ECS-F1AE106K
	15	±10	4.5	7.0	2.5	P2027-ND	.81	6.96	54.52	346.00	322.00/M	301.00/M	ECS-F1AE156K
	22	±10	4.7	8.0	2.5	P2028-ND	1.08	9.24	72.38	460.00	428.00/M	400.00/M	ECS-F1AE226K
	33	±10	5.2	8.5	2.5	P2029-ND	1.30	11.13	87.19	554.00	515.00/M	482.00/M	ECS-F1AE336K
	47	±10	5.5	9.5	2.5	P2030-ND	1.84	15.78	123.61	785.00	731.00/M	683.00/M	ECS-F1AE476K
	68	±20	6.0	11.0	2.5	P2031-ND	2.85	24.42	191.29	1215.00	1131.00/M	1057.00/M	ECS-F1AE686
	100	±20	7.5	12.5	5.0	P2032-ND	6.46	55.38	433.81	2755.00	2564.00/M	2397.00/M	ECS-F1AE107
16	1.0	±10	3.3	5.0	2.5	P2105-ND	.42	3.60	28.20	179.00	167.00/M	156.00/M	ECS-F1CE105K
	1.5	±10	3.3	5.5	2.5	P2033-ND*	.45	3.87	30.32	193.00	179.00/M	168.00/M	ECS-F1CE155K
	2.2	±10	3.5	5.5	2.5	P2034-ND*	.49	4.17	32.67	207.00	193.00/M	181.00/M	ECS-F1CE225K
	3.3	±10	3.5	5.5	2.5	P2035-ND*	.50	4.32	33.84	215.00	200.00/M	187.00/M	ECS-F1CE335K
	4.7	±10	3.7	6.5	2.5	P2036-ND*	.59	5.04	39.48	251.00	233.00/M	218.00/M	ECS-F1CE475K
	6.8	±10	4.0	7.0	2.5	P2037-ND*	.70	6.03	47.24	300.00	279.00/M	261.00/M	ECS-F1CE685K
	10	±10	4.5	7.0	2.5	P2038-ND*	.99	8.46	66.27	421.00	392.00/M	366.00/M	ECS-F1CE106K
	15	±10	4.7	8.0	2.5	P2039-ND*	1.14	9.75	76.38	485.00	451.00/M	422.00/M	ECS-F1CE156K
	22	±10	5.2	8.5	2.5	P2040-ND*	1.30	11.13	87.19	554.00	515.00/M	482.00/M	ECS-F1CE226K
	33	±10	5.5	9.5	2.5	P2041-ND	1.85	15.87	124.32	790.00	735.00/M	687.00/M	ECS-F1CE336K
	47	±20	6.0	11.0	2.5	P2042-ND	2.85	24.42	191.29	1215.00	1131.00/M	1057.00/M	ECS-F1CE476
	68	±20	7.5	12.5	5.0	P2043-ND	6.46	55.38	433.81	2755.00	2564.00/M	2397.00/M	ECS-F1CE686
25	1.5	±10	3.5	5.5	2.5	P2044-ND	.49	4.17	32.67	207.00	193.00/M	181.00/M	ECS-F1EE155K
	2.2	±10	3.5	5.5	2.5	P2045-ND	.54	4.62	36.19	230.00	214.00/M	200.00/M	ECS-F1EE225K
	3.3	±10	3.7	6.5	2.5	P2046-ND	.64	5.49	43.01	273.00	254.00/M	238.00/M	ECS-F1EE335K
	4.7	±10	4.0	7.0	2.5	P2047-ND	.83	7.11	55.70	354.00	329.00/M	308.00/M	ECS-F1EE475K
	6.8	±10	4.5	7.0	2.5	P2048-ND	.98	8.43	66.04	419.00	390.00/M	365.00/M	ECS-F1EE685K
	10	±10	5.2	8.5	2.5	P2049-ND	1.61	13.83	108.34	688.00	640.00/M	599.00/M	ECS-F1EE106K
	15	±10	5.5	9.5	2.5	P2050-ND	1.86	15.90	124.55	791.00	736.00/M	688.00/M	ECS-F1EE156K
	22	±20	6.0	11.0	2.5	P2051-ND	2.64	22.62	177.19	1125.00	1047.00/M	979.00/M	ECS-F1EE226
	33	±20	7.5	12.5	5.0	P2052-ND	3.92	33.60	263.20	1672.00	1556.00/M	1455.00/M	ECS-F1EE336
35	0.1	±20	3.3	5.0	2.5	P2053-ND*	.39	3.33	26.09	166.00	154.00/M	144.00/M	ECS-F1VE104
	0.15	±20	3.3	5.0	2.5	P2054-ND*	.39	3.33	26.09	166.00	154.00/M	144.00/M	ECS-F1VE154
	0.22	±20	3.3	5.0	2.5	P2055-ND*	.39	3.33	26.09	166.00	154.00/M	144.00/M	ECS-F1VE224
	0.33	±20	3.3	5.0	2.5	P2056-ND*	.40	3.42	26.79	170.00	158.00/M	148.00/M	ECS-F1VE334
	0.47	±20	3.3	5.5	2.5	P2057-ND*	.42	3.60	28.20	179.00	167.00/M	156.00/M	ECS-F1VE474
	0.68	±20	3.3	5.5	2.5	P2058-ND*	.45	3.87	30.32	193.00	179.00/M	168.00/M	ECS-F1VE684
	1.0	±10	3.5	5.5	2.5	P2059-ND*	.56	4.83	37.84	240.00	224.00/M	209.00/M	ECS-F1VE105K
	1.5	±10	3.5	5.5	2.5	P2060-ND	.54	4.62	36.19	230.00	214.00/M	200.00/M	ECS-F1VE155K
	2.2	±10	3.7	6.5	2.5	P2061-ND	.64	5.49	43.01	273.00	254.00/M	238.00/M	ECS-F1VE225K
	3.3	±10	4.0	7.0	2.5	P2062-ND	.83	7.11	55.70	354.00	329.00/M	308.00/M	ECS-F1VE335K
	4.7	±10	4.5	7.0	2.5	P2063-ND	.98	8.43	66.04	419.00	390.00/M	365.00/M	ECS-F1VE475K
	6.8	±10	5.2	8.5	2.5	P2064-ND	1.65	14.13	110.69	703.00	654.00/M	612.00/M	ECS-F1VE685K
	10	±10	5.5	9.5	2.5	P2065-ND	1.86	15.90	124.55	791.00	736.00/M	688.00/M	ECS-F1VE106K
	15	±20	6.0	11.0	2.5	P2066-ND	2.95	25.29	198.11	1258.00	1171.00/M	1095.00/M	ECS-F1VE156
	22	±20	7.5	12.5	5.0	P2101-ND	4.02	34.44	269.78	1713.00	1594.00/M	1491.00/M	ECS-F1VE226
50	0.1	±20	3.3	5.0	2.5	P2067-ND	.43	3.66	28.67	182.00	169.00/M	158.00/M	ECS-F1HE104
	0.15	±20	3.3	5.0	2.5	P2068-ND	.43	3.66	28.67	182.00	169.00/M	158.00/M	ECS-F1HE154
	0.22	±20	3.3	5.5	2.5	P2069-ND	.47	4.02	31.49	200.00	186.00/M	174.00/M	ECS-F1HE224
	0.33	±20	3.5	5.5	2.5	P2070-ND	.47	4.02	31.49	200.00	186.00/M	174.00/M	ECS-F1HE334
	0.47	±20	3.7	6.5	2.5	P2071-ND	.51	4.38	34.31	218.00	203.00/M	190.00/M	ECS-F1HE474
	0.68	±20	3.7	6.5	2.5	P2072-ND	.63	5.40	42.30	269.00	250.00/M	234.00/M	ECS-F1HE684
	1.0	±10	4.0	7.0	2.5	P2073-ND	.78	6.72	52.64	334.00	311.00/M	291.00/M	ECS-F1HE105K
	1.5	±10	4.5	7.0	2.5	P2074-ND	1.31	11.25	88.13	560.00	521.00/M	487.00/M	ECS-F1HE155K
	2.2	±10	4.7	8.0	2.5	P2075-ND	1.60	13.71	107.40	682.00	635.00/M	594.00/M	ECS-F1HE225K
	3.3	±10	5.2	8.5	2.5	P2076-ND	2.30	19.74	154.63	982.00	914.00/M	855.00/M	ECS-F1HE335K
	4.7	±10	5.5	9.5	2.5	P2077-ND	3.05	26.13	204.69	1300.00	1210.00/M	1131.00/M	ECS-F1HE475K

*Included in F-KIT-ND.

Panasonic® TE Series Tantalum Electrolytic Chip Capacitors



Dimensions (mm)

EIA Size	Size Code	L ± 0.2	W_1 ± 0.2	W_2 ± 0.1	H ± 0.2	P ± 0.3
A	Y	3.2	1.6	1.2	1.6	0.8
B	X	3.5	2.8	2.2	1.9	0.8
C	C	6.0	3.2	2.2	2.5	1.3
D	D	7.3	4.3	3.65	2.8	1.3

Packing Quantity	Size Y, X	2,000 pieces/reel
	Size C, D	750 pieces/reel

Features

• Wide capacitance range • High performance in temperature and frequency characteristics • Excellent solderability • Excellent terminal construction against bending of P.W.B • Low inductance structure.

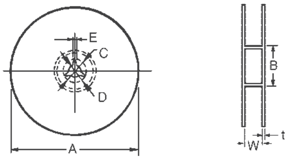
Specifications

• **Operating Temp. Range:** –55 to +125°C • **Capacitance Tolerance:** ±20% at 120Hz, +20°C • **DC Leakage Current:** I = 0.01CV or 0.5µA max. whichever is greater DC leakage current shall be measured after 2 minutes application or rated working voltage at +20°C • **tan ∂:** ≤3.3µF – 0.04 max.; 4.7 ~ 68µF – 0.06 max.; 100µF – 0.08 max • **Solder Heat Resistance:** The capacitor shall withstand dipping into solder bath for 5 ±1 sec at 260 ±5°C • **Moisture Resistance:** Capacitor shall be tested for 500 hours at +40°C and 90-95% R.H. without load After the test, capacitor shall meet the following limits.

Cap. change	± 10% of the initial measured value.
DC leakage	≤ current initial specified value.
tan ∂	≤ initial specified value.

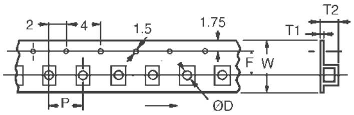
• **Endurance:** After 2000 hours application of DC rated working voltage at +85°C, or derated voltage at +125°C, the capacitor shall meet the following limits.

Cap. change	± 10% of the initial measured value.
DC leakage	≤ 125% of the current initial specified value.
tan ∂	≤ initial specified value.



Dimensions (mm)

	∂A ± 2	∂B Min.	C ± 0.5	D ± 0.8	E ± 0.5	W ± 1.5	t ± 0.5
12mm tape	178	50	13.0	21.0	2.0	14.0	2.0
8mm tape	178	50	13.0	21.0	2.0	10.0	2.0



Tape Running Direction

Dimensions (mm)

Size Code	W ± 0.3	A ± 0.2	B ± 0.2	P ± 0.1	T_1 ± 0.2	F ± 0.1	T_2	∂D ± 0.1
Y X	8.0	1.9 3.3	3.5 3.8	4.0 4.0	1.9 2.1	3.5	0.2	1.1
C D	12.0	3.7 4.7	6.4 7.7	8.0 8.0	3.0 3.3	5.5	0.3	1.6

WV (DC)	Cap (µF)	EIA Size	Size Code	Digi-Key Part No.	Cut Tape Price Each 10	100	500	Digi-Key Part No.	Tape & Reel Size	Pricing	Panasonic Part No.
6.3	10	A	Y	PCS1106CT-ND	.52	.46	.36	PCS1106TR-ND	2,000	204.00/M	ECS-TOJY106R
	15	B	X	PCS1156CT-ND	.61	.53	.42	PCS1156TR-ND	2,000	239.00/M	ECS-TOJX156R
	15	A	Y	P11303CT-ND	.54	.47	.37	P11303TR-ND	2,000	211.00/M	ECS-T0JY156R
	22	A	Y	P11304CT-ND	.85	.75	.59	P11304TR-ND	2,000	335.00/M	ECS-T0JY226R
	22	B	X	PCS1226CT-ND•	.63	.55	.43	PCS1226TR-ND	2,000	245.00/M	ECS-TOJX226R
	33	C	C	PCS1336CT-ND	1.17	1.02	.81	PCS1336TR-ND	750	366.75	ECS-TOJC336R
	47	B	X	P11305CT-ND	.80	.70	.56	P11305TR-ND	2,000	316.00/M	ECS-T0JX476R
	47	D	D	PCS1476CT-ND	1.41	1.24	.98	PCS1476TR-ND	750	443.25	ECS-TOJD476R
	68	C	C	P11306CT-ND	1.06	.93	.74	P11306TR-ND	750	333.75	ECS-T0JC686R
	68	D	D	PCS1686CT-ND•	1.56	1.37	1.08	PCS1686TR-ND	750	489.75	ECS-TOJD686R
	100	D	D	P11307CT-ND	1.65	1.44	1.14	P11307TR-ND	750	517.50	ECS-T0JD107R
	220	D	D	P11308CT-ND	2.26	1.97	1.56	P11308TR-ND	750	709.50	ECS-T0JD227R
10	2.2	A	Y	PCS2225CT-ND•	.43	.38	.30	PCS2225TR-ND	2,000	168.00/M	ECS-T1AY225R
	3.3	A	Y	PCS2335CT-ND	.44	.38	.30	PCS2335TR-ND	2,000	172.00/M	ECS-T1AY335R
	4.7	A	Y	PCS2475CT-ND•	.48	.42	.33	PCS2475TR-ND	2,000	189.00/M	ECS-T1AY475R
	10	A	Y	P11309CT-ND	.55	.48	.38	P11309TR-ND	2,000	215.00/M	ECS-T1AY106R
	10	B	X	PCS2106CT-ND	.61	.53	.42	PCS2106TR-ND	2,000	239.00/M	ECS-T1AX106R
	15	B	X	PCS2156CT-ND•	.63	.55	.43	PCS2156TR-ND	2,000	245.00/M	ECS-T1AX156R
	22	B	X	P11310CT-ND	.71	.62	.49	P11310TR-ND	2,000	280.00/M	ECS-T1AX226R
	22	C	C	PCS2226CT-ND	1.14	.99	.78	PCS2226TR-ND	750	356.25	ECS-T1AC226R
	33	B	X	P11311CT-ND	.81	.71	.56	P11311TR-ND	2,000	319.00/M	ECS-T1AX336R
	33	D	D	PCS2336CT-ND	1.41	1.24	.98	PCS2336TR-ND	750	443.25	ECS-T1AD336R
	47	C	C	P11312CT-ND	1.23	1.08	.85	P11312TR-ND	750	386.25	ECS-T1AC476R
	47	D	D	PCS2476CT-ND•	1.53	1.34	1.06	PCS2476TR-ND	750	480.75	ECS-T1AD476R
	100	D	D	P11313CT-ND	1.71	1.50	1.18	P11313TR-ND	750	537.75	ECS-T1AD107R
	150	D	D	P11314CT-ND	2.14	1.87	1.48	P11314TR-ND	750	673.50	ECS-T1AD157R
16	0.68	A	Y	PCS3684CT-ND•	.43	.38	.30	PCS3684TR-ND	2,000	168.00/M	ECS-T1CY684R
	1.0	A	Y	PCS3105CT-ND•	.43	.38	.30	PCS3105TR-ND	2,000	168.00/M	ECS-T1CY105R
	1.5	A	Y	PCS3155CT-ND•	.43	.38	.30	PCS3155TR-ND	2,000	168.00/M	ECS-T1CY155R
	2.2	A	Y	PCS3225CT-ND•	.44	.38	.30	PCS3225TR-ND	2,000	172.00/M	ECS-T1CY225R
	3.3	A	Y	PCS3335CT-ND•	.48	.42	.33	PCS3335TR-ND	2,000	189.00/M	ECS-T1CY335R
	4.7	A	Y	PCS3475CT-ND•	.52	.46	.36	PCS3475TR-ND	2,000	204.00/M	ECS-T1CY475R
	6.8	A	Y	P11315CT-ND	.57	.50	.39	P11315TR-ND	2,000	223.00/M	ECS-T1CY685R
	6.8	B	X	PCS3685CT-ND•	.66	.58	.46	PCS3685TR-ND	2,000	259.00/M	ECS-T1CX685R
	10	B	X	PCS3106CT-ND•	.63	.55	.43	PCS3106TR-ND	2,000	245.00/M	ECS-T1CX106R
	15	B	X	P11316CT-ND	.71	.62	.49	P11316TR-ND	2,000	280.00/M	ECS-T1CX156R
	15	C	C	PCS3156CT-ND•	1.14	.99	.78	PCS3156TR-ND	750	356.25	ECS-T1CC156R
	22	C	C	P11317CT-ND	1.23	1.08	.85	P11317TR-ND	750	386.25	ECS-T1CC226R
	22	D	D	PCS3226CT-ND•	1.41	1.24	.98	PCS3226TR-ND	750	443.25	ECS-T1CD226R
	33	C	C	P11318CT-ND	1.23	1.08	.85	P11318TR-ND	750	386.25	ECS-T1CC336R
	33	D	D	PCS3336CT-ND	1.53	1.34	1.06	PCS3336TR-ND	750	480.75	ECS-T1CD336R
	47	D	D	P11319CT-ND	1.65	1.44	1.14	P11319TR-ND	750	517.50	ECS-T1CD476R
	68	D	D	P11320CT-ND	1.71	1.50	1.18	P11320TR-ND	750	537.75	ECS-T1CD686R
20	0.68	A	Y	PCS4684CT-ND	.43	.38	.30	PCS4684TR-ND	2,000	168.00/M	ECS-T1DY684R
	1.5	A	Y	PCS4155CT-ND	.44	.38	.30	PCS4155TR-ND	2,000	172.00/M	ECS-T1DY155R
	2.2	B	X	PCS4225CT-ND	.62	.54	.43	PCS4225TR-ND	2,000	244.00/M	ECS-T1DX225R
	3.3	A	Y	P11321CT-ND	.52	.46	.36	P11321TR-ND	2,000	204.00/M	ECS-T1DY335R
	3.3	B	X	PCS4335CT-ND	.59	.51	.41	PCS4335TR-ND	2,000	230.00/M	ECS-T1DX335R
	4.7	A	Y	P11322CT-ND	.57	.50	.39	P11322TR-ND	2,000	223.00/M	ECS-T1DY475R
	4.7	B	X	PCS4475CT-ND	.61	.53	.42	PCS4475TR-ND	2,000	239.00/M	ECS-T1DX475R
	6.8	B	X	P11323CT-ND	.63	.55	.43	P11323TR-ND	2,000	245.00/M	ECS-T1DX685R
	6.8	C	C	PCS4685CT-ND	1.06	.92	.73	PCS4685TR-ND	750	331.50	ECS-T1DC685R
	10	B	X	P11324CT-ND	.71	.62	.49	P11324TR-ND	2,000	280.00/M	ECS-T1DX106R
	10	C	C	PCS4106CT-ND	1.14	.99	.78	PCS4106TR-ND	750	356.25	ECS-T1DC106R
	15	C	C	P11325CT-ND	1.23	1.08	.85	P11325TR-ND	750	386.25	ECS-T1DC156R
	15	D	D	PCS4156CT-ND	1.41	1.24	.98	PCS4156TR-ND	750	443.25	ECS-T1DD156R
	22	C	C	P11326CT-ND	1.54	1.34	1.06	P11326TR-ND	750	482.25	ECS-T1DC226R
	22	D	D	PCS4226CT-ND	1.52	1.33	1.05	PCS4226TR-ND	750	476.25	ECS-T1DD226R
	33	D	D	P11327CT-ND	1.65	1.44	1.14	P11327TR-ND	750	517.50	ECS-T1DD336R
25	0.47	A	Y	PCS5474CT-ND†	.44	.38	.30	PCS5474TR-ND	2,000	172.00/M	ECS-T1EY474R
	1.0	A	Y	PCS5105CT-ND†	.44	.38	.30	PCS5105TR-ND	2,000	172.00/M	ECS-T1EY105R
	1.5	A	Y	P11328CT-ND	.48	.42	.33	P11328TR-ND	2,000	189.00/M	ECS-T1EY155R
	1.5	B	X	PCS5155CT-ND†	.59	.51	.41	PCS5155TR-ND	2,000	230.00/M	ECS-T1EX155R
	2.2	A	Y	P11329CT-ND	.57	.50	.39	P11329TR-ND	2,000	223.00/M	ECS-T1EY225R
	2.2	B	X	PCS5225CT-ND	.61	.53	.42	PCS5225TR-ND	2,000	239.00/M	ECS-T1EX225R
	3.3	B	X	PCS5335CT-ND†	.61	.53	.42	PCS5335TR-ND	2,000	239.00/M	ECS-T1EX335R
	4.7	B	X	P11330CT-ND	.62	.54	.43	P11330TR-ND	2,000	242.00/M	ECS-T1EX475R
	4.7	C	C	PCS5475CT-ND	1.07	.94	.74	PCS5475TR-ND	750	336.75	ECS-T1EC475R
	6.8	C	C	PCS5685CT-ND†	1.17	1.02	.81	PCS5685TR-ND	750	366.75	ECS-T1EC685R
	10	C	C	P11331CT-ND	1.19	1.04	.82	P11331TR-ND	750	373.50	ECS-T1EC106R
	10	D	D	PCS5106CT-ND†	1.41	1.23	.97	PCS5106TR-ND	750	441.00	ECS-T1ED106R
	15	D	D	PCS5156CT-ND	1.58	1.38	1.09	PCS5156TR-ND	750	495.75	ECS-T1ED156R
	22	D	D	PCS5226CT-ND	1.62	1.41	1.12	PCS5226TR-ND	750	507.75	ECS-T1ED226R
35	.1	A	Y	PCS6104CT-ND†	.45	.39	.31	PCS6104TR-ND	2,000	175.00/M	ECS-T1VY104R
	.15	A	Y	PCS6154CT-ND†	.45	.39	.31	PCS6154TR-ND	2,000	175.00/M	ECS-T1VY154R
	.22	A	Y	PCS6224CT-ND†	.43	.38	.30	PCS6224TR-ND	2,000	168.00/M	ECS-T1VY224R
	.33	A	Y	PCS6334CT-ND†	.43	.38	.30	PCS6334TR-ND	2,000	168.00/M	ECS-T1VY334R
	.47	A	Y	PCS6474CT-ND†	.43	.38	.30	PCS6474TR-ND	2,000	168.00/M	ECS-T1VY474R
	.68	A	Y	PCS6684CT-ND†	.44	.38	.30	PCS6684TR-ND	2,000	172.00/M	ECS-T1VY684R
	1.0	A	Y	P11332CT-ND	.48	.42	.33	P11332TR-ND	2,000	189.00/M	ECS-T1VY105R
	1.0	B	X	PCS6105CT-ND†	.59	.51	.41	PCS6105TR-ND	2,000	230.00/M	ECS-T1VX105R
	1.5	B	X	PCS6155CT-ND†	.61	.53	.42	PCS6155TR-ND	2,000	239.00/M	ECS-T1VX155R
	2.2	B	X	PCS6225CT-ND†	.61	.53	.42	PCS6225TR-ND	2,000	239.00/M	ECS-T1VX225R
	3.3	B	X	P11333CT-ND	.62	.54	.43	P11333TR-ND	2,000	242.00/M	ECS-T1VX335R
	3.3	C	C	PCS6335CT-ND†	1.07	.94	.74	PCS6335TR-ND	2,000	336.75	ECS-T1VC335R
	4.7	C	C	PCS6475CT-ND†	1.16	1.02	.80	PCS6475TR-ND	750	364.50	ECS-T1VC475R
	6.8	C	C	P11334CT-ND	1.19	1.04	.82	P11334TR-ND	750	373.50	ECS-T1VC685R
	6.8	D	D	PCS6685CT-ND†	1.41	1.23	.97	PCS6685TR-ND	750	441.00	ECS-T1VD685R
	10	D	D	PCS6106CT-ND	1.58	1.38	1.09	PCS6106TR-ND	750	495.75	ECS-T1VD106R
	15	D	D	P11335CT-ND	1.62	1.41	1.12	P11335TR-ND	750	507.75	ECS-T1VD156R

• **PCS1-KIT-ND** ***Digi-Key® TE-Series Capacitors Kit*** 10 each of values denoted (180 total pieces). Notebook style storage case.................. **$89.95**
† **PCS2-KIT-ND** ***Digi-Key® TE-Series Capacitors Kit*** 10 each of values denoted (180 total pieces). Notebook style storage case.................. **$89.95**

Panasonic® TES Series

Tantalum Electrolytic Chip Capacitors

Features: • Ultra miniature sizes • Low profile 1.2mm max. height

Specifications: • **Operating Temperature Range:** –55°C to +125°C • **Rated Working Voltage Range:** 2.5 to 20VDC • **Nominal Capacitance Range:** 0.1 to 4.7 µF • **Capacitance Tolerance:** ±20% (120Hz, +20°) • **Leakage Current:** I ≤ 0.01CV or 0.5 (µA), whichever is greater measured after 2 minutes application of rated working voltage at +20°C • **tan ∂:** 0.04 max. for ≤ 3.3µF, 0.08 max. for 2.5W.V., 0.10 max. for Z size • **Characteristics at High and Low Temperature:**

-55°C	**Capacitance change**	±12% of initial measured value at +20°C
+125°C	**Leakage current**	≤12.5 times of initial specified value
	Capacitance change	±15% of initial measured value at +20°C

Moisture Resistance: • **Test conditions — Relative humidity:** 90-95% without load • **Ambient temperature:** +40°C • **Duration:** 500 hours. **Post test requirements at +20°C:** • **Leakage current:** ≤ Initial specified value • **Capacitance change:** ±10% of initial measured value • **tan ∂:** ≤ Initial specified value • **Endurance:** Test Conditions

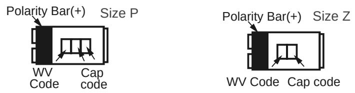
Item / Conditions	Derating	Rating
Duration	2000 hours	2000 hours
Ambient temperature	+125°C	+85°C
Applied voltage	Derated working voltage	Rated working voltage
Source impedance	1Ω/V	1Ω/V

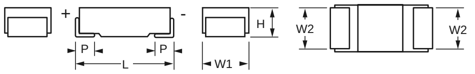
Derating voltage at +125°C

Working voltage [V] DC	2.5	4	6.3	10	16	20
Derating voltage [V] DC	1.6	2.5	4	6.3	10	13

Post test requirements at +20°C: • **Leakage current:** ≤125% of initial specified value • **Capacitance change:** ±10% of initial measured value • **tan ∂:** ≤ Initial specified value

• **Shelf Life:** Test conditions: — Duration 2000 hours, Ambient Temperature +125°C, No applied voltage. Post test requirements at +20°C, same limits for “Endurance” • **Solder Heat Resistance:** The capacitor shall withstand dipping into solder bath for 5 ± 1 seconds at 260 ± 5°C.





Size Code	L ± 0.2	W1 ± 0.2	H max.	P	W2 ± 0.1
Z	2.0	1.25	1.2	0.5 ± 0.2	0.9
P	3.2	1.6	1.2	0.8 ± 0.3	1.2

W.V. (D.C.)	Cap. (µF)	Size Code	Digi-Key Part No.	Cut Tape Price Each 10	100	500	Digi-Key Part No.	Tape & Reel Pricing 3,000	6,000	Panasonic Part No.
4	2.2	Z	PCS0255CCT-ND	.72	.63	.50	PCS0255CTR-ND	283.00/M	267.00/M	ECS-T0GZ225R
	2.2	P	PCS0255BCT-ND	.74	.65	.51	PCS0255BTR-ND	292.00/M	275.00/M	ECS-T0GP225R
	3.3	P	PCS0335BCT-ND	.74	.65	.51	PCS0335BTR-ND	292.00/M	275.00/M	ECS-T0GP335R
	22	Z	P11336CT-ND	.80	.70	.55	P11336TR-ND	315.00/M	297.00/M	ECS-T0GZ226R
6.3	1.5	Z	PCS1155CCT-ND	.72	.63	.50	PCS1155CTR-ND	283.00/M	267.00/M	ECS-T0JZ155R
	1.5	P	PCS1155BCT-ND	.74	.65	.51	PCS1155BTR-ND	292.00/M	275.00/M	ECS-T0JP155R
	2.2	P	PCS1225BCT-ND	.74	.65	.51	PCS1225BTR-ND	292.00/M	275.00/M	ECS-T0JP225R
	1.0	P	PCS2105BCT-ND	.90	.78	.62	PCS2105BTR-ND	352.00/M	332.00/M	ECS-T1AP105R
	10	Z	P11337CT-ND	.77	.68	.54	P11337TR-ND	304.00/M	287.00/M	ECS-T0JZ106R
10	1.0	Z	PCS2105CCT-ND	.72	.63	.50	PCS2105CTR-ND	283.00/M	267.00/M	ECS-T1AZ105R
	1.5	P	PCS2155BCT-ND	.74	.65	.51	PCS2155BTR-ND	292.00/M	275.00/M	ECS-T1AP155R
	2.2	Z	P11338CT-ND	.71	.62	.49	P11338TR-ND	277.00/M	261.00/M	ECS-T1AZ225R
	3.3	Z	P11339CT-ND	.73	.64	.50	P11339TR-ND	285.00/M	269.00/M	ECS-T1AZ335R
	4.7	Z	P11340CT-ND	.75	.66	.52	P11340TR-ND	296.00/M	279.00/M	ECS-T1AZ475R
16	0.68	P	PCS3684BCT-ND	.74	.65	.51	PCS3684BTR-ND	292.00/M	275.00/M	ECS-T1CP684R
	0.68	Z	PCS3684CCT-ND	.72	.63	.50	PCS3684CTR-ND	283.00/M	267.00/M	ECS-T1CZ684R
	1.0	P	PCS3105BCT-ND	.84	.74	.58	PCS3105BTR-ND	331.00/M	313.00/M	ECS-T1CP105R
	1.0	Z	P11341CT-ND	.68	.59	.47	P11341TR-ND	266.00/M	251.00/M	ECS-T1CZ105R
20	0.10	P	PCS4104BCT-ND	.74	.65	.51	PCS4104BTR-ND	292.00/M	275.00/M	ECS-T1DP104R
	0.15	P	PCS4154BCT-ND	.74	.65	.51	PCS4154BTR-ND	292.00/M	275.00/M	ECS-T1DP154R
	0.22	P	PCS4224BCT-ND	.74	.65	.51	PCS4224BTR-ND	292.00/M	275.00/M	ECS-T1DP224R
	0.33	P	PCS4334BCT-ND	.74	.65	.51	PCS4334BTR-ND	292.00/M	275.00/M	ECS-T1DP334R
	0.47	P	PCS4474BCT-ND	.74	.65	.51	PCS4474BTR-ND	292.00/M	275.00/M	ECS-T1DP474R
	0.68	P	PCS4684BCT-ND	.74	.65	.51	PCS4684BTR-ND	292.00/M	275.00/M	ECS-T1DP684R

Panasonic® TEL Series

Features: • Low ESR

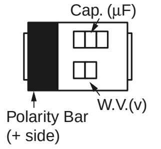
Specifications: • **Category temp. range:** -55 to + 125°C • **Capacitance tolerance:** ± 20% (120Hz/+20°C) • **DC Leakage Current:** 1<0.01CV or 0.5(µA) after 2 minutes application of rated working voltage at 20°C. (Whichever is the greater) • **Resistance to Soldering Heat:** The capacitor shall withstand dipping into solder for 5±1 seconds at +260±5°C

Moisture Resistance: After 500 hours exposure at +40°C and 90 to 95% R.H. without load, the capacitor shall meet the following limits.

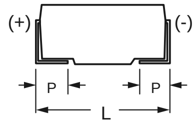
Capacitance change	± 10% of the initial measured value
D.F.	< initial specified value
DC leadkage current	< initial specified value

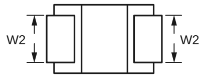
Endurance: After 2000 hours application of rated DC working voltage at + 85°C or derated voltage at +125°C, the capacitor shall meet the following limits.

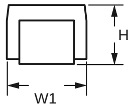
Capacitance change	± 10% of the initial measured value
D.F.	< initial specified value
DC leakage Current	< 125% of initial specified value



(for 6.3W.V. abbreviated to 6V)







EIA code	Szde code	L±0.2	W1±0.2	W2±0.1	H±0.2	P±0.3
6032	C	6.0	3.2	2.2	2.5	1.3
7343	D	7.3	4.3	2.4	2.8	1.3

W.V. (D.C.)	Cap. (uF)	Size Code	D.F. (120Hz) (+20° C)	L.C. (Ua)	ESR (100kHz) (ohms)	Ripple Cur. (100kHz) (+20°C) (mA)	Digi-Key Part No.	Cut Tape Price Each 10	100	500	Digi-Key Part No.	Tape & Reel Pricing 750	1,500	Panasonic Part No.
6.3	100	C	0.08	6.3	0.3	606	P11284CT-ND	2.17	1.90	1.50	P11284TR-ND	681.75	881.00/M	EEJ-L0JC107R
	150	D	0.08	9.5	0.1	1225	P11285CT-ND	2.97	2.60	2.05	P11285TR-ND	934.50	1208.00/M	EEJ-L0JD157R
	220	D	0.12	13.9	0.1	1225	P11286CT-ND	3.13	2.74	2.16	P11286TR-ND	984.75	1273.00/M	EEJ-L0JD227R
10	47	C	0.06	4.7	0.4	524	P11287CT-ND	2.01	1.76	1.39	P11287TR-ND	631.50	816.00/M	EEJ-L1AC476R
	100	D	0.08	10	0.1	1225	P11288CT-ND	2.97	2.60	2.05	P11288TR-ND	934.50	1208.00/M	EEJ-L1AD107R
	150	D	0.10	15	0.1	1225	P11289CT-ND	3.13	2.74	2.16	P11289TR-ND	984.75	1273.00/M	EEJ-L1AD157R
16	33	C	0.06	5.3	0.4	524	P11290CT-ND	2.01	1.76	1.39	P11290TR-ND	631.50	816.00/M	EEJ-L1CC336R
	47	D	0.06	7.6	0.15	1000	P11291CT-ND	2.97	2.60	2.05	P11291TR-ND	934.50	1208.00/M	EEJ-L1CD476R
20	10	C	0.06	2	0.45	494	P11292CT-ND	2.01	1.76	1.39	P11292TR-ND	631.50	816.00/M	EEJ-L1DC106R
	15	D	0.06	3	0.45	494	P11293CT-ND	2.17	1.90	1.50	P11293TR-ND	681.75	881.00/M	EEJ-L1DC156R
	33	D	0.06	6.6	0.2	866	P11294CT-ND	2.97	2.60	2.05	P11294TR-ND	934.50	1208.00/M	EEJ-L1DD336R
25	10	C	0.06	2.5	0.45	494	P11295CT-ND	2.17	1.90	1.50	P11295TR-ND	681.75	881.00/M	EEJ-L1EC106R
	15	D	0.06	3.8	0.25	775	P11296CT-ND	2.97	2.60	2.05	P11296TR-ND	934.50	1208.00/M	EEJ-L1ED156R
	22	D	0.06	5.5	0.2	866	P11297CT-ND	3.13	2.74	2.16	P11297TR-ND	984.75	1273.00/M	EEJ-L1ED226R
	33	D	0.08	8.3	0.2	866	P11298CT-ND	3.30	2.88	2.27	P11298TR-ND	1035.75	1338.00/M	EEJ-L1ED336R
35	6.8	C	0.06	2.4	0.6	428	P11299CT-ND	2.17	1.90	1.50	P11299TR-ND	681.75	881.00/M	EEJ-L1VC685R
	1.0	D	0.06	3.5	0.3	707	P11300CT-ND	2.97	2.60	2.05	P11300TR-ND	934.50	1208.00/M	EEJ-L1VD106R
	15	D	0.06	5.3	0.3	707	P11301CT-ND	3.13	2.74	2.16	P11301TR-ND	984.75	1273.00/M	EEJ-L1VD156R
	22	D	0.08	7.7	0.3	866	P11302CT-ND	3.30	2.88	2.27	P11302TR-ND	1035.75	1338.00/M	EEJ-L1VD226R

Panasonic® TEH Series

Resin Molded Chip Tantalum Electrolytic Capacitors

Specifications

- **Operating temperature range: —**55 to + 125°C
- **Rated working voltage range:** 6.3, 10, 16, 25 and 35V DC
- **Rated capacitance range:** .068 ~ 68µF
- **Capacitance tolerance:** ±20% at 120Hz, +20°C
- **DC leakage current:** I = 0.01CV or 0.5µA max. whichever is greater. DC leakage current shall be measured after 2 minutes application or rated working voltage at +20°C.
- **tan ∂:** less than 3.3µF — 0.04 max.; 4.7 ~ 68µF — 0.06 max.
- **Stability at low and high temperature:**

	–55°C	+125°C
Cap. change	±12% max.	±15% max.
DC leakage current		0.1CV or 5µA whichever is greater.

- **Surge voltage test:**

Rated VDC	6.3	10	16	25	35
Surge VDC	8	13	20	30	44

Capacitor shall withstand the surge test voltage applied through a 1000 ohm resistor at the rate of 1/2 minute “ON,” 5-1/2 minutes “OFF,” for 1000 successive test cycles at +85°C. After the test, capacitor shall meet the following limits.

Cap. change	Within ±5% of the initial measured value.
DC leakage current	Less than initial specified value.
tan δ	Less than initial specified value.

- **Humidity test:**

Capacitor shall be tested for 500 hours at –40°C and 90–95% R.H. without load. After the test, capacitor shall meet the following limits.

Cap. change	Within ±10% of the initial measured value.
DC leakage current	Less than initial specified value.
tan δ	Less than initial specified value.

- **Load life test:**

After 2000 hours application of DC rated working voltage at +85°C, or derated voltage at +125°C, the capacitor shall meet the following limits.

W.V.	Derated voltage
6.3	4
10	6.3
16	10
25	16
35	22

Cap. change	Within ±10% of the initial measured value.
DC leakage current	Less than 125% of the initial specified value.
tan δ	Less than initial specified value.

- **Reverse voltage.**

Reverse voltage shall be less than 5% of the rated working voltage or 1 volt, whichever is smaller.

Rated working voltage	Reverse voltage
6.3 V	–0.32 max.
10 V	–0.50 max.
16 V	–0.80 max.
25 V	–1.00 max.
35 V	–1.00 max.

Test condition
Temperature: 85 ±2°C
Charging voltage: DC voltage as shown above.
Test time: 500 ±12 hours through the resistance or more than 3 times of charging voltage.
(Example: 1V — more than 3Ω)

After this test, capacitor shall meet the value after load life test.

- **Cleaning Solvents:**

The organic solvents such as Freon, 1,1,1-Trichlorethane are acceptable for 5 minutes cleaning. However, Acid and Alkaline solvents shall not be used.

- **Solder heat resistance:**

The capacitor shall withstand dipping into solder bath for 5 ±1 sec at 260 ±5°C.

- **Solderability:**

Lead tabs shall be uniformly covered with solder uniformity on the following conditions.

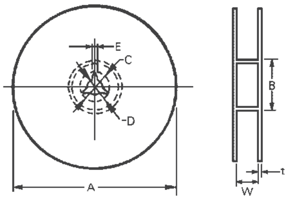
Solder bath temp .... 230 ± 5°C
Solder dipping time .... 2 ±0.5 sec. after dipping flux.

- **Maximum pressure:**

When the capacitor is taken and mounted by the mounting machine, pressure given to the capacitor shall not exceed 500g at 1.5mm (0.059 inch) diameter of the tip.

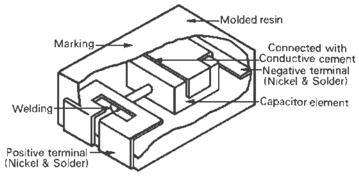
PANASONIC TE CROSS REFERENCES

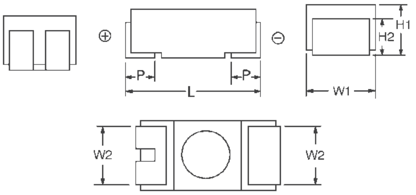
Sprague: 293D; **Kemet:** T491; **Mepco:** 49MC; **NEC:** SV; **Nichicon:** F93; **Hitachi:** TMC; **Matsuo:** 267.



Dimensions (mm)

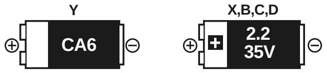
	ϕA ±2	ϕB Min.	C ±0.5	D ±0.8	E ±0.5	W ±1.5	t ±0.5
12mm tape	178	50	13.0	21.0	2.0	14.0	2.0
8mm tape	178	50	13.0	21.0	2.0	10.0	2.0

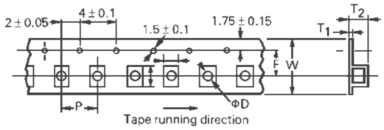

Molded resin
Marking
Connected with Conductive cement
Negative terminal (Nickel & Solder)
Welding
Capacitor element
Positive terminal (Nickel & Solder)



Dimensions (mm)

EIA Size	Size Code	L ±0.2	W_1 ±0.2	W_2 ±0.1	H_1 ±0.2	H_2 Typ.	P ±0.3
A	Y	3.2	1.6	1.2	1.6	1.0	0.8
B	X	3.5	2.8	2.2	1.9	1.2	0.8
C	C	6.0	3.2	2.2	2.5	1.5	1.3
D	D	7.3	4.3	2.4	2.8	1.6	1.3





Dimensions (mm)

Size Code	W ±0.3	A ±0.2	B ±0.2	P ±0.1	T_1 ±0.2	F ±0.1	T_2	ϕD ±0.1
Y	8.0	1.9	3.5	4.0	1.9	3.5	0.2	1.1
X		3.3	3.8	4.0	2.1			
C	12.0	3.7	6.4	8.0	3.0	5.5	0.3	1.6
D		4.7	7.7	8.0	3.3			

Packing Quantity	
Size Y, X	2,000 pieces/reel
Size C, D	750 pieces/reel

W.V. (D.C.)	Cap. (µF)	EIA Size	Size Code	Digi-Key Part No.	Cut Tape Pricing		Digi-Key Part No.	Tape & Reel Pricing					Panasonic Part No.
					10	100		750	1,500	2,000	4,000	6,000	
6.3	3.3	A	Y	PCT1335CT-ND	4.70	41.04	PCT1335TR-ND	—	—	185.00/M	178.00/M	175.00/M	ECS-H0JY335R
	6.8	B	X	PCT1685CT-ND	6.31	55.10	PCT1685TR-ND	—	—	249.00/M	238.00/M	235.00/M	ECS-H0JX685R
	15	C	C	PCT1156CT-ND	11.09	96.90	PCT1156TR-ND	348.75	451.00/M	—	—	413.00/M	ECS-H0JC156R
	22	C	C	PCT1226CT-ND	11.66	101.84	PCT1226TR-ND	366.75	474.00/M	—	—	434.00/M	ECS-H0JC226R
	47	D	D	PCT1476CT-ND	15.36	134.14	PCT1476TR-ND	483.00	625.00/M	—	—	572.00/M	ECS-H0JD476R
	68	D	D	PCT1686CT-ND	17.01	148.58	PCT1686TR-ND	535.50	692.00/M	—	—	633.00/M	ECS-H0JD686R
10	2.2	A	Y	PCT2225CT-ND	4.70	41.04	PCT2225TR-ND	—	—	185.00/M	178.00/M	175.00/M	ECS-H1AY225R
	4.7	B	X	PCT2475CT-ND	6.31	55.10	PCT2475TR-ND	—	—	249.00/M	238.00/M	235.00/M	ECS-H1AX475R
	10	C	C	PCT2106CT-ND	11.09	96.90	PCT2106TR-ND	348.75	451.00/M	—	—	413.00/M	ECS-H1AC106R
	15	C	C	PCT2156CT-ND	11.66	101.84	PCT2156TR-ND	366.75	474.00/M	—	—	434.00/M	ECS-H1AC156R
	33	D	D	PCT2336CT-ND	15.36	134.14	PCT2336TR-ND	483.00	625.00/M	—	—	572.00/M	ECS-H1AD336R
	47	D	D	PCT2476CT-ND	16.79	146.68	PCT2476TR-ND	528.75	683.00/M	—	—	625.00/M	ECS-H1AD476R
16	0.68	A	Y	PCT3684CT-ND	4.70	41.04	PCT3684TR-ND	—	—	185.00/M	178.00/M	175.00/M	ECS-H1CY684R
	1.0	A	Y	PCT3105CT-ND	4.70	41.04	PCT3105TR-ND	—	—	185.00/M	178.00/M	175.00/M	ECS-H1CY105R
	1.5	A	Y	PCT3155CT-ND	4.70	41.04	PCT3155TR-ND	—	—	185.00/M	178.00/M	175.00/M	ECS-H1CY155R
	2.2	B	X	PCT3225CT-ND	6.31	55.10	PCT3225TR-ND	—	—	249.00/M	238.00/M	235.00/M	ECS-H1CX225R
	3.3	B	X	PCT3335CT-ND	6.39	55.86	PCT3335TR-ND	—	—	252.00/M	242.00/M	238.00/M	ECS-H1CX335R
	4.7	C	C	PCT3475CT-ND	11.35	99.18	PCT3475TR-ND	357.00	462.00/M	—	—	423.00/M	ECS-H1CC475R
	6.8	C	C	PCT3685CT-ND	11.09	96.90	PCT3685TR-ND	348.75	451.00/M	—	—	413.00/M	ECS-H1CC685R
	10	C	C	PCT3106CT-ND	11.66	101.84	PCT3106TR-ND	366.75	474.00/M	—	—	434.00/M	ECS-H1CC106R
	22	D	D	PCT3226CT-ND	15.36	134.14	PCT3226TR-ND	483.00	625.00/M	—	—	572.00/M	ECS-H1CD226R
	33	D	D	PCT3336CT-ND	16.79	146.68	PCT3336TR-ND	528.75	683.00/M	—	—	625.00/M	ECS-H1CD336R
20	0.68	A	Y	PCT4684CT-ND	4.70	41.04	PCT4684TR-ND	—	—	185.00/M	178.00/M	175.00/M	ECS-H1DY684R
	2.2	B	X	PCT4225CT-ND	6.31	55.10	PCT4225TR-ND	—	—	249.00/M	238.00/M	235.00/M	ECS-H1DX225R
	4.7	C	C	PCT4475CT-ND	11.09	96.90	PCT4475TR-ND	348.75	451.00/M	—	—	413.00/M	ECS-H1DC475R
	6.8	C	C	PCT4685CT-ND	11.66	101.84	PCT4685TR-ND	366.75	474.00/M	—	—	434.00/M	ECS-H1DC685R
	15	D	D	PCT4156CT-ND	15.36	134.14	PCT4156TR-ND	483.00	625.00/M	—	—	572.00/M	ECS-H1DD156R
25	0.47	A	Y	PCT5474CT-ND†	4.79	41.80	PCT5474TR-ND	—	—	189.00/M	181.00/M	178.00/M	ECS-H1EY474R
	1.5	B	X	PCT5155CT-ND†	6.39	55.86	PCT5155TR-ND	—	—	252.00/M	242.00/M	238.00/M	ECS-H1EX155R
	3.3	C	C	PCT5335CT-ND†	9.40	82.08	PCT5335TR-ND	295.50	382.00/M	—	—	350.00/M	ECS-H1EC335R
	10	D	D	PCT5106CT-ND†	15.36	134.14	PCT5106TR-ND	483.00	625.00/M	—	—	572.00/M	ECS-H1ED106R
35	.1	A	Y	PCT6104CT-ND†	4.96	43.32	PCT6104TR-ND	—	—	196.00/M	187.00/M	185.00/M	ECS-H1VY104R
	.15	A	Y	PCT6154CT-ND†	4.96	43.32	PCT6154TR-ND	—	—	196.00/M	187.00/M	185.00/M	ECS-H1VY154R
	.22	A	Y	PCT6224CT-ND†	4.70	41.04	PCT6224TR-ND	—	—	185.00/M	178.00/M	175.00/M	ECS-H1VY224R
	.33	A	Y	PCT6334CT-ND†	4.70	41.04	PCT6334TR-ND	—	—	185.00/M	178.00/M	175.00/M	ECS-H1VY334R
	.47	B	X	PCT6474CT-ND†	6.79	59.28	PCT6474TR-ND	—	—	268.00/M	256.00/M	253.00/M	ECS-H1VX474R
	0.68	B	X	PCT6684CT-ND†	6.79	59.28	PCT6684TR-ND	—	—	268.00/M	256.00/M	253.00/M	ECS-H1VX684R
	1.0	B	X	PCT6105CT-ND†	6.39	55.86	PCT6105TR-ND	—	—	252.00/M	242.00/M	238.00/M	ECS-H1VX105R
	1.5	C	C	PCT6155CT-ND†	11.01	96.14	PCT6155TR-ND	346.50	448.00/M	—	—	410.00/M	ECS-H1VC155R
	2.2	C	C	PCT6225CT-ND†	11.22	98.04	PCT6225TR-ND	353.25	456.00/M	—	—	418.00/M	ECS-H1VC225R
	3.3	D	D	PCT6335CT-ND†	13.53	118.18	PCT6335TR-ND	426.00	550.00/M	—	—	504.00/M	ECS-H1VD335R
	4.7	D	D	PCT6475CT-ND†	13.79	120.46	PCT6475TR-ND	434.25	561.00/M	—	—	513.00/M	ECS-H1VD475R
	6.8	D	D	PCT6685CT-ND†	15.36	134.14	PCT6685TR-ND	483.00	625.00/M	—	—	572.00/M	ECS-H1VD685R

†PCT2-KIT-ND ***Digi-Key® TEH-Series Capacitors Kit*** 10 each of values denoted (160 total pieces). Notebook style storage case and bin storage guide included. **$99.95**

Panasonic® B-Series Polyester Capacitors

PANASONIC ECQ-B CROSS REFERENCE:

Sprague: 225P, 418P; **Mepco:** 713D1, 711D1, 719D1; **TRW:** 601PE, 601CPE; **Packtron:** PE, FM; **Secor:** MFDW, MFDR; **Roederstein:** KT1805, KT1806, KT1807, KT1898; **Wima:** FKS; **CSF Thompson:** ED (Dip); **Rubycon:** F2X, F2S, F3U; **Nichicon:** TDY; **Nissei:** AMZ, AMX, AMR, AMM.

SPECIFICATIONS:

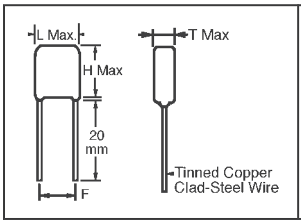
• **Operating Temp. Range:** -40° ~ +85°C • **Rated Voltage:** DC 50V, 100V, 200V • **Capacitance Range:** .0001 ~ 0.47µF • **Capacitance Tolerance:** ±5% (J), ±10% (K) • **Dissipation Factor:** 1.0% (20°C, 1kHz) • **Withstand Voltage:** Between Terminals: rated voltage(V, DC) x 250% 1 ~ 5 sec. • **Insulation Resistance:** C ≤0.33µF: 30000MΩ min. (20°C, 50VDC 60s: ECQB1H(F), C>0.33µF: 10000MΩ·µF min. (20°C, 100VDC 60s: ECQB1(F), ECQB2(F) • **Construction:** Polyester film, non-inductive, epoxy coating.

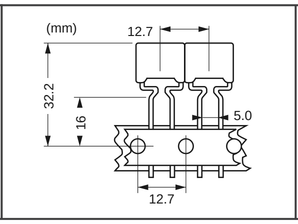
FEATURES:

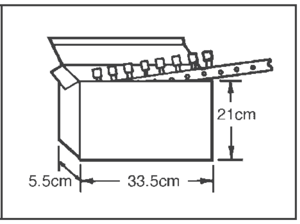
High volumetric efficiency; non-inductive construction; low-loss, high stability; and epoxy resin coating.

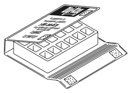
APPLICATIONS:

Blocking, by-pass and coupling of DC and signal to VHF range; pulse, logic and timing circuits; light duty pulse forming networks; filter & noise suppression circuits; and general purpose usage.









Panasonic Polyester Capacitors

Digi-Key® B-Series Kit

300 capacitors in all.

P4550-KIT-ND . . . $29.95

Includes those parts listed below (*).

P4551-ND . . 80 pc.	P4555-ND . . 30 pc.	P4559-ND . . 30 pc.
P4552-ND . . 10 pc.	P4556-ND . . 10 pc.	P4560-ND . . 10 pc.
P4553-ND . . 20 pc.	P4557-ND . . 20 pc.	P4561-ND . . 30 pc.
P4554-ND . . 20 pc.	P4558-ND . . 20 pc.	P4562-ND . . 20 pc.

Volts	Cap. µF	Tolerance	Dimensions (mm) L	T	H	F	Digi-Key Part No.	Pricing 10	100	1,000	5,000	10,000	Panasonic Part No.
50WV (Bulk Pkg.)	.0001	±10%	6.5	3.0	5.5	5.0	P4570-ND	1.59	10.60	83.00	80.00/M	73.00/M	ECQ-B1H101KF
	.00012	±10%	6.5	3.0	5.5	5.0	P4571-ND	1.59	10.60	83.00	80.00/M	73.00/M	ECQ-B1H121KF
	.00015	±10%	6.5	3.0	5.5	5.0	P4572-ND	1.59	10.60	83.00	80.00/M	73.00/M	ECQ-B1H151KF
	.00018	±10%	6.5	3.0	5.5	5.0	P4573-ND	1.59	10.60	83.00	80.00/M	73.00/M	ECQ-B1H181KF
	.00022	±10%	6.5	3.0	5.5	5.0	P4574-ND	1.59	10.60	83.00	80.00/M	73.00/M	ECQ-B1H221KF
	.00027	±10%	6.5	3.0	5.5	5.0	P4575-ND	1.59	10.60	83.00	80.00/M	73.00/M	ECQ-B1H271KF
	.00033	±10%	6.5	3.0	5.5	5.0	P4576-ND	1.59	10.60	83.00	80.00/M	73.00/M	ECQ-B1H331KF
	.00039	±10%	6.5	3.0	5.5	5.0	P4577-ND	1.59	10.60	83.00	80.00/M	73.00/M	ECQ-B1H391KF
	.00047	±5%	6.5	3.0	5.5	5.0	P4578-ND	1.23	8.20	64.00	62.00/M	56.00/M	ECQ-B1H471JF
	.00056	±5%	6.5	3.0	5.5	5.0	P4579-ND	1.23	8.20	64.00	62.00/M	56.00/M	ECQ-B1H561JF
	.00068	±5%	6.5	3.0	5.5	5.0	P4580-ND	1.23	8.20	64.00	62.00/M	56.00/M	ECQ-B1H681JF
	.00082	±5%	6.5	3.0	5.5	5.0	P4581-ND	1.23	8.20	64.00	62.00/M	56.00/M	ECQ-B1H821JF
	.001	±5%	6.5	3.0	5.5	5.0	P4551-ND*	1.11	7.40	58.00	56.00/M	51.00/M	ECQ-B1H102JF
	.0012	±5%	6.5	3.0	5.5	5.0	P4552-ND*	1.11	7.40	58.00	56.00/M	51.00/M	ECQ-B1H122JF
	.0015	±5%	6.5	3.0	5.5	5.0	P4553-ND*	1.11	7.40	58.00	56.00/M	51.00/M	ECQ-B1H152JF
	.0018	±5%	6.5	3.0	5.5	5.0	P4554-ND*	1.11	7.40	58.00	56.00/M	51.00/M	ECQ-B1H182JF
	.0022	±5%	6.5	3.0	5.5	5.0	P4555-ND*	1.11	7.40	58.00	56.00/M	51.00/M	ECQ-B1H222JF
	.0027	±5%	6.5	3.0	5.5	5.0	P4556-ND*	1.11	7.40	58.00	56.00/M	51.00/M	ECQ-B1H272JF
	.0033	±5%	6.5	3.0	5.5	5.0	P4557-ND*	1.11	7.40	58.00	56.00/M	51.00/M	ECQ-B1H332JF
	.0039	±5%	6.5	3.0	5.5	5.0	P4558-ND*	1.11	7.40	58.00	56.00/M	51.00/M	ECQ-B1H392JF
	.0047	±5%	6.5	3.0	5.5	5.0	P4559-ND*	1.11	7.40	58.00	56.00/M	51.00/M	ECQ-B1H472JF
	.0056	±5%	6.5	3.0	5.5	5.0	P4560-ND*	1.11	7.40	58.00	56.00/M	51.00/M	ECQ-B1H562JF
	.0068	±5%	6.5	3.0	5.5	5.0	P4561-ND*	1.11	7.40	58.00	56.00/M	51.00/M	ECQ-B1H682JF
	.0082	±5%	6.5	3.0	5.5	5.0	P4562-ND*	1.11	7.40	58.00	56.00/M	51.00/M	ECQ-B1H822JF
	.01	±5%	6.5	3.0	5.5	5.0	P4582-ND	1.23	8.20	64.00	62.00/M	56.00/M	ECQ-B1H103JF
	.012	±5%	7.0	3.0	6.0	5.0	P4583-ND	1.29	8.60	67.00	65.00/M	59.00/M	ECQ-B1H123JF
	.015	±5%	7.0	3.0	6.0	5.0	P4584-ND	1.32	8.80	69.00	66.00/M	60.00/M	ECQ-B1H153JF
	.018	±5%	7.0	3.0	6.0	5.0	P4585-ND	1.35	9.00	70.00	68.00/M	62.00/M	ECQ-B1H183JF
	.022	±5%	7.0	3.0	6.0	5.0	P4586-ND	1.44	9.60	75.00	73.00/M	66.00/M	ECQ-B1H223JF
	.027	±5%	7.0	3.5	6.5	5.0	P4587-ND	1.77	11.80	92.00	89.00/M	81.00/M	ECQ-B1H273JF
	.033	±5%	7.5	3.5	6.5	5.0	P4569-ND	2.07	13.80	108.00	104.00/M	95.00/M	ECQ-B1H333JF
	.039	±5%	7.5	3.5	6.5	5.0	P4588-ND	2.07	13.80	108.00	104.00/M	95.00/M	ECQ-B1H393JF
	.047	±5%	7.5	4.0	6.5	5.0	P4589-ND	2.16	14.40	113.00	109.00/M	99.00/M	ECQ-B1H473JF
	.056	±5%	8.0	4.0	7.5	5.0	P4590-ND	2.28	15.20	119.00	115.00/M	104.00/M	ECQ-B1H563JF
	.068	±5%	8.0	4.0	8.5	5.0	P4591-ND	2.34	15.60	122.00	118.00/M	107.00/M	ECQ-B1H683JF
	.082	±5%	8.0	4.5	8.5	5.0	P4592-ND	2.46	16.40	128.00	124.00/M	112.00/M	ECQ-B1H823JF
	.1	±5%	8.0	4.5	9.5	5.0	P4593-ND	2.64	17.60	138.00	133.00/M	121.00/M	ECQ-B1H104JF
	.12	±5%	11.0	4.5	9.5	7.5	P4594-ND	3.15	21.00	164.00	159.00/M	144.00/M	ECQ-B1H124JF
	.15	±5%	11.0	5.0	9.5	7.5	P4595-ND	3.39	22.60	177.00	171.00/M	155.00/M	ECQ-B1H154JF
	.18	±5%	11.0	5.5	10.0	7.5	P4596-ND	3.54	23.60	184.00	178.00/M	162.00/M	ECQ-B1H184JF
	.22	±5%	11.0	6.0	11.0	7.5	P4597-ND	3.96	26.40	206.00	199.00/M	181.00/M	ECQ-B1H224JF
	.27	±5%	13.0	6.0	12.0	10.0	P4598-ND	4.95	33.00	258.00	249.00/M	226.00/M	ECQ-B1H274JF
	.33	±5%	13.0	6.0	13.0	10.0	P4599-ND	5.34	35.60	278.00	269.00/M	244.00/M	ECQ-B1H334JF
	.39	±5%	13.0	6.5	14.0	10.0	P4734-ND	5.76	38.40	300.00	290.00/M	263.00/M	ECQ-B1H394JF
	.47	±5%	13.0	7.0	14.5	10.0	P4735-ND	6.33	42.20	330.00	319.00/M	289.00/M	ECQ-B1H474JF
100WV (Bulk Pkg.)	.0001	±5%	7.0	3.0	5.5	5.0	P4773-ND	2.04	13.60	106.00	103.00/M	93.00/M	ECQ-B1101JF
	.00012	±5%	7.0	3.0	5.5	5.0	P4774-ND	2.04	13.60	106.00	103.00/M	93.00/M	ECQ-B1121JF
	.00015	±5%	7.0	3.0	5.5	5.0	P4775-ND	2.04	13.60	106.00	103.00/M	93.00/M	ECQ-B1151JF
	.00018	±5%	7.0	3.0	5.5	5.0	P4776-ND	2.04	13.60	106.00	103.00/M	93.00/M	ECQ-B1181JF
	.00022	±5%	7.0	3.0	5.5	5.0	P4777-ND	2.04	13.60	106.00	103.00/M	93.00/M	ECQ-B1221JF
	.00027	±5%	7.0	3.0	5.5	5.0	P4778-ND	2.04	13.60	106.00	103.00/M	93.00/M	ECQ-B1271JF
	.00033	±5%	7.0	3.0	5.5	5.0	P4779-ND	2.04	13.60	106.00	103.00/M	93.00/M	ECQ-B1331JF
	.00039	±5%	7.0	3.0	5.5	5.0	P4780-ND	2.04	13.60	106.00	103.00/M	93.00/M	ECQ-B1391JF
	.00047	±5%	7.0	3.0	5.5	5.0	P4781-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1471JF
	.00056	±5%	7.0	3.0	5.5	5.0	P4782-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1561JF
	.00068	±5%	7.0	3.0	5.5	5.0	P4783-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1681JF
	.00082	±5%	7.0	3.0	5.5	5.0	P4784-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1821JF
	.001	±5%	7.0	3.0	5.5	5.0	P4785-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1102JF
	.0012	±5%	7.0	3.0	5.5	5.0	P4786-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1122JF
	.0015	±5%	7.0	3.0	5.5	5.0	P4787-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1152JF
	.0018	±5%	7.0	3.0	6.5	5.0	P4788-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1182JF
	.0022	±5%	7.0	3.0	6.5	5.0	P4789-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1222JF
	.0027	±5%	7.0	3.0	6.5	5.0	P4790-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1272JF
	.0033	±5%	7.0	3.0	6.5	5.0	P4791-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1332JF
	.0039	±5%	7.0	3.0	6.5	5.0	P4792-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1392JF
	.0047	±5%	7.0	3.0	6.5	5.0	P4793-ND	1.83	12.20	95.00	92.00/M	84.00/M	ECQ-B1472JF
	.0056	±5%	7.0	3.0	6.5	5.0	P4794-ND	1.83	12.20	95.00	92.00/M	84.00/M	ECQ-B1562JF
	.0068	±5%	7.0	3.0	6.5	5.0	P4795-ND	1.83	12.20	95.00	92.00/M	84.00/M	ECQ-B1682JF
	.0082	±5%	7.0	3.2	7.0	5.0	P4796-ND	1.83	12.20	95.00	92.00/M	84.00/M	ECQ-B1822JF
	.01	±5%	7.0	3.2	7.0	5.0	P4797-ND	1.83	12.20	95.00	92.00/M	84.00/M	ECQ-B1103JF

Volts	Cap. µF	Toler-ance	Dimensions (mm)				Digi-Key Part No.	Pricing					Panasonic Part No.
			L	T	H	F		10	100	1,000	5,000	10,000	
100WV (Bulk Pkg.)	.012	±5%	7.2	3.5	7.0	5.0	P4798-ND	1.83	12.20	95.00	92.00/M	84.00/M	ECQ-B1123JF
	.015	±5%	7.2	4.0	7.5	5.0	P4799-ND	1.83	12.20	95.00	92.00/M	84.00/M	ECQ-B1153JF
	.018	±5%	7.2	4.5	8.0	5.0	P4647-ND	1.83	12.20	95.00	92.00/M	84.00/M	ECQ-B1183JF
	.022	±5%	7.2	4.5	9.0	5.0	P4648-ND	1.83	12.20	95.00	92.00/M	84.00/M	ECQ-B1223JF
	.027	±5%	7.5	5.0	9.5	5.0	P4649-ND	1.92	12.80	100.00	97.00/M	88.00/M	ECQ-B1273JF
	.033	±5%	7.5	5.5	10.0	5.0	P4650-ND	2.10	14.00	109.00	106.00/M	96.00/M	ECQ-B1333JF
	.039	±5%	7.5	6.0	10.5	5.0	P4651-ND	2.22	14.80	116.00	112.00/M	101.00/M	ECQ-B1393JF
	.047	±5%	7.5	6.5	11.5	5.0	P4652-ND	2.34	15.60	122.00	118.00/M	107.00/M	ECQ-B1473JF
	.056	±5%	10.0	5.0	9.5	7.5	P4653-ND	2.52	16.80	131.00	127.00/M	115.00/M	ECQ-B1563JF
	.068	±5%	10.0	5.5	10.0	7.5	P4654-ND	2.70	18.00	141.00	136.00/M	123.00/M	ECQ-B1683JF
	.082	±5%	10.0	5.5	12.0	7.5	P4655-ND	2.94	19.60	153.00	148.00/M	134.00/M	ECQ-B1823JF
	.1	±5%	10.5	6.0	12.5	7.5	P4656-ND	3.12	20.80	163.00	157.00/M	142.00/M	ECQ-B1104JF
	.12	±5%	10.5	7.0	13.5	7.5	P4657-ND	3.75	25.00	195.00	189.00/M	171.00/M	ECQ-B1124JF
	.15	±5%	13.0	7.0	12.0	10.0	P4658-ND	4.35	29.00	227.00	219.00/M	199.00/M	ECQ-B1154JF
	.18	±5%	13.0	7.5	12.5	10.0	P4659-ND	5.04	33.60	263.00	254.00/M	230.00/M	ECQ-B1184JF
	.22	±5%	13.0	8.0	13.0	10.0	P4660-ND	5.67	37.80	295.00	285.00/M	259.00/M	ECQ-B1224JF
	.27	±5%	13.0	8.5	15.0	10.0	P4661-ND	6.33	42.20	330.00	319.00/M	289.00/M	ECQ-B1274JF
	.33	±5%	13.0	9.0	16.0	10.0	P4662-ND	6.99	46.60	364.00	352.00/M	319.00/M	ECQ-B1334JF
	.39	±5%	13.0	10.5	17.0	10.0	P4663-ND	7.62	50.80	397.00	384.00/M	348.00/M	ECQ-B1394JF
	.47	±5%	13.0	11.5	17.5	10.0	P4664-ND	8.25	55.00	430.00	415.00/M	377.00/M	ECQ-B1474JF
200V (B Series Poly.)	.001	±5%	8.5	4.0	7.0	5.0	P4537A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2102JF
	.0012	±5%	8.5	4.0	7.5	5.0	P4538A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2122JF
	.0015	±5%	8.5	4.0	7.5	5.0	P4539A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2152JF
	.0018	±5%	8.5	4.5	7.5	5.0	P4540A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2182JF
	.0022	±5%	8.5	4.5	7.5	5.0	P4541A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2222JF
	.0027	±5%	8.5	4.5	8.0	5.0	P4542A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2272JF
	.0033	±5%	11.0	4.5	7.5	7.5	P4543A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2332JF
	.0039	±5%	11.0	4.5	7.5	7.5	P4544A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2392JF
	.0047	±5%	11.0	4.5	8.5	7.5	P4545A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2472JF
	.0056	+5%	11.0	4.5	8.5	7.5	P4546A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2562JF
	.0068	±5%	11.0	4.5	9.0	7.5	P4547A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2682JF
	.0082	±5%	11.0	4.5	9.0	7.5	P4548A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2822JF
	.01	±5%	11.0	4.5	10.0	7.5	P4549A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2103JF
	.012	±5%	11.0	5.0	10.5	7.5	P4550A-ND	2.22	14.80	116.00	112.00/M	101.00/M	ECQ-B2123JF
	.015	±5%	11.0	5.5	10.5	7.5	P4551A-ND	2.22	14.80	116.00	112.00/M	101.00/M	ECQ-B2153JF
	.018	±5%	11.0	5.5	10.0	7.5	P4552A-ND	2.31	15.40	120.00	116.00/M	105.00/M	ECQ-B2183JF
	.022	±5%	11.0	6.0	10.5	7.5	P4553A-ND	2.52	16.80	131.00	127.00/M	115.00/M	ECQ-B2223JF
	.027	±5%	11.0	6.5	11.5	7.5	P4554A-ND	2.58	17.20	134.00	130.00/M	118.00/M	ECQ-B2273JF
	.033	±5%	11.0	7.0	12.0	7.5	P4555A-ND	2.79	18.60	145.00	140.00/M	127.00/M	ECQ-B2333JF
	.039	±5%	13.5	5.0	12.5	10.0	P4556A-ND	2.88	19.20	150.00	145.00/M	132.00/M	ECQ-B2393JF
	.047	±5%	13.5	5.5	13.0	10.0	P4557A-ND	2.94	19.60	153.00	148.00/M	134.00/M	ECQ-B2473JF
	.056	±5%	13.5	6.0	13.5	10.0	P4558A-ND	3.15	21.00	164.00	159.00/M	144.00/M	ECQ-B2563JF
	.068	±5%	16.0	5.5	13.0	12.5	P4559A-ND	3.30	22.00	172.00	166.00/M	151.00/M	ECQ-B2683JF
	.082	±5%	16.0	6.0	13.5	12.5	P4560A-ND	3.51	23.40	183.00	177.00/M	160.00/M	ECQ-B2823JF
	.1	±5%	16.0	7.0	14.5	12.5	P4561A-ND	4.14	27.60	216.00	208.00/M	189.00/M	ECQ-B2104JF
	.12	±5%	19.0	6.5	16.0	15.0	P4562A-ND	4.98	33.20	259.00	251.00/M	227.00/M	ECQ-B2124JF
	.15	±5%	19.0	7.5	17.0	15.0	P4563A-ND	5.82	38.80	303.00	293.00/M	266.00/M	ECQ-B2154JF
	.18	±5%	19.0	8.0	17.5	15.0	P4564A-ND	7.14	47.60	372.00	359.00/M	326.00/M	ECQ-B2184JF
	.22	±5%	19.0	9.0	18.5	15.0	P4565A-ND	7.86	52.40	409.00	396.00/M	359.00/M	ECQ-B2224JF
	.27	±5%	24.0	8.0	17.5	20.0	P4566A-ND	8.94	59.60	466.00	450.00/M	408.00/M	ECQ-B2274JF
	.33	±5%	24.0	9.0	18.5	20.0	P4567A-ND	11.13	74.20	580.00	560.00/M	508.00/M	ECQ-B2334JF
	.39	±5%	24.0	10.0	19.5	20.0	P4568A-ND	12.42	82.80	647.00	625.00/M	567.00/M	ECQ-B2394JF
	.47	±5%	24.0	11.5	20.5	20.0	P4569A-ND	14.13	94.20	736.00	711.00/M	645.00/M	ECQ-B2474JF

Volts	Cap. µF	Toler-ance	Dimensions (mm)				Digi-Key Part No.	Tape & Box Pricing								Panasonic Part No.
			L	T	H	F		500	1,000	2,000	5,000	6,000	10,000	25,000	26,000	
50WV (Ammo Box Pkg.)	.0001	±10%	6.5	3.0	5.5	5.0	P4570TB-ND	—	—	92.00/M	—	89.00/M	81.00/M	—	71.00/M	ECQ-B1H101KF3
	.00012	±10%	6.5	3.0	5.5	5.0	P4571TB-ND	—	—	92.00/M	—	89.00/M	81.00/M	—	71.00/M	ECQ-B1H121KF3
	.00015	±10%	6.5	3.0	5.5	5.0	P4572TB-ND	—	—	92.00/M	—	89.00/M	81.00/M	—	71.00/M	ECQ-B1H151KF3
	.00018	±10%	6.5	3.0	5.5	5.0	P4573TB-ND	—	—	92.00/M	—	89.00/M	81.00/M	—	71.00/M	ECQ-B1H181KF3
	.00022	±10%	6.5	3.0	5.5	5.0	P4574TB-ND	—	—	92.00/M	—	89.00/M	81.00/M	—	71.00/M	ECQ-B1H221KF3
	.00027	±10%	6.5	3.0	5.5	5.0	P4575TB-ND	—	—	92.00/M	—	89.00/M	81.00/M	—	71.00/M	ECQ-B1H271KF3
	.00033	±10%	6.5	3.0	5.5	5.0	P4576TB-ND	—	—	92.00/M	—	89.00/M	81.00/M	—	71.00/M	ECQ-B1H331KF3
	.00039	±10%	6.5	3.0	5.5	5.0	P4577TB-ND	—	—	92.00/M	—	89.00/M	81.00/M	—	71.00/M	ECQ-B1H391KF3
	.00047	±5%	6.5	3.0	5.5	5.0	P4578TB-ND	—	—	70.00/M	—	68.00/M	62.00/M	—	54.00/M	ECQ-B1H471JF3
	.00056	±5%	6.5	3.0	5.5	5.0	P4579TB-ND	—	—	70.00/M	—	68.00/M	62.00/M	—	54.00/M	ECQ-B1H561JF3
	.00068	±5%	6.5	3.0	5.5	5.0	P4580TB-ND	—	—	70.00/M	—	68.00/M	62.00/M	—	54.00/M	ECQ-B1H681JF3
	.00082	±5%	6.5	3.0	5.5	5.0	P4581TB-ND	—	—	70.00/M	—	68.00/M	62.00/M	—	54.00/M	ECQ-B1H821JF3
	.001	±5%	6.5	3.0	5.5	5.0	P4551TB-ND	—	—	67.00/M	—	65.00/M	59.00/M	—	52.00/M	ECQ-B1H102JF3
	.0012	±5%	6.5	3.0	5.5	5.0	P4552TB-ND	—	—	67.00/M	—	65.00/M	59.00/M	—	52.00/M	ECQ-B1H122JF3
	.0015	±5%	6.5	3.0	5.5	5.0	P4553TB-ND	—	—	67.00/M	—	65.00/M	59.00/M	—	52.00/M	ECQ-B1H152JF3
	.0018	±5%	6.5	3.0	5.5	5.0	P4554TB-ND	—	—	67.00/M	—	65.00/M	59.00/M	—	52.00/M	ECQ-B1H182JF3
	.0022	±5%	6.5	3.0	5.5	5.0	P4555TB-ND	—	—	67.00/M	—	65.00/M	59.00/M	—	52.00/M	ECQ-B1H222JF3
	.0027	±5%	6.5	3.0	5.5	5.0	P4556TB-ND	—	—	67.00/M	—	65.00/M	59.00/M	—	52.00/M	ECQ-B1H272JF3
	.0033	±5%	6.5	3.0	5.5	5.0	P4557TB-ND	—	—	67.00/M	—	65.00/M	59.00/M	—	52.00/M	ECQ-B1H332JF3
	.0039	±5%	6.5	3.0	5.5	5.0	P4558TB-ND	—	—	67.00/M	—	65.00/M	59.00/M	—	52.00/M	ECQ-B1H392JF3
	.0047	±5%	6.5	3.0	5.5	5.0	P4559TB-ND	—	—	67.00/M	—	65.00/M	59.00/M	—	52.00/M	ECQ-B1H472JF3
	.0056	±5%	6.5	3.0	5.5	5.0	P4560TB-ND	—	—	67.00/M	—	65.00/M	59.00/M	—	52.00/M	ECQ-B1H562JF3
	.0068	±5%	6.5	3.0	5.5	5.0	P4561TB-ND	—	—	67.00/M	—	65.00/M	59.00/M	—	52.00/M	ECQ-B1H682JF3
	.0082	±5%	6.5	3.0	5.5	5.0	P4562TB-ND	—	—	67.00/M	—	65.00/M	59.00/M	—	52.00/M	ECQ-B1H822JF3
	.01	±5%	6.5	3.0	5.5	5.0	P4582TB-ND	—	—	70.00/M	—	68.00/M	62.00/M	—	54.00/M	ECQ-B1H103JF3
	.012	±5%	7.0	3.0	6.0	5.0	P4583TB-ND	—	—	73.00/M	—	71.00/M	64.00/M	—	57.00/M	ECQ-B1H123JF3
	.015	±5%	7.0	3.0	6.0	5.0	P4584TB-ND	—	—	75.00/M	—	73.00/M	66.00/M	—	58.00/M	ECQ-B1H153JF3
	.018	±5%	7.0	3.0	6.0	5.0	P4585TB-ND	—	—	80.00/M	—	77.00/M	70.00/M	—	62.00/M	ECQ-B1H183JF3
	.022	±5%	7.0	3.0	6.0	5.0	P4586TB-ND	—	—	83.00/M	—	80.00/M	73.00/M	—	64.00/M	ECQ-B1H223JF3
	.027	±5%	7.0	3.5	6.5	5.0	P4587TB-ND	—	—	98.00/M	—	95.00/M	86.00/M	—	76.00/M	ECQ-B1H273JF3
	.033	±5%	7.5	3.5	6.5	5.0	P4569TB-ND	—	—	116.00/M	—	112.00/M	101.00/M	—	90.00/M	ECQ-B1H333JF3
	.039	±5%	7.5	3.5	6.5	5.0	P4588TB-ND	—	—	116.00/M	—	112.00/M	101.00/M	—	90.00/M	ECQ-B1H393JF3
	.047	±5%	7.5	4.0	6.5	5.0	P4589TB-ND	—	120.00	—	116.00/M	—	105.00/M	93.00/M	—	ECQ-B1H473JF3
	.056	±5%	8.0	4.0	7.5	5.0	P4590TB-ND	—	125.00	—	121.00/M	—	110.00/M	97.00/M	—	ECQ-B1H563JF3
	.068	±5%	8.0	4.0	8.5	5.0	P4591TB-ND	—	128.00	—	124.00/M	—	112.00/M	99.00/M	—	ECQ-B1H683JF3
	.082	±5%	8.0	4.5	8.5	5.0	P4592TB-ND	—	139.00	—	134.00/M	—	122.00/M	108.00/M	—	ECQ-B1H823JF3
	.1	±5%	8.0	4.5	9.5	5.0	P4593TB-ND	—	145.00	—	140.00/M	—	127.00/M	113.00/M	—	ECQ-B1H104JF3
	.12	±5%	11.0	4.5	9.5	5.0	P4594TB-ND	—	172.00	—	166.00/M	—	151.00/M	133.00/M	—	ECQ-B1H124JF3
	.15	±5%	11.0	5.0	9.5	5.0	P4595TB-ND	—	184.00	—	178.00/M	—	162.00/M	143.00/M	—	ECQ-B1H154JF3
	.18	±5%	11.0	5.5	10.0	5.0	P4596TB-ND	97.50	—	—	189.00/M	—	171.00/M	151.00/M	—	ECQ-B1H184JF3
	.22	±5%	11.0	6.0	11.0	5.0	P4597TB-ND	107.00	—	—	207.00/M	—	188.00/M	166.00/M	—	ECQ-B1H224JF3

Panasonic V-Series ±5% Stacked Metallized Film Capacitors

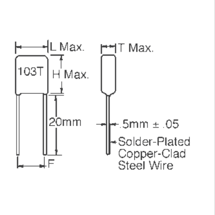
Suitable for Replacement of Monolithic Ceramic Capacitors in Most Cases

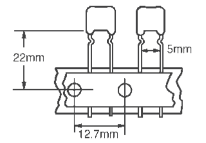
FEATURES: • High volumetric efficiency • Low dissipation factor • Stacked and non-inductive construction • Operating temperature range: –40°C to +85°C • Temperature coefficientΔc/c: 200 ppm • Dissipation factor (max.): 1.0% • Insulation resistance (25°C): 1000MΩ µF • Self-healing

APPLICATIONS: • Blocking, by-pass and coupling of DC • Pulse, logic and timing circuits • Light duty pulse forming • Filter and noise suppression

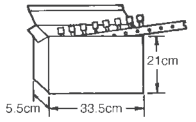
PANASONIC ECQ-V CROSS REFERENCE
Sprague: 453P/454P. **CSF Thompson:** IRD. **Siemens:** B32509.

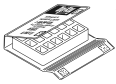
(To convert millimeters to inches divide by 25.4.)





* All taped parts have 5mm lead space.





*** Panasonic V-Series Stacked Metallized Film Capacitors**

Digi-Key® V-Series Capacitors Kit

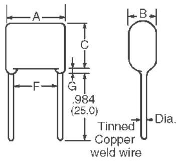
P4542-KIT-ND* **(50 Volt K)**........... **$49.95**
P4700-KIT-ND† **(100 Volt K)**......... **$49.95**

Includes 10 each of those parts indicated below (* or †). 180 capacitors. 10 each of the values listed in the chart. Price includes a notebook style storage box with bin guide for easy storage and quick access.

Volts	Cap. µF	Dimensions (mm) L	T	H	F	Digi-Key Part No.	Pricing 10	100	1,000	5,000	10,000	Panasonic Part No.
Bulk Package												
50 WV	0.01	7.3	3.2	5.0	5.0	P4513-ND*	1.35	11.25	67.00	62.00/M	58.00/M	ECQ-V1H103JL
	0.012	7.3	3.2	5.0	5.0	P4514-ND	1.35	11.25	67.00	62.00/M	58.00/M	ECQ-V1H123JL
	0.015	7.3	3.2	5.0	5.0	P4515-ND*	1.41	11.75	70.00	65.00/M	61.00/M	ECQ-V1H153JL
	0.018	7.3	3.2	5.0	5.0	P4516-ND	1.44	12.00	72.00	67.00/M	62.00/M	ECQ-V1H183JL
	0.022	7.3	3.2	5.0	5.0	P4517-ND*	1.47	12.25	73.00	68.00/M	64.00/M	ECQ-V1H223JL
	0.027	7.3	3.2	5.0	5.0	P4518-ND*	1.53	12.75	76.00	71.00/M	66.00/M	ECQ-V1H273JL
	0.033	7.3	3.2	5.0	5.0	P4519-ND*	1.59	13.25	79.00	74.00/M	69.00/M	ECQ-V1H333JL
	0.039	7.3	3.2	5.0	5.0	P4520-ND	1.59	13.25	79.00	74.00/M	69.00/M	ECQ-V1H393JL
	0.047	7.3	3.2	5.0	5.0	P4521-ND*	1.56	13.00	78.00	72.00/M	68.00/M	ECQ-V1H473JL
	0.056	7.3	3.2	5.0	5.0	P4522-ND	1.65	13.75	82.00	76.00/M	71.00/M	ECQ-V1H563JL
	0.068	7.3	3.2	5.0	5.0	P4523-ND*	1.77	14.75	88.00	82.00/M	77.00/M	ECQ-V1H683JL
	0.082	7.3	3.6	5.0	5.0	P4524-ND*	1.83	15.25	91.00	85.00/M	79.00/M	ECQ-V1H823JL
	0.1	7.3	4.0	5.0	5.0	P4525-ND*	1.83	15.25	91.00	85.00/M	79.00/M	ECQ-V1H104JL
	0.12	7.3	4.0	5.0	5.0	P4526-ND	2.01	16.75	100.00	93.00/M	87.00/M	ECQ-V1H124JL
	0.15	10.2	3.4	9.0	7.5	P4538-ND	2.07	17.25	103.00	96.00/M	90.00/M	ECQ-V1H154JC
	0.15	7.3	4.4	5.5	5.0	P4665-ND*	2.07	17.25	103.00	96.00/M	90.00/M	ECQ-V1H154JL
	0.18	7.3	4.5	5.5	5.0	P4666-ND*	2.10	17.50	104.00	97.00/M	91.00/M	ECQ-V1H184JL
	0.22	7.3	4.8	5.5	5.0	P4667-ND	2.28	19.00	113.00	106.00/M	99.00/M	ECQ-V1H224JL
	0.27	7.3	4.6	7.0	5.0	P4668-ND*	2.58	21.50	128.00	119.00/M	112.00/M	ECQ-V1H274JL
	0.33	7.3	5.2	7.0	5.0	P4669-ND*	2.94	24.50	146.00	136.00/M	127.00/M	ECQ-V1H334JL
	0.39	7.3	5.7	7.3	5.0	P4670-ND	3.30	27.50	164.00	153.00/M	143.00/M	ECQ-V1H394JL
	0.47	7.3	6.0	7.3	5.0	P4671-ND*	3.66	30.50	182.00	169.00/M	158.00/M	ECQ-V1H474JL
	0.56	7.3	5.8	10.0	5.0	P4672-ND*	4.35	36.25	216.00	201.00/M	188.00/M	ECQ-V1H564JL
	0.68	7.3	6.5	10.0	5.0	P4673-ND*	5.16	43.00	257.00	239.00/M	223.00/M	ECQ-V1H684JL
	0.82	7.3	6.8	10.0	5.0	P4674-ND*	6.15	51.25	306.00	285.00/M	266.00/M	ECQ-V1H824JL
	1.0	7.3	8.0	11.0	5.0	P4675-ND*	7.05	58.75	351.00	326.00/M	305.00/M	ECQ-V1H105JL
63 WV	0.18	10.2	3.5	9.0	7.5	P4539-ND	2.28	19.00	113.00	106.00/M	99.00/M	ECQ-V1J184JM
	0.22	10.2	3.5	9.0	7.5	P4540-ND	2.34	19.50	116.00	108.00/M	101.00/M	ECQ-V1J224JM
	0.27	10.2	3.5	9.0	7.5	P4541-ND	2.70	22.50	134.00	125.00/M	117.00/M	ECQ-V1J274JM
	0.33	10.2	3.8	9.0	7.5	P4549-ND	3.06	25.50	152.00	142.00/M	132.00/M	ECQ-V1J334JM
	0.39	10.2	4.0	9.0	7.5	P4543-ND	3.42	28.50	170.00	158.00/M	148.00/M	ECQ-V1J394JM
	0.47	10.2	4.5	9.0	7.5	P4544-ND	3.84	32.00	191.00	178.00/M	166.00/M	ECQ-V1J474JM
	0.56	10.2	4.9	9.0	7.5	P4545-ND	4.56	38.00	227.00	211.00/M	197.00/M	ECQ-V1J564JM
	0.68	10.2	5.5	10.0	7.5	P4546-ND	5.40	45.00	269.00	250.00/M	234.00/M	ECQ-V1J684JM
	0.82	10.2	6.1	10.0	7.5	P4547-ND	6.39	53.25	318.00	296.00/M	277.00/M	ECQ-V1J824JM
	1.0	10.2	6.9	10.0	7.5	P4548-ND	7.35	61.25	366.00	340.00/M	318.00/M	ECQ-V1J105JM
100 WV	0.01	7.3	3.2	7.0	5.0	P4713-ND†	1.92	16.00	96.00	89.00/M	83.00/M	ECQ-V1103JM
	0.012	7.3	3.2	7.0	5.0	P4714-ND	1.92	16.00	96.00	89.00/M	83.00/M	ECQ-V1123JM
	0.015	7.3	3.2	7.0	5.0	P4715-ND†	1.92	16.00	96.00	89.00/M	83.00/M	ECQ-V1153JM
	0.018	7.3	3.2	7.0	5.0	P4716-ND	1.92	16.00	96.00	89.00/M	83.00/M	ECQ-V1183JM
	0.022	7.3	3.2	7.0	5.0	P4717-ND†	1.92	16.00	96.00	89.00/M	83.00/M	ECQ-V1223JM
	0.027	7.3	3.2	7.0	5.0	P4718-ND†	2.01	16.75	100.00	93.00/M	87.00/M	ECQ-V1273JM
	0.033	7.3	3.2	7.0	5.0	P4719-ND†	2.01	16.75	100.00	93.00/M	87.00/M	ECQ-V1333JM
	0.039	7.3	3.2	7.0	5.0	P4720-ND†	2.04	17.00	101.00	94.00/M	88.00/M	ECQ-V1393JM
	0.047	7.3	4.0	7.0	5.0	P4721-ND†	2.04	17.00	101.00	94.00/M	88.00/M	ECQ-V1473JM
	0.056	7.3	4.2	7.0	5.0	P4722-ND†	2.10	17.50	104.00	97.00/M	91.00/M	ECQ-V1563JM
	0.068	7.3	4.5	7.0	5.0	P4723-ND†	2.22	18.50	110.00	103.00/M	96.00/M	ECQ-V1683JM
	0.082	7.3	5.0	7.0	5.0	P4724-ND†	2.28	19.00	113.00	106.00/M	99.00/M	ECQ-V1823JM
	0.1	7.3	5.8	7.0	5.0	P4725-ND†	2.31	19.25	115.00	107.00/M	100.00/M	ECQ-V1104JM
	0.12	10.0	3.4	9.0	7.5	P4726-ND	2.58	21.50	128.00	119.00/M	112.00/M	ECQ-V1124JM
	0.15	10.0	3.8	9.0	7.5	P4727-ND†	2.64	22.00	131.00	122.00/M	114.00/M	ECQ-V1154JM
	0.18	10.0	4.0	9.0	7.5	P4728-ND†	2.76	23.00	137.00	128.00/M	119.00/M	ECQ-V1184JM
	0.22	10.0	4.3	9.0	7.5	P4729-ND†	2.91	24.25	145.00	135.00/M	126.00/M	ECQ-V1224JM
	0.27	10.0	5.2	10.0	7.5	P4730-ND†	3.36	28.00	167.00	156.00/M	145.00/M	ECQ-V1274JM
	0.33	10.0	5.9	10.0	7.5	P4731-ND†	3.84	32.00	191.00	178.00/M	166.00/M	ECQ-V1334JM
	0.39	10.0	7.5	11.0	7.5	P4732-ND†	4.23	35.25	210.00	196.00/M	183.00/M	ECQ-V1394JM
	0.47	10.0	8.1	11.0	7.5	P4733-ND†	4.71	39.25	234.00	218.00/M	204.00/M	ECQ-V1474JM

Volts	Cap. µF	Dimensions (mm) L	T	H	F	Digi-Key Part No.	Pricing 1,000	2,000	5,000	6,000	10,000	26,000	Panasonic Part No.
Ammo Box Package													
50 WV	0.01	7.3	3.2	7.0	5.0	P4513TB-ND	—	76.00/M	—	71.00/M	66.00/M	62.00/M	ECQ-V1H103JZ3
	0.012	7.3	3.2	7.0	5.0	P4514TB-ND	—	76.00/M	—	71.00/M	66.00/M	62.00/M	ECQ-V1H123JZ3
	0.015	7.3	3.2	7.0	5.0	P4515TB-ND	—	79.00/M	—	74.00/M	69.00/M	65.00/M	ECQ-V1H153JZ3
	0.018	7.3	3.2	7.0	5.0	P4516TB-ND	—	82.00/M	—	76.00/M	71.00/M	67.00/M	ECQ-V1H183JZ3
	0.022	7.3	3.2	5.0	5.0	P4517TB-ND	—	84.00/M	—	78.00/M	73.00/M	68.00/M	ECQ-V1H223JL3
	0.027	7.3	3.2	7.0	5.0	P4518TB-ND	—	85.00/M	—	79.00/M	74.00/M	70.00/M	ECQ-V1H273JZ3
	0.033	7.3	3.2	7.0	5.0	P4519TB-ND	—	88.00/M	—	82.00/M	77.00/M	72.00/M	ECQ-V1H333JZ3
	0.039	7.3	3.2	5.0	5.0	P4520TB-ND	—	88.00/M	—	82.00/M	77.00/M	72.00/M	ECQ-V1H393JL3
	0.047	7.3	3.2	7.0	5.0	P4521TB-ND	—	85.00/M	—	79.00/M	74.00/M	70.00/M	ECQ-V1H473JZ3
	0.056	7.3	3.2	5.0	5.0	P4522TB-ND	—	90.00/M	—	83.00/M	78.00/M	73.00/M	ECQ-V1H563JL3
	0.068	7.3	3.9	7.0	5.0	P4523TB-ND	—	94.00/M	—	87.00/M	82.00/M	77.00/M	ECQ-V1H683JZ3
	0.082	7.3	4.1	7.0	5.0	P4524TB-ND	—	100.00/M	—	93.00/M	87.00/M	82.00/M	ECQ-V1H823JZ3
	0.1	7.3	4.4	7.0	5.0	P4525TB-ND	—	100.00/M	—	93.00/M	87.00/M	82.00/M	ECQ-V1H104JZ3
	0.12	7.3	4.7	7.0	5.0	P4526TB-ND	—	107.00/M	—	100.00/M	94.00/M	88.00/M	ECQ-V1H124JZ3
	0.15	10.0	3.4	9.0	5.0	P4527TB-ND	115.00	—	107.00/M	—	100.00/M	—	ECQ-V1H154JZ3
	0.18	10.0	3.5	9.0	5.0	P4528TB-ND	113.00	—	106.00/M	—	99.00/M	—	ECQ-V1H184JZ3
	0.22	10.0	3.7	9.0	5.0	P4529TB-ND	119.00	—	111.00/M	—	104.00/M	—	ECQ-V1H224JZ3
	0.27	10.0	4.0	9.0	5.0	P4530TB-ND	137.00	—	128.00/M	—	119.00/M	—	ECQ-V1H274JZ3
	0.33	10.0	4.2	9.0	5.0	P4531TB-ND	155.00	—	144.00/M	—	135.00/M	—	ECQ-V1H334JZ3
	0.39	10.0	4.9	9.0	5.0	P4532TB-ND	170.00	—	158.00/M	—	148.00/M	—	ECQ-V1H394JZ3
	0.47	10.0	5.5	10.0	5.0	P4533TB-ND	188.00	—	175.00/M	—	164.00/M	—	ECQ-V1H474JZ3
	0.56	10.0	6.1	10.0	5.0	P4534TB-ND	227.00	—	211.00/M	—	197.00/M	—	ECQ-V1H564JZ3
	0.68	10.0	6.8	10.0	5.0	P4535TB-ND	263.00	—	244.00/M	—	229.00/M	—	ECQ-V1H684JZ3
	0.82	7.3	6.8	10.0	5.0	P4536TB-ND	312.00	—	290.00/M	—	271.00/M	—	ECQ-V1H824JL3
	1.0	7.3	8.0	11.0	5.0	P4537TB-ND	357.00	—	332.00/M	—	310.00/M	—	ECQ-V1H105JL3

Panasonic® E-Series Metallized Polyester Capacitors



GENERAL SPECIFICATIONS:
ELECTRICAL: Rated Voltage 100 V.D.C., 250 V.D.C., 400 V.D.C., 630 V.D.C. **Capacitance Tolerance** ±10% (K)
Insulation Resistance: Less than 0.33 µF: 9,000 MΩ; More than 0.33 µF: 3,000 MΩ. **Dissipation Factor** = 1.0% at 1kHz

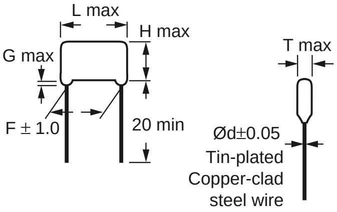
Withstanding Voltage Rated Voltage X 1.5 (1 min.)
Operating Temperature -40°C ~ +85°C

PANASONIC ECQ-E CROSS REFERENCES:
Sprague: DF/450P/451P/453P;
Westlake: 160/168/185/167/184/186;
Mepco: 713A1/ 719A1/C280; **TRW:** X601PE/X601CPE;
Packtron: MF/RB; **Secor:** MMKS/MMKR/MMDR;
RIFA: PHE353/PHE354; **Roederstein:** MKT1818/MKT1822;
WIMA: MKS; **CSF Thompson:** MD/MC;
Siemens: B325X-XX; **Rubycon:** MC/MN; **Nichicon:** DDXM.

Working Voltage	µF	Dimensions (mm)						Digi-Key Part No.	Pricing						Panasonic Part No.
		A	B	C	F	G	Dia.		1	10	100	1,000	5,000	10,000	
100	.1	12.0	4.0	7.4	10.0	1.0	.6	E1104-ND	.34	2.94	23.03	147.00	138.00/M	127.00/M	ECQ-E1104KZ
	.12	12.0	4.5	7.4	10.0	1.0	.6	E1124-ND	.35	3.03	23.74	151.00	142.00/M	131.00/M	ECQ-E1124KZ
	.15	12.0	4.0	9.5	10.0	1.0	.6	E1154-ND	.36	3.12	24.44	156.00	147.00/M	135.00/M	ECQ-E1154KZ
	.18	12.0	4.5	10.0	10.0	1.0	.6	E1184-ND	.39	3.30	25.85	165.00	155.00/M	143.00/M	ECQ-E1184KZ
	.22	12.0	5.0	10.5	10.0	1.0	.6	E1224-ND	.41	3.54	27.73	177.00	166.00/M	153.00/M	ECQ-E1224KZ
	.27	17.0	4.5	8.0	15.0	1.0	.6	E1274-ND	.46	3.90	30.55	195.00	183.00/M	169.00/M	ECQ-E1274KZ
	.33	17.0	4.5	10.0	15.0	1.0	.6	E1334-ND	.51	4.35	34.08	217.00	205.00/M	188.00/M	ECQ-E1334KZ
	.39	17.0	5.0	10.0	15.0	1.0	.6	E1394-ND	.53	4.50	35.25	225.00	212.00/M	195.00/M	ECQ-E1394KZ
	.47	17.0	5.5	11.0	15.0	1.0	.6	E1474-ND	.55	4.74	37.13	237.00	223.00/M	205.00/M	ECQ-E1474KZ
	.56	17.0	6.5	11.5	15.0	1.0	.6	E1564-ND	.64	5.46	42.77	272.00	257.00/M	236.00/M	ECQ-E1564KZ
	.68	17.0	7.0	12.0	15.0	1.0	.8	E1684-ND	.72	6.21	48.65	310.00	292.00/M	269.00/M	ECQ-E1684KZ
	.82	17.0	7.5	13.0	15.0	1.0	.8	E1824-ND	.79	6.81	53.35	340.00	320.00/M	295.00/M	ECQ-E1824KZ
	1.0	17.0	8.0	14.0	15.0	1.0	.8	E1105-ND	.86	7.41	58.05	370.00	348.00/M	321.00/M	ECQ-E1105KZ
	1.2	17.0	8.5	16.0	15.0	1.0	.8	E1125-ND	1.00	8.58	67.21	428.00	403.00/M	371.00/M	ECQ-E1125KZ
	1.5	25.5	7.5	14.5	22.5	1.0	.8	E1155-ND	1.17	10.02	78.49	500.00	471.00/M	434.00/M	ECQ-E1155KZ
	1.8	25.5	8.5	16.0	22.5	1.0	.8	E1185-ND	1.30	11.13	87.19	555.00	523.00/M	482.00/M	ECQ-E1185KZ
	2.2	25.5	9.5	16.5	22.5	1.0	.8	E1225-ND	1.47	12.60	98.70	629.00	592.00/M	545.00/M	ECQ-E1225KZ
	2.7	25.5	10.0	18.5	22.5	1.0	.8	E1275-ND	1.67	14.31	112.10	714.00	673.00/M	619.00/M	ECQ-E1275KZ
	3.3	25.5	10.0	19.0	22.5	1.0	.8	E1335-ND	2.13	18.24	142.88	910.00	858.00/M	790.00/M	ECQ-E1335KZ
	3.9	30.5	11.0	18.0	27.5	1.5	.8	E1395-ND	2.41	20.67	161.92	1031.00	972.00/M	895.00/M	ECQ-E1395KZ
	4.7	30.5	11.0	20.5	27.5	1.5	.8	E1475-ND	2.72	23.31	182.60	1163.00	1096.00/M	1009.00/M	ECQ-E1475KZ
	5.6	30.5	12.5	21.0	27.5	1.5	.8	E1565-ND	3.23	27.72	217.14	1383.00	1303.00/M	1200.00/M	ECQ-E1565KZ
	6.8	30.5	13.0	24.0	27.5	1.5	.8	E1685-ND	3.67	31.47	246.52	1570.00	1480.00/M	1362.00/M	ECQ-E1685KZ
	8.2	30.5	15.0	25.0	27.5	1.5	.8	E1825-ND	4.24	36.30	284.35	1811.00	1707.00/M	1571.00/M	ECQ-E1825KZ
	10.0	30.5	16.0	27.0	27.5	1.5	.8	E1106-ND	4.93	42.24	330.88	2108.00	1986.00/M	1829.00/M	ECQ-E1106KZ
250	.01	12.5	5.0	8.5	10.0	1.0	.6	E2103-ND*	.31	2.67	20.92	133.00	126.00/M	116.00/M	ECQ-E2103KS
	.012	12.5	5.0	8.5	10.0	1.0	.6	E2123-ND*	.31	2.67	20.92	133.00	126.00/M	116.00/M	ECQ-E2123KS
	.015	12.5	5.0	8.5	10.0	1.0	.6	E2153-ND	.31	2.67	20.92	133.00	126.00/M	116.00/M	ECQ-E2153KS
	.018	12.5	5.0	8.5	10.0	1.0	.6	E2183-ND	.31	2.67	20.92	133.00	126.00/M	116.00/M	ECQ-E2183KS
	.022	12.5	5.0	8.5	10.0	1.0	.6	E2223-ND*	.31	2.67	20.92	133.00	126.00/M	116.00/M	ECQ-E2223KS
	.027	12.5	5.0	8.5	10.0	1.0	.6	E2273-ND	.31	2.67	20.92	133.00	126.00/M	116.00/M	ECQ-E2273KS
	.033	12.5	5.0	8.5	10.0	1.0	.6	E2333-ND*	.31	2.67	20.92	133.00	126.00/M	116.00/M	ECQ-E2333KS
	.039	12.5	5.0	8.5	10.0	1.0	.6	E2393-ND	.31	2.67	20.92	133.00	126.00/M	116.00/M	ECQ-E2393KS
	.047	12.5	5.0	8.0	10.0	1.0	.6	E2473-ND*	.26	2.19	17.16	109.00	103.00/M	95.00/M	ECQ-E2473KS
	.056	12.5	5.5	8.5	10.0	1.0	.6	E2563-ND	.32	2.76	21.62	138.00	130.00/M	119.00/M	ECQ-E2563KS
	.068	12.5	5.5	8.5	10.0	1.0	.6	E2683-ND*	.33	2.82	22.09	141.00	133.00/M	122.00/M	ECQ-E2683KS
	.082	12.5	5.5	10.0	10.0	1.0	.6	E2823-ND	.34	2.94	23.03	147.00	138.00/M	127.00/M	ECQ-E2823KS
	.10	12.5	5.5	10.5	10.0	1.0	.6	E2104-ND*	.31	2.64	20.68	132.00	124.00/M	114.00/M	ECQ-E2104KS
	.12	17.5	5.5	10.0	15.0	1.0	.8	E2124-ND	.40	3.42	26.79	171.00	161.00/M	148.00/M	ECQ-E2124KS
	.15	17.5	6.0	10.5	15.0	1.0	.8	E2154-ND*	.43	3.72	29.14	186.00	175.00/M	161.00/M	ECQ-E2154KS
	.18	17.5	6.0	10.5	15.0	1.0	.8	E2184-ND	.46	3.90	30.55	195.00	183.00/M	169.00/M	ECQ-E2184KS
	.22	17.5	6.0	11.0	15.0	1.0	.8	E2224-ND*	.48	4.08	31.96	204.00	192.00/M	177.00/M	ECQ-E2224KS
	.27	23.0	6.0	10.5	20.0	1.0	.8	E2274-ND	.55	4.71	36.90	235.00	221.00/M	204.00/M	ECQ-E2274KS
	.33	23.0	6.0	11.0	20.0	1.0	.8	E2334-ND*	.60	5.16	40.42	257.00	243.00/M	223.00/M	ECQ-E2334KS
	.39	23.0	6.5	11.5	20.0	1.0	.8	E2394-ND	.65	5.55	43.48	277.00	261.00/M	240.00/M	ECQ-E2394KS
	.47	23.0	7.0	12.0	20.0	1.0	.8	E2474-ND*	.69	5.94	46.53	296.00	279.00/M	257.00/M	ECQ-E2474KS
	.56	23.0	7.5	13.0	20.0	1.0	.8	E2564-ND	.76	6.51	51.00	325.00	306.00/M	282.00/M	ECQ-E2564KS
	.68	23.0	8.5	14.0	20.0	1.0	.8	E2684-ND	.84	7.17	56.17	358.00	337.00/M	310.00/M	ECQ-E2684KS
	.82	31.0	7.5	13.0	27.5	1.0	.8	E2824-ND	.92	7.89	61.81	394.00	371.00/M	342.00/M	ECQ-E2824KS
	1.0	31.0	8.5	14.0	27.5	1.0	.8	E2105-ND*	.98	8.37	65.57	418.00	394.00/M	362.00/M	ECQ-E2105KS
	1.2	31.0	8.5	16.0	27.5	1.0	.8	E2125-ND*	1.07	9.18	71.91	458.00	432.00/M	397.00/M	ECQ-E2125KS
	1.5	31.0	9.5	17.0	27.5	1.0	.8	E2155-ND*	1.38	11.82	92.59	590.00	556.00/M	512.00/M	ECQ-E2155KS
	1.8	31.0	9.5	18.5	27.5	1.0	.8	E2185-ND	1.66	14.25	111.63	711.00	670.00/M	617.00/M	ECQ-E2185KS
	2.2	31.0	10.5	19.5	27.5	1.0	.8	E2225-ND*	1.67	14.31	112.10	714.00	673.00/M	619.00/M	ECQ-E2225KS
400	.01	14.0	5.0	8.5	10.5	1.0	.6	E4103-ND	.42	3.60	28.20	180.00	169.00/M	156.00/M	ECQ-E4103KZ
	.012	14.0	5.5	8.5	10.5	1.0	.6	E4123-ND	.42	3.60	28.20	180.00	169.00/M	156.00/M	ECQ-E4123KZ
	.015	14.0	5.0	8.5	10.5	1.0	.6	E4153-ND	.43	3.72	29.14	186.00	175.00/M	161.00/M	ECQ-E4153KZ
	.018	14.0	5.5	8.5	10.5	1.0	.6	E4183-ND	.43	3.72	29.14	186.00	175.00/M	161.00/M	ECQ-E4183KZ
	.022	14.0	5.5	10.0	10.5	1.0	.6	E4223-ND	.44	3.75	29.38	187.00	176.00/M	162.00/M	ECQ-E4223KZ
	.027	14.0	5.5	10.5	10.5	1.0	.6	E4273-ND	.47	3.99	31.26	199.00	188.00/M	173.00/M	ECQ-E4273KZ
	.033	14.0	6.0	11.0	10.5	1.0	.6	E4333-ND	.49	4.20	32.90	210.00	197.00/M	182.00/M	ECQ-E4333KZ
	.039	14.0	6.5	11.5	10.5	1.0	.6	E4393-ND	.50	4.26	33.37	213.00	200.00/M	184.00/M	ECQ-E4393KZ
	.047	14.0	7.0	12.0	10.5	1.0	.6	E4473-ND	.50	4.26	33.37	213.00	200.00/M	184.00/M	ECQ-E4473KZ
	.056	17.0	6.5	11.0	13.5	1.0	.6	E4563-ND	.54	4.59	35.96	229.00	216.00/M	199.00/M	ECQ-E4563KZ
	.068	17.0	7.0	12.0	13.5	1.0	.6	E4683-ND	.57	4.86	38.07	243.00	228.00/M	210.00/M	ECQ-E4683KZ
	.082	17.0	7.5	12.5	13.5	1.0	.6	E4823-ND	.59	5.07	39.72	253.00	238.00/M	219.00/M	ECQ-E4823KZ
	.10	17.0	7.5	14.5	13.5	1.0	.6	E4104-ND	.58	4.98	39.01	249.00	234.00/M	216.00/M	ECQ-E4104KZ
	.12	17.0	8.5	15.5	13.5	1.0	.6	E4124-ND	.66	5.67	44.42	283.00	267.00/M	245.00/M	ECQ-E4124KZ
	.15	17.0	9.0	16.5	13.5	1.0	.8	E4154-ND	.72	6.21	48.65	310.00	292.00/M	269.00/M	ECQ-E4154KZ
	.18	17.0	10.0	17.0	13.5	1.0	.8	E4184-ND	.77	6.63	51.94	331.00	312.00/M	287.00/M	ECQ-E4184KZ
	.22	24.5	8.5	15.5	20.5	1.0	.8	E4224-ND	.83	7.11	55.70	355.00	334.00/M	308.00/M	ECQ-E4224KZ
	.27	24.5	9.0	16.5	20.5	1.0	.8	E4274-ND	.92	7.86	61.57	392.00	370.00/M	340.00/M	ECQ-E4274KZ
	.33	24.5	9.5	17.0	20.5	1.0	.8	E4334-ND	.99	8.46	66.27	422.00	398.00/M	366.00/M	ECQ-E4334KZ
	.39	29.5	9.5	16.5	25.5	1.5	.8	E4394-ND	1.07	9.18	71.91	458.00	432.00/M	397.00/M	ECQ-E4394KZ
	.47	29.5	10.0	17.5	25.5	1.5	.8	E4474-ND	1.16	9.90	77.55	494.00	465.00/M	429.00/M	ECQ-E4474KZ
	.56	29.5	11.0	18.0	25.5	1.5	.8	E4564-ND	1.26	10.80	84.60	539.00	508.00/M	468.00/M	ECQ-E4564KZ
	.68	29.5	12.0	19.0	25.5	1.5	.8	E4684-ND	1.41	12.09	94.71	603.00	568.00/M	523.00/M	ECQ-E4684KZ
	.82	29.5	13.0	21.0	25.5	1.5	.8	E4824-ND	1.54	13.20	103.40	659.00	621.00/M	571.00/M	ECQ-E4824KZ
	1.0	29.5	15.0	22.0	25.5	1.5	.8	E4105-ND	1.68	14.43	113.04	720.00	678.00/M	625.00/M	ECQ-E4105KZ
	1.2	29.5	15.0	25.0	25.5	1.5	.8	E4125-ND	2.38	20.40	159.80	1018.00	959.00/M	883.00/M	ECQ-E4125KZ
	1.5	43.5	13.0	22.0	38.5	1.5	.8	E4155-ND	2.56	21.96	172.02	1096.00	1032.00/M	951.00/M	ECQ-E4155KZ
	1.8	43.5	14.5	24.0	38.5	1.5	.8	E4185-ND	3.03	26.01	203.75	1298.00	1223.00/M	1126.00/M	ECQ-E4185KZ
	2.2	43.5	16.0	25.5	38.5	1.5	.8	E4225-ND	3.47	29.70	232.65	1482.00	1396.00/M	1286.00/M	ECQ-E4225KZ
630	.01	14.0	5.5	8.5	10.5	1.0	.6	E6103-ND	.45	3.87	30.32	193.00	182.00/M	168.00/M	ECQ-E6103KZ
	.015	14.0	6.0	10.5	10.5	1.0	.6	E6153-ND	.48	4.14	32.43	207.00	195.00/M	179.00/M	ECQ-E6153KZ
	.018	14.0	6.0	11.0	10.5	1.0	.6	E6183-ND	.50	4.26	33.37	213.00	200.00/M	184.00/M	ECQ-E6183KZ
	.022	14.0	6.5	12.0	10.5	1.0	.6	E6223-ND	.52	4.44	34.78	222.00	209.00/M	192.00/M	ECQ-E6223KZ
	.027	17.0	5.5	12.5	13.5	1.0	.6	E6273-ND	.54	4.59	35.96	229.00	216.00/M	199.00/M	ECQ-E6273KZ
	.033	17.0	6.0	12.0	13.5	1.0	.6	E6333-ND	.55	4.74	37.13	237.00	223.00/M	205.00/M	ECQ-E6333KZ
	.039	17.0	6.5	12.0	13.5	1.0	.6	E6393-ND	.57	4.86	38.07	243.00	228.00/M	210.00/M	ECQ-E6393KZ
	.047	17.0	7.0	13.5	13.5	1.0	.6	E6473-ND	.58	4.98	39.01	249.00	234.00/M	216.00/M	ECQ-E6473KZ
	.056	17.0	7.5	14.0	13.5	1.0	.6	E6563-ND	.62	5.34	41.83	266.00	251.00/M	231.00/M	ECQ-E6563KZ
	.068	17.0	8.5	15.0	13.5	1.0	.6	E6683-ND	.67	5.76	45.12	287.00	271.00/M	249.00/M	ECQ-E6683KZ
	.082	17.0	9.0	16.0	13.5	1.0	.8	E6823-ND	.72	6.15	48.18	307.00	289.00/M	266.00/M	ECQ-E6823KZ
	.10	24.5	7.0	14.0	20.5	1.5	.8	E6104-ND	.77	6.57	51.47	328.00	309.00/M	284.00/M	ECQ-E6104KZ
	.12	24.5	8.5	15.5	20.5	1.5	.8	E6124-ND	.85	7.26	56.87	362.00	341.00/M	314.00/M	ECQ-E6124KZ
	.15	24.5	9.0	16.5	20.5	1.5	.8	E6154-ND	.95	8.13	63.69	406.00	382.00/M	352.00/M	ECQ-E6154KZ
	.18	24.5	10.0	17.0	20.5	1.5	.8	E6184-ND	1.01	8.67	67.92	433.00	408.00/M	375.00/M	ECQ-E6184KZ
	.22	29.5	9.5	17.0	25.5	1.5	.8	E6224-ND	1.10	9.45	74.03	472.00	444.00/M	409.00/M	ECQ-E6224KZ
	.27	29.5	10.5	17.5	25.5	1.5	.8	E6274-ND	1.24	10.65	83.43	531.00	501.00/M	461.00/M	ECQ-E6274KZ
	.33	29.5	11.5	18.5	25.5	1.5	.8	E6334-ND	1.40	12.00	94.00	599.00	564.00/M	519.00/M	ECQ-E6334KZ
	.39	29.5	12.0	19.5	25.5	1.5	.8	E6394-ND	1.52	13.05	102.23	651.00	614.00/M	565.00/M	ECQ-E6394KZ
	.47	29.5	13.0	20.5	25.5	1.5	.8	E6474-ND	1.64	14.07	110.22	702.00	661.00/M	609.00/M	ECQ-E6474KZ
	.56	29.5	15.0	21.5	25.5	1.5	.8	E6564-ND	1.95	16.68	130.66	832.00	784.00/M	722.00/M	ECQ-E6564KZ
	.68	43.5	12.5	19.5	38.5	1.5	.8	E6684-ND	2.52	21.60	169.20	1078.00	1016.00/M	935.00/M	ECQ-E6684KZ
	.82	43.5	14.0	21.0	38.5	1.5	.8	E6824-ND	2.77	23.70	185.65	1183.00	1114.00/M	1026.00/M	ECQ-E6824KZ
	1.0	43.5	14.5	24.0	38.5	1.5	.8	E6105-ND	3.36	28.77	225.37	1436.00	1353.00/M	1245.00/M	ECQ-E6105KZ
	1.2	43.5	16.0	25.5	38.5	1.5	.8	E6125-ND	3.53	30.24	236.88	1509.00	1422.00/M	1309.00/M	ECQ-E6125KZ
	1.5	43.5	18.5	27.0	38.5	1.5	.8	E6155-ND	4.31	36.96	289.52	1844.00	1738.00/M	1600.00/M	ECQ-E6155KZ

*** E-KIT-ND** ***Digi-Key® E-Series Capacitors Kit*** 10 each of all values denoted (except #E2104 which has 30 pcs.) - 170 total pieces. Notebook style storage case **$59.95**

Panasonic® ECQ-E(B) Series Miniaturized Metallized Polyester Film Capacitors



The type ECQ-E(B) series is a down-sized version of the popular ECQ-E(F) series. It provides similar electrical characteristics in a smaller package.

FEATURES:

- Non-inductive construction
- Wound metallized polyester dielectric

APPLICATIONS:

- Blocking, by-passing, filtering, timing, interference suppression, low pulse applications.

SPECIFICATIONS:

Operating temperature range: -40°C to +85°C

Rated voltage: 250VDC

Capacitance tolerance: ±10%(K) @ 1kHZ

Dissipation factor: ≤1.0% (20°C 1kHz)

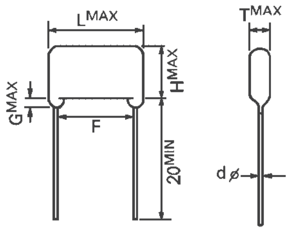
Withstand voltage: 250VDC X 150% for 60 seconds between terminals

Insulation resistance: ≥9,000MΩ (C ≤ 0.33µF) @ 100VDC, 20° for 60 seconds. ≥3,000MΩ · µF (C > 0.33µF) @ 100VDC, 20° for 60 seconds.

Voltage (VDC)	Cap. (µF)	Dimensions (mm)						Digi-Key	Price Each					Panasonic
		L	T	H	F	G	dø	Part No.	1	10	100	500	1,000	Part No.
250	0.01	7.9	4.2	7.1	5.0	1.0	0.5	P10955-ND	.38	.26	.19	.13	.10	ECQ-E2103KB
	0.012	7.9	4.2	7.1	5.0	1.0	0.5	P10956-ND	.38	.26	.19	.13	.10	ECQ-E2123KB
	0.015	7.9	4.2	7.1	5.0	1.0	0.5	P10957-ND	.38	.26	.19	.13	.10	ECQ-E2153KB
	0.018	7.9	4.3	7.2	5.0	1.0	0.5	P10958-ND	.38	.26	.19	.13	.10	ECQ-E2183KB
	0.022	7.9	4.3	7.2	5.0	1.0	0.5	P10959-ND	.38	.26	.19	.13	.10	ECQ-E2223KB
	0.027	7.9	4.3	7.2	5.0	1.0	0.5	P10960-ND	.38	.26	.19	.13	.10	ECQ-E2273KB
	0.033	7.9	4.3	7.2	5.0	1.0	0.5	P10961-ND	.38	.26	.19	.13	.10	ECQ-E2333KB
	0.039	7.9	4.5	7.4	5.0	1.0	0.5	P10962-ND	.38	.26	.19	.13	.10	ECQ-E2393KB
	0.047	7.9	4.5	7.4	5.0	1.0	0.5	P10963-ND	.32	.22	.16	.11	.09	ECQ-E2473KB
	0.056	7.9	4.7	7.7	5.0	1.0	0.5	P10964-ND	.39	.27	.19	.13	.11	ECQ-E2563KB
	0.068	7.9	5.1	8.0	5.0	1.0	0.5	P10965-ND	.34	.26	.18	.13	.10	ECQ-E2683KB
	0.082	7.9	5.4	8.6	5.0	1.0	0.5	P10966-ND	.36	.27	.19	.14	.11	ECQ-E2823KB
	0.1	7.9	5.9	9.0	5.0	1.0	0.5	P10967-ND	.38	.26	.19	.13	.10	ECQ-E2104KB
	0.12	7.9	5.7	10.6	5.0	1.0	0.5	P10968-ND	.41	.31	.22	.16	.13	ECQ-E2124KB
	0.15	7.9	6.3	11.2	5.0	1.0	0.5	P10969-ND	.44	.33	.23	.17	.13	ECQ-E2154KB
	0.18	10.3	5.0	9.7	7.5	1.0	0.5	P10970-ND	.46	.35	.25	.18	.14	ECQ-E2184KB
	0.22	10.3	5.4	10.1	7.5	1.0	0.5	P10971-ND	.49	.37	.26	.19	.15	ECQ-E2224KB
	0.27	10.3	5.9	10.8	7.5	1.0	0.5	P10972-ND	.57	.42	.30	.22	.17	ECQ-E2274KB
	0.33	10.3	6.4	11.3	7.5	1.0	0.5	P10973-ND	.62	.46	.33	.24	.19	ECQ-E2334KB
	0.39	12.3	5.7	10.9	10.0	1.0	0.6	P10974-ND	.61	.46	.34	.24	.20	ECQ-E2394KB
	0.47	12.3	6.2	11.4	10.0	1.0	0.6	P10975-ND	.65	.48	.36	.26	.21	ECQ-E2474KB
	0.56	12.3	6.7	11.9	10.0	1.0	0.6	P10976-ND	.71	.53	.39	.28	.23	ECQ-E2564KB
	0.68	12.3	7.3	12.7	10.0	1.0	0.6	P10977-ND	.78	.59	.43	.31	.25	ECQ-E2684KB
	0.82	15.3	6.3	13.3	12.5	1.0	0.6	P10978-ND	.87	.65	.48	.35	.28	ECQ-E2824KB
	1.0	15.3	7.0	14.0	12.5	1.0	0.6	P10979-ND	.92	.69	.51	.37	.29	ECQ-E2105KB
	1.2	15.3	7.6	14.6	12.5	1.0	0.6	P10980-ND	1.02	.76	.56	.41	.33	ECQ-E2125KB
	1.5	15.3	8.6	15.7	12.5	1.0	0.6	P10981-ND	1.20	.90	.68	.49	.40	ECQ-E2155KB
	1.8	20.8	7.6	14.6	17.5	1.0	0.8	P10982-ND	1.32	.99	.75	.53	.44	ECQ-E2185KB
	2.2	20.8	8.4	15.6	17.5	1.0	0.8	P10983-ND	1.45	1.09	.82	.59	.49	ECQ-E2225KB
	2.7	20.8	9.3	16.7	17.5	1.0	0.8	P10984-ND	1.64	1.23	.92	.66	.55	ECQ-E2275KB
	3.3	20.8	10.5	17.9	17.5	1.0	0.8	P10985-ND	1.98	1.49	1.12	.80	.66	ECQ-E2335KB
	3.9	20.8	10.8	19.8	17.5	1.0	0.8	P10986-ND	2.80	2.12	1.60	1.20	1.04	ECQ-E2395KB
	4.7	20.8	11.9	21.0	17.5	1.0	0.8	P10987-ND	3.12	2.36	1.79	1.34	1.16	ECQ-E2475KB

Panasonic® ECQ-E(F) Series

Miniaturized Metallized Polyester Film Capacitors



The type ECQ-E(F) series is using a dual side metallized polyester film with high dielectric constant(e) which makes it possible to produce large C-values in small dimensions, and is economical capacitor meeting high requirements for professional circuit design.

FEATURES:

- Self-healing property
- Flame retardant epoxy resin coating

APPLICATIONS:

- Blocking, by-passing, filtering, timing, interference suppression, low pulse applications.

SPECIFICATIONS:

Reference standard: JIS C5115, C5151

Operating temperature range: -40°C to +85°C (+105°C, 75% of Rated voltage)

Rated voltage: 100V, 250V, 400V, 630V

Capacitance tolerance: ±10% (K)

Dissipation factor: 1.0% Max. (20°C 1kHz)

Withstand voltage: Rated voltage DC100V ~ 630V (V.DC) X 150% 1 minute between terminals

Insulation resistance: DC100V ~ 630V: C ≤ 0.33µF 9,000MΩ Min., C > 0.33µF 3,000ΩVµF Min.

Working Voltage (VDC)	Capacitance (µF)	Dimensions (mm)						Digi-Key	Price Each					Panasonic
		L	T	H	F	G	d	Part No.	1	10	100	500	1,000	Part No.
100	.01	7.8	4.6	7.7	5.0	1.0	0.5	EF1103-ND	.42	.32	.23	.17	.13	ECQ-E1103KF
	.012	7.8	4.5	7.6	5.0	1.0	0.5	EF1123-ND	.42	.32	.23	.17	.13	ECQ-E1123KF
	.015	7.8	4.5	7.6	5.0	1.0	0.5	EF1153-ND	.42	.32	.23	.17	.13	ECQ-E1153KF
	.018	7.8	4.6	7.7	5.0	1.0	0.5	EF1183-ND	.42	.32	.23	.17	.13	ECQ-E1183KF
	.022	7.8	4.9	8.0	5.0	1.0	0.5	EF1223-ND	.42	.32	.23	.17	.13	ECQ-E1223KF
	.027	7.8	4.7	7.8	5.0	1.0	0.5	EF1273-ND	.42	.32	.23	.17	.13	ECQ-E1273KF
	.033	7.8	4.6	7.7	5.0	1.0	0.5	EF1333-ND	.42	.32	.23	.17	.13	ECQ-E1333KF
	.039	7.8	4.9	8.0	5.0	1.0	0.5	EF1393-ND	.42	.32	.23	.17	.13	ECQ-E1393KF
	.047	7.8	4.5	7.5	5.0	1.0	0.5	EF1473-ND	.42	.32	.23	.17	.13	ECQ-E1473KF
	.056	7.8	4.8	7.9	5.0	1.0	0.5	EF1563-ND	.42	.32	.23	.17	.13	ECQ-E1563KF
	.068	7.8	4.8	7.9	5.0	1.0	0.5	EF1683-ND	.42	.32	.23	.17	.13	ECQ-E1683KF
	.082	7.8	4.7	9.9	5.0	1.0	0.5	EF1823-ND	.42	.32	.23	.17	.13	ECQ-E1823KF
	.1	7.8	5.0	10.0	5.0	1.0	0.5	EF1104-ND	.42	.32	.23	.17	.13	ECQ-E1104KF
	.12	10.3	4.5	7.5	7.5	1.0	0.6	EF1124-ND	.45	.33	.24	.17	.14	ECQ-E1124KF
	.15	10.3	4.5	7.5	7.5	1.0	0.6	EF1154-ND	.46	.34	.24	.18	.14	ECQ-E1154KF
	.18	10.3	4.8	7.9	7.5	1.0	0.6	EF1184-ND	.49	.37	.26	.19	.15	ECQ-E1184KF
	.22	10.3	5.0	8.0	7.5	1.0	0.6	EF1224-ND	.52	.39	.28	.20	.16	ECQ-E1224KF
	.27	10.3	4.5	12.0	7.5	1.0	0.6	EF1274-ND	.57	.42	.30	.22	.17	ECQ-E1274KF
	.33	10.3	6.0	10.7	7.5	1.0	0.6	EF1334-ND	.65	.48	.34	.25	.19	ECQ-E1334KF
	.39	10.3	6.3	11.0	7.5	1.0	0.6	EF1394-ND	.67	.49	.35	.26	.20	ECQ-E1394KF
	.47	10.3	6.0	12.0	7.5	1.0	0.6	EF1474-ND	.69	.52	.37	.27	.21	ECQ-E1474KF
	.56	12.0	5.5	10.9	10.0	1.0	0.6	EF1564-ND	.73	.55	.40	.29	.23	ECQ-E1564KF
	.68	12.0	6.0	11.9	10.0	1.0	0.6	EF1684-ND	.83	.62	.46	.33	.27	ECQ-E1684KF
	.82	12.0	6.0	13.5	10.0	1.0	0.6	EF1824-ND	.91	.68	.50	.36	.29	ECQ-E1824KF
	1.0	12.0	6.7	14.0	10.0	1.0	0.6	EF1105-ND	.99	.74	.55	.40	.32	ECQ-E1105KF
	1.2	18.5	5.5	12.8	15.0	1.0	0.6	EF1125-ND	1.14	.86	.63	.46	.36	ECQ-E1125KF
	1.5	18.5	6.0	13.4	15.0	1.0	0.8	EF1155-ND	1.24	.93	.70	.50	.42	ECQ-E1155KF
	1.8	18.5	6.5	14.4	15.0	1.0	0.8	EF1185-ND	1.38	1.04	.78	.56	.46	ECQ-E1185KF
	2.2	18.5	7.0	15.0	15.0	1.0	0.8	EF1225-ND	1.56	1.17	.88	.63	.52	ECQ-E1225KF
	2.7	18.5	8.0	15.8	15.0	1.0	0.8	EF1275-ND	1.78	1.34	1.00	.72	.60	ECQ-E1275KF
	3.3	18.5	8.5	16.5	15.0	1.0	0.8	EF1335-ND	2.26	1.70	1.27	.91	.75	ECQ-E1335KF
	3.9	26.0	7.0	16.4	22.5	1.0	0.8	EF1395-ND	2.24	1.70	1.29	.97	.84	ECQ-E1395KF
	4.7	26.0	7.5	17.0	22.5	1.0	0.8	EF1475-ND	2.53	1.92	1.45	1.09	.95	ECQ-E1475KF
	5.6	26.0	8.3	17.5	22.5	1.0	0.8	EF1565-ND	3.01	2.28	1.72	1.29	1.12	ECQ-E1565KF
	6.8	26.0	9.0	18.5	22.5	1.0	0.8	EF1685-ND	3.42	2.59	1.96	1.47	1.27	ECQ-E1685KF
	8.2	26.0	10.0	20.0	22.5	1.5	0.8	EF1825-ND	3.94	2.99	2.25	1.69	1.47	ECQ-E1825KF
	10.0	26.0	11.5	21.0	22.5	1.5	0.8	EF1106-ND	4.58	3.47	2.62	1.97	1.71	ECQ-E1106KF

(Continued)

Panasonic® ECQ-E(F) Series Miniaturized Metallized Polyester Film Capacitors *(Cont.)*

Working Voltage (VDC)	Capacitance (µF)	Dimensions (mm)						Digi-Key	Price Each					Panasonic
		L	T	H	F	G	d	Part No.	1	10	100	500	1,000	Part No.
250	.01	10.3	4.3	7.4	7.5	1.0	0.6	EF2103-ND	.37	.28	.20	.15	.11	ECQ-E2103KF
	.012	10.3	4.4	7.5	7.5	1.0	0.6	EF2123-ND	.45	.31	.22	.15	.12	ECQ-E2123KF
	.015	10.3	4.4	7.5	7.5	1.0	0.6	EF2153-ND	.45	.31	.22	.15	.12	ECQ-E2153KF
	.018	10.3	4.4	7.5	7.5	1.0	0.6	EF2183-ND	.45	.31	.22	.15	.12	ECQ-E2183KF
	.022	10.3	4.4	7.5	7.5	1.0	0.6	EF2223-ND	.37	.28	.20	.15	.11	ECQ-E2223KF
	.027	10.3	4.4	7.5	7.5	1.0	0.6	EF2273-ND	.45	.31	.22	.15	.12	ECQ-E2273KF
	.033	10.3	4.5	7.5	7.5	1.0	0.6	EF2333-ND	.37	.28	.20	.15	.11	ECQ-E2333KF
	.039	10.3	4.5	7.5	7.5	1.0	0.6	EF2393-ND	.45	.31	.22	.15	.12	ECQ-E2393KF
	.047	10.3	4.5	7.5	7.5	1.0	0.6	EF2473-ND	.37	.26	.18	.13	.10	ECQ-E2473KF
	.056	10.3	4.8	7.9	7.5	1.0	0.6	EF2563-ND	.47	.32	.23	.16	.13	ECQ-E2563KF
	.068	10.3	4.5	7.5	7.5	1.0	0.6	EF2683-ND	.40	.30	.22	.16	.12	ECQ-E2683KF
	.082	10.3	4.9	8.0	7.5	1.0	0.6	EF2823-ND	.42	.32	.23	.17	.13	ECQ-E2823KF
	.1	10.3	5.8	8.4	7.5	1.0	0.6	EF2104-ND	.45	.31	.22	.15	.12	ECQ-E2104KF
	.12	10.3	6.0	9.0	7.5	1.0	0.6	EF2124-ND	.49	.37	.26	.19	.15	ECQ-E2124KF
	.15	10.3	6.0	10.8	7.5	1.0	0.6	EF2154-ND	.52	.39	.28	.20	.16	ECQ-E2154KF
	.18	12.0	5.0	10.3	10.0	1.0	0.6	EF2184-ND	.55	.41	.29	.21	.17	ECQ-E2184KF
	.22	12.0	5.5	10.5	10.0	1.0	0.6	EF2224-ND	.58	.43	.31	.22	.18	ECQ-E2224KF
	.27	12.0	6.0	11.5	10.0	1.0	0.6	EF2274-ND	.67	.50	.36	.26	.20	ECQ-E2274KF
	.33	12.0	6.5	12.0	10.0	1.0	0.6	EF2334-ND	.66	.50	.37	.27	.21	ECQ-E2334KF
	.39	18.5	4.9	12.0	15.0	1.0	0.6	EF2394-ND	.72	.54	.40	.29	.23	ECQ-E2394KF
	.47	18.5	5.3	12.5	15.0	1.0	0.6	EF2474-ND	.77	.57	.42	.31	.24	ECQ-E2474KF
	.56	18.5	5.5	13.0	15.0	1.0	0.6	EF2564-ND	.84	.63	.47	.34	.27	ECQ-E2564KF
	.68	18.5	6.0	13.5	15.0	1.0	0.8	EF2684-ND	.92	.69	.51	.37	.29	ECQ-E2684KF
	.82	18.5	6.5	14.5	15.0	1.0	0.8	EF2824-ND	1.03	.77	.57	.41	.33	ECQ-E2824KF
	1.0	18.5	7.4	15.0	15.0	1.0	0.8	EF2105-ND	1.09	.81	.60	.44	.35	ECQ-E2105KF
	1.2	18.5	8.0	15.9	15.0	1.0	0.8	EF2125-ND	1.21	.91	.67	.48	.39	ECQ-E2125KF
	1.5	18.5	9.0	16.8	15.0	1.0	0.8	EF2155-ND	1.42	1.07	.81	.57	.48	ECQ-E2155KF
	1.8	26.0	7.5	15.5	22.5	1.0	0.8	EF2185-ND	1.56	1.18	.88	.63	.52	ECQ-E2185KF
	2.2	26.0	8.5	16.3	22.5	1.0	0.8	EF2225-ND	1.72	1.30	.97	.69	.58	ECQ-E2225KF
	2.7	26.0	9.4	17.0	22.5	1.0	0.8	EF2275-ND	1.94	1.46	1.10	.78	.65	ECQ-E2275KF
	3.3	26.0	10.3	18.0	22.5	1.5	0.8	EF2335-ND	2.36	1.77	1.33	.95	.79	ECQ-E2335KF
	3.9	26.0	11.0	20.5	22.5	1.5	0.8	EF2395-ND	3.33	2.52	1.90	1.43	1.24	ECQ-E2395KF
	4.7	26.0	12.0	21.5	22.5	1.5	0.8	EF2475-ND	3.70	2.81	2.12	1.59	1.38	ECQ-E2475KF
	5.6	31.0	11.8	21.0	27.5	1.5	0.8	EF2565-ND	4.68	3.55	2.68	2.01	1.74	ECQ-E2565KF
	6.8	31.0	13.0	22.4	27.5	1.5	0.8	EF2685-ND	5.06	3.84	2.90	2.18	1.89	ECQ-E2685KF
	8.2	31.0	14.3	23.5	27.5	1.5	0.8	EF2825-ND	6.04	4.58	3.46	2.59	2.25	ECQ-E2825KF
	10.0	31.0	15.9	25.8	27.5	1.5	0.8	EF2106-ND	7.01	5.32	4.01	3.01	2.61	ECQ-E2106KF
400	.01	10.3	4.3	7.4	7.5	1.0	0.6	EF4103-ND	.51	.38	.27	.20	.16	ECQ-E4103KF
	.012	10.3	4.4	7.5	7.5	1.0	0.6	EF4123-ND	.51	.38	.27	.20	.16	ECQ-E4123KF
	.015	10.3	4.4	7.5	7.5	1.0	0.6	EF4153-ND	.52	.39	.28	.20	.16	ECQ-E4153KF
	.018	10.3	4.4	7.5	7.5	1.0	0.6	EF4183-ND	.52	.39	.28	.20	.16	ECQ-E4183KF
	.022	10.3	4.8	7.9	7.5	1.0	0.6	EF4223-ND	.53	.40	.28	.21	.16	ECQ-E4223KF
	.027	10.3	5.5	8.0	7.5	1.0	0.6	EF4273-ND	.56	.42	.30	.22	.17	ECQ-E4273KF
	.033	10.3	6.0	9.0	7.5	1.0	0.6	EF4333-ND	.59	.44	.32	.23	.18	ECQ-E4333KF
	.039	12.0	4.9	8.0	10.0	1.0	0.6	EF4393-ND	.61	.45	.32	.24	.18	ECQ-E4393KF
	.047	12.0	5.0	8.3	10.0	1.0	0.6	EF4473-ND	.60	.45	.32	.23	.18	ECQ-E4473KF
	.056	12.0	5.0	10.0	10.0	1.0	0.6	EF4563-ND	.65	.48	.35	.25	.20	ECQ-E4563KF
	.068	12.0	5.4	10.5	10.0	1.0	0.6	EF4683-ND	.68	.51	.36	.26	.21	ECQ-E4683KF
	.082	12.0	5.8	11.0	10.0	1.0	0.6	EF4823-ND	.72	.54	.38	.28	.22	ECQ-E4823KF
	.1	12.0	6.3	12.0	10.0	1.0	0.6	EF4104-ND	.69	.52	.37	.27	.21	ECQ-E4104KF
	.12	18.5	5.0	10.0	15.0	1.0	0.6	EF4124-ND	.73	.55	.40	.29	.23	ECQ-E4124KF
	.15	18.5	5.0	12.4	15.0	1.0	0.6	EF4154-ND	.80	.60	.44	.32	.25	ECQ-E4154KF
	.18	18.5	5.4	12.5	15.0	1.0	0.6	EF4184-ND	.85	.64	.47	.34	.27	ECQ-E4184KF
	.22	18.5	5.9	13.0	15.0	1.0	0.6	EF4224-ND	.90	.67	.50	.36	.29	ECQ-E4224KF
	.27	18.5	6.5	14.3	15.0	1.0	0.8	EF4274-ND	1.01	.75	.55	.40	.32	ECQ-E4274KF
	.33	18.5	7.0	14.9	15.0	1.0	0.8	EF4334-ND	1.08	.81	.59	.43	.34	ECQ-E4334KF
	.39	18.5	7.5	15.4	15.0	1.0	0.8	EF4394-ND	1.17	.88	.65	.47	.37	ECQ-E4394KF
	.47	18.5	7.8	17.0	15.0	1.0	0.8	EF4474-ND	1.27	.95	.70	.51	.40	ECQ-E4474KF
	.56	26.0	6.5	16.0	22.5	1.0	0.8	EF4564-ND	1.29	.97	.73	.52	.43	ECQ-E4564KF
	.68	26.0	7.0	16.5	22.5	1.0	0.8	EF4684-ND	1.44	1.08	.81	.58	.48	ECQ-E4684KF
	.82	26.0	7.9	17.3	22.5	1.0	0.8	EF4824-ND	1.57	1.18	.89	.63	.53	ECQ-E4824KF
	1.0	26.0	8.5	18.9	22.5	1.0	0.8	EF4105-ND	1.72	1.30	.97	.69	.58	ECQ-E4105KF
	1.2	26.0	9.5	18.9	22.5	1.0	0.8	EF4125-ND	2.12	1.61	1.22	.91	.79	ECQ-E4125KF
	1.5	31.0	9.5	19.0	27.5	1.0	0.8	EF4155-ND	2.29	1.73	1.31	.98	.85	ECQ-E4155KF
	1.8	31.0	11.0	20.5	27.5	1.5	0.8	EF4185-ND	2.71	2.06	1.55	1.17	1.01	ECQ-E4185KF
	2.2	31.0	11.0	22.0	27.5	1.5	0.8	EF4225-ND	3.09	2.34	1.77	1.33	1.15	ECQ-E4225KF
630	.01	12.0	4.5	7.5	10.0	1.0	0.6	EF6103-ND	.54	.40	.29	.21	.16	ECQ-E6103KF
	.012	12.0	4.5	7.8	10.0	1.0	0.6	EF6123-ND	.57	.42	.30	.22	.17	ECQ-E6123KF
	.015	12.0	5.0	8.2	10.0	1.0	0.6	EF6153-ND	.59	.44	.31	.23	.18	ECQ-E6153KF
	.018	12.0	4.9	10.0	10.0	1.0	0.6	EF6183-ND	.61	.45	.32	.24	.18	ECQ-E6183KF
	.022	12.0	5.3	10.5	10.0	1.0	0.6	EF6223-ND	.63	.47	.34	.24	.19	ECQ-E6223KF
	.027	12.0	5.5	10.9	10.0	1.0	0.6	EF6273-ND	.65	.48	.35	.25	.20	ECQ-E6273KF
	.033	12.0	6.0	11.9	10.0	1.0	0.6	EF6333-ND	.67	.50	.36	.26	.20	ECQ-E6333KF
	.039	12.0	6.0	13.4	10.0	1.0	0.6	EF6393-ND	.68	.51	.36	.26	.21	ECQ-E6393KF
	.047	12.0	6.5	13.5	10.0	1.0	0.6	EF6473-ND	.69	.52	.37	.27	.21	ECQ-E6473KF
	.056	18.5	5.4	10.5	15.0	1.0	0.6	EF6563-ND	.69	.52	.38	.28	.22	ECQ-E6563KF
	.068	18.5	5.8	11.0	15.0	1.0	0.6	EF6683-ND	.74	.55	.41	.30	.24	ECQ-E6683KF
	.082	18.5	6.5	12.0	15.0	1.0	0.6	EF6823-ND	.79	.59	.44	.32	.25	ECQ-E6823KF
	.1	18.5	6.3	14.0	15.0	1.0	0.6	EF6104-ND	.85	.63	.47	.34	.27	ECQ-E6104KF
	.12	18.5	6.3	14.5	15.0	1.0	0.8	EF6124-ND	.93	.70	.51	.37	.30	ECQ-E6124KF
	.15	18.5	7.5	15.4	15.0	1.0	0.8	EF6154-ND	1.04	.78	.57	.42	.33	ECQ-E6154KF
	.18	18.5	8.0	16.0	15.0	1.0	0.8	EF6184-ND	1.11	.83	.61	.44	.35	ECQ-E6184KF
	.22	18.5	9.0	16.5	15.0	1.0	0.8	EF6224-ND	1.21	.90	.67	.48	.38	ECQ-E6224KF
	.27	26.0	7.0	16.5	22.5	1.0	0.8	EF6274-ND	1.27	.96	.72	.51	.43	ECQ-E6274KF
	.33	26.0	7.8	17.0	22.5	1.0	0.8	EF6334-ND	1.43	1.08	.81	.58	.48	ECQ-E6334KF
	.39	26.0	8.5	17.9	22.5	1.0	0.8	EF6394-ND	1.55	1.17	.88	.63	.52	ECQ-E6394KF
	.47	26.0	9.3	18.5	22.5	1.0	0.8	EF6474-ND	1.68	1.26	.95	.68	.56	ECQ-E6474KF
	.56	26.0	10.0	20.0	22.5	1.5	0.8	EF6564-ND	1.98	1.49	1.12	.80	.66	ECQ-E6564KF
	.68	26.0	11.5	21.0	22.5	1.5	0.8	EF6684-ND	2.24	1.70	1.29	.97	.84	ECQ-E6684KF
	.82	31.0	11.3	20.5	27.5	1.5	0.8	EF6824-ND	2.47	1.87	1.41	1.06	.92	ECQ-E6824KF
	1.0	31.0	12.5	21.9	27.5	1.5	0.8	EF6105-ND	2.99	2.27	1.71	1.29	1.12	ECQ-E6105KF
	1.2	31.0	13.5	23.0	27.5	1.5	0.8	EF6125-ND	3.16	2.40	1.81	1.36	1.18	ECQ-E6125KF
	1.5	31.0	15.3	24.7	27.5	1.5	0.8	EF6155-ND	3.85	2.92	2.20	1.65	1.43	ECQ-E6155KF
	1.8	31.0	16.8	27.0	27.5	1.5	0.8	EF6185-ND	4.32	3.27	2.47	1.86	1.61	ECQ-E6185KF
	2.2	31.0	19.5	29.0	27.5	1.5	0.8	EF6225-ND	4.86	3.69	2.78	2.09	1.81	ECQ-E6225KF

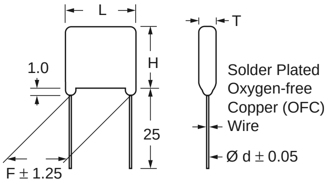
Panasonic PPS Film Capacitors - ECHS

Non-inductive construction using PPS film as designed for high heat resistance and high frequency applications.

Features:
- Wide operating temperature range -40 to +125°C
- Excellent temperature coefficient -100PPM/°C
- Excellent frequency characteristics

Applications:
- Automotive
- Oscillation circuits

Electrical Specifications:
- Temperature Range: -40°C to +125°C
- Rated Voltage: 50V DC, 100VDC
- Capacitance Range: 0.0001 to 0.47µF
- Capacitance Tolerance: ±2%(G) & ±5%(J)
- Dissipation Factor: 0.3% max. at 1kHz and 20°C
- Withstand Voltage: 1-5 seconds at 250% of rated voltage between terminals
- Insulation Resistance: 45,000 MΩ min., for values equal to or less than .33µF. 15,000 MΩ/µF min., for greater than .33µF (20°C, 100VDC, 60s)



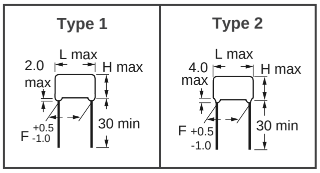
WV DC	Cap. µF	Toler-ance	Dimensions (mm)					Digi-Key Part No.	Price Each				Panasonic Part No.
			L	T	H	F	d		1	10	100	1,000	
50 WV	.001	2%	8.5	4.0	6.5	5.0	0.60	PS1H102G-ND	.80	.69	.58	.35	ECH-S1H102GZ
	.0012	2%	8.5	4.0	7.0	5.0	0.60	PS1H122G-ND	.80	.69	.58	.35	ECH-S1H122GZ
	.0015	2%	8.5	4.0	7.0	5.0	0.60	PS1H152G-ND	.80	.69	.58	.35	ECH-S1H152GZ
	.0018	2%	8.5	4.0	7.0	5.0	0.60	PS1H182G-ND	.80	.69	.58	.35	ECH-S1H182GZ
	.0022	2%	8.5	4.0	7.0	5.0	0.60	PS1H222G-ND	.80	.69	.58	.35	ECH-S1H222GZ
	.0027	2%	8.5	4.0	7.0	5.0	0.60	PS1H272G-ND	.80	.69	.58	.35	ECH-S1H272GZ
	.0033	2%	8.5	4.0	7.0	5.0	0.60	PS1H332G-ND	.80	.69	.58	.35	ECH-S1H332GZ
	.0039	2%	8.5	4.0	7.0	5.0	0.60	PS1H392G-ND	.80	.69	.58	.35	ECH-S1H392GZ
	.0047	2%	8.5	4.0	7.0	5.0	0.60	PS1H472G-ND	.80	.69	.58	.35	ECH-S1H472GZ
	.0056	2%	8.5	4.0	7.0	5.0	0.60	PS1H562G-ND	.82	.71	.59	.36	ECH-S1H562GZ
	.0068	2%	8.5	4.0	7.0	5.0	0.60	PS1H682G-ND	.85	.73	.61	.37	ECH-S1H682GZ
	.0082	2%	8.5	4.0	6.5	5.0	0.60	PS1H822G-ND	.86	.75	.62	.37	ECH-S1H822GZ
	.01	2%	8.5	4.0	7.0	5.0	0.60	PS1H103G-ND	.89	.77	.64	.38	ECH-S1H103GZ
	.012	2%	8.5	4.0	7.0	5.0	0.60	PS1H123G-ND	.97	.84	.70	.42	ECH-S1H123GZ
	.015	2%	12.0	4.5	7.0	7.5	0.60	PS1H153G-ND	1.06	.91	.76	.46	ECH-S1H153GZ
	.018	2%	12.0	4.5	7.0	7.5	0.60	PS1H183G-ND	1.16	1.00	.83	.50	ECH-S1H183GZ
	.022	2%	12.0	4.5	7.0	7.5	0.60	PS1H223G-ND	1.26	1.08	.90	.54	ECH-S1H223GZ
	.027	2%	12.0	4.5	8.5	7.5	0.60	PS1H273G-ND	1.38	1.19	.99	.60	ECH-S1H273GZ
	.033	2%	12.0	4.5	9.0	7.5	0.60	PS1H333G-ND	1.51	1.29	1.08	.65	ECH-S1H333GZ
	.039	2%	12.0	5.0	9.5	7.5	0.60	PS1H393G-ND	1.62	1.40	1.16	.70	ECH-S1H393GZ
	.047	2%	12.0	5.0	9.5	7.5	0.60	PS1H473G-ND	1.75	1.51	1.26	.75	ECH-S1H473GZ
	.056	2%	12.0	5.5	10.0	7.5	0.60	PS1H563G-ND	1.94	1.67	1.39	.84	ECH-S1H563GZ
	.068	2%	14.5	5.0	9.5	10.00	0.60	PS1H683G-ND	2.14	1.83	1.53	.92	ECH-S1H683GZ
	.082	2%	14.5	5.5	10.0	10.00	0.60	PS1H823G-ND	2.33	2.00	1.67	1.00	ECH-S1H823GZ
	.1	2%	14.5	6.0	10.5	10.00	0.60	PS1H104G-ND	2.54	2.18	1.82	1.09	ECH-S1H104GZ
	.12	2%	14.5	6.5	11.0	10.00	0.60	PS1H124G-ND	2.95	2.53	2.11	1.27	ECH-S1H124GZ
	.15	2%	17.0	6.5	11.0	12.50	0.60	PS1H154G-ND	3.39	2.91	2.42	1.45	ECH-S1H154GZ
	.18	2%	17.0	6.5	12.5	12.50	0.60	PS1H184G-ND	3.81	3.27	2.72	1.63	ECH-S1H184GZ
	.22	2%	17.0	7.0	13.5	12.50	0.60	PS1H224G-ND	4.31	3.69	3.08	1.85	ECH-S1H224GZ
	.27	2%	17.0	7.5	14.5	12.50	0.80	PS1H274G-ND	4.87	4.17	3.48	2.09	ECH-S1H274GZ
	.33	2%	17.0	8.5	15.5	12.50	0.80	PS1H334G-ND	5.46	4.69	3.91	2.34	ECH-S1H334GZ
	.39	2%	17.0	9.0	16.0	12.50	0.80	PS1H394G-ND	6.05	5.19	4.33	2.59	ECH-S1H394GZ
	.47	2%	17.0	10.0	16.5	12.50	0.80	PS1H474G-ND	6.70	5.75	4.79	2.87	ECH-S1H474GZ
50 WV	.001	5%	8.5	4.0	6.5	5.0	0.60	PS1H102J-ND	.35	.31	.26	.16	ECH-S1H102JZ
	.0012	5%	8.5	4.0	7.0	5.0	0.60	PS1H122J-ND	.35	.31	.26	.16	ECH-S1H122JZ
	.0015	5%	8.5	4.0	7.0	5.0	0.60	PS1H152J-ND	.35	.31	.26	.16	ECH-S1H152JZ
	.0018	5%	8.5	4.0	7.0	5.0	0.60	PS1H182J-ND	.35	.31	.26	.16	ECH-S1H182JZ
	.0022	5%	8.5	4.0	7.0	5.0	0.60	PS1H222J-ND	.35	.31	.26	.16	ECH-S1H222JZ
	.0027	5%	8.5	4.0	7.0	5.0	0.60	PS1H272J-ND	.35	.31	.26	.16	ECH-S1H272JZ
	.0033	5%	8.5	4.0	7.0	5.0	0.60	PS1H332J-ND	.35	.31	.26	.16	ECH-S1H332JZ
	.0039	5%	8.5	4.0	7.0	5.0	0.60	PS1H392J-ND	.35	.31	.26	.16	ECH-S1H392JZ
	.0047	5%	8.5	4.0	7.0	5.0	0.60	PS1H472J-ND	.35	.31	.26	.16	ECH-S1H472JZ
	.0056	5%	8.5	4.0	7.0	5.0	0.60	PS1H562J-ND	.36	.32	.26	.16	ECH-S1H562JZ
	.0068	5%	8.5	4.0	7.0	5.0	0.60	PS1H682J-ND	.36	.32	.26	.16	ECH-S1H682JZ
	.0082	5%	8.5	4.0	6.5	5.0	0.60	PS1H822J-ND	.37	.32	.27	.16	ECH-S1H822JZ
	.01	5%	8.5	4.0	7.0	5.0	0.60	PS1H103J-ND	.37	.32	.27	.16	ECH-S1H103JZ
	.012	5%	8.5	4.0	7.0	5.0	0.60	PS1H123J-ND	.42	.37	.31	.19	ECH-S1H123JZ
	.015	5%	12.0	4.5	7.0	7.5	0.60	PS1H153J-ND	.48	.42	.35	.21	ECH-S1H153JZ
	.018	5%	12.0	4.5	7.0	7.5	0.60	PS1H183J-ND	.50	.44	.36	.22	ECH-S1H183JZ
	.022	5%	12.0	4.5	7.0	7.5	0.60	PS1H223J-ND	.59	.51	.43	.26	ECH-S1H223JZ
	.027	5%	12.0	4.5	8.5	7.5	0.60	PS1H273J-ND	.63	.55	.46	.28	ECH-S1H273JZ
	.033	5%	12.0	4.5	9.0	7.5	0.60	PS1H333J-ND	.67	.58	.48	.29	ECH-S1H333JZ
	.039	5%	12.0	5.0	9.5	7.5	0.60	PS1H393J-ND	.69	.60	.50	.30	ECH-S1H393JZ
	.047	5%	12.0	5.0	9.5	7.5	0.60	PS1H473J-ND	.71	.61	.51	.31	ECH-S1H473JZ
	.056	5%	12.0	5.5	10.0	7.5	0.60	PS1H563J-ND	.82	.70	.59	.35	ECH-S1H563JZ
	.068	5%	14.5	5.0	9.5	10.00	0.60	PS1H683J-ND	.92	.79	.66	.40	ECH-S1H683JZ
	.082	5%	14.5	5.5	10.0	10.00	0.60	PS1H823J-ND	1.02	.88	.73	.44	ECH-S1H823JZ
	.1	5%	14.5	6.0	10.5	10.00	0.60	PS1H104J-ND	1.12	.96	.80	.48	ECH-S1H104JZ
	.12	5%	14.5	6.5	11.0	10.00	0.60	PS1H124J-ND	1.34	1.15	.96	.58	ECH-S1H124JZ
	.15	5%	17.0	6.5	11.0	12.50	0.60	PS1H154J-ND	1.57	1.35	1.12	.68	ECH-S1H154JZ
	.18	5%	17.0	6.5	12.5	12.50	0.60	PS1H184J-ND	1.81	1.55	1.29	.78	ECH-S1H184JZ
	.22	5%	17.0	7.0	13.5	12.50	0.60	PS1H224J-ND	2.05	1.77	1.47	.88	ECH-S1H224JZ
	.27	5%	17.0	7.5	14.5	12.50	0.80	PS1H274J-ND	2.26	1.94	1.62	.97	ECH-S1H274JZ
	.33	5%	17.0	8.5	15.5	12.50	0.80	PS1H334J-ND	2.52	2.16	1.80	1.08	ECH-S1H334JZ
	.39	5%	17.0	9.0	16.0	12.50	0.80	PS1H394J-ND	2.83	2.43	2.03	1.22	ECH-S1H394JZ
	.47	5%	17.0	10.0	16.5	12.50	0.80	PS1H474J-ND	3.17	2.72	2.27	1.36	ECH-S1H474JZ

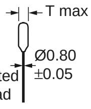
(Continued)

WV	Cap.	Toler-	Dimensions (mm)					Digi-Key	Price Each				Panasonic
DC	µF	ance	L	T	H	F	d	Part No.	1	10	100	1,000	Part No.
100 WV	.0001	5%	8.5	4.0	6.5	5.0	0.60	PS1101J-ND	.60	.51	.43	.26	ECH-S1101JZ
	.00012	5%	8.5	4.0	6.5	5.0	0.60	PS1121J-ND	.60	.51	.43	.26	ECH-S1121JZ
	.00015	5%	8.5	4.0	6.5	5.0	0.60	PS1151J-ND	.60	.51	.43	.26	ECH-S1151JZ
	.00018	5%	8.5	4.0	6.5	5.0	0.60	PS1181J-ND	.60	.51	.43	.26	ECH-S1181JZ
	.00022	5%	8.5	4.0	6.5	5.0	0.60	PS1221J-ND	.60	.51	.43	.26	ECH-S1221JZ
	.00027	5%	8.5	4.0	6.5	5.0	0.60	PS1271J-ND	.60	.51	.43	.26	ECH-S1271JZ
	.00033	5%	8.5	4.0	6.5	5.0	0.60	PS1331J-ND	.60	.51	.43	.26	ECH-S1331JZ
	.00039	5%	8.5	4.0	6.5	5.0	0.60	PS1391J-ND	.60	.51	.43	.26	ECH-S1391JZ
	.00047	5%	8.5	4.0	6.5	5.0	0.60	PS1471J-ND	.60	.51	.43	.26	ECH-S1471JZ
	.00056	5%	8.5	4.0	6.5	5.0	0.60	PS1561J-ND	.60	.51	.43	.26	ECH-S1561JZ
	.00068	5%	8.5	4.0	6.5	5.0	0.60	PS1681J-ND	.60	.51	.43	.26	ECH-S1681JZ
	.00082	5%	8.5	4.0	6.5	5.0	0.60	PS1821J-ND	.60	.51	.43	.26	ECH-S1821JZ
	.001	5%	10.0	4.5	7.0	5.0	0.60	PS1102J-ND	.39	.34	.28	.17	ECH-S1102JZ
	.0012	5%	10.0	4.5	7.0	5.0	0.60	PS1122J-ND	.39	.34	.28	.17	ECH-S1122JZ
	.0015	5%	10.0	4.5	7.0	5.0	0.60	PS1152J-ND	.39	.34	.28	.17	ECH-S1152JZ
	.0018	5%	10.0	4.5	7.0	5.0	0.60	PS1182J-ND	.39	.34	.28	.17	ECH-S1182JZ
	.0022	5%	10.0	4.5	7.5	5.0	0.60	PS1222J-ND	.39	.34	.28	.17	ECH-S1222JZ
	.0027	5%	10.0	4.5	7.0	5.0	0.60	PS1272J-ND	.39	.34	.28	.17	ECH-S1272JZ
	.0033	5%	10.0	4.5	7.5	5.0	0.60	PS1332J-ND	.39	.34	.28	.17	ECH-S1332JZ
	.0039	5%	10.0	4.5	7.0	5.0	0.60	PS1392J-ND	.39	.34	.28	.17	ECH-S1392JZ
	.0047	5%	10.0	5.0	7.5	5.0	0.60	PS1472J-ND	.40	.35	.29	.18	ECH-S1472JZ
	.0056	5%	12.0	4.5	7.5	7.5	0.60	PS1562J-ND	.41	.36	.30	.18	ECH-S1562JZ
	.0068	5%	12.0	4.5	7.0	7.5	0.60	PS1682J-ND	.44	.38	.32	.19	ECH-S1682JZ
	.0082	5%	12.0	4.5	7.5	7.5	0.60	PS1822J-ND	.47	.40	.34	.20	ECH-S1822JZ
	.01	5%	12.0	4.5	7.0	7.5	0.60	PS1103J-ND	.49	.43	.36	.22	ECH-S1103JZ
	.012	5%	12.0	5.0	7.5	7.5	0.60	PS1123J-ND	.54	.47	.39	.24	ECH-S1123JZ
	.015	5%	12.0	5.0	7.5	7.5	0.60	PS1153J-ND	.60	.51	.43	.26	ECH-S1153JZ
	.018	5%	12.0	5.5	8.0	7.5	0.60	PS1183J-ND	.65	.56	.47	.28	ECH-S1183JZ
	.022	5%	12.0	5.0	10.0	7.5	0.60	PS1223J-ND	.70	.61	.51	.31	ECH-S1223JZ
	.027	5%	12.0	5.5	10.5	7.5	0.60	PS1273J-ND	.74	.64	.53	.32	ECH-S1273JZ
	.033	5%	14.5	5.5	10.0	10.0	0.60	PS1333J-ND	.79	.68	.57	.34	ECH-S1333JZ
	.039	5%	14.5	6.0	10.0	10.0	0.60	PS1393J-ND	.83	.72	.60	.36	ECH-S1393JZ
	.047	5%	14.5	6.0	10.5	10.0	0.60	PS1473J-ND	.88	.76	.63	.38	ECH-S1473JZ
	.056	5%	14.5	6.5	11.0	10.0	0.60	PS1563J-ND	.98	.85	.71	.43	ECH-S1563JZ
	.068	5%	17.0	6.5	10.5	12.5	0.60	PS1683J-ND	1.11	.96	.80	.48	ECH-S1683JZ
	.082	5%	17.0	6.5	12.0	12.5	0.60	PS1823J-ND	1.23	1.05	.88	.53	ECH-S1823JZ
	.1	5%	17.0	7.0	13.5	12.5	0.60	PS1104J-ND	1.37	1.18	.98	.59	ECH-S1104JZ
	.12	5%	17.0	7.5	14.0	12.5	0.60	PS1124J-ND	1.62	1.39	1.16	.70	ECH-S1124JZ
	.15	5%	20.5	7.5	14.0	15.0	0.80	PS1154J-ND	1.91	1.64	1.37	.82	ECH-S1154JZ
	.18	5%	20.5	7.5	14.5	15.0	0.80	PS1184J-ND	2.17	1.87	1.56	.93	ECH-S1184JZ
	.22	5%	20.5	8.5	15.5	15.0	0.80	PS1224J-ND	2.48	2.13	1.77	1.06	ECH-S1224JZ
	.27	5%	20.5	9.0	16.5	15.0	0.80	PS1274J-ND	2.76	2.37	1.98	1.19	ECH-S1274JZ
	.33	5%	20.5	10.0	17.0	15.0	0.80	PS1334J-ND	3.09	2.65	2.21	1.32	ECH-S1334JZ
	.39	5%	20.5	10.5	18.0	15.0	0.80	PS1394J-ND	3.37	2.90	2.41	1.45	ECH-S1394JZ
	.47	5%	20.5	11.5	19.5	15.0	0.80	PS1474J-ND	3.78	3.24	2.70	1.62	ECH-S1474JZ

Panasonic Metallized Polyester/Polypropylene Film Capacitors

ECHAX Type – Equipped with a Safety Mechanism





Solder-plated Copper-clad steel wire

Features:
- Non-inductive construction
- Excellent safety characteristics
- Flame-retardant epoxy resin dipped enclosure
- Small and compact

Application:
- Motor running
- Fluorescent lamp ballast

Electrical Specifications:
- Temperature Range: -25°C to +70°C
- Rated Voltage: 180, 220 and 250VAC
- Capacitance Range: 1.0 to 6.0µF
- Capacitance Tolerance: ±5%(J)
- Dissipation Factor: 0.4% max. at 50/60Hz and 20°C
- Withstand Voltage: Between Terminals; VAC (rated voltage) x 175% 60s. Between Terminals to Enclosure; 2000VAC 60s
- Insulation Resistance: Between Terminals; 1000Ω Fmin. (20°C 100VDC 60s). Between Terminals to Enclosure; 1000MΩmin. (20°C 500 VDC 60s)

WV	Cap.	Toler-	Dimensions (mm)					Digi-Key	Price Each				Panasonic
AC	µF	ance	L	T	H	F	Type	Part No.	1	10	100	1,000	Part No.
180	1.0	5%	26.5	8.5	17.5	22.5	1	P10937-ND	3.00	2.57	2.02	1.29	ECH-A18105JX
	2.0	5%	26.5	11.5	21.0	22.5	1	P10938-ND	4.04	3.47	2.72	1.74	ECH-A18205JX
	3.0	5%	26.5	14.0	24.0	22.5	1	P10939-ND	5.07	4.35	3.41	2.18	ECH-A18305JX
	4.0	5%	31.5	14.5	24.0	27.5	1	P10940-ND	6.00	5.15	4.03	2.58	ECH-A18405JX
	5.0	5%	31.5	16.5	26.0	27.5	1	P10941-ND	6.87	5.89	4.62	2.95	ECH-A18505JX
	6.0	5%	37.0	16.5	25.5	32.5	1	P10942-ND	8.46	7.25	5.68	3.63	ECH-A18605JX
220	1.0	5%	26.5	10.0	19.5	22.5	1	P10943-ND	3.14	2.69	2.11	1.35	ECH-A22105JX
	2.0	5%	26.5	14.0	23.5	22.5	1	P10944-ND	4.36	3.74	2.93	1.87	ECH-A22205JX
	3.0	5%	31.5	15.5	25.0	27.5	1	P10945-ND	5.24	4.49	3.52	2.25	ECH-A22305JX
	4.0	5%	37.0	16.0	25.5	32.5	1	P10946-ND	6.55	5.62	4.40	2.81	ECH-A22405JX
	5.0	5%	37.0	18.0	27.5	32.5	1	P10947-ND	7.53	6.46	5.06	3.23	ECH-A22505JX
	6.0	5%	37.0	19.5	29.5	32.5	1	P10948-ND	8.45	7.25	5.68	3.63	ECH-A22605JX
250	1.0	5%	26.5	12.0	21.5	22.5	1	P10949-ND	3.27	2.81	2.20	1.41	ECH-A25105JX
	2.0	5%	31.5	15.0	24.5	27.5	1	P10950-ND	4.80	4.12	3.23	2.06	ECH-A25205JX
	3.0	5%	37.0	16.5	26.0	32.5	1	P10951-ND	6.27	5.38	4.22	2.69	ECH-A25305JX
	4.0	5%	37.0	19.5	29.0	32.5	1	P10952-ND	7.31	6.27	4.91	3.14	ECH-A25405JX
	5.0	5%	40.5	20.0	30.0	30.0	2	P10953-ND	9.00	7.72	6.05	3.86	ECH-A25505JX
	6.0	5%	40.5	22.0	32.0	30.0	2	P10954-ND	10.91	9.36	7.33	4.68	ECH-A25605JX

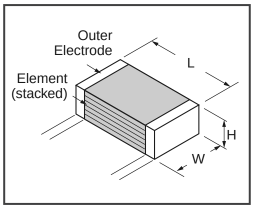
Panasonic® SMT Capacitors ECW-U (PEN Film, Stand. Type) & ECH-U (PPS Film, High Grade Type)

FEATURES: • Small in size • High moisture resistance

APPLICATIONS: Type ECH-U: • Time constant • Filtering • Oscillation and resonance **Type ECW-U:** • Coupling • By-pass • General purpose **TYPE ECH-U:** • Operating Temperature: -55°C to +125°C • Rated Voltage: 16VDC, 50VDC • Capacitance Tolerance: 5%, 2% • Withstand Voltage: Between terminals: Rated voltage (VDC) x 175% 1 to 5s • Dissipation Factor: ≤0.6% (20°C, 1kHz) • Insulation Resistance: **16VDC:** ≥3000MΩ (20°C, 10VDC 60s), **50VDC:** ≥3000MΩ (20°C, 50VDC 60s) • Soldering Conditions: Flow Soldering: 260°C max., 5sec. max. • Reflow Soldering: 260°C max. and 30 sec. max. at more than 230°C (temp. at cap surface). **TYPE ECW-U:** • Operating Temperature: -55°C to +105°C • Rated Voltage: 16VDC, 50VDC • Capacitance Tolerance: 5% • Withstand Voltage: Between terminals: Rated Voltage (VDC) x 175% 1 to 5s • Dissipation Factor: ≤1.0% (20°C, 1kHz) • Insulation Resistance: **C ≤0.33µF: 16VDC:** ≥3000MΩ (20°C, 10VDC 60s), **50VDC:** ≥3000MΩ (20°C, 50VDC 60s), **C >0.33µF: 16VDC:** 1000MΩ (20°C, 10VDC 60s) • Soldering Conditions: Reflow Soldering: 240°C max. and 30 sec. max. at more than 210°C (temp. at cap surface).

Size Code	Dim. in (mm)* L	W	Size Code	Dim. in (mm)* L	W
0805 (2012)	2.0	1.25	2825 (7163)	7.1	6.3
1206 (3216)	3.2	1.6	3022 (7755)	7.7	5.5
1210 (3225)	3.2	2.5	3925 (9863)	9.8	6.3
1913 (4833)	4.8	8.3	3931 (9880)	9.8	8.0
2416 (6041)	6.0	4.1	6031 (1580)	15.2	8.0
2420 (6050)	6.0	5.0	6039 (1510)	15.2	10.0
2820 (7150)	7.1	5.0			

* For H measurement see chart



Item Code	WV DC	Cap. µF	Dim. H (mm)	Digi-Key Part No.	Price Each 10	100	500	Digi-Key Part No.	Tape & Reel Size	Pricing	Panasonic Part No.
ECW-U(B) (Standard Type) 5% Tolerance Reflow Only											
1913 (4833) Size	16	.15	1.4	PCF1060CT-ND	.73	.63	.49	—	—	—	ECW-U1C154JB9
	16	.12	1.4	PCF1137CT-ND	.79	.68	.53	PCF1137TR-ND	3,000	314.00/M	ECW-U1C124JC9
	16	.15	2.0	PCF1138CT-ND	.86	.75	.58	PCF1138TR-ND	3,000	344.00/M	ECW-U1C154JC9
	16	.18	4.8	PCF1139CT-ND	.94	.82	.63	PCF1139TR-ND	3,000	376.00/M	ECW-U1C184JC9
	16	.22	4.8	PCF1140CT-ND	1.02	.89	.68	PCF1140TR-ND	2,000	408.00/M	ECW-U1C224JC9
2416 (6041) Size	16	.33	1.8	PCF1064CT-ND	1.13	.98	.75	—	—	—	ECW-U1C334JB9
	16	.27	1.8	PCF1141CT-ND	1.18	1.03	.79	PCF1141TR-ND	3,000	472.00/M	ECW-U1C274JC9
	16	.33	2.0	PCF1142CT-ND	1.34	1.16	.89	PCF1142TR-ND	3,000	535.00/M	ECW-U1C334JC9
	16	.39	2.4	PCF1143CT-ND	1.66	1.44	1.11	PCF1143TR-ND	2,000	665.00/M	ECW-U1C394JC9
	16	.47	2.8	PCF1144CT-ND	1.66	1.44	1.11	PCF1144TR-ND	2,000	665.00/M	ECW-U1C474JC9
1206 (3216) Size	50	.0033	0.8	PCF1040CT-ND†	.50	.44	.34	PCF1040TR-ND	3,000	200.00/M	ECW-U1H332JB5
	50	.0039	0.8	PCF1041CT-ND†	.50	.44	.34	PCF1041TR-ND	3,000	200.00/M	ECW-U1H392JB5
	50	.0047	0.8	PCF1042CT-ND†	.50	.44	.34	PCF1042TR-ND	3,000	200.00/M	ECW-U1H472JB5
	50	.0056	0.8	PCF1043CT-ND†	.53	.46	.36	PCF1043TR-ND	3,000	212.00/M	ECW-U1H562JB5
	50	.0068	0.8	PCF1044CT-ND†	.53	.46	.36	PCF1044TR-ND	3,000	212.00/M	ECW-U1H682JB5
	50	.0082	1.0	PCF1045CT-ND†	.54	.47	.36	PCF1045TR-ND	3,000	217.00/M	ECW-U1H822JB5
	50	.01	1.0	PCF1046CT-ND†	.55	.48	.37	PCF1046TR-ND	3,000	218.00/M	ECW-U1H103JB5
1210 (3225) Size	50	.012	1.0	PCF1047CT-ND	.56	.49	.37	PCF1047TR-ND	2,000	223.00/M	ECW-U1H123JB5
	50	.015	1.0	PCF1048CT-ND†	.57	.49	.38	PCF1048TR-ND	2,000	226.00/M	ECW-U1H153JB5
	50	.018	1.4	PCF1049CT-ND†	.58	.51	.39	PCF1049TR-ND	2,000	232.00/M	ECW-U1H183JB5
	50	.022	1.4	PCF1050CT-ND†	.59	.52	.40	PCF1050TR-ND	2,000	236.00/M	ECW-U1H223JB5
	50	.027	1.4	PCF1051CT-ND†	.60	.52	.40	PCF1051TR-ND	2,000	241.00/M	ECW-U1H273JB5
	50	.033	2.0	PCF1052CT-ND†	.61	.53	.41	PCF1052TR-ND	2,000	242.00/M	ECW-U1H333JB5
	50	.039	2.0	PCF1053CT-ND†	.63	.55	.42	PCF1053TR-ND	2,000	253.00/M	ECW-U1H393JB5
	50	.047	2.0	PCF1054CT-ND†	.65	.56	.43	PCF1054TR-ND	2,000	259.00/M	ECW-U1H473JB5
1913 (4833) Size	50	.068	1.4	PCF1056CT-ND	.66	.57	.44	—	—	—	ECW-U1H683JB9
	50	.082	2.0	PCF1057CT-ND	.71	.61	.47	PCF1057TR-ND	3,000	281.00/M	ECW-U1H823JB9
	50	.056	2.0	PCF1145CT-ND†	.71	.62	.47	PCF1145TR-ND	3,000	283.00/M	ECW-U1H563JC9
	50	.068	2.0	PCF1146CT-ND†	.78	.68	.52	PCF1146TR-ND	3,000	311.00/M	ECW-U1H683JC9
	50	.082	2.4	PCF1147CT-ND†	.84	.73	.56	PCF1147TR-ND	2,000	334.00/M	ECW-U1H823JC9
	50	.1	2.8	PCF1148CT-ND†	.90	.78	.60	PCF1148TR-ND	2,000	358.00/M	ECW-U1H104JC9
2416 (6041) Size	50	.12	1.8	PCF1149CT-ND	1.15	1.00	.77	PCF1149TR-ND	3,000	460.00/M	ECW-U1H124JC9
	50	.15	2.0	PCF1150CT-ND	1.38	1.20	.92	PCF1150TR-ND	3,000	552.00/M	ECW-U1H154JC9
	50	.18	2.4	PCF1151CT-ND	1.59	1.38	1.06	PCF1151TR-ND	2,000	636.00/M	ECW-U1H184JC9
	50	.22	2.8	PCF1152CT-ND	1.76	1.53	1.18	PCF1152TR-ND	2,000	705.00/M	ECW-U1H224JC9
ECW-U(C) (Standard Type) 5% Tolerance, Reflow Only											
1913 (4833) Size	100	.012	1.4	PCF1209CT-ND	.85	.74	.57	PCF1209TR-ND	3,000	339.00/M	ECW-U1123JC9
	100	.015	1.4	PCF1210CT-ND	.87	.76	.58	PCF1210TR-ND	3,000	349.00/M	ECW-U1153JC9
	100	.018	1.4	PCF1211CT-ND	.90	.78	.60	PCF1211TR-ND	3,000	359.00/M	ECW-U1183JC9
	100	.022	1.4	PCF1212CT-ND	.92	.80	.62	PCF1212TR-ND	3,000	367.00/M	ECW-U1223JC9
	100	.027	1.4	PCF1213CT-ND	.95	.82	.63	PCF1213TR-ND	3,000	377.00/M	ECW-U1273JC9
	100	.033	1.4	PCF1214CT-ND	.97	.84	.65	PCF1214TR-ND	3,000	387.00/M	ECW-U1333JC9
	100	.039	1.4	PCF1215CT-ND	1.00	.87	.67	PCF1215TR-ND	3,000	401.00/M	ECW-U1393JC9
	100	.047	2.0	PCF1216CT-ND	1.04	.90	.69	PCF1216TR-ND	3,000	414.00/M	ECW-U1473JC9
	100	.056	2.0	PCF1217CT-ND	1.06	.92	.71	PCF1217TR-ND	3,000	424.00/M	ECW-U1563JC9
	100	.068	2.4	PCF1218CT-ND	1.10	.95	.73	PCF1218TR-ND	2,000	438.00/M	ECW-U1683JC9
	100	.082	2.8	PCF1219CT-ND	1.13	.98	.76	PCF1219TR-ND	2,000	453.00/M	ECW-U1823JC9
2416 (6041) Size	100	.1	1.8	PCF1220CT-ND	1.17	1.01	.78	PCF1220TR-ND	3,000	467.00/M	ECW-U1104JC9
	100	.12	2.4	PCF1221CT-ND	1.27	1.10	.85	PCF1221TR-ND	2,000	509.00/M	ECW-U1124JC9
	100	.15	2.8	PCF1222CT-ND	1.34	1.17	.90	PCF1222TR-ND	2,000	537.00/M	ECW-U1154JC9
ECW-U(X) (Standard Type) 5% Tolerance, Reflow Only											
1206 (3216) Size	100	.001	1.1	PCF1348CT-ND	.59	.51	.40	PCF1348TR-ND	3,000	236.00/M	ECW-U1102JX5
	100	.0012	1.1	PCF1349CT-ND	.59	.51	.40	PCF1349TR-ND	3,000	236.00/M	ECW-U1122JX5
	100	.0015	1.1	PCF1350CT-ND	.59	.51	.40	PCF1350TR-ND	3,000	236.00/M	ECW-U1152JX5
	100	.0018	1.1	PCF1351CT-ND	.60	.52	.40	PCF1351TR-ND	3,000	239.00/M	ECW-U1182JX5
	100	.0022	1.1	PCF1352CT-ND	.60	.52	.40	PCF1352TR-ND	3,000	239.00/M	ECW-U1222JX5
1206 (3216) Size	100	.0027	1.1	PCF1353CT-ND	.60	.52	.40	PCF1353TR-ND	3,000	239.00/M	ECW-U1272JX5
	100	.0033	1.5	PCF1354CT-ND	.60	.52	.40	PCF1354TR-ND	2,000	239.00/M	ECW-U1332JX5
	100	.0039	1.5	PCF1355CT-ND	.62	.54	.41	PCF1355TR-ND	2,000	246.00/M	ECW-U1392JX5
	100	.0047	1.5	PCF1356CT-ND	.63	.55	.42	PCF1356TR-ND	2,000	251.00/M	ECW-U1472JX5
1210 (3225) Size	100	.0056	1.5	PCF1357CT-ND	.66	.58	.44	PCF1357TR-ND	2,000	264.00/M	ECW-U1562JX5
	100	.0068	1.5	PCF1358CT-ND	.66	.58	.44	PCF1358TR-ND	2,000	264.00/M	ECW-U1682JX5
	100	.0082	2.1	PCF1359CT-ND	.67	.58	.45	PCF1359TR-ND	2,000	268.00/M	ECW-U1822JX5
	100	.01	2.1	PCF1360CT-ND	.69	.60	.46	PCF1360TR-ND	2,000	275.00/M	ECW-U1103JX5
ECW-U(C) (Standard Type) 10% Tolerance, Reflow Only											
1913 (4833) Size	100	.012	1.4	PCF1223CT-ND	.71	.61	.47	PCF1223TR-ND	3,000	281.00/M	ECW-U1123KC9
	100	.015	1.4	PCF1224CT-ND	.73	.63	.49	PCF1224TR-ND	3,000	291.00/M	ECW-U1153KC9
	100	.018	1.4	PCF1225CT-ND	.75	.65	.50	PCF1225TR-ND	3,000	298.00/M	ECW-U1183KC9
	100	.022	1.4	PCF1226CT-ND	.77	.67	.51	PCF1226TR-ND	3,000	307.00/M	ECW-U1223KC9
	100	.027	1.4	PCF1227CT-ND	.79	.68	.53	PCF1227TR-ND	3,000	313.00/M	ECW-U1273KC9
	100	.033	1.4	PCF1228CT-ND	.81	.70	.54	PCF1228TR-ND	3,000	323.00/M	ECW-U1333KC9
	100	.039	1.4	PCF1229CT-ND	.84	.73	.56	PCF1229TR-ND	3,000	333.00/M	ECW-U1393KC9
	100	.047	2.0	PCF1230CT-ND	.87	.75	.58	PCF1230TR-ND	3,000	345.00/M	ECW-U1473KC9
	100	.056	2.0	PCF1231CT-ND	.89	.77	.59	PCF1231TR-ND	3,000	354.00/M	ECW-U1563KC9
	100	.068	2.4	PCF1232CT-ND	.92	.79	.61	PCF1232TR-ND	2,000	365.00/M	ECW-U1683KC9
	100	.082	2.8	PCF1233CT-ND	.95	.82	.63	PCF1233TR-ND	2,000	377.00/M	ECW-U1823KC9
2416 (6041) Size	100	.1	1.8	PCF1234CT-ND	.97	.85	.65	PCF1234TR-ND	3,000	389.00/M	ECW-U1104KC9
	100	.12	2.4	PCF1235CT-ND	1.06	.92	.71	PCF1235TR-ND	2,000	424.00/M	ECW-U1124KC9
	100	.15	2.8	PCF1236CT-ND	1.12	.97	.75	PCF1236TR-ND	2,000	448.00/M	ECW-U1154KC9
2820 (7150) Size	100	.18	2.0	PCF1237CT-ND	1.18	1.02	.79	PCF1237TR-ND	1,500	472.00/M	ECW-U1184KC9
	100	.22	2.4	PCF1238CT-ND	1.25	1.09	.84	PCF1238TR-ND	1,500	500.00/M	ECW-U1224KC9
	100	.27	2.9	PCF1239CT-ND	1.30	1.13	.87	PCF1239TR-ND	1,500	519.00/M	ECW-U1274KC9
	100	.33	3.5	PCF1240CT-ND	1.36	1.18	.91	PCF1240TR-ND	1,500	542.00/M	ECW-U1334KC9
3022 (7755)	100	.39	3.4	PCF1241CT-ND	1.42	1.23	.95	PCF1241TR-ND	1,000	566.00	ECW-U1394KCV
	100	.47	4.0	PCF1242CT-ND	1.46	1.27	.98	PCF1242TR-ND	1,000	584.00	ECW-U1474KCV
3925 (9863) Size	100	.56	3.0	PCF1243CT-ND	1.56	1.36	1.04	PCF1243TR-ND	1,000	625.00	ECW-U1564KCV
	100	.68	3.6	PCF1244CT-ND	1.62	1.41	1.08	PCF1244TR-ND	1,000	648.00	ECW-U1684KCV
	100	.82	4.3	PCF1245CT-ND	1.65	1.43	1.10	PCF1245TR-ND	1,000	660.00	ECW-U1824KCV
	100	1.0	5.1	PCF1246CT-ND	1.66	1.44	1.11	PCF1246TR-ND	1,000	665.00	ECW-U1105KCV
1913 (4833) Size	250	.001	1.4	PCF1247CT-ND	.89	.77	.59	PCF1247TR-ND	3,000	354.00/M	ECW-U2102KC9
	250	.0012	1.4	PCF1248CT-ND	.89	.77	.59	PCF1248TR-ND	3,000	354.00/M	ECW-U2122KC9
	250	.0015	1.4	PCF1249CT-ND	.89	.77	.59	PCF1249TR-ND	3,000	354.00/M	ECW-U2152KC9
	250	.0018	1.4	PCF1250CT-ND	.89	.77	.59	PCF1250TR-ND	3,000	354.00/M	ECW-U2182KC9
	250	.0022	1.4	PCF1251CT-ND	.89	.77	.59	PCF1251TR-ND	3,000	354.00/M	ECW-U2222KC9
	250	.0027	1.4	PCF1252CT-ND	.89	.77	.59	PCF1252TR-ND	3,000	354.00/M	ECW-U2272KC9
	250	.0033	1.4	PCF1253CT-ND	.89	.77	.59	PCF1253TR-ND	3,000	354.00/M	ECW-U2332KC9
	250	.0039	1.4	PCF1254CT-ND	.89	.77	.59	PCF1254TR-ND	3,000	354.00/M	ECW-U2392KC9
	250	.0047	1.4	PCF1255CT-ND	.89	.77	.59	PCF1255TR-ND	3,000	354.00/M	ECW-U2472KC9
	250	.0056	1.4	PCF1256CT-ND	.89	.77	.59	PCF1256TR-ND	3,000	354.00/M	ECW-U2562KC9
	250	.0068	1.4	PCF1257CT-ND	.89	.77	.59	PCF1257TR-ND	3,000	354.00/M	ECW-U2682KC9
	250	.0082	1.4	PCF1258CT-ND	.89	.77	.59	PCF1258TR-ND	3,000	354.00/M	ECW-U2822KC9
	250	.01	1.4	PCF1259CT-ND	.89	.77	.59	PCF1259TR-ND	3,000	354.00/M	ECW-U2103KC9
	250	.012	1.4	PCF1260CT-ND	.89	.77	.59	PCF1260TR-ND	3,000	354.00/M	ECW-U2123KC9
	250	.015	1.4	PCF1261CT-ND	.89	.77	.59	PCF1261TR-ND	3,000	354.00/M	ECW-U2153KC9
	250	.018	2.0	PCF1262CT-ND	.89	.77	.59	PCF1262TR-ND	3,000	354.00/M	ECW-U2183KC9
	250	.022	2.0	PCF1263CT-ND	.89	.77	.59	PCF1263TR-ND	3,000	354.00/M	ECW-U2223KC9
	250	.027	2.4	PCF1264CT-ND	.92	.79	.61	PCF1264TR-ND	2,000	365.00/M	ECW-U2273KC9
	250	.033	2.8	PCF1265CT-ND	.95	.82	.63	PCF1265TR-ND	2,000	377.00/M	ECW-U2333KC9
2416 (6041) Size	250	.039	2.0	PCF1266CT-ND	.97	.85	.65	PCF1266TR-ND	3,000	389.00/M	ECW-U2393KC9
	250	.047	2.4	PCF1267CT-ND	1.00	.87	.67	PCF1267TR-ND	2,000	401.00/M	ECW-U2473KC9
	250	.056	2.8	PCF1268CT-ND	1.06	.92	.71	PCF1268TR-ND	2,000	424.00/M	ECW-U2563KC9
	250	.068	3.2	PCF1269CT-ND	1.12	.97	.75	PCF1269TR-ND	2,000	448.00/M	ECW-U2683KC9
2420 (6050)	250	.082	3.2	PCF1270CT-ND	1.18	1.02	.79	PCF1270TR-ND	1,500	472.00/M	ECW-U2823KC9
	250	.1	3.8	PCF1271CT-ND	1.24	1.08	.83	PCF1271TR-ND	1,500	495.00/M	ECW-U2104KC9

(Continued)

Panasonic SMT Capacitors ECW-U (PEN Film, Stand. Type) & ECH-U (PPS Film, High Grade Type) *(Cont.)*

Item Code	WV DC	Cap. µF	Dim. H (mm)	Digi-Key Part No.	Price Each 10	100	500	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing	Panasonic Part No.
2825 (7163) Size	250	.12	2.8	PCF1272CT-ND	1.36	1.18	.91	PCF1272TR-ND	1,500	542.00/M	ECW-U2124KC9
	250	.15	3.5	PCF1273CT-ND	1.47	1.28	.98	PCF1273TR-ND	1,000	589.00	ECW-U2154KCV
	250	.18	4.1	PCF1274CT-ND	1.59	1.38	1.06	PCF1274TR-ND	1,000	637.00	ECW-U2184KCV
	250	.22	5.1	PCF1275CT-ND	1.65	1.43	1.10	PCF1275TR-ND	1,000	660.00	ECW-U2224KCV
3925 (9863)	250	.27	3.9	PCF1276CT-ND	1.83	1.58	1.22	PCF1276TR-ND	1,000	731.00	ECW-U2274KCV
	250	.33	4.8	PCF1277CT-ND	1.94	1.69	1.30	PCF1277TR-ND	1,000	778.00	ECW-U2334KCV
3931 (9880)	250	.39	4.4	PCF1278CT-ND	2.06	1.79	1.38	PCF1278TR-ND	1,000	825.00	ECW-U2394KCV
	250	.47	5.3	PCF1279CT-ND	2.18	1.89	1.46	PCF1279TR-ND	1,000	872.00	ECW-U2474KCV
6031 (1580)	250	.56	3.7	PCF1280CT-ND	2.53	2.20	1.69	PCF1280TR-ND	750	760.50	ECW-U2564KCZ
	250	.68	4.4	PCF1281CT-ND	3.24	2.81	2.16	PCF1281TR-ND	750	972.75	ECW-U2684KCZ
6039 (1510)	250	.82	4.2	PCF1282CT-ND	3.53	3.06	2.36	PCF1282TR-ND	750	1061.25	ECW-U2824KCZ
	250	1.0	5.1	PCF1283CT-ND	3.83	3.32	2.55	PCF1283TR-ND	750	1149.75	ECW-U2105KCZ
ECH-U(B) (High Grade Type) 2% Tolerance Reflow/Flow											
0805 (2012) Size	50	.0001	0.8	PCF1089CT-ND	.62	.54	.42	PCF1089TR-ND	3,000	248.00/M	ECH-U1H101GB5
	50	.00012	0.8	PCF1090CT-ND	.62	.54	.42	PCF1090TR-ND	3,000	248.00/M	ECH-U1H121GB5
	50	.00015	0.8	PCF1091CT-ND	.62	.54	.42	PCF1091TR-ND	3,000	248.00/M	ECH-U1H151GB5
	50	.00018	0.8	PCF1092CT-ND	.62	.54	.42	PCF1092TR-ND	3,000	248.00/M	ECH-U1H181GB5
	50	.00022	0.8	PCF1093CT-ND	.62	.54	.42	PCF1093TR-ND	3,000	248.00/M	ECH-U1H221GB5
	50	.00027	0.8	PCF1094CT-ND	.62	.54	.42	PCF1094TR-ND	3,000	248.00/M	ECH-U1H271GB5
	50	.00033	0.8	PCF1095CT-ND	.62	.54	.42	PCF1095TR-ND	3,000	248.00/M	ECH-U1H331GB5
	50	.00039	0.8	PCF1096CT-ND	.62	.54	.42	PCF1096TR-ND	3,000	248.00/M	ECH-U1H391GB5
	50	.00047	0.8	PCF1097CT-ND	.62	.54	.42	PCF1097TR-ND	3,000	248.00/M	ECH-U1H471GB5
	50	.00056	0.8	PCF1098CT-ND	.62	.54	.42	PCF1098TR-ND	3,000	248.00/M	ECH-U1H561GB5
	50	.00068	0.8	PCF1099CT-ND	.62	.54	.42	PCF1099TR-ND	3,000	248.00/M	ECH-U1H681GB5
	50	.00082	0.8	PCF1100CT-ND	.62	.54	.42	PCF1100TR-ND	3,000	248.00/M	ECH-U1H821GB5
	50	.001	0.8	PCF1101CT-ND	.62	.54	.42	PCF1101TR-ND	3,000	248.00/M	ECH-U1H102GB5
	50	.0012	0.8	PCF1102CT-ND	.62	.54	.42	PCF1102TR-ND	3,000	248.00/M	ECH-U1H122GB5
	50	.0015	0.8	PCF1103CT-ND	.62	.54	.42	PCF1103TR-ND	3,000	248.00/M	ECH-U1H152GB5
	50	.0018	0.8	PCF1104CT-ND	.62	.54	.42	PCF1104TR-ND	3,000	248.00/M	ECH-U1H182GB5
	50	.0022	0.8	PCF51105CT-ND	.62	.54	.42	PCF1105TR-ND	3,000	248.00/M	ECH-U1H222GB5
	50	.0027	0.8	PCF1106CT-ND	.62	.54	.42	PCF1106TR-ND	3,000	248.00/M	ECH-U1H272GB5
1206 (3216) Size	50	.0033	0.8	PCF1107CT-ND	.73	.63	.49	PCF1107TR-ND	3,000	290.00/M	ECH-U1H332GB5
	50	.0039	0.8	PCF1108CT-ND	.74	.65	.50	PCF1108TR-ND	3,000	296.00/M	ECH-U1H392GB5
	50	.0047	0.8	PCF1109CT-ND	.77	.66	.51	PCF1109TR-ND	3,000	305.00/M	ECH-U1H472GB5
	50	.0056	0.8	PCF1110CT-ND	.79	.68	.53	PCF1110TR-ND	3,000	314.00/M	ECH-U1H562GB5
	50	.0068	0.8	PCF1111CT-ND	.81	.70	.54	PCF1111TR-ND	3,000	323.00/M	ECH-U1H682GB5
	50	.0082	1.0	PCF1112CT-ND	.83	.72	.56	PCF1112TR-ND	3,000	332.00/M	ECH-U1H822GB5
	50	.01	1.0	PCF1113CT-ND	.86	.74	.57	PCF1113TR-ND	3,000	341.00/M	ECH-U1H103GB5
1210 (3225) Size	50	.012	1.0	PCF1114CT-ND	.87	.76	.58	PCF1114TR-ND	2,000	347.00/M	ECH-U1H123GB5
	50	.015	1.0	PCF1115CT-ND	.90	.78	.60	PCF1115TR-ND	2,000	358.00/M	ECH-U1H153GB5
	50	.018	1.4	PCF1116CT-ND	.92	.80	.62	PCF1116TR-ND	2,000	368.00/M	ECH-U1H183GB5
	50	.022	1.4	PCF1117CT-ND	.96	.83	.64	PCF1117TR-ND	2,000	382.00/M	ECH-U1H223GB5
	50	.027	1.4	PCF1118CT-ND	1.00	.87	.67	PCF1118TR-ND	2,000	400.00/M	ECH-U1H273GB5
	50	.033	2.0	PCF1119CT-ND	1.05	.91	.70	PCF1119TR-ND	2,000	418.00/M	ECH-U1H333GB5
	50	.039	2.0	PCF1120CT-ND	1.10	.95	.73	PCF1120TR-ND	2,000	438.00/M	ECH-U1H393GB5
1913 (4833) Size	50	.047	1.4	PCF1162CT-ND	.97	.84	.65	PCF1162TR-ND	3,000	386.00/M	ECH-U1H473GC9
	50	.056	2.0	PCF1163CT-ND	1.03	.89	.69	PCF1163TR-ND	3,000	409.00/M	ECH-U1H563GC9
	50	.068	2.0	PCF1164CT-ND	1.09	.95	.73	PCF1164TR-ND	3,000	436.00/M	ECH-U1H683GC9
	50	.082	2.4	PCF1165CT-ND	1.17	1.02	.78	PCF1165TR-ND	2,000	468.00/M	ECH-U1H823GC9
	50	.1	2.8	PCF1166CT-ND	1.26	1.09	.84	PCF1166TR-ND	2,000	502.00/M	ECH-U1H104GC9
2416 (6041) Size	50	.12	1.8	PCF1167CT-ND	1.49	1.29	.99	PCF1167TR-ND	3,000	595.00/M	ECH-U1H124GC9
	50	.15	2.4	PCF1168CT-ND	1.58	1.37	1.05	PCF1168TR-ND	2,000	630.00/M	ECH-U1H154GC9
	50	.18	2.8	PCF1169CT-ND	1.66	1.44	1.11	PCF1169TR-ND	2,000	665.00/M	ECH-U1H184GC9
	50	.22	3.2	PCF1170CT-ND	1.75	1.52	1.17	PCF1170TR-ND	2,000	701.00/M	ECH-U1H224GC9
ECH-U(B) (High Grade Type) 5% Tolerance Reflow/Flow											
0805 (2012) Size	16	.0033	0.8	PCF1070CT-ND	.49	.43	.33	PCF1070TR-ND	3,000	195.00/M	ECH-U1C332JB5
	16	.0039	0.8	PCF1071CT-ND	.49	.43	.33	PCF1071TR-ND	3,000	195.00/M	ECH-U1C392JB5
	16	.0047	0.8	PCF1072CT-ND	.49	.43	.33	PCF1072TR-ND	3,000	195.00/M	ECH-U1C472JB5
	16	.0056	0.8	PCF1073CT-ND	.49	.43	.33	PCF1073TR-ND	3,000	195.00/M	ECH-U1C562JB5
	16	.0068	0.8	PCF1074CT-ND	.49	.43	.33	PCF1074TR-ND	3,000	195.00/M	ECH-U1C682JB5
	16	.0082	1.0	PCF1075CT-ND	.49	.43	.33	PCF1075TR-ND	3,000	195.00/M	ECH-U1C822JB5
	16	.01	1.0	PCF1076CT-ND	.49	.43	.33	PCF1076TR-ND	3,000	195.00/M	ECH-U1C103JB5
1206 (3216) Size	16	.012	0.8	PCF1077CT-ND	.52	.45	.35	PCF1077TR-ND	3,000	206.00/M	ECH-U1C123JB5
	16	.015	0.8	PCF1078CT-ND	.54	.47	.36	PCF1078TR-ND	3,000	214.00/M	ECH-U1C153JB5
	16	.018	0.8	PCF1079CT-ND	.54	.47	.36	PCF1079TR-ND	3,000	214.00/M	ECH-U1C183JB5
	16	.022	0.8	PCF1080CT-ND	.58	.50	.39	PCF1080TR-ND	3,000	230.00/M	ECH-U1C223JB5
	16	.027	1.0	PCF1081CT-ND	.59	.52	.40	PCF1081TR-ND	3,000	236.00/M	ECH-U1C273JB5
	16	.033	1.0	PCF1082CT-ND	.61	.53	.41	PCF1082TR-ND	3,000	244.00/M	ECH-U1C333JB5
	16	.039	1.4	PCF1083CT-ND	.64	.55	.43	PCF1083TR-ND	2,000	254.00/M	ECH-U1C393JB5
	16	.047	1.4	PCF1084CT-ND	.67	.58	.45	PCF1084TR-ND	2,000	268.00/M	ECH-U1C473JB5

Item Code	WV DC	Cap. µF	Dim. H (mm)	Digi-Key Part No.	Price Each 10	100	500	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing	Panasonic Part No.
1210 (3225) Size	16	.056	1.4	PCF1085CT-ND	.74	.64	.49	PCF1085TR-ND	2,000	295.00/M	ECH-U1C563JB5
	16	.068	1.4	PCF1086CT-ND	.79	.69	.53	PCF1086TR-ND	2,000	316.00/M	ECH-U1C683JB5
	16	.082	2.0	PCF1087CT-ND	.85	.74	.57	PCF1087TR-ND	2,000	340.00/M	ECH-U1C823JB5
	16	.1	2.0	PCF1088CT-ND	.90	.78	.60	PCF1088TR-ND	2,000	359.00/M	ECH-U1C104JB5
	50	.0001	0.8	PCF1000CT-ND•	.50	.44	.34	PCF1000TR-ND	3,000	200.00/M	ECH-U1H101JB5
	50	.00012	0.8	PCF1001CT-ND	.50	.44	.34	PCF1001TR-ND	3,000	200.00/M	ECH-U1H121JB5
	50	.00015	0.8	PCF1002CT-ND•	.50	.44	.34	PCF1002TR-ND	3,000	200.00/M	ECH-U1H151JB5
	50	.00018	0.8	PCF1003CT-ND	.50	.44	.34	PCF1003TR-ND	3,000	200.00/M	ECH-U1H181JB5
	50	.00022	0.8	PCF1004CT-ND•	.50	.44	.34	PCF1004TR-ND	3,000	200.00/M	ECH-U1H221JB5
0805 (2012) Size	50	.00027	0.8	PCF1005CT-ND	.50	.44	.34	PCF1005TR-ND	3,000	200.00/M	ECH-U1H271JB5
	50	.00033	0.8	PCF1006CT-ND•	.50	.44	.34	PCF1006TR-ND	3,000	200.00/M	ECH-U1H331JB5
	50	.00039	0.8	PCF1007CT-ND	.50	.44	.34	PCF1007TR-ND	3,000	200.00/M	ECH-U1H391JB5
	50	.00047	0.8	PCF1008CT-ND•	.50	.44	.34	PCF1008TR-ND	3,000	200.00/M	ECH-U1H471JB5
	50	.00056	0.8	PCF1009CT-ND	.50	.44	.34	PCF1009TR-ND	3,000	200.00/M	ECH-U1H561JB5
	50	.00068	0.8	PCF1010CT-ND	.50	.44	.34	PCF1010TR-ND	3,000	200.00/M	ECH-U1H681JB5
	50	.00082	0.8	PCF1011CT-ND	.50	.44	.34	PCF1011TR-ND	3,000	200.00/M	ECH-U1H821JB5
	50	.001	0.8	PCF1012CT-ND•	.50	.44	.34	PCF1012TR-ND	3,000	200.00/M	ECH-U1H102JB5
	50	.0012	0.8	PCF1013CT-ND	.50	.44	.34	PCF1013TR-ND	3,000	200.00/M	ECH-U1H122JB5
	50	.0015	0.8	PCF1014CT-ND•	.50	.44	.34	PCF1014TR-ND	3,000	200.00/M	ECH-U1H152JB5
	50	.0018	0.8	PCF1015CT-ND	.50	.44	.34	PCF1015TR-ND	3,000	200.00/M	ECH-U1H182JB5
	50	.0022	0.8	PCF1016CT-ND•	.50	.44	.34	PCF1016TR-ND	3,000	200.00/M	ECH-U1H222JB5
	50	.0027	0.8	PCF1017CT-ND	.50	.44	.34	PCF1017TR-ND	3,000	200.00/M	ECH-U1H272JB5
1206 (3216) Size	50	.0033	0.8	PCF1018CT-ND•	.59	.51	.39	PCF1018TR-ND	3,000	235.00/M	ECH-U1H332JB5
	50	.0039	0.8	PCF1019CT-ND	.60	.52	.40	PCF1019TR-ND	3,000	241.00/M	ECH-U1H392JB5
	50	.0047	0.8	PCF1020CT-ND•	.62	.54	.42	PCF1020TR-ND	3,000	248.00/M	ECH-U1H472JB5
	50	.0056	0.8	PCF1021CT-ND	.64	.55	.43	PCF1021TR-ND	3,000	254.00/M	ECH-U1H562JB5
	50	.0068	0.8	PCF1022CT-ND•	.66	.57	.44	PCF1022TR-ND	3,000	262.00/M	ECH-U1H682JB5
	50	.0082	1.0	PCF1023CT-ND	.67	.58	.45	PCF1023TR-ND	3,000	266.00/M	ECH-U1H822JB5
	50	.01	1.0	PCF1024CT-ND•	.69	.60	.46	PCF1024TR-ND	3,000	277.00/M	ECH-U1H103JB5
1210 (3225) Size	50	.012	1.0	PCF1025CT-ND	.71	.62	.47	PCF1025TR-ND	2,000	283.00/M	ECH-U1H123JB5
	50	.015	1.0	PCF1026CT-ND•	.73	.63	.49	PCF1026TR-ND	2,000	290.00/M	ECH-U1H153JB5
	50	.018	1.4	PCF1027CT-ND	.75	.65	.50	PCF1027TR-ND	2,000	298.00/M	ECH-U1H183JB5
	50	.022	1.4	PCF1028CT-ND•	.77	.67	.52	PCF1028TR-ND	2,000	308.00/M	ECH-U1H223JB5
	50	.027	1.4	PCF1029CT-ND	.80	.70	.54	PCF1029TR-ND	2,000	320.00/M	ECH-U1H273JB5
	50	.033	2.0	PCF1030CT-ND•	.85	.74	.57	PCF1030TR-ND	2,000	338.00/M	ECH-U1H333JB5
	50	.039	2.0	PCF1031CT-ND	.88	.77	.59	PCF1031TR-ND	2,000	352.00/M	ECH-U1H393JB5
1913 (4833) Size	50	.082	2.0	PCF1035CT-ND•	.95	.82	.63	—	—	—	ECH-U1H823JB9
	50	.047	1.4	PCF1153CT-ND	.78	.67	.52	PCF1153TR-ND	3,000	310.00/M	ECH-U1H473JC9
	50	.056	2.0	PCF1154CT-ND	.83	.72	.55	PCF1154TR-ND	3,000	330.00/M	ECH-U1H563JC9
	50	.068	2.0	PCF1155CT-ND•	.88	.76	.59	PCF1155TR-ND	3,000	350.00/M	ECH-U1H683JC9
	50	.082	2.4	PCF1156CT-ND	.95	.82	.63	PCF1156TR-ND	2,000	377.00/M	ECH-U1H823JC9
	50	.1	2.8	PCF1157CT-ND•	.93	.81	.62	PCF1157TR-ND	2,000	371.00/M	ECH-U1H104JC9
2416 (6041) Size	50	.12	1.8	PCF1158CT-ND	1.15	1.00	.77	PCF1158TR-ND	3,000	458.00/M	ECH-U1H124JC9
	50	.15	2.4	PCF1159CT-ND	1.21	1.05	.81	PCF1159TR-ND	2,000	485.00/M	ECH-U1H154JC9
	50	.18	2.8	PCF1160CT-ND	1.28	1.11	.86	—	—	—	ECH-U1H184JC9
	50	.22	3.2	PCF1161CT-ND	1.35	1.17	.90	PCF1161TR-ND	2,000	539.00/M	ECH-U1H224JC9
ECH-U(X) (High Grade Type) 2% Tolerance, Reflow Only											
0805 (2012) Size	16	0.0033	0.9	PCF1171CT-ND	.44	.38	.29	PCF1171TR-ND	3,000	173.00/M	ECH-U1C332GX5
	16	0.0039	0.9	PCF1172CT-ND	.50	.44	.34	PCF1172TR-ND	3,000	200.00/M	ECH-U1C392GX5
	16	0.0047	0.9	PCF1173CT-ND	.52	.45	.35	PCF1173TR-ND	3,000	205.00/M	ECH-U1C472GX5
	16	0.0056	0.9	PCF1174CT-ND	.42	.37	.28	PCF1174TR-ND	3,000	168.00/M	ECH-U1C562GX5
	16	0.0068	0.9	PCF1175CT-ND	.50	.44	.34	PCF1175TR-ND	3,000	200.00/M	ECH-U1C682GX5
	16	0.0082	1.1	PCF1176CT-ND	.49	.43	.33	PCF1176TR-ND	3,000	195.00/M	ECH-U1C822GX5
	16	0.01	1.1	PCF1177CT-ND	.47	.41	.32	PCF1177TR-ND	3,000	189.00/M	ECH-U1C103GX5
1206 (3216) Size	16	0.012	0.9	PCF1178CT-ND	.51	.44	.34	PCF1178TR-ND	3,000	202.00/M	ECH-U1C123GX5
	16	0.015	0.9	PCF1179CT-ND	.60	.52	.40	PCF1179TR-ND	3,000	237.00/M	ECH-U1C153GX5
	16	0.018	0.9	PCF1180CT-ND	.59	.51	.40	PCF1180TR-ND	3,000	236.00/M	ECH-U1C183GX5
	16	0.022	0.9	PCF1181CT-ND	.57	.49	.38	PCF1181TR-ND	3,000	226.00/M	ECH-U1C223GX5
	16	0.027	1.1	PCF1182CT-ND	.58	.50	.39	PCF1182TR-ND	3,000	229.00/M	ECH-U1C273GX5
	16	0.033	1.1	PCF1183CT-ND	.67	.58	.45	PCF1183TR-ND	3,000	266.00/M	ECH-U1C333GX5
	16	0.039	1.5	PCF1184CT-ND	.61	.53	.41	PCF1184TR-ND	2,000	243.00/M	ECH-U1C393GX5
	16	0.047	1.5	PCF1185CT-ND	.71	.62	.48	PCF1185TR-ND	2,000	283.00/M	ECH-U1C473GX5
1210 (3225) Size	16	0.056	1.5	PCF1186CT-ND	.74	.64	.49	PCF1186TR-ND	2,000	295.00/M	ECH-U1C563GX5
	16	0.068	1.5	PCF1187CT-ND	.80	.69	.53	PCF1187TR-ND	2,000	318.00/M	ECH-U1C683GX5
	16	0.082	2.1	PCF1188CT-ND	.92	.79	.61	PCF1188TR-ND	2,000	365.00/M	ECH-U1C823GX5
	16	0.1	2.1	PCF1189CT-ND	.68	.59	.46	PCF1189TR-ND	2,000	273.00/M	ECH-U1C104GX5
0805 (2012) Size	50	.0001	0.9	PCF1284CT-ND	.54	.47	.36	PCF1284TR-ND	3,000	216.00/M	ECH-U1H101GX5
	50	.00012	0.9	PCF1285CT-ND	.54	.47	.36	PCF1285TR-ND	3,000	216.00/M	ECH-U1H121GX5
	50	.00015	0.9	PCF1286CT-ND	.55	.47	.37	PCF1286TR-ND	3,000	217.00/M	ECH-U1H151GX5

(Continued)

Panasonic SMT Capacitors ECW-U (PEN Film, Stand. Type) & ECH-U (PPS Film, High Grade Type) *(Cont.)*

Item Code	WV DC	Cap. µF	Dim. H (mm)	Digi-Key Part No.	Price Each 10	100	500	Digi-Key Part No.	Tape & Reel Size	Pricing	Panasonic Part No.
0805 (2012) Size	50	.00018	0.9	PCF1287CT-ND	.55	.47	.37	PCF1287TR-ND	3,000	217.00/M	ECH-U1H181GX5
	50	.00022	0.9	PCF1288CT-ND	.55	.47	.37	PCF1288TR-ND	3,000	217.00/M	ECH-U1H221GX5
	50	.00027	0.9	PCF1289CT-ND	.51	.44	.34	PCF1289TR-ND	3,000	202.00/M	ECH-U1H271GX5
	50	.00033	0.9	PCF1290CT-ND	.53	.46	.35	PCF1290TR-ND	3,000	211.00/M	ECH-U1H331GX5
	50	.00039	0.9	PCF1291CT-ND	.52	.45	.35	PCF1291TR-ND	3,000	205.00/M	ECH-U1H391GX5
	50	.00047	0.9	PCF1292CT-ND	.54	.47	.36	PCF1292TR-ND	3,000	214.00/M	ECH-U1H471GX5
	50	.00056	0.9	PCF1293CT-ND	.54	.47	.36	PCF1293TR-ND	3,000	216.00/M	ECH-U1H561GX5
	50	.00068	0.9	PCF1294CT-ND	.53	.46	.35	PCF1294TR-ND	3,000	211.00/M	ECH-U1H681GX5
	50	.00082	0.9	PCF1295CT-ND	.53	.46	.35	PCF1295TR-ND	3,000	211.00/M	ECH-U1H821GX5
	50	.001	0.9	PCF1296CT-ND	.47	.41	.32	PCF1296TR-ND	3,000	189.00/M	ECH-U1H102GX5
	50	.0012	0.9	PCF1297CT-ND	.36	.31	.24	PCF1297TR-ND	3,000	143.00/M	ECH-U1H122GX5
	50	.0015	0.9	PCF1298CT-ND	.50	.44	.34	PCF1298TR-ND	3,000	200.00/M	ECH-U1H152GX5
	50	.0018	0.9	PCF1299CT-ND	.54	.47	.36	PCF1299TR-ND	3,000	216.00/M	ECH-U1H182GX5
	50	.0022	0.9	PCF1300CT-ND	.50	.44	.34	PCF1300TR-ND	3,000	200.00/M	ECH-U1H222GX5
	50	.0027	0.9	PCF1301CT-ND	.49	.43	.33	PCF1301TR-ND	3,000	195.00/M	ECH-U1H272GX5
1206 (3216) Size	50	.0033	0.9	PCF1302CT-ND	.63	.54	.42	PCF1302TR-ND	3,000	249.00/M	ECH-U1H332GX5
	50	.0039	0.9	PCF1303CT-ND	.61	.53	.41	PCF1303TR-ND	3,000	244.00/M	ECH-U1H392GX5
	50	.0047	0.9	PCF1304CT-ND	.67	.58	.45	PCF1304TR-ND	3,000	268.00/M	ECH-U1H472GX5
	50	.0056	0.9	PCF1305CT-ND	.66	.58	.44	PCF1305TR-ND	3,000	264.00/M	ECH-U1H562GX5
	50	.0068	0.9	PCF1306CT-ND	.70	.61	.47	PCF1306TR-ND	3,000	280.00/M	ECH-U1H682GX5
	50	.0082	1.1	PCF1307CT-ND	.71	.62	.48	PCF1307TR-ND	3,000	285.00/M	ECH-U1H822GX5
1210 (3225) Size	50	.01	1.1	PCF1308CT-ND	.74	.64	.49	PCF1308TR-ND	3,000	293.00/M	ECH-U1H103GX5
	50	.012	1.1	PCF1309CT-ND	.70	.61	.47	PCF1309TR-ND	2,000	280.00/M	ECH-U1H123GX5
	50	.015	1.1	PCF1310CT-ND	.78	.67	.52	PCF1310TR-ND	2,000	310.00/M	ECH-U1H153GX5
	50	.018	1.5	PCF1311CT-ND	.79	.69	.53	PCF1311TR-ND	2,000	315.00/M	ECH-U1H183GX5
	50	.022	1.5	PCF1312CT-ND	.79	.69	.53	PCF1312TR-ND	2,000	315.00/M	ECH-U1H223GX5
	50	.027	1.5	PCF1313CT-ND	.83	.72	.56	PCF1313TR-ND	2,000	332.00/M	ECH-U1H273GX5
	50	.033	2.1	PCF1314CT-ND	.88	.77	.59	PCF1314TR-ND	2,000	352.00/M	ECH-U1H333GX5
	50	.039	2.1	PCF1315CT-ND	.93	.81	.62	PCF1315TR-ND	2,000	372.00/M	ECH-U1H393GX5
ECH-U(X) (High Grade Type) 5% Tolerance, Reflow Only											
0805 (2012) Size	16	0.0033	0.9	PCF1190CT-ND	.34	.30	.23	PCF1190TR-ND	3,000	136.00/M	ECH-U1C332JX5
	16	0.0039	0.9	PCF1191CT-ND	.42	.36	.28	PCF1191TR-ND	3,000	165.00/M	ECH-U1C392JX5
	16	0.0047	0.9	PCF1192CT-ND	.42	.37	.28	PCF1192TR-ND	3,000	167.00/M	ECH-U1C472JX5
	16	0.0056	0.9	PCF1193CT-ND	.41	.36	.28	PCF1193TR-ND	3,000	163.00/M	ECH-U1C562JX5
	16	0.0068	0.9	PCF1194CT-ND	.42	.37	.28	PCF1194TR-ND	3,000	167.00/M	ECH-U1C682JX5
	16	0.0082	1.1	PCF1195CT-ND	.42	.37	.28	PCF1195TR-ND	3,000	167.00/M	ECH-U1C822JX5
	16	0.01	1.1	PCF1196CT-ND	.41	.35	.27	PCF1196TR-ND	3,000	162.00/M	ECH-U1C103JX5
1206 (3216) Size	16	0.012	0.9	PCF1197CT-ND	.42	.37	.28	PCF1197TR-ND	3,000	168.00/M	ECH-U1C123JX5
	16	0.015	0.9	PCF1198CT-ND	.45	.39	.30	PCF1198TR-ND	3,000	177.00/M	ECH-U1C153JX5
	16	0.018	0.9	PCF1199CT-ND	.42	.37	.28	PCF1199TR-ND	3,000	167.00/M	ECH-U1C183JX5
	16	0.022	0.9	PCF1200CT-ND	.44	.38	.29	PCF1200TR-ND	3,000	173.00/M	ECH-U1C223JX5

Item Code	WV DC	Cap. µF	Dim. H (mm)	Digi-Key Part No.	Price Each 10	100	500	Digi-Key Part No.	Tape & Reel Size	Pricing	Panasonic Part No.
1206 (3216) Size	16	0.027	1.1	PCF1201CT-ND	.50	.43	.34	PCF1201TR-ND	3,000	199.00/M	ECH-U1C273JX5
	16	0.033	1.1	PCF1202CT-ND	.50	.43	.33	PCF1202TR-ND	3,000	197.00/M	ECH-U1C333JX5
	16	0.039	1.5	PCF1203CT-ND	.51	.45	.34	PCF1203TR-ND	2,000	204.00/M	ECH-U1C393JX5
	16	0.047	1.5	PCF1204CT-ND	.56	.49	.37	PCF1204TR-ND	2,000	222.00/M	ECH-U1C473JX5
1210 (3225) Size	16	0.056	1.5	PCF1205CT-ND	.60	.52	.40	PCF1205TR-ND	2,000	237.00/M	ECH-U1C563JX5
	16	0.068	1.5	PCF1206CT-ND	.53	.46	.36	PCF1206TR-ND	2,000	212.00/M	ECH-U1C683JX5
	16	0.082	2.1	PCF1207CT-ND	.71	.62	.48	PCF1207TR-ND	2,000	283.00/M	ECH-U1C823JX5
	16	0.1	2.1	PCF1208CT-ND	.68	.59	.46	PCF1208TR-ND	2,000	273.00/M	ECH-U1C104JX5
0805 (2012) Size	50	.0001	0.9	PCF1316CT-ND	.40	.35	.27	PCF1316TR-ND	3,000	158.00/M	ECH-U1H101JX5
	50	.00012	0.9	PCF1317CT-ND	.41	.35	.27	PCF1317TR-ND	3,000	162.00/M	ECH-U1H121JX5
	50	.00015	0.9	PCF1318CT-ND	.41	.35	.27	PCF1318TR-ND	3,000	162.00/M	ECH-U1H151JX5
	50	.00018	0.9	PCF1319CT-ND	.39	.34	.26	PCF1319TR-ND	3,000	153.00/M	ECH-U1H181JX5
	50	.00022	0.9	PCF1320CT-ND	.36	.31	.24	PCF1320TR-ND	3,000	141.00/M	ECH-U1H221JX5
	50	.00027	0.9	PCF1321CT-ND	.40	.34	.27	PCF1321TR-ND	3,000	157.00/M	ECH-U1H271JX5
	50	.00033	0.9	PCF1322CT-ND	.37	.33	.25	PCF1322TR-ND	3,000	148.00/M	ECH-U1H331JX5
	50	.00039	0.9	PCF1323CT-ND	.37	.33	.25	PCF1323TR-ND	3,000	148.00/M	ECH-U1H391JX5
	50	.00047	0.9	PCF1324CT-ND	.37	.33	.25	PCF1324TR-ND	3,000	148.00/M	ECH-U1H471JX5
	50	.00056	0.9	PCF1325CT-ND	.40	.34	.27	PCF1325TR-ND	3,000	157.00/M	ECH-U1H561JX5
	50	.00068	0.9	PCF1326CT-ND	.40	.35	.27	PCF1326TR-ND	3,000	160.00/M	ECH-U1H681JX5
	50	.00082	0.9	PCF1327CT-ND	.40	.34	.27	PCF1327TR-ND	3,000	157.00/M	ECH-U1H821JX5
	50	.001	0.9	PCF1328CT-ND	.40	.35	.27	PCF1328TR-ND	3,000	158.00/M	ECH-U1H102JX5
	50	.0012	0.9	PCF1329CT-ND	.33	.29	.22	PCF1329TR-ND	3,000	130.00/M	ECH-U1H122JX5
	50	.0015	0.9	PCF1330CT-ND	.41	.35	.27	PCF1330TR-ND	3,000	162.00/M	ECH-U1H152JX5
	50	.0018	0.9	PCF1331CT-ND	.26	.23	.18	PCF1331TR-ND	3,000	104.00/M	ECH-U1H182JX5
	50	.0022	0.9	PCF1332CT-ND	.39	.34	.26	PCF1332TR-ND	3,000	155.00/M	ECH-U1H222JX5
	50	.0027	0.9	PCF1333CT-ND	.40	.34	.27	PCF1333TR-ND	3,000	157.00/M	ECH-U1H272JX5
1206 (3216) Size	50	.0033	0.9	PCF1334CT-ND	.47	.41	.32	PCF1334TR-ND	3,000	187.00/M	ECH-U1H332JX5
	50	.0039	0.9	PCF1335CT-ND	.44	.38	.29	PCF1335TR-ND	3,000	173.00/M	ECH-U1H392JX5
	50	.0047	0.9	PCF1336CT-ND	.50	.44	.34	PCF1336TR-ND	3,000	200.00/M	ECH-U1H472JX5
	50	.0056	0.9	PCF1337CT-ND	.50	.44	.34	PCF1337TR-ND	3,000	200.00/M	ECH-U1H562JX5
	50	.0068	0.9	PCF1338CT-ND	.53	.46	.35	PCF1338TR-ND	3,000	209.00/M	ECH-U1H682JX5
	50	.0082	1.1	PCF1339CT-ND	.53	.46	.36	PCF1339TR-ND	3,000	212.00/M	ECH-U1H822JX5
	50	.01	1.1	PCF1340CT-ND	.55	.47	.37	PCF1340TR-ND	3,000	217.00/M	ECH-U1H103JX5
1210 (3225) Size	50	.012	1.1	PCF1341CT-ND	.57	.50	.38	PCF1341TR-ND	2,000	227.00/M	ECH-U1H123JX5
	50	.015	1.1	PCF1342CT-ND	.59	.51	.40	PCF1342TR-ND	2,000	236.00/M	ECH-U1H153JX5
	50	.018	1.5	PCF1343CT-ND	.57	.49	.38	PCF1343TR-ND	2,000	226.00/M	ECH-U1H183JX5
	50	.022	1.5	PCF1344CT-ND	.61	.53	.41	PCF1344TR-ND	2,000	243.00/M	ECH-U1H223JX5
	50	.027	1.5	PCF1345CT-ND	.64	.55	.43	PCF1345TR-ND	2,000	254.00/M	ECH-U1H273JX5
	50	.033	2.1	PCF1346CT-ND	.66	.58	.44	PCF1346TR-ND	2,000	264.00/M	ECH-U1H333JX5
	50	.039	2.1	PCF1347CT-ND	.71	.62	.48	PCF1347TR-ND	2,000	283.00/M	ECH-U1H393JX5

• **PCF1-KIT-ND** ***Digi-Key® ECH-U Series Capacitors Kit*** 10 each of parts indicated (180 pieces). Notebook style storage and bin, storage guide included **$59.95**

† **PCF2-KIT-ND** ***Digi-Key® ECW-U Series Capacitors Kit*** 10 each of parts indicated (180 pieces). Notebook style storage and bin, storage guide included.................... **$59.95**

Panasonic SMT Capacitors ECP-U (SF Submicron)

FEATURES:

• Small in size • Low ESR • Anti-shock • Excellent sound quality

APPLICATIONS:

• Coupling • Decoupling • Noise Reduction

SPECIFICATIONS:

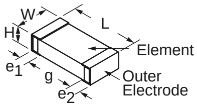
• Operating Temperature: -40°C to +85°C • Rated Voltage: 16VDC • Capacitance Range: 0.1 to 1.0µF (E6 series) • Capacitance Tolerance: ±20% (M) • Dissipation Factor: 1.5% max. (20°C, 1kHz) • CWithstand Voltage: Between terminals rated volt (VDC) x 175%, 1 to 5s • Insulation Resistance: C≤0.33µF: 1000MΩ min. (20°C, 10VDC 60s), C>0.33µF: 300MΩ min. (20°C, 10VDC 60s) • Soldering Reflow Conditions: 240°C max. and 30 sec. max. at more than 210°C (temp. at cap. surface)

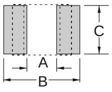
Note: Solder paste/flux shall have less than 0.1wt% halogen content.

Storage: The unpacked products shall be kept in polyethylene bag together with well-dried silica-gel (from 5g to 10g) or be kept in storage at a temperature of 25°C, with a humidity less than 50%RH.

This capacitor shall be used in only reflow method. Don’t use in flow, dipping, or VPS soldering method.

A recommended solder paste thickness is between 0.10mm and 0.15mm.





Type	Dimensions (mm) e1 • e2	g
J2	0.45 ± 0.25	0.6min.
H1-H2-H3	0.65 ± 0.3	1.0min.
G2	0.65 ± 0.3	1.0min.

Type/ Size Code	Dim. of land (mm) A	B	C
J2 (2012)	0.8	2.4	1.1
H1-H2-H3 (3216)	1.8	3.6	1.4
G2 (3225)	1.8	3.6	2.3

Item Code	WV DC	Cap. µF	Dimensions (±0.2) L	W	H	Type	Digi-Key Part No.	Cut Tape Price Each 10	100	500	Digi-Key Part No.	Tape & Reel Pricing 2,000	3,000	Panasonic Part No.
ECP-U (A) Type — 20% Tolerance														
0805	16	.10	2.0	1.25	1.0	J2	PCF1126CT-ND	.56	.49	.38	PCF1126TR-ND	—	224.00/M	ECP-U1C104MA5
1206	16	.15	3.2	1.60	.80	H1	PCF1127CT-ND	.56	.49	.38	PCF1127TR-ND	—	224.00/M	ECP-U1C154MA5
1206	16	.22	3.2	1.60	.80	H1	PCF1128CT-ND	.56	.49	.38	PCF1128TR-ND	—	224.00/M	ECP-U1C224MA5
1206	16	.33	3.2	1.60	1.0	H2	PCF1129CT-ND	.56	.49	.38	PCF1129TR-ND	—	224.00/M	ECP-U1C334MA5
1206	16	.47	3.2	1.60	1.4	H3	PCF1130CT-ND	.63	.55	.42	PCF1130TR-ND	253.00/M	—	ECP-U1C474MA5
1206	16	.68	3.2	1.60	1.4	H3	PCF1131CT-ND	.70	.61	.47	PCF1131TR-ND	280.00/M	—	ECP-U1C684MA5
1210	16	1.0	3.2	2.5	1.4	G2	PCF1132CT-ND	.77	.67	.52	PCF1132TR-ND	308.00/M	—	ECP-U1C105MA5

Panasonic® M-Series Polyester and Foil Capacitors

Features:
High insulation resistance. Non-inductive construction: with tinned copper leads welded to the foils. High peak current capability. Solvent-resistant resin coated body.

Applications:
Blocking, by-pass and coupling of D.C. and signals to VHF range. Pulse, logic and timing circuits. Light-duty pulse forming networks. Filter and noise suppression circuits. General purpose usage.

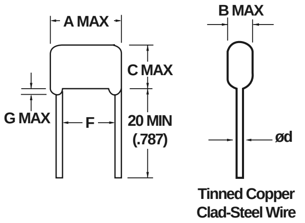
Specifications:
Reference standard: JIS C5113 Characteristic M. Operating temperature range: -40°C ~ +85°C. Construction: Polyester film, non-inductive, phenolic/epoxy resin coating, wax impregnation.

Electrical Specifications:
Capacitance Tolerance: ±10% (K). Insulation Resistance: Greater than 10,000 MV. Dissipation Factor: Less than 1.0% at 1 KHZ. Dielectric Withstanding Voltage: 250% of rated voltage for 5 seconds. Operating Temperature: -40°C ~+80°C.

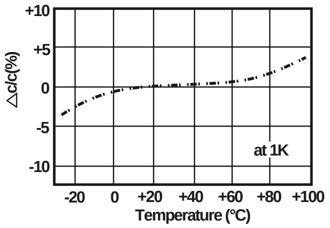
PANASONIC ECQ CROSS REFERENCE

Sprague: 225P, 418P; **Mepco:** 713D1, 711D1, 719D1; **TWR:** 601PE, 601CPE; **Pactron:** PE, FM; **Secor:** MFDN, MFDR; **Roederstein:** KT1805, KT1806, KT1807, KT1808; **Wima:** FKS; **CSF Thompson:** ED (Dip); **Rubycon:** F2X, F2S, F3U; **Nichicon:** TDY; **Nissiei:** AMZ, AMX, AMR, AMM.

Style: Straight Radial Leads



Typical Capacitance Change

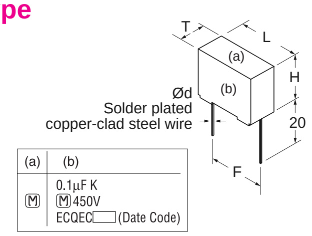


Panasonic/Matsushita Electric has announced a change in the Corporate Trademark. Present trademark: ▲. New trademark: Ⓜ.

Cap.	Dimensions (mm)						Digi-Key	Pricing					Panasonic
µF	A	B	C	F±1.25	G	d	Part No.	10	100	1,000	5,000	10,000	Part No.
100 WV DC													
.056	16.0	6.0	13.5	11.5	3	0.6	P1021-ND	1.38	11.50	69.00	64.00/M	60.00/M	ECQ-M1563KZ
200 WV DC													
.001	9.0	5.0	9.0	5.5	2	0.6	P1029-ND*	1.32	10.97	65.00	61.00/M	57.00/M	ECQ-M2102KZ
.0012	9.0	5.0	9.0	5.5	2	0.6	P1030-ND	1.32	10.97	65.00	61.00/M	57.00/M	ECQ-M2122KZ
.0015	9.0	5.0	9.5	5.5	3	0.6	P1031-ND*	1.32	10.97	65.00	61.00/M	57.00/M	ECQ-M2152KZ
.0018	9.0	5.5	9.5	5.5	3	0.6	P1032-ND	1.32	10.97	65.00	61.00/M	57.00/M	ECQ-M2182KZ
.0022	9.0	6.0	10.0	5.5	3	0.6	P1033-ND*	1.32	10.97	65.00	61.00/M	57.00/M	ECQ-M2222KZ
.0027	9.0	5.0	9.0	5.5	3	0.6	P1034-ND	1.32	10.97	65.00	61.00/M	57.00/M	ECQ-M2272KZ
.0033	9.0	5.0	9.0	5.5	3	0.6	P1035-ND*	1.35	11.24	67.00	62.00/M	58.00/M	ECQ-M2332KZ
.0039	12.0	5.5	9.5	7.5	3	0.6	P1036-ND	1.35	11.24	67.00	62.00/M	58.00/M	ECQ-M2392KZ
.0047	12.0	6.0	9.5	7.5	3	0.6	P1037-ND*	1.35	11.24	67.00	62.00/M	58.00/M	ECQ-M2472KZ
.0056	12.0	6.0	9.5	7.5	3	0.6	P1038-ND	1.35	11.24	67.00	62.00/M	58.00/M	ECQ-M2562KZ
.0068	12.0	6.0	10.5	7.5	3	0.6	P1039-ND*	1.35	11.24	67.00	62.00/M	58.00/M	ECQ-M2682KZ
.0082	14.0	5.5	10.0	9.5	3	0.6	P1040-ND	1.35	11.24	67.00	62.00/M	58.00/M	ECQ-M2822KZ
.01	14.0	6.0	10.0	9.5	3	0.6	P1041-ND*	1.32	10.97	65.00	61.00/M	57.00/M	ECQ-M2103KZ
.012	14.0	6.0	10.5	9.5	3	0.6	P1042-ND	1.32	10.97	65.00	61.00/M	57.00/M	ECQ-M2123KZ
.015	14.0	6.5	11.5	9.5	3	0.6	P1043-ND*	1.32	10.97	65.00	61.00/M	57.00/M	ECQ-M2153KZ
.018	17.0	5.5	10.0	12.5	3	0.6	P1044-ND	1.32	10.97	65.00	61.00/M	57.00/M	ECQ-M2183KZ
.022	17.0	5.5	11.0	12.5	3	0.6	P1045-ND*	1.44	12.04	72.00	67.00/M	63.00/M	ECQ-M2223KZ
.027	17.0	6.0	11.0	12.5	3	0.6	P1046-ND	1.48	12.31	73.00	68.00/M	64.00/M	ECQ-M2273KZ
.033	17.0	6.5	11.5	12.5	3	0.6	P1047-ND*	1.57	13.11	78.00	73.00/M	68.00/M	ECQ-M2333KZ
.039	17.0	6.0	13.5	12.5	3	0.6	P1048-ND	1.64	13.64	81.00	76.00/M	71.00/M	ECQ-M2393KZ
.047	17.0	6.5	14.0	12.5	3	0.6	P1049-ND*	1.67	13.91	83.00	77.00/M	72.00/M	ECQ-M2473KZ
.056	20.0	6.5	14.0	14.5	3	0.6	P1050-ND	1.80	14.98	89.00	83.00/M	78.00/M	ECQ-M2563KZ
.068	20.0	7.0	14.5	14.5	3	0.6	P1051-ND*	1.89	15.78	94.00	88.00/M	82.00/M	ECQ-M2683KZ
.082	20.0	7.5	15.0	15.0	3	0.6	P1052-ND	1.93	16.05	96.00	89.00/M	83.00/M	ECQ-M2823KZ
.1	20.0	8.0	17.0	15.0	3	0.6	P1053-ND*	2.38	19.80	118.00	110.00/M	103.00/M	ECQ-M2104KZ
.12	20.0	8.5	17.5	15.0	3	0.8	P1054-ND	2.82	23.54	141.00	131.00/M	122.00/M	ECQ-M2124KZ
.15	20.0	9.5	18.5	15.0	3	0.8	P1055-ND*	2.79	23.27	139.00	129.00/M	121.00/M	ECQ-M2154KZ
.18	23.0	13.0	22.0	18.5	3	0.8	P1056-ND	4.21	35.04	209.00	195.00/M	182.00/M	ECQ-M2184KZ
.22	23.0	14.0	23.0	18.5	3	0.8	P1057-ND*	4.21	35.04	209.00	195.00/M	182.00/M	ECQ-M2224KZ
400 WV DC													
.001	11.0	5.5	9.5	6.5	2	0.6	P1058-ND†	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4102KZ
.0012	11.0	6.0	10.0	6.5	2	0.6	P1059-ND†	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4122KZ
.0015	11.0	6.0	10.0	6.5	2	0.6	P1060-ND†	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4152KZ
.0018	11.0	6.0	10.0	6.5	2	0.6	P1061-ND†	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4182KZ
.0022	11.0	6.5	10.5	6.5	2	0.6	P1062-ND†	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4222KZ
.0027	12.0	6.0	10.0	7.5	2	0.6	P1063-ND	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4272KZ
.0033	12.0	6.5	10.5	7.5	2	0.6	P1064-ND†	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4332KZ
.0039	12.0	6.5	10.5	7.5	2	0.6	P1065-ND	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4392KZ
.0047	14.0	6.0	10.0	9.5	2	0.6	P1066-ND†	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4472KZ
.0056	14.0	6.0	10.0	9.5	2	0.6	P1067-ND	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4562KZ
.0068	14.0	6.5	10.5	9.5	3	0.6	P1068-ND†	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4682KZ
.0082	14.0	6.5	12.0	9.5	3	0.6	P1069-ND	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4822KZ
.01	14.0	7.0	12.5	9.5	3	0.6	P1070-ND†	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4103KZ
.012	17.0	6.0	12.0	12.5	3	0.6	P1071-ND	1.80	15.00	90.00	83.00/M	78.00/M	ECQ-M4123KZ
.015	17.0	6.5	12.5	12.5	3	0.6	P1072-ND†	1.80	15.00	90.00	83.00/M	78.00/M	ECQ-M4153KZ
.018	17.0	7.0	13.0	12.5	3	0.6	P1073-ND	1.92	16.00	96.00	89.00/M	83.00/M	ECQ-M4183KZ
.022	17.0	7.5	13.5	12.5	3	0.6	P1074-ND†	1.95	16.25	97.00	90.00/M	84.00/M	ECQ-M4223KZ
.027	20.0	7.0	14.5	15.0	2	0.7	P1075-ND	2.16	18.00	107.00	100.00/M	94.00/M	ECQ-M4273KZ
.033	20.0	7.5	15.0	15.0	2	0.7	P1076-ND†	2.28	19.00	113.00	106.00/M	99.00/M	ECQ-M4333KZ
.039	20.0	8.5	16.0	15.0	3	0.7	P1077-ND	2.40	20.00	119.00	111.00/M	104.00/M	ECQ-M4393KZ
.047	20.0	9.0	16.5	15.0	3	0.7	P1078-ND†	2.55	21.25	127.00	118.00/M	110.00/M	ECQ-M4473KZ
.056	23.0	8.5	15.5	18.0	3	0.7	P1079-ND	2.88	24.00	143.00	133.00/M	125.00/M	ECQ-M4563KZ
.068	23.0	9.0	16.5	18.0	3	0.7	P1080-ND†	3.12	26.00	155.00	144.00/M	135.00/M	ECQ-M4683KZ
.082	24.0	9.5	17.0	18.0	3	0.8	P1081-ND	3.42	28.50	170.00	158.00/M	148.00/M	ECQ-M4823KZ
.1	24.0	10.0	19.0	18.0	3	0.8	P1082-ND†	3.99	33.25	199.00	185.00/M	173.00/M	ECQ-M4104KZ

M200-KIT-ND** ***Digi-Key® M-Series Capacitors Kit 200 Volt Assortment. 10 each of parts indicated. Notebook style storage case and bin storage guide included. **$29.95**
†M400-KIT-ND ***Digi-Key® M-Series Capacitors Kit*** 400 Volt Assortment. 10 each of parts indicated. Notebook style storage case and bin storage guide included. **$29.95**

Panasonic® Metallized Polyester Capacitors – ECQE(C) Type



Features:
- Box-type construction (case meets UL94V-0 flame classification, meets requirements of IEC950)
- Operating temperature range: -25°C to +85°C (105°C*)

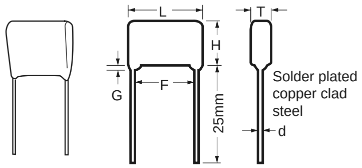
(* Requires voltage, current and pulse current de-rating)

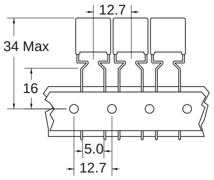
Application:
Interference suppressor for active circuits

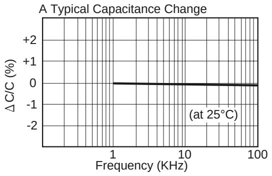
Electrical Specifications:
- Rated Voltage: 450VDC
- Capacitance Tolerance: ±10%
- Withstand Voltage: Between Terminals: 1 minute at 150% of rated voltage (The capacitor shall be applied the voltage through a resistor of 2kΩ or more when charged and discharged.) Between Terminals connected together and case: 1-5 seconds at 200% of rated voltage
- Insulation Resistance Between Terminals: 9,000 MΩ or more (when C≤0.33µF) 3,000 MΩ/µF or more (when C>0.33µF) at 100VDC±15V for 60±5 seconds, at 20°C
- Dissipation Factor: 1.0% or less (measured at a frequency of 1±0.2kHz, at 20°C)

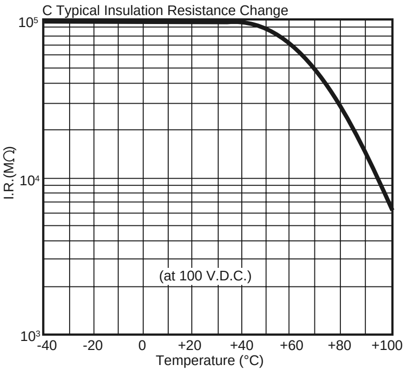
WV DC	Cap. µF	Toler-ance	Dimensions (mm)					Digi-Key Part No.	Price Each				Panasonic Part No.
			L	T	H	F	d		1	10	100	1,000	
450	.10	10%	18.5	5.5	14.5	15.0	0.6	P10755-ND	.62	.53	.44	.26	ECQ-E2W104KC
	.15	10%	18.5	6.0	16.5	15.0	0.6	P10756-ND	.75	.65	.54	.32	ECQ-E2W154KC
	.22	10%	18.5	7.0	18.0	15.0	0.6	P10757-ND	.89	.77	.64	.38	ECQ-E2W224KC
	.33	10%	18.0	9.0	17.5	15.0	0.8	P10758-ND	1.10	.94	.79	.47	ECQ-E2W334KC
	.47	10%	18.0	9.5	17.5	15.0	0.8	P10759-ND	1.30	1.12	.93	.55	ECQ-E2W474KC
	.68	10%	25.5	10.5	20.0	22.5	0.8	P10760-ND	1.77	1.53	1.27	.76	ECQ-E2W684KC
	1.0	10%	25.5	12.5	22.0	22.5	0.8	P10761-ND	2.32	2.00	1.66	.99	ECQ-E2W105KC
	1.5	10%	25.5	15.5	24.5	22.5	0.8	P10762-ND	3.07	2.64	2.20	1.31	ECQ-E2W155KC
	2.2	10%	31.0	14.0	24.5	27.5	0.8	P10763-ND	4.03	3.45	2.88	1.72	ECQ-E2W225KC

Panasonic® P-Series Polypropylene Capacitors









Features: • Wide capacitance range • Close capacitance tolerance • High insulation resistance • Low dissipation factor • Non-inductive const. • Epoxy resin coating

Applications: • Blocking, by-pass and coupling of DC and signal to UHF range • Pulse, logic and timing circuit • Light duty pulse forming network • Filter and noise suppression circuit

Electrical Specifications: • Reference Standard: EIAJ RC-3670A • Temperature Range: –40°C to +85°C • Dissipation Factor: .1% max. at 1KHz and 25°C • Withstand Voltage: 1-5 seconds at 250% of rated voltage • Insulation Resistance: 45,000 MΩ min., for values less than .33µF. 15,000 MΩ/µF min., for .33µF and greater. (Measured after a 2-minute charge at rated voltage and 25°C.)

PANASONIC ECQ-P CROSS REF.

Sprague: 715P
Westlake: 173/174
Mepco: 719E1/719H1
Secor: PFDS/PFDR
Roderstein: KP1835
Wima: FKP
CSF Thompson: PL/PS
Rubycon: PP
Nissel: APS/APA.

WV DC	Cap. µF	Toler-ance	Dimensions (mm)						Digi-Key Part No.	Pricing						Panasonic Part No.
			L	T	H	F	G	d		1	10	100	1,000	5,000	10,000	
50	.0001	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3101-ND*	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H101JZ
50	.00012	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3121-ND	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H121JZ
50	.00015	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3151-ND	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H151JZ
50	.00018	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3181-ND	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H181JZ
50	.00022	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3221-ND*	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H221JZ
50	.00027	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3271-ND	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H271JZ
50	.00033	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3331-ND*	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H331JZ
50	.00039	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3391-ND	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H391JZ
50	.00047	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3471-ND*	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H471JZ
50	.00056	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3561-ND	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H561JZ
50	.00068	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3681-ND	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H681JZ
50	.00082	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3821-ND	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H821JZ
50	.001	2%	8.5	4.5	7.5	5.0	1.0	0.5	P3102-ND*	.46	3.90	32.50	194.00	181.00/M	169.00/M	ECQ-P1H102GZ
50	.0012	2%	8.5	4.5	7.5	5.0	1.0	0.5	P3122-ND	.46	3.90	32.50	194.00	181.00/M	169.00/M	ECQ-P1H122GZ
50	.0015	2%	8.5	4.5	7.5	5.0	1.0	0.5	P3152-ND	.46	3.90	32.50	194.00	181.00/M	169.00/M	ECQ-P1H152GZ
50	.0018	2%	8.5	4.5	7.5	5.0	1.0	0.5	P3182-ND	.46	3.90	32.50	194.00	181.00/M	169.00/M	ECQ-P1H182GZ
50	.0022	2%	8.5	4.5	7.5	5.0	1.0	0.5	P3222-ND*	.46	3.90	32.50	194.00	181.00/M	169.00/M	ECQ-P1H222GZ
50	.0027	2%	8.5	4.5	7.5	5.0	1.0	0.5	P3272-ND	.46	3.90	32.50	194.00	181.00/M	169.00/M	ECQ-P1H272GZ
50	.0033	2%	8.5	4.5	7.5	5.0	1.0	0.5	P3332-ND*	.46	3.90	32.50	194.00	181.00/M	169.00/M	ECQ-P1H332GZ
50	.0039	2%	8.5	4.5	7.5	5.0	1.0	0.5	P3392-ND	.46	3.90	32.50	194.00	181.00/M	169.00/M	ECQ-P1H392GZ
50	.0047	2%	8.5	4.5	7.5	5.0	1.0	0.5	P3472-ND*	.46	3.90	32.50	194.00	181.00/M	169.00/M	ECQ-P1H472GZ
50	.0056	2%	8.5	4.5	8.0	5.0	1.0	0.5	P3562-ND	.49	4.20	35.00	209.00	194.00/M	182.00/M	ECQ-P1H562GZ
50	.0068	2%	8.5	5.0	8.0	5.0	1.0	0.5	P3682-ND	.49	4.20	35.00	209.00	194.00/M	182.00/M	ECQ-P1H682GZ
50	.0082	2%	12.0	5.5	9.0	7.5	1.0	0.6	P3822-ND	.49	4.20	35.00	209.00	194.00/M	182.00/M	ECQ-P1H822GZ
50	.01	2%	12.0	5.0	8.5	7.5	1.0	0.6	P3103-ND*	.53	4.50	37.50	224.00	208.00/M	195.00/M	ECQ-P1H103GZ
50	.012	2%	12.0	5.5	9.0	7.5	1.0	0.6	P3123-ND	.53	4.50	37.50	224.00	208.00/M	195.00/M	ECQ-P1H123GZ
50	.015	2%	12.0	5.0	9.0	7.5	1.0	0.6	P3153-ND	.53	4.50	37.50	224.00	208.00/M	195.00/M	ECQ-P1H153GZ
50	.018	2%	12.0	5.5	9.5	7.5	1.0	0.6	P3183-ND	.57	4.86	40.50	242.00	225.00/M	210.00/M	ECQ-P1H183GZ
50	.022	2%	12.0	5.5	10.5	7.5	1.0	0.6	P3223-ND*	.57	4.86	40.50	242.00	225.00/M	210.00/M	ECQ-P1H223GZ
50	.027	2%	12.0	6.0	11.0	7.5	1.0	0.6	P3273-ND	.59	5.07	42.25	252.00	235.00/M	219.00/M	ECQ-P1H273GZ
50	.033	2%	12.0	6.5	11.5	7.5	1.0	0.6	P3333-ND*	.59	5.07	42.25	252.00	235.00/M	219.00/M	ECQ-P1H333GZ
50	.039	2%	14.5	5.5	12.0	10.0	1.0	0.6	P3393-ND	.64	5.52	46.00	275.00	256.00/M	239.00/M	ECQ-P1H393GZ
50	.047	2%	14.5	6.0	12.5	10.0	1.0	0.6	P3473-ND*	.64	5.52	46.00	275.00	256.00/M	239.00/M	ECQ-P1H473GZ
50	.056	2%	14.5	6.5	13.5	10.0	1.0	0.6	P3563-ND	.72	6.15	51.25	306.00	285.00/M	266.00/M	ECQ-P1H563GZ
50	.068	2%	14.5	7.0	14.0	10.0	1.0	0.6	P3683-ND	.72	6.15	51.25	306.00	285.00/M	266.00/M	ECQ-P1H683GZ
50	.082	2%	17.0	7.0	14.0	12.5	1.0	0.6	P3823-ND	.86	7.41	61.75	369.00	343.00/M	321.00/M	ECQ-P1H823GZ
50	.1	2%	17.0	7.5	14.5	12.5	1.0	0.6	P3104-ND*	.86	7.41	61.75	369.00	343.00/M	321.00/M	ECQ-P1H104GZ
50	.12	2%	17.0	8.5	15.5	12.5	1.0	0.6	P3124-ND	1.06	9.06	75.50	451.00	419.00/M	392.00/M	ECQ-P1H124GZ
50	.15	2%	20.0	8.0	15.5	15.0	1.0	0.6	P3154-ND	1.06	9.06	75.50	451.00	419.00/M	392.00/M	ECQ-P1H154GZ
50	.18	2%	20.0	9.0	16.0	15.0	1.0	0.6	P3184-ND	1.28	11.01	91.75	548.00	510.00/M	477.00/M	ECQ-P1H184GZ
50	.22	2%	20.0	9.5	17.0	15.0	1.0	0.6	P3224-ND*	1.28	11.01	91.75	548.00	510.00/M	477.00/M	ECQ-P1H224GZ
50	.27	2%	20.0	10.5	18.0	15.0	1.0	0.6	P3274-ND	1.58	13.56	113.00	675.00	628.00/M	587.00/M	ECQ-P1H274GZ
50	.33	2%	22.5	10.0	19.5	17.5	1.0	0.8	P3334-ND*	1.58	13.56	113.00	675.00	628.00/M	587.00/M	ECQ-P1H334GZ
50	.39	2%	22.5	11.0	20.0	17.5	1.0	0.8	P3394-ND	1.89	16.20	135.00	806.00	750.00/M	701.00/M	ECQ-P1H394GZ
50	.47	2%	22.5	12.0	21.0	17.5	1.0	0.8	P3474-ND	1.89	16.20	135.00	806.00	750.00/M	701.00/M	ECQ-P1H474GZ

WV DC	Cap. µF	Toler-ance	Dimensions (mm)				Digi-Key Part No.	Tape & Box Pricing					Panasonic Part No.
			L	T	H	F	d		500	1,000	5,000	10,000	25,000	
50	.0001	5%	8.5	4.5	7.5	5.0	0.5	P3101TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H101JZ3
50	.00012	5%	8.5	4.5	7.5	5.0	0.5	P3121TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H121JZ3
50	.00015	5%	8.5	4.5	7.5	5.0	0.5	P3151TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H151JZ3
50	.00018	5%	8.5	4.5	7.5	5.0	0.5	P3181TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H181JZ3
50	.00022	5%	8.5	4.5	7.5	5.0	0.5	P3221TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H221JZ3
50	.00027	5%	8.5	4.5	7.5	5.0	0.5	P3271TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H271JZ3
50	.00033	5%	8.5	4.5	7.5	5.0	0.5	P3331TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H331JZ3
50	.00039	5%	8.5	4.5	7.5	5.0	0.5	P3391TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H391JZ3
50	.00047	5%	8.5	4.5	7.5	5.0	0.5	P3471TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H471JZ3
50	.00056	5%	8.5	4.5	7.5	5.0	0.5	P3561TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H561JZ3
50	.00068	5%	8.5	4.5	7.5	5.0	0.5	P3681TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H681JZ3
50	.00082	5%	8.5	4.5	7.5	5.0	0.5	P3821TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H821JZ3
50	.001	2%	8.5	4.5	7.5	5.0	0.5	P3102TB-ND	—	214.00	207.00/M	188.00/M	166.00/M	ECQ-P1H102GZ3
50	.0012	2%	8.5	4.5	7.5	5.0	0.5	P3122TB-ND	—	214.00	207.00/M	188.00/M	166.00/M	ECQ-P1H122GZ3
50	.0015	2%	8.5	4.5	7.5	5.0	0.5	P3152TB-ND	—	214.00	207.00/M	188.00/M	166.00/M	ECQ-P1H152GZ3
50	.0018	2%	8.5	4.5	7.5	5.0	0.5	P3182TB-ND	—	214.00	207.00/M	188.00/M	166.00/M	ECQ-P1H182GZ3
50	.0022	2%	8.5	4.5	7.5	5.0	0.5	P3222TB-ND	—	214.00	207.00/M	188.00/M	166.00/M	ECQ-P1H222GZ3
50	.0027	2%	8.5	4.5	7.5	5.0	0.5	P3272TB-ND	—	214.00	207.00/M	188.00/M	166.00/M	ECQ-P1H272GZ3
50	.0033	2%	8.5	4.5	7.5	5.0	0.5	P3332TB-ND	—	214.00	207.00/M	188.00/M	166.00/M	ECQ-P1H332GZ3
50	.0039	2%	8.5	4.5	7.5	5.0	0.5	P3392TB-ND	—	214.00	207.00/M	188.00/M	166.00/M	ECQ-P1H392GZ3
50	.0047	2%	8.5	4.5	7.5	5.0	0.5	P3472TB-ND	—	214.00	207.00/M	188.00/M	166.00/M	ECQ-P1H472GZ3
50	.0056	2%	8.5	4.5	8.0	5.0	0.5	P3562TB-ND	—	228.00	221.00/M	200.00/M	177.00/M	ECQ-P1H562GZ3
50	.0068	2%	8.5	5.0	8.0	5.0	0.5	P3682TB-ND	—	228.00	221.00/M	200.00/M	177.00/M	ECQ-P1H682GZ3
50	.0082	2%	12.0	5.5	9.0	5.0	0.6	P3822TB-ND	—	228.00	221.00/M	200.00/M	177.00/M	ECQ-P1H822GZ3
50	.01	2%	12.0	5.0	8.5	5.0	0.6	P3103TB-ND	—	245.00	237.00/M	215.00/M	190.00/M	ECQ-P1H103GZ3
50	.012	2%	12.0	5.5	9.0	5.0	0.6	P3123TB-ND	—	245.00	237.00/M	215.00/M	190.00/M	ECQ-P1H123GZ3
50	.015	2%	12.0	5.0	9.0	5.0	0.6	P3153TB-ND	—	245.00	237.00/M	215.00/M	190.00/M	ECQ-P1H153GZ3
50	.018	2%	12.0	5.5	9.5	5.0	0.6	P3183TB-ND	—	264.00	255.00/M	232.00/M	204.00/M	ECQ-P1H183GZ3
50	.022	2%	12.0	5.5	10.5	5.0	0.6	P3223TB-ND	—	264.00	255.00/M	232.00/M	204.00/M	ECQ-P1H223GZ3
50	.027	2%	12.0	6.0	11.0	5.0	0.6	P3273TB-ND	137.50	—	266.00/M	241.00/M	213.00/M	ECQ-P1H273GZ3
50	.033	2%	12.0	6.5	11.5	5.0	0.6	P3333TB-ND	137.50	—	266.00/M	241.00/M	213.00/M	ECQ-P1H333GZ3

*** P3100-KIT-ND** ***Digi-Key® P-Series Capacitors Kit*** 10 each of parts indicated. Notebook style storage and bin, storage guide included. **$69.95**

Panasonic

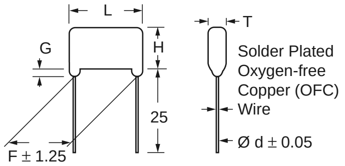
Polypropylene Film Capacitors - ECQP(U)

Non-inductive construction using Polypropylene film with flame retardant epoxy resin coating.

Features:
- Low loss and excellent frequency characteristics.
- Excellent temperature characteristics.
- High insulation resistance.

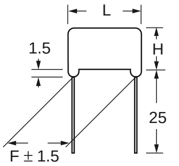
Applications:
- High frequency and high current circuits.
- General purpose circuit.

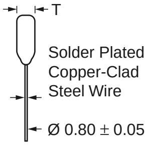
Electrical Specifications:
- Reference Standard: EIAJ RC-3670B. Characteristics P.
- Temperature Range: −40°C to +85°C. Derating of rated voltage at more than 85°C. (rated voltage x 50%).
- Capacitance Tolerance: ±5%
- Dissipation Factor: 0.1% max. at 1kHz and 20°C.
- Withstand Voltage: 1-5 seconds at 250% of rated voltage between terminals
- Insulation Resistance: 45,000 MΩ min., for values equal to or less than .33μF. 15,000 MΩ/μF min., for greater than.33μF (20°C, 100VDC, 60s).



WV DC	Cap. μF	Tolerance	Dimensions (mm)						Digi-Key Part No.	Pricing						Panasonic Part No.
			L	T	H	F	G	d		1	10	100	1,000	5,000	10,000	
400 WV	.0082	5%	19.5	6.0	11.0	15.0	1.0	0.60	P3475-ND	.49	4.20	35.00	209.00	194.00/M	182.00/M	ECQ-P4822JU
	.01	5%	19.5	6.5	11.5	15.0	1.0	0.60	P3476-ND	.51	4.35	36.25	216.00	201.00/M	188.00/M	ECQ-P4103JU
	.012	5%	19.5	6.5	13.5	15.0	1.0	0.60	P3477-ND	.53	4.50	37.50	224.00	208.00/M	195.00/M	ECQ-P4123JU
	.015	5%	19.5	6.0	13.5	15.0	1.0	0.60	P3478-ND	.55	4.71	39.25	234.00	218.00/M	204.00/M	ECQ-P4153JU
	.018	5%	19.5	6.0	13.5	15.0	1.0	0.60	P3479-ND	.57	4.86	40.50	242.00	225.00/M	210.00/M	ECQ-P4183JU
	.022	5%	19.5	6.0	13.5	15.0	1.0	0.60	P3480-ND	.59	5.04	42.00	251.00	233.00/M	218.00/M	ECQ-P4223JU
	.027	5%	19.5	6.5	14.0	15.0	1.0	0.60	P3481-ND	.60	5.16	43.00	257.00	239.00/M	223.00/M	ECQ-P4273JU
	.033	5%	19.5	7.0	15.0	15.0	1.0	0.60	P3482-ND	.62	5.34	44.50	266.00	247.00/M	231.00/M	ECQ-P4333JU
	.039	5%	19.5	7.5	16.0	15.0	1.0	0.60	P3483-ND	.64	5.46	45.50	272.00	253.00/M	236.00/M	ECQ-P4393JU
	.047	5%	19.5	8.0	17.0	15.0	1.0	0.60	P3484-ND	.70	6.03	50.25	300.00	279.00/M	261.00/M	ECQ-P4473JU
	.056	5%	24.5	7.0	16.0	20.0	1.5	0.80	P3485-ND	.76	6.54	54.50	325.00	303.00/M	283.00/M	ECQ-P4563JU
	.068	5%	24.5	7.5	16.5	20.0	1.5	0.80	P3486-ND	.82	7.02	58.50	349.00	325.00/M	304.00/M	ECQ-P4683JU
	.082	5%	24.5	8.5	17.5	20.0	1.5	0.80	P3487-ND	.88	7.53	62.75	375.00	349.00/M	326.00/M	ECQ-P4823JU
	.1	5%	24.5	9.0	18.0	20.0	1.5	0.80	P3488-ND	.94	8.07	67.25	401.00	374.00/M	349.00/M	ECQ-P4104JU
	.12	5%	24.5	10.0	19.0	20.0	1.5	0.80	P3489-ND	1.05	9.03	75.25	449.00	418.00/M	391.00/M	ECQ-P4124JU
	.15	5%	24.5	11.0	20.5	20.00	1.5	0.80	P3490-ND	1.18	10.08	84.00	501.00	467.00/M	436.00/M	ECQ-P4154JU
	.18	5%	29.5	10.5	20.0	25.00	1.5	0.80	P3491-ND	1.30	11.10	92.50	552.00	514.00/M	481.00/M	ECQ-P4184JU
	.22	5%	29.5	11.5	21.0	25.00	1.5	0.80	P3492-ND	1.38	11.82	98.50	588.00	547.00/M	512.00/M	ECQ-P4224JU
	.27	5%	29.5	13.0	22.5	25.00	1.5	0.80	P3493-ND	1.65	14.13	117.75	703.00	654.00/M	612.00/M	ECQ-P4274JU
	.33	5%	29.5	15.0	23.5	25.00	1.5	0.80	P3494-ND	1.78	15.24	127.00	758.00	706.00/M	660.00/M	ECQ-P4334JU
	.39	5%	35.0	15.0	24.0	30.00	1.5	0.80	P3495-ND	1.90	16.32	136.00	812.00	756.00/M	706.00/M	ECQ-P4394JU
	.47	5%	35.0	16.5	26.0	30.00	1.5	0.80	P3496-ND	2.03	17.40	145.00	866.00	806.00/M	753.00/M	ECQ-P4474JU
630 WV	.001	5%	14.5	5.0	10.5	10.00	1.0	0.60	P3497-ND	.42	3.60	30.00	179.00	167.00/M	156.00/M	ECQ-P6102JU
	.0012	5%	14.5	5.5	10.5	10.00	1.0	0.60	P3498-ND	.43	3.66	30.50	182.00	169.00/M	158.00/M	ECQ-P6122JU
	.0015	5%	14.5	5.5	10.5	10.00	1.0	0.60	P3499-ND	.43	3.72	31.00	185.00	172.00/M	161.00/M	ECQ-P6152JU
	.0018	5%	14.5	5.5	10.5	10.00	1.0	0.60	P3500-ND	.44	3.78	31.50	188.00	175.00/M	164.00/M	ECQ-P6182JU
	.0022	5%	14.5	5.5	10.5	10.00	1.0	0.60	P3501-ND	.45	3.84	32.00	191.00	178.00/M	166.00/M	ECQ-P6222JU
	.0027	5%	14.5	5.5	11.0	10.00	1.0	0.60	P3502-ND	.46	3.90	32.50	194.00	181.00/M	169.00/M	ECQ-P6272JU
	.0033	5%	14.5	6.0	11.5	10.00	1.0	0.60	P3503-ND	.47	4.02	33.50	200.00	186.00/M	174.00/M	ECQ-P6332JU
	.0039	5%	14.5	6.0	13.5	10.00	1.0	0.60	P3504-ND	.49	4.20	35.00	209.00	194.00/M	182.00/M	ECQ-P6392JU
	.0047	5%	14.5	6.5	13.5	10.00	1.0	0.60	P3505-ND	.51	4.35	36.25	216.00	201.00/M	188.00/M	ECQ-P6472JU
	.0056	5%	14.5	7.0	14.0	10.00	1.0	0.60	P3506-ND	.54	4.59	38.25	228.00	212.00/M	199.00/M	ECQ-P6562JU
	.0068	5%	19.5	5.5	12.0	15.00	1.0	0.60	P3507-ND	.55	4.71	39.25	234.00	218.00/M	204.00/M	ECQ-P6682JU
	.0082	5%	19.5	6.0	13.0	15.00	1.0	0.60	P3508-ND	.57	4.86	40.50	242.00	225.00/M	210.00/M	ECQ-P6822JU
	.01	5%	19.5	6.0	13.5	15.00	1.0	0.60	P3509-ND	.58	4.98	41.50	248.00	231.00/M	216.00/M	ECQ-P6103JU
	.012	5%	19.5	6.5	14.0	15.00	1.0	0.60	P3510-ND	.60	5.16	43.00	257.00	239.00/M	223.00/M	ECQ-P6123JU
	.015	5%	19.5	7.0	14.5	15.00	1.0	0.60	P3511-ND	.62	5.34	44.50	266.00	247.00/M	231.00/M	ECQ-P6153JU
	.018	5%	19.5	7.0	16.0	15.00	1.0	0.60	P3512-ND	.64	5.46	45.50	272.00	253.00/M	236.00/M	ECQ-P6183JU
	.022	5%	19.5	8.0	17.0	15.00	1.0	0.60	P3513-ND	.65	5.58	46.50	278.00	258.00/M	242.00/M	ECQ-P6223JU
	.027	5%	19.5	8.5	17.5	15.00	1.0	0.60	P3514-ND	.70	6.00	50.00	299.00	278.00/M	260.00/M	ECQ-P6273JU
	.033	5%	24.5	8.0	16.5	20.00	1.5	0.80	P3515-ND	.72	6.15	51.25	306.00	285.00/M	266.00/M	ECQ-P6333JU
	.039	5%	24.5	8.5	17.5	20.00	1.5	0.80	P3516-ND	.80	6.87	57.25	342.00	318.00/M	297.00/M	ECQ-P6393JU
	.047	5%	24.5	9.0	18.0	20.00	1.5	0.80	P3517-ND	.90	7.71	64.25	384.00	357.00/M	334.00/M	ECQ-P6473JU
	.056	5%	24.5	10.0	19.0	20.00	1.5	0.80	P3518-ND	.91	7.83	65.25	390.00	362.00/M	339.00/M	ECQ-P6563JU
	.068	5%	24.5	11.0	20.5	20.00	1.5	0.80	P3519-ND	1.01	8.67	72.25	431.00	401.00/M	375.00/M	ECQ-P6683JU
	.082	5%	29.5	10.5	20.0	25.00	1.5	0.80	P3520-ND	1.09	9.33	77.75	464.00	432.00/M	404.00/M	ECQ-P6823JU
	.1	5%	29.5	11.5	21.0	25.00	1.5	0.80	P3521-ND	1.18	10.14	84.50	504.00	469.00/M	439.00/M	ECQ-P6104JU

Panasonic Metallized Polypropylene Film Capacitors - ECWF(B)





Designed for applications where high current and high frequency are required.

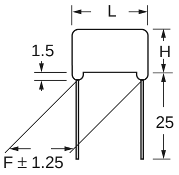
Features:
- Low-loss
- Excellent frequency characteristics
- Flame retardant epoxy resin coating

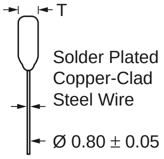
Applications:
- High frequency and high current circuits (TV, display, monitor, power supply, etc.)

Electrical Specifications:
- Temperature Range: −25°C to +85°C
- Rated Voltage: 250VDC (150Vrms, 250Vp-p)
  400VDC (200Vrms, 400Vp-p)
- Capacitance Tolerance: ±5%
- Dissipation Factor:
  .068 to .51µF: 0.05%max.(20°C, 1kHz) 250VDC
  .56 to 4.7µF: 0.1%max. (20°C, 1kHz) 250VDC
  .068 to 4.7µF: 0.2%max. (20°C, 10kHz) 250VDC
  .068 to 1.5µF: 0.1%max. (20°C, 1kHz) 400VDC
- Withstand Voltage: Between terminals.- Rated vol. (VDC) x 150% for 60s
- Insulation Resistance:
  9,000 MΩ min., for values 0.068 to .33µF
  3,000 MΩ/µF min., for 0.36 to 4.7µF (20°C, 100VDC, 60s)

WV DC	Cap. µF	Tolerance	Frequency	Dimensions (mm)				Digi-Key Part No.	Pricing					Panasonic Part No.
				L	T	H	F		1	10	100	1,000	5,000	
250 WV	.068	5%	2.3	18.0	6.0	13.0	15.0	PF2683-ND	1.77	15.15	126.25	756.00	712.00/M	ECW-F2683JB
	.082	5%	2.7	18.0	6.5	13.5	15.0	PF2823-ND	1.84	15.75	131.25	786.00	740.00/M	ECW-F2823JB
	.1	5%	3.1	18.0	7.0	14.0	15.0	PF2104-ND	1.87	16.05	133.75	801.00	755.00/M	ECW-F2104JB
	.12	5%	3.5	18.0	7.5	14.5	15.0	PF2124-ND	1.94	16.65	138.75	831.00	783.00/M	ECW-F2124JB
	.15	5%	3.9	18.0	8.5	15.0	15.0	PF2154-ND	2.06	17.64	147.00	880.00	829.00/M	ECW-F2154JB
	.18	5%	3.3	18.0	6.5	13.5	15.0	PF2184-ND	2.10	17.97	149.75	897.00	845.00/M	ECW-F2184JB
	.22	5%	3.8	18.0	7.0	14.0	15.0	PF2224-ND	2.13	18.24	152.00	910.00	858.00/M	ECW-F2224JB
	.27	5%	4.1	18.0	8.0	14.5	15.0	PF2274-ND	2.15	18.39	153.25	918.00	865.00/M	ECW-F2274JB
	.33	5%	4.4	18.0	8.5	15.0	15.0	PF2334-ND	2.17	18.60	155.00	928.00	874.00/M	ECW-F2334JB
	.39	5%	4.7	18.0	9.0	16.0	15.0	PF2394-ND	2.36	20.19	168.25	1007.00	949.00/M	ECW-F2394JB
	.47	5%	4.5	23.0	8.0	15.0	20.0	PF2474-ND	2.55	21.87	182.25	1091.00	1028.00/M	ECW-F2474JB
	.56	5%	4.8	23.0	8.5	15.5	20.0	PF2564-ND	2.68	22.98	191.50	1147.00	1080.00/M	ECW-F2564JB
	.68	5%	5.1	23.0	9.5	16.5	20.0	PF2684-ND	2.79	23.91	199.25	1193.00	1124.00/M	ECW-F2684JB
	.82	5%	5.4	23.0	10.5	17.0	20.0	PF2824-ND	2.89	24.81	206.75	1238.00	1166.00/M	ECW-F2824JB
	1.0	5%	5.7	23.0	11.5	18.0	20.0	PF2105-ND	2.94	25.17	209.75	1256.00	1183.00/M	ECW-F2105JB
	1.2	5%	6.0	23.0	12.5	19.5	20.0	PF2125-ND	3.06	26.25	218.75	1310.00	1234.00/M	ECW-F2125JB
	1.5	5%	6.4	23.0	14.0	21.0	20.0	PF2155-ND	3.40	29.16	243.00	1455.00	1371.00/M	ECW-F2155JB
	1.8	5%	6.7	28.0	12.5	21.0	25.0	PF2185-ND	3.83	32.85	273.75	1639.00	1544.00/M	ECW-F2185JB
	2.2	5%	7.1	28.0	14.0	22.5	25.0	PF2225-ND	4.60	39.39	328.25	1966.00	1852.00/M	ECW-F2225JB
	2.7	5%	7.3	28.0	15.5	24.0	25.0	PF2275-ND	5.11	43.77	364.75	2184.00	2058.00/M	ECW-F2275JB
	3.3	5%	7.9	28.0	17.0	26.0	25.0	PF2335-ND	5.52	47.28	394.00	2359.00	2223.00/M	ECW-F2335JB
	3.9	5%	8.1	33.0	16.5	25.5	30.0	PF2395-ND	5.86	50.22	418.50	2506.00	2361.00/M	ECW-F2395JB
	4.7	5%	8.5	33.0	18.0	27.0	30.0	PF2475-ND	6.33	54.27	452.25	2708.00	2551.00/M	ECW-F2475JB
400 WV	.068	5%	2.3	18.0	6.5	13.0	15.0	PF4683-ND	1.80	15.45	121.03	772.50	721.00/M	ECW-F4683JB
	.082	5%	2.7	18.0	7.0	13.5	15.0	PF4823-ND	1.83	15.72	123.14	786.00	733.60/M	ECW-F4823JB
	.1	5%	3.1	18.0	7.5	14.0	15.0	PF4104-ND	1.87	15.99	125.26	799.50	746.20/M	ECW-F4104JB
	.12	5%	3.5	18.0	8.0	15.0	15.0	PF4124-ND	1.92	16.47	129.02	823.50	768.60/M	ECW-F4124JB
	.15	5%	3.9	18.0	8.5	15.5	15.0	PF4154-ND	2.00	17.13	134.19	856.50	799.40/M	ECW-F4154JB
	.18	5%	4.2	18.0	9.5	16.5	15.0	PF4184-ND	2.02	17.28	135.36	864.00	806.40/M	ECW-F4184JB
	.22	5%	4.4	20.0	9.5	16.5	17.0	PF4224-ND	2.05	17.61	137.95	880.50	821.80/M	ECW-F4224JB
	.27	5%	4.7	20.0	10.5	17.0	17.0	PF4274-ND	2.14	18.36	143.82	918.00	856.80/M	ECW-F4274JB
	.33	5%	5.0	20.0	11.5	18.0	17.0	PF4334-ND	2.37	20.28	158.86	1014.00	946.40/M	ECW-F4334JB
	.39	5%	5.3	23.0	13.5	20.5	20.0	PF4394-ND	2.57	21.99	172.26	1099.50	1026.20/M	ECW-F4394JB
	.47	5%	5.9	23.0	14.5	21.5	20.0	PF4474-ND	2.78	23.82	186.59	1191.00	1111.60/M	ECW-F4474JB
	.56	5%	6.1	23.0	13.0	20.0	20.0	PF4564-ND	2.92	25.02	195.99	1251.00	1167.60/M	ECW-F4564JB
	.68	5%	6.5	23.0	14.5	21.5	20.0	PF4684-ND	3.03	26.01	203.75	1300.50	1213.80/M	ECW-F4684JB
	.82	5%	6.8	28.0	14.0	20.5	25.0	PF4824-ND	3.15	27.00	211.50	1350.00	1260.00/M	ECW-F4824JB
	1.0	5%	7.0	28.0	15.0	22.0	25.0	PF4105-ND	3.20	27.42	214.79	1371.00	1279.60/M	ECW-F4105JB
	1.2	5%	7.4	28.0	16.5	23.5	25.0	PF4125-ND	3.34	28.62	224.19	1431.00	1335.60/M	ECW-F4125JB
	1.5	5%	7.8	28.0	18.5	25.5	25.0	PF4155-ND	3.71	31.77	248.87	1588.50	1482.60/M	ECW-F4155JB

Panasonic High Voltage Metallized Polypropylene Film Capacitors - ECWH(V)





Designed for applications where high frequency and high pulse are required.

Features:
- Low-loss and inherent temperature rise
- Excellent electrical characteristics
- Flame-retardant epoxy resin coating

Recommended Applications:
- High pulse circuits (TV, displays, electronic ballast, etc.)

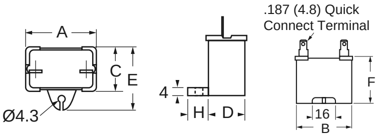
Electrical Specifications:
- Temperature Range: −25°C to +85°C
- Rated Voltage: 1250Vdc
  1600Vdc
- Capacitance Tolerance: ±5%
- Dissipation Factor: 0.1% or less at 1kHz
  0.2% or less at 10kHz
- Withstand Voltage:
  Between terminals - Rated vol. (VDC) x 150% for 60s
  Terminal to Enclosure - 1500Vac for 60s
- Insulation Resistance: 30,000 MΩ min., at 500Vdc, 20° for 60s

WV DC	Cap. µF	Tolerance	Dimensions (mm)				Digi-Key Part No.	Pricing						Panasonic Part No.
			L	T	H	F		1	10	100	1,000	5,000	10,000	
1250 WV	.0010	5%	18.0	6.5	13.5	15.0	P10470-ND	.86	7.41	58.05	370.50	345.80/M	321.10/M	ECW-H12102JV
	.0012	5%	18.0	7.0	13.5	15.0	P10471-ND	.86	7.41	58.05	370.50	345.80/M	321.10/M	ECW-H12122JV
	.0015	5%	18.0	6.5	13.5	15.0	P10472-ND	.91	7.77	60.87	388.50	362.60/M	336.70/M	ECW-H12152JV
	.0018	5%	18.0	7.0	14.0	15.0	P10473-ND	.91	7.77	60.87	388.50	362.60/M	336.70/M	ECW-H12182JV
	.0022	5%	18.0	6.5	13.5	15.0	P10474-ND	.94	8.07	63.22	403.50	376.60/M	349.70/M	ECW-H12222JV
	.0027	5%	18.0	7.0	14.0	15.0	P10475-ND	.97	8.34	65.33	417.00	389.20/M	361.40/M	ECW-H12272JV
	.0033	5%	18.0	7.5	14.5	15.0	P10476-ND	1.00	8.58	67.21	429.00	400.40/M	371.80/M	ECW-H12332JV
	.0039	5%	18.0	6.0	12.5	15.0	P10477-ND	1.00	8.58	67.21	429.00	400.40/M	371.80/M	ECW-H12392JV
	.0047	5%	18.0	6.0	13.0	15.0	P10478-ND	1.00	8.58	67.21	429.00	400.40/M	371.80/M	ECW-H12472JV
	.0056	5%	18.0	6.5	13.5	15.0	P10479-ND	1.04	8.91	69.80	445.50	415.80/M	386.10/M	ECW-H12562JV
	.0068	5%	18.0	7.0	13.5	15.0	P10480-ND	1.16	9.90	77.55	495.00	462.00/M	429.00/M	ECW-H12682JV
	.0082	5%	18.0	7.5	14.0	15.0	P10481-ND	1.21	10.38	81.31	519.00	484.40/M	449.80/M	ECW-H12822JV
	.010	5%	18.0	8.0	15.0	15.0	P10482-ND	1.24	10.65	83.43	532.50	497.00/M	461.50/M	ECW-H12103JV
	.012	5%	18.0	8.5	15.5	15.0	P10483-ND	1.30	11.16	87.42	558.00	520.80/M	483.60/M	ECW-H12123JV
	.015	5%	18.0	9.5	16.0	15.0	P10484-ND	1.44	12.30	96.35	615.00	574.00/M	533.00/M	ECW-H12153JV
	.018	5%	23.0	7.5	16.0	20.0	P10485-ND	1.60	13.68	107.16	684.00	638.40/M	592.80/M	ECW-H12183JV
	.022	5%	23.0	8.5	16.5	20.0	P10486-ND	1.74	14.91	116.80	745.50	695.80/M	646.10/M	ECW-H12223JV
	.027	5%	23.0	9.0	17.5	20.0	P10487-ND	2.11	18.12	141.94	906.00	845.60/M	785.20/M	ECW-H12273JV
	.033	5%	23.0	10.0	18.5	20.0	P10488-ND	2.26	19.35	151.58	967.50	903.00/M	838.50/M	ECW-H12333JV
	.039	5%	23.0	10.5	19.5	20.0	P10489-ND	2.43	20.79	162.86	1039.50	970.20/M	900.90/M	ECW-H12393JV
	.047	5%	23.0	11.5	20.5	20.0	P10490-ND	2.73	23.37	183.07	1168.50	1090.60/M	1012.70/M	ECW-H12473JV
	.056	5%	28.0	11.5	20.5	25.0	P10491-ND	2.93	25.11	196.70	1255.50	1171.80/M	1088.10/M	ECW-H12563JV
	.068	5%	28.0	12.5	21.5	25.0	P10492-ND	3.34	28.65	224.43	1432.50	1337.00/M	1241.50/M	ECW-H12683JV
	.082	5%	28.0	14.0	22.5	25.0	P10493-ND	4.68	40.14	314.43	2007.00	1873.20/M	1739.40/M	ECW-H12823JV
	.10	5%	28.0	15.5	24.0	25.0	P10494-ND	5.58	47.79	374.36	2389.50	2230.20/M	2070.90/M	ECW-H12104JV
1600 WV	.0010	5%	18.0	6.5	13.5	15.0	P10495-ND	.99	8.49	66.51	424.50	396.20/M	367.90/M	ECW-H16102JV
	.0012	5%	18.0	7.0	13.5	15.0	P10496-ND	.99	8.49	66.51	424.50	396.20/M	367.90/M	ECW-H16122JV
	.0015	5%	18.0	6.5	13.5	15.0	P10497-ND	.99	8.49	66.51	424.50	396.20/M	367.90/M	ECW-H16152JV
	.0018	5%	18.0	7.0	14.0	15.0	P10498-ND	.99	8.49	66.51	424.50	396.20/M	367.90/M	ECW-H16182JV
	.0022	5%	18.0	6.0	12.5	15.0	P10499-ND	.99	8.49	66.51	424.50	396.20/M	367.90/M	ECW-H16222JV
	.0027	5%	18.0	6.0	13.0	15.0	P10500-ND	1.02	8.73	68.39	436.50	407.40/M	378.30/M	ECW-H16272JV
	.0033	5%	18.0	6.5	13.5	15.0	P10501-ND	1.09	9.33	73.09	466.50	435.40/M	404.30/M	ECW-H16332JV
	.0039	5%	18.0	7.0	14.0	15.0	P10502-ND	1.16	9.90	77.55	495.00	462.00/M	429.00/M	ECW-H16392JV
	.0047	5%	23.0	6.5	14.5	20.0	P10503-ND	1.20	10.32	80.84	516.00	481.60/M	447.20/M	ECW-H16472JV
	.0056	5%	23.0	6.5	15.0	20.0	P10504-ND	1.23	10.56	82.72	528.00	492.80/M	457.60/M	ECW-H16562JV
	.0068	5%	23.0	7.0	15.5	20.0	P10505-ND	1.27	10.86	85.07	543.00	506.80/M	470.60/M	ECW-H16682JV
	.0082	5%	23.0	7.5	16.0	20.0	P10506-ND	1.37	11.73	91.89	586.50	547.40/M	508.30/M	ECW-H16822JV
	.010	5%	23.0	8.0	16.5	20.0	P10507-ND	1.44	12.36	96.82	618.00	576.80/M	535.60/M	ECW-H16103JV
	.012	5%	23.0	9.0	17.0	20.0	P10508-ND	1.55	13.29	104.11	664.50	620.20/M	575.90/M	ECW-H16123JV
	.015	5%	23.0	9.5	18.0	20.0	P10509-ND	1.85	15.87	124.32	793.50	740.60/M	687.70/M	ECW-H16153JV
	.018	5%	23.0	10.5	19.5	20.0	P10510-ND	2.06	17.67	138.42	883.50	824.60/M	765.70/M	ECW-H16183JV
	.022	5%	28.0	9.5	18.0	25.0	P10511-ND	2.23	19.14	149.93	957.00	893.20/M	829.40/M	ECW-H16223JV
	.027	5%	28.0	10.5	19.5	25.0	P10512-ND	2.73	23.37	183.07	1168.50	1090.60/M	1012.70/M	ECW-H16273JV
	.033	5%	28.0	11.5	20.5	25.0	P10513-ND	2.91	24.93	195.29	1246.50	1163.40/M	1080.30/M	ECW-H16333JV
	.039	5%	28.0	13.5	22.0	25.0	P10514-ND	3.13	26.82	210.09	1341.00	1251.60/M	1162.20/M	ECW-H16393JV
	.047	5%	28.0	15.0	23.5	25.0	P10515-ND	3.55	30.39	238.06	1519.50	1418.20/M	1316.90/M	ECW-H16473JV
	.056	5%	28.0	16.0	24.5	25.0	P10516-ND	3.81	32.64	255.68	1632.00	1523.20/M	1414.40/M	ECW-H16563JV

Panasonic® Dry Film AC Capacitors

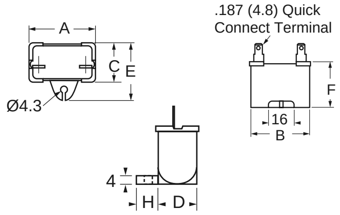
Stack Type

Panasonic's "stack type" construction offers significant reduction in case size (compared to oil-filled can type) with a built-in mounting foot. **Features:** • Compact size compared to oil-filled type capacitors. • 0.187 inch (4.75mm) terminals standard (0.250 inch [6.35mm] available). • 180, 200, 230 are standard voltages. • U.L. 810 (File # E76560) and C.S.A listed. (CSA-C22.2 No. 0-M91 File # LR99617) • JIS standard is available. (JIS C 4908). • Primary applications: refrigeration, motor run, lighting, etc. • Flame retardant plastic case is rated 94 V-0.



Wound Type

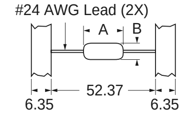
Panasonic's "wound type" construction brings dry film technology to higher voltage and microfarad applications, not available from our "stack type" construction. **Features:** • Replacement for typical oil-filled aluminum or plastic can capacitor. • Compact size —ideal where space is a premium. • Built-in mounting bracket eliminates need for mounting strap. • Meets U.L. 810 (File #E76560). • Primary applications: motor run, lighting, etc. • Terminals: 0.187 inch (4.75mm).



Voltage VAC	Cap. µF	Dimensions A	B	C	D	E	F	H	Digi-Key Part No	Pricing 1	10	100	500	Panasonic Part No.
									Stack Type - SQ Case					
180	7.5	39.5	38.0	17.5	16.0	28.0	30.5	11.0	P9400-ND	3.38	27.00	229.50	1012.50	JSU18X755AQF
180	10	39.5	38.0	22.0	20.5	32.5	30.5	11.0	P9401-ND	4.03	32.20	273.70	1207.50	JSU18X106AQJ
180	12	39.5	38.0	22.0	20.5	34.2	32.0	13.0	P9402-ND	4.50	36.00	306.00	1350.00	JSU18X126AQH
180	15	39.5	38.0	26.7	25.2	37.0	32.0	11.0	P9403-ND	5.03	40.20	341.70	1507.50	JSU18X156AQP
180	20	39.5	38.0	26.7	25.2	37.0	41.0	11.0	P9404-ND	6.43	51.40	436.90	1927.50	JSU18X206AQD
210	10	39.5	38.0	22.0	20.5	34.2	32.0	13.0	P9405-ND	4.15	33.20	282.20	1245.00	JSU21X106AQB
210	12	39.5	38.0	26.7	25.2	37.0	32.0	11.0	P9406-ND	4.65	37.20	316.20	1395.00	JSU21X126AQE
210	15	39.5	38.0	26.7	25.2	37.0	32.0	11.0	P9407-ND	5.58	44.60	379.10	1672.50	JSU21X156AQH
230	10	39.5	38.0	22.0	20.5	34.2	32.0	13.0	P9408-ND	4.88	39.00	331.50	1462.50	JSU23X106AQC
230	12	39.5	38.0	26.7	25.2	37.0	32.0	11.0	P9409-ND	5.38	43.00	365.50	1612.50	JSU23X126AQE
230	15	39.5	38.0	26.7	25.2	37.0	41.0	11.0	P9410-ND	6.95	55.60	472.60	2085.00	JSU23X156AQE
									Wound Type - Q Case					
250	10	49.7	48.3	24.0	22.5	34.5	34.5	11.5	P9411-ND	6.68	53.40	453.90	2002.50	SPU25X106AQSD
250	12	50.0	48.5	26.7	25.3	37.5	38.0	11.5	P9412-ND	7.60	60.80	516.80	2280.00	SPU25X126AQSA
250	15	50.0	48.5	30.5	28.8	41.0	36.0	11.5	P9413-ND	8.98	71.80	610.30	2692.50	SPU25X156AQSA

BEYSCHLAG
CENTRALAB
COMPONENTS

Axial Ceramic Capacitors



Taped and Reeled per EIA RS-296E

Size Code	A	B
15	3.81mm Max	2.54mm Max
20	5.08mm Max	3.05mm Max
29	7.37mm Max	3.81mm Max

MECHANICAL PARAMETERS:

Terminal Strength: 2.2 Kg (5 lbs) Minimum pull to destruction, per Method B5 of RS-198-CII, Test Condition A.

Lead Materials: #24 AWG (.020" ±0.001") Tinned, Copper Clad Steel. 30% Conductivity. Temper: Soft; Tensile Strength: 65000 PSI Max.

Body: Conformally coated Epoxy.

ELECTRICAL PARAMETERS:

Capacitance: Measured @ 1Mhz @ 1.0 ±0.2 VRMS @ 25°C for C0G types with C ≤1000pF. Measured @ Khz @ 1.0 ±0.2 VRMS @ 25°C for C0G types with C >1000pF. Measured @ 1Khz @ 1.0 VRMS ±.2 VRMS @ 25°C for X7R types. Measure @ 1Khz @ .5 VRMS ±.1 VRMS @ 25°C for Z5U types.

Dissipation Factor: .1% Maximum for C0G types, 2.5% Maximum for X7R types and 4.0% for Z5U types; measurement conditions are the same as for capacitance measurement.

Dielectric Strength: Parts are subjected for up to 5 seconds @ 25°C to 250% of Rated Voltage and will exhibit no evidence of breakdown.

Insulation Resistance: When measured @ 25°C and Rated Voltage, the following Minimum Values will be met: 100K MegΩ or 1000 MegΩ x µF (whichever is less) for C0G and X7R types, 10K MegΩ or 1000 MegΩ x µF (whichever is less) for Z5U types.

Body Insulation: 500VDC Minimum, in accordance with RS-198-CII.

Operating Temperature Range: -55°C to +125°C for C0G, -55°C to +125°C for X7R, -55°C to +85°C for Z5U

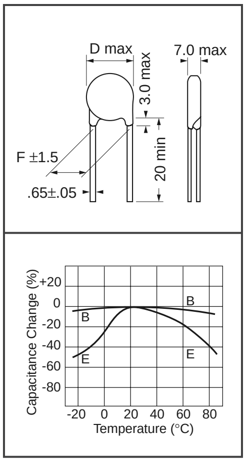
Packaging: Mono-Axial parts are supplied in tape and reel and form per EIA RS-296.

Type	Volt.	Cap.	Cap. Tol.(%)	Size Code	Digi-Key Part No.	Cut Tape Pricing 10	100	1,000	Digi-Key Part No.	Tape & Reel Size	Price	BC Components Part No.
COG	100V	10pf	±5	15	1011PHCT-ND	1.91	13.81	95.63	1011PHTR-ND	5,000	63.75/M	A100J15C0GHVVWA
		15pf	±5	15	1012PHCT-ND	1.91	13.81	95.63	1012PHTR-ND	5,000	63.75/M	A150J15C0GHVVWA
		18pf	±5	15	1013PHCT-ND	1.91	13.81	95.63	1013PHTR-ND	5,000	63.75/M	A180J15C0GHVVWA
		22pf	±5	15	1014PHCT-ND	1.91	13.81	95.63	1014PHTR-ND	5,000	63.75/M	A220J15C0GHVVWA
		27pf	±5	15	1015PHCT-ND	1.91	13.81	95.63	1015PHTR-ND	5,000	63.75/M	A270J15C0GHVVWA
		33pf	±5	15	1016PHCT-ND	1.91	13.81	95.63	1016PHTR-ND	5,000	63.75/M	A330J15C0GHVVWA
		47pf	±5	15	1017PHCT-ND	1.95	14.11	97.65	1017PHTR-ND	5,000	65.10/M	A470J15C0GHVVWA
		68pf	±5	15	1018PHCT-ND	1.99	14.37	99.45	1018PHTR-ND	5,000	66.30/M	A680J15C0GH5TAA
		82pf	±5	15	1019PHCT-ND	2.03	14.63	101.25	1019PHTR-ND	5,000	67.50/M	A820J15C0GHVVWA
	50V	100pf	±5	15	1001PHCT-ND	2.03	14.63	101.25	1001PHTR-ND	5,000	67.50/M	A101J15C0GFVVWA
		150pf	±5	15	1002PHCT-ND	2.14	15.47	107.10	1002PHTR-ND	5,000	71.40/M	A151J15C0GFVVWA
		180pf	±5	15	1003PHCT-ND	2.14	15.47	107.10	1003PHTR-ND	5,000	71.40/M	A181J15C0GFVVWA
		220pf	±5	15	1004PHCT-ND	2.14	15.47	107.10	1004PHTR-ND	5,000	71.40/M	A221J15C0GFVVWA
		330pf	±5	15	1005PHCT-ND	2.14	15.47	107.10	1005PHTR-ND	5,000	71.40/M	A331J15C0GFVVWA
		390pf	±5	15	1006PHCT-ND	2.14	15.47	107.10	1006PHTR-ND	5,000	71.40/M	A391J15C0GFVVWA
		470pf	±5	15	1007PHCT-ND	2.14	15.47	107.10	1007PHTR-ND	5,000	71.40/M	A471J15C0GFVVWA
		560pf	±5	15	1008PHCT-ND	2.14	15.47	107.10	1008PHTR-ND	5,000	71.40/M	A561J15C0GFVVWA
		680pf	±5	15	1009PHCT-ND	2.14	15.47	107.10	1009PHTR-ND	5,000	71.40/M	A681J15C0GFVVWA
		1000pf	±5	15	1010PHCT-ND	2.37	17.13	118.58	1010PHTR-ND	5,000	79.05/M	A102J15C0GFVVWA
X7R	100V	220pf	±10	15	1110PHCT-ND	1.84	13.26	91.80	1110PHTR-ND	5,000	61.20/M	A221K15X7RHVVWA
		270pf	±10	15	1111PHCT-ND	1.84	13.26	91.80	1111PHTR-ND	5,000	61.20/M	A271K15X7RHVVWA
		330pf	±10	15	1112PHCT-ND	1.84	13.26	91.80	1112PHTR-ND	7,000	61.20/M	A331K15X7RHVVWA
		470pf	±10	15	1113PHCT-ND	1.84	13.26	91.80	1113PHTR-ND	5,000	61.20/M	A471K15X7RHVVWA
		680pf	±10	15	1114PHCT-ND	1.84	13.26	91.80	1114PHTR-ND	5,000	61.20/M	A681K15X7RHVVWA
		820pf	±10	15	1115PHCT-ND	1.84	13.26	91.80	1115PHTR-ND	5,000	61.20/M	A821K15X7RHVVWA
		.001µf	±10	15	1116PHCT-ND	1.84	13.26	91.80	1116PHTR-ND	5,000	61.20/M	A102K15X7RHVVWA
		.0012µf	±10	15	1117PHCT-ND	1.84	13.26	91.80	1117PHTR-ND	5,000	61.20/M	A122K15X7RHVVWA
		.0015µf	±10	15	1118PHCT-ND	1.84	13.26	91.80	1118PHTR-ND	5,000	61.20/M	A152K15X7RHVVWA
		.0022µf	±10	15	1119PHCT-ND	1.84	13.26	91.80	1119PHTR-ND	5,000	61.20/M	A222K15X7RHVVWA
	50V	.0033µf	±10	15	1101PHCT-ND	1.87	13.52	93.60	1101PHTR-ND	5,000	62.40/M	A332K15X7RFVVWA
		.0047µf	±10	15	1102PHCT-ND	1.87	13.52	93.60	1102PHTR-ND	5,000	62.40/M	A472K15X7RFVVWA
		.01µf	±10	15	1103PHCT-ND	1.19	8.58	59.40	1103PHTR-ND	5,000	39.60/M	A103K15X7RFVVWA
		.015µf	±10	15	1104PHCT-ND	2.14	15.47	107.10	1104PHTR-ND	5,000	71.40/M	A153K15X7RFVVWC
		.022µf	±10	15	1105PHCT-ND	2.37	17.13	118.58	1105PHTR-ND	5,000	79.05/M	A223K15X7RFVVWE
		.033µf	±10	15	1106PHCT-ND	2.57	18.53	128.25	1106PHTR-ND	5,000	85.50/M	A333K15X7RFVVWG
		.047µf	±10	20	1107PHCT-ND	2.64	19.08	132.08	1107PHTR-ND	5,000	88.05/M	A473K20X7RFVVWJ
		.056µf	±10	20	1108PHCT-ND	2.87	20.74	143.55	1108PHTR-ND	5,000	95.70/M	A563K20X7RFVVWK
		.1µf	±10	29	1109PHCT-ND	3.44	24.86	172.13	1109PHTR-ND	5,000	114.75/M	A104K20X7RFVVWN
Z5U	50V	.01µf	±20	15	1206PHCT-ND	1.15	8.29	57.38	1206PHTR-ND	5,000	38.25/M	A103M15Z5UFVVWA
		.01µf	+80, -20	15	1201PHCT-ND	1.15	8.29	57.38	1201PHTR-ND	5,000	38.25/M	A103Z15Z5UFVVWA
		.022µf	±20	15	1207PHCT-ND	1.38	9.95	68.85	1207PHTR-ND	5,000	45.90/M	A223M15Z5UFVVWE
		.033µf	±20	15	1208PHCT-ND	1.38	9.95	68.85	1208PHTR-ND	5,000	45.90/M	A333M15Z5UFVVWG
		.047µf	±20	15	1209PHCT-ND	1.45	10.50	72.68	1209PHTR-ND	5,000	48.45/M	A473M15Z5UFVVWJ
		.047µf	+80, -20	15	1202PHCT-ND	1.38	9.95	68.85	1202PHTR-ND	5,000	45.90/M	A473Z15Z5UFVVWJ
		.1µf	±20	15	1210PHCT-ND	1.15	8.29	57.38	1210PHTR-ND	5,000	38.25/M	A104M15Z5UFVVWN
		.1µf	+80, -20	15	1203PHCT-ND	1.15	8.29	57.38	1203PHTR-ND	5,000	38.25/M	A104Z15Z5UFVVWN
		.22µf	±20	20	1211PHCT-ND	3.02	21.84	151.20	1211PHTR-ND	5,000	100.80/M	A224M20Z5UFVVWT
		.22µf	+80, -20	20	1204PHCT-ND	2.95	21.29	147.38	1204PHTR-ND	7,000	98.25/M	A224Z20Z5UFVVWT
		.27µf	+80, -20	29	1212PHCT-ND	2.95	21.29	147.38	1212PHTR-ND	5,000	98.25/M	A274Z20Z5UFVVWV
		.33µf	±20	29	1213PHCT-ND	3.06	22.10	153.00	1213PHTR-ND	5,000	102.00/M	A334M20Z5UFVVWW
		.33µf	+80, -20	29	1205PHCT-ND	2.98	21.55	149.18	1205PHTR-ND	5,000	99.45/M	A334Z20Z5UFVVWW
		.47µf	+80, -20	29	1214PHCT-ND	5.70	41.18	285.08	1214PHTR-ND	5,000	190.05/M	A474Z20Z5UFVVWY

Panasonic

Ceramic Disc Capacitors for Safety Regulations – Type RS

(IEC384-14 2nd Ed. Sub-Class Y2/X1)



The Type RS is recognized by UL and CSA (UL1414 and CSA C22.2 No. 1).

SPECIFICATIONS:

- **Operating Temperature Range:** -25°C to 85°C
- **Rated Voltage:**

Applicable Standards	Rated Voltage
UL, CSA	125 VAC
IEC 384-14 2nd Ed. (EN 132 400) Sub-Class Y2	250 VAC
IEC 384-14 2nd Ed. (EN 132 400) Sub-Class X1	400 VAC
IEC 65 5th Ed.: 1985 BSI (BS415: 1990), VDE 560-2, SEV1016	400 VAC

- **Dielectric Withstanding Voltage:** 2600 VAC (50/60 Hz) for 1 minute
- **Capacitance:** Within the tolerance, when measured at 1 kHz ± 20%, 1 Vrms and 20°C
- **Dissipation Factor (tan δ):** 0.025 max., when measured at 1 kHz ± 20%, 1 Vrms and 20°C
- **Insulation Resistance:** 10,000 MΩ min. at 500 VDC and 1 minute electrification

Temperature Characteristics:

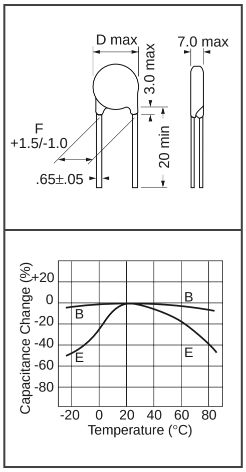
Temp. Char.	Cap. Change	Temp. Range
B/Y5P/2B4	±10% Max.	-25°C to 85°C
E/Y5U/2E4	+20/-55% Max.	-25°C to 85°C
The reference temperature: 20°C		

Nominal Cap. (pF)	Cap. Tol. (%)	Temp. Char.	Dimensions (mm) D	Dimensions (mm) F	Digi-Key Part No.	Pricing 5	Pricing 10	Pricing 100	Panasonic Part No.
100	±20	B	9.5	7.5	P10430-ND	2.23	3.29	23.50	ECK-DRS101MBY
150	±20	B	9.5	7.5	P10431-ND	2.23	3.29	23.50	ECK-DRS151MBY
220	±20	B	9.5	7.5	P10432-ND	2.23	3.29	23.50	ECK-DRS221MBY
470	±20	B	9.5	7.5	P10433-ND	2.23	3.29	23.50	ECK-DRS471MBY
1000	±20	B	10.0	7.5	P10434-ND	2.71	3.99	28.50	ECK-DRS102MBY
1500	±20	E	10.0	7.5	P10435-ND	3.42	5.04	36.00	ECK-DRS152MEY
2200	±20	E	10.5	7.5	P10439-ND	3.46	5.15	37.84	ECK-DRS222MEY
3300	±20	E	12.5	7.5	P10440-ND	3.98	5.92	43.48	ECK-DRS332MEY
4700	±20	E	16.5	10.0	P10441-ND	4.58	6.82	50.06	ECK-DRS472MEY

Panasonic

Ceramic Disc Capacitors for Safety Regulations – Type NS-A

(IEC384-14 2nd Ed. Sub-Class Y1)



Class II Equipment. The Type NS-A is recognized by UL and CSA (UL1414/250 VAC and CSA C22.2 No. 1).

SPECIFICATIONS:

- **Operating Temperature Range:** -25°C to 85°C
- **Rated Voltage:**

Applicable Standards	Rated Voltage
UL	250 VAC
CSA	125 VAC
IEC 384-14 2nd Ed. (EN 132 400) Sub-Class Y1	250 VAC
SEV 1016 (3300 to 4700 pF)	250 VAC
BSI (BS415: 1990), VDE 560-2, SEV1016 (100 to 2200 pF)	400 VAC

- **Dielectric Withstanding Voltage:** 4000 VAC (50/60 Hz) for 1 minute
- **Capacitance:** Within the tolerance, when measured at 1 kHz ± 20%, 1 Vrms and 20°C
- **Dissipation Factor (tan δ):** 0.025 max., when measured at 1 kHz ± 20%, 1 Vrms and 20°C
- **Insulation Resistance:** 10,000 MΩ min. at 500 VDC and 1 minute electrification

Temperature Characteristics:

Temp. Char.	Cap. Change	Temp. Range
B/Y5P/2B4	±10% Max.	-25°C to 85°C
E/Y5U/2E4	+20/-55% Max.	-25°C to 85°C
The reference temperature: 20°C		

Nominal Cap. (pF)	Cap.Tol. (%)	Temp. Char.	Dimensions (mm) D	Dimensions (mm) F	Digi-Key Part No.	Pricing 5	Pricing 10	Pricing 100	Panasonic Part No.
100	±20	B	11.0	10.0	P10446-ND	3.42	5.04	36.00	ECK-DNA101MB
150	±20	B	11.0	10.0	P10447-ND	3.42	5.04	36.00	ECK-DNA151MB
220	±20	B	11.0	10.0	P10448-ND	3.48	5.18	38.07	ECK-DNA221MB
470	±20	B	11.0	10.0	P10449-ND	3.48	5.18	38.07	ECK-DNA471MB
1000	±20	B	11.0	10.0	P10450-ND	3.89	5.79	42.54	ECK-DNA102MB
1500	±20	E	11.0	10.0	P10451-ND	4.30	6.40	47.00	ECK-DNA152ME
2200	±20	E	11.0	10.0	P10452-ND	4.86	7.23	53.11	ECK-DNA222ME
3300	±20	E	13.0	10.0	P10453-ND	5.61	8.35	61.34	ECK-DNA332ME
4700	±20	E	16.0	10.0	P10454-ND	6.30	9.38	68.86	ECK-DNA472ME

Panasonic

Ceramic Disc Capacitors for Safety Regulations – Type TS

(IEC384-14 2nd Ed. Sub-Class Y2/X1)

Fig. 1

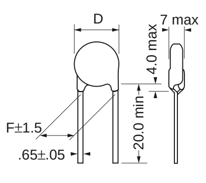
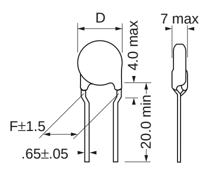
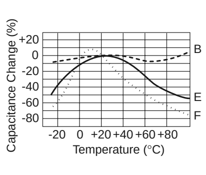


Fig. 2





Approved by UL and CSA for rated voltage 250 VAC.

RECOMMENDED APPLICATIONS:
Noise suppression circuit for switching power supply.

SPECIFICATIONS:

- **Operating Temperature Range:** –25°C to 125°C
- **Rated Voltage:** 250 VAC
- **Voltage Proof:** 2600 VAC for 1 minute
- **Capacitance:** Within the tolerance, when measured at 1 kHz±20%, 1 Vrms and 20ºC
- **Dissipation Factor (tan δ):** 0.025 max., when measured at 1 kHz ± 20%, 1 Vrms and 20°C
- **Insulation Resistance:** 10,000 MΩ min. at 500 VDC and 1 minute electrification
- **Temperature Characteristics:**

Temp. Char.	Cap. Change	Temp. Range
B/Y5P/2B4	±10% Max.	-25°C to 85°C
E/Y5U/2E4	+20/-55% Max.	-25°C to 85°C
F/Y5V/2F4	+30/-80% Max.	-25°C to 85°C
The reference temperature: 20°C		

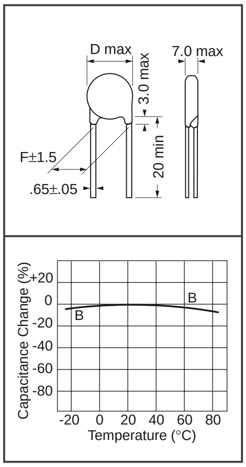
Fig.	Nominal Cap. (pF)	Cap. Tol. (%)	Temp. Char.	Dimensions (mm) D ± 1.0	Dimensions (mm) F	Digi-Key Part No.	Pricing 5	Pricing 10	Pricing 100	Panasonic Part No.
1	100	±20	B	7.0	7.5	P10455-ND	1.73	2.34	16.50	ECK-ATS101MB
1	150	±20	B	7.0	7.5	P10456-ND	1.73	2.34	16.50	ECK-ATS151MB
1	220	±20	B	7.0	7.5	P10457-ND	1.73	2.34	16.50	ECK-ATS221MB
1	330	±20	B	7.0	7.5	P10458-ND	1.73	2.34	16.50	ECK-ATS331MB
1	470	±20	B	7.0	7.5	P10459-ND	1.73	2.34	16.50	ECK-ATS471MB
1	680	±20	B	7.0	7.5	P10460-ND	1.73	2.34	16.50	ECK-ATS681MB
1	1000	±20	E	7.0	7.5	P10461-ND	1.73	2.34	16.50	ECK-ATS102ME
1	1500	±20	E	8.0	7.5	P10462-ND	2.13	2.89	20.35	ECK-ATS152ME
1	2200	±20	E	9.0	7.5	P10463-ND	2.21	3.00	21.18	ECK-ATS222ME
2	3300	±20	E	11.5	7.5	P10464-ND	2.19	3.22	23.00	ECK-ATS332ME
1	4700	±20	E	14.0	10.0	P10465-ND	2.61	3.85	27.50	ECK-ATS472ME
2	4700	±20	F	11.5	7.5	P10466-ND	2.19	3.22	23.00	ECK-ATS472MF
1	10000	±20	F	16.0*	10.0	P10467-ND	3.38	5.02	36.90	ECK-ATS103MF
2	4700	±20	E	14.0	7.5	P10468-ND	3.38	5.02	36.90	ECK-ATS472ME6
2	10000	±20	F	16.0*	7.5	P10469-ND	2.84	4.23	31.06	ECK-ATS103MF6

* D is ± 1.5.

Panasonic

Ceramic Disc Capacitors for Safety Regulations – Type NS-B

(IEC384-14 2nd Ed. Sub-Class Y2)



Class I Equipment. The Type NS-B is recognized by UL and CSA (UL1414/250 VAC and CSA C22.2 No. 1).

SPECIFICATIONS:

- **Operating Temperature Range:** -25°C to 85°C
- **Rated Voltage:**

Applicable Standards	Rated Voltage
UL	250 VAC
CSA	125 VAC
IEC 384-14 2nd Ed. (EN 132 400) Sub-Class Y2	250 VAC
SEV 1016 (3300 to 4700 pF)	250 VAC
BSI (BS415: 1990), VDE 560-2, SEV1016 (100 to 2200 pF)	400 VAC

- **Dielectric Withstanding Voltage:** 2600 VAC (50/60 Hz) for 1 minute
- **Capacitance:** Within the tolerance, when measured at 1 kHz ± 20%, 1 Vrms and 20°C
- **Dissipation Factor (tan δ):** 0.025 max., when measured at 1 kHz ± 20%, 1 Vrms and 20°C
- **Insulation Resistance:** 10,000 MΩ min. at 500 VDC and 1 minute electrification

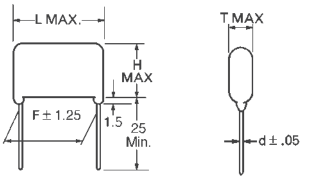
Temperature Characteristics:

Temp. Char.	Cap. Change	Temp. Range
B/Y5P/2B4	±10% Max.	-25°C to 85°C
E/Y5U/2E4	+20/-55% Max.	-25°C to 85°C
The reference temperature: 20°C		

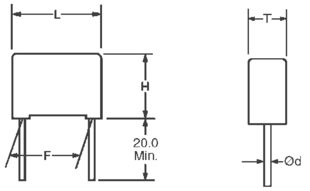
Nominal Cap. (pF)	Cap. Tol. (%)	Temp. Char.	Dimensions (mm) D	Dimensions (mm) F	Digi-Key Part No.	Pricing 5	Pricing 10	Pricing 100	Panasonic Part No.
100	±20	B	10.5	7.5	P10442-ND	1.68	2.47	17.64	ECK-DNB101MB
150	±20	B	10.5	7.5	P10443-ND	1.70	2.51	17.92	ECK-DNB151MB
220	±20	B	10.5	7.5	P10445-ND	1.70	2.51	17.92	ECK-DNB221MB

Panasonic® Interference Suppressor Capacitors X-Y Series-Metallized Film

ECQ - UN, EW, UF



ECQ - UV, UG, UL



Electrical Specifications:

- **Operating Temperature Range:** -40°C to +85°C (-40°C to +100°C for ECQ-UG/UL)
- **Capacitance Tolerance:** ±20% (M)
- **Dissipation Factor:** Less than 1.0% (at 25°C 1 kHz)

ECQ-UN Series: **Rated Voltage:** 250VAC. **Standards: UL (UL 1414);** Across-The-Line Capacitor. Antenna Coupling and Line-By-Pass Components. File No. E62674. **CSA (CSA C22.2);** No. 0-M1982, No. 1-M1981. Across-The-Line, antenna-isolation and line-by-pass capacitor. File No. LR35752. **VDE (VED0565-1);** class X2 File No. 4811.6-4670-1041. **SEV (SEV1055);** class X, Ref No. 89, 5 50251,05. **DEMKO (AFSNIT21);** class X2, Ref No. 70726EC. **SEMKO (SS4430414);** class X2 Reg No. 8602146. **NEMKO (NEMKO);** class X2 Ref No. E 25082 02. **EI (E384-14);** class X2, Reg No. 062521 01~14(0.001~0.012µF), Reg No. 062522 01~15(0.015~0.22µF).

ECQ-EW Series: **Rated Voltage:** 250VAC. **Standards: UL (UL 1283);** Electromagnetic Interference Filters Class X File No. E79502. **SEMKO (SS 443 04 14);** class X2 Reg No. 8932009. **DEMKO (AFSNIT21);** class X2 Ref No. 94911EC. **VDE (VDE0565-1);** class X2 File No. 4811. 6-4670-1035.

ECQ-UF Series: **Rated Voltage:** 250VAC **Standards: SEMKO (SEMKO 101)** Reg. No. 61-88271/1-4. **DEMKO (AFSNIT 21);** class Y/X, Ref No. 61254EC. **VDE (VDE 0565-1)** class Y/X2, File No. 4811-6-1-4670-1032. **BSI (BS415);** certified No. 6026. **UL (UL1414)** Across-The-Line Capacitor & Antenna-Coupling and Line-by-pass. File No. E62674. **CSA (CSA C22.2)** No. 0-M1982, No.1-M1981, Across-The-Line, Antenna-Isolation & LIne-by-Pass Capacitor, File No. LR35752.

ECQ-UV Series: **Rated Voltage:** 250VAC **Standards: UL (UL1414);** Across-The-Line Capacitors. Antenna-Coupling and Line-by-Pass Components. File No. E62674. **(UL1283);** Electromagnetic Interference Filters, File No. E79502. **CSA (CSA C22.2);** Across-The-Line, Antenna-Isolation and Line-by-Pass Capacitor, No. 0-M1982, No. 1-M1981. **SEMKO (SS 443 04 14);** Class X2/Y Reg No. 8804123. **DEMKO (AFSNIT21);** Class X2/Y Ref No. 89275EC. **NEMKO (NEMKO 132);** Class X2 Ref No. 37892, Class Y Ref No. 37894. **EI (IEC 384/14);** Class X2/Y Reg No. 110918-01-02. **VDE (VDE 0565-1);** Class X2/Y File No. 4811.6-4670-1070. **SEV (SEV 1055);** Class X ref No. 88,1 00318,01.

ECQ-UG — Class X2 Series: **Rated Voltage:** 250/275VAC **Standards: UL (UL1414);** Across-The-Line Capacitors. Antenna-Coupling and Line-by-Pass Components. **CSA (Standard C22.2 No. 1-94);** Across-The-Line Capacitors. Antenna-Isolation and Line-by-Pass Capacitors. **SEMKO, DEMKO, NEMKO, FIMCO, VDE, SEV;** IEC384-14, 1993, EN132400, Class X2.

ECQ-UG — Class X1 Series: **Rated Voltage:** 250/300VAC **Standards: UL (UL1414);** Across-The-Line Capacitors. Antenna-Coupling and Line-by-Pass Components. **CSA (Standard C22.2 No. 1-94);** Across-The-Line Capacitors. Antenna-Isolation and Line-by-Pass Capacitors. **FIMCO and VDE;** IEC384-14, 1993, A1 - 1995, EN132400, Class X1.

ECQ-UL Series: **Rated Voltage:** 250/275VAC **Standards: UL (UL1414);** Across-The-Line Capacitors. Antenna-Coupling and Line-by-Pass Components. **CSA (Standard C22.2 No. I-94);** Across-The-Line Capacitors. Antenna-Isolation and Line-by-Pass Capacitors. **VDE;** IEC384-14, 1993, EN132400, Class X2.

Volt-age (VAC)	Cap. (µF)	Dimensions (mm)					Digi-Key Part No.	Price Each			Panasonic Part No.
		L	T	H	F	dø		1	10	100	
ECQ-UN											
250	0.0047	17.0	6.5	13.5	13.5	0.6	P4600-ND†	.93	.80	.67	ECQ-U2A472MN
	0.01	17.0	7.0	14.0	13.5	0.6	P4601-ND†	.93	.80	.67	ECQ-U2A103MN
	0.047	25.5	7.0	14.0	21.5	0.6	P4602-ND†	1.18	1.01	.84	ECQ-U2A473MN
	0.1	30.5	7.5	17.01	26.5	0.8	P4603-ND†	1.44	1.24	1.03	ECQ-U2A104MN
ECQ-EW											
250	0.047	17.0	7.5	13.0	13.5	0.6	P4604-ND†	.79	.69	.57	ECQ-E2A473MW
	0.1	24.0	8.0	13.5	20.5	0.8	P4605-ND†	.95	.81	.68	ECQ-E2A104MW
	0.22	24.0	10.5	17.5	20.5	0.8	P4606-ND†	1.34	1.15	.96	ECQ-E2A224MW
	0.47	29.0	13.0	20.5	25.5	0.8	P4607-ND†	1.79	1.54	1.28	ECQ-E2A474MW
ECQ-UF											
250	0.0047	20.0	7.0	14.5	16.5	0.6	P4608-ND†	.90	.78	.65	ECQ-U2A472MF
	0.01	23.0	7.5	15.0	19.5	0.6	P4609-ND†	.95	.81	.68	ECQ-U2A103MF
ECQ-UV											
250	0.001	17.5	4.0	10.5	15.0	0.6	P4617-ND	.89	.76	.64	ECQ-U2A102MV
	0.0012	17.5	4.0	10.5	15.0	0.6	P4618-ND	.89	.76	.64	ECQ-U2A122MV
	0.0015	17.5	4.0	10.5	15.0	0.6	P4619-ND	.89	.76	.64	ECQ-U2A152MV
	0.0018	17.5	4.0	10.5	15.0	0.6	P4620-ND	.89	.76	.64	ECQ-U2A182MV
	0.0022	17.5	4.0	10.5	15.0	0.6	P4621-ND	.89	.76	.64	ECQ-U2A222MV
	0.0027	17.5	4.0	10.5	15.0	0.6	P4622-ND	.89	.76	.64	ECQ-U2A272MV
	0.0033	17.5	4.0	10.5	15.0	0.6	P4623-ND	.89	.76	.64	ECQ-U2A332MV
	0.0039	17.5	4.0	10.5	15.0	0.6	P4624-ND	.89	.76	.64	ECQ-U2A392MV
	0.0047	17.5	4.0	10.5	15.0	0.6	P4625-ND	.89	.76	.64	ECQ-U2A472MV
	0.0056	17.5	4.0	10.5	15.0	0.6	P4626-ND	.89	.76	.64	ECQ-U2A562MV
	0.0068	17.5	4.0	10.5	15.0	0.6	P4627-ND	.89	.76	.64	ECQ-U2A682MV
	0.0082	17.5	4.0	10.5	15.0	0.6	P4628-ND	.89	.76	.64	ECQ-U2A822MV
	0.01	17.5	4.0	10.5	15.0	0.6	P4629-ND	.89	.76	.64	ECQ-U2A103MV
	0.012	17.5	4.0	10.5	15.0	0.6	P4630-ND	.89	.76	.64	ECQ-U2A123MV
	0.015	17.5	4.0	10.5	15.0	0.6	P4631-ND	.91	.79	.66	ECQ-U2A153MV
	0.018	17.5	4.5	10.5	15.0	0.6	P4632-ND	.93	.80	.67	ECQ-U2A183MV
	0.022	17.5	4.5	10.5	15.0	0.6	P4633-ND	.95	.82	.68	ECQ-U2A223MV
	0.027	17.5	4.5	13.0	15.0	0.6	P4634-ND	.97	.84	.70	ECQ-U2A273MV
	0.033	17.5	4.5	13.0	15.0	0.6	P4635-ND	1.00	.87	.72	ECQ-U2A333MV
	0.039	17.5	5.5	12.5	15.0	0.6	P4636-ND	1.02	.88	.73	ECQ-U2A393MV
	0.047	17.5	5.5	12.5	15.0	0.6	P4637-ND	1.04	.90	.75	ECQ-U2A473MV
	0.056	17.5	7.0	14.0	15.0	0.6	P4638-ND	1.08	.93	.78	ECQ-U2A563MV
	0.068	17.5	7.0	14.0	15.0	0.6	P4639-ND	1.14	.98	.82	ECQ-U2A683MV
	0.082	17.5	8.0	15.0	15.0	0.6	P4640-ND	1.17	1.01	.84	ECQ-U2A823MV
	0.1	17.5	8.0	15.0	15.0	0.8	P4610-ND	1.10	.95	.79	ECQ-U2A104MV
	0.12	25.5	6.5	16.5	22.5	0.6	P4641-ND	1.31	1.13	.94	ECQ-U2A124MV
	0.15	25.5	6.5	16.5	22.5	0.8	P4611-ND	1.41	1.22	1.01	ECQ-U2A154MV
	0.18	25.5	8.5	17.0	22.5	0.6	P4642-ND	1.51	1.29	1.08	ECQ-U2A184MV
	0.22	25.5	8.5	17.0	22.5	0.8	P4612-ND	1.48	1.27	1.06	ECQ-U2A224MV
	0.27	30.5	10.0	18.0	27.5	0.6	P4643-ND	2.07	1.78	1.48	ECQ-U2A274MV
	0.33	30.5	10.0	18.0	27.5	0.8	P4613-ND	2.44	2.10	1.75	ECQ-U2A334MV
	0.39	30.5	12.0	20.0	27.5	0.6	P4644-ND	2.71	2.33	1.94	ECQ-U2A394MV
	0.47	30.5	12.0	20.0	27.5	0.8	P4614-ND	2.49	2.14	1.78	ECQ-U2A474MV
	0.56	30.5	13.5	23.5	27.5	0.6	P4645-ND	3.13	2.69	2.24	ECQ-U2A564MV
	0.68	30.5	13.5	23.5	27.5	0.8	P4615-ND	3.40	2.91	2.43	ECQ-U2A684MV
	0.82	30.5	16.5	26.5	27.5	0.6	P4646-ND	3.88	3.33	2.77	ECQ-U2A824MV
	1.0	30.5	16.5	26.5	27.5	0.8	P4616-ND	3.77	3.24	2.70	ECQ-U2A105MV
ECQ-UG — Class X2											
250/ 275	0.033	15.0	6.0	13.0	12.5	0.60	P10520-ND	.94	.81	.64	ECQ-U2A333MG
	0.047	15.0	6.0	13.0	12.5	0.60	P10521-ND	.97	.84	.66	ECQ-U2A473MG
	0.068	15.0	8.0	15.0	12.5	0.60	P10522-ND	1.07	.92	.72	ECQ-U2A683MG
	0.1	15.0	8.0	16.5	12.5	0.60	P10523-ND	1.07	.93	.73	ECQ-U2A104MG
	0.1	17.5	6.0	15.0	15.0	0.80	P10524-ND	.91	.78	.61	ECQ-U2A104BC1
250/ 275	0.15	17.5	8.0	16.5	15.0	0.80	P10525-ND	1.34	1.15	.90	ECQ-U2A154MG
	0.22	17.5	9.0	17.5	15.0	0.80	P10526-ND	1.39	1.19	.94	ECQ-U2A224MG
	0.33	25.5	9.0	18.5	22.5	0.80	P10527-ND	2.30	1.97	1.55	ECQ-U2A334MG
	0.47	25.5	10.5	20.0	22.5	0.80	P10528-ND	2.35	2.01	1.58	ECQ-U2A474MG
	0.68	25.5	12.5	22.0	22.5	0.80	P10529-ND	3.19	2.74	2.15	ECQ-U2A684MG
	1.0	25.5	15.5	24.5	24.5	0.80	P10530-ND	3.55	3.05	2.39	ECQ-U2A105MG
NEW! ECQ-UG — Class X1 NEW!											
250/ 300	0.01	15.0	5.0	11.5	12.5	0.60	P11110-ND	.73	.63	.50	ECQ-U3A103MG
	0.015	15.0	5.0	11.5	12.5	0.60	P11111-ND	.74	.64	.50	ECQ-U3A153MG
	0.022	15.0	5.0	11.5	12.5	0.60	P11112-ND	.76	.66	.52	ECQ-U3A223MG
	0.033	15.0	6.0	13.0	12.5	0.60	P11113-ND	.69	.60	.47	ECQ-U3A333MG
	0.047	15.0	6.0	13.0	12.5	0.60	P11114-ND	.72	.62	.49	ECQ-U3A473MG
	0.068	15.0	8.0	15.0	12.5	0.60	P11115-ND	.79	.68	.53	ECQ-U3A683MG
	0.1	15.0	8.0	15.0	12.5	0.60	P11116-ND	.79	.68	.53	ECQ-U3A104MG
	0.15	17.5	8.0	16.5	15.0	0.80	P11117-ND	.98	.85	.67	ECQ-U3A154MG
	0.22	17.5	9.0	17.5	15.0	0.80	P11118-ND	1.03	.89	.70	ECQ-U3A224MG
	0.33	25.5	9.0	18.5	22.5	0.80	P11119-ND	1.69	1.45	1.14	ECQ-U3A334MG
	0.47	25.5	10.5	20.0	22.5	0.80	P11120-ND	1.72	1.48	1.16	ECQ-U3A474MG
	0.68	25.5	12.5	22.0	22.5	0.80	P11121-ND	2.34	2.01	1.58	ECQ-U3A684MG
	1.0	27.0	16.5	25.5	22.5	0.80	P11122-ND	2.48	2.13	1.67	ECQ-U3A105MG
ECQ-UL											
250/ 275	0.001	15.0	5.0	11.5	12.5	0.60	P10988-ND	.60	.52	.41	ECQ-U2A102ML
	0.0012	15.0	5.0	11.5	12.5	0.60	P10989-ND	.60	.52	.41	ECQ-U2A122ML
	0.0015	15.0	5.0	11.5	12.5	0.60	P10990-ND	.60	.52	.41	ECQ-U2A152ML
	0.0018	15.0	5.0	11.5	12.5	0.60	P10991-ND	.60	.52	.41	ECQ-U2A182ML
	0.0022	15.0	5.0	11.5	12.5	0.60	P10992-ND	.60	.52	.41	ECQ-U2A222ML
	0.0027	15.0	5.0	11.5	12.5	0.60	P10993-ND	.60	.52	.41	ECQ-U2A272ML
	0.0033	15.0	5.0	11.5	12.5	0.60	P10994-ND	.60	.52	.41	ECQ-U2A332ML
	0.0039	15.0	5.0	11.5	12.5	0.60	P10995-ND	.60	.52	.41	ECQ-U2A392ML
	0.0047	15.0	5.0	11.5	12.5	0.60	P10996-ND	.60	.52	.41	ECQ-U2A472ML
	0.0056	15.0	5.0	11.5	12.5	0.60	P10997-ND	.60	.52	.41	ECQ-U2A562ML
	0.0068	15.0	5.0	11.5	12.5	0.60	P10998-ND	.60	.52	.41	ECQ-U2A682ML
	0.0082	15.0	5.0	11.5	12.5	0.60	P10999-ND	.60	.52	.41	ECQ-U2A822ML
	0.01	15.0	5.0	11.5	12.5	0.60	P10724-ND	.69	.59	.47	ECQ-U2A103ML
	0.012	15.0	5.0	11.5	12.5	0.60	P11000-ND	.63	.54	.43	ECQ-U2A123ML
	0.015	15.0	5.0	11.5	12.5	0.60	P10725-ND	.69	.59	.47	ECQ-U2A153ML
	0.018	15.0	5.0	13.0	12.5	0.60	P11001-ND	.63	.54	.43	ECQ-U2A183ML
	0.022	15.0	5.0	11.5	12.5	0.60	P10726-ND	.69	.59	.47	ECQ-U2A223ML
	0.027	15.0	5.0	11.5	12.5	0.60	P11002-ND	.63	.54	.43	ECQ-U2A273ML
	0.033	15.0	6.0	13.0	12.5	0.60	P10727-ND	.69	.59	.47	ECQ-U2A333ML
	0.039	15.0	6.0	13.0	12.5	0.60	P11003-ND	.63	.54	.43	ECQ-U2A393ML
	0.047	15.0	6.0	13.0	12.5	0.60	P10728-ND	.69	.59	.47	ECQ-U2A473ML
	0.056	17.5	4.5	11.5	15.0	0.60	P11004-ND	.66	.57	.45	ECQ-U2A563ML
	0.068	17.5	4.5	11.5	15.0	0.60	P10729-ND	.75	.65	.51	ECQ-U2A683ML
	0.082	17.5	5.5	12.0	15.0	0.60	P11005-ND	.70	.61	.48	ECQ-U2A823ML
	0.1	17.5	5.5	12.0	15.0	0.60	P10730-ND	.79	.68	.53	ECQ-U2A104ML
	0.12	17.5	6.5	14.5	15.0	0.60	P11006-ND	.75	.65	.51	ECQ-U2A124ML
	0.15	17.5	6.5	14.5	15.0	0.60	P10731-ND	.92	.79	.62	ECQ-U2A154ML
	0.18	17.5	8.0	16.0	15.0	0.60	P11007-ND	.86	.74	.58	ECQ-U2A184ML
	0.22	17.5	8.0	16.0	15.0	0.60	P10732-ND	.96	.82	.65	ECQ-U2A224ML
	0.27	17.5	9.5	17.5	15.0	0.80	P11008-ND	1.25	1.08	.85	ECQ-U2A274ML
	0.33	17.5	9.5	17.5	15.0	0.80	P10733-ND	1.61	1.38	1.08	ECQ-U2A334ML
	0.39	25.5	8.5	17.5	22.5	0.80	P11009-ND	1.51	1.29	1.02	ECQ-U2A394ML
	0.47	25.5	8.5	17.5	22.5	0.80	P10734-ND	1.67	1.44	1.13	ECQ-U2A474ML
	0.56	25.5	10.5	19.5	22.5	0.80	P11010-ND	1.88	1.62	1.27	ECQ-U2A564ML
	0.68	25.5	10.5	19.5	22.5	0.80	P10735-ND	2.25	1.94	1.52	ECQ-U2A684ML
	0.82	25.5	12.5	22.0	22.5	0.80	P11011-ND	2.16	1.86	1.46	ECQ-U2A824ML
	1.0	25.5	12.0	22.0	22.5	0.80	P10736-ND	2.43	2.09	1.64	ECQ-U2A105ML
	1.2	30.5	16.5	26.5	27.5	0.80	P11012-ND	2.51	2.15	1.69	ECQ-U2A125ML
	1.5	30.5	16.5	26.5	27.5	0.80	P10737-ND	3.21	2.75	2.16	ECQ-U2A155ML
	1.8	30.5	19.0	29.5	27.5	0.80	P11013-ND	3.58	3.07	2.41	ECQ-U2A185ML
	2.2	30.5	19.0	29.5	27.5	0.80	P10738-ND	4.23	3.63	2.85	ECQ-U2A225ML

† **P4650-KIT-ND** ***Digi-Key® X-Y Series Capacitors Kit*** 10 each of all values denoted. (100 pcs.) Notebook style box included. **$59.95**

Panasonic

Monolithic Ceramic Capacitors

Type COG, X7R, Z5U

Features:

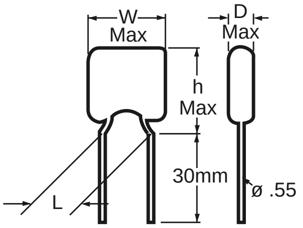
- High capacitance per unit volume
- Suitable for automatic assembly in accordance with IEC standard
- High reliability and damp heat resistance
- Non-polar
- Low-loss
- Pulse strength

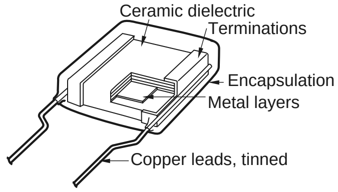
Applications:

- Data processing
- Communications engineering
- Measuring and control equipment
- Photo industry
- Entertainment industry
- Medical engineering
- Automotive electronic systems

Temperature Range:

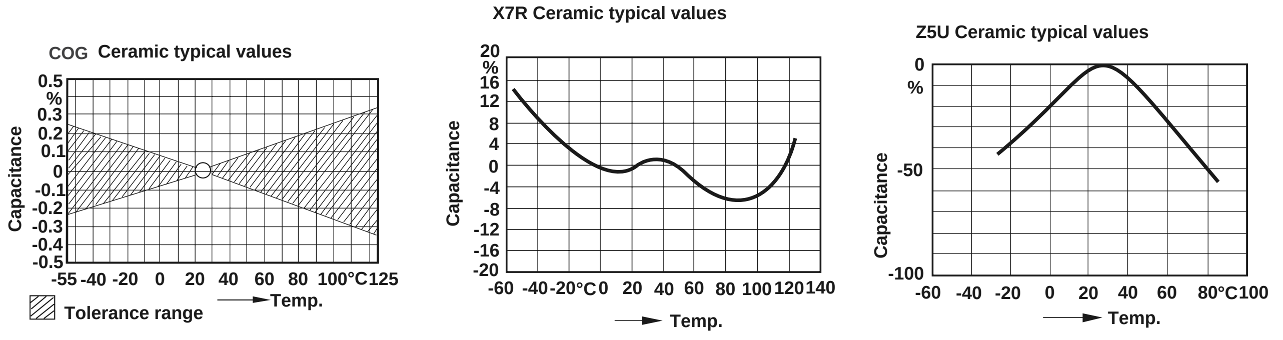
COG/X7R: -55 to +125°C
Z5U: -25 to +85°C





Marking: Rated capacitance, tolerance, manufacturer's logo, ceramic material, voltage

Capacitance Change vs. Temperature


COG Ceramic typical values

X7R Ceramic typical values

Z5U Ceramic typical values

			Dimensions (mm)				Digi-Key			Pricing				Panasonic
Type	VDC	Cap.	W*	D*	H*	L	Part No.	1	10	100	500	1,000	5,000	Part No.
COG ±5%	50	100pf	5.0	2.5	5.5	2.5	P4925-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S1H101JCA
	50	120pf	5.0	2.5	5.5	2.5	P4926-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S1H121JCA
	50	150pf	5.0	2.5	5.5	2.5	P4927-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S1H151JCA
	50	180pf	5.0	2.5	5.5	2.5	P4928-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S1H181JCA
	50	220pf	5.0	2.5	5.5	2.5	P4929-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S1H221JCA
	50	270pf	5.0	2.5	5.5	2.5	P4930-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S1H271JCA
	50	330pf	5.0	2.5	5.5	2.5	P4931-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S1H331JCA
	50	390pf	5.0	2.5	5.5	2.5	P4932-ND	.44	3.00	21.19	73.20	115.58	100.17/M	ECU-S1H391JCA
	50	470pf	5.0	2.5	5.5	2.5	P4933-ND	.44	3.00	21.19	73.20	115.58	100.17/M	ECU-S1H471JCA
	50	560pf	5.0	2.5	5.5	2.5	P4934-ND	.44	3.00	21.19	73.20	115.58	100.17/M	ECU-S1H561JCA
	50	680pf	5.0	3.1	6.5	5.0	P4935-ND	.46	3.38	24.15	86.94	135.24	125.58/M	ECU-S1H681JCB
	50	820pf	5.0	3.1	6.5	5.0	P4936-ND	.46	3.38	24.15	86.94	135.24	125.58/M	ECU-S1H821JCB
	50	1000pf	5.0	3.1	6.5	5.0	P4937-ND	.46	3.38	24.15	86.94	135.24	125.58/M	ECU-S1H102JCB
	50	1200pf	5.0	3.1	6.5	5.0	P4938-ND	.55	4.07	29.04	104.54	162.61	151.00/M	ECU-S1H122JCB
	50	1500pf	5.0	3.1	6.5	5.0	P4939-ND	.55	4.07	29.04	104.54	162.61	151.00/M	ECU-S1H152JCB
	50	1800pf	5.0	3.1	6.5	5.0	P4940-ND	.68	4.99	35.65	128.34	199.64	185.38/M	ECU-S1H182JCB
	50	2200pf	5.0	3.1	6.5	5.0	P4941-ND	.68	4.99	35.65	128.34	199.64	185.38/M	ECU-S1H222JCB
	50	2700pf	5.0	3.1	6.5	5.0	P4942-ND	.82	6.07	44.59	161.29	256.16	246.68/M	ECU-S1H272JCB
	50	3300pf	5.0	3.1	6.5	5.0	P4943-ND	.82	6.07	44.59	161.29	256.16	246.68/M	ECU-S1H332JCB
	50	4700pf	5.0	3.1	6.5	5.0	P4944-ND	1.00	7.43	54.59	197.46	313.61	301.99/M	ECU-S1H472JCB
	50	5600pf	7.5	3.8	9.0	5.0	P4945-ND	1.63	12.21	91.60	325.68	541.44	521.09/M	ECU-S1H562JCB
	50	6800pf	7.5	3.8	9.0	5.0	P4946-ND	1.63	12.21	91.60	325.68	541.44	521.09/M	ECU-S1H682JCB
	50	8200pf	7.5	3.8	9.0	5.0	P4947-ND	1.92	14.42	108.16	384.56	639.33	615.30/M	ECU-S1H822JCB
	50	.01µf	7.5	3.8	9.0	5.0	P4948-ND	1.92	14.42	108.16	384.56	639.33	615.30/M	ECU-S1H103JCB
	100	10pf	5.0	2.5	5.5	2.54	P4837-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A100JCA
	100	12pf	5.0	2.5	5.5	2.54	P4838-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A120JCA
	100	15pf	5.0	2.5	5.5	2.54	P4839-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A150JCA
	100	18pf	5.0	2.5	5.5	2.54	P4840-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A180JCA
	100	22pf	5.0	2.5	5.5	2.54	P4841-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A220JCA
	100	27pf	5.0	2.5	5.5	2.54	P4842-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A270JCA
	100	33pf	5.0	2.5	5.5	2.54	P4843-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A330JCA
	100	39pf	5.0	2.5	5.5	2.54	P4844-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A390JCA
	100	47pf	5.0	2.5	5.5	2.54	P4845-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A470JCA

* Max Dimensions. Actual Dimensions may be smaller.

Type	VDC	Cap.	Dimensions (mm)				Digi-Key	Pricing						Panasonic
			W*	D*	H*	L	Part No.	1	10	100	500	1,000	5,000	Part No.
COG ±5%	100	56pf	5.0	2.5	5.5	2.54	P4846-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A560JCA
	100	68pf	5.0	2.5	5.5	2.54	P4847-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A680JCA
	100	82pf	5.0	2.5	5.5	2.54	P4848-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A820JCA
	100	100pf	5.0	2.5	5.5	2.54	P4849-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A101JCA
	100	120pf	5.0	2.5	5.5	2.54	P4850-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A121JCA
	100	150pf	5.0	2.5	5.5	2.54	P4851-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A151JCA
	100	180pf	5.0	2.5	5.5	2.54	P4852-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A181JCA
	100	220pf	5.0	3.1	6.5	5.08	P4853-ND	.50	3.41	24.04	83.03	131.10	113.62/M	ECU-S2A221JCB
	100	270pf	5.0	3.1	6.5	5.08	P4854-ND	.50	3.41	24.04	83.03	131.10	113.62/M	ECU-S2A271JCB
	100	330pf	5.0	3.1	6.5	5.08	P4855-ND	.50	3.41	24.04	83.03	131.10	113.62/M	ECU-S2A331JCB
	100	390pf	5.0	3.1	6.5	5.08	P4856-ND	.50	3.41	24.04	83.03	131.10	113.62/M	ECU-S2A391JCB
	100	470pf	5.0	3.1	6.5	5.08	P4857-ND	.50	3.41	24.04	83.03	131.10	113.62/M	ECU-S2A471JCB
	100	560pf	5.0	3.1	6.5	5.08	P4858-ND	.49	3.62	25.88	93.15	144.90	134.55/M	ECU-S2A561JCB
	100	680pf	5.0	3.1	6.5	5.08	P4859-ND	.49	3.62	25.88	93.15	144.90	134.55/M	ECU-S2A681JCB
	100	820pf	5.0	3.1	6.5	5.08	P4860-ND	.57	4.23	30.19	108.68	169.05	156.98/M	ECU-S2A821JCB
	100	1000pf	5.0	3.1	6.5	5.08	P4861-ND	.57	4.23	30.19	108.68	169.05	156.98/M	ECU-S2A102JCB
	100	1200pf	5.0	3.1	6.5	5.08	P4862-ND	.69	5.07	36.23	130.41	202.86	188.37/M	ECU-S2A122JCB
	100	1500pf	5.0	3.1	6.5	5.08	P4863-ND	.69	5.07	36.23	130.41	202.86	188.37/M	ECU-S2A152JCB
	100	1800pf	7.5	3.8	9.0	5.08	P4864-ND	1.25	9.31	68.37	247.31	392.78	378.24/M	ECU-S2A182JCB
	100	2200pf	7.5	3.8	9.0	5.08	P4865-ND	1.25	9.31	68.37	247.31	392.78	378.24/M	ECU-S2A222JCB
	100	.018µf	10.0	5.0	11.5	5.08	P4876-ND	3.84	29.09	219.52	823.20	1427.00	1383.00/M	ECU-S2A183JCB
X7R ±10%	50	3300pf	5.0	2.5	5.5	2.5	P4949-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S1H332KBA
	50	4700pf	5.0	2.5	5.5	2.5	P4950-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S1H472KBA
	50	6800pf	5.0	2.5	5.5	2.5	P4951-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S1H682KBA
	50	.010µf	5.0	2.5	5.5	2.5	P4922-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S1H103KBA
	50	.015µf	5.0	2.5	5.5	2.5	P4952-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S1H153KBA
	50	.022µf	5.0	2.5	5.5	2.5	P4953-ND	.40	2.69	18.98	65.55	103.50	89.70/M	ECU-S1H223KBA
	50	.033µf	5.0	2.5	5.5	5.0	P4954-ND	.49	3.32	23.40	80.85	127.65	110.63/M	ECU-S1H333KBB
	50	.047µf	5.0	2.5	5.5	5.0	P4955-ND	.49	3.32	23.40	80.85	127.65	110.63/M	ECU-S1H473KBB
	50	.068µf	5.0	2.5	5.5	5.0	P4956-ND	.48	3.54	25.30	91.08	141.68	131.56/M	ECU-S1H683KBB
	50	.10µf	5.0	2.5	5.5	5.0	P4923-ND	.55	4.07	29.04	104.54	162.61	151.00/M	ECU-S1H104KBB
	50	.15µf	5.0	2.5	5.5	5.0	P4957-ND	.79	5.80	41.40	149.04	231.84	215.28/M	ECU-S1H154KBB
	50	.22µf	7.5	3.8	9.0	5.0	P4958-ND	1.18	8.80	64.59	233.62	371.05	357.31/M	ECU-S1H224KBB
	50	.33µf	7.5	3.8	9.0	5.0	P4959-ND	1.45	10.82	79.45	287.39	456.44	439.53/M	ECU-S1H334KBB
	50	.47µf	7.5	3.8	9.0	5.0	P4960-ND	1.74	13.08	98.07	348.68	579.68	557.89/M	ECU-S1H474KBB
	50	.68µf	7.5	3.8	9.0	5.0	P4961-ND	2.42	18.11	135.84	483.00	802.99	772.80/M	ECU-S1H684KBB
	50	1.0µf	10.0	5.0	11.5	5.0	P4962-ND	3.12	23.59	178.02	667.58	1157.13	1121.53/M	ECU-S1H105KBB
	63	.15µf	5.0	2.5	5.5	5.08	P4888-ND	.58	4.27	30.51	109.84	171.00	159.00/M	ECU-S1J154KBB
	100	470pf	5.0	2.5	5.5	2.54	P4896-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S2A471KBA
	100	680pf	5.0	2.5	5.5	2.54	P4897-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S2A681KBA
	100	1000pf	5.0	2.5	5.5	2.54	P4898-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S2A102KBA
	100	1500pf	5.0	2.5	5.5	2.54	P4899-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S2A152KBA
	100	2200pf	5.0	2.5	5.5	2.54	P4900-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S2A222KBA
	100	3300pf	5.0	2.5	5.5	2.54	P4901-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S2A332KBA
	100	4700pf	5.0	2.5	5.5	2.54	P4902-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S2A472KBA
	100	6800pf	5.0	3.1	6.5	2.54	P4903-ND	.44	3.00	21.19	73.20	115.58	100.17/M	ECU-S2A682KBA
	100	.010µf	5.0	3.1	6.5	2.54	P4904-ND	.44	3.00	21.19	73.20	115.58	100.17/M	ECU-S2A103KBA
	100	.015µf	5.0	3.1	6.5	2.54	P4905-ND	.44	3.00	21.19	73.20	115.58	100.17/M	ECU-S2A153KBA
	100	.022µf	5.0	3.1	6.5	2.54	P4906-ND	.48	3.23	22.77	78.66	124.20	107.64/M	ECU-S2A223KBA
	100	.033µf	5.0	3.1	6.5	2.54	P4907-ND	.54	3.68	25.93	89.59	141.45	122.59/M	ECU-S2A333KBA
	100	.047µf	5.0	3.1	6.5	2.54	P4908-ND	.51	3.78	27.03	97.29	151.34	140.53/M	ECU-S2A473KBA
	100	.068µf	5.0	3.1	6.5	2.54	P4909-ND	.60	4.39	31.34	112.82	175.49	162.96/M	ECU-S2A683KBA
	100	.10µf	5.0	3.1	6.5	2.54	P4910-ND	.74	5.47	39.10	140.76	218.96	203.32/M	ECU-S2A104KBA
	100	.15µf	7.5	3.8	9.0	5.08	P4911-ND	1.24	9.20	67.56	244.38	388.13	373.75/M	ECU-S2A154KBB
Z5U ±20%	50	.010µf	5.0	2.5	5.5	2.5	P4963-ND	.32	2.15	15.18	52.44	82.80	71.76/M	ECU-S1H103MEA
	50	.022µf	5.0	2.5	5.5	2.5	P4964-ND	.32	2.15	15.18	52.44	82.80	71.76/M	ECU-S1H223MEA
	50	.047µf	5.0	2.5	5.5	2.5	P4965-ND	.37	2.51	17.71	61.18	96.60	83.72/M	ECU-S1H473MEA
	50	.10µf	5.0	3.1	6.5	2.5	P4924-ND	.43	2.92	20.56	71.01	112.13	97.18/M	ECU-S1H104MEA
	50	.22µf	5.0	3.1	6.5	2.5	P4966-ND	.55	4.07	29.04	104.54	162.61	151.00/M	ECU-S1H224MEA
	50	.47µf	7.5	3.8	9.0	5.0	P4967-ND	.99	7.36	54.05	195.50	310.50	299.00/M	ECU-S1H474MEB
	50	1.0µf	7.5	3.8	9.0	5.0	P4968-ND	1.44	10.71	78.64	284.45	451.78	435.05/M	ECU-S1H105MEB
	50	2.2µf	10.0	5.0	11.5	5.0	P4969-ND	3.24	24.56	185.38	695.18	1204.97	1167.90/M	ECU-S1H225MEB
	63	.022µf	5.0	2.5	5.5	2.54	P4915-ND	.23	1.59	11.19	38.65	61.00	53.00/M	ECU-S1J223MEA

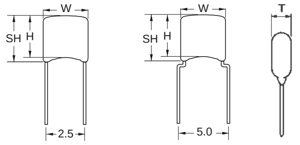
* Max Dimensions. Actual Dimensions may be smaller.

BEYSCHLAG
CENTRALAB
COMPONENTS

Mono-Kap™ Leaded Ceramic Multilayer Capacitors

These conformally coated radial leaded capacitors are designed for commercial and industrial applications, such as: timing, coupling/decoupling, signal comparison and biasing.

Size Code	Dimensions (mm) W Max.	H Max.	T Max.	SH Max. 2.5mm LS	5.08mm LS
15	4.0	4.0	2.5	5.58	6.5
20	5.0	5.0	3.2	6.58	7.5
30	7.5	7.5	3.8	9.08	10.7



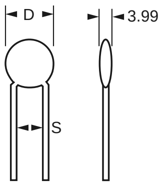
2.5mm Lead Spacing

5.08mm Lead Spacing

Cap Value	Size Code	LS	Digi-Key Part No.	Cut Tape Price Each 10	100	Digi-Key Part No.	Tape & Reel Pricing	BC Components Part No.
Type COG 50V ±5%								
10 pf	15	2.54	BC1001CT-ND	.11	.08	BC1001TR-ND	144.00/4000	K100J15C0GF5TL2
12 pf	15	2.54	BC1002CT-ND	.11	.08	BC1002TR-ND	144.00/4000	K120J15C0GF5TL2
15 pf	15	2.54	BC1003CT-ND	.11	.08	BC1003TR-ND	144.00/4000	K150J15C0GF5TL2
18 pf	15	2.54	BC1004CT-ND	.11	.08	BC1004TR-ND	144.00/4000	K180J15C0GF5TL2
22 pf	15	2.54	BC1005CT-ND	.11	.08	BC1005TR-ND	144.00/4000	K220J15C0GF5TL2
27 pf	15	2.54	BC1006CT-ND	.11	.08	BC1006TR-ND	144.00/4000	K270J15C0GF5TL2
33 pf	15	2.54	BC1007CT-ND	.11	.08	BC1007TR-ND	144.00/4000	K330J15C0GF5TL2
39 pf	15	2.54	BC1008CT-ND	.11	.08	BC1008TR-ND	144.00/4000	K390J15C0GF5TL2
47 pf	15	2.54	BC1009CT-ND	.11	.08	BC1009TR-ND	144.00/4000	K470J15C0GF5TL2
56 pf	15	2.54	BC1010CT-ND	.12	.09	BC1010TR-ND	151.20/4000	K560J15C0GF5TL2
68 pf	15	2.54	BC1011CT-ND	.12	.09	BC1011TR-ND	151.20/4000	K680J15C0GF5TL2
82 pf	15	2.54	BC1012CT-ND	.12	.09	BC1012TR-ND	151.20/4000	K820J15C0GF5TL2
100 pf	15	2.54	BC1013CT-ND	.12	.09	BC1013TR-ND	151.20/4000	K101J15C0GF5TL2
120 pf	15	2.54	BC1014CT-ND	.13	.09	BC1014TR-ND	165.60/4000	K121J15C0GF5TL2
150 pf	15	2.54	BC1015CT-ND	.13	.09	BC1015TR-ND	165.60/4000	K151J15C0GF5TL2
180 pf	15	2.54	BC1016CT-ND	.13	.09	BC1016TR-ND	165.60/4000	K181J15C0GF5TL2
220 pf	15	2.54	BC1017CT-ND	.13	.09	BC1017TR-ND	165.60/4000	K221J15C0GF5TL2
270 pf	15	2.54	BC1018CT-ND	.14	.10	BC1018TR-ND	180.00/4000	K271J15C0GF5TL2
330 pf	15	2.54	BC1019CT-ND	.14	.10	BC1019TR-ND	180.00/4000	K331J15C0GF5TL2
390 pf	15	2.54	BC1020CT-ND	.15	.11	BC1020TR-ND	194.40/4000	K391J15C0GF5TL2
470 pf	15	2.54	BC1021CT-ND	.16	.11	BC1021TR-ND	201.60/4000	K471J15C0GF5TL2
560 pf	15	2.54	BC1022CT-ND	.16	.12	BC1022TR-ND	208.80/4000	K561J15C0GF5TL2
680 pf	15	2.54	BC1023CT-ND	.17	.12	BC1023TR-ND	216.00/4000	K681J15C0GF5TL2
820 pf	15	2.54	BC1024CT-ND	.18	.13	BC1024TR-ND	230.40/4000	K821J15C0GF5TL2
1000 pf	15	2.54	BC1025CT-ND	.17	.13	BC1025TR-ND	223.20/4000	K102J15C0GF5TL2
1200 pf	15	2.54	BC1026CT-ND	.18	.13	BC1026TR-ND	230.40/4000	K122J15C0GF5TL2
1500 pf	15	2.54	BC1027CT-ND	.18	.13	BC1027TR-ND	230.40/4000	K152J15C0GF5TL2
1800 pf	15	2.54	BC1028CT-ND	.21	.15	BC1028TR-ND	273.60/4000	K182J15C0GF5TL2
2200 pf	15	2.54	BC1029CT-ND	.22	.16	BC1029TR-ND	280.80/4000	K222J15C0GF5TL2
10 pf	15	5.08	BC1030CT-ND	.11	.08	BC1030TR-ND	144.00/4000	K100J15C0GF5TH5
12 pf	15	5.08	BC1031CT-ND	.11	.08	BC1031TR-ND	144.00/4000	K120J15C0GF5TH5
15 pf	15	5.08	BC1032CT-ND	.11	.08	BC1032TR-ND	144.00/4000	K150J15C0GF5TH5
18 pf	15	5.08	BC1033CT-ND	.11	.08	BC1033TR-ND	144.00/4000	K180J15C0GF5TH5
22 pf	15	5.08	BC1034CT-ND	.11	.08	BC1034TR-ND	144.00/4000	K220J15C0GF5TH5
27 pf	15	5.08	BC1035CT-ND	.11	.08	BC1035TR-ND	144.00/4000	K270J15C0GF5TH5
33 pf	15	5.08	BC1036CT-ND	.11	.08	BC1036TR-ND	144.00/4000	K330J15C0GF5TH5
39 pf	15	5.08	BC1037CT-ND	.11	.08	BC1037TR-ND	144.00/4000	K390J15C0GF5TH5
47 pf	15	5.08	BC1038CT-ND	.11	.08	BC1038TR-ND	144.00/4000	K470J15C0GF5TH5
56 pf	15	5.08	BC1039CT-ND	.12	.09	BC1039TR-ND	151.20/4000	K560J15C0GF5TH5
68 pf	15	5.08	BC1040CT-ND	.12	.09	BC1040TR-ND	151.20/4000	K680J15C0GF5TH5
82 pf	15	5.08	BC1041CT-ND	.12	.09	BC1041TR-ND	151.20/4000	K820J15C0GF5TH5
100 pf	15	5.08	BC1042CT-ND	.12	.09	BC1042TR-ND	151.20/4000	K101J15C0GF5TH5
150 pf	15	5.08	BC1043CT-ND	.13	.09	BC1043TR-ND	165.60/4000	K151J15C0GF5TH5
220 pf	15	5.08	BC1044CT-ND	.13	.09	BC1044TR-ND	165.60/4000	K221J15C0GF5TH5
330 pf	15	5.08	BC1045CT-ND	.14	.10	BC1045TR-ND	180.00/4000	K331J15C0GF5TH5
470 pf	15	5.08	BC1046CT-ND	.16	.11	BC1046TR-ND	201.60/4000	K471J15C0GF5TH5
680 pf	15	5.08	BC1047CT-ND	.17	.12	BC1047TR-ND	216.00/4000	K681J15C0GF5TH5
1000 pf	15	5.08	BC1048CT-ND	.17	.13	BC1048TR-ND	223.20/4000	K102J15C0GF5TH5
1500 pf	15	5.08	BC1049CT-ND	.18	.13	BC1049TR-ND	230.40/4000	K152J15C0GF5TH5
2200 pf	15	5.08	BC1050CT-ND	.21	.15	BC1050TR-ND	273.60/4000	K222J15C0GF5TH5
3300 pf	20	5.08	BC1051CT-ND	.30	.22	BC1051TR-ND	297.00/3000	K332J20C0GF5TH5
4700 pf	20	5.08	BC1052CT-ND	.37	.27	BC1052TR-ND	361.80/3000	K472J20C0GF5TH5
Type COG 100V ±5%								
10 pf	15	2.54	BC1054CT-ND	.11	.08	BC1054TR-ND	144.00/4000	K100J15C0GH5TL2
22 pf	15	2.54	BC1055CT-ND	.11	.08	BC1055TR-ND	144.00/4000	K220J15C0GH5TL2
47 pf	15	2.54	BC1056CT-ND	.11	.08	BC1056TR-ND	144.00/4000	K470J15C0GH5TL2
100 pf	15	2.54	BC1057CT-ND	.12	.09	BC1057TR-ND	151.20/4000	K101J15C0GH5TL2
220 pf	15	2.54	BC1058CT-ND	.15	.11	BC1058TR-ND	194.40/4000	K221J15C0GH5TL2
470 pf	15	2.54	BC1059CT-ND	.20	.15	BC1059TR-ND	259.20/4000	K471J15C0GH5TL2
1000 pf	20	2.54	BC1060CT-ND	.30	.22	BC1060TR-ND	297.00/3000	K102J20C0GH5TL2
10 pf	15	5.08	BC1061CT-ND	.11	.08	BC1061TR-ND	144.00/4000	K100J15C0GH5TH5
22 pf	15	5.08	BC1062CT-ND	.11	.08	BC1062TR-ND	144.00/4000	K220J15C0GH5TH5
47 pf	15	5.08	BC1063CT-ND	.11	.08	BC1063TR-ND	144.00/4000	K470J15C0GH5TH5
100 pf	15	5.08	BC1064CT-ND	.12	.09	BC1064TR-ND	151.20/4000	K101J15C0GH5TH5
220 pf	15	5.08	BC1065CT-ND	.15	.11	BC1065TR-ND	194.40/4000	K221J15C0GH5TH5
470 pf	15	5.08	BC1066CT-ND	.20	.15	BC1066TR-ND	259.20/4000	K471J15C0GH5TH5
1000 pf	20	5.08	BC1067CT-ND	.30	.22	BC1067TR-ND	297.00/3000	K102J20C0GH5TH5
Type X7R 50V ±10%								
220 pf	15	2.54	BC1068CT-ND	.11	.08	BC1068TR-ND	136.80/4000	K221K15X7RF5TL2
330 pf	15	2.54	BC1069CT-ND	.11	.08	BC1069TR-ND	136.80/4000	K331K15X7RF5TL2
470 pf	15	2.54	BC1070CT-ND	.11	.08	BC1070TR-ND	136.80/4000	K471K15X7RF5TL2
680 pf	15	2.54	BC1071CT-ND	.11	.08	BC1071TR-ND	136.80/4000	K681K15X7RF5TL2
1000 pf	15	2.54	BC1072CT-ND	.11	.08	BC1072TR-ND	136.80/4000	K102K15X7RF5TL2
1500 pf	15	2.54	BC1073CT-ND	.11	.08	BC1073TR-ND	136.80/4000	K152K15X7RF5TL2
2200 pf	15	2.54	BC1074CT-ND	.11	.08	BC1074TR-ND	136.80/4000	K222K15X7RF5TL2
3300 pf	15	2.54	BC1075CT-ND	.12	.09	BC1075TR-ND	151.20/4000	K332K15X7RF5TL2
4700 pf	15	2.54	BC1076CT-ND	.12	.09	BC1076TR-ND	151.20/4000	K472K15X7RF5TL2
6800 pf	15	2.54	BC1077CT-ND	.12	.09	BC1077TR-ND	151.20/4000	K682K15X7RF5TL2
.01 µf	15	2.54	BC1078CT-ND	.11	.08	BC1078TR-ND	144.00/4000	K103K15X7RF5TL2
.015 µf	15	2.54	BC1079CT-ND	.12	.09	BC1079TR-ND	158.40/4000	K153K15X7RF5TL2
.022 µf	15	2.54	BC1080CT-ND	.13	.09	BC1080TR-ND	165.60/4000	K223K15X7RF5TL2
.033 µf	15	2.54	BC1081CT-ND	.14	.10	BC1081TR-ND	180.00/4000	K333K15X7RF5TL2
.047 µf	15	2.54	BC1082CT-ND	.14	.11	BC1082TR-ND	187.20/4000	K473K15X7RF5TL2
.068 µf	20	2.54	BC1083CT-ND	.20	.15	BC1083TR-ND	259.20/4000	K683K20X7RF5TL2
.1 µf	20	2.54	BC1084CT-ND	.19	.14	BC1084TR-ND	244.80/4000	K104K15X7RF5TL2
220 pf	15	5.08	BC1085CT-ND	.11	.08	BC1085TR-ND	136.80/4000	K221K15X7RF5TH5
330 pf	15	5.08	BC1086CT-ND	.11	.08	BC1086TR-ND	136.80/4000	K331K15X7RF5TH5
470 pf	15	5.08	BC1087CT-ND	.11	.08	BC1087TR-ND	136.80/4000	K471K15X7RF5TH5
680 pf	15	5.08	BC1088CT-ND	.11	.08	BC1088TR-ND	136.80/4000	K681K15X7RF5TH5
1000 pf	15	5.08	BC1089CT-ND	.11	.08	BC1089TR-ND	136.80/4000	K102K15X7RF5TH5
1500 pf	15	5.08	BC1090CT-ND	.11	.08	BC1090TR-ND	136.80/4000	K152K15X7RF5TH5
2200 pf	15	5.08	BC1091CT-ND	.11	.08	BC1091TR-ND	136.80/4000	K222K15X7RF5TH5
3300 pf	15	5.08	BC1092CT-ND	.12	.09	BC1092TR-ND	151.20/4000	K332K15X7RF5TH5
4700 pf	15	5.08	BC1093CT-ND	.12	.09	BC1093TR-ND	151.20/4000	K472K15X7RF5TH5
6800 pf	15	5.08	BC1094CT-ND	.12	.09	BC1094TR-ND	151.20/4000	K682K15X7RF5TH5
.01 µf	15	5.08	BC1095CT-ND	.11	.08	BC1095TR-ND	144.00/4000	K103K15X7RF5TH5
.015 µf	15	5.08	BC1096CT-ND	.12	.09	BC1096TR-ND	158.40/4000	K153K15X7RF5TH5
.022 µf	15	5.08	BC1097CT-ND	.13	.09	BC1097TR-ND	165.60/4000	K223K15X7RF5TH5
.033 µf	15	5.08	BC1098CT-ND	.14	.10	BC1098TR-ND	180.00/4000	K333K15X7RF5TH5
.047 µf	15	5.08	BC1099CT-ND	.14	.11	BC1099TR-ND	187.20/4000	K473K15X7RF5TH5
.068 µf	20	5.08	BC1100CT-ND	.20	.15	BC1100TR-ND	259.20/4000	K683K20X7RF5TH5
.1 µf	20	5.08	BC1101CT-ND	.19	.14	BC1101TR-ND	244.80/4000	K104K15X7RF5TH5
.15 µf	20	5.08	BC1102CT-ND	.38	.27	BC1102TR-ND	372.60/3000	K154K20X7RF5TH5
.22 µf	20	5.08	BC1103CT-ND	.40	.29	BC1103TR-ND	333.00/2500	K224K20X7RF5TH5
Type X7R 100V ±10%								
220 pf	15	2.54	BC1106CT-ND	.11	.08	BC1106TR-ND	136.80/4000	K221K15X7RH5TL2
470 pf	15	2.54	BC1107CT-ND	.11	.08	BC1107TR-ND	136.80/4000	K471K15X7RH5TL2
1000 pf	15	2.54	BC1108CT-ND	.11	.08	BC1108TR-ND	136.80/4000	K102K15X7RH5TL2
2200 pf	15	2.54	BC1109CT-ND	.11	.08	BC1109TR-ND	144.00/4000	K222K15X7RH5TL2
4700 pf	15	2.54	BC1110CT-ND	.12	.09	BC1110TR-ND	151.20/4000	K472K15X7RH5TL2
.01 µf	15	2.54	BC1111CT-ND	.13	.10	BC1111TR-ND	172.80/4000	K103K15X7RH5TL2
.022 µf	20	2.54	BC1112CT-ND	.17	.12	BC1112TR-ND	216.00/4000	K223K20X7RH5TL2
.047 µf	20	2.54	BC1113CT-ND	.21	.15	BC1113TR-ND	205.20/3000	K473K20X7RH5TL2
.1 µf	20	2.54	BC1114CT-ND	.26	.19	BC1114TR-ND	259.20/3000	K104K20X7RH5TL2
220 pf	15	5.08	BC1115CT-ND	.11	.08	BC1115TR-ND	136.80/4000	K221K15X7RH5TH5
470 pf	15	5.08	BC1116CT-ND	.11	.08	BC1116TR-ND	136.80/4000	K471K15X7RH5TH5
1000 pf	15	5.08	BC1117CT-ND	.11	.08	BC1117TR-ND	136.80/4000	K102K15X7RH5TH5
2200 pf	15	5.08	BC1118CT-ND	.11	.08	BC1118TR-ND	144.00/4000	K222K15X7RH5TH5
4700 pf	15	5.08	BC1119CT-ND	.12	.09	BC1119TR-ND	151.20/4000	K472K15X7RH5TH5
.01 µf	15	5.08	BC1120CT-ND	.13	.10	BC1120TR-ND	172.80/4000	K103K15X7RH5TH5
.022 µf	20	5.08	BC1121CT-ND	.17	.12	BC1121TR-ND	216.00/4000	K223K20X7RH5TH5
.047 µf	20	5.08	BC1122CT-ND	.21	.15	BC1122TR-ND	205.20/3000	K473K20X7RH5TH5
.1 µf	20	5.08	BC1123CT-ND	.26	.19	BC1123TR-ND	259.20/3000	K104K15X7RH5TH5
Type Z5U 50V ±20%								
.01 µf	15	2.54	BC1124CT-ND	.11	.08	BC1124TR-ND	136.80/4000	K103M15Z5UF5TL2
.022 µf	15	2.54	BC1125CT-ND	.11	.08	BC1125TR-ND	144.00/4000	K223M15Z5UF5TL2
.047 µf	15	2.54	BC1126CT-ND	.12	.09	BC1126TR-ND	151.20/4000	K473M15Z5UF5TL2
.1 µf	15	2.54	BC1127CT-ND	.11	.08	BC1127TR-ND	144.00/4000	K104M15Z5UF5TL2
.15 µf	15	2.54	BC1128CT-ND	.13	.10	BC1128TR-ND	172.80/4000	K154M15Z5UF5TL2
.22 µf	15	2.54	BC1129CT-ND	.18	.13	BC1129TR-ND	237.60/4000	K224M15Z5UF5TL2
.01 µf	15	5.08	BC1130CT-ND	.11	.08	BC1130TR-ND	136.80/4000	K103M15Z5UF5TH5
.022 µf	15	5.08	BC1131CT-ND	.11	.08	BC1131TR-ND	144.00/4000	K223M15Z5UF5TH5
.047 µf	15	5.08	BC1132CT-ND	.12	.09	BC1132TR-ND	151.20/4000	K473M15Z5UF5TH5
.1 µf	15	5.08	BC1133CT-ND	.11	.08	BC1133TR-ND	144.00/4000	K104M15Z5UF5TH5
.15 µf	15	5.08	BC1134CT-ND	.13	.10	BC1134TR-ND	172.80/4000	K154M15Z5UF5TH5
.22 µf	15	5.08	BC1135CT-ND	.18	.13	BC1135TR-ND	237.60/4000	K224M15Z5UF5TH5
.33 µf	20	5.08	BC1136CT-ND	.23	.17	BC1136TR-ND	226.80/3000	K334M20Z5UF5TH5
.47 µf	20	5.08	BC1137CT-ND	.29	.21	BC1137TR-ND	280.80/3000	K474M20Z5UF5TH5
.68 µf	20	5.08	BC1138CT-ND	.41	.30	BC1138TR-ND	410.40/3000	K684M20Z5UF5TH5
1 µf	20	5.08	BC1139CT-ND	.48	.35	BC1139TR-ND	475.20/3000	K105M20Z5UF5TH5
Type Z5U 100V ±20%								
.01 µf	15	2.54	BC1140CT-ND	.12	.09	BC1140TR-ND	158.40/4000	K103M15Z5UH5TL2
.022 µf	20	2.54	BC1141CT-ND	.15	.11	BC1141TR-ND	145.80/3000	K223M20Z5UH5TL2
.047 µf	20	2.54	BC1142CT-ND	.19	.14	BC1142TR-ND	183.60/3000	K473M20Z5UH5TL2
.1 µf	20	2.54	BC1143CT-ND	.26	.19	BC1143TR-ND	253.80/3000	K104M20Z5UH5TL2
.01 µf	15	5.08	BC1144CT-ND	.12	.09	BC1144TR-ND	158.40/4000	K103M15Z5UH5TH5
.1 µf	20	5.08	BC1145CT-ND	.26	.19	BC1145TR-ND	253.80/3000	K104M20Z5UH5TH5
Type Y5V 25V +80 -20%								
.01 µf	15	2.54	BC1146CT-ND	.11	.08	BC1146TR-ND	136.80/4000	K103Z15Y5VE5TL2
.022 µf	15	2.54	BC1147CT-ND	.11	.08	BC1147TR-ND	136.80/4000	K223Z15Y5VE5TL2
.1 µf	15	2.54	BC1148CT-ND	.11	.08	BC1148TR-ND	144.00/4000	K104Z15Y5VE5TL2
.22 µf	15	2.54	BC1149CT-ND	.18	.13	BC1149TR-ND	230.40/4000	K224Z15Y5VE5TL2
.47 µf	20	2.54	BC1150CT-ND	.27	.20	BC1150TR-ND	270.00/3000	K474Z20Y5VE5TL2
1 µf	20	2.54	BC1151CT-ND	.47	.34	BC1151TR-ND	464.40/3000	K105Z20Y5VE5TL2
.01 µf	15	5.08	BC1152CT-ND	.11	.08	BC1152TR-ND	136.80/4000	K103Z15Y5VE5TH5
.022 µf	15	5.08	BC1153CT-ND	.11	.08	BC1153TR-ND	136.80/4000	K223Z15Y5VE5TH5
.1 µf	15	5.08	BC1154CT-ND	.11	.08	BC1154TR-ND	144.00/4000	K104Z15Y5VE5TH5
.22 µf	15	5.08	BC1155CT-ND	.18	.13	BC1155TR-ND	230.40/4000	K224Z15Y5VE5TH5
.47 µf	20	5.08	BC1156CT-ND	.27	.20	BC1156TR-ND	270.00/3000	K474Z20Y5VE5TH5
1 µf	20	5.08	BC1157CT-ND	.47	.34	BC1157TR-ND	464.40/3000	K105Z20Y5VE5TH5
Type Y5V 50V +80 -20%								
.01 µf	15	2.54	BC1158CT-ND	.11	.08	BC1158TR-ND	136.80/4000	K103Z15Y5VF5TL2
.022 µf	15	2.54	BC1159CT-ND	.11	.08	BC1159TR-ND	144.00/4000	K223Z15Y5VF5TL2
.1 µf	15	2.54	BC1160CT-ND	.11	.08	BC1160TR-ND	144.00/4000	K104Z15Y5VF5TL2
.22 µf	15	2.54	BC1161CT-ND	.18	.13	BC1161TR-ND	237.60/4000	K224Z15Y5VF5TL2
1 µf	20	2.54	BC1162CT-ND	.48	.35	BC1162TR-ND	475.20/3000	K105Z20Y5VF5TL2
.01 µf	15	5.08	BC1163CT-ND	.11	.08	BC1163TR-ND	136.80/4000	K103Z15Y5VF5TH5
.022 µf	15	5.08	BC1164CT-ND	.11	.08	BC1164TR-ND	144.00/4000	K223Z15Y5VF5TH5
.1 µf	15	5.08	BC1165CT-ND	.11	.08	BC1165TR-ND	144.00/4000	K104Z15Y5VF5TH5
.22 µf	15	5.08	BC1166CT-ND	.18	.13	BC1166TR-ND	237.60/4000	K224Z15Y5VF5TH5
.47 µf	20	5.08	BC1167CT-ND	.28	.20	BC1167TR-ND	275.40/3000	K474Z20Y5VF5TH5
1 µf	20	5.08	BC1168CT-ND	.48	.35	BC1168TR-ND	475.20/3000	K105Z20Y5VF5TH5

BEYSCHLAG
CENTRALAB
COMPONENTS

Ceramic Disc Capacitors



EIA Temperature Coefficient Code	COG	N750	Y5V	Y5P
Capacitance Temperature Coefficient	30PPM/°C	-1000PPM/°C (1425PH-ND: ±120ppms)	+22%, -82%	±10%
Operating Temperature Range	-25 to +85°C	-25 to +85°C	-30 to +85°C	-30 to +85°C
Tolerance on Capacitance	±5%	±5%	+80/-20%	±10%
Q Factor	C ≥ 30pf: Q ≥ 1000 C < 30pf: Q ≥ 400 +20°C	C ≥ 30pf: Q ≥ 1000 C < 30pf: Q ≥ 400 +20°C	— —	— —
Dissipation Factor	—	—	4.0% max.	2.5% max.
Insulation Resistance	10000 MΩ	10000 MΩ min.	10000 MΩ min.	10000 MΩ min.

Tolerance	Dimensions (mm)		Capacitance Value	Digi-Key Part No.	Pricing				BC Components Part No.
	D	S			10	100	500	1,000	
Type N750, 100V									
±.5	5.00	6.35	10pF	1301PH-ND•	.72	5.67	20.60	30.00	D100D20U2MHAAAC
5%	5.00	6.35	12pF	1302PH-ND	.72	5.67	20.60	30.00	D120J20U2MHAAAC
5%	5.00	6.35	15pF	1303PH-ND•	.72	5.67	20.60	30.00	D150J20U2MHAAAC
5%	5.00	6.35	18pF	1304PH-ND•	.72	5.67	20.60	30.00	D180J20U2MHAAAC
5%	5.00	6.35	22pF	1305PH-ND•	.72	5.67	20.60	30.00	D220J20U2MHAAAC
5%	5.00	6.35	27pF	1306PH-ND•	.72	5.67	20.60	30.00	D270J20U2MHAAAC
5%	5.00	6.35	33pF	1307PH-ND•	.72	5.67	20.60	30.00	D330J20U2MHAAAC
5%	5.00	6.35	39pF	1308PH-ND•	.72	5.67	20.60	30.00	D390J20U2MHAAAC
5%	5.00	6.35	47pF	1309PH-ND•	.72	5.67	20.60	30.00	D470J20U2MHAAAC
5%	5.00	6.35	56pF	1310PH-ND•	.72	5.67	20.60	30.00	D560J20U2MHAAAC
5%	6.50	6.35	68pF	1311PH-ND•	.72	5.67	20.60	30.00	D680J25U2MHAAAC
5%	6.50	6.35	100pF	1313PH-ND•	.80	6.27	22.80	34.00	D101J25U2MHAAAC
5%	7.37	6.35	150pF	1315PH-ND•	.80	6.27	22.80	34.00	D151J29U2MHAAAC
5%	7.37	6.35	180pF	1316PH-ND•	.80	6.27	22.80	34.00	D181J31U2MHAAAC
5%	10.01	6.35	220pF	1317PH-ND•	.80	6.27	22.80	34.00	D221J39U2MHAAAC
5%	10.01	6.35	270pF	1318PH-ND•	.89	6.96	25.30	37.00	D271J39U2MHAAAC
5%	10.01	6.35	330pF	1319PH-ND•	.89	6.96	25.30	37.00	D331J39U2MHAAAC
5%	11.99	6.35	470pF	1321PH-ND•	1.10	8.61	31.30	46.00	D471J47U2MHAAAC
5%	11.99	6.35	1000pF	1325PH-ND•	1.40	11.00	40.00	59.00	D102J69U2MHAAAC
Type COG, 100V									
±.5	5.00	6.35	10pF	1326PH-ND	.72	5.67	20.60	30.00	D100D20COGHAAAC
5%	5.00	6.35	15pF	1328PH-ND	.72	5.67	20.60	30.00	D150J20COGHAAAC
5%	5.00	6.35	18pF	1329PH-ND	.72	5.67	20.60	30.00	D180J20COGHAAAC
5%	5.00	6.35	22pF	1330PH-ND	.72	5.67	20.60	30.00	D220J20COGHAAAC
5%	5.00	6.35	27pF	1331PH-ND	.72	5.67	20.60	30.00	D270J20COGHAAAC
5%	5.00	6.35	33pF	1332PH-ND	.72	5.67	20.60	30.00	D330J20COGHAAAC
5%	6.50	6.35	39pF	1333PH-ND	.72	5.67	20.60	30.00	D390J25COGHAAAC
5%	6.50	6.35	47pF	1334PH-ND	.80	6.27	22.80	34.00	D470J25COGHAAAC
5%	6.50	6.35	56pF	1335PH-ND	.80	6.27	22.80	34.00	D560J25COGHAAAC
5%	6.50	6.35	68pF	1336PH-ND	.80	6.27	22.80	34.00	D680J25COGHAAAC
5%	7.37	6.35	100pF	1338PH-ND	.88	6.88	25.00	37.00	D101J29COGHAAAC
5%	7.37	6.35	120pF	1339PH-ND	.88	6.88	25.00	37.00	D121J31COGHAAAC
5%	10.01	6.35	150pF	1340PH-ND	1.10	8.66	31.50	46.00	D151J39COGHAAAC
5%	10.01	6.35	220pF	1342PH-ND	1.10	8.66	31.50	46.00	D221J39COGHAAAC
Type N750, 500V									
10%	5.00	6.35	10pF	1344PH-ND	1.37	10.73	39.00	57.00	D100K20U2MLAAAA
10%	5.00	6.35	22pF	1347PH-ND	1.37	10.73	39.00	57.00	D220K20U2MLAAAA
10%	6.50	6.35	33pF	1349PH-ND	1.72	13.48	49.00	72.00	D330K25U2MLAAAA
10%	6.50	6.35	47pF	1351PH-ND	1.72	13.48	49.00	72.00	D470K25U2MLAAAA
Type COG, 500V									
±.5	5.00	6.35	10pF	1355PH-ND	1.37	10.73	39.00	57.00	D100D20COGLAAAA
5%	5.00	6.35	15pF	1356PH-ND	1.37	10.73	39.00	57.00	D150J20COGLAAAA
5%	6.50	6.35	22pF	1358PH-ND	1.72	13.48	49.00	72.00	D220J25COGLAAAA
5%	14.99	9.52	180pF	1369PH-ND	7.25	56.93	207.00	305.00	D181J59COGLABAA
Type Y5P, 100V									
10%	5.00	6.35	100pF	1371PH-ND	.77	6.05	22.00	32.00	D101K20Y5PHAAEU
10%	5.00	6.35	180pF	1374PH-ND	.77	6.05	22.00	32.00	D181K20Y5PHAAEU
10%	5.00	6.35	220pF	1375PH-ND	.77	6.05	22.00	32.00	D221K20Y5PHAAEU
10%	5.00	6.35	330pF	1377PH-ND	.77	6.05	22.00	32.00	D331K20Y5PHAAEU
10%	5.00	6.35	470pF	1379PH-ND	.77	6.05	22.00	32.00	D471K20Y5PHAAEU
10%	5.00	6.35	1000pF	1383PH-ND	.77	6.05	22.00	32.00	D102K20Y5PHAAEU
10%	6.50	6.35	2200pF	1387PH-ND	.77	6.05	22.00	32.00	D222K25Y5PHAAEU
10%	7.37	6.35	2700pF	1388PH-ND	.84	6.60	24.00	35.00	D272K33Y5PL63L6
10%	7.37	6.35	3300pF	1389PH-ND	.84	6.60	24.00	35.00	D332K29Y5PHAAEU
10%	10.01	6.35	4700pF	1391PH-ND	1.10	8.61	31.30	46.00	D472K39Y5PHAAEU
Type Y5V, 100V									
+80/-20	5.00	6.35	1000pF	1394PH-ND	.77	6.05	22.00	32.00	D102Z20Y5VHAAEU
+80/-20	5.00	6.35	1500pF	1395PH-ND	.77	6.05	22.00	32.00	D152Z20Y5VHAAEU
+80/-20	5.00	6.35	2200pF	1396PH-ND	.77	6.05	22.00	32.00	D222Z20Y5VHAAEU
+80/-20	5.00	6.35	3300pF	1397PH-ND	.77	6.05	22.00	32.00	D332Z20Y5VHAAEU
+80/-20	6.50	6.35	4700pF	1398PH-ND	.84	6.60	24.00	35.00	D472Z25Y5VHAAEU
+80/-20	7.87	6.35	0.01µf	1400PH-ND	.84	6.60	24.00	35.00	D103Z31Y5VHAAEU
Type Y5P, 500V									
10%	5.00	6.35	100pF	1401PH-ND	1.37	10.73	39.00	57.00	D101K20Y5PLAAEU
10%	5.00	6.35	150pF	1402PH-ND	1.37	10.73	39.00	57.00	D151K20Y5PLAAEU
10%	5.00	6.35	220pF	1404PH-ND	1.37	10.73	39.00	57.00	D221K20Y5PLAAEU
10%	5.00	6.35	270pF	1405PH-ND	1.37	10.73	39.00	57.00	D271K20Y5PLAAEU
10%	5.00	6.35	330pF	1406PH-ND	1.37	10.73	39.00	57.00	D331K20Y5PLAAEU
10%	5.00	6.35	470pF	1408PH-ND	1.37	10.73	39.00	57.00	D471K20Y5PLAAEU
10%	6.50	6.35	1000pF	1412PH-ND	1.72	13.48	49.00	72.00	D102K25Y5PLAAEC
10%	9.91	9.52	2200pF	1415PH-ND	2.07	16.23	59.00	87.00	D222K39Y5PLABEC
10%	11.99	9.52	3300pF	1417PH-ND	2.77	21.73	79.00	116.00	D332K47Y5PLABEC
10%	17.53	9.52	0.01µf	1424PH-ND	5.25	41.25	150.00	221.00	D103K69Y5PLABEC

• **PHD1-KIT-ND** ***Digi-Key® N750 Series Capacitors Kit*** 20 each of values denoted (360 total pieces) **$21.95**

Panasonic Ceramic Disc Capacitors

PANASONIC ECC SERIES (CLASS I)

Features:
- Conform to EIA Standard
- Linear temperature coefficient of capacitance
- High stability of capacitance
- Low loss at wide range of frequency

Specifications:
- Operating temperature range: –55°C to +85°C
- Temperature characteristics: Conform to EIA classes GP & NPO.
  GP: General purpose capacitors with temp. char. between +150 and –1500PPM/°C (EIA U2M char.)
  NPO: Max. cap. change of ±5% from –55°C to +85°C.

PANASONIC ECK SERIES (CLASS II)

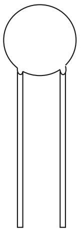
Features: • Conform to EIA Standard • Large capacitance in small sizes • Non linear temperature coefficient of capacitance • High temperature stability (for 1-3KV, Y5P char.) • Low loss at pulse voltage (for pulse circuit only)

Specifications: • **Operating temperature range:** –30°C to +85°C (25-500V), –25°C to +125°C (1-3KV) • **Dissipation factor:** Y5P: 2.5% max., Y5V and Z4V: 5% max., 1K (tan.): 25 x 10^{-3} at 1KHz 1 to 5Vrms, and 20°C • **Temperature characteristics:** Per EIA code. Y5P: Max. cap. change of ±10% from –25°C to +85°C, Y5V: Max. cap. change of +22, –82% from +10°C to +60°C, E: Max. cap. change is +20 ~ –55% over temp. range of –25°C to +85°C, B: Max. cap. change is ±10% over temp. range of –25°C to +85°C, V: Max. cap. change is +30 ~ –80% over temp. range of 0°C to +70°C • **Insulation resistance:** 10,000M ohms min. • **Dielectric strength:** 250% (200% for 1-3KV) of rated voltage for 1-5 sec.

PANASONIC ECF SERIES (CLASS III)

Features: SB/SR (Intergranular barrier layer type)
- Linear temperature characteristics of capacitance
- Stable capacitance change over the specified temperature
- Low loss at wide range of frequency
- Cost saving by replacing film capacitors
  SF (Surface barrier layer type)
- Ultra large capacitance in small sizes

Specifications:
- Operating temperature range: –25°C to +85°C
- Dissipation factor/tan (at 1KHz, 1 ±0.2 Vrms, 20°C): SR, SB 1 ±0.2 V, SF 0.1 ±0.2 V; SB, SR...25 x 10^{-3} max., SF...75 x 10^{-3} max.
- Insulation resistance (at 20°C): SB, SR, SF...1,000M ohms or 100M ohms mF, whichever is the smaller
- Temperature characteristics: SB: +10% from –25° to +85°C, SR: ±15% from –25° to +85°C, SF: +30, –85% from –25° to +85°C



Voltage	Capacitance	Tolerance	Temp. Char.	Dimensions (mm)			Digi-Key Part No.	Pricing						Panasonic Part No.
				Dia.	Thickness	Lead Space		10	100	1,000	5,000	10,000	25,000	
100	82pf	±5%	NPO	8.0	3.5	6.35	P4455-ND	1.70	11.46	59.14	49.90/M	47.13/M	46.20/M	ECC-F2A820JCE
500	18pf	±5%	NPO	7.0	3.5	6.35	P4403-ND	1.57	11.09	60.48	52.42/M	50.40/M	48.39/M	ECC-D2H180JCE
500	39pf	±5%	NPO	8.5	3.5	6.35	P4407-ND	1.70	12.01	65.52	56.79/M	54.60/M	52.42/M	ECC-D2H390JCE
500	82pf	±5%	NPO	13.0	3.5	9.5	P4411-ND	2.98	21.28	119.17	110.66/M	106.40/M	102.15/M	ECC-D2H820JCE
25	.047µf	+80%-20%	Z4V	8.5	3.5	6.35	P4307-ND	1.34	9.03	46.59	39.32/M	37.13/M	36.40/M	ECK-F1E473ZVE
25	.1µf	+80%-20%	Z4V	12.5	3.5	5.0	P4201-ND	2.23	15.71	85.68	74.26/M	71.40/M	68.55/M	ECK-F1E104ZV
100	6800pf	+80%-20%	Y5V	8.0	3.5	6.35	P4209-ND	1.03	6.94	35.84	30.24/M	28.56/M	28.00/M	ECK-F2A682ZFE
1K	100pf	±10%	Y5P	6.0	5.0	5.00	P4116-ND	2.61	18.43	100.50	87.10/M	83.75/M	80.40/M	ECK-D3A101KBN
1K	120pf	±10%	Y5P	6.0	5.0	5.00	P4117-ND	2.61	18.43	100.50	87.10/M	83.75/M	80.40/M	ECK-D3A121KBN
1K	150pf	±10%	Y5P	6.0	5.0	5.00	P4118-ND	2.54	17.88	97.50	84.50/M	81.25/M	78.00/M	ECK-D3A151KBN
1K	180pf	±10%	Y5P	6.0	5.0	5.00	P4119-ND	2.54	17.88	97.50	84.50/M	81.25/M	78.00/M	ECK-D3A181KBN
1K	220pf	±10%	Y5P	6.0	5.0	5.00	P4120-ND	2.54	17.88	97.50	84.50/M	81.25/M	78.00/M	ECK-D3A221KBN
1K	270pf	±10%	Y5P	6.0	5.0	5.00	P4121-ND	2.54	17.88	97.50	84.50/M	81.25/M	78.00/M	ECK-D3A271KBN
1K	330pf	±10%	Y5P	8.0	5.0	5.00	P4122-ND	2.98	21.25	119.00	110.50/M	106.25/M	102.00/M	ECK-D3A331KBN
1K	390pf	±20%	Y5P	8.0	5.0	5.00	P4123-ND	2.98	21.25	119.00	110.50/M	106.25/M	102.00/M	ECK-D3A391KBN
1K	470pf	±10%	Y5P	8.0	5.0	5.00	P4124-ND	2.98	21.25	119.00	110.50/M	106.25/M	102.00/M	ECK-D3A471KBN
1K	560pf	±10%	Y5P	8.0	5.0	5.00	P4125-ND	2.98	21.25	119.00	110.50/M	106.25/M	102.00/M	ECK-D3A561KBN
1K	680pf	±10%	Y5P	8.0	5.0	5.00	P4126-ND	3.12	22.00	120.00	104.00/M	100.00/M	96.00/M	ECK-D3A681KBN
1K	820pf	±10%	Y5P	10.0	5.0	5.00	P4127-ND	2.98	21.25	119.00	110.50/M	106.25/M	102.00/M	ECK-D3A821KBN
1K	1000pf	±10%	Y5P	10.0	5.0	5.00	P4128-ND	2.98	21.25	119.00	110.50/M	106.25/M	102.00/M	ECK-D3A102KBN
1K	1200pf	±10%	Y5P	10.0	5.0	5.00	P4129-ND	3.71	26.50	148.40	137.80/M	132.50/M	127.20/M	ECK-D3A122KBN
1K	1500pf	±10%	Y5P	11.0	5.0	5.00	P4130-ND	3.71	26.50	148.40	137.80/M	132.50/M	127.20/M	ECK-D3A152KBN
1K	1800pf	±10%	Y5P	11.0	5.0	5.00	P4131-ND	3.71	26.50	148.40	137.80/M	132.50/M	127.20/M	ECK-D3A182KBN
1K	2200pf	±10%	Y5P	13.0	5.0	5.00	P4199-ND	3.71	26.50	148.40	137.80/M	132.50/M	127.20/M	ECK-D3A222KBP
1K	2700pf	±10%	Y5P	13.0	5.0	5.00	P4211-ND	3.71	26.50	148.40	137.80/M	132.50/M	127.20/M	ECK-D3A272KBP
1K	3300pf	±10%	Y5P	13.5	5.0	10.00	P4134-ND	4.20	30.00	168.00	156.00/M	150.00/M	144.00/M	ECK-D3A332KBN
1K	3900pf	±10%	Y5P	15.5	5.0	10.00	P4135-ND	5.41	39.72	228.15	219.70/M	211.25/M	202.80/M	ECK-D3A392KBN
1K	4700pf	±10%	Y5P	18.0	5.0	10.00	P4136-ND	6.40	47.00	270.00	260.00/M	250.00/M	240.00/M	ECK-D3A472KBN
1K	5600pf	±10%	Y5P	18.0	5.0	10.00	P4137-ND	6.40	47.00	270.00	260.00/M	250.00/M	240.00/M	ECK-D3A562KBN
1K	6800pf	±10%	Y5P	22.0	5.0	10.00	P4138-ND	8.96	65.80	378.00	364.00/M	350.00/M	336.00/M	ECK-D3A682KBN
1K	8200pf	±10%	Y5P	22.0	5.0	10.00	P4139-ND	8.96	65.80	378.00	364.00/M	350.00/M	336.00/M	ECK-D3A822KBN
1K	10000pf	±10%	Y5P	22.0	5.0	10.00	P4140-ND	9.57	71.78	424.27	408.32/M	398.75/M	382.80/M	ECK-D3A103KBN
2K	100pf	±10%	Y5P	7.0	5.0	7.5	P4474A-ND	3.78	27.00	151.20	140.40/M	135.00/M	129.60/M	ECK-D3D101KBP
2K	120pf	±10%	Y5P	7.0	5.0	7.5	P4475A-ND	3.78	27.00	151.20	140.40/M	135.00/M	129.60/M	ECK-D3D121KBP
2K	150pf	±10%	Y5P	7.0	5.0	7.5	P4476A-ND	3.78	27.00	151.20	140.40/M	135.00/M	129.60/M	ECK-D3D151KBP
2K	180pf	±10%	Y5P	7.0	5.0	7.5	P4477A-ND	3.78	27.00	151.20	140.40/M	135.00/M	129.60/M	ECK-D3D181KBP
2K	220pf	±10%	Y5P	7.0	5.0	7.5	P4478A-ND	3.78	27.00	151.20	140.40/M	135.00/M	129.60/M	ECK-D3D221KBP
2K	270pf	±10%	Y5P	7.0	5.0	7.5	P4479A-ND	3.78	27.00	151.20	140.40/M	135.00/M	129.60/M	ECK-D3D271KBP
2K	330pf	±10%	Y5P	7.0	5.0	7.5	P4480A-ND	3.78	27.00	151.20	140.40/M	135.00/M	129.60/M	ECK-D3D331KBP
2K	390pf	±10%	Y5P	7.0	5.0	7.5	P4481A-ND	3.78	27.00	151.20	140.40/M	135.00/M	129.60/M	ECK-D3D391KBP
2K	470pf	±10%	Y5P	7.5	5.0	7.5	P4482A-ND	4.06	29.00	162.40	150.80/M	145.00/M	139.20/M	ECK-D3D471KBP
2K	560pf	±10%	Y5P	8.0	5.0	7.5	P4483A-ND	4.06	29.00	162.40	150.80/M	145.00/M	139.20/M	ECK-D3D561KBP
2K	680pf	±10%	Y5P	9.0	5.0	7.5	P4484A-ND	4.27	30.50	170.80	158.60/M	152.50/M	146.40/M	ECK-D3D681KBP
2K	820pf	±10%	Y5P	9.0	5.0	7.5	P4485A-ND	4.27	30.50	170.80	158.60/M	152.50/M	146.40/M	ECK-D3D821KBP
2K	1000pf	±10%	Y5P	10.0	5.0	7.5	P4486A-ND	5.22	37.25	208.60	193.70/M	186.25/M	178.80/M	ECK-D3D102KBP
2K	1200pf	±10%	Y5P	10.5	5.0	7.5	P4487A-ND	5.41	39.72	228.15	219.70/M	211.25/M	202.80/M	ECK-D3D122KBP
2K	1500pf	±10%	Y5P	12.0	5.0	7.5	P4488A-ND	6.30	46.30	265.95	256.10/M	246.25/M	236.40/M	ECK-D3D152KBP
2K	1800pf	±10%	Y5P	12.5	5.0	7.5	P4489A-ND	6.30	46.30	265.95	256.10/M	246.25/M	236.40/M	ECK-D3D182KBP
2K	2200pf	±10%	Y5P	14.0	5.0	10.0	P4490A-ND	9.70	71.21	409.05	393.90/M	378.75/M	363.60/M	ECK-D3D222KBP
2K	2700pf	±10%	Y5P	16.0	5.0	10.0	P4491A-ND	9.63	72.23	426.93	410.88/M	401.25/M	385.20/M	ECK-D3D272KBP
2K	3300pf	±10%	Y5P	17.0	5.0	10.0	P4492A-ND	11.61	87.08	514.71	495.36/M	483.75/M	464.40/M	ECK-D3D332KBP
2K	3900pf	±10%	Y5P	18.0	5.0	10.0	P4493A-ND	12.33	92.48	546.63	526.08/M	513.75/M	493.20/M	ECK-D3D392KBP
2K	4700pf	±10%	Y5P	25.0	5.0	10.0	P4494A-ND	13.50	101.25	598.50	576.00/M	562.50/M	540.00/M	ECK-D3D472KBP
2K	5600pf	±10%	Y5P	25.0	5.0	10.0	P4495A-ND	13.50	101.25	598.50	576.00/M	562.50/M	540.00/M	ECK-D3D562KBP
3K	100pf	±10%	Y5P	7.5	6.0	7.5	P4496A-ND	3.85	27.50	154.00	143.00/M	137.50/M	132.00/M	ECK-D3F101KBP
3K	120pf	±10%	Y5P	7.5	6.0	7.5	P4497A-ND	3.85	27.50	154.00	143.00/M	137.50/M	132.00/M	ECK-D3F121KBP
3K	150pf	±10%	Y5P	7.5	6.0	7.5	P4498A-ND	3.85	27.50	154.00	143.00/M	137.50/M	132.00/M	ECK-D3F151KBP
3K	180pf	±10%	Y5P	7.5	6.0	7.5	P4499A-ND	3.85	27.50	154.00	143.00/M	137.50/M	132.00/M	ECK-D3F181KBP
3K	220pf	±10%	Y5P	7.5	6.0	7.5	P4500A-ND	3.85	27.50	154.00	143.00/M	137.50/M	132.00/M	ECK-D3F221KBP
3K	270pf	±10%	Y5P	7.5	6.0	7.5	P4501A-ND	3.85	27.50	154.00	143.00/M	137.50/M	132.00/M	ECK-D3F271KBP
3K	330pf	±10%	Y5P	8.0	6.0	7.5	P4502A-ND	4.10	29.25	163.80	152.10/M	146.25/M	140.40/M	ECK-D3F331KBP
3K	390pf	±10%	Y5P	9.0	6.0	7.5	P4503A-ND	4.34	31.00	173.60	161.20/M	155.00/M	148.80/M	ECK-D3F391KBP
3K	470pf	±10%	Y5P	9.5	6.0	7.5	P4504A-ND	4.66	33.25	186.20	172.90/M	166.25/M	159.60/M	ECK-D3F471KBP
3K	560pf	±10%	Y5P	10.0	6.0	7.5	P4505A-ND	4.97	35.50	198.80	184.60/M	177.50/M	170.40/M	ECK-D3F561KBP
3K	680pf	±10%	Y5P	11.0	6.0	7.5	P4506A-ND	6.30	46.30	265.95	256.10/M	246.25/M	236.40/M	ECK-D3F681KBP
3K	820pf	±10%	Y5P	11.0	6.0	7.5	P4507A-ND	6.30	46.30	265.95	256.10/M	246.25/M	236.40/M	ECK-D3F821KBP
3K	1000pf	±10%	Y5P	12.5	6.0	7.5	P4508A-ND	6.43	47.24	271.35	261.30/M	251.25/M	241.20/M	ECK-D3F102KBP
3K	1200pf	±10%	Y5P	14.5	6.0	10.0	P4509A-ND	9.69	72.68	429.59	413.44/M	403.75/M	387.60/M	ECK-D3F122KBP
3K	1500pf	±10%	Y5P	14.5	6.0	10.0	P4510A-ND	9.54	71.55	422.94	407.04/M	397.50/M	381.60/M	ECK-D3F152KBP
3K	1800pf	±10%	Y5P	16.0	6.0	10.0	P4511A-ND	13.17	98.78	583.87	561.92/M	548.75/M	526.80/M	ECK-D3F182KBP
3K	2200pf	±10%	Y5P	17.0	6.0	10.0	P4512A-ND	13.86	103.95	614.46	591.36/M	577.50/M	554.40/M	ECK-D3F222KBP
3K	2700pf	±10%	Y5P	18.5	6.0	10.0	P4513A-ND	16.41	123.08	727.51	700.16/M	683.75/M	656.40/M	ECK-D3F272KBP
25	4700pf	±20%	SR	4.5	3.5	2.50	P4422-ND	1.49	10.07	51.97	43.85/M	41.42/M	40.60/M	ECF-F1E472MR
50	6800pf	±10%	SB	6.5	3.5	5.00	P4157-ND	2.66	18.79	102.48	88.82/M	85.40/M	81.99/M	ECF-F1H682KB

Panasonic Ceramic Disc Capacitors

Type RS, Class 1 Safety

Ceramic disc capacitors, Type RS, are recognized by the following safety regulations: • UL1414 (125 VAC) and CSA (125 VAC) • European safety regulations for "Class I" equipment: VDE, SEV, BSI, SEMKO, FIMKO, NEMKO and DEMKO.

Specifications:

Oper Temp. Range	-25°C to 85°C		
Rated Voltage	Applicable Standards	Rated Voltage	
	UL, CSA	125 VAC	
	VDE (565-1)	250 VAC	
	VDE (560-2), FIMKO, SEV, BS, SEMKO, NEMKO, DEMKO	400 VAC	
Dielectric Withstanding Voltage	T.C.	Voltage	
	B, E	2600 VAC for 1 min	
	V	2500 VAC for 1 min	
Capacitance	Within the tolerance, when measured at 1 kHz, 5 Vrms max. and 20°C		
Dissipation Factor	B, E: 0.025 max. V: 0.05 max when measured at 1 kHz, 5 Vrms max. and 20°C		
Insulation Resist.	10000 MΩ min. at 500 VDC, 1 minute		
Temperature Characteristics	T.C.	Cap. Change	Temp. Range
	B	±10% max.	-25°C to 85°C
	E	+20/-55% max	-25°C to 85°C
	V	+30/-80% max	0°C to 70°C
	The reference temperature: 20°C		

Class 2, High Dielectric Constant

Features: • Large capacitance in small size • Minimum coating resin on leads **Applications:** • Coupling and By-pass, where low losses and high stability of capacitance are not so important **Specifications:** • Operating Temperature Range: -25°C to 85°C • Rated Voltage: 25 VDC, 50VDC, 500VDC • Dielectric Withstanding Voltage: 250% of the rated voltage for 1 to 5 seconds (no damage occurs when the test voltage is applied between terminals) • Capacitance: measured at 1kHz ±10%, 1 Vrms and 20°C within the specified tolerance - standard capacitance tolerance [Y5P]: ±10% [Y5V, Z4V]: +80/-20% • Dissipation Factor: [Y5P]: D.F. ≤0.025 [Y5V, Z4V]: D.F. ≤0.05 • Insulation Resistance: C≤0.02 µF: ≥10000 MΩ, C>0.02 µF: CR products ≥ 200 MΩ (measured at the rated voltage and 1 minute electrification) • Temperature Characteristics:

$$\text{Cap. Change} = \frac{\triangle C}{C20} \times 100\%$$

Where C20: Capacitance value in pF at the specified reference temperature of 20°C.
△C: Capacitance drifts in pF from the capacitance value at 20°C over the specified temperature range.

Temp. Char.	Max. Cap. Change	Temp. Range
Y5P	± 10%	-25°C to 85°C
Y5V	+30/-80%	-25°C to 85°C
Z4V	+30/-80%	0°C to 70°C

Class 1, Temperature Compensating

Features: • Wide product range for temperature compensation • Liner temperature coefficient of capacitance • High stability of capacitance and close tolerance • Low loss at wide range of frequency **Applications:** • Temperature compensation of resonant circuit and filters • Where low losses and high stability of capacitance tolerance and high insulation resistance are required **Specifications:** Operating Temperature Range: -25°C to 85°C • Rated Voltage: 50 VDC, 500 VDC • Dielectric Withstanding Voltage: 300% of the rated voltage for 1 to 5 seconds (no damage occurs when the test voltage is applied between terminals) • Capacitance: measured at 1MHz ±20%, 5 Vrms. max. and 20°C within the specified tolerance - standard capacitance tolerance: ±0.25 pF (1 to 5 pF), ±0.5 pF (1 to 10 pF), ±1 pF (10pF), ±5% (Over 10 pF NPO), ±10% (Over 10 pF GP) • Q Factor: Cap. <30 pF: Q≥400+20XC (c: Rated capacitance in pF), Cap≥30 pF: Q≥1000 • Insulation Resistance: ≥10000 MΩ (measured at the rated voltage and 1 minute electrification) • Temperature Coefficient of Capacitance: Temperature Range: -25°C to 85°C, Reference Temperature: 20°C, T.C. = $\frac{\triangle C}{C_{20} \times \triangle T}$

Where: C20: Capacitance value in pF at the specified reference temperature of 20°C. △C: Capacitance drifts in pF from the capacitance value at 20°C. △T: The specified temperature range to be measured in °C.

Capacitance (pF)	Rated temperature Coefficient (ppm/°C)	
	NPO	GP
1 to 2	±250	+350 to -1000
3	±120	
4 and above	±60	

Volt-age	Capac-itance	Tolerance	Temp. Char.	Dimensions (mm)			Digi-Key Part No.	Pricing			Panasonic Part No.
				Dia.	Thick-ness	Lead Space		10	100	1,000	
RS Safety Type Class 1											
125	150pf	±20%	B	9.5	7.0	7.5	P4463A-ND	2.86	20.44	114.46	ECK-DRS151MB
125	1500pf	±20%	E	10.0	7.0	7.5	P4467A-ND	4.23	30.24	169.34	ECK-DRS152ME
125	4700pf	+80, -20%	V	11.5	7.0	7.5	P4472A-ND	3.57	25.48	142.69	ECK-DRS472ZV
Class 2 High Dielectric Constant											
25	.01µF	+80, -20%	Z4V	5.0	3.5	2.5	P4300A-ND•	.93	6.25	32.26	ECK-F1E103ZV
25	.022µF	+80, -20%	Z4V	6.5	3.5	5.0	P4303A-ND•	1.13	7.64	39.42	ECK-F1E223ZV
25	.033µF	+80, -20%	Z4V	8.5	3.5	5.0	P4305A-ND•	1.29	8.68	44.80	ECK-F1E333ZV
25	.047µF	+80, -20%	Z4V	8.5	3.5	5.0	P4307A-ND•	1.44	9.72	50.18	ECK-F1E473ZV
25	.1µF	+80, -20%	Z4V	12.5	3.5	5.0	P4201-ND•	2.23	15.71	85.68	ECK-F1E104ZV
50	100pf	±10%	Y5P	5.0	3.5	2.5	P4037A-ND	.98	6.60	34.05	ECK-F1H101KB
50	120pf	±10%	Y5P	5.0	3.5	2.5	P4038A-ND	.98	6.60	34.05	ECK-F1H121KB
50	150pf	±10%	Y5P	5.0	3.5	2.5	P4039A-ND	.98	6.60	34.05	ECK-F1H151KB
50	180pf	±10%	Y5P	5.0	3.5	2.5	P4040A-ND	.98	6.60	34.05	ECK-F1H181KB
50	220pf	±10%	Y5P	5.0	3.5	2.5	P4041A-ND	.98	6.60	34.05	ECK-F1H221KB
50	270pf	±10%	Y5P	5.0	3.5	2.5	P4042A-ND	.98	6.60	34.05	ECK-F1H271KB
50	330pf	±10%	Y5P	5.0	3.5	2.5	P4043A-ND	.98	6.60	34.05	ECK-F1H331KB
50	390pf	±10%	Y5P	5.0	3.5	2.5	P4044A-ND	.98	6.60	34.05	ECK-F1H391KB
50	470pf	±10%	Y5P	5.0	3.5	2.5	P4045A-ND	.98	6.60	34.05	ECK-F1H471KB
50	560pf	±10%	Y5P	5.0	3.5	2.5	P4046A-ND	.98	6.60	34.05	ECK-F1H561KB
50	680pf	±10%	Y5P	5.0	3.5	2.5	P4047A-ND	.98	6.60	34.05	ECK-F1H681KB
50	820pf	±10%	Y5P	5.0	3.5	2.5	P4048A-ND	.98	6.60	34.05	ECK-F1H821KB
50	1000pf	±10%	Y5P	5.0	3.5	2.5	P4049A-ND	1.08	7.29	37.63	ECK-F1H102KB
50	1200pf	±10%	Y5P	5.0	3.5	2.5	P4050A-ND	1.08	7.29	37.63	ECK-F1H122KB
50	1500pf	±10%	Y5P	5.0	3.5	2.5	P4051A-ND	1.08	7.29	37.63	ECK-F1H152KB
50	1800pf	±10%	Y5P	6.5	3.5	5.0	P4052A-ND	1.08	7.29	37.63	ECK-F1H182KB
50	2200pf	±10%	Y5P	6.5	3.5	5.0	P4053A-ND	1.18	7.99	41.22	ECK-F1H222KB
50	2700pf	±10%	Y5P	6.5	3.5	5.0	P4054A-ND	1.18	7.99	41.22	ECK-F1H272KB
50	3300pf	±10%	Y5P	8.0	3.5	5.0	P4055A-ND	1.18	7.99	41.22	ECK-F1H332KB
50	3900pf	±10%	Y5P	8.0	3.5	5.0	P4056A-ND	1.29	8.68	44.80	ECK-F1H392KB
50	4700pf	±10%	Y5P	8.0	3.5	5.0	P4057A-ND	1.29	8.68	44.80	ECK-F1H472KB
50	5600pf	±10%	Y5P	9.5	3.5	5.0	P4058A-ND	1.29	8.68	44.80	ECK-F1H562KB
50	6800pf	±10%	Y5P	9.5	3.5	5.0	P4059A-ND	2.10	14.78	80.64	ECK-F1H682KB
50	1000pf	+80, -20%	Y5V	4.5	3.5	2.5	P4060A-ND•	.93	6.25	32.26	ECK-F1H102ZF
50	1500pf	+80, -20%	Y5V	5.0	3.5	2.5	P4061A-ND•	.93	6.25	32.26	ECK-F1H152ZF
50	2200pf	+80, -20%	Y5V	5.0	3.5	2.5	P4062A-ND•	.93	6.25	32.26	ECK-F1H222ZF
50	3300pf	+80, -20%	Y5V	5.0	3.5	2.5	P4063A-ND•	1.03	6.94	35.84	ECK-F1H332ZF
50	4700pf	+80, -20%	Y5V	5.0	3.5	2.5	P4064A-ND•	.98	6.60	34.05	ECK-F1H472ZF
50	6800pf	+80, -20%	Y5V	6.5	3.5	5.0	P4065A-ND•	1.03	6.94	35.84	ECK-F1H682ZF
50	10000pf	+80, -20%	Y5V	6.5	3.5	5.0	P4066A-ND	1.03	6.94	35.84	ECK-F1H103ZF
50	22000pf	+80, -20%	Y5V	8.5	3.5	5.0	P4067A-ND	2.01	14.17	77.28	ECK-F1H223ZF
500	100pf	±10%	Y5P	6.0	4.0	5.0	P4100A-ND•	1.13	7.64	39.42	ECK-D2H101KB5
500	150pf	±10%	Y5P	6.0	4.0	5.0	P4102A-ND•	1.13	7.64	39.42	ECK-D2H151KB5
500	180pf	±10%	Y5P	6.0	4.0	5.0	P4103A-ND	1.13	7.64	39.42	ECK-D2H181KB5
500	220pf	±10%	Y5P	6.0	4.0	5.0	P4104A-ND•	1.13	7.64	39.42	ECK-D2H221KB5
500	270pf	±10%	Y5P	6.0	4.0	5.0	P4105A-ND	1.13	7.64	39.42	ECK-D2H271KB5
500	330pf	±10%	Y5P	6.0	4.0	5.0	P4106A-ND•	1.13	7.64	39.42	ECK-D2H331KB5
500	390pf	±10%	Y5P	6.0	4.0	5.0	P4107A-ND	1.13	7.64	39.42	ECK-D2H391KB5
500	470pf	±10%	Y5P	6.0	4.0	5.0	P4108A-ND•	1.13	7.64	39.42	ECK-D2H471KB5
500	560pf	±10%	Y5P	6.0	4.0	5.0	P4109A-ND	1.13	7.64	39.42	ECK-D2H561KB5
500	680pf	±10%	Y5P	6.0	4.0	5.0	P4110A-ND•	1.13	7.64	39.42	ECK-D2H681KB5
500	820pf	±10%	Y5P	7.0	4.0	5.0	P4111A-ND	1.13	7.64	39.42	ECK-D2H821KB5
500	1000pf	±10%	Y5P	7.0	4.0	5.0	P4112A-ND	1.75	11.80	60.93	ECK-D2H102KB5
500	1500pf	±10%	Y5P	7.0	4.0	5.0	P4115A-ND	1.75	11.80	60.93	ECK-D2H152KB5
500	1800pf	±10%	Y5P	8.5	4.0	5.0	P4116A-ND	1.75	11.80	60.93	ECK-D2H182KB5
500	2200pf	±10%	Y5P	8.5	4.0	5.0	P4165A-ND	1.75	11.80	60.93	ECK-D2H222KB5
500	2700pf	±10%	Y5P	10.0	4.0	5.0	P4166A-ND	1.75	12.32	67.20	ECK-D2H272KB5
500	3300pf	±10%	Y5P	10.0	4.0	5.0	P4167A-ND	1.75	12.32	67.20	ECK-D2H332KB5
500	3900pf	±10%	Y5P	11.0	4.0	5.0	P4168A-ND	1.75	12.32	67.20	ECK-D2H392KB5
500	4700pf	±10%	Y5P	13.0	4.0	10.0	P4169A-ND	2.27	16.02	87.36	ECK-D2H472KB5
500	5600pf	±10%	Y5P	13.0	4.0	10.0	P4170A-ND	2.27	16.02	87.36	ECK-D2H562KB5
500	6800pf	±10%	Y5P	14.0	4.0	10.0	P4171A-ND	2.32	16.32	89.04	ECK-D2H682KB5
500	8200pf	±10%	Y5P	16.0	4.0	10.0	P4172A-ND	2.32	16.32	89.04	ECK-D2H822KB5
500	10000pf	±10%	Y5P	17.5	4.0	10.0	P4198A-ND	2.32	16.32	89.04	ECK-D2H103KB5
Class 1 Temperature Compensating											
50	10pf	±0.5pf	GP	5.0	3.5	2.5	P4012A-ND	.82	5.56	28.67	ECC-F1H100D
50	12pf	±5%	GP	5.0	3.5	2.5	P4013A-ND	.93	6.25	32.26	ECC-F1H120J
50	15pf	±5%	GP	5.0	3.5	2.5	P4014A-ND	.93	6.25	32.26	ECC-F1H150J
50	18pf	±5%	GP	5.0	3.5	2.5	P4015A-ND	.93	6.25	32.26	ECC-F1H180J
50	22pf	±5%	GP	5.0	3.5	2.5	P4016A-ND	.93	6.25	32.26	ECC-F1H220J
50	27pf	±5%	GP	5.0	3.5	2.5	P4017A-ND	.93	6.25	32.26	ECC-F1H270J
50	33pf	±5%	GP	5.0	3.5	2.5	P4018A-ND	.93	6.25	32.26	ECC-F1H330J
50	39pf	±5%	GP	5.0	3.5	2.5	P4019A-ND	.93	6.25	32.26	ECC-F1H390J
50	47pf	±5%	GP	5.0	3.5	2.5	P4020A-ND	.93	6.25	32.26	ECC-F1H470J
50	56pf	±5%	GP	5.0	3.5	2.5	P4021A-ND	.93	6.25	32.26	ECC-F1H560J
50	68pf	±5%	GP	5.0	3.5	2.5	P4022A-ND	.93	6.25	32.26	ECC-F1H680J
50	82pf	±5%	GP	5.0	3.5	2.5	P4023A-ND	.93	6.25	32.26	ECC-F1H820J
50	100pf	±5%	GP	5.0	3.5	2.5	P4024A-ND	.93	6.25	32.26	ECC-F1H101J
50	120pf	±5%	GP	5.0	3.5	2.5	P4025A-ND	.93	6.25	32.26	ECC-F1H121J
50	150pf	±5%	GP	5.0	3.5	2.5	P4026A-ND	.93	6.25	32.26	ECC-F1H151J
50	180pf	±5%	GP	5.0	3.5	2.5	P4027A-ND	.93	6.25	32.26	ECC-F1H181J
50	220pf	±5%	GP	6.5	3.5	5.0	P4028A-ND	.93	6.25	32.26	ECC-F1H221J
50	270pf	±5%	GP	6.5	3.5	5.0	P4029A-ND	1.18	7.99	41.22	ECC-F1H271J
50	330pf	±5%	GP	6.5	3.5	5.0	P4030A-ND	1.18	7.99	41.22	ECC-F1H331J
50	390pf	±5%	GP	8.0	3.5	5.0	P4031A-ND	1.18	7.99	41.22	ECC-F1H391J
50	470pf	±5%	GP	8.0	3.5	5.0	P4032A-ND	1.24	8.33	43.01	ECC-F1H471J
50	560pf	±5%	GP	9.5	3.5	5.0	P4033A-ND	1.24	8.33	43.01	ECC-F1H561J
50	680pf	±5%	GP	9.5	3.5	5.0	P4034A-ND	1.24	8.33	43.01	ECC-F1H681J
50	820pf	±5%	GP	10.5	3.5	5.0	P4035A-ND	1.24	8.33	43.01	ECC-F1H821J
50	1000pf	±5%	GP	10.5	3.5	5.0	P4036A-ND	1.83	12.94	70.56	ECC-F1H102J
50	10pf	±0.5pf	NPO	5.0	3.5	2.5	P4444A-ND	1.60	10.76	55.55	ECC-F1H100DC
50	12pf	±5%	NPO	5.0	3.5	2.5	P4445A-ND	1.60	10.76	55.55	ECC-F1H120JC
50	15pf	±5%	NPO	5.0	3.5	2.5	P4446A-ND	1.60	10.76	55.55	ECC-F1H150JC
50	18pf	±5%	NPO	5.0	3.5	2.5	P4447A-ND	1.60	10.76	55.55	ECC-F1H180JC
50	22pf	±5%	NPO	5.0	3.5	2.5	P4448A-ND	1.60	10.76	55.55	ECC-F1H220JC
50	27pf	±5%	NPO	5.0	3.5	2.5	P4449A-ND	1.60	10.76	55.55	ECC-F1H270JC
50	33pf	±5%	NPO	5.0	3.5	2.5	P4450A-ND	1.60	10.76	55.55	ECC-F1H330JC
50	39pf	±5%	NPO	5.0	3.5	2.5	P4451A-ND	1.60	10.76	55.55	ECC-F1H390JC
50	47pf	±5%	NPO	5.0	3.5	2.5	P4452A-ND	1.97	13.86	75.60	ECC-F1H470JC4
50	56pf	±5%	NPO	6.5	3.5	5.0	P4453A-ND	1.97	13.86	75.60	ECC-F1H560JC
50	68pf	±5%	NPO	6.5	3.5	5.0	P4454A-ND	1.97	13.86	75.60	ECC-F1H680JC
50	82pf	±5%	NPO	6.5	3.5	5.0	P4455A-ND	1.97	13.86	75.60	ECC-F1H820JC4
50	100pf	±5%	NPO	6.5	3.5	5.0	P4456A-ND	2.36	16.63	90.72	ECC-F1H101JC4
50	120pf	±5%	NPO	8.0	3.5	5.0	P4457A-ND	2.36	16.63	90.72	ECC-F1H121JC4
50	150pf	±5%	NPO	8.0	3.5	5.0	P4458A-ND	2.62	18.48	100.80	ECC-F1H151JC4

(Continued)

Panasonic Ceramic Disc Capacitors *(Cont.)*

Volt-age	Capac-itance	Tolerance	Temp. Char.	Dimensions (mm) Dia.	Thick-ness	Lead Space	Digi-Key Part No.	Pricing 10	100	1,000	Panasonic Part No.
Class 1 Temperature Compensating cont.											
50	180pf	±5%	NPO	9.5	3.5	5.0	P4459A-ND	2.62	18.48	100.80	ECC-F1H181JC4
50	220pf	±5%	NPO	9.5	3.5	5.0	P4460A-ND	2.62	18.48	100.80	ECC-F1H221JC4
50	270pf	±5%	NPO	10.5	3.5	5.0	P4461A-ND	2.62	18.48	100.80	ECC-F1H271JC4
500	10pf	±10%	GP	6.0	3.5	5.0	P4000A-ND	1.66	11.16	57.60	ECC-D2H100F5
500	15pf	±10%	GP	6.0	3.5	5.0	P4002A-ND	1.66	11.16	57.60	ECC-D2H150K5
500	18pf	±10%	GP	6.0	3.5	5.0	P4003A-ND	1.66	11.16	57.60	ECC-D2H180K5
500	22pf	±10%	GP	6.0	3.5	5.0	P4004A-ND	1.66	11.16	57.60	ECC-D2H220K5
500	27pf	±10%	GP	6.0	3.5	5.0	P4005A-ND	1.66	11.16	57.60	ECC-D2H270K5
500	33pf	±10%	GP	6.0	3.5	5.0	P4006A-ND	1.66	11.16	57.60	ECC-D2H330K5
500	39pf	±10%	GP	6.0	3.5	5.0	P4007A-ND	1.66	11.16	57.60	ECC-D2H390K5
500	47pf	±10%	GP	6.0	3.5	5.0	P4008A-ND•	1.66	11.16	57.60	ECC-D2H470K5
500	56pf	±10%	GP	6.0	3.5	5.0	P4009A-ND	1.66	11.16	57.60	ECC-D2H560K5
500	68pf	±10%	GP	7.0	3.5	5.0	P4010A-ND	1.66	11.16	57.60	ECC-D2H680K5
500	82pf	±10%	GP	7.0	3.5	5.0	P4011A-ND	1.66	11.16	57.60	ECC-D2H820K5
500	10pf	±0.5pf	NPO	6.0	3.5	5.0	P4400A-ND	1.66	11.16	57.60	ECC-D2H100DC5
500	15pf	±5%	NPO	6.0	3.5	5.0	P4402A-ND	2.54	17.88	97.50	ECC-D2H150JC5
500	18pf	±5%	NPO	6.0	3.5	5.0	P4403A-ND	2.54	17.88	97.50	ECC-D2H180JC5
500	22pf	±5%	NPO	6.0	3.5	5.0	P4404A-ND	2.54	17.88	97.50	ECC-D2H220JC5
500	27pf	±5%	NPO	7.0	3.5	5.0	P4405A-ND	2.54	17.88	97.50	ECC-D2H270JC5
500	33pf	±5%	NPO	7.0	3.5	5.0	P4406A-ND	2.54	17.88	97.50	ECC-D2H330JC5
500	39pf	±5%	NPO	7.0	3.5	5.0	P4407A-ND	2.65	18.70	102.00	ECC-D2H390JC5
500	47pf	±5%	NPO	8.5	3.5	5.0	P4408A-ND	3.00	21.18	115.50	ECC-D2H470JC5
500	56pf	±5%	NPO	8.5	3.5	5.0	P4409A-ND	3.00	21.18	115.50	ECC-D2H560JC5
500	68pf	±5%	NPO	8.5	3.5	5.0	P4410A-ND	3.04	21.45	117.00	ECC-D2H680JC5
500	82pf	±5%	NPO	10.0	3.5	5.0	P4411A-ND	4.69	33.50	187.60	ECC-D2H820JC5
500	100pf	±5%	NPO	10.0	3.5	5.0	P4412A-ND	4.66	33.25	186.20	ECC-D2H101JC5
500	120pf	±5%	NPO	11.0	3.5	5.0	P4413A-ND	4.69	33.50	187.60	ECC-D2H121JC5
500	150pf	±5%	NPO	13.0	3.5	10.0	P4414A-ND	4.94	35.25	197.40	ECC-D2H151JC5
500	180pf	±5%	NPO	13.0	3.5	10.0	P4415A-ND	4.94	35.25	197.40	ECC-D2H181JC5
500	220pf	±5%	NPO	14.0	3.5	10.0	P4416A-ND	4.94	35.25	197.40	ECC-D2H221JC5

- **PDC1-KIT-ND** ***Digi-Key® Ceramic Disc Capacitors Kit*** 20 each of values denoted (360 total pieces) **$25.95**

Panasonic Ceramic Disc Capacitors - KGE Series

High Voltage - Rated 1 to 3 kVDC, Temperature Char. SL/GP

FEATURES:

- Wide operating temperature range: -25°C to 105°C
- Low loss at wide frequency range and stable against high voltage pulses
- Temperature stable (Char. SL/GP)
- Flame-retardant insulating coating applied

RECOMMENDED APPLICATIONS:

- Ballast circuit of LCD backlighting inverter
- Snubber circuit of switching power supply
- Horizontal resonance circuit of TV and CRT display
- Inverter type lighting apparatus
- High voltage pulse and DC circuits

SPECIFICATIONS:

Operating Temperature Range: -25°C to +105°C

Rated Voltage: 1kVDC, 2kVDC, 3kVDC

Dielectric Withstanding Voltage: 200% of the rated voltage for 1 to 5 seconds

Capacitance: Within tolerance, when measured at 1 MHz ±20%, 1 to 5 Vrms, and 20°C

Q Factor: Capacitance <30pF: Q≥400+20xC (C: Rated Capacitance in pF). Capacitance ≥30pF: Q≥1000 at 1 MHz±20%, 1 to 5 Vrms, and 20°C

Insulation Resistance: 10,000 MΩ min. at 500 VDC and 1 minute electrification

Temperature Characteristics: Temperature Coefficient: +350 to -1000 ppm/°C over the temperature range of 20°C to 85°C

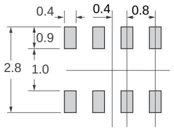
Voltage	Capac-itance	Tolerance	Temperature Char.	Dimensions (mm) Diameter	Thickness	Lead Space	Digi-Key Part No.	Price Each 10	100	1,000	Panasonic Part No.
1K	12pf	±5%	GP	6.0	5.0	5.0	P10793-ND	.29	.20	.11	ECC-D3A120JGE
1K	15pf	±5%	GP	6.0	5.0	5.0	P10794-ND	.29	.20	.11	ECC-D3A150JGE
1K	18pf	±5%	GP	6.0	5.0	5.0	P10795-ND	.29	.20	.11	ECC-D3A180JGE
1K	22pf	±5%	GP	6.0	5.0	5.0	P10796-ND	.29	.20	.11	ECC-D3A220JGE
1K	27pf	±5%	GP	6.0	5.0	5.0	P10797-ND	.29	.20	.11	ECC-D3A270JGE
1K	33pf	±5%	GP	6.0	5.0	5.0	P10798-ND	.30	.21	.12	ECC-D3A330JGE
1K	39pf	±5%	GP	6.0	5.0	5.0	P10799-ND	.30	.21	.12	ECC-D3A390JGE
1K	47pf	±5%	GP	6.0	5.0	5.0	P10800-ND	.30	.21	.12	ECC-D3A470JGE
1K	56pf	±5%	GP	6.0	5.0	5.0	P10801-ND	.30	.21	.12	ECC-D3A560JGE
1K	68pf	±5%	GP	6.0	5.0	5.0	P10802-ND	.30	.21	.12	ECC-D3A680JGE
1K	82pf	±5%	GP	6.0	5.0	5.0	P10803-ND	.30	.21	.12	ECC-D3A820JGE
1K	100pf	±5%	GP	7.0	5.0	5.0	P10804-ND	.32	.23	.13	ECC-D3A101JGE
1K	120pf	±5%	GP	7.0	5.0	5.0	P10805-ND	.32	.23	.13	ECC-D3A121JGE
1K	150pf	±5%	GP	8.0	5.0	5.0	P10806-ND	.31	.22	.13	ECC-D3A151JGE
1K	180pf	±5%	GP	8.0	5.0	5.0	P10807-ND	.31	.22	.13	ECC-D3A181JGE
1K	220pf	±5%	GP	9.0	5.0	5.0	P10808-ND	.33	.24	.14	ECC-D3A221JGE
1K	270pf	±5%	GP	9.0	5.0	5.0	P10809-ND	.34	.24	.14	ECC-D3A271JGE
1K	330pf	±5%	GP	11.0	5.0	5.0	P10810-ND	.38	.27	.15	ECC-D3A331JGE
1K	390pf	±5%	GP	11.0	5.0	5.0	P10811-ND	.40	.28	.16	ECC-D3A391JGE
1K	470pf	±5%	GP	13.0	5.0	7.5	P10812-ND	.45	.32	.18	ECC-D3A471JGE
2K	12pf	±5%	GP	7.0	5.5	7.5	P10813-ND	.32	.23	.13	ECC-D3D120JGE
2K	15pf	±5%	GP	7.0	5.5	7.5	P10814-ND	.32	.23	.13	ECC-D3D150JGE
2K	18pf	±5%	GP	7.0	5.5	7.5	P10815-ND	.32	.23	.13	ECC-D3D180JGE
2K	22pf	±5%	GP	7.0	5.5	7.5	P10816-ND	.32	.23	.13	ECC-D3D220JGE
2K	27pf	±5%	GP	7.0	5.5	7.5	P10817-ND	.32	.23	.13	ECC-D3D270JGE
2K	33pf	±5%	GP	7.0	5.5	7.5	P10818-ND	.33	.23	.13	ECC-D3D330JGE
2K	39pf	±5%	GP	7.0	5.5	7.5	P10819-ND	.33	.23	.13	ECC-D3D390JGE
2K	47pf	±5%	GP	7.0	5.5	7.5	P10820-ND	.33	.23	.13	ECC-D3D470JGE
2K	56pf	±5%	GP	7.0	5.5	7.5	P10821-ND	.34	.24	.14	ECC-D3D560JGE
2K	68pf	±5%	GP	7.0	5.5	7.5	P10822-ND	.34	.24	.14	ECC-D3D680JGE
2K	82pf	±5%	GP	7.0	5.5	7.5	P10823-ND	.35	.25	.14	ECC-D3D820JGE
2K	100pf	±5%	GP	8.0	5.5	7.5	P10824-ND	.35	.25	.14	ECC-D3D101JGE
2K	120pf	±5%	GP	8.0	5.5	7.5	P10825-ND	.37	.26	.15	ECC-D3D121JGE
2K	150pf	±5%	GP	9.0	5.5	7.5	P10826-ND	.38	.27	.16	ECC-D3D151JGE
2K	180pf	±5%	GP	10.0	5.5	7.5	P10827-ND	.39	.28	.16	ECC-D3D181JGE
2K	220pf	±5%	GP	10.0	5.5	7.5	P10828-ND	.39	.28	.16	ECC-D3D221JGE
3K	12pf	±5%	GP	7.0	6.0	7.5	P10829-ND	.41	.29	.17	ECC-D3F120JGE
3K	15pf	±5%	GP	7.0	6.0	7.5	P10830-ND	.41	.29	.17	ECC-D3F150JGE
3K	18pf	±5%	GP	7.0	6.0	7.5	P10831-ND	.41	.29	.17	ECC-D3F180JGE
3K	22pf	±5%	GP	7.0	6.0	7.5	P10832-ND	.41	.29	.17	ECC-D3F220JGE
3K	27pf	±5%	GP	7.0	6.0	7.5	P10833-ND	.41	.29	.17	ECC-D3F270JGE
3K	33pf	±5%	GP	7.0	6.0	7.5	P10834-ND	.42	.30	.17	ECC-D3F330JGE
3K	39pf	±5%	GP	7.0	6.0	7.5	P10835-ND	.42	.30	.17	ECC-D3F390JGE
3K	47pf	±5%	GP	7.0	6.0	7.5	P10836-ND	.42	.30	.17	ECC-D3F470JGE
3K	56pf	±5%	GP	8.0	6.0	7.5	P10837-ND	.44	.31	.18	ECC-D3F560JGE
3K	68pf	±5%	GP	8.0	6.0	7.5	P10838-ND	.44	.31	.18	ECC-D3F680JGE
3K	82pf	±5%	GP	9.0	6.0	7.5	P10839-ND	.44	.31	.18	ECC-D3F820JGE
3K	100pf	±5%	GP	10.0	6.0	7.5	P10840-ND	.50	.36	.20	ECC-D3F101JGE
3K	120pf	±5%	GP	10.0	6.0	7.5	P10841-ND	.51	.36	.21	ECC-D3F121JGE
3K	150pf	±5%	GP	11.0	6.0	7.5	P10842-ND	.52	.37	.21	ECC-D3F151JGE

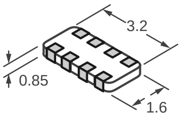
Panasonic

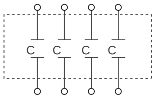
Multilayer Ceramic Chip Capacitor Arrays - ECJ-R Series

FEATURES:
- Four elements in a 1206 pkg.
- Compact design (3.2mm x 1.6mm) for high density PWB assembly
- Improvement of placement time on mounting machines

RECOMMENDED APPLICATIONS:
- EMI noise suppression
- Digital noise reduction







Size Code	Type	WV DC	Cap.	Tolerance	Digi-Key Part No.	Cut Tape Price Each 1	10	100	500	1,000	Digi-Key Part No.	Tape & Reel Pricing 4,000	Panasonic Part No.
1206	NPO	50	10pF	±1pF	P10580CT-ND	.40	.36	.31	.26	.22	P10580TR-ND	141.00/M	ECJ-RVC1H100F
		50	12pF	±10%	P10581CT-ND	.40	.36	.31	.26	.22	P10581TR-ND	141.00/M	ECJ-RVC1H120K
		50	15pF	±10%	P10582CT-ND	.40	.36	.31	.26	.22	P10582TR-ND	141.00/M	ECJ-RVC1H150K
		50	18pF	±10%	P10583CT-ND	.40	.36	.31	.26	.22	P10583TR-ND	141.00/M	ECJ-RVC1H180K
		50	22pF	±10%	P10584CT-ND	.40	.36	.31	.26	.22	P10584TR-ND	141.00/M	ECJ-RVC1H220K
		50	27pF	±10%	P10585CT-ND	.49	.43	.37	.31	.27	P10585TR-ND	171.00/M	ECJ-RVC1H270K
		50	33pF	±10%	P10586CT-ND	.49	.43	.37	.31	.27	P10586TR-ND	171.00/M	ECJ-RVC1H330K
		50	39pF	±10%	P10587CT-ND	.49	.43	.37	.31	.27	P10587TR-ND	171.00/M	ECJ-RVC1H390K
		50	47pF	±10%	P10588CT-ND	.49	.43	.37	.31	.27	P10588TR-ND	171.00/M	ECJ-RVC1H470K
		50	56pF	±10%	P10589CT-ND	.50	.44	.38	.32	.27	P10589TR-ND	175.00/M	ECJ-RVC1H560K
		50	68pF	±10%	P10590CT-ND	.50	.44	.38	.32	.27	P10590TR-ND	175.00/M	ECJ-RVC1H680K
		50	82pF	±10%	P10591CT-ND	.50	.44	.38	.32	.27	P10591TR-ND	175.00/M	ECJ-RVC1H820K
		50	100pF	±10%	P10592CT-ND	.51	.45	.39	.32	.28	P10592TR-ND	179.00/M	ECJ-RVC1H101K
		50	120pF	±10%	P10593CT-ND	.51	.45	.39	.32	.28	P10593TR-ND	179.00/M	ECJ-RVC1H121K
		50	150pF	±10%	P10594CT-ND	.52	.46	.39	.33	.28	P10594TR-ND	182.00/M	ECJ-RVC1H151K
		50	180pF	±10%	P10595CT-ND	.52	.46	.39	.33	.28	P10595TR-ND	182.00/M	ECJ-RVC1H181K
		50	220pF	±10%	P10596CT-ND	.52	.46	.39	.33	.28	P10596TR-ND	182.00/M	ECJ-RVC1H221K
		50	270pF	±10%	P10597CT-ND	.52	.46	.39	.33	.28	P10597TR-ND	182.00/M	ECJ-RVC1H271K
		50	330pF	±10%	P10598CT-ND	.52	.46	.39	.33	.28	P10598TR-ND	182.00/M	ECJ-RVC1H331K
		50	390pF	±10%	P10599CT-ND	.52	.46	.39	.33	.28	P10599TR-ND	182.00/M	ECJ-RVC1H391K
		50	470pF	±10%	P10600CT-ND	.52	.46	.39	.33	.28	P10600TR-ND	182.00/M	ECJ-RVC1H471K
	X7R	50	330pF	±20%	P10601CT-ND	.40	.35	.30	.25	.22	P10601TR-ND	140.00/M	ECJ-RVB1H331M
		50	470pF	±20%	P10602CT-ND	.40	.35	.30	.25	.22	P10602TR-ND	140.00/M	ECJ-RVB1H471M
		50	680pF	±20%	P10603CT-ND	.40	.35	.30	.25	.22	P10603TR-ND	140.00/M	ECJ-RVB1H681M
		50	1000pF	±20%	P10604CT-ND	.40	.35	.30	.25	.22	P10604TR-ND	140.00/M	ECJ-RVB1H102M
		50	1500pF	±20%	P10605CT-ND	.40	.36	.31	.26	.22	P10605TR-ND	141.00/M	ECJ-RVB1H152M
		50	2200pF	±20%	P10606CT-ND	.40	.36	.31	.26	.22	P10606TR-ND	141.00/M	ECJ-RVB1H222M
		50	3300pF	±20%	P10607CT-ND	.41	.36	.31	.26	.22	P10607TR-ND	143.00/M	ECJ-RVB1H332M
		50	4700pF	±20%	P10608CT-ND	.41	.36	.31	.26	.22	P10608TR-ND	143.00/M	ECJ-RVB1H472M
		50	6800pF	±20%	P10609CT-ND	.41	.36	.31	.26	.22	P10609TR-ND	143.00/M	ECJ-RVB1H682M
		50	10000pF	±20%	P10610CT-ND	.41	.36	.31	.26	.22	P10610TR-ND	143.00/M	ECJ-RVB1H103M
		16	.1µF	±20%	P11148CT-ND	.57	.50	.43	.36	.31	P11148TR-ND	198.00/M	ECJ-RVB1C104M
	Y5V	25	.1µF	+80%/-20%	P10611CT-ND	.40	.35	.30	.25	.22	P10611TR-ND	140.00/M	ECJ-RVF1E104Z

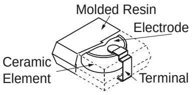
Panasonic

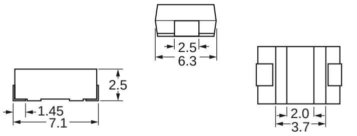
High Voltage Ceramic Capacitors (SMD)

FEATURES:
- Resin molded type for reflow solderings • High reliability through disc capacitor element molded construction • Excellent "Voltage vs. Temperature Rise" through low loss ceramic dielectric • Temperature stable (SL/GP) & (B/Y5P)

SPECIFICATIONS:
- Operating Temperature Range: -25°C to 105°C • Insulation Resistance: 10000 MΩ min. at 500 VDC & 1 min. electrification • Q or Dissipation Factor (tand): *SL/GP Temp. Char.*: C < 30pF: Q ≥ 400+20 C (C:cap.pF), C ≥ 30 pF: Q ≥ 1000 at 1 MHz, 1-5 Vrms and 20°C *B/Y5P Temp. Char.*: D.F. (tand)≤0.025 at 1kHz, 1 to 5 Vrms and 20°C • Temperature Characteristics: *SL/GP* Temp. Coefficient: +350 to -1000ppm/°C *B/Y5P* Max. Capacitance Change: ΔC/C≤±10% (Temperature Range: -25 to 85°C) • Capacitance: *SL/GP Temp. Char.*: 1MHz, 1-5 Vrms and 20°C *B/Y5P Temp. Char.*: 1kHz, 1-5 Vrms and 20°C • Dielectric Withstanding Voltage: *SL/GP Temp. Char.*, (voltage 4kVDC): 150% of the rated voltage for 1-5 seconds *SL/GP Temp. Char.*, (voltage 2-3kVDC): 200% of the rated voltage for 1-5 sec. *B/Y5P Temp. Char.*: 200% of the rated voltage for 1-5 seconds

RECOMMENDED APPLICATIONS:
- Output circuit of LCD backlighting inverter • Snubber circuit of switching power supply • High voltage circuit





Volt-age	Capac-itance	Capac. Tol. %	Temp. Char.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	TR Pricing 2,000	Panasonic Part No.
3KVDC	10pF	±5	SL/GP	PCC100JCT-ND	2.92	2.21	1.67	PCC100JTR-ND	1084.00/M	ECC-S3F100JG
3KVDC	12pF	±5	SL/GP	PCC120JCT-ND	2.92	2.21	1.67	PCC120JTR-ND	1084.00/M	ECC-S3F120JG
3KVDC	15pF	±5	SL/GP	PCC150JCT-ND	2.92	2.21	1.67	PCC150JTR-ND	1084.00/M	ECC-S3F150JG
3KVDC	18pF	±5	SL/GP	PCC180JCT-ND	2.92	2.21	1.67	PCC180JTR-ND	1084.00/M	ECC-S3F180JG
3KVDC	22pF	±5	SL/GP	PCC220JCT-ND	2.92	2.21	1.67	PCC220JTR-ND	1084.00/M	ECC-S3F220JG
3KVDC	27pF	±5	SL/GP	PCC270JCT-ND	2.92	2.21	1.67	PCC270JTR-ND	1084.00/M	ECC-S3F270JG
3KVDC	33pF	±5	SL/GP	PCC330JCT-ND	2.92	2.21	1.67	PCC330JTR-ND	1084.00/M	ECC-S3F330JG
3KVDC	39pF	±5	SL/GP	PCC390JCT-ND	2.92	2.21	1.67	PCC390JTR-ND	1084.00/M	ECC-S3F390JG
3KVDC	47pF	±5	SL/GP	PCC470JCT-ND	2.92	2.21	1.67	PCC470JTR-ND	1084.00/M	ECC-S3F470JG
3KVDC	56pF	±5	SL/GP	PCC560JCT-ND	2.92	2.21	1.67	PCC560JTR-ND	1084.00/M	ECC-S3F560JG

Volt-age	Capaci-tance	Capac. Tol. %	Temp. Char.	Digi-Key Part No.	Bulk Price Each 1	10	100	Panasonic Part No.
4KVDC	10pF	±5	SL/GP	PCC2082-ND	1.58	1.19	.90	ECC-S3G100JG
4KVDC	12pF	±5	SL/GP	PCC2083-ND	1.58	1.19	.90	ECC-S3G120JG
4KVDC	15pF	±5	SL/GP	PCC2084-ND	1.58	1.19	.90	ECC-S3G150JG
4KVDC	18pF	±5	SL/GP	PCC2085-ND	1.58	1.19	.90	ECC-S3G180JG
4KVDC	22pF	±5	SL/GP	PCC2086-ND	1.58	1.19	.90	ECC-S3G220JG
4KVDC	27pF	±5	SL/GP	PCC2087-ND	1.58	1.19	.90	ECC-S3G270JG
4KVDC	33pF	±5	SL/GP	PCC2088-ND	1.58	1.19	.90	ECC-S3G330JG
4KVDC	39pF	±5	SL/GP	PCC2089-ND	1.58	1.19	.90	ECC-S3G390JG
4KVDC	47pF	±5	SL/GP	PCC2090-ND	1.58	1.19	.90	ECC-S3G470JG
2KVDC	68pF	±5	SL/GP	PCC2091-ND	1.58	1.19	.90	ECC-S3D680JG
2KVDC	100pF	±10	B/Y5P	PCC2092-ND	1.58	1.19	.90	ECK-S3D101KB
2KVDC	120pF	±10	B/Y5P	PCC2093-ND	1.58	1.19	.90	ECK-S3D121KB
2KVDC	150pF	±10	B/Y5P	PCC2094-ND	1.58	1.19	.90	ECK-S3D151KB
2KVDC	180pF	±10	B/Y5P	PCC2095-ND	1.58	1.19	.90	ECK-S3D181KB
2KVDC	220pF	±10	B/Y5P	PCC2096-ND	1.58	1.19	.90	ECK-S3D221KB
2KVDC	270pF	±10	B/Y5P	PCC2097-ND	1.58	1.19	.90	ECK-S3D271KB
2KVDC	330pF	±10	B/Y5P	PCC2098-ND	1.58	1.19	.90	ECK-S3D331KB
1KVDC	390pF	±10	B/Y5P	PCC2099-ND	1.34	1.01	.76	ECK-S3A391KB
1KVDC	470pF	±10	B/Y5P	PCC2100-ND	1.34	1.01	.76	ECK-S3A471KB

Panasonic

Ceramic Capacitors for Safety Regulations - Type BC (SMD)

FEATURES:
- Resin molded type for reflow soldering surface mountings
- High reliability through disc capacitor element molded construction
- Related by IEC 384-14 sub-class Y2/X1 and Japan Domestic Safety Regulations
- One standard size cover wide capacitance range for 1000pF to 4700pF

APPLICATIONS:
- On-board type power module
- DC-DC Converter
- FAX Modulater-Demodulator

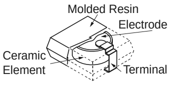


Fig. 1

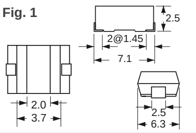
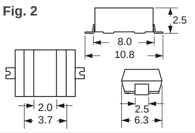


Fig. 2



Volt-age	Capaci-tance	Capac. Tol. %	Temp. Char.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 2,000	Panasonic Part No.
Fig. 1 – J-Lead										
250VAC	1000pF	±20	E	P10739CT-ND	1.86	1.46	1.07	P10739TR-ND	1062.00/M	ECK-TBC102ME
250VAC	1500pF	±20	E	P10740CT-ND	1.86	1.46	1.07	P10740TR-ND	1062.00/M	ECK-TBC152ME
250VAC	2200pF	±20	E	P10741CT-ND	1.86	1.46	1.07	P10741TR-ND	1062.00/M	ECK-TBC222ME
250VAC	3300pF	±20	F	P10742CT-ND	1.86	1.46	1.07	P10742TR-ND	1062.00/M	ECK-TBC332MF
250VAC	4700pF	±20	F	P10743CT-ND	1.86	1.46	1.07	P10743TR-ND	1062.00/M	ECK-TBC472MF
Fig. 2 – Gull-Wing										
250VAC	1000pF	±20	E	P10744CT-ND	1.86	1.46	1.07	P10744TR-ND	1062.00/M	ECK-TBC102MEM
250VAC	1500pF	±20	E	P10745CT-ND	1.86	1.46	1.07	P10745TR-ND	1062.00/M	ECK-TBC152MEM
250VAC	2200pF	±20	E	P10746CT-ND	1.86	1.46	1.07	P10746TR-ND	1062.00/M	ECK-TBC222MEM
250VAC	3300pF	±20	F	P10747CT-ND	1.86	1.46	1.07	P10747TR-ND	1062.00/M	ECK-TBC332MFM
250VAC	4700pF	±20	F	P10748CT-ND	1.86	1.46	1.07	P10748TR-ND	1062.00/M	ECK-TBC472MFM

Panasonic

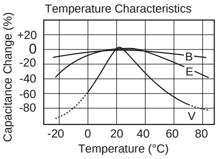
Ceramic Disc Capacitors - Type GL

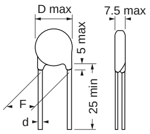
UL 1414 • CSA C22.2 APPROVED

FEATURES:

Rated 250 VAC.
CSA rating: 125 VAC

APPLICATIONS:
- Antenna coupling
- Line-bypass and Across-the-line
- Switching surge killer etc.





Volt-age	Capaci-tance	Tolerance	Temp. Char.	Dimensions (mm) Dia.	Thick-ness	Lead Space	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
250	100pF	±20%	B	8.0	5.5	7.5	P4484-ND	.61	.46	.33	.19	ECK-DGL101MB
250	150pF	±20%	B	8.0	5.5	7.5	P4485-ND	.61	.46	.33	.19	ECK-DGL150MB
250	220pF	±20%	B	8.0	5.5	7.5	P4486-ND	.61	.46	.33	.19	ECK-DGL221MB
250	330pF	±20%	B	8.0	5.5	7.5	P4487-ND	.61	.46	.33	.19	ECK-DGL331MB
250	470pF	±20%	B	9.0	5.5	7.5	P4488-ND	.61	.46	.33	.19	ECK-DGL471MB
250	680pF	±20%	B	9.0	5.5	7.5	P4489-ND	.65	.48	.34	.20	ECK-DGL681MB
250	1000pF	±20%	E	9.0	5.5	7.5	P4490-ND	.52	.39	.28	.16	ECK-DGL102ME
250	1500pF	±20%	E	11.0	5.5	7.5	P4491-ND	.70	.52	.39	.22	ECK-DGL152ME
250	2200pF	±20%	E	12.0	5.5	7.5	P4492-ND	.83	.63	.46	.27	ECK-DGL222ME
250	3300pF	±20%	E	15.0	5.5	10.0	P4493-ND	.93	.70	.51	.30	ECK-DGL332ME
250	4700pF	±20%	E	17.0	5.5	10.0	P4494-ND	1.20	.90	.68	.40	ECK-DGL472ME
250	4700pF	+80%, -20%	V	12.0	5.5	7.5	P4495-ND	1.14	.85	.63	.36	ECK-DGL472ZV
250	10000pF	+80%, -20%	V	17.0	5.5	10.0	P4496-ND	1.58	1.19	.89	.53	ECK-DGL103ZV

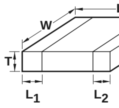
Panasonic Multilayer Ceramic Chip Capacitors 0201, 0402, 0603, 0612, 0805, 1206 & 1210

FEATURES:
- Small in size and wide capacitance range
- Superior humidity characteristic and long life due to the monolithic construction
- Excellent solderability and resistance to soldering heat due to terminals with three layers of silver nickel and solder
- Low self-inductance and excellent frequency characteristic

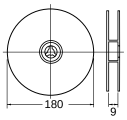
RECOMMENDED APPLICATIONS:

Class 1 (T.C. Type): Temperature compensations, tuned circuits and filter circuits, where low loss and high stability of capacitance and high insulation resistance are required.

Class 2 (HI-K type): Coupling and By-pass, where low loss and high stability of capacitance are not so important.



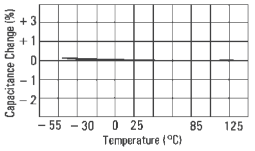
Dimensions shown in mm.



Size Code (EIA)	L	W	L1 / L2
0201	0.6±0.03	0.3±0.03	0.15±0.05
0402	1.00±0.05	0.50±0.05	0.20±0.10
0603	1.60±0.10	0.80±0.10	0.30±0.20
0612	1.60±0.20	3.20±0.20	0.30±0.20
0805	2.00±0.10	1.25±0.10	0.50±0.25
1206	3.20±0.15	1.60±0.15	0.80±0.30
1210	3.20±0.30	2.50±0.20	0.60±0.30

NPO Type - Class 1:
- Operating temperature range: -55°C ~+125°C

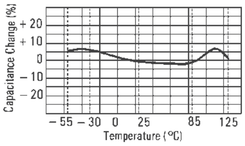
Temperature Coefficient



X7R Type - Class 2:
- Operating temperature range: -55°C ~+125°C

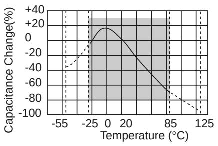
X5R Type - Class 2:
- Operating temperature range: -35°C ~+85°C (-25°C ~+85°C for 0201 series)

Temperature Coefficient



Y5V Type - Class 2:
- Operating temperature range: -25°C ~+85°C

Temperature Coefficient



† NOTE: Panasonic is in the process of changing all MLCC part numbers to a standardized system. This is a part number change only and does not affect the electrical or mechanical specifications. As a result of this change, Digi-Key may ship parts labeled with either the old or new number. Parts that **do not** have a new Panasonic part number listed will be subject to availability beginning March 2001 and are not recommended for new design. Please contact Digi-Key for a direct replacement.

Size Code	Type	Dim. WV DC	Cap.	Tolerance	(mm) T	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel		Old † Panasonic Part No.	New † Panasonic Part No.
							10	100	500	1,000		Size	Pricing		
0201	NPO	25	0.5pF	±.25pF	0.30	PCC2101CT-ND	.28	.20	.15	.12	PCC2101TR-ND	15,000	99.00/M	ECJ-ZEC1E0R5C	ECJ-ZEC1E0R5C
		25	1.0pF	±.25pF	0.30	PCC2102CT-ND	.28	.20	.15	.12	PCC2102TR-ND	15,000	99.00/M	ECJ-ZEC1E010C	ECJ-ZEC1E010C
		25	1.5pF	±.25pF	0.30	PCC2103CT-ND	.28	.20	.15	.12	PCC2103TR-ND	15,000	99.00/M	ECJ-ZEC1E1R5C	ECJ-ZEC1E1R5C
		25	2.0pF	±.25pF	0.30	PCC2104CT-ND	.28	.20	.15	.12	PCC2104TR-ND	15,000	99.00/M	ECJ-ZEC1E020C	ECJ-ZEC1E020C
		25	3.0pF	±.25pF	0.30	PCC2105CT-ND	.28	.20	.15	.12	PCC2105TR-ND	15,000	99.00/M	ECJ-ZEC1E030C	ECJ-ZEC1E030C
		25	4.0pF	±.25pF	0.30	PCC2106CT-ND	.28	.20	.15	.12	PCC2106TR-ND	15,000	99.00/M	ECJ-ZEC1E040C	ECJ-ZEC1E040C
		25	5.0pF	±.25pF	0.30	PCC2107CT-ND	.28	.20	.15	.12	PCC2107TR-ND	15,000	99.00/M	ECJ-ZEC1E050C	ECJ-ZEC1E050C
		25	6.0pF	±.5pF	0.30	PCC2108CT-ND	.28	.20	.15	.12	PCC2108TR-ND	15,000	99.00/M	ECJ-ZEC1E060D	ECJ-ZEC1E060D
		25	7.0pF	±.5pF	0.30	PCC2109CT-ND	.28	.20	.15	.12	PCC2109TR-ND	15,000	99.00/M	ECJ-ZEC1E070D	ECJ-ZEC1E070D
		25	8.0pF	±.5pF	0.30	PCC2110CT-ND	.28	.20	.15	.12	PCC2110TR-ND	15,000	99.00/M	ECJ-ZEC1E080D	ECJ-ZEC1E080D
		25	9.0pF	±.5pF	0.30	PCC2111CT-ND	.28	.20	.15	.12	PCC2111TR-ND	15,000	99.00/M	ECJ-ZEC1E090D	ECJ-ZEC1E090D
		25	10pF	±.5pF	0.30	PCC2112CT-ND	.28	.20	.15	.12	PCC2112TR-ND	15,000	99.00/M	ECJ-ZEC1E100D	ECJ-ZEC1E100D
		25	12pF	±5%	0.30	PCC2113CT-ND	.28	.20	.15	.12	PCC2113TR-ND	15,000	99.00/M	ECJ-ZEC1E120J	ECJ-ZEC1E120J
		25	15pF	±5%	0.30	PCC2114CT-ND	.28	.20	.15	.12	PCC2114TR-ND	15,000	99.00/M	ECJ-ZEC1E150J	ECJ-ZEC1E150J
		25	18pF	±5%	0.30	PCC2115CT-ND	.28	.20	.15	.12	PCC2115TR-ND	15,000	99.00/M	ECJ-ZEC1E180J	ECJ-ZEC1E180J
		25	22pF	±5%	0.30	PCC2116CT-ND	.28	.20	.15	.12	PCC2116TR-ND	15,000	99.00/M	ECJ-ZEC1E220J	ECJ-ZEC1E220J
		25	27pF	±5%	0.30	PCC2117CT-ND	.28	.20	.15	.12	PCC2117TR-ND	15,000	99.00/M	ECJ-ZEC1E270J	ECJ-ZEC1E270J
		25	33pF	±5%	0.30	PCC2118CT-ND	.28	.20	.15	.12	PCC2118TR-ND	15,000	99.00/M	ECJ-ZEC1E330J	ECJ-ZEC1E330J
		16	39pF	±5%	0.30	PCC2119CT-ND	.37	.27	.20	.15	PCC2119TR-ND	15,000	132.00/M	ECJ-ZEC1C390J	ECJ-ZEC1C390J
		16	47pF	±5%	0.30	PCC2120CT-ND	.37	.27	.20	.15	PCC2120TR-ND	15,000	132.00/M	ECJ-ZEC1C470J	ECJ-ZEC1C470J
		16	56pF	±5%	0.30	PCC2121CT-ND	.37	.27	.20	.15	PCC2121TR-ND	15,000	132.00/M	ECJ-ZEC1C560J	ECJ-ZEC1C560J
		16	68pF	±5%	0.30	PCC2122CT-ND	.37	.27	.20	.15	PCC2122TR-ND	15,000	132.00/M	ECJ-ZEC1C680J	ECJ-ZEC1C680J
		16	82pF	±5%	0.30	PCC2123CT-ND	.37	.27	.20	.15	PCC2123TR-ND	15,000	132.00/M	ECJ-ZEC1C820J	ECJ-ZEC1C820J
		16	100pF	±5%	0.30	PCC2124CT-ND	.37	.27	.20	.15	PCC2124TR-ND	15,000	132.00/M	ECJ-ZEC1C101J	ECJ-ZEC1C101J
	X7R	25	150pF	±10%	0.30	PCC2125CT-ND	.28	.20	.15	.12	PCC2125TR-ND	15,000	99.00/M	ECJ-ZEB1E151K	ECJ-ZEB1E151K
		25	220pF	±10%	0.30	PCC2126CT-ND	.28	.20	.15	.12	PCC2126TR-ND	15,000	99.00/M	ECJ-ZEB1E221K	ECJ-ZEB1E221K
		25	331pF	±10%	0.30	PCC2127CT-ND	.28	.20	.15	.12	PCC2127TR-ND	15,000	99.00/M	ECJ-ZEB1E331K	ECJ-ZEB1E331K
		25	470pF	±10%	0.30	PCC2128CT-ND	.28	.20	.15	.12	PCC2128TR-ND	15,000	99.00/M	ECJ-ZEB1E471K	ECJ-ZEB1E471K
		25	680pF	±10%	0.30	PCC2129CT-ND	.28	.20	.15	.12	PCC2129TR-ND	15,000	99.00/M	ECJ-ZEB1E681K	ECJ-ZEB1E681K
		25	1000pF	±10%	0.30	PCC2130CT-ND	.28	.20	.15	.12	PCC2130TR-ND	15,000	99.00/M	ECJ-ZEB1E102K	ECJ-ZEB1E102K
		16	1500pF	±10%	0.30	PCC2131CT-ND	.37	.27	.20	.15	PCC2131TR-ND	15,000	132.00/M	ECJ-ZEB1C152K	ECJ-ZEB1C152K
		16	2200pF	±10%	0.30	PCC2132CT-ND	.37	.27	.20	.15	PCC2132TR-ND	15,000	132.00/M	ECJ-ZEB1C222K	ECJ-ZEB1C222K
	X5R	10	3300pF	±10%	0.30	PCC2133CT-ND	.40	.29	.21	.16	PCC2133TR-ND	15,000	142.00/M	ECJ-ZEB1A332K	ECJ-ZEB1A332K
		6.3	4700pF	±10%	0.30	PCC2134CT-ND	.44	.31	.23	.18	PCC2134TR-ND	15,000	154.00/M	ECJ-ZEB0J472K	ECJ-ZEB0J472K
		6.3	6800pF	±10%	0.30	PCC2135CT-ND	.44	.31	.23	.18	PCC2135TR-ND	15,000	154.00/M	ECJ-ZEB0J682K	ECJ-ZEB0J682K
		6.3	10000pF	±10%	0.30	PCC2136CT-ND	.44	.31	.23	.18	PCC2136TR-ND	15,000	154.00/M	ECJ-ZEB0J103K	ECJ-ZEB0J103K
0402	NPO	50	0.5pF	±.25pF	0.50	PCC0R5CQCT-ND•	.24	.17	.12	.10	PCC0R5CQTR-ND	10,000	76.00/M	ECU-E1H0R5CCQ	ECJ-0EC1H0R5C
		50	1.0pF	±.25pF	0.50	PCC010CQCT-ND•	.24	.17	.12	.10	PCC010CQTR-ND	10,000	76.00/M	ECU-E1H010CCQ	ECJ-0EC1H010C
		50	1.5pF	±.25pF	0.50	PCC1R5CQCT-ND•	.24	.17	.12	.10	PCC1R5CQTR-ND	10,000	76.00/M	ECU-E1H1R5CCQ	ECJ-0EC1H1R5C
		50	2.0pF	±.25pF	0.50	PCC020CQCT-ND•	.24	.17	.12	.10	PCC020CQTR-ND	10,000	76.00/M	ECU-E1H020CCQ	ECJ-0EC1H020C
		50	3.0pF	±.25pF	0.50	PCC030CQCT-ND•	.24	.17	.12	.10	PCC030CQTR-ND	10,000	76.00/M	ECU-E1H030CCQ	ECJ-0EC1H030C
		50	4.0pF	±.25pF	0.50	PCC040CQCT-ND•	.24	.17	.12	.10	PCC040CQTR-ND	10,000	76.00/M	ECU-E1H040CCQ	ECJ-0EC1H040C
		50	5.0pF	±.25pF	0.50	PCC050CQCT-ND•	.24	.17	.12	.10	PCC050CQTR-ND	10,000	76.00/M	ECU-E1H050CCQ	ECJ-0EC1H050C
		50	6.0pF	±.5pF	0.50	PCC060CQCT-ND•	.24	.17	.12	.10	PCC060CQTR-ND	10,000	76.00/M	ECU-E1H060DCQ	ECJ-0EC1H060D
		50	7.0pF	±.5pF	0.50	PCC070CQCT-ND•	.24	.17	.12	.10	PCC070CQTR-ND	10,000	76.00/M	ECU-E1H070DCQ	ECJ-0EC1H070D
		50	8.0pF	±.5pF	0.50	PCC080CQCT-ND•	.24	.17	.12	.10	PCC080CQTR-ND	10,000	76.00/M	ECU-E1H080DCQ	ECJ-0EC1H080D
		50	9.0pF	±.5pF	0.50	PCC090CQCT-ND•	.24	.17	.12	.10	PCC090CQTR-ND	10,000	76.00/M	ECU-E1H090DCQ	ECJ-0EC1H090D
		50	10pF	±.5pF	0.50	PCC100CQCT-ND•	.24	.17	.12	.10	PCC100CQTR-ND	10,000	76.00/M	ECU-E1H100DCQ	ECJ-0EC1H100D
		50	11pF	±5%	0.50	PCC110CQCT-ND	.24	.17	.12	.10	PCC110CQTR-ND	10,000	76.00/M	ECU-E1H110JCQ	(Not for new design)
		50	12pF	±5%	0.50	PCC120CQCT-ND	.24	.17	.12	.10	PCC120CQTR-ND	10,000	76.00/M	ECU-E1H120JCQ	ECJ-0EC1H120J
		50	13pF	±5%	0.50	PCC130CQCT-ND	.24	.17	.12	.10	PCC130CQTR-ND	10,000	76.00/M	ECU-E1H130JCQ	(Not for new design)
		50	15pF	±5%	0.50	PCC150CQCT-ND•	.24	.17	.12	.10	PCC150CQTR-ND	10,000	76.00/M	ECU-E1H150JCQ	ECJ-0EC1H150J
		50	16pF	±5%	0.50	PCC160CQCT-ND	.24	.17	.12	.10	PCC160CQTR-ND	10,000	76.00/M	ECU-E1H160JCQ	(Not for new design)
		50	18pF	±5%	0.50	PCC180CQCT-ND•	.24	.17	.12	.10	PCC180CQTR-ND	10,000	76.00/M	ECU-E1H180JCQ	ECJ-0EC1H180J
		50	20pF	±5%	0.50	PCC200CQCT-ND	.24	.17	.12	.10	PCC200CQTR-ND	10,000	76.00/M	ECU-E1H200JCQ	(Not for new design)
		50	22pF	±5%	0.50	PCC220CQCT-ND•	.24	.17	.12	.10	PCC220CQTR-ND	10,000	76.00/M	ECU-E1H220JCQ	ECJ-0EC1H220J
		50	24pF	±5%	0.50	PCC240CQCT-ND•	.24	.17	.12	.10	PCC240CQTR-ND	10,000	76.00/M	ECU-E1H240JCQ	(Not for new design)
		50	27pF	±5%	0.50	PCC270CQCT-ND•	.24	.17	.12	.10	PCC270CQTR-ND	10,000	76.00/M	ECU-E1H270JCQ	ECJ-0EC1H270J
		50	30pF	±5%	0.50	PCC300CQCT-ND•	.24	.17	.12	.10	PCC300CQTR-ND	10,000	76.00/M	ECU-E1H300JCQ	(Not for new design)
		50	33pF	±5%	0.50	PCC330CQCT-ND•	.24	.17	.12	.10	PCC330CQTR-ND	10,000	76.00/M	ECU-E1H330JCQ	ECJ-0EC1H330J
		50	36pF	±5%	0.50	PCC360CQCT-ND	.24	.17	.12	.10	PCC360CQTR-ND	10,000	76.00/M	ECU-E1H360JCQ	(Not for new design)
		50	39pF	±5%	0.50	PCC390CQCT-ND•	.24	.17	.12	.10	PCC390CQTR-ND	10,000	76.00/M	ECU-E1H390JCQ	ECJ-0EC1H390J
		50	43pF	±5%	0.50	PCC430CQCT-ND	.24	.17	.12	.10	PCC430CQTR-ND	10,000	76.00/M	ECU-E1H430JCQ	(Not for new design)
		50	47pF	±5%	0.50	PCC470CQCT-ND•	.24	.17	.12	.10	PCC470CQTR-ND	10,000	76.00/M	ECU-E1H470JCQ	ECJ-0EC1H470J
		50	51pF	±5%	0.50	PCC510CQCT-ND	.24	.17	.12	.10	PCC510CQTR-ND	10,000	76.00/M	ECU-E1H510JCQ	(Not for new design)
		50	56pF	±5%	0.50	PCC560CQCT-ND•	.24	.17	.12	.10	PCC560CQTR-ND	10,000	76.00/M	ECU-E1H560JCQ	ECJ-0EC1H560J
		50	62pF	±5%	0.50	PCC620CQCT-ND	.24	.17	.12	.10	PCC620CQTR-ND	10,000	76.00/M	ECU-E1H620JCQ	(Not for new design)
		50	68pF	±5%	0.50	PCC680CQCT-ND•	.24	.17	.12	.10	PCC680CQTR-ND	10,000	76.00/M	ECU-E1H680JCQ	ECJ-0EC1H680J
		50	75pF	±5%	0.50	PCC750CQCT-ND	.24	.17	.12	.10	PCC750CQTR-ND	10,000	76.00/M	ECU-E1H750JCQ	(Not for new design)

(Continued)

Size Code	Type	WV DC	Cap.	Tolerance	Dim. (mm) T	Digi-Key Part No.	Cut Tape Price Each 10	100	500	1,000	Digi-Key Part No.	Tape & Reel Size	Pricing	Old † Panasonic Part No.	New † Panasonic Part No.
0402	NPO	50	82pF	±5%	0.50	PCC820CQCT-ND•	.27	.19	.13	.11	PCC820CQTR-ND	10,000	84.00/M	ECU-E1H820JCQ	ECJ-0EC1H820J
		50	91pF	±5%	0.50	PCC910CQCT-ND	.27	.19	.13	.11	PCC910CQTR-ND	10,000	84.00/M	ECU-E1H910JCQ	(Not for new design)
		50	100pF	±5%	0.50	PCC101CQCT-ND•	.27	.19	.13	.11	PCC101CQTR-ND	10,000	84.00/M	ECU-E1H101JCQ	ECJ-0EC1H101J
		50	110pF	±5%	0.50	PCC111CQCT-ND	.27	.19	.14	.11	PCC111CQTR-ND	10,000	86.00/M	ECU-E1H111JCQ	(Not for new design)
		50	120pF	±5%	0.50	PCC121CQCT-ND•	.27	.19	.14	.11	PCC121CQTR-ND	10,000	86.00/M	ECU-E1H121JCQ	ECJ-0EC1H121J
		50	130pF	±5%	0.50	PCC131CQCT-ND	.29	.20	.14	.11	PCC131CQTR-ND	10,000	90.00/M	ECU-E1H131JCQ	(Not for new design)
		50	150pF	±5%	0.50	PCC151CQCT-ND•	.29	.20	.14	.11	PCC151CQTR-ND	10,000	90.00/M	ECU-E1H151JCQ	ECJ-0EC1H151J
		50	160pF	±5%	0.50	PCC161CQCT-ND	.30	.22	.15	.12	PCC161CQTR-ND	10,000	96.00/M	ECU-E1H161JCQ	(Not for new design)
		50	180pF	±5%	0.50	PCC181CQCT-ND•	.29	.21	.15	.12	PCC181CQTR-ND	10,000	101.00/M	ECU-E1H181JCQ	ECJ-0EC1H181J
		50	200pF	±5%	0.50	PCC201CQCT-ND•	.31	.22	.16	.13	PCC201CQTR-ND	10,000	108.00/M	ECU-E1H201JCQ	(Not for new design)
		50	220pF	±5%	0.50	PCC221CQCT-ND•	.32	.23	.17	.13	PCC221CQTR-ND	10,000	111.00/M	ECU-E1H221JCQ	ECJ-0EC1H221J
	X7R	50	100pF	±10%	0.50	PCC1709CT-ND	.24	.17	.12	.10	PCC1709TR-ND	10,000	76.00/M	ECU-E1H101KBQ	ECJ-0EB1H101K
		50	120pF	±10%	0.50	PCC1710CT-ND	.24	.17	.12	.10	PCC1710TR-ND	10,000	76.00/M	ECU-E1H121KBQ	ECJ-0EB1H121K
		50	150pF	±10%	0.50	PCC1711CT-ND	.24	.17	.12	.10	PCC1711TR-ND	10,000	76.00/M	ECU-E1H151KBQ	ECJ-0EB1H151K
		50	180pF	±10%	0.50	PCC1712CT-ND	.24	.17	.12	.10	PCC1712TR-ND	10,000	76.00/M	ECU-E1H181KBQ	ECJ-0EB1H181K
		50	220pF	±10%	0.50	PCC1713CT-ND	.24	.17	.12	.10	PCC1713TR-ND	10,000	76.00/M	ECU-E1H221KBQ	ECJ-0EB1H221K
		50	270pF	±10%	0.50	PCC1714CT-ND	.24	.17	.12	.10	PCC1714TR-ND	10,000	76.00/M	ECU-E1H271KBQ	ECJ-0EB1H271K
		50	330pF	±10%	0.50	PCC1715CT-ND	.24	.17	.12	.10	PCC1715TR-ND	10,000	76.00/M	ECU-E1H331KBQ	ECJ-0EB1H331K
		50	390pF	±10%	0.50	PCC1716CT-ND	.24	.17	.12	.10	PCC1716TR-ND	10,000	76.00/M	ECU-E1H391KBQ	ECJ-0EB1H391K
		50	470pF	±10%	0.50	PCC1717CT-ND	.24	.17	.12	.10	PCC1717TR-ND	10,000	76.00/M	ECU-E1H471KBQ	ECJ-0EB1H471K
		50	560pF	±10%	0.50	PCC1718CT-ND	.24	.17	.12	.10	PCC1718TR-ND	10,000	76.00/M	ECU-E1H561KBQ	ECJ-0EB1H561K
		50	680pF	±10%	0.50	PCC1719CT-ND	.24	.17	.12	.10	PCC1719TR-ND	10,000	76.00/M	ECU-E1H681KBQ	ECJ-0EB1H681K
		50	820pF	±10%	0.50	PCC1720CT-ND	.24	.17	.12	.10	PCC1720TR-ND	10,000	76.00/M	ECU-E1H821KBQ	ECJ-0EB1H821K
		50	1000pF	±10%	0.50	PCC1721CT-ND	.24	.17	.12	.10	PCC1721TR-ND	10,000	76.00/M	ECU-E1H102KBQ	ECJ-0EB1H102K
		50	1200pF	±10%	0.50	PCC1722CT-ND	.24	.17	.12	.10	PCC1722TR-ND	10,000	76.00/M	ECU-E1H122KBQ	ECJ-0EB1H122K
		50	1500pF	±10%	0.50	PCC1723CT-ND	.24	.17	.12	.10	PCC1723TR-ND	10,000	76.00/M	ECU-E1H152KBQ	ECJ-0EB1H152K
		50	1800pF	±10%	0.50	PCC1724CT-ND	.24	.17	.12	.10	PCC1724TR-ND	10,000	76.00/M	ECU-E1H182KBQ	ECJ-0EB1H182K
		50	2200pF	±10%	0.50	PCC1725CT-ND	.24	.17	.12	.10	PCC1725TR-ND	10,000	76.00/M	ECU-E1H222KBQ	ECJ-0EB1H222K
		50	2700pF	±10%	0.50	PCC1726CT-ND	.27	.19	.13	.11	PCC1726TR-ND	10,000	84.00/M	ECU-E1H272KBQ	ECJ-0EB1H272K
		50	3300pF	±10%	0.50	PCC1727CT-ND	.29	.20	.14	.11	PCC1727TR-ND	10,000	90.00/M	ECU-E1H332KBQ	ECJ-0EB1H332K
		50	3900pF	±10%	0.50	PCC1728CT-ND	.29	.21	.14	.11	PCC1728TR-ND	10,000	91.00/M	ECU-E1H392KBQ	ECJ-0EB1H392K
		25	100pF	±10%	0.50	PCC1702CT-ND	.24	.17	.12	.09	PCC1702TR-ND	10,000	75.00/M	ECU-E1E101KBQ	ECJ-0EB1E101K
		25	120pF	±10%	0.50	PCC1703CT-ND	.24	.17	.12	.09	PCC1703TR-ND	10,000	75.00/M	ECU-E1E121KBQ	ECJ-0EB1E121K
		25	150pF	±10%	0.50	PCC1704CT-ND	.24	.17	.12	.09	PCC1704TR-ND	10,000	75.00/M	ECU-E1E151KBQ	ECJ-0EB1E151K
		25	180pF	±10%	0.50	PCC1705CT-ND	.24	.17	.12	.09	PCC1705TR-ND	10,000	75.00/M	ECU-E1E181KBQ	ECJ-0EB1E181K
		25	220pF	±10%	0.50	PCC1706CT-ND	.24	.17	.12	.09	PCC1706TR-ND	10,000	75.00/M	ECU-E1E221KBQ	ECJ-0EB1E221K
		25	270pF	±10%	0.50	PCC271BQCT-ND•	.24	.17	.12	.10	PCC271BQTR-ND	10,000	76.00/M	ECU-E1E271KBQ	ECJ-0EB1E271K
		25	330pF	±10%	0.50	PCC331BQCT-ND•	.24	.17	.12	.10	PCC331BQTR-ND	10,000	76.00/M	ECU-E1E331KBQ	ECJ-0EB1E331K
		25	391pF	±10%	0.50	PCC391BQCT-ND•	.24	.17	.12	.10	PCC391BQTR-ND	10,000	76.00/M	ECU-E1E391KBQ	ECJ-0EB1E391K
		25	470pF	±10%	0.50	PCC471BQCT-ND•	.24	.17	.12	.10	PCC471BQTR-ND	10,000	76.00/M	ECU-E1E471KBQ	ECJ-0EB1E471K
		25	560pF	±10%	0.50	PCC561BQCT-ND•	.24	.17	.12	.10	PCC561BQTR-ND	10,000	76.00/M	ECU-E1E561KBQ	ECJ-0EB1E561K
		25	680pF	±10%	0.50	PCC681BQCT-ND•	.24	.17	.12	.10	PCC681BQTR-ND	10,000	76.00/M	ECU-E1E681KBQ	ECJ-0EB1E681K
		25	820pF	±10%	0.50	PCC821BQCT-ND•	.24	.17	.12	.10	PCC821BQTR-ND	10,000	76.00/M	ECU-E1E821KBQ	ECJ-0EB1E821K
		25	1000pF	±10%	0.50	PCC102BQCT-ND•	.24	.14	.12	.10	PCC102BQTR-ND	10,000	76.00/M	ECU-E1E102KBQ	ECJ-0EB1E102K
		25	1200pF	±10%	0.50	PCC122BQCT-ND•	.24	.17	.12	.10	PCC122BQTR-ND	10,000	76.00/M	ECU-E1E122KBQ	ECJ-0EB1E122K
		25	1500pF	±10%	0.50	PCC152BQCT-ND•	.24	.17	.12	.10	PCC152BQTR-ND	10,000	76.00/M	ECU-E1E152KBQ	ECJ-0EB1E152K
		25	1800pF	±10%	0.50	PCC182BQCT-ND•	.24	.17	.12	.10	PCC182BQTR-ND	10,000	76.00/M	ECU-E1E182KBQ	ECJ-0EB1E182K
		25	2200pF	±10%	0.50	PCC222BQCT-ND•	.24	.17	.12	.10	PCC222BQTR-ND	10,000	76.00/M	ECU-E1E222KBQ	ECJ-0EB1E222K
		25	2700pF	±10%	0.50	PCC272BQCT-ND•	.27	.19	.13	.11	PCC272BQTR-ND	10,000	84.00/M	ECU-E1E272KBQ	ECJ-0EB1E272K
		25	3300pF	±10%	0.50	PCC332BQCT-ND•	.29	.20	.14	.11	PCC332BQTR-ND	10,000	90.00/M	ECU-E1E332KBQ	ECJ-0EB1E332K
		25	3900pF	±10%	0.50	PCC392BQCT-ND•	.29	.21	.15	.12	PCC392BQTR-ND	10,000	93.00/M	ECU-E1E392KBQ	ECJ-0EB1E392K
		25	4700pF	±10%	0.50	PCC472BQCT-ND•	.30	.21	.15	.12	PCC472BQTR-ND	10,000	95.00/M	ECU-E1E472KBQ	ECJ-0EB1E472K
		25	5600pF	±10%	0.50	PCC1707CT-ND	.29	.20	.14	.11	PCC1707TR-ND	10,000	90.00/M	ECU-E1E562KBQ	ECJ-0EB1E562K
		25	6800pF	±10%	0.50	PCC1708CT-ND	.29	.21	.14	.11	PCC1708TR-ND	10,000	91.00/M	ECU-E1E682KBQ	ECJ-0EB1E682K
		16	5600pF	±10%	0.50	PCC562BQCT-ND•	.29	.20	.14	.11	PCC562BQTR-ND	10,000	90.00/M	ECU-E1C562KBQ	ECJ-0EB1C562K
		16	6800pF	±10%	0.50	PCC682BQCT-ND•	.29	.21	.15	.12	PCC682BQTR-ND	10,000	93.00/M	ECU-E1C682KBQ	ECJ-0EB1C682K
		16	8200pF	±10%	0.50	PCC822BQCT-ND•	.30	.21	.15	.12	PCC822BQTR-ND	10,000	95.00/M	ECU-E1C822KBQ	ECJ-0EB1C822K
		16	10000pF	±10%	0.50	PCC103BQCT-ND•	.30	.22	.15	.12	PCC103BQTR-ND	10,000	96.00/M	ECU-E1C103KBQ	ECJ-0EB1C103K
		16	12000pF	±10%	0.50	PCC1700CT-ND	.30	.21	.15	.12	PCC1700TR-ND	10,000	95.00/M	ECU-E1C123KBQ	ECJ-0EB1C123K
		16	15000pF	±10%	0.50	PCC1701CT-ND	.30	.21	.15	.12	PCC1701TR-ND	10,000	95.00/M	ECU-E1C153KBQ	ECJ-0EB1C153K
		16	18000pF	±10%	0.50	PCC2137CT-ND	.26	.18	.13	.10	PCC2137TR-ND	10,000	81.00/M	ECJ-0EB1C183K	ECJ-0EB1C183K
		16	22000pF	±10%	0.50	PCC2138CT-ND	.26	.18	.13	.10	PCC2138TR-ND	10,000	81.00/M	ECJ-0EB1C223K	ECJ-0EB1C223K
	X5R	10	27000pF	±10%	0.50	PCC2139CT-ND	.26	.18	.13	.10	PCC2139TR-ND	10,000	81.00/M	ECJ-0EB1A273K	ECJ-0EB1A273K
		10	33000pF	±10%	0.50	PCC2140CT-ND	.26	.18	.13	.10	PCC2140TR-ND	10,000	81.00/M	ECJ-0EB1A333K	ECJ-0EB1A333K
		10	39000pF	±10%	0.50	PCC2141CT-ND	.26	.18	.13	.10	PCC2141TR-ND	10,000	81.00/M	ECJ-0EB1A393K	ECJ-0EB1A393K
		10	47000pF	±10%	0.50	PCC2142CT-ND	.27	.19	.13	.11	PCC2142TR-ND	10,000	85.00/M	ECJ-0EB1A473K	ECJ-0EB1A473K
		10	56000pF	±10%	0.50	PCC2143CT-ND	.27	.19	.13	.11	PCC2143TR-ND	10,000	85.00/M	ECJ-0EB1A563K	ECJ-0EB1A563K
		10	68000pF	±10%	0.50	PCC2144CT-ND	.27	.19	.13	.11	PCC2144TR-ND	10,000	85.00/M	ECJ-0EB1A683K	ECJ-0EB1A683K
		10	82000pF	±10%	0.50	PCC2145CT-ND	.28	.20	.14	.11	PCC2145TR-ND	10,000	89.00/M	ECJ-0EB1A823K	ECJ-0EB1A823K
		10	.1µF	±10%	0.50	PCC2146CT-ND	.28	.20	.14	.11	PCC2146TR-ND	10,000	89.00/M	ECJ-0EB1A104K	ECJ-0EB1A104K
	Y5V	50	1000pF	+80%/-20%	0.50	PCC1741CT-ND	.22	.16	.11	.09	PCC1741TR-ND	10,000	69.00/M	ECU-E1H102ZFQ	ECJ-0EF1H102Z
		50	1500pF	+80%/-20%	0.50	PCC1742CT-ND	.22	.16	.11	.09	PCC1742TR-ND	10,000	69.00/M	ECU-E1H152ZFQ	ECJ-0EF1H152Z
		50	2200pF	+80%/-20%	0.50	PCC1743CT-ND	.22	.16	.11	.09	PCC1743TR-ND	10,000	69.00/M	ECU-E1H222ZFQ	ECJ-0EF1H222Z
		50	3300pF	+80%/-20%	0.50	PCC1744CT-ND	.22	.16	.11	.09	PCC1744TR-ND	10,000	69.00/M	ECU-E1H332ZFQ	ECJ-0EF1H332Z
		50	4700pF	+80%/-20%	0.50	PCC1745CT-ND	.22	.16	.11	.09	PCC1745TR-ND	10,000	69.00/M	ECU-E1H472ZFQ	ECJ-0EF1H472Z
		50	6800pF	+80%/-20%	0.50	PCC1746CT-ND	.22	.16	.11	.09	PCC1746TR-ND	10,000	69.00/M	ECU-E1H682ZFQ	ECJ-0EF1H682Z
		50	10000pF	+80%/-20%	0.50	PCC1747CT-ND	.23	.17	.12	.09	PCC1747TR-ND	10,000	74.00/M	ECU-E1H103ZFQ	ECJ-0EF1H103Z
		25	1000pF	+80%/-20%	0.50	PCC1732CT-ND	.22	.16	.11	.09	PCC1732TR-ND	10,000	69.00/M	ECU-E1E102ZFQ	ECJ-0EF1E102Z
		25	1500pF	+80%/-20%	0.50	PCC1733CT-ND	.22	.16	.11	.09	PCC1733TR-ND	10,000	69.00/M	ECU-E1E152ZFQ	ECJ-0EF1E152Z
		25	2200pF	+80%/-20%	0.50	PCC1734CT-ND	.22	.16	.11	.09	PCC1734TR-ND	10,000	69.00/M	ECU-E1E222ZFQ	ECJ-0EF1E222Z
		25	3300pF	+80%/-20%	0.50	PCC1735CT-ND	.22	.16	.11	.09	PCC1735TR-ND	10,000	69.00/M	ECU-E1E332ZFQ	ECJ-0EF1E332Z
		25	4700pF	+80%/-20%	0.50	PCC1736CT-ND	.22	.16	.11	.09	PCC1736TR-ND	10,000	69.00/M	ECU-E1E472ZFQ	ECJ-0EF1E472Z
		25	6800pF	+80%/-20%	0.50	PCC1737CT-ND	.22	.16	.11	.09	PCC1737TR-ND	10,000	69.00/M	ECU-E1E682ZFQ	ECJ-0EF1E682Z
		25	10000pF	+80%/-20%	0.50	PCC1738CT-ND	.23	.17	.12	.09	PCC1738TR-ND	10,000	74.00/M	ECU-E1E103ZFQ	ECJ-0EF1E103Z
		25	15000pF	+80%/-20%	0.50	PCC1739CT-ND	.26	.18	.13	.10	PCC1739TR-ND	10,000	81.00/M	ECU-E1E153ZFQ	ECJ-0EF1E153Z
		25	22000pF	+80%/-20%	0.50	PCC1740CT-ND	.26	.18	.13	.10	PCC1740TR-ND	10,000	81.00/M	ECU-E1E223ZFQ	ECJ-0EF1E223Z
		16	15000pF	+80%/-20%	0.50	PCC153FQCT-ND•	.26	.18	.13	.10	PCC153FQTR-ND	10,000	81.00/M	ECU-E1C153ZFQ	ECJ-0EF1C153Z
		16	22000pF	+80%/-20%	0.50	PCC223FQCT-ND•	.27	.19	.14	.11	PCC223FQTR-ND	10,000	86.00/M	ECU-E1C223ZFQ	ECJ-0EF1C223Z
		16	33000pF	+80%/-20%	0.50	PCC333FQCT-ND•	.29	.20	.14	.11	PCC333FQTR-ND	10,000	90.00/M	ECU-E1C333ZFQ	ECJ-0EF1C333Z
		16	47000pF	+80%/-20%	0.50	PCC1729CT-ND	.29	.20	.14	.11	PCC1729TR-ND	10,000	90.00/M	ECU-E1C473ZFQ	ECJ-0EF1C473Z
		16	68000pF	+80%/-20%	0.50	PCC1730CT-ND	.29	.20	.14	.11	PCC1730TR-ND	10,000	90.00/M	ECU-E1C683ZFQ	ECJ-0EF1C683Z
		16	.1µF	+80%/-20%	0.50	PCC1731CT-ND	.32	.22	.16	.12	PCC1731TR-ND	10,000	100.00/M	ECU-E1C104ZFQ	ECJ-0EF1C104Z

(Continued)

Panasonic Multilayer Ceramic Chip Capacitors 0201, 0402, 0603, 0612, 0805, 1206 & 1210 *(Cont.)*

Size Code	Type	WV DC	Cap.	Tolerance	Dim. (mm) T	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel		Old † Panasonic Part No.	New † Panasonic Part No.
							10	100	500	1,000		Size	Pricing		
0603	NPO	100	10pF	±0.5pF	0.80	PCC1941CT-ND	.19	.13	.09	.07	PCC1941TR-ND	4,000	55.00/M	ECJ-1VC2A100D	ECJ-1VC2A100D
		100	15pF	±5%	0.80	PCC1942CT-ND	.19	.13	.09	.07	PCC1942TR-ND	4,000	55.00/M	ECJ-1VC2A150J	ECJ-1VC2A150J
		100	22pF	±5%	0.80	PCC1943CT-ND	.19	.13	.09	.07	PCC1943TR-ND	4,000	55.00/M	ECJ-1VC2A220J	ECJ-1VC2A220J
		100	33pF	±5%	0.80	PCC1944CT-ND	.20	.15	.10	.09	PCC1944TR-ND	4,000	66.00/M	ECJ-1VC2A330J	ECJ-1VC2A330J
		100	47pF	±5%	0.80	PCC1945CT-ND	.20	.15	.10	.09	PCC1945TR-ND	4,000	66.00/M	ECJ-1VC2A470J	ECJ-1VC2A470J
		100	68pF	±5%	0.80	PCC1946CT-ND	.23	.17	.12	.10	PCC1946TR-ND	4,000	77.00/M	ECJ-1VC2A680J	ECJ-1VC2A680J
		100	100pF	±5%	0.80	PCC1947CT-ND	.25	.18	.13	.11	PCC1947TR-ND	4,000	83.00/M	ECJ-1VC2A101J	ECJ-1VC2A101J
		50	0.5pF	±0.25pF	0.80	PCC0R5CVCT-ND•	.09	.06	.04	.04	PCC0R5CVTR-ND	4,000	26.00/M	ECU-V1H0R5CCV	ECJ-1VC1H0R5C
		50	1pF	±0.25pF	0.80	PCC010CVCT-ND•	.09	.06	.04	.04	PCC010CVTR-ND	4,000	26.00/M	ECU-V1H010CCV	ECJ-1VC1H010C
		50	1.5pF	±0.25pF	0.80	PCC1R5CVCT-ND•	.09	.06	.04	.04	PCC1R5CVTR-ND	4,000	26.00/M	ECU-V1H1R5CCV	ECJ-1VC1H1R5C
		50	2pF	±0.25pF	0.80	PCC020CVCT-ND•	.09	.06	.04	.04	PCC020CVTR-ND	4,000	26.00/M	ECU-V1H020CCV	ECJ-1VC1H020C
		50	3pF	±0.25pF	0.80	PCC030CVCT-ND•	.09	.06	.04	.04	PCC030CVTR-ND	4,000	26.00/M	ECU-V1H030CCV	ECJ-1VC1H030C
		50	4pF	±0.25pF	0.80	PCC040CVCT-ND•	.09	.06	.04	.04	PCC040CVTR-ND	4,000	26.00/M	ECU-V1H040CCV	ECJ-1VC1H040C
		50	5pF	±0.25pF	0.80	PCC050CVCT-ND•	.09	.06	.04	.04	PCC050CVTR-ND	4,000	26.00/M	ECU-V1H050CCV	ECJ-1VC1H050C
		50	6pF	±0.5pF	0.80	PCC060CVCT-ND•	.09	.06	.04	.04	PCC060CVTR-ND	4,000	26.00/M	ECU-V1H060DCV	ECJ-1VC1H060D
		50	7pF	±0.5pF	0.80	PCC070CVCT-ND•	.09	.06	.04	.04	PCC070CVTR-ND	4,000	26.00/M	ECU-V1H070DCV	ECJ-1VC1H070D
		50	8pF	±0.5pF	0.80	PCC080CVCT-ND•	.09	.06	.04	.04	PCC080CVTR-ND	4,000	26.00/M	ECU-V1H080DCV	ECJ-1VC1H080D
		50	9pF	±0.5pF	0.80	PCC090CVCT-ND•	.09	.06	.04	.04	PCC090CVTR-ND	4,000	26.00/M	ECU-V1H090DCV	ECJ-1VC1H090D
		50	10pF	±0.5pF	0.80	PCC100CVCT-ND•	.09	.06	.04	.04	PCC100CVTR-ND	4,000	26.00/M	ECU-V1H100DCV	ECJ-1VC1H100D
		50	12pF	±5%	0.80	PCC120ACVCT-ND	.09	.06	.04	.04	PCC120ACVTR-ND	4,000	26.00/M	ECU-V1H120JCV	ECJ-1VC1H120J
		50	15pF	±5%	0.80	PCC150ACVCT-ND•	.09	.06	.04	.04	PCC150ACVTR-ND	4,000	26.00/M	ECU-V1H150JCV	ECJ-1VC1H150J
		50	18pF	±5%	0.80	PCC180ACVCT-ND•	.09	.06	.04	.04	PCC180ACVTR-ND	4,000	26.00/M	ECU-V1H180JCV	ECJ-1VC1H180J
		50	22pF	±5%	0.80	PCC220ACVCT-ND•	.09	.06	.04	.04	PCC220ACVTR-ND	4,000	26.00/M	ECU-V1H220JCV	ECJ-1VC1H220J
		50	27pF	±5%	0.80	PCC270ACVCT-ND•	.10	.07	.05	.04	PCC270ACVTR-ND	4,000	27.00/M	ECU-V1H270JCV	ECJ-1VC1H270J
		50	33pF	±5%	0.80	PCC330ACVCT-ND•	.10	.07	.05	.04	PCC330ACVTR-ND	4,000	27.00/M	ECU-V1H330JCV	ECJ-1VC1H330J
		50	39pF	±5%	0.80	PCC390ACVCT-ND•	.10	.07	.05	.04	PCC390ACVTR-ND	4,000	27.00/M	ECU-V1H390JCV	ECJ-1VC1H390J
		50	47pF	±5%	0.80	PCC470ACVCT-ND•	.10	.07	.05	.04	PCC470ACVTR-ND	4,000	27.00/M	ECU-V1H470JCV	ECJ-1VC1H470J
		50	56pF	±5%	0.80	PCC560ACVCT-ND•	.10	.07	.05	.04	PCC560ACVTR-ND	4,000	27.00/M	ECU-V1H560JCV	ECJ-1VC1H560J
		50	68pF	±5%	0.80	PCC680ACVCT-ND•	.10	.07	.05	.04	PCC680ACVTR-ND	4,000	27.00/M	ECU-V1H680JCV	ECJ-1VC1H680J
		50	82pF	±5%	0.80	PCC820ACVCT-ND•	.10	.07	.05	.04	PCC820ACVTR-ND	4,000	27.00/M	ECU-V1H820JCV	ECJ-1VC1H820J
		50	100pF	±5%	0.80	PCC101ACVCT-ND•	.11	.08	.06	.05	PCC101ACVTR-ND	4,000	32.00/M	ECU-V1H101JCV	ECJ-1VC1H101J
		50	120pF	±5%	0.80	PCC121ACVCT-ND•	.11	.08	.06	.05	PCC121ACVTR-ND	4,000	32.00/M	ECU-V1H121JCV	ECJ-1VC1H121J
		50	150pF	±5%	0.80	PCC151ACVCT-ND•	.11	.08	.06	.05	PCC151ACVTR-ND	4,000	32.00/M	ECU-V1H151JCV	ECJ-1VC1H151J
		50	180pF	±5%	0.80	PCC181ACVCT-ND•	.11	.08	.06	.05	PCC181ACVTR-ND	4,000	32.00/M	ECU-V1H181JCV	ECJ-1VC1H181J
		50	220pF	±5%	0.80	PCC221ACVCT-ND•	.11	.08	.06	.05	PCC221ACVTR-ND	4,000	32.00/M	ECU-V1H221JCV	ECJ-1VC1H221J
		50	270pF	±5%	0.80	PCC271ACVCT-ND•	.12	.09	.06	.05	PCC271ACVTR-ND	4,000	35.00/M	ECU-V1H271JCV	ECJ-1VC1H271J
		50	330pF	±5%	0.80	PCC331ACVCT-ND•	.13	.09	.06	.05	PCC331ACVTR-ND	4,000	38.00/M	ECU-V1H331JCV	ECJ-1VC1H331J
		50	390pF	±5%	0.80	PCC391ACVCT-ND•	.15	.10	.07	.06	PCC391ACVTR-ND	4,000	42.00/M	ECU-V1H391JCV	ECJ-1VC1H391J
		50	470pF	±5%	0.80	PCC2147CT-ND	.16	.11	.08	.06	PCC2147TR-ND	4,000	47.00/M	ECJ-1VC1H471J	ECJ-1VC1H471J
		50	560pF	±5%	0.80	PCC2148CT-ND	.20	.14	.09	.08	PCC2148TR-ND	4,000	57.00/M	ECJ-1VC1H561J	ECJ-1VC1H561J
		50	680pF	±5%	0.80	PCC2149CT-ND	.20	.14	.09	.08	PCC2149TR-ND	4,000	57.00/M	ECJ-1VC1H681J	ECJ-1VC1H681J
		50	820pF	±5%	0.80	PCC2150CT-ND	.24	.17	.11	.09	PCC2150TR-ND	4,000	70.00/M	ECJ-1VC1H821J	ECJ-1VC1H821J
		50	1000pF	±5%	0.80	PCC2151CT-ND	.24	.17	.11	.09	PCC2151TR-ND	4,000	70.00/M	ECJ-1VC1H102J	ECJ-1VC1H102J
	X7R	200	220pF	±10%	0.80	PCC1953CT-ND	.27	.19	.14	.12	PCC1953TR-ND	4,000	90.00/M	ECJ-1VB2D221K	ECJ-1VB2D221K
		200	330pF	±10%	0.80	PCC1954CT-ND	.27	.19	.14	.12	PCC1954TR-ND	4,000	90.00/M	ECJ-1VB2D331K	ECJ-1VB2D331K
		200	470pF	±10%	0.80	PCC1955CT-ND	.27	.19	.14	.12	PCC1955TR-ND	4,000	90.00/M	ECJ-1VB2D471K	ECJ-1VB2D471K
		200	680pF	±10%	0.80	PCC1956CT-ND	.27	.19	.14	.12	PCC1956TR-ND	4,000	90.00/M	ECJ-1VB2D681K	ECJ-1VB2D681K
		200	1000pF	±10%	0.80	PCC1957CT-ND	.27	.19	.14	.12	PCC1957TR-ND	4,000	90.00/M	ECJ-1VB2D102K	ECJ-1VB2D102K
		100	220pF	±10%	0.80	PCC1948CT-ND	.19	.13	.09	.07	PCC1948TR-ND	4,000	55.00/M	ECJ-1VB2A221K	ECJ-1VB2A221K
		100	330pF	±10%	0.80	PCC1949CT-ND	.19	.13	.09	.07	PCC1949TR-ND	4,000	55.00/M	ECJ-1VB2A331K	ECJ-1VB2A331K
		100	470pF	±10%	0.80	PCC1950CT-ND	.19	.13	.09	.07	PCC1950TR-ND	4,000	55.00/M	ECJ-1VB2A471K	ECJ-1VB2A471K
		100	680pF	±10%	0.80	PCC1951CT-ND	.19	.13	.09	.07	PCC1951TR-ND	4,000	55.00/M	ECJ-1VB2A681K	ECJ-1VB2A681K
		100	1000pF	±10%	0.80	PCC1952CT-ND	.19	.13	.09	.07	PCC1952TR-ND	4,000	55.00/M	ECJ-1VB2A102K	ECJ-1VB2A102K
		50	220pF	±10%	0.80	PCC221BVCT-ND•	.09	.06	.04	.04	PCC221BVTR-ND	4,000	24.00/M	ECU-V1H221KBV	(Not for new design)
		50	270pF	±10%	0.80	PCC271BVCT-ND•	.09	.06	.04	.04	PCC271BVTR-ND	4,000	24.00/M	ECU-V1H271KBV	(Not for new design)
		50	330pF	±10%	0.80	PCC331BVCT-ND•	.09	.06	.04	.04	PCC331BVTR-ND	4,000	24.00/M	ECU-V1H331KBV	(Not for new design)
		50	390pF	±10%	0.80	PCC391BVCT-ND•	.09	.06	.04	.04	PCC391BVTR-ND	4,000	24.00/M	ECU-V1H391KBV	(Not for new design)
		50	470pF	±10%	0.80	PCC471BVCT-ND•	.09	.06	.04	.04	PCC471BVTR-ND	4,000	26.00/M	ECU-V1H471KBV	(Not for new design)
		50	560pF	±10%	0.80	PCC561BVCT-ND•	.09	.06	.04	.04	PCC561BVTR-ND	4,000	26.00/M	ECU-V1H561KBV	(Not for new design)
		50	680pF	±10%	0.80	PCC681BVCT-ND•	.09	.06	.04	.04	PCC681BVTR-ND	4,000	26.00/M	ECU-V1H681KBV	(Not for new design)
		50	820pF	±10%	0.80	PCC821BVCT-ND•	.09	.06	.04	.04	PCC821BVTR-ND	4,000	26.00/M	ECU-V1H821KBV	(Not for new design)
		50	1000pF	±10%	0.80	PCC102BVCT-ND•	.09	.06	.04	.04	PCC102BVTR-ND	4,000	26.00/M	ECU-V1H102KBV	(Not for new design)
		50	1000pF	±10%	0.80	PCC1772CT-ND	.06	.05	.03	.03	PCC1772TR-ND	4,000	18.00/M	ECJ-1VB1H102K	ECJ-1VB1H102K
		50	1200pF	±10%	0.80	PCC122BVCT-ND•	.10	.07	.05	.04	PCC122BVTR-ND	4,000	27.00/M	ECU-V1H122KBV	(Not for new design)
		50	1200pF	±10%	0.80	PCC1773CT-ND	.07	.05	.03	.03	PCC1773TR-ND	4,000	19.00/M	ECJ-1VB1H122K	ECJ-1VB1H122K
		50	1500pF	±10%	0.80	PCC152BVCT-ND•	.09	.07	.05	.04	PCC152BVTR-ND	4,000	26.00/M	ECU-V1H152KBV	(Not for new design)
		50	1500pF	±10%	0.80	PCC1774CT-ND	.07	.05	.03	.03	PCC1774TR-ND	4,000	19.00/M	ECJ-1VB1H152K	ECJ-1VB1H152K
		50	1800pF	±10%	0.80	PCC182BVCT-ND•	.10	.07	.05	.04	PCC182BVTR-ND	4,000	28.00/M	ECU-V1H182KBV	(Not for new design)
		50	1800pF	±10%	0.80	PCC1775CT-ND	.07	.05	.04	.03	PCC1775TR-ND	4,000	20.00/M	ECJ-1VB1H182K	ECJ-1VB1H182K
		50	2200pF	±10%	0.80	PCC222BVCT-ND•	.10	.07	.05	.04	PCC222BVTR-ND	4,000	28.00/M	ECU-V1H222KBV	(Not for new design)
		50	2200pF	±10%	0.80	PCC1776CT-ND	.07	.05	.04	.03	PCC1776TR-ND	4,000	20.00/M	ECJ-1VB1H222K	ECJ-1VB1H222K
		50	2700pF	±10%	0.80	PCC272BVCT-ND•	.10	.07	.05	.04	PCC272BVTR-ND	4,000	28.00/M	ECU-V1H272KBV	(Not for new design)
		50	2700pF	±10%	0.80	PCC1777CT-ND	.07	.05	.04	.03	PCC1777TR-ND	4,000	20.00/M	ECJ-1VB1H272K	ECJ-1VB1H272K
		50	3300pF	±10%	0.80	PCC332BVCT-ND•	.08	.05	.04	.03	PCC332BVTR-ND	4,000	21.00/M	ECU-V1H332KBV	(Not for new design)
		50	3300pF	±10%	0.80	PCC1778CT-ND	.08	.05	.04	.03	PCC1778TR-ND	4,000	22.00/M	ECJ-1VB1H332K	ECJ-1VB1H332K
		50	3900pF	±10%	0.80	PCC392BVCT-ND•	.09	.07	.05	.04	PCC392BVTR-ND	4,000	26.00/M	ECU-V1H392KBV	(Not for new design)
		50	3900pF	±10%	0.80	PCC1779CT-ND	.08	.06	.04	.03	PCC1779TR-ND	4,000	23.00/M	ECJ-1VB1H392K	ECJ-1VB1H392K
		50	4700pF	±10%	0.80	PCC472BVCT-ND•	.12	.08	.06	.05	PCC472BVTR-ND	4,000	34.00/M	ECU-V1H472KBV	(Not for new design)
		50	4700pF	±10%	0.80	PCC1780CT-ND	.09	.06	.04	.04	PCC1780TR-ND	4,000	24.00/M	ECJ-1VB1H472K	ECJ-1VB1H472K
		50	5600pF	±10%	0.80	PCC562BVCT-ND•	.12	.08	.06	.05	PCC562BVTR-ND	4,000	34.00/M	ECU-V1H562KBV	(Not for new design)
		50	5600pF	±10%	0.80	PCC1781CT-ND	.09	.06	.04	.04	PCC1781TR-ND	4,000	24.00/M	ECJ-1VB1H562K	ECJ-1VB1H562K
		50	6800pF	±10%	0.80	PCC682BVCT-ND•	.13	.09	.06	.05	PCC682BVTR-ND	4,000	37.00/M	ECU-V1H682KBV	(Not for new design)
		50	6800pF	±10%	0.80	PCC1782CT-ND	.10	.07	.05	.04	PCC1782TR-ND	4,000	27.00/M	ECJ-1VB1H682K	ECJ-1VB1H682K
		50	8200pF	±10%	0.80	PCC822BVCT-ND•	.14	.09	.07	.05	PCC822BVTR-ND	4,000	46.00/M	ECU-V1H822KBV	(Not for new design)
		50	8200pF	±10%	0.80	PCC1783CT-ND	.10	.07	.05	.04	PCC1783TR-ND	4,000	28.00/M	ECJ-1VB1H822K	ECJ-1VB1H822K
		50	10000pF	±10%	0.80	PCC103BVCT-ND•	.14	.09	.07	.05	PCC103BVTR-ND	4,000	39.00/M	ECU-V1H103KBV	(Not for new design)
		50	10000pF	±10%	0.80	PCC1784CT-ND	.10	.07	.05	.04	PCC1784TR-ND	4,000	28.00/M	ECJ-1VB1H103K	ECJ-1VB1H103K
		50	12000pF	±10%	0.80	PCC123BVCT-ND•	.14	.10	.07	.06	PCC123BVTR-ND	4,000	41.00/M	ECU-V1H123KBV	(Not for new design)
		50	12000pF	±10%	0.80	PCC1785CT-ND	.11	.07	.05	.04	PCC1785TR-ND	4,000	30.00/M	ECJ-1VB1H123K	ECJ-1VB1H123K
		50	15000pF	±10%	0.80	PCC153BVCT-ND•	.16	.11	.08	.06	PCC153BVTR-ND	4,000	46.00/M	ECU-V1H153KBV	(Not for new design)
		50	15000pF	±10%	0.80	PCC1786CT-ND	.11	.08	.06	.05	PCC1786TR-ND	4,000	32.00/M	ECJ-1VB1H153K	ECJ-1VB1H153K
		25	10000pF	±10%	0.80	PCC1763CT-ND	.11	.07	.05	.04	PCC1763TR-ND	4,000	30.00/M	ECJ-1VB1E103K	ECJ-1VB1E103K
		25	12000pF	±10%	0.80	PCC1764CT-ND	.11	.08	.06	.05	PCC1764TR-ND	4,000	32.00/M	ECJ-1VB1E123K	ECJ-1VB1E123K
		25	15000pF	±10%	0.80	PCC1765CT-ND	.12	.09	.06	.05	PCC1765TR-ND	4,000	35.00/M	ECJ-1VB1E153K	ECJ-1VB1E153K
		25	18000pF	±10%	0.80	PCC183BVCT-ND•	.17	.12	.08	.07	PCC183BVTR-ND	4,000	49.00/M	ECU-V1E183KBV	(Not for new design)
		25	18000pF	±10%	0.80	PCC1766CT-ND	.12	.09	.06	.05	PCC1766TR-ND	4,000	35.00/M	ECJ-1VB1E183K	ECJ-1VB1E183K

(Continued)

Size Code	Type	WV DC	Cap.	Tolerance	Dim. (mm) T	Digi-Key Part No.	Cut Tape Price Each 10	100	500	1,000	Digi-Key Part No.	Tape & Reel Size	Pricing	Old † Panasonic Part No.	New † Panasonic Part No.
0603	X7R	25	22000pF	±10%	0.80	PCC223BVCT-ND•	.15	.10	.07	.06	PCC223BVTR-ND	4,000	42.00/M	ECU-V1E223KBV	(Not for new design)
		25	22000pF	±10%	0.80	PCC1767CT-ND	.13	.09	.06	.05	PCC1767TR-ND	4,000	36.00/M	ECJ-1VB1E223K	ECJ-1VB1E223K
		25	27000pF	±10%	0.80	PCC1768CT-ND	.13	.09	.06	.05	PCC1768TR-ND	4,000	38.00/M	ECJ-1VB1E273K	ECJ-1VB1E273K
		25	33000pF	±10%	0.80	PCC1769CT-ND	.14	.09	.07	.05	PCC1769TR-ND	4,000	39.00/M	ECJ-1VB1E333K	ECJ-1VB1E333K
		25	39000pF	±10%	0.80	PCC1770CT-ND	.14	.09	.07	.05	PCC1770TR-ND	4,000	39.00/M	ECJ-1VB1E393K	ECJ-1VB1E393K
		25	47000pF	±10%	0.80	PCC1771CT-ND	.14	.09	.07	.05	PCC1771TR-ND	4,000	39.00/M	ECJ-1VB1E473K	ECJ-1VB1E473K
		16	10000pF	±10%	0.80	PCC1750CT-ND	.11	.07	.05	.04	PCC1750TR-ND	4,000	30.00/M	ECJ-1VB1C103K	ECJ-1VB1C103K
		16	12000pF	±10%	0.80	PCC1751CT-ND	.11	.08	.06	.05	PCC1751TR-ND	4,000	32.00/M	ECJ-1VB1C123K	ECJ-1VB1C123K
		16	15000pF	±10%	0.80	PCC1752CT-ND	.13	.09	.06	.05	PCC1752TR-ND	4,000	36.00/M	ECJ-1VB1C153K	ECJ-1VB1C153K
		16	18000pF	±10%	0.80	PCC1753CT-ND	.13	.09	.06	.05	PCC1753TR-ND	4,000	38.00/M	ECJ-1VB1C183K	ECJ-1VB1C183K
		16	22000pF	±10%	0.80	PCC1754CT-ND	.14	.09	.07	.05	PCC1754TR-ND	4,000	39.00/M	ECJ-1VB1C223K	ECJ-1VB1C223K
		16	27000pF	±10%	0.80	PCC1755CT-ND	.14	.09	.07	.05	PCC1755TR-ND	4,000	39.00/M	ECJ-1VB1C273K	ECJ-1VB1C273K
		16	33000pF	±10%	0.80	PCC1756CT-ND	.14	.09	.07	.05	PCC1756TR-ND	4,000	39.00/M	ECJ-1VB1C333K	ECJ-1VB1C333K
		16	39000pF	±10%	0.80	PCC1757CT-ND	.14	.09	.07	.05	PCC1757TR-ND	4,000	39.00/M	ECJ-1VB1C393K	ECJ-1VB1C393K
		16	47000pF	±10%	0.80	PCC1758CT-ND	.14	.09	.07	.05	PCC1758TR-ND	4,000	39.00/M	ECJ-1VB1C473K	ECJ-1VB1C473K
		16	56000pF	±10%	0.80	PCC1759CT-ND	.14	.09	.07	.05	PCC1759TR-ND	4,000	39.00/M	ECJ-1VB1C563K	ECJ-1VB1C563K
		16	68000pF	±10%	0.80	PCC1760CT-ND	.14	.09	.07	.05	PCC1760TR-ND	4,000	39.00/M	ECJ-1VB1C683K	ECJ-1VB1C683K
		16	82000pF	±10%	0.80	PCC1761CT-ND	.16	.11	.07	.06	PCC1761TR-ND	4,000	45.00/M	ECJ-1VB1C823K	ECJ-1VB1C823K
		16	.1µF	±10%	0.80	PCC1762CT-ND	.16	.11	.07	.06	PCC1762TR-ND	4,000	45.00/M	ECJ-1VB1C104K	ECJ-1VB1C104K
	X5R	10	.12µF	±10%	0.80	PCC1906CT-ND	.18	.13	.09	.08	PCC1906TR-ND	4,000	59.00/M	ECJ-1VB1A124K	ECJ-1VB1A124K
		10	.15µF	±10%	0.80	PCC1748CT-ND	.18	.13	.09	.08	PCC1748TR-ND	4,000	60.00/M	ECJ-1VB1A154K	ECJ-1VB1A154K
		10	.18µF	±10%	0.80	PCC1907CT-ND	.18	.13	.09	.08	PCC1907TR-ND	4,000	60.00/M	ECJ-1VB1A184K	ECJ-1VB1A184K
		10	.22µF	±10%	0.80	PCC1749CT-ND	.19	.13	.09	.08	PCC1749TR-ND	4,000	61.00/M	ECJ-1VB1A224K	ECJ-1VB1A224K
		6.3	.27µF	±10%	0.80	PCC1908CT-ND	.24	.17	.12	.10	PCC1908TR-ND	4,000	78.00/M	ECJ-1VB0J274K	ECJ-1VB0J274K
		6.3	.33µF	±10%	0.80	PCC1909CT-ND	.24	.17	.12	.10	PCC1909TR-ND	4,000	78.00/M	ECJ-1VB0J334K	ECJ-1VB0J334K
		6.3	.39µF	±10%	0.80	PCC1910CT-ND	.24	.17	.12	.10	PCC1910TR-ND	4,000	78.00/M	ECJ-1VB0J394K	ECJ-1VB0J394K
		6.3	.47µF	±10%	0.80	PCC1911CT-ND	.24	.17	.12	.10	PCC1911TR-ND	4,000	78.00/M	ECJ-1VB0J474K	ECJ-1VB0J474K
		6.3	.56µF	±10%	0.80	PCC1912CT-ND	.25	.18	.12	.10	PCC1912TR-ND	4,000	81.00/M	ECJ-1VB0J564K	ECJ-1VB0J564K
		6.3	.68µF	±10%	0.80	PCC1913CT-ND	.25	.18	.13	.11	PCC1913TR-ND	4,000	83.00/M	ECJ-1VB0J684K	ECJ-1VB0J684K
		6.3	.82µF	±10%	0.80	PCC1914CT-ND	.25	.18	.13	.11	PCC1914TR-ND	4,000	83.00/M	ECJ-1VB0J824K	ECJ-1VB0J824K
		6.3	1µF	±10%	0.80	PCC1915CT-ND	.25	.18	.13	.11	PCC1915TR-ND	4,000	83.00/M	ECJ-1VB0J105K	ECJ-1VB0J105K
	Y5V	50	1000pF	+80%/-20%	0.80	PCC1795CT-ND	.07	.05	.04	.03	PCC1795TR-ND	4,000	20.00/M	ECU-V1H102ZFV	(Not for new design)
		50	1500pF	+80%/-20%	0.80	PCC1796CT-ND	.07	.05	.04	.03	PCC1796TR-ND	4,000	21.00/M	ECU-V1H152ZFV	(Not for new design)
		50	2200pF	+80%/-20%	0.80	PCC1797CT-ND	.07	.05	.04	.03	PCC1797TR-ND	4,000	20.00/M	ECU-V1H222ZFV	(Not for new design)
		50	3300pF	+80%/-20%	0.80	PCC1798CT-ND	.07	.05	.04	.03	PCC1798TR-ND	4,000	21.00/M	ECU-V1H332ZFV	(Not for new design)
		50	4700pF	+80%/-20%	0.80	PCC1799CT-ND	.07	.05	.04	.03	PCC1799TR-ND	4,000	21.00/M	ECU-V1H472ZFV	(Not for new design)
		50	6800pF	+80%/-20%	0.80	PCC1800CT-ND	.07	.05	.04	.03	PCC1800TR-ND	4,000	21.00/M	ECU-V1H682ZFV	(Not for new design)
		50	10000pF	+80%/-20%	0.80	PCC1801CT-ND	.06	.05	.03	.03	PCC1801TR-ND	4,000	18.00/M	ECJ-1VF1H103Z	ECJ-1VF1H103Z
		50	15000pF	+80%/-20%	0.80	PCC1802CT-ND	.07	.05	.04	.03	PCC1802TR-ND	4,000	20.00/M	ECJ-1VF1H153Z	ECJ-1VF1H153Z
		50	22000pF	+80%/-20%	0.80	PCC1803CT-ND	.08	.06	.04	.03	PCC1803TR-ND	4,000	23.00/M	ECJ-1VF1H223Z	ECJ-1VF1H223Z
		50	33000pF	+80%/-20%	0.80	PCC1804CT-ND	.09	.06	.04	.04	PCC1804TR-ND	4,000	26.00/M	ECJ-1VF1H333Z	ECJ-1VF1H333Z
		50	47000pF	+80%/-20%	0.80	PCC1805CT-ND	.10	.07	.05	.04	PCC1805TR-ND	4,000	28.00/M	ECJ-1VF1H473Z	ECJ-1VF1H473Z
		50	68000pF	+80%/-20%	0.80	PCC2152CT-ND	.11	.07	.05	.04	PCC2152TR-ND	4,000	29.00/M	ECJ-1VF1H683Z	ECJ-1VF1H683Z
		50	.1µF	+80%/-20%	0.80	PCC2153CT-ND	.11	.08	.05	.04	PCC2153TR-ND	4,000	31.00/M	ECJ-1VF1H104Z	ECJ-1VF1H104Z
		25	68000pF	+80%/-20%	0.80	PCC1793CT-ND	.11	.08	.06	.05	PCC1793TR-ND	4,000	32.00/M	ECJ-1VF1E683Z	ECJ-1VF1E683Z
		25	.1µF	+80%/-20%	0.80	PCC1794CT-ND	.11	.07	.05	.04	PCC1794TR-ND	4,000	30.00/M	ECJ-1VF1E104Z	ECJ-1VF1E104Z
		16	.1µF	+80%/-20%	0.80	PCC1788CT-ND	.11	.07	.05	.04	PCC1788TR-ND	4,000	30.00/M	ECJ-1VF1C104Z	ECJ-1VF1C104Z
		16	.15µF	+80%/-20%	0.80	PCC1789CT-ND	.11	.07	.05	.04	PCC1789TR-ND	4,000	30.00/M	ECJ-1VF1C154Z	ECJ-1VF1C154Z
		16	.22µF	+80%/-20%	0.80	PCC1790CT-ND	.11	.08	.06	.05	PCC1790TR-ND	4,000	32.00/M	ECJ-1VF1C224Z	ECJ-1VF1C224Z
		16	.33µF	+80%/-20%	0.80	PCC1791CT-ND	.14	.10	.07	.06	PCC1791TR-ND	4,000	41.00/M	ECJ-1VF1C334Z	ECJ-1VF1C334Z
		16	.47µF	+80%/-20%	0.80	PCC1792CT-ND	.17	.12	.08	.07	PCC1792TR-ND	4,000	49.00/M	ECJ-1VF1C474Z	ECJ-1VF1C474Z
		10	.68µF	+80%/-20%	0.80	PCC2154CT-ND	.17	.12	.09	.07	PCC2154TR-ND	4,000	55.00/M	ECJ-1VF1A684Z	ECJ-1VF1A684Z
		10	1µF	+80%/-20%	0.80	PCC1787CT-ND	.20	.14	.10	.08	PCC1787TR-ND	4,000	64.00/M	ECJ-1VF1A105Z	ECJ-1VF1A105Z
0612	X7R	50	15000pF	±10%	0.85	PCC2173CT-ND	.37	.26	.19	.16	PCC2173TR-ND	4,000	135.00/M	ECJ-WVB1H153K	ECJ-WVB1H153K
0805	NPO	200	10pF	±0.5pF	0.85	PCC1971CT-ND	.30	.22	.16	.13	PCC1971TR-ND	4,000	111.00/M	ECJ-2VC2D100D	ECJ-2VC2D100D
		200	15pF	±5%	0.85	PCC1972CT-ND	.31	.22	.16	.13	PCC1972TR-ND	4,000	112.00/M	ECJ-2VC2D150J	ECJ-2VC2D150J
		200	22pF	±5%	0.85	PCC1973CT-ND	.31	.22	.16	.13	PCC1973TR-ND	4,000	112.00/M	ECJ-2VC2D220J	ECJ-2VC2D220J
		200	33pF	±5%	0.85	PCC1974CT-ND	.31	.22	.16	.14	PCC1974TR-ND	4,000	114.00/M	ECJ-2VC2D330J	ECJ-2VC2D330J
		200	47pF	±5%	0.85	PCC1975CT-ND	.31	.22	.16	.14	PCC1975TR-ND	4,000	114.00/M	ECJ-2VC2D470J	ECJ-2VC2D470J
		200	68pF	±5%	1.25	PCC1976CT-ND	.38	.27	.20	.17	PCC1976TR-ND	2,000	151.00/M	ECJ-2YC2D680J	ECJ-2YC2D680J
		200	100pF	±5%	1.25	PCC1977CT-ND	.39	.28	.20	.17	PCC1977TR-ND	2,000	153.00/M	ECJ-2YC2D101J	ECJ-2YC2D101J
		200	150pF	±5%	1.25	PCC1978CT-ND	.40	.29	.21	.17	PCC1978TR-ND	2,000	158.00/M	ECJ-2YC2D151J	ECJ-2YC2D151J
		200	220pF	±5%	1.25	PCC1979CT-ND	.40	.29	.21	.17	PCC1979TR-ND	2,000	158.00/M	ECJ-2YC2D221J	ECJ-2YC2D221J
		200	330pF	±5%	1.25	PCC1980CT-ND	.40	.29	.21	.17	PCC1980TR-ND	2,000	158.00/M	ECJ-2YC2D331J	ECJ-2YC2D331J
		100	10pF	±0.5pF	0.85	PCC1958CT-ND	.20	.15	.10	.09	PCC1958TR-ND	4,000	66.00/M	ECJ-2VC2A100D	ECJ-2VC2A100D
		100	15pF	±5%	0.85	PCC1959CT-ND	.21	.15	.10	.09	PCC1959TR-ND	4,000	68.00/M	ECJ-2VC2A150J	ECJ-2VC2A150J
		100	22pF	±5%	0.85	PCC1960CT-ND	.21	.15	.10	.09	PCC1960TR-ND	4,000	68.00/M	ECJ-2VC2A220J	ECJ-2VC2A220J
		100	33pF	±5%	0.85	PCC1961CT-ND	.21	.15	.11	.09	PCC1961TR-ND	4,000	69.00/M	ECJ-2VC2A330J	ECJ-2VC2A330J
		100	47pF	±5%	0.85	PCC1962CT-ND	.21	.15	.11	.09	PCC1962TR-ND	4,000	69.00/M	ECJ-2VC2A470J	ECJ-2VC2A470J
		100	68pF	±5%	0.85	PCC1963CT-ND	.26	.18	.13	.11	PCC1963TR-ND	4,000	85.00/M	ECJ-2VC2A680J	ECJ-2VC2A680J
		100	100pF	±5%	0.85	PCC1964CT-ND	.26	.18	.13	.11	PCC1964TR-ND	4,000	85.00/M	ECJ-2VC2A101J	ECJ-2VC2A101J
		100	150pF	±5%	0.85	PCC1965CT-ND	.27	.19	.13	.11	PCC1965TR-ND	4,000	88.00/M	ECJ-2VC2A151J	ECJ-2VC2A151J
		100	220pF	±5%	0.85	PCC1966CT-ND	.27	.19	.13	.11	PCC1966TR-ND	4,000	88.00/M	ECJ-2VC2A221J	ECJ-2VC2A221J
		100	330pF	±5%	0.85	PCC1967CT-ND	.27	.19	.13	.11	PCC1967TR-ND	4,000	88.00/M	ECJ-2VC2A331J	ECJ-2VC2A331J
		100	470pF	±5%	0.85	PCC1968CT-ND	.30	.21	.15	.13	PCC1968TR-ND	4,000	99.00/M	ECJ-2VC2A471J	ECJ-2VC2A471J
		100	680pF	±5%	0.85	PCC1969CT-ND	.30	.21	.16	.13	PCC1969TR-ND	4,000	109.00/M	ECJ-2VC2A681J	ECJ-2VC2A681J
		100	1000pF	±5%	0.85	PCC1970CT-ND	.43	.31	.22	.19	PCC1970TR-ND	4,000	159.00/M	ECJ-2VC2A102J	ECJ-2VC2A102J
		50	0.5pF	±0.25pF	0.60	PCC0R5CNCT-ND•	.08	.06	.04	.03	PCC0R5CNTR-ND	5,000	23.00/M	ECU-V1H0R5CCN	ECJ-2VC1H0R5C
		50	1.0pF	±0.25pF	0.60	PCC010CNCT-ND•	.08	.06	.04	.03	PCC010CNTR-ND	5,000	23.00/M	ECU-V1H010CCN	ECJ-2VC1H010C
		50	1.5pF	±0.25pF	0.60	PCC1R5CNCT-ND•	.08	.06	.04	.03	PCC1R5CNTR-ND	5,000	23.00/M	ECU-V1H1R5CCN	ECJ-2VC1H1R5C
		50	2.0pF	±0.25pF	0.60	PCC020CNCT-ND•	.08	.06	.04	.03	PCC020CNTR-ND	5,000	23.00/M	ECU-V1H020CCN	ECJ-2VC1H020C
		50	3.0pF	±0.25pF	0.60	PCC030CNCT-ND•	.08	.06	.04	.03	PCC030CNTR-ND	5,000	23.00/M	ECU-V1H030CCN	ECJ-2VC1H030C
		50	4.0pF	±0.25pF	0.60	PCC040CNCT-ND•	.08	.06	.04	.03	PCC040CNTR-ND	5,000	23.00/M	ECU-V1H040CCN	ECJ-2VC1H040C
		50	5.0pF	±0.25pF	0.60	PCC050CNCT-ND•	.08	.06	.04	.03	PCC050CNTR-ND	5,000	23.00/M	ECU-V1H050CCN	ECJ-2VC1H050C
		50	6.0pF	±0.5pF	0.60	PCC060CNCT-ND•	.08	.06	.04	.03	PCC060CNTR-ND	5,000	23.00/M	ECU-V1H060DCN	ECJ-2VC1H060D
		50	7.0pF	±0.5pF	0.60	PCC070CNCT-ND•	.08	.06	.04	.03	PCC070CNTR-ND	5,000	23.00/M	ECU-V1H070DCN	ECJ-2VC1H070D
		50	8.0pF	±0.5pF	0.60	PCC080CNCT-ND•	.08	.06	.04	.03	PCC080CNTR-ND	5,000	23.00/M	ECU-V1H080DCN	ECJ-2VC1H080D
		50	9.0pF	±0.5pF	0.60	PCC090CNCT-ND•	.08	.06	.04	.03	PCC090CNTR-ND	5,000	23.00/M	ECU-V1H090DCN	ECJ-2VC1H090D
		50	10pF	±0.5pF	0.60	PCC100CNCT-ND•	.08	.06	.04	.03	PCC100CNTR-ND	5,000	23.00/M	ECU-V1H100DCN	ECJ-2VC1H100D
		50	12pF	±5%	0.60	PCC120CNCT-ND	.08	.06	.04	.03	PCC120CNTR-ND	5,000	23.00/M	ECU-V1H120JCN	ECJ-2VC1H120J
		50	15pF	±5%	0.60	PCC150CNCT-ND•	.08	.06	.04	.03	PCC150CNTR-ND	5,000	23.00/M	ECU-V1H150JCN	ECJ-2VC1H150J
		50	18pF	±5%	0.60	PCC180CNCT-ND	.08	.06	.04	.03	PCC180CNTR-ND	5,000	23.00/M	ECU-V1H180JCN	ECJ-2VC1H180J
		50	22pF	±5%	0.60	PCC220CNCT-ND•	.08	.06	.04	.03	PCC220CNTR-ND	5,000	23.00/M	ECU-V1H220JCN	ECJ-2VC1H220J
		50	27pF	±5%	0.60	PCC270CGCT-ND	.08	.06	.04	.03	PCC270CGTR-ND	5,000	23.00/M	ECU-V1H270JCG	ECJ-2VC1H270J

(Continued)

Size Code	Type	WV DC	Cap.	Tolerance	Dim. (mm) T	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel		Old † Panasonic Part No.	New † Panasonic Part No.
							10	100	500	1,000		Size	Pricing		
0805	NPO	50	33pF	±5%	0.60	PCC330CGCT-ND•	.08	.06	.04	.03	PCC330CGTR-ND	5,000	23.00/M	ECU-V1H330JCG	ECJ-2VC1H330J
		50	39pF	±5%	0.60	PCC390CGCT-ND	.08	.06	.04	.03	PCC390CGTR-ND	5,000	23.00/M	ECU-V1H390JCG	ECJ-2VC1H390J
		50	47pF	±5%	0.60	PCC470CGCT-ND•	.08	.06	.04	.03	PCC470CGTR-ND	5,000	23.00/M	ECU-V1H470JCG	ECJ-2VC1H470J
		50	56pF	±5%	0.60	PCC560CGCT-ND	.08	.06	.04	.03	PCC560CGTR-ND	5,000	23.00/M	ECU-V1H560JCG	ECJ-2VC1H560J
		50	68pF	±5%	0.60	PCC680CGCT-ND•	.08	.06	.04	.03	PCC680CGTR-ND	5,000	23.00/M	ECU-V1H680JCG	ECJ-2VC1H680J
		50	82pF	±5%	0.60	PCC820CGCT-ND	.11	.08	.05	.04	PCC820CGTR-ND	5,000	31.00/M	ECU-V1H820JCG	ECJ-2VC1H820J
		50	100pF	±5%	0.60	PCC101CGCT-ND•	.11	.08	.05	.04	PCC101CGTR-ND	5,000	31.00/M	ECU-V1H101JCG	ECJ-2VC1H101J
		50	120pF	±5%	0.60	PCC121CGCT-ND•	.11	.08	.05	.04	PCC121CGTR-ND	5,000	31.00/M	ECU-V1H121JCG	ECJ-2VC1H121J
		50	150pF	±5%	0.60	PCC151CGCT-ND•	.11	.08	.05	.04	PCC151CGTR-ND	5,000	31.00/M	ECU-V1H151JCG	ECJ-2VC1H151J
		50	180pF	±5%	0.60	PCC181CGCT-ND•	.11	.08	.05	.04	PCC181CGTR-ND	5,000	31.00/M	ECU-V1H181JCG	ECJ-2VC1H181J
		50	220pF	±5%	0.60	PCC221CGCT-ND•	.11	.08	.06	.04	PCC221CGTR-ND	5,000	32.00/M	ECU-V1H221JCG	ECJ-2VC1H221J
		50	270pF	±5%	0.60	PCC271CGCT-ND•	.11	.08	.06	.04	PCC271CGTR-ND	5,000	32.00/M	ECU-V1H271JCG	ECJ-2VC1H271J
		50	330pF	±5%	0.60	PCC331CGCT-ND•	.11	.08	.06	.04	PCC331CGTR-ND	5,000	32.00/M	ECU-V1H331JCG	ECJ-2VC1H331J
		50	390pF	±5%	0.60	PCC391CGCT-ND•	.13	.09	.06	.05	PCC391CGTR-ND	5,000	36.00/M	ECU-V1H391JCG	ECJ-2VC1H391J
		50	470pF	±5%	0.60	PCC471CGCT-ND•	.14	.09	.07	.05	PCC471CGTR-ND	5,000	39.00/M	ECU-V1H471JCX	ECJ-2VC1H471J
		50	560pF	±5%	0.60	PCC561CGCT-ND•	.15	.10	.07	.06	PCC561CGTR-ND	5,000	43.00/M	ECU-V1H561JCX	ECJ-2VC1H561J
		50	680pF	±5%	0.60	PCC681CGCT-ND•	.16	.11	.07	.06	PCC681CGTR-ND	5,000	45.00/M	ECU-V1H681JCX	ECJ-2VC1H681J
		50	820pF	±5%	0.60	PCC821CGCT-ND•	.17	.12	.08	.06	PCC821CGTR-ND	5,000	49.00/M	ECU-V1H821JCX	ECJ-2VC1H821J
		50	1000pF	±5%	0.60	PCC102CGCT-ND•	.17	.12	.08	.06	PCC102CGTR-ND	5,000	50.00/M	ECU-V1H102JCX	ECJ-2VC1H102J
		50	1200pF	±5%	0.60	PCC2155CT-ND	.20	.14	.09	.07	PCC2155TR-ND	5,000	55.00/M	ECJ-2VC1H122J	ECJ-2VC1H122J
		50	1500pF	±5%	0.60	PCC2156CT-ND	.20	.14	.09	.07	PCC2156TR-ND	5,000	55.00/M	ECJ-2VC1H152J	ECJ-2VC1H152J
		50	1800pF	±5%	0.60	PCC2157CT-ND	.26	.18	.12	.09	PCC2157TR-ND	5,000	72.00/M	ECJ-2VC1H182J	ECJ-2VC1H182J
		50	2200pF	±5%	0.60	PCC2158CT-ND	.26	.18	.12	.09	PCC2158TR-ND	5,000	72.00/M	ECJ-2VC1H222J	ECJ-2VC1H222J
		50	2700pF	±5%	0.60	PCC2159CT-ND	.26	.18	.12	.09	PCC2159TR-ND	4,000	72.00/M	ECJ-2VC1H272J	ECJ-2VC1H272J
	X7R	200	220pF	±10%	0.85	PCC1993CT-ND	.29	.21	.15	.13	PCC1993TR-ND	4,000	105.00/M	ECJ-2VB2D221K	ECJ-2VB2D221K
		200	330pF	±10%	0.85	PCC1994CT-ND	.29	.21	.15	.13	PCC1994TR-ND	4,000	105.00/M	ECJ-2VB2D331K	ECJ-2VB2D331K
		200	470pF	±10%	0.85	PCC1995CT-ND	.29	.21	.15	.13	PCC1995TR-ND	4,000	107.00/M	ECJ-2VB2D471K	ECJ-2VB2D471K
		200	680pF	±10%	0.85	PCC1996CT-ND	.30	.22	.16	.13	PCC1996TR-ND	4,000	111.00/M	ECJ-2VB2D681K	ECJ-2VB2D681K
		200	1000pF	±10%	0.85	PCC1997CT-ND	.30	.22	.16	.13	PCC1997TR-ND	4,000	111.00/M	ECJ-2VB2D102K	ECJ-2VB2D102K
		200	1500pF	±10%	0.85	PCC1998CT-ND	.32	.23	.17	.14	PCC1998TR-ND	4,000	116.00/M	ECJ-2VB2D152K	ECJ-2VB2D152K
		200	2200pF	±10%	0.85	PCC1999CT-ND	.33	.23	.17	.14	PCC1999TR-ND	4,000	120.00/M	ECJ-2VB2D222K	ECJ-2VB2D222K
		200	3300pF	±10%	0.85	PCC2000CT-ND	.33	.23	.17	.14	PCC2000TR-ND	4,000	120.00/M	ECJ-2VB2D332K	ECJ-2VB2D332K
		200	4700pF	±10%	0.85	PCC2001CT-ND	.35	.25	.18	.15	PCC2001TR-ND	4,000	127.00/M	ECJ-2VB2D472K	ECJ-2VB2D472K
		200	6800pF	±10%	1.25	PCC2002CT-ND	.35	.25	.18	.15	PCC2002TR-ND	2,000	137.00/M	ECJ-2YB2D682K	ECJ-2YB2D682K
		200	10000pF	±10%	1.25	PCC2003CT-ND	.65	.48	.35	.30	PCC2003TR-ND	2,000	274.00/M	ECJ-2YB2D103K	ECJ-2YB2D103K
		100	220pF	±10%	0.85	PCC1981CT-ND	.20	.14	.10	.08	PCC1981TR-ND	4,000	64.00/M	ECJ-2VB2A221K	ECJ-2VB2A221K
		100	330pF	±10%	0.85	PCC1982CT-ND	.20	.14	.10	.08	PCC1982TR-ND	4,000	64.00/M	ECJ-2VB2A331K	ECJ-2VB2A331K
		100	470pF	±10%	0.85	PCC1983CT-ND	.20	.14	.10	.08	PCC1983TR-ND	4,000	64.00/M	ECJ-2VB2A471K	ECJ-2VB2A471K
		100	680pF	±10%	0.85	PCC1984CT-ND	.20	.15	.10	.09	PCC1984TR-ND	4,000	66.00/M	ECJ-2VB2A681K	ECJ-2VB2A681K
		100	1000pF	±10%	0.85	PCC1985CT-ND	.21	.15	.10	.09	PCC1985TR-ND	4,000	68.00/M	ECJ-2VB2A102K	ECJ-2VB2A102K
		100	1500pF	±10%	0.85	PCC1986CT-ND	.21	.15	.11	.09	PCC1986TR-ND	4,000	69.00/M	ECJ-2VB2A152K	ECJ-2VB2A152K
		100	2200pF	±10%	0.85	PCC1987CT-ND	.22	.16	.11	.09	PCC1987TR-ND	4,000	73.00/M	ECJ-2VB2A222K	ECJ-2VB2A222K
		100	3300pF	±10%	0.85	PCC1988CT-ND	.22	.16	.11	.09	PCC1988TR-ND	4,000	73.00/M	ECJ-2VB2A332K	ECJ-2VB2A332K
		100	4700pF	±10%	0.85	PCC1989CT-ND	.24	.17	.12	.10	PCC1989TR-ND	4,000	78.00/M	ECJ-2VB2A472K	ECJ-2VB2A472K
		100	6800pF	±10%	0.85	PCC1990CT-ND	.24	.17	.12	.10	PCC1990TR-ND	4,000	78.00/M	ECJ-2VB2A682K	ECJ-2VB2A682K
		100	10000pF	±10%	0.85	PCC1991CT-ND	.43	.31	.22	.19	PCC1991TR-ND	4,000	159.00/M	ECJ-2VB2A103K	ECJ-2VB2A103K
		100	15000pF	±10%	1.25	PCC1992CT-ND	.43	.31	.22	.19	PCC1992TR-ND	2,000	171.00/M	ECJ-2YB2A153K	ECJ-2YB2A153K
		50	220pF	±10%	0.60	PCC221BNCT-ND•	.08	.06	.04	.03	PCC221BNTR-ND	5,000	23.00/M	ECU-V1H221KBN	(Not for new design)
		50	270pF	±10%	0.60	PCC271BNCT-ND•	.08	.06	.04	.03	PCC271BNTR-ND	5,000	23.00/M	ECU-V1H271KBN	(Not for new design)
		50	330pF	±10%	0.60	PCC331BNCT-ND•	.08	.06	.04	.03	PCC331BNTR-ND	5,000	23.00/M	ECU-V1H331KBN	(Not for new design)
		50	390pF	±10%	0.60	PCC391BNCT-ND•	.08	.06	.04	.03	PCC391BNTR-ND	5,000	23.00/M	ECU-V1H391KBN	(Not for new design)
		50	470pF	±10%	0.60	PCC471BNCT-ND•	.08	.06	.04	.03	PCC471BNTR-ND	5,000	23.00/M	ECU-V1H471KBN	(Not for new design)
		50	560pF	±10%	0.60	PCC561BNCT-ND•	.08	.06	.04	.03	PCC561BNTR-ND	5,000	23.00/M	ECU-V1H561KBN	(Not for new design)
		50	680pF	±10%	0.60	PCC681BNCT-ND•	.08	.06	.04	.03	PCC681BNTR-ND	5,000	23.00/M	ECU-V1H681KBN	(Not for new design)
		50	820pF	±10%	0.60	PCC821BNCT-ND•	.08	.06	.04	.03	PCC821BNTR-ND	5,000	23.00/M	ECU-V1H821KBN	(Not for new design)
		50	1000pF	±10%	0.60	PCC102BNCT-ND•	.08	.06	.04	.03	PCC102BNTR-ND	5,000	23.00/M	ECU-V1H102KBN	ECJ-2VB1H102K
		50	1200pF	±10%	0.60	PCC122BNCT-ND•	.08	.06	.04	.03	PCC122BNTR-ND	5,000	23.00/M	ECU-V1H122KBN	ECJ-2VB1H122K
		50	1500pF	±10%	0.60	PCC152BNCT-ND•	.09	.06	.04	.03	PCC152BNTR-ND	5,000	24.00/M	ECU-V1H152KBN	ECJ-2VB1H152K
		50	1800pF	±10%	0.60	PCC182BNCT-ND•	.08	.06	.04	.03	PCC182BNTR-ND	5,000	23.00/M	ECU-V1H182KBN	ECJ-2VB1H182K
		50	2200pF	±10%	0.60	PCC222BNCT-ND•	.09	.06	.04	.03	PCC222BNTR-ND	5,000	24.00/M	ECU-V1H222KBN	ECJ-2VB1H222K
		50	2700pF	±10%	0.60	PCC272BNCT-ND•	.09	.06	.04	.03	PCC272BNTR-ND	5,000	24.00/M	ECU-V1H272KBN	ECJ-2VB1H272K
		50	3300pF	±10%	0.60	PCC332BNCT-ND•	.08	.06	.04	.03	PCC332BNTR-ND	5,000	23.00/M	ECU-V1H332KBN	ECJ-2VB1H332K
		50	3900pF	±10%	0.60	PCC392BNCT-ND•	.08	.06	.04	.03	PCC392BNTR-ND	5,000	23.00/M	ECU-V1H392KBN	ECJ-2VB1H392K
		50	4700pF	±10%	0.60	PCC472BNCT-ND•	.10	.07	.05	.04	PCC472BNTR-ND	5,000	27.00/M	ECU-V1H472KBG	ECJ-2VB1H472K
		50	5600pF	±10%	0.60	PCC562BNCT-ND•	.09	.06	.04	.04	PCC562BNTR-ND	5,000	26.00/M	ECU-V1H562KBG	ECJ-2VB1H562K
		50	6800pF	±10%	0.60	PCC682BNCT-ND•	.10	.07	.05	.04	PCC682BNTR-ND	5,000	27.00/M	ECU-V1H682KBG	ECJ-2VB1H682K
		50	8200pF	±10%	0.60	PCC822BNCT-ND•	.10	.07	.05	.04	PCC822BNTR-ND	5,000	27.00/M	ECU-V1H822KBG	ECJ-2VB1H822K
		50	10000pF	±10%	0.60	PCC103BNCT-ND•	.10	.07	.05	.04	PCC103BNTR-ND	5,000	29.00/M	ECU-V1H103KBG	ECJ-2VB1H103K
		50	12000pF	±10%	0.60	PCC123BGCT-ND•	.12	.08	.06	.04	PCC123BGTR-ND	5,000	33.00/M	ECU-V1H123KBX	ECJ-2VB1H123K
		50	15000pF	±10%	0.60	PCC153BGCT-ND•	.12	.08	.06	.04	PCC153BGTR-ND	5,000	33.00/M	ECU-V1H153KBX	ECJ-2VB1H153K
		50	18000pF	±10%	0.60	PCC183BGCT-ND•	.12	.08	.06	.04	PCC183BGTR-ND	5,000	33.00/M	ECU-V1H183KBX	ECJ-2VB1H183K
		50	22000pF	±10%	0.60	PCC223BGCT-ND•	.14	.10	.07	.05	PCC223BGTR-ND	5,000	41.00/M	ECU-V1H223KBX	ECJ-2VB1H223K
		50	27000pF	±10%	1.00	PCC273BGCT-ND•	.16	.11	.08	.06	PCC273BGTR-ND	4,000	47.00/M	ECU-V1H273KBX	(Not for new design)
		50	27000pF	±10%	0.85	PCC1833CT-ND	.12	.09	.06	.05	PCC1833TR-ND	4,000	35.00/M	ECJ-2VB1H273K	ECJ-2VB1H273K
		50	33000pF	±10%	0.85	PCC1834CT-ND	.13	.09	.06	.05	PCC1834TR-ND	4,000	38.00/M	ECJ-2VB1H333K	ECJ-2VB1H333K
		50	39000pF	±10%	0.85	PCC1835CT-ND	.15	.10	.07	.06	PCC1835TR-ND	4,000	42.00/M	ECJ-2VB1H393K	ECJ-2VB1H393K
		50	47000pF	±10%	1.25	PCC1836CT-ND	.17	.11	.08	.06	PCC1836TR-ND	2,000	56.00/M	ECJ-2YB1H473K	ECJ-2YB1H473K
		50	56000pF	±10%	1.25	PCC1837CT-ND	.17	.11	.08	.06	PCC1837TR-ND	2,000	56.00/M	ECJ-2YB1H563K	ECJ-2YB1H563K
		50	68000pF	±10%	1.25	PCC1838CT-ND	.17	.11	.08	.06	PCC1838TR-ND	2,000	56.00/M	ECJ-2YB1H683K	ECJ-2YB1H683K
		50	82000pF	±10%	1.25	PCC1839CT-ND	.17	.11	.08	.06	PCC1839TR-ND	2,000	56.00/M	ECJ-2YB1H823K	ECJ-2YB1H823K
		50	.1µF	±10%	1.25	PCC1840CT-ND	.17	.11	.08	.06	PCC1840TR-ND	2,000	56.00/M	ECJ-2YB1H104K	ECJ-2YB1H104K
		25	39000pF	±10%	0.85	PCC1819CT-ND	.13	.09	.06	.05	PCC1819TR-ND	4,000	38.00/M	ECJ-2VB1E393K	ECJ-2VB1E393K
		25	47000pF	±10%	0.85	PCC1820CT-ND	.14	.10	.07	.06	PCC1820TR-ND	4,000	41.00/M	ECJ-2VB1E473K	ECJ-2VB1E473K
		25	56000pF	±10%	0.85	PCC1825CT-ND	.14	.10	.07	.05	PCC1825TR-ND	4,000	40.00/M	ECJ-2VB1E563K	ECJ-2VB1E563K
		25	68000pF	±10%	0.85	PCC1826CT-ND	.16	.11	.08	.06	PCC1826TR-ND	4,000	46.00/M	ECJ-2VB1E683K	ECJ-2VB1E683K
		25	82000pF	±10%	0.85	PCC1827CT-ND	.16	.11	.08	.06	PCC1827TR-ND	4,000	46.00/M	ECJ-2VB1E823K	ECJ-2VB1E823K
		25	.1µF	±10%	0.85	PCC1828CT-ND	.16	.11	.08	.06	PCC1828TR-ND	4,000	46.00/M	ECJ-2VB1E104K	ECJ-2VB1E104K
		25	.12µF	±10%	1.25	PCC1829CT-ND	.15	.11	.08	.06	PCC1829TR-ND	2,000	56.00/M	ECJ-2YB1E124K	ECJ-2YB1E124K
		25	.15µF	±10%	1.25	PCC1830CT-ND	.15	.11	.08	.07	PCC1830TR-ND	2,000	57.00/M	ECJ-2YB1E154K	ECJ-2YB1E154K
		25	.18µF	±10%	1.25	PCC1831CT-ND	.16	.11	.08	.07	PCC1831TR-ND	2,000	59.00/M	ECJ-2YB1E184K	ECJ-2YB1E184K
		25	.22µF	±10%	1.25	PCC1832CT-ND	.20	.14	.10	.08	PCC1832TR-ND	2,000	74.00/M	ECJ-2YB1E224K	ECJ-2YB1E224K
		16	47000pF	±10%	0.85	PCC1808CT-ND	.14	.10	.07	.06	PCC1808TR-ND	4,000	41.00/M	ECJ-2VB1C473K	ECJ-2VB1C473K
		16	56000pF	±10%	0.85	PCC1809CT-ND	.16	.11	.08	.06	PCC1809TR-ND	4,000	46.00/M	ECJ-2VB1C563K	ECJ-2VB1C563K
		16	68000pF	±10%	0.85	PCC1810CT-ND	.15	.11	.08	.06	PCC1810TR-ND	4,000	48.00/M	ECJ-2VB1C683K	ECJ-2VB1C683K

(Continued)

Panasonic Multilayer Ceramic Chip Capacitors 0201, 0402, 0603, 0612, 0805, 1206 & 1210 *(Cont.)*

Size Code	Type	WV DC	Cap.	Tolerance	Dim. (mm) T	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel		Old † Panasonic Part No.	New † Panasonic Part No.
							10	100	500	1,000		Size	Pricing		
0805	X7R	16	82000pF	±10%	0.85	PCC1811CT-ND	.15	.11	.08	.06	PCC1811TR-ND	4,000	48.00/M	ECJ-2VB1C823K	ECJ-2VB1C823K
		16	.1µF	±10%	0.85	PCC1812CT-ND	.16	.12	.08	.07	PCC1812TR-ND	4,000	53.00/M	ECJ-2VB1C104K	ECJ-2VB1C104K
		16	.12µF	±10%	0.85	PCC1813CT-ND	.17	.12	.09	.07	PCC1813TR-ND	4,000	56.00/M	ECJ-2VB1C124K	ECJ-2VB1C124K
		16	.15µF	±10%	0.85	PCC1814CT-ND	.19	.13	.09	.08	PCC1814TR-ND	4,000	61.00/M	ECJ-2VB1C154K	ECJ-2VB1C154K
		16	.18µF	±10%	0.85	PCC1815CT-ND	.25	.18	.13	.11	PCC1815TR-ND	4,000	90.00/M	ECJ-2VB1C184K	ECJ-2VB1C184K
		16	.22µF	±10%	0.85	PCC1816CT-ND	.25	.18	.13	.11	PCC1816TR-ND	4,000	90.00/M	ECJ-2VB1C224K	ECJ-2VB1C224K
		16	.27µF	±10%	1.25	PCC1916CT-ND	.24	.17	.13	.11	PCC1916TR-ND	2,000	95.00/M	ECJ-2YB1C274K	ECJ-2YB1C274K
		16	.33µF	±10%	1.25	PCC1817CT-ND	.25	.18	.13	.11	PCC1817TR-ND	2,000	98.00/M	ECJ-2YB1C334K	ECJ-2YB1C334K
		16	.39µF	±10%	1.25	PCC1917CT-ND	.24	.17	.13	.11	PCC1917TR-ND	2,000	95.00/M	ECJ-2YB1C394K	ECJ-2YB1C394K
		16	.47µF	±10%	1.25	PCC1818CT-ND	.25	.18	.13	.11	PCC1818TR-ND	2,000	98.00/M	ECJ-2YB1C474K	ECJ-2YB1C474K
	X5R	10	.56µF	±10%	1.25	PCC1918CT-ND	.40	.29	.21	.18	PCC1918TR-ND	2,000	160.00/M	ECJ-2YB1A564K	ECJ-2YB1A564K
		10	.68µF	±10%	1.25	PCC1806CT-ND	.41	.30	.22	.18	PCC1806TR-ND	2,000	164.00/M	ECJ-2YB1A684K	ECJ-2YB1A684K
		10	.82µF	±10%	1.25	PCC1919CT-ND	.41	.30	.22	.19	PCC1919TR-ND	2,000	170.00/M	ECJ-2YB1A824K	ECJ-2YB1A824K
		10	1µF	±10%	1.25	PCC1807CT-ND	.42	.31	.22	.19	PCC1807TR-ND	2,000	174.00/M	ECJ-2YB1A105K	ECJ-2YB1A105K
		6.3	1.2µF	±10%	1.25	PCC1920CT-ND	.42	.31	.23	.19	PCC1920TR-ND	2,000	177.00/M	ECJ-2YB0J125K	(Not for new design)
		6.3	1.5µF	±10%	1.25	PCC1921CT-ND	.44	.32	.24	.20	PCC1921TR-ND	2,000	184.00/M	ECJ-2YB0J155K	ECJ-2YB0J155K
		6.3	1.8µF	±10%	1.25	PCC1922CT-ND	.46	.34	.25	.21	PCC1922TR-ND	2,000	193.00/M	ECJ-2YB0J185K	(Not for new design)
		6.3	2.2µF	±10%	1.25	PCC1923CT-ND	.48	.35	.26	.22	PCC1923TR-ND	2,000	200.00/M	ECJ-2YB0J225K	ECJ-2YB0J225K
		6.3	2.7µF	±10%	1.25	PCC1924CT-ND	.49	.36	.27	.23	PCC1924TR-ND	2,000	207.00/M	ECJ-2YB0J275K	(Not for new design)
		6.3	3.3µF	±10%	1.25	PCC1925CT-ND	.52	.38	.28	.24	PCC1925TR-ND	2,000	216.00/M	ECJ-2YB0J335K	ECJ-2YB0J335K
	Y5V	50	10000pF	+80%/-20%	0.60	PCC1858CT-ND	.06	.05	.03	.03	PCC1858TR-ND	5,000	18.00/M	ECJ-2VF1H103Z	ECJ-2VF1H103Z
		50	15000pF	+80%/-20%	0.60	PCC1859CT-ND	.06	.05	.03	.03	PCC1859TR-ND	5,000	18.00/M	ECJ-2VF1H153Z	ECJ-2VF1H153Z
		50	22000pF	+80%/-20%	0.60	PCC1860CT-ND	.07	.05	.03	.03	PCC1860TR-ND	5,000	19.00/M	ECJ-2VF1H223Z	ECJ-2VF1H223Z
		50	33000pF	+80%/-20%	0.60	PCC1861CT-ND	.07	.05	.04	.03	PCC1861TR-ND	5,000	20.00/M	ECJ-2VF1H333Z	ECJ-2VF1H333Z
		50	47000pF	+80%/-20%	0.60	PCC1862CT-ND	.08	.06	.04	.03	PCC1862TR-ND	5,000	23.00/M	ECJ-2VF1H473Z	ECJ-2VF1H473Z
		50	68000pF	+80%/-20%	0.60	PCC1863CT-ND	.09	.06	.04	.04	PCC1863TR-ND	5,000	26.00/M	ECJ-2VF1H683Z	ECJ-2VF1H683Z
		50	.1µF	+80%/-20%	0.85	PCC1864CT-ND	.12	.09	.06	.05	PCC1864TR-ND	4,000	35.00/M	ECJ-2VF1H104Z	ECJ-2VF1H104Z
		50	.15µF	+80%/-20%	0.85	PCC1865CT-ND	.15	.10	.07	.06	PCC1865TR-ND	4,000	43.00/M	ECJ-2VF1H154Z	ECJ-2VF1H154Z
		50	.22µF	+80%/-20%	0.85	PCC1866CT-ND	.15	.10	.07	.06	PCC1866TR-ND	4,000	43.00/M	ECJ-2VF1H224Z	ECJ-2VF1H224Z
		25	68000pF	+80%/-20%	0.60	PCC1852CT-ND	.09	.06	.04	.04	PCC1852TR-ND	5,000	26.00/M	ECJ-2VF1E683Z	ECJ-2VF1E683Z
		25	.1µF	+80%/-20%	0.60	PCC1853CT-ND	.11	.08	.05	.04	PCC1853TR-ND	5,000	31.00/M	ECJ-2VF1E104Z	ECJ-2VF1E104Z
		25	.15µF	+80%/-20%	0.60	PCC1854CT-ND	.12	.09	.06	.05	PCC1854TR-ND	5,000	35.00/M	ECJ-2VF1E154Z	ECJ-2VF1E154Z
		25	.22µF	+80%/-20%	0.85	PCC1855CT-ND	.16	.11	.07	.06	PCC1855TR-ND	4,000	45.00/M	ECJ-2VF1E224Z	ECJ-2VF1E224Z
		25	.33µF	+80%/-20%	1.25	PCC1856CT-ND	.23	.17	.12	.10	PCC1856TR-ND	2,000	89.00/M	ECJ-2YF1E334Z	ECJ-2YF1E334Z
		25	.47µF	+80%/-20%	1.25	PCC1857CT-ND	.24	.17	.12	.10	PCC1857TR-ND	2,000	92.00/M	ECJ-2YF1E474Z	ECJ-2YF1E474Z
		16	.1µF	+80%/-20%	0.60	PCC1843CT-ND	.11	.08	.06	.04	PCC1843TR-ND	5,000	32.00/M	ECJ-2VF1C104Z	ECJ-2VF1C104Z
		16	.15µF	+80%/-20%	0.60	PCC1844CT-ND	.12	.09	.06	.05	PCC1844TR-ND	5,000	35.00/M	ECJ-2VF1C154Z	ECJ-2VF1C154Z
		16	.22µF	+80%/-20%	0.60	PCC1845CT-ND	.15	.10	.07	.06	PCC1845TR-ND	5,000	43.00/M	ECJ-2VF1C224Z	ECJ-2VF1C224Z
		16	.33µF	+80%/-20%	0.85	PCC1846CT-ND	.17	.11	.08	.06	PCC1846TR-ND	4,000	47.00/M	ECJ-2VF1C334Z	ECJ-2VF1C334Z
		16	.47µF	+80%/-20%	0.85	PCC1847CT-ND	.17	.12	.09	.07	PCC1847TR-ND	4,000	56.00/M	ECJ-2VF1C474Z	ECJ-2VF1C474Z
		16	.68µF	+80%/-20%	0.85	PCC1848CT-ND	.20	.14	.10	.08	PCC1848TR-ND	4,000	65.00/M	ECJ-2VF1C684Z	ECJ-2VF1C684Z
		16	1µF	+80%/-20%	0.85	PCC1849CT-ND	.23	.17	.12	.10	PCC1849TR-ND	4,000	85.00/M	ECJ-2VF1C105Z	ECJ-2VF1C105Z
		16	1.5µF	+80%/-20%	1.25	PCC1850CT-ND	.35	.25	.18	.15	PCC1850TR-ND	2,000	137.00/M	ECJ-2YF1C155Z	ECJ-2YF1C155Z
		16	2.2µF	+80%/-20%	1.25	PCC1851CT-ND	.39	.28	.20	.17	PCC1851TR-ND	2,000	154.00/M	ECJ-2YF1C225Z	ECJ-2YF1C225Z
		10	3.3µF	+80%/-20%	1.25	PCC1841CT-ND	.41	.30	.22	.19	PCC1841TR-ND	2,000	170.00/M	ECJ-2YF1A335Z	(Not for new design)
		10	4.7µF	+80%/-20%	1.25	PCC1842CT-ND	.45	.33	.24	.21	PCC1842TR-ND	2,000	186.00/M	ECJ-2YF1A475Z	ECJ-2YF1A475Z
1206	NPO	200	470pF	±5%	1.15	PCC2007CT-ND	.57	.42	.31	.26	PCC2007TR-ND	2,000	239.00/M	ECJ-3YC2D471J	ECJ-3YC2D471J
		200	680pF	±5%	1.15	PCC2008CT-ND	.71	.52	.38	.33	PCC2008TR-ND	2,000	298.00/M	ECJ-3YC2D681J	ECJ-3YC2D681J
		200	1000pF	±5%	1.15	PCC2009CT-ND	.83	.61	.44	.38	PCC2009TR-ND	2,000	347.00/M	ECJ-3YC2D102J	ECJ-3YC2D102J
		100	1500pF	±5%	0.85	PCC2004CT-ND	.57	.42	.31	.26	PCC2004TR-ND	4,000	231.00/M	ECJ-3VC2A152J	ECJ-3VC2A152J
		100	2200pF	±5%	0.85	PCC2005CT-ND	.67	.49	.36	.31	PCC2005TR-ND	4,000	269.00/M	ECJ-3VC2A222J	ECJ-3VC2A222J
		100	3300pF	±5%	0.85	PCC2006CT-ND	.90	.66	.48	.41	PCC2006TR-ND	4,000	363.00/M	ECJ-3VC2A332J	ECJ-3VC2A332J
		50	.5pF	±0.25pF	0.60	PCC0R5CCT-ND•	.12	.08	.06	.04	PCC0R5CTR-ND	5,000	33.00/M	ECU-V1H0R5CCM	(Not for new design)
		50	1.0pF	±0.25pF	0.60	PCC010CCT-ND•	.12	.08	.06	.04	PCC010CTR-ND	5,000	33.00/M	ECU-V1H010CCM	(Not for new design)
		50	1.5pF	±0.25pF	0.60	PCC1R5CCT-ND•	.10	.07	.05	.04	PCC1R5CTR-ND	5,000	27.00/M	ECU-V1H1R5CCM	(Not for new design)
		50	2.2pF	±0.25pF	0.60	PCC2R2CCT-ND•	.10	.07	.05	.04	PCC2R2CTR-ND	5,000	27.00/M	ECU-V1H2R2CCM	(Not for new design)
		50	2.7pF	±0.25pF	0.60	PCC2R7CCT-ND•	.12	.08	.06	.04	PCC2R7CTR-ND	5,000	33.00/M	ECU-V1H2R7CCM	(Not for new design)
		50	3.3pF	±0.25pF	0.60	PCC3R3CCT-ND•	.10	.07	.05	.04	PCC3R3CTR-ND	5,000	27.00/M	ECU-V1H3R3CCM	(Not for new design)
		50	3.9pF	±0.25pF	0.60	PCC3R9CCT-ND•	.10	.07	.05	.04	PCC3R9CTR-ND	5,000	27.00/M	ECU-V1H3R9CCM	(Not for new design)
		50	4.7pF	±0.25pF	0.60	PCC4R7CCT-ND•	.12	.08	.06	.04	PCC4R7CTR-ND	5,000	33.00/M	ECU-V1H4R7CCM	(Not for new design)
		50	5.1pF	±0.25pF	0.60	PCC5R1CCT-ND•	.12	.08	.06	.04	PCC5R1CTR-ND	5,000	33.00/M	ECU-V1H5R1CCM	(Not for new design)
		50	5.6pF	±0.25pF	0.60	PCC5R6CCT-ND•	.12	.08	.06	.04	PCC5R6CTR-ND	5,000	33.00/M	ECU-V1H5R6CCM	(Not for new design)
		50	6.8pF	±0.5pF	0.60	PCC6R8CCT-ND•	.10	.07	.05	.04	PCC6R8CTR-ND	5,000	27.00/M	ECU-V1H6R8DCM	(Not for new design)
		50	7.5pF	±0.5pF	0.60	PCC7R5CCT-ND•	.12	.08	.06	.04	PCC7R5CTR-ND	5,000	33.00/M	ECU-V1H7R5DCM	(Not for new design)
		50	8.2pF	±0.5pF	0.60	PCC8R2CCT-ND•	.12	.08	.06	.04	—	—	—	ECU-V1H8R2DCM	(Not for new design)
		50	9.1pF	±0.5pF	0.60	PCC9R1CCT-ND•	.10	.07	.05	.04	PCC9R1CTR-ND	5,000	27.00/M	ECU-V1H9R1DCM	(Not for new design)
		50	10pF	±0.5pF	0.60	PCC100CCT-ND•	.12	.08	.06	.04	PCC100CTR-ND	5,000	33.00/M	ECU-V1H100DCM	(Not for new design)
		50	12pF	±5%	0.60	PCC120CCT-ND•	.10	.07	.05	.04	PCC120CTR-ND	5,000	29.00/M	ECU-V1H120JCM	(Not for new design)
		50	15pF	±5%	0.60	PCC150CCT-ND•	.13	.09	.06	.05	PCC150CTR-ND	5,000	36.00/M	ECU-V1H150JCM	(Not for new design)
		50	18pF	±5%	0.60	PCC180CCT-ND•	.13	.09	.06	.05	PCC180CTR-ND	5,000	36.00/M	ECU-V1H180JCM	(Not for new design)
		50	20pF	±5%	0.60	PCC200CCT-ND•	.13	.09	.06	.05	PCC200CTR-ND	5,000	36.00/M	ECU-V1H200JCM	(Not for new design)
		50	22pF	±5%	0.60	PCC220CCT-ND•	.13	.09	.06	.05	PCC220CTR-ND	5,000	36.00/M	ECU-V1H220JCM	(Not for new design)
		50	27pF	±5%	0.60	PCC270CCT-ND•	.13	.09	.06	.05	PCC270CTR-ND	5,000	36.00/M	ECU-V1H270JCM	(Not for new design)
		50	33pF	±5%	0.60	PCC330CCT-ND•	.13	.09	.06	.05	PCC330CTR-ND	5,000	36.00/M	ECU-V1H330JCM	(Not for new design)
		50	39pF	±5%	0.60	PCC390CCT-ND•	.13	.09	.06	.05	PCC390CTR-ND	5,000	36.00/M	ECU-V1H390JCM	(Not for new design)
		50	47pF	±5%	0.60	PCC470CCT-ND•	.14	.10	.07	.05	PCC470CTR-ND	5,000	40.00/M	ECU-V1H470JCM	(Not for new design)
		50	51pF	±5%	0.60	PCC510CCT-ND•	.14	.10	.07	.05	PCC510CTR-ND	5,000	40.00/M	ECU-V1H510JCM	(Not for new design)
		50	56pF	±5%	0.60	PCC560CCT-ND•	.14	.10	.07	.05	PCC560CTR-ND	5,000	40.00/M	ECU-V1H560JCM	(Not for new design)
		50	68pF	±5%	0.60	PCC680CCT-ND•	.14	.10	.07	.05	PCC680CTR-ND	5,000	40.00/M	ECU-V1H680JCM	(Not for new design)
		50	100pF	±5%	0.60	PCC101CCT-ND•	.14	.10	.07	.05	PCC101CTR-ND	5,000	40.00/M	ECU-V1H101JCH	(Not for new design)
		50	120pF	±5%	0.60	PCC121CCT-ND•	.14	.10	.07	.05	PCC121CTR-ND	5,000	40.00/M	ECU-V1H121JCH	(Not for new design)
		50	1000pF	±5%	0.60	PCC102CCT-ND•	.20	.14	.10	.08	PCC102CTR-ND	5,000	66.00/M	ECU-V1H102JCH	(Not for new design)
		50	2700pF	±5%	0.60	PCC2160CT-ND	1.22	.86	.60	.47	PCC2160TR-ND	5,000	405.00/M	ECJ-3VC1H272J	ECJ-3VC1H272J
		50	3300pF	±5%	0.60	PCC2161CT-ND	1.52	1.08	.75	.59	PCC2161TR-ND	5,000	507.00/M	ECJ-3VC1H332J	ECJ-3VC1H332J
		50	3900pF	±5%	0.60	PCC2162CT-ND	1.69	1.19	.83	.65	PCC2162TR-ND	5,000	562.00/M	ECJ-3VC1H392J	ECJ-3VC1H392J
		50	4700pF	±5%	0.60	PCC2163CT-ND	1.78	1.26	.87	.69	PCC2163TR-ND	5,000	592.00/M	ECJ-3VC1H472J	ECJ-3VC1H472J
		50	5600pF	±5%	0.85	PCC2164CT-ND	1.87	1.32	.92	.72	PCC2164TR-ND	4,000	623.00/M	ECJ-3VC1H562J	ECJ-3VC1H562J
		50	6800pF	±5%	0.85	PCC2165CT-ND	1.87	1.32	.92	.72	PCC2165TR-ND	4,000	623.00/M	ECJ-3VC1H682J	ECJ-3VC1H682J
		50	8200pF	±5%	1.15	PCC2166CT-ND	1.97	1.39	.96	.76	PCC2166TR-ND	3,000	656.00/M	ECJ-3YC1H822J	ECJ-3FC1H822J
		50	10000pF	±5%	1.15	PCC2167CT-ND	1.97	1.39	.96	.76	PCC2167TR-ND	3,000	656.31/M	ECJ-3YC1H103J	ECJ-3FC1H103J
	X7R	200	15000pF	±10%	1.15	PCC2013CT-ND	.70	.52	.38	.32	PCC2013TR-ND	2,000	294.00/M	ECJ-3YB2D153K	ECJ-3YB2D153K
		200	22000pF	±10%	1.15	PCC2014CT-ND	.70	.52	.38	.32	PCC2014TR-ND	2,000	294.00/M	ECJ-3YB2D223K	ECJ-3YB2D223K
		100	22000pF	±10%	1.15	PCC2010CT-ND	.46	.33	.24	.20	PCC2010TR-ND	2,000	182.00/M	ECJ-3YB2A223K	ECJ-3YB2A223K

(Continued)

Panasonic Multilayer Ceramic Chip Capacitors 0201, 0402, 0603, 0612, 0805, 1206 & 1210 *(Cont.)*

Size Code	Type	WV DC	Cap.	Tolerance	Dim. (mm) T	Digi-Key Part No.	Cut Tape Price Each 10	100	500	1,000	Digi-Key Part No.	Tape & Reel Size	Pricing	Old † Panasonic Part No.	New † Panasonic Part No.
1206	X7R	100	33000pF	±10%	1.15	PCC2011CT-ND	.51	.36	.26	.22	PCC2011TR-ND	2,000	202.00/M	ECJ-3YB2A333K	ECJ-3YB2A333K
		100	47000pF	±10%	1.15	PCC2012CT-ND	.51	.36	.26	.22	PCC2012TR-ND	2,000	202.00/M	ECJ-3YB2A473K	ECJ-3YB2A473K
		50	220pF	±10%	0.60	PCC221BCT-ND•	.11	.08	.05	.04	PCC221BTR-ND	5,000	32.00/M	ECU-V1H221KBM	(Not for new design)
		50	270pF	±10%	0.60	PCC271BCT-ND•	.11	.08	.05	.04	PCC271BTR-ND	5,000	32.00/M	ECU-V1H271KBM	(Not for new design)
		50	330pF	±10%	0.60	PCC331BCT-ND•	.11	.08	.05	.04	PCC331BTR-ND	5,000	32.00/M	ECU-V1H331KBM	(Not for new design)
		50	390pF	±10%	0.60	PCC391BCT-ND•	.11	.08	.05	.04	PCC391BTR-ND	5,000	32.00/M	ECU-V1H391KBM	(Not for new design)
		50	470pF	±10%	0.60	PCC471BCT-ND•	.11	.08	.05	.04	PCC471BTR-ND	5,000	32.00/M	ECU-V1H471KBM	(Not for new design)
		50	560pF	±10%	0.60	PCC561BCT-ND•	.11	.08	.05	.04	PCC561BTR-ND	5,000	32.00/M	ECU-V1H561KBM	(Not for new design)
		50	680pF	±10%	0.60	PCC681BCT-ND•	.11	.08	.05	.04	PCC681BTR-ND	5,000	31.00/M	ECU-V1H681KBM	(Not for new design)
		50	820pF	±10%	0.60	PCC821BCT-ND•	.11	.08	.05	.04	PCC821BTR-ND	5,000	31.00/M	ECU-V1H821KBM	(Not for new design)
		50	1000pF	±10%	0.60	PCC102BCT-ND•	.12	.08	.06	.05	PCC102BTR-ND	5,000	34.00/M	ECU-V1H102KBM	(Not for new design)
		50	1200pF	±10%	0.60	PCC122BCT-ND•	.12	.08	.06	.05	PCC122BTR-ND	5,000	34.00/M	ECU-V1H122KBM	(Not for new design)
		50	1500pF	±10%	0.60	PCC152BCT-ND•	.12	.08	.06	.05	PCC152BTR-ND	5,000	34.00/M	ECU-V1H152KBM	(Not for new design)
		50	1800pF	±10%	0.60	PCC182BCT-ND•	.12	.08	.06	.05	PCC182BTR-ND	5,000	34.00/M	ECU-V1H182KBM	(Not for new design)
		50	2200pF	±10%	0.60	PCC222BCT-ND•	.12	.08	.06	.05	PCC222BTR-ND	5,000	34.00/M	ECU-V1H222KBM	(Not for new design)
		50	2700pF	±10%	0.60	PCC272BCT-ND•	.12	.08	.06	.05	PCC272BTR-ND	5,000	35.00/M	ECU-V1H272KBM	(Not for new design)
		50	3300pF	±10%	0.60	PCC332BCT-ND•	.12	.08	.06	.05	PCC332BTR-ND	5,000	35.00/M	ECU-V1H332KBM	(Not for new design)
		50	3900pF	±10%	0.60	PCC392BCT-ND•	.13	.09	.06	.05	PCC392BTR-ND	5,000	38.00/M	ECU-V1H392KBM	(Not for new design)
		50	4700pF	±10%	0.60	PCC472BCT-ND•	.14	.09	.06	.05	PCC472BTR-ND	5,000	38.00/M	ECU-V1H472KBM	(Not for new design)
		50	5600pF	±10%	0.60	PCC562BCT-ND•	.14	.10	.07	.05	PCC562BTR-ND	5,000	40.00/M	ECU-V1H562KBM	(Not for new design)
		50	6800pF	±10%	0.60	PCC682BCT-ND•	.14	.10	.07	.05	PCC682BTR-ND	5,000	41.00/M	ECU-V1H682KBM	(Not for new design)
		50	8200pF	±10%	0.60	PCC822BCT-ND•	.15	.10	.07	.06	PCC822BTR-ND	5,000	42.00/M	ECU-V1H822KBM	(Not for new design)
		50	10000pF	±10%	0.60	PCC103BCT-ND•	.15	.10	.07	.06	PCC103BTR-ND	5,000	43.00/M	ECU-V1H103KBM	(Not for new design)
		50	12000pF	±10%	0.60	PCC123BCT-ND•	.16	.11	.08	.06	PCC123BTR-ND	5,000	46.00/M	ECU-V1H123KBM	(Not for new design)
		50	15000pF	±10%	0.60	PCC153BCT-ND•	.17	.12	.08	.06	PCC153BTR-ND	5,000	48.00/M	ECU-V1H153KBM	(Not for new design)
		50	18000pF	±10%	0.60	PCC183BCT-ND•	.18	.12	.08	.06	PCC183BTR-ND	5,000	51.00/M	ECU-V1H183KBM	(Not for new design)
		50	22000pF	±10%	0.60	PCC223BCT-ND•	.19	.13	.09	.07	PCC223BTR-ND	5,000	53.00/M	ECU-V1H223KBM	(Not for new design)
		50	27000pF	±10%	0.60	PCC273BCT-ND•	.19	.13	.09	.07	PCC273BTR-ND	5,000	53.00/M	ECU-V1H273KBW	(Not for new design)
		50	33000pF	±10%	0.60	PCC333BCT-ND•	.22	.15	.10	.08	PCC333BTR-ND	5,000	62.00/M	ECU-V1H333KBW	(Not for new design)
		50	39000pF	±10%	0.60	PCC393BCT-ND•	.22	.15	.10	.08	PCC393BTR-ND	5,000	64.00/M	ECU-V1H393KBW	(Not for new design)
		50	47000pF	±10%	0.60	PCC473BCT-ND•	.20	.14	.10	.08	PCC473BTR-ND	5,000	64.00/M	ECU-V1H473KBW	(Not for new design)
		50	.1µF	±10%	1.00	PCC104BCT-ND•	.35	.25	.18	.15	PCC104BTR-ND	4,000	128.00/M	ECU-V1H104KBW	ECJ-3VB1H104K
		25	.1µF	±10%	0.85	PCC1883CT-ND	.19	.14	.10	.08	PCC1883TR-ND	4,000	62.00/M	ECJ-3VB1E104K	ECJ-3VB1E104K
		25	.12µF	±10%	0.85	PCC1884CT-ND	.21	.15	.11	.09	PCC1884TR-ND	4,000	69.00/M	ECJ-3VB1E124K	ECJ-3VB1E124K
		25	.15µF	±10%	0.85	PCC1885CT-ND	.25	.18	.12	.10	PCC1885TR-ND	4,000	81.00/M	ECJ-3VB1E154K	ECJ-3VB1E154K
		25	.18µF	±10%	0.85	PCC1886CT-ND	.25	.18	.12	.10	PCC1886TR-ND	4,000	81.00/M	ECJ-3VB1E184K	ECJ-3VB1E184K
		25	.22µF	±10%	0.85	PCC1887CT-ND	.25	.18	.12	.10	PCC1887TR-ND	4,000	81.00/M	ECJ-3VB1E224K	ECJ-3VB1E224K
		25	.27µF	±10%	0.85	PCC1888CT-ND	.25	.18	.12	.10	PCC1888TR-ND	4,000	81.00/M	ECJ-3VB1E274K	ECJ-3VB1E274K
		25	.33µF	±10%	0.85	PCC1889CT-ND	.25	.18	.12	.10	PCC1889TR-ND	4,000	81.00/M	ECJ-3VB1E334K	ECJ-3VB1E334K
		25	.39µF	±10%	1.15	PCC1890CT-ND	.34	.24	.18	.15	PCC1890TR-ND	2,000	134.00/M	ECJ-3YB1E394K	ECJ-3YB1E394K
		25	.47µF	±10%	1.15	PCC1891CT-ND	.42	.30	.22	.18	PCC1891TR-ND	2,000	167.00/M	ECJ-3YB1E474K	ECJ-3YB1E474K
		25	.56µF	±10%	1.60	PCC1926CT-ND	.41	.29	.21	.18	PCC1926TR-ND	2,000	162.00/M	ECJ-3YB1E564K	ECJ-3YB1E564K
		25	.68µF	±10%	1.60	PCC1892CT-ND	.42	.30	.22	.18	PCC1892TR-ND	2,000	167.00/M	ECJ-3YB1E684K	ECJ-3YB1E684K
		25	.82µF	±10%	1.60	PCC1927CT-ND	.43	.32	.23	.20	PCC1927TR-ND	2,000	180.00/M	ECJ-3YB1E824K	ECJ-3YB1E824K
		25	1µF	±10%	1.60	PCC1893CT-ND	.45	.33	.24	.21	PCC1893TR-ND	2,000	188.00/M	ECJ-3YB1E105K	ECJ-3YB1E105K
		16	.1µF	±10%	0.85	PCC1870CT-ND	.24	.17	.12	.10	PCC1870TR-ND	4,000	86.00/M	ECJ-3VB1C104K	ECJ-3VB1C104K
		16	.12µF	±10%	0.85	PCC1871CT-ND	.25	.18	.13	.11	PCC1871TR-ND	4,000	90.00/M	ECJ-3VB1C124K	ECJ-3VB1C124K
		16	.15µF	±10%	0.85	PCC1872CT-ND	.25	.18	.13	.11	PCC1872TR-ND	4,000	90.00/M	ECJ-3VB1C154K	ECJ-3VB1C154K
		16	.18µF	±10%	0.85	PCC1873CT-ND	.27	.19	.14	.12	PCC1873TR-ND	4,000	99.00/M	ECJ-3VB1C184K	ECJ-3VB1C184K
		16	.22µF	±10%	0.85	PCC1874CT-ND	.28	.20	.15	.12	PCC1874TR-ND	4,000	104.00/M	ECJ-3VB1C224K	ECJ-3VB1C224K
		16	.27µF	±10%	0.85	PCC1875CT-ND	.30	.21	.15	.13	PCC1875TR-ND	4,000	108.00/M	ECJ-3VB1C274K	ECJ-3VB1C274K
		16	.33µF	±10%	0.85	PCC1876CT-ND	.31	.22	.16	.13	PCC1876TR-ND	4,000	112.00/M	ECJ-3VB1C334K	ECJ-3VB1C334K
		16	.39µF	±10%	0.85	PCC1877CT-ND	.35	.25	.18	.15	PCC1877TR-ND	4,000	130.00/M	ECJ-3VB1C394K	ECJ-3VB1C394K
		16	.47µF	±10%	0.85	PCC1878CT-ND	.39	.28	.20	.17	PCC1878TR-ND	4,000	143.00/M	ECJ-3VB1C474K	ECJ-3VB1C474K
		16	.56µF	±10%	0.85	PCC1879CT-ND	.40	.29	.21	.18	PCC1879TR-ND	4,000	160.00/M	ECJ-3VB1C564K	ECJ-3VB1C564K
		16	.68µF	±10%	0.85	PCC1880CT-ND	.44	.33	.24	.20	PCC1880TR-ND	4,000	185.00/M	ECJ-3VB1C684K	ECJ-3VB1C684K
		16	.82µF	±10%	1.15	PCC1881CT-ND	.55	.40	.29	.25	PCC1881TR-ND	2,000	228.00/M	ECJ-3YB1C824K	ECJ-3YB1C824K
		16	1µF	±10%	1.15	PCC1882CT-ND	.63	.47	.34	.29	PCC1882TR-ND	2,000	266.00/M	ECJ-3YB1C105K	ECJ-3YB1C105K
		16	1.2µF	±10%	1.60	PCC1928CT-ND	.66	.48	.35	.30	PCC1928TR-ND	2,000	275.00/M	ECJ-3YB1C125K	(Not for new design)
		16	1.5µF	±10%	1.60	PCC1929CT-ND	.73	.54	.39	.34	PCC1929TR-ND	2,000	308.00/M	ECJ-3YB1C155K	ECJ-3YB1C155K
		16	1.8µF	±10%	1.60	PCC1930CT-ND	.75	.57	.40	.37	PCC1930TR-ND	2,000	333.00/M	ECJ-3YB1C185K	(Not for new design)
		16	2.2µF	±10%	1.60	PCC1931CT-ND	.79	.59	.42	.38	PCC1931TR-ND	2,000	348.00/M	ECJ-3YB1C225K	ECJ-3YB1C225K
	X5R	10	1.2µF	±10%	1.60	PCC1932CT-ND	.66	.48	.35	.30	PCC1932TR-ND	2,000	275.00/M	ECJ-3YB1A125K	(Not for new design)
		10	1.5µF	±10%	1.60	PCC1867CT-ND	.70	.53	.38	.34	PCC1867TR-ND	2,000	310.00/M	ECJ-3YB1A155K	ECJ-3YB1A155K
		10	1.8µF	±10%	1.60	PCC1933CT-ND	.75	.57	.40	.37	PCC1933TR-ND	2,000	333.00/M	ECJ-3YB1A185K	(Not for new design)
		10	2.2µF	±10%	1.60	PCC1868CT-ND	.81	.61	.43	.39	PCC1868TR-ND	2,000	356.00/M	ECJ-3YB1A225K	ECJ-3YB1A225K
		10	2.7µF	±10%	1.60	PCC1934CT-ND	.86	.64	.46	.42	PCC1934TR-ND	2,000	378.00/M	ECJ-3YB1A275K	(Not for new design)
		10	3.3µF	±10%	1.60	PCC1869CT-ND	.99	.74	.53	.48	PCC1869TR-ND	2,000	435.00/M	ECJ-3YB1A335K	ECJ-3YB1A335K
		6.3	3.9µF	±10%	1.60	PCC1935CT-ND	.99	.75	.53	.48	PCC1935TR-ND	2,000	439.00/M	ECJ-3YB0J395K	(Not for new design)
		6.3	4.7µF	±10%	1.60	PCC1936CT-ND	.99	.75	.53	.48	PCC1936TR-ND	2,000	439.00/M	ECJ-3YB0J475K	ECJ-3YB0J475K
		6.3	5.6µF	±10%	1.60	PCC1937CT-ND	1.02	.77	.55	.50	PCC1937TR-ND	2,000	452.00/M	ECJ-3YB0J565K	(Not for new design)
		6.3	6.8µF	±10%	1.60	PCC1938CT-ND	1.02	.77	.55	.50	PCC1938TR-ND	2,000	452.00/M	ECJ-3YB0J685K	ECJ-3YB0J685K
		6.3	8.2µF	±10%	1.60	PCC1939CT-ND	1.16	.87	.62	.56	PCC1939TR-ND	2,000	513.00/M	ECJ-3YB0J825K	(Not for new design)
		6.3	10µF	±10%	1.60	PCC1940CT-ND	1.16	.87	.62	.56	PCC1940TR-ND	2,000	513.00/M	ECJ-3YB0J106K	ECJ-3YB0J106K
	Y5V	25	.47µF	+80/-20%	0.85	PCC1901CT-ND	.23	.17	.12	.10	PCC1901TR-ND	4,000	77.00/M	ECJ-3VF1E474Z	ECJ-3VF1E474Z
		25	.68µF	+80/-20%	1.15	PCC1902CT-ND	.29	.21	.15	.13	PCC1902TR-ND	2,000	115.00/M	ECJ-3YF1E684Z	ECJ-3YF1E684Z
		25	1µF	+80/-20%	1.15	PCC1903CT-ND	.33	.24	.17	.15	PCC1903TR-ND	2,000	132.00/M	ECJ-3YF1E105Z	ECJ-3YF1E105Z
		25	1.5µF	+80/-20%	1.15	PCC1904CT-ND	.42	.31	.23	.19	PCC1904TR-ND	2,000	177.00/M	ECJ-3YF1E155Z	ECJ-3YF1E155Z
		25	2.2µF	+80/-20%	1.15	PCC1905CT-ND	.42	.31	.23	.19	PCC1905TR-ND	2,000	177.00/M	ECJ-3YF1E225Z	ECJ-3YF1E225Z
		16	.68µF	+80/-20%	0.85	PCC1895CT-ND	.38	.27	.20	.16	PCC1895TR-ND	4,000	138.00/M	ECJ-3VF1C684Z	ECJ-3VF1C684Z
		16	1µF	+80/-20%	0.85	PCC1896CT-ND	.42	.30	.22	.18	PCC1896TR-ND	4,000	153.00/M	ECJ-3VF1C105Z	ECJ-3VF1C105Z
		16	1.5µF	+80/-20%	0.85	PCC1897CT-ND	.42	.30	.22	.18	PCC1897TR-ND	4,000	155.00/M	ECJ-3VF1C155Z	(Not for new design)
		16	2.2µF	+80/-20%	0.85	PCC1898CT-ND	.42	.30	.22	.18	PCC1898TR-ND	4,000	155.00/M	ECJ-3VF1C225Z	ECJ-3VF1C225Z
		16	3.3µF	+80/-20%	1.15	PCC1899CT-ND	.49	.36	.27	.23	PCC1899TR-ND	2,000	207.00/M	ECJ-3YF1C335Z	(Not for new design)
		16	4.7µF	+80/-20%	1.15	PCC1900CT-ND	.68	.50	.36	.31	PCC1900TR-ND	2,000	285.00/M	ECJ-3YF1C475Z	ECJ-3YF1C475Z
		10	10µF	+80/-20%	1.60	PCC1894CT-ND	.77	.58	.41	.38	PCC1894TR-ND	2,000	340.00/M	ECJ-3YF1A106Z	ECJ-3YF1A106Z
1210	X5R	16	4.7µF	±10%	2.00	PCC2168CT-ND	.78	.59	.42	.38	PCC2168TR-ND	2,000	344.00/M	ECJ-4YB1C475K	ECJ-4YB1C475K
		16	10µF	±10%	2.00	PCC2169CT-ND	.94	.70	.50	.46	PCC2169TR-ND	2,000	413.00/M	ECJ-4YB1C106K	ECJ-4YB1C106K
		10	10µF	±10%	2.00	PCC2170CT-ND	.78	.59	.42	.38	PCC2170TR-ND	2,000	344.00/M	ECJ-4YB1A106K	ECJ-4YB1A106K
	Y5V	25	10µF	+80%/-20%	1.60	PCC2171CT-ND	1.24	.93	.67	.60	PCC2171TR-ND	2,000	549.00/M	ECJ-4YF1E106Z	ECJ-4YF1E106Z
		10	22µF	+80%/-20%	2.00	PCC2172CT-ND	1.19	.90	.64	.58	PCC2172TR-ND	2,000	528.00/M	ECJ-4YF1A226Z	ECJ-4YF1A226Z

Digi-Key® Notebook Style Kit Boxes

Notebook style kit box with velcro closure can be stored as a normal kit box, or vertically as a book. Each compartment is identified with an easy-to-read kit index.

- **PCC5-KIT-ND** ***1206/NPO Series Kit*** 10 each of values denoted (300 total pieces) **$34.95**
- **PCC6-KIT-ND** ***1206/X7R Series Kit*** 10 each of values denoted (300 total pieces) **$49.95**
- **PCC7-KIT-ND** ***0805/NPO Series Kit*** 10 each of values denoted (300 total pieces).................. **$29.95**
- **PCC8-KIT-ND** ***0805/X7R Series Kit*** 10 each of values denoted (260 total pieces) **$29.95**
- **PCC9-KIT-ND** ***0603/NPO Series Kit*** 10 each of values denoted (300 total pieces).................. **$29.95**
- **PCC10-KIT-ND** ***0603/X7R Series Kit*** 10 each of values denoted (250 total pieces) **$29.95**
- **PCC11-KIT-ND** ***0402/NPO Series Kit*** 10 each of values denoted (300 total pieces).................. **$64.95**
- **PCC12-KIT-ND** ***0402/X7R & Y5V Series Kit*** 10 each of values denoted (230 total pcs.).............. **$49.95**

Phycomp
A FORMER PHILIPS COMPANY

Surface Mount Ceramic Multilayer Chip Capacitors –
0402, 0603, 0805, 1206, 1812

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- High capacitance per unit volume
- For high frequency applications
- NiSn terminations

Applications:
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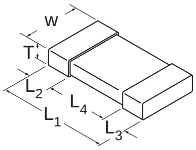

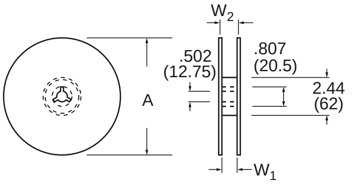

Case Size	L_1	W	T Min.	T Max.	L_2 and L_3 Min.	L_2 and L_3 Max.	L_4 Min.
0402	.040" (1.0mm)	.020" (0.5mm)	.018" (0.45mm)	.022" (0.55mm)	.008" (0.20mm)	.012" (0.30mm)	.016" (0.40mm)
0603	.063" (1.6mm)	.032" (0.8mm)	.029" (0.73mm)	.035" (0.87mm)	.010" (0.25mm)	.026" (0.65mm)	.016" (0.40mm)
0805	.079" (2.0mm)	.049" (1.25mm)	.020" (0.51mm)	.053" (1.35mm)	.010" (0.25mm)	.030" (0.75mm)	.022" (0.55mm)
1206	.126" (3.2mm)	.063" (1.6mm)	.020" (0.51mm)	.069" (1.75mm)	.010" (0.25mm)	030" (0.75mm)	.056" (1.40mm)
1812	.177" (4.5mm)	.126" (3.2mm)	.020" (0.51mm)	.072" (1.80mm)	.010" (0.25mm)	030" (0.75mm)	.088" (2.20mm)

Case Size	Tape Width (mm)	A (mm)	W1 (mm)	W2 Max. (mm)
0402, 0603 0605, 1206	.315" (8mm)	7.087" (180mm)	.331" (8.4mm)	.567" (14.4mm)
1812	.472" (12mm)	7.087" (180mm)	.488" (12.4mm)	.724" (18.4mm)

Case Size	Type	WV DC	Capacitance	Tolerance	Digi-Key Part No.	Cut Tape Pricing 10	Cut Tape Pricing 100	Cut Tape Pricing 500	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing	Phycomp Part No.
0402	NPO	50	.5pF	±0.25pF	311-1001-1-ND	1.05	6.18	17.81	311-1001-2-ND	10,000	17.10/M	0402CG508C9B200
		50	1.2pF	±0.25pF	311-1002-1-ND	.99	5.85	16.88	311-1002-2-ND	10,000	16.20/M	0402CG129C9B200
		50	1.5pF	±0.25pF	311-1003-1-ND	.99	5.85	16.88	311-1003-2-ND	10,000	16.20/M	0402CG159C9B200
		50	1.8pF	±0.25pF	311-1004-1-ND	.99	5.85	16.88	311-1004-2-ND	10,000	16.20/M	0402CG189C9B200
		50	2.0pF	±0.25pF	311-1006-1-ND	1.05	6.18	17.81	311-1006-2-ND	10,000	17.10/M	0402CG209C9B200
		50	2.7pF	±0.25pF	311-1005-1-ND	.99	5.85	16.88	311-1005-2-ND	10,000	16.20/M	0402CG279C9B200
		50	3.0pF	±0.25pF	311-1007-1-ND	.99	5.85	16.88	311-1007-2-ND	10,000	16.20/M	0402CG309C9B200
		50	3.3pF	±0.25pF	311-1008-1-ND	.99	5.85	16.88	311-1008-2-ND	10,000	16.20/M	0402CG339C9B200
		50	5.0pF	±0.25pF	311-1010-1-ND	.99	5.85	16.88	311-1010-2-ND	10,000	16.20/M	0402CG509C9B200
		50	5.6pF	±0.5pF	311-1011-1-ND	.99	5.85	16.88	311-1011-2-ND	10,000	16.20/M	0402CG569D9B200
		50	8.2pF	±0.5pF	311-1012-1-ND	.99	5.85	16.88	311-1012-2-ND	10,000	16.20/M	0402CG829D9B200
		50	9.1pF	±0.5pF	311-1013-1-ND	.70	4.25	14.00	311-1013-2-ND	10,000	18.00/M	0402CG919D9B200
		50	10pF	±5%	311-1014-1-ND	.77	4.55	13.13	311-1014-2-ND	10,000	12.60/M	0402CG100J9B200
		50	11pF	±5%	311-1015-1-ND	1.09	6.44	18.56	311-1015-2-ND	10,000	17.82/M	0402CG110J9B200
		50	12pF	±5%	311-1016-1-ND	.88	5.20	15.00	311-1016-2-ND	10,000	14.40/M	0402CG120J9B200
		50	15pF	±5%	311-1017-1-ND	.88	5.20	15.00	311-1017-2-ND	10,000	14.40/M	0402CG150J9B200
		50	22pF	±5%	311-1018-1-ND	.88	5.20	15.00	311-1018-2-ND	10,000	14.40/M	0402CG220J9B200
		50	27pF	±5%	311-1019-1-ND	.94	5.53	15.94	311-1019-2-ND	10,000	15.30/M	0402CG270J9B200
		50	33pF	±5%	311-1020-1-ND	.94	5.53	15.94	311-1020-2-ND	10,000	15.30/M	0402CG330J9B200
		50	39pF	±5%	311-1009-1-ND	.94	5.53	15.94	311-1009-2-ND	10,000	15.30/M	0402CG390J9B200
		50	47pF	±5%	311-1021-1-ND	.88	5.20	15.00	311-1021-2-ND	10,000	14.40/M	0402CG470J9B200
		50	56pF	±5%	311-1022-1-ND	.94	5.53	15.94	311-1022-2-ND	10,000	15.30/M	0402CG560J9B200
		50	82pF	±5%	311-1023-1-ND	.99	5.85	16.88	311-1023-2-ND	10,000	16.20/M	0402CG820J9B200
		50	100pF	±5%	311-1024-1-ND	.83	4.88	14.06	311-1024-2-ND	10,000	13.50/M	0402CG101J9B200
		50	150pF	±5%	311-1025-1-ND	.77	4.68	15.40	311-1025-2-ND	10,000	19.80/M	0402CG151J9B200
		25	220pF	±5%	311-1026-1-ND	.99	5.85	16.88	311-1026-2-ND	10,000	16.20/M	0402CG221J8B200
	X7R	50	330pF	±10%	311-1027-1-ND	.77	4.55	13.13	311-1027-2-ND	10,000	12.60/M	04022R331K9B20D
		50	470pF	±10%	311-1028-1-ND	.77	4.55	13.13	311-1028-2-ND	10,000	12.60/M	04022R471K9B20D
		50	560pF	±10%	311-1029-1-ND	.77	4.55	13.13	311-1029-2-ND	10,000	12.60/M	04022R561K9B20D
		50	680pF	±10%	311-1030-1-ND	.77	4.55	13.13	311-1030-2-ND	10,000	12.60/M	04022R681K9B20D
		50	1200pF	±10%	311-1031-1-ND	.77	4.55	13.13	311-1031-2-ND	10,000	12.60/M	04022R122K9B20D
		50	1500pF	±10%	311-1032-1-ND	.77	4.55	13.13	311-1032-2-ND	10,000	12.60/M	04022R152K9B20D
		50	2700pF	±10%	311-1033-1-ND	.77	4.55	13.13	311-1033-2-ND	10,000	12.60/M	04022R272K9B20D
		50	3300pF	±10%	311-1034-1-ND	.83	4.88	14.06	311-1034-2-ND	10,000	13.50/M	04022R332K9B20D
		50	220pF	±10%	311-1035-1-ND	.77	4.55	13.13	311-1035-2-ND	10,000	12.60/M	04022R221K9B200
		50	1000pF	±10%	311-1036-1-ND	.83	4.88	14.06	311-1036-2-ND	10,000	13.50/M	04022R102K9B200
		25	2200pF	±10%	311-1037-1-ND	.77	4.55	13.13	311-1037-2-ND	10,000	12.60/M	04022R222K8B20D
		25	3900pF	±10%	311-1038-1-ND	.83	4.88	14.06	311-1038-2-ND	10,000	13.50/M	04022R392K8B20D
		25	4700pF	±10%	311-1039-1-ND	.77	4.55	13.13	311-1039-2-ND	10,000	12.60/M	04022R472K8B20D
		16	5600pF	±10%	311-1040-1-ND	.88	5.20	15.00	311-1040-2-ND	10,000	14.40/M	04022R562K7B20D
		16	8200pF	±10%	311-1041-1-ND	.94	5.53	15.94	311-1041-2-ND	10,000	15.30/M	04022R822K7B20D
		16	10000pF	±10%	311-1042-1-ND	.77	4.55	13.13	311-1042-2-ND	10,000	12.60/M	04022R103K7B20D
	Y5V	16	22000pF	-20%/+80%	311-1043-1-ND	.86	5.07	14.63	311-1043-2-ND	10,000	14.04/M	04022F223Z7B20D
		16	33000pF	-20%/+80%	311-1044-1-ND	.88	5.20	15.00	311-1044-2-ND	10,000	14.40/M	04022F333Z7B20D
		16	10000pF	-20%/+80%	311-1045-1-ND	.74	4.36	12.56	311-1045-2-ND	10,000	12.06/M	04022F103Z7B20D
		16	47000pF	-20%/+80%	311-1046-1-ND	.94	5.53	15.94	311-1046-2-ND	10,000	15.30/M	04022F473Z7B20D
		16	.10µF	-20%/+80%	311-1047-1-ND	.88	5.20	15.00	311-1047-2-ND	10,000	14.40/M	04022F104Z7B20D
0603	NPO	50	.5pF	±0.25pF	311-1048-1-ND	.75	4.42	12.75	311-1048-2-ND	4,000	12.24/M	0603CG508C9B200
		50	1.0pF	±0.25pF	311-1049-1-ND	.66	3.90	11.25	311-1049-2-ND	4,000	10.80/M	0603CG109C9B200
		50	1.5pF	±0.25pF	311-1050-1-ND	.66	3.90	11.25	311-1050-2-ND	4,000	10.80/M	0603CG159C9B200
		50	2.0ppF	±0.25pF	311-1051-1-ND	.72	4.23	12.19	311-1051-2-ND	4,000	11.70/M	0603CG209C9B200
		50	3.0pF	±0.25pF	311-1052-1-ND	.72	4.23	12.19	311-1052-2-ND	4,000	11.70/M	0603CG309C9B200
		50	4.0pF	±0.25pF	311-1053-1-ND	.75	4.42	12.75	311-1053-2-ND	4,000	12.24/M	0603CG409C9B200
		50	5.0pF	±0.25pF	311-1054-1-ND	.72	4.23	12.19	311-1054-2-ND	4,000	11.70/M	0603CG509C9B200
		50	6.0pF	±0.5%	311-1055-1-ND	.66	3.90	11.25	311-1055-2-ND	4,000	10.80/M	0603CG609C9B200
		50	7.0pF	±0.5%	311-1056-1-ND	.75	4.42	12.75	311-1056-2-ND	4,000	12.24/M	0603CG709D9B200
		50	8.0pF	±0.5%	311-1057-1-ND	.75	4.42	12.75	311-1057-2-ND	4,000	12.24/M	0603CG809D9B200
		50	10pF	±5%	311-1058-1-ND	.57	3.38	9.75	311-1058-2-ND	4,000	9.36/M	0603CG100J9B200
		50	12pF	±5%	311-1059-1-ND	.55	3.25	9.38	311-1059-2-ND	4,000	9.00/M	0603CG120J9B200
		50	15pF	±5%	311-1060-1-ND	.57	3.38	9.75	311-1060-2-ND	4,000	9.36/M	0603CG150J9B200
		50	18pF	±5%	311-1061-1-ND	.57	3.38	9.75	311-1061-2-ND	4,000	9.36/M	0603CG180J9B200
		50	22pF	±5%	311-1062-1-ND	.58	3.45	9.94	311-1062-2-ND	4,000	9.54/M	0603CG220J9B200
		50	27pF	±5%	311-1063-1-ND	.66	3.90	11.25	311-1063-2-ND	4,000	10.80/M	0603CG270J9B200
		50	33pF	±5%	311-1064-1-ND	.65	3.84	11.06	311-1064-2-ND	4,000	10.62/M	0603CG330J9B200

(Continued)

Surface Mount Ceramic Multilayer Chip Capacitors – 0402, 0603, 0805, 1206, 1812 *(Cont.)*

Case					Digi-Key	Cut Tape Pricing			Digi-Key	Tape & Reel		Phycomp
Size	Type	WV DC	Capacitance	Tolerance	Part No.	10	100	500	Part No.	Size	Pricing	Part No.
0603	NPO	50	47pF	±5%	311-1065-1-ND	.65	3.84	11.06	311-1065-2-ND	4,000	10.62/M	0603CG470J9B200
		50	56pF	±5%	311-1066-1-ND	.68	4.03	11.63	311-1066-2-ND	4,000	11.16/M	0603CG560J9B200
		50	68pF	±5%	311-1067-1-ND	.68	4.03	11.63	311-1067-2-ND	4,000	11.16/M	0603CG680J9B200
		50	82pF	±5%	311-1068-1-ND	.73	4.29	12.38	311-1068-2-ND	4,000	11.88/M	0603CG820J9B200
		50	100pF	±5%	311-1069-1-ND	.62	3.64	10.50	311-1069-2-ND	4,000	10.08/M	0603CG101J9B200
		50	120pF	±5%	311-1070-1-ND	.73	4.29	12.38	311-1070-2-ND	4,000	11.88/M	0603CG121J9B200
		50	150pF	±5%	311-1071-1-ND	.86	5.07	14.63	311-1071-2-ND	4,000	14.04/M	0603CG151J9B200
		50	180pF	±5%	311-1072-1-ND	.94	5.53	15.94	311-1072-2-ND	4,000	15.30/M	0603CG181J9B200
		50	220pF	±5%	311-1073-1-ND	1.02	6.05	17.44	311-1073-2-ND	4,000	16.74/M	0603CG221J9B200
		50	270pF	±5%	311-1074-1-ND	.70	4.25	14.00	311-1074-2-ND	4,000	15.00/M	0603CG271J9B200
		50	330pF	±5%	311-1075-1-ND	.77	4.68	15.40	311-1075-2-ND	4,000	16.50/M	0603CG331J9B200
		50	390pF	±5%	311-1076-1-ND	.84	5.10	16.80	311-1076-2-ND	4,000	18.00/M	0603CG391J9B200
	X7R	50	220pF	±10%	311-1077-1-ND	.55	3.25	9.38	311-1077-2-ND	4,000	9.00/M	06032R221K9B20D
		50	270pF	±10%	311-1185-1-ND *NEW!*	.55	3.25	9.38	311-1185-2-ND *NEW!*	4,000	9.00/M	06032R271K9B20D
		50	330pF	±10%	311-1186-1-ND *NEW!*	.55	3.25	9.38	311-1186-2-ND *NEW!*	4,000	9.00/M	06032R331K9B20D
		50	390pF	±10%	311-1187-1-ND *NEW!*	.55	3.25	9.38	311-1187-2-ND *NEW!*	4,000	9.00/M	06032R391K9B20D
		50	470pF	±10%	311-1078-1-ND	.55	3.25	9.38	311-1078-2-ND	4,000	9.00/M	06032R471K9B20D
		50	560pF	±10%	311-1079-1-ND	.55	3.25	9.38	311-1079-2-ND	4,000	9.00/M	06032R561K9B20D
		50	680pF	±10%	311-1188-1-ND *NEW!*	.55	3.25	9.38	311-1188-2-ND *NEW!*	4,000	9.00/M	06032R681K9B20D
		50	820pF	±10%	311-1189-1-ND *NEW!*	.55	3.25	9.38	311-1189-2-ND *NEW!*	4,000	9.00/M	06032R821K9B20D
		50	1000pF	±10%	311-1080-1-ND	.55	3.25	9.38	311-1080-2-ND	4,000	9.00/M	06032R102K9B20D
		50	1500pF	±10%	311-1184-1-ND *NEW!*	.57	3.38	9.75	311-1184-2-ND *NEW!*	4,000	9.36/M	06032R152K9B20D
		50	2200pF	±10%	311-1081-1-ND	.55	3.25	9.38	311-1081-2-ND	4,000	9.00/M	06032R222K9B20D
		50	3300pF	±10%	311-1082-1-ND	.57	3.38	9.75	311-1082-2-ND	4,000	9.36/M	06032R332K9B20D
		50	4700pF	±10%	311-1083-1-ND	.55	3.25	9.38	311-1083-2-ND	4,000	9.00/M	06032R472K9B20D
		50	6800pF	±10%	311-1084-1-ND	.61	3.58	10.31	311-1084-2-ND	4,000	9.90/M	06032R682K9B20D
		50	10000pF	±10%	311-1085-1-ND	.59	3.51	10.13	311-1085-2-ND	4,000	9.72/M	06032R103K9B20D
		25	22000pF	±10%	311-1086-1-ND	.88	5.20	15.00	311-1086-2-ND	4,000	14.40/M	06032R223K8B20D
		16	.10µF	±10%	311-1088-1-ND	1.05	6.18	17.81	311-1088-2-ND	4,000	17.10/M	06032R104K7B20D
	Y5V	25	.10µF	-20%/+80%	311-1087-1-ND	.64	3.77	10.88	311-1087-2-ND	4,000	10.44/M	06032F104Z8B20D
0805	NPO	50	1.0pF	±0.25pF	311-1089-1-ND	.75	4.42	12.75	311-1089-2-ND	4,000	12.24/M	0805CG109C9B200
		50	1.5pF	±0.25pF	311-1090-1-ND	.75	4.42	12.75	311-1090-2-ND	4,000	12.24/M	0805CG159C9B200
		50	2.0pF	±0.25pF	311-1091-1-ND	.81	4.81	13.88	311-1091-2-ND	4,000	13.32/M	0805CG209C9B200
		50	3.0pF	±0.25pF	311-1092-1-ND	.81	4.81	13.88	311-1092-2-ND	4,000	13.32/M	0805CG309C9B200
		50	4.0pF	±0.25pF	311-1093-1-ND	.81	4.81	13.88	311-1093-2-ND	4,000	13.32/M	0805CG409C9B200
		50	5.0pF	±0.25pF	311-1094-1-ND	.86	5.07	14.63	311-1094-2-ND	4,000	14.04/M	0805CG508C9B200
		50	6.0pF	±0.5%	311-1095-1-ND	.81	4.81	13.88	311-1095-2-ND	4,000	13.32/M	0805CG609D9B200
		50	7.0pF	±0.5%	311-1096-1-ND	.81	4.81	13.88	311-1096-2-ND	4,000	13.32/M	0805CG709D9B200
		50	8.0pF	±0.5%	311-1097-1-ND	.81	4.81	13.88	311-1097-2-ND	4,000	13.32/M	0805CG809D9B200
		50	9.0pF	±0.5%	311-1098-1-ND	.81	4.81	13.88	311-1098-2-ND	4,000	13.32/M	0805CG909D9B200
		50	10pF	±5%	311-1099-1-ND	.66	3.90	11.25	311-1099-2-ND	4,000	10.80/M	0805CG100J9B200
		50	12pF	±5%	311-1100-1-ND	.75	4.42	12.75	311-1100-2-ND	4,000	12.24/M	0805CG120J9B200
		50	15pF	±5%	311-1101-1-ND	.75	4.42	12.75	311-1101-2-ND	4,000	12.24/M	0805CG150J9B200
		50	18pF	±5%	311-1102-1-ND	.75	4.42	12.75	311-1102-2-ND	4,000	12.24/M	0805CG180J9B200
		50	22pF	±5%	311-1103-1-ND	.75	4.42	12.75	311-1103-2-ND	4,000	12.24/M	0805CG220J9B200
		50	27pF	±5%	311-1104-1-ND	.75	4.42	12.75	311-1104-2-ND	4,000	12.24/M	0805CG270J9B200
		50	33pF	±5%	311-1105-1-ND	.76	4.49	12.94	311-1105-2-ND	4,000	12.42/M	0805CG330J9B200
		50	39pF	±5%	311-1106-1-ND	.77	4.55	13.13	311-1106-2-ND	4,000	12.60/M	0805CG390J9B200
		50	47pF	±5%	311-1107-1-ND	.78	4.62	13.31	311-1107-2-ND	4,000	12.78/M	0805CG470J9B200
		50	56pF	±5%	311-1108-1-ND	.81	4.81	13.88	311-1108-2-ND	4,000	13.32/M	0805CG560J9B200
		50	68pF	±5%	311-1109-1-ND	.83	4.88	14.06	311-1109-2-ND	4,000	13.50/M	0805CG680J9B200
		50	82pF	±5%	311-1110-1-ND	.99	5.85	16.88	311-1110-2-ND	4,000	16.20/M	0805CG820J9B200
		50	100pF	±5%	311-1111-1-ND	.95	5.62	16.20	311-1111-2-ND	4,000	15.56/M	0805CG101J9B200
		50	120pF	±5%	311-1112-1-ND	.97	5.72	16.50	311-1112-2-ND	4,000	15.84/M	0805CG121J9B200
		50	150pF	±5%	311-1113-1-ND	.97	5.72	16.50	311-1113-2-ND	4,000	15.84/M	0805CG151J9B200
		50	180pF	±5%	311-1114-1-ND	.99	5.85	16.88	311-1114-2-ND	4,000	16.20/M	0805CG181J9B200
		50	220pF	±5%	311-1115-1-ND	.99	5.85	16.88	311-1115-2-ND	4,000	16.20/M	0805CG221J9B200
		50	270pF	±5%	311-1116-1-ND	.76	4.59	15.12	311-1116-2-ND	4,000	16.20/M	0805CG271J9B200
		50	330pF	±5%	311-1117-1-ND	1.01	5.98	17.25	311-1117-2-ND	4,000	16.56/M	0805CG331J9B200
		50	390pF	±5%	311-1118-1-ND	.70	4.25	14.00	311-1118-2-ND	4,000	15.00/M	0805CG391J9B200
		50	470pF	±5%	311-1119-1-ND	.77	4.68	15.40	311-1119-2-ND	4,000	16.50/M	0805CG471J9B200
		50	560pF	±5%	311-1120-1-ND	.84	5.10	16.80	311-1120-2-ND	4,000	18.00/M	0805CG561J9B200
		50	680pF	±5%	311-1121-1-ND	.92	5.61	18.48	311-1121-2-ND	4,000	19.80/M	0805CG681J9B200
		50	1000pF	±5%	311-1122-1-ND	1.05	6.38	21.00	311-1122-2-ND	4,000	22.50/M	0805CG102J9B200
	X7R	50	220pF	±10%	311-1123-1-ND	.61	3.58	10.31	311-1123-2-ND	4,000	9.90/M	08052R221K9B20D
		50	270pF	±10%	311-1191-1-ND *NEW!*	.77	4.55	13.13	311-1191-2-ND *NEW!*	4,000	12.60/M	08052R271K9B20D
		50	330pF	±10%	311-1192-1-ND *NEW!*	.77	4.55	13.13	311-1192-2-ND *NEW!*	4,000	12.60/M	08052R331K9B20D
		50	390pF	±10%	311-1193-1-ND *NEW!*	.77	4.55	13.13	311-1193-2-ND *NEW!*	4,000	12.60/M	08052R391K9B20D
		50	470pF	±10%	311-1124-1-ND	.64	3.77	10.88	311-1124-2-ND	4,000	10.44/M	08052R471K9B20D
		50	560pF	±10%	311-1125-1-ND	.64	3.77	10.88	311-1125-2-ND	4,000	10.44/M	08052R561K9B20D
		50	680pF	±10%	311-1126-1-ND	.64	3.77	10.88	311-1126-2-ND	4,000	10.44/M	08052R681K9B20D
		50	820pF	±10%	311-1194-1-ND *NEW!*	.77	4.55	13.13	311-1194-2-ND *NEW!*	4,000	12.60/M	08052R821K9B20D
		50	1000pF	±10%	311-1127-1-ND	.64	3.77	10.88	311-1127-2-ND	4,000	10.44/M	08052R102K9B20D
		50	1500pF	±10%	311-1128-1-ND	.64	3.77	10.88	311-1128-2-ND	4,000	10.44/M	08052R152K9B20D
		50	2200pF	±10%	311-1129-1-ND	.61	3.58	10.31	311-1129-2-ND	4,000	9.90/M	08052R222K9B20D
		50	2700pF	±10%	311-1130-1-ND	.61	3.58	10.31	311-1130-2-ND	4,000	9.90/M	08052R272K9B20D
		50	3300pF	±10%	311-1131-1-ND	.64	3.77	10.88	311-1131-2-ND	4,000	10.44/M	08052R332K9B20D
		50	3900pF	±10%	311-1132-1-ND	.64	3.77	10.88	311-1132-2-ND	4,000	10.44/M	08052R392K9B20D
		50	4700pF	±10%	311-1133-1-ND	.64	3.77	10.88	311-1133-2-ND	4,000	10.44/M	08052R472K9B20D

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Case					Digi-Key	Cut Tape Pricing			Digi-Key	Tape & Reel		Phycomp
Size	Type	WV DC	Capacitance	Tolerance	Part No.	10	100	500	Part No.	Size	Pricing	Part No.
0805	X7R	50	5600pF	±10%	311-1134-1-ND	.64	3.77	10.88	311-1134-2-ND	4,000	10.44/M	08052R562K9B20D
		50	6800pF	±10%	311-1135-1-ND	.64	3.77	10.88	311-1135-2-ND	4,000	10.44/M	08052R682K9B20D
		50	10000pF	±10%	311-1136-1-ND	.66	3.90	11.25	311-1136-2-ND	4,000	10.80/M	08052R103K9B20D
		50	18000pF	±10%	311-1137-1-ND	.66	3.90	11.25	311-1137-2-ND	4,000	10.80/M	08052R183K9B20D
		50	22000pF	±10%	311-1138-1-ND	.77	4.55	13.13	311-1138-2-ND	4,000	12.60/M	08052R223K9B20D
		50	27000pF	±10%	311-1139-1-ND	.83	4.88	14.06	311-1139-2-ND	4,000	13.50/M	08052R273K9B20D
		50	.10µF	±10%	311-1140-1-ND	.91	5.53	18.20	311-1140-2-ND	3,000	19.50/M	08052R104K9BB0D
		25	.10µF	±10%	311-1141-1-ND	.84	5.10	16.80	311-1141-2-ND	4,000	18.00/M	08052R104K8B20D
		16	.10µF	±10%	311-1142-1-ND	.77	4.68	15.40	311-1142-2-ND	4,000	16.50/M	08052R104K7B20D
		50	15000pF	±10%	311-1143-1-ND	.66	3.90	11.25	311-1143-2-ND	4,000	10.80/M	08052R153K9B20D
	Y5V	10	3.3uF	±20%+80%	311-1190-1-ND *NEW!*	1.75	11.78	39.90	311-1190-2-ND *NEW!*	4,000	51.30/M	08052F335Z6BB0D
1206	NPO	1KV	1000pF	±10%	311-1144-1-ND	2.98	21.25	76.50	311-1144-2-ND	3,000	110.50/M	12062R102KEBB00
		50	.5pF	±0.25pF	311-1145-1-ND	.98	5.95	19.60	311-1145-2-ND	4,000	21.00/M	1206CG508C9B200
		50	1pF	±0.25pF	311-1212-1-ND *NEW!*	.92	6.20	21.00	311-1212-2-ND *NEW!*	4,000	27.00/M	1206CG109C9B200
		50	1.5pF	±0.25pF	311-1214-1-ND *NEW!*	.92	6.20	21.00	311-1214-2-ND *NEW!*	4,000	27.00/M	1206CG159C9B200
		50	1.8pF	±0.25pF	311-1215-1-ND *NEW!*	.92	6.20	21.00	311-1215-2-ND *NEW!*	4,000	27.00/M	1206CG189C9B200
		50	2.2pF	±0.25pF	311-1146-1-ND	.95	5.78	19.04	311-1146-2-ND	4,000	20.40/M	1206CG229C9B200
		50	2.7pF	±0.25pF	311-1216-1-ND *NEW!*	.92	6.20	21.00	311-1216-2-ND *NEW!*	4,000	27.00/M	1206CG279C9B200
		50	3.3pF	±0.25pF	311-1147-1-ND	.95	5.74	18.90	311-1147-2-ND	4,000	20.25/M	1206CG339C9B200
		50	3.9pF	±0.25pF	311-1217-1-ND *NEW!*	.92	6.20	21.00	311-1217-2-ND *NEW!*	4,000	27.00/M	1206CG399C9B200
		50	4.7pF	±0.25pF	311-1218-1-ND *NEW!*	.92	6.20	21.00	311-1218-2-ND *NEW!*	4,000	27.00/M	1206CG479C9B200
		50	5.1pF	±0.25pF	311-1148-1-ND	1.02	6.16	20.30	311-1148-2-ND	4,000	21.75/M	1206CG519C9B200
		50	5.6pF	±0.25pF	311-1149-1-ND	.95	5.74	18.90	311-1149-2-ND	4,000	20.25/M	1206CG569C9B200
		50	6.8pF	±0.5pF	311-1220-1-ND *NEW!*	.92	6.20	21.00	311-1220-2-ND *NEW!*	4,000	27.00/M	1206CG689D9B200
		50	7.5pF	±0.5pF	311-1221-1-ND *NEW!*	1.15	7.75	26.25	311-1221-2-ND *NEW!*	4,000	33.75/M	1206CG759D9B200
		50	8.2pF	±0.5pF	311-1222-1-ND *NEW!*	.92	6.20	21.00	311-1222-2-ND *NEW!*	4,000	27.00/M	1206CG829D9B200
		50	9.1pF	±0.5pF	311-1223-1-ND *NEW!*	1.15	7.75	26.25	311-1223-2-ND *NEW!*	4,000	33.75/M	1206CG919D9B200
		50	10pF	±5%	311-1150-1-ND	.90	5.48	18.06	311-1150-2-ND	4,000	19.35/M	1206CG100J9B200
		50	12pF	±5%	311-1213-1-ND *NEW!*	1.33	8.08	26.60	311-1213-2-ND *NEW!*	4,000	28.50/M	1206CG120J9B200
		50	15pF	±5%	311-1151-1-ND	.90	5.48	18.06	311-1151-2-ND	4,000	19.35/M	1206CG150J9B200
		50	18pF	±5%	311-1152-1-ND	.90	5.48	18.06	311-1152-2-ND	4,000	19.35/M	1206CG180J9B200
		50	20pF	±5%	311-1153-1-ND	.95	5.74	18.90	311-1153-2-ND	4,000	20.25/M	1206CG200J9B200
		50	22pF	±5%	311-1154-1-ND	.90	5.48	18.06	311-1154-2-ND	4,000	19.35/M	1206CG220J9B200
		50	27pF	±5%	311-1155-1-ND	.90	5.48	18.06	311-1155-2-ND	4,000	19.35/M	1206CG270J9B200
		50	33pF	±5%	311-1156-1-ND	.90	5.48	18.06	311-1156-2-ND	4,000	19.35/M	1206CG330J9B200
		50	39pF	±5%	311-1157-1-ND	.98	5.95	19.60	311-1157-2-ND	4,000	21.00/M	1206CG390J9B200
		50	47pF	±5%	311-1158-1-ND	.98	5.95	19.60	311-1158-2-ND	4,000	21.00/M	1206CG470J9B200
		50	51pF	±5%	311-1219-1-ND *NEW!*	1.56	10.54	35.70	311-1219-2-ND *NEW!*	4,000	45.90/M	1206CG510J9B200
		50	56pF	±5%	311-1159-1-ND	1.05	6.38	21.00	311-1159-2-ND	4,000	22.50/M	1206CG560J9B200
		50	68pF	±5%	311-1160-1-ND	1.12	6.80	22.40	311-1160-2-ND	4,000	24.00/M	1206CG680J9B200
		50	100pF	±5%	311-1161-1-ND	1.05	6.38	21.00	311-1161-2-ND	4,000	22.50/M	1206CG101J9B200
		50	120pF	±5%	311-1162-1-ND	1.12	6.80	22.40	311-1162-2-ND	4,000	24.00/M	1206CG121J9B200
		50	1000pF	±5%	311-1163-1-ND	1.10	7.44	25.20	311-1163-2-ND	4,000	32.40/M	1206CG102J9B200
	X7R	50	220pF	±10%	311-1164-1-ND	.90	5.48	18.06	311-1164-2-ND	4,000	19.35/M	12062R221K9B20D
		50	270pF	±10%	311-1165-1-ND	.90	5.48	18.06	311-1165-2-ND	4,000	19.35/M	12062R271K9B20D
		50	330pF	±10%	311-1166-1-ND	.90	5.48	18.06	311-1166-2-ND	4,000	19.35/M	12062R331K9B20D
		50	390pF	±10%	311-1205-1-ND *NEW!*	.98	5.95	19.60	311-1205-2-ND *NEW!*	4,000	21.00/M	12062R391K9B20D
		50	470pF	±10%	311-1167-1-ND	.84	5.10	16.80	311-1167-2-ND	4,000	18.00/M	12062R471K9B20D
		50	560pF	±10%	311-1168-1-ND	.84	5.10	16.80	311-1168-2-ND	4,000	18.00/M	12062R561K9B20D
		50	680pF	±10%	311-1169-1-ND	.84	5.10	16.80	311-1169-2-ND	4,000	18.00/M	12062R681K9B20D
		50	820pF	±10%	311-1210-1-ND *NEW!*	.98	5.95	19.60	311-1210-2-ND *NEW!*	4,000	21.00/M	12062R821K9B20D
		50	1000pF	±10%	311-1170-1-ND	.84	5.10	16.80	311-1170-2-ND	4,000	18.00/M	12062R102K9B20D
		50	1200pF	±10%	311-1197-1-ND *NEW!*	.98	5.95	19.60	311-1197-2-ND *NEW!*	4,000	21.00/M	12062R122K9B20D
		50	1500pF	±10%	311-1200-1-ND *NEW!*	.98	5.95	19.60	311-1200-2-ND *NEW!*	4,000	21.00/M	12062R152K9B20D
		50	1800pF	±10%	311-1201-1-ND *NEW!*	.98	5.95	19.60	311-1201-2-ND *NEW!*	4,000	21.00/M	12062R182K9B20D
		50	2200pF	±10%	311-1171-1-ND	.90	5.48	18.06	311-1171-2-ND *NEW!*	4,000	19.35/M	12062R222K9B20D
		50	2700pF	±10%	311-1203-1-ND *NEW!*	.98	5.95	19.60	311-1203-2-ND *NEW!*	4,000	21.00/M	12062R272K9B20D
		50	3300pF	±10%	311-1172-1-ND	.90	5.48	18.06	311-1172-2-ND	4,000	19.35/M	12062R332K9B20D
		50	3900pF	±10%	311-1206-1-ND *NEW!*	.98	5.95	19.60	311-1206-2-ND *NEW!*	4,000	21.00/M	12062R392K9B20D
		50	4700pF	±10%	311-1173-1-ND	.84	5.10	16.80	311-1173-2-ND	4,000	18.00/M	12062R472K9B20D
		50	5600pF	±10%	311-1208-1-ND *NEW!*	1.05	6.38	21.00	311-1208-2-ND *NEW!*	4,000	22.50/M	12062R562K9B20D
		50	6800pF	±10%	311-1209-1-ND *NEW!*	1.05	6.38	21.00	311-1209-2-ND *NEW!*	4,000	22.50/M	12062R682K9B20D
		50	8200pF	±10%	311-1211-1-ND *NEW!*	1.12	6.80	22.40	311-1211-2-ND *NEW!*	4,000	24.00/M	12062R822K9B20D
		50	10000pF	±10%	311-1174-1-ND	.84	5.10	16.80	311-1174-2-ND	4,000	18.00/M	12062R103K9B20D
		50	12000pF	±10%	311-1198-1-ND *NEW!*	1.33	8.08	26.60	311-1198-2-ND *NEW!*	4,000	28.50/M	12062R123K9B20D
		50	15000pF	±10%	311-1175-1-ND	.90	5.48	18.06	311-1175-2-ND	4,000	19.35/M	12062R153K9B20D
		50	18000pF	±10%	311-1202-1-ND *NEW!*	1.33	8.08	26.60	311-1202-2-ND *NEW!*	4,000	28.50/M	12062R183K9B20D
		50	22000pF	±10%	311-1176-1-ND	.97	5.91	19.46	311-1176-2-ND	4,000	20.85/M	12062R223K9B20D
		50	27000pF	±10%	311-1204-1-ND *NEW!*	.92	6.20	21.00	311-1204-2-ND *NEW!*	4,000	27.00/M	12062R273K9B20D
		50	33000pF	±10%	311-1177-1-ND	1.02	6.16	20.30	311-1177-2-ND	4,000	21.75/M	12062R333K9B20D
		50	39000pF	±10%	311-1207-1-ND *NEW!*	.92	6.20	21.00	311-1207-2-ND *NEW!*	4,000	27.00/M	12062R393K9B20D
		50	47000pF	±10%	311-1178-1-ND	1.04	6.33	20.86	311-1178-2-ND	4,000	22.35/M	12062R473K9B20D
		50	.10µF	±10%	311-1179-1-ND	1.01	6.12	20.16	311-1179-2-ND	4,000	21.60/M	12062R104K9B20D
		25	.33µF	±10%	311-1180-1-ND	2.30	16.23	56.05	311-1180-2-ND	3,000	76.70/M	12062R334K8BB0D
		16	1.0µF	±10%	311-1181-1-ND	2.45	17.50	63.00	311-1181-2-ND	3,000	91.00/M	12062R105K7BB0D
		10	1.2uF	±10%	311-1199-1-ND *NEW!*	3.08	22.00	79.20	311-1199-2-ND *NEW!*	4,000	114.40/M	12062R125K6B20D
	Y5V	16	3.3uF	±20%+80%	311-1196-1-ND *NEW!*	1.75	11.78	39.90	311-1196-2-ND *NEW!*	4,000	51.30/M	12062F335Z7BB0D
1812	NPO	3KV	220pF	±5%	311-1182-1-ND	6.08	44.65	161.50	311-1182-2-ND	1,500	247.00/M	1812CG221JGBB00
	X7R	1KV	1000pF	±10%	311-1183-1-ND	4.42	32.43	117.30	311-1183-2-ND	1,000	179.40	18122R102KEBB00

Surface Mount MICA Capacitors

Cornell Dubilier mica capacitors are made of pure India Ruby muscovite mica. It is among the most inert and stable materials in the universe. When used as the insulator (dielectric) in a capacitor, the result is an electronic component with the ultimate in stability and reliability.

The capacitance change from zero to full rated operating voltage is generally less than ±0.1%. The series inductance of these capacitors is as little as eight nanohenrys (nH). The stability characteristics also apply to frequency which is why mica capacitors are so useful in the gigahertz range.

Mica capacitors are so efficient that less that 0.05% of the applied volt-amperes is lost as heat. Dipped silver mica capacitors such as the Standard Types are manufactured by applying pure silver to ultra-thin mica plates. The plates are stacked and secured by brass clips with copper-clad steel leads welded to each clip. The extra mass of the metal acts as a heat sink and enables these capacitors to absorb voltage transients up to 100,000 volts per microsecond.

Type MC - High-Frequency, High Stability Chip for Instruments and RF

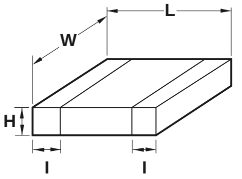
- Low impedance to beyond 1 GHz,
- Near-zero capacitance change, all environments

SPECIFICATIONS:

Capacitance Tolerance:

- **Manufacture's part number suffix letter:** D = ±0.5pF
- **Manufacture's part number suffix letter:** J = ±5%

Temperature Range: -55°C to +125°C



Tape and Reel packaging available with lead time.

Size Code	Vdc	Temperature Coefficient ppm/°C	Capacitance	Dimension - Inch (mm) L	W	H	I (Max)	Digi-Key Part No.	Price Each 1	10	100	Cornell Dubilier Part No.
0805	100	100±100	2.0pF	.079 (2.0)	.049 (1.25)	.055 (1.4)	.035 (.9)	338-1034-ND	1.75	1.50	1.25	MC08CA020D
		100±100	3.0pF	.079 (2.0)	.049 (1.25)	.055 (1.4)	.035 (.9)	338-1014-ND	1.75	1.50	1.25	MC08CA030D
		100±100	5.0pF	.079 (2.0)	.049 (1.25)	.055 (1.4)	.035 (.9)	338-1027-ND	1.75	1.50	1.25	MC08CA050D
		100±100	10pF	.079 (2.0)	.049 (1.25)	.055 (1.4)	.035 (.9)	338-1010-ND	1.75	1.50	1.25	MC08CA100D
		50±50	15pF	.079 (2.0)	.049 (1.25)	.055 (1.4)	.035 (.9)	338-1009-ND	1.75	1.50	1.25	MC08EA150J
		50±50	20pF	.079 (2.0)	.049 (1.25)	.055 (1.4)	.035 (.9)	338-1012-ND	1.75	1.50	1.25	MC08EA200J
		50±50	22pF	.079 (2.0)	.049 (1.25)	.055 (1.4)	.035 (.9)	338-1037-ND	1.75	1.50	1.25	MC08EA220J
		50±50	27pF	.079 (2.0)	.049 (1.25)	.055 (1.4)	.035 (.9)	338-1031-ND	1.75	1.50	1.25	MC08EA270J
1210	100	25±25	47pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1017-ND	2.00	1.71	1.43	MC12FA470J
		25±25	68pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1041-ND	2.00	1.71	1.43	MC12FA680J
		25±25	100pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1001-ND	2.17	1.86	1.55	MC12FA101J
		25±25	150pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1007-ND	2.21	1.89	1.58	MC12FA151J
		25±25	150pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1028-ND†	5.32	4.56	3.80	MC12FA151F
		25±25	200pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1024-ND	2.38	2.04	1.70	MC12FA201J
		25±25	220pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1003-ND	2.38	2.04	1.70	MC12FA221J
		25±25	240pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1029-ND	2.38	2.04	1.70	MC12FA241J
1812	100	25±25	470pF	.177 (4.5)	.126 (3.2)	.079 (2.0)	.051 (1.3)	338-1022-ND	3.15	2.70	2.25	MC18FA471J
2220	100	25±25	1000pF	.224 (5.7)	.197 (5.0)	.079 (2.0)	.051 (1.3)	338-1008-ND	5.01	4.29	3.58	MC22FA102J
		25±25	2000pF	.224 (5.7)	.197 (5.0)	.079 (2.0)	.051 (1.3)	338-1019-ND	6.58	5.64	4.70	MC22FA202J
1210	500	100±100	5.0pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1032-ND	2.17	1.86	1.55	MC12CD050D
		100±100	10pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1002-ND	2.17	1.86	1.55	MC12CD100D
		50±50	15pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1013-ND	2.21	1.89	1.58	MC12ED150J
		50±50	18pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1030-ND	2.21	1.89	1.58	MC12ED180J
		25±25	33pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1006-ND	2.21	1.89	1.58	MC12FD330J
		25±25	47pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1023-ND	2.21	1.89	1.58	MC12FD470J
		25±25	62pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1038-ND	2.21	1.89	1.58	MC12FD620J
		25±25	68pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1033-ND	2.21	1.89	1.58	MC12FD680J
		25±25	100pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1015-ND	2.70	2.31	1.93	MC12FD101J
1812	500	25±25	100pF	.177 (4.5)	.126 (3.2)	.079 (2.0)	.051 (1.3)	338-1025-ND	2.70	2.31	1.93	MC18FD101J
		25±25	120pF	.177 (4.5)	.126 (3.2)	.079 (2.0)	.051 (1.3)	338-1020-ND	2.70	2.31	1.93	MC18FD121J
		25±25	220pF	.177 (4.5)	.126 (3.2)	.079 (2.0)	.051 (1.3)	338-1016-ND	3.01	2.58	2.15	MC18FD221J
		25±25	300pF	.177 (4.5)	.126 (3.2)	.079 (2.0)	.051 (1.3)	338-1026-ND	3.26	2.79	2.33	MC18FD301J
		25±25	330pF	.177 (4.5)	.126 (3.2)	.079 (2.0)	.051 (1.3)	338-1039-ND	3.26	2.79	2.33	MC18FD331J
		25±25	390pF	.177 (4.5)	.126 (3.2)	.079 (2.0)	.051 (1.3)	338-1021-ND	3.75	3.21	2.68	MC18FD391J
		25±25	470pF	.177 (4.5)	.126 (3.2)	.079 (2.0)	.051 (1.3)	338-1018-ND	3.75	3.21	2.68	MC18FD471J
2220	500	25±25	500pF	.224 (5.7)	.197 (5.0)	.079 (2.0)	.051 (1.3)	338-1040-ND	4.59	3.93	3.28	MC22FD501J
		25±25	750pF	.224 (5.7)	.197 (5.0)	.079 (2.0)	.051 (1.3)	338-1011-ND	5.11	4.38	3.65	MC22FD751J
		25±25	1000pF	.224 (5.7)	.197 (5.0)	.079 (2.0)	.051 (1.3)	338-1004-ND	5.67	4.86	4.05	MC22FD102J
2220	1000	25±25	430pF	.224 (5.7)	.197 (5.0)	.079 (2.0)	.051 (1.3)	338-1005-ND	5.11	4.38	3.65	MC22FF431J
		25±25	470pF	.224 (5.7)	.197 (5.0)	.079 (2.0)	.051 (1.3)	338-1036-ND	5.11	4.38	3.65	MC22FF471J
		25±25	1000pF	.224 (5.7)	.197 (5.0)	.079 (2.0)	.051 (1.3)	338-1035-ND	6.90	5.91	4.93	MC22FF102J

† 1% Tolerance

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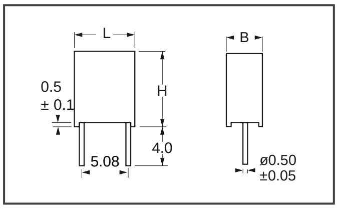
COMPONENTS

Metallized Polyester Film Capacitors



Features: • Low-inductive wound cell of metallized(PETP) film • Potted with blue epoxy resin in a blue flame retardant case • Radial leads of solder-coated wire • Withstand solvents and rinsing liquids • Small stand-off pips to allow removal of solder flux • Suitable for high density packaging

Applications: • Blocking and coupling • Bypass and energy reservoir applications

Specifications: • Capacitance Range: .001 to 1.0µf • Capacitance Tolerance: ±5% • Rated Voltage: U_{Rdc} 63V, 100V, 250V, 400V • Climatic Category: 55/100/56 • Maximum Application Temperature: 100°C • Rated Temperature: 85°C • Tangent of Loss Angle: 10 kHz 100 x 10^{-4} • Reference Specification: IEC 384-2, DIN 44122, DIN 45910 Draft • Performance Grade: Grade 1 (long life) • Qualified in accordance with CECC 30 401-801

Working Voltage (VDC)	Capacitance (µF)	Dimensions (mm) B Max.	H Max.	L Max.	Digi-Key Part No.	Price Each 10	100	1,000	BC Components Part No.
400	.0010*	2.5	6.5	7.2	3001PH-ND	.13	.09	.07	2222 370 52102
	.0015*	2.5	6.5	7.2	3002PH-ND	.13	.09	.07	2222 370 52152
	.0022*	2.5	6.5	7.2	3003PH-ND	.13	.09	.07	2222 370 52222
	.0033*	2.5	6.5	7.2	3004PH-ND	.13	.09	.07	2222 370 52332
250	.0047*	2.5	6.5	7.2	3005PH-ND	.13	.09	.07	2222 370 42472
	.0068*	2.5	6.5	7.2	3006PH-ND	.13	.09	.07	2222 370 42682
	.010	2.5	6.5	7.2	3007PH-ND	.13	.09	.07	2222 370 42103
	.015	3.5	8.0	7.2	3008PH-ND	.13	.09	.07	2222 370 42153
	.022	3.5	8.0	7.2	3009PH-ND	.15	.10	.08	2222 370 42223
	.033	3.5	8.0	7.2	3010PH-ND	.18	.12	.09	2222 370 42333
100	.047	2.5	6.5	7.2	3011PH-ND	.15	.10	.08	2222 370 22473
	.068	3.5	8.0	7.2	3012PH-ND	.19	.13	.10	2222 370 22683
	.10	3.5	8.0	7.2	3013PH-ND	.21	.14	.11	2222 370 22104
63	.15	3.5	8.0	7.2	3014PH-ND	.18	.12	.09	2222 370 12154
	.22	3.5	8.0	7.2	3015PH-ND	.22	.15	.11	2222 370 12224
	.33	3.5	8.0	7.2	3016PH-ND	.28	.19	.14	2222 370 12334
	.47	4.5	9.0	7.2	3017PH-ND	.35	.24	.18	2222 370 12474
	.68	5.0	10.0	7.2	3018PH-ND	.47	.32	.24	2222 370 12684
	1.0	6.0	11.0	7.2	3019PH-ND	.51	.34	.26	2222 370 12105

* Marked capacitance values are not CECC qualified.

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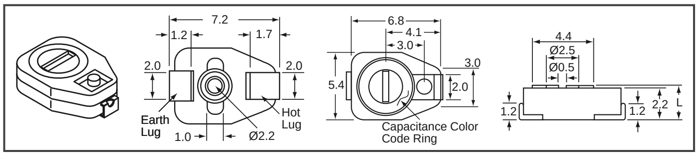
COMPONENTS

SMD Trimmer Capacitors

Film Dielectric Capacitors



Description: SMD trimmer capacitors use a PTE Teflon film dielectric for excellent long-term stability and low temperature coefficient of capacitance. These units consist of brass rotors and stators separated by film dielectric and enclosed in a plastic case.

Specifications: • Insulation Resistance between Stator and Rotor: 10,000MΩ min. • Voltage Rating: 100 VDC • Minimum Q @ 10MHz: 1000 • Temperature Coefficient: –100 ± 100 PPM/°C • Soldering Maximum: 260°C for 5 seconds • Operating Temperature Range: –40°C to +85°C • Effective Angle of Rotation: 360° • Operating Torque: 20 - 300 g.cm • Ratio of Maximum to Minimum Torque: Within 3:1

Capacitance (pF) Min.	Max.	Dim. L (mm)	Color Code	Digi-Key Part No.	Price Each 1	10	100	500	1,000	BC Components Part No.
0.3 ±0.2	5-0.5/+3	2.2	Orange	2807S505-ND	1.68	1.46	1.32	1.12	.98	2807S0R505NHA4BAA
0.4 ±0.2	10-1/+5	2.2	Black	2807S610-ND	1.68	1.46	1.32	1.12	.98	2807S0R610NHB4BAA
0.5 ±0.3	15-0/+7	2.4	Blue	2807S815-ND	1.68	1.46	1.32	1.12	.98	2807S0R815NHC4BAA
0.7 ±0.3	20-0/+10	2.55	Green	2807S020-ND	1.68	1.46	1.32	1.12	.98	2807S1R020NHD4BAA

CDE CORNELL DUBILIER GC/Waldom

Dipped Silver MICA Capacitors — Radial Lead

Cornell Dubilier mica capacitors are made of pure India Ruby muscovite mica. It is among the most inert and stable materials in the universe. When used as the insulator (dielectric) in a capacitor, the result is an electronic component with the ultimate in stability and reliability.

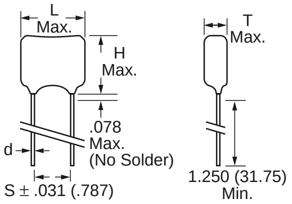
The capacitance change from zero to full rated operating voltage is generally less than ±0.1%. The series inductance of these capacitors is as little as eight nanohenrys (nH). The stability characteristics also apply to frequency which is why mica capacitors are so useful in the gigahertz range.

Mica capacitors are so efficient that less that 0.05% of the applied volt-amperes is lost as heat. Dipped silver mica capacitors such as the Standard Types are manufactured by applying pure silver to ultra-thin mica plates. The plates are stacked and secured by brass clips with copper-clad steel leads welded to each clip. The extra mass of the metal acts as a heat sink and enables these capacitors to absorb voltage transients up to 100,000 volts per microsecond.

SPECIFICATIONS:

Capacitance Tolerance:
- **Manufacture's part number letter:** D03 = ±1/2 pF
- **Manufacture's part number letter:** J03 = ±5%
- **Manufacture's part number letter:** F03 = ±1%

Temperature Range: -55°C to +125°C



Voltage	Capacitance	Temperature Coefficient ppm/°C	Dimension - Inch (mm) L Max	H Max	T Max	S	d	Digi-Key Part No.	Price Each 1	10	100	Cornell Dubilier Part No.
Standard												
100	1000pF	0 to +70	.480 (12.2)	.400 (10.2)	.230 (5.8)	.234 (5.9)	.025 (.6)	338-1048-ND	2.63	2.25	1.88	CD15FA102J03
	1000pF	0 to +70	.480 (12.2)	.400 (10.2)	.230 (5.8)	.234 (5.9)	.025 (.6)	338-1092-ND	4.48	3.84	3.20	CD15FA102F03
300	680pF	0 to +70	.470 (11.9)	.390 (9.9)	.210 (5.3)	.234 (5.9)	.025 (.6)	338-1060-ND	1.75	1.50	1.25	CD15FC681J03
	560pF	0 to +70	.460 (11.7)	.380 (9.7)	.210 (5.3)	.234 (5.9)	.025 (.6)	338-1081-ND	2.00	1.71	1.43	CD15FC561J03
500	5pF	-200 to +200	.360 (9.1)	.330 (8.4)	.190 (4.8)	.141 (3.6)	.016 (.4)	338-1064-ND	1.23	1.05	.88	CD10CD050D03
	10pF	-200 to +200	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1061-ND	.81	.69	.58	CD15CD100J03
	10pF	-200 to +200	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1068-ND	.81	.69	.58	CD15CD100D03
	15pF	-200 to +200	.360 (9.1)	.330 (8.4)	.190 (4.8)	.141 (3.6)	.016 (.4)	338-1088-ND	1.23	1.05	.88	CD10CD150J03
	15pF	-200 to +200	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1054-ND	.74	.63	.53	CD15CD150J03
	20pF	-20 to +100	.360 (9.1)	.330 (8.4)	.190 (4.8)	.141 (3.6)	.016 (.4)	338-1095-ND	1.26	1.08	.90	CD10ED200J03
	20pF	-20 to +100	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1051-ND	.74	.63	.53	CD15ED200J03
	22pF	-20 to +100	.360 (9.1)	.330 (8.4)	.190 (4.8)	.141 (3.6)	.016 (.4)	338-1070-ND	.91	.78	.65	CD10ED220J03
	22pF	-20 to +100	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1049-ND	.81	.69	.58	CD15ED220J03
	27pF	-20 to +100	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1085-ND	.81	.69	.58	CD15ED270J03
	30pF	-20 to +100	.370 (9.4)	.340 (8.6)	.190 (4.8)	.141 (3.6)	.016 (.4)	338-1076-ND	.91	.78	.65	CD10ED300J03
	30pF	-20 to +100	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1056-ND	.81	.69	.58	CD15ED300J03
	33pF	-20 to +100	.370 (9.4)	.340 (8.6)	.190 (4.8)	.141 (3.6)	.016 (.4)	338-1072-ND	.91	.78	.65	CD10ED330J03
	33pF	-20 to +100	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1047-ND	.81	.69	.58	CD15ED330J03
	39pF	-20 to +100	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1093-ND	.81	.69	.58	CD15ED390J03
	47pF	-20 to +100	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1053-ND	.81	.69	.58	CD15ED470J03
	68pF	-20 to +100	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1091-ND	.81	.69	.58	CD15ED680J03
	100pF	0 to +70	.370 (9.4)	.350 (8.9)	.200 (5.1)	.141 (3.6)	.016 (.4)	338-1050-ND	1.12	.96	.80	CD10FD101J03
	100pF	0 to +70	.460 (11.7)	.360 (9.1)	.180 (4.6)	.234 (5.9)	.025 (.6)	338-1042-ND	.81	.69	.58	CD15FD101J03
	120pF	0 to +70	.460 (11.7)	.370 (9.4)	.180 (4.6)	.234 (5.9)	.025 (.6)	338-1058-ND	.91	.78	.65	CD15FD121J03
	150pF	0 to +70	.460 (11.7)	.370 (9.4)	.190 (4.8)	.234 (5.9)	.025 (.6)	338-1052-ND	.91	.78	.65	CD15FD151J03
	180pF	0 to +70	.460 (11.7)	.370 (9.4)	.190 (4.8)	.234 (5.9)	.025 (.6)	338-1082-ND	1.05	.90	.75	CD15FD181J03
	200pF	0 to +70	.460 (11.7)	.380 (9.7)	.190 (4.8)	.234 (5.9)	.025 (.6)	338-1063-ND	1.05	.90	.75	CD15FD201J03
	220pF	0 to +70	.460 (11.7)	.380 (9.7)	.200 (5.1)	.234 (5.9)	.025 (.6)	338-1046-ND	1.12	.96	.80	CD15FD221J03
	240pF	0 to +70	.460 (11.7)	.380 (9.7)	.200 (5.1)	.234 (5.9)	.025 (.6)	338-1079-ND	1.16	.99	.83	CD15FD241J03
	270pF	0 to +70	.470 (11.9)	.390 (9.9)	.210 (5.3)	.234 (5.9)	.025 (.6)	338-1062-ND	1.26	1.08	.90	CD15FD271J03
	300pF	0 to +70	.470 (11.9)	.390 (9.9)	.210 (5.3)	.234 (5.9)	.025 (.6)	338-1065-ND	1.47	1.26	1.05	CD15FD301J03
	330pF	0 to +70	.470 (11.9)	.390 (9.9)	.210 (5.3)	.234 (5.9)	.025 (.6)	338-1045-ND	1.37	1.17	.98	CD15FD331J03
	390pF	0 to +70	.470 (11.9)	.390 (9.9)	.210 (5.3)	.234 (5.9)	.025 (.6)	338-1057-ND	1.65	1.41	1.18	CD15FD391J03
	470pF	0 to +70	.470 (11.9)	.400 (10.2)	.220 (5.6)	.234 (5.9)	.025 (.6)	338-1043-ND	1.89	1.62	1.35	CD15FD471J03
	470pF	0 to +70	.640 (16.3)	.510 (13.0)	.200 (5.1)	.344 (8.7)	.032 (.8)	338-1089-ND	1.58	1.35	1.13	CD19FD471J03
	500pF	0 to +70	.470 (11.9)	.400 (10.2)	.220 (5.6)	.234 (5.9)	.025 (.6)	338-1069-ND	1.89	1.62	1.35	CD15FD501J03
	510pF	0 to +70	.470 (11.9)	.400 (10.2)	.220 (5.6)	.234 (5.9)	.025 (.6)	338-1077-ND	2.00	1.71	1.43	CD15FD511J03
	680pF	0 to +70	.650 (16.5)	.510 (13.0)	.210 (5.3)	.344 (8.7)	.032 (.8)	338-1086-ND	1.86	1.59	1.33	CD19FD681J03
	820pF	0 to +70	.650 (16.5)	.510 (13.0)	.210 (5.3)	.344 (8.7)	.032 (.8)	338-1094-ND	1.86	1.59	1.33	CD19FD821J03
	1000pF	0 to +70	.650 (16.5)	.520 (13.2)	.220 (5.6)	.344 (8.7)	.025 (.6)	338-1044-ND	2.00	1.71	1.43	CD19FD102J03
	1500pF	0 to +70	.660 (16.8)	.520 (13.2)	.230 (5.8)	.344 (8.7)	.032 (.8)	338-1071-ND	2.59	2.22	1.85	CD19FD152J03
	2000pF	0 to +70	.670 (17.0)	.530 (13.5)	.240 (6.1)	.344 (8.7)	.032 (.8)	338-1074-ND	3.26	2.79	2.33	CD19FD202J03
	2200pF	0 to +70	.670 (17.0)	.530 (13.5)	.250 (6.4)	.344 (8.7)	.032 (.8)	338-1055-ND	3.26	2.79	2.33	CD19FD222J03
	4700pF	0 to +70	.700 (17.8)	.580 (14.7)	.350 (8.9)	.344 (8.7)	.032 (.8)	338-1067-ND	5.43	4.65	3.88	CD19FD472J03
	10000pF	0 to +70	.800 (20.3)	.890 (22.6)	.340 (8.6)	.438 (11.1)	.040 (1.0)	338-1078-ND	11.97	10.26	8.55	CD30FD103J03
Miniature												
300	5pF	-200 to +200	.270 (6.9)	.190 (4.8)	.110 (2.8)	.120 (3.0)	.016 (.4)	338-1073-ND	1.47	1.26	1.05	CD5CC050D03
	10pF	-200 to +200	.270 (6.9)	.190 (4.8)	.110 (2.8)	.120 (3.0)	.016 (.4)	338-1090-ND	1.05	.90	.75	CD5CC100J03
	15pF	-200 to +200	.270 (6.9)	.190 (4.8)	.120 (3.0)	.120 (3.0)	.016 (.4)	338-1083-ND	1.12	.96	.80	CD5CC150J03
	20pF	-20 to +100	.270 (6.9)	.200 (5.1)	.120 (3.0)	.120 (3.0)	.016 (.4)	338-1075-ND	1.12	.96	.80	CD5EC200J03
	22pF	-20 to +100	.270 (6.9)	.200 (5.1)	.120 (3.0)	.120 (3.0)	.016 (.4)	338-1080-ND	1.16	.99	.83	CD5EC220J03
	30pF	-20 to +100	.270 (6.9)	.200 (5.1)	.130 (3.3)	.120 (3.0)	.016 (.4)	338-1087-ND	1.26	1.08	.90	CD5EC300J03
	33pF	-20 to +100	.270 (6.9)	.200 (5.1)	.130 (3.3)	.120 (3.0)	.016 (.4)	338-1066-ND	1.33	1.14	.95	CD5EC330J03
	47pF	-20 to +100	.270 (6.9)	.210 (5.3)	.140 (3.6)	.120 (3.0)	.016 (.4)	338-1084-ND	1.47	1.26	1.05	CD5EC470J03
	100pF	0 to +70	.270 (6.9)	.240 (6.1)	.180 (4.6)	.120 (3.0)	.016 (.4)	338-1059-ND	2.17	1.86	1.55	CD5FC101J03

Panasonic Hybrid Passive RF/Microwave Devices

Note: All drawings are top view.

These components are especially suited for Mobile Phones (Handsets & Base Stations), Navigation Devices (GPS), Pagers, Mobile Computing (PCs & PDAs), Mobile Data Terminals, Wireless Microphones, Cordless Phones as well as Wireless Local Area Network (WLAN) applications.

SPECIFICATIONS: Operating Temperature: -40°C to +85°C **Soldering:** 230°C for 5 seconds

BALUN: Ultra small, thin, high precision, with ultra-fine geometry baluns to meet your single-ended to double-ended to electronic circuitry interface requirements. Typical Application: Single/Double Ended Mixer, Differential Amp, Matching. **DIRECTIONAL COUPLER:** Miniaturized, high coupling efficiency, low-cost, with ultra-fine geometry directional couplers to meet your most demanding coupling needs. Typical Application: To control transmitted power. **DIRECTIONAL COUPLER with LC FILTER:** A directional coupler having the above same features and benefits, but also incorporating a LC Filter. Typical Application: To control transmitted power while suppressing spurious noise. **POWER DIVIDER:** Miniaturized, high efficiency/low-loss, with ultra-fine geometry, three port power divider to meet your circuitry power handling requirements. Typical Application: To divide internal signals (ex. VCO).

Fig. 1

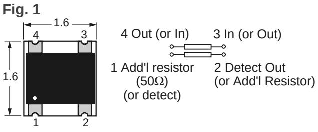

1.6
4
3
1.6
1
2
4 Out (or In)
3 In (or Out)
1 Add'l resistor (50Ω) (or detect)
2 Detect Out (or Add'l Resistor)

Fig. 2

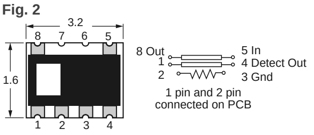


Fig. 3

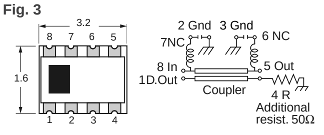


Fig. 4

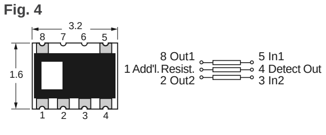


Fig. 5

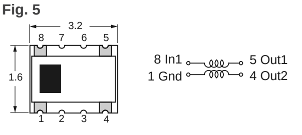


Fig. 6

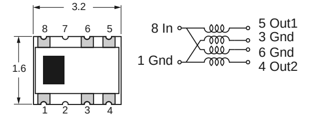


Fig. 7

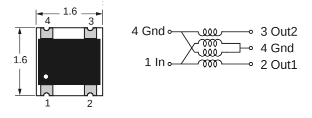


Fig. 8

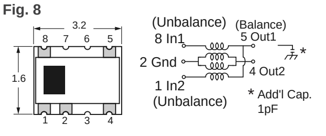


Fig. 9

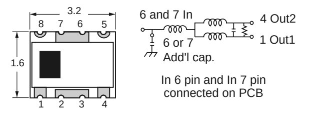


Fig. 10

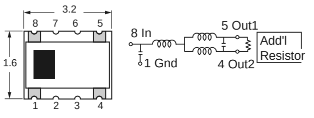


Fig. 11

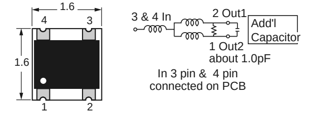

1.6
4
3
1.6
1
2
3 & 4 In
2 Out1
1 Out2
Add'l Capacitor about 1.0pF
In 3 pin & 4 pin connected on PCB

Fig. 12

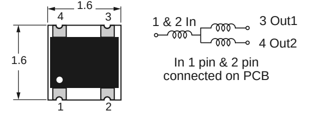


Fig. 13

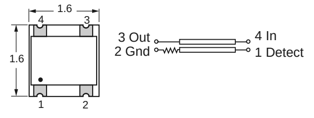


Fig. 14

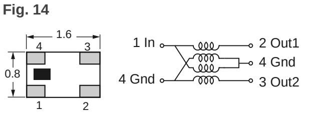


Fig. 15

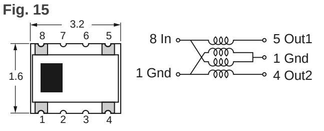


Fig. 16

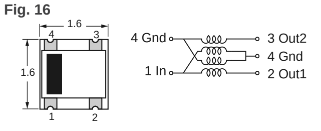
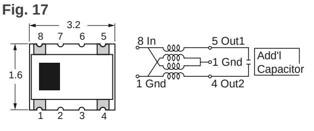


Fig. 17



Description	Fig.	Operating Freq. (Mhz)	Impedance In/Out (ohms)	Insertion Loss (max.)	Difference of Phase (deg.)	Size (mm)	Digi-Key Part No.	Price Each 1	10	100	Tape/Reel Pricing 4,000	Panasonic Part No.
Balun	17	130~500	50/200	3dB	180±15	3.2 x 1.6	P10702-ND	1.89	1.58	1.26	—	EHF-FD1617
	15	670~900	50/200	1dB	180±15	3.2 x 1.6	P10704-ND	1.89	1.58	1.26	—	EHA-FD1615
	5	700~1300	50/50	1dB	180±15	3.2 x 1.6	P10705CT-ND†	1.71	1.43	1.14	756.72/M	EHF-FD1618
	7	750~950	50/200	1dB	180±15	1.6 x 1.6	P10703-ND	1.89	1.58	1.26	—	EHF-FD1622
	7	950~1250	50/200	1dB	180±15	1.6 x 1.6	P10706CT-ND†	1.89	1.58	1.26	837.16/M	EHF-FD1620
	15	1100~1450	50/200	1dB	180±15	3.2 x 1.6	P10707CT-ND†	1.89	1.58	1.26	837.16/M	EHF-FD1621
	5	1200~2200	50/50	1dB	180±15	3.2 x 1.6	P10708CT-ND†	1.71	1.43	1.14	756.72/M	EHF-FD1619
	6	1600~1800	50/200	1dB	180±15	3.2 x 1.6	P10709-ND	1.71	1.43	1.14	—	EHA-FD1611
	14	1600~1950	50/200	1dB	180±15	1.6 x 0.8	P10701-ND	2.43	2.03	1.62	—	EHF-FD1750
	6	1700~1900	50/200	1dB	180±15	3.2 x 1.6	P10711-ND	1.71	1.43	1.14	—	EHF-FD1626
	16	1600~1950	50/200	1dB	180±15	1.6 x 1.6	P10710-ND	1.89	1.58	1.26	—	EHF-FD1624B
	16	3400~4000	50/200	2dB	180±15	1.6 x 1.6	P10712-ND	1.89	1.58	1.26	—	EHF-FD1624
Dual Balun	8	1800~2000	50/50	1dB	180±20	3.2 x 1.6	P10713-ND	1.89	1.58	1.26	—	EHF-FD1631

† For Tape & Reel Part Number, change CT to TR

Description	Fig.	Operating Freq. (Mhz)	Coupling Factor (dB±2)	Insertion Loss (max.)	Isolation (min.)	Volt. Standing Wave Ratio (max.)	Size (mm)	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
Directional Coupler	2	800~1000	14	.35dB	20dB	1.3	3.2 x 1.6	P10686-ND*	1.71	1.43	1.14	EHF-FD1736
	1	800~1000	17	.25dB	25dB	1.3	1.6 x 1.6	P10684-ND	1.62	1.35	1.08	EHF-FD1540
	2	800~1000	17	.25dB	25dB	1.3	3.2 x 1.6	P10687-ND*	1.71	1.43	1.14	EHF-FD1746
	1	800~1000	20	.20dB	25dB	1.3	1.6 x 1.6	P10692-ND	1.62	1.35	1.08	EHF-FD1549
	2	800~1000	20	.2dB	28dB	1.3	3.2 x 1.6	P10685-ND*	1.71	1.43	1.14	EHF-FD1555
	2	1400~1600	17	.3dB	23dB	1.3	3.2 x 1.6	P10688-ND*	1.71	1.43	1.14	EHF-FD1745
	2	1850~1950	14	.35dB	20dB	1.3	3.2 x 1.6	P10689-ND*	1.71	1.43	1.14	EHF-FD1735
	2	1850~2000	17	.30dB	21dB	1.3	3.2 x 1.6	P10690-ND*	1.71	1.43	1.14	EHF-FD1550
	1	1850~2000	14	.35dB	20dB	1.3	1.6 x 1.6	P10691-ND	1.62	1.35	1.08	EHF-FD1541
	13	800~1000	17	.20dB	25dB	1.3	1.6 x 1.6	P10693-ND*	1.71	1.43	1.14	EHF-FD1546
Dual Directional Coupler	4	800~1000 1850~1959	14	.35dB	20dB	1.3	3.2 x 1.6	P10698-ND	1.93	1.61	1.29	EHF-FD1552

* Requires 50 ohm termination resistor

Description	Fig.	Operating Freq. (Mhz)	Coupling Factor (dB)	Insertion Loss (max.)	2FO Attenuation (min.)	3FO Attenuation (min.)	Size (mm)	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
Direct. Coupler w/LC Filter	3	824~849	17	.5dB	20dB	18dB	3.2 x 1.6	P10694-ND	2.16	1.80	1.44	EHF-FD1724
	3	880~915	16.5	.45dB	20dB	18dB	3.2 x 1.6	P10695-ND	2.16	1.80	1.44	EHF-FD1722

Description	Fig.	Operating Freq. (Mhz)	Insertion Loss (max.)	Isolation (min.)	Volt. Standing Wave Ratio (max.)	Size (mm)	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
Power Divider	9	720~760	4.0dB	18dB	1.9	3.2 x 1.6	P10715-ND	2.02	1.69	1.35	EHF-FD1502
	10	1000~1050	4.0dB	18dB	1.9	3.2 x 1.6	P10716-ND	2.02	1.69	1.35	EHF-FD1508
	10	1546~1630	4.0dB	18dB	1.9	3.2 x 1.6	P10717-ND	1.93	1.61	1.29	EHF-FD1503
	10	1607~1685	4.0dB	18dB	1.7	3.2 x 1.6	P10718-ND	1.93	1.61	1.29	EHF-FD1506
	10	1720~1790	4.0dB	18dB	1.9	3.2 x 1.6	P10719-ND	1.93	1.61	1.29	EHF-FD1513
	10	1880~1920	4.0dB	18dB	1.9	3.2 x 1.6	P10720-ND	1.93	1.61	1.29	EHF-FD1507
	10	2100~2200	4.0dB	18dB	1.7	3.2 x 1.6	P10721-ND	1.93	1.61	1.29	EHF-FD1509
	11	2500	4.0dB	18dB	2.1	1.6 x 1.6	P10714-ND	1.93	1.61	1.29	EHF-FD1495

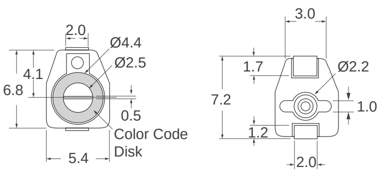
Description	Fig.	Operating Freq. (Mhz)	Insertion Loss In/Out1 (max.)	Insertion Loss In/Out2 (max.)	Divided Level Balance (max.)	Size (mm)	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
Power Splitter	12	650~2000	4.0dB	4.0dB	2.0dB	1.6 x 1.6	P10699-ND	1.71	1.43	1.14	EHF-FD1545

SPRAGUE GOODMAN

GSX Series SMD Trimmer Capacitors

SPECIFICATIONS:
- **Operating Temperature Range:** –25°C to +85°C • **Voltage Rating:** 100 VDC • **Dielectric Withstanding Voltage:** 200 VDC • **Insulation Resistance:** 10^4 MΩ min. • **Torque:** 20 to 300 g-cm (0.28 to 4.2 oz-in)

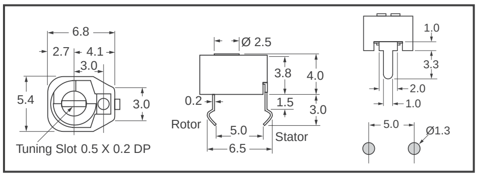
Capacitance (pF) Min.	Max.	TCC (ppm / °C)	Q (min.) 10MHz	Color Code	Digi-Key Part No.	Cut Tape Pricing 10	100	Digi-Key Part No.	Tape/Reel Pricing 3,000	Sprague-Goodman Part No.
0.4	10.0	N100	1000	Black	SG2017CT-ND	14.70	126.00	SG2017TR-ND	625.41/M	GSX358
0.3	5.0	N100	1000	Orange	SG2018CT-ND	12.90	111.00	SG2018TR-ND	550.00/M	GSX364
0.5	15.0	N100	1000	Blue	SG2019CT-ND	16.30	140.00	SG2019TR-ND	700.00/M	GSX365
0.7	20.0	N100	1000	Green	SG2020CT-ND	23.44	200.94	SG2020TR-ND	1004.71/M	GSX366



GCL Series Trimmer Capacitors

SPECIFICATIONS:
- **Operating Temperature Range:** -25°C to 85°C
- **Voltage Rating:** 50 VDC
- **Dielectric Withstanding Voltage:** 100 VDC
- **Insulation Resistance:** 20 x 10^4 MΩ
- **Torque:** 0.21-3 oz-in (15-200 g-cm)

Capacitance (pF) Min.	Max.	TCC (ppm / °C)	Q (min.) 1 MHz	Color Code	Digi-Key Part No.	Pricing 1	10	100	Sprague-Goodman Part No.
0.7	10.0	P350	1000	Brown	SG1034-ND	.58	5.00	35.00	GCL10000
0.8	20.0	P350	1000	Green	SG1035-ND	.58	5.00	35.00	GCL20000
0.9	30.0	P350	1000	Yellow	SG1036-ND	.85	7.30	51.00	GCL30000
1.0	40.0	P350	1000	Blue	SG1037-ND	.93	8.00	56.00	GCL40000



GKG Series Ceramic Trimmer Capacitors

SPECIFICATIONS: • **Operating Temperature Range:** –25°C to +85°C • **Voltage Rating:** 100 VDC • **Dielectric Withstanding Voltage:** 220 VDC • **Insulation Resistance:** 10^4 Megohms min.

Fig.	Capacitance (pF) Min.	Max.	TCC (ppm / °C)	Q (min.)	Color Code	Digi-Key Part No.	Pricing 1	10	100	Sprague-Goodman Part No.
Top Adjust Ceramic Trimmer Capacitors										
1	2.8	10.0	0±250	300	White	SG1002-ND	.98	8.40	77.00	GKG10011
	4.0	20.0	N600±300	300	Red	SG1003-ND	.98	8.40	77.00	GKG20011
	5.5	30.0	N750±300	200	Green	SG1004-ND	.98	8.40	77.00	GKG30011
	6.5	40.0	N750±400	200	Yellow	SG1005-ND	.98	8.40	77.00	GKG40011
	8.0	50.0	N1200±600	200	Orange	SG1006-ND	1.05	9.00	82.50	GKG50011
	10.5	60.0	N1200±600	200	Brown	SG1007-ND	1.05	9.00	82.50	GKG60011
	12.0	70.0	N1200±600	200	Grey	SG1008-ND	1.05	9.00	82.50	GKG70011
	20.0	90.0	N1200±600	200	Black	SG1009-ND	1.05	9.00	82.50	GKG90011
Top Adjust Ceramic Trimmer Capacitors										
2	1.7	3.0	0±200	300	Red Dot*	SG1020-ND	.56	4.80	44.00	GKG3R021
	2.5	6.0	0±200	500	Blue	SG1021-ND	.56	4.80	44.00	GKG6R021
	3.5	10.0	0±200	500	White	SG1022-ND	.56	4.80	44.00	GKG10021
	5.5	20.0	N900±350	500	Red	SG1023-ND	.56	4.80	44.00	GKG20021
	7.5	30.0	N1100±450	300	Green	SG1024-ND	.56	4.80	44.00	GKG30021
	15.0	50.0	N1700±500	300	Orange	SG1026-ND	.56	4.80	44.00	GKG50021
Top Adjust Ceramic Trimmer Capacitors										
3	1.7	3.0	0±200	300	Red Dot*	SG1027-ND	.56	4.80	44.00	GKG3R024
	2.5	6.0	0±200	500	Blue	SG1028-ND	.56	4.80	44.00	GKG6R024
	3.5	10.0	0±200	500	White	SG1029-ND	.56	4.80	44.00	GKG10024
	5.5	20.0	N900±350	500	Red	SG1030-ND	.56	4.80	44.00	GKG20024
	7.5	30.0	N1100±450	300	Green	SG1031-ND	.56	4.80	44.00	GKG30024
	15.0	50.0	N1700±500	300	Orange	SG1033-ND	.56	4.80	44.00	GKG50024
Bottom Adjust Ceramic Trimmer Capacitors										
4A	1.0	3.0	NPO±250	300	Black	SG3R016-ND	.60	5.25	45.00	GKG3R016
	2.0	5.0	NPO±250	300	Blue	SG5R016-ND	.60	5.25	45.00	GKG5R016
	3.0	10.0	NPO±250	300	White	SG10016-ND	.60	5.25	45.00	GKG10016
	5.0	20.0	N750±250	300	Red	SG20016-ND	.60	5.25	45.00	GKG20016
	6.5	30.0	N1000±500	200	Green	SG30016-ND	.60	5.25	45.00	GKG30016
	7.0	40.0	N2200±800	200	Yellow	SG40016-ND	.60	5.25	45.00	GKG40016
	10.0	50.0	N2200±800	200	Brown	SG50016-ND	.64	5.60	48.00	GKG50016
	12.0	60.0	N2200±800	200	Brown	SG60016-ND	.64	5.60	48.00	GKG60016
	15.0	70.0	N2200±800	200	Brown	SG70016-ND	.64	5.60	48.00	GKG70016
Top Adjust Ceramic Trimmer Capacitors										
4B	1.0	3.0	NPO±250	300	Black	SG3R015-ND	.56	4.90	42.00	GKG3R015
	2.0	5.0	NPO±250	300	Blue	SG5R015-ND	.56	4.90	42.00	GKG5R015
	3.0	10.0	NPO±250	300	White	SG10015-ND	.56	4.90	42.00	GKG10015
	5.0	20.0	N750±250	300	Red	SG20015-ND	.56	4.90	42.00	GKG20015
	6.5	30.0	N1000±500	200	Green	SG30015-ND	.56	4.90	42.00	GKG30015
	7.0	40.0	N2200±800	200	Yellow	SG40015-ND	.56	4.90	42.00	GKG40015
	10.0	50.0	N2200±800	200	Brown	SG50015-ND	.60	5.25	45.00	GKG50015
	12.0	60.0	N2200±800	200	Brown	SG60015-ND	.60	5.25	45.00	GKG60015
	15.0	70.0	N2200±800	200	Brown	SG70015-ND	.60	5.25	45.00	GKG70015

* Marking on bottom of capacitor.

Tuning Tool

SG9007-ND	5mm Type (SG1002 through SG1019)	$13.00
SG9005-ND	4 x 4.5mm Type (SG1020 through SG1033)	$13.00

Fig. 1

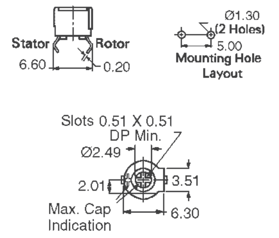


Fig. 2

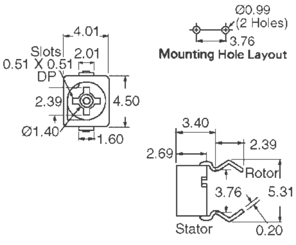


Fig. 3

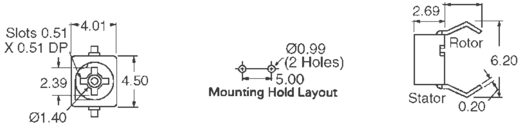


Fig. 4

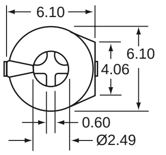


Fig. 4A

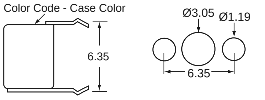
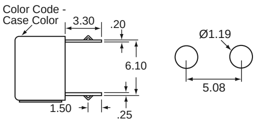


Fig. 4B



SURFTRIM® Surface Mount Variable Capacitors

• Sealed Construction • 4 x 4.5 x 2.7mm

FEATURES:
- Process seal provides protection against contaminants (flux, solvents, etc.) during production.
- Designed for vapor phase reflow soldering.

SPECIFICATIONS:
- **Operating Temperature Range:** –25°C to 85°C
- **Dielectric Withstanding Voltage:** 220 VDC
- **Insulation Resistance:** 10^4 Megohms min.
- **Voltage Rating:** 100 VDC
- **Torque:** 15 to 100 g-cm (0.2 to 1.39 in.-oz.)

Fig.	Capacitance (pF) Min.	Max.	TCC (ppm / °C)	Q (min.) 1MHz	Color Code	Digi-Key Part No.	Cut Tape Pricing 5	25	100	Digi-Key Part No.	Tape/Reel Pricing 700	Sprague-Goodman Part No.
1	1.4	3.0	0±200	300	Red Dot*	SG2000CT-ND	5.40	23.63	74.25	SG2000TR-ND	313.60	GKG3R066-07
	2.0	6.0	0±200	500	Blue	SG2001CT-ND	5.40	23.63	74.25	SG2001TR-ND	313.60	GKG6R066-07
	3.0	10.0	0±300	500	White	SG2002CT-ND	5.40	23.63	74.25	SG2002TR-ND	313.60	GKG10066-07
	4.5	20.0	N750±300	500	Red	SG2003CT-ND	5.40	23.63	74.25	SG2003TR-ND	313.60	GKG20066-07
	6.5	30.0	N900±450	300	Green	SG2004CT-ND	5.40	23.63	74.25	SG2004TR-ND	313.60	GKG30066-07
2	1.4	3.0	0±200	300	Red Dot*	SG2007CT-ND	6.40	28.00	88.00	SG2007TR-ND	371.70	GKG3R067-07
	2.0	6.0	0±200	500	Blue	SG2008CT-ND	6.40	28.00	88.00	SG2008TR-ND	371.70	GKG6R067-07
	3.0	10.0	0±300	500	White	SG2009CT-ND	6.40	28.00	88.00	SG2009TR-ND	371.70	GKG10067-07
	4.5	20.0	N750±300	500	Red	SG2010CT-ND	6.40	28.00	88.00	SG2010TR-ND	371.70	GKG20067-07
	6.5	30.0	N900±450	300	Green	SG2011CT-ND	6.40	28.00	88.00	SG2011TR-ND	371.70	GKG30067-07

*Marking on bottom of capacitor.

SG9005-ND Tuning Tool $13.00

Fig. 1

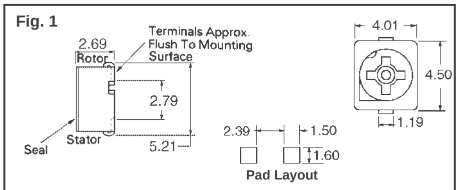
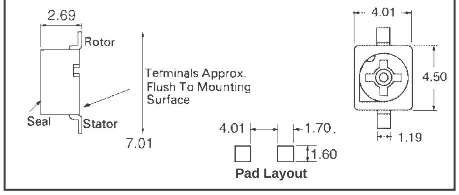


Fig. 2



SPRAGUE GOODMAN

SURFTRIM® Surface Mount GKP Series Capacitors

2.2mm x 3.1mm x 1.2mm

FEATURES:

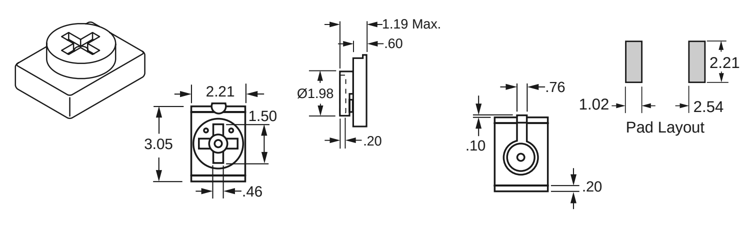
- Thinnest and smallest chip type
- Multilayer construction
- Carrier and reel packaging standard

SPECIFICATIONS: • **Operating Temperature Range:** -25°C – 85°C

- **Dielectric Withstanding Voltage:** 55 VDC
- **Insulation Resistance:** 10^4 Megohms min.
- **Voltage Rating:** 25 VDC
- **Torque:** 0.14 to 1.39 in.-oz.

Tuning Tool

GTT-11-ND (SG2014 - SG2016)..**$3.22**



Capacitance (pF) Min.	Capacitance (pF) Max.	TCC (ppm /°C)	Q(min.) Code (1 MHZ)	Digi-Key Part No.	Cut Tape Pricing 5	Cut Tape Pricing 25	Cut Tape Pricing 100	Digi-Key Part No.	Tape & Reel Pricing 2,000	Sprague-Goodman Part No.
2.5	6.0	NPO±500	200	SG2016CT-ND	8.00	35.00	110.00	SG2016TR-ND	600.00/M	GKP6R066
3.0	10.0	NPO±500	200	SG2014CT-ND	8.00	35.00	110.00	SG2014TR-ND	600.00/M	GKP10066
4.5	20.0	N750±500	200	SG2015CT-ND	8.00	35.00	110.00	SG2015TR-ND	600.00/M	GKP20066

Top & Bottom/Side Adjust FILMTRIM® Plastic Dielectric Capacitors

GYA, GYB Series — 8mm; GYC, GYD, GZC, GZD Series — 10mm

Fig. 1

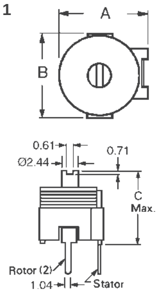
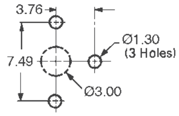
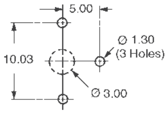


Fig. 1A
8 mm



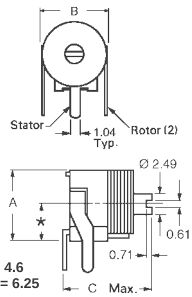
Mounting Hole Layout 3 Lead

Fig. 1B
10 mm



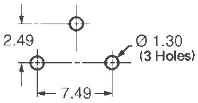
Mounting Hole Layout

Fig. 2



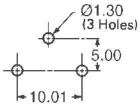
∗ 8mm = 4.6
10mm = 6.25

Fig. 2A
8 mm



Mounting Hole Layout

Fig. 2B
10 mm



Mounting Hole Layout

FEATURES:

- Compact size
- Most stable TCC for single turn trimmers
- Low cost for commercial/industrial applications
- Linear capacitance change vs. rotation
- Typical applications: Mobile radios, transmitters, pagers, electronic games, wireless equipment, CATV

SPECIFICATIONS:

- **Dielectric Construction:** GYA, GYB, GYC, GYD Series: Polypropylene; GZC and GZD Series: Polycarbonate
- **Voltage Rating:** 100 WVDC
- **Dielectric Withstanding Voltage:** 200 VDC
- **Operating Temperature:** GYA and GYB Series: –40°C to 70°C; GYC, GYD, GZC, GZD Series: –40°C to 85°C
- **Contact Resistance:** <0.010 Ohm
- **Insulation Resistance:** >10,000 M Ohm
- **Torque:** GYA and GYB Series: 0.2-3.0 in.-oz.; GYC, GYD, GZC, GZD Series: 0.2-5.5 in.-oz.
- **Q (min) @ 1 MHz:** GYA, GYB, GYC, GYD Series: 1000; GZC and GZD Series: 200

Fig.	Capacitance (pF) Min.	Capacitance (pF) Max.	TCC (ppm/°C)	Dimensions A	Dimensions B	Dimensions C	Color Code	Digi-Key Part No.	Pricing 1	Pricing 10	Pricing 100	Sprague-Goodman Part No.
8mm												
1A	1.6	5.0	0±300	8.51	7.87	10.2	Gray	SG3000-ND	1.19	10.20	93.50	GYA5R000
	2.0	10.0	0±300	8.51	7.87	10.2	Yellow	SG3001-ND	1.19	10.20	93.50	GYA10000
	2.0	15.0	0±400	8.51	7.87	10.2	Blue	SG3002-ND	1.30	11.10	101.75	GYA15000
	2.2	22.0	0±400	8.51	7.87	10.2	Green	SG3003-ND	1.30	11.10	101.75	GYA22000
	2.3	27.0	0±350	8.51	7.87	10.2	Red	SG3004-ND	1.37	11.70	107.25	GYA27000
	3.0	36.0	0±300	8.51	7.87	10.2	Violet	SG3005-ND	2.00	17.10	156.75	GYA36000
2A	1.6	5.0	0±300	8.51	7.87	10.2	Gray	SG3020-ND	2.14	18.30	167.75	GYB5R000
	2.0	10.0	0±300	8.51	7.87	10.2	Yellow	SG3021-ND	2.14	18.30	167.75	GYB10000
	2.0	15.0	0±400	8.51	7.87	10.2	Blue	SG3022-ND	2.28	19.50	178.75	GYB15000
	2.2	22.0	0±400	8.51	7.87	10.2	Green	SG3023-ND	2.31	19.80	181.50	GYB22000
	2.3	27.0	0±350	8.51	7.87	10.2	Red	SG3024-ND	2.38	20.40	187.00	GYB27000
10mm												
1B	2.0	15.0	0±400	11	10.16	10.2	Blue	SG3006-ND	1.68	14.40	132.00	GYC15000
	3.0	20.0	0±400	11	10.16	10.2	Green	SG3007-ND	1.68	14.40	132.00	GYC20000
	3.5	40.0	0±350	11	10.16	10.2	Clear	SG3008-ND	1.65	14.10	129.25	GYC40000
	4.5	65.0	0±350	11	10.16	10.2	Yellow	SG3009-ND	1.68	14.40	132.00	GYC65000
2B	2.0	15.0	0±400	11	10.16	10.2	Blue	SG3025-ND	2.28	19.50	178.75	GYD15000
	3.0	20.0	0±400	11	10.16	10.2	Green	SG3026-ND	2.35	20.10	184.25	GYD20000
	3.0	40.0	0±350	11	10.16	10.2	Clear	SG3027-ND	2.52	21.60	198.00	GYD40000
	4.5	65.0	0±350	11	10.16	10.2	Yellow	SG3028-ND	2.77	23.70	217.25	GYD65000
1B	8.0	80.0	0±200	11	10.16	11.4	Red	SG3010-ND	2.28	19.50	178.75	GZC80000
	9.0	100.0	0±400	11	10.16	11.4	Violet	SG3011-ND	3.61	30.90	283.25	GZC10100
	9.0	120.0	0±350	11	10.16	11.4	Orange	SG3012-ND	5.36	45.90	420.75	GZC12100
	10.0	150.0	0±350	11	10.16	12.0	Orange	SG3013-ND	6.23	53.40	489.50	GZC15100
	10.0	180.0	0±350	11	10.16	12.0	Orange	SG3014-ND	7.32	62.70	574.75	GZC18100
2B	8.0	80.0	0±200	11	10.16	11.4	Red	SG3015-ND	3.05	26.10	239.25	GZD80000
	9.0	100.0	0±400	11	10.16	11.4	Violet	SG3016-ND	4.55	39.00	357.50	GZD10100
	9.0	120.0	0±350	11	10.16	11.4	Orange	SG3017-ND	6.16	52.80	484.00	GZD12100
	10.0	150.0	0±350	11	10.16	12.0	Orange	SG3018-ND	6.97	59.70	547.25	GZD15100
	10.0	180.0	0±350	11	10.16	12.0	Orange	SG3019-ND	7.77	66.60	610.50	GZD18100

Tuning Tool

SG9004-ND **$15.44**

Panasonic® Micro Speakers

Features: • Thin and lightweight design • High efficiency and high fidelity sound • High reliability **Recommended Applications:** • Compact AV equipment • Electronic office equipment • Information and communication equipment

Fig. 1

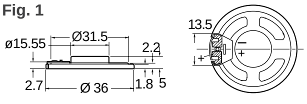


Fig. 2

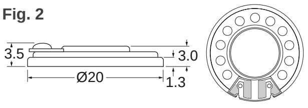


Fig. 3

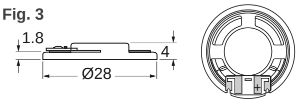


Fig. 4

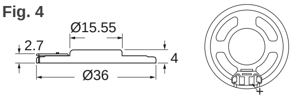


Fig.	Outer Dims. (mm.)	Input (W) Rated	Imped-ance (Ω)	Frequency Range (Hz)	Sound Press. Level	Net Wgt. (g)	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
1	36	0.20	8	325~3500	74	8	P9604-ND	6.88	6.19	5.50	EAS-3P128A
2	20	0.2	7	Full Range	77	2.5	P10173-ND	4.29	3.82	3.17	EAS-2P113D
3	28	0.3	8	Full Range	81	5	P10174-ND	6.01	5.34	4.44	EAS-2P104H
4	36	0.5	8	Full Range	84	8	P10175-ND	5.38	4.79	3.97	EAS-3P127A

Oval Magnetic Shielded Speakers

Features: • Low magnetic leakage flux • High tone quality **Recommended Applications:** • AV equipment

Fig. 1

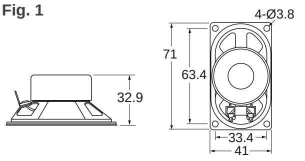


Fig. 2

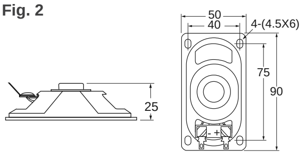


Fig. 3

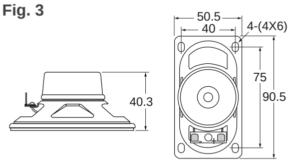


Fig. 4

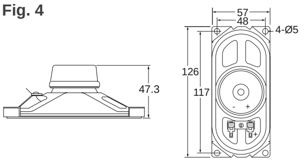
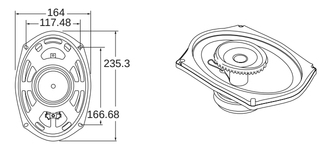


Fig.	Outer Dims. (mm.)	Input (W) Rated	Imped-ance (Ω)	Frequency Range (Hz)	Sound Press. Level	Net Wgt. (g)	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
1	70 x 40	1.5	16	Full Range	90	107	P10184-ND	3.63	3.23	2.68	EAS-G7D504A2
2	90 x 50	1.5	16	Full Range	87	45	P10185-ND	3.23	2.87	2.38	EAS-G9D550B2
3	90 x 50	3	8	Full Range	88.5	135	P10186-ND	4.54	4.04	3.35	EAS-G9D541A2
4	120 x 60	3	8	Full Range	93.5	180	P10187-ND	6.05	5.38	4.47	EAS-G12D531E2

Two Way Speakers (Automotive)

- High rigidity polypropylene cone

6” x 9” Rear Deck Mount – 2 Way
2-1/2” Cone Tweeter

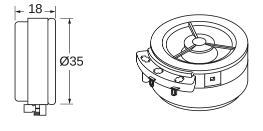


Outer Dimensions (mm unless noted)	Input (W) Rated	Max.	Imped-ance (Ω)	Frequency Range (Hz)	Sound Press. Level	Net Wgt. (g)	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
6” x 9” (152.4 x 228.6mm)	40	120	4	30hz~25khz	87	1200	P10181-ND	33.64	29.91	24.83	EAS-A23DX02B1

Balanced Dome Tweeter

Features: • High efficiency • High quality sound • Compact and lightweight

Recommended Applications: • Audio components • TV • Car speaker system



Outer Dims. (mm.)	Input (W) Rated (Max)	Imped-ance (Ω)	Frequency Range (Hz)	Sound Press. Level	Net Wgt. (g)	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
35	30	6	8khz~20khz	80	83	P10183-ND	19.91	17.70	14.69	EAS-13KH11HB4-A

Hi-Fi Micro Speakers

Features:
• Discrete edge surround, wide range reproduction • Slim design • Low magnetic leakage flux design

Recommended Applications:
• Multimedia equipment

Fig. 1

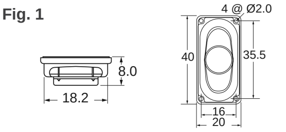


Fig. 2

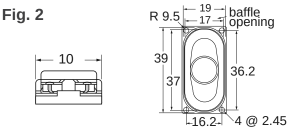


Fig. 3

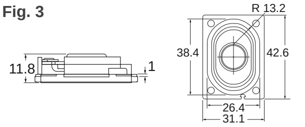


Fig.	Outer Dims. (mm.)	Input (W) Rated	Imped-ance (Ω)	Frequency Range (Hz)	Sound Press. Level	Net Wgt. (g)	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
1	40 x 20	0.5	8	Full Range	78	8	P9611-ND	8.69	7.73	6.42	EAS-4D06C
2	40 x 20	1	8	Full Range	76	7	P9612-ND	10.03	8.92	7.40	EAS-4D05A
3	40 x 30	1	16	Full Range	73	12	P9613-ND	7.21	6.41	5.32	EAS-4D02C0

Small Size General Purpose Speakers

Features: • Wide frequency range • Apply to wide variety of needs • Wide range of product selection
Recommended Applications: • CD-radio-cassette recorders • Information and communication equipment

Fig. 1

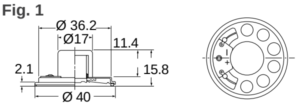


Fig. 2

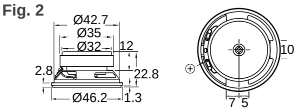


Fig. 3

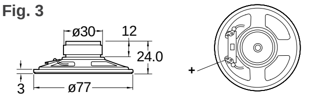


Fig. 4

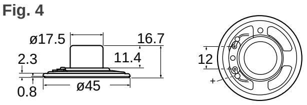


Fig. 5

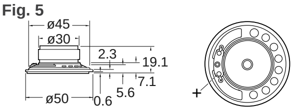


Fig. 6

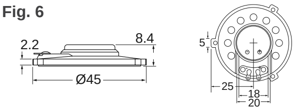


Fig. 7

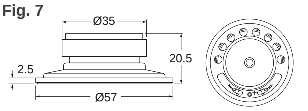


Fig. 8

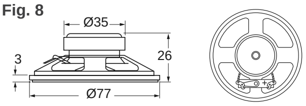


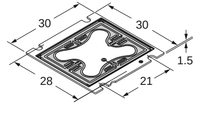
Fig.	Outer Dims. (mm.)	Input (W) Rated	Max.	Imped-ance (Ω)	Frequency Range (Hz)	Sound Pressure Level	Net Wgt. (g)	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
1	40	0.10	—	8	530~3000	92	25	P9605-ND	5.61	5.05	4.49	EAS-4P15SA
2	45	1.00	2.00	4	430~10000	88	70	P9606-ND	5.64	5.08	4.52	EAS-45P36S
3	80	0.63	—	8	185~4000	93	68	P9607-ND	4.44	4.00	3.56	EAS-8P29SG
4	45	0.10	—	8	390~3000	93	24	P9608-ND	4.50	4.05	3.60	EAS-45P30S
5	50	0.16	—	8	350~3000	93	57	P9610-ND	3.76	3.39	3.01	EAS-5P13S
6	45	0.25	—	8	Full Range	77	13	P10176-ND	8.58	7.63	6.34	EAS-45P104S
7	57	0.5	—	8	Full Range	92	75	P10177-ND	7.21	6.41	5.32	EAS-6P22S
8	77	0.63	—	25	Full Range	95	83	P10178-ND	6.87	6.11	5.07	EAS-8P36S

Card Type Speakers

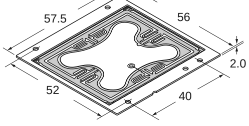
Ultra-thin and ultra-light, these new card type speakers deliver a wide frequency range of high-quality sound. These amazing new Card Type Speakers from Panasonic are only 1/5th the thickness of dynamic speakers (comparing the WM-R57A with dynamic speakers which have the same dimensions). Based on newly developed, original technology, they deliver top-quality, low-distortion reproduction across a wide frequency sound. So small and light, they are ideal for applications that range from notebook PCs, PDAs, and other mobile communications to AV equipment and home electronics.

Key Features: • Ultra-thin, ultra-light design using a piezo ceramic diaphragm. • Outstanding broad-spectrum audio reproduction made possible by the two-way mechanical structure of the divided diaphragm, combining one large speaker for low-frequency sounds with four small speakers for high-frequency sounds. • Newly developed double construction damper and high polymer material minimize distortion, ensuring superior reproduction. • Because no coil or magnet is used, there is no leakage of electromagnetic radiation to interfere with magnetic media. • The vibrating membrane is covered completely with a high polymer coating, to protect against dampness, dust, and corrosion.

WM-R30B



WM-R57A



Specificications: • **Storage Temperature:** -40°C to 70°C • **Operating Temperature:** -30°C to 60°C

Dimensions (H x W) (mm)	Depth (mm)	Frequency Response (Hz)	S.P.L at 3V RMS†	Distance of Mic & Speaker	Max. Input (V RMS)	Wgt. (g)	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
30.0 x 30.0	1.5	400Hz~100kHz	70dB	0.3 m	7	1.0	P11123-ND	5.67	5.04	4.19	WM-R30B
57.5 x 56.0	2.0	150Hz~100kHz	70dB	0.5 m	7	5.0	P11124-ND	6.62	5.88	4.89	WM-R57A

† ± 5dB average at .4 kHz, .8 kHz, 1.5 kHz, 3 kHz.

CUI STACK Ferrite Magnet Speakers

These low cost ferrite speakers are ideal for general applications such as information and communications equipment, portable audio equipment, and industrial use. Mylar cone versions offer additional protection in moist environments or conditions requiring enhanced weather resistance.

Fig. 1 Paper Cone or Mylar Cone

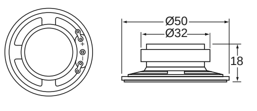


Fig. 2 Paper Cone

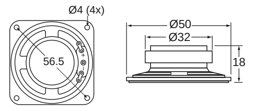


Fig. 3 Paper Cone or Mylar Cone

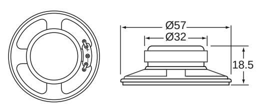


Fig. 4 Paper Cone

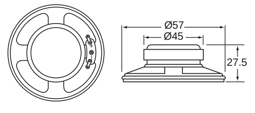


Fig. 5 Paper Cone or Mylar Cone

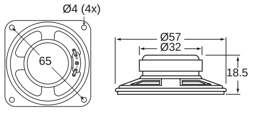


Fig. 6 Paper Cone or Mylar Cone

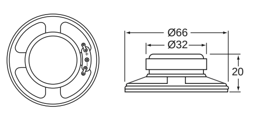


Fig. 7 Paper Cone

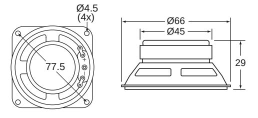


Fig. 8 Paper Cone

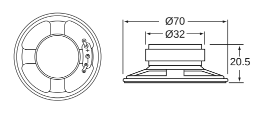


Fig. 9 Paper Cone or Mylar Cone

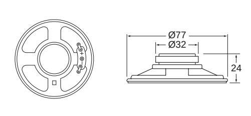


Fig. 10 Paper Cone

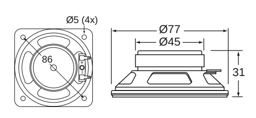


Fig. 11 Paper Cone

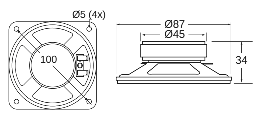


Fig. 12 Paper Cone

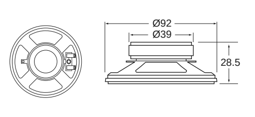


Fig. 13 Paper Cone

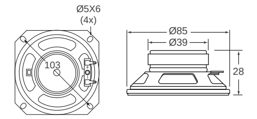


Fig. 14 Paper Cone or Mylar Cone

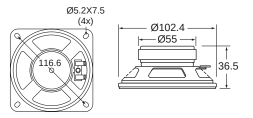


Fig. 15 Paper Cone

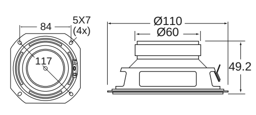


Fig. 16 Mylar Cone

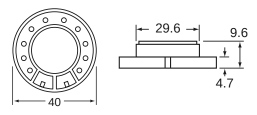


Fig. 17 Mylar Cone

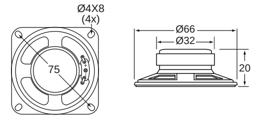


Fig. 18 Mylar Cone

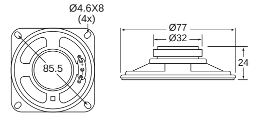


Fig. 19 Mylar Cone

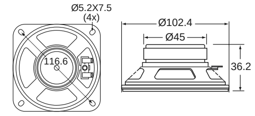


Fig.	Diameter (mm)	Depth (mm)	Speaker Shape	Frame Shape	Impedance (Ω)	Frequency Range		Input (W) Norm/Max.		Magnet Weight (oz.)	S.P.L. (dB)	Digi-Key Part No.	Price Each 1	10	50	100	CUI Stack Part No.
Paper Cone Type																	
1	50	17.5	Round	Round	8	450	4K	0.25	0.5	0.58	87	GF0501-ND	2.45	1.96	1.72	1.63	GF0501
2	50	17.5	Round	Square	8	480	4K	0.25	0.5	0.58	80	GF0506-ND	2.48	1.98	1.73	1.65	GF0506
3	57	18.5	Round	Round	8	380	4K	0.25	0.5	0.58	86	GF0571-ND	2.45	1.96	1.72	1.63	GF0571
4	57	27.2	Round	Round	8	450	12K	3.00	5.0	1.70	92	GF0573-ND	3.35	2.68	2.35	2.23	GF0573
5	57	18.5	Round	Square	8	380	4K	0.25	0.5	0.58	86	GF0576-ND	2.48	1.98	1.73	1.65	GF0576
6	66	19.5	Round	Round	8	300	4K	0.30	0.5	0.58	86	GF0661-ND	2.80	2.24	1.96	1.87	GF0661
7	66	29	Round	Square	8	300	16K	3.00	5.0	1.70	90	GF0668-ND	3.67	2.93	2.57	2.44	GF0668
8	70	21.5	Round	Round	8	310	4K	0.50	1.0	0.58	91	GF0701-ND	2.88	2.31	2.02	1.92	GF0701
9	77	24	Round	Round	8	240	10K	1.00	2.0	0.58	90	GF0771-ND	2.88	2.30	2.01	1.92	GF0771
10	77	31	Round	Square	8	250	23K	3.00	5.0	1.70	95	GF0778-ND	3.86	3.09	2.70	2.57	GF0778
11	87	32.5	Round	Square	8	290	16K	2.00	4.0	1.70	99	GF0876-ND	4.06	3.25	2.84	2.70	GF0876
12	92	32	Round	Round	8	300	5K	2.00	3.0	1.00	93	GF0922-ND	3.74	2.99	2.62	2.49	GF0922
13	92	32	Round	Square	8	300	5K	2.00	3.0	1.00	93	GF0927-ND	3.67	2.93	2.57	2.44	GF0927
14	102	36.5	Round	Square	8	145	17K	6.00	10.0	2.60	93	GF1004-ND	5.15	4.12	3.61	3.43	GF1004
15	110	49.2	Round	Square	8	100	15K	20.00	40.0	3.00	90	GF1004H-ND	8.36	6.69	5.85	5.57	GF1004H
Mylar Cone Type (Weather Resistant)																	
16	40	9.6	Round	Round	8	150	3K	0.1	0.2	—	113	GF0401M-ND	2.49	1.99	1.74	1.66	GF0401M
1	50	18.2	Round	Round	8	470	5K	0.25	0.5	0.58	84	GF0501M-ND	2.96	2.37	2.07	1.97	GF0501M
3	57	18.5	Round	Round	8	420	9K	0.25	0.5	0.58	92	GF0571M-ND	2.96	2.37	2.07	1.97	GF0571M
6	66	22	Round	Round	8	430	9K	0.5	1	0.58	88	GF0661M-ND	3.16	2.53	2.21	2.10	GF0661M
17	66	22	Round	Square	8	330	9K	0.5	1	0.58	83	GF0666M-ND	3.20	2.56	2.24	2.13	GF0666M
9	77	24	Round	Round	8	280	11K	1	2	0.58	90	GF0771M-ND	3.35	2.68	2.35	2.23	GF0771M
18	77	24	Round	Square	8	360	11K	1	2	0.58	91	GF0776M-ND	3.35	2.68	2.35	2.23	GF0776M
19	100	36	Round	Square	8	250	13K	3	5	1.70	93	GF1003M-ND	4.57	3.65	3.20	3.04	GF1003M
14	100	37	Round	Square	8	230	15K	6	10	3.00	93	GF1004M-ND	5.62	4.50	3.94	3.75	GF1004M

NEW! Notebook Speakers

Features: • Low profile rectangular design • Light weight rugged resin frame • Wide frequency range • Low resonant frequency
Recommended Applications: • Notebook Computers • Portable communication equipment • Multimedia equipment.

Fig. 1

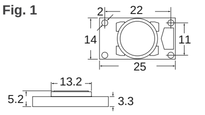


Fig. 2

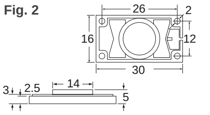


Fig. 3

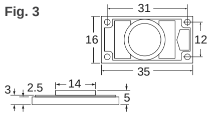


Fig. 4

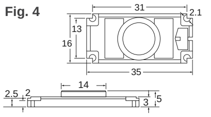


Fig. 5

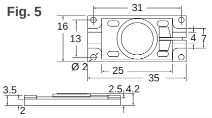


Fig. 6

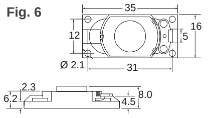
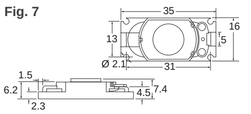


Fig. 7



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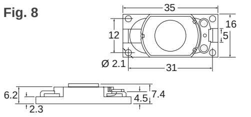

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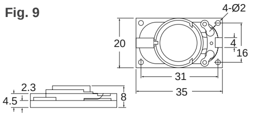


Fig. 10

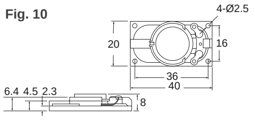


Fig. 11

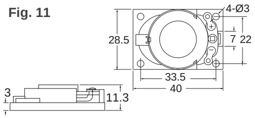


Fig.	Size (mm)	Depth (mm)	Frame Style	Resonant Freq. HZ +/-20%	Freq. Range (HZ)	Impedence Ohms	Power (W) Input NOM	MAX	Magnet Size (mm)	Digi-Key Part Number	Price Each 1	10	50	100	CUI Stack Part No.
1	14 x 25	5.2	Plastic	750	fo ~ 3.5K	8	1.0	1.5	7.9 x 1.3	GC0251K-ND	3.95	3.16	2.77	2.63	GC0251K
2	16 x 30	5.0	Plastic	500	fo ~ 4K	8	0.5	1.0	7.9 x 1.3	GC0301K-ND	4.05	3.24	2.84	2.70	GC0301K
3	16 x 35	5.0	Plastic	650	fo ~ 20K	8	0.5	1.0	7.9 x 1.3	GC0351M-ND	3.30	2.64	2.31	2.20	GC0351M
4	16 x 35	5.0	Plastic	650	fo ~ 20K	8	0.5	1.0	7.9 x 1.3	GC0351M-3-ND	3.30	2.64	2.31	2.20	GC0351M-3
5	16 x 35	4.2	Plastic	650	fo ~ 4K	8	1.0	1.5	7.9 x 1.0	GC0351N-ND	4.23	3.38	2.96	2.82	GC0351N
6	16 x 35	8.0	Plastic	500	fo ~ 12K	8	1.0	2.0	8.0 x 2.0	GC0351P-ND	4.33	3.46	3.03	2.88	GC0351P
7	16 x 35	7.4	Plastic	630	fo ~ 13K	4	1.0	2.0	8.1 x 1.4	GC0351P-1-ND	4.33	3.46	3.03	2.88	GC0351P-1
8	16 x 35	7.4	Plastic	630	fo ~ 13K	4	1.0	2.0	8.1 x 1.4	GC0351P-3-ND	4.33	3.46	3.03	2.88	GC0351P-3
9	20 x 35	8.0	Plastic	550	fo ~ 11K	8	1.0	1.5	11.0 x 1.5	GC0351K-ND	4.33	3.46	3.03	2.88	GC0351K
10	20 x 40	8.0	Plastic	550	fo ~ 12K	8	1.0	1.5	11.0 x 1.5	GC0401S-ND	4.43	3.54	3.10	2.95	GC0401S
11	28.5 x 40	11.3	Plastic	390	fo ~ 20K	8	1.0	2.0	12.5 x 1.8	GC0401K-ND	4.43	3.54	3.10	2.95	GC0401K

CTS Speakers

Fig. 1

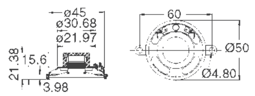


Fig. 2

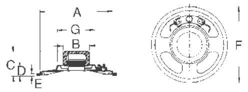


Fig. 3

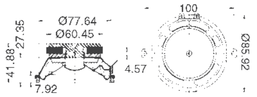


Fig. 4

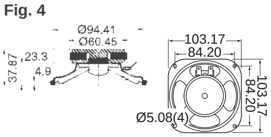


Fig. 5

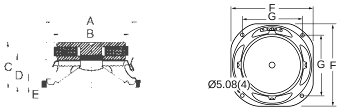


Fig. 6

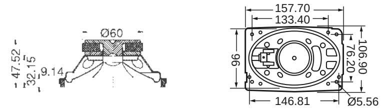


Fig. 7

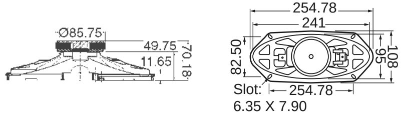


Fig.	Description	Nominal Impedance Ohm ± 15%	Power Rating Watt	Resonance Frequency Hz	Response Range Hz	Nominal Sensitivity* dB ± 2.0 avg	Voice Coil Diameter (mm)	Magnet Dimensions (mm) A	B	C	D	E	F	G	Magnet Size (mm)	Weight (Oz)	Digi-Key Part No	Pricing 1	25	50	CTS Part No.
1	2" Round	8	0.5	450 ± 20%	390 ~ 3,000	80.0	12.70	—	—	—	—	—	—	—	12.96 X 9.98	0.34	10338-ND	15.60	352.50	645.00	400-200-08
2	2.5" Round	8	0.5	390 ± 20%	390 ~ 3,000	82.0	12.70	59.48	21.97	20.32	9.01	2.20	66.04	30.86	12.96 X 9.98	0 34	10339-ND	16.51	373.06	682.63	400-212-08
3	3.5" Round	10	15	135 ± 15%	135 ~ 22,000	84.0	19.05	—	—	—	—	—	—	—	60.45 X 25.4 X 7.11	2.94	10340-ND	16.90	381.88	698.75	400-312-10
4	4" Round	4	15	245 ± 10%	245 ~ 6,000	93.5	19.05	—	—	—	—	—	—	—	60.45 X 25.4 X 7.11	2.94	10341-ND	20.80	470.00	860.00	400-400-04
5	4.5" Round	8	25	78 ± 15 Hz	78 ~ 20,000	90.0	25.40	104.54	85.75	52.62	32.18	8.17	114.30	84.18	87.75 X 32.51 X 10.8	9.4	10342-ND	21.45	484.69	886.88	400-412-08
5	5" Round	4	15	325 ± 10%	325 ~ 6,000	93.5	25.40	109.04	60.45	42.36	27.83	8.94	16.91	—	87.75 X 32.51 X 10.8	2.94	10343-ND	21.32	481.75	881.50	400-500-04
5	6" Round	4	25	55 ± 10 Hz	55 ~ 15,000	88.5	25.40	140.25	85.75	63.01	42.57	8.78	157.00	—	87.75 X 32.51 X 10.8	9.4	10344-ND	24.70	558.13	1021.25	400-600-04
6	4 X 6" Oval	4	15	110 ± 15 Hz	110 ~ 18,000	88.5	19.05	—	—	—	—	—	—	—	60.45 X 25.4 X 7.11	2.94	10346-ND	17.42	393.63	720.25	401-406-04
7	4 X 10" Oval	4	25	70 ± 15 Hz	70 ~ 15,000	92.5	25.40	—	—	—	—	—	—	—	87.75 X 32.51 X 10.8	9.40	10347-ND	27.95	631.56	1155.63	401-410-04

* @ 300, 400, 500, & 600 Hz.

Panasonic Miniature Audio Transducer For General Application

For use in: burglar alarms, paging systems, smoke detectors, gas detectors, light and radiation detectors, data entry terminals, cash registers, alarm clocks, fish finders, metal detectors, medical equipment, test instruments, telephones, movie cameras, automotive warning systems, production machinery and various electronic equipment. NOT WASHABLE UNLESS NOTED!

Fig. 1

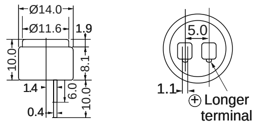


Fig. 2

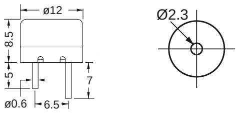


Fig. 3

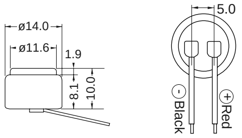


Fig. 4

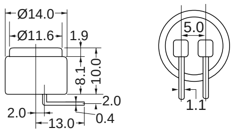


Fig. 5

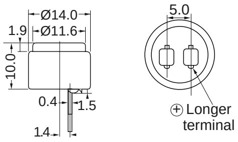


Fig. 6

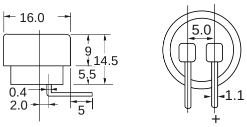


Fig. 7

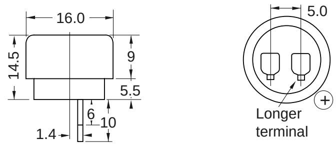
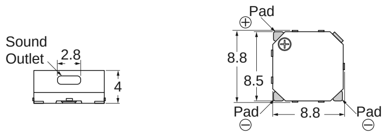
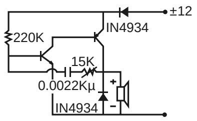


Fig. 8



Continuous Tone



Intermittent Tone

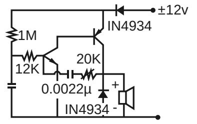


Fig.	Rated Input (mW)	D.C. Resistance (Ohms)	Impedence (Ohms)	S. P. L. (dB/1 W/1 m)	Frequency (Hz)	Physical Size (mm)	Terminal	Digi-Key Part No.	Pricing 1	10	100	500	Tape & Reel Pricing 1,000	Panasonic Part No.
2	50	12	35	86	3.8K~4.3K	12 x 8.5	Straight Pin	P9965-ND	4.44	39.37	318.20	1121.21	—	EAF-12RF04C
3	50	15	45	93	2.5K~3K	14 x 10	Lead Wire	P9966-ND	3.48	30.83	249.19	878.03	—	EAF-14R06A
4	50	15	45	93	2.5K~3K	14 x 10	Lead Wire	P9977-ND	4.50	39.90	322.50	1136.36	—	EAF-14R06B
5	50	15	45	93	2.5K~3K	14 x 10	Straight Pin	P9978-ND*	3.61	31.97	258.43	910.61	—	EAF-14RM06CT
6	50	15	45	93	2.5K~3K	16 x 14.5	Bent Pin	P9980-ND	5.86	50.80	420.11	1480.30	—	EAF-16R02B
7	50	15	45	100	2.5K~3K	16 x 14.5	Straight Pin	P9981-ND	5.45	48.28	390.23	1375.00	—	EAF-16R02C
5	50	15	45	93	2.5K~3K	14 x 10	Straight Pin	P9999-ND*†	6.33	56.15	453.87	1599.24	—	EAF-14R06CW
1	50	15	45	93	2.5K~3K	14 x 10	Straight Pin	P9969-ND†	4.42	39.18	316.70	1115.91	—	EAF-14RM06CN
8	10	20	—	92	2.5K~2.7K	8.5 x 8.5	Surface Mount	P9902CT-ND‡	4.76	43.03	384.55	1611.46	2435.00	EAF-8RM08EF
2	50	36	80	85	2048	12 x 8.5	Straight Pin	P10171-ND	2.93	26.33	234.08	971.43	—	EAF-12RT04CC

*Washable †Heat Resistance Type ‡ For Tape and Reel Part No. change "CT-ND" (cut-tape) to "TR-ND".

Panasonic® Piezoelectric Ceramic Buzzer Units

Applications: Smoke detectors, alarms, detectors, home appliances, radio beepers, electronic games, keyboard signalers, cameras, and telephone ringers.

P9948 and P9928 Features: • Drive oscillator circuitry — will run directly from commonly used voltage source such as dry batteries. • High sound level and low input voltage. • Low power consumption. Wide operating range of supply voltage: 3 to 20VDC.

Features For All Others: • Low power consumption. • Long life and no noise due to non-contact. • Thin thickness buzzer element. • External drive type. • Covering wide frequency range. • No magnetic field is generated. • High sound pressure level.

Example Driving Circuit (For Self Drive Type)

P9912	P9920
P9913	P9921
P9914	P9923
P9915	

Q: ZTX451 or equivalent
D: 1N4148 or equivalent

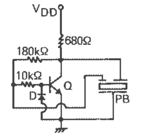


Fig. 1

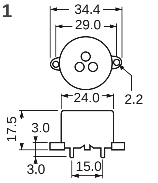


Fig. 2

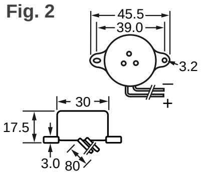


Fig. 3

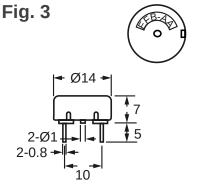


Fig. 4

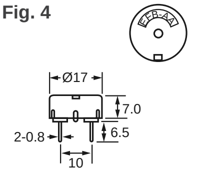


Fig. 5

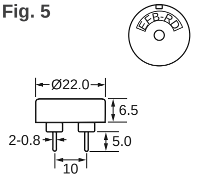


Fig. 6

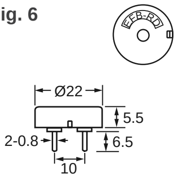


Fig. 7

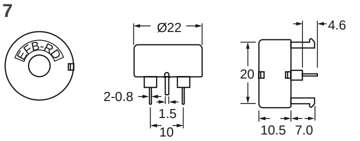


Fig. 8

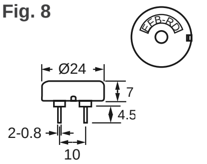


Fig. 9

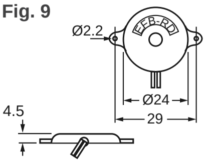


Fig. 10

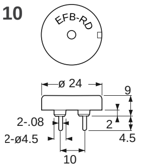


Fig. 11

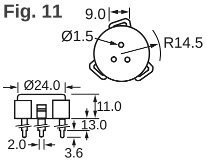


Fig. 12

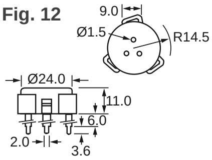


Fig. 13

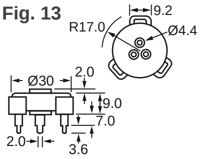


Fig. 14

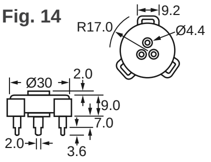


Fig. 15

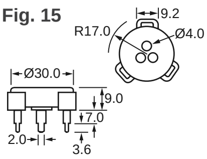


Fig. 16

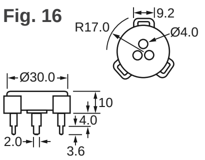


Fig. 17

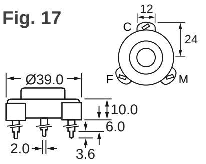


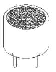
Fig.	Sound Pressure Level	Oscillating Freq.	Cap. (@1 KHz)	Current (12 VDC)	Input Voltage	Digi-Key Part No.	Pricing 1	10	100	500	1,000	5,000	Panasonic Part No.
1	80dB min. @ 12VDC	3.7KHz	—	15mA	3 ~ 20VDC	P9948-ND	8.34	70.53	551.43	1943.00	3664.00	3420.00/M	EFB-CB37C11
2	90dB min. @ 12VDC	2.8KHz	—	15mA	3 ~ 20VDC	P9928-ND	8.32	70.41	550.47	1939.50	3658.00	3414.00/M	EFB-CC28C15
3	74dB min. @ (15V p-p, 4KHz Sq. Wave)	—	8500pF	—	25V p-p	P9900-ND	3.19	27.01	211.18	744.00	1403.00	1310.00/M	EFB-AA14D001
4	86dB min. @ (15V p-p, 4KHz Sq. Wave)	—	7000pF	—	25V p-p	P9957-ND	2.13	17.99	140.63	495.50	934.00	872.00/M	EFB-AA40D102
5	85dB min. @ (15V p-p, 4KHz Sq. Wave)	—	15000pF	—	30V p-p	P9929-ND	2.18	18.48	144.48	509.00	960.00	896.00/M	EFB-RD22C41
6	80dB min. @ (15V p-p, 4KHz Sq. Wave)	—	15000pF	—	30V p-p	P9951-ND	2.14	18.14	141.83	500.00	942.00	880.00/M	EFB-RD22C413
7	98dB min. @ (15V p-p, 4KHz Sq. Wave)	—	15000pF	—	30V p-p	P9909-ND	2.26	19.10	149.30	526.00	992.00	926.00/M	EFB-RD22C415
8	85dB min. @ (15V p-p, 4KHz Sq. Wave)	—	10000pF	—	30V p-p	P9910-ND	2.80	23.72	185.42	653.50	1232.00	1150.00/M	EFB-RD24C41B
9	80dB min. @ (15V p-p, 4KHz Sq. Wave)	—	12000pF	—	30V p-p	P9911-ND	2.18	18.48	144.48	509.00	960.00	896.00/M	EFB-RC24C41
10	85dB min. @ (15V p-p, 4KHz Sq. Wave)	—	10000pF	—	30V p-p	P9924-ND	1.80	15.25	119.20	420.00	792.00	739.00/M	EFB-RD24C411
11	96dB min. @ 10VDC	3.5KHz	—	—	3 ~ 20VDC	P9912-ND*	3.41	28.86	225.63	795.00	1499.00	1399.00/M	EFB-RM38C13
12	93dB min. @ 10VDC	3.5KHz	—	—	3 ~ 20VDC	P9913-ND*	3.41	28.86	225.63	795.00	1499.00	1399.00/M	EFB-RM38C123
13	85dB min. @ 12VDC	2.0KHz	—	—	3 ~ 20VDC	P9914-ND*	2.98	25.19	196.97	694.00	1309.00	1222.00/M	EFB-RL20C102
14	104dB min. @ 12VDC	2.8KHz	—	—	3 ~ 20VDC	P9915-ND*	2.92	24.67	192.88	679.50	1282.00	1196.00/M	EFB-RL28C11
15	106dB min. @ 12VDC	3.7KHz	—	—	3 ~ 20VDC	P9920-ND*	3.17	26.83	209.74	739.00	1394.00	1301.00/M	EFB-RL37C20
16	106dB min. @ 12VDC	3.7KHz	—	—	3 ~ 20VDC	P9921-ND*	3.17	26.83	209.74	739.00	1394.00	1301.00/M	EFB-RL37C22
17	106dB min. @ 12VDC	3.2KHz	—	—	3 ~ 20VDC	P9923-ND*	6.08	51.41	401.90	1416.00	2670.00	2492.00/M	EFB-BD32B21

* Driving circuit required. **NOTE**: All buzzers and microphones are non-washable.

Ultrasonic Ceramic Sensor/Transducer

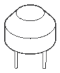
Ultrasonic Ceramic Sensor consisting of a disc/bimorph type piezoelectric ceramic vibrator that is used as a sensor for transmitting and receiving ultrasonics in the air.
Since the ultrasonic sensor has a resonance type vibrator, it is high in sensitivity and has outstanding sound pressure level. It has wide applications for burglar alarm systems, automatic door openers, flow rate detectors, and remote-control systems in TV, home appliance and toys etc. Sensors are not washable.

Type U Standard Type *
Type S Temperature Stable Type **



* Temp. Range: -20°C to 60°C
** Temp. Range: -40°C to 100°C

Type Q
Enclosed Type *



Type	Class	Ctr Freq. 51.0 (KHz)	Sensitivity (dB/V/mbar)	Sensitivity (0dB = 1V/Pa)	Min. Band-Width (KHz)	Sound Pressure Level (dB)	Max. Input Volt. (Vrms)	Dimensions (mm) Physical Size Dia.	Ht.	Leads Length	Space	Digi-Key Part No.	Pricing 1	10	100	500	1,000	Panasonic Part No.
Q	Receiver	40.0	-75	-55	1.0	—	—	18.0	12.0	12.5	7.5	P9892-ND	21.63	194.64	1730.18	6488.16	12111.23	EFR-RQB40K5
Q	Transmitter	40.0	—	—	1.0	105	20	18.0	12.0	12.5	7.5	P9893-ND	21.63	194.64	1730.18	6488.16	12111.23	EFR-RTQB40KS
S	Receiver	40.0	-70	-50	4.0	—	—	16.0	12.0	10.0	10.0	P9894-ND	9.20	82.76	735.62	2758.56	5149.31	EFR-RSB40K5
S	Transmitter	40.0	—	—	4.0	105	20	16.0	12.0	10.0	10.0	P9895-ND	9.20	82.76	735.62	2758.56	5149.31	EFR-TSB40KS
U	Transmitter	40.0	—	—	4.0	110	20	16.0	12.0	10.0	10.0	P9851-ND	5.60	50.40	448.00	1680.00	3136.00	EFR-OUB40K22

ITC Ultrasonic Transducers

The ITC piezoelectric transducers are designed using quarter wavelength matching technology for optimal performance in air. The narrow beam with no side lobes makes it a good choice for demanding proximity, position, and level sensor applications. It can be used as a transmitter, receiver, or both as needed.

FEATURES: • Aluminum housing • Coaxial Cable (RG174/U) • H/S Tubing Black Polyolefin.

Fig. 1

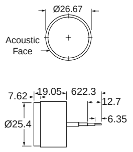


Fig. 2

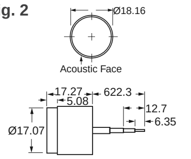


Fig. 3

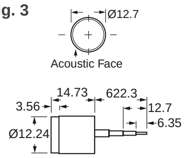
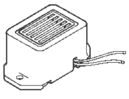


Fig.	Frequency at Receiving	Transmit Bandwidth	Transmit Sensitivity (dB vs. 1 µbar/ 1 Vrms @ 1 ft.)	Receive Sensitivity (dB vs. 1 Vrms/µbar)	Drive Voltage (10% duty cycle)	Nominal Impedance	Beam Angle (-3dB) Conical	Operating Temperature	Humidity	Weight (grams)	Digi Key Part No.	Pricing 1	10	25	ITC Part No.
1	92 kHz	12 kHz	+17	-63	100Vp-p	1000 Ω	10°	0-70°C	0-90%	26	270-1000-ND	65.19	521.49	1199.50	ITC-9071
2	150 kHz	20 kHz	+23	-68	50Vp-p	1000 Ω	10°	0-70°C	0-90%	14	270-1001-ND	60.84	486.72	1119.53	ITC-9072
3	215 kHz	30 kHz	+23	-73	50Vp-p	1000 Ω	10°	0-70°C	0-90%	10	270-1002-ND	56.50	451.96	1039.56	ITC-9073

All specifications typical at 22°C and subject to change without notice.

CUI STACK

9-15VDC Buzzer



Operates from 9-15VDC. Case size: 23mm(L) x 15mm(W) x 13.5mm(H) with mounting hole centers at 27mm.

140C-ND **$2.88/1**
..... **$26.40/10**

Panasonic

Electret Condenser Microphone Cartridge

Consists of a high voltage internal electret membrane, metal electrode and a Field Effect Transistor (FET). Doesn't need a high-voltage bias from the outside like ordinary condenser microphones.

Features: Highly efficient electrical specification, pressure type operating principle, low impedance (2.2kΩ), omnidirectional back directivity, and a high degree of reliability under adverse shock, vibration and environmental tests.

Applications: Telephone and telephone answering devices, tape recorders, intercoms, computer modems, completed microphones for recording, testing and monitoring, hearing aids, sonic controlled toys and sensors, and others. All buzzers and microphones are non-washable.

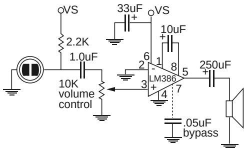


Fig. 1

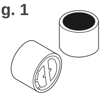


Fig. 2

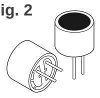


Fig. 3

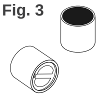


Fig. 4

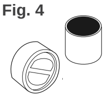


Fig. 5

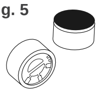


Fig. 6

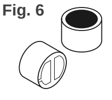


Fig. 7

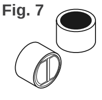


Fig. 8

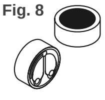


Fig.	Type	Physical Size (mm)	Sensitivity (0dB = 1V/Pa)	Frequency Range (Hz)	Operating Voltage Max./Std.	Current Consumption Max.	Sensitivity Reduction	S/N Ratio	Digi-Key Part No.	Price Each			Panasonic Part No.
										1	10	100	
7	Omnidirectional	ø6.0 X 2.2	-45dB ±4dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P9955-ND†	5.02	4.46	3.60	WM-64C
7	Omnidirectional	ø6.0 X 2.2	-45dB ±4dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P9958-ND†	5.02	4.46	3.60	WM-64K
4	Omnidirectional	ø6.0 X 2.7	-45dB ±4dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P9933-ND	4.47	3.97	3.21	WM-62A
7	Omnidirectional	ø6.0 X 2.7	-45dB ±4dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P9926-ND†	4.34	3.85	3.12	WM-62CC
6	Omnidirectional	ø6.0 X 3.4	-35dB ±4dB	20-20k	10V/2V	0.5mA	within -3dB @ 1.5V	>62dB	P9925-ND	3.20	2.84	2.29	WM-61A
3	Omnidirectional	ø6.0 X 5.0	-42dB ±3dB	20-20k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P9959-ND	2.64	2.35	1.90	WM-60AY
2	Omnidirectional	ø9.7 X 4.5	-44dB ±2dB	20-16k	10V/1.5V	0.3mA	within -3dB @ 1.1V	>60dB	P9970-ND	1.06	.95	.77	WM-52BM
2	Omnidirectional	ø9.7 X 4.5	-44dB ±3dB	20-16k	10V/2.5V	0.6mA	within -3dB @ 2V	>60dB	P9949-ND	.84	.75	.61	WM-54BT
1	Omnidirectional	ø9.7 X 6.7	-42dB ±3dB	20-16k	10V/4.5V	0.8mA	within -3dB @ 3V	>60dB	P9956-ND	1.48	1.31	1.06	WM-034CY
2	Omnidirectional	ø9.7 X 6.7	-42dB ±3dB	20-16k	10V/4.5V	0.8mA	within -3dB @ 3V	>60dB	P9931-ND	1.64	1.46	1.18	WM-034BY
2	Omnidirectional	ø9.7 X 6.7	-42dB ±3dB	20-16k	10V/4.5V	0.8mA	within -3dB @ 3V	>60dB	P9962-ND*	2.77	2.46	1.99	WM-034CY195M
3	Unidirectional	ø6.0 X 5.0	-50dB ±4dB	100-12k	10V/2V	0.5mA	within -3dB @ 1.5V	>55dB	P9964-ND	4.00	3.55	2.87	WM-65A103
5	Unidirectional	ø9.7 X 5.0	-47dB ±4dB	100-16k	10V/1.5V	0.5mA	within -3dB @ 1V	>60dB	P9961-ND	3.55	3.15	2.55	WM-55A103
5	Unidirectional	ø9.7 X 5.0	-50dB ±4dB	100-16k	10V/1.5V	0.5mA	within -3dB @ 1V	>58dB	P9963-ND	2.97	2.64	2.13	WM-56A103
8	Noise Canceling	ø6.0 X 2.2	-51dB ±4dB	100-10k	10V/2V	0.5mA	within -3dB @ 1.5V	>50dB	P9973-ND	4.11	3.65	2.95	WM-67D103
8	Noise Canceling	ø6.0 X 2.7	-45dB ±4dB	100-10k	10V/2V	0.5mA	within -3dB @ 1.5V	>50dB	P9968-ND†	4.34	3.85	3.12	WM-66DC103
4	Noise Canceling	ø6.0 X 2.7	-51dB ±4.5dB	100-10k	10V/2V	0.5mA	within -3dB @ 1.5V	>50dB	P9896-ND	3.77	3.35	2.71	WM-66D103
5	Noise Canceling	ø9.7 X 5.0	-54dB ±4dB	100-10k	10V/1.5V	0.5mA	within -3dB @ 1V	>58dB	P9897-ND	3.42	3.04	2.46	WM-55D103

***** Has 18mm long leads. † With built-in cap.

Microphone Holders

Fig. 1

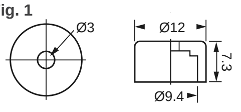


Fig. 2

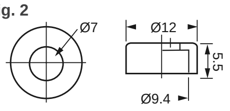


Fig. 3

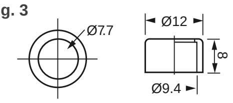


Fig. 4

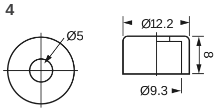


Fig. 5

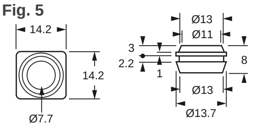


Fig. 6

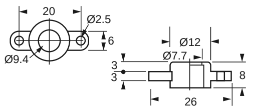


Fig. 7

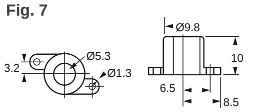


Fig.	Digi-Key Part No.	Price Each				Panasonic Part No.	Use With Panasonic Part No.
		1	10	100	500		
1	P9950-ND	.59	.50	.39	.28	M3CA0208A4	WM-52BM, WM-54BT, WM-55A103, WM-55D103, WM-56A103
2	P9952-ND	.59	.50	.39	.28	M3CA0207A4	WM-52BM, WM-54BT, WM-55A103, WM-55D103, WM-56A103
3	P9974-ND	.59	.50	.39	.28	YPM-CH022AA4	WM-034 Series
4	P9953-ND	.59	.50	.39	.28	M3CA0082A4	WM-034 Series
5	P9698-ND	.51	.44	.34	.24	YPMCH008	WM-034 Series
6	P9899-ND	.59	.50	.39	.28	YPM-CH009AA4	WM-034 Series
7	P9898-ND	.59	.50	.39	.28	YPM-CH021AA4	WM-063T, WM60AT, WM60AY, WM65A103

HORN INDUSTRIAL

Electret Condenser Microphone

Electret condenser microphones consist of a high voltage internal electret membrane, a metal electrode, and a field effect transistor (FET). Horn Industrial microphones are manufactured in a quality controlled facility in China. All microphones are produced with Japanese made FETs to ensure high quality and reliability. This along with 100% testing ensure a zero defect rate. Horn's commitment to quality has earned them approval from a famous global manufacturer of mobile phones. Horn's ECMs utilize a highly efficient, low impedance design, available in omni directional, unidirectional, and noise canceling versions. Typical applications are telephone and telephone answering equipment, tape recorders, intercoms, hearing aids, and sonically controlled games and toys. All microphones are non-washable.

Fig. 1

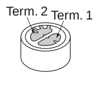
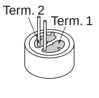


Fig. 2



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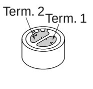

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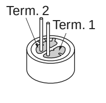

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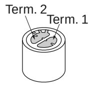

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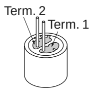

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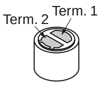

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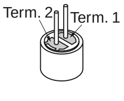
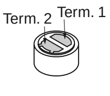


Fig. 9



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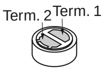


Fig. 11

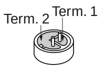


Fig. 12

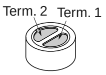


Fig. 13

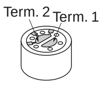


Fig. 14

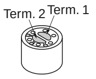


Fig. 15

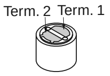


Fig. 16

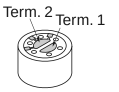


Fig. 17

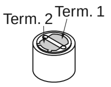


Fig.	Type	Physical Size (mm)	Sensitivity (0dB = 1V/Pa)	Frequency Range (Hz)	Operating Voltage Std.	Current Consumption Max.	Sensitivity Reduction	S/N Ratio	Digi-Key Part No.	Price Each			Horn Part No.
										1	10	100	
1	Omnidirectional	ø9.7 x 6.5	-42dB ±2dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1001-ND	.86	.65	.43	EM9765-422
2	Omnidirectional	ø9.7 x 6.5	-42dB ±2dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1002-ND	.94	.71	.47	EM9765P-422
3	Omnidirectional	ø9.7 x 4.5	-44dB ±2dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1006-ND	.97	.73	.49	EM9745-442
4	Omnidirectional	ø9.7 x 4.5	-44dB ±2dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1007-ND	1.05	.79	.53	EM9745P-442
5	Omnidirectional	ø9.4 x 6.5	-44dB ±2dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1008-ND	1.02	.77	.51	EM9465-442
6	Omnidirectional	ø9.4 x 6.5	-44dB ±2dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1009-ND	1.09	.82	.55	EM9465P-442
7	Omnidirectional	ø6.0 x 5.0	-42dB ±3dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1011-ND	1.09	.82	.55	EM6050-423
7	Omnidirectional	ø6.0 x 5.0	-44dB ±3dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1012-ND	1.09	.82	.55	EM6050-443
8	Omnidirectional	ø6.0 x 5.0	-42dB ±3dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1013-ND	1.17	.88	.59	EM6050P-423
8	Omnidirectional	ø6.0 x 5.0	-44dB ±3dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1014-ND	1.17	.88	.59	EM6050P-443
9	Omnidirectional	ø6.0 x 3.5	-38dB ±3dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1017-ND	2.65	1.99	1.33	EM6035-383
9	Omnidirectional	ø6.0 x 3.5	-40dB ±3dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1018-ND	2.65	1.99	1.33	EM6035-403
10	Omnidirectional	ø6.0 x 2.7	-42dB ±3dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1019-ND	2.65	1.99	1.33	EM6027-423
11	Omnidirectional	ø6.0 x 2.7	-42dB ±3dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1020-ND	2.96	2.22	1.48	EM6027PA-423
12	Omnidirectional	ø4.5 x 3.0	-44dB ±3dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1021-ND	3.12	2.34	1.56	EM4530-443
13	Unidirectional	ø9.7 x 5.2	-47dB ±4dB	20-20k	1.5V	0.5mA	within -3dB @ 1V	>58dB	359-1003-ND	2.96	2.22	1.48	EM9752U-474
13	Unidirectional	ø9.7 x 5.2	-51dB ±4dB	20-20k	1.5V	0.5mA	within -3dB @ 1V	>58dB	359-1004-ND	2.96	2.22	1.48	EM9752U-514
14	Unidirectional	ø8.0 x 5.0	-51dB ±4dB	20-20k	1.5V	0.5mA	within -3dB @ 1V	>60dB	359-1010-ND	2.96	2.22	1.48	EM8050U-514
15	Unidirectional	ø6.0 x 5.0	-51dB ±4dB	20-20k	2.0V	0.5mA	within -3dB @ 1.5V	>58dB	359-1016-ND	2.81	2.11	1.41	EM6050U-514
16	Noise Cancelling	ø9.7 x 5.2	-51dB ±4dB	20-20k	1.5V	0.5mA	within -3dB @ 1V	>60dB	359-1005-ND	2.88	2.17	1.45	EM9752N-514
17	Noise Cancelling	ø6.0 x 5.0	-51dB ±4dB	20-20k	2.0V	0.5mA	within -3dB @ 1.5V	>58dB	359-1015-ND	2.81	2.11	1.41	EM6050N-514

BEYSCHLAG
CENTRALAB
COMPONENTS

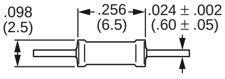
1% Metal Film Fixed Resistors — .40 Watt 5043ED Series

- Solder plated
- Copper leads

The resistors are coated with a light green lacquer which provides electrical, mechanical, and climatic protection. The encapsulation is resistant to all cleaning solvents in accordance with MIL-STD-202E, Method 215, and IEC 68-2-45.

CHARACTERISTICS:

- **Resistance Tolerance:** ±1% • **Temp.Coefficient:** ≤ ±100 ppm/°C • **Abs. Maximum Dissipation at TAMB = 70°C:** 0.40W • **Thermal Resistance, RTH:** 200°C/W • **Maximum Continuous Oper. Volt.:** 250 V (DC or RMS) • **Noise R ≤ 1 MΩ:** Maximum 0.1 µV/V • **Operating Temperature Range:** -55°C to +155°C



Description	Value Range	Digi-Key Part No.	Pricing 5	200	1,000	5,000	10,000	BC Components Part No.
.40 Watt, 1% Metal Film Fixed Resistor; Tape & Reel (5,000/Reel)	10.0 - 2.00M Ω	BC + Value + "YTR-ND"	—	—	—	22.50/M	19.20/M	5043EDxxxxxF12AF5
.40 Watt, 1% Metal Film Fixed Resistor; Tape	10.0 - 2.00M Ω	BC + Value + "YCT-ND"	.95	14.50	37.50	—	—	5043EDxxxxxF12AF5

NEW! **1% Metal Film Fixed Resistor Kits**

Digi-Key® Assortment Kits

5 Each of Values 10.0Ω to 97.6Ω.
BCY1-KIT-ND..**$34.95**

5 Each of Values 100Ω to 976Ω.
BCY2-KIT-ND..**$34.95**

5 Each of Values 1.00KΩ to 9.76KΩ.
BCY3-KIT-ND..**$34.95**

5 Each of Values 10.0KΩ to 97.6KΩ.
BCY4-KIT-ND..**$34.95**

5 Each of Values 100KΩ to 2.00MΩ.
BCY5-KIT-ND..**$46.95**

BC Components Standard Resistor Values

10.0	18.2	34.0	62.0	113	210	383	698	1.30K	2.43K	4.53K	8.25K	15.4K	28.7K	52.3K	95.3K	174K	316K	590K	1.07M	1.91M
10.2	18.7	34.8	63.4	115	215	392	715	1.33K	2.49K	4.64K	8.45K	15.8K	29.4K	53.6K	97.6K	178K	324K	604K	1.10M	1.96M
10.5	19.1	35.7	64.9	118	220	402	732	1.37K	2.55K	4.75K	8.66K	16.2K	30.1K	54.9K	100K	182K	332K	619K	1.13M	2.00M
10.7	19.6	36.5	66.5	121	221	412	750	1.40K	2.61K	4.87K	8.87K	16.5K	30.9K	56.0K	102K	187K	340K	634K	1.15M	
11.0	20.0	37.4	68.1	124	226	422	768	1.43K	2.67K	4.99K	9.09K	16.9K	31.6K	56.2K	105K	191K	348K	649K	1.18M	
11.3	20.5	38.3	69.8	127	232	430	787	1.47K	2.74K	5.10K	9.31K	17.4K	32.4K	57.6K	107K	196K	357K	665K	1.21M	
11.5	21.0	39.2	71.5	130	237	432	806	1.50K	2.80K	5.11K	9.53K	17.8K	33.2K	59.0K	110K	200K	365K	681K	1.24M	
11.8	21.5	40.2	73.2	133	243	442	825	1.54K	2.87K	5.23K	9.76K	18.2K	34.0K	60.4K	113K	205K	374K	698K	1.27M	
12.0	22.1	41.2	75.0	137	249	453	845	1.58K	2.94K	5.36K	10.0K	18.7K	34.8K	61.9K	115K	210K	383K	715K	1.30M	
12.1	22.6	42.2	76.8	140	255	464	866	1.62K	3.01K	5.49K	10.2K	19.1K	35.7K	63.4K	118K	215K	392K	732K	1.33M	
12.4	23.2	43.2	78.7	143	261	475	887	1.65K	3.09K	5.60K	10.5K	19.6K	36.0K	64.9K	120K	221K	402K	750K	1.37M	
12.7	23.7	44.2	80.6	147	267	487	909	1.69K	3.16K	5.62K	10.7K	20.0K	36.5K	66.5K	121K	226K	412K	768K	1.40M	
13.0	24.3	45.3	82.0	150	274	499	931	1.74K	3.24K	5.76K	11.0K	20.5K	37.4K	68.1K	124K	232K	422K	787K	1.43M	
13.3	24.9	46.4	82.5	154	280	511	953	1.78K	3.32K	5.90K	11.3K	21.0K	38.3K	69.8K	127K	237K	432K	806K	1.47M	
13.7	25.5	47.5	84.5	158	287	523	976	1.82K	3.40K	6.04K	11.5K	21.5K	39.2K	71.5K	130K	243K	442K	825K	1.50M	
14.0	26.1	48.7	86.6	162	294	536	1.00K	1.87K	3.48K	6.19K	11.8K	22.1K	40.2K	73.2K	133K	249K	453K	845K	1.54M	
14.3	26.7	49.9	88.7	165	301	549	1.02K	1.91K	3.57K	6.34K	12.1K	22.6K	41.2K	75.0K	137K	255K	464K	866K	1.58M	
14.7	27.4	51.1	90.9	169	309	562	1.05K	1.96K	3.65K	6.49K	12.4K	23.2K	42.2K	76.8K	140K	261K	475K	887K	1.60M	
15.0	28.0	52.3	93.1	174	316	576	1.07K	2.00K	3.74K	6.65K	12.7K	23.7K	43.2K	78.7K	143K	267K	487K	909K	1.62M	
15.4	28.7	53.6	95.3	178	324	590	1.10K	2.05K	3.83K	6.81K	13.0K	24.3K	44.2K	80.6K	147K	270K	499K	910K	1.65M	
15.8	29.4	54.9	97.6	182	332	604	1.13K	2.10K	3.92K	6.98K	13.3K	24.9K	45.3K	82.5K	150K	274K	511K	931K	1.69M	
16.2	30.1	56.2	100	187	340	619	1.15K	2.15K	4.02K	7.15K	13.7K	25.5K	46.4K	84.5K	154K	280K	523K	953K	1.74M	
16.5	30.9	57.6	102	191	348	634	1.18K	2.21K	4.12K	7.32K	14.0K	26.1K	47.5K	86.6K	158K	287K	536K	976K	1.78M	
16.9	31.6	59.0	105	196	357	649	1.21K	2.26K	4.22K	7.50K	14.3K	26.7K	48.7K	88.7K	162K	294K	549K	1.00M	1.80M	
17.4	32.4	60.4	107	200	365	665	1.24K	2.32K	4.32K	7.68K	14.7K	27.4K	49.9K	90.9K	165K	301K	562K	1.02M	1.82M	
17.8	33.2	61.9	110	205	374	681	1.27K	2.37K	4.42K	8.06K	15.0K	28.0K	51.1K	93.1K	169K	309K	576K	1.05M	1.87M	

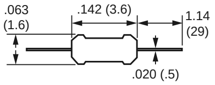
1% Metal Film Fixed Resistors — .40 Watt 5063JD "Spacemiser" Series

- Tin plated
- Copper leads

The resistors are coated with a blue lacquer which provides electrical, mechanical, and climatic protection. The encapsulation is resistant to all cleaning solvents in accordance with MIL-STD-202E, Method 215, and IEC 68-2-45.

CHARACTERISTICS:

- **Resistance Tolerance:** ±1% • **Temperature Coefficient:** ≤ ±100 ppm/°C • **Abs. Maximum Dissipation at TAMB = 70°C:** 0.40W • **Thermal Resistance, RTH:** 200°C/W • **Maximum Continuous Operating Voltage:** 200 V (DC or RMS) • **Noise R ≤ 1 MΩ:** Maximum 0.1 µV/V • **Operating Temperature Range:** -55°C to +125°C



Description	Value Range	Digi-Key Part No.	Pricing 5	200	1,000	5,000	10,000	BC Components Part No.
.40 Watt, 1% Metal Film Fixed Resistor; Tape & Reel (5,000/Reel)	10.0 - 2.00M Ω	BC + Value + "XTR-ND"	—	—	—	61.88/M	52.80/M	5063JDxxxxxF12AF5
.40 Watt, 1% Metal Film Fixed Resistor; Tape	10.0 - 2.00M Ω	BC + Value + "XCT-ND"	1.95	29.73	76.88	—	—	5063JDxxxxxF12AF5

NEW! **1% Metal Film Fixed Resistor Kits**

Digi-Key® Assortment Kits

5 Each of Values 10.0Ω to 97.6Ω.
BCX1-KIT-ND...**$69.95**

5 Each of Values 100Ω to 976Ω.
BCX2-KIT-ND...**$69.94**

5 Each of Values 1.00KΩ to 9.76KΩ.
BCX3-KIT-ND...**$69.94**

5 Each of Values 10.0KΩ to 97.6KΩ.
BCX4-KIT-ND...**$69.94**

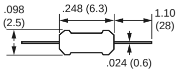
5 Each of Values 100KΩ to 2.00MΩ.
BCX5-KIT-ND...**$94.96**

BC Components Standard Resistor Values

10.0	18.2	33.2	60.4	110	200	365	649	1.18K	2.15K	3.92K	7.15K	12.7K	23.2K	42.2K	76.8K	137K	243K	442K	787K	1.40M
10.2	18.7	34.0	61.9	113	205	374	665	1.21K	2.21K	4.02K	7.32K	13.0K	23.7K	43.2K	78.7K	140K	249K	453K	806K	1.43M
10.5	19.1	34.8	63.4	115	210	383	681	1.24K	2.26K	4.12K	7.50K	13.3K	24.3K	44.2K	80.6K	143K	255K	464K	820K	1.47M
10.7	19.6	35.7	64.9	118	215	390	698	1.27K	2.32K	4.22K	7.68K	13.7K	24.9K	45.3K	82.5K	147K	261K	475K	825K	1.50M
11.0	20.0	36.5	66.5	121	221	392	715	1.30K	2.37K	4.32K	7.87K	14.0K	25.5K	46.4K	84.5K	150K	267K	487K	845K	1.54M
11.3	20.5	37.4	68.1	124	226	402	732	1.33K	2.43K	4.42K	8.06K	14.3K	26.1K	47.5K	86.6K	154K	274K	499K	866K	1.58M
11.5	21.0	38.3	69.8	127	232	412	750	1.37K	2.49K	4.53K	8.20K	14.7K	26.7K	48.7K	88.7K	158K	280K	511K	887K	1.60M
11.8	21.5	39.2	71.5	130	237	422	768	1.40K	2.55K	4.64K	8.25K	15.0K	27.4K	49.9K	90.9K	162K	287K	523K	909K	1.62M
12.1	22.1	40.2	73.2	133	243	432	787	1.43K	2.61K	4.75K	8.45K	15.4K	28.0K	51.1K	91.0K	165K	294K	536K	931K	1.65M
12.4	22.6	41.2	75.0	137	249	442	806	1.47K	2.67K	4.87K	8.66K	15.8K	28.7K	52.3K	93.1K	169K	301K	549K	953K	1.69M
12.7	23.2	42.2	76.8	140	255	453	825	1.50K	2.74K	4.99K	8.87K	16.2K	29.4K	53.6K	95.3K	174K	309K	562K	976K	1.74M
13.0	23.7	43.2	78.7	143	261	464	845	1.54K	2.80K	5.11K	9.09K	16.5K	30.1K	54.9K	97.6K	178K	316K	576K	1.00M	1.78M
13.3	24.3	44.2	80.6	147	267	475	866	1.58K	2.87K	5.23K	9.31K	16.9K	30.9K	56.2K	100K	182K	324K	590K	1.02M	1.80M
13.7	24.9	45.3	82.5	150	274	487	887	1.62K	2.94K	5.36K	9.53K	17.4K	31.6K	57.6K	102K	187K	332K	604K	1.05M	1.82M
14.0	25.5	46.4	84.5	154	280	499	909	1.65K	3.01K	5.49K	9.76K	17.8K	32.4K	59.0K	105K	191K	340K	619K	1.07M	1.87M
14.3	26.1	47.5	86.6	158	287	511	931	1.69K	3.09K	5.62K	10.0K	18.2K	33.2K	60.4K	107K	196K	348K	634K	1.10M	1.91M
14.7	26.7	48.7	88.7	162	294	523	953	1.74K	3.16K	5.76K	10.2K	18.7K	34.0K	61.9K	110K	200K	357K	649K	1.13M	1.96M
15.0	27.4	49.9	90.9	165	301	536	976	1.78K	3.24K	5.90K	10.5K	19.1K	34.8K	63.4K	113K	205K	365K	665K	1.15M	2.00M
15.4	28.0	51.1	93.1	169	309	549	1.00K	1.82K	3.32K	6.04K	10.7K	19.6K	35.7K	64.9K	115K	210K	374K	680K	1.18M	
15.8	28.7	52.3	95.3	174	316	562	1.02K	1.87K	3.40K	6.19K	11.0K	20.0K	36.5K	66.5K	118K	215K	383K	681K	1.21M	
16.2	29.4	53.6	97.6	178	324	576	1.05K	1.91K	3.48K	6.34K	11.3K	20.5K	37.4K	68.1K	121K	220K	392K	698K	1.24M	
16.5	30.1	54.9	100	182	332	590	1.07K	1.96K	3.57K	6.49K	11.5K	21.0K	38.3K	69.8K	124K	221K	402K	715K	1.27M	
16.9	30.9	56.2	102	187	340	604	1.10K	2.00K	3.65K	6.65K	11.8K	21.5K	39.2K	71.5K	127K	226K	412K	732K	1.30M	
17.4	31.6	57.6	105	191	348	619	1.13K	2.05K	3.74K	6.81K	12.1K	22.1K	40.2K	73.2K	130K	232K	422K	750K	1.33M	
17.8	32.4	59.0	107	196	357	634	1.15K	2.10K	3.83K	6.98K	12.4K	22.6K	41.2K	75.0K	133K	237K	432K	768K	1.37M	

BEYSCHLAG
CENTRALAB
COMPONENTS

1% Metal Film Fixed Resistors — .60 Watt B0207C-F Series



- Tin plated
- Copper leads

The resistors are coated with a blue lacquer which provides electrical, mechanical, and climatic protection. The encapsulation is resistant to all cleaning solvents in accordance with MIL-STD-202E, Method 215, and IEC 68-2-45.

CHARACTERISTICS:
• **Resistance Tolerance:** ±1% • **Temperature Coefficient:** ≤ ±50 ppm/°C • **Abs. Maximum Dissipation at T_{AMB} = 70°C:** 0.60W • **Thermal Resistance, R_{TH}:** 140°C/W • **Maximum Continuous Operating Voltage:** 300 V (DC or RMS) • **Noise R ≤ 1 MΩ:** Maximum 1.0 µV/V • **Operating Temperature Range:** -55°C to +155°C

NEW! **1% Metal Film Fixed Resistor Kits**

Digi-Key® Assortment Kits

5 Each of Values 10.0Ω to 97.6Ω.
BCZ1-KIT-ND **$57.95**

5 Each of Values 100Ω to 976Ω.
BCZ2-KIT-ND **$57.95**

5 Each of Values 1.00KΩ to 9.76KΩ.
BCZ3-KIT-ND **$57.95**

5 Each of Values 10.0KΩ to 97.6KΩ.
BCZ4-KIT-ND **$57.94**

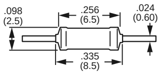
5 Each of Values 100KΩ to 2.20MΩ.
BCZ5-KIT-ND **$59.95**

BC Components Standard Resistor Values

10.0	19.6	38.3	75.0	147	287	562	1.10K	2.15K	4.22K	8.25K	16.2K	31.6K	63.4K	124K	243K	475K	931K
10.2	20.0	39.2	76.8	150	294	576	1.13K	2.21K	4.32K	8.45K	16.5K	32.4K	64.9K	127K	249K	487K	953K
10.5	20.5	40.2	78.7	154	301	590	1.15K	2.26K	4.42K	8.66K	16.9K	33.2K	66.5K	130K	255K	499K	976K
10.7	21.0	41.2	80.6	158	309	604	1.18K	2.32K	4.53K	8.87K	17.4K	34.0K	68.1K	133K	261K	511K	1.10M
11.0	21.5	42.2	82.5	162	316	619	1.21K	2.37K	4.64K	9.09K	17.8K	34.8K	69.8K	137K	267K	523K	1.20M
11.3	22.1	43.2	84.5	165	324	634	1.24K	2.43K	4.75K	9.31K	18.2K	35.7K	71.5K	140K	274K	536K	1.30M
11.5	22.6	44.2	86.6	169	332	649	1.27K	2.49K	4.87K	9.53K	18.7K	36.5K	73.2K	143K	280K	549K	1.50M
11.8	23.2	45.3	88.7	174	340	665	1.30K	2.55K	4.99K	9.76K	19.1K	37.4K	75.0K	147K	287K	562K	1.60M
12.1	23.7	46.4	90.9	178	348	681	1.33K	2.61K	5.11K	10.0K	19.6K	38.3K	76.8K	150K	294K	576K	1.80M
12.4	24.3	47.5	93.1	182	357	698	1.37K	2.67K	5.23K	10.2K	20.0K	39.2K	78.7K	154K	301K	590K	2.00M
12.7	24.9	48.7	95.3	187	365	715	1.40K	2.74K	5.36K	10.5K	20.5K	40.2K	80.6K	158K	309K	604K	2.20M
13.0	25.5	49.9	97.6	191	374	732	1.43K	2.80K	5.49K	10.7K	21.0K	41.2K	82.5K	162K	316K	619K	
13.3	26.1	51.1	100	196	383	750	1.47K	2.87K	5.62K	11.0K	21.5K	43.2K	84.5K	165K	324K	634K	
13.7	26.7	52.3	102	200	392	768	1.50K	2.94K	5.76K	11.3K	22.1K	44.2K	86.6K	169K	332K	649K	
14.0	27.4	53.6	105	205	402	787	1.54K	3.01K	5.90K	11.5K	22.6K	45.3K	88.7K	174K	340K	665K	
14.3	28.0	54.9	107	210	412	806	1.58K	3.09K	6.04K	11.8K	23.2K	46.4K	90.9K	178K	348K	681K	
14.7	28.7	56.2	110	215	422	825	1.62K	3.16K	6.19K	12.1K	23.7K	47.5K	93.1K	182K	357K	698K	
15.0	29.4	57.6	113	221	432	845	1.65K	3.24K	6.34K	12.4K	24.3K	48.7K	95.3K	187K	365K	715K	
15.4	30.1	59.0	115	226	442	866	1.69K	3.32K	6.49K	12.7K	24.9K	49.9K	97.6K	191K	374K	732K	
15.8	30.9	60.4	118	232	453	887	1.74K	3.40K	6.65K	13.0K	25.5K	51.1K	100K	196K	383K	750K	
16.2	31.6	61.9	121	237	464	909	1.78K	3.48K	6.81K	13.3K	26.1K	52.3K	102K	200K	392K	768K	
16.5	32.4	63.4	124	243	475	931	1.82K	3.57K	6.98K	13.7K	26.7K	53.6K	105K	205K	402K	787K	
16.9	33.2	64.9	127	249	487	953	1.87K	3.65K	7.15K	14.0K	27.4K	54.9K	107K	210K	412K	806K	
17.4	34.0	66.5	130	255	499	976	1.91K	3.74K	7.32K	14.3K	28.0K	56.2K	110K	215K	422K	825K	
17.8	34.8	68.1	133	261	511	1.00K	1.96K	3.83K	7.50K	14.7K	28.7K	57.6K	113K	221K	432K	845K	
18.2	35.7	69.8	137	267	523	1.02K	2.00K	3.92K	7.68K	15.0K	29.4K	59.0K	115K	226K	442K	866K	
18.7	36.5	71.5	140	274	536	1.05K	2.05K	4.02K	7.87K	15.4K	30.1K	60.4K	118K	232K	453K	887K	
19.1	37.4	73.2	143	280	549	1.07K	2.10K	4.12K	8.06K	15.8K	30.9K	61.9K	121K	237K	464K	909K	

Description	Value Range	Digi-Key Part No.	Pricing 5	200	1,000	5,000	10,000	BC Components Part No.
.60 Watt, 1% Metal Film Fixed Resistor; Tape & Reel (5,000/Reel)	10.0 - 2.20M Ω	BC + Value + “ZTR-ND”	—	—	—	50.63/M	43.20/M	B0207CxxxxxF5T
.60 Watt, 1% Metal Film Fixed Resistor; Tape	10.0 - 2.20M Ω	BC + Value + “ZCT-ND”	1.66	25.38	65.63	—	—	B0207CxxxxxF5T

5% Power Metal Film Resistors — 1 Watt 5073NW Series



- Solder plated
- Copper leads

The resistors are coated with a red, nonflammable lacquer which provides electrical, mechanical, and climatic protection. The encapsulation is resistant to all cleaning solvents in accordance with MIL-STD-202E, Method 215, and IEC 68-2-45.

CHARACTERISTICS:
• **Resistance Tolerance:** ±5% • **Temperature Coefficient:** ±250 ppm/°C • **Abs. Maximum Dissipation at T_{AMB} = 70°C:** 1.00W • **Maximum Continuous Operating Voltage:** 350 V (DC or RMS) • **Operating Temperature Range:** -55°C to +155°C

NEW! **5% Power Metal Film Resistor Kits**

Digi-Key® Assortment Kits

5 Each of values 1.0Ω to 91Ω.
BCAW1-KIT-ND **$29.95**

5 Each of values 100Ω to 9.1KΩ.
BCBW1-KIT-ND **$29.95**

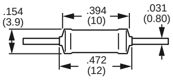
5 Each of values 10KΩ to 1.0MΩ.
BCCW1-KIT-ND **$29.96**

BC Components Standard Resistor Values

1.0	3.6	12	43	150	510	1.8K	6.2K	22K	75K	270K	910K
1.1	3.9	13	47	160	560	2.0K	6.8K	24K	82K	300K	1.0M
1.2	4.3	15	51	180	620	2.2K	7.5K	27K	91K	330K	
1.3	4.7	16	56	200	680	2.4K	8.2K	30K	100K	360K	
1.5	5.1	18	62	220	750	2.7K	9.1K	33K	110K	390K	
1.6	5.6	20	68	240	820	3.0K	10K	36K	120K	430K	
1.8	6.2	22	75	270	910	3.3K	11K	39K	130K	470K	
2.0	6.8	24	82	300	1.0K	3.6K	12K	43K	150K	510K	
2.2	7.5	27	91	330	1.1K	3.9K	13K	47K	160K	560K	
2.4	8.2	30	100	360	1.2K	4.3K	15K	51K	180K	620K	
2.7	9.1	33	110	390	1.3K	4.7K	16K	56K	200K	680K	
3.0	10	36	120	430	1.5K	5.1K	18K	62K	220K	750K	
3.3	11	39	130	470	1.6K	5.6K	20K	68K	240K	820K	

Description	Value Range	Digi-Key Part No.	Pricing 5	100	1,000	5,000	10,000	BC Components Part No.
1 Watt, 5% Power Metal Film Resistor; Tape & Reel (5,000/Reel)	1.0 - 1.0M Ω	BC + Value + “W-1TR-ND”	—	—	—	50.62/M	45.84/M	5073NWxxxxxJ12AFX
1 Watt, 5% Power Metal Film Resistor; Tape	1.0 - 1.0M Ω	BC + Value + “W-1CT-ND”	.80	8.40	62.37	—	—	5073NWxxxxxJ12AFX

5% Power Metal Film Resistors — 2 Watt 5083NW Series



- Solder plated
- Copper leads

The resistors are coated with a red, nonflammable lacquer which provides electrical, mechanical, and climatic protection. The encapsulation is resistant to all cleaning solvents in accordance with MIL-STD-202E, Method 215, and IEC 68-2-45.

CHARACTERISTICS:
• **Resistance Tolerance:** ±5% • **Temperature Coefficient:** ±250 ppm/°C • **Abs. Maximum Dissipation at T_{AMB} = 70°C:** 2.00W • **Maximum Continuous Operating Voltage:** 500 V (DC or RMS) • **Operating Temperature Range:** -55°C to +155°C

NEW! **5% Power Metal Film Resistor Kits**

Digi-Key® Assortment Kits

5 Each of values 1.0Ω to 91Ω.
BCAW2-KIT-ND **$39.95**

5 Each of values 100Ω to 9.1KΩ.
BCBW2-KIT-ND **$39.95**

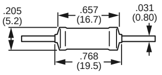
5 Each of values 10KΩ to 1.0MΩ.
BCCW2-KIT-ND **$39.95**

BC Components Standard Resistor Values

1.0	3.6	12	43	150	510	1.8K	6.2K	22K	75K	270K	910K
1.1	3.9	13	47	160	560	2.0K	6.8K	24K	82K	300K	1.0M
1.2	4.3	15	51	180	620	2.2K	7.5K	27K	91K	330K	
1.3	4.7	16	56	200	680	2.4K	8.2K	30K	100K	360K	
1.5	5.1	18	62	220	750	2.7K	9.1K	33K	110K	390K	
1.6	5.6	20	68	240	820	3.0K	10K	36K	120K	430K	
1.8	6.2	22	75	270	910	3.3K	11K	39K	130K	470K	
2.0	6.8	24	82	300	1.0K	3.6K	12K	43K	150K	510K	
2.2	7.5	27	91	330	1.1K	3.9K	13K	47K	160K	560K	
2.4	8.2	30	100	360	1.2K	4.3K	15K	51K	180K	620K	
2.7	9.1	33	110	390	1.3K	4.7K	16K	56K	200K	680K	
3.0	10	36	120	430	1.5K	5.1K	18K	62K	220K	750K	
3.3	11	39	130	470	1.6K	5.6K	20K	68K	240K	820K	

Description	Value Range	Digi-Key Part No.	Pricing 5	100	1,000	5,000	10,000	BC Components Part No.
2 Watt, 5% Power Metal Film Resistor; Tape & Reel (5,000/Reel)	1.0 - 1.0M Ω	BC + Value + “W-2TR-ND”	—	—	—	100.70/M	91.20/M	5083NWxxxxxJ12AFX
2 Watt, 5% Power Metal Film Resistor; Tape	1.0 - 1.0M Ω	BC + Value + “W-2CT-ND”	1.60	18.06	124.74	—	—	5083NWxxxxxJ12AFX

5% Power Metal Film Resistors — 3 Watt 5093NW Series



- Solder plated
- Copper leads

The resistors are coated with a red, nonflammable lacquer which provides electrical, mechanical, and climatic protection. The encapsulation is resistant to all cleaning solvents in accordance with MIL-STD-202E, Method 215, and IEC 68-2-45.

CHARACTERISTICS:
• **Resistance Tolerance:** ±5% • **Temperature Coefficient:** ±250 ppm/°C • **Abs. Maximum Dissipation at T_{AMB} = 70°C:** 3.00W • **Maximum Continuous Operating Voltage:** 750 V (DC or RMS) • **Operating Temperature Range:** -55°C to +155°C

NEW! **5 % Power Metal Film Resistor Kits**

Digi-Key® Assortment Kits

5 Each of values 10Ω to 430Ω.
BCAW3-KIT-ND **$59.95**

5 Each of values 470Ω to 20KΩ.
BCBW3-KIT-ND **$59.95**

5 Each of values 22KΩ to 1.0MΩ.
BCCW3-KIT-ND **$59.96**

BC Components Standard Resistor Values

10	30	82	240	680	2.0K	5.6K	16K	47K	130K	390K
11	33	91	270	750	2.2K	6.2K	18K	51K	150K	430K
12	36	100	300	820	2.4K	6.8K	20K	56K	160K	470K
13	39	110	330	910	2.7K	7.5K	22K	62K	180K	510K
15	43	120	360	1.0K	3.0K	8.2K	24K	68K	200K	560K
16	47	130	390	1.1K	3.3K	9.1K	27K	75K	220K	620K
18	51	150	430	1.2K	3.6K	10K	30K	82K	240K	680K
20	56	160	470	1.3K	3.9K	11K	33K	91K	270K	750K
22	62	180	510	1.5K	4.3K	12K	36K	100K	300K	820K
24	68	200	560	1.6K	4.7K	13K	39K	110K	330K	910K
27	75	220	620	1.8K	5.1K	15K	43K	120K	360K	1.0M

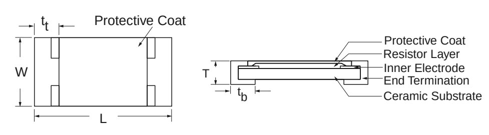
Description	Value Range	Digi-Key Part No.	Pricing 5	100	500	1,000	5,000	BC Components Part No.
3 Watt, 5% Power Metal Film Resistors; Tape & Box (500 AMMO Pack)	10 - 1.0M Ω	BC + Value + “W-3TB-ND”	—	—	107.52	199.58	178.08/M	5093NWxxxxxJ08AFX
3 Watt, 5% Power Metal Film Resistors; Tape	10 - 1.0M Ω	BC + Value + “W-3CT-ND”	2.71	30.62	—	—	—	5093NWxxxxxJ08AFX

Phycomp
A FORMER PHILIPS COMPANY

Surface Mount 1% & 5% Thick Film Chip Resistors

DESCRIPTION:
The resistors are constructed on a high grade ceramic body (aluminum oxide). Internal metal electrodes are added at each end and connected by a resistive paste which is applied to the top surface of the substrate. The composition of the paste is adjusted to give the approximate resistance required and the value is trimmed to within tolerance, by laser cutting of the resistive layer. The resistive layer is covered with a protective coat. Finally, the two external end terminations are added. For ease of soldering the outerlayer of these end terminations is a lead/tin alloy.

Size Code	0402		0603		0805		1206	
	1%	5%	1%	5%	1%	5%	1%	5%
Temperature Coefficient **1Ω ≤ R ≤ 10Ω** **10Ω ≤ R ≤ 10MΩ**	≤250±250 ≤±200	≤250±250x10^{-6}/K ≤±200x10^{-6}/K	≤250±250 ≤±100	≤250±250x10^{-6}/K ≤±200x10^{-6}/K	≤250±250 ≤±100	≤250±250x10^{-6}/K ≤±200x10^{-6}/K	≤250±250 ≤±100	≤250±250x10^{-6}/K ≤±200x10^{-6}/K
Maximum dissipation at T_{amb} = 70°C	0.063W		0.063W/0.1W		0.125W		0.25W	
Maximum permissible voltage	50V (DC or RMS)		50V (DC or RMS)		150V (DC or RMS)		200V (DC or RMS)	



Type	Dimension (mm)				
	L	W	T	t_t	t_b
0402	1.00	0.50	0.35	0.20	0.25
0603	1.60	0.80	0.45	0.30	0.30
0805	2.00	1.25	0.55	0.40	0.40
1206	3.20	1.60	0.55	0.45	0.50

1%, 1/16 Watt — 0402 Series

Phycomp Standard Resistor Values

1.00	28.0	56.0	120	300	470	680	1.21K	2.21K	3.90K	5.49K	7.87K	10.0K	12.1K	17.4K	22.1 K	30.1K	40.2K	47.5K	60.4K	80.6K	95.3K	124K	210K	270K	442K	620K
4.70	33.0	62.0	150	301	499	715	1.50K	2.40K	3.92K	5.62K	8.06K	10.7K	13.0K	18.0K	24.9K	33.0K	42.2K	49.9K	61.9K	82.0K	97.6K	127K	220K	300K	470K	649K
10.0	36.0	68.0	160	330	510	910	1.80K	2.70K	4.30K	6.20K	8.20K	11.0K	14.0K	19.1K	26.1K	35.7K	43.0K	51.0K	62.0K	82.5K	100K	150K	226K	301K	499K	768K
22.0	39.0	68.1	180	332	511	1.00K	1.82K	3.01K	4.64K	6.49K	8.87K	11.3K	15.0K	20.0K	27.0K	36.0K	45.3K	51.1K	64.9K	88.7K	110K	180K	240K	332K	510K	1.00M
24.9	49.9	75.0	220	430	560	1.10K	1.96K	3.30K	5.10K	6.80K	9.10K	11.5K	16.0K	21.0K	28.0K	39.0K	46.4K	53.6K	68.0K	90.9K	120K	187K	249K	360K	560K	3.30M
26.1	51.0	100	280	464	620	1.20K	2.20K	3.74K	5.36K	7.50K	9.53K	12.0K	16.2K	22.0K	30.0K	39.2K	47.0K	56.0K	78.7K	91.0K	121K	200K	261K	430K	562K	3.60M

Description	Value Range	Digi-Key Part No.	Pricing 10	50	200	10,000	30,000	Phycomp Part No.
1/16 Watt, 1% Thick Film Chip Resistors (Tape & Reel) 10,000 / Reel	1.00 - 3.60M Ω	311 - Value + “LTR-ND”	—	—	—	9.62/M	8.55/M	9C1A0402XXXXFLHF3
1/16 Watt, 1% Thick Film Chip Resistors (Cut Tape)	1.00 - 3.60M Ω	311 - Value + “LCT-ND”	1.04	2.80	6.43	—	—	9C1A0402XXXXFLHF3

1%, 1/16 Watt — 0603 Series

Phycomp Standard Resistor Values

1.00	7.50	16.0	24.9	38.3	57.6	90.9	147	232	357	536	820	1.30K	2.10K	3.24K	4.87K	7.50K	12.0K	19.1K	30.0K	44.2K	68.1K	110K	178K	267K	400K	590K	910K
2.00	10.0	16.2	25.5	39.0	59.0	91.0	150	237	360	549	825	1.33K	2.15K	3.30K	4.99K	7.68K	12.1K	19.6K	30.1K	45.3K	69.8K	113K	180K	270K	402K	604K	931K
2.10	10.2	16.5	26.1	39.2	60.4	93.1	154	240	365	560	845	1.37K	2.20K	3.32K	5.10K	7.87K	12.4K	20.0K	30.9K	46.4K	71.5K	115K	182K	274K	412K	619K	953K
2.15	10.5	16.9	26.7	40.2	61.9	95.3	158	243	374	562	866	1.40K	2.21K	3.40K	5.11K	8.06K	12.7K	20.5K	31.6K	47.0K	73.2K	118K	187K	280K	422K	620K	976K
2.21	10.7	17.4	27.0	41.2	62.0	97.6	160	249	383	576	887	1.43K	2.26K	3.48K	5.23K	8.20K	13.0K	21.0K	32.4K	47.5K	75.0K	120K	190K	287K	430K	634K	1.00M
2.43	11.0	17.8	27.4	42.2	63.4	100	162	255	390	590	909	1.47K	2.32K	3.57K	5.36K	8.25K	13.3K	21.5K	33.0K	48.7K	76.8K	121K	191K	294K	432K	649K	1.20M
2.47	11.3	18.0	28.0	43.0	64.9	102	165	261	392	600	910	1.50K	2.37K	3.60K	5.49K	8.45K	13.7K	22.0K	33.2K	49.9K	78.7K	124K	196K	300K	442K	665K	1.21M
2.49	11.5	18.2	28.7	43.2	66.5	105	169	267	402	604	931	1.54K	2.40K	3.65K	5.60K	8.66K	14.0K	22.1K	34.0K	51.0K	80.6K	127K	200K	301K	453K	680K	1.50M
2.74	11.8	18.7	29.4	44.2	68.0	107	174	270	412	619	953	1.58K	2.43K	3.74K	5.62K	8.87K	14.3K	22.6K	34.8K	51.1K	82.0K	130K	205K	309K	464K	681K	2.00M
3.01	12.0	19.1	30.0	45.3	68.1	110	178	274	422	620	976	1.60K	2.49K	3.83K	5.76K	9.09K	14.7K	23.2K	35.7K	52.3K	82.5K	133K	210K	316K	470K	698K	2.21M
3.32	12.1	19.6	30.1	46.4	69.8	113	180	280	430	634	1.00K	1.62K	2.55K	3.90K	5.90K	9.10K	15.0K	23.7K	36.0K	53.6K	84.5K	137K	215K	324K	475K	715K	2.49M
3.92	12.4	20.0	30.9	47.0	71.5	115	182	287	432	649	1.02K	1.65K	2.61K	3.92K	6.04K	9.31K	15.4K	24.0K	36.5K	54.9K	86.6K	140K	220K	330K	487K	732K	2.94M
4.02	12.7	20.5	31.6	47.5	73.2	118	187	294	442	665	1.05K	1.69K	2.67K	4.02K	6.19K	9.53K	15.8K	24.3K	37.4K	56.2K	88.7K	143K	221K	332K	499K	750K	3.01M
4.42	13.0	21.0	32.4	48.7	75.0	120	191	300	453	680	1.07K	1.74K	2.70K	4.12K	6.20K	9.76K	16.0K	24.9K	38.3K	57.6K	90.9K	147K	226K	340K	500K	768K	4.70M
4.75	13.3	21.5	33.0	49.9	76.8	121	196	301	464	681	1.10K	1.78K	2.74K	4.22K	6.34K	10.0K	16.2K	25.5K	39.0K	59.0K	91.0K	150K	232K	348K	510K	787K	4.75M
4.99	13.7	22.0	33.2	51.0	78.7	124	200	309	470	698	1.13K	1.80K	2.80K	4.30K	6.49K	10.2K	16.5K	26.1K	39.2K	60.4K	93.1K	154K	234K	357K	511K	806K	10.0M
5.11	14.0	22.1	34.0	51.1	80.6	127	205	316	475	715	1.15K	1.82K	2.87K	4.32K	6.65K	10.5K	16.9K	26.7K	40.0K	61.9K	95.3K	158K	237K	360K	523K	820K	
5.23	14.3	22.6	34.8	52.3	82.0	130	210	324	487	732	1.18K	1.87K	2.94K	4.42K	6.80K	10.7K	17.4K	27.0K	40.2K	62.0K	97.6K	160K	240K	365K	536K	825K	
5.62	14.7	23.2	35.7	53.6	82.5	133	215	330	499	750	1.20K	1.91K	3.00K	4.53K	6.81K	11.0K	17.8K	27.4K	41.2K	63.4K	100K	162K	243K	374K	549K	845K	
5.76	15.0	23.7	36.0	54.9	84.5	137	220	332	510	768	1.21K	1.96K	3.01K	4.64K	6.98K	11.3K	18.0K	28.0K	42.2K	64.9K	102K	165K	249K	383K	560K	866K	
6.04	15.4	24.0	36.5	56.0	88.6	140	221	340	511	787	1.24K	2.00K	3.09K	4.70K	7.15K	11.5K	18.2K	28.7K	43.0K	66.5K	105K	169K	255K	390K	562K	887K	
6.81	15.8	24.3	37.4	56.2	88.7	143	226	348	523	806	1.27K	2.05K	3.16K	4.75K	7.32K	11.8K	18.7K	29.4K	43.2K	68.0K	107K	174K	261K	392K	576K	909K	

Description	Value Range	Digi-Key Part No.	Pricing 10	50	200	5,000	10,000	Phycomp Part No.
1/16 Watt, 1% Thick Film Chip Resistors (Tape & Reel) 5,000 / Reel	1.00 - 10.0M Ω	311 - Value + “HTR-ND”	—	—	—	7.65/M	6.89/M	9C06031AXXXXFKHFT
1/16 Watt, 1% Thick Film Chip Resistors (Cut Tape)	1.00 - 10.0M Ω	311 - Value + “HCT-ND”	.90	2.42	5.57	—	—	9C06031AXXXXFKHFT

1%, 1/10 Watt — 0805 Series

Phycomp Standard Resistor Values

1.00	1.91	3.57	6.34	12.0	22.0	37.4	63.4	115	210	360	619	1.10K	2.00K	3.40K	5.76K	10.2K	18.7K	33.0K	56.0K	100K	182K	324K	549K	953K	1.96M	3.65M	6.98M
1.02	1.96	3.65	6.49	12.1	22.1	38.3	64.9	118	215	365	620	1.13K	2.05K	3.48K	5.90K	10.5K	19.1K	33.2K	56.2K	102K	187K	330K	560K	976K	2.00M	3.74M	7.15M
1.05	2.00	3.74	6.65	12.4	22.6	39.0	66.5	120	220	374	634	1.15K	2.10K	3.57K	6.04K	10.7K	19.6K	34.0K	57.6K	105K	191K	332K	562K	1.00M	2.05M	3.83M	7.32M
1.07	2.05	3.83	6.80	12.7	23.2	39.2	68.0	121	221	383	649	1.18K	2.15K	3.60K	6.19K	11.0K	20.0K	34.8K	59.0K	107K	196K	340K	576K	1.10M	2.10M	3.92M	7.50M
1.10	2.10	3.90	6.81	13.0	23.7	40.2	68.1	124	226	390	665	1.20K	2.20K	3.65K	6.20K	11.3K	20.5K	35.7K	60.4K	110K	200K	348K	590K	1.13M	2.15M	4.02M	7.68M
1.13	2.15	3.92	6.98	13.3	24.0	41.2	69.8	127	232	392	680	1.21K	2.21K	3.74K	6.34K	11.5K	21.0K	36.0K	61.9K	113K	205K	357K	604K	1.15M	2.20M	4.12M	7.87M
1.15	2.20	4.02	7.15	13.7	24.3	42.2	71.5	130	237	402	681	1.24K	2.26K	3.83K	6.49K	11.8K	21.5K	36.5K	62.0K	115K	210K	360K	619K	1.18M	2.21M	4.22M	8.06M
1.18	2.21	4.12	7.32	14.0	24.9	43.0	73.2	133	240	412	698	1.27K	2.32K	3.90K	6.65K	12.0K	22.0K	37.4K	63.4K	118K	215K	365K	620K	1.20M	2.26M	4.32M	8.25M
1.21	2.26	4.22	7.50	14.3	25.5	43.2	75.0	137	243	422	715	1.30K	2.37K	3.92K	6.80K	12.1K	22.1K	38.3K	64.9K	120K	220K	374K	634K	1.21M	2.32M	4.42M	8.45M
1.24	2.32	4.32	7.68	14.7	26.1	44.2	76.8	140	249	430	732	1.33K	2.40K	4.02K	6.81K	12.4K	22.6K	39.0K	66.5K	121K	221K	383K	649K	1.24M	2.37M	4.53M	8.66M
1.27	2.37	4.42	7.87	15.0	26.7	45.3	78.7	143	255	432	750	1.37K	2.43K	4.12K	6.98K	12.7K	23.2K	39.2K	68.0K	124K	226K	390K	665K	1.27M	2.43M	4.64M	8.87M
1.30	2.43	4.53	8.06	15.4	27.0	46.4	80.6	147	261	442	768	1.40K	2.49K	4.22K	7.15K	13.0K	23.7K	40.2K	68.1K	127K	232K	392K	680K	1.30M	2.49M	4.70M	9.09M
1.33	2.49	4.64	8.25	15.8	27.4	47.0	82.0	150	267	453	787	1.43K	2.50K	4.30K	7.32K	13.3K	24.0K	41.2K	69.8K	130K	237K	402K	681K	1.33M	2.55M	4.75M	9.31M
1.37	2.55	4.70	8.45	16.0	28.0	47.5	82.5	154	270	464	806	1.47K	2.55K	4.32K	7.50K	13.7K	24.3K	42.2K	71.5K	133K	240K	412K	698K	1.37M	2.61M	4.87M	9.53M
1.40	2.61	4.75	8.66	16.2	28.7	48.7	84.5	158	274	470	820	1.50K	2.61K	4.42K	7.68K	14.0K	24.9K	43.0K	73.2K	137K	243K	422K	715K	1.40M	2.67M	4.99M	9.76M
1.43	2.67	4.87	8.87	16.5	29.4	49.9	86.6	160	280	475	825	1.54K	2.67K	4.53K	7.87K	14.3K	25.5K	43.2K	75.0K	140K	249K	430K	732K	1.43M	2.74M	5.11M	10.0M
1.47	2.74	4.99	9.09	16.9	30.0	51.0	88.7	162	287	487	845	1.58K	2.70K	4.64K	8.06K	14.7K	26.1K	44.2K	76.8K	143K	255K	432K	750K	1.47M	2.80M	5.23M	10.2M
1.50	2.80	5.11	9.31	17.4	30.1	51.1	90.9	165	294	499	866	1.60K	2.74K	4.70K	8.20K	15.0K	26.7K	45.3K	78.7K	147K	261K	442K	768K	1.50M	2.87M	5.36M	10.5M
1.54	2.87	5.23	9.53	17.8	30.9	52.3	91.0	169	300	510	887	1.62K	2.80K	4.75K	8.25K	15.4K	27.0K	46.4K	80.6K	150K	267K	453K	787K	1.54M	2.94M	5.49M	
1.58	2.94	5.36	9.76	18.0	31.6	53.6	93.1	174	301	511	909	1.65K	2.87K	4.87K	8.45K	15.8K	27.4K	47.0K	82.0K	154K	270K	464K	806K	1.58M	3.01M	5.62M	
1.62	3.00	5.49	10.0	18.2	32.4	54.9	95.3	178	309	523	910	1.69K	2.94K	4.99K	8.66K	16.0K	28.0K	47.5K	82.5K	158K	274K	470K	820K	1.62M	3.09M	5.76M	
1.65	3.01	5.60	10.2	18.7	33.0	56.0	97.6	180	316	536	931	1.74K	3.00K	5.10K	8.87K	16.2K	28.7K	48.7K	84.5K	160K	280K	475K	825K	1.65M	3.16M	5.90M	
1.69	3.09	5.62	10.5	19.1	33.2	56.2	100	182	324	549	953	1.78K	3.01K	5.11K	9.09K	16.5K	29.4K	49.9K	86.6K	162K	287K	487K	845K	1.69M	3.24M	6.04M	
1.74	3.16	5.76	10.7	19.6	34.0	57.6	102	187	330	560	976	1.80K	3.09K	5.23K	9.10K	16.9K	30.0K	51.0K	88.7K	165K	294K	499K	866K	1.74M	3.30M	6.19M	
1.78	3.24	5.90	11.0	20.0	34.8	59.0	105	191	332	562	1.00K	1.82K	3.16K	5.36K	9.31K	17.4K	30.1K	51.1K	90.9K	169K	300K	510K	887K	1.80M	3.32M	6.34M	
1.80	3.32	6.04	11.3	20.5	35.7	60.4	107	196	340	576	1.02K	1.87K	3.24K	5.49K	9.53K	17.8K	30.9K	52.3K	93.1K	174K	301K	511K	909K	1.82M	3.40M	6.49M	
1.82	3.40	6.19	11.5	21.0	36.0	61.9	110	200	348	590	1.05K	1.91K	3.30K	5.60K	9.76K	18.0K	31.6K	53.6K	95.3K	178K	309K	523K	910K	1.87M	3.48M	6.65M	
1.87	3.48	6.20	11.8	21.5	36.5	62.0	113	205	357	604	1.07K	1.96K	3.32K	5.62K	10.0K	18.2K	32.4K	54.9K	97.6K	180K	316K	536K	931K	1.91M	3.57M	6.81M	

Description	Value Range	Digi-Key Part No.	Pricing 10	50	200	5,000	10,000	Phycomp Part No.
1/10 Watt, 1% Thick Film Chip Resistors (Tape & Reel) 5,000 / Reel	1.00 - 10.7M Ω	311 - Value + “CTR-ND”	—	—	—	9.99/M	9.00/M	9C08052AXXXXFKHFT
1/10 Watt, 1% Thick Film Chip Resistors (Cut Tape)	1.00 - 10.7M Ω	311 - Value + “CCT-ND”	1.01	2.71	6.23	—	—	9C08052AXXXXFKHFT

1%, 1/8 Watt — 1206 Series

Phycomp Standard Resistor Values

1.00	1.96	3.60	6.49	12.4	24.0	43.2	80.6	158	294	499	910	1.80K	3.32K	6.04K	11.5K	22.1K	40.2K	71.5K	140K	261K	470K	866K	1.69M	3.09M	5.60M
1.02	2.00	3.65	6.65	12.7	24.3	44.2	82.0	160	300	510	931	1.82K	3.40K	6.19K	11.8K	22.6K	41.2K	73.2K	143K	267K	475K	887K	1.74M	3.16M	5.62M
1.05	2.05	3.74	6.80	13.0	24.9	45.3	82.5	162	301	511	953	1.87K	3.48K	6.20K	12.0K	23.2K	42.2K	75.0K	147K	270K	487K	909K	1.78M	3.24M	5.76M
1.07	2.10	3.83	6.81	13.3	25.5	46.4	84.5	165	309	523	976	1.91K	3.57K	6.34K	12.1K	23.7K	43.0K	76.8K	150K	274K	499K	910K	1.80M	3.30M	5.90M
1.10	2.15	3.90	6.98	13.7	26.1	47.0	86.6	169	316	536	1.00K	1.96K	3.60K	6.49K	12.4K	24.0K	43.2K	78.7K	154K	280K	510K	931K	1.82M	3.32M	6.04M
1.13	2.20	3.92	7.15	14.0	26.7	47.5	88.7	174	320	549	1.02K	2.00K	3.65K	6.65K	12.7K	24.3K	44.2K	80.6K	158K	287K	511K	953K	1.87M	3.40M	6.19M
1.15	2.21	4.02	7.32	14.3	27.0	48.7	90.9	178	324	560	1.05K	2.05K	3.74K	6.80K	13.0K	24.9K	45.3K	82.0K	160K	294K	523K	976K	1.91M	3.48M	6.20M
1.18	2.26	4.12	7.50	14.7	27.4	49.9	91.0	180	330	562	1.07K	2.10K	3.83K	6.81K	13.3K	25.5K	46.4K	82.5K	162K	300K	536K	1.00M	1.92M	3.57M	6.34M
1.20	2.32	4.22	7.68	15.0	28.0	51.0	93.1	182	331	576	1.10K	2.15K	3.90K	6.98K	13.7K	26.1K	47.0K	84.5K	165K	301K	549K	1.02M	1.96M	3.60M	6.49M
1.21	2.37	4.30	7.87	15.4	28.7	51.1	95.3	187	332	590	1.13K	2.20K	3.92K	7.15K	14.0K	26.7K	47.5K	86.6K	169K	309K	560K	1.05M	2.00M	3.65M	6.65M
1.24	2.40	4.32	8.06	15.8	29.4	52.3	97.6	191	340	604	1.15K	2.21K	4.02K	7.32K	14.3K	27.0K	48.7K	88.7K	174K	316K	562K	1.07M	2.05M	3.74M	6.80M
1.27	2.43	4.42	8.20	16.0	30.0	53.6	100	196	348	619	1.18K	2.26K	4.12K	7.50K	14.7K	27.2K	49.9K	90.9K	178K	324K	576K	1.10M	2.10M	3.83M	6.81M
1.30	2.49	4.53	8.25	16.2	30.1	54.9	102	200	357	620	1.20K	2.32K	4.22K	7.68K	15.0K	28.0K	51.0K	91.0K	180K	330K	590K	1.13M	2.15M	3.90M	6.98M
1.33	2.55	4.64	8.45	16.5	30.9	56.0	105	205	360	634	1.21K	2.37K	4.30K	7.87K	15.4K	28.7K	51.1K	93.1K	182K	332K	604K	1.15M	2.20M	3.92M	7.15M
1.37	2.61	4.70	8.66	16.9	31.6	56.2	107	210	365	649	1.24K	2.40K	4.32K	8.06K	15.8K	29.4K	52.3K	95.3K	187K	340K	619K	1.18M	2.21M	4.02M	7.32M
1.40	2.67	4.75	8.87	17.4	32.4	57.6	110	215	374	665	1.27K	2.43K	4.42K	8.20K	16.0K	30.0K	53.6K	97.6K	191K	348K	620K	1.20M	2.26M	4.12M	7.50M
1.43	2.70	4.87	9.09	17.8	33.0	59.0	113	220	382	680	1.30K	2.49K	4.53K	8.25K	16.2K	30.1K	54.9K	100K	196K	357K	634K	1.21M	2.32M	4.22M	7.68M
1.47	2.74	4.99	9.10	18.0	33.2	60.4	115	221	383	681	1.33K	2.55K	4.64K	8.45K	16.5K	30.9K	56.0K	102K	200K	360K	649K	1.24M	2.37M	4.30M	7.87M
1.50	2.80	5.10	9.31	18.2	34.0	61.9	118	226	390	698	1.37K	2.61K	4.70K	8.66K	16.9K	31.6K	56.2K	105K	205K	365K	665K	1.27M	2.40M	4.32M	8.06M
1.54	2.87	5.11	9.53	18.7	34.8	62.0	120	232	392	715	1.40K	2.67K	4.75K	8.87K	17.4K	32.4K	57.6K	107K	210K	374K	680K	1.30M	2.43M	4.42M	8.20M
1.58	2.94	5.23	9.76	19.1	35.7	63.4	121	237	402	732	1.43K	2.70K	4.87K	9.09K	17.8K	33.0K	59.0K	110K	215K	383K	681K	1.33M	2.49M	4.53M	8.25M
1.60	3.00	5.36	10.0	19.6	36.0	64.9	124	240	412	750	1.47K	2.74K	4.99K	9.10K	18.0K	33.2K	60.4K	113K	220K	390K	698K	1.37M	2.55M	4.64M	8.45M
1.62	3.01	5.49	10.2	20.0	36.5	66.5	127	243	422	768	1.50K	2.80K	5.10K	9.31K	18.2K	34.0K	61.9K	115K	221K	392K	715K	1.40M	2.61M	4.70M	8.66M
1.65	3.09	5.60	10.5	20.5	37.4	68.0	130	249	430	787	1.54K	2.87K	5.11K	9.53K	18.7K	34.8K	62.0K	118K	226K	402K	732K	1.43M	2.67M	4.75M	8.87M
1.69	3.16	5.62	10.7	21.0	38.3	68.1	133	255	432	806	1.58K	2.94K	5.23K	9.76K	19.1K	35.7K	63.4K	120K	232K	412K	750K	1.47M	2.70M	4.87M	9.09M
1.74	3.24	5.76	11.0	21.5	39.0	69.8	137	261	442	820	1.60K	3.00K	5.36K	10.0K	19.6K	36.0K	64.9K	121K	237K	422K	768K	1.50M	2.74M	4.99M	9.10M
1.78	3.30	5.90	11.3	22.0	39.2	71.5	140	267	453	825	1.62K	3.01K	5.49K	10.2K	20.0K	36.5K	66.2K	124K	240K	430K	787K	1.54M	2.80M	5.10M	9.31M
1.80	3.32	6.04	11.5	22.1	40.2	73.2	143	270	464	845	1.65K	3.09K	5.60K	10.5K	20.5K	37.4K	66.5K	127K	243K	432K	806K	1.58M	2.87M	5.11M	9.53M
1.82	3.40	6.19	11.8	22.6	41.2	75.0	147	274	470	866	1.69K	3.16K	5.62K	10.7K	21.0K	38.3K	68.0K	130K	246K	442K	820K	1.60M	2.94M	5.23M	9.76M
1.87	3.48	6.20	12.0	23.2	42.2	76.8	150	280	475	887	1.74K	3.24K	5.76K	11.0K	21.5K	39.0K	68.1K	133K	249K	453K	825K	1.62M	3.00M	5.36M	10.0M
1.91	3.57	6.34	12.1	23.7	43.0	78.7	154	287	487	909	1.78K	3.30K	5.90K	11.3K	22.0K	39.2K	69.8K	137K	255K	464K	845K	1.65M	3.01M	5.49M	

Description	Value Range	Digi-Key Part No.	Pricing					Phycomp Part No.
			10	50	200	5,000	10,000	
1/8 Watt, 1% Thick Film Chip Resistors (Tape & Reel) 5,000 / Reel	1.00 - 10.0M Ω	311 - Value + “FTR-ND”	—	—	—	17.40/M	15.66/M	9C12063AXXXXFKHFT
1/8 Watt, 1% Thick Film Chip Resistors (Cut Tape)	1.00 - 10.0M Ω	311 - Value + “FCT-ND”	1.35	3.63	8.33	—	—	9C12063AXXXXFKHFT

5%, 1/16 Watt — 0402 Series

Phycomp Standard Resistor Values

0.0	2.2	4.3	8.2	18	30	43	68	100	200	300	430	620	1.0K	2.0K	3.0K	4.3K	6.2K	10K	18K	30K	47K	82K	150K	270K	470K	1.5M
1.0	3.0	4.7	10	20	33	47	75	150	220	330	470	680	1.2K	2.2K	3.3K	4.7K	6.8K	11K	22K	33K	56K	100K	180K	300K	560K	3.0M
1.1	3.3	5.1	12	22	36	51	82	160	240	360	510	820	1.5K	2.4K	3.6K	5.1K	7.5K	12K	24K	39K	62K	110K	200K	330K	680K	3.3M
2.0	3.9	5.6	15	27	39	56	91	180	270	390	560	910	1.8K	2.7K	3.9K	5.6K	8.2K	15K	27K	43K	68K	120K	220K	430K	1.0M	

Description	Value Range	Digi-Key Part No.	Pricing					Phycomp Part No.
			10	50	200	10,000	30,000	
1/16 Watt, 5% Thick Film Chip Resistors (Tape & Reel) 10,000 / Reel	0.0 - 3.30M Ω	311 - Value + “JTR-ND”	—	—	—	6.48/M	5.76/M	9C1A0402XXXXJLHF3
1/16 Watt, 5% Thick Film Chip Resistors (Cut Tape)	0.0 - 3.30M Ω	311 - Value + “JCT-ND”	.88	2.37	5.44	—	—	9C1A0402XXXXJLHF3

5%, 1/16 Watt — 0603 Series

Phycomp Standard Resistor Values

0.0	1.6	3.3	5.6	10	18	33	56	100	180	330	560	1.0K	1.8K	3.3K	5.6K	10K	18K	33K	56K	100K	180K	330K	560K	1.0M	1.8M	3.3M	5.6M
1.0	1.8	3.6	6.2	11	20	36	62	110	200	360	620	1.1K	2.0K	3.6K	6.2K	11K	20K	36K	62K	110K	200K	360K	620K	1.1M	2.0M	3.6M	6.2M
1.1	2.2	3.9	6.8	12	22	39	68	120	220	390	680	1.2K	2.2K	3.9K	6.8K	12K	22K	39K	68K	120K	220K	390K	680K	1.2M	2.2M	3.9M	6.8M
1.2	2.4	4.3	7.5	13	24	43	75	130	240	430	750	1.3K	2.4K	4.3K	7.5K	13K	24K	43K	75K	130K	240K	430K	750K	1.3M	2.4M	4.3M	8.2M
1.3	2.7	4.7	8.2	15	27	47	82	150	270	470	820	1.5K	2.7K	4.7K	8.2K	15K	27K	47K	82K	150K	270K	470K	820K	1.5M	2.7M	4.7M	10M
1.5	3.0	5.1	9.1	16	30	51	91	160	300	510	910	1.6K	3.0K	5.1K	9.1K	16K	30K	51K	91K	160K	300K	510K	910K	1.6M	3.0M	5.1M	

Description	Value Range	Digi-Key Part No.	Pricing					Phycomp Part No.
			10	50	200	5,000	10,000	
1/16 Watt, 5% Thick Film Chip Resistors (Tape & Reel) 5,000 / Reel	0.0 - 10M Ω	311 - Value + “GTR-ND”	—	—	—	4.68/M	4.22/M	9C06031AXXXXJLHFT
1/16 Watt, 5% Thick Film Chip Resistors (Cut Tape)	0.0 - 10M Ω	311 - Value + “GCT-ND”	.76	2.06	4.73	—	—	9C06031AXXXXJLHFT

5%, 1/10 Watt — 0805 Series

Phycomp Standard Resistor Values

0.0	1.6	3.0	5.1	9.1	16	30	51	91	160	300	510	910	1.6K	3.0K	5.1K	9.1K	16K	30K	51K	91K	160K	300K	510K	910K	1.6M	3.0M	5.1M	9.1M
1.0	1.8	3.3	5.6	10	18	33	56	100	180	330	560	1.0K	1.8K	3.3K	5.6K	10K	18K	33K	56K	100K	180K	330K	560K	1.0M	1.8M	3.3M	5.6M	10M
1.1	2.0	3.6	6.2	11	20	36	62	110	200	360	620	1.1K	2.0K	3.6K	6.2K	11K	20K	36K	62K	110K	200K	360K	620K	1.1M	2.0M	3.6M	6.2M	
1.2	2.2	3.9	6.8	12	22	39	68	120	220	390	680	1.2K	2.2K	3.9K	6.8K	12K	22K	39K	68K	120K	220K	390K	680K	1.2M	2.2M	3.9M	6.8M	
1.3	2.4	4.3	7.5	13	24	43	75	130	240	430	750	1.3K	2.4K	4.3K	7.5K	13K	24K	43K	75K	130K	240K	430K	750K	1.3M	2.4M	4.3M	7.5M	
1.5	2.7	4.7	8.2	15	27	47	82	150	270	470	820	1.5K	2.7K	4.7K	8.2K	15K	27K	47K	82K	150K	270K	470K	820K	1.5M	2.7M	4.7M	8.2M	

Description	Value Range	Digi-Key Part No.	Pricing					Phycomp Part No.
			10	50	200	5,000	10,000	
1/10 Watt, 5% Thick Film Chip Resistors (Tape & Reel) 5,000 / Reel	0.0 - 10M Ω	311 - Value + “ATR-ND”	—	—	—	7.20/M	6.48/M	9C08052AXXXXJLHFT
1/10 Watt, 5% Thick Film Chip Resistors (Cut Tape)	0.0 - 10M Ω	311 - Value + “ACT-ND”	.88	2.37	5.44	—	—	9C08052AXXXXJLHFT

5%, 1/8 Watt — 1206 Series

Phycomp Standard Resistor Values

0.0	1.6	3.0	5.1	9.1	16	30	56	100	180	330	560	1.0K	1.8K	3.3K	5.6K	10K	18K	33K	56K	100K	180K	330K	560K	1.0M	1.8M	3.3M	5.6M	10M
1.0	1.8	3.3	5.6	10	18	33	62	110	200	360	620	1.1K	2.0K	3.6K	6.2K	11K	20K	36K	62K	110K	200K	360K	620K	1.1M	2.0M	3.6M	6.2M	11M
1.1	2.0	3.6	6.2	11	20	36	68	120	220	390	680	1.2K	2.2K	3.9K	6.8K	12K	22K	39K	68K	120K	220K	390K	680K	1.2M	2.2M	3.9M	6.8M	12M
1.2	2.2	3.9	6.8	12	22	39	75	130	240	430	750	1.3K	2.4K	4.3K	7.5K	13K	24K	43K	75K	130K	240K	430K	750K	1.3M	2.4M	4.3M	7.5M	13M
1.3	2.4	4.3	7.5	13	24	43	82	150	270	470	820	1.5K	2.7K	4.7K	8.2K	15K	27K	47K	82K	150K	270K	470K	820K	1.5M	2.7M	4.7M	8.2M	
1.5	2.7	4.7	8.2	15	27	51	91	160	300	510	910	1.6K	3.0K	5.1K	9.1K	16K	30K	51K	91K	160K	300K	510K	910K	1.6M	3.0M	5.1M	9.1M	

Description	Value Range	Digi-Key Part No.	Pricing					Phycomp Part No.
			10	50	200	5,000	10,000	
1/8 Watt, 5% Thick Film Chip Resistors (Tape & Reel) 5,000 / Reel	0.0 - 13M Ω	311 - Value + “ETR-ND”	—	—	—	9.12/M	8.21/M	9C12063AXXXXJLHFT
1/8 Watt, 5% Thick Film Chip Resistors (Cut Tape)	0.0 - 13M Ω	311 - Value + “ECT-ND”	.97	2.60	5.98	—	—	9C12063AXXXXJLHFT

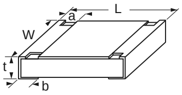
PANASONIC® ERA 0603/0805 .1% Metal Film Chip Resistors
Surface Mount — Available In 1/16 and 1/10 Watt

Standard Resistor Values

See below for complete part numbers when ordering.

100	130	180	240	330	430	560	750	1.0K	1.3K	1.8K	2.4K	3.3K	4.3K	5.6K	7.5K	10K	13K	18K	24K	33K	43K	56K	75K	100K
110	150	200	270	360	470	620	820	1.1K	1.5K	2.0K	2.7K	3.6K	4.7K	6.2K	8.2K	11K	15K	20K	27K	36K	47K	62K	82K	
120	160	220	300	390	510	680	910	1.2K	1.6K	2.2K	3.0K	3.9K	5.1K	6.8K	9.1K	12K	16K	22K	30K	39K	51K	68K	91K	

Features:
- High reliability
- Low TCR and current noise
- Excellent non-linearity

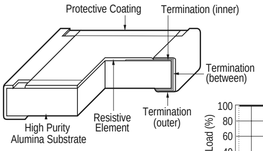


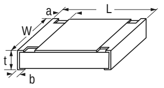
Type	Type (Power Rating)	Max. RCWV	Max. Overload Voltage	Dimensions (mm) L	W	t	a	b	Temperature Coefficient	Panasonic Part No.
0603	1/16 Watt	75V	150V	1.60	0.80	0.45	0.30	0.30	±25ppm / °C	ERA-3YE
0805	1/10 Watt	100V	200V	2.00	1.25	0.50	0.40	0.40	±25ppm / °C	ERA-6YE

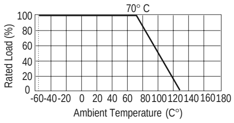
Description	Value Range	Digi-Key Part No.	Pricing 10	50	200	1,000	Digi-Key Part No.	Pkg. Size	Tape & Reel Pricing 5,000	10,000	25,000	50,000	Panasonic Part No.
0603, 1/16 W, .1%	100 ~ 33K	P+ Value + "YCT-ND"	6.84	24.23	79.80	330.60	P + Value + "YTR-ND"	5,000	264.00/M	220.00/M	182.60/M	165.00/M	ERA-3YEBxxxV
0805, 1/10 W, .1%	100 ~ 100K	P+ Value + "ZCT-ND"	6.84	24.23	79.80	330.60	P + Value + "ZTR-ND"	5,000	264.00/M	220.00/M	182.60/M	165.00/M	ERA-6YEBxxxV

0402 / 0603 / 0805 / 1206 / 1210 / 2010 / 2512 1% Precision Thick Film Chip Resistors
Surface Mount Available In 1/16, 1/10, 1/8, 1/4, 1/2 and 1 Watt

Panasonic® 0402 0603 0805 1206 1210 2010 2512 Available in 1/16, 1/10, 1/8, 1/4, 1/2 and 1 Watt







Size	Power Rating at 70°	Maximum RCWV*	Maximum Overload Voltage	Dimensions L	W	a	b	t	Temperature Coefficient	Panasonic Part No.
0402	1/16 W	50 V	100 V	1.00	0.50	0.20	0.25	0.35	10 ~ 91Ω±100ppm/°C, 100 ~ 100K±50ppm/°C 110K ~ 1MΩ±100ppm/°C	ERJ-2RKFxxxxX
0603	1/16 W - (1/10 W)**	50 V	100 V	1.60	0.80	0.30	0.30	0.45	10 ~ 1MΩ±100ppm/°C	ERJ-3EKFxxxxV
0805	1/10 W - (1/8 W)**	150 V	200 V	2.00	1.25	0.40	0.40	0.60	10 ~ 2.2MΩ±100ppm/°C	ERJ-6ENFxxxxV
1206	1/8 W - (1/4 W)**	200 V	400 V	3.20	1.60	0.50	0.50	0.60		ERJ-8ENFxxxxV
1210	1/4 W	200 V	400 V	3.20	2.50	0.50	0.50	0.60	10 ~ 1MΩ±100ppm/°C	ERJ-14NFxxxxU
2010	1/2 W	200 V	400 V	5.00	2.50	0.60	0.60	0.60		ERJ-12SFxxxxU
2512	1 W	200 V	400 V	6.40	3.20	0.65	0.60	0.60		ERJ-1TYFxxxU

* Rated Continuous Working Voltage (RCWV) shall be determined from RCWV = $\sqrt{\text{Power Rating x Resistance Values}}$, or max. RCWV listed above, whichever is less.

** Available for reduction of load of pulse characteristics (RCWV x 2.5 RCWV x 2.0, R≥1.1kΩ).

Description	Value Range	Digi-Key Part No.	Cut Tape Pricing 10	50	200	1,000	Digi-Key Part Number	Pkg. Size	Tape & Reel Pricing 4,000	5,000	10,000	12,000	24,000	25,000	30,000	Panasonic Part No.
0402, 1/16 Watt, 1%	10.0 ~ 1.00M Ω	P + Value + "LCT-ND"	.98	2.65	6.08	20.74	P + Value + "LTR-ND"	10,000	—	—	8.51/M	—	—	—	7.56/M	ERJ-2RKFxxxxX
0603, 1/16 Watt, 1%	10.0 ~ 2.20M Ω	P + Value + "HCT-ND"	.90	2.42	5.57	19.00	P + Value + "HTR-ND"	5,000	—	7.65/M	6.89/M	—	—	6.12/M	—	ERJ-3EKFxxxxV
0805, 1/10 Watt, 1%	10.0 ~ 2.20M Ω	P + Value + "CCT-ND"	.90	2.42	5.57	19.00	P + Value + "CTR-ND"	5,000	—	7.65/M	6.89/M	—	—	6.12/M	—	ERJ-6ENFxxxxV
1206, 1/8 Watt, 1%	10.0 ~ 2.20M Ω	P + Value + "FCT-ND"	1.17	3.15	7.23	24.65	P + Value + "FTR-ND"	5,000	—	13.50/M	12.15/M	—	—	10.80/M	—	ERJ-8ENFxxxxV
1210, 1/4 Watt, 1%	10.0 ~ 1.00M Ω	P + Value + "AACT-ND" *NEW!*	3.78	10.18	23.38	79.75	P + Value + "AATR-ND" *NEW!*	5,000	—	70.50/M	63.45/M	—	—	56.40/M	—	ERJ-14NFxxxxU
2010, 1/2 Watt, 1%	See Chart	P + Value + "ACCT-ND" *NEW!*	3.00	10.63	35.00	145.00	P + Value + "ACTR-ND" *NEW!*	5,000	—	138.00/M	124.20/M	—	—	110.40/M	—	ERJ-12SFxxxxU
2512, 1 Watt, 1%	See Chart	PT + Value + "AECT-ND" *NEW!*	7.08	25.08	82.60	342.20	PT + Value + "AETR-ND" *NEW!*	4,000	273.60/M	—	—	228.00/M	189.24/M	—	—	ERJ-1TYFxxxU

Panasonic Standard Resistor Values

10.0	20.0	40.2	80.6	162	324	649	1.30K	2.61K	5.23K	10.5K	21.0K	42.2K	84.5K	169K	340K	681K
10.2	20.5	41.2	82.5	165	332	665	1.33K	2.67K	5.36K	10.7K	21.5K	43.2K	86.6K	174K	348K	698K
10.5	21.0	42.2	84.5	169	340	681	1.37K	2.74K	5.49K	11.0K	22.1K	44.2K	88.7K	178K	357K	715K
10.7	21.5	43.2	86.6	174	348	698	1.40K	2.80K	5.62K	11.3K	22.6K	45.3K	90.9K	182K	365K	732K
11.0	22.1	44.2	88.7	178	357	715	1.43K	2.87K	5.76K	11.5K	23.2K	46.4K	93.1K	187K	374K	750K
11.3	22.6	45.3	90.9	182	365	732	1.47K	2.94K	5.90K	11.8K	23.7K	47.5K	95.3K	191K	383K	768K
11.5	23.2	46.4	93.1	187	374	750	1.50K	3.01K	6.04K	12.1K	24.3K	48.7K	97.6K	196K	392K	787K
11.8	23.7	47.5	95.3	191	383	768	1.54K	3.09K	6.19K	12.4K	24.9K	49.9K	100K	200K	402K	806K
12.1	24.3	48.7	97.6	196	392	787	1.58K	3.16K	6.34K	12.7K	25.5K	51.1K	102K	205K	412K	825K
12.4	24.9	49.9	100	200	402	806	1.62K	3.24K	6.49K	13.0K	26.1K	52.3K	105K	210K	422K	845K
12.7	25.5	51.1	102	205	412	825	1.65K	3.32K	6.65K	13.3K	26.7K	53.6K	107K	215K	432K	866K
13.0	26.1	52.3	105	210	422	845	1.69K	3.40K	6.81K	13.7K	27.4K	54.9K	110K	221K	442K	887K
13.3	26.7	53.6	107	215	432	866	1.74K	3.48K	6.98K	14.0K	28.0K	56.2K	113K	226K	453K	909K
13.7	27.4	54.9	110	221	442	887	1.78K	3.57K	7.15K	14.3K	28.7K	57.6K	115K	232K	464K	931K
14.0	28.0	56.2	113	226	453	909	1.82K	3.65K	7.32K	14.7K	29.4K	59.0K	118K	237K	475K	953K
14.3	28.7	57.6	115	232	464	931	1.87K	3.74K	7.50K	15.0K	30.1K	60.4K	121K	243K	487K	976K
14.7	29.4	59.0	118	237	475	953	1.91K	3.83K	7.68K	15.4K	30.9K	61.9K	124K	249K	499K	1.00M
15.0	30.1	60.4	121	243	487	976	1.96K	3.92K	7.87K	15.8K	31.6K	63.4K	127K	255K	511K	1.10M
15.4	30.9	61.9	124	249	499	1.00K	2.00K	4.02K	8.06K	16.2K	32.4K	64.9K	130K	261K	523K	1.20M
15.8	31.6	63.4	127	255	511	1.02K	2.05K	4.12K	8.25K	16.5K	33.2K	66.5K	133K	267K	536K	1.30M
16.2	32.4	64.9	130	261	523	1.05K	2.10K	4.22K	8.45K	16.9K	34.0K	68.1K	137K	274K	549K	1.50M
16.5	33.2	66.5	133	267	536	1.07K	2.15K	4.32K	8.66K	17.4K	34.8K	69.8K	140K	280K	562K	1.60M
16.9	34.0	68.1	137	274	549	1.10K	2.21K	4.42K	8.87K	17.8K	35.7K	71.5K	143K	287K	576K	1.80M
17.4	34.8	69.8	140	280	562	1.13K	2.26K	4.53K	9.09K	18.2K	36.5K	73.2K	147K	294K	590K	2.00M
17.8	35.7	71.5	143	287	576	1.15K	2.32K	4.64K	9.31K	18.7K	37.4K	75.0K	150K	301K	604K	2.20M
18.2	36.5	73.2	147	294	590	1.18K	2.37K	4.75K	9.53K	19.1K	38.3K	76.8K	154K	309K	619K	
18.7	37.4	75.0	150	301	604	1.21K	2.43K	4.87K	9.76K	19.6K	39.2K	78.7K	158K	316K	634K	
19.1	38.3	76.8	154	309	619	1.24K	2.49K	4.99K	10.0K	20.0K	40.2K	80.6K	162K	324K	649K	
19.6	39.2	78.7	158	316	634	1.27K	2.55K	5.11K	10.2K	20.5K	41.2K	82.5K	165K	332K	665K	

Panasonic 2512 Values

10	100	270	1K	10K	100K	150K	330K	1M

Panasonic 2010 Values

10.0	33.2	110	365	1.21K	4.02K	13.3K	44.2K	147K	487K
10.5	34.8	115	383	1.27K	4.22K	14.0K	46.4K	154K	511K
11.0	36.5	121	402	1.33K	4.42K	14.7K	48.7K	162K	536K
11.5	38.3	127	422	1.40K	4.64K	15.4K	51.1K	169K	562K
12.1	40.2	133	442	1.47K	4.87K	16.2K	53.6K	178K	590K
12.7	42.2	140	464	1.54K	5.11K	16.9K	56.2K	187K	619K
13.3	44.2	147	487	1.62K	5.36K	17.8K	59.0K	196K	649K
14.0	46.4	154	511	1.69K	5.62K	18.7K	61.9K	205K	681K
14.7	48.7	162	536	1.78K	5.90K	19.6K	64.9K	215K	715K
15.4	51.1	169	562	1.87K	6.19K	20.5K	68.1K	226K	750K
16.2	53.6	178	590	1.96K	6.49K	21.5K	71.5K	237K	787K
16.9	56.2	187	619	2.05K	6.81K	22.6K	75.0K	249K	825K
17.8	59.0	196	649	2.15K	7.15K	23.7K	78.7K	261K	866K
18.7	61.9	205	681	2.26K	7.50K	24.9K	82.5K	274K	909K
19.6	64.9	215	715	2.37K	7.87K	26.1K	86.6K	287K	953K
20.5	68.1	226	750	2.49K	8.25K	27.4K	90.9K	301K	1.00M
21.5	71.5	237	787	2.61K	8.66K	28.7K	95.3K	316K	
22.6	75.0	249	825	2.74K	9.09K	30.1K	100K	332K	
23.7	78.7	261	866	2.87K	9.53K	31.6K	105K	348K	
24.9	82.5	274	909	3.01K	10.0K	33.2K	110K	365K	
26.1	86.6	287	953	3.16K	10.5K	34.8K	115K	383K	
27.4	90.9	301	1.00K	3.32K	11.0K	36.5K	121K	402K	
28.7	95.3	316	1.05K	3.48K	11.5K	38.3K	127K	422K	
30.1	100	332	1.10K	3.65K	12.1K	40.2K	133K	442K	
31.6	105	348	1.15K	3.83K	12.7K	42.2K	140K	464K	

Panasonic® 1% Chip Resistors

Digi-Key® Assortment Kits

Digi-Key® 0402 1% Chip Resistor Kits

RSM1L-ND 50 ea. of Values 10.0Ω to 97.6Ω **$349.00**
RSM2L-ND 50 ea. of Values 100Ω to 976Ω **$349.00**
RSM3L-ND 50 ea. of Values 1.00KΩ to 9.76KΩ **$349.00**
RSM4L-ND 50 ea. of Values 10.0KΩ to 97.6KΩ **$349.00**
RSM5L-ND 50 ea. of Values 100KΩ to 1.00MΩ **$349.00**

Digi-Key® 0603 1% Chip Resistor Kits

RSM1H-ND 50 ea. of Values 10.0Ω to 97.6Ω **$199.00**
RSM2H-ND 50 ea. of Values 100Ω to 976Ω **$199.00**
RSM3H-ND 50 ea. of Values 1.00KΩ to 9.76KΩ **$199.00**
RSM4H-ND 50 ea. of Values 10.0KΩ to 97.6KΩ **$199.00**
RSM5H-ND 50 ea. of Values 100KΩ to 1.00MΩ **$199.00**

Digi-Key® 1206 1% Chip Resistor Kits

RSM1FA-ND 50 ea. of Values 10Ω to 97.6Ω **$129.95**
RSM1F-ND 200 ea. of Values 10Ω to 97.6Ω **$495.00**

RSM2FA-ND 50 ea. of Values 100Ω to 976Ω **$129.95**
RSM2F-ND 200 ea. of Values 100Ω to 976Ω **$495.00**

RSM3FA-ND 50 ea. of Values 1.00KΩ to 9.76KΩ **$129.95**
RSM3F-ND 200 ea. of Values 1.00KΩ to 9.76KΩ **$495.00**

RSM4FA-ND 50 ea. of Values 10.0KΩ to 97.6KΩ **$129.95**
RSM4F-ND 200 ea. of Values 10.0KΩ to 97.6KΩ **$495.00**

RSM5FA-ND 50 ea. of Values 100KΩ to 1.00MΩ **$129.95**
RSM5F-ND 200 ea. of Values 100KΩ to 1.00MΩ **$495.00**

Digi-Key® 0805 1% Chip Resistor Kits

RSM1CA-ND 50 ea. of Values 10Ω to 97.6Ω **$129.95**
RSM1C-ND 200 ea. of Values 10Ω to 97.6Ω **$495.00**

RSM2CA-ND 50 ea. of Values 100Ω to 976Ω **$129.95**
RSM2C-ND 200 ea. of Values 100Ω to 976Ω **$495.00**

RSM3CA-ND 50 ea. of Values 1.00KΩ to 9.76KΩ **$129.95**
RSM3C-ND 200 ea. of Values 1.00KΩ to 9.76KΩ **$495.00**

RSM4CA-ND 50 ea. of Values 10.0KΩ to 97.6KΩ **$129.95**
RSM4C-ND 200 ea. of Values 10.0KΩ to 97.6KΩ **$495.00**

RSM5CA-ND 50 ea. of Values 100KΩ to 1.00MΩ **$129.95**
RSM5C-ND 200 ea. of Values 100KΩ to 1.00MΩ **$495.00**

PANASONIC® 0201/0402/0603/0805/1206/1210/2010/2512
Surface Mount 5% Thick Film Chip Resistors — 1/20, 1/16, 1/10, 1/8, 1/4, 1/2 and 1 Watt

0201 Series — Standard Resistor Values
See below for complete part numbers when ordering.

10	47	220	1.0K	4.7K	22K	100K	470K
12	56	270	1.2K	5.6K	27K	120K	560K
15	68	330	1.5K	6.8K	33K	150K	680K
18	82	390	1.8K	8.2K	39K	180K	820K
22	100	470	2.2K	10K	47K	220K	1.0M
27	120	560	2.7K	12K	56K	270K	
33	150	680	3.3K	15K	68K	330K	
39	180	820	3.9K	18K	82K	390K	

0402/0603/0805/1206/1210/2010/2512 Series — Standard Resistor Values
See below for complete part numbers when ordering.

* 12M, 15M, 18M and 22M are 10% Tolerance

1.0	2.4	5.6	13	33	75	180	430	1.0K	2.4K	5.6K	13K	33K	75K	180K	430K	1.0M	2.4M	5.6M	18M*
1.1	2.7	6.2	15	36	82	200	470	1.1K	2.7K	6.2K	15K	36K	82K	200K	470K	1.1M	2.7M	6.2M	22M*
1.2	3.0	6.8	16	39	91	220	510	1.2K	3.0K	6.8K	16K	39K	91K	220K	510K	1.2M	3.0M	6.8M	
1.3	3.3	7.5	18	43	100	240	560	1.3K	3.3K	7.5K	18K	43K	100K	240K	560K	1.3M	3.3M	7.5M	
1.5	3.6	8.2	20	47	110	270	620	1.5K	3.6K	8.2K	20K	47K	110K	270K	620K	1.5M	3.6M	8.2M	
1.6	3.9	9.1	22	51	120	300	680	1.6K	3.9K	9.1K	22K	51K	120K	300K	680K	1.6M	3.9M	9.1M	
1.8	4.3	10	24	56	130	330	750	1.8K	4.3K	10K	24K	56K	130K	330K	750K	1.8M	4.3M	10M	
2.0	4.7	11	27	62	150	360	820	2.0K	4.7K	11K	27K	62K	150K	360K	820K	2.0M	4.7M	12M*	
2.2	5.1	12	30	68	160	390	910	2.2K	5.1K	12K	30K	68K	160K	390K	910K	2.2M	5.1M	15M*	

Digi-Key® 1206, 1/8W, 5% Chip Resistor Assortments

CR1A-KIT-ND 50 ea. of every other value from 10, 12, 15, 18, etc. 1.0M (3,050) **$89.95**

CR1-KIT-ND 200 ea. (same values as kit above) . . **$329.00**

CR2A-KIT-ND 50 ea. of every other value from 11, 13, 16, 20, etc. 910K (3,000) **$89.95**

CR2-KIT-ND 200 ea. (same values as kit above) . . . **$329.00**

Digi-Key® 0805, 1/10W, 5% Chip Resistor Assortments

CR3A-KIT-ND 50 ea. of every other value from 10, 12, 15, 18, etc. 1.0M (3,050) **$89.95**

CR3-KIT-ND 200 ea. (same values as kit above) **$349.00**

CR4A-KIT-ND 50 ea. of every other value from 11, 13, 16, 20, etc. 910K (3,000) **$89.95**

CR4-KIT-ND 200 ea. (same values as kit above) **$349.00**

Digi-Key® 0603, 1/16W, 5% Chip Resistor Assortments

CR5A-KIT-ND 50 ea. of every other value from 10, 12, 15, 18, etc. 1.0M (3,050)......................... **$94.95**

CR5-KIT-ND 200 ea. (same values as kit above) . . **$379.00**

CR6A-KIT-ND 50 ea. of every other value from 11, 13, 16, 20, etc. 910K (3,000) **$94.95**

CR6-KIT-ND 200 ea. (same values as kit above) . . **$379.00**

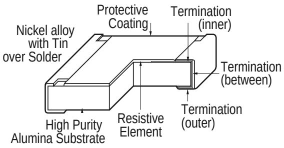
Digi-Key® 0402, 1/16W, 5% Chip Resistor Assortments

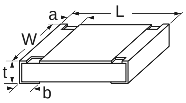
CR7A-KIT-ND 50 ea. of every other value from 10, 12, 15, 18, 22, , 1.0M (3,050) **$99.95**

CR7-KIT-ND 200 ea. (same values as kit above) . . **$399.00**

CR8A-KIT-ND 50 ea. of every other value from 11, 13, 16, 20, etc. 910K (3,000) **$99.95**

CR8-KIT-ND 200 ea. (same values as kit above) . . **$399.00**





Type	Power Rating	Max. RCWV	Overload Voltage	Dimensions (mm) L	W	t	a	b	Temperature Coefficient (ppm/°C)	Panasonic Part No.
0201	1/20W	15V	30V	0.60	0.30	0.20	0.15	0.15	<10Ω: -100ppm/°C to +600ppm/°C 10Ω ~ 1MΩ: ±200ppm°C 1MΩ >: -400ppm/°C to +600ppm/°C	ERJ-1GEJ
0402	1/16W	50V	100V	1.00	0.50	0.35	0.20	0.25		ERJ-2GEJ
0603	1/16W	50V	100V	1.60	0.80	0.45	0.30	0.30		ERJ-3GSY
0805	1/10W	150V	200V	2.00	1.25	0.60	0.40	0.40		ERJ-6GEY
1206	1/8W	200V	400V	3.20	1.60	0.60	0.50	0.50		ERJ-8GEY
1210	1/4W	200V	400V	3.20	2.50	0.60	0.50	0.50		ERJ-14Y
2010	1/2W	200V	400V	5.00	2.50	0.60	0.60	0.60		ERJ-12ZY
2512	1W	250V	500V	6.40	3.20	0.60	0.65	0.60		ERJ-1TY

Description	Value Range	Digi-Key Part No.	Pricing 10	50	200	1,000	Digi-Key Part No.	Pkg. Size	Tape & Reel Pricing 4,000	5,000	10,000	12,000	Panasonic Part No.
0201, 1/20 W, 5%	(10-1.0MΩ)	P + Value + "AGCT-ND"†	5.64	15.17	34.85	118.90	P + Value + "AGTR-ND"†	10,000	—	—	99.90/M	—	ERJ-1GEJxxxX
0402, 1/16 W, 5%	(1~10MΩ)	P + Value + "JCT-ND"†	.84	2.26	5.19	17.69	P + Value + "JTR-ND"†	10,000	—	—	5.67/M	—	ERJ-2GEJxxxX
0603, 1/16 W, 5%	(1~22MΩ)*	P + Value + "GCT-ND"†	.80	2.15	4.93	16.82	P + Value + "GTR-ND"†	5,000	—	5.40/M	4.86/M	—	ERJ-3GEYJxxxV
0805, 1/10 W, 5%	(1~22MΩ)*	P + Value + "ACT-ND"†	.80	2.15	4.93	16.82	P + Value + "ATR-ND"†	5,000	—	5.40/M	4.86/M	—	ERJ-6GEYJxxxV
1206, 1/8 W, 5%	(1~22MΩ)*	P + Value + "ECT-ND"†	.94	2.53	5.82	19.87	P + Value + "ETR-ND"†	5,000	—	8.55/M	7.70/M	—	ERJ-8GEYJxxxV
1210, 1/4 W, 5%	(1~10MΩ)	P + Value + "VCT-ND"	2.70	7.25	16.66	56.84	P + Value + "VTR-ND"	5,000	—	46.80/M	42.12/M	—	ERJ-14YJxxxU
2010, 1/2 W, 5%	(1~10MΩ)	P + Value + "WCT-ND"	4.00	10.77	24.74	84.39	P + Value + "WTR-ND"	5,000	—	75.30/M	67.77/M	—	ERJ-12ZYJxxxU
2512, 1 W, 5%	(1~2.2MΩ)	PT + Value + "XCT-ND" *NEW!*	3.84	13.60	44.80	185.60	PT + Value + "XTR-ND" *NEW!*	4,000	144.00/M	—	—	120.00/M	ERJ-1TYJxxxU

† 0.0Ω (zerohm) value also available. ∗ 12M, 15M, 18M and 22M are 10% tolerance.

PANASONIC® 0603/0805/1206/1210/2010/2512 5% and 0603/0805/1206 1%
Surface Mount Ultra Low Ohm Thick Film Chip Resistors — 1/10, 1/8, 1/4, 1/2 and 1 Watt

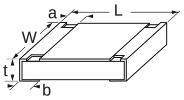
Standard Resistor Values
See below for complete part numbers when ordering.

.10	.15	.22	.33	.47	.68	1.0	1.5	2.2	3.3	4.7	6.8	9.1
.12	.18	.27	.39	.56	.82	1.2	1.8	2.7	3.9	5.6	8.2	

Rated Continuous Working Voltage (RCWV): The rated voltage at each resistance should be calculated from the following equation: RCWV=$\sqrt{P \times R}$

RCWV(V):P(W):R(Ω)

Max. overload voltage = RCWVx2.5



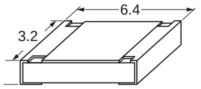
Type	Type (Power Rating)	Dimensions (mm) L	W	t	a	b	Temperature Coefficient (ppm/°C)	Panasonic Part No.
0603	1/10 (1/5)* Watt	1.6	0.8	0.45	0.30	0.30	.1 ~ .82Ω ±300ppm / °C/1.0 ~ 8.2 Ω + ±200ppm/C	ERJ-3RS/Q
0805	1/10 (1/4)*Watt	2.00	1.25	0.60	0.40	0.40	.1 ~ .91Ω ±250ppm / °C/1.0 ~ 9.1 Ω + ±200ppm/C	ERJ-6RS/Q
1206	1/8 (1/4) Watt	3.20	1.60	0.60	0.50	0.50	.1 ~ .91Ω ±250ppm / °C/1.0 ~ 9.1 Ω + ±200ppm/C	ERJ-8RS/Q
1210	1/4 (1/2)*Watt	3.20	2.50	0.60	0.50	0.50	.1 ~ .91Ω ±200ppm / °C/1.0 ~ 9.1 Ω + ±100ppm/C	ERJ-14RS/Q
2010	1/2 Watt	5.00	2.50	0.60	0.60	0.60	.22 ~ 1.0Ω ±200ppm / °C	ERJ-12ZQJ
2512	1 Watt	6.40	3.20	0.60	0.65	0.60	.1 ~ .91Ω ±200ppm / °C/1.0 ~ 9.1 Ω + ±100ppm/C	ERJ-1TRS/Q

Description	Value Range	Digi-Key Part No.	Pricing 10	50	200	1,000	Digi-Key Part No.	Pkg. Size	Tape & Reel Pricing 4,000	5,000	10,000	12,000	Panasonic Part No.
0603, 1/10 (1/5)* W, 5%	(.1 ~ .18Ω)	P + Value + "AHCT-ND"	3.26	8.77	20.15	68.76	P + Value + "AHTR-ND"	5,000	—	59.13/M	53.22/M	—	ERJ-3RSJxxxV
0603, 1/10 (1/5)* W, 5%	(.22 ~ .8.2Ω)	P + Value + "AHCT-ND"	1.91	5.13	11.78	40.19	P + Value + "AHTR-ND"	5,000	—	29.58/M	26.63/M	—	ERJ-3RQJxxxV
0603, 1/10 (1/5)* W, 1%	(.1 ~ .18Ω)	P + Value + "AJCT-ND"	4.61	12.40	28.48	97.18	P + Value + "AJTR-ND"	5,000	—	88.53/M	79.68/M	—	ERJ-3RSFxxxV
0603, 1/10 (1/5)* W, 1%	(.22 ~ .8.2Ω)	P + Value + "AJCT-ND"	2.58	6.95	15.96	54.46	P + Value + "AJTR-ND"	5,000	—	44.34/M	39.91/M	—	ERJ-3RQFxxxV
0805, 1/10 (1/4)* W, 5%	(.1 ~ .18Ω)	P + Value + "BCT-ND"	14.03	37.74	86.70	295.80	P + Value + "BTR-ND"	5,000	—	294.00/M	264.60/M	—	ERJ-6RSJxxxV
0805, 1/10 (1/4)* W, 5%	(.22 ~ 9.1Ω)	P + Value + "BCT-ND"	6.33	17.02	39.10	133.40	P + Value + "BTR-ND"	5,000	—	126.00/M	113.40/M	—	ERJ-6RQJxxxV
0805, 1/10 (1/4)*W, 1%	(.22 ~ 9.1Ω)	P + Value + "DCT-ND"	4.26	15.09	49.70	205.90	P + Value + "DTR-ND"	5,000	—	160.80/M	134.00/M	—	ERJ-6RQFxxxV
1206, 1/8 (1/4)*W, 5%	(.1 ~ .18Ω)	P + Value + "PCT-ND"	13.34	35.89	82.45	281.30	P + Value + "PTR-ND"	5,000	—	279.00/M	251.10/M	—	ERJ-8RSJxxxV
1206, 1/8 (1/4)*W, 5%	(.22 ~ 9.1Ω)	P + Value + "PCT-ND"	5.64	15.17	34.85	118.90	P + Value + "PTR-ND"	5,000	—	111.00/M	99.90/M	—	ERJ-8RQJxxxV
1206, 1/8 (1/4)*W, 1%	(.22 ~ 9.1Ω)	P + Value + "RCT-ND"	3.90	13.81	45.50	188.50	P + Value + "RTR-ND"	5,000	—	146.40/M	122.00/M	—	ERJ-8RQFxxxV
1210, 1/4 (1/2)*W, 5%	(.1 ~ .18Ω)	P + Value + "SCT-ND"	5.52	19.55	64.40	266.80	P + Value + "STR-ND"	5,000	—	211.20/M	176.00/M	—	ERJ-14RSJxxxU
1210, 1/4 (1/2)*W, 5%	(.22 ~ 9.1Ω)	P + Value + "SCT-ND"	3.42	12.11	39.90	165.30	P + Value + "STR-ND"	5,000	—	127.20/M	106.00/M	—	ERJ-14RQJxxxU
2010, 1/2 (1/2)*W, 5%	(.22 ~1.0Ω)	P + Value + "AFCT-ND"	6.48	22.95	75.60	313.20	P + Value + "AFTR-ND"	5,000	—	249.60/M	208.00/M	—	ERJ-12ZQJxxxU
2512, 1 W, 5%	(.1 ~ .18Ω)	PT + Value + "UCT-ND" *NEW!*	10.68	43.39	154.86	694.20	PT + Value + "UTR-ND" *NEW!*	4,000	591.75/M	—	—	499.70/M	ERJ-1TRSJxxxU
2512, 1 W, 5%	(.22 ~ 9.1Ω)	PT + Value + "UCT-ND" *NEW!*	8.64	30.60	100.80	417.60	PT + Value + "UTR-ND" *NEW!*	4,000	336.00/M	—	—	280.00/M	ERJ-1TRQJxxxU

* Available for reduction of load pulse characteristic (RSWV x 2.0)

PANASONIC® Thick Film Chip Resistors / Low Resistance Type
For Current Sensing Applications

Features:
- 2512 Package (1 watt)
- Available in both 1% and 5% tolerance
- Operating temperature of -55°C to 125°C (derating required above 70°C)
- Resistance Range of 1.0-100mΩ
- Temperature Coefficient: ±100ppm >5mΩ
±350ppm <5mΩ



Standard Resistor Values (mΩ)
See below for complete part numbers when ordering.

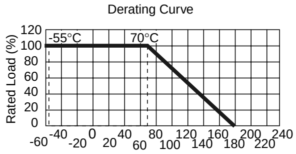
1.0*	2.0*	4.0	8.0	12	16	47*	100
1.5*	3.0	5.0	10	15	20	50	

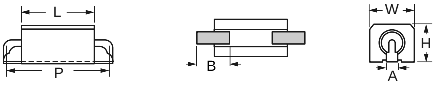
* not available in 1% tolerance

Description	Value Range (mΩ)	Digi-Key Part No.	Cut Tape Pricing 10	50	200	Digi-Key Part No.	Tape & Reel Pricing 3,000	Panasonic Part No.
2512, 1 W, 5%	1.0 ~ 1.5	P + Value + "TCT-ND" *NEW!*	18.60	75.56	269.69	P + Value + "TTR-ND" *NEW!*	1037.21/M	ERJ-M1WTJxxxU
2512, 1 W, 5%	2.0	P + Value + "TCT-ND"	13.02	52.90	188.80	P + Value + "TTR-ND"	723.42/M	ERJ-M1WTJxxxU
2512, 1 W, 5%	3.0 ~ 20	P + Value + "TCT-ND"	11.08	45.03	160.71	P + Value + "TTR-ND"	614.43/M	ERJ-M1WSJxxxU
2512, 1 W, 5%	47 ~ 100	P + Value + "TCT-ND"	7.88	32.01	114.26	P + Value + "TTR-ND"	434.25/M	ERJ-L1WKJxxxU
2512, 1 W, 1%	3.0 ~ 20	P + Value + "MCT-ND"	12.18	49.47	176.59	P + Value + "MTR-ND"	676.04/M	ERJ-M1WSFxxxU
2512, 1 W, 1%	50 ~ 100	P + Value + "MCT-ND"	9.40	38.19	136.30	P + Value + "MTR-ND"	519.75/M	ERJ-L1WKFxxxU

PANASONIC® 1 & 2 Watt — 5% SMD Metal Film Fixed Resistors

FEATURES:
- Non-flammable nature
- High reliability
- Approved under the ISO 9001 system





Type	Dimensions (mm) P	L	W	H	A	B
1W	12.5	9.0	5.6	5.0	1.5	3.0
2W	15.0	12.0	6.4	5.8	1.5	4.0

Standard Resistor Values (mΩ)
See below for complete part numbers when ordering.

.022	.068	.22	.68	2.2	6.8
.027	.082	.27	.82	2.7	8.2
.033	.10	.33	1.0	3.3	
.039	.12	.39	1.2	3.9	
.047	.15	.47	1.5	4.7	
.056	.18	.56	1.8	5.6	

Description	Value Range (mΩ)	Digi-Key Part No.	Cut Tape Pricing 10	50	200	Digi-Key Part No.	Pkg. Size	Tape & Reel Pricing 1,000	2,000	5,000	6,000	Panasonic Part No
1 Watt, 5%	.022 ~ .082	PRX1W + Value + "CT-ND"	35.51	95.55	219.50	PRX1W + Value + "TR-ND"	2,000	—	508.48/M	—	406.79/M	ERX-1HQJxxMH
1 Watt, 5%	.10 ~ .18	PRX1W + Value + "CT-ND"	39.51	106.32	244.26	PRX1W + Value + "TR-ND"	2,000	—	566.72/M	—	453.38/M	ERX-1HZJxxxH
1 Watt, 5%	.22 ~ 8.2	PRX1W + Value + "CT-ND"	35.51	95.55	219.50	PRX1W + Value + "TR-ND"	2,000	—	508.48/M	—	406.79/M	ERX-1HJxxxH
2 Watt, 5%	.022 ~ .082	PRX2W + Value + "CT-ND"	39.51	106.32	244.26	PRX2W + Value + "TR-ND"	1,000	566.72	—	453.38/M	—	ERX-2HQJxxMH
2 Watt, 5%	.10 ~ .18	PRX2W + Value + "CT-ND"	45.67	122.90	282.34	PRX2W + Value + "TR-ND"	1,000	656.32	—	525.06/M	—	ERX-2HZJxxxH
2 Watt, 5%	.22 ~ 8.2	PRX2W + Value + "CT-ND"	39.51	106.32	244.26	PRX2W + Value + "TR-ND"	1,000	566.72	—	453.38/M	—	ERX-2HJxxxH

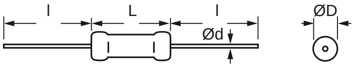
PANASONIC® 5% Metal Oxide Film Resistors

Now Available In Tape and Reel

Matsushita fixed metal oxide film resistors feature small sized dimensions and have higher power rating at the same size as the conventional type.

Features:

Flame retardancy of the exclusively formulated inorganic insulative material exhibits an equivalent performance requirements of UL-94 (VE-O) and when operated at a potential less than 16 times RCWV, Matsushita metal (oxide) film resistors never flame nor arc. The coating and markings resist normal washing of solvents, such as Freon (TE, TMC, TF), trichloroethane.



Type	Max. Working Volt.	Dimensions (mm) L	l	D	d
1W	350	9.0	30.0	2.8	0.65
2W	350	12.0	30.0	4.0	0.80
3W	350	15.0	38.0	5.5	0.80

Characteristics:

Temperature Coefficient	R. Wattage of 1, 2, 3 ±350ppm/°C
Voltage Coefficient	25ppm/V Max
Insulation Resist.	10,000 MΩ Min
Temp. Cycling	±(1% + 0.05Ω) Max
Short-time Overload	±(2% + 0.05Ω) Max
Humidity (Steady State)	±(2% + 0.05Ω) Max
Load Life in Humidity	±(5% + 0.05Ω) Max
Load Life	±(5% + 0.05Ω) Max
Resistance to Soldering Heat	±(1% + 0.05Ω) Max
Vibration Low Freq	±(1% + 0.05Ω) Max
Thermal Shock	±(2% + 0.05Ω) Max
Noise	1.0μV/V Max

Standard Resistor Values — See below for complete part numbers when ordering.

0.47	0.82	1.5	2.7	4.3	6.8	11	18	30	47	75	120	200	330	510	820	1.3K	2.2K	3.6K	5.6K	9.1K	15K	24K	39K	62K	100K	160K	270K	430K	680K
0.51	0.91	1.6	3.0	4.7	7.5	12	20	33	51	82	130	220	360	560	910	1.5K	2.4K	3.9K	6.2K	10K	16K	27K	43K	68K	110K	180K	300K	470K	750K
0.56	1.0	1.8	3.3	5.1	8.2	13	22	36	56	91	150	240	390	620	1.0K	1.6K	2.7K	4.3K	6.8K	11K	18K	30K	47K	75K	120K	200K	330K	510K	820K
0.62	1.1	2.0	3.6	5.6	9.1	15	24	39	62	100	160	270	430	680	1.1K	1.8K	3.0K	4.7K	7.5K	12K	20K	33K	51K	82K	130K	220K	360K	560K	910K
0.68	1.2	2.2	3.9	6.2	10	16	27	43	68	110	180	300	470	750	1.2K	2.0K	3.3K	5.1K	8.2K	13K	22K	36K	56K	91K	150K	240K	390K	620K	1.0M
0.75	1.3	2.4																											

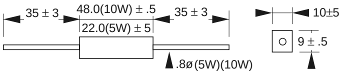
Description	Digi-Key Part Number	Pricing 1	5	100	1M	5M	10M
1 Watt, 5% Metal Oxide Film Resistors Bulk Package (0.47-68KΩ)	"P" + Value + "W-1BK-ND" (i.e. P20W-1BK-ND)	.24	.89	10.07	69.47	61.86/M	55.58/M
1 Watt, 5% Metal Oxide Film Resistors Tape and Reel (0.47-68KΩ)	"P" + Value + "W-1TR-ND" (i.e. P1.0KW-1TR-ND)	—	—	—	—	64.95/M	58.36/M
2 Watt, 5% Metal Oxide Film Resistors Bulk Package (0.47-100KΩ)	"P" + Value + "W-2BK-ND" (i.e. P20W-2BK-ND)	.29	1.06	13.65	83.58	74.38/M	66.71/M
2 Watt, 5% Metal Oxide Film Resistors Tape and Reel (0.47-100KΩ)	"P" + Value + "W-2TR-ND" (i.e. P1.0KW-2TR-ND)	283.13/3M		504.19/6M	906.01/12M	1761.79/27M	
3 Watt, 5% Metal Oxide Film Resistors Bulk Package (0.47-100KΩ)	"P" + Value + "W-3BK-ND" (i.e. P20W-3BK-ND)	.52	2.44	31.39	188.33	181.35/M	174.38/M
3 Watt, 5% Metal Oxide Film Resistors Tape and Reel (0.47-100KΩ)	"P" + Value + "W-3TR-ND" (i.e. P1.0KW-3TR-ND)	315.37/1,500		1123.21/6M	1766.08/10,500	3706.82/25,500	

YAGEO 5 and 10 Watt Wirewound Rectangular Resistors 5%

Axial Lead Type

- **Operating Temperature Range: −55° to +250°C**

• Exceptionally small and sturdy; mechanically safe. Excellent electrical characteristics. • The materials used and the construction techniques ensure excellent flame resistance, arc resistance and moisture resistance as well as self-extinguishing capabilities. They will withstand the most rigorous loading test. • Applicable specifications: EIA RS-344 and EIA RC649.



5 Watt Standard Resistor Values — See below for complete part numbers when ordering.

0.30	0.62	1.2	2.2	3.9	6.8	12	22	39	68	120	220	390	680	1.2K
0.33	0.68	1.3	2.4	4.3	7.5	13	24	43	75	130	240	430	750	1.3K
0.39	0.75	1.5	2.7	4.7	8.2	15	27	47	82	150	270	470	820	1.5K
0.43	0.82	1.6	3.0	5.1	9.1	16	30	51	91	160	300	510	910	1.6K
0.47	0.91	1.8	3.3	5.6	10	18	33	56	100	180	330	560	1.0K	1.8K
0.51	1.0	2.0	3.6	6.2	11	20	36	62	110	200	360	620	1.1K	2.0K
0.56	1.1													

10 Watt Standard Resistor Values — See below for complete part numbers when ordering.

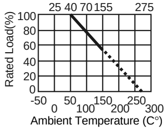
1.0	1.8	3.3	5.6	10	18	33	56	100	180	300	470	750	1.2K	2.0K
1.1	2.0	3.6	6.2	11	20	36	62	110	200	330	510	820	1.3K	2.2K
1.2	2.2	3.9	6.8	12	22	39	68	120	220	360	560	910	1.5K	2.4K
1.3	2.4	4.3	7.5	13	24	43	75	130	240	390	620	1.0K	1.6K	2.7K
1.5	2.7	4.7	8.2	15	27	47	82	150	270	430	680	1.1K	1.8K	3.0K
1.6	3.0	5.1	9.1	16	30	51	91	160						

Description	Digi-Key Part Number	Pricing 1	10	100	1M	5M	10M
5 Watt, 5% Metal Wirewound Rectangular Resistors, Bulk Package	Value + "W-5-ND" (i.e. 0.30W-5-ND)	.41	3.41	27.28	163.68	146.63/M	129.58/M
10 Watt, 5% Wirewound Rectangular Resistors, Bulk Package	Value + "W-10-ND" (i.e. 1.0W-10-ND)	.60	5.01	40.08	240.48	215.43/M	190.38/M

Characteristics

Temperature Coefficient	±300 PPM/°C
Insulation Resistance	100 MΩ
Load Life (1,000 hours)	±5% + 0.05Ω
Short-Time Overload	±2% + 0.05Ω
Dielectric Withstanding Volt	±2% + 0.05Ω
Moisture Resistance	±5% + 0.05Ω
Shock and Vibration	±1% + 0.05Ω
Effect of Soldering	±2% + 0.05Ω

Derating Curve



Digi-Key® 5 Watt Resistor Assortment Kit

RS105-ND 0.30Ω-0.91Ω — 5 each 60 Resistors **$23.95**

RS205-ND 1.0Ω-9.1Ω — 4 each 96 Resistors **$32.95**

RS305-ND 10Ω-91Ω — 4 each 96 Resistors **$32.95**

RS405-ND 100Ω-2.0KΩ — 3 each 96 Resistors **$32.95**

Digi-Key® 10 Watt Resistor Assortment Kit

2 each of all 10 watt standard resistor values listed above. A total of 168 resistors.

R110-ND **$72.95**

YAGEO Zerohm Jumper Wires

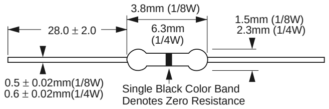
Applications:

Generally they are used for the following reasons:

- Inability to connect two points on a P.C. Board due to other circuit paths which must be crossed over.
- An After-the-Fact design change that requires new point connections.
- Circuit tuning by changing point connections.

Specifications:

Maximum Resistance: 0.004 ohm on 1/8 watt, 0.003 ohm on 1/4 watt; Typical Resistance: 0.002 ohm on both; Lead Material: tin-plated copper; Body Material: electrical grade, high performance molding compound; Min. Insulation Resistance — Dry: 10,000 megΩ, Wet: 100 megΩ; Min. Dielectric Withstanding Voltage — Atmospheric: 500V RMS, Reduced: 325V RMS; Insulation Flammability: resistor-insulation is self extinguishing within 10 seconds after externally applied flame is removed; Current Rating: 25 Amps at 25°C, derating to 0 amps at 150°C.



Description	Digi-Key Part No.	Pricing 5	200	1M	5M	10M	50M
1/8 Watt, Zerohm Jumper, Bulk Package	0.0EBK-ND	.26	8.11	16.28	14.93/M	13.52/M	12.48/M
1/8 Watt, Zerohm Jumper, Tape/Reel (5M Pcs./Reel)	0.0ETR-ND	—	—	—	18.37/M	17.29/M	14.14/M
1/4 Watt, Zerohm Jumper, Bulk Package	0.0QBK-ND	.27	4.93	10.03	9.23/M	8.37/M	7.73/M
1/4 Watt, Zerohm Jumper, Tape/Reel (5M Pcs./Reel)	0.0QTR-ND	—	—	—	11.53/M	10.85/M	8.90/M

YAGEO 5% Carbon Film Resistors

Available In 1/8, 1/4 and 1/2 Watt

Standard Resistor Values

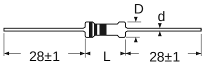
See below for complete part numbers when ordering.

1.0	1.8	3.3	5.6	10	18	33	56	100	180	330	560	1.0K	1.8K	3.3K	5.6K	10K	18K	33K	56K	100K	180K	330K	560K	1.0M	1.8M	3.3M	5.6M	10M
1.1	2.0	3.6	6.2	11	20	36	62	110	200	360	620	1.1K	2.0K	3.6K	6.2K	11K	20K	36K	62K	110K	200K	360K	620K	1.1M	2.0M	3.6M	6.2M	
1.2	2.2	3.9	6.8	12	22	39	68	120	220	390	680	1.2K	2.2K	3.9K	6.8K	12K	22K	39K	68K	120K	220K	390K	680K	1.2M	2.2M	3.9M	6.8M	
1.3	2.4	4.3	7.5	13	24	43	75	130	240	430	750	1.3K	2.4K	4.3K	7.5K	13K	24K	43K	75K	130K	240K	430K	750K	1.3M	2.4M	4.3M	7.5M	
1.5	2.7	4.7	8.2	15	27	47	82	150	270	470	820	1.5K	2.7K	4.7K	8.2K	15K	27K	47K	82K	150K	270K	470K	820K	1.5M	2.7M	4.7M	8.2M	
1.6	3.0	5.1	9.1	16	30	51	91	160	300	510	910	1.6K	3.0K	5.1K	9.1K	16K	30K	51K	91K	160K	300K	510K	910K	1.6M	3.0M	5.1M	9.1M	

Characteristics

Terminal Strength	Soldering	Temperature Change	Vibration	Moisture Resistance	Load Life	Dielectric Strength	Insulation Resistance	Short-Time Overload	Voltage Coefficient	Solvents Resistance
0.6mm load 10N (1kg): 10s Δ Rmax. 0.25% + 0.05Ω	2s 230°C 0.5% activated flux Δ Rmax. 0.25% + 0.25Ω	½ hr. @ −55°C, ½ hr. @ +155°C 5 cycles; Δ Rmax. 0.25% + 0.25Ω	1.5mm displacement @ 10 to 500 Hz; Δ Rmax. 0.25% + 0.05Ω	Δ Rmax. ±3%	Δ Rmax. ±2.5%	1000 hrs.: 70°C: Pnom or Vmax. Δ Rmax. 1% + 0.05Ω	500Vrms appl. for 1 min.: No breakdown	Room temp., dissipation 6.25× Pnom. 10 cycles, 5 sec. on, 45 sec. off; Δ Rmax. 0.25% +0.05Ω	5 ppm	No damage

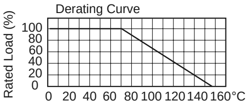
CFR Series



Features

- Industry's lowest cost!
- Available in 1/8, 1/4, 1/2 watt; packaged in bulk or tape/reel (except 1/2 watt)
- Exceeds carbon comp MIL-R-11 performance
- Standard tolerance: 65%
- Exceptional long-term stability

Derating Curve



General Specifications

Type (Power Rating)	Dimensions (mm) L	D	d	Max. Working Voltage	Max. Overload Voltage	Rated Ambient Temperature	Temperature Cycling	Resistance Range	Resistance Tolerance
1/8 Watt	3.8 ± 0.2	1.8 ± 0.2	0.45	200V	400V	70°C	−55°C to +155°C	1.0Ω to 10 MΩ	±5%
1/4 Watt	6.5 ± 0.5	2.3 ± 0.3	0.60	250V	500V	70°C	−55°C to +155°C	1.0Ω to 10MΩ	±5%
1/2 Watt	9.5 ± 0.5	3.2 ± 0.5	0.60	350V	700V	70°C	−55°C to +155°C	1.0Ω to 10MΩ	±5%

Description	Digi-Key Part No.	Pricing 5	200	1M	5M	10M	50M
1/8 **Watt, 5% Carbon Film Resistors** Bulk Package	(Value)EBK-ND (i.e. 1.0EBK-ND)	.28	4.70	13.63	12.22/M	11.28/M	10.34/M
1/8 **Watt, 5% Carbon Film Resistors — Tape and Reel** (5,000 pcs./reel — Order in multiples of 5,000)	(Value)ETR-ND (i.e. 1.0ETR-ND)	—	—	—	14.95/M	13.80/M	11.04/M
1/4 **Watt, 5% Carbon Film Resistors** Bulk Package	(Value)QBK-ND (i.e. 1.0QBK-ND)	.28	3.89	8.70	8.27/M	7.69/M	6.24/M
1/4 **Watt, 5% Carbon Film Resistors — Tape and Reel** (5,000 pcs./reel — Order in multiples of 5,000)	(Value)QTR-ND (i.e. 1.0QTR-ND)	—	—	—	8.94/M	8.25/M	6.60/M
1/2 **Watt, 5% Carbon Film Resistors** Bulk Package	(Value)H-ND (i.e. 1.0H-ND)	.27	3.96	12.87	11.88/M	10.89/M	9.90/M

"E" = Eighth Watt; "Q" = Quarter Watt; "H" = Half Watt. Please be sure to specify. Half watt available in bulk package only.

Digi-Key® 1/8 Watt Resistor Assortment

RSE200-ND 200 each of all std. values 5% 1/8 watt carbon film resistors in the series 1.0 - 10 megohms (33,800 total pcs.)............... **$409.00**

RS112-ND Set of 5 each of 73 standard 5% 1/8 watt carbon film resistors in the series 1.0, 1.2, 1.5, 1.8, 2.2, etc., through 1.0 megohm (365 total pieces) **$16.96**

RS212-ND Set of 5 each of the 72 standard 5% 1/8 watt carbon film resistors in the series 1.1, 1.3, 1.6, 2.0, 2.4, etc., through 910 kilohm (360 total pieces) **$16.99**

Digi-Key® 1/4 Watt Resistor Assortment

RSQ200-ND 200 each of all std. values 5% 1/4 watt carbon film resistors in the series 1.0 - 10 megohms (33,800 total pcs.) **$239.00**

RS125-ND Set of 5 each of 73 standard 5% 1/4 watt carbon film resistors in the series 1.0, 1.2, 1.5, 1.8, 2.2, etc., through 1.0 megohm (365 total pieces).................................... **$14.95**

RS225-ND Set of 5 each of the 72 standard 5% 1/4 watt carbon film resistors in the series 1.1, 1.3, 1.6, 2.0, 2.4, etc., through 910 kilohm (360 total pieces).. **$14.95**

Digi-Key® 1/2 Watt Resistor Assortment

RSH200-ND 200 each of all std. values 5% 1/2 watt carbon film resistors in the series 1.0 - 10 megohms (33,800 total pcs.)........ **$335.00**

RS150-ND Set of 5 each of 73 standard 5% 1/2 watt carbon film resistors in the series 1.0, 1.2, 1.5, 1.8, 2.2, etc., through 1.0 megohm (365 total pieces)... **$16.95**

RS250-ND Set of 5 each of the 72 standard 5% 1/2 watt carbon film resistors in the series 1.1, 1.3, 1.6, 2.0, 2.4, etc., through 910 kilohm (360 total pieces **$16.95**

YAGEO 1% Metal Film Fixed Resistors 1/4 Watt

MFR Series

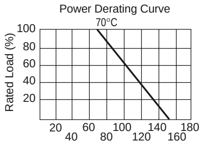
The MFR series Metal Film Resistors are manufactured using vacuum sputtering system to deposit multiple layers of mixed metals and passivative materials onto a carefully treated high grade ceramic substrate, the resistors are coated with layers of light-blue lacquer.

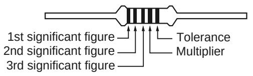
General Specifications:

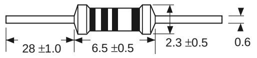
Power Rating: 1/4 Watt. **Max. Working Voltage:** 250V. **Max. Overload Voltage:** 500V. **Rated Ambient Temperature:** 70°C. **Temperature Cycling:** –65°C to +150°C. **Resistance Range:** 10.0Ω to 1.00MΩ. **Resistance Tolerance:** ±1%.

Electrical Specifications:

All measurements are taken at +25°C at 1KHz and 65% relative humidity, unless stated otherwise. **Type:** MF-25 **Style:** RN-55 **Power Rating:** 1/4 Watt **Resistance Tolerance:** ±1% **Temperature Coefficient:** ±100PPM/°C







Characteristics

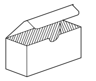
Temperature Cycling, -65°C to +150°C	(%)	.......±0.25
Low Temperature Operation, -65°C	(%)	.......±0.25
Short Time Overload	(%)	.......±0.20
Terminal Strength, 5 lb. pull	(%)	.......±0.20
Resistance to Soldering Heat, +350°C	(%)	.......±0.10
Moisture Resistance, Mil Std 202	(%)	.......±0.50
Life 1000 hrs. (Rated Power)	(%)	.......±0.50
Shock, 50G, 11ms	(%)	.......±0.20
Vibration-High Frequency, 10-2000Hz	(%)	.......±0.20
Insulation Resistance	(%)	......=$10^{10}\Omega$
Failure-Rate	(%)	.......10^{-8}/h

1% Metal Film Resistors

Digi-Key® Assortment Kits

35% SAVINGS

Over Parts Purchased Separately



5 Each of Values 10Ω to 97.6Ω
RS1X-ND....................**$29.95**

5 Each of Values 100Ω to 976Ω
RS2X-ND....................**$29.95**

5 Each of Values 1.00KΩ to 9.76KΩ
RS3X-ND....................**$29.95**

5 Each of Values 10.0KΩ to 97.6KΩ
RS4X-ND....................**$29.95**

5 Each of Values 100KΩ to 1.00MΩ
RS5X-ND....................**$29.95**

Description	Value Range	Digi-Key Part No.	Pricing 5	200	1M	5M	10M	50M	100M	500M	1,000M
1/4 Watt, 1% Metal Film Resistors Bulk Package	10.0 ~ 1.00M Ω 10.0 ~ 1.0M Ω	Value + “X” +“BK-ND” (i.e. 10.0XBK-ND)	.54	8.27	21.38	18.24/M	15.68/M	12.54/M	—	—	—
1/4 Watt, 1% Metal Film Resistors Order in multiples of 5,000 (5,000 pcs./reel)	10.0 ~ 1.00M Ω 10.0 ~ 1.00M Ω	Value + “X” + “TR-ND” (i.e. 10.0XTR-ND)	—	—	—	20.63/M	17.60/M	14.30/M	12.10/M	9.90/M	8.80/M

YAGEO Standard Resistor Values

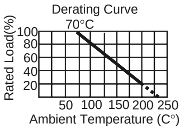
10.0 10.2 10.5 10.7 11.0 11.3 11.5 11.8 12.1 12.4 12.7 13.0 13.3 13.7 14.0 14.3 14.7 15.0 15.4 15.8 16.2 16.5 16.9 17.4 17.8 18.2
18.7 19.1 19.6 20.0 20.5 21.0 21.5 22.1 22.6 23.2 23.7 24.3 24.9 25.5 26.1 26.7 27.4 28.0 28.7 29.4 30.1 30.9 31.6 32.4 33.2 34.0
34.8 35.7 36.5 37.4 38.3 39.2 40.2 41.2 42.2 43.2 44.2 45.3 46.4 47.5 48.7 49.9 51.1 52.3 53.6 54.9 56.2 57.6 59.0 60.4 61.9 63.4
64.9 66.5 68.1 69.8 71.5 73.2 75.0 76.8 78.7 80.6 82.5 84.5 86.6 88.7 90.9 93.1 95.3 97.6 100 102 105 107 110 113 115 118
121 124 127 130 133 137 140 143 147 150 154 158 162 165 169 174 178 182 187 191 196 200 205 210 215 221
226 232 237 243 249 255 261 267 274 280 287 294 301 309 316 324 332 340 348 357 365 374 383 392 402 412
422 432 442 453 464 475 487 499 511 523 536 549 562 576 590 604 619 634 649 665 681 698 715 732 750 768
787 806 825 845 866 887 909 931 953 976 1.00K 1.02K 1.05K 1.07K 1.10K 1.13K 1.15K 1.18K 1.21K 1.24K 1.27K 1.30K 1.33K 1.37K 1.40K 1.43K
1.47K 1.50K 1.54K 1.58K 1.62K 1.65K 1.69K 1.74K 1.78K 1.82K 1.87K 1.91K 1.96K 2.00K 2.05K 2.10K 2.15K 2.21K 2.26K 2.32K 2.37K 2.43K 2.49K 2.55K 2.61K 2.67K
2.74K 2.80K 2.87K 2.94K 3.01K 3.09K 3.16K 3.24K 3.32K 3.40K 3.48K 3.57K 3.65K 3.74K 3.83K 3.92K 4.02K 4.12K 4.22K 4.32K 4.42K 4.53K 4.64K 4.75K 4.87K 4.99K
5.11K 5.23K 5.36K 5.49K 5.62K 5.76K 5.90K 6.04K 6.19K 6.34K 6.49K 6.65K 6.81K 6.98K 7.15K 7.32K 7.50K 7.68K 7.87K 8.06K 8.25K 8.45K 8.66K 8.87K 9.09K 9.31K
9.53K 9.76K 10.0K 10.2K 10.5K 10.7K 11.0K 11.3K 11.5K 11.8K 12.1K 12.4K 12.7K 13.0K 13.3K 13.7K 14.0K 14.3K 14.7K 15.0K 15.4K 15.8K 16.2K 16.5K 16.9K 17.4K
17.8K 18.2K 18.7K 19.1K 19.6K 20.0K 20.5K 21.0K 21.5K 22.1K 22.6K 23.2K 23.7K 24.3K 24.9K 25.5K 26.1K 26.7K 27.4K 28.0K 28.7K 29.4K 30.1K 30.9K 31.6K 32.4K
33.2K 34.0K 34.8K 35.7K 36.5K 37.4K 38.3K 39.2K 40.2K 41.2K 42.2K 43.2K 44.2K 45.3K 46.4K 47.5K 48.7K 49.9K 51.1K 52.3K 53.6K 54.9K 56.2K 57.6K 59.0K 60.4K
61.9K 63.4K 64.9K 66.5K 68.1K 69.8K 71.5K 73.2K 75.0K 76.8K 78.7K 80.6K 82.5K 84.5K 86.6K 88.7K 90.9K 93.1K 95.3K 97.6K 100K 102K 105K 107K 110K 113K
115K 118K 121K 124K 127K 130K 133K 137K 140K 143K 147K 150K 154K 158K 162K 165K 169K 174K 178K 182K 187K 191K 196K 200K 205K 210K
215K 221K 226K 232K 237K 243K 249K 255K 261K 267K 274K 280K 287K 294K 301K 309K 316K 324K 332K 340K 348K 357K 365K 374K 383K 392K
402K 412K 422K 432K 442K 453K 464K 475K 487K 499K 511K 523K 536K 549K 562K 576K 590K 604K 619K 634K 649K 665K 681K 698K 715K 732K
750K 768K 787K 806K 825K 845K 866K 887K 909K 931K 953K 976K 1.00M

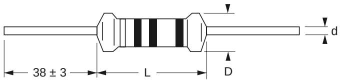
YAGEO 5% Metal Oxide Film Resistors

RSF Series

These Metal Oxide Resistors offer lower cost alternatives to Carbon Composition Resistors and General Purpose Metal Films. They can replace many low power General Purpose wirewound applications. These Metal Oxides meet overload tests in accordance with UL specification #1412 without producing a fire hazard. They withstand solvents in accordance with article Mil-Std-202E without producing mechanical or electrical damage.

Features: High surge/overload capability. Non-inductive design. Coating and marking resist Trichlorethelyne, Freon, and other cleaning agents.





Type	Max. Working Volt.	Dimensions (mm) L	D	d
1W	350	13.0	4.5	0.8
2W	350	17.0	5.5	0.65

Digi-Key® 1 and 2 Watt Resistor Assortment Kits

255 resistors per assortment. 5 each of the values in the ranges listed:

	0.47Ω - 56Ω	62Ω- 7.5KΩ	8.2KΩ - 1.0M	
1 Watt	RS101-ND	RS201-ND	RS301-ND	**$26.95**
2 Watt	RS102-ND	RS202-ND	RS302-ND	**$29.95**

Characteristics:

Temperature Coefficient	±100 PPM Typ. ±200 Max
Insulation Resist.	10,000 MΩ Min
Load Life (1,000 hours)	◄1% Typ. ±3% Max
Short-time Overload	±0.5% Max
Temp. Cycling	±0.5% Max
Moisture Resistance	±1.0% Max
Shock & Vibration	±0.2% Max
Effect of Soldering	±0.5% Max
Voltage Coefficient	.001%/V
Current Noise	◄.1µV/V

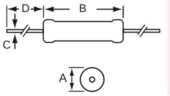
Standard Resistor Values — See below for complete part numbers when ordering.

0.47 0.51 0.56 0.62 0.68 0.75
0.82 0.91 1.0 1.1 1.2 1.3
1.5 1.6 1.8 2.0 2.2 2.4
2.7 3.0 3.3 3.6 3.9
4.3 4.7 5.1 5.6 6.2
6.8 7.5 8.2 9.1 10
11 12 13 15 16
18 20 22 24 27
30 33 36 39 43
47 51 56 62 68
75 82 91 100 110
120 130 150 160 180
200 220 240 270 300
330 360 390 430 470
510 560 620 680 750
820 910 1.0K 1.1K 1.2K
1.3K 1.5K 1.6K 1.8K 2.0K
2.2K 2.4K 2.7K 3.0K 3.3K
3.6K 3.9K 4.3K 4.7K 5.1K
5.6K 6.2K 6.8K 7.5K 8.2K
9.1K 10K 11K 12K 13K
15K 16K 18K 20K 22K
24K 27K 30K 33K 36K
39K 43K 47K 51K 56K
62K 68K 75K 82K 91K
100K 110K 120K 130K 150K
160K 180K 200K 220K 240K
270K 300K 330K 360K 390K
430K 470K 510K 560K 620K
680K 750K 820K 910K 1.0M

Description	Digi-Key Part Number	Pricing 1	10	100	1M	5M	10M
1 Watt, 5% Metal Oxide Film Resistors Bulk Package (0.47-0.91Ω)	Value + “W-1-ND” (i.e. 0.47W-1-ND)	.27	1.96	12.60	77.00	68.60/M	61.60/M
1 Watt, 5% Metal Oxide Film Resistors Bulk Package (1.0-1.0MΩ)	Value + “W-1-ND” (i.e. 1.0W-1-ND)	.19	1.40	9.00	55.00	49.00/M	44.00/M
2 Watt, 5% Metal Oxide Film Resistors Bulk Package (0.47-0.91Ω)	Value + “W-2-ND” (i.e. 0.47W-2-ND)	.29	2.10	13.50	82.50	73.50/M	66.00/M
2 Watt, 5% Metal Oxide Film Resistors Bulk Package (1.0-1.0MΩ)	Value + “W-2-ND (i.e. 1.0W-2-ND)	.23	1.68	10.80	66.00	58.80/M	52.80/M

HUNTINGTON ELECTRIC, INC.

Silicone Coated Wirewound Resistors – 1, 3, 5 Watt, 1%



RESISTANCE VALUE CHART

.10	.50	5.0	22	40	100	225	400	750	1.5K	3.5K	6.8K	20.0K
.13	.75	7.5	25	47	120	250	470	800	1.8K	3.9K	7.5K	25.0K
.15	1.0	10	27	50	125	270	500	820	2.0K	4.0K	8.0K	
.20	1.5	12	30	56	150	300	560	900	2.2K	4.7K	8.2K	
.25	2.0	15	33	68	180	330	600	1.0K	2.5K	5.0K	10.0K	
.30	3.0	18	35	75	200	350	680	1.1K	2.7K	5.6K	12.5K	
.33	4.0	20	39	82	220	390	700	1.2K	3.0K	6.0K	15.0K	

Series	A ±.81mm	B ±.81mm	C	D
ALSR-1	2.79	9.78	.51	38.10
ALSR-3	5.08	13.46	.81	38.10
ALSR-5	7.92	23.80	.81	38.10

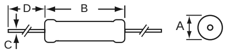
Electrical Specifications:

Series	ALSR-1	ALSR-3, ALSR-5
Resistance Tolerance	±1%	±1%
Dielectric Withstanding Voltage	500 VAC	1000 VAC
Short Time Overload	5 X rated wattage for 5 seconds	

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each					Huntington Part No.
			1	10	25	50	100	
.10-.75	1	ALSR1F-(Value)-ND	1.98	1.77	—	1.50	1.10	ALSR-1-(Value)-1%
1.0-900	1	ALSR1F-(Value)-ND	1.95	1.74	—	1.47	1.08	ALSR-1-(Value)-1%
1.0K-3.0K	1	ALSR1F-(Value)-ND	2.08	1.86	—	1.57	1.16	ALSR-1-(Value)-1%
.10-900	3	ALSR3F-(Value)-ND	1.38	—	1.16	—	.97	ALSR-3-(Value)-1%
1.0K-2.7K	3	ALSR3F-(Value)-ND	1.33	—	1.12	—	.93	ALSR-3-(Value)-1%
3.0K-4.7K	3	ALSR3F-(Value)-ND	1.38	—	1.16	—	.97	ALSR-3-(Value)-1%
5.0K-10.0K	3	ALSR3F-(Value)-ND	1.40	—	1.18	—	.98	ALSR-3-(Value)-1%
.10-900	5	ALSR5F-(Value)-ND	1.35	—	1.14	—	.95	ALSR-5-(Value)-1%
1.0K-4.7K	5	ALSR5F-(Value)-ND	1.33	—	1.12	—	.93	ALSR-5-(Value)-1%
5.0K-8.2K	5	ALSR5F-(Value)-ND	1.30	—	1.10	—	.91	ALSR-5-(Value)-1%
10.0K-20.0K	5	ALSR5F-(Value)-ND	1.35	—	1.14	—	.95	ALSR-5-(Value)-1%
25.0K	5	ALSR5F-(Value)-ND	1.33	—	1.12	—	.93	ALSR-5-(Value)-1%

* For complete part number, substitute Digi-Key value (from Resistance Value Chart) for (Value).

Silicone Coated Wirewound Resistors – 1, 3, 5, 10 Watt, 5%



RESISTANCE VALUE CHART

.10	2.0	25	75	270	680	1.75K	4.0K	8.5K	20.0K
.13	3.0	27	82	300	700	1.8K	4.5K	9.0K	22.0K
.15	4.0	30	100	330	750	2.0K	4.7K	10.0K	22.5K
.20	5.0	33	120	350	800	2.2K	5.0K	11.0K	25.0K
.25	7.5	35	125	390	820	2.25K	5.6K	12.0K	
.30	10	39	150	400	900	2.5K	6.0K	12.5K	
.33	12	40	180	450	1.0K	2.7K	6.8K	13.5K	
.50	15	47	200	470	1.1K	3.0K	7.0K	15.0K	
.75	18	50	220	500	1.2K	3.3K	7.5K	16.0K	
1.0	20	56	225	560	1.25K	3.5K	8.0K	17.5K	
1.5	22	68	250	600	1.5K	3.9K	8.2K	18.0K	

Series	A ±.81mm	B ±.81mm	C	D
ALSR-1	2.79	9.78	.51	38.10
ALSR-3	5.08	13.46	.81	38.10
ALSR-5	7.92	23.80	.81	38.10
ALSR-10	7.92	45.72	.81	38.10

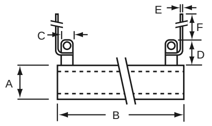
Electrical Specifications:

Series	ALSR-1	ALSR-3	ALSR-5	ALSR-10
Resistance Tolerance	±5%	±5%	±5%	±5%
Power Rating	1 Watts at 25°C	3 Watts at 25°C	5 Watts at 25°C	10 Watts at 25°C
Dielectric Withstanding Voltage	500 VAC	1000 VAC	1000 VAC	1000 VAC
Short Time Overload	5 X rated wattage for 5 seconds		10 X rated wattage for 5 seconds	

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each				Huntington Part No.
			1	10	50	100	
.10-.75	1	ALSR1J-(Value)-ND	1.63	1.45	1.23	.90	ALSR-1-(Value)
1.0-900	1	ALSR1J-(Value)-ND	1.59	1.43	1.21	.89	ALSR-1-(Value)
1.0K-5.6K	1	ALSR1J-(Value)-ND	1.85	1.66	1.40	1.03	ALSR-1-(Value)
6.0K-10.0K	1	ALSR1J-(Value)-ND	1.95	1.74	1.47	1.08	ALSR-1-(Value)
.10-900	3	ALSR3J-(Value)-ND	1.40	1.25	1.06	.78	ALSR-3-(Value)
1.0K-4.7K	3	ALSR3J-(Value)-ND	1.27	1.14	.96	.71	ALSR-3-(Value)
5.0K-10.0K	3	ALSR3J-(Value)-ND	1.53	1.37	1.16	.85	ALSR-3-(Value)
.10-.75	5	ALSR5J-(Value)-ND	1.56	1.40	1.18	.87	ALSR-5-(Value)
1.0-7.5	5	ALSR5J-(Value)-ND	1.56	1.40	1.18	.87	ALSR-5-(Value)
10-2.7K	5	ALSR5J-(Value)-ND	1.56	1.40	1.18	.87	ALSR-5-(Value)
3.0K-4.7K	5	ALSR5J-(Value)-ND	1.56	1.40	1.18	.87	ALSR-5-(Value)
5.0K-9.0K	5	ALSR5J-(Value)-ND	1.56	1.40	1.18	.87	ALSR-5-(Value)
10.0K-22.5K	5	ALSR5J-(Value)-ND	1.56	1.40	1.18	.87	ALSR-5-(Value)
25.0K	5	ALSR5J-(Value)-ND	1.53	1.37	1.16	.85	ALSR-5-(Value)
.10-.75	10	ALSR10-(Value)-ND	1.98	1.77	1.50	1.10	ALSR-10-(Value)
1.0-680, 750-900	10	ALSR10-(Value)-ND	1.69	1.51	1.28	.94	ALSR-10-(Value)
1.0K-2.7K	10	ALSR10-(Value)-ND	1.82	1.63	1.38	1.01	ALSR-10-(Value)
3.0K-9.0K	10	ALSR10-(Value)-ND	2.11	1.89	1.60	1.17	ALSR-10-(Value)
10.0K-22.5K	10	ALSR10-(Value)-ND	2.31	2.06	1.74	1.28	ALSR-10-(Value)
25.0K	10	ALSR10-(Value)-ND	2.60	2.32	1.96	1.44	ALSR-10-(Value)

* For complete part number, substitute Digi-Key value (from Resistance Value Chart) for (Value).

Vitreous Enamel Wirewound Power Resistors – 8, 12 Watt



Electrical Specifications:

Series	FVTS-5	FVTS-10
Resistance Tolerance	±5% 1Ω & above ±10% 1Ω & below	±5% 1Ω & above ±10% 1Ω & below
Power Rating	8 Watts at 25°C	12 Watts at 25°C
Dielectric Withstanding Voltage	1000 VAC	1000 VAC
Short Time Overload	10 X rated wattage for 5 seconds	

Series	A	B	C	D	E	F
FVTS-5	7.94	25.40	4.76	11.11	.81	50.80
FVTS-10	7.94	44.45	4.76	11.11	.81	50.80

RESISTANCE VALUE CHART

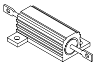
2.0	7.5	20	50	125	250	450	750	1.2K	2.0K	3.5K	5.0K	7.5K	10.0K	20.0K	50.0K
3.0	10	25	75	150	300	500	900	1.25K	2.5K	4.0K	6.0K	8.0K	12.0K	25.0K	
5.0	15	35	100	200	400	600	1.0K	1.5K	3.0K	4.5K	7.0K	9.0K	15.0K	40.0K	

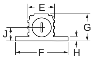
Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each				Huntington Part No.
			1	25	100	250	
5.0-900	8	FVTS5-(Value)-ND	1.84	1.58	1.21	1.08	FVTS-5-(Value)
1.0K-4.5K	8	FVTS5-(Value)-ND	1.98	1.70	1.30	1.16	FVTS-5-(Value)
5.0K-9.0K	8	FVTS5-(Value)-ND	2.12	1.81	1.39	1.24	FVTS-5-(Value)
10.0K	8	FVTS5-(Value)-ND	1.95	1.67	1.28	1.14	FVTS-5-(Value)
2.0-450	12	FVTS10-(Value)-ND	2.09	1.79	1.37	1.22	FVTS-10-(Value)
500-900	12	FVTS10-(Value)-ND	2.31	1.98	1.52	1.35	FVTS-10-(Value)
1.0K-5.0K, 7.5K-9.0K	12	FVTS10-(Value)-ND	2.56	2.19	1.68	1.49	FVTS-10-(Value)
10.0K-20.0K	12	FVTS10-(Value)-ND	2.83	2.43	1.86	1.65	FVTS-10-(Value)
25.0K	12	FVTS10-(Value)-ND	3.19	2.73	2.09	1.86	FVTS-10-(Value)
40.0K, 50.0K	12	FVTS10-(Value)-ND	4.26	3.65	2.79	2.48	FVTS-10-(Value)

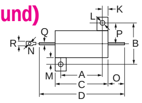
* For complete part number, substitute Digi-Key value (from Resistance Value Chart) for (Value).

Aluminum Housed Chassis Mount Resistors – 5, 10, 25, 50 Watt, 1% (Precision Power Wirewound)

HEI's high power aluminum housed resistors use centerless ground ceramic cores for uniform heat distribution. Molded in a special high temperature material and mounted in an extruded aluminum finned housing, these designs provide maximum power dissipation and reliability. They have tinned copperweld leads for solderability and meet or exceed MIL-R-18546, including "N" characteristic, and MIL-R-39009. **Specifications:** • Power Rating: Based on full power operation at 25°C, and maximum hotspot 275°C. • Mounting on proper heat sink as follows: For 5 and 10 Watt – use 4" x 6" x 2" x .040" (101.60 x 152.40 x 50.80 x 1.02mm) aluminum chassis; For 25 and 50 Watt – use 5" x 7" x 2" x .040" (127.00 x 177.80 x 50.80 x 1.02mm) aluminum chassis.







RESISTANCE VALUE CHART

TMC-5		TMC-10			TMC-25		TMC-50			
.10	100	.20	35	2.0K	.10	40	.15	2.5	20	300
.50	150	1.0	50	2.5K	1.0	100	.20	3.3	30	500
1.0	300	2.0	75	10.0K	2.0	200	.25	5.0	40	1.0K
5.0	390	2.5	100		3.0	300	.30	6.0	50	1.5K
10	2.0K	10	300		12	500	.50	8.0	75	2.5K
12	10.0K	25	330		15	1.0K	1.0	10	100	5.0K
25	15.0K	33	1.0K		20	2.0K	1.5	12	150	
30					25	3.0K	2.0	16	250	

Electrical Specifications:

Series	TMC-5	TMC-10	TMC-25	TMC-50
MIL-R-39009/MIL-R-18546	RER-60/RE-60	RER-65/RE-65	RER-70/RE-70	RER-75/RE-75
HEI Power	7.5 Watts	12.5 Watts	25 Watts	50 Watts
MIL Power	5 Watts	10 Watts	20 Watts	30 Watts
Working Voltage	160	265	550	1250
Dielectric Strength	1000 VAC	1000 VAC	2500 VAC	2500 VAC

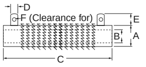
Series	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q AWG	R
TMC-5	11.40	12.57	16.03	30.15	8.86	16.79	8.51	1.91	3.81	2.24	2.49	2.36	1.40	8.33	7.01	16	2.97
TMC-10	14.40	16.00	19.84	36.50	11.30	20.70	10.54	2.16	5.08	2.62	2.49	2.97	2.31	9.50	8.71	12	4.37
TMC-25	18.39	19.96	27.76	50.80	13.84	27.81	14.61	2.41	6.86	4.62	3.30	3.56	2.31	12.70	10.72	12	4.37
TMC-50	39.83	21.56	50.77	72.21	16.00	29.34	16.00	2.41	7.87	5.23	3.30	3.56	2.31	12.70	11.51	12	4.37

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each					Huntington* Part No.
			1	10	50	100	250	
.10-15.0K	5	TMC5-(Value)-ND	3.10	2.65	2.19	1.87	1.72	TMC-5-(Value)-1%
.20-10.0K	10	TMC10-(Value)-ND	3.28	2.80	2.29	1.98	1.81	TMC-10-(Value)-1%
.10-3.0K	25	TMC25-(Value)-ND	4.66	3.98	3.27	2.81	2.58	TMC-25-(Value)-1%
.15-5.0K	50	TMC50-(Value)-ND	4.90	4.17	3.43	2.95	2.70	TMC-50-(Value)-1%

* For complete part number, substitute Digi-Key value (from Resistance Value Chart) for (Value).

Edgewound Resistors – 300, 1000 Watt

HEI Edgewound Resistors are designed for applications demanding maximum power dissipation in minimum space. Edgewounds are constructed of special alloy resistance wire, crimped, and wound on edge. High quality ceramic cores are used with a coating of either vitreous enamel or silicone to provide heat sink for short term overloads and maximum dissipation. **Specifications:** • **Dielectric Withstanding Voltage:** Measured from terminals to brackets, 1000 VAC • **Overload:** 10 X rated power for 5 seconds • **Tolerance:** ±10% • Wattage is based on 25°C free air rating.



Series	A	(Core) B	C	D	(Terminal) E	F
FVE-300	28.58	19.05	215.90	7.94	15.88	254.00 - 812.80
AVE-300	28.58	19.05	215.90	7.94	15.88	254.00 - 812.80
FSE-1000	63.50	44.45	381.00	12.70	15.88	6.35 - 508.00

Resistance Range (Ω)	Wattage	Digi-Key* Part No.	Price Each			Huntington* Part No.
			1	10	25	
.50 - 20	300	FVE300-(Value)-ND	16.48	14.81	12.54	FVE-300-(Value)
.10 - 20	300	AVE300-(Value)-ND	25.76	20.58	14.42	AVE-300-(Value)
.25 - 15	1000	FSE1000-(Value)-ND	51.50	46.35	—	FSE-1000-(Value)
FVE-300 and AVE-300 Mounting Kit		K1016-ND	9.75 each			K1016
FSE-1000 Mounting Kit		K3003-ND	16.69 each			K3003

RESISTANCE VALUE CHART

FVE-300 Fixed		AVE-300 Adj.		FSE-1000 Fixed	
.50	10	.10	1.0	.25	4.5
1.2	12	.12	1.6	.50	10
2.0	16	.16	8.0	1.0	15
5.0	20	.20	16	3.5	
8.0		.80	20		

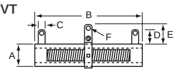
* For complete part number, substitute Digi-Key value (from Resistance Value Chart) for (Value).

Vitreous Enamel Wirewound Power Resistors – 25, 50, 100, 225 Watt

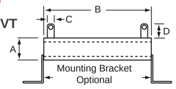
RESISTANCE VALUE CHART

1.0	50	750	12.0K
2.0	100	1.0K	25.0K
3.0	150	2.5K	50.0K
5.0	200	4.0K	
10	250	5.0K	
25	500	10.0K	

AVT



FVT



Series	A	B	C	D	E	F
AVT25	14.29	50.80	6.35	14.29	17.46	4.22
AVT50	14.29	101.60	6.35	14.29	17.46	4.22
AVT100	19.05	165.10	6.35	14.29	17.46	4.22
AVT200	28.58	266.70	7.94	15.88	22.23	4.22

Series	A	B	C	D
FVT25	14.29	50.80	6.35	14.29
FVT50	14.29	101.60	6.35	14.29
FVT100	19.05	165.10	6.35	14.29
FVT200	28.58	266.70	7.94	15.88

ADJUSTABLE AVT SERIES: • **Resistance Tolerance:** ±10%, wattage rating applied only when the entire resistance is in the circuit • **Dielectric Withstanding Voltage:** 1000VAC • **Short Time Overload:** 10 times the rated wattage for 5 seconds **FIXED FVT SERIES:** • **Resistance Tolerance:** ±5% above 1 ohm, ±10% below 1 ohm • **Dielectric Withstanding Voltage:** 1000VAC • **Short Time Overload:** 10 times the rated wattage for 5 seconds

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each				Huntington Part No.
			1	10	25	100	
2.0-3.0	25	FVT25-(Value)-ND	3.31	—	2.40	1.89	FVT-25-(Value)
10, 25, 100	25	FVT25-(Value)-ND	3.28	—	2.38	1.87	FVT-25-(Value)
500-4.0K	25	FVT25-(Value)-ND	3.28	—	2.38	1.87	FVT-25-(Value)
5.0K	25	FVT25-(Value)-ND	3.54	—	2.57	2.02	FVT-25-(Value)
10.0K-12.0K	25	FVT25-(Value)-ND	3.77	—	2.73	2.15	FVT-25-(Value)
25.0K-50.0K	25	FVT25-(Value)-ND	4.76	—	3.45	2.71	FVT-25-(Value)
1.0-5.0	50	FVT50-(Value)-ND	4.79	—	3.47	2.73	FVT-50-(Value)
10-100, 500, 1.0K	50	FVT50-(Value)-ND	4.50	—	3.26	2.56	FVT-50-(Value)
5.0K	50	FVT50-(Value)-ND	4.79	—	3.47	2.73	FVT-50-(Value)
1.0, 2.0, 5.0	100	FVT100-(Value)-ND	8.21	—	5.95	4.67	FVT-100-(Value)
10, 50, 100, 250, 1.0K	100	FVT100-(Value)-ND	7.48	—	5.42	4.26	FVT-100-(Value)
1.0, 3.0, 5.0	225	FVT200-(Value)-ND	12.36	11.13	9.89	9.27	FVT-200-(Value)
10, 50, 100, 250, 500	225	FVT200-(Value)-ND	10.30	9.27	8.24	7.73	FVT-200-(Value)
1.0K	225	FVT200-(Value)-ND	10.30	9.27	8.24	7.73	FVT-200-(Value)
1.0, 3.0, 5.0	25	AVT25-(Value)-ND	5.63	5.18	4.28	3.60	AVT-25-(Value)
10-100, 250, 500	25	AVT25-(Value)-ND	4.65	4.28	3.54	2.98	AVT-25-(Value)
1.0-5.0	50	AVT50-(Value)-ND	6.58	6.05	5.00	4.21	AVT-50-(Value)
10-100, 500	50	AVT50-(Value)-ND	5.65	5.20	4.30	3.62	AVT-50-(Value)
1.0K	50	AVT50-(Value)-ND	5.93	5.46	4.51	3.80	AVT-50-(Value)
1.0, 2.0	100	AVT100-(Value)-ND	12.83	11.80	9.75	8.21	AVT-100-(Value)
10, 50, 100, 250	100	AVT100-(Value)-ND	9.48	8.72	7.21	6.07	AVT-100-(Value)
1.0K	100	AVT100-(Value)-ND	10.95	10.08	8.33	7.01	AVT-100-(Value)
1.0-5.0	225	AVT200-(Value)-ND	22.35	20.57	16.99	14.31	AVT-200-(Value)
10-500	225	AVT200-(Value)-ND	16.10	14.82	12.24	10.31	AVT-200-(Value)
1.0K	225	AVT200-(Value)-ND	16.90	15.55	12.85	10.82	AVT-200-(Value)
Mounting Bracket for 25/50W Res.‡		B1003-ND	.45	—	.35	.25	B1003-1
Mounting Bracket for 100W Res.‡		B1002-ND	.54	—	.42	.30	B1002-1
Mounting Bracket for 200W Res.‡		B1001-ND	.59	—	.46	.33	B1001-1

* For complete part number, substitute Digi-Key value (from Resistance Value Chart) for (Value).
‡ Requires 2 brackets per resistor

OHMITE

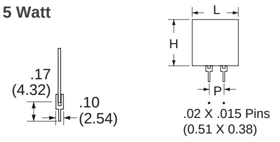
TA Series Power Chip® Resistors - Thick Film on Alumina Substrate

5, 10 and 25 Watt

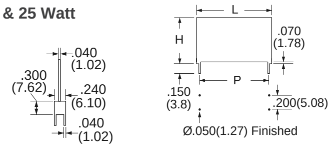
Ohmite Power Chip Resistors are thick film on alumina oxide substrates with copper plated silver conductors, Ruthenium oxide resistance material, and a glass passivation layer. These resistors offer very low inductance (50nh measured at 1MHz) and outstanding power density (10W/in2). Repetitive transient capability is 5 times rated power as long as one second average dissipation remains equal to or less than the free air rating.

Features: • Wide resistance range • Low inductance • High power density • Easy to install. PC-mountable. **Material:** • Terminals: Solder Plated Phosphor Bronze • Coating: Glass. **Electrical:** • Resistance Tolerance: ±5% • Power Rating: Based on 25°C free air with linear derating to 0 watts at 350°C • Maximum Operating Voltage: 350 VAC, 500 VDC through glass 1000 VAC, 1500 VDC through substrate • Overload: Five times rated power, as long as the one second average dissipation does not exceed the wattage rating • DR: ±2%, 2000 hours • Derating: Linearly from 100% @ +25°C to 0% @ 350°C

5 Watt



10 & 25 Watt



Res. Series	Maximum Dim. - in. (mm)		
	P	L (length)	H (height)
TA205	.200 (5.08)	.50 (12.70)	1.00 (25.40)
TA810	.800 (20.32)	1.00 (25.40)	1.00 (25.40)
TA025	1.90 (48.3)	2.220 (56.39)	1.170 (29.70)

RESISTANCE VALUE CHART

5 Watt			10 Watt		25 Watt
Value (Code)	Value (Code)	Value (Code)	Value (Code)	Value (Code)	Value (Code)
1.0 (1R00)	15 (15R0)	200 (200R)	1.0 (1R00)	100 (100R)	2.0 (2R00)
1.2 (1R20)	18 (18R0)	240 (240R)	1.5 (1R50)	150 (150R)	3.0 (3R00)
1.5 (1R50)	20 (20R0)	300 (300R)	2.0 (2R00)	200 (200R)	3.9 (3R90)
1.8 (1R80)	24 (24R0)	330 (330R)	3.0 (3R00)	300 (300R)	5.1 (5R10)
2.0 (2R00)	30 (30R0)	390 (390R)	3.9 (3R90)	390 (390R)	8.2 (8R20)
2.4 (2R40)	33 (33R0)	470 (470R)	5.1 (5R10)	510 (510R)	20 (20R0)
3.0 (3R00)	39 (39R0)	510 (510R)	6.8 (6R80)	680 (680R)	30 (30R0)
3.3 (3R30)	47 (47R0)	560 (560R)	8.2 (8R20)	820 (820R)	39 (39R0)
3.9 (3R90)	51 (51R0)	680 (680R)	10 (10R0)	1K (1K00)	51 (51R0)
4.7 (4R70)	56 (56R0)	820 (820R)	15 (15R0)	1.5K (1K50)	82 (82R0)
5.1 (5R10)	68 (68R0)	1K (1K00)	20 (20R0)	2.0K (2K00)	200 (200R)
5.6 (5R60)	82 (82R0)	1.2K (1K20)	30 (30R0)		300 (300R)
6.8 (6R80)	100 (100R)	1.5K (1K50)	39 (39R0)		390 (390R)
8.2 (8R20)	120 (120R)	1.8K (1K80)	51 (51R0)		510 (510R)
10 (10R0)	150 (150R)	2K (2K00)	68 (68R0)		820 (820R)
12 (12R0)	180 (180R)	2.4K (2K40)	82 (82R0)		2.0K (2K00)

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	50	100	500
1.0-8.2	5	TA205PA(Code)J-ND	1.30	1.11	.91	.78
10-2.4K	5	TA205PA(Code)J-ND	1.20	1.02	.84	.72
1.0-2.0K	10	TA810PW(Code)J-ND	1.78	1.52	1.25	1.08
2.0-2K	25	TA025PW(Code)J-ND	5.48	4.11	3.29	3.01

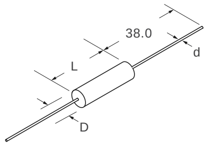
* For complete part number, substitute the corresponding code from the Resistance Value Chart for (Code).

OX / OY Resistor Series - Ceramic Composition

Features: • Replaces 1 and 2 watt carbon composition resistors • Meets high energy density demands • High peak power • 10% Tolerance. **Material:** • Terminals: Solder-coated axial leads • Coating: UL-94 V0 approved silicone. **Derating:** • Linear from 100% @ +70°C to 0% @ +200°C. **Electrical:** • Resistance Tolerance: ±10% standard • Power Rating: Based on 70°C free air rating • Temperature Coefficient: -1300 ±300ppm/°C • Dielectric Withstanding Voltage: 500VAC (750VAC for OY Series) • Joules Maximum (For a single impulse): 50 (80 for OY Series)

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	100	1,000
3.3-100	1	OX(Code)-ND	.77	.62	.50
120-100K	1	OX(Code)-ND	.71	.57	.46
3.3-100	2	OY(Code)-ND	1.00	.80	.65
120-100K	2	OY(Code)-ND	.93	.74	.60
120K-1MEG	2	OY(Code)-ND	1.09	.87	.71

* For complete part number, substitute the corresponding code from the Resistance Value Chart for (Code).



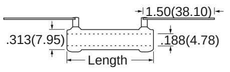
Res. Series	Maximum Dim. - in. (mm)		
	D	L	d
OX	.256 (6.5)	.748 (19.0)	.030 (.81)
OY	.315 (8.0)	.886 (22.5)	.030 (.81)

RESISTANCE VALUE CHART

Value (Code)	Value (Code)	Value (Code)	Value (Code)	Value (Code)
3.3 (33GK)	47 (470K)	680 (681K)	10K (103K)	150K (154K)
3.9 (39GK)	56 (560K)	820 (821K)	12K (123K)	180K (184K)
4.7 (47GK)	68 (680K)	1K (102K)	15K (153K)	220K (224K)
5.6 (56GK)	82 (820K)	1.2K (122K)	18K (183K)	270K (274K)
6.8 (68GK)	100 (101K)	1.5K (152K)	22K (223K)	330K (334K)
8.2 (82GK)	120 (121K)	1.8K (182K)	27K (273K)	390K (394K)
10 (100K)	150 (151K)	2.2K (222K)	33K (333K)	470K (474K)
12 (120K)	180 (181K)	2.7K (272K)	39K (393K)	560K (564K)
15 (150K)	220 (221K)	3.3K (332K)	47K (473K)	680K (684K)
18 (180K)	270 (271K)	3.9K (392K)	56K (563K)	820K (824K)
22 (220K)	330 (331K)	4.7K (472K)	68K (683K)	1MEG (105K)
27 (270K)	390 (391K)	5.6K (562K)	82K (823K)	
33 (330K)	470 (471K)	6.8K (682K)	100K (104K)	
39 (390K)	560 (561K)	8.2K (822K)	120K (124K)	

Vitreous Enamel Power Resistors

8 and 12 Watt



	B8J	B12J
Max. Voltage	250	625
Overload	10 times rated wattage for 5 seconds	
Length	1.000” (25.40mm)	1.750” (44.45mm)

RESISTANCE VALUE CHART

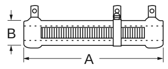
Value (Code)	Value (Code)	Value (Code)	Value (Code)	Value (Code)
2.0 (2R0)	75 (75R)	600 (600)	3.5K (3K5)	12.0K (12K)
3.0 (3R0)	100 (100)	750 (750)	4.0K (4K0)	15.0K (15K)
5.0 (5R0)	125 (125)	900 (900)	4.5K (4K5)	20.0K (20K)
7.5 (7R5)	150 (150)	1.0K (1K0)	5.0K (5K0)	25.0K (25K)
10 (10R)	200 (200)	1.2K (1K2)	6.0K (6K0)	40.0K (40K)
15 (15R)	250 (250)	1.25K (1K25)	7.0K (7K0)	50.0K (50K)
20 (20R)	300 (300)	1.5K (1K5)	7.5K (7K5)	
25 (25R)	400 (400)	2.0K (2K0)	8.0K (8K0)	
35 (35R)	450 (450)	2.5K (2K5)	9.0K (9K0)	
50 (50R)	500 (500)	3.0K (3K0)	10.0K (10K)	

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	25	100	250
5.0-7.5	8	B8J(Code)-ND	2.80	2.52	2.24	1.96
10-500	8	B8J(Code)-ND	2.70	2.43	2.16	1.89
600-1.0K	8	B8J(Code)-ND	2.50	2.25	2.00	1.75
2.0K-9.0K	8	B8J(Code)-ND	2.55	2.30	2.04	1.79
10.0K	8	B8J(Code)-ND	2.77	2.49	2.22	1.94
2.0-7.5	12	B12J(Code)-ND	2.70	2.43	2.16	1.89
10-900	12	B12J(Code)-ND	2.39	2.15	1.91	1.67
1.0K-1.5K	12	B12J(Code)-ND	2.59	2.33	2.07	1.81
2.0K-4.0K	12	B12J(Code)-ND	2.66	2.39	2.13	1.86
4.5K-9.0K	12	B12J(Code)-ND	2.80	2.52	2.24	1.96
10.0K-15.0K	12	B12J(Code)-ND	2.86	2.57	2.29	2.00
20.0K-40.0K	12	B12J(Code)-ND	2.97	2.67	2.38	2.08
50.0K	12	B12J(Code)-ND	3.74	3.37	2.99	2.62

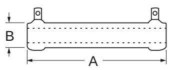
*For complete part number, substitute the corresponding code from the Resistance Value Chart for (Code).

25, 50, 100, and 225 Watt

Adjustable with Tabs - Type 210
D25K, D50K, D100K, D225K



Fixed with Tabs - Type 270
L25J, L50J, L100J, L225J



RESISTANCE VALUE CHART

Value (Code)	Value (Code)	Value (Code)
1.0 (1R0)	100 (100)	2.5K (2K5)
2.0 (2R0)	150 (150)	4.0K (4K0)
3.0 (3R0)	200 (200)	5.0K (5K0)
5.0 (5R0)	250 (250)	10.0K (10K)
10 (10R)	500 (500)	12.0K (12K)
25 (25R)	750 (750)	25.0K (25K)
50 (50R)	1.0K (1K0)	50.0K (50K)

	L25J/D25K	L50J/D50K	L100J/D100K	L225J/D225K
Max. Volt.	625	1625	2845	4595
Overload	10 times rated wattage for 5 seconds			
DWV	1000VAC	1000VAC	1000VAC	3000VAC
Length A	2” (50.80mm)	4” (101.60mm)	6.5” (165.10mm)	10.5” (266.70mm)
Diameter B	.5625” (14.29mm)	.5625” (14.29mm)	.750” (19.05mm)	1.125” (28.58mm)

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	10	25	100
2.0-3.0	25	L25J(Code)-ND	4.53	—	3.85	3.17
10, 25, 100, 500, 750	25	L25J(Code)-ND	4.44	—	3.77	3.11
1.0K, 2.5K	25	L25J(Code)-ND	4.65	—	3.95	3.26
4.0K, 5.0K	25	L25J(Code)-ND	4.70	—	4.00	3.29
10.0K-12.0K	25	L25J(Code)-ND	5.64	—	4.79	3.95
25.0K	25	L25J(Code)-ND	5.80	—	4.93	4.06
50.0K	25	L25J(Code)-ND	6.05	—	5.14	4.24
Mtg. Bracket 25/50W‡	25	9-100-ND	.64	.43	—	.21
1.0	25	D25K(Code)-ND	8.68	—	7.38	6.08
3.0, 5.0, 10, 25, 50, 100, 250, 500	25	D25K(Code)-ND	7.38	—	6.27	5.17
1.0	50	L50J(Code)-ND	6.98	—	5.93	4.89
2.0-5.0	50	L50J(Code)-ND	6.54	—	5.56	4.58
10, 25, 50, 100, 500	50	L50J(Code)-ND	6.41	—	5.45	4.49
1.0K, 5.0K	50	L50J(Code)-ND	6.35	—	5.40	4.45
1.0-3.0	50	D50K(Code)-ND	12.33	—	10.48	8.63
5.0	50	D50K(Code)-ND	12.11	—	10.29	8.48
10, 25, 50	50	D50K(Code)-ND	10.55	—	8.97	7.39
100, 500	50	D50K(Code)-ND	10.33	—	8.78	7.23
1.0K	50	D50K(Code)-ND	11.04	—	9.38	7.73

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	10	25	100
1.0-2.0	100	L100J(Code)-ND	9.60	—	8.16	7.20
5.0	100	L100J(Code)-ND	9.23	—	7.85	6.92
10, 50	100	L100J(Code)-ND	8.76	—	7.45	6.57
100, 250	100	L100J(Code)-ND	8.54	—	7.26	6.41
1.0K	100	L100J(Code)-ND	8.22	—	6.99	6.17
1.0	100	D100K(Code)-ND	15.25	—	13.73	12.20
2.0,10	100	D100K(Code)-ND	14.84	—	13.36	11.87
50, 100, 250	100	D100K(Code)-ND	13.34	—	12.01	10.67
1.0K	100	D100K(Code)-ND	13.34	—	12.01	10.67
1.0	225	L225J(Code)-ND	28.05	—	25.25	22.44
5.0	225	L225J(Code)-ND	16.25	—	14.63	13.00
10, 50, 100	225	L225J(Code)-ND	14.10	—	12.69	11.28
250, 500	225	L225J(Code)-ND	13.45	—	12.11	10.76
1.0K	225	L225J(Code)-ND	12.70	—	11.43	10.16
1.0	225	D225K(Code)-ND	31.50	28.35	25.20	—
2.0-3.0	225	D225K(Code)-ND	26.72	24.05	21.38	—
5.0	225	D225K(Code)-ND	24.11	21.70	19.29	—
10, 25, 50	225	D225K(Code)-ND	21.47	19.32	17.18	—
100, 150, 200, 250, 500, 1.0K	225	D225K(Code)-ND	18.13	16.32	14.50	—
Mtg. Bracket 100W‡	100	12-100-ND	1.39	.93	—	.45
Mtg. Bracket 200W‡	200	18-100-ND	1.46	.98	—	.47

* For complete part number, substitute the corresponding code from the Resistance Value Chart for (Code). ‡ Requires 2 brackets per resistor.

NOTE: *Not all values are stocked at all wattages. Please see chart.*

SMD Power Resistors

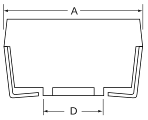
1, 1.5, 2, 3 and 3.5 Watt

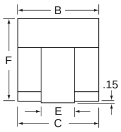
Electrical Specifications

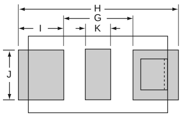
	RW1S0BA	RW1S5CA	RW2S0CB	RW2R0DA	RW3R0DB	RW3R5EA
Power at 25°C Ambient	1 watt	1.5 watt	2 watt	2 watt	3 watt	3.5 watt
Max. Voltage	50	75	100	100	200	350
Temperature Coefficient	0.1 to 1 ohm — ±90 ppm/°C 1 to 10 ohms — ±50 ppm/°C 10 ohms and over — ±20 ppm/°C					
Dielectric Withstanding Voltage	1000 V					

RESISTANCE VALUE CHART

RW1S0BA( )F 1%	RW1S0BA( )J 5%		RW1S5CA 5%	RW2R0DA 5%	RW2S0CB 5%	RW3R0DB 5%	RW3R5EA 5%
Value (Code)	**Value (Code)**	**Value (Code)**	**Value (Code)**	**Value (Code)**	**Value (Code)**	**Value (Code)**	**Value (Code)**
.010 (R010)	.005 (R005)	.100 (R100)	.005 (R005)	.005 (R005)	.005 (R005)	.005 (R005)	.010 (R010)
.015 (R015)	.010 (R010)	.150 (R150)	.010 (R010)	.010 (R010)	.010 (R010)	.010 (R010)	.020 (R020)
.020 (R020)	.015 (R015)	.200 (R200)	.015 (R015)	.015 (R015)	.020 (R020)	.015 (R015)	.025 (R025)
.030 (R030)	.020 (R020)	.240 (R240)	.030 (R030)	.020 (R020)	.030 (R030)	.025 (R025)	.030 (R030)
.033 (R033)	.024 (R024)	.300 (R300)	.040 (R040)	.025 (R025)	.050 (R050)	.036 (R036)	.036 (R036)
.039 (R039)	.027 (R027)	.360 (R360)	.080 (R080)	.030 (R030)	.150 (R150)	.050 (R050)	.050 (R050)
.047 (R047)	.030 (R030)	.470 (R470)	.100 (R100)	.050 (R050)	.200 (R200)	.075 (R075)	.100 (R100)
.050 (R050)	.036 (R036)	.680 (R680)	.150 (R150)	.100 (R100)	.300 (R300)	.100 (R100)	.200 (R200)
.100 (R100)	.050 (R050)	.750 (R750)	.200 (R200)	.470 (R470)	.500 (R500)	.500 (R500)	.500 (R500)
	.075 (R075)	1.00 (1R00)	.500 (R500)	1.00 (1R00)	1.00 (1R00)	1.00 (1R00)	1.00 (1R00)







Series	Max. Dimensions (mm) A	B	C	D	E	F	G	H	I	J	K
RW1S0BA	6.76	3.58	3.38 Ref.	3.05	1.63	3.58	3.81	8.79	2.49	3.20	1.27
RW1S5CA	10.52	4.17	3.96 Ref.	5.84	2.24	4.17	6.50	13.31	3.40	3.20	1.52
RW2S0CB	10.85	5.87	5.64 Ref.	6.86	2.46	5.77	7.01	13.64	3.33	3.20	2.36
RW2R0DA	12.06	6.22	5.99 Ref.	6.86	3.94	5.87	8.05	14.86	3.40	3.94	2.36
RW3R0DB	16.05	7.06	6.81 Ref.	10.85	3.94	5.87	12.04	18.85	3.40	3.94	2.36
RW3R5EA	21.11	7.06	6.81 Ref.	14.78	3.94	6.98	15.52	25.40	4.95	3.94	2.36

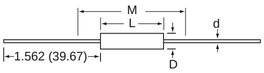
Resistance Range (Ohms)	Wattage	Tolerance	Digi-Key* Part No.	Bulk Price Each 1	100	500	Digi-Key* Part No.	Tape & Reel Pricing 750	1,000	1,500	2,000
.010 - .050	1	1%	RW1S0BA(Code)FBK-ND *NEW!*	2.53	2.10	1.79	RW1S0BA(Code)FTTR-ND *NEW!*	—	—	—	1680.00/M
.100	1	1%	RW1S0BA(Code)FBK-ND	3.22	2.68	2.28	RW1S0BA(Code)FTTR-ND	—	—	—	2140.00/M
.005 - .050	1	5%	RW1S0BA(Code)JBK-ND *NEW!*	2.05	1.70	1.45	RW1S0BA(Code)JTTR-ND *NEW!*	—	—	—	1360.00/M
.075 - 1.00	1	5%	RW1S0BA(Code)JBK-ND *NEW!*	2.48	2.06	1.75	RW1S0BA(Code)JTTR-ND *NEW!*	—	—	—	1650.01/M
.005 - .040	1.5	5%	RW1S5CA(Code)JBK-ND	1.81	1.50	1.28	RW1S5CA(Code)JTTR-ND	—	—	1200.00/M	—
.080 - .500	1.5	5%	RW1S5CA(Code)JBK-ND	2.39	1.98	1.68	RW1S5CA(Code)JTTR-ND	—	—	1580.00/M	—
.050	2	1%	RW2R0DAR050FBK-ND	2.13	1.77	1.50	RW2R0DAR050FTTR-ND	—	1420.00	—	—
.005 - .050	2	5%	RW2R0DA(Code)JBK-ND *NEW!*	1.87	1.55	1.32	RW2R0DA(Code)JTTR-ND *NEW!*	—	1240.00	—	—
.100 - 1.00	2	5%	RW2R0DA(Code)JBK-ND	2.24	1.86	1.58	RW2R0DA(Code)JTTR-ND	—	1490.00	—	—
.005 - 050	2	5%	RW2S0CB(Code)JBK-ND	1.79	1.49	1.27	RW2S0CB(Code)JTTR-ND	—	1190.00	—	—
.150 - 1.00	2	5%	RW2S0CB(Code)JBK-ND *NEW!*	2.28	1.89	1.61	RW2S0CB(Code)JTTR-ND *NEW!*	—	1510.00	—	—
.005- .050	3	5%	RW3R0DB(Code)JBK-ND *NEW!*	2.15	1.78	1.51	RW3R0DB(Code)JTTR-ND *NEW!*	—	1420.00	—	—
.075 - 1.00	3	5%	RW3R0DB(Code)JBK-ND	2.42	2.01	1.71	RW3R0DB(Code)JTTR-ND	—	1610.00	—	—
.010 - .050	3.5	5%	RW3R5EA(Code)JBK-ND *NEW!*	2.28	1.89	1.61	RW3R5EA(Code)JTTR-ND *NEW!*	1132.50	—	—	—
.100 - 1.00	3.5	5%	RW3R5EA(Code)JBK-ND *NEW!*	2.42	2.02	1.72	RW3R5EA(Code)JTTR-ND *NEW!*	1215.00	—	—	—

*For complete part number, substitute the corresponding code from the Resistance Value Chart for (Code).

10 Series - Molded Silicone Axial Lead Wire Element Resistors

Ideal for Current Sensing

Electrical Specifications: • **Resistance Tolerance:** ±1% (F Type) • **Power Rating:** Based on 25°C free air rating • **Overload:** 5x rated power for 5 seconds • **Dielectric Withstanding Volt.:** 2 watt – 500 VRMS, 3 and 5 watt – 1000 VRMS • **Insulation Resistance:** Not less than 1000MΩ • **Temp. Range:** -55°C to 275°C



Watts	Maximum Dim. – mm D	L	d	M
2	2.64	10.57	.86	29.36
3	5.46	14.48	.86	33.27
5	8.64	23.50	1.07	42.55

RESISTANCE VALUE CHART

12F Series	13F Series	15F Series
Value (Code)	**Value (Code)**	**Value (Code)**
.005 (R005)	.005 (R005)	.005 (R005)
.010 (R010)	.010 (R010)	.010 (R010)
.015 (R015)	.015 (R015)	.015 (R015)
.020 (R020)	.020 (R020)	.020 (R020)
.025 (R025)	.025 (R025)	.025 (R025)
.030 (R030)	.030 (R030)	.030 (R030)
.040 (R040)	.040 (R040)	.040 (R040)
.050 (R050)	.050 (R050)	.050 (R050)
.070 (R070)	.070 (R070)	.070 (R070)
.100 (R100)	.100 (R100)	.100 (R100)
	.150 (R150)	.150 (R150)
	.200 (R200)	.200 (R200)
		.250 (R250)
		.300 (R300)

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	10	100	250
.005 - .020	2	12F(Code)-ND	1.56	1.40	1.25	1.17
.025 - .040	2	12F(Code)-ND	1.54	1.39	1.23	1.16
.050	2	12F(Code)-ND	1.45	1.31	1.16	1.09
.070	2	12F(Code)-ND	1.56	1.40	1.25	1.17
.100	2	12F(Code)-ND	1.70	1.53	1.36	1.28
.005	3	13F(Code)-ND	1.55	1.40	1.24	1.16
.010 - .015	3	13F(Code)-ND	1.46	1.31	1.17	1.10
.020 - .030	3	13F(Code)-ND	1.40	1.26	1.12	1.05
.040 - .050	3	13F(Code)-ND	1.38	1.24	1.10	1.04
.070 - .200	3	13F(Code)-ND	1.55	1.40	1.24	1.16
.005	5	15F(Code)-ND	1.85	1.67	1.48	1.39
.010 - .030	5	15F(Code)-ND	1.79	1.61	1.43	1.34
.040 - .050	5	15F(Code)-ND	1.75	1.58	1.40	1.31
.070 - .300	5	15F(Code)-ND	1.72	1.55	1.38	1.29

*For complete part number, substitute the corresponding code from Resistance Value Chart for (Code).

G

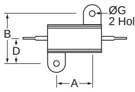
89 Type - Aluminum Housed Axial Lead Wirewound Resistors

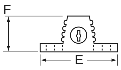
The 89 Type are high performance axial-lead-type resistors. They are better suited to withstand vibration, shock and harsh environmental conditions than standard axial-lead resistors. The 89 Type are aluminum housed to maintain high stability during operation and to permit secure mounting to chassis surfaces. The housing also provides heat-sinking capabilities. The 89 Type resistors meet or exceed MIL-R-18546 specifications.

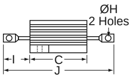
Electrical Specifications

	5 Watt	10 Watt	25 Watt	50 Watt
Resistance Tolerance	±1%	±1%	±1%	±1%
Power Rating* (mm) Proper Heat	101.60 x 152.40 x 50.80 x 1.02 aluminum chassis		127.00 x 177.80 x 50.80 x 1.02 aluminum chassis	304.80 x 304.80 x 1.50 aluminum panel
Max. Operating Voltage	210	320	520	1170
Overload	5 times rated power for 5 seconds			
Temperature Coefficient	Under 1 ohm — ±90 ppm/°C 1 to 9.99 ohms — ±50 ppm/°C 10 ohms and over — ±20 ppm/°C			
Dielectric Withstanding Voltage	1000VAC	1000VAC	2500VAC	2500VAC

* Based on chassis mounting area and temperature stability.







Watts	Max. Dimensions (mm) A	B	C	D	E	F	G	H	I	J
5	11.40	12.57	16.03	6.30	16.79	8.51	2.49	1.40	8.33	30.15
10	14.40	16.00	19.84	8.00	20.70	10.29	2.49	2.31	9.50	36.50
25	18.39	19.96	27.76	10.01	27.81	14.25	3.30	2.31	12.70	50.80
50	39.83	21.56	50.77	10.79	29.34	15.88	3.30	2.31	12.70	72.21

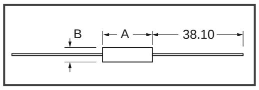
RESISTANCE VALUE CHART

5 Watt		10 Watt		25 Watt		50 Watt	
Value (Code)	**Value (Code)**	**Value (Code)**	**Value (Code)**	**Value (Code)**	**Value (Code)**	**Value (Code)**	**Value (Code)**
1.0 (1R0)	75 (75R)	1.0 (1R0)	250 (250)	.10 (R10)	100 (100)	.10 (R10)	150 (150)
2.0 (2R0)	100 (100)	2.0 (2R0)	500 (500)	1.0 (1R0)	150 (150)	1.0 (1R0)	250 (250)
5.0 (5R0)	150 (150)	5.0 (5R0)	750 (750)	2.0 (2R0)	250 (250)	2.0 (2R0)	500 (500)
7.5 (7R5)	250 (250)	10 (10R)	1.0K (1K0)	5.0 (5R0)	500 (500)	5.0 (5R0)	750 (750)
10 (10R)	500 (500)	15 (15R)	2.5K (2K5)	7.5 (7R5)	750 (750)	10 (10R)	1.0K (1K0)
15 (15R)	750 (750)	20 (20R)	5.0K (5K0)	10 (10R)	1.0K (1K0)	15 (15R)	2.5K (2K5)
25 (25R)	1.0K (1K0)	50 (50R)	10.0K 10K	20 (20R)	2.5K (2K5)	25 (25R)	5.0K (5K0)
40 (40R)	2.5K (2K5)	75 (75R)	25.0K 25K	25 (25R)	5.0K (5K0)	40 (40R)	10.0K (10K)
50 (50R)	5.0K (5K0)	100 (100)		50 (50R)	10.0K (10K)	50 (50R)	25.0K (25K)
				75 (75R)	25.0K (25K)	75 (75R)	100K (100K)
						100 (100)	

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	10	50	100
1.0 - 25	5	805F(Code)-ND	3.45	3.11	2.76	2.59
40 - 750	5	805F(Code)-ND	3.78	3.40	3.02	2.84
1.0K - 2.5K	5	805F(Code)-ND	4.69	4.22	3.75	3.52
5.0K	5	805F(Code)-ND	5.24	4.72	4.19	3.93
1.0 - 750	10	810F(Code)-ND	3.62	3.26	2.90	2.72
1.0K - 2.5K	10	810F(Code)-ND	4.00	3.60	3.20	3.00
5.0K	10	810F(Code)-ND	4.49	4.04	3.59	3.37
10.0K	10	810F(Code)-ND	5.15	4.64	4.12	3.86
25.0K	10	810F(Code)-ND	6.47	5.82	5.18	4.85
.10	25	825F(Code)-ND	5.15	4.64	4.12	3.86
1.0 - 75	25	825F(Code)-ND	4.66	4.19	3.73	3.50
100 - 750	25	825F(Code)-ND	4.80	4.32	3.84	3.60
1.0K - 5.0K	25	825F(Code)-ND	5.38	4.84	4.30	4.04
10.0K	25	825F(Code)-ND	5.91	5.32	4.73	4.43
25.0K	25	825F(Code)-ND	7.40	6.66	5.92	5.55
.10	50	850F(Code)-ND	6.55	5.90	5.24	4.91
1.0 - 750	50	850F(Code)-ND	5.38	4.84	4.30	4.04
1.0K - 5.0K	50	850F(Code)-ND	6.09	5.48	4.87	4.57
10.0K	50	850F(Code)-ND	6.42	5.78	5.14	4.82
25.0K	50	850F(Code)-ND	7.23	6.51	5.78	5.42
100K	50	850F(Code)-ND	9.81	8.83	7.85	7.36

*For complete part number, substitute the corresponding code from the Resistance Value Chart for (Code).

Silicone - Ceramic Conformal Wirewound Resistors



Resistor Series	Power Rating	Max. Length A (mm)	Max. Dia. B (mm)	Lead Dia. C (mm)
41F	1W	11.10	3.18	.51
43F	3W	15.06	5.54	.81
45F	5W	23.80	8.71	1.02

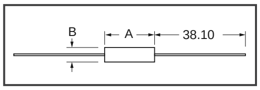
Electrical Specifications:

	41F Series	43F Series	45F Series
Resistance Tolerance	±1%	±1%	±1%
Power Rating	1 watt at 25°C ambient temperature	3 watts at 25°C ambient temperature	5 watts at 25°C ambient temperature
Temperature Coefficient of Resistance	Under 1 ohm — ±90 ppm/°C 1 to 9.99 ohms — ±50ppm/°C 10 ohms and over — ±20ppm/ °C		
Dielectric Withstanding Voltage	500 VAC	1000 VAC	1000 VAC
Short Time Overload	5 times rated wattage for 5 seconds	5 times rated wattage for 5 seconds	10 times rated wattage for 5 seconds

Resistance Range (Ω)	Wattage	Digi-Key* Part No.	Price Each 1	25	100	250
.33	1	41F(Code)-ND	2.30	1.96	1.73	1.50
1.0-5.0	1	41F(Code)-ND	2.22	1.89	1.67	1.44
10-68	1	41F(Code)-ND	1.92	1.63	1.44	1.25
100-470	1	41F(Code)-ND	2.15	1.83	1.61	1.40
500-900	1	41F(Code)-ND	2.38	2.02	1.79	1.55
1.0K-1.2K	1	41F(Code)-ND	2.71	2.30	2.03	1.76
2.0K-3.0K	1	41F(Code)-ND	3.26	2.77	2.45	2.12
.10-.75	3	43F(Code)-ND	1.76	1.50	1.32	1.14
1.0-5.0	3	43F(Code)-ND	1.40	1.19	1.05	.91
10-82	3	43F(Code)-ND	1.14	.97	.86	.74
100-900	3	43F(Code)-ND	.98	.83	.74	.64
1.0K-1.8K	3	43F(Code)-ND	1.19	1.01	.89	.77
2.2K-2.7K	3	43F(Code)-ND	1.58	1.34	1.19	1.03
3.5K-4.7K	3	43F(Code)-ND	1.91	1.62	1.43	1.24
5.0K-6.8K	3	43F(Code)-ND	2.30	1.96	1.73	1.50
7.5K-10.0K	3	43F(Code)-ND	2.38	2.02	1.79	1.55
.10-.50	5	45F(Code)-ND	1.97	1.67	1.48	1.28
1.0-7.5	5	45F(Code)-ND	1.37	1.16	1.03	.89
10-50	5	45F(Code)-ND	1.19	1.01	.89	.77
100-900	5	45F(Code)-ND	1.14	.97	.86	.74
1.0K-2.7K	5	45F(Code)-ND	1.32	1.12	.99	.86
3.0K-6.8K	5	45F(Code)-ND	1.54	1.31	1.16	1.00
7.5K-8.0K	5	45F(Code)-ND	2.02	1.72	1.52	1.31
10.0K-15.0K	5	45F(Code)-ND	2.14	1.82	1.61	1.39
20.0K-25.0K	5	45F(Code)-ND	2.65	2.25	1.99	1.72

* For complete part number, substitute the corresponding code from the Resistance Value Chart for (Code).

Vitreous Enamel Conformal Wirewound Resistors



Resistor Series	Power Rating	Max. Length A (mm)	Max. Dia. B (mm)	Lead Dia. C (mm)
23J	3W	12.70	5.59	.81
25J	5W	23.01	7.01	.81
20J	10W	46.84	10.01	.81

Electrical Specifications:

	23J Series	25J Series	20J Series
Resistance Tolerance	±5%	±5%	±5%
Power Rating	3W	5W	10W
Dielectric Withstanding Voltage	1000V	1000V	1000V
Short time Overload	5 times rated wattage for 5 seconds	10 times rated wattage for 5 seconds	10 times rated wattage for 5 seconds

Resistance Range (Ω)	Wattage	Digi-Key* Part No.	Price Each 1	50	100	250
.15-.75	3	23J(Code)-ND	1.75	1.49	1.31	1.14
1.0-7.5	3	23J(Code)-ND	1.14	.97	.86	.74
10-82	3	23J(Code)-ND	1.03	.88	.77	.67
100-450	3	23J(Code)-ND	.93	.79	.70	.60
470-900	3	23J(Code)-ND	1.02	.87	.77	.66
1.0K-4.7K	3	23J(Code)-ND	1.38	1.17	1.04	.90
5.0K-7.0K	3	23J(Code)-ND	1.81	1.54	1.36	1.18
7.5K-10.0K	3	23J(Code)-ND	2.07	1.76	1.55	1.35
.15-.75	5	25J(Code)-ND	1.45	1.23	1.09	.94
1.0-7.5	5	25J(Code)-ND	1.38	1.17	1.04	.90
10-82	5	25J(Code)-ND	1.32	1.12	.99	.86
100-470	5	25J(Code)-ND	1.09	.93	.82	.71
500-900	5	25J(Code)-ND	1.27	1.08	.95	.83
1.0K-4.7K	5	25J(Code)-ND	1.53	1.30	1.15	.99
5.0K-9.0K	5	25J(Code)-ND	1.94	1.65	1.46	1.26
10.0K-15.0K	5	25J(Code)-ND	2.15	1.83	1.61	1.40
16.0K-25.0K	5	25J(Code)-ND	2.54	2.16	1.91	1.65
.10-.75	10	20J(Code)-ND	1.89	1.61	1.42	1.23
1.0-5.0	10	20J(Code)-ND	1.84	1.56	1.38	1.20
10-82	10	20J(Code)-ND	1.72	1.46	1.29	1.12
100-680	10	20J(Code)-ND	1.56	1.33	1.17	1.01
1.0K-2.7K	10	20J(Code)-ND	1.87	1.59	1.40	1.22
3.0K-4.7K	10	20J(Code)-ND	2.13	1.81	1.60	1.38
5.0K-8.5K	10	20J(Code)-ND	2.44	2.07	1.83	1.59
10.0K-22.5K	10	20J(Code)-ND	2.77	2.35	2.08	1.80
25.0K	10	20J(Code)-ND	3.13	2.66	2.35	2.03

* For complete part number, substitute corresponding code from the Resistance Value Chart for (Code).

RESISTANCE VALUE CHART (for Silicone and Vetreous Wirewound Resistors)

Value (Code)	Value (Code)	Value (Code)	Value (Code)	Value (Code)	Value (Code)	Value (Code)	Value (Code)	Value (Code)	Value (Code)	Value (Code)	Value (Code)
.10 (R10)	1.0 (1R0)	15 (15R)	39 (39R)	120 (120)	300 (300)	600 (600)	1.2K (1K2)	2.7K (2K7)	5.6K (5K6)	10.0K (10K)	20.0K (20K)
.13 (R13)	1.5 (1R5)	18 (18R)	40 (40R)	125 (125)	330 (330)	680 (680)	1.25K• (1K25)•	3.0K (3K0)	6.0K (6K0)	11.0K• (11K)•	22.0K• (22K)•
.15 (R15)	2.0 (2R0)	20 (20R)	47 (47R)	150 (150)	350 (350)	700 (700)	1.5K (1K5)	3.3K• (3K3)•	6.8K (6K8)	12.0K• (12K)•	22.5K• (22K5)•
.20 (R20)	3.0 (3R0)	22 (22R)	50 (50R)	180 (180)	390 (390)	750 (750)	1.75K• (1K75)•	3.5K (3K5)	7.0K• (7K0)•	12.5K (12K5)	25.0K (25K)
.25 (R25)	4.0 (4R0)	25 (25R)	56 (56R)	200 (200)	400 (400)	800 (800)	1.8K (1K8)	3.9K (3K9)	7.5K (7K5)	13.5K• (13K5)•	
.30 (R30)	5.0 (5R0)	27 (27R)	68 (68R)	220 (220)	450• (450)•	820 (820)	2.0K (2K0)	4.0K (4K0)	8.0K (8K0)	15.0K (15K)	
.33 (R33)	7.5 (7R5)	30 (30R)	75 (75R)	225 (225)	470 (470)	900 (900)	2.2K (2K2)	4.5K• (4K5)•	8.2K (8K2)	16.0K• (16K)•	
.50 (R50)	10 (10R)	33 (33R)	82 (82R)	250 (250)	500 (500)	1.0K (1K0)	2.25K• (2K25)•	4.7K (4K7)	8.5K• (8K5)•	17.5K• (17K5)•	
.75 (R75)	12 (12R)	35 (35R)	100 (100)	270 (270)	560 (560)	1.1K (1K1)	2.5K (2K5)	5.0K (5K0)	9.0K• (9K0)•	18.0K• (18K)•	

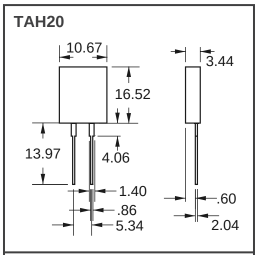
• Value not available in Silicone-Ceramic Conformal

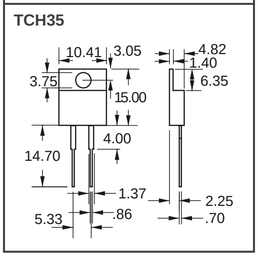
TO220 Style Thick Film Power Resistors - Heat Sink Mountable

TAH20 and TCH35 Series

Electrical Specifications:

	TAH20	TCH35
Resistance Tolerance	±5%	±5%
Max. Operating Voltage:	350V	350V
Dielectric Strength:	1800VAC	1800VAC
Insulation Resistance:	10GΩ Min.	10GΩ Min.
Power Rating	20W @ 25°C	35W @ 25°C
Mounting:	Requires use of a snap-on heat sink. A thermal compound should be properly applied	Single screw mounting tab (with thermal compound recommended)





RESISTANCE VALUE CHART

Value (Code)	Value (Code)	Value (Code)
.05• (R050)•	5.6 (5R60)	150 (150R)
.10 (R100)	7.5• (7R50)•	220 (220R)
.22 (R220)	10 (10R0)	470 (470R)
.33 (R330)	15 (15R0)	510 (510R)
.51 (R510)	22 (22R0)	750 (750R)
1.0 (1R00)	33 (33R0)	1.0K (1K00)
1.5 (1R50)	47 (47R0)	2.7K (2K70)
2.2 (2R20)	51 (51R0)	5.1K (5K10)
3.3 (3R30)	75 (75R0)	10K (10K0)
3.9 (3R90)	100 (100R)	

• Not available in the TCH35 Series.

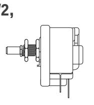
Series	Resistance Range (ohms)	Wattage	Digi-Key* Part No.	Price Each 1	50	100	500
TAH20	.05 - 10K	20	TAH20P(Code)J-ND	4.38	3.77	3.07	2.63
TCH35	.10 - 10K	35	TCH35P(Code)J-ND	4.35	3.75	3.05	2.61

* For complete part number, substitute the corresponding code from the Resistance Value Chart for (Code).

Wirewound Rheostats

	RES	RHS	RJS
Wattage	12-1/2 W*	25W†	50W†
Res. Tolerance	±10%	±10%	±10%
Core Diameter (mm)	22.23	39.69	58.74
Shaft Diameter (mm)	3.18	6.35	6.35
Running Torque	1 to 6 in. oz.	.25 to .5 in. lb.	.25 to 2 in. lb.
Weight	.6 oz.	.19 lbs.	.32 lbs.
Rotation	300° ±5%	300° ±5%	300° ±5%
Memcor-Truohm Equivalent	RH12	RH25	RH50

12-1/2, 25 & 50W



† 12-1/2 watt uses knob **5151-ND**

†† 25 & 50 watt uses knob **5150-ND**

RESISTANCE VALUE CHARTS

12.5 / 25 Watt

Value (Code)	Value (Code)	Value (Code)	Value (Code)
1.0 (1R0)	15 (15R)	175 (175)	1.5K (1K5)
2.0 (2R0)	25 (25R)	250 (250)	2.5K (2K5)
3.0 (3R0)	50 (50R)	350 (350)	3.5K (3K5)
6.0 (6R0)	75 (75R)	500 (500)	5.0K (5K0)
8.0 (8R0)	100 (100)	750 (750)	10.0K (10K)
10 (10R)	125 (125)	1.0K (1K0)	

50Watt

Value (Code)	Value (Code)	Value (Code)
.50 (R50)	225 (225)	10.0K (10K)
1.0 (1R0)	1.0K (1K0)	
6.0 (6R0)	5.0K (5K0)	
35 (35R)	150 (150)	
50 (50R)	500 (500)	
125 (125)	2.5K (2K5)	

Resistance Range (ohms)	Wattage	Digi-Key* Part No.	Price Each 1	10	100	250
1.0-8.0	12.5	RES(Code)-ND†	21.00	18.90	14.70	13.65
10-350	12.5	RES(Code)-ND†	19.90	17.91	13.93	12.94
500-1.5K	12.5	RES(Code)-ND†	20.44	18.40	14.31	13.29
2.5K-5.0K	12.5	RES(Code)-ND†	21.75	19.58	15.23	14.14
10.0K	12.5	RES(Code)-ND†	23.50	21.15	16.45	15.28
1.0-8.0	25	RHS(Code)-ND††	24.10	21.69	16.87	—
10-750	25	RHS(Code)-ND††	23.03	20.73	16.12	—
1.0K-5.0K	25	RHS(Code)-ND††	23.82	21.44	16.67	—
10.0K	25	RHS(Code)-ND††	25.84	23.26	18.10	—
.50	50	RJS(Code)-ND††	34.89	31.40	24.42	20.93
1.0-6.0	50	RJS(Code)-ND††	31.16	28.04	21.81	18.70
35-150	50	RJS(Code)-ND††	27.26	24.53	19.08	16.36
225-500	50	RJS(Code)-ND††	26.20	23.58	18.35	15.72
1.0K-10.0K	50	RJS(Code)-ND††	28.64	25.78	20.05	17.18
Knob for 25/50W Rheostat		5150-ND	6.00	4.20	—	—
Knob for 12.5W Rheostat		5151-ND	4.40	3.08	—	—

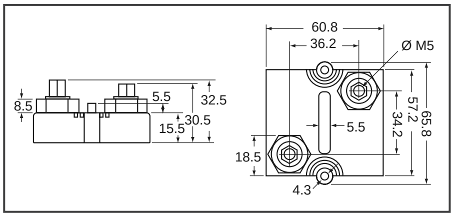
* For complete part number, substitute the corresponding code from the Resistance Value Chart for (Code).

OHMITE® *NEW!* TAP600 Heat Sinkable Planar Resistors - 600 Watt

TAP600 delivers 600 watts of reliable power to a variety of power conditioning, power transmission, and power control applications. These resistors can be used designed for liquid, or air cooled heat sink systems used in variable speed drives, power supplies, robotics, motor control, and other control devices.

Features: • Dielectric Strength: Up to 12KV • Special Design for Low Inductive and Capacitance Values • Easy termination to contacts with M5 screws • Calibrated Mounting Simplifies Assembly

Electrical Specifications: • Resistance Tolerance: ±10% Std. • Max. Operating Voltage: 5000VDC • Power Rating: 600W at 70°C heat sink temperature • Temperature Coefficient: ±150ppm/°C • Operating Temperature Range: -55°C to 150°C • Electric Strength Voltage: Up to 12000Vrms, 50HZ, 1min. @ 500V • Insulation Resistance: 10G ohms min at 500V • Air Distance: 14mm min. • Inductance: ≤80nH



RESISTANCE VALUE CHART

Value (Code)	Value (Code)
1 (1R0)	30 (30R)
2 (2R0)	50 (50R)
3 (3R0)	75 (75R)
4 (4R0)	100 (100)
5 (5R0)	500 (500)
10 (10R)	1000 (1K0)
22 (22R)	10000 (10K)

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	10	25	50
1-10000 (see chart)	600W	TAP600K(Code)-ND	103.30	80.39	73.69	63.80

*For complete part number, substitute the corresponding code from Resistance Value Chart for (Code).

NEW! TAP1000 Heat Sinkable Planar Resistors - 1000 Watt

TAP1000 Series resistors deliver 1000 watts of continuous power with thick film on alumina substrate technology. Up to 30% smaller, the TAP1000 is capable of 2 to 4 times the power dissipation of traditional heat sinkable resistor technologies. Designed for use with liquid cooled heat sinks, TAP1000 resistors are capable of dissipating 1000 watts of continuous power when properly mounted (based on 70°C base temperature).

Offering the highest power available in a heat sinkable package, the TAP1000 is well suited for power conditioning, power distribution, power conversion, and power control applications. Constructed of durable, lightweight materials, the TAP1000 package is easy to design and mount.

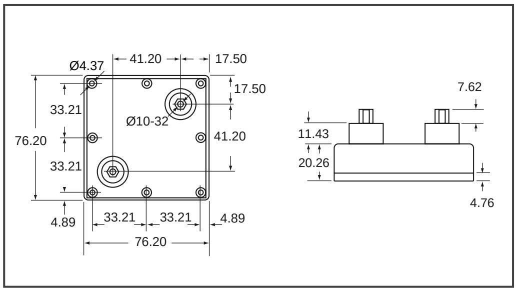
Features: • Dissipates 1000 Watts @ 70°C Mounting Plate Temperature • High Energy Rating • Low Inductance • Resistor Element Electrically Isolated • High Dielectric Strength • Small Footprint

Applications: • Power semiconductor balancing • Motor control • Inrush current limiting

Material Specifications: Resistor element - thick film on alumina substrate

Electrical Specifications: • Resistance Tolerance: ±10% Std. • Max. Operating Voltage: 2000VDC • Power Rating: 1000W @70°C • Temperature Coefficient: ±250 ppm/°C • Dielectric Strength: 6KV • Operating Temperature Range: -55°C to 150°C

Case Specifications: • Terminal Screws (#10 - 32), Max Contacts Torque: 10 in-lb. • Mounting Screws (#8 - 32), Max Mounting Torque: 15 in-lb.



RESISTANCE VALUE CHART

Value (Code)
2.5 (2R5R0)
3.0 (3R00)
5.0 (5R00)
8.0 (8R00)
10 (10R0)
15 (15R0)
25 (25R0)
30 (30R0)
50 (50R0)

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	10	25	50
2.5-50 (see chart)	1000W	TA1K0PH(Code)K-ND	115.00	85.00	78.00	70.01

*For complete part number, substitute the corresponding code from Resistance Value Chart for (Code).

NEW! TL88 Series - Heat Sinkable Thick Film Power Resistors

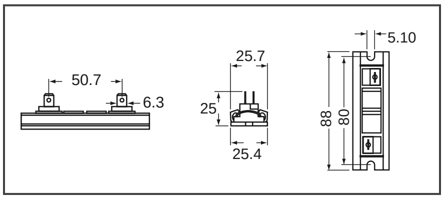
The TL88 Series add heat sinkable options to the thick film resistor family. The resistor element is packaged with plastic insulators, and quick-connect terminals in a symmetrical aluminum profile for easy heat sink mounting. Self-insulating package design increases voltage withstanding characteristics when compared to traditional aluminum housings. The in-line mounting profile makes the TL88 Series easily adaptable to most heat sink systems. Thermal compound is always recommended when heat sinking.

Features: • Very low inductance • Low profile design • In-Line Mounting Profile • 1/4" Quick connect terminals

Applications: • Semiconductor Balancing • Frequency Converters • Snubber • In-Rush Current Limiter • Bleeder Resistor • Power Switching • Voltage Dividers

Material Specifications: • Resistive Element: Thick film on alumina • Housing: Aluminum • Insulators: Glass reinforced high temperature Valox® • Terminals: Tinned brass

Electrical Specifications: • Tolerance: ± 10% Std. • Temperature Coefficient: ±250 PPM • Working Voltage: 1200 VAC • Temperature Limits: -40°C to +125°C • Air Distance, Terminal to Ground: 7mm • Inductance: 50-100 nH • Max. Voltage Between Terminal: 2500V



RESISTANCE VALUE CHART

Value (Code)	Value (Code)
1 (1R00)	47 (47R0)
3 (3R00)	50 (50R0)
5 (5R00)	75 (75R0)
10 (10R0)	100 (100R)
15 (15R0)	240 (240R)
25 (25R0)	470 (470R)
33 (33R0)	

Resistance Range (Ohms)	Wattage†	Digi-Key* Part No.	Price Each 10	50	100
1-470 (see chart)	114W	TL88K(Code)-ND	20.51	16.41	13.44

* For complete part number, substitute the corresponding code from Resistance Value Chart for (Code).

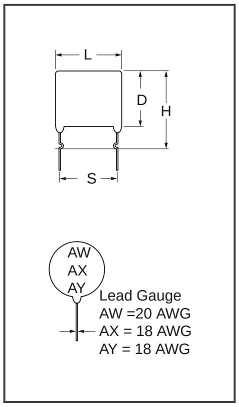
† Standard wattage for properly heat sinked resistors.

Ceramic Composition Resistors

The "A" Series of non-inductive, ceramic composite resistors are designed for a variety of applications where high energy handling capabilities are crucial. Designed for use in motor drives, UPS and other power conversion systems, these resistors are ideal for any application which is subject to surges, high peak power, impulse energy, or inrush current limiting.

Material Specifications: • Resistance Element: Bulk Ceramic • Terminals: Solder coated radial leads (axial lead version available upon request) • Coating: UL94V0, solvent resistant epoxy

Electrical Specifications: • Tolerance: ± 10% Standard • Derating: Derates linearly from 100% @ 50°C to 0% @ 150°C • Temperature Rise: 100°C @ 100% rated power, 50°C ambient



Series	L max in. (mm)	D max in. (mm)	H max in. (mm)	S norm in. (mm)
AW	.78 (20)	.51 (13)	.87 (22)	.69 (17.5)
AX	.59 (15)	.83 (21)	1.22 (31)	.49 (12.5)
AY	.98 (25)	.83 (21)	1.22 (31)	.89 (22.5)

RESISTANCE VALUE CHART

2.5W Value (Code)	3.5W Value (Code)	4.5W Value (Code)
4.7 (47G)	1.0 (10G)	2.2 (22G)
6.8 (68G)	2.2 (22G)	3.3 (33G)
10 (100)	3.3 (33G)	4.7 (47G)
15 (150)	4.7 (47G)	10 (100)
22 (220)	10 (100)	15 (150)
33 (330)	22 (220)	22 (220)
47 (470)	33 (330)	33 (330)
56 (560)	47 (470)	39 (390)
68 (680)	68 (680)	47 (470)
100 (101)	100 (101)	68 (680)
		100 (101)

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	10	50	250
4.7-100	2.5W	AW(Code)K-ND	10.22	8.52	7.27	6.41
1.0-100	3.5W	AX(Code)K-ND	11.40	9.52	8.12	7.15
2.2-100	4.5W	AY(Code)K-ND	11.80	9.85	8.39	7.39

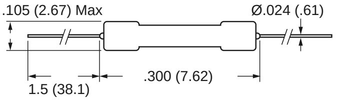
*For complete part number, substitute the corresponding code from Resistance Value Chart for (Code).

OHMITE® VICTOREEN COMPONENTS DIVISION Metal Oxide / Epoxy Coated Resistors

"Mini-Mox" Series

Applications: • Avionics • Medical Electronics • High Gain Feedback • Current Pluse Limiters

Electrical: • Voltage Rating: 500V • Operating Temperature: -55°C to +220°C • Dielectric Withstanding Voltage: 750 Volts



Resistance Range (Ω)	Tol.	Watt-age	Digi-Key Part No.	Price Each 1	10	50	100
10K - 1,000M	1%	.25	MOX200F-10MEG-ND	2.36	2.05	1.63	1.08
			MOX200F-100MEG-ND	4.01	3.48	2.17	1.63
			MOX200F-1000MEG-ND	13.73	10.98	7.14	6.97
	5%	.25	MOX200J-10MEG-ND	1.91	1.66	1.41	.86
			MOX200J-100MEG-ND	2.85	2.47	1.55	1.08
			MOX200J-1000MEG-ND	3.45	2.76	2.49	1.94

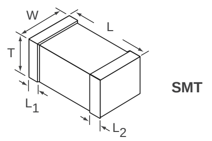
Panasonic

Multilayer Chip NTC Thermistors (ERTJ)

The Multilayer Chip NTC Thermistors are especially designed for surface mountings featuring the miniature sizes of “0402” and “0603” type (EIA) with highly reliable multilayer and monolithic structure.

FEATURES:

- Highly reliable multilayer/monolithic structure
- Superior heat resistance to reflow soldering and excellent solderability thanks to the unique external electrodes of three metallic layers
- Wide ranges of operating temperature (-40°C to 125°C)
- Low Capacitance (less 3pF)
- Soldering Temperature (270±5°C), Dipping Time (3.0±0.5 sec.)
- Heat Dissipation Constant: Series 0402 at approx. 2mw/°C; Series 0603 at approx. 3mw/°C
- Mounted on a glass epoxy (1.6t)



SMT

Size Code (EIA)	Dimensions (mm) L	W	T	L1 L2
0402	1.00	0.50	0.50	0.20
0603	1.60	0.80	0.80	0.30

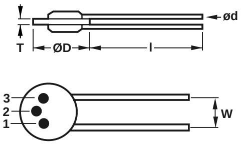
Zero-Power Resistance (at 25°C)	B Value B25/50	B25/85	Digi-Key Part No.	Cut Tape Price Each 1	10	100	500	Digi-Key Part No.	Tape& Reel Size	Pricing	Panasonic Part No.
0402											
22Ω	2750K±3%	(2700K)	P10557CT-ND	1.05	.93	.73	.60	P10557TR-ND	10,000	355.05/M	ERT-J0EA220J
33Ω	2750K±3%	(2700K)	P10558CT-ND	1.05	.93	.73	.60	P10558TR-ND	10,000	355.05/M	ERT-J0EA330J
40Ω	2750K±3%	(2700K)	P10559CT-ND	1.05	.93	.73	.60	P10559TR-ND	10,000	355.05/M	ERT-J0EA400J
47Ω	2750K±3%	(2700K)	P10560CT-ND	1.05	.93	.73	.60	P10560TR-ND	10,000	355.05/M	ERT-J0EA470J
68Ω	2800K±3%	(2750K)	P10561CT-ND	1.05	.93	.73	.60	P10561TR-ND	10,000	355.05/M	ERT-J0EA680J
100Ω	2800K±3%	(2750K)	P10562CT-ND	1.05	.93	.73	.60	P10562TR-ND	10,000	355.05/M	ERT-J0EA101J
150Ω	2800K±3%	(2750K)	P10563CT-ND	1.05	.93	.73	.60	P10563TR-ND	10,000	355.05/M	ERT-J0EA151J
1kΩ	4500K±3%	(4450K)	P10564CT-ND	1.05	.93	.73	.60	P10564TR-ND	10,000	355.05/M	ERT-J0ET102J
1.5kΩ	4500K±3%	(4450K)	P10565CT-ND	1.05	.93	.73	.60	P10565TR-ND	10,000	355.05/M	ERT-J0ET152J
2.0kΩ	4500K±3%	(4450K)	P10566CT-ND	1.05	.93	.73	.60	P10566TR-ND	10,000	355.05/M	ERT-J0ET202J
2.2kΩ	4500K±3%	(4450K)	P10567CT-ND	1.05	.93	.73	.60	P10567TR-ND	10,000	355.05/M	ERT-J0ET222J
3.0kΩ	4500K±3%	(4450K)	P10568CT-ND	1.05	.93	.73	.60	P10568TR-ND	10,000	355.05/M	ERT-J0ET302J
3.3kΩ	4500K±3%	(4450K)	P10569CT-ND	1.05	.93	.73	.60	P10569TR-ND	10,000	355.05/M	ERT-J0ET332J
4.7kΩ	4500K±3%	(4450K)	P10570CT-ND	1.05	.93	.73	.60	P10570TR-ND	10,000	355.05/M	ERT-J0ET472J
3.3kΩ	4250K±3%	(4300K)	P10571CT-ND	1.05	.93	.73	.60	P10571TR-ND	10,000	355.05/M	ERT-J0ER332J
4.7kΩ	4250K±3%	(4300K)	P10572CT-ND	1.05	.93	.73	.60	P10572TR-ND	10,000	355.05/M	ERT-J0ER472J
6.8kΩ	4250K±3%	(4300K)	P10573CT-ND	1.05	.93	.73	.60	P10573TR-ND	10,000	355.05/M	ERT-J0ER682J
10kΩ	4250K±3%	(4300K)	P10574CT-ND	1.05	.93	.73	.60	P10574TR-ND	10,000	355.05/M	ERT-J0ER103J
15kΩ	4250K±3%	(4300K)	P10575CT-ND	1.05	.93	.73	.60	P10575TR-ND	10,000	355.05/M	ERT-J0ER153J
22kΩ	4250K±3%	(4300K)	P10576CT-ND	1.05	.93	.73	.60	P10576TR-ND	10,000	355.05/M	ERT-J0ER223J
33kΩ	4250K±3%	(4300K)	P10577CT-ND	1.05	.93	.73	.60	P10577TR-ND	10,000	355.05/M	ERT-J0ER333J
47kΩ	4700K±3%	(4750K)	P10578CT-ND	1.05	.93	.73	.60	P10578TR-ND	10,000	355.05/M	ERT-J0EV473J
68kΩ	4700K±3%	(4750K)	P10579CT-ND	1.05	.93	.73	.60	P10579TR-ND	10,000	355.05/M	ERT-J0EV683J
0603											
22Ω	2750K±3%	(2700K)	P10531CT-ND	.96	.84	.66	.54	P10531TR-ND	4,000	358.50/M	ERT-J1VA220J
33Ω	2750K±3%	(2700K)	P10532CT-ND	.96	.84	.66	.54	P10532TR-ND	4,000	358.50/M	ERT-J1VA330J
40Ω	2800K±3%	(2750K)	P10533CT-ND	.96	.84	.66	.54	P10533TR-ND	4,000	358.50/M	ERT-J1VA400J
47Ω	2800K±3%	(2750K)	P10534CT-ND	.96	.84	.66	.54	P10534TR-ND	4,000	358.50/M	ERT-J1VA470J
68Ω	2800K±3%	(2750K)	P10535CT-ND	.96	.84	.66	.54	P10535TR-ND	4,000	358.50/M	ERT-J1VA680J
100Ω	2800K±3%	(2750K)	P10536CT-ND	.96	.84	.66	.54	P10536TR-ND	4,000	358.50/M	ERT-J1VA101J
1kΩ	4500K±3%	(4450K)	P10537CT-ND	.96	.84	.66	.54	P10537TR-ND	4,000	358.50/M	ERT-J1VT102J
1.5kΩ	4500K±3%	(4450K)	P10538CT-ND	.96	.84	.66	.54	P10538TR-ND	4,000	358.50/M	ERT-J1VT152J
2.0kΩ	4500K±3%	(4450K)	P10539CT-ND	.96	.84	.66	.54	P10539TR-ND	4,000	358.50/M	ERT-J1VT202J
2.2kΩ	4500K±3%	(4450K)	P10540CT-ND	.96	.84	.66	.54	P10540TR-ND	4,000	358.50/M	ERT-J1VT222J
3.0kΩ	4500K±3%	(4450K)	P10541CT-ND	.96	.84	.66	.54	P10541TR-ND	4,000	358.50/M	ERT-J1VT302J
3.3kΩ	4500K±3%	(4450K)	P10542CT-ND	.96	.84	.66	.54	P10542TR-ND	4,000	358.50/M	ERT-J1VT332J
4.7kΩ	4500K±3%	(4450K)	P10543CT-ND	.96	.84	.66	.54	P10543TR-ND	4,000	358.50/M	ERT-J1VT472J
3.3kΩ	4250K±3%	(4300K)	P10544CT-ND	.96	.84	.66	.54	P10544TR-ND	4,000	358.50/M	ERT-J1VR332J
4.7kΩ	4250K±3%	(4300K)	P10545CT-ND	.96	.84	.66	.54	P10545TR-ND	4,000	358.50/M	ERT-J1VR472J
6.8kΩ	4250K±3%	(4300K)	P10546CT-ND	.96	.84	.66	.54	P10546TR-ND	4,000	358.50/M	ERT-J1VR682J
10kΩ	4250K±3%	(4300K)	P10547CT-ND	.96	.84	.66	.54	P10547TR-ND	4,000	358.50/M	ERT-J1VR103J
15kΩ	4250K±3%	(4300K)	P10548CT-ND	.96	.84	.66	.54	P10548TR-ND	4,000	358.50/M	ERT-J1VR153J
22kΩ	4250K±3%	(4300K)	P10549CT-ND	.96	.84	.66	.54	P10549TR-ND	4,000	358.50/M	ERT-J1VR223J
33kΩ	4250K±3%	(4300K)	P10550CT-ND	.96	.84	.66	.54	P10550TR-ND	4,000	358.50/M	ERT-J1VR333J
47kΩ	4250K±3%	(4300K)	P10551CT-ND	.96	.84	.66	.54	P10551TR-ND	4,000	358.50/M	ERT-J1VR473J
68kΩ	4250K±3%	(4300K)	P10552CT-ND	.96	.84	.66	.54	P10552TR-ND	4,000	358.50/M	ERT-J1VR683J
47kΩ	4700K±3%	(4750K)	P10553CT-ND	.96	.84	.66	.54	P10553TR-ND	4,000	358.50/M	ERT-J1VV473J
68kΩ	4700K±3%	(4750K)	P10554CT-ND	.96	.84	.66	.54	P10554TR-ND	4,000	358.50/M	ERT-J1VV683J
100kΩ	4700K±3%	(4750K)	P10555CT-ND	.96	.84	.66	.54	P10555TR-ND	4,000	358.50/M	ERT-J1VV104J
150kΩ	4700K±3%	(4750K)	P10556CT-ND	.96	.84	.66	.54	P10556TR-ND	4,000	358.50/M	ERT-J1VV154J

Panasonic

NTC Thermistors

1&2: Significant digit;
3: Multiplier

Uses standard resistance color codes.



FEATURES:

- Resistance temperature coefficient is negative and extremely large
- Wide selection of temperature coefficient (constant B)
- Excellent electrical and thermal stability
- Color coded to indicate resistance value @ 25°C.

SPECIFICATIONS:

Max. Watt Rtg. (W): PNT100-123 – 0.4; PNT124-138 – 0.6. Nom. Time Constant (sec.): PNT100-123 – 20; PNT124-138 – 27.

APPLICATION:

- For measuring equipment: thermometer, wind gauge, liquid level gauge, temperature controller
- For temperature compensation: transistor circuit, measuring equipment
- For driving: delay setting in relay operation, inrush current surge protection, communication equipment, AGC, time lag.

F Type Dimensions	øD	T	l	W	ød
PNT100 ~ PNT123 (D2)	5.0 ± 0.5	1.3 ± 0.5	30 min.	2.5 ± 1	0.4
PNT124 ~ PNT138 (D3)	7.5 ± 0.5	1.4 ± 0.5	30 min.	5 ± 1	0.5

Res. at 25°C (Ω)	Temp. Coef. (25°C) %/°C	Res. Ratio R_{25}/R_{50}	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
20	–3.4	2.18	PNT100-ND	1.07	.92	.62	.39	ERT-D2FEL200S
40	–3.9	2.48	PNT101-ND	1.07	.92	.62	.39	ERT-D2FFL400S
75	–4.2	2.62	PNT102-ND	1.07	.92	.62	.39	ERT-D2FGL750S
100	–3.9	2.48	PNT104-ND	1.07	.92	.62	.39	ERT-D2FFL101S
100	–4.2	2.62	PNT105-ND	1.07	.92	.62	.39	ERT-D2FGL101S
170	–4.2	2.62	PNT106-ND	1.07	.92	.62	.39	ERT-D2FGL171S
250	–3.9	2.48	PNT107-ND	1.07	.92	.62	.39	ERT-D2FFL251S
250	–4.2	2.62	PNT108-ND	1.07	.92	.62	.39	ERT-D2FGL251S
300	–4.2	2.62	PNT109-ND	1.07	.92	.62	.39	ERT-D2FGL301S
350	–3.9	2.48	PNT110-ND	1.07	.92	.62	.39	ERT-D2FFL351S
600	–4.5	2.83	PNT111-ND	1.07	.92	.62	.39	ERT-D2FGL601S
800	–4.4	2.76	PNT112-ND	1.07	.92	.62	.39	ERT-D2FGL801S
1,000	–4.1	2.55	PNT113-ND	1.07	.92	.62	.39	ERT-D2FGL102S
1,400	–4.4	2.76	PNT114-ND	1.07	.92	.62	.39	ERT-D2FGL142S
2,000	–4.5	2.83	PNT115-ND	1.07	.92	.62	.39	ERT-D2FGL202S
3,300	–4.5	2.83	PNT116-ND	1.07	.92	.62	.39	ERT-D2FGL332S
4,600	–4.6	2.90	PNT117-ND	1.07	.92	.62	.39	ERT-D2FHL462S
8,000	–4.6	2.90	PNT118-ND	1.07	.92	.62	.39	ERT-D2FHL802S
10,000	–4.6	2.90	PNT119-ND	1.07	.92	.62	.39	ERT-D2FHL103S
15,000	–4.7	2.98	PNT120-ND	1.07	.92	.62	.39	ERT-D2FHL153S
33,000	–5.1	3.22	PNT121-ND	1.07	.92	.62	.39	ERT-D2FHL333S
50,000	–5.1	3.48	PNT122-ND	1.07	.92	.62	.39	ERT-D2FHL503S
150,000	–5.4	3.48	PNT123-ND	1.07	.92	.62	.39	ERT-D2FIL154S
8	–3.4	2.18	PNT124-ND	2.25	1.94	1.29	.81	ERT-D3FEL8R0S
13	–3.6	2.30	PNT125-ND	2.25	1.94	1.29	.81	ERT-D3FFL130S
16	–3.6	2.30	PNT126-ND	2.25	1.94	1.29	.81	ERT-D3FFL160S
20	–3.6	2.30	PNT127-ND	2.25	1.94	1.29	.81	ERT-D3FFL200S
30	–3.7	2.30	PNT128-ND	2.25	1.94	1.29	.81	ERT-D3FFL300S
40	–3.2	2.30	PNT130-ND	2.25	1.94	1.29	.81	ERT-D3FFL400S
75	–4.2	2.62	PNT131-ND	2.25	1.94	1.29	.81	ERT-D3FGL750S
80	–4.2	2.62	PNT132-ND	2.25	1.94	1.29	.81	ERT-D3FGL800S
130	–4.5	2.62	PNT134-ND	2.25	1.94	1.29	.81	ERT-D3FGL131S
500	–4.6	2.83	PNT135-ND	2.25	1.94	1.29	.81	ERT-D3FGL501S
4,000	–4.6	2.90	PNT136-ND	2.25	1.94	1.29	.81	ERT-D3FHL402S
20,000	–5.1	3.22	PNT137-ND	2.25	1.94	1.29	.81	ERT-D3FHL203S
80,000	–5.6	3.70	PNT138-ND	2.25	1.94	1.29	.81	ERT-D3FIL803S

CANTHERM

Encapsulated Thermostats

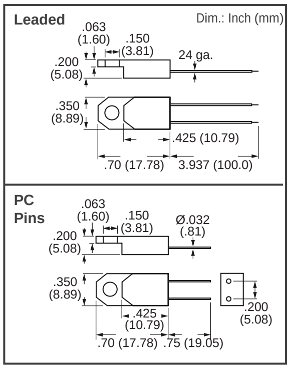
Encapsulated Thermostats are ideal for sensing the temperature of a surface or of stagnant air in an enclosure. Available with PC pins or with flexible wire leads for remote installation. Their high temperature resistance and high dielectric strength make it ideal for protecting heatsink-mounted semiconductors. Other applications would be protecting power supplies, or simply turning on a fan at a desired temperature.

Current Sensitivity: The thermostats are not current sensitive at rated currents. At loads above the rated values, up to maximum loading there is self-heating of the current carrying contacts.

Insulation Resistance: 2500 V @ 25°C, Leads to Earth 1500 V @ 100°C. Across open contacts, dependent on response temperature: 500 V eff. AC.

Marking: Response temperature in clear text (5°C steps). Normally Closed = blue or black (epoxy); Normally Open = red (epoxy)

UL E46827 VDE 4523-4510-1015



Electrical Specifications

Type	N/C	N/O
Voltage Rating 50-60 Hz	120 V / 250 V	120 V / 250 V
Current Rating Resistive	3.0 A / 2.0 A	1 A / 1 A*
Current Rating Inductive	3.0 A / 2.0 A	1 A / 1 A
Max. Load Resistive	4.0 A	4.0 A
Short Circuit Current Up to	6.3 A	6.3 A
Contact Arrangement Normally Closed N/C Normally Open N/O	—○—○—	—○╲○—
Contact Resistance	< 40 mΩ	< 40 mΩ
Response Temperature Range	+70°C to +160° C	+70°C to +150°C
Tolerance Range	±5°C	±5°C
Max. Permanent Temperature of Housing - G410	220°C	220°C
Housing Material - G410	PPS Stanyl	PPS Stanyl
Thermal Conductivity	4.0 BTU - in. / hr. / ft^2 / °F	

* When N/O contacts are closed, self heating will occur at currents exceeding normal rating. It is possible that, given certain combinations of set temperature current and ambient temperature, the contacts will not reset.

Thermostats With Leads

Switch Temp. (°C)	Digi-Key Part No.	Price Each 1	10	50	100	Cantherm Part No.
		Normally Closed				
70	317-1000-ND	6.24	5.46	4.60	3.16	F1107025ACFA06E
75	317-1001-ND	6.24	5.46	4.60	3.16	F1107525ACFA06E
80	317-1002-ND	6.24	5.46	4.60	3.16	F1108025ACFA06E
85	317-1003-ND	6.24	5.46	4.60	3.16	F1108525ACFA06E
90	317-1004-ND	6.24	5.46	4.60	3.16	F1109025ACFA06E
95	317-1005-ND	6.24	5.46	4.60	3.16	F1109525ACFA06E
100	317-1006-ND	6.24	5.46	4.60	3.16	F1110025ACFA06E
105	317-1007-ND	6.24	5.46	4.60	3.16	F1110525ACFA06E
110	317-1008-ND	6.24	5.46	4.60	3.16	F1111025ACFA06E
115	317-1009-ND	6.24	5.46	4.60	3.16	F1111525ACFA06E
120	317-1010-ND	6.24	5.46	4.60	3.16	F1112025ACFA06E
125	317-1011-ND	6.24	5.46	4.60	3.16	F1112525ACFA06E
130	317-1012-ND	6.24	5.46	4.60	3.16	F1113025ACFA06E
135	317-1013-ND	6.24	5.46	4.60	3.16	F1113525ACFA06E
140	317-1014-ND	6.24	5.46	4.60	3.16	F1114025ACFA06E
145	317-1015-ND	6.24	5.46	4.60	3.16	F1114525ACFA06E
150	317-1016-ND	6.24	5.46	4.60	3.16	F1115025ACFA06E
155	317-1017-ND	6.24	5.46	4.60	3.16	F1115525ACFA06E
160	317-1018-ND	6.24	5.46	4.60	3.16	F1116025ACFA06E
		Normally Open				
70	317-1019-ND	8.12	7.11	5.98	4.11	F1107015ACFA06E
75	317-1020-ND	8.12	7.11	5.98	4.11	F1107515ACFA06E
80	317-1021-ND	8.12	7.11	5.98	4.11	F1108015ACFA06E
85	317-1022-ND	8.12	7.11	5.98	4.11	F1108515ACFA06E
90	317-1023-ND	8.12	7.11	5.98	4.11	F1109015ACFA06E
95	317-1024-ND	8.12	7.11	5.98	4.11	F1109515ACFA06E
100	317-1025-ND	8.12	7.11	5.98	4.11	F1110015ACFA06E
105	317-1026-ND	8.12	7.11	5.98	4.11	F1110515ACFA06E
110	317-1027-ND	8.12	7.11	5.98	4.11	F1111015ACFA06E
115	317-1028-ND	8.12	7.11	5.98	4.11	F1111515ACFA06E
120	317-1029-ND	8.12	7.11	5.98	4.11	F1112015ACFA06E
125	317-1030-ND	8.12	7.11	5.98	4.11	F1112515ACFA06E
130	317-1031-ND	8.12	7.11	5.98	4.11	F1113015ACFA06E
135	317-1032-ND	8.12	7.11	5.98	4.11	F1113515ACFA06E
140	317-1033-ND	8.12	7.11	5.98	4.11	F1114015ACFA06E
145	317-1034-ND	8.12	7.11	5.98	4.11	F1114515ACFA06E
150	317-1035-ND	8.12	7.11	5.98	4.11	F1115015ACFA06E

Thermostats With PC Pins

Switch Temp. (°C)	Digi-Key Part No.	Price Each 1	10	50	100	Cantherm Part No.
		Normally Closed				
70	317-1038-ND	6.24	5.46	4.60	3.16	F11070251ZA0060
75	317-1039-ND	6.24	5.46	4.60	3.16	F11075251ZA0060
80	317-1040-ND	6.24	5.46	4.60	3.16	F11080251ZA0060
85	317-1041-ND	6.24	5.46	4.60	3.16	F11085251ZA0060
90	317-1042-ND	6.24	5.46	4.60	3.16	F11090251ZA0060
95	317-1043-ND	6.24	5.46	4.60	3.16	F11095251ZA0060
100	317-1044-ND	6.24	5.46	4.60	3.16	F11100251ZA0060
105	317-1045-ND	6.24	5.46	4.60	3.16	F11105251ZA0060
110	317-1046-ND	6.24	5.46	4.60	3.16	F11110251ZA0060
115	317-1047-ND	6.24	5.46	4.60	3.16	F11115251ZA0060
120	317-1048-ND	6.24	5.46	4.60	3.16	F11120251ZA0060
125	317-1049-ND	6.24	5.46	4.60	3.16	F11125251ZA0060
130	317-1050-ND	6.24	5.46	4.60	3.16	F11130251ZA0060
135	317-1051-ND	6.24	5.46	4.60	3.16	F11135251ZA0060
140	317-1052-ND	6.24	5.46	4.60	3.16	F11140251ZA0060
145	317-1053-ND	6.24	5.46	4.60	3.16	F11145251ZA0060
150	317-1054-ND	6.24	5.46	4.60	3.16	F11150251ZA0060
155	317-1055-ND	6.24	5.46	4.60	3.16	F11155251ZA0060
160	317-1056-ND	6.24	5.46	4.60	3.16	F11160251ZA0060
		Normally Open				
70	317-1057-ND	8.12	7.11	5.98	4.11	F11070151ZA0060
75	317-1058-ND	8.12	7.11	5.98	4.11	F11075151ZA0060
80	317-1059-ND	8.12	7.11	5.98	4.11	F11080151ZA0060
85	317-1060-ND	8.12	7.11	5.98	4.11	F11085151ZA0060
90	317-1061-ND	8.12	7.11	5.98	4.11	F11090151ZA0060
95	317-1062-ND	8.12	7.11	5.98	4.11	F11095151ZA0060
100	317-1063-ND	8.12	7.11	5.98	4.11	F11100151ZA0060
105	317-1064-ND	8.12	7.11	5.98	4.11	F11105151ZA0060
110	317-1065-ND	8.12	7.11	5.98	4.11	F11110151ZA0060
115	317-1066-ND	8.12	7.11	5.98	4.11	F11115151ZA0060
120	317-1067-ND	8.12	7.11	5.98	4.11	F11120151ZA0060
125	317-1068-ND	8.12	7.11	5.98	4.11	F11125151ZA0060
130	317-1069-ND	8.12	7.11	5.98	4.11	F11130151ZA0060
135	317-1070-ND	8.12	7.11	5.98	4.11	F11135151ZA0060
140	317-1071-ND	8.12	7.11	5.98	4.11	F11140151ZA0060
145	317-1072-ND	8.12	7.11	5.98	4.11	F11145151ZA0060
150	317-1073-ND	8.12	7.11	5.98	4.11	F11150151ZA0060

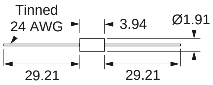
THERMOMETRICS
GLOBAL BUSINESS

Glass Encapsulated Thermistors

SPECIFICATIONS:

- Temp. Range: -50°C to 204°C
- Dissipation Constant: 2.0mW/°C
- Time Constant: 3 sec.

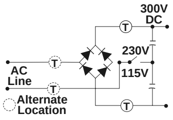
Thermometrics glass encapsulated NTC thermistors are tiny pellets of thermistor material thermetically sealed in glass bodies with a controlled amount of selected atmosphere. The thermetic seal makes these parts extremely stable in applications up to 204°C (400°F).



Ro @ 25°C	Temp. Coef. %/°C. @ 25°C	Material	Digi-Key Part No.	Price Each 1	10	100	250
250	-3.34	GE55*	KC001G-ND	2.66	2.39	1.89	1.50
500	-3.34	GE55*	KC002G-ND	2.66	2.39	1.89	1.50
1K	-3.83	GE73	KC003G-ND	2.66	2.39	1.89	1.50
2K	-3.83	GE73	KC004G-ND	2.66	2.39	1.89	1.50
2786	-4.68	GE101	KC005G-ND	2.66	2.39	1.89	1.50
3K	-3.85	GE76	KC006G-ND	2.66	2.39	1.89	1.50
4K	-3.85	GE76	KC007G-ND	2.66	2.39	1.89	1.50
5K	-3.85	GE76	KC008G-ND	2.66	2.39	1.89	1.50
10K	-4.41	GE97A	KC009G-ND	2.66	2.39	1.89	1.50
20K	-4.34	GE98	KC010G-ND	2.66	2.39	1.89	1.50
30K	-4.34	GE98	KC011G-ND	2.66	2.39	1.89	1.50
50K	-4.32	GE97B	KC012G-ND	2.66	2.39	1.89	1.50
100K	-4.32	GE97B	KC013G-ND	2.66	2.39	1.89	1.50
200K	-4.71	GE123	KC014G-ND	2.66	2.39	1.89	1.50
500K	-4.99	GE138	KC015G-ND	2.66	2.39	1.89	1.50
1M	-5.07	GE145	KC016G-ND	2.66	2.39	1.89	1.50

* Maximum Operating Temperature: 150°C.

Inrush Current Limiters



Inrush Current Limiters protect against high peak inrush current, especially in AC/DC switching power supplies.

All resistances ±25% @ 25°C.

All parts insulated with a protective coating.

Resistance under load is for reference only. Actual values may vary due to ambient temperature, air flow, or mounting conditions.

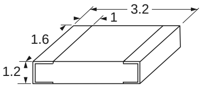
No Load Res. @ 25° C (Ω)	Max.• Steady State Current (Amps)	Approx Res. @ I Max. (Ω)	Dia. (mm)	Digi-Key Part No.	Price Each 1	10	100
0.7	12.0	.02	19.56	KC022L-ND	2.58	2.32	1.83
1.3	8.0	.04	13.97	KC023L-ND	2.39	2.15	1.69
2.5	8.0	.06	19.56	KC003L-ND	2.58	2.32	1.83
5.0	6.0	.11	19.56	KC004L-ND	2.58	2.32	1.83
7.0	5.0	.16	19.56	KC005L-ND	2.58	2.32	1.83
10.0	5.0	.18	19.56	KC006L-ND	2.58	2.32	1.83
16.0	4.0	.27	19.56	KC007L-ND	2.58	2.32	1.83
47.0	3.0	.49	19.56	KC008L-ND	2.58	2.32	1.83
120.0	2.0	1.18	23.62	KC009L-ND	2.91	2.62	2.06
0.5	16.0	.02	23.62	KC024L-ND	4.18	3.76	2.96
10.0	3.2	.18	10.16	KC011L-ND	2.35	2.11	1.67
10.0	1.7	.34	10.16	KC012L-ND	2.35	2.11	1.67
50.0	1.6	.75	11.43	KC013L-ND	2.35	2.11	1.67
50.0	1.1	.89	11.43	KC014L-ND	2.35	2.11	1.67
5.0	4.7	.11	13.97	KC015L-ND	2.39	2.15	1.69
5.0	2.8	.20	13.97	KC016L-ND	2.39	2.15	1.69
16.0	2.7	.33	13.97	KC017L-ND	2.39	2.15	1.69
16.0	1.7	.49	13.97	KC018L-ND	2.39	2.15	1.69
25.0	2.4	.41	13.97	KC019L-ND	2.39	2.15	1.69
25.0	1.7	.49	13.97	KC020L-ND	2.39	2.15	1.69
30.0	1.5	.60	15.24	KC021L-ND	2.35	2.11	1.67

• These values are suggested maximums based upon 25°C ambient, no air flow environment with the thermistor mounted 1/2" from circuit board.

THERMOMETRICS
GLOBAL BUSINESS

NTC Thermistors

NHQ Series



These devices are ceramic chip thermistors with a negative temperature coefficient of resistance intended for surface mount applications. The electrode material is palladium silver, nickel-plated with a solder-plated covering. The ceramic between the electrodes is glass covered.

Res. @ 25°C. Ω	Digi-Key Part No.	Bulk Price Each 1	10	100	Thermometrics Part No.
3K	235-1016-ND	2.40	1.89	1.50	NHQ302R10
10K	235-1017-ND	2.40	1.89	1.50	NHQ103R10
15K	235-1018-ND	2.40	1.89	1.50	NHQ153R10
50K	235-1019-ND	2.40	1.89	1.50	NHQ503R10
150K	235-1021-ND	2.40	1.89	1.50	NHQ154R10
500K	235-1022-ND	2.40	1.89	1.50	NHQ504R10

Res. @ 25°C. Ω	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel* Pricing 3,000	Thermometrics Part No.
3K	235-1108-1-ND	2.64	2.31	1.82	990.00/M	NHQ302B410T10
10K	235-1109-1-ND	2.64	2.31	1.82	990.00/M	NHQ103B375T10
15K	235-1110-1-ND	2.64	2.31	1.82	990.00/M	NHQ153B400T10
50K	235-1111-1-ND	2.64	2.31	1.82	990.00/M	NHQ503B400T10
100K	235-1112-1-ND	2.64	2.31	1.82	990.00/M	NHQ104B425T10
150K	235-1113-1-ND	2.64	2.31	1.82	990.00/M	NHQ154B425T10
500K	235-1114-1-ND	2.64	2.31	1.82	990.00/M	NHQ504B435T10

*For Tape and Reel part number, change -1-ND to -2-ND.

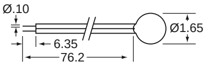
NHQM Series

These devices are ceramic chip thermistors with a negative temperature coefficient of resistance intended for surface mount applications. The electrode material is palladium silver, nickel-plated with solder-plated covering. The ceramic between the electrodes is glass covered.

Res. @ 25°C. Ω	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel* Pricing 3,000	Thermometrics Part No.
3K	235-1115-1-ND	2.64	2.31	1.82	990.00/M	NHQM302B410T10
10K	235-1116-1-ND	2.64	2.31	1.82	990.00/M	NHQM103B375T10
15K	235-1117-1-ND	2.64	2.31	1.82	990.00/M	NHQM153B400T10
50K	235-1118-1-ND	2.64	2.31	1.82	990.00/M	NHQM503B415T10
100K	235-1119-1-ND	2.64	2.31	1.82	990.00/M	NHQM104B425T10

*For Tape and Reel part number, change -1-ND to -2-ND.

MC65 Series

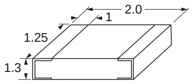


These thermistors are epoxy-coated for stability and have a maximum diameter of .065 inch (1.65mm). Standard leads are 3 inches (76.20mm) of 38 gauge, nickel alloy, bifilar, heavy isomid insulated wire. Each unit tracks a specified curve over the temperature range of 0°C to 50°C (see table).

Temperature Range	Tolerance Code (±°C) 235-1057-ND	235-1058-ND	235-1059-ND
0°C - 20°C	±.15	±.2	±.25
20°C - 35°C	±.1	±.15	±.2
35°C - 39°C	±.05	±.1	±.15
39°C - 42°C	±.075	±.15	±.2
42°C - 45°C	±.1	±.15	±.2
45°C - 50°C	±.15	±.2	±.25

Res. @ 25°C. Ω	Digi-Key Part No.	Price Each 1	10	100	Thermometrics Part No.
10K	235-1057-ND	9.48	7.47	5.93	MC65F103A
10K	235-1058-ND	6.76	5.33	4.23	MC65F103B
10K	235-1059-ND	5.28	4.16	3.30	MC65F103C

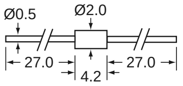
NC0805 Series



This series of ceramic chip thermistors offer an EIA "0805" case style in a variety of resistance values with a resistance tolerance of ±10% at 25°C. The electrode material is palladium silver. Temperature range is -40°C to 125°C.

Res. @ 25°C. Ω	Digi-Key Part No.	Price Each 1	10	100	Thermometrics Part No.
5K	235-1028-ND	1.79	1.42	1.12	NC0805KA502KB
10K	235-1029-ND	1.79	1.42	1.12	NC0805KH103KB
22K	235-1030-ND	1.79	1.42	1.12	NC0805KB223KB
50K	235-1031-ND	1.79	1.42	1.12	NC0805R503T10
100K	235-1032-ND	1.79	1.42	1.12	NC0805R104T10
150K	235-1033-ND	1.79	1.42	1.12	NC0805KE154KB

DK Series

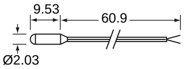


The DK range of DO-35 packaged NTC thermistors is designed for temperature measurement and control in applications which demand cost effective reliability. Typical applications include domestic appliances, automotive systems, data processing equipment and heating/ventilating/air conditioning control.

The hermetically-sealed construction combines the advantages of high temperature operation and high reliability of glass bead types with the closer tolerances associated with chip devices. The glass encapsulation offers the additional benefit of high voltage insulation.

Res. @ 25°C. Ω	Digi-Key Part No.	Price Each 1	10	100	Thermometrics Part No.
5K	235-1103-ND	3.33	2.92	2.27	DKA502N5
10K	235-1104-ND	3.33	2.92	2.27	DKF103N5
20K	235-1105-ND	3.33	2.92	2.27	DKF203N5
30K	235-1106-ND	3.33	2.92	2.27	DKF303N5
50K	235-1107-ND	3.33	2.92	2.27	DKF503N5

MA100 Series



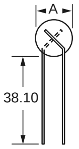
These biomedical thermistor chips and subassemblies are designed to be interchangeable over a 0°C to 50°C range (see table). Best overall stability is maintained when exposure and storage temperatures remain below 70°C.

Temperature Range	Tolerance Code (±°C) 235-1060/ 235-1064-ND	235-1061/ 235-1065-ND	235-1062/ 235-1063-ND
0°C - 20°C	±.15	±.2	±.25
20°C - 35°C	±.1	±.15	±.2
35°C - 39°C	±.05	±.1	±.15
39°C - 42°C	±.075	±.15	±.2
42°C - 45°C	±.1	±.15	±.2
45°C - 50°C	±.15	±.2	±.25

Res. @ 25°C. Ω	Digi-Key Part No.	Price Each 1	10	100	Thermometrics Part No.
10K	235-1060-ND	13.44	10.59	8.40	MA100GG103A
10K	235-1061-ND	9.56	7.53	5.98	MA100GG103B
10K	235-1062-ND	8.64	6.81	5.40	MA100GG103C
2252	235-1063-ND	8.64	6.81	5.40	MA100GG232C
10K	235-1064-ND	13.44	10.59	8.40	MA100BF103A
10K	235-1065-ND	9.56	7.53	5.98	MA100BF103B

Standard Thermistors For Temperature Measurement

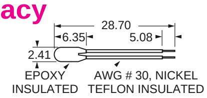
Accuracy ±1°C (0°C - 120°C)



Operating Range: -50°C to +150°C **D.C.:** Dissipation Constant (mW/°C) **T.C.:** Time Constant (Seconds)

R25°	A Max. (mm)	D.C. mW/°C	T.C. Sec.	Digi-Key Part No.	Price Each 1	10	100	Thermometrics Part No.
1000	8.13	3.5	30	KC001E-ND	2.39	2.15	1.69	RL3005-574.0-103-SA
2000	5.59	2.5	20	KC002E-ND	2.30	2.07	1.63	RL2005-1148-103-SA
2786	5.59	2.5	20	KC003E-ND	2.30	2.07	1.63	RL2006-1600-103-SA
3000	5.59	2.5	20	KC004E-ND	2.30	2.07	1.63	RL2007-1723-103-SA
5000	2.79	1.0	10	KC005E-ND	2.88	2.60	2.05	RL1003-2871-103-SA
10000	2.79	1.0	10	KC006E-ND	2.88	2.60	2.05	RL1005-5744-103-SA

Miniature Sensors 1°C Accuracy

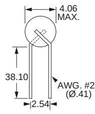


SPECIFICATIONS:
- Temp. Accuracy: ±1°C @ 25°C
- Dissipation Constant: 1.4 mW/°C
- Time Constant: 15 sec.
- Operating Range: -50°C to +150°C.

9190B-ND Thermometrics Global BusinessThermistor Catalog.................................**$4.98**

Ro @ 25°C	Temp. Coef. %/°C . @ 25°C	Material	Digi-Key Part No.	Price Each 1	10	100	250	Thermometrics Part No.
2K	-3.83	MS73	KC001T-ND	2.71	2.44	1.92	1.52	RL0503-1248-73-MS
5K	-4.43	MS95	KC002T-ND	2.71	2.44	1.92	1.52	RL0503-2890-95-MS
10K	-4.40	MS97	KC003T-ND	2.71	2.44	1.92	1.52	RL0503-5820-97-MS
30K	-4.32	MS96	KC004T-ND	2.71	2.44	1.92	1.52	RL0503-17.56K-96-MS
50K	-4.84	MS120	KC005T-ND	2.71	2.44	1.92	1.52	RL0503-27.53K-120-MS
100K	-4.78	MS122	KC006T-ND	2.71	2.44	1.92	1.52	RL0503-55.36K-122-MS

Precision Thermistors ± 0.2°C from 0°C to 75°C



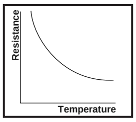
Thermometrics precision units are the designer's choice for low cost, close tolerance temperature measurement. These ultra stable thermistors are accurate to ± 0.2°C from 0°C to 75°C. They are widely used in OEM applications because they offer close-tolerance temperature measurement without requiring individual calibration. A protective coating is standard.

Specifications: • Temp. Coef.: @ 25°C = -4.40%/°C • Dissipation Constant: 1.0 mW/°C • Time Constant: 10sec. • Max. Operating Temp.: 100°C.

Ro @ 25°C	Digi-Key Part No.	Price Each 1	10	100	250	Thermometrics Part No.
3K	KC001A-ND	11.50	10.34	8.15	6.47	RL1003-1746-97-SP
5K	KC002A-ND	11.50	10.34	8.15	6.47	RL1005-2910-97-SP
10K	KC003A-ND	11.50	10.34	8.15	6.47	RL1008-5820-97-SP

THERMOMETRICS
GLOBAL BUSINESS

NTC Thermistors



NTC (Negative Temperature Coefficient) Thermistors decrease in resistance as temperature increases. Temperature coefficients range from –20%/°C to –5%/°C @ 25°C. Maximum operating temperature: 150°C. Tolerance: ±20% 100-5Ω; ±10% 1K-100KΩ.

Res. @ 25°C (Ω)	Res. Ratio ††	D.C.†	Dim. A (mm)	Digi-Key Part No.	Price Each 1	10	100	250
100	5.53	2.5	2.79	KC001N-ND⋆	2.76	2.48	1.96	1.55
50	5.53	6.5	5.59	KC012N-ND⋆	2.19	1.97	1.55	1.23
25	5.53	6.5	5.59	KC011N-ND⋆	2.19	1.97	1.55	1.23
10	5.53	7.0	8.13	KC021N-ND⋆	2.24	2.02	1.59	1.26
5	5.53	10.0	12.19	KC024N-ND⋆	2.40	2.16	1.71	1.35
1K	6.85	2.8	2.79	KC003N-ND⋆	2.72	2.45	1.93	1.53
500	6.85	2.5	2.79	KC002N-ND	2.72	2.45	1.93	1.53
300	6.85	6.5	5.59	KC015N-ND⋆	2.14	1.93	1.52	1.21
200	6.85	6.5	5.59	KC014N-ND⋆	2.14	1.93	1.52	1.21
100	6.85	6.5	5.59	KC013N-ND	2.14	1.93	1.52	1.21
50	6.85	7.5	9.40	KC022N-ND	2.19	1.98	1.56	1.24
10K	9.60	2.5	2.79	KC025N-ND⋆	2.72	2.45	1.93	1.53
5K	9.10	2.5	2.79	KC005N-ND⋆	2.72	2.45	1.93	1.53
3K	9.10	2.5	2.79	KC004N-ND⋆	2.72	2.45	1.93	1.53
2K	9.10	6.5	5.59	KC017N-ND⋆	2.14	1.93	1.52	1.21
1K	9.10	6.5	5.59	KC016N-ND	2.14	1.93	1.52	1.21
300	9.10	9.0	10.92	KC023N-ND	2.36	2.13	1.68	1.33
25K	11.41	2.8	2.79	KC007N-ND⋆	2.88	2.60	2.05	1.62
10K	11.41	7.2	5.59	KC018N-ND	2.44	2.20	1.73	1.38
100K	12.90	2.7	2.79	KC009N-ND⋆	2.88	2.60	2.05	1.62
50K	12.90	2.5	2.79	KC008N-ND	2.88	2.60	2.05	1.62
25K	12.90	6.5	5.59	KC019N-ND	2.35	2.12	1.67	1.33
200K	13.82	2.5	2.79	KC010N-ND⋆	2.88	2.60	2.05	1.62
100K	13.82	6.5	5.59	KC020N-ND	2.35	2.12	1.67	1.33

† D.C. — Dissipation Constant (MW/°C)

†† Resistance Ratio — ratio of zero power resistance @ 0°C to zero power resistance @ 50°C; AWG.

⋆ **KCNTC-KIT-ND** ***Digi-Key® NTC Thermistors Kit*** 2 each of 15 values denoted (30 total pieces). Notebook style storage case and bin storage guide included. **$39.95**

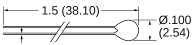
NTC Thermistors

THERMAL AND ELECTRICAL PROPERTIES: Dissipation Constant: (Still Air) 1 m w/Deg C., (Stirred Oil) 8 m w/Deg C. **Thermal Time Constant:** (Still Air) 10 Seconds, (Stirred Oil) 1 Second. **Maximum Power Rating:** .075 Watts (Derated from 100% at 25°C to 0% at 100°C.

Type EC95 and Type DC95 Thermistors may be used at temperatures as low as -80°C and as high as 150°C, however, best over-all stability is achieved with exposure or storage temperatures lower than 105°C.

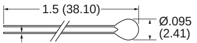
Thermometrics Type C100 Thermochips are low cost, epoxy coated chip thermistors which represent the highest level of thermistor technology. Thermometrics exclusive “state of the art” materials processing techniques have been proven through extensive field use and long term testing to provide stable, rugged, easy handling thermistors suitable for applications in the temperature range of -80°C to +150°C. Best stability is achieved at temperatures not exceeding 105°C.

Type C100



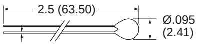
Ø.012 (0.30)-Tinned copper leads
Epoxy coated thermochip

Type EC95 Thermistors are designed to be interchangeable over 0°C to 70° and 0°C to 100°C.



Ø.012 (0.30)-Tinned copper leads
Epoxy coated thermochip

Type EC95 Thermistors are designed to be interchangeable over -20°C to 50°C and 0°C to 70°C.

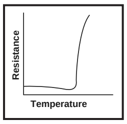


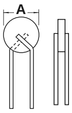
Ø.008 (0.20)-Tinned copper alloy leads
Epoxy coated thermochip

Res. @ 25°C (Ω)	Res. Ratio†	Digi Key Part No.	Price Each 1	10	100	250	Thermometrics Part No.
10K	9.06	235-1001-ND	5.80	4.57	3.63	2.69	C100F103G
10K	9.06	235-1002-ND	4.56	3.60	2.85	2.11	C100F103J
10K	7.60	235-1003-ND	4.56	3.60	2.85	2.11	C100Y103J
10K	9.06	235-1004-ND	6.36	5.01	3.98	2.95	DC95F103W
2K	9.06	235-1005-ND	6.36	5.01	3.98	2.95	DC95F202W
2252	9.06	235-1006-ND	6.36	5.01	3.98	2.95	DC95F232W
5K	9.06	235-1007-ND	6.36	5.01	3.98	2.95	DC95F502W
100K	10.45	235-1008-ND	6.36	5.01	3.98	2.95	DC95G104W
50K	10.45	235-1009-ND	6.36	5.01	3.98	2.95	DC95G503W
10K	9.06	235-1010-ND	6.36	5.01	3.98	2.95	EC95F103W
2K	9.06	235-1011-ND	5.52	4.35	3.45	2.56	EC95F202W
3K	9.06	235-1012-ND	6.36	5.01	3.98	2.95	EC95F302W
100K	10.45	235-1013-ND	6.36	5.01	3.98	2.95	EC95G104W
50K	10.45	235-1014-ND	6.36	5.01	3.98	2.95	EC95G503W
30K	8.69	235-1015-ND	6.36	5.01	3.98	2.95	EC95H303W

† 0°C/50°C Ratio

PTC Thermistors





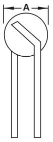
PTC (Positive Temperature Coefficient) Thermistors are thermally sensitive resistors made of polycrystalline ceramic materials. They are characterized by an extremely large resistance change in a small temperature span. All PTC resistances ±30% at 25°C. Tolerance on transition temperature is ±7°C.

Oper. Volt.	R @ 25°C (Ω)	Transition Temp.	D.C.†	Dim. A (mm)	Digi-Key* Part No.	Price Each 1	10	100
12	1	120°C	14.0	15.24	KC012P-ND	2.98	2.68	2.11
12	2	120°C	14.0	15.24	KC013P-ND	2.98	2.68	2.11
12	10	110°C	7.0	8.89	KC014P-ND	2.98	2.68	2.11
12	25	110°C	7.0	8.89	KC015P-ND	2.54	2.28	1.80
25	50	30°C	7.0	7.62	KC001P-ND*	2.54	2.28	1.80
25	50	40°C	7.0	7.62	KC002P-ND*	2.54	2.28	1.80
25	50	50°C	7.0	7.62	KC003P-ND*	2.54	2.28	1.80
25	50	60°C	7.0	7.62	KC004P-ND*	2.54	2.28	1.80
25	50	70°C	7.0	7.62	KC006P-ND*	2.54	2.28	1.80
25	50	80°C	7.0	7.62	KC007P-ND*	2.54	2.28	1.80
25	50	90°C	7.0	7.62	KC008P-ND*	2.54	2.28	1.80
25	50	100°C	7.0	7.62	KC009P-ND*	2.54	2.28	1.80
25	50	110°C	7.0	7.62	KC010P-ND*	2.54	2.28	1.80
25	50	120°C	7.0	7.62	KC011P-ND*	2.54	2.28	1.80
50	5	65°C	14.0	15.24	KC016P-ND	2.98	2.68	2.11
50	10	110°C	10.0	11.43	KC017P-ND	3.26	2.93	2.31
50	50	110°C	12.0	11.43	KC018P-ND	2.98	2.68	2.11
50	200	110°C	9.0	10.16	KC019P-ND	3.26	2.93	2.31
120	10	120°C	20.0	20.32	KC020P-ND	3.81	3.43	2.70
120	20	120°C	18.0	16.51	KC021P-ND	3.05	2.74	2.16
120	25	60°C	15.0	15.24	KC022P-ND	3.05	2.74	2.16
120	50	120°C	12.0	12.70	KC023P-ND	2.98	2.68	2.11
240	40	110°C	18.0	16.51	KC024P-ND	3.26	2.93	2.31
240	50	65°C	17.0	15.24	KC025P-ND	3.26	2.93	2.31
240	50	110°C	18.0	16.51	KC026P-ND	3.26	2.93	2.31
240	100	120°C	18.0	16.51	KC027P-ND	3.26	2.93	2.31
240	1500	100°C	12.0	8.89	KC028P-ND	3.29	2.93	2.31
480	1000	100°C	18.0	19.05	KC029P-ND	3.81	3.43	2.70
480	2000	100°C	15.0	13.97	KC030P-ND	2.98	2.68	2.11
480	5000	100°C	12.0	8.89	KC031P-ND	3.26	2.93	2.31

† D.C. – Dissipation Constant (MW/°C)

* **KCPTC1-KIT-ND** ***Digi-Key® PTC Thermistors Kits*** 2 each of all values denoted (20 total pieces). Notebook style storage case and bin storage guide included **$37.95**

PTC Resettable Fuses



- Telephone line fault protection
- Over-current protection for transformers
- Locked rotor protection for FHP motors

Minimum Limit Current: The minimum amount of current required by the PTC to guarantee switching at the minimum ambient temperatures.

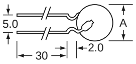
Maximum Limit Current: The maximum amount of current the PTC must be able to pass without switching at the maximum ambient temperature.

Oper. Volt.	No Ld. Res. @25°C	Dim. A (mm)	Min. Switch Current 0°C	20°C	Max. No-Switch Current 30°C	55°C	Type Number	Digi-Key Part No.	Price Each 1	10	100
12	1	15.24	1.45	1.32	0.84	0.64	RL5305-1-110-12-PTF	KC001R-ND	3.11	2.80	2.20
	2.5	15.24	0.92	0.84	0.53	0.40	RL5305-2.5-110-12-PTF	KC014R-ND	3.11	2.80	2.20
	5	11.43	0.55	0.50	0.32	0.24	RL4005-5-110-12-PTF	KC002R-ND	2.87	2.58	2.03
	10	8.89	0.32	0.30	0.19	0.14	RL3005-10-110-12-PTF	KC003R-ND	2.66	2.40	1.89
	25	8.89	0.20	0.19	0.12	0.09	RL3005-25-110-12-PTF	KC013R-ND	2.66	2.40	1.89
25	1.5	19.05	1.34	1.22	0.77	0.59	RL7008-1.5-110-25-PTF	KC015R-ND	3.87	3.48	2.75
	3.0	13.97	0.84	0.76	0.48	0.37	RL5008-3.0-110-25-PTF	KC016R-ND	3.22	2.90	2.29
50	5.0	15.24	0.65	0.59	0.37	0.29	RL5506-5-110-50-PTF	KC005R-ND	3.11	2.80	2.20
	10	11.43	0.39	0.35	0.22	0.17	RL4006-10-110-50-PTF	KC006R-ND	2.87	2.58	2.03
	25	12.70	0.27	0.24	0.15	0.12	RL4508-25-110-50-PTF	KC017R-ND	3.22	2.90	2.29
	50	11.43	0.19	0.17	0.11	0.08	RL4010-50-110-50-PTF	KC012R-ND	2.87	2.58	2.03
	100	10.67	0.13	0.12	0.08	0.06	RL3810-100-110-50-PTF	KC008R-ND	3.02	2.72	2.14
120	10	20.32	0.55	0.50	0.32	0.24	RL7510-10-110-120-PTF	KC009R-ND	3.87	3.48	2.75
	20	16.51	0.37	0.34	0.21	0.16	RL6010-20-110-120-PTF	KC018R-ND	3.11	2.80	2.20
	50	12.70	0.19	0.17	0.11	0.08	RL4510-50-110-120-PTF	KC010R-ND	3.22	2.90	2.29
	100	10.16	0.13	0.12	0.07	0.06	RL3510-100-110-120-PTF	KC011R-ND	3.02	2.72	2.14
240	50	16.51	0.23	0.21	0.13	0.10	RL6315-50-110-240-PTF	KC019R-ND	3.87	3.48	2.75
	100	16.51	0.16	0.15	0.09	0.04	RL6315-100-110-240-PTF	KC020R-ND	3.87	3.48	2.75
	250	16.51	0.10	0.06	0.06	0.05	RL6315-250-110-240-PTF	KC021R-ND	3.87	3.48	2.75

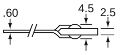
PTC Thermistors

YM120 Series

Electrical Specifications							Dim. A	Digi-Key	Price Each			Thermometrics
Res. @ 25°C. Ω	Int(25°C)mA	It(25°C) mA	Int(55°C) mA	It(10°C) mA	Imo A	Vmax Vrms	max	Part No.	1	10	100	Part No.
1800	16	23	12	25	0.1	730	4.0mm	235-1072-ND	2.41	2.11	1.64	YM120C15N182
1200	20	28	16	31	0.1	610	4.0mm	235-1073-ND	2.41	2.11	1.64	YM120C20N122
600	28	40	22	44	0.2	540	4.0mm	235-1074-ND	2.41	2.11	1.64	YM120C30N601
300	39	55	30	60	0.2	450	4.0mm	235-1075-ND	2.41	2.11	1.64	YM120C45N301
150	57	80	44	88	0.2	265	4.0mm	235-1076-ND	2.41	2.11	1.64	YM120C60N151
100	70	98	54	108	0.4	265	4.5mm	235-1077-ND	1.46	1.28	.99	YM120C80N101
60	93	131	72	144	0.6	265	6.0mm	235-1078-ND	1.46	1.28	.99	YM120D105N600
45	110	155	85	170	0.7	265	7.0mm	235-1079-ND	1.46	1.28	.99	YM120D125N450
33	128	181	99	198	0.9	265	7.5mm	235-1080-ND	2.07	1.82	1.41	YM120D150N330
25	161	228	125	250	1.1	265	8.5mm	235-1081-ND	2.07	1.82	1.41	YM120D170N250
20	192	265	149	298	1.3	265	9.5mm	235-1082-ND	2.07	1.82	1.41	YM120D200N200
15	234	330	181	362	1.7	265	11.5mm	235-1083-ND	2.88	2.53	1.96	YM120D260N150
10	314	444	243	486	2.7	265	14.0mm	235-1084-ND	4.17	3.66	2.84	YM120D370N100
6	407	575	315	630	3.9	265	16.5mm	235-1085-ND	5.12	4.49	3.48	YM120D480N060



This range of PTC thermistors is designed to operate at main voltages and is intended for general purpose usage in over-current, over-voltage and direct over-temperature protection.



Each device in the range consists of a disc of barium titanate thermistor material with silvered faces and solder coated copper lead wires. A painted finish is applied which is not intended to confer insulating properties.

R25	Resistance at 25°C
20%	Tolerance on resistance at 25°C
Int(25°C)	Current which will not trip thermistor (25°C ambient)
It(25°C)	Current which will trip thermistor (25°C ambient)
Int(55°C)	Current which will not trip thermistor (55°C ambient)
It(10°C)	Current which will trip thermistor (10°C ambient)
I mo	Maximum overload current at 265V rms (10° ambient)
V max	Maximum voltage V ms
D max	Maximum disc diameter
T max	Maximum overall thickness

Panasonic Surface Mount Chip Resistor Networks

Chip Resistor Networks - Series EXB-A, EXB-E and EXB-D:

FEATURES:

- High Density: Bussed 8 resistors for pull up/down circuit in EXB-A Type 2512 (6.4mm x 3.1mm x 0.55mm), EXB-E Type 1608 (4.0mm x 2.1mm x 0.55mm), and EXB-D Type 1206 (3.2mm x 1.6mm x .55mm) size
- Automatic Placement: Taped and reeled packaging is suitable for high speed automatic placement machine
- 2 common terminals without directional problem
- Superior Solderability: Self-alignment by unique concave terminal design with reflow soldering

SPECIFICATIONS:

- Resistance Range: 47Ω to 1MΩ
- Resistance Tolerance: ±5%
- Number of Terminals: 10 terminals
- Number of Resistors: 8 resistors
- Power Rating at 70°C: 62.5mW/element (50mW/element for EXB-D)
- Maximum Rated Continuous Working Voltage*: EXB-A: 50V, EXB-E: 25V, and EXB-D: 25V
- Maximum Overload Voltage: EXB-A: 100V, EXB-E: 50V, and EXB-D: 50V
- Temperature Characteristic Range: ±200 ppm/°C
- Operating Temperature Range: -55°C to 125°C
- Solderability: 95% coverage (Test temperature at solder 230±5°C; Dwell time in solder: 5±1 seconds)

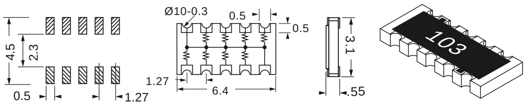
Resistance Codes

(Values listed in ohms)

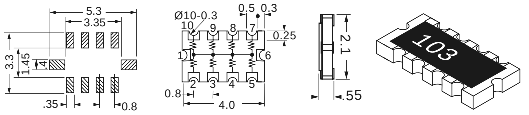
Code (Value)	Code (Value)	Code (Value)
470 (47)	152 (1.5K)	473 (47K)
560 (56)	182 (1.8K)	563 (56K)
680 (68)	222 (2.2K)	683 (68K)
820 (82)	272 (2.7K)	823 (82K)
101 (100)	332 (3.3K)	104 (100K)
121 (120)	392 (3.9K)	124 (120K)
151 (150)	472 (4.7K)	154 (150K)
181 (180)	562 (5.6K)	184 (180K)
221 (220)	682 (6.8K)	224 (220K)
271 (270)	822 (8.2K)	274 (270K)
331 (330)	103 (10K)	334 (330K)
391 (390)	123 (12K)	394 (390K)
471 (470)	153 (15K)	474 (470K)
561 (560)	183 (18K)	564 (560K)
681 (680)	223 (22K)	684 (680K)
821 (820)	273 (27K)	824 (820K)
102 (1.0K)	333 (33K)	105 (1M)
122 (1.2K)	393 (39K)	

* Rated continuous working voltage (RCWV) shall be determined from
RCWV = $\sqrt{\text{Power Rating x Resistance Value}}$, or max. RCWV listed above, whichever is less.

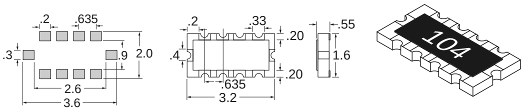
EXB-A



EXB-E



EXB-D



Digi-Key* Part No.	Cut Tape Pricing 1	10	100	500	1,000	Digi-Key* Part No.	Tape & Reel Pricing 4,000	5,000	8,000	10,000	Panasonic* Part No.
U7□□□CT-ND	.46	4.26	34.50	143.75	230.00	U7□□□TR-ND	209.00/M	—	177.00/M	—	EXB-A10P□□□J
U8□□□CT-ND	.42	3.89	31.50	131.25	210.00	U8□□□TR-ND	191.00/M	—	162.00/M	—	EXB-E10C□□□J
U9□□□CT-ND	.44	4.03	32.70	136.25	218.00	U9□□□TR-ND	—	198.00/M	—	168.00/M	EXB-D10C□□□J

* For complete part number, substitute the corresponding resistance code (listed above) for □□□.

Surface Mount Chip Resistor Arrays

FEATURES:

- High Density:
  - 2 resistors in 1.6mm x 1.6mm size (EXB-V4V)
  - 4 resistors in 3.2mm x 1.6mm size (EXB-V8V)
  - 2 resistors in 1.0mm x 1.0mm size (EXB-24V)
  - 4 resistors in 2.0mm x 1.0mm size (EXB-28V)
  - 2 resistors in 1.6mm x 1.6mm size (EXB-34V)
  - 4 resistors in 3.2mm x 1.6mm size (EXB-38V)
  - 8 resistors in 3.8mm x 1.6mm size (EXB-2HV)
- Improvement of placement efficiency: Placement efficiency of Chip Resistor Array is two or four times that of discrete chip resistors.

SPECIFICATIONS:

- Resistance Range: 10Ω to 1MΩ
- Resistance Tolerance: J: ±5%
- Power Rating at 70°C: 1/16 W/element
- Maximum Rated Continuous Working Voltage*: 50V; 25V for EXB-2HV
- Maximum Overload Voltage: 100V; 50V for EXB-2HV
- Temperature Characteristic Range: ±200ppm/°C
- Operating Temperature Range: -55°C to 125°C
- Storage Temperature Range: -55°C to 125°C

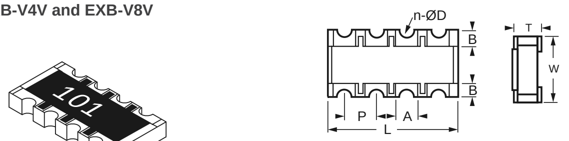
* Rated continuous working voltage (RCWV) shall be determined from
RCWV = $\sqrt{\text{Power Rating x Resistance Value}}$, or max. RCWV listed above, whichever is less.

Isolated Terminals Resistance Codes

(Value listed in ohms)

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
100 (10)	820 (82)	681 (680)	562 (5.6K)	473 (47K)	394 (390K)
120 (12)	101 (100)	821 (820)	682 (6.8K)	563 (56K)	474 (470K)
150 (15)	121 (120)	102 (1K)	822 (8.2K)	683 (68K)	564 (560K)
180 (18)	151 (150)	122 (1.2K)	103 (10K)	823 (82K)	684 (680K)
220 (22)	181 (180)	152 (1.5K)	123 (12K)	104 (100K)	824 (820K)
270 (27)	221 (220)	182 (1.8K)	153 (15K)	124 (120K)	105 (1M)
330 (33)	271 (270)	222 (2.2K)	183 (18K)	154 (150K)	000 (0.0)†
390 (39)	331 (330)	272 (2.7K)	223 (22K)	184 (180K)	
470 (47)	391 (390)	332 (3.3K)	273 (27K)	224 (220K)	† Zero ohm jumper is for EXB-2HV Series Only
560 (56)	471 (470)	392 (3.9K)	333 (33K)	274 (270K)	
680 (68)	561 (560)	472 (4.7K)	393 (39K)	334 (330K)	

EXB-V4V and EXB-V8V



No of Res.	Dimensions n	L	W	T	A	B	øD	P
2	4	1.60	1.60	0.60	0.50	0.3	0.3	0.80
4	8	3.20	1.60	0.60	0.60	0.3	0.3	0.80

Isolated Terminals

Fig. 1 — 2 Resistors

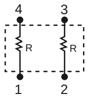


Fig. 2 — 4 Resistors

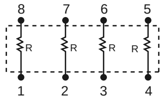
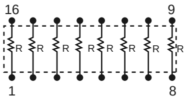
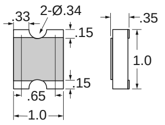


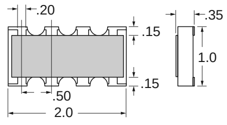
Fig. 3 — 8 Resistors



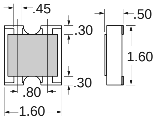
EXB-24V



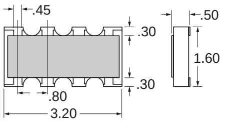
EXB-28V



EXB-34V



EXB-38V



EXB-2HV

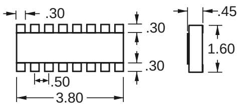
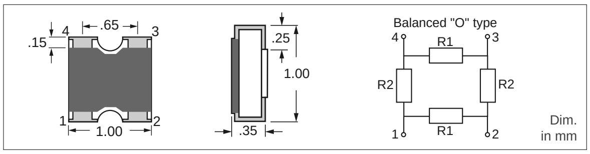


Fig.	No. of Res.	Digi-Key* Part No.	Cut Tape Pricing 10	100	500	1,000	Digi-Key* Part No.	Tape & Reel Pricing 5,000	10,000	20,000	Panasonic* Part No.
1	2	Y2□□□CT-ND	.48	4.20	15.00	25.80	Y2□□□TR-ND	17.00/M	16.00/M	—	EXB-V4V□□□JV
2	4	Y4□□□CT-ND	.80	7.00	25.00	43.00	Y4□□□TR-ND	28.00/M	26.00/M	—	EXB-V8V□□□JV
1	2	Y5□□□CT-ND	1.56	13.65	48.75	83.85	Y5□□□TR-ND	—	53.00/M	51.00/M	EXB-24V□□□JX
2	4	Y7□□□CT-ND	2.56	22.40	80.00	137.60	Y7□□□TR-ND	—	86.00/M	83.00/M	EXB-28V□□□JX
1	2	Y8□□□CT-ND	.52	4.55	16.25	27.95	Y8□□□TR-ND	18.00/M	17.00/M	—	EXB-34V□□□JV
2	4	Y9□□□CT-ND	.96	8.40	30.00	51.60	Y9□□□TR-ND	34.00/M	31.00/M	—	EXB-38V□□□JV
3	8	Y1□□□CT-ND	1.80	15.75	56.25	96.75	Y1□□□TR-ND	61.00/M	59.00/M	—	EXB-2HV□□□JV

* For complete part number, substitute the corresponding resistance code (listed above) for □□□.

Panasonic®

NEW! Surface Mount 0404 Balanced 0 Type Chip Attenuator Series EXB-24AB



Dim. in mm

FEATURES: • Balanced "0" type attenuator circuit in one 0404 chip (1.0mm x 1.0mm) • Mounting occupation area reduction; –approx. 65% reduction compared with the attenuator circuit and consists of four discrete 0402 chip resistors; –approx. 26% reduction compared with the attenuator circuit and consists of four discrete 0201 chip resistors • Mounting time reduction: 4 times >>> 1time • Attenuation: 0dB to 10dB

APPLICATIONS: • Attenuation/level control/impedance matching of high frequency signals of communication equipment – cellular phones (GSM, CDMA, PDC, etc.), PHS, PDA, for example.

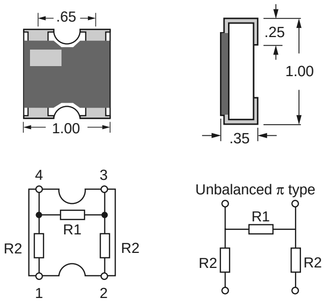
SPECIFICATIONS: • Rated Power: 0.040 W (40mW)/package • Frequency Range: DC to 2.5 GHz • VSWR (Voltage Standing Wave Ratio) 1.2 maximum (typical), 1.5 maximum (0 dB, typical) • Operating Temperature Range: -55°C to +125°C

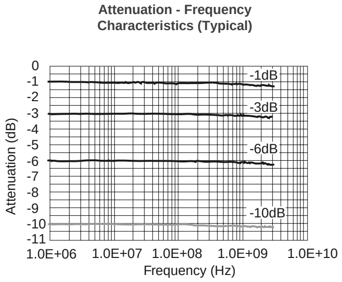
Tolerance of Attenuation	Attenuation Value (dB)	R1 (Ω)	R2 (Ω)	Characteristic Impedance (Ω)	Digi-Key Part No.	Cut Tape Price Each 10	100	500	Digi-Key Part No.	Tape & Reel Pricing 10,000	Panasonic Part No.
±0.8	0	0	open	0	P11153CT-ND	.26	.23	.17	P11153TR-ND	87.00/M	EXB-24AB00R8X
	1	5.77	1.74k	100	P11154CT-ND	.26	.23	.17	P11154TR-ND	87.00/M	EXB-24AB1CR8X
	2	11.6	872	100	P11155CT-ND	.26	.23	.17	P11155TR-ND	87.00/M	EXB-24AB2CR8X
	3	17.6	585	100	P11156CT-ND	.26	.23	.17	P11156TR-ND	87.00/M	EXB-24AB3CR8X
±1.0	6	37.4	301	100	P11157CT-ND	.26	.23	.17	P11157TR-ND	87.00/M	EXB-24AB6C1RX
±2.0	10	71.2	192	100	P11158CT-ND	.26	.23	.17	P11158TR-ND	87.00/M	EXB-24ABAC2RX
±0.8	1	11.5	3.48k	200	P11159CT-ND	.26	.23	.17	P11159TR-ND	87.00/M	EXB-24AB1ER8X
	2	23.2	1.74k	200	P11160CT-ND	.26	.23	.17	P11160TR-ND	87.00/M	EXB-24AB2ER8X
	3	35.2	1.17k	200	P11161CT-ND	.26	.23	.17	P11161TR-ND	87.00/M	EXB-24AB3ER8X
	6	74.7	602	200	P11162CT-ND	.26	.23	.17	P11162TR-ND	87.00/M	EXB-24AB6E1RX
	10	142	385	200	P11163CT-ND	.26	.23	.17	P11163TR-ND	87.00/M	EXB-24ABAE2RX
	1	17.3	5.22k	300	P11164CT-ND	.26	.23	.17	P11164TR-ND	87.00/M	EXB-24AB1GR8X
	2	34.8	2.62k	300	P11165CT-ND	.26	.23	.17	P11165TR-ND	87.00/M	EXB-24AB2GR8X
	3	52.8	1.75k	300	P11166CT-ND	.26	.23	.17	P11166TR-ND	87.00/M	EXB-24AB3GR8X
±1.0	6	112	903	300	P11167CT-ND	.26	.23	.17	P11167TR-ND	87.00/M	EXB-24AB6G1RX
±2.0	10	213	577	300	P11168CT-ND	.26	.23	.17	P11168TR-ND	87.00/M	EXB-24ABAG2RX

Panasonic®

Surface Mount 0404 Chip Attenuator

Series EXB-24AT





Dim. in mm

FEATURES:
- Unbalanced π type attenuator circuit in one chip (1.0mm x 1.0mm) • Mounting occupation area reduction: about 50% reduction compared with attenuator circuit consisting of three 0402 chip resistors • Mounting Times reduction: 3 time >>> 1 time
- Attenuation: 1dB to 10dB

APPLICATIONS:
- Attenuation/level control/impedance matching of high frequency signals of communication equipment – cellular phones (GSM, CDMA, PDC, etc.), PHS, PDA, for example.

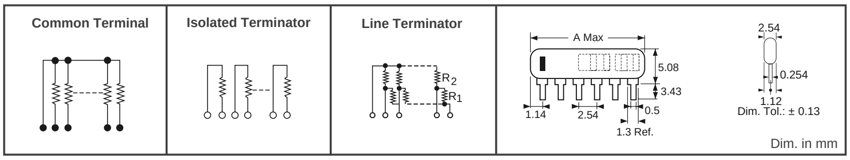
SPECIFICATIONS:
- Characteristic Impedance: 50Ω • Rated Power: 0.040 W (40 mW)/package
- Frequency Range: DC to 2 GHz • VSWR (Voltage Standing Wave Ratio) 1.3 maximum

Tolerance of Attenuation	Attenuation Value (dB)	R1 (Ω)	R2 (Ω)	Digi-Key Part No.	Cut Tape Price Each 10	100	500	Digi-Key Part No.	Tape & Reel Pricing 10,000	Panasonic Part No.
±0.3	1	5.77	870	P11103CT-ND	.19	.17	.12	P11103TR-ND	64.00/M	EXB-24AT1AR3X
	2	11.6	436	P11104CT-ND	.19	.17	.12	P11104TR-ND	64.00/M	EXB-24AT2AR3X
	3	17.6	292	P11105CT-ND	.19	.17	.12	P11105TR-ND	64.00/M	EXB-24AT3AR3X
	4	23.9	221	P11106CT-ND	.19	.17	.12	P11106TR-ND	64.00/M	EXB-24AT4AR3X
	5	30.4	179	P11107CT-ND	.19	.17	.12	P11107TR-ND	64.00/M	EXB-24AT5AR3X
±0.5	6	37.4	151	P11108CT-ND	.19	.17	.12	P11108TR-ND	64.00/M	EXB-24AT6AR5X
	10	71.2	96.3	P11109CT-ND	.19	.17	.12	P11109TR-ND	64.00/M	EXB-24ATAAR5X

Panasonic®

2% Thick Film Resistor Networks

Low Profile, Single-In-Line Package, Highly Stable, Equivalent to MIL-R-83401



Dim. in mm

General Specifications:

Rated Power: Common: 125mW (70°C); Isolated: 200mW (60°C); Line Terminator: 75mW (70°C). **Rated Continuous Working Voltage** (RCWV): √ Rated Power x Resistance Value or 100V, whichever is less. **Operating Temperature Range:** –55°C ~ +125°C. **Storage Temperature Range:** –55°C ~ +150°C.

Common Terminal: Isolated Terminal: Resistance Codes

Code (Value)	Code (Value)
101 (100)	471 (470)
104 (100K)	473 (47K)
151 (150)	474 (470K)
152 (1.5K)	561 (560)
153 (15K)	562 (5.6K)
154 (150K)	563 (56K)
221 (220)	564 (560K)
222 (2.2K)	681 (680)
223 (22K)	682 (6.8K)
224 (220K)	683 (68K)
331 (330)	684 (680K)
332 (3.3K)	821 (820)
333 (33K)	822 (8.2K)
334 (330K)	823 (82K)

Line Terminator: Resistance Codes

Code (R1/R2)
TO1 (160/240)
TO2 (180/390)
TO3 (220/270)
TO4 (220/330)
TO5 (330/390)
TO6 (330/470)
TO7 (330/680)
TO8 (1.5K/3.3K)
TO9 (3K/6.2K)

Res. Elements	No. of Pins	Dim. A (mm)	Digi-Key* Part No.	Pricing 1	10	100	1,000	5,000	Panasonic Part No.
Common Terminal									
5	6	14.88	Q5☐☐☐-ND	.25	2.03	15.23	102.00	92.00/M	EXB-F6E☐☐☐G
7	8	19.96	Q7☐☐☐-ND	.33	2.67	19.99	133.00	121.00/M	EXB-F8E☐☐☐G
9	10	25.04	Q9☐☐☐-ND	.42	3.35	25.14	168.00	152.00/M	EXB-F10E☐☐☐G
Isolated Terminator									
3	6	14.88	Q2☐☐☐-ND	.25	2.03	15.23	102.00	92.00/M	EXB-F6V☐☐☐G
4	8	19.96	Q4☐☐☐-ND	.33	2.67	19.99	133.00	121.00/M	EXB-F8V☐☐☐G
5	10	25.04	Q6☐☐☐-ND	.42	3.35	25.14	168.00	152.00/M	EXB-F10V☐☐☐G
Line Terminator									
8	6	14.88	Q0☐☐☐-ND	.40	3.23	24.22	161.00	147.00/M	EXB-F6WT☐☐G
12	8	19.96	Q1☐☐☐-ND	.54	4.32	32.39	216.00	196.00/M	EXB-F8WT☐☐G
16	10	25.04	Q3☐☐☐-ND	.67	5.38	40.37	269.00	245.00/M	EXB-F10WT☐☐G

* For complete part number, substitute the corresponding resistance code (listed at left) for ☐☐☐.

Panasonic

Surface Mount Chip 3-Terminal Capacitor Array

Series EZA-SC

FEATURES*:*

Suitable for EMI suppression filtering:

- The low residual inductance at high frequency range provides effective reduction of noise
- Equivalent noise reduction to the EMI filters with low cost design

Compact design for high density PWB assembly:

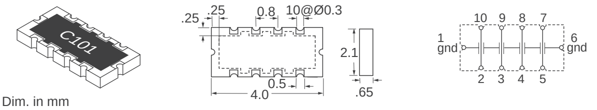
- 4.0 x 2.1 x 0.65mm
- Flat and square packages suitable for high speed automatic placement machine

Superior mountability with concave terminals:

- Firm solder joint (two times of convex terminal)
- Self-alignment of placement at reflow process

SPECIFICATIONS*:*

- Capacitance Tolerance: ±20% (+30% / -20% in the case of 22pf)
- Temperature Characteristic: △C: +20% / -55% (-25°C to +85°C)
- Dissipation Factor: Less than 2.0% (25°C, 1kHz – In measuring at 1MHz, capacitance value and dissipation factor are different, 1 Vrms)
- Rated Voltage: 25V
- Rated Current: 200mA (between input terminal and output terminal)
- Resistance: Less than 1.0Ω (between input terminal and output terminal)
- Operating Temperature Range: -25°C to +85°C



Dim. in mm

Volts (DC)	Cap. (pF)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	500	Digi-Key Part No.	Tape & Reel Pricing 4,000	Panasonic Part No.
25	22	P10192CT-ND	1.18	1.04	.89	.74	P10192TR-ND	414.00/M	EZA-SCE220M
25	47	P10193CT-ND	1.18	1.04	.89	.74	P10193TR-ND	414.00/M	EZA-SCE470M
25	100	P10194CT-ND	1.18	1.04	.89	.74	P10194TR-ND	414.00/M	EZA-SCE101M

Panasonic

Surface Mount Chip Capacitor Networks

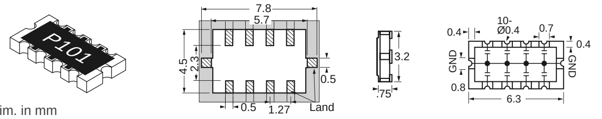
Series EZA-NP

FEATURES*:*

- Chip Capacitor Networks, exclusively developed by Panasonic thick film technology. Bussed 8 capacitors in one package (6.3 mm x 3.2 mm x 0.75 mm), half-pitch (0.65 mm) spacing for high density automatic placing
- Superior noise reduction by using two ground terminals
- Superior solderability by using Ni + Solder plating with unique concave terminals

SPECIFICATIONS*:*

- Capacitance Range: 47 pF, 100 pF, 220 pF
- Capacitance Tolerance: ±20%
- Temperature Characteristic:
  E Characteristic: +20% / -55% (-25°C to +85°C)
- Dissipation Factor: Less than 3.0% (25°C, 1 kHz, 1 Vrms)
- Rated Voltage: 25V
- Operating Temperature Range: -25°C to +85°C



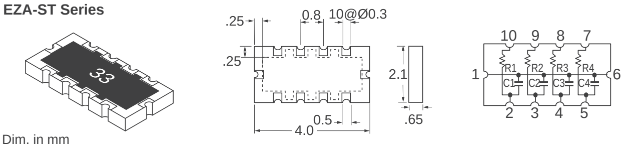
Dim. in mm

Volts (DC)	Cap. (PF)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	500	Digi-Key Part No.	Tape & Reel Pricing 4,000	Panasonic Part No.
25	47	PCN1001CT-ND	2.03	1.78	1.53	1.27	PCN1001TR-ND	710.00/M	EZA-NPE470M
25	100	PCN1002CT-ND	2.03	1.78	1.53	1.27	PCN1002TR-ND	710.00/M	EZA-NPE101M
25	220	PCN1003CT-ND	2.03	1.78	1.53	1.27	PCN1003TR-ND	710.00/M	EZA-NPE221M

Panasonic

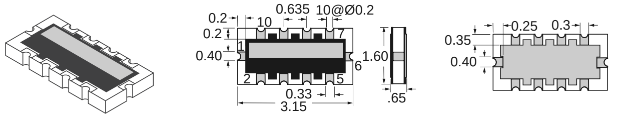
Surface Mount Chip RC Networks Series EZA-ST, EZA-DT and EZA-DL

EZA-ST Series



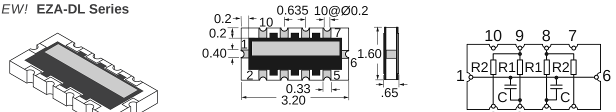
Dim. in mm

EZA-DT Series



Dim. in mm

NEW! **EZA-DL Series**



GND Terminal : 1,2,5,6
I/O Terminal : 3,4,8,9
Dummy Terminal : 7,10

Dim. in mm

FEATURES:

EZA-DT Series: Smallest SMD R/C networks

- Four popular noise reduction circuits made from damping resistors and bypass capacitors in a smallest chip
  EZAST: 4.0 x 2.1 x 0.65 mm, 0.8 mm pitch
  EZADT: 3.2 x 1.6 x 0.65 mm, 0.635 mm pitch
- Smaller occupied space than discrete 0402 (1.0 x 0.5 mm) chips
  EZAST: 70% of 0402 (1.0 x 0.5 mm) chips placing area
  EZADT: 50% of 0402 (1.0 x 0.5 mm) chips placing area

EZA-DL Series: Smallest SMD R/C filter for USB interface

- Including 2 circuits of π type R/C filter in a chip (Chip size: 3.2 mm x 1.6 mm)
- Space saving and low placing cost

EZA-ST, EZA-DT and EZA-DL Series: Superior mountability with concave terminal

- Firm solder joint (two times of convex terminal)
- Self-alignment of placement at reflow soldering

Recommended Applications for EZA-DL Series:

- Information and amusement equipment containing USB interface

SPECIFICATIONS*:*

- Resistance Tolerance: ±5%
- TCR: ±200 ppm/°C
- Rated Power: 0.063 W (≤70°C) – *For resistors operated in ambient temperature above 70°C, rated power shall be derated*
- Maximum Rated Continuous Working Voltage: 25 V *(Rated Voltage for resistor shall be determined from √Rated Power x Resistance Value, or Limiting Element Voltage [Max. Rated Continuous Working Voltage], whichever is less.)*
- Capacitance Tolerance: +30%/-20%
- Capacitance Temperature Characteristic: E Characteristic: +20% / -55% (-25°C to +85°C)
- Dissipation Factor: Less than 3.% (25°C, 1kHz - *In measuring at 1MHz, capacitance and dissipation factor are different,* 1 Vrms)
- Rated Voltage: EZA-ST: 25V; EZA-DT and EZA-DL: 12V
- Operating Temperature Range: -25°C to +85°C

Res. (Ohms)	Cap. (pF)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	500	Digi-Key Part No.	Tape & Reel Size	Pricing	Panasonic Part No.
EZA-ST Series										
22	22	PST11CT-ND	1.18	1.04	.89	.74	PST11TR-ND	4,000	414.00/M	EZA-ST11AAAJ
22	47	PST12CT-ND	1.18	1.04	.89	.74	PST12TR-ND	4,000	414.00/M	EZA-ST12AAAJ
22	100	PST13CT-ND	1.18	1.04	.89	.74	PST13TR-ND	4,000	414.00/M	EZA-ST13AAAJ
47	22	PST21CT-ND	1.18	1.04	.89	.74	PST21TR-ND	4,000	414.00/M	EZA-ST21AAAJ
47	47	PST22CT-ND	1.18	1.04	.89	.74	PST22TR-ND	4,000	414.00/M	EZA-ST22AAAJ
47	100	PST23CT-ND	1.18	1.04	.89	.74	PST23TR-ND	4,000	414.00/M	EZA-ST23AAAJ
100	22	PST31CT-ND	1.18	1.04	.89	.74	PST31TR-ND	4,000	414.00/M	EZA-ST31AAAJ
100	47	PST32CT-ND	1.18	1.04	.89	.74	PST32TR-ND	4,000	414.00/M	EZA-ST32AAAJ
100	100	PST33CT-ND	1.18	1.04	.89	.74	PST33TR-ND	4,000	414.00/M	EZA-ST33AAAJ
220	22	PST41CT-ND	1.18	1.04	.89	.74	PST41TR-ND	4,000	414.00/M	EZA-ST41AAAJ
220	47	PST42CT-ND	1.18	1.04	.89	.74	PST42TR-ND	4,000	414.00/M	EZA-ST42AAAJ
220	100	PST43CT-ND	1.18	1.04	.89	.74	PST43TR-ND	4,000	414.00/M	EZA-ST43AAAJ
470	22	PST51CT-ND	1.18	1.04	.89	.74	PST51TR-ND	4,000	414.00/M	EZA-ST51AAAJ
470	47	PST52CT-ND	1.18	1.04	.89	.74	PST52TR-ND	4,000	414.00/M	EZA-ST52AAAJ
470	100	PST53CT-ND	1.18	1.04	.89	.74	PST53TR-ND	4,000	414.00/M	EZA-ST53AAAJ
1K	22	PST61CT-ND	1.18	1.04	.89	.74	PST61TR-ND	4,000	414.00/M	EZA-ST61AAAJ
1K	47	PST62CT-ND	1.18	1.04	.89	.74	PST62TR-ND	4,000	414.00/M	EZA-ST62AAAJ
1K	100	PST63CT-ND	1.18	1.04	.89	.74	PST63TR-ND	4,000	414.00/M	EZA-ST63AAAJ
EZA-DT Series										
22	22	PDT11CT-ND	.60	.53	.45	.38	PDT11TR-ND	5,000	209.00/M	EZA-DT11AAAJ
22	47	PDT12CT-ND	.60	.53	.45	.38	PDT12TR-ND	5,000	209.00/M	EZA-DT12AAAJ
22	100	PDT13CT-ND	.60	.53	.45	.38	PDT13TR-ND	5,000	209.00/M	EZA-DT13AAAJ
47	22	PDT21CT-ND	.60	.53	.45	.38	PDT21TR-ND	5,000	209.00/M	EZA-DT21AAAJ
47	47	PDT22CT-ND	.60	.53	.45	.38	PDT22TR-ND	5,000	209.00/M	EZA-DT22AAAJ
47	100	PDT23CT-ND	.60	.53	.45	.38	PDT23TR-ND	5,000	209.00/M	EZA-DT23AAAJ
100	22	PDT31CT-ND	.60	.53	.45	.38	PDT31TR-ND	5,000	209.00/M	EZA-DT31AAAJ
100	47	PDT32CT-ND	.60	.53	.45	.38	PDT32TR-ND	5,000	209.00/M	EZA-DT32AAAJ
100	100	PDT33CT-ND	.60	.53	.45	.38	PDT33TR-ND	5,000	209.00/M	EZA-DT33AAAJ
220	22	PDT41CT-ND	.60	.53	.45	.38	PDT41TR-ND	5,000	209.00/M	EZA-DT41AAAJ
220	47	PDT42CT-ND	.60	.53	.45	.38	PDT42TR-ND	5,000	209.00/M	EZA-DT42AAAJ
220	100	PDT43CT-ND	.60	.53	.45	.38	PDT43TR-ND	5,000	209.00/M	EZA-DT43AAAJ
470	22	PDT51CT-ND	.60	.53	.45	.38	PDT51TR-ND	5,000	209.00/M	EZA-DT51AAAJ
470	47	PDT52CT-ND	.60	.53	.45	.38	PDT52TR-ND	5,000	209.00/M	EZA-DT52AAAJ
470	100	PDT53CT-ND	.60	.53	.45	.38	PDT53TR-ND	5,000	209.00/M	EZA-DT53AAAJ
1K	22	PDT61CT-ND	.60	.53	.45	.38	PDT61TR-ND	5,000	209.00/M	EZA-DT61AAAJ
1K	47	PDT62CT-ND	.60	.53	.45	.38	PDT62TR-ND	5,000	209.00/M	EZA-DT62AAAJ
1K	100	PDT63CT-ND	.60	.53	.45	.38	PDT63TR-ND	5,000	209.00/M	EZA-DT63AAAJ
NEW! EZA-DL Series NEW!										
27/15K	47	PDLU01CT-ND	.41	.36	.31	.26	PDLU01TR-ND	5,000	143.00/M	EZA-DLU01AAJ
15/15K	47	PDLU02CT-ND	.41	.36	.31	.26	PDLU02TR-ND	5,000	143.00/M	EZA-DLU02AAJ

NEW! CTS CLEARONE™

BGA Terminators and Bias Networks

- Ceramic BGA Packaging
- High density form factor
- Designed for termination of the parallel data busses
- Designed for high frequency data transmission
- Virtually eliminates parasitic capacitance and inductance
- Ultra low channel capacitance
- Flexible form factor; 1mm and 1.27mm pitch

Dim. in mm

DDR SDRAM Terminator

Fig. 1 RT1400, RT1401

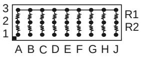


Fig. 2 RT1402, RT1403

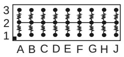
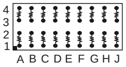


Fig. 3 RT1404, RT1405



Features: • 18 Bit SSTL_2 Termination Sets • Compliant to JEDEC Std. 8-9
Electrical Specifications: • **Resistor Tolerance:** ±1.0% • **Maximum Resistor Power:** 0.05 Watts at 70°C (Not to Exceed Total Network Power) • **Package Power Rating:** 1.0 Watt at 70°C • **Temperature Coefficient of Resistance:** ±200 ppm/°C • **Operating Temperature Range:** -55°C to +125°C

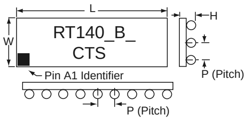


Fig. 1 and 2

Pitch	L	W	H
1.27	11.43	3.81	1.32
1.00	9.00	3.00	1.19

Fig. 3

Pitch	L	W	H
1.27	11.43	5.08	1.32
1.00	9.00	4.00	1.19

Fig.	R1 Ohms	R2 Ohms	Array Size	Pitch (mm)	Digi-Key Part No.	Cut Tape Price Each 1	10	Tape & Reel Pricing* 1,000	CTS Part No.
1	50	25	3x9	1.27	RT1400B6CT-ND	2.29	1.83	885.00	RT1400B6TR7
1	50	25	3x9	1.00	RT1400B7CT-ND	2.45	1.96	947.00	RT1400B7TR7
1	25	22	3x9	1.27	RT1401B6CT-ND	2.29	1.83	885.00	RT1401B6TR7
1	25	22	3x9	1.00	RT1401B7CT-ND	2.45	1.96	947.00	RT1401B7TR7
2	50	—	3x9	1.27	RT1402B6CT-ND	2.29	1.83	885.00	RT1402B6TR7
2	50	—	3x9	1.00	RT1402B7CT-ND	2.45	1.96	947.00	RT1402B7TR7
2	25	—	3x9	1.27	RT1403B6CT-ND	2.29	1.83	885.00	RT1403B6TR7
2	25	—	3x9	1.00	RT1403B7CT-ND	2.45	1.96	947.00	RT1403B7TR7
3	25	—	4x9	1.27	RT1404B6CT-ND	2.69	2.16	1040.00	RT1404B6TR7
3	25	—	4x9	1.00	RT1404B7CT-ND	2.85	2.28	1102.00	RT1404B7TR7
3	22	—	4x9	1.27	RT1405B6CT-ND	2.69	2.16	1040.00	RT1405B6TR7
3	22	—	4x9	1.00	RT1405B7CT-ND	2.85	2.28	1102.00	RT1405B7TR7

*For Tape & Reel Part No., change CT to TR.

CompactPCI Terminator

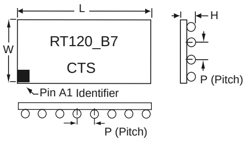


Fig. 1
RT1200B7-16 Bits

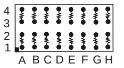
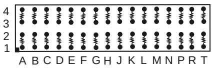


Fig. 2
RT1201B7-32 Bits



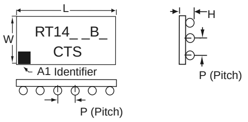
Part No.	L	W	H
RT1200B7	8.00	4.00	1.19
RT1201B7	16.00	4.00	1.19

Features: 16 or 32 Bit Terminators
Electrical Specifications: • **Resistor Tolerance:** ±5.0% • **Maximum Resistor Power:** 0.05 Watts at 70°C • **Maximum Package Power:** RT1200B7 = 0.8 Watts at 70°C, RT1201B7 = 1.6 Watts at 70°C • **Temperature Coefficient of Resistance:** ±200 ppm/°C • **Operating Temp. Range:** -55°C to +125°C

Fig.	R1 Ohms	No. Bits	Array Size	Pitch (mm)	Digi-Key Part No.	Cut Tape Price Each 1	10	Tape & Reel Pricing* 1,000	CTS Part No.
1	10	16	4x8	1.00	RT1200B7CT-ND	2.17	1.74	838.00	RT1200B7TR7
2	10	32	4x16	1.00	RT1201B7CT-ND	3.61	2.89	1396.00	RT1201B7TR7

*For Tape & Reel Part No. change CT to TR

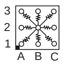
GTL, GTL+, AGTL+ Terminators



Features: • 8-Bit, 16-Bit, and 32-Bit Termination Sets • Compliant for GTL, GTL+, and AGTL+ Termination
Electrical Specifications: • **Resistor Tolerance:** ±1.0% • **Maximum Resistor Power:** 0.05 Watts at 70°C (Not to Exceed Maximum Package Power) • **Maximum Package Power (70°C):** 8 bit = 0.3 Watts, 16 bit = 0.6 Watts, 32 bit = 1.2 Watts • **Temperature Coefficient of Resistance:** ±200 ppm/°C • **Operating Temperature Range:** -55°C to +125°C

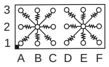
Part No.	L	W	H
RT1410B6	3.81	3.81	1.32
RT1411B6	7.62	3.81	1.32
RT1412B6	15.24	3.81	1.32
RT1412B7	12.00	3.00	1.19

Fig. 1
8 Bit



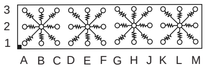
RT1410

Fig. 2
16 Bit



RT1411

Fig. 3
32 Bit



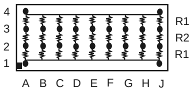
RT1412

Fig.	R1 Ohms	No. Bits	Pitch (mm)	Digi-Key Part No.	Cut Tape Price Each 1	10	Tape & Reel Pricing* 1,000	CTS Part No.
1	150	8	1.27	RT1410B6CT-ND	1.25	1.00	481.00	RT1410B6TR7
2	150	16	1.27	RT1411B6CT-ND	1.89	1.51	729.00	RT1411B6TR7
3	150	32	1.27	RT1412B6CT-ND	3.05	2.44	1179.00	RT1412B6TR7
3	150	32	1.00	RT1412B7CT-ND	3.21	2.57	1241.00	RT1412B7TR7

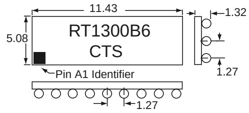
*For Tape & Reel Part No., change CT to TR.

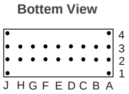
RT1300 Low Voltage Differential SCSI Active Termination Network

Features: • 9-Line LVD Termination Network • Ultra2, Ultra3 Compliant • Low Channel Capacitance Less Than 0.25pF • Laser Trimmed to 1% Tolerance
Electrical Specifications: • **Resistor Tolerance:** ±1.0% • **Maximum Resistor Power:** 0.05 Watts at 70°C (Not to exceed maximum package power) • **Maximum Package Power (70°C):** 1.0 Watt • **Temperature Coefficient of Resistance:** ±200 ppm/°C • **Operating Temperature Range:** -55°C to +125°C



R1=475Ω R2=121Ω





Digi-Key Part No.	Cut Tape Price Each 1	10	Tape & Reel Pricing* 1,000	CTS Part No.
RT1300B6CT-ND	2.81	2.25	1086.00	RT1300B6TR7

*For Tape & Reel Part No., change CT to TR.

Memory and IDE Terminator

Features: • 16 or 32 Bit Terminators • Ultra Low I/O Coupling
Electrical Specifications: • **Resistor Tolerance:** ±5.0% • **Maximum Resistor Power:** 0.05 Watts at 70°C • **Maximum Package Power:** RT1202B7 = 0.8 Watts at 70°C, RT1203B7 = 1.6 Watts at 70°C • **Temperature Coefficient of Resistance:** ±200 ppm/°C • **Operating Temperature Range:** -55°C to +125°C

Fig. 1
RT1202B7-16 Bits

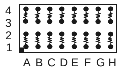
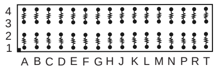
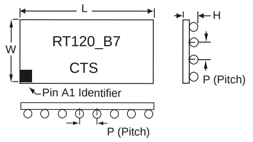


Fig. 2
RT1203B7-32 Bits





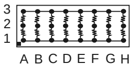
Part No.	L	W	H
RT1202B7	8.00	4.00	1.19
RT1203B7	16.00	4.00	1.19

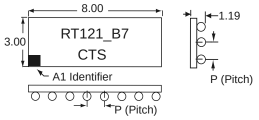
Fig.	R1 Ohms	No. Bits	Array Size	Pitch (mm)	Digi-Key Part No.	Cut Tape Price Each 1	10	Tape & Reel Pricing* 1,000	CTS Part No.
1	33	16	4 x 8	1.00	RT1202B7CT-ND	2.17	1.74	838.00	RT1202B7TR7
2	33	32	4 x 16	1.00	RT1203B7CT-ND	3.98	3.18	1537.00	RT1203B7TR7

*For Tape & Reel Part No., change CT to TR.

VME64, VME64x Terminator

Features: • 8-Bit Termination Network • VME64, VME64x Compliant
Electrical Specifications: • **Resistor Tolerance:** ±1.0% • **Maximum Resistor Power:** 0.05 Watts at 70°C • **Maximum Package Power:** 1.0 Watts at 70°C • **Temperature Coefficient of Resistance:** ±200 ppm/°C • **Operating Temperature Range:** -55°C to +125°C





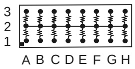
R1 Ohms	R2 Ohms	Array Size	Pitch (mm)	Digi-Key Part No.	Cut Tape Price Each 1	10	Tape & Reel Pricing* 1,000	CTS Part No.
330	470	3 x 8	1.00	RT1210B7CT-ND	1.97	1.58	760.00	RT1210B7TR7
220	1800	3 x 8	1.00	RT1211B7CT-ND	1.97	1.58	760.00	RT1211B7TR7

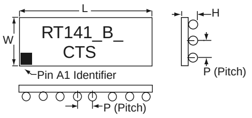
*For Tape & Reel Part No., change CT to TR.

PCI and PCIX Bias Network

Features: • 16 Bit Bias Network • Compliant to PCI and PCIX
Electrical Specifications: • **Resistor Tolerance:** ±1.0% • **Maximum Resistor Power:** 0.05 Watts at 70°C • **Maximum Package Power:** 1.0 Watts at 70°C • **Temperature Coefficient of Resistance:** ±100 ppm/°C • **Operating Temperature Range:** -55° to +125°C

RT1417 and RT1418





Part No.	L	W	H
RT141_B6	10.16	3.81	1.32
RT141_B7	8.00	3.00	1.19

R Ohms	No. Bits	Array Size	Pitch (mm)	Digi-Key Part No.	Cut Tape Price Each 1	10	Tape & Reel Pricing* 1,000	CTS Part No.
4.7K	16	3x8	1.27	RT1417B6CT-ND	1.81	1.45	699.00	RT1417B6TR7
4.7K	16	3x8	1.00	RT1417B7CT-ND	1.97	1.58	760.00	RT1417B7TR7
8.2K	16	3x8	1.27	RT1418B6CT-ND	1.81	1.45	699.00	RT1418B6TR7
8.2K	16	3x8	1.00	RT1418B7CT-ND	1.97	1.58	760.00	RT1418B7TR7

*For Tape & Reel Part No., change CT to TR.

CTS®

Thick Film Chip Resistor Arrays

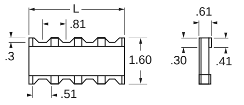
Features:

- **Thick Film Chip Resistor Arrays High Density Packaging:** 30% less space per resistor than 0603 chip resistors and 75% less space per resistor than 0805 chip resistors
- **Placement Efficiency:** Require fewer placements than discrete components, larger overall size eases handling compared to discrete components
- **Low Profile:** Suitable for PCMCIA applications
- **Solder Coated Nickel Barrier Pads**
- **Resistance Tolerance Standard:** ±5% or .5 ohms, whichever is greater
- **Operating Temperature Range:** -55°C to +125°C
- **Temperature Coefficient (TCR) Standard:** ±200ppm/°C

Environmental Performance Specifications

Test	Max. Deltar	Test Description
Thermal Cycle	1.0%	5 Cycles -55°C to 125°C
Short Time Overload	1.0%	2 1/2 x Rated voltage. 5 sec. (or max voltage)
Moisture Resistance	2.0%	240 hours .1 rated load, -10°C +65°C, 90%RH
High Temperature Exposure	1.0%	1000 hours. no load @ 125°C
Load Life	5.0%	1000 hours @ 70°C, rated load
Resistance to Solder Heat	1.0%	10 seconds @ 260°C solder
Resistance to Leach	—	120 seconds @ 260°C solder
Resistance to Solvents	—	Isopropyl alcohol, Freon TMC
Solderability	—	RMA flux, 230°C, 5 seconds dip, 95% coverage

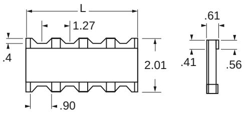
742 SERIES



Electrical Specifications:

- **PCB Area (in²) per Resistor:** .0037
- **Circuit Type:** Isolated
- **Resistance Range Ω:** 10-1M
- **Power per Resistor:** .063W
- **Maximum Operating Voltage:** 50V

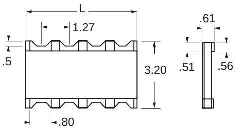
743 SERIES



Electrical Specifications:

- **PCB Area (in²) per Resistor:** .0071
- **Circuit Type:** Isolated
- **Resistance Range Ω:** 10-1M
- **Power per Resistor:** .100W
- **Maximum Operating Voltage:** 100V

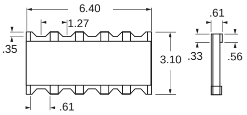
744 SERIES



Electrical Specifications:

- **PCB Area (in²) per Resistor:** .0094
- **Circuit Type:** Isolated
- **Resistance Range Ω:** 10-1M
- **Power per Resistor:** .125W
- **Maximum Operating Voltage:** 200V

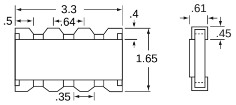
745 SERIES



Electrical Specifications:

- **PCB Area (in²) per Resistor:** .0058
- **Circuit Type:** Bussed
- **Resistance Range Ω:** 100-100K
- **Power per Resistor:** .063W
- **Maximum Operating Voltage:** 50V

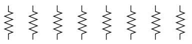
746 SERIES



Electrical Specifications:

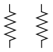
- **PCB Area (in²) per Resistor:** .0013
- **Circuit Type:** Bussed
- **Resistance Range Ω:** 100-100K
- **Power per Resistor:** .031W
- **Maximum Operating Voltage:** 25V

Series 742 Only

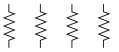


16 Terminations / 8 Resistors

Series 742, 743, 744

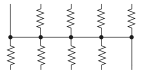


4 Terminations / 2 Resistors



8 Terminations / 4 Resistors

Series 745 and 746



10 Terminations / 8 Resistors

Resistance Values
742C043, 742C163, 743C043, 744C043 Series Chip Arrays

All values listed in ohms

Code (Value)	Code (Value)	Code (Value)	Code (Value)
220 (22)	331 (330)	472 (4.7K)	104 (100K)
330 (33)	471 (470)	103 (10K)	224 (220K)
470 (47)	102 (1K)	223 (22K)	334 (330K)
101 (100)	222 (2.2K)	333 (33K)	474 (470K)
221 (220)	332 (3.3K)	473 (47K)	105 (1MEG)

Resistance Values
745 Series Chip Arrays

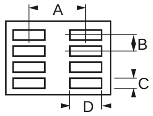
All values listed in ohms

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
101 (100)	681 (680)	222 (2.2K)	103 (10K)	473 (47K)
151 (150)	471 (470)	332 (3.3K)	153 (15K)	683 (68K)
221 (220)	102 (1K)	472 (4.7K)	223 (22K)	104 (100K)
331 (330)	152 (1.5K)	682 (6.8K)	333 (33K)	

Resistance Values
742C083, 743C083, 744C083 Series Chip Arrays

All values listed in ohms

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
100 (10)	111 (110)	122 (1.2K)	153 (15K)	184 (180K)
120 (12)	121 (120)	152 (1.5K)	183 (18K)	224 (220K)
150 (15)	151 (150)	182 (1.8K)	223 (22K)	274 (270K)
180 (18)	181 (180)	222 (2.2K)	273 (27K)	334 (330K)
220 (22)	221 (220)	272 (2.7K)	333 (33K)	394 (390K)
270 (27)	271 (270)	332 (3.3K)	393 (39K)	474 (470K)
330 (33)	331 (330)	392 (3.9K)	473 (47K)	514 (510K)
390 (39)	391 (390)	472 (4.7K)	513 (51K)	564 (560K)
470 (47)	471 (470)	512 (5.1K)	563 (56K)	684 (680K)
510 (51)	511 (510)	562 (5.6K)	683 (68K)	824 (820K)
560 (56)	561 (560)	682 (6.8K)	823 (82K)	105 (1MEG)
680 (68)	681 (680)	822 (8.2K)	104 (100K)	
820 (82)	821 (820)	103 (10K)	124 (120K)	
101 (100)	102 (1K)	123 (12K)	154 (150K)	



Series	Dimensions - mm A	B	C	D
742	1.80	.80	.50	.90
743	1.90	1.27	.80	1.20
744	3.00	1.27	.80	1.30
745	3.00	1.27	.80	1.30
746	1.52	.64	.35	.80

Resistance Values
746 Series Chip Arrays

All values listed in ohms

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
101 (100)	331 (330)	152 (1.5K)	332 (3.3K)	153 (15K)	473 (47K)
151 (150)	471 (470)	222 (2.2K)	472 (4.7K)	223 (22K)	104 (100K)
221 (220)	102 (1K)	272 (2.7K)	103 (10K)	333 (33K)	

Series	No. of Term.	No. of Res.	Dim. "L" (mm)	Resistor Power Rating (mW@70°C)	Digi-Key* Part No.	Cut Tape Pricing 1	10	100	1,000	Digi-Key* Part No.	Tape & Reel Pricing 4,000	5,000
742	4	2	1.60	63	742C043□□□JCT-ND	.07	.60	4.68	39.95	742C043□□□JTR-ND	—	34.00/M
	8	4	3.20		742C083□□□JCT-ND	.12	1.09	8.56	72.85	742C083□□□JTR-ND	—	62.00/M
	16	8	6.40		742C163□□□JCT-ND	.32	2.84	22.28	190.35	742C163□□□JTR-ND	162.00/M	—
743	4	2	2.54	100	743C043□□□JCT-ND	.13	1.16	9.08	77.55	743C043□□□JTR-ND	66.00/M	—
	8	4	5.08		743C083□□□JCT-ND	.17	1.51	11.87	101.05	743C083□□□JTR-ND	86.00/M	—
744	4	2	2.54	125	744C043□□□JCT-ND	.13	1.16	9.08	77.55	744C043□□□JTR-ND	66.00/M	—
	8	4	5.08		744C083□□□JCT-ND	.19	1.65	12.97	110.45	744C083□□□JTR-ND	94.00/M	—
745	10	8	—	63	745C101□□□JCT-ND	.40	3.54	27.78	237.35	745C101□□□JTR-ND	202.00/M	—
746	10	8	—	31	746X101□□□JCT-ND	.40	3.54	27.78	237.35	746X101□□□JTR-ND	—	202.00/M

* For complete part number, substitute the corresponding resistance code (listed above) for □□□.

CTS® 753 SERIES In-Line Surface Mount Leadless Resistor Networks

Series 753 in-line surface mount leadless resistor networks provide the highest density per area of any conventional surface mount solution. In a bussed configuration, the networks provide two times the resistors per area compared to 0603 sized chips, and more than six times that offered by 0805 sized chips.

SPECIFICATIONS: • **Resistance Tolerance:** ±2% or 0.5Ω, whichever is greater • **Max. Operating Voltage:** 25V, not to exceed rated power • **Temp. Coefficient:** ±200ppm/°C • **Operating Temperature Range:** -55°C to +125°C

FEATURES: • High density packaging • Solid ceramic construction • Available terminations per package: Single Row Terminations: 8, 9, 10; Dual Row Terminations: 16, 18, 20, 24 • Solder coated pads • Designed for visual inspection of solder joints and board cleaning

Fig. 1 — SRT Isolated

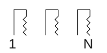


Fig. 3 — DRT Bussed

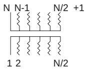


Fig. 5 — GTL Termination

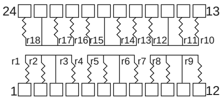

24
13
r18 r17 r16 r15 r14 r13 r12 r11 r10
r1 r2 r3 r4 r5 r6 r7 r8 r9
1
12

Fig. 2 — SRT Bussed

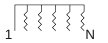
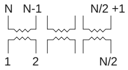


Fig. 4 — DRT Isolated



RESISTANCE VALUES

(All values listed in ohms)

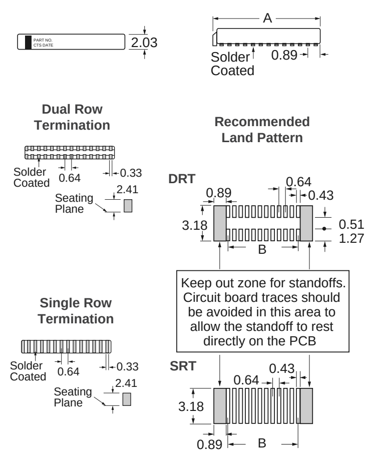
SRT Bussed 8 Terminal	SRT Isolated 8 Terminal	SRT Bussed 9 Terminal	SRT Bussed 10 Terminal	DRT Bussed 16 Terminal	DRT Isolated 16 Terminal	DRT Bussed 18 Terminal	DRT Bussed 20 Terminal	DRT Bussed 24 Terminal	DRT Isolated 24 Terminal	DRT GTL 24 Terminal
(Code) Value	(Code) Value	(Code) Value	(Code) Value	(Code) Value	(Code) Value	(Code) Value	(Code) Value	(Code) Value	(Code) Value	(Code) Value
(102) 1K (103) 10K	(330) 33 (101) 100 (104) 100K	(101) 100 (102) 1K (222) 2.2K (472) 4.7K (103) 10K (223) 22K (104) 100K	(102) 1K (103) 10K (332) 3.3K (472) 4.7K (473) 47K	(111) 110 (103) 10K	(220) 22 (390) 39 (470) 47 (101) 100 (103) 10K	(102) 1K (472) 4.7K (562) 5.6K (103) 10K (223) 22K	(103) 10K	(103) 10K	(220) 22 (101) 100	(390) 39 (510) 51 (680) 68

Fig.	No. of Term.	No. of Resistors	Dim. (mm) A	Dim. (mm) B	Res. Pwr. Rating (mW@70°C)	Digi-Key† Part No.	Cut Tape Pricing 1	Cut Tape Pricing 10	Cut Tape Pricing 100	Digi-Key† Part No.	Tape & Reel Size	Tape & Reel Price
1	8	4	6.22	4.44	80	753083☐☐☐GCT-ND	2.43	22.28	202.50	753083☐☐☐GTR-ND	1,000	1215.00
2	9	8	6.86	4.90	40	753091☐☐☐GCT-ND	2.52	23.10	210.00	753091☐☐☐GTR-ND	1,000	1260.00
2	10	9	7.49	5.72	40	753101☐☐☐GCT-ND	2.52	23.10	210.00	753101☐☐☐GTR-ND	1,000	1260.00
3	16	14	6.22	4.44	40	753161☐☐☐GCT-ND	2.52	23.10	210.00	753161☐☐☐GTR-ND	1,000	1260.00
4	16	8	6.22	4.44	80	753163☐☐☐GCT-ND	2.43	22.28	202.50	753163☐☐☐GTR-ND	1,000	1215.00
3	18	16	6.86	4.90	40	753181☐☐☐GCT-ND	2.52	23.10	210.00	753181☐☐☐GTR-ND	1,000	1260.00
3	20	18	7.49	5.72	40	753201☐☐☐GCT-ND	2.52	23.10	210.00	753201☐☐☐GTR-ND	1,000	1260.00
3	24	22	8.76	6.98	40	753241☐☐☐GCT-ND	2.52	23.10	210.00	753241☐☐☐GTR-ND	1,000	1260.00
4	24	12	8.76	6.98	80	753243☐☐☐GCT-ND	2.43	22.28	202.50	753243☐☐☐GTR-ND	1,000	1215.00
5	24	18	8.76	6.98	60	75324G☐☐☐GCT-ND	2.43	22.28	202.50	75324G☐☐☐GTR-ND	1,000	1215.00

Fig.	No. of Term.	No. of Res.	Dim. (mm) A	Dim. (mm) B	Res. Pwr. Rating (mW@70°C)	Res. Value (ohms)	Digi-Key† Part No.	Cut Tape Pricing 1	Cut Tape Pricing 10	Cut Tape Pricing 100	Digi-Key† Part No.	Tape & Reel Size	Tape & Reel Price
2	8	7	6.22	4.44	40	1K	753081102GBK-ND *NEW!*	3.15	25.20	176.40	753081102GTR-ND *NEW!*	1,000	1092.00
2	8	7	6.22	4.44	40	10K	753081103GBK-ND *NEW!*	3.15	25.20	176.40	753081103GTR-ND *NEW!*	1,000	1092.00
2	9	8	6.86	4.90	40	4.7K	753091472GBK-ND *NEW!*	3.15	25.20	176.40	753091472GTR-ND *NEW!*	1,000	1092.00
3	18	16	6.86	4.90	40	22K	753181223GBK-ND *NEW!*	3.15	25.20	176.40	753181223GTR-ND *NEW!*	1,000	1092.00
3	18	16	6.86	4.90	40	4.7K	753181472GBK-ND *NEW!*	3.15	25.20	176.40	753181472GTR-ND *NEW!*	1,000	1092.00

† For complete part number, substitute the corresponding resistance ***"code "*** (from chart above) in ☐☐☐.

Series 753



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752 SERIES — Surface Mount Single Row & Dual Row Termination

Fig. 1 — SRT Bussed

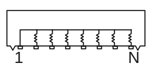


Fig. 2 — DRT Bussed

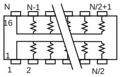


Fig. 3 — SRT Isolated

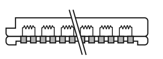


Fig. 4 — SRT Dual Term.

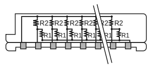
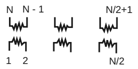
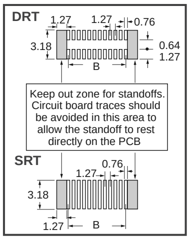


Fig. 5 — DRT Isolated




DRT
1.27
1.27
0.76
3.18
0.64
1.27
B
Keep out zone for standoffs. Circuit board traces should be avoided in this area to allow the standoff to rest directly on the PCB
SRT
0.76
1.27
3.18
1.27
B

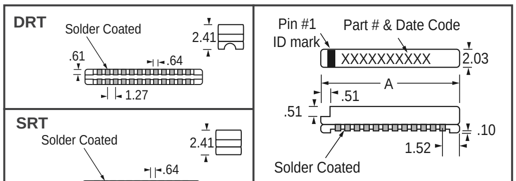
SPECIFICATIONS: Res. Range: Standard: 22Ω to 1 MegΩ. **Res. Tolerance:** The Bussed and Isolated circuits are 2%, the Dual Terminator circuit is 5% **Max. Operating Voltage:** 25V not to exceed rated power **Temp. Coefficient:** Standard: ±200 PPM/°C **Dielectric Strength:** 100 VAC. **Operating Temp. Range:** -55°C to +125°C **In-line Surface Mount Resistor Networks:** • High density packaging • Low profile • Input/outputs available: Dual Row Terminations 16, 18, 20, 24; Single Row Terminations 8, 9, 10, 12 • Solder coated pads • Designed for visual inspection of solder joints and for board cleaning • 24mm tape and reel packaging • Meets UL-94VO requirements

RESISTANCE VALUES

SRT Bussed 9 Term.			SRT Bussed 10 Term.	DRT Bussed 16,18,20,24 Term.			SRT Isolated 8,10,12 Term.		DRT Isolated 24 Term.
100	1K	10K	1K	1K	47K	22	100	3.3K	22
560	2.2K	22K	3.3K	10K	100K	33	1K	4.7K	
680	4.7K	100K	10K			47	2.2K	10K	

	Bussed & Dual Terminator Schematic	Isolated Schematic
@25°C	.12w	.24w
@70°C	.08w	.16w

All values listed in ohms



Max. Resistor Power (Not to exceed total network power)

Fig.	No. of Term.	No. of Res.	Dim. (mm) A	Dim. (mm) B	Res. Pwr. Rating (mW@70°C)	Digi-Key† Part No.	Bulk Pricing 1	Bulk Pricing 10	Bulk Pricing 100	Tape & Reel* Size	Tape & Reel* Pricing
1	9	8	13.08	10.16	80	752-091-(Value)BK-ND	2.51	20.10	140.70	2,500	871.00/M
2	16	14	11.81	8.89	80	752-161-(Value)BK-ND	2.51	20.10	140.70	2,500	871.00/M
2	18	16	13.08	10.16	80	752-181-(Value)BK-ND	2.51	20.10	140.70	2,500	871.00/M
2	20	18	14.35	11.43	80	752-201-(Value)BK-ND	2.51	20.10	140.70	2,500	871.00/M
2	24	22	16.89	13.97	80	752-241-(Value)BK-ND	2.51	20.10	140.70	2,500	871.00/M
3	8	4	11.81	8.89	160	752-083-(Value)BK-ND	2.36	18.90	132.30	2,500	819.00/M
3	10	5	14.35	11.43	160	752-103-(Value)BK-ND	2.36	18.90	132.30	2,500	819.00/M
3	12	6	16.89	13.97	160	752-123-(Value)BK-ND	2.36	18.90	132.30	2,500	819.00/M
4	10	16	14.35	11.43	80	752-105-220/330BK-ND	2.70	21.60	151.20	2,500	936.00/M
1	10	9	14.35	11.43	80	752-101-(Value)BK-ND *NEW!*	2.51	20.10	140.70	1,000	871.00
5	24	12	16.89	13.97	16	752-243-(Value)BK-ND *NEW!*	2.36	18.90	132.30	1,000	819.00

* For Tape & Reel Part No. change BK to TR † For complete part number, substitute the corresponding value from chart above in (value).

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773 SERIES Single-In-Line

SPECIFICATIONS: • **Resistance Tolerance:** 2% • **Maximum Operating Voltage:** 100VDC • **Temperature Coefficient:** ±100 PPM/°C≥50Ω, ±200 PPM/°C≤50Ω • **Dielectric Withstand Voltage:** 200VDC • **Operating Temperature Range:** -55°C to +125°C • **Resistance Power @ 70°C:** -1 and -5 Schematic = .10 Watts and -3 Schematic = .20 Watts

FEATURES: • Low cost • High reliability cermet resistors • 2% standard resistor tolerance • Laser marking for permanent identification • High temperature solder • Low profile

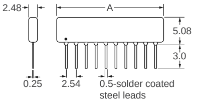


Fig. 1 - Bussed

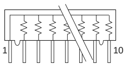


Fig. 2 - Isolated

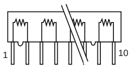


Fig. 3 - Dual Term

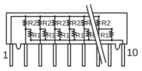


Fig.	No. of Pins	No. of Res.	Dim. "A" (mm)	Res. Pwr. Rating (mW@70°C)	Digi-Key* Part No.	Pricing 1	Pricing 10	Pricing 100	Pricing 1,000
1	6	5	15.55	100	773061☐☐☐-ND	.35	2.78	18.50	92.50
2	6	3	15.55	200	773063☐☐☐-ND	.35	2.78	18.50	92.50
1	8	7	20.65	100	773081☐☐☐-ND	.46	3.60	24.00	120.00
2	8	4	20.65	200	773083☐☐☐-ND	.46	3.60	24.00	120.00
3	8	12	20.65	100	773085☐☐☐/☐☐☐-ND	.97	7.65	51.00	255.00
1	9	8	23.15	100	773091☐☐☐-ND	.71	5.63	37.50	187.50
1	10	9	25.65	100	773101☐☐☐-ND	.57	4.50	30.00	150.00
2	10	5	25.65	200	773103☐☐☐-ND	.57	4.50	30.00	150.00
3	10	16	25.65	100	773105☐☐☐/☐☐☐-ND	1.22	9.60	64.00	320.00

*For complete part number, substitute the corresponding resistance ***"code "*** (listed to the right) in ☐☐☐.

All Resistance values listed in ohms

773061 Series (Bussed)

(Code) Value	(Code) Value
(151) 150	(472) 4.7K
(221) 220	(103) 10K
(271) 270	(153) 15K
(331) 330	(203) 20K
(471) 470	(223) 22K
(102) 1K	(333) 33K
(152) 1.5K	(473) 47K
(272) 2.7K	(104) 100K

773063 Series (Isolated)

(Code) Value	(Code) Value
(101) 100	(103) 10K
(561) 560	(104) 100K
(102) 1K	(224) 220K
(222) 2.2K	(105) 1MEG

773081 Series (Bussed)

(Code) Value	(Code) Value
(151) 150	(102) 1K
(181) 180	(222) 2.2K
(271) 270	(472) 4.7K
(331) 330	(103)10K
(471) 470	(473) 47K
(511) 510	(104) 100K

773083 Series (Isolated)

(Code) Value	(Code) Value
(220) 22	(102) 1K
(270) 27	(122) 1.2K
(330) 33	(152) 1.5K
(470) 47	(222) 2.2K
(510) 51	(272) 2.7K
(560) 56	(332) 3.3K
(101) 100	(472) 4.7K
(121) 120	(103) 10K
(151) 150	(153) 15K
(181) 180	(203) 20K
(221) 220	(223) 22K
(271) 270	(333) 33K
(331) 330	(563) 56K
(471) 470	(104) 100K
(511) 510	(474) 470K
(681) 680	(105) 1MEG

773085 Series (Dual Term)

(Code) Value
(221/331) 220/330

773091 Series (Bussed)

(Code) Value
(270) 27
(103) 10K

773101 Series (Bussed)

(Code) Value	(Code) Value
(470) 47	(332) 3.3K
(101) 100	(472) 4.7K
(121) 120	(512) 5.1K
(221) 220	(103) 10K
(271) 270	(153) 15K
(331) 330	(203) 20K
(471) 470	(223) 22K
(681) 680	(333) 33K
(102) 1K	(473) 47K
(152) 1.5K	(104) 100K
(222) 2.2K	(105) 1MEG
(272) 2.7K	

773103 Series (Isolated)

(Code) Value	(Code) Value
(330) 33	(152) 1.5K
(470) 47	(103) 10K
(101) 100	(333) 33K
(471) 470	(473) 47K
(561) 560	(104) 100K
(102) 1K	(224) 220K

773105 Series (Dual Term)

(Code) Value
(221/331) 220/330
(331/471) 330/470

Resistor Networks

OVER 1,500 VALUES AVAILABLE

750 SERIES

Single-In-Line

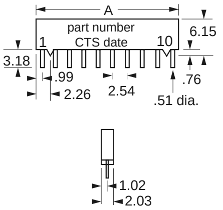
Solid ceramic networks are more efficient because they operate at lower temperatures. This translates into long term reliability in a resistor network.

Specifications:

• **Resistance Values:** 22Ω through 1 MegΩ • **Resistance Tolerance:** ±2% • **Temperature Coefficient:** ±100PPM/°C typical

Features:

• Low-profile construction • Excellent power dissipation • High reliability • Alumina substrate



770 SERIES

Single-In-Line Conformal

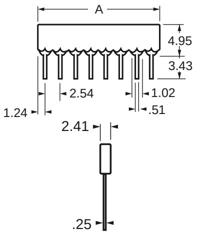
Standard Products 770 series is available in 6, 8, and 10 pin sizes, and in many available resistance values.

Specifications:

• **Resistance Values:** 22Ω through 1 MegΩ • **Resistance Tolerance:** ±2% • **Temperature Coefficient:** ±100PPM/°C typical

Features:

• High reliability resistors • Low-profile construction • .100" lead spacing • High reliability • Alumina substrate



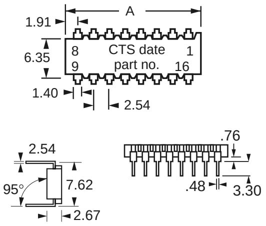
760/761 SERIES

Dual-In-Line

Thin cover coating generates higher power ratings. Thin proprietary cover protection keeps resistors near the surface, allowing the alumina substrate to act as a heat sink. That means higher power ratings than molded networks.

Specifications:

• **Resistance Values:** 22Ω through 1 MegΩ • **Resistance Tolerance:** ±2%. • **Temperature Coefficient:** ±100PPM/°C typical



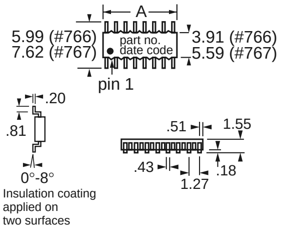
766/767 SERIES

Dual-In-Line Surface Mount

Requires 30% less board space than molded networks of the same power rating.

Specifications:

• **Resistance Range:** 22Ω through 1 MegΩ • **Resistance Tolerance:** Standard: ±2% • **Max. Operating Voltage:** 50V not to exceed rated power • **Temp. Coefficient:** 100Ω through 1 MegΩ ±100PPM/°C typical, Below 100Ω ±200PPM/°C typical • **Operating Temp. Range:** –55°C to 125°C • **Storage Temp. Range:** –55°C to 125°C • **Dielectric Strength**: 100V



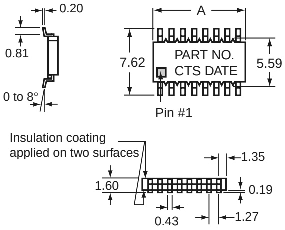
NEW! 768 SERIES

Dual-In-Line Surface Mount

Medium body, small outline products. Low profile — board to network clearance of 0.005"/0.010".

Specifications:

• **Resistance Range:** Standard: 10Ω to 1MegΩ • **Resistance Tolerance:** Standard: ±2% or 0.5Ω (whichever is greater) • **Max. Operating Voltage:** 50V not to exceed rated power • **Temp. Coefficient:** Standard: 100Ω to 1 MegΩ ±100PPM/°C typical, 10Ω to 99Ω ±200PPM/°C typical • **Operating Temp. Range:** -55°C to 125°C • **Dielectric Strength:** 100VAC



AVAILABLE VALUES
(listed in ohms)

Isolated and Bussed Circuits

22	51	120	270	560	1.5K	3.3K	6.8K	18K	39K	100K	270K	680K
27	56	150	330	680	1.8K	3.9K	8.2K	20K	47K	120K	330K	820K
33	68	180	390	820	2K	4.7K	10K	22K	56K	150K	390K	1 Meg
39	82	200	470	1K	2.2K	5.1K	12K	27K	68K	180K	470K	
47	100	220	510	1.2K	2.7K	5.6K	15K	33K	82K	220K	560K	

AVAILABLE VALUES
(listed in ohms)

750 and 770 SERIES
Dual Terminator Circuits

81/130
121/195
162/260
180/390
220/330
330/390

AVAILABLE VALUES
(listed in ohms)

760/761 SERIES
Dual Terminator Circuits

180/390
220/270
220/330
330/390
680/1.5K
1.5K/3.3K

AVAILABLE VALUES
(listed in ohms)

766/767 and 768 SERIES
Dual Terminator Circuits

180/390
220/330
330/390
330/470

Fig. 1 - Bussed

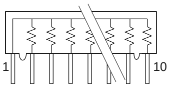


Fig. 2 - Isolated

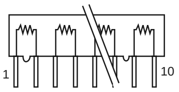


Fig. 3 - Dual Term

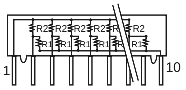


Fig. 4 - Bussed

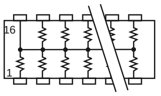


Fig. 5 - Isolated

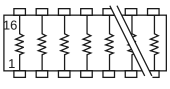
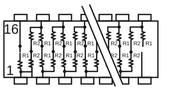


Fig. 6 - Dual Term



Series	Fig.	No. of Pins	No. of Res.	Dim. "A" (mm)	Resistor Power Rating (mW@70°C)	Digi-Key* Part No.	Pricing 1	10	100	1,000
750	1	6	5	14.68	250	750-61-R(Value)-ND	.91	7.95	62.43	454.00
	1	8	7	19.76	250	750-81-R(Value)-ND	1.05	9.17	72.05	524.00
	1	10	9	24.84	250	750-101-R(Value)-ND	1.25	10.92	85.80	624.00
	2	6	3	14.68	400	750-63-R(Value)-ND	.91	7.95	62.43	454.00
	2	8	4	19.76	400	750-83-R(Value)-ND	1.05	9.17	72.05	524.00
	2	10	5	24.84	400	750-103-R(Value)-ND	1.25	10.92	85.80	624.00
	3	8	12	19.76	250	750-85-R(Value)-ND	1.41	12.36	97.08	706.00
	3	10	16	24.84	250	750-105-R(Value)-ND	1.70	14.91	117.15	852.00
770	1	6	5	15.19	100	770-61-R(Value)-ND	.21	1.80	13.50	90.00
	1	8	7	20.27	100	770-81-R(Value)-ND	.29	2.40	18.00	120.00
	1	10	9	25.35	100	770-101-R(Value)-ND	.30	2.63	20.63	150.00
	2	6	3	15.19	200	770-63-R(Value)-ND	.21	1.80	13.50	90.00
	2	8	4	20.27	200	770-83-R(Value)-ND	.29	2.40	18.00	120.00
	2	10	5	25.35	200	770-103-R(Value)-ND	.30	2.63	20.63	150.00
	3	8	12	20.27	100	770-85-R(Value)-ND	.55	4.60	34.50	230.00
	3	10	16	25.35	100	770-105-R(Value)-ND	.52	4.55	35.75	260.00
760/761	4	14	13	19.05	150	760-1-R(Value)-ND	.98	8.13	68.25	422.50
	4	16	15	21.59	150	761-1-R(Value)-ND	1.00	9.16	83.25	499.50
	5	14	7	19.05	300	760-3-R(Value)-ND	.98	8.13	68.25	422.50
	5	16	8	21.59	300	761-3-R(Value)-ND	1.00	9.16	83.25	499.50
	6	14	24	19.05	150	760-5-R(Value)-ND	1.35	11.28	94.71	586.30
	6	16	28	21.59	150	761-5-R(Value)-ND	1.38	12.62	114.75	688.50
766	4	14	13	8.64	80	766-141-R(Value)-ND	1.22	9.72	68.04	421.20
	4	16	15	9.91	80	766-161-R(Value)-ND	1.22	9.72	68.04	421.20
	5	14	7	8.64	160	766-143-R(Value)-ND	1.22	9.72	68.04	421.20
	5	16	8	9.91	160	766-163-R(Value)-ND	1.22	9.72	68.04	421.20
	6	14	24	8.64	80	766-145-R(Value)-ND	1.43	11.40	79.80	494.00
	6	16	28	9.91	80	766-165-R(Value)-ND	1.43	11.40	79.80	494.00
767	4	14	13	9.91	100	767-141-R(Value)-ND	.75	6.00	42.00	260.00
	4	16	15	11.18	100	767-161-R(Value)-ND	.75	6.00	42.00	260.00
	5	14	7	9.91	200	767-143-R(Value)-ND	.75	6.00	42.00	260.00
	5	16	8	11.18	200	767-163-R(Value)-ND	.75	6.00	42.00	260.00
	6	14	24	9.91	100	767-145-R(Value)-ND	.90	7.20	50.40	312.00
	6	16	28	11.18	100	767-165-R(Value)-ND	.90	7.20	50.40	312.00
768	4	14	13	9.91	130	768-141-R(Value)-ND *NEW!*	.75	6.00	42.00	260.00
	4	16	15	11.18	150	768-161-R(Value)-ND *NEW!*	.75	6.00	42.00	260.00
	5	14	7	9.91	130	768-143-R(Value)-ND *NEW!*	.75	6.00	42.00	260.00
	5	16	8	11.18	150	768-163-R(Value)-ND *NEW!*	.75	6.00	42.00	260.00
	6	14	24	9.91	130	768-145-R(Value)-ND *NEW!*	.90	7.20	50.40	312.00
	6	16	28	11.18	150	768-165-R(Value)-ND *NEW!*	.90	7.20	50.40	312.00

* For complete part number, substitute the corresponding value from above chart in (Value).

NEW! Digi-Key® 766 Series Assortment Kits

Bussed Circuits

Set of 5 each of values in the series. 62 values (310 total pieces).
*Kit does not include value 330K ohm.
766-141-KIT-ND.......... **$249.00**

Set of 5 each of values in the series. 63 values (315 total pieces).
766-161-KIT-ND.......... **$249.00**

Isolated Circuits

Set of 5 each of values in the series. 63 values (315 total pieces).
766-143-KIT-ND.......... **$249.00**

Set of 5 each of values in the series. 61 values (305 total pieces).
*Kit does not include values 820, or 1.2K ohm.
766-163-KIT-ND.......... **$249.00**

Dual Terminator Circuits

Set of 5 each of values in the series. 8 values (40 total pieces).
766-DUAL-KIT-ND **$46.95**

NEW! Digi-Key® 767 Series Assortment Kits

Bussed Circuits

Set of 5 each of values in the series. 62 values (310 total pieces).
*Kit does not include value 3.9K ohm.
767-141-KIT-ND **$159.95**

Set of 5 each of values in the series. 63 values (315 total pieces).
767-161-KIT-ND **$159.95**

Isolated Circuits

Set of 5 each of values in the series. 62 values (310 total pieces).
*Kit does not include value 27 ohm.
767-143-KIT-ND **$159.95**

Set of 5 each of values in the series. 63 values (315 total pieces).
767-163-KIT-ND **$159.95**

Dual Terminator Circuits

Set of 5 each of values in the series. 8 values (40 total pieces).
767-DUAL-KIT-ND.......... **$34.95**

NEW! Digi-Key® 768 Series Assortment Kits

Bussed Circuits

Set of 5 each of values in the series. 62 values (310 total pieces).
* Kit does not include value 3.9K ohm.
768-141-KIT-ND **$159.95**

Set of 5 each of values in the series. 63 values (315 total pieces).
768-161-KIT-ND **$159.95**

Isolated Circuits

Set of 5 each of values in the series. 62 values (310 total pieces).
* Kit does not include value 27 ohm.
768-143-KIT-ND **$159.95**

Set of 5 each of values in the series. 63 values (315 total pieces).
768-163-KIT-ND **$159.95**

Dual Terminator Circuits

Set of 5 each of values in the series. 8 values (40 total pieces).
768-DUAL-KIT-ND.......... **$34.95**

Resistor Networks

4100R Series

4116R

Thick Film Molded DIPs

• Compatible with automatic insertion equipment • Copper leads for excellent heat dissipation • High temperature lead attachment to withstand reflow solder temperatures up to 260°C • Trifurcated Krimp-Joint™ lead attachment for product reliability and strength

Electrical Characteristics:

• **Max. Operating Voltage:** 100V. • **Temp. Coefficient of Resistance:** 50Ω to 2.2MΩ: ±100ppm/°C, below 50Ω: ±250ppm°C. • **Operating Temperature:** -55°C to +125°C

Environmental Characteristics:

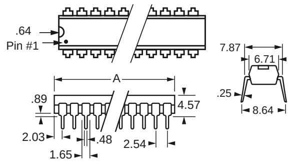
• **Insulation Resistance:** 10,000 megohms minimum • **Dielectric Withstanding Voltage:** 200 VRMS • **Lead Solderability/Solvent Resistance:** Meet requirements of MIL-R-83401

Physical Characteristics:

• **Flammability:** Conforms to UL94V-0 • **Lead Frame Material:** Copper (OLIN 194) 90/10 electroplate • **Body Material**: Novolac Epoxy

Resistance Tolerance:

• **Isolated/Bussed:** Below 50 ohms ±1 ohms; Above 50 ohms ±2% • **Dual Terminated:** Below 100 ohms ±2 ohms; Above 100 ohms ±2%



4800P Series

4816P

Thick Film Surface Mount Medium Body (5.59mm)

• Standard E.I.A. (SOGN-0002) package compatible with automatic placement equipment. • High temperature lead attachment to withstand reflow temperatures up to 260°C.

Electrical Characteristics:

• **Max. Operating Voltage:** 50V • **Temp. Coefficient of Resistance:** 50Ω and above: ±100ppm/°C; below 50Ω: ±250ppm°C • **Operating Temperature:** -55°C to +125°C

Environmental Characteristics:

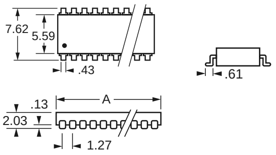
• **Insulation Resistance:** 10,000 megohms minimum. • **Dielectric Withstanding Voltage:** 200 VRMS • **Lead Solderability/Solvent Resistance:** Meet requirements of MIL-R-83401

Physical Characteristics:

• **Flammability:** Conforms to UL94V-0 • **Lead Frame Material:** Copper (OLIN 194) 60/40 solder dip • **Body Material**: Novolac Epoxy

Resistance Tolerance:

• **Isolated/Bussed:** Below 50 ohms ±1 ohms; Above 50 ohms ±2% • **Dual Terminated:** Below 100 ohms ±2 ohms; Above 100 ohms ±2%



All values listed in ohms.

Resistance Values (001 and 002)
Isolated and Bussed Circuits

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
220 (22)	221 (220)	202 (2K)	183 (18K)	154 (150K)
270 (27)	271 (270)	222 (2.2K)	203 (20K)	184 (180K)
330 (33)	331(330)	272 (2.7K)	223 (22K)	224 (220K)
390 (39)	391 (390)	332 (3.3K)	273 (27K)	274 (270K)
470 (47)	471 (470)	392 (3.9K)	333 (33K)	334 (330K)
560 (56)	561 (560)	472 (4.7K)	393 (39K)	394 (390K)
680 (68)	681 (680)	562 (5.6K)	473 (47K)	474 (470K)
820 (82)	821 (820)	682 (6.8K)	563 (56K)	564 (560K)
101 (100)	102 (1K)	822 (8.2K)	683 (68K)	684 (680K)
121 (120)	122 (1.2K)	103 (10K)	823 (82K)	824 (820K)
151 (150)	152 (1.5K)	123 (12K)	104 (100K)	105 (1M)
181 (180)	182 (1.8K)	153 (15K)	124 (120K)	

Resistance Values (003)
Dual Terminator Circuits

Code (Value)
181/391 (180/390)
221/271 (220/270)
221/331 (220/230)
331/391 (330/390)
331/471 (330/470)
302/622 (3K/6.2K)

4300R Series

4306R, 4308R and 4310R

Thick Film Molded SIPs, Low Profile

• Low profile provides compatibility with DIPs • Compatible with automatic insertion equipment • High temperature lead attachment to withstand reflow temperatures up to 260°C • Copper leads for excellent heat dissipation

Electrical Characteristics:

• **Max. Operating Voltage:** 100V • **Temp. Coefficient of Resistance:** 50Ω to 2.2MΩ: ±100ppm/°C; below 50Ω: ±250ppm°C • **Operating Temp.:** -55°C to +125°C • **Power Rating:** Derate to zero power from + 70°C to +125°C

Environmental Characteristics:

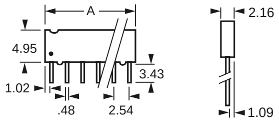
• **Insulation Resistance:** 10,000 megohms minimum • **Dielectric Withstanding Voltage:** 200 VRMS • **Lead Solderability/Solvent Resistance:** Meet requirements of MIL-R-83401

Physical Characteristics:

• **Flammability:** Conforms to UL94V-0 • **Lead Frame Material:** Copper (OLIN 194) 90/10 plated • **Body Material**: Novolac Epoxy

Resistance Tolerance:

• **Isolated/Bussed:** Below 50 ohms ±1 ohms; Above 50 ohms ±2% • **Dual Terminated:** Below 100 ohms ±2 ohms; Above 100 ohms ±2%



4600X Series

4606X, 4608X and 4610X

Thick Film Conformal SIPs, Low Profile

• Low Profile is compatible with DIPs • High temperature lead attachment to withstand reflow temperatures up to 260°C

Electrical Characteristics:

• **Max. Operating Voltage:** 100V • **Temp. Coefficient of Resistance:** 50Ω to 2.2MΩ: ±100ppm/°C, below 50Ω: ±250ppm°C • **Operating Temperature:** -55°C to +125°C

Environmental Characteristics:

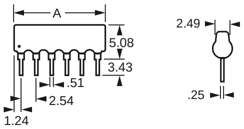
• **Insulation Resistance:** 10,000 megohms minimum • **Dielectric Withstanding Voltage:** 200 VRMS • **Lead Solderability/Solvent Resistance:** Meet requirements of MIL-R-83401

Physical Characteristics:

• **Flammability:** Conforms to UL94V-0 • **Lead Frame Material:** Copper (OLIN 194) 60/40 solder dip • **Body Material**: Epoxy resin/anhydride disphenol A

Resistance Tolerance:

• **Isolated/Bussed:** Below 50 ohms ±1 ohms; Above 50 ohms ±2% • **Dual Terminated:** Below 100 ohms ±2 ohms; Above 100 ohms ±2%



All values listed in ohms.

Resistance Values (001 and 002)
Isolated and Bussed Circuits

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
220 (22)	221 (220)	202 (2K)	183 (18K)	154 (150K)
270 (27)	271 (270)	222 (2.2K)	203 (20K)	184 (180K)
330 (33)	331(330)	272 (2.7K)	223 (22K)	224 (220K)
390 (39)	391 (390)	332 (3.3K)	273 (27K)	274 (270K)
470 (47)	471 (470)	392 (3.9K)	333 (33K)	334 (330K)
560 (56)	561 (560)	472 (4.7K)	393 (39K)	394 (390K)
680 (68)	681 (680)	562 (5.6K)	473 (47K)	474 (470K)
820 (82)	821 (820)	682 (6.8K)	563 (56K)	564 (560K)
101 (100)	102 (1K)	822 (8.2K)	683 (68K)	684 (680K)
121 (120)	122 (1.2K)	103 (10K)	823 (82K)	824 (820K)
151 (150)	152 (1.5K)	123 (12K)	104 (100K)	105 (1M)
181 (180)	182 (1.8K)	153 (15K)	124 (120K)	

Resistance Values (004)
Dual Terminator Circuits

Code (Value)
161/241 (160/240)
181/391 (180/390)
221/271 (220/270)
221/331 (220/330)
331/391 (330/390)
331/471 (330/470)
302/622 (3K/6.2K)

Fig. 1 – Isolated

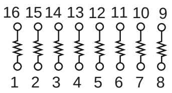


Fig. 2 – Bussed

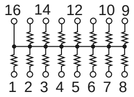


Fig. 3 – Dual Term

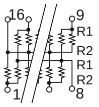


Fig. 4 – Dual Term

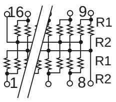


Fig. 5 – Isolated

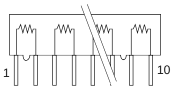


Fig. 6 – Bussed

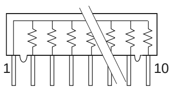
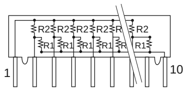


Fig. 7 – Dual Term



Series	Fig.	No. of Pins	No. of Res.	Dim. "A" (mm)	Element Power Rating (W @ 70°C)	Digi-Key* Part No.	Pricing						Bourns* Part No.
							1	10	50	100	500	1,000	
4100	1	16	8	21.97	.25	4116R-1-□□□-ND	.60	5.27	22.10	37.78	157.41	264.00	4116R-001-□□□
	2	16	15	21.97	.125	4116R-2-□□□-ND	.60	5.27	22.10	37.78	157.41	264.00	4116R-002-□□□
	3	16	28	21.97	.125	4116R-3-□□□/□□□-ND	1.27	11.28	47.32	80.89	337.04	566.00	4116R-003-□□□/□□□
4300	6	6	5	14.83	.20	4306R-1-□□□-ND	.47	4.19	17.55	30.00	125.00	210.00	4306R-101-□□□
	5	6	3	14.83	.30	4306R-2-□□□-ND	.47	4.19	17.55	30.00	125.00	210.00	4306R-102-□□□
	7	6	8	14.83	.20	4306R-4-□□□/□□□-ND	.67	5.89	24.70	42.22	175.93	296.00	4306R-104-□□□/□□□
	6	8	7	19.91	.20	4308R-1-□□□-ND	.54	4.81	20.15	34.44	143.52	241.00	4308R-101-□□□
	5	8	4	19.91	.30	4308R-2-□□□-ND	.54	4.81	20.15	34.44	143.52	241.00	4308R-102-□□□
	7	8	12	19.91	.20	4308R-4-□□□/□□□-ND	.74	6.51	27.30	46.67	194.44	327.00	4308R-104-□□□/□□□
	6	10	9	24.99	.20	4310R-1-□□□-ND	.65	5.74	24.05	41.11	171.30	288.00	4310R-101-□□□
	5	10	5	24.99	.30	4310R-2-□□□-ND	.65	5.74	24.05	41.11	171.30	288.00	4310R-102-□□□
	7	10	16	24.99	.20	4310R-4-□□□/□□□-ND	.88	7.75	32.50	55.56	231.48	389.00	4310R-104-□□□/□□□
4600	6	6	5	15.19	.20	4606X-1-□□□-ND	.25	2.23	9.36	16.00	66.67	112.00	4606X-101-□□□
	5	6	3	15.19	.30	4606X-2-□□□-ND	.25	2.23	9.36	16.00	66.67	112.00	4606X-102-□□□
	7	6	8	15.19	.20	4606X-4-□□□/□□□-ND	.53	4.65	19.50	33.33	138.89	233.00	4606X-104-□□□/□□□
	6	8	7	20.27	.20	4608X-1-□□□-ND	.32	2.79	11.70	20.00	83.33	140.00	4608X-101-□□□
	5	8	4	20.27	.30	4608X-2-□□□-ND	.32	2.79	11.70	20.00	83.33	140.00	4608X-102-□□□
	7	8	12	20.27	.20	4608X-4-□□□/□□□-ND	.63	5.58	23.40	40.00	166.67	280.00	4608X-104-□□□/□□□
	6	10	9	25.35	.20	4610X-1-□□□-ND	.39	3.41	14.30	24.44	101.85	171.00	4610X-101-□□□
	5	10	5	25.35	.30	4610X-2-□□□-ND	.39	3.41	14.30	24.44	101.85	171.00	4610X-102-□□□
	7	10	16	25.35	.20	4610X-4-□□□/□□□-ND	.70	6.20	26.00	44.44	185.19	311.00	4610X-104-□□□/□□□
4800	1	16	8	12.45	.160	4816P-1-□□□-ND	1.12	9.92	41.60	71.00	300.00	500.00	4816P-T01-□□□
	2	16	15	12.45	.080	4816P-2-□□□-ND	1.12	9.92	41.60	71.00	300.00	500.00	4816P-T02-□□□
	4	16	28	12.45	.080	4816P-3-□□□/□□□-ND	1.75	15.50	65.00	110.94	468.75	781.00	4816P-T03-□□□/□□□

* For complete part number, substitute the corresponding resistance code (listed above) for □□□.

Panasonic "ZNR" Transient/Surge Absorbers Type D and E

Features: • Excellent clamping voltage characteristic and fast response time (50nsec.) when subjected to impulse surges. Eliminates the discharge lag that is indurative of gap-type arrestors. • Bilateral and symmetrical V-1 characteristic curve. The ZNR can, therefore, be used both in AC and DC circuits, for protection of either positive or negative transients. Panasonic ZNRs are zinc oxide nonlinear resistors whose resistance changes as a function of the applied voltage. The ZNR has a bilateral and symmetrical V-1 characteristic curve and can therefore be used in circuits in place of back-to-back zener diodes. This gives your circuit clamping protection in either direction. The ZNR thus provides a highly reliable and economical way to protect against repeated high voltage transients and surges such as those produced by lightning, switching surges and noise spikes.

Ratings: Varistor Voltage: The voltage between two terminals with the specified measuring current CmA DC applied is called Vc. The measurement shall be made as fast as possible to avoid heat affection.

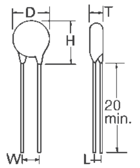
Maximum Allowable Voltage: The recommended maximum sine wave voltage (rms) or the maximum DC voltage that can be applied continuously.

Withstanding Surge Current: The maximum current within the varistor voltage change of 510% with the standard impulse current (8/20µ sec.) applied one time.

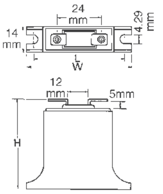
Maximum Clamping Voltage: The maximum voltage between two terminals with the specified standard impulse current (8/20µ sec.) illustrated.

V Series: ZNR Surge Absorbers Type D,Series V, have been put on the market as a result of the development of a new ceramic material composition, higher quality of parts and materials used in the varistor and an improvement of manufacturing process control. They have a smaller size but a larger surge current and energy ratings so that they can be used in smaller equipment and exhibit their excellent surge protection ability in severe conditions. **Features:** • Improved in "Surge Current Handling Capability (@ 8/20 µs, 2 times)" by 1.6 to 3.0 times over the current conventional type. • Very large "Energy Handling Capability" absorbing transient overvoltages in compact sizes • Varistor voltages 250V-1850V are listed under UL1414, UL1449 and CSA 2221 01, varistor voltages 82-150V are UL1449 only • Wide products range for transient/surge protection on AC 100V to AC 480V nominal system with the maximum peak current ratings of 600A to 6500A (@ 8/20 µs, 2 times) • Operating Temperature Range -40°C to 85°C

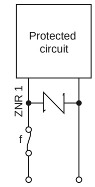
D-Type
Series V



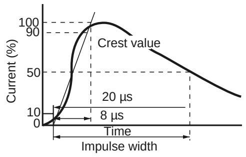
E-Type



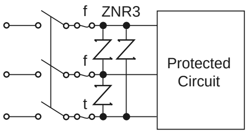
Line to Line Protection
DC AC Single Phase



Maximum Clamping Voltage



AC Three Phase



Ser-ies	Type	Max. Allow. Volt. (V)		Var-istor Volt. ±10% (V)	Max. Clamp Volt. @ Test Current (8/20µsec.)		Surge Cur-rent (A)	Dimensions (mm)					Digi-Key Part No.	Pricing						Panasonic Part No.
		AC	DC		Vc(V)	Ip(A)		D Max.	T Max.	W ±1	H Max.	L ±1		1	10	100	1,000	5,000	10,000	
5	D Ser.V	11	14	18	40	1	125	7.0	4.5	5.0	10.0	1.5	P7282-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D180
		14	18	22	48	1	125	7.0	4.5	5.0	10.0	1.5	P7283-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZV05D220
		17	22	27	60	1	125	7.0	4.5	5.0	10.0	1.5	P7284-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D270
		20	26	33	73	1	125	7.0	4.5	5.0	10.0	1.5	P7285-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D330
		25	31	39	86	1	125	7.0	4.5	5.0	10.0	1.5	P7286-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D390
		30	38	47	104	1	125	7.0	4.5	5.0	10.0	1.5	P7287-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D470
		35	45	56	123	1	125	7.0	4.5	5.0	10.0	1.5	P7288-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D560
		40	56	68	150	1	125	7.0	4.5	5.0	10.0	1.5	P7289-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D680
		50	65	82	145	5	600	7.0	4.1	5.0	10.0	1.4	P7180-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D820
		60	85	100	175	5	600	7.0	4.3	5.0	10.0	1.6	P7240-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D101
		75	100	120	210	5	600	7.0	4.5	5.0	10.0	1.8	P7241-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D121
		95	125	150	260	5	600	7.0	4.8	5.0	10.0	2.1	P7242-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D151
		130	170	200	355	5	600	7.0	4.4	5.0	10.0	1.7	P7181-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D201
		140	180	220	380	5	600	7.0	4.5	5.0	10.0	1.8	P7182-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D221
		150	200	240	415	5	600	7.0	4.6	5.0	10.0	1.9	P7183-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D241
		175	225	270	475	5	600	7.0	4.8	5.0	10.0	2.1	P7184-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D271
		210	270	330	570	5	600	7.0	5.1	5.0	10.0	2.4	P7185-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D331
		230	300	360	620	5	600	7.0	5.3	5.0	10.0	2.5	P7243-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D361
		250	320	390	675	5	600	7.0	5.4	5.0	10.0	2.7	P7244-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D391
		275	350	430	745	5	600	7.0	5.6	5.0	10.0	2.9	P7245-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D431
		300	385	470	810	5	600	7.0	5.8	5.0	10.0	3.1	P7186-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D471
7	D Ser.V	11	14	18	36	2.5	250	8.5	4.5	5.0	11.5	1.3	P7290-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D180
		14	18	22	43	2.5	250	8.5	4.6	5.0	11.5	1.4	P7291-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D220
		17	22	27	53	2.5	250	8.5	4.7	5.0	11.5	1.5	P7292-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D270
		20	26	33	65	2.5	250	8.5	4.9	5.0	11.5	1.7	P7293-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D330
		25	31	39	77	2.5	250	8.5	4.8	5.0	11.5	1.6	P7294-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D390
		30	38	47	93	2.5	250	8.5	4.9	5.0	11.5	1.7	P7295-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D470
		35	45	56	110	2.5	250	8.5	5.0	5.0	11.5	1.8	P7296-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D560
		40	56	68	135	2.5	250	8.5	5.2	5.0	11.5	2.0	P7297-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D680
		50	65	82	135	10	1250	8.5	4.1	5.0	11.5	1.4	P7187-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D820
		60	85	100	165	10	1250	8.5	4.3	5.0	11.5	1.6	P7246-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D101
		75	100	120	200	10	1250	8.5	4.5	5.0	11.5	1.8	P7247-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D121
		95	125	150	250	10	1250	8.5	4.8	5.0	11.5	2.1	P7248-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D151
		130	170	200	340	10	1250	8.5	4.4	5.0	11.5	1.7	P7188-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D201
		140	180	220	360	10	1250	8.5	4.5	5.0	11.5	1.8	P7189-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D221
		150	200	240	395	10	1250	8.5	4.6	5.0	11.5	1.9	P7190-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D241
		175	225	270	455	10	1250	8.5	4.8	5.0	11.5	2.1	P7200-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D271
		210	270	330	545	10	1250	8.5	5.1	5.0	11.5	2.4	P7201-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D331
		230	300	360	595	10	1250	8.5	5.3	5.0	11.5	2.5	P7249-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D361
		250	320	390	650	10	1250	8.5	5.4	5.0	11.5	2.7	P7250-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D391
		275	350	430	710	10	1250	8.5	5.8	5.0	11.5	2.9	P7251-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D431
		300	385	470	775	10	1250	8.5	5.8	5.0	11.5	3.1	P7202-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D471
		320	410	510	845	10	1250	8.5	6.0	5.0	11.5	3.3	P7203-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D511

(Continued)

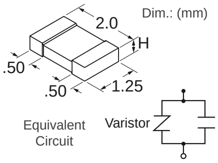
Series	Type	Max. Allow. Volt. (V)		Varistor Volt. ±10% (V)	Max. Clamp Volt. @ Test Current (8/20µsec.)		Surge Current (A)	Dimensions (mm)					Digi-Key Part No.	Pricing						Panasonic Part No.
		AC	DC		Vc(V)	Ip(A)		D Max.	T Max.	W ±1	H Max.	L ±1		1	10	100	1,000	5,000	10,000	
10	D Ser.V	11	14	18	36	5	500	11.5	4.6	7.5	14.5	1.3	P7298-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D180
		14	18	22	43	5	500	11.5	4.7	7.5	14.5	1.4	P7299-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D220
		17	22	27	53	5	500	11.5	4.8	7.5	14.5	1.5	P7300-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D270
		20	26	33	65	5	500	11.5	5.0	7.5	14.5	1.7	P7301-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D330
		25	31	39	77	5	500	11.5	4.9	7.5	14.5	1.6	P7302-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D390
		30	38	47	93	5	500	11.5	5.0	7.5	14.5	1.7	P7303-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D470
		35	45	56	110	5	500	11.5	5.1	7.5	14.5	1.8	P7304-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D560
		40	56	68	135	5	500	11.5	5.3	7.5	14.5	2.0	P7305-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D680
		50	65	82	135	25	2500	11.5	4.5	7.5	14.5	1.6	P7204-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D820
		60	85	100	165	25	2500	11.5	4.7	7.5	14.5	1.8	P7252-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D101
		75	100	120	200	25	2500	11.5	4.9	7.5	14.5	2.0	P7253-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D121
		95	125	150	250	25	2500	11.5	5.2	7.5	14.5	2.3	P7254-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D151
		130	170	200	340	25	2500	11.5	4.8	7.5	14.5	1.9	P7205-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D201
		140	180	220	360	25	2500	11.5	4.9	7.5	14.5	2.0	P7206-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D221
		150	200	240	395	25	2500	11.5	5.0	7.5	14.5	2.1	P7207-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D241
		175	225	270	455	25	2500	11.5	5.2	7.5	14.5	2.3	P7208-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D271
		210	270	330	545	25	2500	11.5	5.5	7.5	14.5	2.6	P7209-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D331
		230	300	360	595	25	2500	11.5	5.7	7.5	14.5	2.8	P7255-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D361
		250	320	390	650	25	2500	11.5	5.8	7.5	14.5	2.9	P7256-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D391
		275	350	430	710	25	2500	11.5	6.0	7.5	14.5	3.1	P7257-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D431
		300	385	470	775	25	2500	11.5	6.2	7.5	14.5	3.3	P7210-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D471
		320	410	510	845	25	2500	11.5	6.4	7.5	14.5	3.5	P7211-ND	.57	4.92	41.00	234.00	219.00/M	212.00/M	ERZ-V10D511
		385	505	620	1025	25	2500	12.5	7.1	7.5	15.5	4.2	P7258-ND	.56	4.83	40.25	229.00	215.00/M	208.00/M	ERZ-V10D621
		420	560	680	1120	25	2500	12.5	7.4	7.5	15.5	4.5	P7259-ND	.56	4.83	40.25	229.00	215.00/M	208.00/M	ERZ-V10D681
		460	615	750	1240	25	2500	12.5	7.8	7.5	15.5	4.9	P7260-ND	.58	4.95	41.25	235.00	220.00/M	213.00/M	ERZ-V10D751
		510	670	820	1355	25	2500	12.5	8.1	7.5	15.5	5.2	P7212-ND	.58	4.95	41.25	235.00	220.00/M	213.00/M	ERZ-V10D821
		550	745	910	1500	25	2500	12.5	8.6	7.5	15.5	5.7	P7213-ND	.77	6.57	54.75	312.00	292.00/M	283.00/M	ERZ-V10D911
		625	825	1000	1650	25	2500	12.5	9.1	7.5	15.5	6.2	P7261-ND	.77	6.57	54.75	312.00	292.00/M	283.00/M	ERZ-V10D102
		680	895	1100	1815	25	2500	12.5	9.7	7.5	15.5	6.8	P7214-ND	.77	6.57	54.75	312.00	292.00/M	283.00/M	ERZ-V10D112
		1000	1465	1800	2970	25	2500	13.5	14.4	11.0	16.5	10.5	P7215-ND	1.33	11.40	95.00	542.00	507.00/M	490.00/M	ERZ-V10D182
14	D Ser.V	11	14	18	36	10	1000	15.5	4.6	7.5	18.5	1.3	P7306-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D180
		14	18	22	43	10	1000	15.5	4.7	7.5	18.5	1.4	P7307-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D220
		17	22	27	53	10	1000	15.5	4.8	7.5	18.5	1.5	P7308-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D270
		20	26	33	65	10	1000	15.5	5.0	7.5	18.5	1.7	P7309-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D330
		25	31	39	77	10	1000	15.5	4.9	7.5	18.5	1.6	P7310-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D390
		30	38	47	93	10	1000	15.5	5.0	7.5	18.5	1.7	P7311-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D470
		35	45	56	110	10	1000	15.5	5.1	7.5	18.5	1.8	P7312-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D560
		40	56	68	135	10	1000	15.5	5.3	7.5	18.5	2.0	P7313-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D680
		50	65	82	135	50	4500	15.5	4.5	7.5	18.5	1.6	P7216-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D820
		60	85	100	165	50	4500	15.5	4.7	7.5	18.5	1.8	P7262-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D101
		75	100	120	200	50	4500	15.5	4.9	7.5	18.5	2.0	P7263-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D121
		95	125	150	250	50	4500	15.5	5.2	7.5	18.5	2.3	P7264-ND	.58	4.95	41.25	235.00	220.00/M	213.00/M	ERZ-V14D151
		130	170	200	340	50	4500	15.5	4.8	7.5	18.5	1.9	P7217-ND	.58	4.95	41.25	235.00	220.00/M	213.00/M	ERZ-V14D201
		140	180	220	360	50	4500	15.5	4.9	7.5	18.5	2.0	P7218-ND	.58	4.95	41.25	235.00	220.00/M	213.00/M	ERZ-V14D221
		150	200	240	395	50	4500	15.5	5.0	7.5	18.5	2.1	P7219-ND	.58	4.95	41.25	235.13	220.00/M	213.00/M	ERZ-V14D241
		175	225	270	455	50	4500	15.5	5.2	7.5	18.5	2.3	P7220-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D271
		210	270	330	545	50	4500	15.5	5.5	7.5	18.5	2.6	P7221-ND	.67	5.70	47.50	271.00	253.00/M	245.00/M	ERZ-V14D331
		230	300	360	595	50	4500	15.5	5.7	7.5	18.5	2.8	P7265-ND	.67	5.70	47.50	271.00	253.00/M	245.00/M	ERZ-V14D361
		250	320	390	650	50	4500	15.5	5.8	7.8	18.5	2.9	P7266-ND	.67	5.70	47.50	271.00	253.00/M	245.00/M	ERZ-V14D391
		275	350	430	710	50	4500	15.5	6.0	7.5	18.5	3.1	P7267-ND	.67	5.70	47.50	271.00	253.00/M	245.00/M	ERZ-V14D431
		300	385	470	775	50	4500	15.5	6.2	7.5	18.5	3.3	P7222-ND	.67	5.70	47.50	271.00	253.00/M	245.00/M	ERZ-V14D471
		320	410	510	845	50	4500	15.5	6.4	7.5	18.5	3.5	P7223-ND	1.02	8.70	72.50	413.00	387.00/M	374.00/M	ERZ-V14D511
		385	505	620	1025	50	4500	16.0	7.1	7.5	19.0	4.2	P7268-ND	1.05	8.97	74.75	426.00	399.00/M	386.00/M	ERZ-V14D621
		420	560	680	1120	50	4500	16.0	7.4	7.5	19.0	4.5	P7269-ND	1.05	8.97	74.75	426.00	399.00/M	386.00/M	ERZ-V14D681
		460	615	750	1240	50	4500	16.0	7.8	7.5	19.0	4.9	P7270-ND	1.05	8.97	74.75	426.00	399.00/M	386.00/M	ERZ-V14D751
		510	670	820	1355	50	4500	16.0	8.1	7.5	19.0	5.2	P7224-ND	1.05	8.97	74.75	426.00	399.00/M	386.00/M	ERZ-V14D821
		550	745	910	1500	50	4500	16.0	8.6	7.5	19.0	5.7	P7225-ND	1.44	12.33	102.75	586.00	548.00/M	530.00/M	ERZ-V14D911
		625	825	1000	1650	50	4500	16.0	9.1	7.5	19.0	6.2	P7271-ND	1.44	12.33	102.75	586.00	548.00/M	530.00/M	ERZ-V14D102
		680	895	1100	1815	50	4500	16.0	9.7	7.5	19.0	6.8	P7226-ND	1.44	12.33	102.75	586.00	548.00/M	530.00/M	ERZ-V14D112
		1000	1465	1800	2970	50	4500	17.0	14.4	15.0	20.5	10.5	P7227-ND	1.99	17.04	142.00	809.00	757.00/M	733.00/M	ERZ-V14D182

(Continued)

Series	Type	Max. Allow. Volt. (V) AC	Max. Allow. Volt. (V) DC	Varistor Volt. ±10% (V)	Max. Clamp Volt. @ Test Current (8/20µsec.) Vc(V)	Max. Clamp Volt. @ Test Current (8/20µsec.) Ip(A)	Surge Current (A)	Dimensions (mm) D Max.	Dimensions (mm) T Max.	Dimensions (mm) W ±1	Dimensions (mm) H Max.	Dimensions (mm) L ±1	Digi-Key Part No.	Pricing 1	Pricing 10	Pricing 100	Pricing 1,000	Pricing 5,000	Pricing 10,000	Panasonic Part No.
20	D Ser.V	11	14	18	36	20	2000	21.5	5.1	10.0	24.5	1.5	P7314-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D180
		14	18	22	43	20	2000	21.5	5.2	10.0	24.5	1.6	P7315-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D220
		17	22	27	53	20	2000	21.5	5.3	10.0	24.5	1.7	P7316-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D270
		20	26	33	65	20	2000	21.5	5.5	10.0	24.5	1.9	P7317-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D330
		25	31	39	77	20	2000	21.5	5.5	10.0	24.5	1.9	P7318-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D390
		30	38	47	93	20	2000	21.5	5.6	10.0	24.5	2.0	P7319-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D470
		35	45	56	110	20	2000	21.5	5.7	10.0	24.5	2.1	P7320-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D560
		40	56	68	135	20	2000	21.5	5.8	10.0	24.5	2.2	P7321-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D680
		50	65	82	135	100	6500	21.5	4.9	10.0	24.5	1.8	P7228-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D820
		60	85	100	165	100	6500	21.5	5.1	10.0	24.5	2.0	P7272-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D101
		75	100	120	200	100	6500	21.5	5.3	10.0	24.5	2.2	P7273-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D121
		95	125	150	250	100	6500	21.5	5.6	10.0	24.5	2.5	P7274-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D151
		130	170	200	340	100	6500	21.5	5.2	7.5	24.5	2.1	P7322-ND	1.14	9.75	81.25	463.00	433.00/M	419.00/M	ERZ-V20R201
		130	170	200	340	100	6500	21.5	5.2	10.0	24.5	2.1	P7229-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D201
		140	180	220	360	100	6500	21.5	5.3	7.5	24.5	2.2	P7323-ND	1.14	9.75	81.25	463.00	433.00/M	419.00/M	ERZ-V20R221
		140	180	220	360	100	6500	21.5	5.3	10.0	24.5	2.2	P7230-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D221
		150	200	240	395	100	6500	21.5	5.4	7.5	24.5	2.3	P7324-ND	.85	7.29	60.75	346.28	324.00/M	313.47/M	ERZ-V20R241
		150	200	240	395	100	6500	21.5	5.4	10.0	24.5	2.3	P7231-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D241
		175	225	270	455	100	6500	21.5	5.6	7.5	24.5	2.5	P7325-ND	.85	7.29	60.75	346.28	324.00/M	313.47/M	ERZ-V20R271
		175	225	270	455	100	6500	21.5	5.6	10.0	24.5	2.5	P7232-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D271
		210	270	330	545	100	6500	21.5	5.9	7.5	24.5	2.8	P7326-ND	1.26	10.77	89.75	511.58	478.67/M	463.11/M	ERZ-V20R331
		210	270	330	545	100	6500	21.5	5.9	10.0	24.5	2.8	P7233-ND	1.14	9.81	81.75	466.00	436.00/M	422.00/M	ERZ-V20D331
		230	300	360	595	100	6500	21.5	6.1	7.5	24.5	3.0	P7327-ND	1.26	10.77	89.75	511.58	478.67/M	463.11/M	ERZ-V20R361
		230	300	360	595	100	6500	21.5	6.1	10.0	24.5	3.0	P7275-ND	1.14	9.81	81.75	466.00	436.00/M	422.00/M	ERZ-V20D361
		250	320	390	650	100	6500	21.5	6.2	7.5	24.5	3.1	P7328-ND	1.26	10.77	89.75	511.58	478.67/M	463.11/M	ERZ-V20R391
		250	320	390	650	100	6500	21.5	6.2	10.0	24.5	3.1	P7276-ND	1.14	9.81	81.75	466.00	436.00/M	422.00/M	ERZ-V20D391
		275	350	430	710	100	6500	21.5	6.4	7.5	24.5	3.3	P7329-ND	1.26	10.77	89.75	511.58	478.67/M	463.11/M	ERZ-V20R431
		275	350	430	710	100	6500	21.5	6.4	10.0	24.5	3.3	P7277-ND	1.14	9.81	81.75	466.00	436.00/M	422.00/M	ERZ-V20D431
		300	385	470	775	100	6500	21.5	6.6	7.5	24.5	3.5	P7330-ND	1.26	10.77	89.75	511.58	478.67/M	463.11/M	ERZ-V20R471
		300	385	470	775	100	6500	21.5	6.6	10.0	24.5	3.5	P7234-ND	1.14	9.81	81.75	466.00	436.00/M	422.00/M	ERZ-V20D471
		320	410	510	845	100	6500	21.5	6.8	7.5	24.5	3.7	P7331-ND	1.26	10.77	89.75	511.58	478.67/M	463.11/M	ERZ-V20R511
		320	410	510	845	100	6500	21.5	6.8	10.0	24.5	3.7	P7235-ND	1.14	9.81	81.75	466.00	436.00/M	422.00/M	ERZ-V20D511
		385	505	620	1025	100	6500	22.5	7.5	10.0	25.5	4.4	P7278-ND	1.82	15.63	130.25	742.00	695.00/M	672.00/M	ERZ-V20D621
		420	560	680	1120	100	6500	22.5	7.8	10.0	25.5	4.7	P7279-ND	1.82	15.63	130.25	742.00	695.00/M	672.00/M	ERZ-V20D681
		460	615	750	1240	100	6500	22.5	8.2	10.0	25.5	5.1	P7280-ND	1.82	15.63	130.25	742.00	695.00/M	672.00/M	ERZ-V20D751
		510	670	820	1355	100	6500	22.5	8.5	10.0	25.5	5.4	P7236-ND	1.82	15.63	130.25	742.00	695.00/M	672.00/M	ERZ-V20D821
		550	745	910	1500	100	6500	22.5	9.0	10.0	25.5	5.9	P7237-ND	2.41	20.67	172.25	982.00	919.00/M	889.00/M	ERZ-V20D911
		625	825	1000	1650	100	6500	22.5	9.5	10.0	25.5	6.4	P7281-ND	2.41	20.67	172.25	982.00	919.00/M	889.00/M	ERZ-V20D102
		680	895	1100	1815	100	6500	22.5	10.1	10.0	25.5	7.0	P7238-ND	2.41	20.67	172.25	982.00	919.00/M	889.00/M	ERZ-V20D112
		1000	1465	1800	2970	100	6500	23.5	14.8	15.0	28.0	10.7	P7239-ND	3.75	32.13	267.75	1526.00	1428.00/M	1382.00/M	ERZ-V20D182
7	D	140	180	220	360	10	1200	9.0	5.3	5.0	12.0	2.1	P7066-ND	.46	3.90	32.50	185.00	173.00/M	168.00/M	ERZ-C07DK221U
10	D	95	125	150	250	25	2500	13.5	5.5	7.5	16.5	2.2	P7057-ND	.63	5.40	45.00	257.00	240.00/M	232.00/M	ERZ-C10DK151
		250	320	390	650	25	2500	14.0	6.8	7.5	17.0	3.4	P7087-ND	.63	5.40	45.00	257.00	240.00/M	232.00/M	ERZ-C10DK391U
20	D	60	85	100	165	100	6500	23.0	5.6	10.0	27.0	2.0	P7049-ND	1.13	9.69	80.75	460.00	431.00/M	417.00/M	ERZ-C20DK101
		385	505	620	1025	100	6500	24.0	7.6	10.0	28.0	4.1	P7102-ND	2.65	22.68	189.00	1077.00	1008.00/M	975.00/M	ERZ-C20DK621U
20	E	130	170	200	340	100	8000	—	—	48.0	42.0	39.0	P7126-ND	20.58	176.40	1470.00	8379.00	7840.00/M	7585.00/M	ERZ-C20EK201
		150	200	240	395	100	8000	—	—	48.0	42.0	39.0	P7127-ND	20.58	176.40	1470.00	8379.00	7840.00/M	7585.00/M	ERZ-C20EK241
		250	320	390	650	100	8000	—	—	48.0	42.0	39.0	P7128-ND	24.50	210.00	1750.00	9975.00	9333.00/M	9030.00/M	ERZ-C20EK391
25	E	130	170	200	340	150	15000	—	—	60.0	55.0	51.0	P7129-ND	36.72	314.73	2622.75	14950.00	13988.00/M	13533.00/M	ERZ-C25EK201
		150	200	240	395	150	15000	—	—	60.0	55.0	51.0	P7130-ND	36.72	314.73	2622.75	14950.00	13988.00/M	13533.00/M	ERZ-C25EK241
		250	320	390	650	150	15000	—	—	60.0	55.0	51.0	P7131-ND	43.72	374.70	3122.50	17798.00	16653.00/M	16112.00/M	ERZ-C25EK391
		510	670	820	1355	150	15000	—	—	60.0	55.0	51.0	P7157-ND	45.17	387.15	3226.25	18390.00	17207.00/M	16647.00/M	ERZ-C25EK821
32	E	130	170	200	340	200	25000	—	—	60.0	55.0	51.0	P7132-ND	45.56	390.51	3254.25	18549.00	17356.00/M	16792.00/M	ERZ-C32EK201
		150	200	240	395	200	25000	—	—	60.0	55.0	51.0	P7133-ND	45.56	390.51	3254.25	18549.00	17356.00/M	16792.00/M	ERZ-C32EK241
		250	320	390	650	200	25000	—	—	60.0	55.0	51.0	P7134-ND	47.39	406.17	3384.75	19293.00	18052.00/M	17465.00/M	ERZ-C32EK391
		550	1500	910	1500	200	25000	—	—	60.0	55.0	51.0	P7135-ND	62.70	537.42	4478.50	25527.00	23885.00/M	23109.00/M	ERZ-C32EK911

Panasonic

Multilayer Varistor Strontium Titanate (0805 Pkg.)



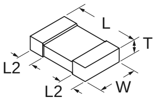
For EMI noise suppression and transient surge protection. **Features:** • Multilayer monolithic construction of SrTiO3 ceramics • Low varistor voltage with high parallel capacitance • Fast response to high speed transient overvoltage for ESD protection (IEC1000-4-2) • dV/dt reduction resulting from the large capacitance • Large withstanding surge and energy capabilities • Operating Temperature Range: -40°C to 85°C

Appl. Circuit	Max. Allow.	Varistor Voltage	Cap.		Max. Peak Current	Max. Energy	Dim. (mm)		Cut Tape Price Each				Tape & Reel Pricing		
DC	Volt.	(V0.1mA)	@ 1KHz	Tolerance	(8/20μs, 2 times)	(2ms)	H	Digi-Key Part No.	1	10	100	Digi-Key Part No.	2,000	5,000	Panasonic Part No.
5V Line	DC06	8-15V	22000	+80%/-20%	25A	0.2J	1.0	P223ZJCT-ND	1.88	1.67	1.40	P223ZJTR-ND	—	766.00/M	EZJ-S2VB223Z
12V Line	DC18	24-35V	8200	+80%/-20%	25A	0.2J	1.45	P822ZJCT-ND	1.57	1.39	1.17	P822ZJTR-ND	640.00/M	—	EZJ-S2YC822Z
24V Line	DC30	40-60V	4700	+80%/-20%	25A	0.2J	1.45	P472ZJCT-ND	1.86	1.65	1.39	P472ZJTR-ND	761.00/M	—	EZJ-S2YD472Z

Panasonic

Multilayer Varistor Zinc Oxide Type (0603 and 0805 Sizes)

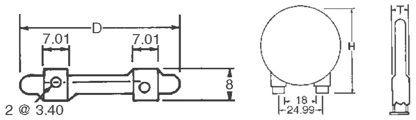
Features:
- Surge/Noise suppression for general electronics
- Designed for both Flow and Reflow soldering
- Operating Temperature Range: -40°C ~ 125°C



	Varistor Voltage	Max. Voltage	Clamping Voltage	Max. Energy	Peak Current	Dimensions (mm)					Cut Tape Price Each				Tape & Reel Pricing	
Size	±10%	VDC	8/20μs, 2A	(J)	(A)	L	W	T	L2	Digi-Key Part No.	1	10	100	Digi-Key Part No.	4,000	Panasonic Part No.
0603	27	20	50	0.05	20	1.6	0.8	0.8	0.3	P10862CT-ND	1.09	.97	.81	P10862TR-ND	443.00/M	EZJ-Z1V270G
0603	33	26	58	0.05	20	1.6	0.8	0.8	0.3	P10863CT-ND	1.09	.97	.81	P10863TR-ND	443.00/M	EZJ-Z1V330G
0805	27	20	50	0.1	30	2	1.25	0.8	0.5	P10864CT-ND	1.19	1.06	.89	P10864TR-ND	485.00/M	EZJ-Z2V270G
0805	33	26	58	0.1	30	2	1.25	0.8	0.5	P10865CT-ND	1.19	1.06	.89	P10865TR-ND	485.00/M	EZJ-Z2V330G

Panasonic

"ZNR" With Tabs, Type C Series 32 and 40



These are heavy duty type ZNR with very unique tab terminals which are used as electrical connecting terminals and also its mounting legs. This ZNR is meant for application in power supplies or transient voltage surge suppressor units where high surge current or high surge energy absorption is required.

Features: • High energy handling capability (210 to 710 joules) • Large withstanding surge current (25 to 30kA) • Compact size • Common terminals for electrical connection & mounting • UL recognized.

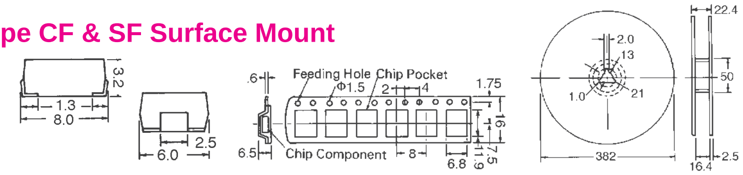
		Max. Allow. Volt. (V)		Varistor Volt. ±10%	Max. Clamp Volt. @ Test Current (8/20μsec.)		Surge Cur-rent	Dimensions (mm)				Pricing						
Ser-ies	Type	AC	DC	(V)	Vc(V)	Lp(A)	(kA)	D max.	T ±.99	H max.	Digi-Key Part No.	1	10	100	1,000	5,000	10,000	Panasonic Part No.
32	C	130	170	200	340	200	25	35.99	7.49	46.00	P7158-ND	16.53	141.69	1180.75	6730.00	6297.00/M	6093.00/M	ERZ-C32CK201W
		150	200	240	395	200	25	35.99	7.49	46.00	P7159-ND	16.53	141.69	1180.75	6730.00	6297.00/M	6093.00/M	ERZ-C32CK241W
		230	300	360	595	200	25	35.99	8.99	46.00	P7160-ND	17.70	151.71	1264.25	7206.00	6743.00/M	6524.00/M	ERZ-C32CK361W
		250	320	390	650	200	25	35.99	8.99	46.00	P7161-ND	17.70	151.71	1264.25	7206.00	6743.00/M	6524.00/M	ERZ-C32CK391W
		275	350	430	710	200	25	35.99	8.99	46.00	P7162-ND	17.70	151.71	1264.25	7206.00	6743.00/M	6524.00/M	ERZ-C32CK431W
		385	505	620	1025	200	25	35.99	9.70	46.00	P7163-ND	19.96	171.09	1425.75	8127.00	7604.00/M	7357.00/M	ERZ-C32CK621W
		420	560	680	1120	200	25	35.99	9.70	46.00	P7164-ND	19.96	171.09	1425.75	8127.00	7604.00/M	7357.00/M	ERZ-C32CK681W
		460	615	750	1240	200	25	35.99	11.51	46.00	P7165-ND	19.96	171.09	1425.75	8127.00	7604.00/M	7357.00/M	ERZ-C32CK751W
		485	640	780	1290	200	25	35.99	11.51	46.00	P7166-ND	19.96	171.09	1425.75	8127.00	7604.00/M	7357.00/M	ERZ-C32CK781W
		510	670	820	1355	200	25	35.99	11.51	46.00	P7167-ND	21.75	186.45	1553.75	8856.00	8287.00/M	8017.00/M	ERZ-C32CK821W
		550	745	910	1500	200	25	35.99	11.51	46.00	P7168-ND	23.39	200.49	1670.75	9523.00	8911.00/M	8621.00/M	ERZ-C32CK911W
40	C	130	170	200	340	250	30	43.99	7.49	50.01	P7169-ND	24.79	212.52	1771.00	10095.00	9445.00/M	9138.00/M	ERZ-C40CK201W
		150	200	240	395	250	30	43.99	7.49	50.01	P7170-ND	24.79	212.52	1771.00	10095.00	9445.00/M	9138.00/M	ERZ-C40CK241W
		230	300	360	595	250	30	43.99	8.99	50.01	P7171-ND	26.43	226.56	1888.00	10762.00	10069.00/M	9742.00/M	ERZ-C40CK361W
		250	320	390	650	250	30	43.99	8.99	50.01	P7172-ND	26.43	226.56	1888.00	10762.00	10069.00/M	9742.00/M	ERZ-C40CK391W
		275	350	430	710	250	30	43.99	8.99	50.01	P7173-ND	26.43	226.56	1888.00	10762.00	10069.00/M	9742.00/M	ERZ-C40CK431W
		385	505	620	1025	250	30	43.99	9.70	50.01	P7174-ND	31.03	265.98	2216.50	12634.00	11821.00/M	11437.00/M	ERZ-C40CK621W
		420	560	680	1120	250	30	43.99	9.70	50.01	P7175-ND	31.03	265.98	2216.50	12634.00	11821.00/M	11437.00/M	ERZ-C40CK681W
		460	615	750	1240	250	30	43.99	11.51	50.01	P7176-ND	31.03	265.98	2216.50	12634.00	11821.00/M	11437.00/M	ERZ-C40CK751W
		485	640	780	1290	250	30	43.99	11.51	50.01	P7177-ND	31.03	265.98	2216.50	12634.00	11821.00/M	11437.00/M	ERZ-C40CK781W
		510	670	820	1355	250	30	43.99	11.51	50.01	P7178-ND	32.28	276.66	2305.50	13141.00	12296.00/M	11896.00/M	ERZ-C40CK821W
		550	745	910	1500	250	30	43.99	11.51	50.01	P7179-ND	33.84	290.04	2417.00	13777.00	12891.00/M	12472.00/M	ERZ-C40CK911W

Panasonic

"ZNR" Chip Type Type CF & SF Surface Mount

Features: • Designed for flow/reflow soldering • Excellent response against high steep surge voltage • Compact package with large withstanding surge capability • Low Clamping Voltage for better surge protection • SF Type has the ability to withstand 2 or 3 times the surge current of the CF Type

Suggestions for Handling: Flow Soldering: Recommended condition: 260°C within 5 seconds. Suggestions: Gas removal is recommended to keep good solderability at high mounting density of components. Reflow Soldering: Recommended condition: 230°C within 10 seconds. Suggestions: If land is too large in comparison with the size of the terminal surface, part may be ill situated at solder melting.



	Varistor Voltage	Max. Allow-able Voltage (V)		Max. Clamp-ing Voltage	Rated Power	Energy (2ms)	Maximum† Peak		Cut Tape Pricing				Tape & Reel Pricing			
Type	±10% (V)	AC	DC	Vxa(V)*	(W)	(J)	Current	Digi-Key Part No.	10	100	1,000	Digi-Key Part No.	2,000	6,000	10,000	Panasonic Part No.
SF	22	14	18	43	0.02	0.9	125	P220ZSCT-ND	20.03	167.96	1356.60	P220ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK220
	27	17	22	53	0.02	1.0	125	P270ZSCT-ND	20.03	167.96	1356.60	P270ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK270
	33	20	26	65	0.02	1.2	125	P330ZSCT-ND	20.03	167.96	1356.60	P330ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK330
	39	25	31	77	0.02	1.5	125	P390ZSCT-ND	20.03	167.96	1356.60	P390ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK390
	47	30	38	93	0.02	1.8	125	P470ZSCT-ND	20.03	167.96	1356.60	P470ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK470
	56	35	45	110	0.02	2.2	125	P560ZSCT-ND	20.03	167.96	1356.60	P560ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK560
	68	40	56	135	0.02	2.5	125	P680ZSCT-ND	20.03	167.96	1356.60	P680ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK680
	82	50	65	135	0.25	3.5	600	P820ZSCT-ND	20.03	167.96	1356.60	P820ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK820
	120	75	100	200	0.25	5.0	600	P121ZSCT-ND	20.03	167.96	1356.60	P121ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK121
	220	140	180	360	0.25	9.0	600	P221ZSCT-ND	20.03	167.96	1356.60	P221ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK221
	240	150	200	395	0.25	10.0	600	P241ZSCT-ND	20.03	167.96	1356.60	P241ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK241
	270	175	225	455	0.25	12.0	600	P271ZSCT-ND	20.03	167.96	1356.60	P271ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK271
	390	250	320	650	0.25	12.0	400	P391ZSCT-ND	20.03	167.96	1356.60	P391ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK391
	470	300	385	775	0.25	12.0	400	P471ZSCT-ND	20.03	167.96	1356.60	P471ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK471
CF	22	14	18	48	0.01	0.4	50	P220ZFCT-ND	18.45	154.70	1249.50	P220ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK220
	27	17	22	60	0.01	0.5	50	P270ZFCT-ND	18.45	154.70	1249.50	P270ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK270
	33	20	26	73	0.01	0.6	50	P330ZFCT-ND	18.45	154.70	1249.50	P330ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK330
	39	25	31	86	0.01	0.8	50	P390ZFCT-ND	18.45	154.70	1249.50	P390ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK390
	47	30	38	104	0.01	1.0	50	P470ZFCT-ND	18.45	154.70	1249.50	P470ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK470
	56	35	45	123	0.01	1.0	50	P560ZFCT-ND	18.45	154.70	1249.50	P560ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK560
	68	40	56	150	0.01	1.2	50	P680ZFCT-ND	18.45	154.70	1249.50	P680ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK680
	82	50	65	145	0.1	1.7	200	P820ZFCT-ND	18.45	154.70	1249.50	P820ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK820
	100	60	85	175	0.1	2.0	200	P101ZFCT-ND	18.45	154.70	1249.50	P101ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK101
	120	75	100	210	0.1	2.5	200	P121ZFCT-ND	18.45	154.70	1249.50	P121ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK121
	150	95	125	200	0.1	3.0	200	P151ZFCT-ND	18.45	154.70	1249.50	P151ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK151
	200	130	170	355	0.1	4.0	200	P201ZFCT-ND	18.45	154.70	1249.50	P201ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK201
	220	140	180	380	0.1	4.5	200	P221ZFCT-ND	18.45	154.70	1249.50	P221ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK221
	240	150	200	415	0.1	5.0	200	P241ZFCT-ND	18.45	154.70	1249.50	P241ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK241
	270	175	225	475	0.1	6.0	200	P271ZFCT-ND	18.45	154.70	1249.50	P271ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK271
	360	230	300	620	0.1	6.0	200	P361ZFCT-ND	18.45	154.70	1249.50	P361ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK361
	390	260	320	675	0.1	6.0	200	P391ZFCT-ND	18.45	154.70	1249.50	P391ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK391
	430	275	350	745	0.1	6.3	200	P431ZFCT-ND	18.45	154.70	1249.50	P431ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK431
	470	300	385	810	0.1	7.0	200	P471ZFCT-ND	18.45	154.70	1249.50	P471ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK471

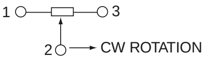
† (8/20 us, 2 times), * Measuring Current of Maximum Clamping Voltage is as follows: For Varistor Voltage of 22 to 68 V: xA=1A, For Varistor Voltage of 82 to 470 V: xA=5A • Temperature Characteristics of Varistor Voltage 0 to -0.05%/°C • Operating Temperature Range: -40°C to 85°C • Storage Temperature Range: -40°C to 125°C

BEYSCHLAG CENTRALAB COMPONENTS

Cermet Potentiometers

NEW! Model ST-32

Surface Mount, Single-Turn

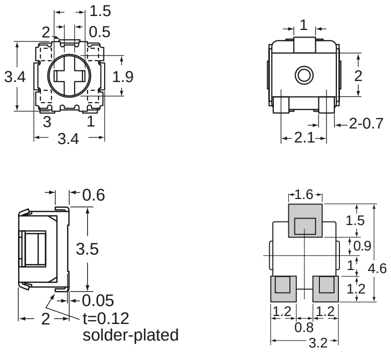


FEATURES: • Top and side adjustment styles • Has a rotor with a cross slot for ease of adjustment • Leaded terminals provide strong as adhesive strength against P.C.B. bending • J-hook, Gull wing and leaded terminal configurations • Compatible with P.C. B. pad outline dimensions for ST-3 series • Sealed/Washable

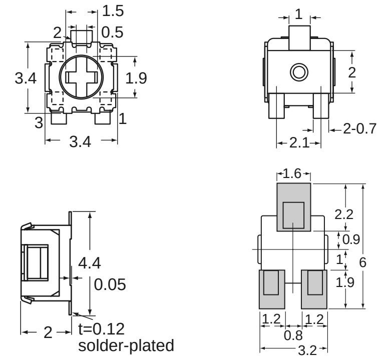
ELECTRICAL: **Resistance Tolerance:** ±20%. **Power Rating:** 0.125W at 70°C, 0W at 125°C. **Input Voltage Maximum:** 200VDC or power rating, whichever is less. **Wiper Current Maximum:** 100mA or power rating, whichever is less. **Effective Electrical Angle:** 210° (1 turn). **End Resistance:** 1% or 2 Ohms, whichever is greater. **Contact Resistance Variation:** 1% or 3 Ohms, whichever is greater. **Operating Temperature Range:** -55°C to +125°C. **Insulation Resistance:** 1000 MΩ minimum at 500VDC. **Dielectric Strength:** 500VAC, 60s.

MECHANICAL: **Mechanical Angle:** 250° (1 turn). **Operating Torque:** 51 gram force-cm maximum. **Stop Strength:** 204 gram force-cm minimum. **Rotational Life:** 100 cycles (▲ R/R ≤ 2 Ω +3%).

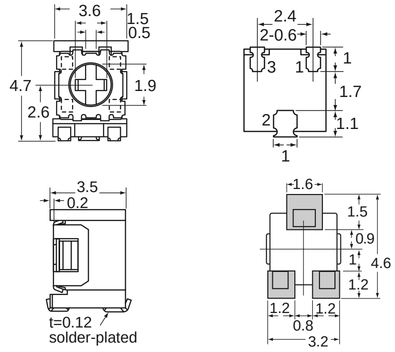
ST-32TA - Top Adjustment, J-Hook



ST-32TB - Top Adjustment, Gull Wing



ST-32TG - Side Adjustment, J-Hook



Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Cut Tape Price Each 10	100	Digi-Key Part No.	Digi-Key Part No.	T&R Pricing* 500
10	ST32TA100CT-ND	ST32TB100CT-ND	2.70	1.95	ST32TA100TR-ND	ST32TB100TR-ND	675.00
20	ST32TA200CT-ND	ST32TB200CT-ND	2.70	1.95	ST32TA200TR-ND	ST32TB200TR-ND	675.00
50	ST32TA500CT-ND	ST32TB500CT-ND	2.48	1.79	ST32TA500TR-ND	ST32TB500TR-ND	618.75
100	ST32TA101CT-ND	ST32TB101CT-ND	2.48	1.79	ST32TA101TR-ND	ST32TB101TR-ND	618.75
200	ST32TA201CT-ND	ST32TB201CT-ND	2.48	1.79	ST32TA201TR-ND	ST32TB201TR-ND	618.75
300	ST32TA301CT-ND	ST32TB301CT-ND	2.48	1.79	ST32TA301TR-ND	ST32TB301TR-ND	618.75
500	ST32TA501CT-ND	ST32TB501CT-ND	2.48	1.79	ST32TA501TR-ND	ST32TB501TR-ND	618.75
1K	ST32TA102CT-ND	ST32TB102CT-ND	2.48	1.79	ST32TA102TR-ND	ST32TB102TR-ND	618.75
2K	ST32TA202CT-ND	ST32TB202CT-ND	2.48	1.79	ST32TA202TR-ND	ST32TB202TR-ND	618.75
3K	ST32TA302CT-ND	ST32TB302CT-ND	2.48	1.79	ST32TA302TR-ND	ST32TB302TR-ND	618.75
5K	ST32TA502CT-ND	ST32TB502CT-ND	2.48	1.79	ST32TA502TR-ND	ST32TB502TR-ND	618.75
10K	ST32TA103CT-ND	ST32TB103CT-ND	2.48	1.79	ST32TA103TR-ND	ST32TB103TR-ND	618.75
20K	ST32TA203CT-ND	ST32TB203CT-ND	2.48	1.79	ST32TA203TR-ND	ST32TB203TR-ND	618.75
30K	ST32TA303CT-ND	ST32TB303CT-ND	2.48	1.79	ST32TA303TR-ND	ST32TB303TR-ND	618.75
50K	ST32TA503CT-ND	ST32TB503CT-ND	2.48	1.79	ST32TA503TR-ND	ST32TB503TR-ND	618.75
100K	ST32TA104CT-ND	ST32TB104CT-ND	2.48	1.79	ST32TA104TR-ND	ST32TB104TR-ND	618.75
200K	ST32TA204CT-ND	ST32TB204CT-ND	2.48	1.79	ST32TA204TR-ND	ST32TB204TR-ND	618.75
500K	ST32TA504CT-ND	ST32TB504CT-ND	2.48	1.79	ST32TA504TR-ND	ST32TB504TR-ND	618.75
1M	ST32TA105CT-ND	ST32TB105CT-ND	2.48	1.79	ST32TA105TR-ND	ST32TB105TR-ND	618.75

Res. (Ohms)	Digi-Key Part No.	Cut Tape Price Each 10	100	Digi-Key Part No.	T&R Pricing* 500
10	ST32TG100CT-ND	2.93	2.12	ST32TG100TR-ND	731.25
20	ST32TG200CT-ND	2.93	2.12	ST32TG200TR-ND	731.25
50	ST32TG500CT-ND	2.70	1.95	ST32TG500TR-ND	675.00
100	ST32TG101CT-ND	2.70	1.95	ST32TG101TR-ND	675.00
200	ST32TG201CT-ND	2.70	1.95	ST32TG201TR-ND	675.00
300	ST32TG301CT-ND	2.70	1.95	ST32TG301TR-ND	675.00
500	ST32TG501CT-ND	2.70	1.95	ST32TG501TR-ND	675.00
1K	ST32TG102CT-ND	2.70	1.95	ST32TG102TR-ND	675.00
2K	ST32TG202CT-ND	2.70	1.95	ST32TG202TR-ND	675.00
3K	ST32TG302CT-ND	2.70	1.95	ST32TG302TR-ND	675.00
5K	ST32TG502CT-ND	2.70	1.95	ST32TG502TR-ND	675.00
10K	ST32TG103CT-ND	2.70	1.95	ST32TG103TR-ND	675.00
20K	ST32TG203CT-ND	2.70	1.95	ST32TG203TR-ND	675.00
30K	ST32TG303CT-ND	2.70	1.95	ST32TG303TR-ND	675.00
50K	ST32TG503CT-ND	2.70	1.95	ST32TG503TR-ND	675.00
100K	ST32TG104CT-ND	2.70	1.95	ST32TG104TR-ND	675.00
200K	ST32TG204CT-ND	2.70	1.95	ST32TG204TR-ND	675.00
500K	ST32TG504CT-ND	2.70	1.95	ST32TG504TR-ND	675.00
1M	ST32TG105CT-ND	2.70	1.95	ST32TG105TR-ND	675.00

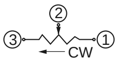
*T&R Denotes Tape & Reel Pricing.

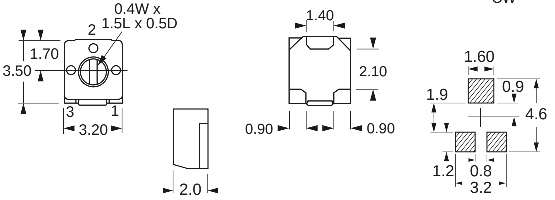
Model ST3

Surface Mount, 3mm Squared Single-Turn

FEATURES: • Sealed to Allow for Automatic Processing • Precious Metal Alloy Contact • Chip Style Design for Compact Size. ***ELECTRICAL:*** **Resistance Tolerance:** ±20% Standard. **Temp. Coeff. of Resistance:** 10 Ohms to 50 Ohms ± 250 ppm/°C, 100 Ohms to 1 Meg. Ohm ± 100 ppm/°C. **Power Rating:** 0.125W at 70°C. **Operating Voltage Max.:** 200VDC or Power Rating, whichever is less. **Wiper Current Max.:** 100mA or Power Rating, whichever is less. **Nom. Electrical Angle:** 210°. **Electrical Continuity:** Continuous Over Full Mechanical Range. **End Resistance:** 1% or 2 Ohms, whichever is greater. **Resolution:** Essentially Infinite. **Contact Resistance Variation:** 1% or 3 Ohms, whichever is greater. **Oper. Temperature Range:** -55°C to +125°C. **Min. Insulation Resistance:** 1000 Meg. at 500VDC. **Dielectric Strength:** 500VAC rms, 1 min., 1 milliamp max. ***MECHANICAL:*** **Nom. Mechanical Angle:** 240°. **Operating Torque:** 50 gram-cm max. (.69 Oz. in.). **Min. Stop Strength:** 200 gram-cm min (2.8 Oz. in.). **Rotational Life:** 100 cycles (▲ R/R ≤ 2 Ω +3%).

ST3A - Top Adjust



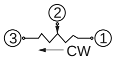


Res. (Ohms)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T & R Pricing* 1,000
1K	ST3A102CT-ND	1.56	1.44	1.35	ST3A102TR-ND	843.00
2K	ST3A202CT-ND	1.56	1.44	1.35	ST3A202TR-ND	843.00
5K	ST3A502CT-ND	1.56	1.44	1.35	ST3A502TR-ND	843.00
10K	ST3A103CT-ND	1.56	1.44	1.35	ST3A103TR-ND	843.00
20K	ST3A203CT-ND	1.56	1.44	1.35	ST3A203TR-ND	843.00
50K	ST3A503CT-ND	1.56	1.44	1.35	ST3A503TR-ND	843.00
100K	ST3A104CT-ND	1.56	1.44	1.35	ST3A104TR-ND	843.00

Units Marked with Resistance Mark and 1 Digit Date Code. *T&R Denotes Tape & Reel Pricing.

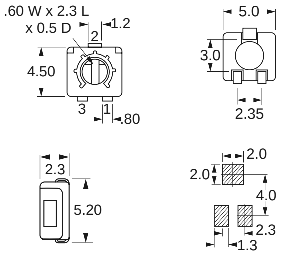
Model ST4

Surface Mount, 4mm Squared Single-Turn

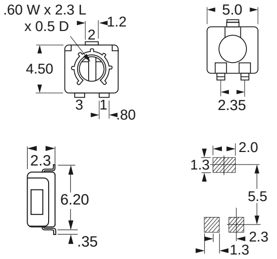


FEATURES: • Sealed to Allow for Automatic Processing • Vertical and Horizontal Adjustment Styles • Precious Metal Alloy Contact • Gull Wing, J Lead and Thru Hole Pin Styles. ***ELECTRICAL:*** **Resistance Tolerance:** ±20% Standard. **Temp. Coeff. of Resistance:** 100 Ohms to 2 Meg. ± 100 ppm, other ±250 ppm. **Power Rating:** 1/4W at 70°C. **Operating Voltage Max.:** 200VDC or Power Rating, whichever is less. **Wiper Current Max.:** 100mA or Power Rating, whichever is Less. **Nom. Electrical Angle:** 210°. **Electrical Continuity:** Continuous Over Full Mechanical Range. **End Resistance:** 1% or 2 Ohms, whichever is Greater. **Resolution:** Essentially Infinite. **Contact Resistance Variation:** 1% or 3 Ohms, whichever is Greater. **Oper. Temp. Range:** -55°C to +125°C. **Min. Insulation Resistance:** 1000 Meg. at 500VDC for 2 minutes. **Dielectric Strength:** 500VAC rms, 1 min., 1 milliamp max. ***MECHANICAL:*** **Nom. Mechanical Angle:** 240°. **Operating Torque:** 100 gram-cm max. (1.39 Oz. in.). **Min. Stop Strength:** 300 gram-cm min (4.17 Oz. in.). **Rotational Life:** 100 cycles (▲ R/R ≤ 2 Ω +3%).

ST4A - J Lead, Top Adjust



ST4B - Gull Wing, Top Adjust



Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Digi-Key Part No.	T&R Pricing* 500
1K	ST4A102CT-ND	ST4B102CT-ND	1.46	1.35	1.26	ST4A102TR-ND	ST4B102TR-ND	486.50
2K	ST4A202CT-ND	ST4B202CT-ND	1.46	1.35	1.26	ST4A202TR-ND	ST4B202TR-ND	486.50
5K	ST4A502CT-ND	ST4B502CT-ND	1.46	1.35	1.26	ST4A502TR-ND	ST4B502TR-ND	486.50
10K	ST4A103CT-ND	ST4B103CT-ND	1.46	1.35	1.26	ST4A103TR-ND	ST4B103TR-ND	486.50
20K	ST4A203CT-ND	ST4B203CT-ND	1.46	1.35	1.26	ST4A203TR-ND	ST4B203TR-ND	486.50
50K	ST4A503CT-ND	ST4B503CT-ND	1.46	1.35	1.26	ST4A503TR-ND	ST4B503TR-ND	486.50
100K	ST4A104CT-ND	ST4B104CT-ND	1.46	1.35	1.26	ST4A104TR-ND	ST4B104TR-ND	486.50

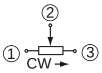
Units Marked with Resistance Mark and 1 Digit Date Code. *T&R Denotes Tape & Reel Pricing.

(Continued)

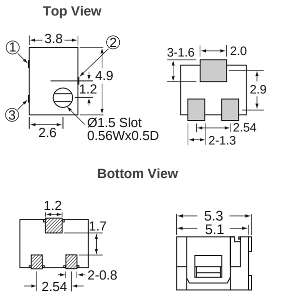
Cermet Potentiometers *(Cont.)*

Model SM4

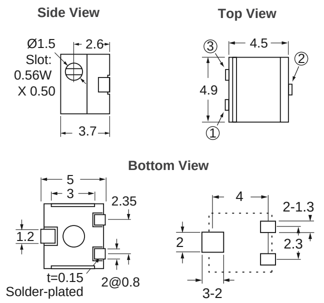
Surface Mount 4mm, 12-Turn, Sealed



SM4W - J Lead, Top Adjust



SM4A - Side Adjust



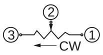
FEATURES: • Sealed to Allow for Automatic Processing • Stable Cermet Element • Precious Metal Contact. ***ELECTRICAL:*** **Resistance Range:** 10Ω – 2MΩ. **Resistance Tolerance:** ±10%. **Max. Temp. Coefficient:** ± 100 ppm/°C. **Power Rating:** 0.25 W at 85°C, 0 W at 150°C. **Max. Input Voltage:** 300VDC or Power Rating, whichever is less. **Max. Wiper Current:** 100mA or Power Rating, whichever is less. **Max. End Resistance:** 1% or 2Ω, whichever is greater. **Contact Resistance Variation:** 1% or 3Ω, whichever is greater. **Operating Temp. Range:** -65°C to +150°C. **Min. Insulation Resistance:** 1000MΩ at 500VDC **Dielectric Strength:** 600VAC, 1 minute. ***MECHANICAL:*** **Mechanical Turn:** 12 Turns. **Operating Torque:** 20-300 g.cm. **Min. Stop Strength:** Clutch Action. **Rotational Life:** 200 cycles, ±3Ω +3%.

Res. (Ohms)	Digi-Key Part No.	Price Each 1	10	100	500
100	SM4W101-ND	3.75	3.25	2.94	2.50
200	SM4W201-ND	3.75	3.25	2.94	2.50
500	SM4W501-ND	3.75	3.25	2.94	2.50
1K	SM4W102-ND	3.75	3.25	2.94	2.50
2K	SM4W202-ND	3.75	3.25	2.94	2.50
5K	SM4W502-ND	3.75	3.25	2.94	2.50
10K	SM4W103-ND	3.75	3.25	2.94	2.50
20K	SM4W203-ND	3.75	3.25	2.94	2.50
50K	SM4W503-ND	3.75	3.25	2.94	2.50
100K	SM4W104-ND	3.75	3.25	2.94	2.50
10	SM4A100-ND	3.75	3.25	2.94	2.50
20	SM4A200-ND	3.75	3.25	2.94	2.50
50	SM4A500-ND	3.75	3.25	2.94	2.50

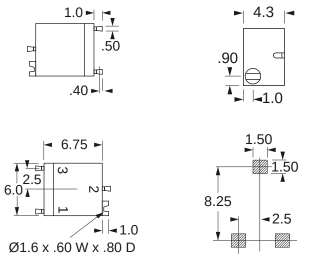
Res. (Ohms)	Digi-Key Part No.	Price Each 1	10	100	500
100	SM4A101-ND	3.75	3.25	2.94	2.50
200	SM4A201-ND	3.75	3.25	2.94	2.50
500	SM4A501-ND	3.75	3.25	2.94	2.50
1K	SM4A102-ND	3.75	3.25	2.94	2.50
2K	SM4A202-ND	3.75	3.25	2.94	2.50
5K	SM4A502-ND	3.75	3.25	2.94	2.50
10K	SM4A103-ND	3.75	3.25	2.94	2.50
20K	SM4A203-ND	3.75	3.25	2.94	2.50
50K	SM4A503-ND	3.75	3.25	2.94	2.50
100K	SM4A104-ND	3.75	3.25	2.94	2.50
500K	SM4A504-ND	3.75	3.25	2.94	2.50
1 Meg.	SM4A105-ND	3.75	3.25	2.94	2.50

Units Marked with Resistance Code and 2-Digit Date Code.

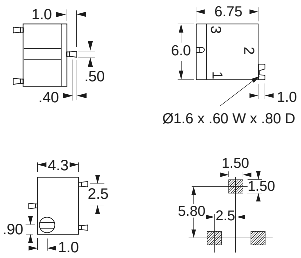
Model ST5 *Surface Mount, 6mm Squared Multi-Turn*



ST5P - Gull Wing, Side Adjust



ST5W - Gull Wing, Top Adjust

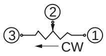


FEATURES: • Sealed to Allow for Automatic Processing • Vertical and Horizontal Mount • Precious Metal Alloy Contact. ***ELECTRICAL:*** **Resistance Tolerance:** ±10% Standard. **Temp. Coeff. of Resistance:** 100 Ohms to 2 Meg. ± 100 ppm/°C, others ±250 ppm/°C. **Power Rating:** 1/4W at 85°C. **Operating Voltage Max.:** 200VDC or Power Rating, whichever is less. **Wiper Current Max.:** 100mA or Power Rating, whichever is less. **Nom. Electrical Angle:** 11 Turns. **Electrical Continuity:** Continuous Over Full Mechanical Range. **End Resistance:** 1% or 2 Ohms, whichever is greater. **Resolution:** Essentially Infinite. **Contact Resistance Variation:** 1% or 3 Ohms, whichever is greater. **Oper. Temp. Range:** -55°C to +125°C. **Min. Insulation Resistance:** 1000 Meg. at 500VDC for 2 minutes. **Dielectric Strength:** 600VAC rms, 1 min., 1 milliamp max. ***MECHANICAL:*** **Nom. Mechanical Angle:** 14 Turns. **Operating Torque:** 200 gram-cm max. (2.78 Oz. in.). **Min. Stop Strength:** N/A, Wiper Idles. **Rotational Life:** 200 cycles, 10Ω to 200 (▲ R/R ≤ 0.5 Ω +3%), 500Ω to 2MΩ (▲ R/R ≤ 0.5 Ω +2%).

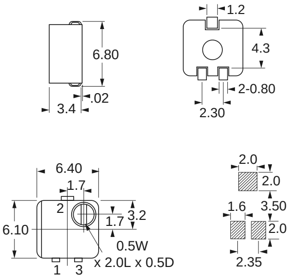
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Digi-Key Part No.	T&R Pricing* 500
1K	ST5P102CT-ND	ST5W102CT-ND	4.19	3.79	3.22	ST5P102TR-ND	ST5W102TR-ND	1431.50
2K	ST5P202CT-ND	ST5W202CT-ND	4.19	3.79	3.22	ST5P202TR-ND	ST5W202TR-ND	1431.50
5K	ST5P502CT-ND	ST5W502CT-ND	4.19	3.79	3.22	ST5P502TR-ND	ST5W502TR-ND	1431.50
10K	ST5P103CT-ND	ST5W103CT-ND	4.19	3.79	3.22	ST5P103TR-ND	ST5W103TR-ND	1431.50
20K	ST5P203CT-ND	ST5W203CT-ND	4.19	3.79	3.22	ST5P203TR-ND	ST5W203TR-ND	1431.50
50K	ST5P503CT-ND	ST5W503CT-ND	4.19	3.79	3.22	ST5P503TR-ND	ST5W503TR-ND	1431.50
100K	ST5P104CT-ND	ST5W104CT-ND	4.19	3.79	3.22	ST5P104TR-ND	ST5W104TR-ND	1431.50

Units Marked with Resistance Mark and 1 Digit Date Code. *T&R Denotes Tape & Reel Pricing.

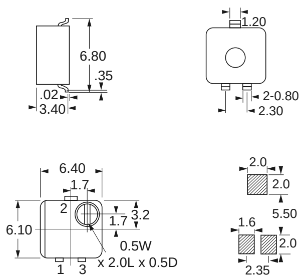
Model ST7 *Low Profile, Surface Mount, 7mm Squared Multi-Turn*



ST7A - J Lead, Top Adjust



ST7B - Gull Wing, Top Adjust

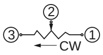


FEATURES: • Sealed to Allow for Auto. Processing • Precious Metal Alloy Contact. ***ELECTRICAL:*** **Resistance Tolerance:** ±20% Standard. **Temp. Coeff. of Resistance:** 100 Ohms to 1 Meg. ± 100 ppm/°C, 50Ω ±250 ppm/°C. **Power Rating:** 1/4W at 70°C. **Operating Volt. Max.:** 200VDC or Power Rating, Whichever is less. **Wiper Current Max.:** 100mA or Power Rating, Whichever is Less. **Nom. Electrical Angle:** 2.5 Turns. **Electrical Continuity:** Continuous Over Full Mechanical Range. **End Resistance:** 1% or 3 Ohms, Whichever is Greater. **Resolution:** Essentially Infinite. **Contact Resistance Variation:** 1% or 3 Ohms, Whichever is Greater. **Oper. Temp. Range:** -55°C to +125°C. **Min. Insulation Resistance:** 1000 Meg. at 500VDC for 2 minutes. **Dielectric Strength:** 500VAC rms, 1 min., 1 milliamp max. ***MECHANICAL:*** **Nom. Mechanical Angle:** 3 Turns. **Operating Torque:** 50 gram-cm max. (0.70 Oz. in.). **Min. Stop Strength:** N/A, Wiper Idles. **Rotational Life:** 100 cycles (▲ R/R ≤ 2.0 Ω +3%).

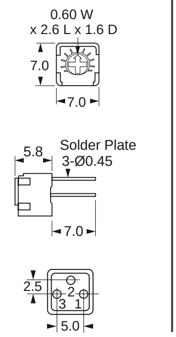
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Digi-Key Part No.	T&R Pricing* 500
1K	ST7A102CT-ND	ST7B102CT-ND	5.33	4.82	4.10	ST7A102TR-ND	ST7B102TR-ND	1710.00
2K	ST7A202CT-ND	ST7B202CT-ND	5.33	4.82	4.10	ST7A202TR-ND	ST7B202TR-ND	1710.00
5K	ST7A502CT-ND	ST7B502CT-ND	5.33	4.82	4.10	ST7A502TR-ND	ST7B502TR-ND	1710.00
10K	ST7A103CT-ND	ST7B103CT-ND	5.33	4.82	4.10	ST7A103TR-ND	ST7B103TR-ND	1710.00
20K	ST7A203CT-ND	ST7B203CT-ND	5.33	4.82	4.10	ST7A203TR-ND	ST7B203TR-ND	1710.00
50K	ST7A503CT-ND	ST7B503CT-ND	5.33	4.82	4.10	ST7A503TR-ND	ST7B503TR-ND	1710.00
100K	ST7A104CT-ND	ST7B104CT-ND	5.33	4.82	4.10	ST7A104TR-ND	ST7B104TR-ND	1710.00

Units Marked with Resistance Mark and 1 Digit Date Code. *T&R Denotes Tape & Reel Pricing.

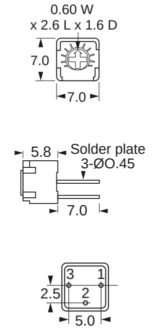
Model CT6 *6mm Squared Single Turn*



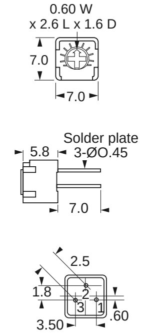
CT6P - Top Adjust



CT6R - Top Adjust

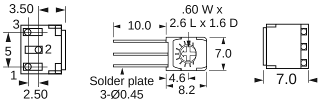


CT6W - Top Adjust



FEATURES: • Sealed to Allow for Automatic Processing • Precious Metal Alloy Contact • Highly Automated Assembly. ***ELECTRICAL:*** **Resistance Tolerance:** ±10% Standard. **Temp. Coeff. of Resistance:** 50 Ohms to 2 Meg. ± 100 ppm/°C, others ±250 ppm/°C. **Power Rating:** 1/2W at 70°C. **Operating Voltage Max.:** 200VDC or Power Rating, Whichever is less. **Wiper Current Max.:** 100mA or Power Rating, Whichever is Less. **Nom. Electrical Angle:** 220°. **Electrical Continuity:** Continuous Over Full Mechanical Range. **End Resistance:** 1% or 2 Ohms, Whichever is Greater. **Resolution:** Essentially Infinite. **Contact Resistance Variation:** 1% or 3 Ohms, Whichever is Greater. **Oper. Temp. Range:** -55°C to +125°C. **Min. Insulation Resistance:** 1000 Meg. at 500VDC for 2 minutes. **Dielectric Strength:** 900VAC rms, 1 min., 1 milliamp max. ***MECHANICAL:*** **Nom. Mechanical Angle:** 260°. **Operating Torque:** 20-200 gram-cm max. (0.27-2.78 Oz. in.). **Min. Stop Strength:** 500 gram-cm min. (6.94 Oz.-in.). **Rotational Life:** 200 cycles (▲ R/R ≤ 2 Ω +3%) **Solderability:** Mil-Std-202 Method 208. **Min. Terminal Strength:** 1 Kg.

CT6X - Side Adjust



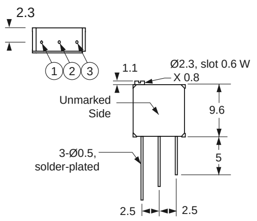
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Price Each 1	10	100	500	1,000
1K	CT6P102-ND	CT6R102-ND	CT6W102-ND	CT6X102-ND	.84	.73	.66	.56	.49
2K	CT6P202-ND	CT6R202-ND	CT6W202-ND	CT6X202-ND	.84	.73	.66	.56	.49
5K	CT6P502-ND	CT6R502-ND	CT6W502-ND	CT6X502-ND	.84	.73	.66	.56	.49
10K	CT6P103-ND	CT6R103-ND	CT6W103-ND	CT6X103-ND	.84	.73	.66	.56	.49
20K	CT6P203-ND	CT6R203-ND	CT6W203-ND	CT6X203-ND	.84	.73	.66	.56	.49
50K	CT6P503-ND	CT6R503-ND	CT6W503-ND	CT6X503-ND	.84	.73	.66	.56	.49
100K	CT6P104-ND	CT6R104-ND	CT6W104-ND	CT6X104-ND	.84	.73	.66	.56	.49

Units Marked with Resistance Mark and 1 Digit Date Code.

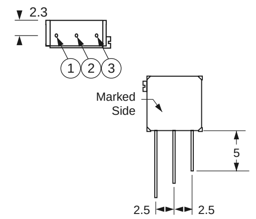
(Continued)

Model CT94 *9mm Squared Multi-Turn*

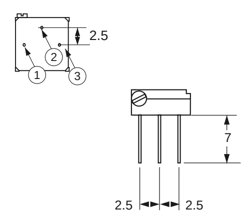
CT94W - Top Adjust



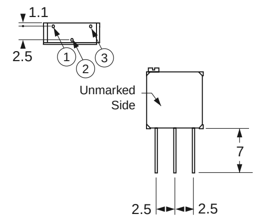
CT94X - Side Adjust



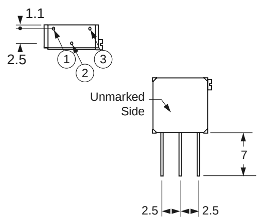
CT94P - Side Adjust

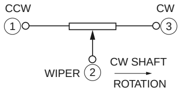


CT94Y - Top Adjust



CT94Z- Side Adjust





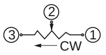
ELECTRICAL: **Resistance Tol.:** ±10%. **Temp. Coeff. of Resistance:** 50 Ohms to 2 Meg. ± 100 ppm/°C, others ±250 ppm/°C. **Power Rating:** 1/2W at 70°C, 0W at 125°C. **Operating Voltage Max.:** 300VDC or Power Rating, Whichever is less. **Wiper Current Max.:** 100mA or Power Rating, Whichever is Less. **End Resistance Max.:** 1% or 2 Ohms, Whichever is Greater. **Contact Resistance Variation:** 1% or 3 Ohms, Whichever is Greater. **Oper. Temp. Range:** -55°C to +125°C. **Min. Insulation Resistance:** 1000 Meg Ohms. at 500VDC. **Dielectric Strength:** 900VAC rms, 1 min. **Number of Mechanical Turns:** 18 turns. ***MECHANICAL:*** **Operating Torque:** 357 gram-cm max. **Mechanical Stop:** Clutch Action. **Minimum Terminal Strength:** 1.02Kg. **Rotational Life:** 200 cycles (▲ R/R ± 2 Ω +3%)

Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Price Each 1	10	100	500
10	CT94W100-ND	CT94X100-ND	1.43	1.33	1.20	1.02
20	CT94W200-ND	CT94X200-ND	1.43	1.33	1.20	1.02
50	CT94W500-ND	CT94X500-ND	1.43	1.33	1.20	1.02
100	CT94W101-ND	CT94X101-ND	1.43	1.33	1.20	1.02
200	CT94W201-ND	CT94X201-ND	1.43	1.33	1.20	1.02
500	CT94W501-ND	CT94X501-ND	1.43	1.33	1.20	1.02
1K	CT94W102-ND	CT94X102-ND	1.43	1.33	1.20	1.02
2K	CT94W202-ND	CT94X202-ND	1.43	1.33	1.20	1.02
5K	CT94W502-ND	CT94X502-ND	1.43	1.33	1.20	1.02
10K	CT94W103-ND	CT94X103-ND	1.43	1.33	1.20	1.02
20K	CT94W203-ND	CT94X203-ND	1.43	1.33	1.20	1.02
50K	CT94W503-ND	CT94X503-ND	1.43	1.33	1.20	1.02
100K	CT94W104-ND	CT94X104-ND	1.43	1.33	1.20	1.02
200K	CT94W204-ND	CT94X204-ND	1.43	1.33	1.20	1.02
500K	CT94W504-ND	CT94X504-ND	1.43	1.33	1.20	1.02
1 Meg	CT94W105-ND	CT94X105-ND	1.43	1.33	1.20	1.02
2 Meg	CT94W205-ND	CT94X205-ND	1.43	1.33	1.20	1.02

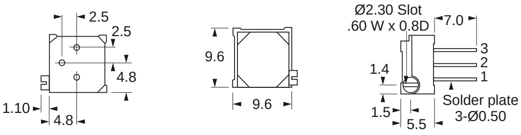
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Price Each 1	10	100	500
10	CT94P100-ND	CT94Y100-ND	CT94Z100-ND	1.57	1.46	1.32	1.12
20	CT94P200-ND	CT94Y200-ND	CT94Z200-ND	1.57	1.46	1.32	1.12
50	CT94P500-ND	CT94Y500-ND	CT94Z500-ND	1.57	1.46	1.32	1.12
100	CT94P101-ND	CT94Y101-ND	CT94Z101-ND	1.57	1.46	1.32	1.12
200	CT94P201-ND	CT94Y201-ND	CT94Z201-ND	1.57	1.46	1.32	1.12
500	CT94P501-ND	CT94Y501-ND	CT94Z501-ND	1.57	1.46	1.32	1.12
1K	CT94P102-ND	CT94Y102-ND	CT94Z102-ND	1.57	1.46	1.32	1.12
2K	CT94P202-ND	CT94Y202-ND	CT94Z202-ND	1.57	1.46	1.32	1.12
5K	CT94P502-ND	CT94Y502-ND	CT94Z502-ND	1.57	1.46	1.32	1.12
10K	CT94P103-ND	CT94Y103-ND	CT94Z103-ND	1.57	1.46	1.32	1.12
20K	CT94P203-ND	CT94Y203-ND	CT94Z203-ND	1.57	1.46	1.32	1.12
50K	CT94P503-ND	CT94Y503-ND	CT94Z503-ND	1.57	1.46	1.32	1.12
100K	CT94P104-ND	CT94Y104-ND	CT94Z104-ND	1.57	1.46	1.32	1.12
200K	CT94P204-ND	CT94Y204-ND	CT94Z204-ND	1.57	1.46	1.32	1.12
500K	CT94P504-ND	CT94Y504-ND	CT94Z504-ND	1.57	1.46	1.32	1.12
1 Meg	CT94P105-ND	CT94Y105-ND	CT94Z105-ND	1.57	1.46	1.32	1.12
2 Meg	CT94P205-ND	CT94Y205-ND	CT94Z205-ND	1.57	1.46	1.32	1.12

Units Marked with Resistance Code and 1 Digit Date Code.

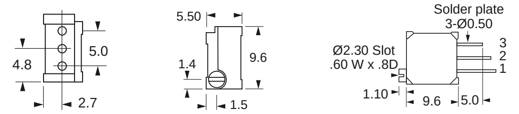
Model CT9P *9mm Squared Multi-Turn*



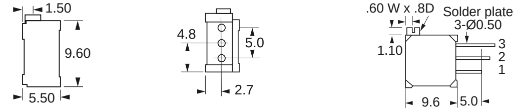
CT9P — Side Adjust



CT9W — Top Adjust



CT9X, Side Adjust



FEATURES:
- Sealed to Withstand Board Washing
- Precious Metal Contact
- Highly Automated Assembly.

ELECTRICAL:
Resistance Tolerance: ±10% Standard. **Temperature Coefficient of Resistance:**. 50 Ohms to 2 Meg. ± 100 ppm/°C, others ±250 ppm/°C. **Power Rating:** 1/2W at 70°C. **Operating Voltage Maximum:** 300VDC or Power Rating, Whichever is less. **Wiper Current Maximum:** 100mA or Power Rating, Whichever is Less. **Nominal Electrical Angle:** 16 Turns. **Electrical Continuity:** Continuous Over Full Mechanical Range. **End Resistance:** 1% or 2 Ohms, Whichever is Greater. **Resolution:** Essentially Infinite. **Contact Resistance Variation:** 1% or 3 Ohms, Whichever is Greater. **Operating Temperature Range:** -55°C to +125°C. **Minimum Insulation Resistance:** 1000 Meg. at 500VDC for 2 minutes. **Dielectric Strength:** 900VAC rms, 1 min., 1 milliamp max.

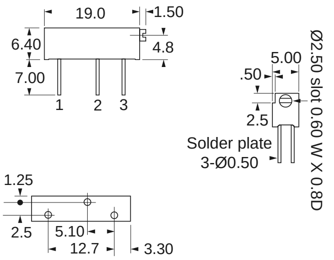
MECHANICAL:
Nominal Mechanical Angle: 18 Turns. **Operating Torque:** 360 gram-cm max. (5 Oz.-in.). **Min. Stop Strength:** N/A, Wiper Idles. **Rotational Life:** 200 cycles, 10 Ω - 200 Ω, ▲ R/R ≤ ± (0.5 Ω + 3%), 500 Ω - 5M Ω ▲ R/R ≤ ± (0.5 Ω + 2%). **Solderability:** Mil-Std-202 Method 208. **Minimum Terminal Strength:** 1 Kg.

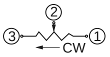
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Price Each 1	10	100	500	1,000
1K	CT9P102-ND	CT9W102-ND	CT9X102-ND	1.65	1.56	1.32	1.23	1.07
2K	CT9P202-ND	CT9W202-ND	CT9X202-ND	1.65	1.56	1.32	1.23	1.07
5K	CT9P502-ND	CT9W502-ND	CT9X502-ND	1.65	1.56	1.32	1.23	1.07
10K	CT9P103-ND	CT9W103-ND	CT9X103-ND	1.65	1.56	1.32	1.23	1.07
20K	CT9P203-ND	CT9W203-ND	CT9X203-ND	1.65	1.56	1.32	1.23	1.07
50K	CT9P503-ND	CT9W503-ND	CT9X503-ND	1.65	1.56	1.32	1.23	1.07
100K	CT9P104-ND	CT9W104-ND	CT9X104-ND	1.65	1.56	1.32	1.23	1.07

Units Marked with Resistance Mark and 1 Digit Date Code.

Model CT20 *20mm Rectangular Multi-Turn*

CT20P — Side Adjust





FEATURES: • Sealed to Allow for Automatic Processing • Precious Metal Alloy Contact • Highly Automated Assembly.

ELECTRICAL: **Resistance Tolerance:** ±10% Standard. **Temperature Coefficient of Resistance:** 50 Ohms to 2 Meg. ± 100 ppm/°C, others ± 250 ppm/°C. **Power Rating:** 3/4W at 70°C. **Operating Voltage Maximum:** 300VDC or Power Rating, Whichever is less. **Wiper Current Maximum:** 100mA or Power Rating, Whichever is Less. **Nominal Electrical Angle:** 12 Turns. **Electrical Continuity:** Continuous Over Full Mechanical Range. **End Resistance:** 1% or 2 Ohms, Whichever is Greater. **Resolution:** Essentially Infinite. **Contact Resistance Variation:** 1% or 3 Ohms, Whichever is Greater. **Operating Temperature Range:** -55°C to +125°C. **Minimum Insulation Resistance:** 1000 Meg. at 500VDC for 2 min. **Dielectric Strength:** 600VAC rms, 1 min., 1 milliamp max.

MECHANICAL: **Nominal Mechanical Angle:** 15 Turns. **Operating Torque:** 360 gram-cm max. (5 Oz.-in.). **Minimum Stop Strength:** N/A, Wiper Idles. **Rotational Life:** 200 cycles, 10Ω-200Ω ▲ R/R ≤ ± (0.5 Ω + 3%), 500 Ω - 5M Ω ▲ R/R ≤ ± (0.5 Ω + 2%) **Solderability:** Mil-Std-202 Method 208.

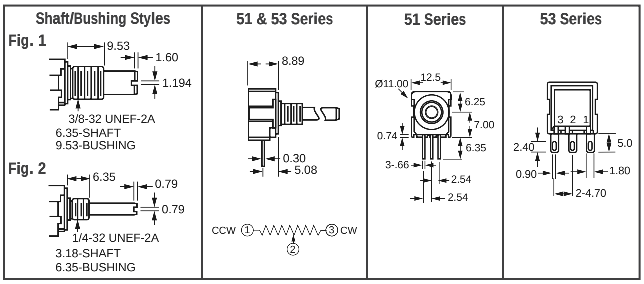
Res. (Ohms)	Digi-Key Part No.	Price Each 1	10	100	500	1,000
1K	CT20P102-ND	1.65	1.54	1.39	1.18	1.07
2K	CT20P202-ND	1.65	1.54	1.39	1.18	1.07
5K	CT20P502-ND	1.65	1.54	1.39	1.18	1.07
10K	CT20P103-ND	1.65	1.54	1.39	1.18	1.07
20K	CT20P203-ND	1.65	1.54	1.39	1.18	1.07
50K	CT20P503-ND	1.65	1.54	1.39	1.18	1.07
100K	CT20P104-ND	1.65	1.54	1.39	1.18	1.07

Units Marked with Resistance Mark and 1 Digit Date Code.

BOURNS Precision Potentiometers

SERIES 50 Sealed 1/2" (12.5mm) Square Control

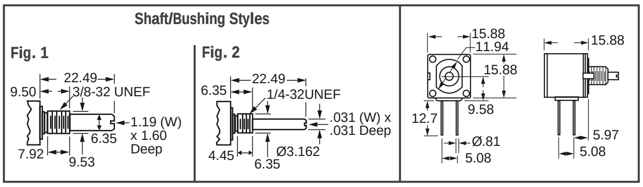
• **Effective Electrical Angle:** 270° ±5° • **Contact Resistance Variation:** 2.0% • **Dielectric Withstanding Voltage:** Sea Level: 1,500 VAC minimum; 70,000 Feet: 500 VAC minimum • **Insulation Resistance:** 1,000 megohms minimum



Bush. Fig.	Taper	Resis. Tolerance	Ohms	Watts	Element Material	Digi-Key Part No.	Price Each 1	25	50	100
2	Linear	±10%	1K	1	Cermet	51CAD-E28-A10-ND	7.39	5.75	4.70	3.98
2	Linear	±10%	5K	1	Cermet	51CAD-E28-A13-ND	7.39	5.75	4.70	3.98
1	Audio	±20%	10K	1/4	Conductive Plastic	51AAD-B28-D15-ND	7.97	6.21	5.07	4.29
2	Audio	±20%	10K	1/4	Conductive Plastic	51CAD-E28-D15-ND	7.97	6.21	5.07	4.29
2	Linear	±20%	10K	1/2	Conductive Plastic	51CAD-E24-B15-ND	7.39	5.75	4.70	3.98
1	Linear	±10%	10K	1	Cermet	51AAD-B24-A15-ND	7.39	5.75	4.70	3.98
2	Linear	±10%	10K	1	Cermet	51CAD-E24-A15-ND	7.39	5.75	4.70	3.98
2	Linear	±10%	100K	1	Cermet	51CAD-E28-A20-ND	7.39	5.75	4.70	3.98
1	Linear	±20%	10K	1/2	Conductive Plastic	53AAA-B28-B15-ND	8.51	6.63	5.41	4.58

SERIES 81 2 Watt Cermet - 5/8" (15.88mm) Square Single - Turn

• **Resistance Tolerance:** ±10% • **Continuity:** Maintained for full mechanical angle • **Effective Electrical Angle:** 240° ±6° • **Contact Resistance Variation:** ±1% or 3 ohms (whichever is greater) • **Theoretical Resolution:** Essentially Infinite • **Dielectric Withstanding Voltage:** MIL-STD-202, Method 301 (Sea Level: 1500 VAC minimum; 70,000 Feet: 500 VAC minimum) • **Insulation Resistance (500 VDC):** 1,000 megohms minimum

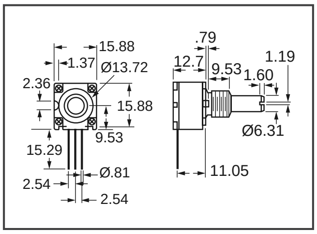


Bushing Fig.	Ohms	Digi-Key Part No.	Price Each 1	25	50	100
1	1K	81A1A-B28-A10-ND	9.02	7.02	5.74	4.85
1	5K	81A1A-B28-A13-ND	9.02	7.02	5.74	4.85
2	5K	81C1A-E28-A13-ND	9.02	7.02	5.74	4.85
1	10K	81A1A-B28-A15-ND	9.02	7.02	5.74	4.85
2	10K	81C1A-E28-A15-ND	9.02	7.02	5.74	4.85
2	100K	81C1A-E28-A20-ND	9.02	7.02	5.74	4.85

SERIES 91

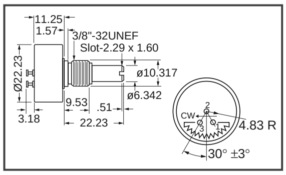
5/8" Square Single-Turn Conductive Plastic - Bushing Mount

• **Resistance Tolerance:** ±20% • **Continuity:** Maintained for full mechanical angle • **Effective Electrical Angle:** 240° ±5° • **Contact Resistance Variation:** ±1% • **Dielectric Withstanding Voltage:** MIL-STD-202, Method 301 (Sea Level: 1,500 VAC minimum; 70,000 Feet: 500 VAC minimum) • **Insulation Resistance (500 VDC):** 1,000 megohms minimum • **Theoretical Resolution:** Essentially infinite



Taper	Ohms	Watts	Shaft Length From Mtg. Surface inches (mm)	Digi-Key Part No.	Price Each 1	25	50	100
Linear	1K	1/2	7/8" (22.23)	91A1A-B28-B10-ND	4.74	3.69	3.01	2.55
Linear	5K	1/2	3/4" (19.05)	91A1A-B24-B13-ND	4.74	3.69	3.01	2.55
Linear	5K	1/2	7/8" (22.23)	91A1A-B28-B13-ND	4.74	3.69	3.01	2.55
Audio	10K	1/4	3/4" (19.05)	91A1A-B24-D15-ND	5.37	4.18	3.42	2.89
Linear	10K	1/2	3/4" (19.05)	91A1A-B24-B15-ND	4.74	3.69	3.01	2.55
Linear	10K	1/2	7/8" (22.23)	91A1A-B28-B15-ND	4.74	3.69	3.01	2.55

SERIES 6639 1 Watt Conductive Plastic - Bushing Mount



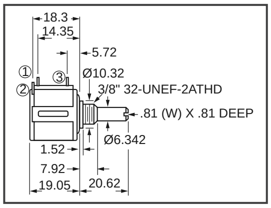
• **Resistance Tolerance:** Standard ±15% • **Resolution:** Essentially infinite • **Effective Electrical Angle:** 340° +3° • **End Voltage:** 0.5% max. • **Output Smoothness:** 0.1% • **Dielectric Withstanding Voltage:** MIL-STD-202, Method 301 (Sea Level: 750 VAC min.) • **Insulation Resistance (500 VDC):** 500 megohms min.

Ohms	Digi-Key Part No.	Price Each 1	50	100	500
1K	6639S-1-102-ND	11.46	9.29	8.48	8.30
5K	6639S-1-502-ND	11.46	9.29	8.48	8.30
10K	6639S-1-103-ND	11.46	9.29	8.48	8.30

SERIES 3540/3541

2 Watt -10 Turn Wirewound/Hybritron®

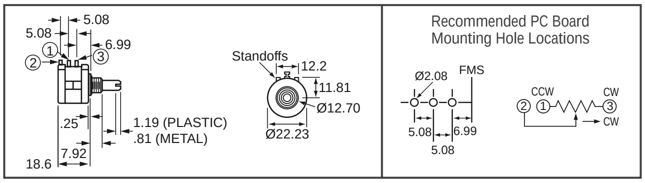
• **Resistance Tolerance:** ±5% for 3540 series ±10% for 3541 series • **Effective Electrical Angle:** 3600° +10°, -0° • **Dielectric Withstanding Voltage:** MIL-STD-202, Method 301 (Sea Level: 1,000 VAC minimum) • **Insulation Resistance (500 VDC):** 1,000 megohms minimum



Ohms	Reso-lution %	Digi-Key Part No.	Price Each 1	50	100	500
		Wirewound				
1K	.027	3540S-1-102-ND	13.38	10.84	9.90	9.37
5K	.021	3540S-1-502-ND	13.38	10.84	9.90	9.37
10K	.019	3540S-1-103-ND	13.38	10.84	9.90	9.37
100K	.008	3540S-1-104-ND	16.72	13.54	12.37	11.70
		Hybritron				
1K	Essen-tially Infinite	3541H-1-102-ND	28.28	22.91	20.93	19.80
5K		3541H-1-502-ND	28.28	22.91	20.93	19.80
10K		3541H-1-103-ND	28.28	22.91	20.93	19.80

SERIES 3590 2 Watt - 10 Turn Wirewound

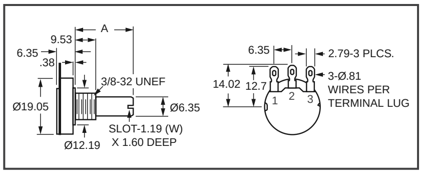
• **Resistance Tolerance:** ±5% • **Effective Electrical Angle:** 3600° +10°, -0° • **Dielectric Withstanding Voltage:** MIL-STD-202, Method 301 (Sea Level: 2,000 VAC minimum) • **Insulation Resistance (500 VDC):** 1,000 megohms minimum



Ohms	Resolu-tion%	Bushing Type & Dim.	Shaft Diameter Inches (mm)	Digi-Key Part No.	Price Each 1	50	100	500
1K	.029	3/8" x 5/16" Plastic	.2480" (6.30)	3590S-1-102-ND	8.10	6.56	5.99	5.67
2K	.023			3590S-1-202-ND	11.08	8.98	8.20	7.76
5K	.025			3590S-1-502-ND	8.10	6.56	5.99	5.67
10K	.020			3590S-1-103-ND	8.10	6.56	5.99	5.67
20K	.016			3590S-1-203-ND	8.10	6.56	5.99	5.67
50K	.013			3590S-1-503-ND	10.24	8.29	7.58	7.17
100K	.009			3590S-1-104-ND	11.08	8.97	8.20	7.76
500	.033	3/8" x 5/16" Metal	.2497" (6.34)	3590S-2-501-ND	10.02	8.12	7.41	7.02
1K	.029			3590S-2-102-ND	10.02	8.12	7.41	7.01
2K	.023			3590S-2-202-ND	10.02	8.12	7.41	7.02
5K	.025			3590S-2-502-ND	10.02	8.12	7.41	7.01
10K	.020			3590S-2-103-ND	10.02	8.12	7.41	7.01
20K	.016			3590S-2-203-ND	10.02	8.12	7.41	7.01
50K	.013			3590S-2-503-ND	12.10	9.80	8.95	8.47
100K	.009			3590S-2-104-ND	12.98	10.51	9.61	9.09
10K	.020	9mm x 7.94mm Metal	.2362" (6.00)	3590S-6-103-ND	12.10	9.80	8.95	8.47

SERIES 3852 2 Watt Cermet 3/4" (19.05mm) Diameter Panel Control

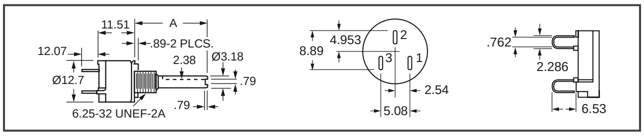
• **Resistance Tolerance:** ±10% • **Continuity:** Maintained for full mechanical angle • **Effective Electrical Angle:** 250° ±5° • **Contact Resistance Variation:** ±3% of total resistance or 3 ohms (whichever is greater) • **Dielectric Withstanding Voltage:** MIL-STD-202, Method 301 (Sea Level: 900 VAC minimum; 70,000 Feet: 350 VAC minimum) • **Insulation Resistance (500 VDC):** 1,000 megohms minimum



Ohms	Dim. A (mm)	Shaft Dia. (mm)	Digi-Key Part No.	Price Each 1	25	50	100	250
1K	12.7	3.18	3852A-162-102A-ND	9.16	7.13	5.83	4.93	4.58
1K	22.20	6.35	3852A-282-102A-ND	9.16	7.13	5.83	4.93	4.58
10K	22.20	6.35	3852A-282-103A-ND	9.16	7.13	5.83	4.93	4.58

SERIES 3862 1 Watt Cermet 1/2" (12.5mm) Diameter Single-Turn Panel Control

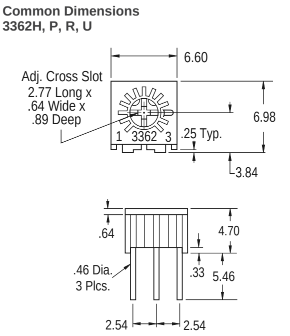
• **Resistance Tolerance:** ±10% • **Continuity:** Maintained for full mechanical angle • **Effective Electrical Angle:** 260° ±10° • **Contact Resistance Variation:** ±3% of total resistance • **Theoretical Resolution:** Essentially infinite • **Dielectric Withstanding Voltage:** MIL-STD-202, Method 301 (Sea Level: 750 VAC minimum; 70,000 Feet: 350 VAC minimum) • **Insulation Resistance (500 VDC):** 1,000 megohms minimum

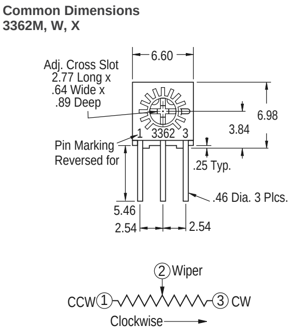


Ohms	Dim. A (mm)	Shaft Dia. (mm)	Digi-Key Part No.	Price Each 1	25	50	100	250
10K	12.7	3.18	3862C-162-103A-ND	14.69	11.44	9.34	7.90	7.35
10K	22.20	6.35	3862C-282-103A-ND	14.69	11.44	9.34	7.90	7.35

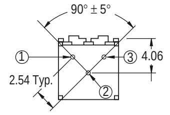
Trimmer Potentiometers

SERIES 3362 1/4" (6.35mm) Square/Single-Turn Cermet/Industrial/Sealed

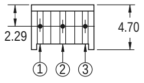




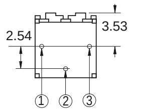
3362H



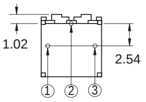
3362M



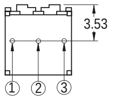
3362P



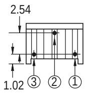
3362R



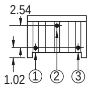
3362U



3362W



3362X



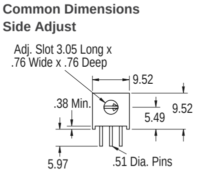
• Miniature package • Rotor designed for automatic machine adjust interface • Multi-wire wiper to minimize CRV • Withstands harsh environments and immersion cleaning process. **Resistance Tolerance:** ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Adjustment Angle:** 240° nom. **Power Rating** (300 volts max.): 70°C — 0.5 watt; 125°C — 0 watt. **Temperature Range:** —55°C to +125°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 0.5 watt @ 70°C (3% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Rotational Life:** 200 cycles (4% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Mechanical Angle:** 270° nom. **Torque:** 3.0 oz-in. max. **Stop Strength:** 7.0 oz-in. min.

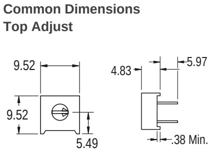
Res. (Ohms)	Digi-Key* Part No.	Digi-Key* Part No.	Digi-Key Part No.	Digi-Key* Part No.	Digi-Key* Part No.	Digi-Key Part No.	Digi-Key* Part No.
100	3362H-101-ND	3362M-101-ND	3362P-101-ND	3362R-101-ND	3362U-101-ND	3362W-101-ND	3362X-101-ND
200	3362H-201-ND	3362M-201-ND	3362P-201-ND	3362R-201-ND	3362U-201-ND	3362W-201-ND	3362X-201-ND
500	3362H-501-ND	3362M-501-ND	3362P-501-ND	3362R-501-ND	3362U-501-ND	3362W-501-ND	3362X-501-ND
1K	3362H-102-ND	3362M-102-ND	3362P-102-ND	3362R-102-ND	3362U-102-ND	3362W-102-ND	3362X-102-ND
2K	3362H-202-ND	3362M-202-ND	3362P-202-ND	3362R-202-ND	3362U-202-ND	3362W-202-ND	3362X-202-ND
5K	3362H-502-ND	3362M-502-ND	3362P-502-ND	3362R-502-ND	3362U-502-ND	3362W-502-ND	3362X-502-ND
10K	3362H-103-ND	3362M-103-ND	3362P-103-ND	3362R-103-ND	3362U-103-ND	3362W-103-ND	3362X-103-ND
20K	3362H-203-ND	3362M-203-ND	3362P-203-ND	3362R-203-ND	3362U-203-ND	3362W-203-ND	3362X-203-ND
25K	3362H-253-ND	3362M-253-ND	3362P-253-ND	3362R-253-ND	3362U-253-ND	3362W-253-ND	3362X-253-ND
50K	3362H-503-ND	3362M-503-ND	3362P-503-ND	3362R-503-ND	3362U-503-ND	3362W-503-ND	3362X-503-ND
100K	3362H-104-ND	3362M-104-ND	3362P-104-ND	3362R-104-ND	3362U-104-ND	3362W-104-ND	3362X-104-ND
200K	3362H-204-ND	3362M-204-ND	3362P-204-ND	3362R-204-ND	3362U-204-ND	3362W-204-ND	3362X-204-ND
500K	3362H-504-ND	3362M-504-ND	3362P-504-ND	3362R-504-ND	3362U-504-ND	3362W-504-ND	3362X-504-ND
1M	3362H-105-ND	3362M-105-ND	3362P-105-ND	3362R-105-ND	3362U-105-ND	3362W-105-ND	3362X-105-ND

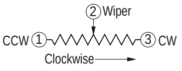
Series	Pricing 1	 10	 50
3362H / 3362M / 3362P / 3362R / 3362U / 3362W / 3362X	.83	7.50	36.75

*** 3362☐-KIT-ND** ***Digi-Key® Series 3362 Trimmer Potentiometers Kit***
10 each of all values in denoted series (140 total pieces). Notebook style storage case and bin storage guide included. For complete number, substitute corresponding letter (H,R,U,M,X) for ☐ **$89.95**

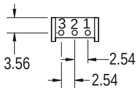
SERIES 3386 3/8" (9.52mm) Square/Single-Turn Cermet/Industrial/Sealed







3386C



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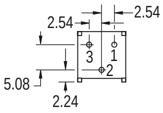
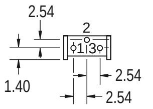
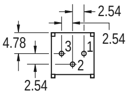


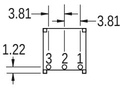
3386H



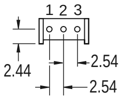
3386P



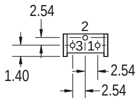
3386R



3386W



3386X



Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Adjustment Angle:** 280°. **Power Rating** (300 volts max.): 85°C — 0.5 watt; 125°C — 0 watt. **Temperature Range:** –55°C to +125°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 0.5 watt @ 70°C (3% ΔTR; CRV, 1% or 1 ohm, whichever is greater). **Rotational Life:** 200 cycles (4% ΔTR; CRV, 1% or 1 ohm, whichever is greater). **Mechanical Angle:** 310° nom. **Torque:** 5.0 oz-in. max. **Stop Strength:** 15.0 oz-in. min.

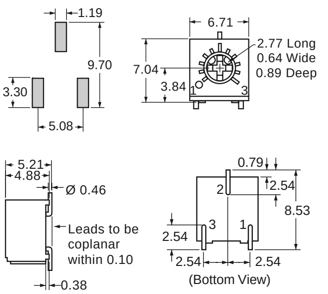
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.
50	3386C-500-ND*	3386F-500-ND*	3386H-500-ND	3386P-500-ND*	3386R-500-ND*	3386W-500-ND	3386X-500-ND*
100	3386C-101-ND*	3386F-101-ND*	3386H-101-ND	3386P-101-ND*	3386R-101-ND*	3386W-101-ND	3386X-101-ND*
200	3386C-201-ND*	3386F-201-ND*	3386H-201-ND	3386P-201-ND*	3386R-201-ND*	3386W-201-ND	3386X-201-ND*
500	3386C-501-ND*	3386F-501-ND*	3386H-501-ND	3386P-501-ND*	3386R-501-ND*	3386W-501-ND	3386X-501-ND*
1K	3386C-102-ND*	3386F-102-ND*	3386H-102-ND	3386P-102-ND*	3386R-102-ND*	3386W-102-ND	3386X-102-ND*
2K	3386C-202-ND*	3386F-202-ND*	3386H-202-ND	3386P-202-ND*	3386R-202-ND*	3386W-202-ND	3386X-202-ND*
5K	3386C-502-ND*	3386F-502-ND*	3386H-502-ND	3386P-502-ND*	3386R-502-ND*	3386W-502-ND	3386X-502-ND*
10K	3386C-103-ND*	3386F-103-ND*	3386H-103-ND	3386P-103-ND*	3386R-103-ND*	3386W-103-ND	3386X-103-ND*
20K	3386C-203-ND*	3386F-203-ND*	3386H-203-ND	3386P-203-ND*	3386R-203-ND*	3386W-203-ND	3386X-203-ND*
25K	3386C-253-ND	3386F-253-ND	3386H-253-ND	3386P-253-ND	3386R-253-ND	3386W-253-ND	3386X-253-ND
50K	3386C-503-ND*	3386F-503-ND*	3386H-503-ND	3386P-503-ND*	3386R-503-ND*	3386W-503-ND	3386X-503-ND*
100K	3386C-104-ND*	3386F-104-ND*	3386H-104-ND	3386P-104-ND*	3386R-104-ND*	3386W-104-ND	3386X-104-ND*
200K	3386C-204-ND*	3386F-204-ND*	3386H-204-ND	3386P-204-ND*	3386R-204-ND*	3386W-204-ND	3386X-204-ND*
250K	3386C-254-ND	3386F-254-ND	3386H-254-ND	3386P-254-ND	3386R-254-ND	3386W-254-ND	3386X-254-ND
500K	3386C-504-ND*	3386F-504-ND*	3386H-504-ND	3386P-504-ND*	3386R-504-ND*	3386W-504-ND	3386X-504-ND*
1M	3386C-105-ND*	3386F-105-ND*	3386H-105-ND	3386P-105-ND*	3386R-105-ND*	3386W-105-ND	3386X-105-ND*
2M	3386C-205-ND*	3386F-205-ND*	3386H-205-ND	3386P-205-ND*	3386R-205-ND*	3386W-205-ND	3386X-205-ND*

Series	Pricing 1	 10	 50
3386C/3386R	1.43	13.00	55.90
3386F/3386H/3386P/3386W/3386X	1.29	11.75	50.53

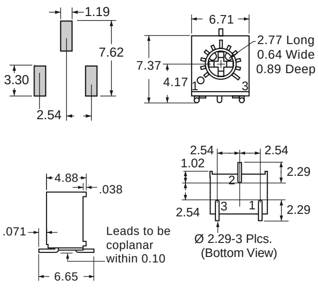
* **3386☐-KIT-ND** ***Digi-Key® Series 3386 Trimmer Potentiometer Kit***
5 each of values denoted in series (75 total pieces). Notebook style kit box and bin storage guide included. For complete number, substitute corresponding letter (C,F,P,R,X) for ☐... **$64.95**

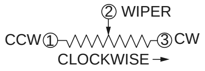
SERIES 3361 1/4" (6.35mm) Square SMD/Single-Turn Cermet/Industrial/Sealed

3361P



3361S





Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Adjustment Angle:** 240° nom. **Power Rating** (300 volts max.): 70°C — 0.50 watt; 125°C — 0 watt. **Temperature Range:** -55°C to +125°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 0.5 watt @ 70°C (3% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Rotational Life:** 200 cycles (4% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Mechanical Angle:** 270° nom. **Torque:** 3.0 oz-in. max. **Stop Strength:** 7.0 oz-in. min.

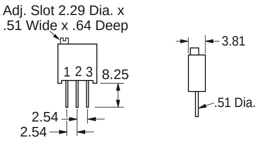
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.
100	3361P-101G☐☐-ND	3361S-101G☐☐-ND
200	3361P-201G☐☐-ND	3361S-201G☐☐-ND
500	3361P-501G☐☐-ND	3361S-501G☐☐-ND
1K	3361P-102G☐☐-ND	3361S-102G☐☐-ND
2K	3361P-202G☐☐-ND	3361S-202G☐☐-ND
5K	3361P-502G☐☐-ND	3361S-502G☐☐-ND
10K	3361P-103G☐☐-ND	3361S-103G☐☐-ND
20K	3361P-203G☐☐-ND	3361S-203G☐☐-ND
50K	3361P-503G☐☐-ND	3361S-503G☐☐-ND
100K	3361P-104G☐☐-ND	3361S-104G☐☐-ND

Series	Part No.	Cut Tape Pricing 1	 10	 50	Part No.	Tape & Reel Pricing 500	 750
3361P	Add “CT-ND”	.96	8.75	42.00	Add “TR-ND”	__	459.75
3361S	Add “CT-ND”	.96	8.75	42.00	Add “TR-ND”	306.50	—

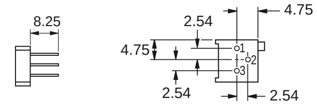
BOURNS Trimmer Potentiometers

SERIES 3292 3/8" (9.52mm) Square/Multiturn (25) Cermet/Industrial/Sealed

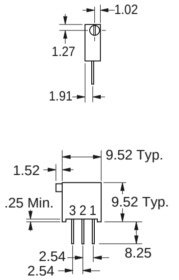
3292W

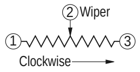


3292P



3292X





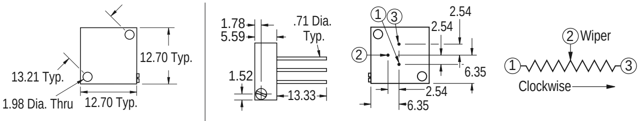
Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Effective Travel:** 25 turns nom. **Power Rating** (400 volts max.): 85°C — 0.5 watt; 150°C — 0 watt. **Temperature Range:** –65°C to +150°C. **Temperature Coefficient:** ±100 ppm/°C. **Load Life:** 1,000 hours 0.5 watt @ 85°C (2% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Rotational Life:** 200 cycles (2% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Torque:** 5.0 oz-in. max. **Mechanical Stops:** Wiper idles.

Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.
100	3292P-101-ND	3292W-101-ND	3292X-101-ND
200	3292P-201-ND	3292W-201-ND	3292X-201-ND
500	3292P-501-ND	3292W-501-ND	3292X-501-ND
1K	3292P-102-ND	3292W-102-ND	3292X-102-ND
2K	3292P-202-ND	3292W-202-ND	3292X-202-ND
5K	3292P-502-ND	3292W-502-ND	3292X-502-ND
10K	3292P-103-ND	3292W-103-ND	3292X-103-ND
20K	3292P-203-ND	3292W-203-ND	3292X-203-ND
50K	3292P-503-ND	3292W-503-ND	3292X-503-ND
100K	3292P-104-ND	3292W-104-ND	3292X-104-ND
200K	3292P-204-ND	3292W-204-ND	3292X-204-ND
500K	3292P-504-ND	3292W-504-ND	3292X-504-ND
1M	3292P-105-ND	3292W-105-ND	3292X-105-ND

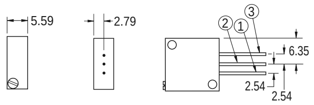
	Pricing		
Series	1	10	50
3292P/3292W/3292X	15.51	141.00	606.30

SERIES 3252 1/2" (12.70mm) Square/Multiturn (25) Cermet/Industrial/Sealed

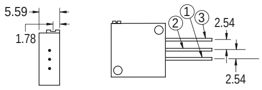
3252P



3252W



3252X



Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc 1,000 megohms min. **Effective Travel:** 25 turns nom. **Power Rating** (400 volts max.): 85°C — 0.75 watt; 150°C — 0 watt. **Temperature Range:** –65°C to +150°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 0.75 watt @ 85°C (3% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Rotational Life:** 200 cycles (2% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Torque:** 5.0 oz-in. max. **Mechanical Stops:** Wiper idles.

Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.
100	3252P-101-ND*	3252W-101-ND*	3252X-101-ND*
200	3252P-201-ND	3252W-201-ND	—
500	3252P-501-ND*	3252W-501-ND*	3252X-501-ND*
1K	3252P-102-ND*	3252W-102-ND*	3252X-102-ND*
2K	3252P-202-ND	3252W-202-ND	3252X-202-ND
5K	3252P-502-ND*	3252W-502-ND*	3252X-502-ND*
10K	3252P-103-ND*	3252W-103-ND*	3252X-103-ND*
20K	3252P-203-ND	3252W-203-ND	3252X-203-ND
50K	3252P-503-ND*	3252W-503-ND*	3252X-503-ND*
100K	3252P-104-ND	3252W-104-ND	3252X-104-ND
200K	3252P-204-ND	3252W-204-ND	3252X-204-ND

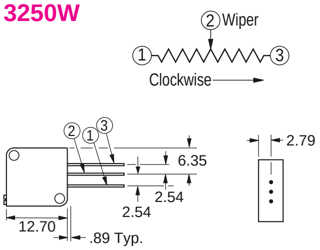
	Pricing		
Series	1	10	50
3252P/3252W/3252X	14.44	131.25	564.38

* **3252-KIT-ND** ***Digi-Key® Series 3252 Trimmer Potentiometer Kit***
5 each of values denoted (90 total pieces). Notebook style kit box and bin storage guide included **$569.00**

SERIES 3250 1/2" (12.70mm) Square/Multiturn (25) Wirewound/Sealed

Resistance Tolerance: ±5% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Adjustment Travel:** 25 turns nom. **Power Rating:** 85°C – 1 watt; 150°C – 0 watt. **Temperature Range:** –65°C to +150°C. **Temperature Coefficient:** ±70 ppm/°C. **Load Life:** 1,000 hours 1 watt @ 85°C (2% ΔTR; ENR, 500 ohms). **Rotational Life:** 200 cycles (2% ΔTR; ENR, 500 ohms). **Torque:** 5.0 oz-in. max. **Mechanical Stops:** Wiper idles.

3250W

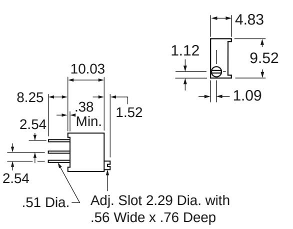


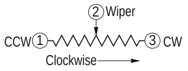
Res. (Ohms)	Digi-Key Part No.	Nominal Resolution (Percent)
200	3250W-201-ND	0.70
500	3250W-501-ND	0.60
1K	3250W-102-ND	0.40
2K	3250W-202-ND	0.30
5K	3250W-502-ND	0.25
10K	3250W-103-ND	0.19
20K	3250W-203-ND	0.16

	Pricing		
Series	1	10	50
3250W	12.49	113.50	488.05

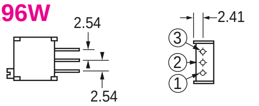
SERIES 3296 3/8" (9.52mm) Square/Multiturn (25) Cermet/Industrial/Sealed

Common Dimensions

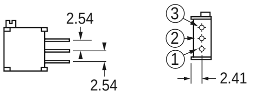




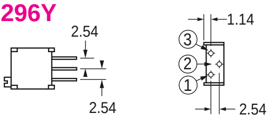
3296W



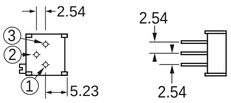
3296X



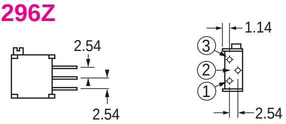
3296Y



3296P



3296Z



Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Effective Travel:** 25 turns nom. **Power Rating** (300 volts max.): 70°C — 0.5 watt; 125°C — 0 watt. **Temperature Range:** -55°C to +125°C. **Temperature Coefficient:** ±100 ppm/°C. **Load Life:** 1,000 hours 0.5 watt @ 70°C (3% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Rotational Life:** 200 cycles (4% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Torque:** 3.0 oz-in. max. **Mechanical Stops:** Wiper idles.

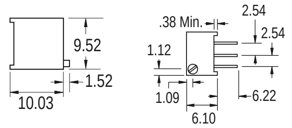
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.
10	3296P-100-ND*	3296W-100-ND*	3296X-100-ND*	3296Y-100-ND*	3296Z-100-ND*
20	3296P-200-ND	3296W-200-ND	3296X-200-ND	3296Y-200-ND	3296Z-200-ND
50	3296P-500-ND*	3296W-500-ND*	3296X-500-ND*	3296Y-500-ND*	3296Z-500-ND*
100	3296P-101-ND*	3296W-101-ND*	3296X-101-ND*	3296Y-101-ND*	3296Z-101-ND*
200	3296P-201-ND	3296W-201-ND	3296X-201-ND	3296Y-201-ND	3296Z-201-ND
500	3296P-501-ND*	3296W-501-ND*	3296X-501-ND*	3296Y-501-ND*	3296Z-501-ND*
1K	3296P-102-ND*	3296W-102-ND*	3296X-102-ND*	3296Y-102-ND*	3296Z-102-ND*
2K	3296P-202-ND*	3296W-202-ND*	3296X-202-ND*	3296Y-202-ND*	3296Z-202-ND*
5K	3296P-502-ND*	3296W-502-ND*	3296X-502-ND*	3296Y-502-ND*	3296Z-502-ND*
10K	3296P-103-ND*	3296W-103-ND*	3296X-103-ND*	3296Y-103-ND*	3296Z-103-ND*
20K	3296P-203-ND*	3296W-203-ND*	3296X-203-ND*	3296Y-203-ND*	3296Z-203-ND*
25K	3296P-253-ND	3296W-253-ND	3296X-253-ND	3296Y-253-ND	3296Z-253-ND
50K	3296P-503-ND*	3296W-503-ND*	3296X-503-ND*	3296Y-503-ND*	3296Z-503-ND*
100K	3296P-104-ND*	3296W-104-ND*	3296X-104-ND*	3296Y-104-ND*	3296Z-104-ND*
200K	3296P-204-ND*	3296W-204-ND*	3296X-204-ND*	3296Y-204-ND*	3296Z-204-ND*
250K	3296P-254-ND	3296W-254-ND	3296X-254-ND	3296Y-254-ND	3296Z-254-ND
500K	3296P-504-ND*	3296W-504-ND*	3296X-504-ND*	3296Y-504-ND*	3296Z-504-ND*
1M	3296P-105-ND*	3296W-105-ND*	3296X-105-ND*	3296Y-105-ND*	3296Z-105-ND*
2M	3296P-205-ND*	3296W-205-ND*	3296X-205-ND*	3296Y-205-ND*	3296Z-205-ND*
5M	3296P-505-ND	3296W-505-ND	3296X-505-ND	—	3296Z-505-ND

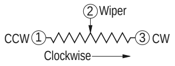
	Pricing		
Series	1	10	50
3296P/3296Z	2.70	24.50	105.35
3296W/3296X/3296Y	2.50	22.75	97.83

* **3296☐ -KIT-ND** ***Digi-Key® Series 3296 Trimmer Potentiometer Kit***
5 each of values denoted in series (75 total pieces). Notebook style case and bin storage guide included. For complete number, substitute corresponding letter (P,W,X,Y,Z) for ☐.. **$139.00**

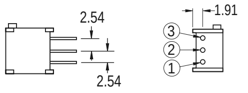
BOURNS Trimmer Potentiometers

SERIES 3299 3/8" (9.52mm) Square/Multiturn (25) Cermet/Industrial/Sealed

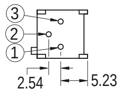




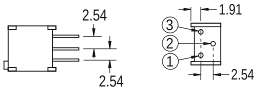
3299X



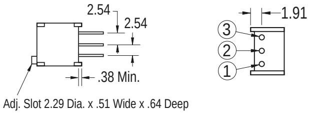
3299P



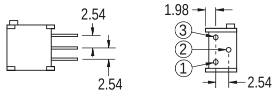
3299Y



3299W



3299Z



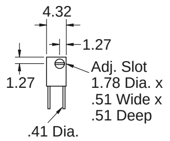
Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Effective Travel:** 25 turns nom. **Power Rating** (300 volts max.): 70°C — 0.5 watt; 125°C — 0 watt. **Temperature Range:** –55°C to +125°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 0.5 watt @ 70°C (3% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Rotational Life:** 200 cycles (4% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Torque:** 3.0 oz-in. max. **Mechanical Stops:** Wiper idles.

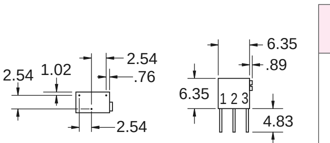
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.
10	3299P-100-ND	3299W-100-ND	3299X-100-ND	3299Y-100-ND	3299Z-100-ND
20	3299P-200-ND	3299W-200-ND	3299X-200-ND	3299Y-200-ND	3299Z-200-ND
50	3299P-500-ND	3299W-500-ND	3299X-500-ND	3299Y-500-ND	3299Z-500-ND
100	3299P-101-ND	3299W-101-ND	3299X-101-ND	3299Y-101-ND	3299Z-101-ND
200	3299P-201-ND	3299W-201-ND	3299X-201-ND	3299Y-201-ND	3299Z-201-ND
500	3299P-501-ND	3299W-501-ND	3299X-501-ND	3299Y-501-ND	3299Z-501-ND
1K	3299P-102-ND	3299W-102-ND	3299X-102-ND	3299Y-102-ND	3299Z-102-ND
2K	3299P-202-ND	3299W-202-ND	3299X-202-ND	3299Y-202-ND	3299Z-202-ND
5K	3299P-502-ND	3299W-502-ND	3299X-502-ND	3299Y-502-ND	3299Z-502-ND
10K	3299P-103-ND	3299W-103-ND	3299X-103-ND	3299Y-103-ND	3299Z-103-ND
20K	3299P-203-ND	3299W-203-ND	3299X-203-ND	3299Y-203-ND	3299Z-203-ND
25K	3299P-253-ND	3299W-253-ND	—	3299Y-253-ND	3299Z-253-ND
50K	3299P-503-ND	3299W-503-ND	3299X-503-ND	3299Y-503-ND	3299Z-503-ND
100K	3299P-104-ND	3299W-104-ND	3299X-104-ND	3299Y-104-ND	3299Z-104-ND
200K	3299P-204-ND	3299W-204-ND	3299X-204-ND	3299Y-204-ND	3299Z-204-ND
250K	3299P-254-ND	3299W-254-ND	3299X-254-ND	3299Y-254-ND	3299Z-254-ND
500K	3299P-504-ND	3299W-504-ND	3299X-504-ND	3299Y-504-ND	3299Z-504-ND
1M	3299P-105-ND	3299W-105-ND	3299X-105-ND	3299Y-105-ND	3299Z-105-ND
2M	3299P-205-ND	3299W-205-ND	3299X-205-ND	3299Y-205-ND	3299Z-205-ND
5M	3299P-505-ND	3299W-505-ND	3299X-505-ND	3299Y-505-ND	3299Z-505-ND

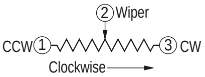
Series	Pricing 1	10	50
3299P	3.14	28.50	122.55
3299W/3299X/3299Y/3299Z	2.92	26.50	113.95

SERIES 3260 1/4" (6.35mm) Square/Multiturn (11) Wirewound/Industrial/Sealed

3260H







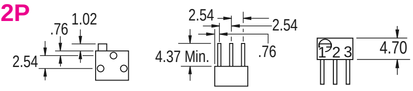
Resistance Tolerance: ±5% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Adjustment Angle:** 11 turns nom. **Power Rating:** 85°C – 0.25 watt; 150°C – 0 watt. **Temperature Range:** –65°C to +150°C. **Temperature Coefficient:** +70ppm/°C. **Load Life:** 1,000 hours 0.25 watt @ 85°C (2% DTR; ENR, 500 ohms). **Rotational Life:** 200 cycles (2% DTR; ENR, 500 ohms). **Torque:** 3.0 oz-in. max. **Mechanical Stops:** Wiper idles.

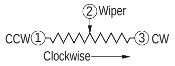
Res. (Ohms)	Digi-Key Part No.	Nominal Resolution (Percent)
100	3260H-101-ND	1.00
200	3260H-201-ND	0.94
500	3260H-501-ND	0.58
1K	3260H-102-ND	0.50
2K	3260H-202-ND	0.45
10K	3260H-103-ND	0.29
20K	3260H-203-ND	0.28

Series	Pricing 1	10	50
3260H	27.17	247.00	1062.10

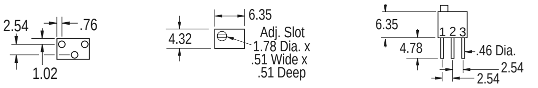
SERIES 3262 1/4" (6.35mm) Square/Multiturn (12) Cermet/Industrial/Sealed

3262P

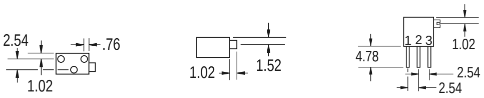




3262W



3262X

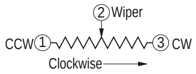


Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Effective Travel:** 12 turns nom. **Power Rating:** (300 volts max.) 85°C — 0.25 watt; 150°C — 0 watt. **Temperature Range:** –65°C to +150°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 0.25 watt @ 85°C (3% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Rotational Life:** 200 cycles (2% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Torque:** 3.0 oz-in. max. **Mechanical Stops:** Wiper idles.

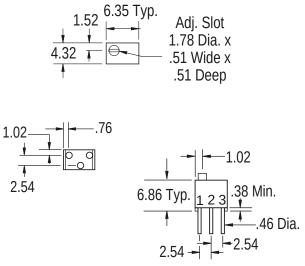
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.
10	3262P-100-ND	3262W-100-ND	3262X-100-ND
20	3262P-200-ND	3262W-200-ND	3262X-200-ND
50	3262P-500-ND	3262W-500-ND	3262X-500-ND
100	3262P-101-ND	3262W-101-ND	3262X-101-ND
200	3262P-201-ND	3262W-201-ND	3262X-201-ND
500	3262P-501-ND	3262W-501-ND	3262X-501-ND
1K	3262P-102-ND	3262W-102-ND	3262X-102-ND
2K	3262P-202-ND	3262W-202-ND	3262X-202-ND
5K	3262P-502-ND	3262W-502-ND	3262X-502-ND
10K	3262P-103-ND	3262W-103-ND	3262X-103-ND
20K	3262P-203-ND	3262W-203-ND	3262X-203-ND
25K	3262P-253-ND	3262W-253-ND	3262X-253-ND
50K	3262P-503-ND	3262W-503-ND	3262X-503-ND
100K	3262P-104-ND	3262W-104-ND	3262X-104-ND
200K	3262P-204-ND	3262W-204-ND	3262X-204-ND
250K	3262P-254-ND	3262W-254-ND	3262X-254-ND
500K	3262P-504-ND	3262W-504-ND	3262X-504-ND
1M	3262P-105-ND	3262W-105-ND	3262X-105-ND

Series	Pricing 1	10	50
3262P/3262W/3262X	14.30	130.00	559.00

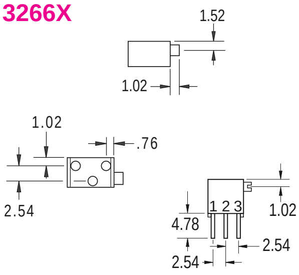
SERIES 3266 1/4" (6.35mm) Square/Multiturn (12) Cermet/Industrial/Sealed



3266W



3266X



Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Effective Travel:** 12 turns nom. **Power Rating (300 volts max.):** 70°C — 0.25 watt; 150°C — 0 watt. **Temperature Range:** –55°C to +125°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 0.25 watt @ 70°C (3% ΔTR; CRV, 3%). **Rotational Life:** 200 cycles (4% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Torque:** 3.0 oz-in. max. **Mechanical Stops:** Wiper idles.

Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.
10	3266W-100-ND*	3266X-100-ND*
20	3266W-200-ND*	3266X-200-ND*
50	3266W-500-ND*	3266X-500-ND*
100	3266W-101-ND*	3266X-101-ND*
200	3266W-201-ND*	3266X-201-ND*
500	3266W-501-ND*	3266X-501-ND*
1K	3266W-102-ND*	3266X-102-ND*
2K	3266W-202-ND*	3266X-202-ND*
5K	3266W-502-ND*	3266X-502-ND*
10K	3266W-103-ND*	3266X-103-ND*
20K	3266W-203-ND*	3266X-203-ND*
25K	3266W-253-ND*	3266X-253-ND*
50K	3266W-503-ND*	3266X-503-ND*
100K	3266W-104-ND*	3266X-104-ND*
200K	3266W-204-ND*	3266X-204-ND*
250K	3266W-254-ND*	3266X-254-ND*
500K	3266W-504-ND*	3266X-504-ND*
1M	3266W-105-ND	3266X-105-ND

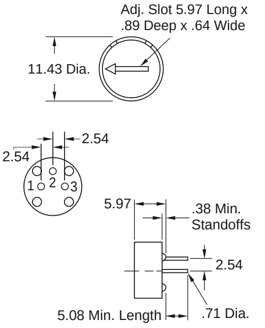
Series	Pricing 1	10	50
3266W/3266X	3.58	32.50	139.75

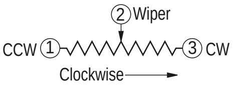
*** 3266☐-KIT-ND** ***Digi-Key® Series 3266 Trimmer Potentiometer Kit***

5 each in values denoted in series (85 total pieces). Notebook style storage case and bin storage guide included. For complete number, substitute corresponding letter (W,X) for ☐ **$189.00**

SERIES 3345 1/2" (12.70mm) Round/Single-Turn Wirewound/Industrial/Sealed

3345P





• Industrial wirewound. • 1.0 watt power rating at 70°C. **Resistance Tolerance:** ±5% std. **Adjustment Angle:** 280° nom. **Power Rating:** 70°C — 1 watt; 150°C — 0 watt. **Temperature Range:** –55°C to +150°C. **Temperature Coefficient:** ±50ppm/°C. **Load Life:** 1,000 hours 1 watt @ 70°C. **Rotational Life:** 200 cycles (2% ΔTR; ENR, 500 ohms). **Mechanical Angle:** 310° nom. **Torque:** 5.0 oz-in. max. **Stop Strength:** 15 oz-in. min.

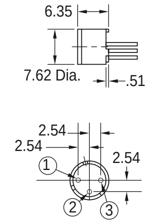
Res. (Ohms)	Digi-Key* Part No.	Nominal Resolution (Percent)
50	3345P-500-ND	0.58
100	3345P-101-ND	0.49
200	3345P-201-ND	0.49
500	3345P-501-ND	0.38
1K	3345P-102-ND	0.30
2K	3345P-202-ND	0.24
5K	3345P-502-ND	0.18
10K	3345P-103-ND	0.14
20K	3345P-203-ND	0.13

Series	Pricing 1	10	50
3345P	8.28	75.25	323.58

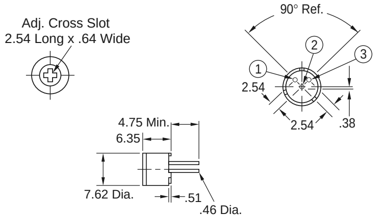
***3345P-KIT-ND** *Digi-Key® Series 3345 Trimmer Potentiometers Kit* 5 each of all values (45 total pieces). Notebook style case and bin storage guide included **$169.95**

SERIES 3339 5/16" (7.95mm) Round/Four-Turn Cermet/Industrial/Sealed

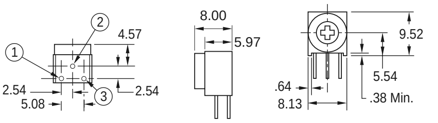
3339P

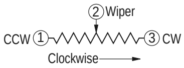


3339H



3339W





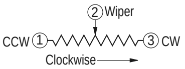
• Unique planetary drive offers precise wiper setting of a multiturn in a single-turn package size. • Top and side adjust styles. **Resistance Tolerance:** ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Effective Travel:** 4 turns nom. **Power Rating** (300 volts max.): 85°C — 0.5 watt; 150°C — 0 watt. **Temperature Range:** –55°C to +150°C. **Temperature Coefficient:** ±100 ppm/°C. **Load Life:** 1,000 hours 0.5 watt @ 85°C (3% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Rotational Life:** 200 cycles (3% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Torque:** 3.0 oz-in. max. **Mechanical Stops:** Wiper idles.

Res. (Ohms)	Digi-Key Part No.	Digi-Key* Part No.	Digi-Key* Part No.
50	3339H-500-ND	3339P-500-ND	3339W-500-ND
100	3339H-101-ND	3339P-101-ND	3339W-101-ND
200	3339H-201-ND	3339P-201-ND	3339W-201-ND
500	3339H-501-ND	3339P-501-ND	3339W-501-ND
1K	3339H-102-ND	3339P-102-ND	3339W-102-ND
2K	3339H-202-ND	3339P-202-ND	3339W-202-ND
5K	3339H-502-ND	3339P-502-ND	3339W-502-ND
10K	3339H-103-ND	3339P-103-ND	3339W-103-ND
20K	3339H-203-ND	3339P-203-ND	3339W-203-ND
50K	3339H-503-ND	3339P-503-ND	3339W-503-ND
100K	3339H-104-ND	3339P-104-ND	3339W-104-ND
200K	3339H-204-ND	3339P-204-ND	3339W-204-ND
500K	3339H-504-ND	3339P-504-ND	3339W-504-ND
1M	3339H-105-ND	3339P-105-ND	3339W-105-ND

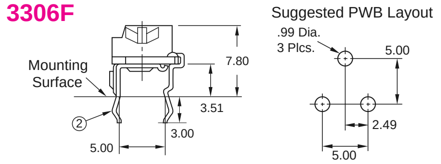
Series	Pricing 1	10	50
3339H/3339P	5.28	48.00	206.40
3339W	7.59	69.00	296.70

* **3339☐-KIT-ND** *Digi-Key® Series 3339 Trimmer Potentiometers Kit*
5 each of all values in denoted series (70 total pieces). Notebook style case and bin storage guide included. For complete number, substitute corresponding letter (P,W) for ☐ **$259.00**

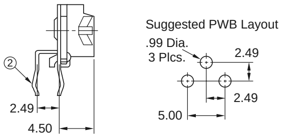
SERIES 3306 6mm Round/Single-Turn Cermet/Industrial/Open Frame



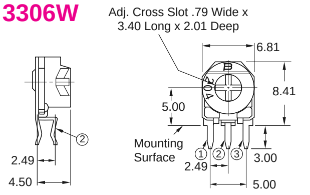
3306F



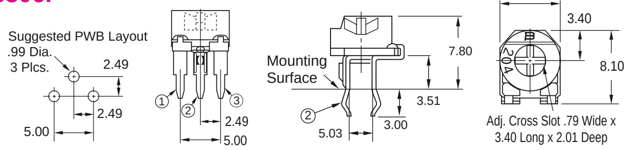
3306K



3306W



3306P



• Cross slot rotor design suitable for automatic adjustment equipment. • Board retention feature. • Dust resistant/splash resistant cover. • Front and top adjust styles. **Resistance Tolerance:** ±25% std. **Adjustment Angle:** 215° nom. **Power Rating** (100 volts max.): 70°C — 0.2 watt. **Temperature Range:** –25°C to +100°C. **Temperature Coefficient:** ±250ppm/°C. **Load Life:** 1,000 hours 0.2 watt @ 70°C (5% ΔTR). **Torque** (Operating): 4.5 oz-in. max. **Stop Strength:** 6.5 oz-in. min.

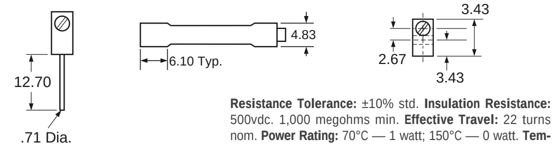
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.
100	3306F-101-ND	3306K-101-ND	3306P-101-ND	3306W-101-ND
200	3306F-201-ND	3306K-201-ND	3306P-201-ND	3306W-201-ND
500	3306F-501-ND	3306K-501-ND	3306P-501-ND	3306W-501-ND
1K	3306F-102-ND	3306K-102-ND	3306P-102-ND	3306W-102-ND
2K	3306F-202-ND	3306K-202-ND	3306P-202-ND	3306W-202-ND
5K	3306F-502-ND	3306K-502-ND	3306P-502-ND	3306W-502-ND
10K	3306F-103-ND	3306K-103-ND	3306P-103-ND	3306W-103-ND
20K	3306F-203-ND	3306K-203-ND	3306P-203-ND	3306W-203-ND
50K	3306F-503-ND	3306K-503-ND	3306P-503-ND	3306W-503-ND
100K	3306F-104-ND	3306K-104-ND	3306P-104-ND	3306W-104-ND
200K	3306F-204-ND	3306K-204-ND	3306P-204-ND	3306W-204-ND
500K	3306F-504-ND	3306K-504-ND	3306P-504-ND	3306W-504-ND
1M	3306F-105-ND	3306K-105-ND	3306P-105-ND	3306W-105-ND

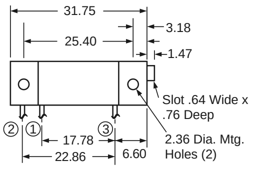
Series	Pricing 1	10	100
3306F / 3306K / 3306P / 3306W	.57	4.30	40.16

G

SERIES 3059 1-1/4" (31.75mm) Rectangular/Multiturn (22) Cermet/Industrial/Sealed

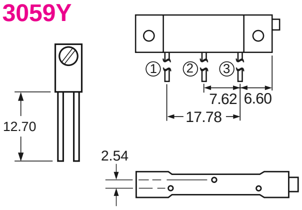
3059P





Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Effective Travel:** 22 turns nom. **Power Rating:** 70°C — 1 watt; 150°C — 0 watt. **Temperature Range:** –55°C to +150°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 1 watt @ 70°C (3% ΔTR; CRV, 1% or 1 ohm, whichever is greater). **Rotational Life:** 200 cycles (2% ΔTR; CRV, 1% or 1 ohm, whichever is greater). **Torque:** 5.0 oz-in. max. **Mechanical Stops:** Wiper idles.

3059Y



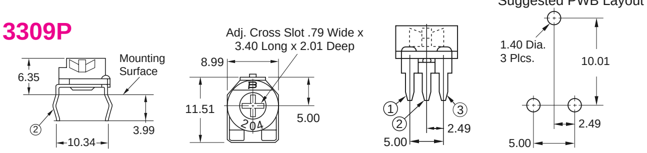
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.
100	3059P-101-ND	3059Y-101-ND
200	3059P-201-ND	3059Y-201-ND
500	3059P-501-ND	3059Y-501-ND
1K	3059P-102-ND	3059Y-102-ND
2K	3059P-202-ND	3059Y-202-ND
5K	3059P-502-ND	3059Y-502-ND
10K	3059P-103-ND	3059Y-103-ND
20K	3059P-203-ND	3059Y-203-ND
50K	3059P-503-ND	3059Y-503-ND
100K	3059P-104-ND	3059Y-104-ND
200K	3059P-204-ND	3059Y-204-ND
500K	3059P-504-ND	3059Y-504-ND
1M	3059P-105-ND	3059Y-105-ND

Series	Pricing 1	10	50
3059P/3059Y	6.49	59.00	253.70

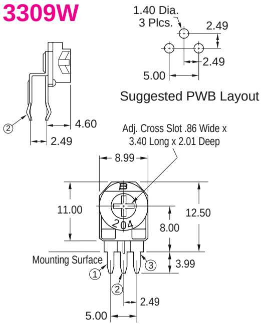
BOURNS Trimmer Potentiometers

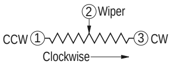
SERIES 3309 9mm Round/Single-Turn Cermet/Industrial/Open Frame

3309P



3309W





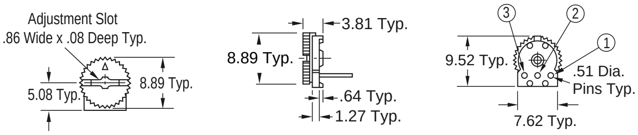
Resistance Tolerance: ±25% std. **Adjustment Angle:** 235° nom. **Power Rating** (250 volts max.): 70°C — 0.5 watt. **Temperature Range:** –25°C to +100°C. **Temperature Coefficient:** ±250ppm/°C. **Load Life:** 1,000 hours 0.5 watt @ 70°C (5% ΔTR). **Torque:** 5.0 oz-in. max. **Stop Strength:** 11.0 oz-in. min.

Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.
100	3309P-101-ND*	3309W-101-ND*
200	3309P-201-ND	3309W-201-ND
500	3309P-501-ND*	3309W-501-ND*
1K	3309P-102-ND*	3309W-102-ND*
2K	3309P-202-ND*	3309W-202-ND*
5K	3309P-502-ND*	3309W-502-ND*
10K	3309P-103-ND*	3309W-103-ND*
20K	3309P-203-ND*	3309W-203-ND*
50K	3309P-503-ND*	3309W-503-ND*
100K	3309P-104-ND*	3309W-104-ND*
200K	3309P-204-ND	3309W-204-ND
500K	3309P-504-ND	3309W-504-ND
1M	3309P-105-ND	3309W-105-ND

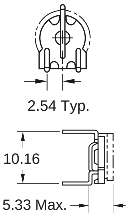
Series	Pricing 1	 10	 100
3309P / 3309W	.56	4.77	39.54

* **3309-KIT-ND** ***Digi-Key® Series 3309 Trimmer Potentiometers Kit***
10 each of values denoted (180 total pieces). Notebook style storage case and bin storage guide included. **$89.95**

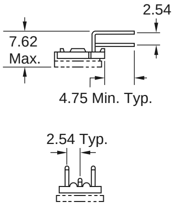
SERIES 3352 3/8" (9.52mm) Round/Single-Turn Cermet/Industrial/Open Frame



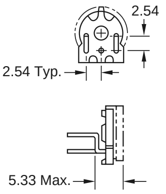
3352E



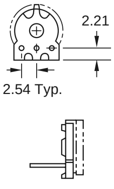
3352H



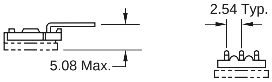
3352P

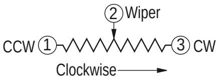


3352T



3352W





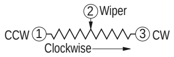
Resistance Tolerance: ±20% std. **Adjustment Angle:** 205° nom. **Power Rating** (250 volts max.): 85°C — 0.5 watt; 125°C — 0 watt. **Temperature Range:** –55°C to +125°C. **Temperature Coefficient:** Below 2K — ±150ppm/°C; 2K & up — +100ppm/°C. **Load Life:** 1,000 hours 0.5 watt @ 85°C (3% ΔTR). **Rotational Life:** 200 cycles (10% DTR). **Mechanical Angle:** 2508 nom. **Torque:** 3.0 oz-in. max. **Stop Strength:** 8 oz-in. min.

Res. (Ohms)	Digi-Key* Part No.	Digi-Key* Part No.	Digi-Key* Part No.	Digi-Key* Part No.	Digi-Key* Part No.
100	3352E-101-ND	3352H-101-ND	3352P-101-ND	3352T-101-ND	3352W-101-ND
200	3352E-201-ND	3352H-201-ND	3352P-201-ND	3352T-201-ND	3352W-201-ND
500	3352E-501-ND	3352H-501-ND	3352P-501-ND	3352T-501-ND	3352W-501-ND
1K	3352E-102-ND	3352H-102-ND	3352P-102-ND	3352T-102-ND	3352W-102-ND
2K	3352E-202-ND	3352H-202-ND	3352P-202-ND	3352T-202-ND	3352W-202-ND
5K	3352E-502-ND	3352H-502-ND	3352P-502-ND	3352T-502-ND	3352W-502-ND
10K	3352E-103-ND	3352H-103-ND	3352P-103-ND	3352T-103-ND	3352W-103-ND
20K	3352E-203-ND	3352H-203-ND	3352P-203-ND	3352T-203-ND	3352W-203-ND
25K	3352E-253-ND	3352H-253-ND	3352P-253-ND	3352T-253-ND	3352W-253-ND
50K	3352E-503-ND	3352H-503-ND	3352P-503-ND	3352T-503-ND	3352W-503-ND
100K	3352E-104-ND	3352H-104-ND	3352P-104-ND	3352T-104-ND	3352W-104-ND
200K	3352E-204-ND	3352H-204-ND	3352P-204-ND	3352T-204-ND	3352W-204-ND
250K	3352E-254-ND	3352H-254-ND	3352P-254-ND	3352T-254-ND	3352W-254-ND
500K	3352E-504-ND	3352H-504-ND	3352P-504-ND	3352T-504-ND	3352W-504-ND
1M	3352E-105-ND	3352H-105-ND	3352P-105-ND	3352T-105-ND	3352W-105-ND

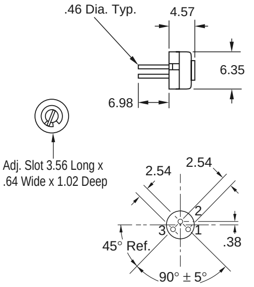
Series	Pricing 1	 10	 50
3352E / 3352H / 3352P / 3352T / 3352W	1.10	10.00	43.00

* **3352☐-KIT-ND** ***Digi-Key® Series 3352 Trimmer Potentiometers Kit***
5 each of all values in denoted series (75 total pieces). Notebook style kit box and bin storage guide included. For complete number, substitute corresponding letter (E,H,P,T,W,) for ☐ **$46.95**

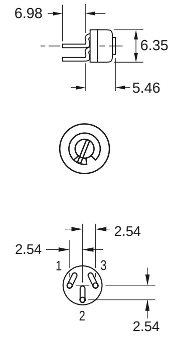
SERIES 3329 1/4" (6.35mm) Round/Single-Turn Cermet/Industrial/Sealed



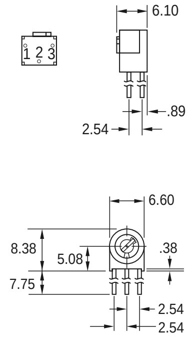
3329H



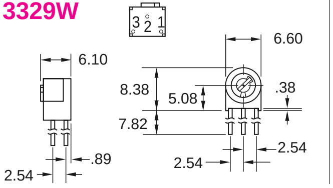
3329P



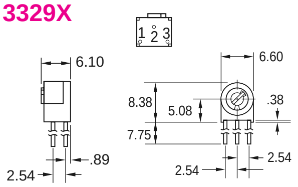
3329S



3329W



3329X



Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Adjustment Angle:** 240° nom. **Power Rating** (300 volts max.): 85°C — 0.5 watt; 150°C — 0 watt. **Temperature Range:** –55°C to +150°C. **Temperature Coefficient:** ±100 ppm/°C. **Load Life:** 1,000 hours 0.5 watt @ 85°C (3% ΔTR; CRV, 3%). **Rotational Life:** 200 cycles (4% ΔTR; CRV, 4%). **Mechanical Angle:** 260° nom. **Torque:** 5.0 oz-in. max. **Stop Strength:** 5.0 oz-in. min.

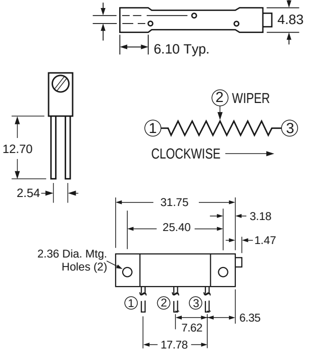
Res. (Ohms)	Digi-Key* Part No.	Digi-Key* Part No.	Digi-Key* Part No.	Digi-Key* Part No.	Digi-Key* Part No.
50	3329H-500-ND	3329P-500-ND	3329S-500-ND	3329W-500-ND	3329X-500-ND
100	3329H-101-ND	3329P-101-ND	3329S-101-ND	3329W-101-ND	3329X-101-ND
200	3329H-201-ND	3329P-201-ND	3329S-201-ND	3329W-201-ND	3329X-201-ND
500	3329H-501-ND	3329P-501-ND	3329S-501-ND	3329W-501-ND	3329X-501-ND
1K	3329H-102-ND	3329P-102-ND	3329S-102-ND	3329W-102-ND	3329X-102-ND
2K	3329H-202-ND	3329P-202-ND	3329S-202-ND	3329W-202-ND	3329X-202-ND
5K	3329H-502-ND	3329P-502-ND	3329S-502-ND	3329W-502-ND	3329X-502-ND
10K	3329H-103-ND	3329P-103-ND	3329S-103-ND	3329W-103-ND	3329X-103-ND
20K	3329H-203-ND	3329P-203-ND	3329S-203-ND	3329W-203-ND	3329X-203-ND
50K	3329H-503-ND	3329P-503-ND	3329S-503-ND	3329W-503-ND	3329X-503-ND
100K	3329H-104-ND	3329P-104-ND	3329S-104-ND	3329W-104-ND	3329X-104-ND
200K	3329H-204-ND	3329P-204-ND	3329S-204-ND	3329W-204-ND	3329X-204-ND
500K	3329H-504-ND	3329P-504-ND	3329S-504-ND	3329W-504-ND	3329X-504-ND
1M	3329H-105-ND	3329P-105-ND	3329S-105-ND	3329W-105-ND	3329X-105-ND

Series	Pricing 1	 10	 50
3329H/3329P	2.61	23.75	102.13
3329S/3329W/3329X	3.14	28.50	122.55

* **3329☐-KIT-ND** ***Digi-Key® Series 3329 Trimmer Potentiometers Kit***
5 each of all values in denoted series (70 total pieces). Notebook style case and bin storage guide included. For complete number, substitute corresponding letter (H,P,S,W,X) for ☐ **$119.95**

SERIES 3057 1-1/4" (31.75mm) Rectangular/Multiturn (22) Wirewound/Industrial/Sealed

3057Y



Resistance Tolerance: ±5% std. **Insulation Resistance:** 500vdc. 1,000 MΩ min. **Adjustment Travel:** 22 turns nom. **Power Rating:** 70°C — 1 watt; 150°C — 0 watt. **Temperature Range:** -55°C to +150°C. **Temperature Coefficient:** ±50ppm/°C. **Load Life:** 1,000 hours 1 watt @ 70°C (2% ΔTR). **Rotational Life:** 200 cycles (2% ΔTR). **Torque:** 5.0 oz-in. max. **Mechanical Stops:** Wiper idles.

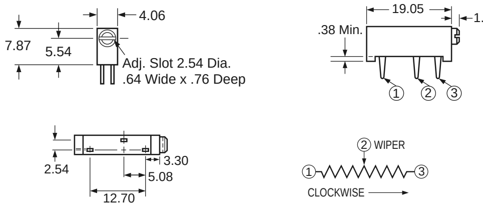
Res. (Ohms)	Digi-Key Part No.	Nominal Resolution (Percent)
200	3057Y-201-ND	0.86
500	3057Y-501-ND	0.89
1K	3057Y-102-ND	0.72
2K	3057Y-202-ND	0.58
5K	3057Y-502-ND	0.43
10K	3057Y-103-ND	0.34
20K	3057Y-203-ND	0.31

Series	Pricing 1	 10	 50
3057Y	17.99	163.50	703.05

Trimmer Potentiometers

SERIES 3005 3/4" (19.05mm) Rectangular/Multiturn (20) Wirewound/Industrial/Sealed

3005P

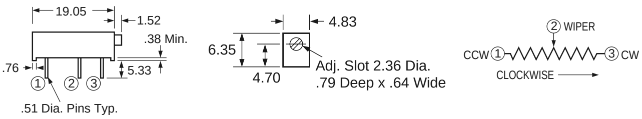


Sealed to prevent contamination from fluxing, soldering and cleaning. **Resistance Tolerance:** ±10% std. **Insulation Resistance:** 500vdc. 1,000 MΩ min. **Adjustment Travel:** 20 turns nom. **Power Rating:** 70°C — 1 watt; 125°C — 0 watt. **Temperature Range:** –65°C to +125°C. **Temperature Coefficient:** ±50ppm/°C. **Load Life:** 1,000 hours 1 watt @ 70°C (3% ΔTR). **Rotational Life:** 200 cycles (4% ΔTR). **Torque:** 5.0 oz-in. max. **Mechanical Stops:** Wiper idles.

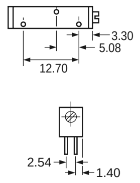
Series	Pricing 1	10	50
3005P	10.15	92.25	396.68

Res. (Ohms)	Digi-Key Part No.	Nominal Resolution (Percent)
100	3005P-101-ND	0.8
200	3005P-201-ND	0.7
500	3005P-501-ND	0.5
1K	3005P-102-ND	0.5
2K	3005P-202-ND	0.4
5K	3005P-502-ND	0.3
10K	3005P-103-ND	0.3
20K	3005P-203-ND	0.2

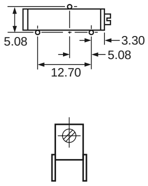
SERIES 3006 3/4" (19.05mm) Rectangular/Multiturn (15) Cermet/Industrial/Sealed



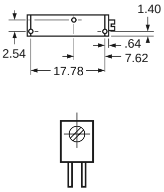
3006P



3006W



3006Y



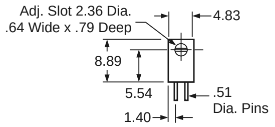
Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms minimum. **Adjustment Angle:** 15 turns nominal. **Power Rating** (400 volts max.): 70°C – 0.75 watt; 150°C – 0 watt. **Temperature Range:** –55°C to +125°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 0.75 watt @ 70°C (4% ΔTR). **Rotational Life:** 200 cycles (3% ΔTR; CRV, 1% or 1 ohm, whichever is greater). **Torque:** 5.0 oz-in. max. **Mechanical Stops:** Wiper idles.

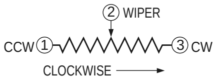
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.
100	3006P-101-ND*	3006W-101-ND	3006Y-101-ND
200	3006P-201-ND*	3006W-201-ND	3006Y-201-ND
500	3006P-501-ND*	3006W-501-ND	3006Y-501-ND
1K	3006P-102-ND*	3006W-102-ND	3006Y-102-ND
2K	3006P-202-ND*	3006W-202-ND	3006Y-202-ND
5K	3006P-502-ND*	3006W-502-ND	3006Y-502-ND
10K	3006P-103-ND*	3006W-103-ND	3006Y-103-ND
20K	3006P-203-ND*	3006W-203-ND	3006Y-203-ND
25K	3006P-253-ND*	3006W-253-ND	3006Y-253-ND
50K	3006P-503-ND*	3006W-503-ND	3006Y-503-ND
100K	3006P-104-ND*	3006W-104-ND	3006Y-104-ND
200K	3006P-204-ND*	3006W-204-ND	3006Y-204-ND
250K	3006P-254-ND	3006W-254-ND	3006Y-254-ND
500K	3006P-504-ND*	3006W-504-ND	3006Y-504-ND
1M	3006P-105-ND*	3006W-105-ND	3006Y-105-ND
2M	3006P-205-ND*	3006W-205-ND	3006Y-205-ND

Series	Pricing 1	10	50
3006P	1.73	15.75	67.73
3006W/3006Y	1.87	17.00	73.10

* **3006P-KIT-ND** ***Digi-Key® Series 3006 Potentiometers Kit***
10 each of values denoted (150 total pieces). Notebook style storage case & bin storage guide included **$159.00**

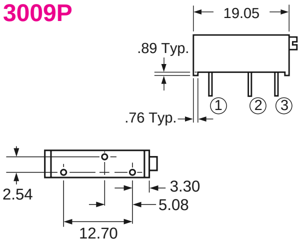
SERIES 3009 3/4" (19.05mm) Rectangular/Multiturn (15) Cermet/Industrial/Sealed



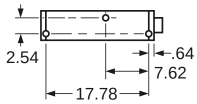


Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms minimum. **Adjustment Travel:** 15 turns nominal. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 0.75 watt @ 70°C (4% ΔTR). **Rotational Life:** 200 cycles (3% ΔTR; CRV, 1% or 1 ohm, whichever is greater). **Torque:** 5.0 oz-in. max. **Mechanical Stops:** Wiper idles.

3009P



3009Y

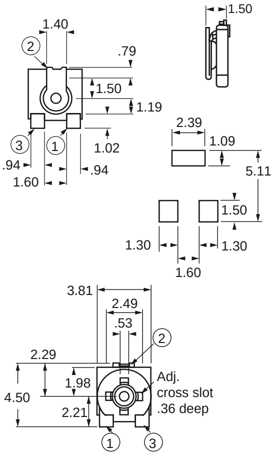


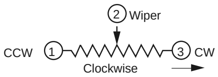
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.
100	3009P-101-ND	3009Y-101-ND
200	3009P-201-ND	3009Y-201-ND
500	3009P-501-ND	3009Y-501-ND
1K	3009P-102-ND	3009Y-102-ND
2K	3009P-202-ND	3009Y-202-ND
5K	3009P-502-ND	3009Y-502-ND
10K	3009P-103-ND	3009Y-103-ND
20K	3009P-203-ND	3009Y-203-ND
25K	3009P-253-ND	3009Y-253-ND
50K	3009P-503-ND	3009Y-503-ND
100K	3009P-104-ND	3009Y-104-ND
200K	3009P-204-ND	3009Y-204-ND
500K	3009P-504-ND	3009Y-504-ND
1M	3009P-105-ND	3009Y-105-ND

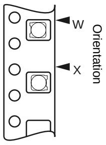
Series	Pricing 1	10	50
3009P/3009Y	2.72	24.75	106.43

SERIES 3364 SMD 4mm Square/Single-Turn Cermet/Industrial/Open Frame

3364W and X







Cross-slot rotor designs suitable for automatic adjustment equipment. Supplied in 12mm embossed tape, compatible with automatic pick-and-place assembly equipment . Rear adjust versions available. **Resistance Tolerance:** ±25% std. **Adjustment Angle:** 260°±20°. **Power Rating** (50 volts max.): 70°C — 0.2 watt. **Temperature Range:** -40°C to +100°C. **Temperature Coefficient:** ±250ppm/°C. **Load Life:** 1,000 hours 0.2 watt @ 70°C (5% ΔTR). **Rotational Life:** 20 cycles (15% ΔTR). **Torque:** 20 to 200g-cm. **Mechanical Angle:** Continuous.

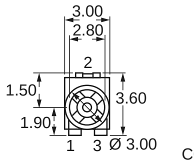
Res. (Ohms)	Digi-Key* Part No.	Digi-Key Part No.
500	3364W-501E□□-ND	3364X-501E□□-ND
1K	3364W-102E□□-ND	3364X-102E□□-ND
2K	3364W-202E□□-ND	3364X-202E□□-ND
5K	3364W-502E□□-ND	3364X-502E□□-ND
10K	3364W-103E□□-ND	3364X-103E□□-ND
20K	3364W-203E□□-ND	3364X-203E□□-ND
50K	3364W-503E□□-ND	3364X-503E□□-ND
100K	3364W-104E□□-ND	3364X-104E□□-ND
200K	3364W-204E□□-ND	3364X-204E□□-ND
500K	3364W-504E□□-ND	3364X-504E□□-ND
1M	3364W-105E□□-ND	3364X-105E□□-ND

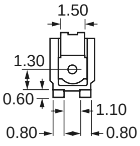
Series	Part No.	Cut Tape Pricing 5	100	Part No.	Tape & Reel Pricing 1,000
3364W/3364X	Add "CT"-ND	4.23	56.55	Add "TR"-ND	321.00

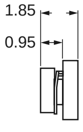
* **3364W-KIT-ND** ***Digi-Key® Series 3364W Trimmer Potentiometers Kit*** 5 each of all values (55 total pieces) **$39.95**

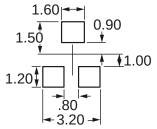
SERIES TC03 Surface Mount 3mm Single-Turn Top Adjust Cermet

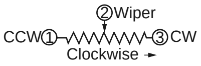
TC03X











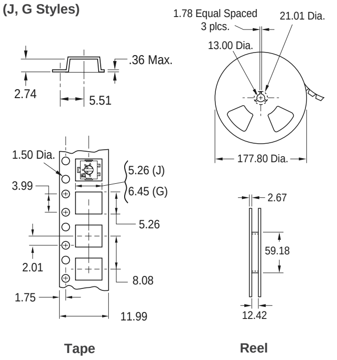
Resistance Tolerance: ±25%. **Adjustment Angle:** 270°. **Power Rating:** .1 watt. **Temperature Range:** -40°C to +85°C. **Temperature Coefficient:** ±250ppm/°C. **Rotational Life:** 20 turns. **Rotational Torque:** 20-200g-cm max.

Res. (Ohms)	Digi-Key Part No.
100	TC03X-101E□□-ND
1K	TC03X-102E□□-ND
2K	TC03X-202E□□-ND
5K	TC03X-502E□□-ND
10K	TC03X-103E□□-ND
20K	TC03X-203E□□-ND

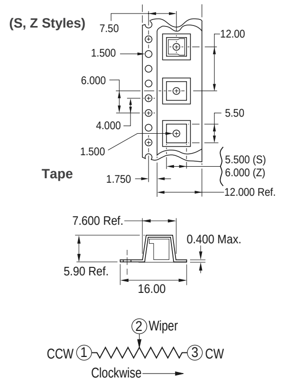
Series	Part No.	Cut Tape Pricing 1	10	100	Part No.	Tape & Reel Pricing 2,000
TC03X	Add "CT-ND"	.20	1.65	14.40	Add "TR-ND"	100.00/M

SERIES 3314 SMD 4mm Square/Single-Turn Cermet/Industrial/Sealed

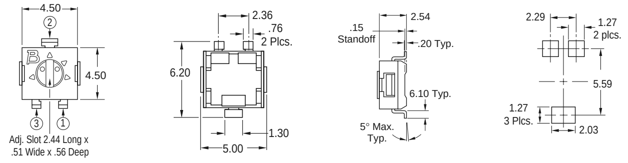
(J, G Styles)



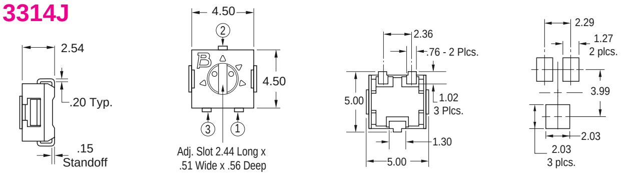
(S, Z Styles)



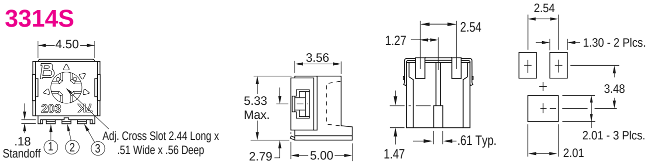
3314G



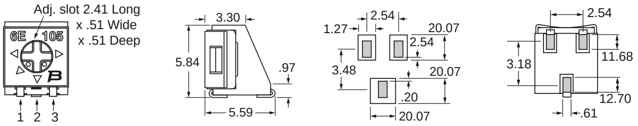
3314J



3314S



3314Z



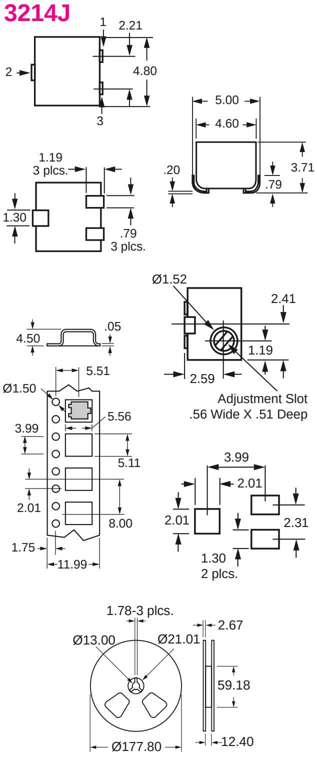
• Compatible with all surface mount soldering processes. • Very low CRV — 1%. • Standoffs facilitate boardwashing and mechanical stability. **Resistance Tolerance:** ±20% std. **Insulation Resistance:** 500vdc. 100 megohms min. **Adjustment Angle:** 210° nom. **Soldering Heat:** 260°C, 10 seconds, TRS ±1%. **Power Rating** (300 volts max.): 70°C — 0.25 watt; 125°C — 0 watt. **Temperature Range:** –55°C to +125°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** (@ 70°C Rated Power 1,000 hours) TRS ±3%. **Rotational Life:** 100 cycles TRS ±3%. **Mechanical Angle:** 240° nom. **Torque:** 180 g-cm. typical. **Stop Strength:** 300 g-cm. typical.

Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.
100	3314G-101E□□-ND	3314J-101E□□-ND	—	3314Z-101E□□-ND
200	3314G-201E□□-ND	3314J-201E□□-ND	—	3314Z-201E□□-ND
500	3314G-501E□□-ND	3314J-501E□□-ND	—	3314Z-501E□□-ND
1K	3314G-102E□□-ND	3314J-102E□□-ND	—	3314Z-102E□□-ND
2K	3314G-202E□□-ND	3314J-202E□□-ND	—	3314Z-202E□□-ND
5K	3314G-502E□□-ND	3314J-502E□□-ND	3314S-502E□□-ND	3314Z-502E□□-ND
10K	3314G-103E□□-ND	3314J-103E□□-ND	—	3314Z-103E□□-ND
20K	3314G-203E□□-ND	3314J-203E□□-ND	—	3314Z-203E□□-ND
25K	3314G-253E□□-ND	3314J-253E□□-ND	—	3314Z-253E□□-ND
50K	3314G-503E□□-ND	3314J-503E□□-ND	—	3314Z-503E□□-ND
100K	3314G-104E□□-ND	3314J-104E□□-ND	—	3314Z-104E□□-ND
200K	3314G-204E□□-ND	3314J-204E□□-ND	3314S-204E□□-ND	3314Z-204E□□-ND
250K	3314G-254E□□-ND	3314J-254E□□-ND	3314S-254E□□-ND	3314Z-254E□□-ND
500K	3314G-504E□□-ND	3314J-504E□□-ND	3314S-504E□□-ND	3314Z-504E□□-ND
1M	3314G-105E□□-ND	3314J-105E□□-ND	—	3314Z-105E□□-ND
2M	3314G-205E□□-ND	3314J-205E□□-ND	3314S-205E□□-ND	3314Z-205E□□-ND

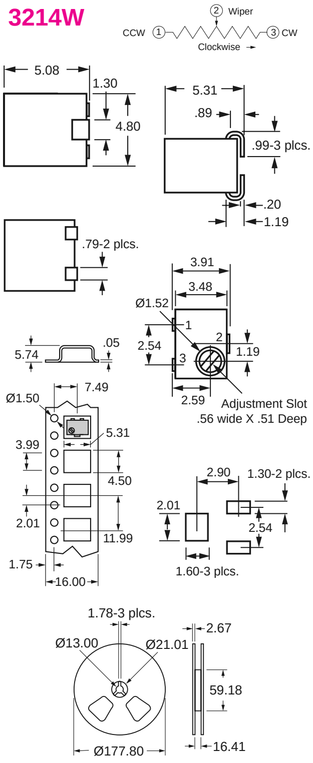
		Cut Tape Pricing			Tape & Reel Pricing	
Series	Part No.	5	100	Part No.	200	500
3314G/3314J	Add “CT-ND”	9.00	156.00	Add “TR-ND”	—	489.00
3314S	Add “CT-ND”	9.90	170.28	—	—	—
3314Z	Add “CT-ND”	9.90	170.28	Add “TR-ND”	244.20	—

SERIES 3214 Surface Mount 4mm Square/ Multi-Turn Cermet/Industrial/Sealed

3214J



3214W



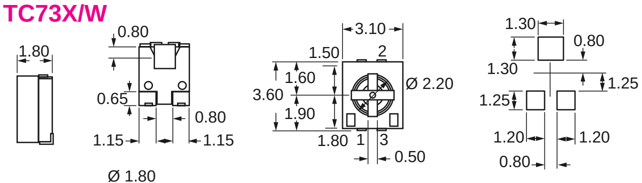
• Sealed to withstand board wash processing • Pick and place centering design, with flush adjustment • Patent #5047746 advanced drive/wiper mechanism. **Resistance Tolerance:** ±10% std. **Absolute Minimum Resistance:** 1% or 2.0 ohms (whichever is greater). **Contact Resistance Variation:** 3% or 3 ohms max. **Resolution:** Essentially Infinite. **Insulation Resistance:** 500 vdc., 100 megohms min. **Dielectric Strength: Sea Level:** 600 vac (1 minute). **Adjustment Angle:** 5 turns nom. **Power Rating (300 volts max.):** 85°C: 0.25 watt, 150°C: 0 watt. **Temperature Range:** -65°C to +150°C. **Temperature Coefficient:** ±100ppm/°C. **Humidity:** MIL-STD 202 Method 106, TRS ±2%; IR 10 megohms. **Vibration:** 20G TRS ±1%; VRS ±1%. **Shock:** 100G TRS ±1%; VRS ±1%. **Load Life (@ 85°C Rated Power 1000 Hours):** TRS 3 ohms or 3% (whichever is greater). **Rotational Cycling:** 200 cycles, TRS 3 ohms or 3% (whichever is greater). **Thermal Shock:** 5 cycles, TRS ±2%; VRS ±1%. **Mechanical Stop:** wiper idles. **Torque:** 180g-cm max. **Weight:** Approximately 0.01 oz. **Marking:** Manufacturer’s code, resistance code and date code. **Solderability:** Per MIL-STD-202, Method 208. **Wiper:** Set at 50% nominal. **Flammability:** UL94V0

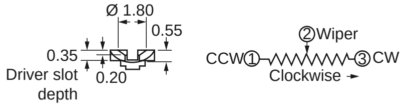
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.
100	3214J-101E□□-ND	3214W-101E□□-ND
200	3214J-201E□□-ND	3214W-201E□□-ND
500	3214J-501E□□-ND	3214W-501E□□-ND
1K	3214J-102E□□-ND	3214W-102E□□-ND
2K	3214J-202E□□-ND	3214W-202E□□-ND
5K	3214J-502E□□-ND	3214W-502E□□-ND
10K	3214J-103E□□-ND	3214W-103E□□-ND
20K	3214J-203E□□-ND	3214W-203E□□-ND
50K	3214J-503E□□-ND	3214W-503E□□-ND
100K	3214J-104E□□-ND	3214W-104E□□-ND

		Cut Tape Pricing				Tape & Reel Pricing	
Series	Part No.	1	10	100	Part No.	250	500
3214J	Add “CT-ND”	3.22	27.60	239.20	Add “TR-ND”	—	750.00
3214W	Add “CT-ND”	3.22	27.60	239.20	Add “TR-ND”	414.00	750.00

SERIES TC73 Surface Mount 3mm Single-Turn Top Adjust Carbon

TC73X/W





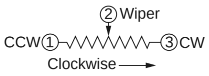
Resistance Tolerance: ±30%. **Adjustment Angle:** 260°. **Power Rating:** .05 watt. **Temperature Range:** -25°C to +85°C. **Temperature Coefficient:** ±250ppm/°C. **Rotational Life:** 20 turns. **Rotational Torque:** 10-150g-cm max.

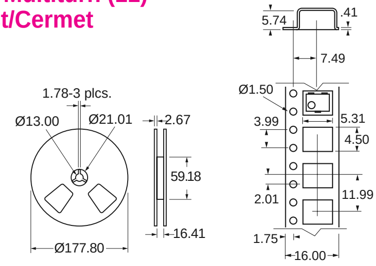
Res. (Ohms)	Digi-Key Part No.
500	TC73X-501E□□-ND
1K	TC73X-102E□□-ND
2K	TC73X-202E□□-ND
5K	TC73X-502E□□-ND
10K	TC73X-103E□□-ND
20K	TC73X-203E□□-ND

		Cut Tape Pricing				Tape & Reel Pricing
Series	Part No.	1	10	100	Part No.	2,000
TC73X	Add “CT-ND”	.20	1.65	14.40	Add “TR-ND”	100.00/M

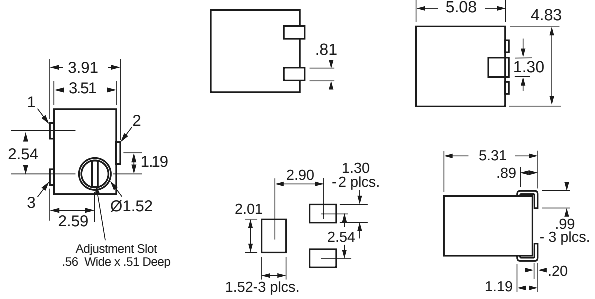
Trimmer Potentiometers

SERIES 3224 SMT 4mm Multiturn (11) Top Adjust/Cermet





3224W



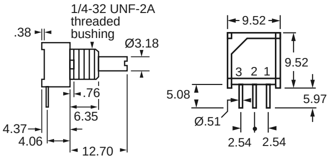
Resistance Tolerance: ±10% standard. **Absolute Minimum Resistance:** 1% or 2.0 ohms (whichever is greater). **Contact Resistance Variation:** 1% or 3 ohms maximum. **Resolution:** Essentially Infinite. **Insulation Resistance:** 500 vdc., 100 megohms minimum. **Dielectric Strength: Sea Level:** 600 vac (1 minute), **Adjustment Angle:** 11 turns nominal. **Power Rating (300 volts max.):** 85°C: 0.25 watt, 150°C: 0 watt. **Temperature Range:** –65°C to +150°C. **Temperature Coefficient:** ±100ppm/°C. **Humidity:** MIL-STD 202 Method 106, TRS ±2%; IR 10 megohms. **Vibration:** 20G TRS ±1%, VRS ±1%. **Shock:** 100G TRS ±1%, VRS ±1%. **Load Life (@ 85°C Rated Power 1000 Hours):** TRS 3 ohms or 3% (whichever is greater). **Rotational Cycling:** 200 cycles, TRS 3 ohms or 3% (whichever is greater). **Thermal Shock:** 5 cycles, TRS ±2%, VRS ±1%. **Mechanical Stop:** Wiper idles. **Torque:** 180g-cm maximum. **Weight:** Approximately 0.01 oz. **Marking:** Manufacturer's code, resistance code and date code.

Res. (Ohms)	Digi-Key Part No.
2K	3224W-202E☐☐-ND
5K	3224W-502E☐☐-ND
10K	3224W-103E☐☐-ND
20K	3224W-203E☐☐-ND

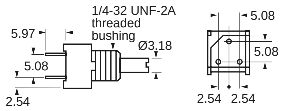
Series	Part No.	Cut Tape Pricing 1	10	100	Part No.	Tape & Reel Pricing 250
3224W	Add "CT-ND"	5.22	44.70	387.40	Add "TR-ND"	670.50

SERIES 3310 9mm Square Panel Control Conductive Plastic, Sealed

3310C



3310Y



- Conductive plastic • Linear • PC board and bushing mount • Plastic bushing and plastic shaft • Withstands typical industrial washing processes • Compact package saves board and panel space

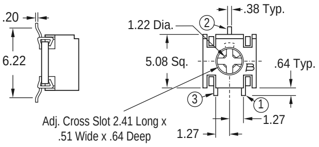
Standard Resistance Range (Linear): 1K ohms to 1 megohm **Total Resistance Tolerance (Linear Tapers):** ±20% **Independent LInearity:** ±5% **Absolute Minimum Resistance:** 2 ohms maximum **Effective Electrical Angle:** 270° ±15° **Contact Resistance Variation:** 1% or 1 ohm (whichever is greater) **Dielectric Withstanding Voltage: (Sea Level)** 900 VAC minimum; **(70,000 Feet)** 350 VAC minimum **Insulation Resistance:** 1,000 megohms minimum **Power Rating @ 70°C:** (Derate to 0 at 125°C - Voltage limited by power dissipation or 200 VAC, whichever is less) 0.25 watts **Stop Strength:** 5.65 nominal **Mechanical Angle:** 300° nominal **Torque (Running):** 3.53 nominal.

Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.
1K	3310C-1-102-ND	3310Y-1-102-ND
2K	3310C-1-202-ND	3310Y-1-202-ND
5K	3310C-1-502-ND	3310Y-1-502-ND
10K	3310C-1-103-ND	3310Y-1-103-ND
20K	3310C-1-203-ND	3310Y-1-203-ND
50K	3310C-1-503-ND	3310Y-1-503-ND
100K	3310C-1-104-ND	3310Y-1-104-ND
200K	3310C-1-204-ND	3310Y-1-204-ND
500K	3310C-1-504-ND	3310Y-1-504-ND
1M	3310C-1-105-ND	3310Y-1-105-ND

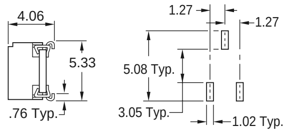
Series	Pricing 1	10	50
3310C/3310Y	2.59	22.94	96.20

SERIES 3335 SMD 5mm Square/Single-Turn Cermet/Industrial/Sealed

Common Dimensions 3335A, B

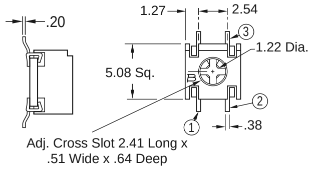


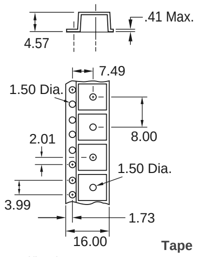
3335A



Common Dimensions 3335W, X

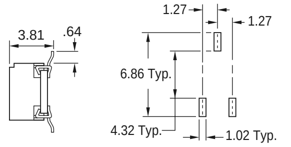
3335-4 Pad



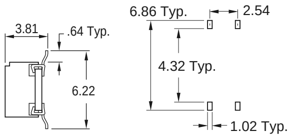


Meets EIA specification 481

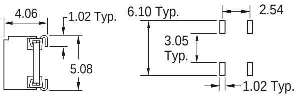
3335B

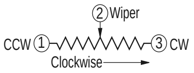


3335W



3335X





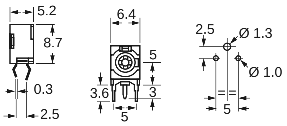
• Available in 3 and 4 pad SMD design • Auto adjust rotor design, packaged in 16mm wide (7' reel) embossed tape, compatible with automatic placement equipment • Rugged lead frame construction • Multi-wire hoetip wiper • Recommended for reflow processing only. **Resistance Tolerance:** ±20% standard. **Insulation Resistance:** 500vdc. 1,000 megohms minimum. **Adjustment Travel:** 240° nominal. **Maximum Exposure** (Temp./Time): +215°C/3 minimum. **Power Rating** (100 volts max.): 85°C — 0.2 watt; 150°C — 0 watt. **Temperature Range:** -55°C to +150°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 0.2 watt @ 85°C (3% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Rotational Life:** 200 cycles (4% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Mechanical Angle:** 270° nominal. **Torque:** 3.0 oz-in. maximum. **Stop Strength:** 4.0 oz-in. minimum.

Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.
100	—	3335B-101ECT-ND	3335W-101ECT-ND	3335X-101ECT-ND
200	—	—	3335W-201ECT-ND	3335X-201ECT-ND
500	—	—	—	3335X-501ECT-ND
1K	—	3335B-102ECT-ND	3335W-102ECT-ND	3335X-102ECT-ND
2K	3335A-202ECT-ND	3335B-202ECT-ND	3335W-202ECT-ND	—
5K	—	3335B-502ECT-ND	—	—
10K	—	—	—	3335X-103ECT-ND
20K	3335A-203ECT-ND	3335B-203ECT-ND	—	—
25K	—	—	3335W-253ECT-ND	3335X-253ECT-ND
50K	3335A-503ECT-ND	3335B-503ECT-ND	—	3335X-503ECT-ND
100K	—	3335B-104ECT-ND	—	—
200K	3335A-204ECT-ND	3335B-204ECT-ND	—	—
250K	—	3335B-254ECT-ND	—	3335X-254ECT-ND
500K	3335A-504ECT-ND	3335B-504ECT-ND	—	—

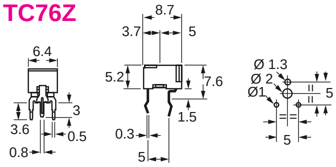
Series	Pricing 5
3335A / 3335B / 3335W / 3335X	12.00

SERIES TC76 6mm Single-Turn Carbon

TC76B



TC76Z



Resistance Tolerance: ±30% **Adjustment Angle:** 280° **Power Rating:** .1 watt **Temperature Range:** -25°C to +70°C **Temperature Coefficient:** ±300ppm/°C **Rotational Life:** 100 turns **Rotational Torque:** .2 to 3 Ncm maximum

Series	Pricing 1	10	100
TC76B	.20	1.65	14.40
TC76Z	.20	1.65	14.40

Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.
100	TC76B-101-ND	TC76Z-101-ND
1K	TC76B-102-ND	TC76Z-102-ND
2K	TC76B-202-ND	TC76Z-202-ND
5K	TC76B-502-ND	TC76Z-502-ND
10K	TC76B-103-ND	TC76Z-103-ND
20K	TC76B-203-ND	TC76Z-203-ND
50K	YC76B-503-ND	TC76Z-503-ND
100K	TC76B-104-ND	TC76Z-104-ND

CTS® Stock Pot™ Potentiometers 23.81mm Diameter

Series 450

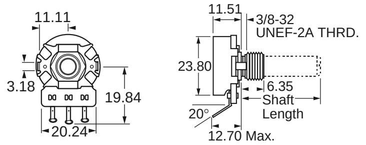


Fig. 1 — SD Slot

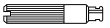


Fig. 2 — Flat

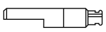
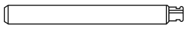


Fig. 3 — Round



To determine shaft length, use appropriate variable (1-8) shown below.						
Shaft Length (mm)	12.70	15.88	19.05	22.23	25.40	50.80
Figure 1 - Slot	1	2	3	4	5	—
Figure 2 - Flat	—	—	—	6	7	—
Figure 3 - Round	—	—	—	—	—	8

Res. Ohms	Digi-Key Part No. *	Price Each 1	10	100	250	500	1,000
500	450D501-☐-ND	3.18	2.87	2.44	2.02	1.70	1.41
1K	450D102-☐-ND	3.18	2.87	2.44	2.02	1.70	1.41
2.5K	450D252-☐-ND	3.18	2.87	2.44	2.02	1.70	1.41
5K	450D502-☐-ND	3.18	2.87	2.44	2.02	1.70	1.41
10K	450D103-☐-ND	3.18	2.87	2.44	2.02	1.70	1.41
25K	450D253-☐-ND	3.18	2.87	2.44	2.02	1.70	1.41
50K	450D503-☐-ND	3.18	2.87	2.44	2.02	1.70	1.41
100K	450D104-☐-ND	3.18	2.87	2.44	2.02	1.70	1.41
250K	450D254-☐-ND	3.18	2.87	2.44	2.02	1.70	1.41
500K	450D504-☐-ND	3.18	2.87	2.44	2.02	1.70	1.41

*For complete part number, substitute corresponding variable (from chart above) for ☐.

Features:

• Off the shelf availability • Wide Resistance Range • Available with three shaft styles: knurled & slotted, flatted or round • Economical in limited volume applications

Electrical and Mechanical Specifications:

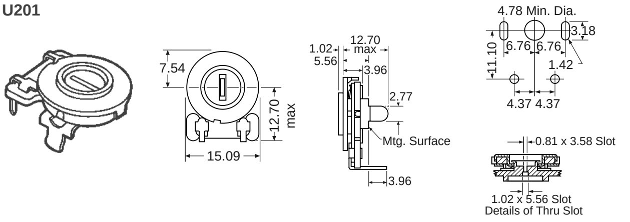
• **Resistance Range:** 500Ω through 500KΩ • **Resistance Tolerance:** ±20% • **Power Rating, Watt:** Through 10KΩ, 1/2 watt; above 10KΩ through 100KΩ, 1/3 watt; above 100KΩ, 1/4 watt • **Voltage Rating:** Bushing to terminals: High pot test, one minute - 1080 VAC • **Shaft Information:** Diameter: 6.35mm (Dia. over knurl 6.10mm – 6.25mm) • **Angle of Rotation:** Total rotation – 300° ±5°; Effective Rotation approximately 300° • **Bushing Information:** Material - Diecast zinc; Diameter – EIA st. 3/8" - 32 UNEF-2A thread; Length - 6.35mm ± .40mm • **Terminal Information:** Solder lug, formed to rear • **Locating Lug:** Left side, terminals down

Mounting hardware included

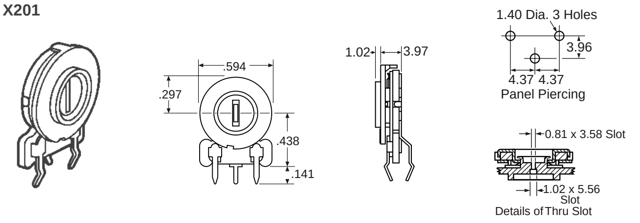
CTS® Miniature 15.08mm Trimmer Potentiometers

Series 201

U201



X201



G

Features:

• Miniature size — knob 15.08mm diameter • Rim to guide screwdriver • Printed circuit mounting with knob parallel or perpendicular to printed circuit board • Wide resistance range • Knob slotted for front or rear screwdriver adjustment • Reliable CTS composition resistance element • Press fit self-supporting mounting

Electrical and Mechanical Specifications:

• **Resistance Range:** 100Ω through 1 Megohm • **Resistance Tolerance:** ±20% • **Power Rating, Watts:** Below 5000Ω — 1/4 watt @ 40°C; 5000Ω and above — 1/4 watt @ 55°C • **Voltage Rating:** 350 VDC • **Resistance Tapers:** Linear • **Adjusting Knob Information:** Blue nylon knob, 15.08mm diameter, slotted for front or rear screwdriver adjustment with rim to guide screwdriver. • **Angle of Rotation:** Total rotation — 260° ± 5°

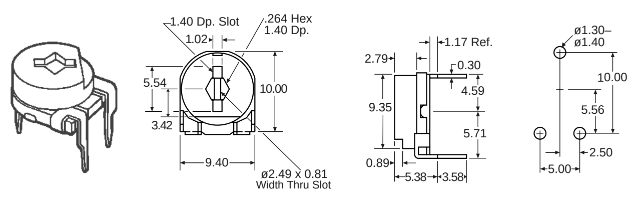
Res. Ohms.	Digi-Key Part No.* Laydown Version	Digi-Key Part No.** Standup Version	Price Each 1	10	100	500	1,000	CTS Part No. Laydown Version	CTS Part No. Standup Version
100	201UR101B-ND	201XR101B-ND	.50	.46	.42	.33	.27	201UR101B	201XR101B
250	201UR251B-ND	201XR251B-ND	.50	.46	.42	.33	.27	201UR251B	201XR251B
500	201UR501B-ND	201XR501B-ND	.50	.46	.42	.33	.27	201UR501B	201XR501B
1K	201UR102B-ND	201XR102B-ND	.50	.46	.42	.33	.27	201UR102B	201XR102B
2.5K	201UR252B-ND	201XR252B-ND	.50	.46	.42	.33	.27	201UR252B	201XR252B
5K	201UR502B-ND	201XR502B-ND	.50	.46	.42	.33	.27	201UR502B	201XR502B
10K	201UR103B-ND	201XR103B-ND	.50	.46	.42	.33	.27	201UR103B	201XR103B
25K	201UR253B-ND	201XR253B-ND	.50	.46	.42	.33	.27	201UR253B	201XR253B
50K	201UR503B-ND	201XR503B-ND	.50	.46	.42	.33	.27	201UR503B	201XR503B
100K	201UR104B-ND	201XR104B-ND	.50	.46	.42	.33	.27	201UR104B	201XR104B
250K	201UR254B-ND	201XR254B-ND	.50	.46	.42	.33	.27	201UR254B	201XR254B
500K	201UR504B-ND	201XR504B-ND	.50	.46	.42	.33	.27	201UR504B	201XR504B
1M	201UR105B-ND	201XR105B-ND	.50	.46	.42	.33	.27	201UR105B	201XR105B

* **201U-KIT-ND** ***Digi-Key® Series 201 Potentiometer Kit (Q656225)*** - 5 each of 13 values **$29.95**
** **201X-KIT-ND** ***Digi-Key® Series 201 Potentiometer Kit (Q656235)*** - 5 each of 13 values **$29.95**

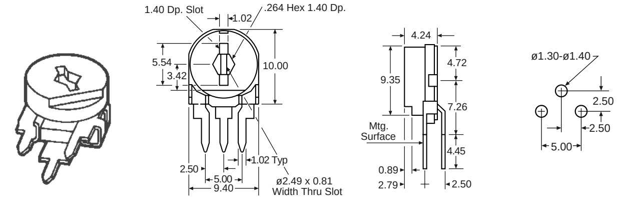
CTS® Miniature 10mm Trimmer Potentiometers

Series 262

U262



X262



Features:

• Miniature size • Adjustment knob slotted for front or rear screwdriver adjustment • P.C. mounting with knob parallel or perpendicular to printed circuit board • Low height profile • Wide resistance range • Reliable screened CTS composition element

Electrical and Mechanical Specifications:

Resistance Range: Standard — 500 ohms through 1 megohm • **Resistance Tolerance:** Standard – ±20% • **Power Rating Watts:** 0.15 watts @ 40°C • **Voltage Rating:** Operating maximum — 350 VDC. • **Resistance Tapers:** Linear • **Adjustment Knob:** Color coded nylon knob with hex hole for top adjustment plus slot for either top or bottom screwdriver adjustment. • **Angle of Rotation:** Total rotation — 265° ±5% • **Rotational Torque:** .3 to 5 inch ounces • **Stop Strength:** 16 inch ounces

Res. Ohms.	Color	Digi-Key Part No.* Laydown Version	Digi-Key Part No.** Standup Version	Price Each 1	10	100	500	1,000	CTS Part No. Laydown Version	CTS Part No. Standup Version
500	Green	U262R501B-ND	X262R501B-ND	.51	.48	.43	.34	.28	U262R501B	X262R501B
1K	Yellow	U262R102B-ND	X262R102B-ND	.51	.48	.43	.34	.28	U262R102B	X262R102B
2.5K	Red	U262R252B-ND	X262R252B-ND	.51	.48	.43	.34	.28	U262R252B	X262R252B
5K	Blue	U262R502B-ND	X262R502B-ND	.51	.48	.43	.34	.28	U262R502B	X262R502B
10K	White	U262R103B-ND	X262R103B-ND	.51	.48	.43	.34	.28	U262R103B	X262R103B
25K	Black	U262R253B-ND	X262R253B-ND	.51	.48	.43	.34	.28	U262R253B	X262R253B
50K	Orange	U262R503B-ND	X262R503B-ND	.51	.48	.43	.34	.28	U262R503B	X262R503B
100K	Gray	U262R104B-ND	X262R104B-ND	.51	.48	.43	.34	.28	U262R104B	X262R104B
250K	Violet	U262R254B-ND	X262R254B-ND	.51	.48	.43	.34	.28	U262R254B	X262R254B
500K	Brown	U262R504B-ND	X262R504B-ND	.51	.48	.43	.34	.28	U262R504B	X262R504B
1M	Lt. Blue	U262R105B-ND	X262R105B-ND	.51	.48	.43	.34	.28	U262R105B	X262R105B

* **U262-KIT-ND** ***Digi-Key® Series 262 Potentiometer Kit (Q656346)*** - 5 each of 11 values **$27.95**
** **X262-KIT-ND** ***Digi-Key® Series 262 Potentiometer Kit (Q656436)*** - 5 each of 11 values **$27.95**

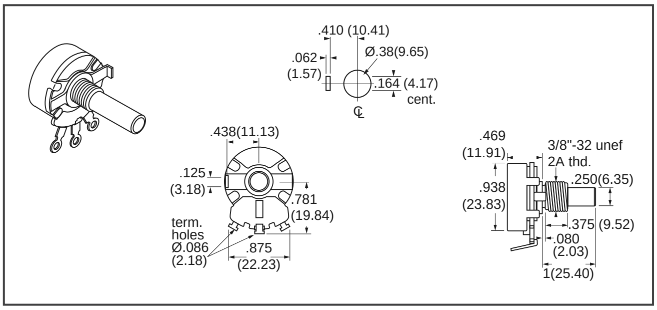
CTS Wirewound Potentiometers - 5 Watt

Series 026

SPECIFICATIONS:

Resistance Range: 5Ω through 25KΩ **Resistance Tolerance:** ±20% **Power Rating Watts:** 5 Watts @ 25°C Derated to No Load @ 105°C **Voltage Rating:** Operating Max. 500VDC **Shaft Information:** 1" FMS x .250" (25.40mm FMS x 6.35mm) Diameter, Metal, Plain Round **Angle of Rotation:** 300° ±5°

Bushing Information: Diameter: EIA Std. 3/8"-32, UNEF-2A Thread Length: 3/8" ± 1/64" (9.52mm ± .40mm) **Terminal Information:** Solder Lug, Formed to Rear **Locating Lug:** Left Side, Terminals Down



Ohms	Digi-Key Part No.	Price Each 1	10	50	100	CTS Part No.
5	CT2150-ND	3.61	3.36	2.79	2.52	026T332R5AOB1A4
10	CT2151-ND*	3.61	3.36	2.79	2.52	026T332R100B1A4
25	CT2152-ND	3.61	3.36	2.79	2.52	026T332R250B1A4
50	CT2153-ND*	3.61	3.36	2.79	2.52	026T332R500B1A4
100	CT2154-ND*	3.61	3.36	2.79	2.52	026T332R101B1A4
250	CT2155-ND	3.61	3.36	2.79	2.52	026T332R251B1A4
500	CT2156-ND*	3.61	3.36	2.79	2.52	026T332R501B1A4
1K	CT2157-ND*	3.61	3.36	2.79	2.52	026T332R102B1A4
5K	CT2158-ND	3.61	3.36	2.79	2.52	026T332R502B1A4
10K	CT2159-ND*	3.61	3.36	2.79	2.52	026T332R103B1A4
25K	CT2160-ND*	3.61	3.36	2.79	2.52	026T332R253B1A4

* **26-KIT-ND** ***Digi-Key® Series 026 Potentiometer Kit (Q656163)*** - 5 each of 7 values **$99.95**

CTS Carbon Potentiometers - 1/8 Watt

Series 296

SPECIFICATIONS:

Resistance Range: 500 ohms through 1 megohm.

Resistance tolerance: ±20%.

Power Rating Watts: 0.15 Watts @ 40°C derated to no load @ 85°C.

Voltage Rating: Across End Terminals: 250VDC.

Rotational Torque: 20-144gcm.

Angle of Rotation: Total rotation: 300° ±5°, Effective Rotation: 280° (Approx.)

Stops: 0.57 N-m Minimum Stop Strength.

Shaft Information: Length: 13.72mm Beyond Cover, Style: KnurFFled, Diameter: 6mm.

Mounting Information: P.C. Board Mounting.

Fig. 1 - Vertical Adjust

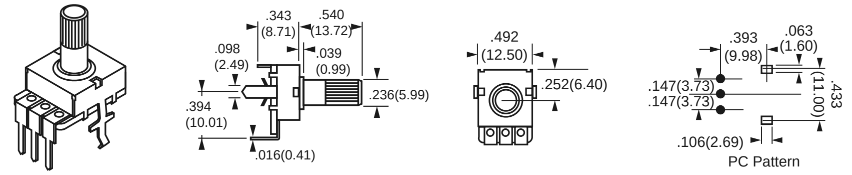


Fig. 2 - Horizontal Adjust

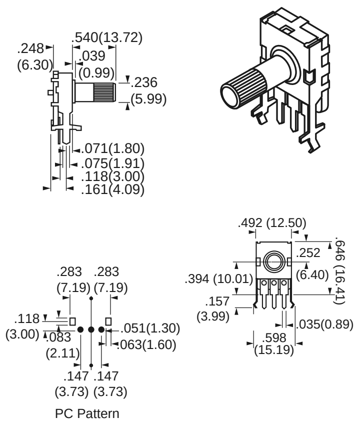


Fig.	Ohms	Description	Digi-Key Part No.	Price Each 1	10	50	100	CTS Part No.
1	500	Vertical	CT2261-ND*	1.51	1.26	1.05	.84	296UD501B1N
	1K	Vertical	CT2262-ND*	1.51	1.26	1.05	.84	296UD102B1N
	2.5K	Vertical	CT2263-ND*	1.51	1.26	1.05	.84	296UD252B1N
	5K	Vertical	CT2264-ND*	1.51	1.26	1.05	.84	296UD502B1N
	10K	Vertical	CT2265-ND*	1.51	1.26	1.05	.84	296UD103B1N
	25K	Vertical	CT2266-ND*	1.51	1.26	1.05	.84	296UD253B1N
	50K	Vertical	CT2267-ND*	1.51	1.26	1.05	.84	296UD503B1N
	100K	Vertical	CT2268-ND*	1.51	1.26	1.05	.84	296UD104B1N
	250K	Vertical	CT2269-ND*	1.51	1.26	1.05	.84	296UD254B1N
	500K	Vertical	CT2270-ND*	1.51	1.26	1.05	.84	296UD504B1N
	1MEG	Vertical	CT2271-ND*	1.51	1.26	1.05	.84	296UD105B1N
2	500	Horizontal	CT2250-ND**	1.51	1.26	1.05	.84	296XD501B1N
	1K	Horizontal	CT2251-ND**	1.51	1.26	1.05	.84	296XD102B1N
	2.5K	Horizontal	CT2252-ND**	1.51	1.26	1.05	.84	296XD252B1N
	5K	Horizontal	CT2253-ND**	1.51	1.26	1.05	.84	296XD502B1N
	10K	Horizontal	CT2254-ND**	1.51	1.26	1.05	.84	296XD103B1N
	25K	Horizontal	CT2255-ND**	1.51	1.26	1.05	.84	296XD253B1N
	50K	Horizontal	CT2256-ND**	1.51	1.26	1.05	.84	296XD503B1N
	100K	Horizontal	CT2257-ND**	1.51	1.26	1.05	.84	296XD104B1N
	250K	Horizontal	CT2258-ND**	1.51	1.26	1.05	.84	296XD254B1N
	500K	Horizontal	CT2259-ND**	1.51	1.26	1.05	.84	296XD504B1N
	1MEG	Horizontal	CT2260-ND**	1.51	1.26	1.05	.84	296XD105B1N

* **296U-KIT-ND** ***Digi-Key® Series 296 Potentiometer Kit (Q656135)*** - 5 each of 11 values **$59.95**

** **296X-KIT-ND** ***Digi-Key® Series 296 Potentiometer Kit (Q656146)*** - 5 each of 11 values **$59.95**

CTS Two Axis, Ministick Controller w/ Optional Momentary Switch

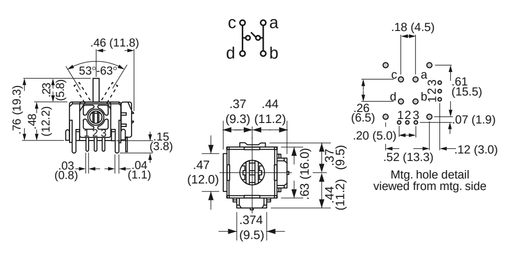
Series 252

SPECIFICATIONS:

Controller w/out Switch: **Resistance Tolerance:** Standard: ±20% **Resistance Taper:** Linear ±5% **Insulation Resistance:** 100MΩ min @ 250 VDC **Rotational Torque:** 153 ±102 gf-cm **Power Rating:** 0.01 watt @50°C, 0.003 watt @ 70°C **Maximum Operating Voltage:** Maximum 50 VAC or 5 VDC **Angle of Rotation:** 60° **Life:** 1,000,000 cycles

Controller w/ Momentary Switch: **Contact Resistance:** 100 mΩ max. **Dielectric Strength:** 250 VAC 50/60 Hz for 1 minute **Insulation Resistance:** 100 MΩ min @ 100 VDC **Operational Force:** 520 ±260 gf **Power Rating:** 12 VDC, 50 Milliamps **Travel:** 0.5 +0.5 -0.4mm **Life:** 100,000 cycles

Ohms	Description	Digi-Key Part No.	Price Each 1	10	50	100	250	CTS Part No.
10K	Controller without Switch	252A103B60NA-ND	5.74	5.33	5.18	4.15	3.32	252A103B60NA
10K	Controller with Switch	252A103B60NB-ND	6.09	5.66	5.53	4.43	3.54	252A103B60NB
100K	Controller without Switch	252A104B60NA-ND	5.74	5.33	5.18	4.15	3.32	252A104B60NA
100K	Controller with Switch	252A104B60NB-ND	6.09	5.66	5.53	4.43	3.54	252A104B60NB



CTS Carbon Slide Potentiometers - 1/5 Watt

Series 448

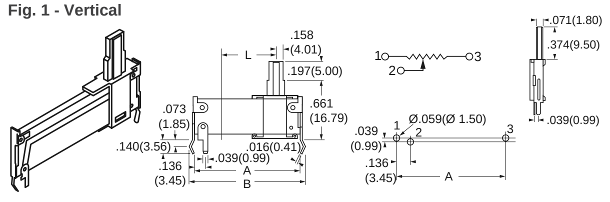


Fig. 1 - Vertical

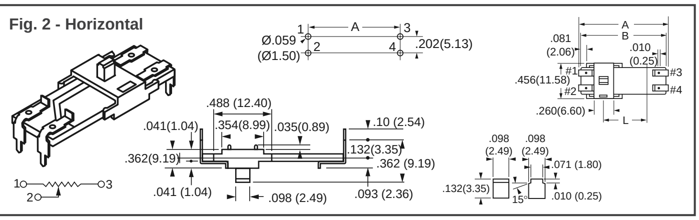


Fig. 2 - Horizontal

Vertical Version

SPECIFICAITONS: Resistance Range: 5K ohms through 1 megohm **Resistance Tolerance:** ±20% **Power Rating Watts:** 0.2 Watts @ 55°C Derated to No Load @ 85°C **Voltage Rating:** Across End Terminals: 300VDC **Operating Life:** 10,000 Cycles **Stop Strength:** Maximum: 3K gf **Resistance Taper:** Linear **Slide Travel:** Mechanical - 20, 30, 45mm **Terminal Information:** Printed Circuit: Vertical or Horizontal Mounting Available **Mounting Information:** Type "X" - Vertical Mount, See Figure 1 for Dimensional Details.

Digi-Key Part No.	Price Each 1	10	50	100	500
CT2303-ND - CT2308-ND	1.40	1.17	.98	.78	.65
CT2309-ND - CT2316-ND	1.44	1.20	1.00	.80	.67
CT2320-ND - CT2324-ND	1.51	1.26	1.05	.84	.70

Ohms	Dimensions – In. (mm) L x A x B (L = Travel)	Digi-Key Part No.	CTS Part No.	Ohms	Dimensions – In. (mm) L x A x B (L = Travel)	Digi-Key Part No.	CTS Part No.	Ohms	Dimensions – In. (mm) L x A x B (L = Travel)	Digi-Key Part No.	CTS Part No.
—		—	—	5K		CT2309-ND	448XD2502BDN	—		—	—
25K		CT2303-ND	448XC2253BDN	25K		CT2311-ND	448XD2253BDN	—		—	—
50K	.787 x 1.358 x 1.440	CT2304-ND	448XC2503BDN	50K	1.18 x 1.751 x 1.834	CT2312-ND	448XD2503BDN	50K	1.77 x 2.3242 x 2.245	CT2320-ND	448XE2503BDN
—	(19.90 x 34.49 x 36.58)	—	—	100K	(29.97 x 44.48 x 46.58)	CT2313-ND	448XD2104BDN	—	(44.96 x 59.03 x 57.02)	—	—
—		—	—	250K		CT2314-ND	448XD2254BDN	250K		CT2322-ND	448XE2254BDN
—		—	—	500K		CT2315-ND	448XD2504BDN	500K		CT2323-ND	448XE2504BDN
1MEG		CT2308-ND	448XC2105BDN	1MEG		CT2316-ND	448XD2105BDN	1 MEG		CT2324-ND	448XE2105BDN

Horizontal Version

SPECIFICATIONS:
Resistance Range: 5K ohms through 1 megohm **Resistance Tolerance:** ±20% **Power Rating Watts:** 0.2 Watts @ 55°C Derated to No Load @ 85°C **Voltage Rating:** Across End Terminals: 300VDC **Operating Life:** 10,000 Cycles **Stop Strength:** Maximum: 3K gf **Resistance Taper:** Linear **Slide Travel:** Mechanical - 10, 15mm. **Terminal Information:** Printed Circuit: Vertical or Horizontal Mounting Available **Mounting Information:** Type "V" - Horizontal Mount, See Figure 2 for Dimensional Details.

Digi-Key Part No.	Price Each 1	10	50	100	500
CT2329-ND - CT2333-ND	1.51	1.26	1.05	.84	.70
CT2337-ND - CT2341-ND	1.51	1.26	1.05	.84	.70

Ohms	Dimensions - In. (mm) L x A x B (L = Travel)	Digi-Key Part No.	CTS Part No	Ohms	Dimensions – In. (mm) L x A x B (L = Travel)	Digi-Key Part No.	CTS Part No.
50K		CT2329-ND	448VA1503BDN	50K		CT2337-ND	448VB1503BDN
—		—	—	100K		CT2338-ND	448VB1104BDN
250K	.393 x 1.188 x 1.129 (9.98 x 30.18 x 28.68)	CT2331-ND	448VA1254BDN	250K	·590 x 1.385 x 1.326 (14.99 x 35.18 x 33.68)	CT2339-ND	448VB1254BDN
500K		CT2332-ND	448VA1504BDN	500K		CT2340-ND	448VB1504BDN
1MEG		CT2333-ND	448VA1105BDN	1MEG		CT2341-ND	448VB1105BDN

CTS Carbon Potentiometers - 1/4 Watt

Series 270

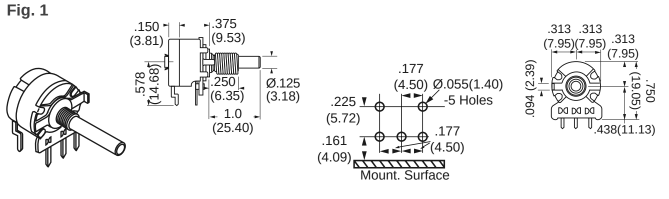


Fig. 1

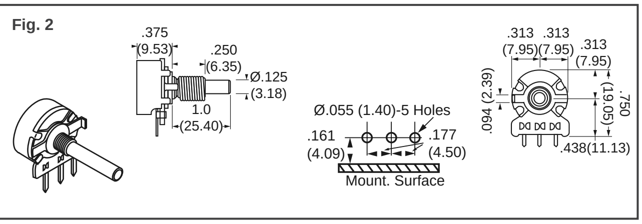


Fig. 2

SPECIFICATIONS:
Resistance Range: 500 ohms through 1 megohm
Resistance Tolerance: ±20%
Power Rating Watts: 1/4 Watt through 100K, 1/5 Watt above 100K
Voltage Rating: Operating Maximum: 500 VDC
Mechanical Rotation: 300° ±5°
Available Power Switch: Type: Rotary Rating: 3A @ 125VAC (UL Approved)
Effective Rotation: Without Switch 300° (Approximate), with Switch 290° (Approximate)
Resistance Taper: Linear, Logarithmic
Locating Lug: Left Side, Terminals Down
Bushing Information: Length: 1/4" (6.35mm), Thread Size: 1/4"-32, diameter: 1/4" (6.35mm)
Shaft Information: Length: 1" (25.40mm) including bushing, Diameter: .125" (3.18mm)

Digi-Key Part No.	Price Each 1	10	50	100	250
CT2223-ND - CT2233-ND	3.48	3.24	2.69	2.43	2.16
CT2201-ND - CT2211-ND	2.71	2.52	2.10	1.89	1.68
CT2212-ND - CT2222-ND	3.53	3.28	2.73	2.46	2.19
CT2234-ND - CT2244-ND	2.77	2.58	2.15	1.94	1.72

Linear Taper with Switch Fig. 1			Linear Taper without Switch Fig. 2			Logarithmic Taper with Switch Fig. 1			Logarithmic Taper without Switch Fig. 2		
Ohms	Digi-Key Part No.	CTS Part No.	Ohms	Digi-Key Part No.	CTS Part No.	Ohms	Digi-Key Part No.	CTS Part No.	Ohms	Digi-Key Part No.	CTS Part No.
500	CT2223-ND*	270-XS8773	500	CT2201-ND**	270-XS8784	500	CT2212-ND†	270-XS8762	500	CT2234-ND††	270-XS8751
1K	CT2224-ND*	270-XS8774	1K	CT2202-ND**	270-XS8785	1K	CT2213-ND†	270-XS8763	1K	CT2235-ND††	270-XS8752
2.5K	CT2225-ND	270-XS8775	2.5K	CT2203-ND	270-XS8786	2.5K	CT2214-ND	270-XS8764	2.5K	CT2236-ND	270-XS8753
5K	CT2226-ND	270-XS8776	5K	CT2204-ND	270-XS8787	5K	CT2215-ND	270-XS8765	5K	CT2237-ND	270-XS8754
10K	CT2227-ND*	270-XS8777	10K	CT2205-ND**	270-XS8788	10K	CT2216-ND†	270-XS8766	10K	CT2238-ND††	270-XS8755
25K	CT2228-ND*	270-XS8778	25K	CT2206-ND**	270-XS8789	25K	CT2217-ND†	270-XS8767	25K	CT2239-ND††	270-XS8756
50K	CT2229-ND*	270-XS8779	50K	CT2207-ND**	270-XS8790	50K	CT2218-ND†	270-XS8768	50K	CT2240-ND††	270-XS8757
100K	CT2230-ND*	270-XS8780	100K	CT2208-ND**	270-XS8791	100K	CT2219-ND†	270-XS8769	100K	CT2241-ND††	270-XS8758
250K	CT2231-ND	270-XS8781	250K	CT2209-ND	270-XS8792	250K	CT2220-ND	270-XS8770	250K	CT2242-ND	270-XS8759
500K	CT2232-ND*	270-XS8782	500K	CT2210-ND**	270-XS8793	500K	CT2221-ND†	270-XS8771	500K	CT2243-ND††	270-XS8760
1MEG	CT2233-ND*	270-XS8783	1 MEG	CT2211-ND**	270-XS8794	1 MEG	CT2222-ND†	270-XS8772	1 MEG	CT2244-ND††	270-XS8761

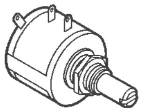
* **270-A-KIT-ND** ***Digi-Key® Series 270 Potentiometer Kit (Q652415)*** - 5 each of 8 values............**$109.95**
** **270-B-KIT-ND** ***Digi-Key® Series 270 Potentiometer Kit (Q653056)*** - 5 each of 8 values.............**$89.95**
† **270-C-KIT-ND** ***Digi-Key® Series 270 Potentiometer Kit (Q653103)*** - 5 each of 8 values............**$109.95**
†† **270-D-KIT-ND** ***Digi-Key® Series 270 Potentiometer Kit (Q655519)*** - 5 each of 8 values.............**$89.95**

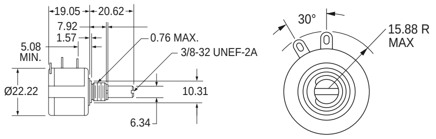
Precision Electronic Components Ltd.

Wirewound Precision Ten-Turn Potentiometers – 2 Watt

Specifications:
- **Resistance Tolerence**: ±5%
- **Electrical/Mechanical Rotation:** 3600° + 10° -0°
- **Effective Rotation:** 3600° nominal
- **Dielectric Strength:** 1000 VAC for 60 seconds at ATM
- **Working Voltage:** 500 volts max
- **Power rating:** 2 watt at 70° C
- **Shaft Lenght and Size:** 13/16” (20.64mm) FMS screwdriver slotted, stainless steel
- **Bushing Style:** 5/16” (7.95mm) Plain
- **Temp. Coefficient of Wire:** ± 20 PPM/°C wire

GU Series:





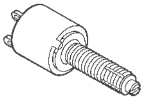
Resistance Code Chart

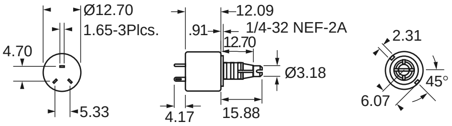
Code (Value)	Code (Value)	Code (Value)
101 (100)	202 (2K)	253 (25K)
201 (200)	502 (5K)	503 (50K)
501 (500)	103 (10K)	104 (100K)
102 (1K)	203 (20K)	

Resistance Range (Ohms)	Digi-Key* Part No.	Price Each					Precision Part No.
		1	10	50	100	250	
100-100K	GU ☐☐☐ 1S26-ND	16.23	13.40	12.58	12.09	11.05	GU☐☐☐ 1S26

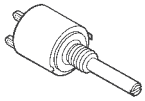
* For complete number, substitute corresponding code (from Resistance Code Chart) for ☐☐☐.

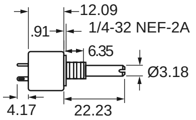
MIL Style RV6 - 1/2 Watt Carbon Potentiometer





RV6L Series





RV6N Series

Specifications:
- **Resistance Tolerance:** ±10% through 500K, ±20% from 1 Meg
- **Resistance Taper:** Linear
- **Power Rating:** .5 Watts @ 70°C
- **Dielectric Strength:** 750V RMS
- **Working Voltage:** 350VDC Maximum, but power not to exceed rating
- **Operating Temperature:** -55°C to 120°C
- **Mechanical Rotation:** 295°

QPL listed under MIL R 94 Specifications. Metal housing, stainless steel shaft

Resistance Code Chart

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
101 (100)	102 (1K)	103 (10K)	104 (100K)	105 (1Meg)
251 (250)	252 (2.5K)	253 (25K)	254 (250K)	505 (5Meg)
501 (500)	502 (5K)	503 (50K)	504 (500K)	

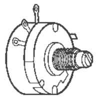
Resistance Range (Ohms)	Digi-Key* Part No.	Price Each					Precision Part No.
		1	10	50	100	250	
100-5Meg	RV6L ☐☐☐ C-ND	8.55	7.89	5.92	3.82	3.50	RV6LAYSA(Code)A
100-5Meg	RV6N ☐☐☐ C-ND	7.70	7.11	5.34	3.44	3.16	RV6NAYSD(Code)A

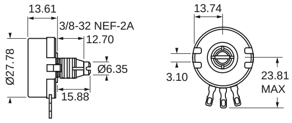
* For complete number, substitute corresponding code (from Resistance Code Chart) for ☐☐☐.

MIL Style RV4 - 2 Watt Carbon Potentiometer

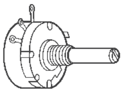
Specifications:
- **Resistance Tolerance:** ±10% through 500K, ±20% from 1 Meg
- **Resistance Taper:** Linear
- **Power Rating:** 2 Watts @ 70°C, Derate to 0 Watt @ 120°C
- **Dielectric Strength:** 900V RMS
- **Working Voltage:** 500 volts, but power not to exceed rating
- **Operating Temperature:** -55°C to 120°C
- **Mechanical Rotation:** 314°

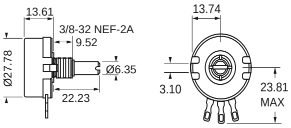
QPL listed under MIL R 94 Specifications. Metal housing, stainless steel shaft.





RV4L Series





RV4N Series

Resistance Code Chart

RV4L SERIES

Code (Value)	Code (Value)	Code (Value)	Code (Value)
500 (50)	102 (1K)	153 (15K)	104 (100K)
101 (100)	252 (2.5K)	253 (25K)	254 (250K)
251 (250)	502 (5K)	353 (35K)	504 (500K)
501 (500)	103 (10K)	503 (50K)	105 (1 Meg)

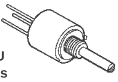
RV4N SERIES

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
500 (50)	501 (500)	502 (5K)	253 (25K)	254 (250K)
101 (100)	102 (1K)	752 (7.5K)	353 (35K)	504 (500K)
151 (150)	152 (1.5K)	103 (10K)	503 (50K)	105 (1 Meg)
251 (250)	252 (2.5K)	153 (15K)	104 (100K)	

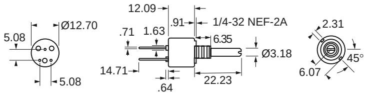
Resistance Range (Ohms)	Digi-Key* Part No.	Price Each					Precision Part No.
		1	10	50	100	250	
50-1Meg	RV4L ☐☐☐ C-ND	5.90	5.34	4.54	3.77	3.30	RV4LAYSA(Code)A
50-1Meg	RV4N ☐☐☐ C-ND	5.62	5.08	4.32	3.59	3.14	RV4NAYSD(Code)A

* For complete number, substitute corresponding code (from Resistance Code Chart) for ☐☐☐.

Type SPR Washable, 1/2 Watt - Carbon Potentiometer



SPRU Series



Specifications:
- **Resistance Tolerance:** ±10% through 500K, ±20% from 1Meg to 5Meg
- **Resistance Taper:** Linear
- **Power Rating:** .5 Watts @ 70°C
- **Dielectric Strength:** 750V RMS
- **Working Voltage:** 350VDC Maximum, but power not to exceed rating
- **Operating Temperature:** -55°C to 120°C
- **Mechanical Rotation:** 295°.

Meets or exceeds MIL R 94 Specifications. Metal housing, stainless steel shaft.

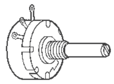
Resistance Code Chart

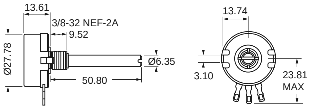
Code (Value)	Code (Value)	Code (Value)	Code (Value)
101 (100)	252 (2.5K)	503 (50K)	105 (1Meg)
251 (250)	502 (5K)	104 (100K)	255 (2.5Meg)
501 (500)	103 (10K)	254(250K)	505 (5Meg)
102 (1K)	253 (25K)	504 (500K)	

Resistance Range (Ohms)	Digi-Key* Part No.	Price Each					Precision Part No.
		1	10	50	100	250	
100-5Meg	SPRU ☐☐☐ C-ND	6.42	5.81	4.94	4.11	3.59	SPRU(Code)1S28

* For complete number, substitute corresponding code (from Resistance Code Chart) for ☐☐☐.

MIL Style RV4 - 2 Watt Carbon Potentiometer





RV4NJ Series

Specifications:
- **Resistance Tolerance:** ±10% through 500K, ±20% for 1 Meg
- **Resistance Taper:** Linear
- **Power Rating:** 2 Watts @ 70°C, derate to 0 Watt @ 120°C
- **Dielectric Strength:** 900V RMS
- **Working Voltage:** 500VDC Max., but power not to exceed rating
- **Operating Temperature:** -55°C to 120°C
- **Mechanical Rotation:** 314°

QPL listed under MIL R 94 Specifications. Metal housing, stainless steel shaft

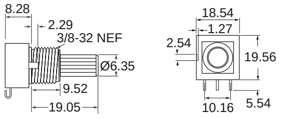
Resistance Code Chart

Code (Value)	Code (Value)
500 (50)	502 (5K)
101 (100)	103 (10K)
251 (250)	253 (25K)
501 (500)	104 (100K)
102 (1K)	504 (500K)
252 (2.5K)	105 (1Meg)

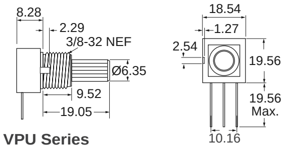
Resistance Range (Ohms)	Digi-Key* Part No.	Price Each					Precision Part No.
		1	10	50	100	250	
50-1Meg	RV4NJ ☐☐☐ C-ND	5.62	5.08	4.32	3.59	3.14	RV4NAYSJ(Code)A

* For complete number, substitute corresponding code (from Resistance Code Chart) for ☐☐☐.

Style V - 2 Watt Cermet Potentiometer



VU Series



VPU Series

Specifications:
- **Resistance Tolerance:** ±10%
- **Resistance Taper:** Linear
- **Power Rating:** 2 Watts @ 70°C, derated to 0 Watts @ 120°C
- **Dielectric Strength:** 2500V RMS at sea level
- **Operating Voltage:** 1000 V, subject to power rating
- **Operating Temperature:** -50°C to +110°C
- **Mechanical Rotation:** 274°

Resistance Code Chart

Code (Value)	Code (Value)
101 (100)	502 (5K)
251 (250)	103 (10K)
501 (500)	253 (25K)
102 (1K)	503 (50K)
252 (2.5K)	104 (100K)

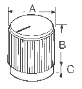
Resistance Range (Ohms)	Digi-Key* Part No.	Price Each					Precision Part No.
		1	10	50	100	250	
100-100K	VU ☐☐☐ -ND	5.75	5.20	4.42	3.67	3.21	VU(Code)1SS24
100-100K	VPU ☐☐☐ -ND	5.23	4.73	4.02	3.34	2.92	VPU(Code)1SS24

* For complete number, substitute corresponding code (from Resistance Code Chart) for ☐☐☐.

KEYSTONE ELECTRONICS CORP.

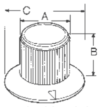
Instrumentation Knobs

Fig. 1



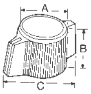
Skirted Round

Fig. 2



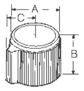
Round with Dial

Fig. 3



Double Bar

Fig. 4



Single Bar

Fig.	Shaft Dia.	Dimensions A	B	C	Digi-Key Part No.	Price Each 1	10	100
1	3.18	12.70	12.95	3.81	8554K-ND	3.38	3.00	2.64
	6.35	17.78	15.49	4.32	8555K-ND	3.51	3.12	2.76
	6.35	22.86	20.07	5.59	8556K-ND	3.62	3.22	2.85
2	3.18	12.70	13.97	22.86	8558K-ND	4.23	3.76	3.32
	6.35	17.78	18.03	29.21	8559K-ND	5.06	4.50	3.97
	6.35	22.86	22.10	38.74	8560K-ND	5.76	5.12	4.53
3	6.35	17.78	15.49	29.21	8565K-ND	4.30	3.82	3.37
	6.35	22.86	16.26	38.74	8566K-ND	4.59	4.08	3.59
4	3.18	12.70	12.95	8.89	8567K-ND	5.09	4.52	4.00
	6.35	17.78	15.49	11.68	8568K-ND	5.85	5.20	4.60
	6.35	22.86	20.07	14.99	8569K-ND	6.32	5.62	4.97

Knobs have a spun aluminum inlay with a clear coat finish.

KILO INTERNATIONAL

Concentric Scale Dials

SERIES: 400, 500, 600, 3400

Made in the USA

Fig. 1

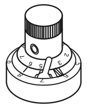


Fig. 2

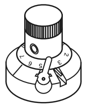


Fig. 3

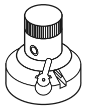
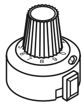


Fig. 4



Features: • Shaft - 1/4" (6.35mm)

400 Series: 1" (25.40mm) Calibrated dials designed for multi-turn potentiometer up to ten turns or other rotary devices. The knob attaches directly to the shaft, and the body of the dial is mounted rigidly to the panel, therefore, accurate readings with a ratio of 1,000 to one for ten turns are provided with zero backlash and reading error.

500 Series: 1" (25.40mm) Single turn calibrated scale dial.

600 Series: 1" (25.40mm) Uncalibrated dial. Mounting Requirements: 1/4" (6.35mm) shaft with 3/8" x 32-NEF-2A Bushing.

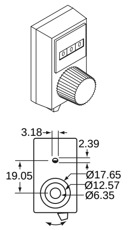
3400 Series: Readout and Operation: Unit shall register a total count of 20 turns. The number in the window (0 through 19) indicates completed number of turns of the drive sleeve. Graduated circular dial indicates the percent of a partial turn of the drive sleeve. Transfer point: The number in center of window shall change as graduated dial rotates between 94 and 0. Rotation: Readout shall increase with clockwise and decrease with counterclockwise rotation. Brake Lever Operation: Positive Detent. Accuracy: Backlash shall be zero between graduated dial and drive sleeve. Mounting: Install mounting bracket between panel and panel nut. The dials mount directly to shaft with No. 4-40 spline socket set screw, located adjacent to No. 95 on graduated dial. 7/8" (22.23mm) diameter.

Fig.	Description	Digi-Key Part No.	Price Each 1	5	10	Kilo Part No.
Commercial 10 Turn						
1	Black Anodize, No Lock	411KL-ND	18.06	16.77	15.48	411
1	Black Anodize, With Lock	412KL-ND	18.71	17.38	16.04	412
1	Clear Anodize, No Lock	461KL-ND	17.77	16.50	15.23	461
1	Clear Anodize, With Lock	462KL-ND	18.71	17.38	16.04	462
Commercial Single Turn						
2	Black Anodize, With Lock	512KL-ND	17.24	16.09	15.32	512
2	Clear Anodize, No Lock	561KL-ND	13.28	12.39	11.80	561
2	Clear Anodize, With Lock	562KL-ND	17.24	16.09	15.32	562
3	Black Anodize, With Lock	612KL-ND	16.67	15.57	14.82	612
3	Clear Anodize, With Lock	662KL-ND	16.67	15.57	14.82	662
Commercial 20 Turn						
4	Black Anodize, With Lock	3412KL-ND	16.70	15.51	14.31	3412
4	Clear Anodize, With Lock	3462KL-ND	16.70	15.51	14.31	3462

PRECISION ELECTRONIC COMPONENTS LTD.

NEW! Model 15 Turns Counting Dial

The left-hand numeral of the Model 15 Multidial indicates the total number of revolutions of the drive sleeve (component shaft) that have been completed. The center numeral and right numeral indicate tenths and hundredth of a revolution, respectively. The graduations between the numerals on the right digit wheel can be read to one five-hundredth of a revolution of the drive sleeve. Example: If the reading in the window displays 652, the reading is 6 turns plus 52% of the seventh turn. Use of the graduations can further subdivide the reading at this setting.



Rear View

Descriptions	Digi-Key Part No.	Price Each	Precision Electronics Part No.
Digital Dial	E15-1-11-ND	29.37	E15-1-11

KILO INTERNATIONAL

Machined Aluminum Instrumentation Knobs

Made in the USA

Features:

- Knobs are anodized in construction
- Set screws accept a 1/16" hex allen wrench included with parts
- All knobs will accept round shafts with sizes indicated below. DDS, DD and JD Series: Two 6-32 screws set 120° apart. HD Series: Two 6-32 set screws set 90° apart. ML Series: One 6-32 set screw.

Fig. 1 - ML Series

"Soft Touch"

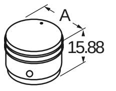


Fig. 2 - DD Series

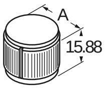


Fig. 3 - JD Series

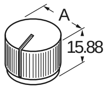


Fig. 4 - HD Series

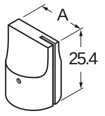


Fig. 5 - DDS Series

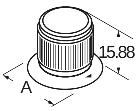


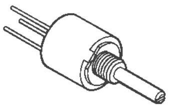
Fig.	Shaft Dia. Inch (mm)	Dim. A Inch (mm)	Digi-Key* Part No.	Price Each 1	10	50	100
1	.125 (3.18)	.50 (12.70)	226-☐000-ND	5.13	4.56	3.77	3.42
	.125 (3.18)	.75 (19.05)	226-☐026-ND	6.26	5.56	4.59	4.17
	.125 (3.18)	.925 (23.50)	226-☐027-ND	6.86	6.10	5.04	4.58
	.250 (6.35)	.50 (12.70)	226-☐025-ND	5.13	4.56	3.77	3.42
	.250 (6.35)	.75 (19.05)	226-☐001-ND	6.26	5.56	4.59	4.17
	.250 (6.35)	.925 (23.50)	226-☐002-ND	6.86	6.10	5.04	4.58
	.236 (6.00)	.50 (12.70)	226-☐003-ND	5.58	4.96	4.10	3.72
	.236 (6.00)	.75 (19.05)	226-☐004-ND	6.71	5.96	4.92	4.47
	.236 (6.00)	.925 (23.50)	226-☐028-ND	7.31	6.50	5.37	4.88
2	.125 (3.18)	.50 (12.70)	226-☐005-ND	4.73	4.20	3.47	3.15
	.125 (3.18)	.75 (19.05)	226-☐042-ND	4.88	4.34	3.59	3.26
	.125 (3.18)	.925 (23.50)	226-☐043-ND	5.13	4.34	3.59	3.26
	.250 (6.35)	.50 (12.70)	226-☐041-ND	4.73	4.34	3.59	3.26
	.250 (6.35)	.75 (19.05)	226-☐006-ND	4.88	4.34	3.59	3.26
	.250 (6.35)	.925 (23.50)	226-☐007-ND	5.13	4.56	3.77	3.42
	.236 (6.00)	.50 (12.70)	226-☐008-ND	5.18	4.60	3.80	3.45
	.236 (6.00)	.75 (19.05)	226-☐009-ND	5.33	4.74	3.92	3.56
	.236 (6.00)	.925 (23.50)	226-☐044-ND	5.58	4.96	4.10	3.72
3	.125 (3.18)	.50 (12.70)	226-☐010-ND	4.73	4.20	3.47	3.15
	.125 (3.18)	.75 (19.05)	226-☐034-ND	4.88	4.34	3.59	3.26
	.125 (3.18)	.925 (23.50)	226-☐035-ND	5.13	4.56	3.77	3.42
	.250 (6.35)	.50 (12.70)	226-☐033-ND	4.73	4.20	3.47	3.15
	.250 (6.35)	.75 (19.05)	226-☐011-ND	4.88	4.34	3.59	3.26
	.250 (6.35)	.925 (23.50)	226-☐012-ND	5.13	4.56	3.77	3.42
	.236 (6.00)	.50 (12.70)	226-☐013-ND	5.18	4.60	3.80	3.45
	.236 (6.00)	.75 (19.05)	226-☐014-ND	5.33	4.74	3.92	3.56
	.236 (6.00)	.925 (23.50)	226-☐036-ND	5.58	4.96	4.10	3.72
4	.125 (3.18)	.50 (12.70)	226-☐015-ND	5.38	4.78	3.95	3.59
	.125 (3.18)	.75 (19.05)	226-☐030-ND	6.48	5.76	4.76	4.32
	.125 (3.18)	.925 (23.50)	226-☐031-ND	7.29	6.48	5.35	4.86
	.250 (6.35)	.50 (12.70)	226-☐029-ND	5.38	4.78	3.95	3.59
	.250 (6.35)	.75 (19.05)	226-☐016-ND	6.48	5.76	4.76	4.32
	.250 (6.35)	.925 (23.50)	226-☐017-ND	7.29	6.48	5.35	4.86
	.236 (6.00)	.50 (12.70)	226-☐018-ND	5.83	5.18	4.28	3.89
	.236 (6.00)	.75 (19.05)	226-☐019-ND	6.93	6.16	5.09	4.62
	.236 (6.00)	.925 (23.50)	226-☐032-ND	7.74	6.88	5.68	5.16
5	.125 (3.18)	.685 (17.40)	226-☐020-ND	5.20	4.62	3.82	3.47
	.125 (3.18)	1.00 (25.40)	226-☐038-ND	6.21	5.52	4.56	4.14
	.125 (3.18)	1.25 (31.75)	226-☐039-ND	6.71	5.96	4.92	4.47
	.250 (6.35)	.685 (17.40)	226-☐037-ND	5.20	4.62	3.82	3.47
	.250 (6.35)	1.00 (25.40)	226-☐021-ND	6.21	5.52	4.56	4.14
	.250 (6.35)	1.25 (31.75)	226-☐022-ND	6.71	5.96	4.92	4.47
	.236 (6.00)	.685 (17.40)	226-☐023-ND	5.65	5.02	4.15	3.77
	.236 (6.00)	1.00 (25.40)	226-☐024-ND	6.66	5.92	4.89	4.44
	.236 (6.00)	1.25 (31.75)	226-☐040-ND	7.16	6.36	5.25	4.77

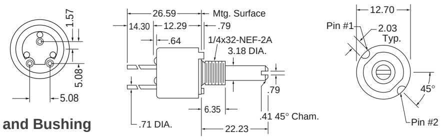
* For complete part number, substitute the corresponding color choice (listed below) for ☐:
1 = Black Gloss **2** = Aluminum Gloss **3** = Aluminum Matte **4** = Black Matte

CLAROSTAT

Washable, Conductive Plastic Potentiometers — 1/2 Watt

SERIES 392JB





Series 392JB: Plastic Shaft and Bushing

RESISTANCE CODE CHART
(Resistance Value — Linear)

Code (Value)	Code (Value)	Code (Value)
101 (100) 251 (250) 501 (500) 102 (1K) 252 (2.5K)	502 (5K) 103 (10K) 253 (25K) 503 (50K)	104 (100K) 254 (250K) 504 (500K) 105 (1 Meg.)

SPECIFICATIONS:

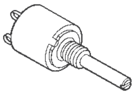
Power Rating: .5 Watts at 70 C. voltage not to exceed rating. **Electrical Rotation:** 295° ±5° **Effective Rotation:** 265° +0°, -10° **Mechanical Rotation:** 295° ±5° **Resistance Tolerance:** ±10% through 500k. ±20% @ 1 Meg **Dielectric Strength:** 750 VAC for 60 sec., @ ATM pressure. 350 VAC for 60 sec., in. Hg **Working Voltage:** 350 VDC across terminals, but power not to exceed rating. **Operational Temperature Range:** -40 C. to + 120 C.

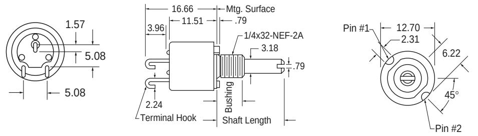
Resistance Range (Ohms)	Digi-Key* Part No.	Price Each 1	10	50	100	250	500	Clarostat Part No.
100-1 Meg.	392JB □□□ -ND	7.09	6.22	5.22	3.87	3.31	2.98	392JB (Value)

* For complete number, substitute corresponding code (from chart above) for □□□.

Conductive Plastic Military Potentiometers — 1/2 Watt

SERIES RV6L-P RV6N-P





RV6L: Locking Bushing: 1/2" (12.70mm) (length). Shaft: 5/8" (15.88mm) (length). (RV6L□□□P: sealed version.)
RV6N: Standard Bushing: 1/4" (6.35mm) (length). Shaft: 7/8" (22.23mm) (length). (RV6N□□□P: sealed version.)

SPECIFICATIONS:

- **Resistance Tolerance:** ±10%. • **Power Rating:** 0.5 watt at 70°C. Derated to zero power at 120°C. • **Electrical and Mechanical Rotation:** 295° ±3° • **Effective Rotation:** 265° +0°, -10°. • **Dielectric Strength:** 750 VAC for 60 Seconds at ATM. 350 VAC for 60 Seconds 3.44 in H.g. • **Working Voltage:** 350 VDC maximum, but power not to exceed rating.

RESISTANCE CODE CHART (Resistance Value — Linear)

Code (Value)	Code (Value)	Code (Value)
101 (100) 501 (500)	102 (1K) 253 (25K)	503 (50K) 254 (250K)

Resistance Range (Ohms)	Digi-Key* Part No.	Price Each 1	10	50	100	Clarostat Part No.
100-1 Meg.	RV6L □□□ P-ND	6.93	6.63	5.70	4.62	RV6LAYSA□□□A-P
100-1 Meg.	RV6N □□□ P-ND	6.65	6.09	5.24	4.25	RV6NAYSD□□□A-P

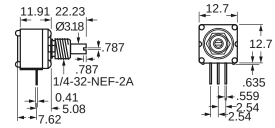
* For complete number, substitute corresponding code (from chart above) for □□□.

Conductive Plastic Potentiometers — 1/2 Watt

SERIES 590SX

SPECIFICATIONS:

Resistance Tolerance: ±10% **Power Rating (Watts):** 0.5W @ 70°C. Derated linearly to 0 Watts at 120°C **Mechanical and Electrical Rotation:** 295° ±5° **Working Voltage:** 350 VAC Max. across end terminals, but within Power Rating **Effective Rotation:** 265° ±5°. Hardware included.



RESISTANCE CODE CHART
(Resistance Value — Linear)

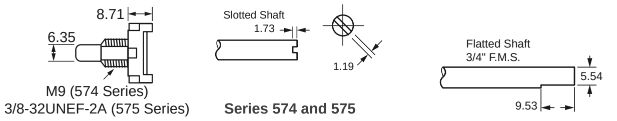
Code (Value)	Code (Value)	Code (Value)
102 (1K)	502 (5K)	103 (10K)

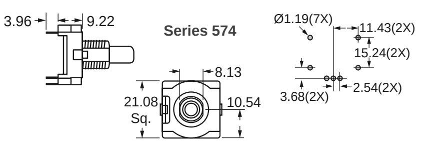
Resistance Range (Ohms)	Digi-Key* Part No.	Price Each 1	10	50	100	Clarostat Part No.
1K-10K	590SX □□□ -ND	4.76	4.32	3.93	3.40	590SX1N56S □□□ SP

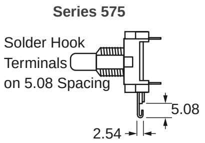
* For complete number, substitute corresponding code (from chart above) for □□□.

Conductive Plastic Potentiometers — 1/4 Watt

SERIES 574SFX 575SSX







RESISTANCE CODE CHART
(Resistance Value — Linear)

Code (Value)	Code (Value)
102 (1K) 103 (10K)	503 (50K) 104 (100K)

SPECIFICATIONS:

Resistance Tolerance: ±20% **Power Rating (Watts):** 0.25W @ 70°C **Mechanical and Electrical Rotation:** 300° ±5° **Working Voltage:** 350VAC Max **Effective Rotation:** 270°

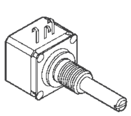
Hardware must be ordered separately.

Resistance Range (Ohms)	Shaft Type	Digi-Key* Part No.	Price Each 1	10	50	100	Clarostat Part No.
10K-100K	Flatted	574SF □□□ -ND	3.74	3.33	2.53	1.88	574SX1M48F □□□ SD
10K-100K	Slotted	574SS □□□ -ND	3.74	3.33	2.53	1.88	574SX1M48S □□□ SD
1K-50K	Flatted	575SF □□□ -ND	2.98	2.65	2.02	1.50	575SX1A48F □□□ SS
1K-50K	Slotted	575SS □□□ -ND	2.98	2.65	2.02	1.50	575SX1A48S □□□ SS
Mounting Nut (574 Series)		02318603-ND	—	.14	.12	.11	02318603
Mounting Nut (575 Series)		01051301-ND	—	.29	.26	.23	01051301
Lock Washer		01070602-ND	—	.29	.26	.23	01070602

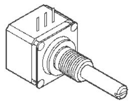
* For complete number, substitute corresponding code (from chart above) for □□□.

Conductive Plastic Potentiometers — 1/2 Watt, 1 Watt

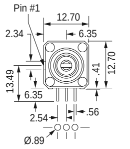
SERIES 308N 308NPC 309NPC

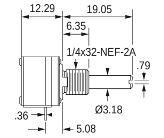


308N Series

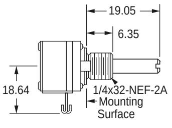


308NPC Series
309NPC Series





308NPC/309NPC Series
PC Terminals



308N Series
Hook Terminals

RESISTANCE CODE CHART
(Resistance Value — Linear)

Code (Value)	Code (Value)	Code (Value)
101 (100) 251 (250) 501 (500) 102 (1K) 252 (2.5K)	502 (5K) 103 (10K) 253 (25K) 503 (50K) 104 (100K)	254 (250K) 504 (500K) 105 (1 Meg.) 255 (2.5 Meg.) 505 (5 Meg.)

SPECIFICATIONS:

Resistance Tolerance: ±10% up to 500K, ±20% above **Electrical and Mechanical Rotation:** 295° ±5° **Dielectric Strength:** 750 VAC (308 Series), 900 VAC (309 Series), for 60 SEC ATM **Working Voltage:** 350 VDC across terminals **Power Rating:** .5 watt at 70°C (308 Series), 1 watt at 150°C (309 Series) **Operating Temperature:** -40° to +120°C (308 Series), -40°C to +150°C (309 Series) **Rotational Life:** 50,000 cycles under load (308 Series), 25,000 cycles under load (309 Series).

Resistance Range (Ohms)	Digi-Key* Part No.	Price Each 1	10	50	100	250	Clarostat Part No.
100-5 Meg.	308N □□□ -ND	10.39	7.99	6.95	5.56	3.97	308N (Value)
100-1 Meg.	308NPC □□□ -ND	10.43	8.03	6.99	5.60	4.01	308NPC (Value)
100-5 Meg.	309NPC □□□ -ND	10.60	8.62	7.18	6.57	5.03	309NPC (Value)

* For complete number, substitute corresponding code (from chart above) for □□□.
N = Shaft: 1/8 in. (3.18mm) diameter x 3/4 in. (19.05mm)

Conductive Plastic Potentiometers — 1 Watt

SERIES 381

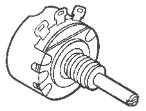
The "Quiet One" with 1% dynamic noise and 5% independent linearity. Manufactured to MIL-R-94D specification. 381N — Bushing, Plain, 1/4" (6.35mm) long. Shaft 3/4" (19.05mm) FMS screwdriver slotted.

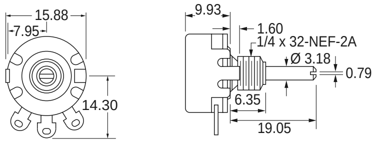
SPECIFICATIONS:

- **Resistance Tolerance:** Linear, up to 500K, ±10%, above 500K, ±20%
- **Power Rating (Watts):** 1 watt maximum continuous power rating for linear taper, but voltage not to exceed rating. Full rating at 70°C, derated linearly to zero watts at 120°C
- **Mechanical and Electrical Rotation:** 300° ±5° without switch
- **Working Voltage:** 350 VDC across end terminals, but power not to exceed rating
- **Effective Rotation:** 270° +0° -10°
- **Dielectric Strength:** 1,000 VAC for 60 Sec. ATM

RESISTANCE CODE CHART
(Value — Linear)

Code (Value)	Code (Value)
101 (100) 251 (250) 501 (500) 102 (1K) 252 (2.5K) 502 (5K) 103 (10K) 253 (25K)	503 (50K) 104 (100K) 254 (250K) 504 (500K) 105 (1 Meg.) 255 (2.5 Meg.) 505 (5 Meg.)





Resistance Range (Ohms)	Digi-Key* Part No.	Price Each 1	10	50	Clarostat Part No.
100-5 Meg.	381N □□□ -ND	12.76	11.23	9.69	381N (Value)

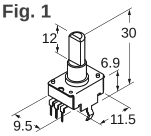
* For complete number, substitute corresponding code (from chart above) for □□□.

Panasonic® Audio Potentiometers

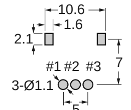
9mm Potentiometers

Specifications: Resistance Range: 5K ohm through 50K ohm • Tolerance: ±20% • Power Rating: .05w @ 50°C • Voltage Rating: E = √PR but E ≤ 50VAC/20VDC • Rotation Angle: 300° ±5° • Life: 10000 turns min. • Application: Audio mixer

Fig. 1



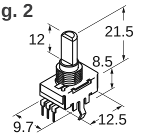
Shaft :Ø 6.0 mm



(View from mtg. side)

Footprint Applies to Figures 1, 2 & 3

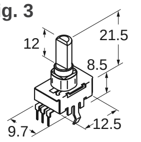
Fig. 2



Shaft :Ø 6.0 mm

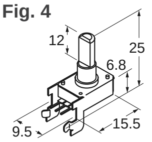
*** Hardware Included**

Fig. 3

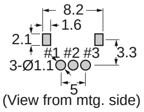


Shaft :Ø 6.0 mm

Fig. 4



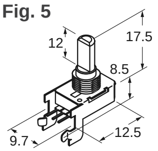
Shaft :Ø 6.0 mm



(View from mtg. side)

Footprint Applies to Figures 4, 5, & 6

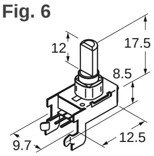
Fig. 5



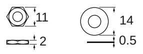
Shaft :Ø 6.0 mm

*** Hardware Included**

Fig. 6



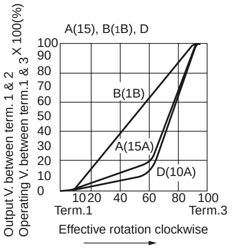
Shaft :Ø 6.0 mm

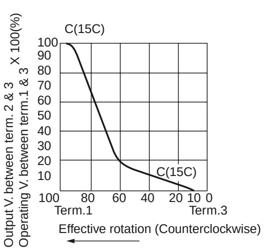


*** Hardware for Fig. 2 and Fig. 5**

Resistance Code Chart
Code (Resistance Value)

Code (Value)	Code (Value)
502 (5K)	103 (10K)
203 (20K)	503 (50K)

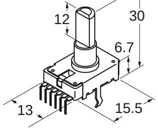




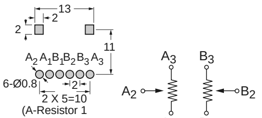
12mm Potentiometers

Specifications: Resistance Range: 5K ohm through 50K ohm • Tolerance: ±20% • Power Rating: .05w @ 50°C • Voltage Rating: E = √PR but E ≤ 50VAC/20VDC (Do not use DC Voltage) • Rotation Angle: 300° ±5° • Life: 15000 turns min. • Application: Audio mixer

Fig. 7



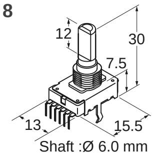
Shaft :Ø 6.0 mm



(A-Resistor 1
B-Resistor 2)
(View from mtg. side)

Footprint Applies to Figures 7, 8, & 9

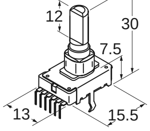
Fig. 8



Shaft :Ø 6.0 mm

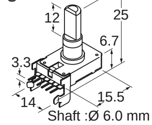
*** Hardware Included**

Fig. 9

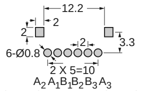


Shaft :Ø 6.0 mm

Fig. 10



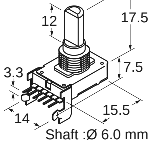
Shaft :Ø 6.0 mm



(A-Resistor 1, B-Resistor 2)
(View from mtg. side)

Footprint Applies to Figures 7, 8, & 9

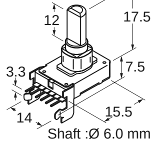
Fig. 11



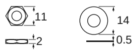
Shaft :Ø 6.0 mm

*** Hardware Included**

Fig. 12



Shaft :Ø 6.0 mm



*** Hardware for Fig. 8 and Fig. 11**

Fig.	Taper	Center Detent	Bushing	Digi-Key Part No.	Pricing 1	10	100	1,000	Panasonic* Part No.
9MM Audio Potentiometers									
1	B	Y	None	P3A1☐☐☐-ND	1.05	8.73	65.48	483.06	EVU-F3AF30B☐☐
	D	Y	None	P3B2☐☐☐-ND	1.05	8.73	65.48	483.06	EVU-F3AF30D☐☐
	B	N	None	P3C3☐☐☐-ND	1.12	9.33	69.98	516.26	EVU-F2AF30B☐☐
	D	N	None	P3D4☐☐☐-ND	.99	8.22	61.65	454.84	EVU-F2AF30D☐☐
2	B	Y	Metal	P3E5☐☐☐-ND	1.90	15.84	118.80	876.48	EVU-F3MFL3B☐☐
	D	Y	Metal	P3F6☐☐☐-ND	1.90	15.84	118.80	876.48	EVU-F3MFL3D☐☐
	B	N	Metal	P3G7☐☐☐-ND	1.84	15.33	114.98	848.26	EVU-F2MFL3B☐☐
	D	N	Metal	P3H8☐☐☐-ND	1.84	15.33	114.98	848.26	EVU-F2MFL3D☐☐
3	B	Y	Plastic	P3I9☐☐☐-ND	1.25	10.44	78.30	577.68	EVU-F3LFL3B☐☐
	D	Y	Plastic	P3J0☐☐☐-ND	1.25	10.44	78.30	577.68	EVU-F3LFL3D☐☐
	B	N	Plastic	P3K1☐☐☐-ND	1.19	9.90	74.25	547.80	EVU-F2LFL3B☐☐
	D	N	Plastic	P3L2☐☐☐-ND	1.19	9.90	74.25	547.80	EVU-F2LFL3D☐☐
4	B	Y	None	P3M3☐☐☐-ND	1.08	9.03	67.73	499.66	EVU-E3AF25B☐☐
	D	Y	None	P3N4☐☐☐-ND	1.08	9.03	67.73	499.66	EVU-E3AF25D☐☐
	B	N	None	P3P5☐☐☐-ND	1.02	8.49	63.68	469.78	EVU-E2AF25B☐☐
	D	N	None	P3Q6☐☐☐-ND	1.02	8.49	63.68	469.78	EVU-E2AF25D☐☐
5	B	Y	Metal	P3R7☐☐☐-ND	1.94	16.17	121.28	894.74	EVU-E3JFK4B☐☐
	D	Y	Metal	P3S8☐☐☐-ND	1.94	16.17	121.28	894.74	EVU-E3JFK4D☐☐
	B	N	Metal	P3T9☐☐☐-ND	1.87	15.60	117.00	863.20	EVU-E2JFK4B☐☐
	D	N	Metal	P3U0☐☐☐-ND	1.87	15.60	117.00	863.20	EVU-E2JFK4D☐☐
6	B	Y	Plastic	P3W1☐☐☐-ND	1.29	10.77	80.78	595.94	EVU-E3KFK4B☐☐
	D	Y	Plastic	P3X2☐☐☐-ND	1.29	10.77	80.78	595.94	EVU-E3KFK4D☐☐
	B	N	Plastic	P3Y3☐☐☐-ND	1.22	10.20	76.50	564.40	EVU-E2KFK4B☐☐
	D	N	Plastic	P3Z4☐☐☐-ND	1.22	10.20	76.50	564.40	EVU-E2KFK4D☐☐
12MM Audio Potentiometers									
7	B	Y	None	P2A5☐☐☐-ND	2.36	19.68	147.60	1088.96	EVJ-Y81F30B☐☐
	AC	Y	None	P2B6☐☐☐-ND	2.36	19.68	147.60	1088.96	EVJ-YE1F30☐☐☐
	A	N	None	P2C7☐☐☐-ND	2.29	19.11	143.33	1057.42	EVJ-Y00F30A☐☐
	D	N	None	P2D8☐☐☐-ND	2.29	19.11	143.33	1057.42	EVJ-Y00F30D☐☐
8	B	Y	Metal	P2E9☐☐☐-ND	2.69	22.41	168.08	1240.02	EVJ-Y91F03B☐☐
	AC	Y	Metal	P2F0☐☐☐-ND	2.69	22.41	168.08	1240.02	EVJ-YK1F03☐☐☐
	A	N	Metal	P2G1☐☐☐-ND	2.62	21.87	164.03	1210.14	EVJ-Y10F03A☐☐
	D	N	Metal	P2H2☐☐☐-ND	2.62	21.87	164.03	1210.14	EVJ-Y10F03D☐☐
9	B	Y	Plastic	P2I3☐☐☐-ND	2.57	21.39	160.43	1183.58	EVJ-Y96F03B☐☐
	AC	Y	Plastic	P2J4☐☐☐-ND	2.57	21.39	160.43	1183.58	EVJ-YK6F03☐☐☐
	A	N	Plastic	P2K5☐☐☐-ND	2.51	20.88	156.60	1155.36	EVJ-Y15F03A☐☐
	D	N	Plastic	P2L6☐☐☐-ND	2.51	20.88	156.60	1155.36	EVJ-Y15F03D☐☐
10	B	Y	None	P2M7☐☐☐-ND	2.39	19.95	149.63	1103.90	EVJ-C31F25B☐☐
	AC	Y	None	P2N8☐☐☐-ND	2.39	19.95	149.63	1103.90	EVJ-CV1F25☐☐☐
	A	N	None	P2P9☐☐☐-ND	2.33	19.38	145.35	1072.36	EVJ-C00F25A☐☐
	D	N	None	P2Q0☐☐☐-ND	2.33	19.38	145.35	1072.36	EVJ-C00F25D☐☐
11	B	Y	Metal	P2R1☐☐☐-ND	2.73	22.71	170.33	1256.62	EVJ-C51F02B☐☐
	AC	Y	Metal	P2S2☐☐☐-ND	2.73	22.71	170.33	1256.62	EVJ-CC1F02☐☐☐
	A	N	Metal	P2T3☐☐☐-ND	2.66	22.14	166.05	1225.08	EVJ-C20F02A☐☐
	D	N	Metal	P2U4☐☐☐-ND	2.66	22.14	166.05	1225.08	EVJ-C20F02D☐☐
12	B	Y	Plastic	P2W5☐☐☐-ND	2.60	21.66	162.45	1198.52	EVJ-C56F02B☐☐
	AC	Y	Plastic	P2X6☐☐☐-ND	2.60	21.66	162.45	1198.52	EVJ-CC6F02☐☐☐
	A	N	Plastic	P2Y7☐☐☐-ND	2.53	21.12	158.40	1168.64	EVJ-C25F02A☐☐
	D	N	Plastic	P2Z8☐☐☐-ND	2.53	21.12	158.40	1168.64	EVJ-C25F02D☐☐

For complete number, substitute corresponding code (from above chart) for ☐☐☐.
***** Call Digi-Key for help in assembling manufacturer part number.

Thumbwheel Potentiometers

Resistance Code Chart
Code (Resistance Value)

Code (Value)	Code (Value)
502 (5K)	203 (20K)
103 (10K)	503 (50K)

Resistance Range: 5K ohm through 50K ohm • Tolerance: ±20% • Power Rating: B taper - .03W, All others .01W • Voltage Rating: 50VAC/20VDC • Rotation Angle: 260° ±10° • Life: 10000 turns min.

Fig. 13

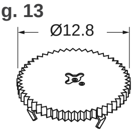
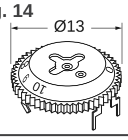
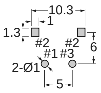


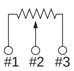
Fig. 14



Footprint Applies to both Fig. 13 & 14



(View from mtg. side)



Element Circuit Diagram

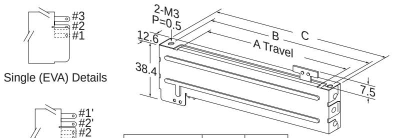
Fig.	Taper	Center Detent	Digi-Key Part No.	Pricing 1	10	100	1,000	Panasonic* Part No.
13	A	N	P4A9☐☐☐-ND	2.07	17.25	129.38	954.50	EVL-HFAA01A☐☐
	B	N	P4B0☐☐☐-ND	2.07	17.25	129.38	954.50	EVL-HFAA01B☐☐
14	A	N	P4C1☐☐☐-ND	2.07	17.25	129.38	954.50	EVL-HFAA06A☐☐
	B	N	P4D2☐☐☐-ND	2.07	17.25	129.38	954.50	EVL-HFAA06B☐☐
13	A	Y	P4E3☐☐☐-ND	2.32	19.32	144.90	1069.04	EVL-HFKA01A☐☐
	B	Y	P4F4☐☐☐-ND	2.32	19.32	144.90	1069.04	EVL-HFKA01B☐☐

For complete number, substitute corresponding code (from chart at left) for ☐☐☐.
***** Call Digi-Key for help in assembling manufacturer part number.

Panasonic Slide Potentiometers for Audio Mixer Applications

Fig. 1 – Rail Guide Type

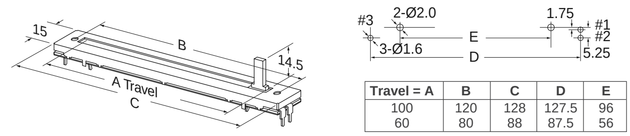
Features: • Wobbleless, smooth travel with wet slide feel • High reliability due to exclusive specular glossing resistive elements for low distortion and precise precious metal contacts • Precise attenuation characteristics • Long life 100,000 cycles min. **Recommended Applications:** • Fader controls for audio mixers • Audio Equipment



Travel = A	B	C
100	120	129.3
60	80	89.3

Fig. 2 – Thin Type

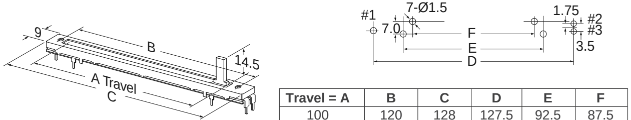
Features: • Thin and compact design with 8mm body height and 15mm width • Light sliding force and excellent operation • Highly accurate attenuation characteristics, maximum attenuation of more than 100dB, and low noise **Recommended Applications:** • Fade control for common type audio mixers



Travel = A	B	C	D	E
100	120	128	127.5	96
60	80	88	87.5	56

Fig. 3 – Mono Type

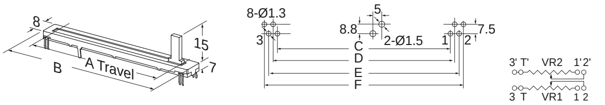
Features: • Slim type fader, 9mm width, 8mm height • Excellent cost performance applicable to audio mixers for amateur use **Recommended Applications:** • Fade control for audio mixers • Multi-Track Recorders • Paper position sensors for copiers



Travel = A	B	C	D	E	F
100	120	128	127.5	92.5	87.5
60	80	88	87.5	52.5	47.5

Fig. 4 – Standard Type

Features: • Excellent operational feeling • Low noise, long operational life, highly accurate attenuation **Recommended Applications:** • Fade control for audio mixers and musical key boards • Heat control or mode switching for car air conditioners • Measurement instruments

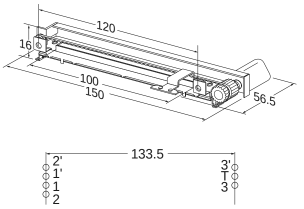


CIRCUIT DIAGRAM
(Note for Single: Do not connect dummy terminal 1' and others
3 and T- short terminals
1', 2', 3' and T'- dummy terminals
Note for Dual: 3 and T- short terminals
3' and T'- short terminals)

Travel = A	B	C	D	E	F
60	75	64	67	70	73
45	60	49	52	55	58

Fig. 5 – Motor Type

Features: • Excellent operation feeling, high speed driving and power saving design • Dust-proof mounting possible by 90° off set lever design **Recommended Application:** • Automated Audio Mixers (Common/Amateur Type)



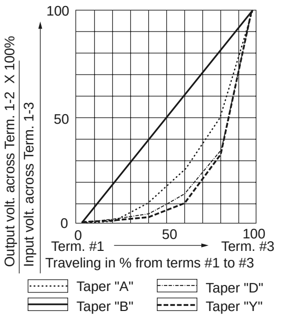
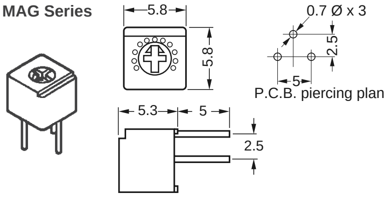


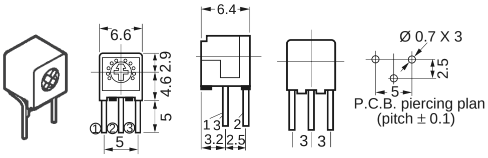
Fig.	Resist. (ohms)	Style	Travel (mm)	Single/ Dual	Taper	Digi-Key Part No.	Price Each 1	10	50	100	Panasonic Part No.
1	10K	Rail	100	S	Y	PJY100SY-ND	37.67	34.04	31.77	30.19	EVA-JYBP08Y14
	10K	Rail	100	S	B	PJY100SB-ND	37.67	34.04	31.77	30.19	EVA-JYMP08B14
	10K	Rail	100	D	Y	PJY100DY-ND	47.09	42.55	39.72	37.73	EVB-JYBP08Y14
	10K	Rail	60	S	Y	PJX060SY-ND	31.39	28.37	26.48	25.16	EVA-JXCP08Y14
	10K	Rail	60	D	Y	PJX060DY-ND	40.81	36.88	34.42	32.70	EVB-JXCP08Y14
2	10K	Thin	100	S	Y	PJQ100SY-ND	8.51	6.81	5.65	5.11	EVA-JQKR15Y14
	10K	Thin	100	S	A	PJQ100SA-ND	8.51	6.81	5.65	5.11	EVA-JQKR15A14
	10K	Thin	100	S	D	PJQ100SD-ND	8.51	6.81	5.65	5.11	EVA-JQKR15D14
	10K	Thin	100	S	B	PJQ100SB-ND	8.51	6.81	5.65	5.11	EVA-JQLR15B14
	10K	Thin	100	D	Y	PJQ100DY-ND	10.88	8.70	7.23	6.53	EVB-JQKR15Y14
	10K	Thin	100	D	A	PJQ100DA-ND	10.88	8.70	7.23	6.53	EVB-JQKR15A14
	10K	Thin	100	D	D	PJQ100DD-ND	10.88	8.70	7.23	6.53	EVB-JQKR15D14
	10K	Thin	60	S	Y	PNA060SY-ND	8.04	6.43	5.34	4.83	EVA-NADR15Y14
	10K	Thin	60	S	A	PNA060SA-ND	8.04	6.43	5.34	4.83	EVA-NADR15A14
	10K	Thin	60	S	D	PNA060SD-ND	8.04	6.43	5.34	4.83	EVA-NADR15D14
	10K	Thin	60	S	B	PNA060SB-ND	8.04	6.43	5.34	4.83	EVA-NAHR15B14
	10K	Thin	60	D	Y	PNA060DY-ND	10.40	8.32	6.91	6.24	EVB-NADR15Y14
	10K	Thin	60	D	A	PNA060DA-ND	10.40	8.32	6.91	6.24	EVB-NADR15A14
	10K	Thin	60	D	D	PNA060DD-ND	10.40	8.32	6.91	6.24	EVB-NADR15D14
3	10K	Mono	100	S	Y	PNF100SY-ND	7.09	5.68	4.71	4.26	EVA-NF4R15Y14
	10K	Mono	100	S	A	PNF100SA-ND	7.09	5.68	4.71	4.26	EVA-NF4R15A14
	10K	Mono	100	S	D	PNF100SD-ND	7.09	5.68	4.71	4.26	EVA-NF4R15D14
	10K	Mono	100	S	B	PNF100SB-ND	7.09	5.68	4.71	4.26	EVA-NF3R15B14
	10K	Mono	60	S	Y	PNE060SY-ND	6.15	4.92	4.09	3.69	EVA-NE4R15Y14
	10K	Mono	60	S	A	PNE060SA-ND	6.15	4.92	4.09	3.69	EVA-NE4R15A14
	10K	Mono	60	S	D	PNE060SD-ND	6.15	4.92	4.09	3.69	EVA-NE4R15D14
	10K	Mono	60	S	B	PNE060SB-ND	6.15	4.92	4.09	3.69	EVA-NE3R15B14
4	10K	Std.	60	S	A	PQ1060SA-ND	3.31	2.65	2.20	1.99	EWA-Q10C15A14
	10K	Std.	60	S	D	PQ1060SD-ND	3.31	2.65	2.20	1.99	EWA-Q10C15D14
	10K	Std.	60	S	B	PQ1060SB-ND	3.31	2.65	2.20	1.99	EWA-Q12C15B14
	10K	Std.	60	D	A	PQ3060DA-ND	4.02	3.22	2.67	2.42	EWA-Q30C15A14
	10K	Std.	60	D	D	PQ3060DD-ND	4.02	3.22	2.67	2.42	EWA-Q30C15D14
	10K	Std.	45	S	A	PP1045SA-ND	2.84	2.27	1.89	1.71	EWA-P10C15A14
	10K	Std.	45	S	D	PP1045SD-ND	2.84	2.27	1.89	1.71	EWA-P10C15D14
	10K	Std.	45	S	B	PP1045SB-ND	2.84	2.27	1.89	1.71	EWA-P12C15B14
	10K	Std.	45	D	A	PP3045DA-ND	3.55	2.84	2.36	2.13	EWA-P30C15A14
	10K	Std.	45	D	D	PP3045DD-ND	3.55	2.84	2.36	2.13	EWA-P30C15D14
5	10K	Motor	100	S	Y	PNC100SY-ND	47.09	42.55	39.72	37.73	EVB-NC2P088BL

Panasonic 5mm Square Single-Turn Cermet Potentiometers

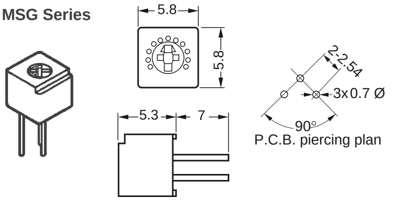
MAG Series



MBG Series



MSG Series



SPECIFICATIONS:

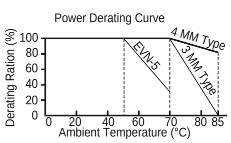
• **Mechanical Characteristics:** • Total rotation angle: Adjustment angle 200° nom. • Soldering: Within 5 seconds max. at 300°C • **Electrical Characteristics:** • Resistance Range: 100Ω to 2 MΩ • Tolerance: ±20% • Power Rating: 0.5W at 70°C • Maximum Voltage: 200V • Dielectric Withstanding Voltage: 600V AC for one minute • Temperature Coefficient: ±100ppm/°C • Insulation Resistance: 100MΩ • **Environmental Characteristics:** • Operating Temperature Range: –55°C to +125°C • Vibration: 20G • Shock: 180G • Seal: MIL-R-22097 Immersion

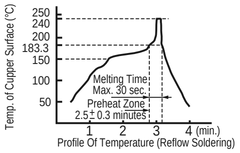
Panasonic/Matsushita Electric has announced a change in the Corporate Trademark. Present trademark: ▲. New trademark: Ⓜ.

Res. (Ohms)	Digi-Key Part No. Top Adjust	Digi-Key Part No. Side Adjust	Digi-Key Part No. Top Adjust	Pricing 1	10	100	1,000	5,000	Panasonic Part No. Top Adjust	Panasonic Part No. Side Adjust	Panasonic Part No. Top Adjust
100	—	MBG12-ND	—	1.59	13.23	121.67	814.00	756.00/M	—	EVM-MBGA01B12	—
500	—	MBG52-ND	—	1.59	13.23	121.67	814.00	756.00/M	—	EVM-MBGA01B52	—
1K	—	—	MSG13-ND	1.59	13.23	121.67	814.00	756.00/M	—	—	EVM-MSGA01B13
20K	—	MBG24-ND	—	1.59	13.23	121.67	814.00	756.00/M	—	EVM-MBGA01B24	—
200K	MAG25-ND	MBG25-ND	—	1.59	13.23	121.67	814.00	756.00/M	EVM-MAGA01B25	EVM-MBGA01B25	—
500K	—	—	MSG55-ND	1.59	13.23	121.67	814.00	756.00/M	—	—	EVM-MSGA01B55
1M	MAG16-ND	MBG16-ND	—	1.59	13.23	121.67	814.00	756.00/M	EVM-MAGA01B16	EVM-MBGA01B16	—
2M	—	—	MSG26-ND	1.59	13.23	121.67	814.00	756.00/M	—	—	EVM-MSGA01B26

Panasonic

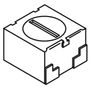
Surface Mount
Trimmer Potentiometers



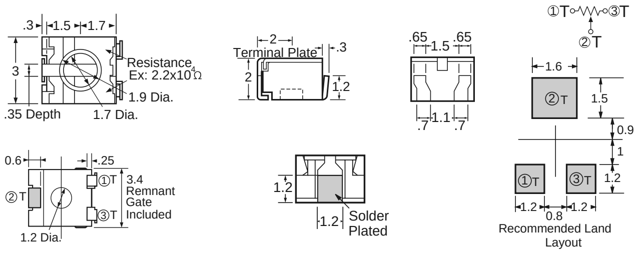


Profile for Reflow Soldering
Pre-Heat: 130°C to 160°C
Melting Temp.: TM = 183.3°C
Peak Time: Tp ≤ 240°C
Melting Temp.: TM ≤ 30s
Solder: Eutectic
Flux: Rosin Flux

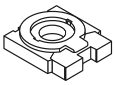
Series P7J – Panasonic Series #EVM-7JSX30BXX



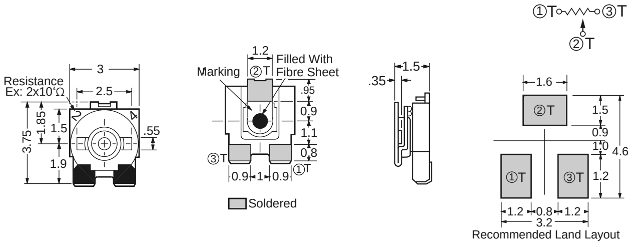
Features: • 3mm sealed type for flow and reflow soldering • Labor cost saving filmless sealed construction; **Resistance Range:** 220-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .05W; **Adjustment Angle:** 260 ±20.; **Rotation Torque:** 10-150 gF; **Operating Temperature:** -40°C to +100°C; **Temperature Coefficient:** ±250 ppm/C (-20°C to +85°C); **Rotation Life:** 10; **Soldering Heat:** 250C 10s/260C 5s



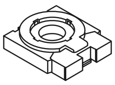
Series P1S – Panasonic Series #EVM-1SSX50BXX



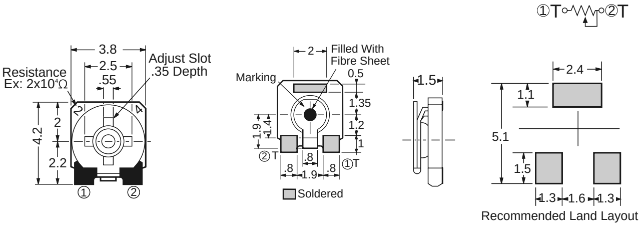
Features: • 3mm open frame type for reflow soldering • Excellent mounting efficiency; **Resistance Range:** 100-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .15W; **Adjustment Angle:** 260 ±20; **Rotation Torque:** 20-200 gF; **Operating Temperature:** -40°C to +100°C; **Temperature Coefficient:** ±250 ppm/C (-20°C to +85°C); **Rotation Life:** 20; **Soldering Heat:** 260C 10s



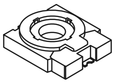
Series P1G – Panasonic Series #EVM-1GSX30BXX



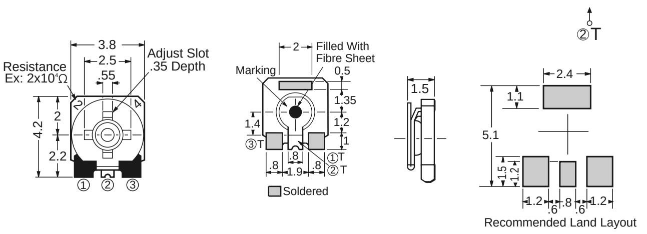
Features: • 4mm open frame type for reflow soldering • Two terminal construction; **Resistance Range:** 100-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .2W; **Adjustment Angle:** 260 ±20; **Rotation Torque:** 20-200 gF; **Operating Temperature:** -40°C to +100°C; **Temperature Coefficient:** ±250 ppm/C (-20°C to +85°C); **Rotation Life:** 20; **Soldering Heat:** 260C 10s



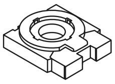
Series P1E – Panasonic Series #EVM-1ESX30BXX



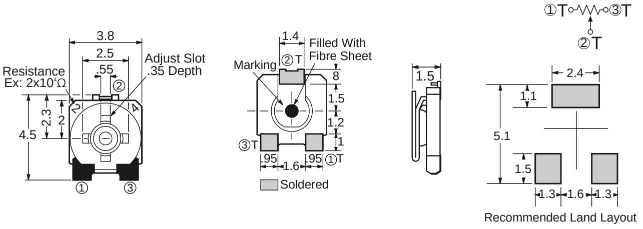
Features: • 4mm open frame type for reflow soldering • Inline terminal construction; **Resistance Range:** 100-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .2W; **Adjustment Angle:** 260 ±20; **Rotation Torque:** 20-200 gF; **Operating Temperature:** -40°C to +100°C; **Temperature Coefficient:** ±250 ppm/C (-20°C to +85°C); **Rotation Life:** 20; **Soldering Heat:** 260C 10s



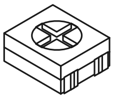
Series P1D – Panasonic Series #EVM-1DSX30BXX



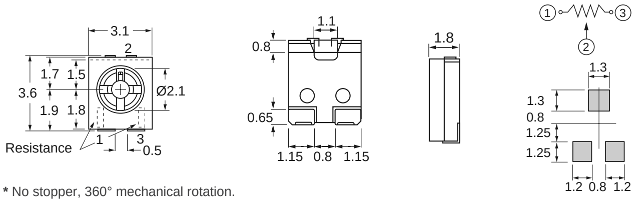
Features: • 4mm open frame type for reflow soldering • Triangle terminal construction; **Resistance Range:** 100-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .2W; **Adjustment Angle:** 260 ±20; **Rotation Torque:** 20-200 gF; **Operating Temperature:** -40°C to +100°C; **Temperature Coefficient:** ±250 ppm/C (-20°C to +85°C); **Rotation Life:** 20; **Soldering Heat:** 260C 10s



Series P5C – Panasonic Series #EVN-5CSX50BXX*
Series P5E – Panasonic Series #EVN-5ESX50BXX



Features: • 3mm carbon dustproof type for reflow soldering • Excellent mounting efficiency for pick & place assy.; • Rotation stopper feature (EVN-5E); **Resistance Range:** 500-1M OHM; **Tolerance:** ±30%; **Taper:** Linear; **Power Rating:** .05W @50C; **Adjustment Angle:** 260 ±20; **Rotation Torque:** 10-150 gF; **Operating Temperature:** -20°C to +70°C; **Temperature Coefficient:** ±500 ppm/C(+25°C to +70°C) / ±750 ppm/C (-20°C to +25°C); **Rotation Life:** 20; **Soldering Heat:** 280C 3s



* No stopper, 360° mechanical rotation.

Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	2,000	Panasonic Part No.
P7J☐ ☐ ☐ CT-ND†	.63	5.28	48.53	P7J☐ ☐ ☐ TR-ND†	325.00	—	EVM-7JSX30BXX*
P1S☐ ☐ ☐ CT-ND†	.46	3.85	35.42	P1S☐ ☐ ☐ TR-ND†	—	237.00/M	EVM-1SSX50BXX*
P1G☐ ☐ ☐ CT-ND†	.44	3.65	33.58	P1G☐ ☐ ☐ TR-ND†	225.00	—	EVM-1GSX30BXX*
P1E☐ ☐ ☐ CT-ND†	.54	4.50	41.40	P1E☐ ☐ ☐ TR-ND†	277.00	—	EVM-1ESX30BXX*
P1D☐ ☐ ☐ CT-ND†	.50	4.13	37.95	P1D☐ ☐ ☐ TR-ND†	254.00	—	EVM-1DSX30BXX*
P5C☐ ☐ ☐ CT-ND†	.31	2.55	23.46	P5C☐ ☐ ☐ TR-ND†	—	157.00/M	EVN-5CSX50BXX*
P5E☐ ☐ ☐ CT-ND†	.28	2.35	21.62	P5E☐ ☐ ☐ TR-ND†	—	145.00/M	EVN-5ESX50BXX*

* For assistance with Panasonic Part Number please call Digi-Key.
† For complete number, substitute corresponding code (from chart) for ☐ ☐ ☐.

Code Resistance Value For P7J Series

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
221 (220) 103 (10K) 474 (470K)	331 (330) 223 (22K) 105 (1.0M)	471 (470) 333 (33K)	102 (1.0K) 473 (47K)	222 (2.2K) 104 (100K)	332 (3.3K) 224 (220K)	472 (4.7K) 334 (330K)

Code Resistance Value For P1 / P5C Series

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
201 (200) 203 (20K)	501 (500) 503 (50K)	102 (1.0K) 104 (100K)	202 (2.0K) 204 (200K)	502 (5.0K) 504 (500K)	103 (10K) 105 (1.0M)	

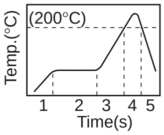
Code Resistance Value For P5E Series

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
501 (500) 104 (100K)	102 (1K) 204 (200K)	202 (2K) 504 (500K)	502 (5K) 105(1M)	103 (10K)	203 (20K)	503 (50K)

Digi-Key® SMT Trimmer Potentiometers Kits

P7J-KIT-ND	10 each of Series P7J, values 220–22K, 47K–1.0M (150 pieces)	**$59.95**
P1S-KIT-ND	10 each of Series P1S, values 200 - 1.0M (120 pieces)	**$43.95**
P1E-KIT-ND	10 each of Series P1E, values 100 - 1.0M (130 pieces)	**$43.95**
P1D-KIT-ND	10 each of Series P1D, values 100 - 1.0M (130 pieces)	**$43.95**

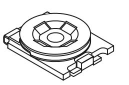
Surface Mount
Trimmer Potentiometers



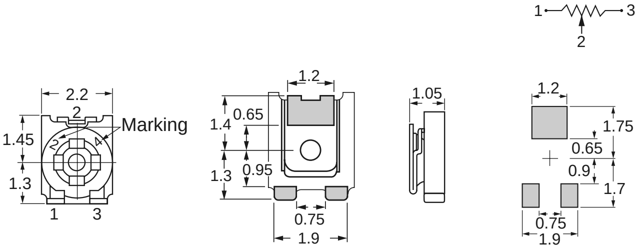
Profile for Reflow Soldering

1. Heat-Up Zone: Room Temperature-
(Preheat Zone 30~60s)
2. Pre-Heat Zone: 140°C to 160°C (60~120s)
3. Heat-Up Zone: Preheat Zone ~200°C (20~40s)
4. Melting-Heat Zone: Peak Temperature (5s max.)
5. Cooling Zone: 200°C to 100°C (1~4C/s)

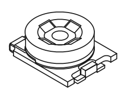
Series P2W – Panasonic Series #EVM-2WSX80BXX



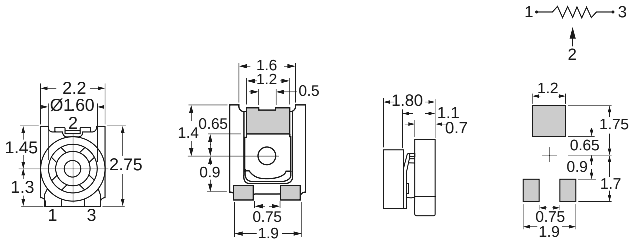
Features: • 2mm open frame type for reflow soldering; **Resistance Range:** 200-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .15W; **Adjustment Angle:** 260 ±20.; **Rotation Torque:** 10-150 gF; **Operating Temperature:** -20°C to +85°C; **Temperature Coefficient:** ±250 ppm/C (-20°C to +85°C); **Rotation Life:** 20; **Soldering Heat:** 240C 5s



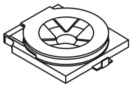
Series P2X – Panasonic Series #EVM-2XSX50BXX



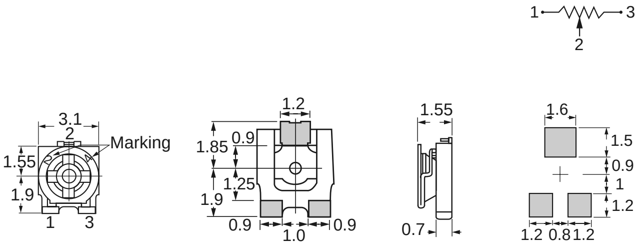
Features: • 2mm open frame type for reflow soldering; **Resistance Range:** 200-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .15W; **Adjustment Angle:** 260 ±20; **Rotation Torque:** 10-150 gF; **Operating Temperature:** -20°C to +85°C; **Temperature Coefficient:** ±250 ppm/C (-20°C to +85°C); **Rotation Life:** 20; **Soldering Heat:** 240C 5s



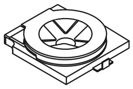
Series P3Y – Panasonic Series #EVM-3YSX50BXX



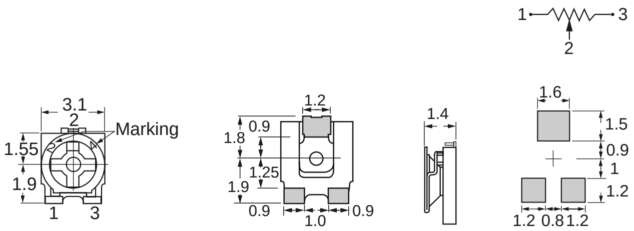
Features: • 3mm open frame type for reflow soldering; **Resistance Range:** 100-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .15W; **Adjustment Angle:** 260 ±20; **Rotation Torque:** 20-150 gF; **Operating Temperature:** -20°C to +85°C; **Temperature Coefficient:** ±250 ppm/C (-20°C to +85°C) ; **Rotation Life:** 20; **Soldering Heat:** 240C 5s



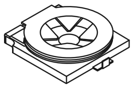
Series P3V – Panasonic Series #EVM-3VSX50BXX



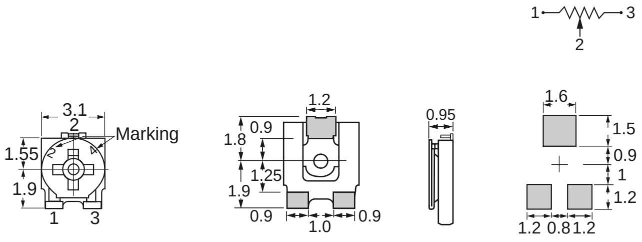
Features: • 3mm open frame type for reflow soldering • Rotation stopper feature; **Resistance Range:** 500-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .15W; **Adjustment Angle:** 240 ±20; **Rotation Torque:** 20-100 gF; **Operating Temperature:** -20°C to +85°C; **Temperature Coefficient:** ±250 ppm/C (-20°C to +85°C); **Rotation Life:** 20; **Soldering Heat:** 240C 5s



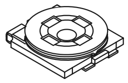
Series P3W – Panasonic Series #EVM-3WSX80BXX



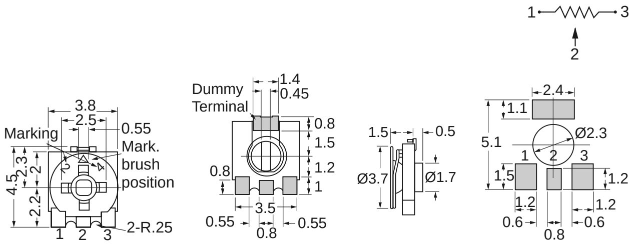
Features: • 3mm open frame type for reflow soldering; **Resistance Range:** 100-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .15W; **Adjustment Angle:** 240 ±20; **Rotation Torque:** 20-200 gF; **Operating Temperature:** -20°C to +85°C; **Temperature Coefficient:** ±250 ppm/C (-20°C to +85°C); **Rotation Life:** 20; **Soldering Heat:** 240C 5s



Series P1U – Panasonic Series #EVM-1USX30BXX



Features: • 4mm open frame type for reflow soldering; **Resistance Range:** 100-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .2W; **Adjustment Angle:** 260 ±20; **Rotation Torque:** 20-200 gF; **Operating Temperature:** -20°C to +100°C; **Temperature Coefficient:** ±250 ppm/C(+25°C to +100°C); **Rotation Life:** 20; **Soldering Heat:** 240C 5s



Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	2,000	3,000	Panasonic Part No.
P2W□ □ □ CT-ND†	.63	5.25	48.30	P2W□ □ □ TR-ND†	—	—	323.00/M	EVM-2WSX80BXX*
P2X□ □ □ CT-ND†	.61	5.05	46.46	P2X□ □ □ TR-ND†	—	311.00/M	—	EVM-2XSX50BXX*
P3Y□ □ □ CT-ND†	.42	3.50	32.20	P3Y□ □ □ TR-ND†	—	215.00/M	—	EVM-3YSX50BXX*
P3V□ □ □ CT-ND†	.52	4.35	40.02	P3V□ □ □ TR-ND†	—	268.00/M	—	EVM-3VSX50BXX*
P3W□ □ □ CT-ND†	.52	4.35	40.02	P3W□ □ □ TR-ND†	—	—	268.00/M	EVM-3WSX80BXX*
P1U□ □ □ CT-ND†	.61	5.05	46.46	P1U□ □ □ TR-ND†	311.00	—	—	EVM-1USX30BXX*

* For assistance with Panasonic Part Number please call Digi-Key.

† For complete number, substitute corresponding code (from chart) for □ □ □.

Code Resistance Value For P2W / P2X Series

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
201 (200) 203 (20K)	501 (500) 503 (50K)	102 (1.0K) 104 (100K)	202 (2.0K) 204 (200K)	502 (5.0K) 504 (500K)	103 (10K) 105 (1.0M)

Code Resistance Value For P3Y / P3W / P1U Series

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
101 (100) 203 (20K)	201 (200) 503 (50K)	501 (500) 104 (100K)	102 (1.0K) 204 (200K)	202 (2.0K) 504 (500K)	502 (5.0K) 105 (1.0M)	103 (10K)

Code Resistance Value For P3V Series

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
501 (500) 104 (100K)	102 (1K) 204 (200K)	202 (2K) 504 (500K)	502 (5K) 105(1M)	103 (10K)	203 (20K)	503 (50K)

Panasonic 6mm Square Ceramic Trimmer Potentiometers

EVM-EAG / EAS / EGG / EGS Series:

Dustproof Type with Knob Protection: Features: • No readjustment needed through knob protected construction • Excellent mounting efficiency due to cubic shape • Automated adjustment available. Face side: Standard cross slot screwdriver suited to automatic adjustment applicable. Back side: Penetrated slot for easy driving. **Applications:** • Audio visual equipment, home appliances.

Specifications • Rotation Torque: 20 to 300gf•cm. • Stopper Strength: 500gf•cm. • Rotation Angle: 210°C ±20°C. • TCR: ±200ppm (-30°C - 100°C) • Nominal Total Resistance & Tolerance: ±25% • Power Rating & Max. Operating Voltage: 0.3W, 100V (70°C) • Residual Resistance: 10Ω max. for R≤1kΩ, 1% max. for 1kΩ<R<100kΩ, 5% max. for R≥100kΩ • Soldering Heat: 5s max. 240 to 280°C, 3s max. 280 to 300°C • Rotation Life: 50 turns.

EVM-EYG and EVM-EYS Series:

Specifications: • Rotation Torque: 20 to 300gf•cm. • Stopper Strength: 500gf•cm. • Rotation Angle: 210°C ±20°C. • TCR: ±100ppm (-40°C – 120°C) • Nominal Total Resistance & Tolerance: ±20% • Power Rating & Max. Operating Voltage: 0.5W, 200V (70°C) • Residual Resistance: 2% • Soldering Heat: 260°C ±5°C for 5 ±1 Sec. • Rotation Life: 50 turns.

EVM-AAS Series:

Specifications: • Resistance Range: 100Ω – 1mΩ • Tolerance: ±25% • Taper: Linear • Residual Resistance: 2% • Wattage Rating: 0.3W • Volt Rating: 100V • TCR: ±200ppm • Torque: 20 to 300gf • Stopper Strength: 350gf • Rotational Angle: 240°C ±20°C • Operational Temperature: -30°C – +100°C.

EVM-F6S Series:

Features: • Higher performance dustproof type. • Excellent reliability for heat and humidity. • High speed radial automatic mounting and excellent mounting performance.

Applications: • Audio visual equipment, home appliances.

Specifications: • Rotation Torque: 20 to 300gf cm. • Stopper Strength: 350gf cm. • Rotation Angle: 240°C ±20°C. • TCR: ±300ppm (-30°C - 100°C) • Nominal Total Resistance & Tolerance: ±25% • Power Rating & Max. Operating Voltage: 0.3W, 100V (70°C) • Residual Resistance: 10Ω max. for R≤1kΩ, 1% max. for 1kΩ<R<100kΩ, 5% max. for R≥100kΩ • Soldering Heat: 5s max. 240 to 280°C, 3s max. 280 to 300°C • Rotation Life: 50 turns.

Fig. 1 - Top Adjust

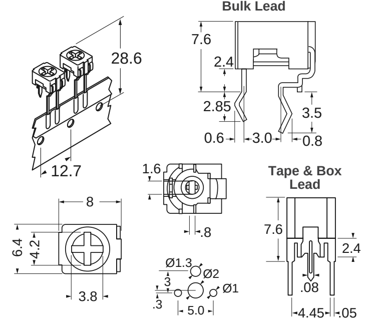


Fig. 2 - Side Adjust

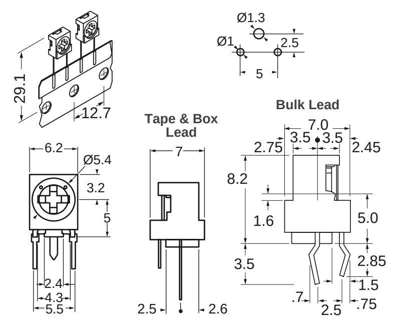


Fig. 3 - Top Adjust

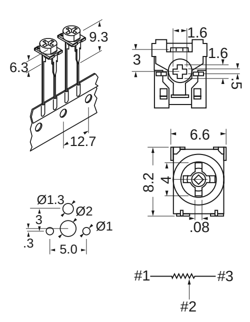
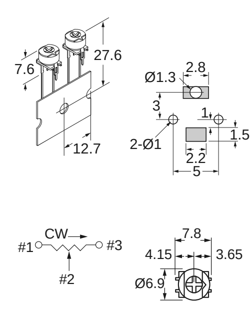


Fig. 4 - Top Adjust



EVM-EAG Series - Top Adjust (Bulk)

Fig.	Res. (Ω)	Digi-Key Part No.	Pricing 1	10	100	500	Panasonic Part No.
1	100	EAG12BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B12
	200	EAG22BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B22
	500	EAG52BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B52
	1K	EAG13BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B13
	2K	EAG23BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B23
	5K	EAG53BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B53
	10K	EAG14BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B14
	20K	EAG24BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B24
	50K	EAG54BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B54
	100K	EAG15BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B15
	200K	EAG25BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B25
	500K	EAG55BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B55
	1M	EAG16BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B16

EVM-EGG Series - Side Adjust (Bulk)

Fig.	Res. (Ω)	Digi-Key Part No.	Pricing 1	10	100	500	Panasonic Part No.
2	100	EGG12BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B12
	200	EGG22BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B22
	500	EGG52BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B52
	1K	EGG13BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B13
	2K	EGG23BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B23
	5K	EGG53BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B53
	10K	EGG14BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B14
	20K	EGG24BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B24
	50K	EGG54BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B54
	100K	EGG15BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B15
	200K	EGG25BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B25
	500K	EGG55BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B55
	1M	EGG16BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B16

EVM-EAS Series - Top Adjust (Tape)

Fig.	Res. (Ω)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Box Pricing 1,000	5,000	Panasonic Part No.
1	100	EAS12CT-ND	.59	4.90	45.08	EAS12TB-ND	362.00	336.00/M	EVM-EASA00B12
	200	EAS22CT-ND	.59	4.90	45.08	EAS22TB-ND	362.00	336.00/M	EVM-EASA00B22
	500	—	—	—	—	EAS52TB-ND	362.00	336.00/M	EVM-EASA00B52
	1K	EAS13CT-ND	.59	4.90	45.08	EAS13TB-ND	362.00	336.00/M	EVM-EASA00B13
	2K	EAS23CT-ND	.59	4.90	45.08	EAS23TB-ND	362.00	336.00/M	EVM-EASA00B23
	5K	EAS53CT-ND	.59	4.90	45.08	EAS53TB-ND	362.00	336.00/M	EVM-EASA00B53
	10K	—	—	—	—	EAS14TB-ND	362.00	336.00/M	EVM-EASA00B14
	20K	EAS24CT-ND	.59	4.90	45.08	EAS24TB-ND	362.00	336.00/M	EVM-EASA00B24
	50K	—	—	—	—	EAS54TB-ND	362.00	336.00/M	EVM-EASA00B54
	100K	—	—	—	—	EAS15TB-ND	362.00	336.00/M	EVM-EASA00B15
	200K	EAS25CT-ND	.59	4.90	45.08	EAS25TB-ND	362.00	336.00/M	EVM-EASA00B25
	500K	EAS55CT-ND	.59	4.90	45.08	EAS55TB-ND	362.00	336.00/M	EVM-EASA00B55
	1M	EAS16CT-ND	.66	5.49	50.48	EAS16TB-ND	362.00	336.00/M	EVM-EASA00B16

EVM-EGS Series - Side Adjust (Tape)

Fig.	Res. (Ω)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Box Pricing 1,000	5,000	Panasonic Part No.
2	100	EGS12CT-ND	.65	5.40	49.68	EGS12TB-ND	372.00	346.00/M	EVM-EGSA00B12
	200	EGS22CT-ND	.65	5.40	49.68	EGS22TB-ND	372.00	346.00/M	EVM-EGSA00B22
	500	EGS52CT-ND	.65	5.40	49.68	EGS52TB-ND	372.00	346.00/M	EVM-EGSA00B52
	1K	EGS13CT-ND	.65	5.40	49.68	EGS13TB-ND	372.00	346.00/M	EVM-EGSA00B13
	2K	EGS23CT-ND	.65	5.40	49.68	EGS23TB-ND	372.00	346.00/M	EVM-EGSA00B23
	5K	EGS53CT-ND	.65	5.40	49.68	EGS53TB-ND	372.00	346.00/M	EVM-EGSA00B53
	10K	EGS14CT-ND	.65	5.40	49.68	EGS14TB-ND	372.00	346.00/M	EVM-EGSA00B14
	20K	EGS24CT-ND	.65	5.40	49.68	EGS24TB-ND	372.00	346.00/M	EVM-EGSA00B24
	50K	EGS54CT-ND	.65	5.40	49.68	EGS54TB-ND	372.00	346.00/M	EVM-EGSA00B54
	100K	EGS15CT-ND	.65	5.40	49.68	EGS15TB-ND	372.00	346.00/M	EVM-EGSA00B15
	200K	—	—	—	—	EGS25TB-ND	372.00	346.00/M	EVM-EGSA00B25
	500K	EGS55CT-ND	.65	5.40	49.68	EGS55TB-ND	372.00	346.00/M	EVM-EGSA00B55
	1M	—	—	—	—	EGS16TB-ND	372.00	346.00/M	EVM-EGSA00B16

EVM-EYG Series — High Grade, Top Adjust (Bulk)

Fig.	Res. (Ω)	Digi-Key Part No.	Pricing 1	10	100	500	Panasonic Part No.
1	1K	EYG13BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B13
	2K	EYG23BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B23
	5K	EYG53BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B53
	10K	EYG14BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B14
	20K	EYG24BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B24
	50K	EYG54BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B54
	100K	EYG15BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B15
	200K	EYG25BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B25
	500K	EYG55BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B55
	1M	EYG16BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B16
	2M	EYG26BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B26

EVM-F6S Series — Top Adjust (Tape)

Fig.	Res. (Ω)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Box Pricing 1,000	5,000	Panasonic Part No.
3	500	F6SA52CT-ND	.38	3.28	27.20	—	—	—	EVM-F6SA00B52
	1K	—	—	—	—	F6SA13TB-ND	213.00	197.00/M	EVM-F6SA00B13
	5K	F6SA53CT-ND	.38	3.28	27.20	—	—	—	EVM-F6SA00B53
	50K	F6SA54CT-ND	.38	3.28	27.20	—	—	—	EVM-F6SA00B54
	100K	F6SA15CT-ND	.38	3.28	27.20	—	—	—	EVM-F6SA00B15
	200K	F6SA25CT-ND	.38	3.28	27.20	—	—	—	EVM-F6SA00B25
	500K	F6SA55CT-ND	.38	3.28	27.20	F6SA55TB-ND	213.00	197.00/M	EVM-F6SA00B55
	1M	F6SA16CT-ND	.38	3.28	27.20	—	—	—	EVM-F6SA00B16

EVM-EYS Series — High Grade, Top Adjust (Tape)

Fig.	Res. (Ω)	Digi-Key Part No.	Tape & Box Pricing 1,000	5,000	10,000	Panasonic Part No.
1	1K	EYS13TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B13
	2K	EYS23TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B23
	5K	EYS53TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B53
	10K	EYS14TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B14
	20K	EYS24TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B24
	50K	EYS54TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B54
	100K	EYS15TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B15
	200K	EYS25TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B25
	500K	EYS55TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B55
	1M	EYS16TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B16
	2M	EYS26TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B26

EVM-AAS Series - Top Adjust (Tape)

Fig.	Res. (Ω)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Box Pricing 1,000	Panasonic Part No.
4	100	AAS12CT-ND	.50	4.15	38.18	AAS12TB-ND	255.00	EVM-AASA00B12
	200	AAS22CT-ND	.50	4.15	38.18	AAS22TB-ND	255.00	EVM-AASA00B22
	500	AAS52CT-ND	.50	4.15	38.18	AAS52TB-ND	255.00	EVM-AASA00B52
	1K	AAS13CT-ND	.50	4.15	38.18	AAS13TB-ND	255.00	EVM-AASA00B13
	2K	AAS23CT-ND	.50	4.15	38.18	AAS23TB-ND	255.00	EVM-AASA00B23
	5K	AAS53CT-ND	.50	4.15	38.18	AAS53TB-ND	255.00	EVM-AASA00B53
	10K	AAS14CT-ND	.50	4.15	38.18	AAS14TB-ND	255.00	EVM-AASA00B14
	20K	AAS24CT-ND	.50	4.15	38.18	AAS24TB-ND	255.00	EVM-AASA00B24
	50K	AAS54CT-ND	.50	4.15	38.18	AAS54TB-ND	255.00	EVM-AASA00B54
	100K	AAS15CT-ND	.50	4.15	38.18	AAS15TB-ND	255.00	EVM-AASA00B15
	200K	AAS25CT-ND	.50	4.15	38.18	AAS25TB-ND	255.00	EVM-AASA00B25
	500K	AAS55CT-ND	.50	4.15	38.18	AAS55TB-ND	255.00	EVM-AASA00B55
	1M	AAS16CT-ND	.50	4.15	38.18	AAS16TB-ND	255.00	EVM-AASA00B16

Panasonic® Ceramic Trimmer Potentiometers

Series EVM-L4G, EVM-L1G, EVM-5AG, and EVM-4LG

Specifications:

- Resistance Range: 100Ω – 1mΩ
- Tolerance: 25%
- Taper: Linear
- Residual: EVM-L4G and EVM-L1G: 5%
  EVM-5AG and EVM-4LG: 2%
- Wattage Rating: EVM-L4G and EVM-L1G: .2W;
  EVM-5AG and EVM-4LG: .3W
- Voltage Rating: EVM-L4G and EVM-L1G: 50V;
  EVM-5AG and EVM-4LG: 100V
- TCR: EVM-L4G and EVM-L1G: ±300ppm;
  EVM-5AG and EVM-4LG: ±200ppm
- Torque: 20-250 gf
- Stopper Strength: EVM-L4G and EVM-L1G: 400gF;
  EVM-5AG and EVM-4LG: 300gF
- Angle of Rotation: 200° ±20°
- Operating Temperature: –30°C ~ +100°C.

Fig. 1 — 4mm,Vertical

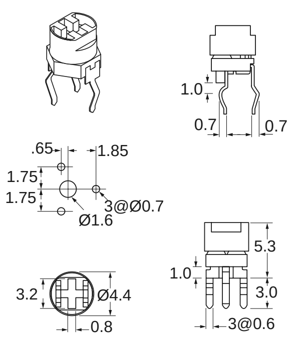


Fig. 2 — 4mm, Right Angle

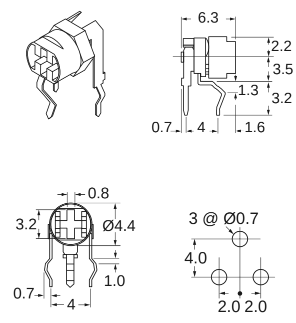


Fig. 3 — 5mm, Vertical

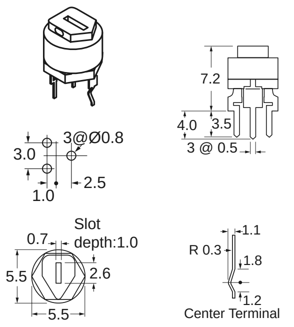


Fig. 4 — 6mm, Vertical

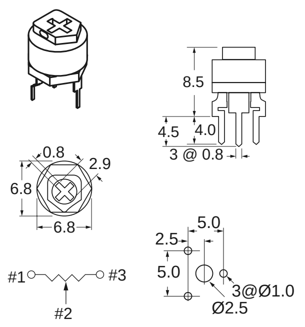
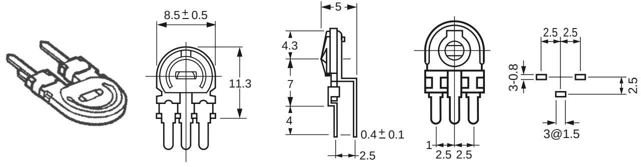


Fig.	Res. (Ohms)	Digi-Key Part No.	Pricing 1	10	100	500	Panasonic Part No.
		EVM-L4G Series — 4mm, Vertical, Top Adjust					
1	100	L4G12BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B12
	200	L4G22BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B22
	500	L4G52BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B52
	1K	L4G13BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B13
	2K	L4G23BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B23
	5K	L4G53BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B53
	10K	L4G14BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B14
	20K	L4G24BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B24
	50K	L4G54BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B54
	100K	L4G15BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B15
	200K	L4G25BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B25
	500K	L4G55BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B55
	1M	L4G16BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B16
		EVM-L1G Series — 4mm, Right Angle, Side Adjust					
2	100	L1G12BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B12
	200	L1G22BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B22
	500	L1G52BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B52
	1K	L1G13BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B13
	2K	L1G23BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B23
	5K	L1G53BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B53
	10K	L1G14BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B14
	20K	L1G24BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B24
	50K	L1G54BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B54
	100K	L1G15BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B15
	200K	L1G25BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B25
	500K	L1G55BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B55
	1M	L1G16BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B16
		EVM-5AG Series — 5mm, Vertical, Top Adjust					
3	100	5AG12BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B12
	200	5AG22BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B22
	500	5AG52BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B52
	1K	5AG13BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B13
	2K	5AG23BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B23
	5K	5AG53BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B53
	10K	5AG14BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B14
	20K	5AG24BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B24
	50K	5AG54BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B54
	100K	5AG15BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B15
	200K	5AG25BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B25
	500K	5AG55BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B55
	1M	5AG16BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B16
		EVM-4LG Series — 6mm, Vertical, Top Adjust					
4	100	4LG12BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B12
	200	4LG22BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B22
	500	4LG52BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B52
	1K	4LG13BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B13
	2K	4LG23BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B23
	5K	4LG53BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B53
	10K	4LG14BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B14
	20K	4LG24BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B24
	50K	4LG54BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B54
	100K	4LG15BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B15
	200K	4LG25BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B25
	500K	4LG55BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B55
	1M	4LG16BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B16

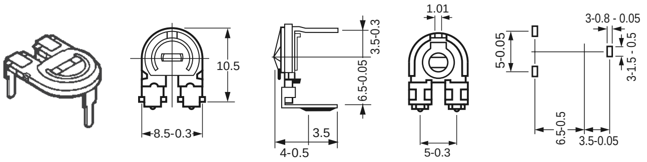
Panasonic® 8mm Trimmer Potentiometers

EVN-SERIES

K0A Series



K4A Series

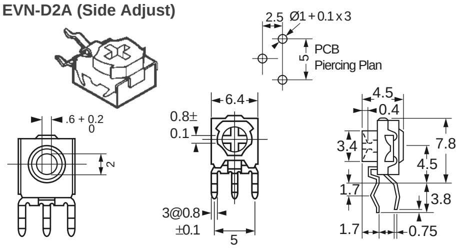


Specifications: • Resistance Range: 300 to 2MΩ • Taper: Linear • Tolerance: ±30% • Working Voltage: 200 V max. • Power Rating: 0.1 W/50°C • Residual Resistance:Up to 1kΩ: 10Ω max. Over 1kΩ: 5% of total resistance • Rotation Angle: 260° ± 20° • Rotation Torque: 0.4 to 4.2 in-oz. • Stop Strength: 1 in. lb. • Operating Temperature: –25°C to 75°C

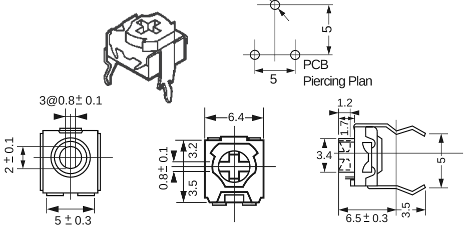
Res. Ohms	Digi-Key Part No. Laydown Version	Digi-Key Part No. Standup Version				Pricing			Panasonic Part No. Laydown Version	Panasonic Part No. Standup Version
			1	10	100	1,000	5,000	10,000		
300	K4A32-ND	K0A32-ND	.31	2.59	23.81	159.00	148.00/M	138.00/M	EVN-65AA00B32	EVN-64AA00B32
500	K4A52-ND	—	.31	2.59	23.81	159.00	148.00/M	138.00/M	EVN-65AA00B52	—
2K	K4A23-ND	K0A23-ND	.31	2.59	23.81	159.00	148.00/M	138.00/M	EVN-65AA00B23	EVN-64AA00B23
5K	—	K0A53-ND	.31	2.59	23.81	159.00	148.00/M	138.00/M	—	EVN-64AA00B53
50K	K4A54-ND	—	.31	2.59	23.81	159.00	148.00/M	138.00/M	EVN-65AA00B54	—
100K	K4A15-ND	—	.31	2.59	23.81	159.00	148.00/M	138.00/M	EVN-65AA00B15	—
200K	K4A25-ND	K0A25-ND	.31	2.59	23.81	159.00	148.00/M	138.00/M	EVN-65AA00B25	EVN-64AA00B25
1M	K4A16-ND	K0A16-ND	.31	2.59	23.81	159.00	148.00/M	138.00/M	EVN-65AA00B16	EVN-64AA00B16
2M	—	K0A26-ND	.31	2.59	23.81	159.00	148.00/M	138.00/M	—	EVN-64AA00B26

Panasonic® 6mm Carbon Trimmer Potentiometers

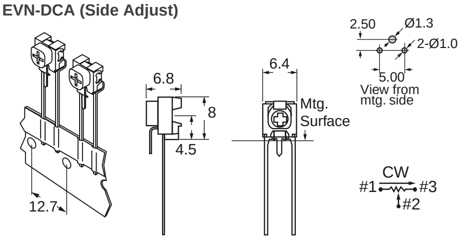
EVN-D2A (Side Adjust)



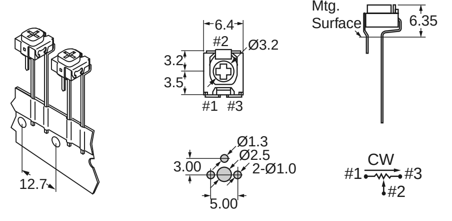
EVN-D8A (Top Adjust)



EVN-DCA (Side Adjust)



EVN-DJA (Top Adjust)



SPECIFICATIONS:

Mechanical: • **Rotation angle:** 210° ±20° • **Rotation torque:** 20 to 250g-cm • **Stopper Strength:** 750gfcm • **Soldering Heat:** 240°C to 280°C, 5 sec. max.; 280°C to 300°C, 3 sec. max. • **Rotation life:** 100 cycles

Electrical: • Power rating: 0.1W (when under 50°C) • Max. operating voltage: 50V • Taper: B (Linear) • Resistance: 200Ω to 1MΩ • Tolerance: ±30%.

FEATURES:

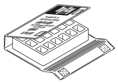
• Miniature size, lightweight, 6.4 x 6.7mm • Suitable for automatic insertion as square housing • Suitable for automatic adjustment as stable rotation torque • Dust proof and flux proof construction • Adjustable from both top and bottom sides • Snap-in mounting terminal for EVN-D8A/D2A

Applications:

- Consumer equipment such as TV, VTR (VCR), stereo, radio.

Panasonic.

Carbon Trimmer Potentiometers



Digi-Key® Assortment Kit
14 Panasonic 6mm Carbon
Trimmer Potentiometers
Panasonic Quality

Cat. No. DXA-KIT-ND **....*ONLY* $29.95**

140 6mm Carbon Trimmer Potentiometers: Price includes convenient divided notebook style storage case with bin guide for easy storage and quick access.

EVN-D2A Side Adjust (Bulk) Series
EVN-D8A Top Adjust (Bulk) Series

Res. (Ω)	Digi-Key Part No. Side Adjust Version	Digi-Key Part No. Top Adjust Version	Bulk Price Each 1	10	100	500	1,000	Panasonic Part No. Side Adjust Version	Panasonic Part No. Top Adjust Version
200	D1AA22-ND*	D4AA22-ND*	.36	.27	.20	.15	.12	EVN-D2AA03B22	EVN-D8AA03B22
500	D1AA52-ND*	D4AA52-ND	.36	.27	.20	.15	.12	EVN-D2AA03B52	EVN-D8AA03B52
1K	D1AA13-ND*	D4AA13-ND*	.36	.27	.20	.15	.12	EVN-D2AA03B13	EVN-D8AA03B13
2K	D1AA23-ND	D4AA23-ND	.36	.27	.20	.15	.12	EVN-D2AA03B23	EVN-D8AA03B23
5K	D1AA53-ND*	D4AA53-ND*	.36	.27	.20	.15	.12	EVN-D2AA03B53	EVN-D8AA03B53
10K	D1AA14-ND	D4AA14-ND	.36	.27	.20	.15	.12	EVN-D2AA03B14	EVN-D8AA03B14
20K	D1AA24-ND*	D4AA24-ND	.36	.27	.20	.15	.12	EVN-D2AA03B24	EVN-D8AA03B24
50K	D1AA54-ND*	D4AA54-ND	.36	.27	.20	.15	.12	EVN-D2AA03B54	EVN-D8AA03B54
100K	D1AA15-ND*	D4AA15-ND*	.36	.27	.20	.15	.12	EVN-D2AA03B15	EVN-D8AA03B15
200K	D1AA25-ND*	D4AA25-ND	.36	.27	.20	.15	.12	EVN-D2AA03B25	EVN-D8AA03B25
500K	D1AA55-ND*	D4AA55-ND*	.36	.27	.20	.15	.12	EVN-D2AA03B55	EVN-D8AA03B55

* Denotes part included in DXA-KIT.

EVN-DCA Side Adjust (Tape) Series
EVN-DJA Top Adjust (Tape) Series

Res. (Ω)	Digi-Key Part No. Side Adjust Version	Digi-Key Part No. Top Adjust Version	Cut Tape Price Each 1	10	100	500	Tape & Box * Pricing 1,000	Panasonic Part No. Side Adjust Version	Panasonic Part No. Top Adjust Version
200	DCA22CT-ND	DJA22CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B22	EVN-DJAA03B22
500	DCA52CT-ND	DJA52CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B52	EVN-DJAA03B52
1K	DCA13CT-ND	DJA13CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B13	EVN-DJAA03B13
2K	DCA23CT-ND	DJA23CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B23	EVN-DJAA03B23
5K	DCA53CT-ND	DJA53CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B53	EVN-DJAA03B53
10K	DCA14CT-ND	DJA14CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B14	EVN-DJAA03B14
20K	DCA24CT-ND	DJA24CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B24	EVN-DJAA03B24
50K	DCA54CT-ND	DJA54CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B54	EVN-DJAA03B54
100K	DCA15CT-ND	DJA15CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B15	EVN-DJAA03B15
200K	DCA25CT-ND	DJA25CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B25	EVN-DJAA03B25
500K	DCA55CT-ND	DJA55CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B55	EVN-DJAA03B55

* For Tape and Box Part No. change "CT-ND" to "TB-ND"

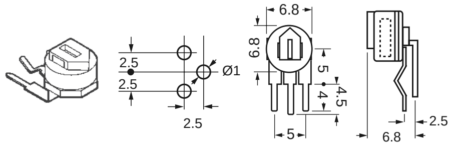
Panasonic® Cermet Series Trimmer Potentiometers
6mm Diameter Cermet Dust-Proof Type

SPECIFICATIONS:

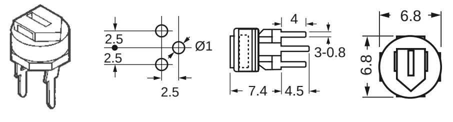
- **Resistance Range:** 100 to 1MΩ
- **Tolerance:** +25%
- **Taper:** Linear
- **Residual Resistance:** 5% max.
- **Wattage Rating:** 0.3W max. (70°C)
- **Voltage Rating:** 100V max.
- **TCR:** +200PPM/°C
- **Rotation Torque:** 20 to 250g-cm
- **Stopper Strength**: 300g-cm min.
- **Rotation Angle:** 200° +20°C
- **Operating Temperature:** 20°C to 100°C (EVN-36CA)
  -40° to 101°C (EVM-31G/36G)

Cross Reference Chart	
Series	**Bourns**
31G	**3306W**
36C/36GA	**3306P**

EVM-31GA (Horizontal Both Sides Adjust)

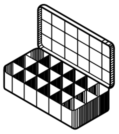


EVN-36CA*
EVM-36GA **(Vertical Both Sides Adjust)**



Panasonic.

Cermet Potentiometers



Digi-Key® Assortment Kits
13 Popular Cermet Trimmers
Panasonic Quality

31G-KIT-ND **$52.95**
36G-KIT-ND **$52.95**

130 Cermet Trimmers
Price includes convenient divided plastic box with bin guide for easy storage and quick access.

Res. Ohms	Digi-Key Part No. Horizontal 31GA	Digi-Key Part No. Vertical 36CA	36GA	Price Each 1	10	100	Panasonic Part No. Horizontal 31GA	Panasonic Part No. Vertical 36CA	36GA
100	31G12-ND	—	36G12-ND	.67	.53	.47	EVM-31GA00B12	—	EVM-36GA00B12
200	31G22-ND	—	36G22-ND	.67	.53	.47	EVM-31GA00B22	—	EVM-36GA00B22
500	31G52-ND	—	36G52-ND	.67	.53	.47	EVM-31GA00B52	—	EVM-36GA00B52
1K	31G13-ND	—	36G13-ND	.67	.53	.47	EVM-31GA00B13	—	EVM-36GA00B13
2K	31G23-ND	—	36G23-ND	.67	.53	.47	EVM-31GA00B23	—	EVM-36GA00B23
5K	31G53-ND	36C53-ND*	36G53-ND	.67	.53	.47	EVM-31GA00B53	EVN-36CA00B53*	EVM-36GA00B53
10K	31G14-ND	—	36G14-ND	.67	.53	.47	EVM-31GA00B14	—	EVM-36GA00B14
20K	31G24-ND	—	36G24-ND	.67	.53	.47	EVM-31GA00B24	—	EVM-36GA00B24
50K	31G54-ND	—	36G54-ND	.67	.53	.47	EVM-31GA00B54	—	EVM-36GA00B54
100K	31G15-ND	—	36G15-ND	.67	.53	.47	EVM-31GA00B15	—	EVM-31GA00B15
200K	31G25-ND	36C25-ND*	36G25-ND	.67	.53	.47	EVM-31GA00B25	EVN-36CA00B25*	EVM-36GA00B25
500K	31G55-ND	—	36G55-ND	.67	.53	.47	EVM-31GA00B55	—	EVM-36GA00B55
1M	31G16-ND	—	36G16-ND	.67	.53	.47	EVM-31GA00B16	—	EVM-36GA00B16

* Not for new design, use EVM-36GA type

Panasonic Slide Switches

Fig. 1

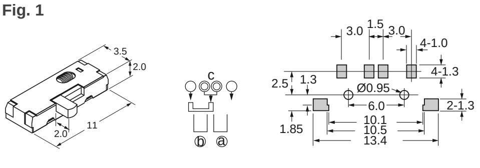


Fig. 2

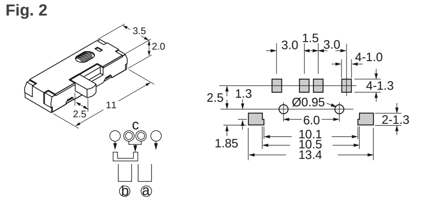


Fig. 3

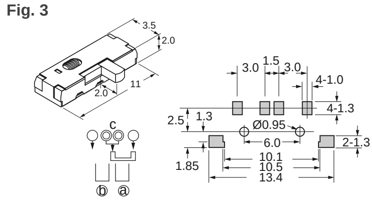


Fig. 4

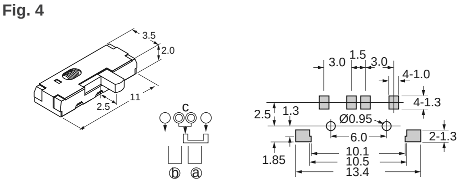


Fig. 5

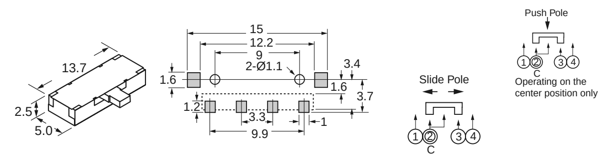


Fig. 6

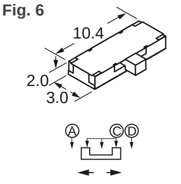


Fig.	Description	Rating	OP Force	Digi-Key Part No.	Cut Tape Price Each 1	10	100	500	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing	Panasonic Part No.
1	SMD 2mm Horizontal Self-return	5VDC 200mA	216gf	P11157SCT-ND	2.35	1.77	1.53	1.18	P11157STR-ND	2,000	853.00/M	ESD-165225
2	SMD 2mm Horizontal Self-return	5VDC 200mA	216gf	P11158SCT-ND	2.35	1.77	1.53	1.18	P11158STR-ND	2,000	853.00/M	ESD-165226
3	SMD 2mm Horizontal Self-return	5VDC 200mA	216gf	P11159SCT-ND	2.35	1.77	1.53	1.18	P11159STR-ND	2,000	853.00/M	ESD-165235
4	SMD 2mm Horizontal Self-return	5VDC 200mA	216gf	P11160SCT-ND	2.35	1.77	1.53	1.18	P11160STR-ND	2,000	853.00/M	ESD-165236
5	SMD Multi Function Slide + Push	10VDC 1mA	40gf	P11155SCT-ND	6.72	5.04	4.37	3.36	P11155STR-ND	1,400	2520.00/M	ESE-15700
6	SMD Multi Function Slide	10VDC 1mA	125gf	P11156SCT-ND	2.02	1.52	1.32	1.01	P11156STR-ND	1,500	756.00/M	ESE-15800

Panasonic Detector Switches

Fig. 1

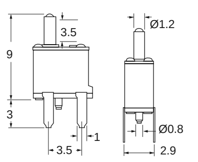


Fig. 2

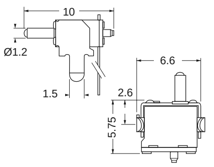


Fig. 3 — Surface Mount

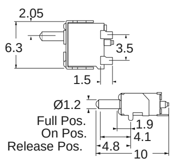


Fig. 4

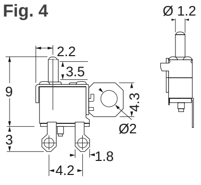


Fig. 5

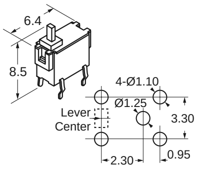


Fig. 6

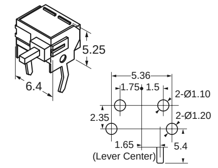
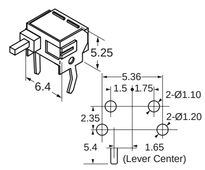


Fig. 7



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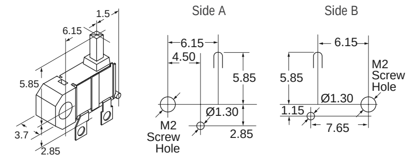


Fig. 9

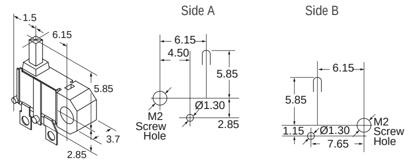


Fig. 10 — Surface Mount

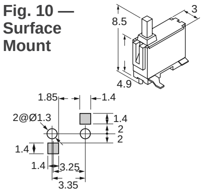


Fig. 11

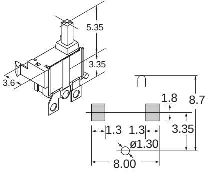


Fig. 12 — Surface Mount

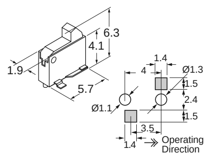


Fig. 13

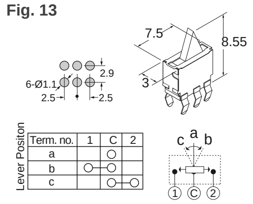


Fig. 14

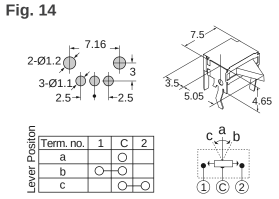


Fig. 15 — Surface Mount

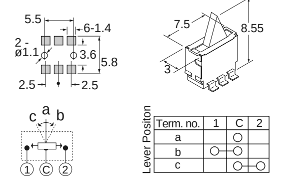


Fig.	Description	Rating	OP Force	Digi-Key Part No.	Price Each 1	10	100	500	1,000	Panasonic Part No.
1	PC 5mm Vertical Mount	5VDC 10mA	35gf	P8039S-ND	.95	.71	.62	—	.40	ESE-105SV1
2	PC 5mm Horizontal Mount	5VDC 10mA	35gf	P8040S-ND	1.08	.81	.70	—	.45	ESE-105SH1
3	Surface Mount, 5mm Horiz. Mount	5VDC 10mA	35gf	P8043S-ND	.86	.73	.67	—	.41	ESE-105MH1
4	Panel 5mm w/ Mounting Hole	5VDC 10mA	35gf	P8041S-ND	.99	.75	.65	—	.42	ESE-105HS1
5	PC 5mm Vertical Mount	5VDC 10mA	35gf	P8062S-ND	.71	.54	.47	.38	.32	ESE-11SV1
6	PC 5mm Horizontal Mount	5VDC 10mA	35gf	P10862S-ND	.71	.54	.47	.36	.30	ESE-11SH1C
7	PC 5mm Horizontal Mount	5VDC 10mA	35gf	P10863S-ND	.71	.54	.47	.36	.30	ESE-11SH2C
8	Tabbed 5mm with Mounting Hole	5VDC 10mA	35gf	P10864S-ND	.78	.59	.51	.40	.33	ESE-11HS1
9	Tabbed 5mm with Mounting Hole	5VDC 10mA	35gf	P10865S-ND	.78	.59	.51	.40	.33	ESE-11HS2
10	SMD 5mm Vertical Mount	5VDC 10mA	35gf	P10866S-ND	.78	.59	.51	.40	.33	ESE-11MV1
11	Snap-In 5mm w/Tabs, Horiz. Mount	5VDC 10mA	35gf	P10867S-ND	.78	.59	.51	.40	.33	ESE-11SF1
12	SMD 5mm Vertical Mount	5VDC 10mA	30gf	P10868S-ND	.78	.59	.51	.40	.33	ESE-22MV1
13	PC 5mm Vertical Mount SPDT	5VDC 10mA	35.7gf	P10870S-ND	1.12	.84	.73	.56	.47	ESE-24SV3
14	PC 5mm Horizontal Mount SPDT	5VDC 10mA	35.7gf	P10871S-ND	1.12	.84	.73	.56	.47	ESE-24SH1
15	SMD 5mm Vertical Mount SPDT	5VDC 10mA	35.7gf	P10872S-ND	1.12	.84	.73	.56	.47	ESE-24MV1

(Continued)

Panasonic Detector Switches *(Cont.)*

Fig. 16

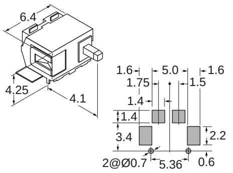


Fig. 17

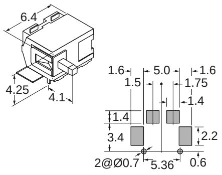


Fig. 18

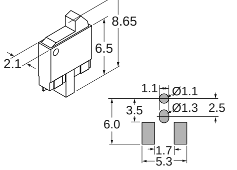


Fig. 19

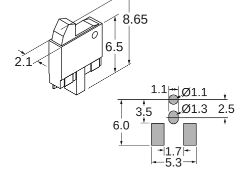


Fig. 20 — Surface Mount

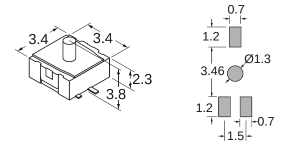


Fig. 21

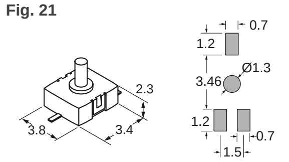


Fig. 22

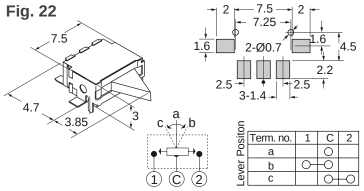


Fig. 23

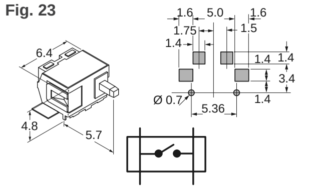


Fig. 24

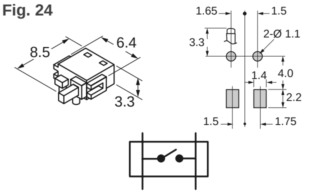


Fig. 25

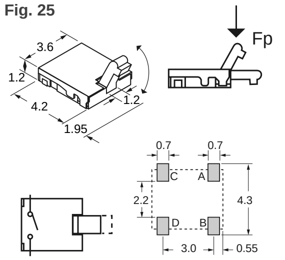


Fig. 26

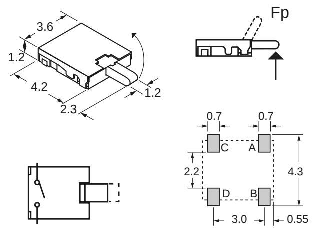


Fig. 27

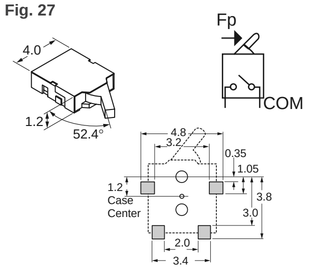


Fig. 28

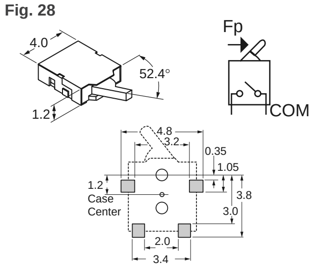


Fig.	Description	Rating	OP Force	Digi-Key Part No.	Cut Tape Price Each 1	10	100	500	Digi-Key Part No.	Tape & Reel Size	Pricing	Panasonic Part No.
16	SMD 5mm Horiz. Mount	5VDC 10mA	35.7gf	P8097SCT-ND	.82	.62	.54	.41	P8097STR-ND	1,500	308.00/M	ESE-11MH1T
17	SMD 5mm Horiz. Mount	5VDC 10mA	35.7gf	P8098SCT-ND	.82	.62	.54	.41	P8098STR-ND	1,500	308.00/M	ESE-11MH2T
18	SMD 2mm Horiz. Mount	5VDC 10mA	31gf	P8094SCT-ND	.82	.62	.54	.41	P8094STR-ND	4,000	297.00/M	ESE-22MH2
19	SMD 2mm Horiz. Mount	5VDC 10mA	31gf	P8095SCT-ND	.82	.62	.54	.41	P8095STR-ND	4,000	297.00/M	ESE-22MH4
20	SMD 2mm Vert. Mount	5VDC 10mA	31gf	P8096SCT-ND	.82	.62	.54	.41	P8096STR-ND	2,000	308.00/M	ESE-2101BT
21	SMD 5mm Vert. Mount	5VDC 10mA	31gf	P10869SCT-ND	.78	.59	.51	.40	P10869STR-ND	2,000	294.00/M	ESE-2131BT
22	SMD 5mm Horiz. Mount SPDT	5VDC 10mA	35.7gf	P10873SCT-ND	1.12	.84	.73	.56	P10873STR-ND	1,000	405.00	ESE-24MH1T
23	SMD 5mm Horiz. Mount	5VCD 10mA	36gf	P11149SCT-ND	.74	.56	.49	.37	P11149STR-ND	1,500	277.00/M	ESE-11MH5T
24	SMD 5mm Horiz. Mount	5VCD 10mA	36gf	P11150SCT-ND	.74	.56	.49	.37	P11150STR-ND	1,500	277.00/M	ESE-11MH6T
25	SMD 1mm Vert. Mount flip down	5VCD 10mA	30gf	P11151SCT-ND	1.08	.81	.70	.54	P11151STR-ND	3,000	390.00/M	ESE-13V01
26	SMD 1mm Vert. Mount flip up	5VCD 10mA	30gf	P11152SCT-ND	1.08	.81	.70	.54	P11152STR-ND	5,000	390.00/M	ESE-13H01
27	SMD 1mm Horiz. Mount	5VCD 10mA	30gf	P11153SCT-ND	1.01	.76	.66	.51	P11153STR-ND	5,000	365.00/M	ESE-18RJ02
28	SMD 1mm Horiz. Mount	5VCD 10mA	30gf	P11154SCT-ND	1.01	.76	.66	.51	P11154STR-ND	5,000	365.00/M	ESE-18LJ02

Panasonic Power / Push Switches

* UL, CSA, BEAB, SEMKO, VDE, SEV, FIMKO, NEMKO, DEMKO, APPROVED

Fig. 1

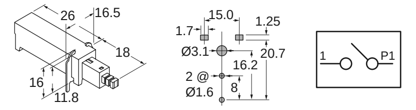


Fig. 2

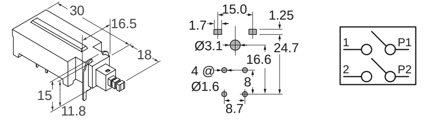


Fig. 3

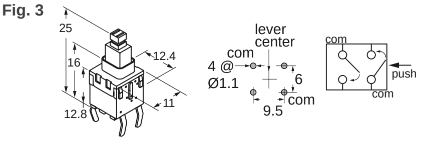


Fig. 4

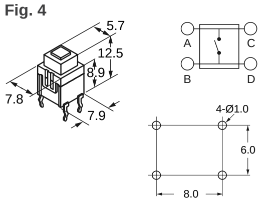


Fig. 5

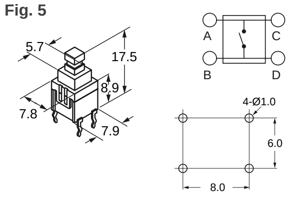


Fig. 6

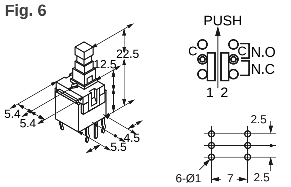


Fig. 7

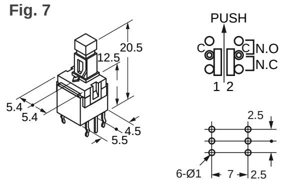
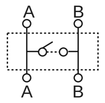


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	500	1,000	Panasonic Part No.
1	Power Switch SPST 5A, 250VAC	P8100S-ND*	2.32	1.75	1.52	1.17	—	ESB-92S21B
2	Power Switch DPST 5A, 250VAC	P8101S-ND*	3.62	2.72	2.36	1.82	—	ESB-92D21B
3	Push Switch DPST 3A, 12VDC	P8102S-ND	3.08	2.31	2.00	1.54	1.16	ESB-32101A
4	Push Switch Momentary SPST, 200mA, 14VDC	P11161S-ND	2.02	1.52	1.32	1.01	—	ESE-20C321
5	Push Switch Momentary SPST, 200mA, 14VDC	P11162S-ND	2.02	1.52	1.32	1.01	—	ESE-20C441
6	Push Switch Soft Sound DPDT, 200mA, 14VDC	P11163S-ND	2.69	2.02	1.75	1.35	—	ESB-30A105
7	Push Switch Soft Sound DPDT, 200mA, 14VDC	P11164S-ND	2.69	2.02	1.75	1.35	—	ESB-30B102

Panasonic Momentary Pushbutton Switches

CIRCUIT DIA. 1



CIRCUIT DIA. 2

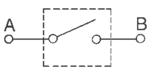


Fig. 1

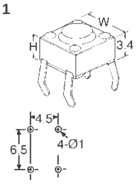


Fig. 2

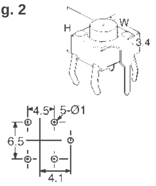


Fig. 3

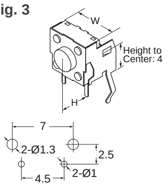


Fig. 4

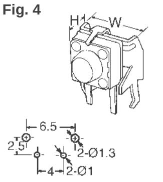


Fig. 5

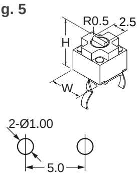


Fig. 6

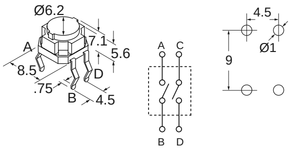


Fig. 7

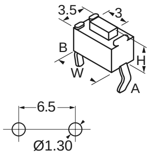


Fig. 8

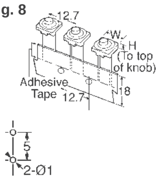


Fig. 9

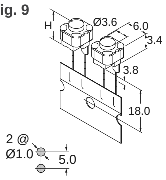


Fig. 10

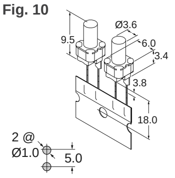


Fig. 11

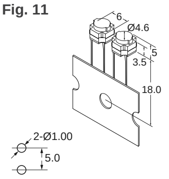


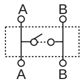
Fig.	Description	Circuit Dia.	Dim. (mm) H	W	Operating Force	Volt Rating (VDC)	Current Rating (mA)	Operating Life	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
	6mm Type													
1	Light Touch Switch Standard	1	4.3	6	100gf	15	20	100K	P8006S-ND	.29	.22	.19	.13	EVQ-PAC04M
	Light Touch Switch Standard	1	4.3	6	130gf	15	20	100K	P8007S-ND	.29	.22	.19	.13	EVQ-PAD04M
	Light Touch Switch Standard	1	4.3	6	160gf	15	20	100K	P8008S-ND	.29	.22	.19	.13	EVQ-PAE04M
	Light Touch Switch Standard	1	4.3	6	250gf	15	20	100K	P8009S-ND	.29	.22	.19	.13	EVQ-PAG04M
	Light Touch Switch Standard	1	5	6	100gf	15	20	100K	P8010S-ND	.29	.22	.19	.13	EVQ-PAC05R
	Light Touch Switch Standard	1	5	6	130gf	15	20	100K	P10890S-ND	.42	.32	.28	.18	EVQ-PAD05R
	Light Touch Switch Standard	1	7	6	100gf	15	20	100K	P8011S-ND	.29	.22	.19	.13	EVQ-PAC07K
	Light Touch Switch Standard	1	7	6	130gf	15	20	100K	P10891S-ND	.50	.38	.33	.21	EVQ-PAD07K
	Light Touch Switch Standard (Long Post)	1	9.5	6	100gf	15	20	100K	P8012S-ND	.29	.22	.19	.13	EVQ-PAC09K
	Light Touch Switch Standard (Long Post)	1	9.5	6	130gf	15	20	100K	P10892S-ND	1.42	1.07	.93	.59	EVQ-PAD09K
2	Light Touch Switch Standard w/Ground Terminal	1	4.3	6	100gf	15	20	100K	P8013S-ND	.34	.26	.23	.15	EVQ-PBC04M
	Light Touch Switch Standard w/Ground Terminal	1	5	6	100gf	15	20	100K	P8014S-ND	.34	.26	.23	.15	EVQ-PBC05R
	Light Touch Switch Standard w/Ground Terminal	1	5	6	130gf	15	20	100K	P10893S-ND	.34	.26	.23	.15	EVQ-PBD05R
	Light Touch Switch Standard w/Ground Terminal	1	7	6	100gf	15	20	100K	P8015S-ND	.34	.26	.23	.15	EVQ-PBC07K
	Light Touch Switch Standard w/Ground Terminal	1	7	6	130gf	15	20	100K	P10894S-ND	.40	.30	.26	.17	EVQ-PBD07K
	Light Touch Switch Standard w/Ground Terminal (Long Post)	1	9.5	6	100gf	15	20	100K	P8016S-ND	.34	.26	.23	.15	EVQ-PBC09K
3	Light Touch Switch Right Angle	2	3.15	7.5	100gf	15	20	100K	P10877S-ND	.39	.30	.26	.17	EVQ-PF003M
	Light Touch Switch Right Angle	2	3.15	7.5	130gf	15	20	100K	P10881S-ND	.39	.30	.26	.17	EVQ-PF103M
	Light Touch Switch Right Angle	2	3.85	7.5	100gf	15	20	100K	P10878S-ND	.39	.30	.26	.17	EVQ-PF004R
	Light Touch Switch Right Angle	2	3.85	7.5	130gf	15	20	100K	P10882S-ND	.39	.30	.26	.17	EVQ-PF104R
	Light Touch Switch Right Angle	2	5.85	7.5	100gf	15	20	100K	P10879S-ND	.39	.30	.26	.17	EVQ-PF006K
	Light Touch Switch Right Angle	2	5.85	7.5	130gf	15	20	100K	P10883S-ND	.39	.30	.26	.17	EVQ-PF106K
	Light Touch Switch Right Angle (Long Post)	2	8.35	7.5	100gf	15	20	100K	P10880S-ND	.39	.30	.26	.17	EVQ-PF008K
	Light Touch Switch Right Angle (Long Post)	2	8.35	7.5	130gf	15	20	100K	P10884S-ND	.39	.30	.26	.17	EVQ-PF108K
4	Light Touch Switch Right Angle (Long Post)	2	5	7.6	130gf	15	20	100K	P8024S-ND	.39	.30	.26	.17	EVQ-QEJ06K
5	Light Touch Switch With Over Travel	2	7.45	6.2	75gf	30	50	100K	P10843S-ND	.51	.39	.34	.22	EVQ-P0E07K
	Light Touch Switch With Over Travel	2	7.45	6.2	130gf	30	50	100K	P10844S-ND	.58	.44	.38	.25	EVQ-P0D07K
	DPST Bi-Directional Type													
6	Light Touch Switch	—	7.1	8.5	130gf	12	50	500K	P10859S-ND	1.46	1.10	.95	.61	EVQ-PW007K
	6mm x 3.5mm Type													
7	Light Touch Switch	2	4.3	6	100gf	12	20	50K	P8056S-ND	.77	.58	.50	.35	EVQ-PJA04Q
	Light Touch Switch (Long Post)	2	5	6	100gf	12	20	50K	P8057S-ND	.77	.58	.50	.35	EVQ-PJA05Q
	Light Touch Switch	2	4.3	6	160gf	12	20	50K	P8058S-ND	.77	.58	.50	.35	EVQ-PJB04K
	Light Touch Switch (Long Post)	2	5	6	160gf	12	20	50K	P8059S-ND	.77	.58	.50	.35	EVQ-PJB05K
	Light Touch Switch	2	4.3	6	240gf	12	20	50K	P8060S-ND	.79	.60	.52	.36	EVQ-PJC04T
	Light Touch Switch (Long Post)	2	5	6	240gf	12	20	50K	P8061S-ND	.79	.60	.52	.36	EVQ-PJC05T

Fig.	Description	Circuit Dia.	Dim. (mm) H	W	Operating Force	Volt Rating (VDC)	Current Rating (mA)	Operating Life	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Box Pricing 2,500	Panasonic Part No.
	6mm Round Type														
8	L. T. Switch Long Travel-Tape Pkg	2	5	8	80gf	12	15	1000K	P8029SCT-ND	.76	.57	.50	P8029STB-ND*	292.00*	EVQ-QJJ05Q
9	Light Touch Switch	1	4.3	6.0	100gf	15	20	100K	P8070SCT-ND	.38	.29	.25	P8070STB-ND	141.00/M	EVQ-11A04M
	Light Touch Switch	1	4.3	6.0	130gf	15	20	100K	P8074SCT-ND	.38	.29	.25	P8074STB-ND	141.00/M	EVQ-11G04M
	Light Touch Switch	1	4.3	6.0	160gf	15	20	100K	P8078SCT-ND	.38	.29	.25	P8078STB-ND	141.00/M	EVQ-11L04M
	Light Touch Switch	1	4.3	6.0	260gf	15	20	100K	P8082SCT-ND	.38	.29	.25	P8082STB-ND	141.00/M	EVQ-11U04M
	Light Touch Switch	1	5.0	6.0	100gf	15	20	100K	P8071SCT-ND	.38	.29	.25	P8071STB-ND	141.00/M	EVQ-11A05R
	Light Touch Switch	1	5.0	6.0	130gf	15	20	100K	P8075SCT-ND	.38	.29	.25	P8075STB-ND	141.00/M	EVQ-11G05R
	Light Touch Switch	1	5.0	6.0	160gf	15	20	100K	P8079SCT-ND	.38	.29	.25	P8079STB-ND	141.00/M	EVQ-11L05R
	Light Touch Switch	1	5.0	6.0	260gf	15	20	100K	P8083SCT-ND	.38	.29	.25	P8083STB-ND	141.00/M	EVQ-11U05R
	Light Touch Switch	1	7.0	6.0	100gf	15	20	100K	P8072SCT-ND	.38	.29	.25	P8072STB-ND	141.00/M	EVQ-11A07K
	Light Touch Switch	1	7.0	6.0	130gf	15	20	100K	P8076SCT-ND	.38	.29	.25	P8076STB-ND	141.00/M	EVQ-11G07K
	Light Touch Switch	1	7.0	6.0	160gf	15	20	100K	P8080SCT-ND	.38	.29	.25	P8080STB-ND	141.00/M	EVQ-11L07K
	Light Touch Switch	1	7.0	6.0	260gf	15	20	100K	P8084SCT-ND	.38	.29	.25	P8084STB-ND	141.00/M	EVQ-11U07K
10	Light Touch Switch	1	9.5	6.0	100gf	15	20	100K	P8073SCT-ND	.38	.29	.25	P8073STB-ND	141.00/M	EVQ-11A09K
	Light Touch Switch	1	9.5	6.0	130gf	15	20	100K	P8077SCT-ND	.38	.29	.25	P8077STB-ND	141.00/M	EVQ-11G09K
	Light Touch Switch	1	9.5	6.0	160gf	15	20	100K	P8081SCT-ND	.38	.29	.25	P8081STB-ND	141.00/M	EVQ-11L09K
	Light Touch Switch	1	9.5	6.0	260gf	15	20	100K	P8085SCT-ND	.38	.29	.25	P8085STB-ND	141.00/M	EVQ-11U09K
11	Light Touch Switch Long Travel	1	5.0	6.0	200gf	12	50	100K	P10856SCT-ND	1.25	.94	.82	P10856STB-ND	470.00/M	EVQ-PVG05K
	Light Touch Switch Long Travel	1	5.0	6.0	220gf	12	50	100K	P10855SCT-ND	1.25	.94	.82	P10855STB-ND	470.00/M	EVQ-PVA05K
	Light Touch Switch Long Travel	1	5.0	6.0	250gf	12	50	100K	P10858SCT-ND	1.25	.94	.82	P10858STB-ND	470.00/M	EVQ-PVF05K
	Light Touch Switch Long Travel	1	5.0	6.0	350gf	12	50	100K	P10857SCT-ND	1.25	.94	.82	P10857STB-ND	470.00/M	EVQ-PVH05K

* Tape & Box Size: 1,000

Panasonic Surface Mount Momentary Pushbutton Switches

CIRCUIT DIA. 1



CIRCUIT DIA. 2

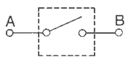
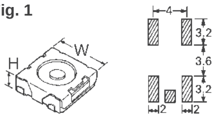
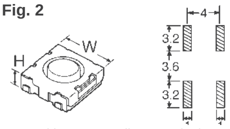


Fig. 1



With or Without Ground Terminal

Fig. 2



Without Grounding Terminal

Fig. 3

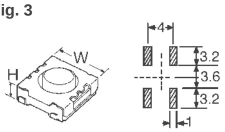


Fig. 4

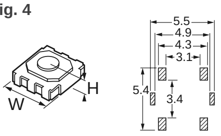


Fig. 5

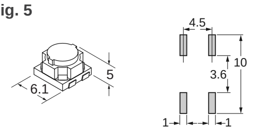


Fig. 6

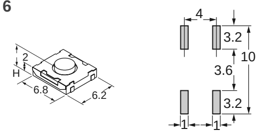


Fig. 7

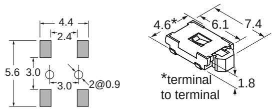


Fig. 8

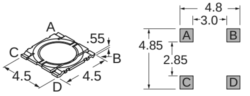
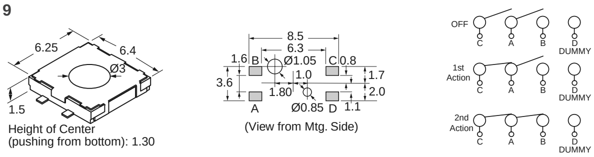


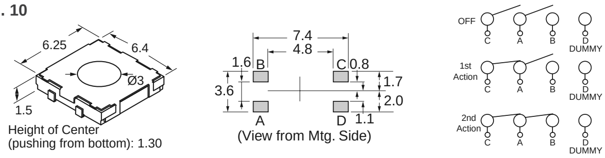
Fig. 9



Height of Center (pushing from bottom): 1.30

(View from Mtg. Side)

Fig. 10



Height of Center (pushing from bottom): 1.30

(View from Mtg. Side)

Fig. 11

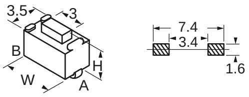


Fig. 12

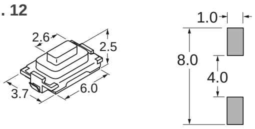


Fig. 13

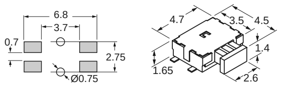


Fig. 14

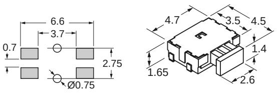


Fig. 15

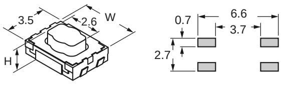


Fig. 16

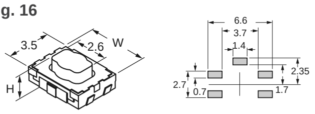


Fig. 17

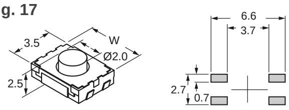


Fig. 18

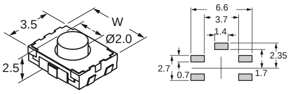


Fig.	Description	Circuit Dia.	Dim. (mm) H	W	Operating Force	Volt. Rating (VDC)	Current Rating (mA)	Oper. Life	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Reel Size	Pricing	Panasonic Part No.
	Surface Mount Light Touch Switch															
1	L.T. Switch Standard	1	2	6.3	130gf	15	20	100K	P8000SCT-ND	1.15	.87	.75	P8000STR-ND	1,000	442.00	EVQ-QFA02K
	L.T. Switch Standard w/Ground Terminal	1	2	6.3	130gf	15	20	100K	P8001SCT-ND	1.10	.83	.72	P8001STR-ND	1,000	422.00	EVQ-QFU02K
2	L.T. Switch Std w/Actuator/Solvent Washable	1	3.1	6.4	130gf	15	20	100K	P8002SCT-ND	.83	.63	.54	P8002STR-ND	2,000	318.00/M	EVQ-PHP03T
3	L.T. Switch Standard w/Actuator	1	2.5	6.2	160gf	15	20	100K	P8004SCT-ND	.70	.53	.46	P8004STR-ND	2,000	269.00/M	EVQ-QHV02W
4	L.T. Switch Rugged Design, Low Profile	1	1.5	5	100gf	12	50	500K	P8045SCT-ND	1.03	.78	.67	P8045STR-ND	5,000	367.00/M	EVQ-PLDA15
	L.T. Switch Rugged Design, Low Profile	1	1.5	5	160gf	12	50	500K	P8046SCT-ND	1.03	.78	.67	P8046STR-ND	5,000	367.00/M	EVQ-PLHA15
	L.T. Switch Rugged Design, Low Profile	1	1.5	5	260gf	12	50	500K	P8047SCT-ND	1.24	.93	.81	P8047STR-ND	5,000	441.00/M	EVQ-PLMA15
5	Light Touch Switch Long Travel	1	5	6.1	250gf	12	50	30K	P10888SCT-ND	1.53	1.15	1.00	P10888STR-ND	2,000	588.00/M	EVQ-P1D05M
	Light Touch Switch Long Travel	1	5	6.1	350gf	12	50	30K	P10889SCT-ND	1.53	1.15	1.00	P10889STR-ND	2,000	588.00/M	EVQ-P1B05M
6	LT Switch (Non-Extending Actuator)	1	2	6.2	130gf	15	20	100K	P10885SCT-ND	.76	.57	.50	P10885STR-ND	4,000	270.00/M	EVQ-QWP01W
	Light Touch Switch	1	2.5	6.2	160gf	15	20	100K	P10886SCT-ND	.76	.57	.50	P10886STR-ND	2,000	291.00/M	EVQ-QWS02W
	Light Touch Switch	1	3.1	6.2	260gf	15	20	100K	P10887SCT-ND	.76	.57	.50	P10887STR-ND	2,000	291.00/M	EVQ-QWT03W
7	L. T. Switch, Side Push	1	1.8	4	160gf	12	50	50K	P8088SCT-ND	1.16	.87	.76	P8088STR-ND	4,000	421.00/M	EVQ-PSD02K
	L. T. Switch, Side Push	1	1.8	4	220gf	12	50	50K	P8089SCT-ND	1.16	.87	.76	P8089STR-ND	4,000	421.00/M	EVQ-PSH02K
8	L. T. Switch, Super Small	1	.55	4.5	160gf	15	20	50K	P8090SCT-ND	.68	.51	.45	P8090STR-ND	10,000	221.00/M	EVQ-PQHB55
	L. T. Switch, Super Small	1	.55	4.5	220gf	15	20	50K	P8091SCT-ND	.68	.51	.45	P8091STR-ND	10,000	221.00/M	EVQ-PQMB55
9	L. T. Switch, SPDT Straight Leads w/Mtg. Boss	—	1.5	6.2	100/260gf	15	20	100K	P10845S-ND*	.83	.72	.59	—	—	—	EVQ-PWAA15
10	L. T. Switch, SPDT J Bent Leads	—	1.5	6.2	100/260gf	15	20	100K	P10846SCT-ND	1.16	.88	.76	P10846STR-ND	5,000	416.00/M	EVQ-PWBA15
	6mm x 3.5mm Type															
11	Light Touch Switch	2	4.3	6	100gf	12	50	50K	P8048SCT-ND	1.16	.87	.76	P8048STR-ND	2,500	435.00/M	EVQ-PJS04K
	Light Touch Switch (Long Post)	2	5.0	6	100gf	12	50	50K	P8049SCT-ND	1.16	.87	.76	P8049STR-ND	2,000	435.00/M	EVQ-PJS05K
	Light Touch Switch	2	4.3	6	160gf	12	50	50K	P8050SCT-ND	1.16	.87	.76	P8050STR-ND	2,500	435.00/M	EVQ-PJX04M
	Light Touch Switch (Long Post)	2	5.0	6	160gf	12	50	50K	P8051SCT-ND	1.16	.87	.76	P8051STR-ND	2,000	435.00/M	EVQ-PJX05M
	Light Touch Switch	2	4.3	6	240gf	12	50	50K	P8052SCT-ND	1.19	.90	.78	P8052STR-ND	2,500	446.00/M	EVQ-PJU04K
	Light Touch Switch (Long Post)	2	5.0	6	240gf	12	50	50K	P8053SCT-ND	1.19	.90	.78	P8053STR-ND	2,000	446.00/M	EVQ-PJU05K
12	Light Touch Switch	2	2.5	6	160gf	12	50	50K	P8086SCT-ND	1.03	.78	.67	P8086STR-ND	4,000	373.00/M	EVQ-PPBA25
	Light Touch Switch	2	2.5	6	240gf	12	50	50K	P8087SCT-ND	1.03	.78	.67	P8087STR-ND	4,000	373.00/M	EVQ-PPDA25
	4.7mm x 3.5mm Type															
13	L. T. Switch Straight Leads, No Mtg. Boss	1	1.65	4.7	220gf	12	50	100K	P10847SCT-ND	1.13	.85	.74	P10847STR-ND	4,000	410.00/M	EVQ-PUA02K
	L. T. Switch Straight Leads,w/ Mtg. Boss	1	1.65	4.7	220gf	12	50	100K	P10849SCT-ND	1.13	.85	.74	P10849STR-ND	4,000	410.00/M	EVQ-PUC02K
	L. T. Switch Straight Leads, No Mtg. Boss	1	1.65	4.7	160gf	12	50	100K	P10851SCT-ND	1.13	.85	.74	P10851STR-ND	4,000	410.00/M	EVQ-PUJ02K
	L. T. Switch Straight Leads, w/ Mtg. Boss	1	1.65	4.7	160gf	12	50	100K	P10853SCT-ND	1.13	.85	.74	P10853STR-ND	4,000	410.00/M	EVQ-PUL02K
14	L. T. Switch J Bent Leads, No Mtg. Boss	1	1.65	4.7	220gf	12	50	100K	P10848SCT-ND	1.13	.85	.74	P10848STR-ND	4,000	410.00/M	EVQ-PUB02K
	L. T. Switch J Bent Leads, w/ Mtg. Boss	1	1.65	4.7	220gf	12	50	100K	P10850SCT-ND	1.13	.85	.74	P10850STR-ND	4,000	410.00/M	EVQ-PUD02K
	L. T. Switch J Bent Leads, No Mtg. Boss	1	1.65	4.7	160gf	12	50	100K	P10852SCT-ND	1.13	.85	.74	P10852STR-ND	4,000	410.00/M	EVQ-PUK02K
	L. T. Switch J Bent Leads, w/ Mtg. Boss	1	1.65	4.7	160gf	12	50	100K	P10854SCT-ND	1.13	.85	.74	P10854STR-ND	4,000	410.00/M	EVQ-PUM02K
15	L. T. Switch J Bent Leads	1	2.1	4.7	240gf	15	20	500K	P11080SCT-ND	1.28	.96	.83	P11080STR-ND	4,000	463.00/M	EVQ-P2402M
	L. T. Switch J.Bent.Leads	1	2.5	4.7	240gf	15	20	500K	P11081SCT-ND	1.28	.96	.83	P11081STR-ND	4,000	463.00/M	EVQ-P2402W
16	L. T. Switch J.Bent Leads, w/Gnd	1	2.1	4.7	240gf	15	20	500K	P11082SCT-ND	1.41	1.06	.92	P11082STR-ND	4,000	512.00/M	EVQ-P2T02M
	L. T. Switch J Bent Leads, w/Gnd	1	2.5	4.7	240gf	15	20	500K	P11083SCT-ND	1.41	1.06	.92	P11083STR-ND	4,000	512.00/M	EVQ-P2T02W
17	L. T. Switch J Bent Leads	1	2.5	4.7	350gf	15	20	500K	P11084SCT-ND	1.28	.96	.83	P11084STR-ND	4,000	463.00/M	EVQ-P2K02Q
18	L. T. Switch J.Bent Leads, w/Gnd	1	2.5	4.7	350gf	15	20	500K	P11085SCT-ND	1.41	1.06	.92	P11085STR-ND	4,000	512.00/M	EVQ-P2D02Q

Note: All switches are non-washable unless otherwise noted. * Bulk

OMRON Momentary Tact Switches

Characteristics:

- **Switching Capacity:** 50 mA 24 VDC (resistive load)
- **Contact Resistance:** 100 mΩ max.
- **Bounce Time:** 5 ms max.
- **Vibration:** Malfunction durability:10 to 55 Hz, 1.5 mm double amplitude
- **Shock:** Mechanical durability: 1,000 m/s² (approx. 100G); Malfunction durability: 100 m/s² (approx. 10G
- **Ambient Temperature:** Operating: -25°C to 70°C
- **Service Life:**
  - *B3F-1 Series – B3F-3 Series* — Mechanical/electrical: 1 x 10^6 (0.3 x 10^6) operations min.
  - *B3F-4 Series* — Mechanical/electrical: 3 x 10^6 (0.3 x 10^6) operations min.
- *B3S-1 Series* — Mechanical/electrical: General-purpose type: 500,000 operations min. High-load type: 300,000 operations min.
- *B3W-1 Series* — Mechanical/electrical: General-purpose type: 1,000,000 operations min. High-load type: 300,000 operations min.
- *B3W-4 Series* — Mechanical/electrical: General-purpose type: 3,000,000 operations min. High-load type: 1,000,000 operations min.

Fig. 1

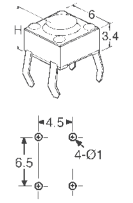


Fig. 2

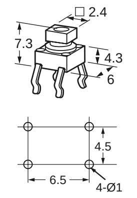


Fig. 3

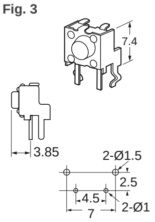


Fig. 4

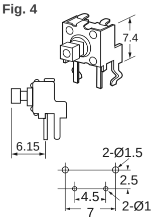


Fig. 5

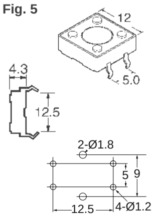


Fig. 6

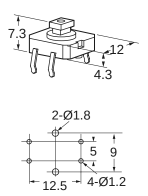


Fig. 7

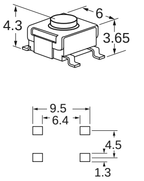


Fig. 8

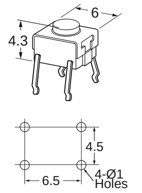


Fig. 9

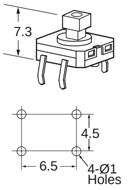


Fig. 10

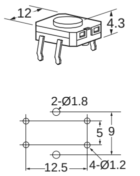


Fig. 11

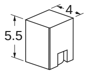


Fig. 12

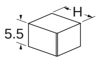


Fig. 13

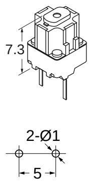


Fig. 14

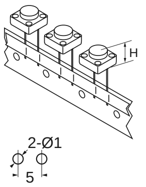


Fig. 15

Sealed

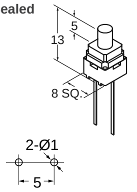
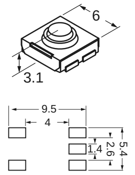
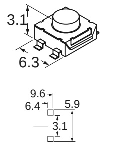


Fig. 16



Note: Eliminate center pad for "without GND Terminal"

Fig. 17



(Top View)
(One-Side PCB t=1.6)

Fig.	Description	Dim. H (mm)	Digi-Key Part No.	Price Each 1	25	50	100	250	500	Omron Part No.
		6 MM								
1	Tact Switch Standard, Flat Actuator w/o Ground Terminal — 100gf	4.3	SW400-ND	.20	.18	.16	.15	.14	.12	B3F-1000
1	Tact Switch Standard, Flat Actuator w/o Ground Terminal — 150gf	4.3	SW401-ND	.23	.21	.18	.17	.16	.14	B3F-1002
1	Tact Switch Standard, Flat Actuator w/o Ground Terminal — 100gf	5.0	SW402-ND	.23	.21	.18	.17	.16	.14	B3F-1020
1	Tact Switch Standard, Flat Actuator w/o Ground Terminal — 150gf	5.0	SW403-ND	.23	.21	.18	.17	.16	.14	B3F-1022
1	Tact Switch Standard, Flat Actuator w/o Ground Terminal — 100gf	9.5	SW406-ND	.25	.23	.20	.18	.17	.15	B3F-1070
2	Tact Switch Standard, Projected Actuator w/o Ground Terminal — 100gf	—	SW404-ND	.23	.21	.18	.17	.16	.14	B3F-1050
2	Tact Switch Standard, Projected Actuator w/o Ground Terminal — 150gf	—	SW405-ND	.23	.21	.18	.17	.16	.14	B3F-1052
3	Tact Switch Rt. Angle, Flat Actuator — 100gf	—	SW407-ND	.30	.27	.24	.22	.21	.18	B3F-3120
3	Tact Switch Rt. Angle, Flat Actuator — 150gf	—	SW408-ND	.30	.27	.24	.22	.21	.18	B3F-3122
4	Tact Switch Rt. Angle, Projected Actuator — 100gf	—	SW409-ND	.30	.27	.24	.22	.21	.18	B3F-3150
4	Tact Switch Rt. Angle, Projected Actuator — 150gf	—	SW410-ND	.30	.27	.24	.22	.21	.18	B3F-3152
		12 MM								
5	Tact Switch Standard, Flat Actuator w/o Ground Terminal — 130gf	—	SW411-ND	.30	.27	.24	.22	.21	.18	B3F-4000
5	Tact Switch Standard, Flat Actuator w/o Ground Terminal — 260gf	—	SW412-ND	.30	.27	.24	.22	.21	.18	B3F-4005
6	Tact Switch Standard, Projected Actuator w/o Ground Terminal — 130gf	—	SW413-ND	.30	.27	.24	.22	.21	.18	B3F-4050
6	Tact Switch Standard, Projected Actuator w/o Ground Terminal — 260gf	—	SW414-ND	.30	.27	.24	.22	.21	.18	B3F-4055
		6 MM Process Sealed (not water washable)								
7	SMT Flat Actuator w/o Ground Terminal — 160gf	—	SW415-ND	.45	.41	.36	.33	.31	.27	B3S-1000
7	SMT Flat Actuator w/o Ground Terminal — 230gf	—	SW416-ND	.45	.41	.36	.33	.31	.27	B3S-1002
8	Tact Switch Flat Actuator w/o Ground Terminal — 160gf	—	SW417-ND	.35	.32	.28	.26	.24	.21	B3W-1000
8	Tact Switch Flat Actuator w/o Ground Terminal — 230gf	—	SW418-ND	.35	.32	.28	.26	.24	.21	B3W-1002
9	Tact Switch Projected Actuator w/o Ground Terminal — 160gf	—	SW419-ND	.35	.32	.28	.26	.24	.21	B3W-1050
9	Tact Switch Projected Actuator w/o Ground Terminal — 230gf	—	SW420-ND	.35	.32	.28	.26	.24	.21	B3W-1052
		12 MM Process Sealed (not water washable)								
10	Tact Switch Flat w/o Ground Terminal — 200gf	—	SW421-ND	.43	.39	.34	.31	.29	.26	B3W-4000
6	Tact Switch Projected w/o Ground Terminal — 200gf	—	SW422-ND	.43	.39	.34	.31	.29	.26	B3W-4050
		Key Caps								
11	Key Cap 4 x 4 mm Light Grey, Fits 6mm Projected Actuator Types	—	SW450-ND	.18	.16	.14	.13	.12	.11	B32-1000
11	Key Cap 4 x 4 mm Black, Fits 6mm Projected Actuator Types	—	SW451-ND	.18	.16	.14	.13	.12	.11	B32-1010
11	Key Cap 4 x 4 mm Yellow, Fits 6mm Projected Actuator Types	—	SW249-ND	.18	.16	.14	.13	.12	.11	B32-1030
11	Key Cap 4 x 4 mm Blue, Fits 6mm Projected Actuator Types	—	SW250-ND	.18	.16	.14	.13	.12	.11	B32-1040
11	Key Cap 4 x 4 mm White, Fits 6mm Projected Actuator Types	—	SW251-ND	.18	.16	.14	.13	.12	.11	B32-1060
11	Key Cap 4 x 4 mm Red, Fits 6mm Projected Actuator Types	—	SW252-ND	.18	.16	.14	.13	.12	.11	B32-1080
12	Key Cap 9 x 9 mm Light Grey, Fits 12mm Projected Actuator Types	9	SW452-ND	.18	.16	.14	.13	.12	.11	B32-1200
12	Key Cap 9 x 9 mm Black, Fits 12mm Projected Actuator Types	9	SW453-ND	.18	.16	.14	.13	.12	.11	B32-1210
12	Key Cap 9 x 9 mm Yellow, Fits 12mm Projected Actuator Types	9	SW253-ND	.18	.16	.14	.13	.12	.11	B32-1230
12	Key Cap 9 x 9 mm Blue, Fits 12mm Projected Actuator Types	9	SW254-ND	.18	.16	.14	.13	.12	.11	B32-1240
12	Key Cap 9 x 9 mm White, Fits 12mm Projected Actuator Types	9	SW255-ND	.18	.16	.14	.13	.12	.11	B32-1260
12	Key Cap 9 x 9 mm Red, Fits 12mm Projected Actuator Types	9	SW256-ND	.18	.16	.14	.13	.12	.11	B32-1280
12	Key Cap 12 x 12 mm Light Grey, Fits 12mm Projected Actuator Types	12	SW454-ND	.18	.16	.14	.13	.12	.11	B32-1300
12	Key Cap 12 x 12 mm Black, Fits 12mm Projected Actuator Types	12	SW455-ND	.18	.16	.14	.13	.12	.11	B32-1310
12	Key Cap 12 x 12 mm Yellow, Fits 12mm Projected Actuator Types	12	SW257-ND	.18	.16	.14	.13	.12	.11	B32-1330
12	Key Cap 12 x 12 mm Blue, Fits 12mm Projected Actuator Types	12	SW258-ND	.18	.16	.14	.13	.12	.11	B32-1340
12	Key Cap 12 x 12 mm White, Fits 12mm Projected Actuator Types	12	SW259-ND	.18	.16	.14	.13	.12	.11	B32-1360
12	Key Cap 12 x 12 mm Red, Fits 12mm Projected Actuator Types	12	SW260-ND	.18	.16	.14	.13	.12	.11	B32-1380
		6MM Long Stroke Tact Switch								
13	Tact Switch with Long Stroke and Positive Click — 70gf	—	SW426-ND	.63	.57	.50	.45	.43	.38	B3M-6009

Fig.	Description	Dim. H (mm)	Digi-Key Part No.	Cut Tape Price Each 1	25	50	100	Digi-Key Part No.	Size	Pricing	Omron Part No.
			6 MM Auto Placement								
14	Tact Switch Auto-Placement 6mm Sq. — 100gf	4.3	SW263CT-ND	.30	.28	.25	.22	SW263TB-ND*	1,000	125.00	B3F-6000
14	Tact Switch Auto-Placement 6mm Sq. — 150gf	5.0	SW264CT-ND	.32	.29	.27	.24	SW264TB-ND*	1,000	137.50	B3F-6022
15	Tact Switch Auto-Placement - Water Tight - Dust Sealed	—	SW425CT-ND	.51	.46	.42	.37	SW425TB-ND*	1,000	212.50	B3WN-6002
			6 MM Process Sealed (not water washable)								
16	SMT Flat Actuator w/o Ground Terminal — 160gf	—	SW261CT-ND	.76	.69	.62	.55	SW261TR-ND**	3,000	325.00/M	B3SN-3012P
16	SMT Flat Actuator w/ Ground Terminal — 160gf	—	SW262CT-ND	.76	.69	.62	.55	SW262TR-ND**	3,000	325.00/M	B3SN-3112P
17	SMT Tact Switch 6mm Sq. (snap-action) — 100gf	—	SW423CT-ND	.45	.41	.37	.33	SW423TR-ND**	3,000	187.50/M	B3FS-1000
17	SMT Tact Switch 6mm Sq. (snap-action) — 150gf	—	SW424CT-ND	.45	.41	.37	.33	SW424TR-ND**	3,000	187.50/M	B3FS-1002

* TB = Tape and Box   ** TR= Tape and Reel

ITT Industries
Engineered for life

C&K Momentary Tact Switches

(Dimensions in mm)

Fig.	Description	Dim H (mm)	Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	Tape & Reel Pricing 3,000	C & K Part No.
	PTS Momentary Tact Switches (Non-Washable)								
1	6mm, w/o ESD pin — 130gF	4.3	CKN9009-ND	.24	.20	.16	—	—	PTS645SL43
1	6mm, w/o ESD pin — 130gF	5.0	CKN9010-ND	.24	.20	.16	—	—	PTS645SL50
1	6mm, with ESD pin — 130gF	4.3	CKN9011-ND	.24	.20	.16	—	—	PTS645TL43
1	6mm, with ESD pin — 130gF	5.0	CKN9012-ND	.24	.20	.16	—	—	PTS645TL50
2	6mm, Right Angle, — 130gF	3.15	CKN9013-ND	.30	.24	.19	—	—	PTS645VL31
2	6mm, Right Angle, — 130gF	3.85	CKN9014-ND	.30	.24	.19	—	—	PTS645VL39
3	12mm, w/o ESD pin — 160gF	4.3	CKN9015-ND	.30	.24	.19	—	—	PTS125SM43
4	6 x 3.5 mm, w/o ESD pin — 130gF	4.3	CKN9016-ND	.33	.27	.21	—	—	PTS635SL43
4	6 x 3.5 mm, w/o ESD pin — 130gF	5.0	CKN9017-ND	.33	.27	.21	—	—	PTS635SL50
5	4.5mm, w/o ESD pin — 130gF	3.8	CKN9018-ND	.45	.36	.29	—	—	PTS453SL38
5	4.5mm, with ESD pin — 130gF	3.8	CKN9019-ND	.45	.36	.29	—	—	PTS453TL38
6	5.25mm, Sq. SMT, — 130gF	1.5	CKN9020CT-ND	.75	.60	.48	CKN9020TR-ND	312.50/M	PTS525SM10SM

Fig.	Circuit	Switching Function	Contact Material	Dim. (mm) L x W x D	Cap Color	Digi-Key Part No.	Price Each 1	25	100	C & K Part No.
		Momentary Tact Switches (Process sealed; Washable)								
7	SPST	Mom (N/O)	G	6.22 x 6.37 x 2.84	—	CKN4050-ND	1.17	.94	.75	KT11B0CM
7	SPST	Mom (N/O)	G	6.22 x 6.37 x 3.48	—	CKN4070-ND	2.40	1.92	1.52	KT11B1CM
7	SPST	Mom (N/O)	G	6.22 x 6.37 x 5.08	—	CKN4071-ND	2.49	2.00	1.58	KT11B2CM
7	SPST	Mom (N/O)	G	6.22 x 6.37 x 5.21	—	CKN4051-ND	1.35	1.08	.86	KT11P2CM
7	SPST	Mom (N/O)	G	6.22 x 6.37 x 3.96	—	CKN4052-ND	1.35	1.08	.86	KT11P3CM
		Ultra Low Profile Momentary Tact Switches (Process Sealed; Non-Washable)								
10	SPST	Mom (N/O)	H	6.3 x 6.6 x 5.0	—	CKN1257-ND	.75	.60	.48	RT11P2BCHD1
10	SPST	Mom (N/O)	H	6.3 x 6.6 x 5.0	—	CKN1258-ND	.75	.60	.48	RT11P2ECHD1
		KS Momentary Tact Switches (Non-Washable)								
11	SPST	Mom (N/O)	G	.488 x .488 x .388	White	CKN4077-ND	2.25	1.80	1.43	KS11R21CBD
11	SPST	Mom (N/O)	Q	.488 x .488 x .388	White	CKN4078-ND	1.35	1.08	.86	KS11R21CQD
11	SPST	Mom (N/O)	G	.488 x .488 x .388	Black	CKN4079-ND	2.25	1.80	1.43	KS11R22CBD
11	SPST	Mom (N/O)	Q	.488 x .488 x .388	Black	CKN4080-ND	1.35	1.08	.86	KS11R22CQD
11	SPST	Mom (N/O)	B	.488 x .488 x .388	Red	CKN4081-ND	2.34	1.88	1.49	KS11R23CBD
11	SPST	Mom (N/O)	Q	.488 x .488 x .388	Red	CKN4082-ND	1.35	1.08	.86	KS11R23CQD

Fig.	Switch. Function	Actuator Height (PushForce)	Term.	Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	Tape & Reel Pricing	C & K Part No.
			Surface Mount (Process Sealed; Washable)							
8	Mom (N/O)	Flush	J-Lead	CKN9001CT-ND	1.27	1.10	.88	CKN9001TR-ND	772.20/1100	KT11B0JM
8	Mom (N/O)	.088”	J-Lead	CKN4069CT-ND	2.83	2.44	1.96	CKN4069TR-ND	1722.60/1100	KT11B2JM
8	Mom (N/O)	.089”	J-Lead	CKN9002CT-ND	1.46	1.26	1.02	CKN9002TR-ND	891.00/1100	KT11P2JM
8	Mom (N/O)	.044”	J-Lead	CKN9003CT-ND	1.46	1.26	1.02	CKN9003TR-ND	891.00/1100	KT11P3JM
8	Mom (N/O)	Flush	Gull Lead	CKN4072CT-ND	2.41	2.08	1.67	CKN4072TR-ND	1465.20/1100	KT11B0SM
8	Mom (N/O)	.025”	Gull Lead	CKN4073CT-ND	2.70	2.33	1.87	CKN4073TR-ND	1643.40/1100	KT11B1SM
8	Mom (N/O)	.088”	Gull Lead	CKN4074CT-ND	2.76	2.38	1.92	CKN4074TR-ND	1683.00/1100	KT11B2SM
8	Mom (N/O)	.093”	Gull Lead	CKN9004CT-ND	1.46	1.26	1.02	CKN9004TR-ND	891.00/1100	KT11P2SM
8	Mom (N/O)	.044”	Gull Lead	CKN9005CT-ND	1.46	1.26	1.02	CKN9005TR-ND	891.00/1100	KT11P3SM
9	Mom (N/O)	Flush	Gull Lead	CKN9006CT-ND	1.46	1.26	1.02	CKN9006TR-ND	648.00/800	KT11B0SAM
9	Mom (N/O)	.025”	Gull Lead	CKN9007CT-ND	1.46	1.26	1.02	CKN9007TR-ND	648.00/800	KT11B1SAM
9	Mom (N/O)	.088”	Gull Lead	CKN9008CT-ND	1.40	1.21	.97	CKN9008TR-ND	619.20/800	KT11B2SAM
			Surface Mount Ultra Low Profile Tact Switches (Process Sealed; Non-Washable)							
12	Mom (N/O)	120gF	Gull Lead	CKN1259-ND	.75	.60	.48	—	—	RT11P2BSHD1
12	Mom (N/O)	300gF	Gull Lead	CKN1260-ND	.75	.60	.48	—	—	RT11P2ESHD1
13	Mom (N/O)	120gF	Gull Lead	CKN1261CT-ND	.87	.70	.56	—	—	KN11B1FJM
13	Mom (N/O)	450gF	Gull Lead	CKN1263CT-ND	.87	.70	.56	CKN1263TR-ND	906.25/2500	KN11B1NJM
14	Mom (N/O)	200gF	Gull Lead	CKN1265CT-ND	.96	.77	.61	—	—	KN01P3DSAQ

Fig. 1

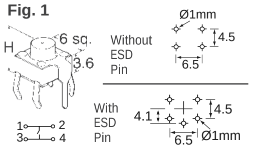
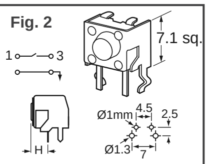


Fig. 2



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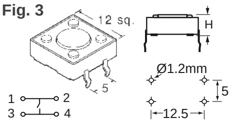

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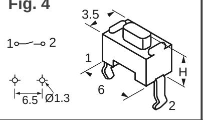

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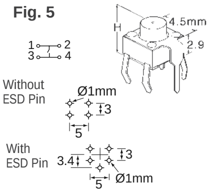

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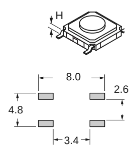

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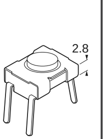

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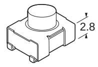

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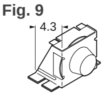

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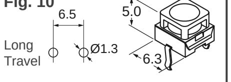

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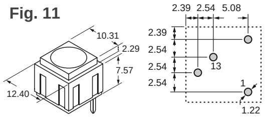

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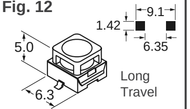

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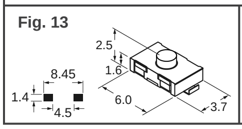

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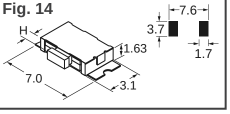


Contact Materials

G Contacts: Coin silver, w/gold plate over nickel plate. Terminals: Copper alloy, w/gold plate over nickel plate. Rating: 0.4 VA max. @ 20 VAC or DC max. or 1 amp @ 120 VAC or 28 VDC.

H Terminals: Brass. Contact Rating: 5mA max. @ 12 VDC. 50µA min. @ 2 VDC. Operating Temperature: -30°C to 80°C

Q Movable Contacts: Beryllium copper, silver plated. 25mA max. @ 50V AC or DC max. Stationary Contacts & All Terminals: Copper alloy, silver plated.

B Contacts: Gold Terminals: Gold Rating 25mA max. @ 50V AC or DC max.

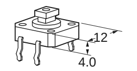
E-SWITCH®

A Division of Electronic Components Groupe

Momentary Tact Switches

9157B-ND	E-Switch Data Book....................**$2.95**

Fig. 1



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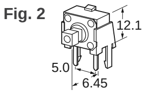

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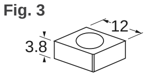

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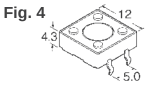

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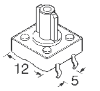

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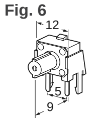


Fig. 7

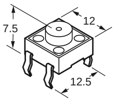
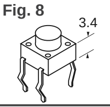


Fig. 8



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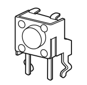

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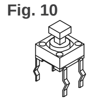

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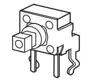

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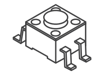

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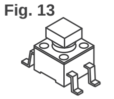


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	T & R Pricing* 1,200	E-Switch Part No.
1	Tact Switch 12mm Square Extended Actuator, Actuator Length = 7.3	EG1821-ND	.47	.38	.34	—	TL1100F160Q
2	Tact Switch Right Angle 12mm Square Extended Actuator, Actuator Length = 7.3	EG1822-ND	.58	.47	.42	—	TL1100CF160Q
3	Key Cap 12 x 12mm Black, Fits 12mm Extended Actuator Types	EG1080-ND	.22	.18	.17	—	4J BLACK
3	Key Cap 12 x 12mm Grey, Fits 12mm Extended Actuator Types	EG1079-ND	.22	.18	.17	—	4J GREY
3	Key Cap 12 x 12mm Red, Fits 12mm Extended Actuator Types	EG1078-ND	.22	.18	.17	—	4J RED
3	Key Cap 12 x 12mm White, Fits 12mm Extended Actuator Types	EG1077-ND	.22	.18	.17	—	4J WHITE
4	Tact Switch 12mm Square Flat Actuator	EG1023-ND	.50	.40	.37	—	TL1100DF160Q
5	Tact Switch 12mm Square Post Actuator, Actuator Length = 12.0	EG1024-ND	.44	.36	.33	—	TL1104
6	Tact Switch 12mm Square Right Angle Post Actuator, Actuator Length = 9.0	EG1025-ND	.83	.67	.61	—	TL1100GF160Q
—	Key Cap Rectangular Black, Fits 12mm Post Actuator Types	EG1076-ND	.45	.36	.33	—	TAA BLACK
—	Key Cap Rectangular White, Fits 12mm Post Actuator Types	EG1075-ND	.45	.36	.33	—	TAA WHITE
—	Key Cap Rectangular Grey, Fits 12mm Post Actuator Types	EG1074-ND	.45	.36	.33	—	TAA GREY
—	Key Cap Rectangular Red, Fits 12mm Post Actuator Types	EG1073-ND	.45	.36	.33	—	TAA RED
7	Tact Switch 12mm Square Long Flat Actuator	EG1826-ND	.44	.36	.33	—	TL1104B
8	Tact Switch 6mm Square 4.3mm Actuator 160gf	EG1827-ND	.30	.25	.22	—	TL1105F160Q
8	Tact Switch 6mm Square 4.3mm Actuator 250gf	EG1828-ND	.30	.25	.22	—	TL1105F250Q
8	Tact Switch 6mm Square 5mm Actuator 160gf	EG1829-ND	.30	.25	.22	—	TL1105AF160Q
8	Tact Switch 6mm Square 5mm Actuator 250gf	EG1830-ND	.30	.25	.22	—	TL1105AF250Q
8	Tact Switch 6mm Square 7mm Actuator 160gf	EG1831-ND	.30	.25	.22	—	TL1105EF160Q
8	Tact Switch 6mm Square 7mm Actuator 250gf	EG1832-ND	.30	.25	.22	—	TL1105EF250Q
8	Tact Switch 6mm Square 9.5mm Actuator 160gf	EG1833-ND	.30	.25	.22	—	TL1105BF160Q
8	Tact Switch 6mm Square 9.5mm Actuator 250gf	EG1834-ND	.30	.25	.22	—	TL1105BF250Q
8	Tact Switch 6mm Square 13mm Actuator 160gf	EG1865-ND	.30	.25	.22	—	TL1105DF160Q
8	Tact Switch 6mm Square 13mm Actuator 250gf	EG1866-ND	.30	.25	.22	—	TL1105DF250Q
9	Tact Switch 6mm Right Angle 3.15mm Actuator 160gf	EG1835-ND	.44	.36	.33	—	TL1105WF160Q
9	Tact Switch 6mm Right Angle 3.15mm Actuator 250gf	EG1836-ND	.44	.36	.33	—	TL1105WF250Q
9	Tact Switch 6mm Right Angle 6.15mm Actuator 160gf	EG1837-ND	.44	.36	.33	—	TL1105RF160Q
9	Tact Switch 6mm Right Angle 6.15mm Actuator 250gf	EG1838-ND	.44	.36	.33	—	TL1105RF250Q
9	Tact Switch 6mm Right Angle 8.35mm Actuator 160gf	EG1839-ND	.40	.32	.29	—	TL1105SF160Q
9	Tact Switch 6mm Right Angle 8.35mm Actuator 250gf	EG1840-ND	.40	.32	.29	—	TL1105SF250Q
10	Tact Switch 6mm Extended Actuator 160gf	EG1861-ND	.36	.29	.26	—	TL1105SPF160Q
10	Tact Switch 6mm Extended Actuator 250gf	EG1862-ND	.36	.29	.26	—	TL1105SPF250Q
11	Tact Switch 6mm Right Angle Extended Actuator 160gf	EG1863-ND	.61	.49	.45	—	TL1105JAF160Q
11	Tact Switch 6mm Right Angle Extended Actuator 250gf	EG1864-ND	.61	.49	.45	—	TL1105JAF250Q
12	Tact Switch 6mm SMT H=4.3mm 160gf	EG1867CT-ND	.56	.45	.41	222.30/M	TL3301NF160QG/TR
12	Tact Switch 6mm SMT H=4.3mm 260gf	EG1868CT-ND	.56	.45	.41	222.30/M	TL3301NF260QG/TR
13	Tact Switch 6mm SMT Extended Actuator 160gf	EG1869-ND	.56	.45	.41	—	TL3301SPF160QG
13	Tact Switch 6mm SMT Extended Actuator 260gf	EG1870-ND	.56	.45	.41	—	TL3301SPF260QG
—	Switch Cap, 8mm Square Black for 12mm Switch w/Extended Actuators	EG1885-ND	.18	.16	.14	—	6J BLK
—	Switch Cap, 8mm Square Red for 12mm Switch w/Extended Actuators	EG1886-ND	.18	.16	.14	—	6J RED
—	Switch Cap, 8mm Square White for 12mm Switch w/Extended Actuators	EG1887-ND	.18	.16	.14	—	6J WHT
—	Switch Cap, 8mm Square Grey for 12mm Switch w/Extended Actuators	EG1888-ND	.18	.16	.14	—	6J GRY

* For Tape & Reel Part No., change CT to TR.

Series 96 Keypads

Grayhill's Series 96 are their most economical 3x4 and 4x4 keypad family. They have such features as conductive rubber contacts with an operational life of 3 million operations and a good tactile feel for positive feedback to the operator. GH5001 thru GH5004 have black legends with white keys and a black ABS housing. GH5008 thru GH5011 have white legends with black keys and a black ABS housing.

SPECIFICATIONS:

Rating Criteria: • **Rating at 12Vdc:** 5 mA for .5 seconds • **Contact Bounce:** <12 milliseconds • **Contact Resistance:** <100Ω (@ stated operating force) • **Operation Life:** 3,000,000 min. cycles per key • **Operating Force:** 175 ±40 grams • **Operating Temperature:** -30°C to +80°C

Material and Finishes: • **Terminal Pin:** Phosphor Bronze, solder plated • **PC Board:** FR-4 glass cloth epoxy • **Keypad:** Silicone rubber • **Housing:** ABS, cycolac "KJW" • **Housing Color:** Black • **Output:** Matrix (Rear SIL Header)

12 Key mating connector use Digi-Key part numbers:
A3016-ND (connector, 1 piece) / A3007-ND (contacts, 1 package)

16 Key mating connector use Digi-Key part numbers:
A3017-ND (connector, 1 piece) / A3007-ND (contacts, 1 package)

Fig. 1 — 3x4 Rear Panel Mount

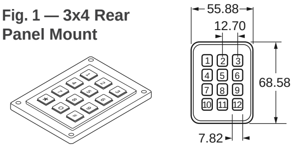


Fig. 2 — 4x4 Front Panel Mount

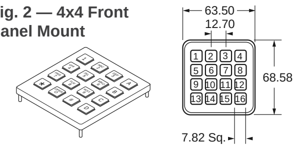


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	Grayhill Part No.
1	12 Key Keypad, Front Mount, White Keys	GH5001-ND	11.56	10.15	8.67	96AB2-102-F
1	12 Key Keypad, Rear Mount, White Keys	GH5002-ND	11.56	10.15	8.67	96AB2-102-R
2	16 Key Keypad, Front Mount, White Keys	GH5003-ND	12.87	11.30	9.66	96BB2-006-F
2	16 Key Keypad, Rear Mount, White Keys	GH5004-ND	12.87	11.30	9.66	96BB2-006-R
1	12 Key Keypad, Front Mount, Black Keys	GH5008-ND	11.56	10.15	8.67	96AB2-152-F
1	12 Key Keypad, Rear Mount, Black Keys	GH5009-ND	11.56	10.15	8.67	96AB2-152-R
2	16 Key Keypad, Front Mount, Black Keys	GH5010-ND	12.87	11.30	9.66	96BB2-056-F
2	16 Key Keypad, Rear Mount, Black Keys	GH5011-ND	12.87	11.30	9.66	96BB2-056-R

Series 88 Sealed Keypads

Versatile keypads that work indoors or outdoors.

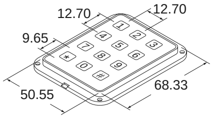
Grayhill Series 88 keypads are fully sealed keypads for use indoors or outdoors that offer a fully sealed snap-dome contact with an operational life of 3 million operations per key. Various colored graphic overlays are available or you can create your own keypad by using 3 items: (1) a blank keyboard; (2) the clear window overlay; (3) a sheet of legend transfers. Optional panel seal gasket provides a dust and water weather seal between your keypad and your equipment panel.

SPECIFICATIONS:

Rating Criteria: • **Rating at 24 Vdc:** 10 milliamps, resistive • **Contact Resistance:** Compatible with MOS, TTL and DTL (10 ohms max.) • **Voltage Breakdown:** 250 Vac between mutually insulated parts • **Life Expectancy:** 3,000,000 operations per button • **Contact Bounce:** Less than 4 milliseconds at make, 10 milliseconds at break • **Operating Temperature:** -40°C to +80°C.

Operating Features: • **Button Travel:** 0.015" nominal total travel • **Typical Operating Force:** 350 grams.

Materials and Finishes: • **Housing:** ABS polycarbonate, black • **Graphic Overlay:** Polyester • **Contact Dome:** Stainless steel, selectively gold plated • **Terminals:** Copper alloy, CDA No. 725, Tin-lead plated.



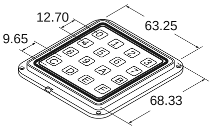


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	Grayhill Part No.
	Series 88 Keypads					
1	12-Key Keypad w/Black housing; White keys and Black lettering	GH5012-ND	23.14	20.31	17.36	88AB2-143
2	12-Key Keypad w/Black housing; White keys and Blue lettering	GH5013-ND	23.14	20.31	17.36	88AB2-152
2	12-Key Keypad w/Black housing; Blue keys and White lettering	GH5014-ND	23.14	20.31	17.36	88AB2-172
3	16-Key Keypad w/Black housing, Blue/White keys and Black/Blue lettering	GH5015-ND	26.73	23.46	20.05	88BB2-052
3	16-Key Keypad w/Black housing, Blue keys and White lettering	GH5016-ND	26.73	23.46	20.05	88BB2-072
3	16-Key Keypad w/Black housing, Red keys and White lettering	GH5017-ND	26.73	23.46	20.05	88BB2-082
	Series 88 Clear Key Keypads — Customize Your Own Keypad Layout					
4	12-Key Keypad w/Blank keys for use with Legend sheets below	GH5018-ND	18.36	16.12	11.76	88AB2
4	16-Key Keypad w/Blank keys for use with Legend sheets below	GH5019-ND	20.41	17.92	15.31	88BB2
4	20-Key Keypad w/Blank keys for use with Legend sheets below	GH5020-ND	27.20	23.87	20.40	88JB2
—	Legend Sheet, Small Print lettering for Blank Keys, dry transfer type	GH5021-ND	3.89	3.57	3.24	87-DT-2096-088
—	Legend Sheet, Medium Print lettering for Blank Keys, dry transfer type	GH5022-ND	3.89	3.57	3.24	87-DT-2096-125
—	Legend Sheet, Large Print lettering for Blank Keys, dry transfer type	GH5023-ND	3.89	3.57	3.24	87-DT-2096-187
—	Legend Sheet, Medium Print lettering for Blank Keys, self-adhesive type	GH5024-ND	5.38	4.94	4.49	87AC2046
4	Clear Protective Overlay for 12-Key Keypad (protects your customized lettering)	GH5025-ND	17.01	15.60	14.18	88-101
4	Clear Protective Overlay for 16-Key Keypad (protects your customized lettering)	GH5026-ND	14.90	13.67	12.42	88-001
4	Clear Protective Overlay for 20-Key Keypad (protects your customized lettering)	GH5027-ND	15.46	14.18	12.89	88-201
	Panel Seal Gaskets for Series 88 Keypads					
—	Optional Panel Gasket Seal for all 12-Key Series 88 Keypads - Subpanel Mount	GH5028-ND	1.31	1.21	1.10	88M2001-2
—	Optional Panel Gasket Seal for all 16-Key Series 88 Keypads - Subpanel Mount	GH5029-ND	1.35	1.24	1.13	88M2009-2
—	Optional Panel Gasket Seal for all 20-Key Series 88 Keypads - Subpanel Mount	GH5030-ND	1.42	1.31	1.19	88M2019-1
—	Optional Panel Gasket Seal for all 12-Key Series 88 Keypads - Top Panel Mount	GH5031-ND	1.67	1.54	1.40	88M2012-1
—	Optional Panel Gasket Seal for all 16-Key Series 88 Keypads - Top Panel Mount	GH5032-ND	1.75	1.61	1.46	88M2015-1
—	Optional Panel Gasket Seal for all 20-Key Series 88 Keypads - Top Panel Mount	GH5033-ND	1.78	1.64	1.49	88M2018-1

Fig. 1

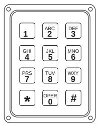


Fig. 2

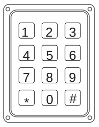


Fig. 3

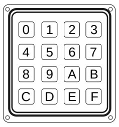
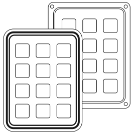


Fig. 4



Cannon

ITT Industries
Engineered for life

C&K Sealed Membrane Keypads

with Removable Legends

FEATURES: • Adhesive backed for easy mounting • Tactile feedback on all keys • Attached .1" female connector • Legends easily swapped • Allows for custom legends • Rim embossed keys for finger placement • Splashproof, sealed switches • Low profile height (.059 inches)

SPECIFICATIONS: • **Contact Rating:** 0.5 VA, 100 mA, 30 VDC max. • **Actuation Force:** 300 grams • **Contact Bounce:** Below 10 msec. typ. • **Travel:** 0.63 – 0.76mm typ. • **Operating Temperature:** –30°C to +60°C.

MATERIALS: • **Overlay:** Polyester/polycarbonate blend with uniform low gloss fine texture • **Connector:** Single row female connector, tin lead plating

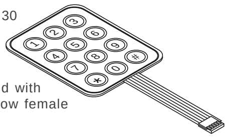


Fig. 1

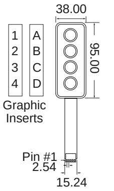


Fig. 2

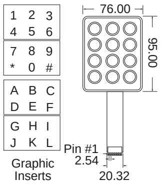


Fig. 3

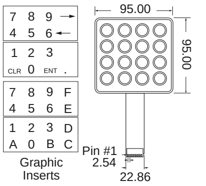


Fig.	Description	Digi-Key Part No.	Pricing 1	10	100	C & K Part No.
1	4-Key with 1 legend set - A-D / 1-4	CKN6009-ND	17.34	149.72	1260.80	4214A1
2	12-Key with 2 legend sets - A-L / 1-9, *, #	CKN6010-ND	25.37	219.07	1844.80	4234A1
3	16-Key with 2 legend sets - A-F, 1-9 / 1-9, *, #, ENT	CKN6011-ND	20.44	176.51	1486.40	4244A1

Storm
data entry technology

Environmentally Sealed Keypads

700 Series Sealed Keypads

The 700 Series of sealed keypads intended for use individually, or as modular building blocks to create more complex key-panel layouts. Unlike other sealed keypads, the 700 series have excellent tactile characteristics providing fast and reliable data input. When a keytop is depressed a conductive rubber pill makes contact with a gold on nickel plated PCB. These contact materials provide the highest level of protection against corrosive atmospheres and contact oxidization. Each keypad has interchangeable keytop legend tiles. Keypads come in two colors, gray or black, and feature a matrix style output. Instructions and pinouts are included. Compatible with Storm Universal Encoder part no. "MGR1301-ND".

Fig. 1

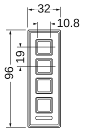


Fig. 2

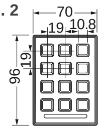


Fig. 3

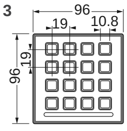


Fig. 4

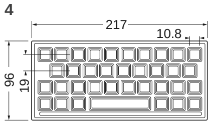
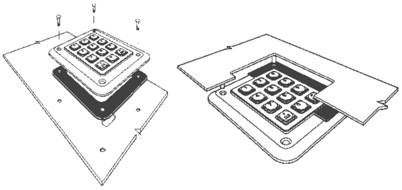


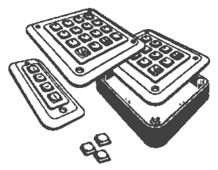
Fig.	Description	Digi-Key Part No.	Price Each
1	4 Key Keypad W/ Legend Set A, Gray	MGR1101-ND	26.01
1	4 Key Keypad W/ Legend Set A, Black	MGR1111-ND	26.01
2	12 Key Keypad W/ Legend Set A, Gray	MGR1102-ND	34.68
2	12 Key Keypad W/ Legend Set A, Black	MGR1112-ND	34.68
3	16 Key Keypad W/ Legend Set A, Gray	MGR1103-ND	44.96
3	16 Key Keypad W/ Legend Set A, Black	MGR1113-ND	44.96
4	36 Key Keypad W/ Legend Set B & C, Gray	MGR1104-ND	77.16
4	36 Key Keypad W/ Legend Set B & C, Black	MGR1114-ND	77.16
—	Legend Set A 0-9, Arith. Function, Arrows	MGR1201-ND	4.30
—	Legend Set B Computer Legend, Arrows	MGR1202-ND	4.30
—	Legend Set C Alphabet Legend	MGR1203-ND	4.30
—	Legend Set D F1-F12, Misc. Keys	MGR1204-ND	4.30
—	Legend Set E Blank Legend	MGR1205-ND	4.30
—	Legend Set F 0-9, Ent, Off, +, -, #, *	MGR1206-ND	4.30
—	Under Panel Mount Clip (2pcs)	MGR1401-ND	3.87

K Range Keypad System Interchangeable for Different Environments/Applications



Storm K Range keypads are 100% interchangeable to suit any application. Each series is identical in size and mounting specifications, allowing for easy price/performance selection for different environments. Each keypad is available in calculator or telephone formats (arrows or F-Keys on the 4-key version) or the end user may customize by using optional blank keys. All keypads are compatible with the Storm Universal Encoder and includes instructions and a gasket seal. Storm K Range Keypads are ideal for access control, pin numbering/banking functions and kiosk application. Storm 1000 and GFX Series keypads are available with illumination for low light applications. **GENERAL SPECIFICATIONS:** • **Contact bounce:** 5ms (max.) • **Contact resistance:** 100 ohms (max.) • **Insulation resistance:** 50 Meg ohms (min.) • **Breakdown Voltage:** 500V AC (60 Secs) • **Operating Voltage:** 24V DC (max.) • **Operating Current:** 50mA (max.) **ACCESSORIES:** • **Rear Casing:** Provides space to house additional components and circuitry (12 Key format only) • **Privacy-Protection Shroud:** Front-mounted shroud conceals sensitive data entry info. i.e. PINS (12 key format only)

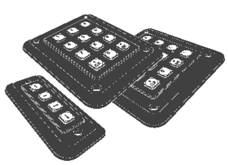
Fig. 1 Storm 1000 Series
Public/Outdoor Environments



Available with Character Illumination

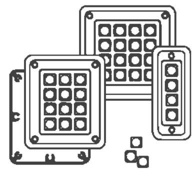
- Anti-Vandal design ideal for public environment
- Features metal casing and keys
- Fully sealed, to IP67, for use in outdoor environments
- 4, 12 and 16 key formats available
- Available with red/green LED illumination
- Key color: Silver
- Case Color: Silver
- Operational life: 4 Million cycles (min) per key
- Operational temp. range: -40°C to +100°C
- Gold on nickel plated FR4 contact PCB
- Connector: 0.1” pitch, gold plated, square pin, male

Fig. 2 Storm PLX Series
Anti-Vandal, Industrial Sealed Keypad



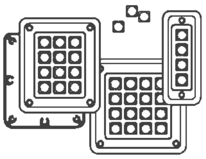
- Tough metal key keypad with polymer housing
- Ideal for public and industrial environments
- Sealed to IP65 for exposed environments
- 4, 12, and 16 key formats available
- Case Color: Black
- Key Color: Silver
- Operational life: 4 million cycles (min) per key
- Operational temp. range: -40°C to +100°C
- Gold on nickel plated FR4 contact PCB
- Connector: 0.1” pitch, goldplated, square pin, male

Fig. 3 Storm 2000 Series
Harsh Industrial/Wet Environments



- Impact resistant industrial keypad
- High impact resistant polymer casing and keys
- Sealed to IP65, allowing pressure hose wash
- 4, 12, and 16 key formats available
- Case Color: Mid Gray
- Key Color: Light Gray
- Operational life: 4 million cycles (min) per key
- Operational temp. range: -25°C to +85°C
- Gold on nickel plated FR4 contact PCB
- Connector: 0.1” pitch, gold plated, square pin, male

Fig. 4 Storm 3000 Series
General Service/Sheltered Outdoor Use



- Reliable keypad for sheltered environments
- General service polymer casing and keys
- Rain and splash proof to IP54 specifications
- 4, 12, and 16 key formats available
- Case Color: Black
- Key Color: Black
- Operational life: 2 million cycles (min) per key
- Operational temp. range: -10°C to +85°C
- Gold on nickel plated FR4 contact PCB
- Connector: 0.1” pitch, gold plated, square pin, male

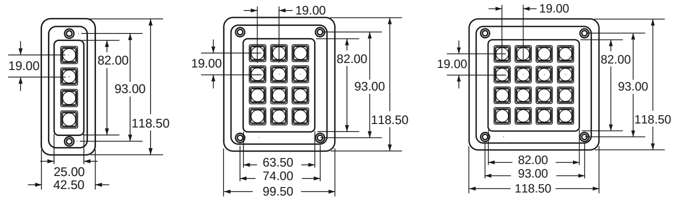


Fig.	Description	Digi-Key Part No.	Price Each	MGR Part No.
	1000 Series (Silver Diecast Housing)			
1	Vandal Resistant 4 Key Keypad, Arrow keys	MGR1512-ND*	45.00	1K041103
	Vandal Resistant 4 Key Keypad, F1-F4 keys	MGR1511-ND*	45.00	1K042103
	Vandal Resistant 12 Key Keypad, Telephone	MGR1513-ND†	65.00	1K12T103
	Vandal Resistant 12 Key Keypad Calculator	MGR1501-ND†	65.00	1K120103
	Vandal Resistant 16 Key Keypad, Telephone	MGR1514-ND‡	75.37	1K16T103
	Vandal Resistant 16 Key Keypad Calculator	MGR1601-ND‡	75.37	1K160103
	Illuminated Vandal Resistant 4 Key Keypad, Arrow keys	MGR1574-ND	56.12	1KL041103
	Illuminated Vandal Resistant 4 Key Keypad, F1-F4 keys	MGR1575-ND	56.12	1KL042103
	Illuminated Vandal Resistant 12 Key Keypad, Calculator	MGR1576-ND	81.06	1KL120103
	Illuminated Vandal Resistant 12 Key Keypad, Telephone	MGR1577-ND	81.06	1KL12T103
	Illuminated Vandal Resistant 16 Key Keypad, Calculator	MGR1578-ND	97.27	1KL160103
	Illuminated Vandal Resistant 16 Key Keypad, Telephone	MGR1579-ND	97.27	1KL16T103
	PLX Series			
2	4-Key Keypad, F1-F4 Keys, Black Case	MGR1541-ND	39.14	PLX042203
	4-Key Keypad, Arrow Keys, Black Case	MGR1542-ND	39.14	PLX041203
	12-Key Keypad, Calculator Format, Black Case	MGR1543-ND	56.55	PLX120203
	12-Key Keypad, Telephone Format, Black Case	MGR1544-ND	56.55	PLX12T203
	16-Key Keypad, Calculator Format, Black Case	MGR1545-ND	69.05	PLX160203
	16-Key Keypad, Telephone Format, Black Case	MGR1546-ND	69.05	PLX16T203
	2000 Series (Mid-Grey Impact Polymer Housing)			
3	Industrial 4 Key Keypad, Arrow keys	MGR1516-ND*	30.93	2K041103
	Industrial 4 Key Keypad, F1-F4 keys	MGR1517-ND*	30.93	2K042103
	Industrial 12 Key Keypad, Calculator Format	MGR1518-ND†	44.89	2K120103
	Industrial 12 Key Keypad, Telephone Format	MGR1519-ND†	44.89	2K12T103
	Industrial 16 Key Keypad, Calculator Format	MGR1520-ND‡	54.87	2K160103
	Industrial 16 Key Keypad, Telephone Format	MGR1521-ND‡	54.87	2K16T103
	3000 Series (Mid-Grey General Service Polymer Housing)			
4	Commercial 4 Key Keypad, Arrow keys	MGR1523-ND*	19.75	3K041103
	Commercial 4 Key Keypad, F1-F4 keys	MGR1524-ND*	19.75	3K042103
	Commercial 12 Key Keypad, Calculator Format	MGR1525-ND†	29.12	3K120103
	Commercial 12 Key Keypad, Telephone Format	MGR1526-ND†	29.12	3K12T103
	Commercial 16 Key Keypad, Calculator Format	MGR1527-ND‡	35.41	3K160103
	Commercial 16 Key Keypad, Telephone Format	MGR1528-ND‡	35.41	3K16T103
	Accessories			
—	Blank Keys for 1000 Series 4 pieces	MGR1515-ND	6.02	1K000003
—	Blank Keys for 2000/3000 Series 4 pieces	MGR1522-ND	2.58	2K000003
—	Rear Casing for 12 Key Keypad	MGR1536-ND	27.50	RC120203
—	Privacy Shroud for 12-Key Keypads	MGR1562-ND	27.05	1KFS0203

• 4 Key Mating Connector use Digi-Key Part Numbers: WM2003-ND (Connector, 1 pkg)/ WM2200-ND (Contacts, 1 pkg)

† 12 Key Mating Connector use Digi-Key Part Numbers: WM2006-ND (Connector, 1 pkg)/ WM2200-ND (Contacts, 1 pkg)

‡ 16 Key Mating Connector use Digi-Key Part Numbers: WM2006-ND (Connector, 1 pkg)/ WM2200-ND (Contacts, 1 pkg)

Universal Encoder

The Universal Keypad Encoder is a compact microprocessor controlled unit designed to interface between Storm Keypads and computers. The encoder converts signals from the keypad to PC XT/AT/PS2 as well as ASCII RS232 and is compatible with Storm 700 Series and K Range Keypads The Universal Encoder can read up to 90 key positions with a single 5V power supply. Complete Instructions included.

MGR1301-ND..**$140.56**

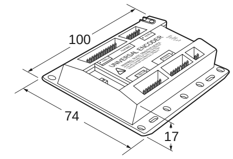
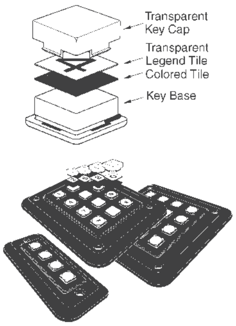


Fig. 5 Storm GFX Series
Customizable Keypad



Available with Full Key Illumination

Graphic Series Keypads feature customizable keytop legends. Keypad layouts are customized by inserting legend tiles into the transparent keycap, then securing the self-locking cap onto the key base. Once pressed into place, the keycap provides a permanent cover, resistant to water, dust, and physical damage.

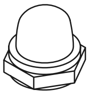
Illuminated Graphic Series Keypads are perfect for dimly lit environments. As well as featuring easily customizable legends, each keytop can illuminated in a wide range of colors using the translucent color tiles. Available with white or red/green LED key illumination.

- Fully customizable impact-resistant keypads
- Ideal for commercial and industrial applications
- Rain and splash proof to IP54 specifications
- 4, 12, and 16 key formats available
- Case Color: Black
- Operational life: 2 million cycles (min) per key
- Operational temp. range -10°C to +85°C
- Gold on nickel plated FR4 contact PCB
- Connector: 0.1” pitch, gold plated, square pin, mail

Fig.	Description	Digi-Key Part No.	Price Each	MGR Part No.
5	4-Key Graphic Keypad and 5 Keycaps, Common Bus	MGR1547-ND	24.80	GS040203
	12-Key Graphic Keypad and 13 Keycaps, Black, Matrix	MGR1548-ND	36.00	GS120203
	12-Key Graphic Keypad and 13 Keycaps, Black, Common Bus	MGR1563-ND	38.28	GS12NS03-0271
	16-Key Graphic Keypad and 17 Keycaps, Black, Matrix	MGR1549-ND	44.00	GS160203
	4-Key Illuminated Graphic Keypad (Red/Green LED)	MGR1568-ND	29.67	GSRG040203
	12-Key Illuminated Graphic Keypad (Red/Green LED)	MGR1569-ND	43.09	GSRG120203
	16-Key Illuminated Graphic Keypad (Red/Green LED)	MGR1570-ND	52.67	GSRG160203
	4-Key Illuminated Graphic Keypad (White LED)	MGR1571-ND	34.62	GSLW040203
	12-Key Illuminated Graphic Keypad (White LED)	MGR1572-ND	53.87	GSLW120203
	16-Key Illuminated Graphic Keypad (White LED)	MGR1573-ND	70.23	GSLW160203
	Legend Set A, 0-9, Arithmetic Function, Arrows, 26 Tiles	MGR1550-ND	2.60	GSA0T203
	Legend Set B, Computer Legend, Arrows, 26 Tiles	MGR1551-ND	2.60	GSB0T203
	Legend Set C, Alphabet Legend, 26 Tiles	MGR1552-ND	2.60	GSC0T203
	Legend Set D, F1-F4 Keys, Misc. Keys, 26 Tiles	MGR1553-ND	2.60	GSD0T203
	Legend Set E, Blank Keys Legend, 26 Tiles	MGR1554-ND	2.60	GSE0T203
	Legend Set F, 0-9, Ent., Off, +, -, #, *, 26 Tiles	MGR1555-ND	2.60	GSF0T203
	Gray Colored Legends, 26 Tiles	MGR1556-ND	2.58	GS000203
	Red Colored Legends, 26 Tiles	MGR1557-ND	2.58	GS000303
	Green Colored Legends, 26 Tiles	MGR1558-ND	2.58	GS000403
	Blue Colored Legends, 26 Tiles	MGR1559-ND	2.58	GS000503
	Yellow Colored Legends, 26 Tiles	MGR1560-ND	2.58	GS000603
	Replacement Clear Keycaps, 4 pieces	MGR1561-ND	5.17	GS000003

APM HEXSEAL

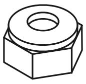
Pushbutton Switch Boots



APM's sealing boots are designed to protect your switches and potentiometers from hostile environments without compromising or interfering with the switches basic function. Boots create a full environmental seal even under high-pressure washdowns. Each seal is made from a tough, high tear strength elastomer that is resistant to most chemicals, lubricants, acids and solvents. UL and CSA recognized which facilitate easier agency listings and most Hexseals are QPL approved under MIL-B-5423.

Thread Size	Throat Size (I.D.) Inch (mm)	Plunger Height Inch (mm)	Color	Digi Key Part No.	Price Each 1	25	100	APM Hexseal Part No.
15/32-32NS-2B	.422 (10.72)	.281 (7.14)	Gray	335-1009-ND	3.18	2.55	2.02	N3030
15/32-32NS-2B	.422 (10.72)	.438 (11.13)	Gray	335-1008-ND	3.18	2.55	2.02	NC3030
15/32-32NS-2B	.422 (10.72)	.438 (11.13)	Clear	335-1010-ND	3.57	2.86	2.27	NC3030(Clear)
7/16-28UNEF-2B	.422 (10.72)	.438 (11.13)	Clear	335-1013-ND	3.66	2.93	2.32	NC303 7/16-28(CLR)

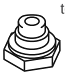
Rotary Shaft Seals



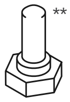
Hexseal's rotary switch and potentiometer seals surround the shaft and form a watertight, and dust tight seal against the shaft and front panel surface. Color: Gray

Thread Size	Max. Shaft Size Inch. (mm)	Hex Nut Flat Inch. (mm)	Digi Key Part No.	Price Each 1	25	100	APM Hexseal Part No.
3/8-32NEF-2B	.125 (3.18)	.500 (12.70)	335-1015-ND	2.91	2.33	1.85	N9030x1/8
3/8-32NEF-2B	.250 (6.35)	.500 (12.70)	335-1016-ND	2.91	2.33	1.85	N9030x1/4
1/4-28NEF-2B	.125 (3.18)	.375 (9.53)	335-1014-ND	2.91	2.33	1.85	N9042x1/8

Toggle Switch Boots



* Half-boot toggle

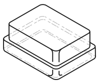


** Full-boot toggle

Hexseal toggle switch boots are molded from a high tear strength, silicon rubber bonded to a built-in mounting nut. Each encloses the base of the protruding switch bushing and forms a water and dust tight seal against the front panel surface.

Thread Size	Throat Size (I.D.) Inch (mm)	Height Inch (mm)	Color	Digi Key Part No.	Price Each 1	25	100	APM Hexseal Part No.
15/32-32NS-2B	.078 (1.98)	.437 (11.10)	Gray	335-1007-ND*	3.18	2.55	2.02	N1030B
1/4-40NS-2B	.047 (1.19)	.250 (6.35)	Gray	335-1006-ND*	3.81	3.05	2.42	N5032B
15/32-32NS-2B	.219 (5.56)	.844 (21.44)	Gray	335-1005-ND**	3.18	2.55	2.02	N1030
1/4-40NS-2B	.062 (1.57)	.390 (9.91)	Gray	335-1000-ND**	3.81	3.05	2.42	N5030R
1/4-40NS-2B	.062 (1.57)	.594 (15.09)	Gray	335-1001-ND**	3.78	3.03	2.40	N5030S
1/4-40NS-2B	.062 (1.57)	.500 (12.70)	Red	335-1002-ND**	4.26	3.41	2.70	N5030L(Red)
1/4-40NS-2B	.062 (1.57)	.500 (12.70)	Black	335-1003-ND**	4.26	3.41	2.70	N5030L(Black)
1/4-40NS-2B	.062 (1.57)	.500 (12.70)	Yellow	335-1004-ND**	4.26	3.41	2.70	N5030L(Yellow)

Transparent Rocker Switch Seals



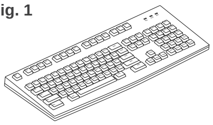
Seals without compromising switch operation, position status viewing or legend visibility.

Max. Rocker Actuator Len. Inch (mm)	Max. Rocker Actuator Wid. Inch (mm)	Maxi. Rocker Above Panel Inch (mm)	Digi-Key Part No.	Price Each 1	25	100	APM Hexseal Part No.
.531 (13.49)	.348 (8.84)	.228 (5.79)	335-1011-ND	1.98	1.59	1.26	C1113/66(Clear)
1.375 (34.93)	.750 (19.05)	.560 (14.22)	335-1012-ND	1.98	1.59	1.26	C1113/80(Clear)

CHERRY

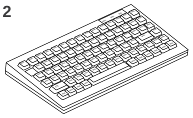
Full 104-Key Computer Keyboard

Fig. 1



83-6104 is a fully compatible Windows 95 keyboard complete with auto-repeat and full travel keyswitches.

Fig. 2



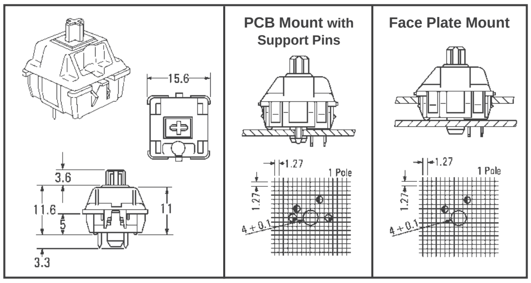
G84-4100 is a low profile compact 83 key keyboard, ideal for portable systems and laptops. Used for all applications where small size and low weight are critical.

Fig.	Description	Digi-Key Part No.	Price Each	Cherry Part No.
1	104-Key Keyboard Windows 95 with PS2-style Connect	CH216-ND	28.35	G83-6104LPNUS
2	83-Key Keyboard Compact Style with PS2-Style Connect	CH217-ND	75.60	G84-4100PPAUS

MX Key Switches

Main Advantages: • The MX is a modern full-travel low-profile keyswitch • The key-switch module is designed to meet all current ergonomic standards demanded for word and data processing applications • Gold wire crossbar contacts ensure long life expectancy • High reliability also during quick actuation • All switches are momentary N/O type

Specifications: • Max. Voltage 12 • Max. Current 10mA • Contact Resistance 200mΩ • Capacity at 1MHz <1pf • Bouncing Time at 0.4 ≤5ms



PCB Mount with Support Pins

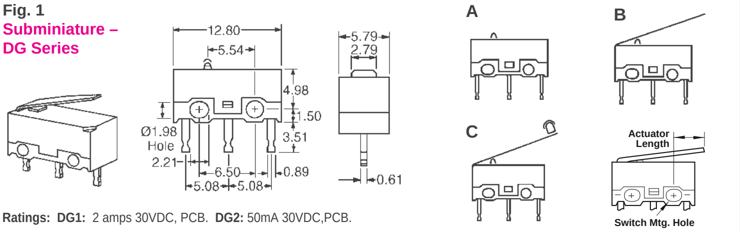
Face Plate Mount

Description	Digi-Key Part No.	Price Each 1	10	100	Cherry Part No.
PCB Mount					
Linear Feel	CH160-ND	.86	.77	.53	MX1A-11NW
Click Tactile Feel	CH197-ND	.95	.84	.57	MX1A-EINW
PCB Mt. Soft Tactile Feel	CH310-ND	.70	.63	.43	MX1A-C1NW
PCB Mt. w/ Diode	CH311-ND	2.16	1.92	1.31	MX1A-11DW
Face Plate Mount					
Linear Feel	CH162-ND	.86	.77	.53	MX1A-11NN
Click Tactile Feel	CH196-ND	.86	.77	.52	MX1A-EINN
Soft Tactile Feel	CH198-ND	1.16	1.04	.71	MX1A-CINN

Basic Type Switches

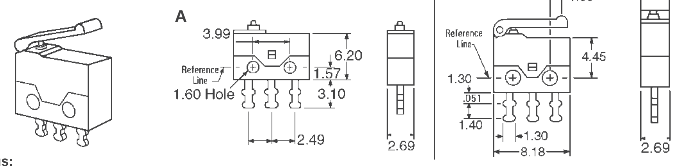
UL Recognized and CSA Certified

Fig. 1
Subminiature – DG Series



Ratings: DG1: 2 amps 30VDC, PCB. **DG2:** 50mA 30VDC,PCB.

Fig. 2.
Ultra-Subminiature – DH Series



Ratings:
DH1C: 50-500mA resistive @ 30VDC, Silver plated contacts, PCB.
DH2C: 5-50mA resistive @ 30VDC, Gold plated contacts, PCB.

Fig. 3 Water and Dust Sealed — DC Series

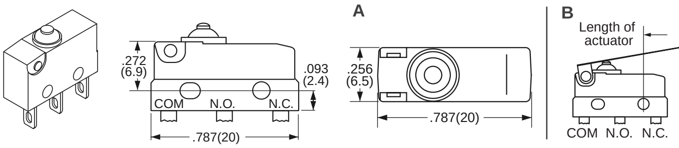


Fig.	Cir-Cuitry	Oper. Force (Max.gms.)	Current	Terminal	Actuator	Actuator Length Inch (mm)	Digi-Key Part No.	Price Each 1	10	100	500	Cherry Part No.
Subminiature — DG Series												
1A	SPDT	140	2A	PCB	Button	—	CH164-ND	3.40	3.03	2.06	1.89	DG13-B1AA
1B	SPDT	45	2A	PCB	Lever	.169 (4.29)	CH165-ND	3.56	3.17	2.16	1.98	DG13-B1LA
1C	SPDT	45	2A	PCB	Roller	.075 (1.91)	CH166-ND	3.70	3.29	2.24	2.06	DG13-B1RA
1A	SPDT	140	50mA	PCB	Button	—	CH167-ND	3.70	3.29	2.24	2.06	DG23-B1AA
1B	SPDT	45	50mA	PCB	Lever	.169 (4.29)	CH168-ND	3.81	3.39	2.30	2.12	DG23-B1LA
1C	SPDT	45	50mA	PCB	Roller	.075 (1.91)	CH169-ND	3.94	3.51	2.38	2.19	DG23-B1RA
Ultra-Subminiature — DH Series												
2A	SPDT	90	500mA	PCB	Button	—	CH170-ND	4.70	4.18	3.01	2.75	DH1C-B1AA
2B	SPDT	50	500mA	PCB	Lever	—	CH171-ND	4.81	4.28	3.08	2.82	DH1C-B1PA
2A	SPDT	90	500mA	PCB	Button	—	CH172-ND	4.97	4.42	3.00	2.76	DH2C-B1AA
2B	SPDT	50	500mA	PCB	Lever	—	CH173-ND	5.13	4.56	3.10	2.85	DH2C-B1PA
2B	SPDT	50	500mA	Right Angle Solder	Lever	.043 (1.09)	CH294-ND	4.97	4.42	3.18	2.91	DH1C-B2PA
2B	SPDT	50	500mA	Right Angle Solder	Lever	.043 (1.09)	CH295-ND	5.24	4.66	3.17	2.91	DH2C-B2PA
2B	SPDT	50	500mA	Left Angle Solder	Lever	.043 (1.09)	CH296-ND	5.24	4.66	3.17	2.91	DH2C-B3PA
Water and Dust Sealed — DC Series												
3A	SPDT	204	5A	Solder	Basic	—	CH290-ND	4.08	3.63	2.47	2.27	DC1C-A1AA
3B	SPDT	204	5A	Solder	Lever	.189 (4.80)	CH291-ND	4.54	4.04	2.74	2.52	DC1C-A1LB
3A	SPDT	347	10A	Solder	Basic	—	CH292-ND	4.51	4.01	2.73	2.51	DC2C-A1AA
3A	SPDT	347	.1A	Solder	Basic	—	CH293-ND	5.99	5.33	3.62	3.33	DC3C-A1AA

Slide Switches

Made in U.S.A.

Fig. 1

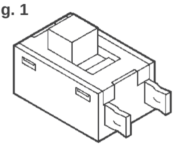


Fig. 2

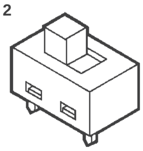


Fig. 3

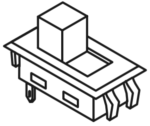


Fig. 4

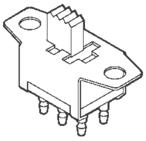


Fig. 5

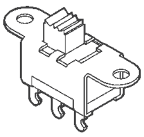


Fig. 6

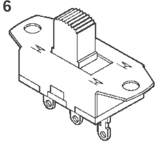


Fig. 7

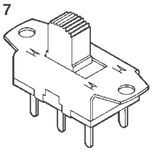


Fig. 8

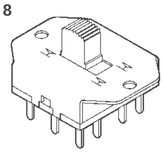


Fig. 9

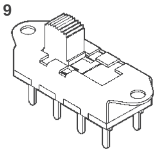


Fig. 10

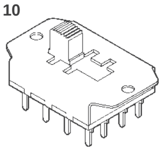


Fig. 11

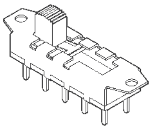


Fig. 12

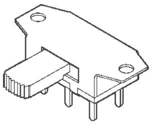


Fig. 13

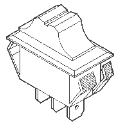


Fig. 14

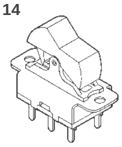


Fig. 15

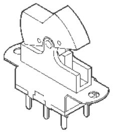


Fig. 16

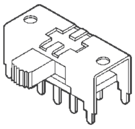


Fig. 17

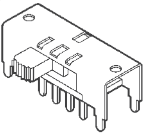


Fig. 18

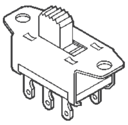


Fig. 19

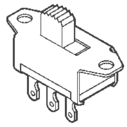


Fig. 20

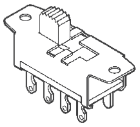


Fig. 21

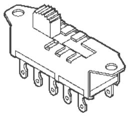


Fig. 22

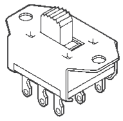


Fig. 23

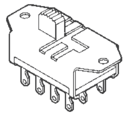
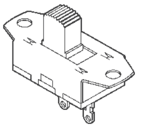


Fig. 24



NEW! **Fig. 25**

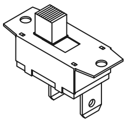
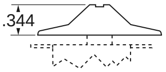


Fig. 26



CW Industries slide switches became popular with the industrial explosion after World War I. Thousands of consumer products have used CW Industries slide switches for applications such as: radios, TVs, appliances, and automotive. Aircraft, telephones, and marine equipment use CW Industries slide switches for both power switching and low level switching. Available in both solder eyelet versions for hand soldering or pc mount terminals for direct mounting. All slide switch actuators and buttons are black nylon 6/6. **MATERIALS: Buttons:** Type 6/6 nylon, black; **Moving Contact:** Copper; **Moving Contact Plating:** Silver; **Terminals:** Copper; **Terminal Plating:** Silver. **High Voltage Breakdown:** Min. of 1000 volts RMS, 60 Hz for one minute between parts of opposite polarity. **Contact Resistance:** Less than 0.01 ohm at 20 milliamperes dc. **LIFE CYCLING (no load):** Switches will be operative after 10,000 (min.) cycles at the rate of 10 cycles per minute. **LIFE CYCLING (load):** Switches will be operative after 6,000 (minimum) cycles at the rate of 10 cycles per minute at rated load. **APPROVAL LISTING:** UL/CSA

Digi-Key® Slide Switches Kit

Assortment of switches denoted. Includes notebook style storage case and bin storage guide.

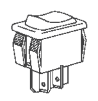
*** SW-KIT-ND** 130 total pieces **$89.95**

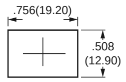
		Volts		Curr. Rtg. (A)		Dimensions - In. (mm)		Digi-Key	Price Each				CW Industries
Fig.	Circuit	DC	AC	DC	AC	L x W x H	Description	Part No.	1	10	100	500	Part No.
1	SPST	125	125	.5	.5	.250 x .320 x .620 (6.35 x 8.13 x 15.75)	Vertical Mount PC Switch	SW100-ND	.76	.70	.61	.52	G105-0513
2	SPDT	125	125	.5	.5	.505 x .305 x .515 (12.83 x 7.75 x 13.08)	Horizontal Mount PC Switch	SW101-ND*	1.23	1.13	.99	.84	G107-0513
3	SPST	125	125	.5	.5	.705 x.385 x .395 (17.91 x 9.78 x 10.03)	Panel Mount Snap-In Switch	SW331-ND	1.64	1.48	1.11	.74	G-107-SI-0005
3	SPDT	125	125	.5	.5	.705 x .385 x .395 (17.91 x 9.78 x 10.03)	Panel Mount Snap-In Switch	SW332-ND	1.84	1.65	1.24	.83	G-107-SI-0511
4	DPDT	125	125	.5	.5	.762 x .312 x .558 (19.35 x 7.92 x 14.17)	Micro-Miniature Switch	SW102-ND*	.83	.77	.67	.57	GS113-0512
5	SPDT	125	125	.5	.5	.750 x .220 x .458 (19.05 x 5.59 x 11.63)	Micro-Miniature Switch	SW103-ND*	.67	.62	.54	.46	GS115-0511
6	SPDT	125	125	.5	6.0	1.360 x .550 x .966 (34.54 x 13.97 x 24.54)	Standard Size Switch Eyelet Term	SW104-ND*	.37	.35	.30	.26	GF624-6014
6	SPDT	125	125	.5	6.0	1.360 x .550 x .966 (34.54 x 13.97 x 24.54)	Standard Size Switch (Off-Mom)	SW338-ND	1.81	1.63	1.22	.82	G-1132-0003
7	DPDT	125	125	.5	11	1.360 x .550 x .747 (34.54 x 13.97 x 18.97)	Standard Size Switch PCB Mount	SW105-ND*	.71	.65	.57	.48	GF1126-1110
7	DPDT	125	125	.5	11	1.360 x .550 x .747 (34.54 x 13.97 x 18.97)	Standard Size Switch Eyelet Term	SW333-ND	.94	.85	.64	.43	GF-1126-0033
8	4PDT	125	125	.5	6.0	1.360 x 1.000 x .767 (34.54 x 25.40 x 19.48)	Standard Size Switch PCB Mount	SW106-ND*	1.20	1.11	.96	.82	GF642-6010
9	DP-3Pos	125	125	.5	11	1.656 x .550 x .757 (42.06 x 13.97 x 19.23)	Standard Size Switch PCB Mount	SW107-ND*	.86	.79	.69	.59	G1128S-1110
9	DP-3Pos	125	125	.5	11	1.656 x .550 x .664 (42.06 x 13.97 x 16.87)	Standard Size Switch Eyelet Term	SW334-ND	1.15	1.03	.77	.52	G1128S-0055
9	SP-3Pos	125	125	.5	11	1.656 x .550 x .664 (42.06 x 13.97 x 16.87)	Standard Size Switch (On-Off-Mom)	SW337-ND	1.48	1.33	1.00	.67	G-633S-0000
10	4P-3Pos	125	125	.5	6.0	1.656 x 1.000 x .767 (42.06 x 25.40 x 19.48)	Standard Size Switch PCB Mount	SW108-ND	1.55	1.43	1.24	1.06	G660S-6010
11	DP-4Pos	125	125	.5	11	1.968 x .560 x .757 (49.99 x 14.22 x 19.23)	Standard Size Switch PCB Mount	SW109-ND	1.03	.95	.83	.70	G1138S-1110
11	DP-4Pos	125	125	.5	11	1.968 x .560 x .757 (49.99 x 14.22 x 19.23)	Standard Size Switch Eyelet Term	SW335-ND	1.38	1.24	.93	.62	G1138S-0048
12	DPDT	125	125	.5	3.0	1.360 x .550 x .610 (34.54 x 13.97 x 15.49)	Side Actuated Switch PCB Mount	SW110-ND	.50	.46	.40	.34	GG350-3010
13	SPDT	125	125	.5	13	1.235 x .680 x 1.397 (31.37 x 17.27 x 35.48)	Pop-in Mount Slide Switch	SW111-ND	.73	.68	.59	.50	G2012-1315
14	DPDT	125	125	.5	6.0	1.375 x .550 x 1.167 (34.93 x 13.97 x 29.64)	Rocker Switch PCB Mount	SW112-ND*	1.38	1.28	1.11	.95	GR5-626-6010
15	DPDT	125	125	.5	11	1.562 x .550 x 1.417 (39.67 x 13.97 x 35.99)	Rocker Switch PCB Mount	SW113-ND*	1.63	1.50	1.30	1.11	GR29-1126-1110
16	DPDT	125	125	.5	3.0	1.000 x .404 x .484 (25.40 x 10.26 x 12.29)	Miniature Side Actuated Switch PCB	SW114-ND*	.82	.76	.66	.56	GPI152-3013
17	DP-3Pos	125	125	.5	3.0	1.170 x .404 x .484 (29.72 x 10.26 x 12.29)	Miniature Side Actuated Switch PCB	SW115-ND*	1.00	.92	.80	.68	GPI154-3013
18	DPDT	125	125	.5	3.0	1.000 x .400 x .735 (25.40 x 10.16 x 18.67)	Miniature Slide Switch Eyelet Term	SW116-ND	.55	.51	.44	.38	GF126-3011
18	DPDT	125	125	.5	3.0	.628 x .400 x .735 (15.95 x 10.16 x 18.67)	Miniature Slide Switch w/o Mnt. Ears, PC Mnt.	SW342-ND	1.44	1.29	.97	.65	GF-126-0159
19	SPDT	125	125	.5	.5	1.000 x .400 x .735 (25.40 x 10.16 x 18.67)	Spring Return Switch Eyelet Term.	SW118-ND*	.74	.68	.59	.50	G133-3011
20	DP-3Pos	125	125	.5	3.0	1.190 x .400 x .745 (30.23 x 10.16 x 18.92)	Miniature Slide Switch Eyelet Term	SW119-ND*	.69	.64	.56	.47	G128S-3011
21	DP-4Pos	125	125	.5	3.0	1.377 x .400 x .745 (34.98 x 10.16 x 18.92)	Miniature Slide Switch Eyelet Term	SW120-ND	1.05	.97	.85	.72	G141S-3011
22	3PDT	125	125	.5	3.0	1.000 x .567 x .745 (25.40 x 14.40 x 18.92)	Miniature Slide Switch Eyelet Term	SW121-ND*	.94	.86	.75	.64	GF161-3011
23	3P-3Pos	125	125	.5	3.0	1.190 x .567 x .745 (30.23 x 14.40 x 18.92)	Miniature Slide Switch Eyelet Term	SW122-ND	1.17	1.08	.94	.80	G168S-3011
23	3P-3Pos	125	125	.5	3.0	1.656 x .780 x .674 (42.06 x 19.81 x 17.12)	Standard Size Switch Eyelet Term	SW336-ND	1.42	1.28	.96	.64	G-368S-0000
24	SPST	125	125	.5	11	1.360 x .550 x .654 (34.54 x 13.97 x 16.61)	Standard Size Switch Eyelet Term	SW148-ND	.73	.68	.59	.50	GF-1123-0009
25	SPST	—	125	—	16	1.360 x .550 x .654 (34.54 x 13.97 x 16.61)	Standard Size Power Switch Eyelet Term	SW615-ND *NEW!*	.70	.63	.47	.32	GF-1623-0000
26	Black Topper Button for SW105-ND, SW107-ND, SW110-ND, SW148-ND, SW333-ND, SW337-ND & SW334-ND							SW149-ND	.20	.19	.16	.14	G-02-072

CW INDUSTRIES Panel Mount Rocker Switches

Mini Rocker Switches

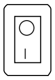
CW Rocker switches are single pole or double pole switches capable of currents normally associated with much larger switches. Standard black body with either black or red rocker knob. Designed to satisfy unique styling requirements which can be the key to a products success. Switches with markings are white ink stamped markings on rocker knob. Illuminated "Soft Glow" switches are 110VAC neon bulbs, red diffused lens. Typical applications: Motor-driven devices, instruments, household appliances, auto. access., recreational vehicles, and telecommunication, computer and computer peripheral equipment. All terminals are .187" QC





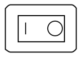
Switch Markings

A



Vertical Hot Stamp

B



Horizontal Hot Stamp

MATERIALS: • **Rocker Knob:** Nylon 94V-2. • **Housing:** Nylon 94V-2. • **Terminal/Stationary/Moving Contact:** Copper alloy, and/or copper alloy silver plated.

MOUNTING: Self locks without hardware when popped into the panel cutout. Acceptable panel thickness range is from .050 to .150 (1.27mm to 3.81mm).

PERFORMANCE STANDARDS: Contact Resistance: Less than .01Ω at 10mA (initial). **Operating Temp.:** 105°C maximum.

Caution: Burr direction must be away from the direction of insertion.

Switch Marking	Rocker Color	Circuit	Finish	Switch Function	Electrical Ratings	Listing Agencies	Digi-Key Part No.	Price Each 1	10	100	500	CW Industries Part No.
—	Black	SPST	Matte	ON/OFF	16A 125-250VAC	UL, CSA, VDE	SW339-ND	1.22	1.10	.83	.55	GRS-4011-0024
—	Black	SPST	Matte	ON/OFF	16A 125-250VAC	UL, CSA, VDE	SW301-ND	1.16	1.04	.78	.52	GRS-4011-1600
—	Red	SPST	Matte	ON/OFF	16A 125-250VAC	UL, CSA, VDE	SW302-ND	1.16	1.04	.78	.52	GRS-4011-0040
B	Black	SPST	Matte	ON/OFF	16A 125-250VAC	UL, CSA, VDE	SW322-ND	1.33	1.20	.90	.60	GRS-4011-0068
A	Black	SPST	Matte	ON/OFF	16A 125-250VAC	UL, CSA, VDE	SW323-ND	1.33	1.20	.90	.60	GRS-4011-0076
—	Black	SPDT	Matte	ON/ON	16A 125-250VAC	UL, CSA, VDE	SW303-ND	1.25	1.13	.85	.57	GRS-4012-1600
—	Red	SPDT	Matte	ON/ON	16A 125-250VAC	UL, CSA, VDE	SW304-ND	1.29	1.16	.87	.58	GRS-4012-0026
A	Black	SPDT	Matte	ON/ON	16A 125-250VAC	UL, CSA, VDE	SW324-ND	1.43	1.28	.96	.64	GRS-4012-0047
—	Black	DPDT	Matte	ON/ON	16A 125-250VAC	UL, CSA, VDE	SW307-ND	1.78	1.60	1.20	.80	GRS-4022-1600
—	Red	DPDT	Matte	ON/ON	16A 125-250VAC	UL, CSA, VDE	SW308-ND	1.78	1.60	1.20	.80	GRS-4022-0010
A	Black	DPDT	Matte	ON/ON	16A 125-250VAC	UL, CSA, VDE	SW325-ND	1.96	1.76	1.32	.88	GRS-4022-0013
—	Black	SPDT	Matte	ON/OFF/ON	13A 125VAC, 10A 250VAC	UL, CSA	SW305-ND	1.59	1.43	1.07	.72	GRS-4013A-1300
—	Red	SPDT	Matte	ON/OFF/ON	13A 125VAC, 10A 250VAC	UL, CSA	SW306-ND	1.59	1.43	1.07	.72	GRS-4013A-0008
—	Black	SPST	Matte	OFF/MOM	13A 125VAC, 10A 250VAC	UL, CSA	SW329-ND	1.34	1.20	.90	.60	GRS-4011B-1300
—	Black	SPDT	Matte	MOM/OFF/MOM	13A 125VAC, 12A 250VAC	UL, CSA	SW340-ND	1.55	1.39	1.05	.70	GRS-4013C-0001
—	Black	DPDT	Matte	ON/OFF/ON	13A 125VAC, 10A 250VAC	UL, CSA	SW309-ND	2.12	1.90	1.43	.95	GRS-4023A-1300
—	Red	DPDT	Matte	ON/OFF/ON	13A 125VAC, 10A 250VAC	UL, CSA	SW310-ND	2.12	1.90	1.43	.95	GRS-4023A-0009
—	Black	DPST	Matte	OFF/MOM	13A 125VAC, 10A 250VAC	UL, CSA	SW330-ND	1.87	1.68	1.26	.84	GRS-4021B-0000
—	Black	DPDT	Matte	MOM/OFF/MOM	13A 125VAC, 10A 250VAC	UL, CSA	SW311-ND	2.12	1.90	1.43	.95	GRS-4023C-1300
—	Red	DPDT	Matte	MOM/OFF/MOM	13A 125VAC, 10A 250VAC	UL, CSA	SW312-ND	2.12	1.90	1.43	.95	GRS-4023C-0005
—	Red Illum.	SPST	Matte	ON/OFF	16A 125VAC	UL, CSA	SW300-ND	2.93	2.63	1.97	1.32	GRL-4011-1600

Standard Rocker Switches

CW Rocker Switches are designed to solve the switching problems of the user and styled to satisfy the designer…easy to mount, easy to terminate, and easy to actuate. Hot stamped versions are marked for switch position identification illuminated version is 120VAC neon bulb. **OPERATING STANDARDS: Temperature:** 105°C max. **Contact Resistance:** 0.01Ω at 10mA. **MATERIALS: Rocker Knob:** Nylon 94V-4. **Housing:** Nylon 94V-2. **Terminal Board:** Nylon 94V-0. **Terminal/Moving Contact:** Copper and/or copper alloy silver plated. **MOUNTING:** No hardware or tools needed; self locks into proper panel cutout. Acceptable panel thickness range is from .025 to .180 (0.64mm to 4.57mm). All terminals are .250" QC.

Caution: Burr direction must be away from the direction of insertion.

Fig. 1

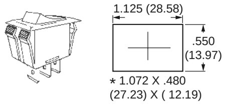
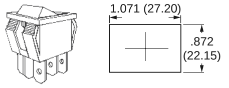


Fig. 2



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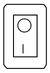


Vertical
Hot Stamp

Switch Markings

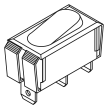
Fig.	Switch Marking	Rocker Color	Finish	Circuit	Switch Function	Electrical Ratings	Listing Agencies	Digi-Key Part No.	Price Each 1	10	100	500	CW Industries Part No.
1	—	Red Illum.	Matte	SPST-NO	ON/OFF	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW313-ND	2.37	2.12	1.59	1.06	GRL-2011-1600
1	—	Black	Matte	SPST-NO	ON/OFF	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW314-ND	1.06	.96	.72	.48	GRS-2011-2000
1	—	Red	Matte	SPST-NO	ON/OFF	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW315-ND	1.12	1.00	.75	.50	GRS-2011-2019
1	A	Black	Matte	SPST-NO	ON/OFF	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW326-ND	1.23	1.11	.83	.56	GRS-2011-2080
1	—	Black	Matte	SPST-NO	ON/OFF	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW316-ND*****	1.12	1.00	.75	.50	GRS-2011-3000
1	—	Black	Matte	SPDT	ON/ON	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW319-ND*****	1.20	1.08	.81	.54	GRS-2012-3000
1	A	Black	Matte	SPST	ON/OFF	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW341-ND*****	1.29	1.16	.87	.58	GRS-2011-3020
1	—	Black	Matte	SPDT	ON/ON	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW317-ND	1.20	1.08	.81	.54	GRS-2012-2000
1	—	Red	Matte	SPDT	ON/ON	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW318-ND	1.20	1.08	.81	.54	GRS-1200-2009
1	A	Black	Matte	SPDT	ON/ON	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW327-ND	1.38	1.24	.93	.62	GRS-2012-2028
1	—	Black	Matte	SPDT	ON/OFF/ON	16A 125VAC, 12A 250VAC	UL, CSA	SW320-ND	1.55	1.40	1.05	.70	GRS-2013A-2000
1	—	Black	Matte	SPST-NO	OFF/MOM	13A 125VAC	UL, CSA	SW613-ND *NEW!*	1.23	1.11	.83	.56	GRS-2011B-2000
1	—	Black	Matte	SPST-NC	ON/MOM	13A 125VAC	UL, CSA	SW614-ND *NEW!*	1.23	1.11	.83	.56	GRS-2011C-2000
2	—	Black	Matte	DPDT	ON/ON	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW321-ND	2.88	2.58	1.94	1.29	GR-2022-1600
2	A	Black	Matte	DPDT	ON/ON	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW328-ND	3.06	2.74	2.06	1.37	GR-2022-0007

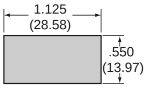
* Dimensions are 1.072" x .480" (27.23mm x 12.19mm)

NEW! StyleLine Rocker Switches

CW's GRS-2000 Series StyleLine Rocker Switches, available in SPST, SPDT, AND SPDT-Center Off versions, are specially designed to meet contemporary product styling and global appearance trends. The contoured design and slim attractive profile of the switch knob and bezel provide superior styling, and are available in both high-gloss and matte finish.

They are ideal for appliances, recreational equipment, medical and scientific devices, testing equipment, security systems, computers and peripherals, and many other products where performance and style are important. All terminals are .250" QC.





Rocker Color	Finish	Circuit	Switch Function	Electrical Ratings	Listing Agencies	Digi-Key Part No.	Price Each 1	10	100	500	CW Industries Part No.
Black	Matte	SPST	ON/OFF	16A-125VAC	UL, CSA, VDE	SW601-ND	1.33	1.19	.90	.60	GRS-2011-2400
White	Matte	SPST	ON/OFF	16A-125VAC	UL, CSA, VDE	SW602-ND	1.39	1.25	.94	.63	GRS-2011-2401
Black	Hi-Gloss	SPST	ON/OFF	16A-125VAC	UL, CSA, VDE	SW603-ND	1.33	1.19	.90	.60	GRS-2011-2500
White	Hi-Gloss	SPST	ON/OFF	16A-125VAC	UL, CSA, VDE	SW604-ND	1.39	1.25	.94	.63	GRS-2011-2501
Black	Matte	SPDT	ON/OFF	16A-125VAC	UL, CSA, VDE	SW605-ND	1.50	1.35	1.02	.68	GRS-2012-2400
White	Matte	SPDT	ON/OFF	16A-125VAC	UL, CSA, VDE	SW606-ND	1.57	1.41	1.06	.71	GRS-2012-2401
Black	Hi-Gloss	SPDT	ON/OFF	16A-125VAC	UL, CSA, VDE	SW607-ND	1.50	1.35	1.02	.68	GRS-2012-2503
White	Hi-Gloss	SPDT	ON/OFF	16A-125VAC	UL, CSA, VDE	SW608-ND	1.57	1.41	1.06	.71	GRS-2012-2504
Black	Matte	SPDT	ON/OFF/ON	16A-125VAC	UL, CSA, VDE	SW609-ND	1.94	1.74	1.31	.87	GRS-2013A-2400
White	Matte	SPDT	ON/OFF/ON	16A-125VAC	UL, CSA, VDE	SW610-ND	2.01	1.80	1.35	.90	GRS-2013A-2401
Black	Hi-Gloss	SPDT	ON/OFF/ON	16A-125VAC	UL, CSA, VDE	SW611-ND	1.94	1.74	1.31	.87	GRS-2013A-2500
White	Hi-Gloss	SPDT	ON/OFF/ON	16A-125VAC	UL, CSA, VDE	SW612-ND	2.01	1.80	1.35	.90	GRS-2013A-2501

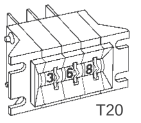
Thumbwheel Switches

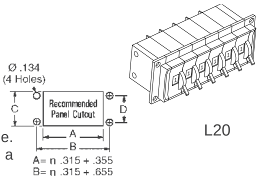
Fig.	Output Code	Posi-tions	Read-Out	Finish	Digi-Key Part No.	Price Each 1	10	100	500	Cherry Part No.
T55/T56 Pushwheel — Front Snap-In Mount										
2A	BCD	10	0-9	Matte	CH178-ND	16.15	14.36	8.75	—	PACA-3000
2A	BCD Compl.	10	0-9	Matte	CH179-ND	24.92	22.16	13.51	—	PAEA-3000
2A	BCD*	10	0-9	Matte	CH180-ND	19.68	17.50	10.67	—	PACA-4000
Right End Caps for T55 Switches					CH188-ND	.68	.60	.42	.40	0609-0799
Left End Caps for T55 Switches					CH189-ND	.68	.60	.42	.40	0609-0801
2B	Decimal	10	0-9	Matte	CH239-ND	18.66	16.59	10.11	9.51	PEAA-3000
2B	BCD	10	0-9	Matte	CH181-ND	18.20	16.18	9.87	—	PECA-3000
2B	Hex	16	0-15	Matte	CH240-ND	25.08	22.30	13.60	12.78	PEGA-3000
2B	Hex	16	0-9, A-F	Matte	CH281-ND	24.76	22.01	13.42	12.61	PEHA-3000
2B	BCD*	10	0-9	Matte	CH183-ND	23.06	20.50	12.50	—	PECA-4000
Right End Caps for T56 Switches					CH190-ND	.68	.60	.42	.40	0609-0756
Left End Caps for T56 Switches					CH191-ND	.68	.60	.42	.40	0609-0754
T57 Pushwheel — Back Mount										
3	Decimal	10	0-9	Matte	CH242-ND	14.50	12.89	9.27	8.49	0T57-01M0
T59 Pushwheel — "Dustproof" Front Mount										
2C	BCD	10	0-9	Matte	CH185-ND	7.86	6.99	4.08	—	PBC1-E015
Right End Caps for T59 Switches					CH194-ND	.68	.60	.42	.40	0609-1347
Left End Caps for T59 Switches					CH195-ND	.68	.60	.42	.40	0609-1346
T20 Thumbwheel — L20 Leverwheel										
1	Decimal	10	0-9	Gloss	CH226-ND	6.72	6.24	6.00	—	0T20-01A0
1	Hex	16	0-9, A-F	Gloss	CH282-ND	10.81	10.04	9.65	—	0T20-13A0
1	Decimal	10	0-9	Gloss	CH233-ND	8.44	7.84	7.54	—	0L20-01A0
1	Decimal	10	0-9	Matte	CH234-ND	8.72	8.10	7.79	—	0L20-01M0

* With extended board for diodes.

Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	Cherry Part No.
Connectors						
4	T55 Series BCD/HEX, PC Mount Terminal	CH271-ND	3.94	3.51	2.44	C2KO-P107
4	T56 Series BCD/HEX, PC Mount Terminal	CH274-ND	4.21	3.75	2.61	C2RO-P111

Fig. 1 – T20, L20 (Right and Left End Caps)





Each digit is a separate module. Combine each module to make a final unit, as shown above.

Model	A	B	C	D
T20/L20	(n x 12.70) = 10.29	(n x 12.70) + 15.11	24.89	22.86

Fig. 2 – T55, T56 & T59 (Right and Left End Caps)

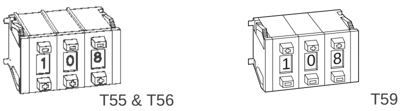


Fig. A

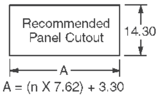


Fig. B

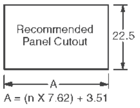
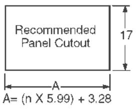
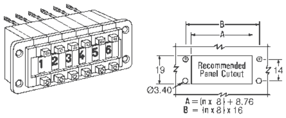


Fig. C



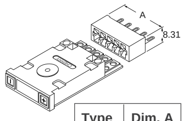
Each digit is a separate module. Combine each module to make a final unit, as shown above.

Fig. 3 – T57



Each digit is a separate module. Combine each module to make a final unit, as shown above.

Fig. 4 – Connectors



Type	Dim. A
T55	16.00
T56	23.88
T57	25.91

Thumbwheel Switches

A7B Series:

Features: • Dustproof construction ensures highly reliable performance at low voltage and very small current even under adverse environmental conditions • Switch units can be assembled simply by fitting the integral hook coupler of each unit into the mating unit, thus eliminating the need of nuts and bolts for assembly • Switch assembly can be mounted easily by merely pushing the assembly into the mounting panel cutout from front

A7CN Series:

Features: • Designed specially for printed circuit boards • The transparent window plate fitted in the readout section prevents the ingress of dust and also protects dial characters against wear by incorrect handling • Switch units can be assembled simply by fitting the integral hook coupler of each unit, into the mating unit, thus eliminating the need of nuts and bolts for assembly

A7D Series:

Features: • Cost effectiveness and improved reliability achieved through insert-molding and fewer component parts • Plastic spring with minimal fatigue and a mechanical service life of 30,000

Fig. 1

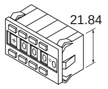


Fig. 2

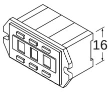
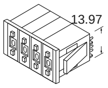


Fig. 3

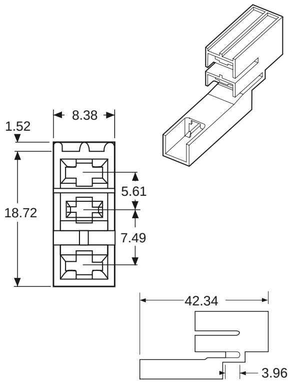


Each digit is a separate module. Combine each module to make a final unit, as shown above.

Fig.	Output	No. of Positions	Color	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
1	BCD	0-9	Black Gloss	SW266-ND	8.48	7.63	6.78	A7BS-206-1
1	BCD	0-9	Black Gloss	SW267-ND	8.48	7.63	6.78	A7BS-206-S-1
1	BCD w/ Ext. Brd.	0-9	Black Gloss	SW268-ND	9.13	8.22	7.30	A7BS-207-1
1	+, - Display Only	+, -	Black Gloss	SW269-ND	10.93	9.84	8.74	A7BS-207-PM-1
—	Connector for A7BS Series, Solder Terminal w/ Mount Ears			SW270-ND	4.98	4.48	3.98	A7B-C
—	End Caps for A7BS Series, Left/Right 2 Pcs.			SW271-ND	1.38	1.24	1.10	A7B-M-1
—	Spacer for A7BS Series, Black No Marking			SW272-ND	.75	.68	.60	A7B-PA-1
2	BCD (Back Mount)	0-9	Black Gloss	SW273-ND	6.78	6.10	5.42	A7CN-106-1
2	BCD (Front Mount)	0-9	Black Gloss	SW274-ND	6.78	6.10	5.42	A7CN-206-1
—	End Caps for A7CN Series, Back Mount Only			SW275-ND	.83	.75	.66	A7CN-1M-1
—	Spacer for A7CN Series, Back Mount Only, Black			SW276-ND	.65	.59	.52	A7CN-1PA-1
—	End Caps for A7CN Series, Front Mount Only			SW277-ND	.83	.75	.66	A7CN-2M-1
—	Spacer for A7CN Series, Front Mount Only, Black			SW278-ND	.65	.59	.52	A7CN-2PA-1
3	BCD (Back Mount)	0-9	Black Gloss	SW279-ND	5.23	4.71	4.18	A7D-106-1
3	BCD (Front Mount)	0-9	Black Gloss	SW280-ND	5.23	4.71	4.18	A7D-206-1
3	BCD (Back Mount)	0-9	Light Gray	SW504-ND	5.23	4.71	4.18	A7D-106
3	BCD (Front Mount)	0-9	Light Gray	SW505-ND	5.23	4.71	4.18	A7D-206
—	End Caps for A7D Series, Back Mount Only, Black			SW281-ND	.83	.75	.66	A7D-1M-1
—	End Caps for A7D Series, Front Mount Only, Black			SW282-ND	.75	.68	.60	A7D-2M-1
—	Spacer for A7D Series, Back Mount Only, Black			SW283-ND	.83	.75	.66	A7D-1PA-1
—	Spacer for A7D Series, Front Mount Only, Black			SW284-ND	.83	.75	.66	A7D-2PA-1
—	End Caps for A7D Series, Back Mount Only, Light Gray			SW506-ND	.83	.75	.66	A7D-1M
—	End Caps for A7D Series, Front Mount Only, Light Gray			SW508-ND	.78	.70	.62	A7D-2M
—	Spacer for A7D Series, Back Mount Only, Light Gray			SW507-ND	.83	.75	.66	A7D-1PA
—	Spacer for A7D Series, Front Mount Only, Light Gray			SW509-ND	.83	.75	.66	A7D-2PA

Switch Connector and Terminal

(To be used with Omron "V" Series Lever Switch)



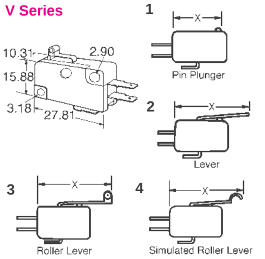
Switch Connector: 94V-2 Nylon • U.L. Approved • Accepts 14-28 AWG • No. of Circuits: 3 • Max. Current Rating: 10 • Max. Voltage Rating: 250 • Mounting Ears: No • Max. Panel Thickness: N/A • Eng. No.: 2191.

Switch Connector:	**Terminal:** Without Detent, Loose Form
WM2553-ND	**WM2514-ND**
$.53/1	**$.20**/1
$3.83/10	**$1.49**/10
$34.00/100	**$13.20**/100
$255.00/1000	**$99.00**/1000

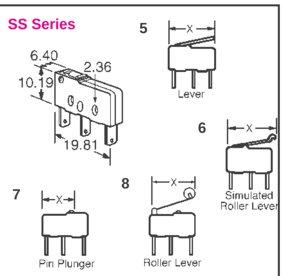
OMRON® Basic Lever Type Switches

9247B-ND Omron Switch Databook...**$2.00**

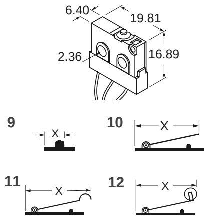
V Series



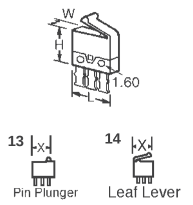
SS Series



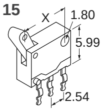
D2SW Series - Watertight



D2MQ Series



15



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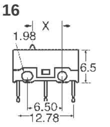

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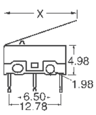
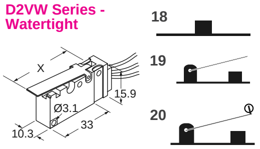
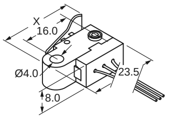


D2VW Series - Watertight



21 Watertight



V Series: **Features:** • Operating Frequency: Mechanical: 600 operations per minute; Electrical: 60 operations per minute • Contact Resistance: 15mΩ maximum • Ambient Operating Temperature: -25°C to +80°C • Humidity: 85% RH maximum • Service Life: Mechanical: 50,000,000 operations minimum Electrical: 100,000 operations minimum

SS Series: **Features:** • Economical, subminiature basic switch offers long service life (30 million operations minimum) • All models are free from overtravel restrictions, permit easy setting • Wide switching capacity range from microvoltage/current loads (1mA at 5 VDC) to high-capacity loads 10.1A at 250VAC) **Characteristics:** • Operating Frequency: Mechanical: 400 operations per minute. Electrical: 60 operations per minute • Ambient Operating Temperature: -25°C to +85°C • Humidity: 85% RH max. • Service Life: Mechanical: 30 million operations minimum (10 million operations minimum for the SS-10 series). Electrical: 200,000 operations minimum

Watertight D2SW Miniature Basic Switch: **Features:** • High-quality watertight miniature basic switch - meets IP67 requirements • A wide operating temperature range of -40°C to 85°C is ideal for any operating environment • Ideal for the automobile, agricultural machinery, automatic vending machine, refrigerator, ice-manufacturing, bath equipment, hot-water supply, air conditioner, and factory machine industries **Characteristics:** • Operating Frequency: Mechanical: 300 operations/min; Electrical: 60 operations/minute • Contact Resistance: 50mΩ maximum • Life Expectancy: Mechanical: 5,000,000 operations minimum, Electrical: 200,000 operations minimum • Ambient Operating Humidity: 95% maximum • Enclosure Rating: Reference to IP67

D3C Series: **Features:** • Built-in slide mechanism selects shorting or non-shorting switch timing • 3mm long stroke • PCB mount switch with 100 milliamp capacity • Ideal for household appliances, sound equipment, office equipment, communications equipment, etc. • Compact size (8W x 6H x 4.2D mm) **Characteristics:** • Operating Frequency: Mechanical:200 operations per minute; Electrical: 30 operations per minute • Contact Resistance: 50mΩ max. • Ambient Operating Temperature: -20°C to 80°C • Operating Humidity: 65% max. at 5° to 35°C • Service Life: 50,000 operations minimum at the rated switch frequency

D2F Series: **Features:** • Super compact, ideal for PCB mounting • Long life span assured by high-precision dual spring revers-action mechanism • Flux penetration prevented by using an insert terminal and allowing a height difference at the case bottom • Ideal for a wide variety of applications, from household appliances and office equipment to audio equipment and communications equipment

Watertight D2VW/D2FW Miniature Basic Switch: **Features:** • High-quality watertight, high-precision miniature basic switch — meets IP67 requirements • Monoblock construction assures high sealing capability and is ideal for dusty places or where water is sprayed • V-series internal mechanism assures high operating-position accuracy (±0.4mm) and long life (10 million operations) • Wide operating temperature range of -40°C to 90°C is ideal for any operating environment • General-load (5A @ 250VAC) and micro-load (.1A @ 125VAC) available

Fig.	Contact Style	Contact Rating	Terminal Size Inch (mm)	Dim. "X" (mm)	Actuation Force	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
V Switches										
1	SPDT	10 amps	.187 QC (4.75)	24.38	100gf	SW126-ND	1.85	1.67	1.48	V-10G-1C24-K
2	SPDT	10 amps	.187 QC (4.75)	38.35	125gf	SW127-ND	1.88	1.69	1.50	V-10G2-1C25-K
3	SPDT	10 amps	.187 QC (4.75)	24.38	240gf	SW128-ND	2.25	2.03	1.80	V-10G5-1C25-K
1	SPDT	15 amps	.187 QC (4.75)	24.38	200gf	SW129-ND	1.85	1.67	1.48	V-15G-1C25-K
1	SPDT	15 amps	.187 QC (4.75)	24.38	400gf	SW130-ND	1.85	1.67	1.48	V-15G-1C26-K
2	SPDT	15 amps	.187 QC (4.75)	38.35	125gf	SW132-ND	1.88	1.69	1.50	V-15G2-1C26-K
2	SPDT	15 amps	.187 QC (4.75)	62.23	70gf	SW133-ND	2.05	1.85	1.64	V-15G3-1C25-K
2	SPDT	15 amps	.187 QC (4.75)	62.23	130gf	SW134-ND	2.05	1.85	1.64	V-15G3-1C26-K
4	SPDT	15 amps	.187 QC (4.75)	38.86	125gf	SW135-ND	1.98	1.78	1.58	V-15G4-1C25-K
3	SPDT	15 amps	.187 QC (4.75)	24.38	480gf	SW136-ND	2.25	2.03	1.80	V-15G5-1C26-K
3	SPDT	15 amps	.187 QC (4.75)	34.04	250gf	SW151-ND	2.25	2.03	1.80	V-15G6-1C26-K
SS Switches										
7	SPDT Gold	.1 amp	.110 QC (2.79)	13.46	50gf	SW138-ND	2.08	1.87	1.66	SS-01FT
5	SPDT Gold	.1 amp	.110 QC (2.79)	19.69	50gf	SW139-ND	2.30	2.07	1.84	SS-01GLT
7	SPDT Gold	.1 amp	PC Mount	13.46	150gf	SW155-ND	2.03	1.83	1.62	SS-01D
5	SPDT Gold	.1 amp	PC Mount	19.69	50gf	SW239-ND	2.00	1.80	1.60	SS-01GLD
6	SPDT Gold	.1 amp	PC Mount	21.59	50gf	SW240-ND	2.00	1.80	1.60	SS-01GL13D
8	SPDT Gold	.1 amp	PC Mount	19.61	50gf	SW343-ND	2.40	2.16	1.92	SS-01GL2D
7	SPDT	5 amps	.110 QC (2.79)	13.46	150gf	SW141-ND	1.35	1.22	1.08	SS-5T
5	SPDT	5 amps	.110 QC (2.79)	19.69	50gf	SW143-ND	1.23	1.11	.98	SS-5GLT
6	SPDT	5 amps	.110 QC (2.79)	21.59	50gf	SW144-ND	1.18	1.06	.94	SS-5GL13T
7	SPDT	5 amps	.110 QC (2.79)	13.46	50gf	SW142-ND	1.23	1.11	.98	SS-5FT
8	SPDT	5 amps	Solder	19.61	50gf	SW156-ND	1.45	1.31	1.16	SS-5GL2
7	SPDT	5 amps	PC Mount	13.46	150gf	SW241-ND	1.23	1.11	.98	SS-5D
5	SPDT	5 amps	PC Mount	19.69	50gf	SW242-ND	1.48	1.33	1.18	SS-5GLD
6	SPDT	5 amps	PC Mount	21.59	50gf	SW243-ND	1.53	1.38	1.22	SS-5GL13D
8	SPDT	5 amps	PC Mount	19.61	50gf	SW244-ND	1.73	1.56	1.38	SS-5GL2D
7	SPDT	10 amps	.110 QC (2.79)	13.46	150gf	SW245-ND	2.18	1.96	1.74	SS-10T
5	SPDT	10 amps	.110 QC (2.79)	19.69	50gf	SW246-ND	1.98	1.78	1.58	SS-10GLT
6	SPDT	10 amps	.110 QC (2.79)	21.59	50gf	SW247-ND	2.00	1.80	1.60	SS-10GL13T
8	SPDT	10 amps	.110 QC(2.79)	19.61	50gf	SW248-ND	2.23	2.01	1.78	SS-10GL2T
Watertight D2SW Series Switches										
9	SPDT	3 amps	Solder	13.46	180gf	SW228-ND	2.53	2.28	2.02	D2SW-3HS
9	SPDT	3 amps	.110 QC (2.79)	13.46	180gf	SW229-ND	2.53	2.28	2.02	D2SW-3TS
9	SPDT	3 amps	PC Mount	13.46	180gf	SW291-ND	2.53	2.28	2.02	D2SW-3DS
9	SPDT	3 amps	12 Wires (304.8)	13.46	180gf	SW292-ND	4.18	3.76	3.34	D2SW-3MS
10	SPDT	3 amps	Solder	19.69	60gf	SW293-ND	2.68	2.41	2.14	D2SW-3L1HS
10	SPDT	3 amps	.110 QC (2.79)	19.69	60gf	SW294-ND	2.68	2.41	2.14	D2SW-3L1TS
10	SPDT	3 amps	12 Wires (304.8)	19.69	60gf	SW295-ND	4.35	3.92	3.48	D2SW-3L1MS
11	SPDT	3 amps	Solder	21.59	60gf	SW296-ND	2.68	2.41	2.14	D2SW-3L3HS
11	SPDT	3 amps	12 Wires (304.8)	21.59	60gf	SW297-ND	4.35	3.92	3.48	D2SW-3L3MS
12	SPDT	3 amps	Solder	19.61	60gf	SW237-ND	3.05	2.75	2.44	D2SW-3L2HS
12	SPDT	3 amps	12 Wires (304.8)	19.61	60gf	SW238-ND	4.60	4.14	3.68	D2SW-3L2MS
D2MQ Switches										
13	SPDT Silver	500mA	.05 (1.27)	6.00	120gf	SW145-ND	2.80	2.52	2.24	D2MQ-1
14	SPDT Silver	500mA	.05 (1.27)	7.70	60gf	SW146-ND	2.88	2.59	2.30	D2MQ-1L
D3C Series Switches										
15	Non-Short	.1 amp	PC Mount	8.69	130gf	SW224-ND	1.13	1.02	.90	D3C-1210
15	Shorting	.1 amp	PC Mount	8.69	130gf	SW226-ND	1.13	1.02	.90	D3C-2210
15	Non-Short	.1 amp	PC Mount	8.69	40gf	SW225-ND	1.13	1.02	.90	D3C-1220
15	Shorting	.1 amp	PC Mount	8.69	40gf	SW227-ND	1.13	1.02	.90	D3C-2220
D2F Series Switches										
16	SPDT	3 amps	PC Mount	5.18	150gf	SW500-ND	1.00	.90	.80	D2F
16	SPDT	.1 amp	PC Mount	5.18	150gf	SW501-ND	1.00	.90	.80	D2F-01
16	SPDT	.1 amp	PC Mount	5.18	75gf	SW502-ND	1.00	.90	.80	D2F-01F
16	SPDT	3 amps	PC Mount	5.18	75gf	SW503-ND	.95	.86	.76	D2F-F
D2F Lever Series										
17	SPDT	3 amps	PC Mount	13.97	80gf	SW152-ND	1.10	.99	.88	D2F-L
17	SPDT	3 amps	PC Mount	13.97	25gf	SW153-ND	1.10	.99	.88	D2F-FL
17	SPDT	.1 amp	PC Mount	13.97	80gf	SW154-ND	1.10	.99	.88	D2F-01L
Watertight D2VW Series Switches										
18	SPDT	.1 amp	.187 QC (4.75)	20	200gf	SW427-ND	3.55	3.20	2.84	D2VW-01-1HS
18	SPDT	.1 amp	12 wires (304.8)	20	200gf	SW428-ND	7.28	6.55	5.82	D2VW-01-1MS
19	SPDT	.1 amp	.187 QC (4.75)	59	120gf	SW429-ND	4.25	3.83	3.40	D2VW-01L1-1HS
19	SPDT	.1 amp	12 wires (304.8)	59	120gf	SW430-ND	7.63	6.87	6.10	D2VW-01L1-1MS
20	SPDT	.1 amp	.187 QC (4.75)	34	120gf	SW431-ND	5.68	5.11	4.54	D2VW-01L2-1HS
20	SPDT	.1 amp	12 wires (304.8)	34	120gf	SW432-ND	7.43	6.69	5.94	D2VW-01L2-1MS
18	SPDT	5 amps	.187 QC (4.75)	20	200gf	SW433-ND	3.40	3.06	2.72	D2VW-5-1HS
18	SPDT	5 amps	12 wires (304.8)	20	200gf	SW434-ND	5.63	5.07	4.50	D2VW-5-1MS
19	SPDT	5 amps	.187 QC (4.75)	59	120gf	SW435-ND	3.55	3.20	2.84	D2VW-5L1-1HS
19	SPDT	5 amps	12 wires (304.8)	59	120gf	SW436-ND	5.48	4.93	4.38	D2VW-5L1-1MS
20	SPDT	5 amps	.187 QC (4.75)	34	120gf	SW437-ND	3.78	3.40	3.02	D2VW-5L2-1HS
20	SPDT	5 amps	12 wires (304.8)	34	120gf	SW438-ND	5.85	5.27	4.68	D2VW-5L2-1MS
Watertight D2FW Series Switches										
21	SPST-NO	.1 amp	12 wires (304.8)	22.8	250gf	SW511-ND	3.48	3.13	2.78	D2FW-G073M
21	SPST-NO	1 amp	12 wires (304.8)	22.8	250gf	SW512-ND	3.48	3.13	2.78	D2FW-G273M
21	SPST-NO	.1 amp	12 wires (304.8)	19.0	300gf	SW513-ND	3.48	3.13	2.78	D2FW-G083M
21	SPST-NO	1 amp	12 wires (304.8)	19.0	300gf	SW514-ND	3.48	3.13	2.78	D2FW-G283M

OMRON® Basic Switch

Omron's "Z" Series switches feature 15A contacts which directly switches such loads as motors, halogen lamps and solenoids. Omron's "A" Series has the same body yet switches 20A loads with large inrush currents. All switches feature screw terminal connections and are UL listed CSA certified. Both series are momentary action, SPDT versions.

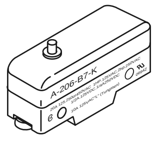


Fig. 1

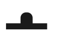


Fig. 2

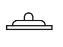


Fig. 3

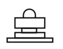


Fig. 4

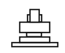
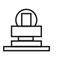


Fig. 5



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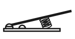

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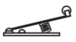


Fig. 8

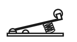
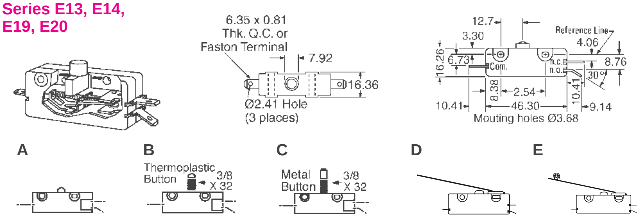


Fig.	Operating Force g max.	Switch Current (A)	Actuator Type	Actuator Length (mm)	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
1	350	15	Pin Plunger	—	SW190-ND	6.85	6.17	5.48	Z15G-B
2	350	15	Spring Plunger	—	SW191-ND	8.43	7.59	6.74	Z15GD-B
3	350	15	Panel Plunger	—	SW192-ND	11.50	10.35	9.20	Z15GQ-B
4	350	15	Panel Roller	—	SW193-ND	13.58	12.22	10.86	Z15GQ21-B
5	350	15	Panel Roller	—	SW194-ND	13.58	12.22	10.86	Z15GQ22-B
6	70	15	Lever	63.50	SW195-ND	9.20	8.28	7.36	Z15GW-B
7	100	15	Roller Lever	48.49	SW196-ND	9.20	8.28	7.36	Z15GW2-B
8	160	15	Roller Lever	26.59	SW197-ND	8.60	7.74	6.88	Z15GW22-B
6	6	15	Low Force Lever	63.50	SW198-ND	9.50	8.55	7.60	Z15HW24-B7-K
1	625	20	Pin Plunger	—	SW230-ND	9.28	8.35	7.42	A20G-B7-K
6	70	20	Lever	63.50	SW231-ND	9.33	8.40	7.46	A20GV-B7-K
7	90	20	Roller Lever	48.49	SW232-ND	9.33	8.40	7.46	A20GV2-B7-K
3	625	20	Panel Plunger	—	SW233-ND	14.10	12.69	11.28	A20GQ-B7-K
8	160	20	Roller Lever	26.59	SW234-ND	10.03	9.03	8.02	A20GV22-B7-K
Phenolic Terminal Cover for A/Z Series					SW235-ND	.88	.79	.70	AP-B
Terminal Cover with Strain Relief for A/Z Series					SW236-ND	4.53	4.08	3.62	AP-Z

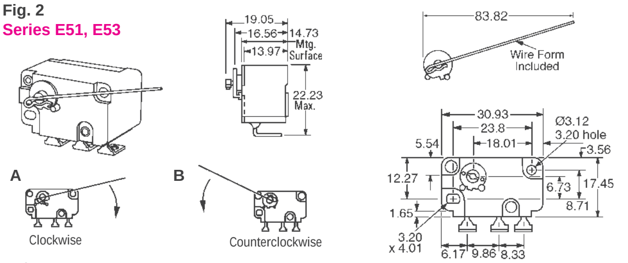
Basic and Lever Type Switches

Fig. 1
Series E13, E14, E19, E20



Ratings:
E13: 15A – 125/250VAC, 3/4 HP – 125VAC, 1-1/2 HP – 250VAC. **E14:** 25A – 125/250VAC, 1 HP – 125VAC, 2 HP – 250VAC. **E19:** 15A – 125/250VAC, 3/4 HP – 125VAC. **E20:** 20A – 125/250VAC, 1 HP – 125 VAC

Fig. 2
Series E51, E53

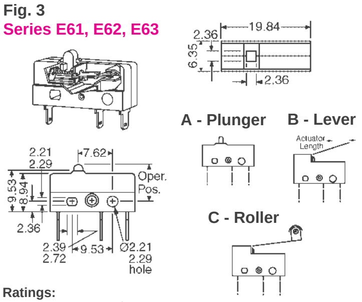


Ratings:
E51: 6 amps 250VAC. **E53:** 0.1 amps 125VAC. Gold crosspoint contacts. **Operating Torque:** Standard force – 4.0 inch grams. **Overtravel:** 15° min. **Movement differential:** 3° min.

Fig.	Circuitry	Current	Terminal Inch (mm)	Actuator	Actuator Length Inch (mm)	Operating Force (Max. gms.)	Digi-Key Part No.	Price Each 1	10	100	Cherry Part No.
General Purpose — E13, E14, E19 and E20 Power Series											
1A	SPDT	15A	.250 QC (6.35)	Plastic Button	—	425	CH102-ND	2.78	2.48	1.68	E13-00E
1D	SPDT	15A	.250 QC (6.35)	Long Lever	1.5 (38.10)	100	CH312-ND	3.81	3.39	2.31	E13-00H
1B	SPDT	15A	.250 QC (6.35)	THD Bushing/Plastic Button	—	425	CH100-ND	3.11	2.76	1.89	E13-00J
1E	SPDT	15A	.250 QC (6.35)	Long Roller	1.391 (35.33)	100	CH313-ND	4.59	4.08	2.78	E13-00K
1C	SPDT	15A	.250 QC (6.35)	THD Bushing/Metal Button	—	425	CH101-ND	3.92	3.48	2.37	E13-00M
1D	SPDT	15A	.250 QC (6.35)	Long Lever	1.75 (44.45)	65	CH314-ND	3.81	3.39	2.31	E13-50H
1A	SPDT	25A	.250 QC (6.35)	Plastic Button	—	850	CH315-ND	3.48	3.10	2.10	E14-00A
1D	SPDT	25A	.250 QC (6.35)	Short Lever	.821 (20.85)	285	CH316-ND	4.73	4.20	2.86	E14-00H
1E	SPDT	25A	.250 QC (6.35)	Short Roller	.652 (16.56)	285	CH317-ND	5.29	4.71	3.19	E14-00K
1C	SPDT	25A	.250 QC (6.35)	THD Bushing/Metal Button	—	850	CH318-ND	4.67	4.16	2.83	E14-00M
1D	SPDT	25A	.250 QC (6.35)	Long Lever	1.071 (27.20)	170	CH319-ND	4.64	4.13	2.81	E14-50H
1A	DPDT	15A	.250 QC (6.35)	Plastic Button	—	850	CH320-ND	5.83	5.19	3.53	E19-00A
1D	DPDT	15A	.250 QC (6.35)	Long Lever	1.5 (38.10)	205	CH321-ND	6.97	6.20	4.20	E19-00H
1B	DPDT	15A	.250 QC (6.35)	THD Bushing/Plastic Button	—	850	CH322-ND	6.26	5.57	3.78	E19-00J
1E	DPDT	15A	.250 QC (6.35)	Long Roller	1.391 (35.33)	212	CH323-ND	7.99	7.11	4.82	E19-00K
1C	DPDT	15A	.250 QC (6.35)	THD Bushing/Metal Button	—	850	CH324-ND	6.62	5.88	4.00	E19-00M
1D	DPDT	15A	.250 QC (6.35)	Long Lever	1.75 (44.45)	130	CH325-ND	6.40	5.69	3.87	E19-50H
1E	DPDT	15A	.250 QC (6.35)	Long Roller	1.645 (41.78)	150	CH326-ND	8.07	7.18	4.87	E19-50K
1D	DPDT	20A	.250 QC (6.35)	Short Lever	.821 (20.85)	425	CH328-ND	10.29	9.15	6.22	E20-00K
1C	DPDT	20A	.250 QC (6.35)	THD Bushing/Metal Button	—	850	CH329-ND	9.75	8.67	5.88	E20-00M
1E	DPDT	20A	.250 QC (6.35)	Long Roller	1.391 (35.33)	212	CH330-ND	10.85	9.65	6.55	E20-50K
Brass Mounting Nut for Threaded Bushing							CH284-ND	.14	.12	.09	0012-0023
Low Torque — E51 and E53 Series											
2A	SPDT	6A	.205 QC (5.21)	CW Lever	—	4	CH146-ND	9.37	8.33	5.65	E51-00B
2A	SPDT	6A	.187 QC (4.75)	CW Lever	—	4	CH148-ND	9.37	8.33	5.65	E51-00R
2B	SPDT	6A	.205 QC (5.21)	CCW Lever	—	4	CH147-ND	9.37	8.33	5.65	E51-00E
2B	SPDT	6A	.187 QC (4.75)	CCW Lever	—	4	CH149-ND	9.37	8.33	5.65	E51-00T
2A	SPDT	6A	.187 QC (4.75)	CW Lever	—	4	CH364-ND	9.37	8.33	5.65	E51-50R
2B	SPDT	6A	.187 QC (4.75)	CCW Lever	—	4	CH365-ND	9.37	8.33	5.65	E51-50T
2A	SPDT	.1A	.187 QC (4.75)	CW Lever	—	4	CH152-ND	12.26	10.90	7.40	E53-00R
2B	SPDT	.1A	.187 QC (4.75)	CCW Lever	—	4	CH153-ND	12.26	10.90	7.40	E53-00T
Subminiature — E61, E62, E63 Series											
3A	SPDT	5A	.093 QC (2.36)	Plunger Only	—	90	CH103-ND	3.32	2.96	2.01	E61-00A
3B	SPDT	5A	.093 QC (2.36)	Lever Std. Ratio	.271 (6.88)	27	CH105-ND	4.78	4.25	2.88	E61-00H
3C	SPDT	5A	.093 QC (2.36)	Roller Std. Ratio	.201 (5.11)	30	CH107-ND	5.08	4.52	3.07	E61-00K
3A	SPDT	5A	Solder Eyelet	Plunger Only	—	90	CH104-ND	3.32	2.96	2.01	E61-10A
3B	SPDT	5A	Solder Eyelet	Lever Std. Ratio	.271 (6.88)	27	CH106-ND	4.78	4.25	2.88	E61-10H
3C	SPDT	5A	Solder Eyelet	Roller Std. Ratio	.201 (5.11)	30	CH108-ND	5.08	4.52	3.07	E61-10K
3A	SPDT	5A	.110 QC (2.79)	Plunger Only	—	90	CH370-ND	3.32	2.96	2.01	E61-30A
3B	SPDT	5A	.110 QC (2.79)	Lever Std. Ratio	.271 (6.88)	27	CH371-ND	4.78	4.25	2.88	E61-30H
3C	SPDT	5A	.110 QC (2.79)	Roller Lever	.201 (5.11)	30	CH372-ND	5.08	4.52	3.07	E61-30K
3B	SPDT	5A	PC Mount	Lever Std. Ratio	.396 (10.06)	9	CH373-ND	4.78	4.25	2.88	E61-50H
3C	SPDT	5A	PC Mount	Roller Lever	.326 (8.28)	10	CH374-ND	5.08	4.52	3.07	E61-50K
3A	SPDT	10A	.093 QC (2.36)	Plunger Only	—	212	CH109-ND	3.75	3.34	2.27	E62-00A
3B	SPDT	10A	.093 QC (2.36)	Lever Std. Ratio	.271 (6.88)	56	CH111-ND	4.78	4.25	2.88	E62-00H
3C	SPDT	10A	.093 QC (2.36)	Roller Std. Ratio	.201 (5.11)	65	CH113-ND	5.48	4.88	3.32	E62-00K
3A	SPDT	10A	Solder Eyelet	Plunger Only	—	212	CH110-ND	3.75	3.34	2.27	E62-10A
3B	SPDT	10A	Solder Eyelet	Lever Std. Ratio	.271 (6.88)	56	CH112-ND	4.78	4.25	2.88	E62-10H
3C	SPDT	10A	Solder Eyelet	Roller Std. Ratio	.201 (5.11)	65	CH114-ND	5.48	4.88	3.32	E62-10K
3A	SPDT	10A	.110 QC (2.79)	Plunger Only	—	212	CH377-ND	3.75	3.34	2.27	E62-30A
3C	SPDT	10A	.110 QC (2.79)	Roller Lever	.201 (5.11)	65	CH378-ND	5.48	4.88	3.32	E62-30K
3C	SPDT	10A	PC Mount	Roller Lever	.326 (8.28)	33	CH379-ND	5.48	4.88	3.32	E62-50K
3A	SPDT	.1A	.110 QC (2.79)	Plunger Only	—	90	CH380-ND	6.94	6.17	4.19	E63-00A
3B	SPDT	.1A	.110 QC (2.79)	Lever Std. Ratio	.271 (6.88)	27	CH381-ND	7.56	6.72	4.57	E63-00H
3C	SPDT	.1A	.110 QC (2.79)	Roller Lever	.201 (5.11)	30	CH382-ND	8.10	7.20	4.89	E63-00K
3A	SPDT	.1A	Short Solder	Plunger Only	—	90	CH383-ND	5.94	5.28	3.80	E63-10A
3B	SPDT	.1A	PC Mount	Lever Std. Ratio	.396 (10.06)	9	CH384-ND	7.56	6.72	4.57	E63-50H
Ultra Subminiature — DA3 Series											
4A	SPDT	.1A	.110 QC (2.79)	Plunger Only	—	90	CH285-ND	3.73	3.32	2.25	DA3C-B1AA
4A	SPDT	.1A	.093 QC (2.36)	Plunger Only	—	90	CH140-ND	3.65	3.24	2.21	DA3C-F1AA
4A	SPDT	.1A	.093 QC (2.36)	Plunger Only	—	90	CH141-ND	2.97	2.64	1.90	DA3C-D1AA
4A	SPDT	.1A	PC Mount	Plunger Only	—	90	CH287-ND	4.48	3.99	2.87	DA3C-H1AA
4B	SPDT	.1A	.093 QC (2.36)	Lever Std. Ratio	.271 (6.88)	27	CH142-ND	5.51	4.90	3.33	DA3C-F1LB
4B	SPDT	.1A	Solder Eyelet	Lever Std. Ratio	.271 (6.88)	27	CH143-ND	5.75	5.12	3.48	DA3C-D1LB
4C	SPDT	.1A	.093 QC (2.36)	Roller Std. Ratio	.201 (5.11)	30	CH144-ND	5.94	5.28	3.59	DA3C-F1RB
4C	SPDT	.1A	Solder Eyelet	Roller Std. Ratio	.201 (5.11)	30	CH145-ND	5.94	5.28	3.59	DA3C-D1RB
4D	SPDT	.1A	.093 QC (2.36)	Simulated Roller	.197 (5.00)	30	CH286-ND	5.99	5.33	3.62	DA3C-B1SB
Panel Mount Pushbutton Single Pole — E69, E79 Series											
5A	SPDT	10A	.187 QC (1.87)	Momentary	.875 (22.23)	425	CH154-ND	3.70	3.29	2.23	E69-00A
5D	SPDT	10A	.187 QC (1.87)	Momentary Cheat Interlock	.980 (24.89)	425/285	CH155-ND	4.40	3.92	2.66	E69-30A
5C	SPDT	10A	.187 QC (1.87)	Short Button Momentary	.450 (11.43)	425	CH156-ND	3.70	3.29	2.23	E69-40A
5A	DPDT	10A	.187 QC (1.87)	Momentary	.875 (22.23)	680	CH157-ND	6.37	5.67	3.86	E79-00A
5B	DPDT	10A	.187 QC (1.87)	Momentary Cheat Interlock	.980 (24.89)	757/567	CH158-ND	8.51	7.56	5.14	E79-30A
5C	DPDT	10A	.187 QC (1.87)	Short Button Momentary	.450 (11.43)	680	CH159-ND	6.37	5.67	3.86	E79-40A

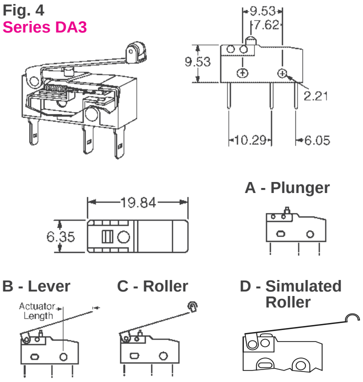
(Continued)

Fig. 3
Series E61, E62, E63



Ratings:
E61: 5 amps – 125/250VAC.
E62: 10.1 amps – 125/250VAC, 1/4 HP – 125VAC.
E63: .1 amp – 125VAC, .25 amp – 30VDC

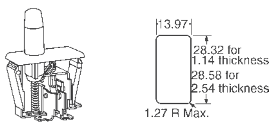
Fig. 4
Series DA3



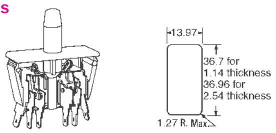
Ratings: DA3: 0.1 amps 125VAC.

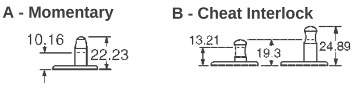
Fig. 5

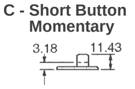
Series E69



Series E79







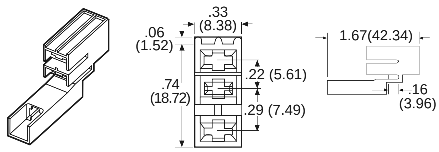
Ratings:
E69: 10 amps 125/250VAC, 1/3 H.P., 125/250 VAC.
E79: 10 amps 125/250VAC, 1/3 H.P., 125/250VAC.

CHERRY Basic and Lever Type Switches *(Cont.)*

Fig.	Circuitry	Current	Terminal Inch (mm)	Actuator	Actuator Length Inch (mm)	Operating Force (Max. gms.)	Digi-Key Part No.	Price Each 1	10	100	Cherry Part No.
Water and Dust Sealed — E72 Series											
6A	SPDT	10A	10” Wires	Plunger Only	.230 (5.84)	300	CH389-ND	10.91	9.70	6.59	E72-40AT
6B	SPDT	10A	10” Wires	Roller Lever	.858 (21.79)	25	CH390-ND	13.18	11.72	7.96	E72-40KT
6C	SPDT	10A	10” Wires	Roller Lever	.858 (21.79)	67	CH391-ND	11.64	10.35	7.02	E72-40HT
Internationally Approved Ultra Subminiature — DB1 Series											
7	SPDT	5A	Solder	Plunger Only	—	150	CH288-ND	4.27	3.80	2.57	DB1C-A1AA
7	SPDT	5A	PCB Pin	Plunger Only	—	150	CH289-ND	4.27	3.80	2.57	DB1C-C1AA
Panel Mount Pushbutton and Line Interrupt Switches											
8	SPDT	10A	.187” QC (4.75)	Push-Pull	.920 (23.37) Pushed	510	CH392-ND	6.37	5.67	3.86	E79-20A
8	SPDT	.1A	.187” QC (4.75)	Momentary	.845 (21.46)	425	CH386-ND	5.24	4.66	3.17	E68-00A
8	SPDT	.1A	.187” QC (4.75)	Cheat Interlock	.730 (18.54)	385	CH387-ND	5.54	4.92	3.34	E68-30A
8	SPDT	.1A	.187” QC (4.75)	Short Button Mom.	.420 (10.67)	425	CH388-ND	5.67	5.04	3.43	E68-40A
9	SPST	10A	.187” QC (4.75)	Plunger Only	—	866	CH303-ND	10.91	9.70	6.59	F81A-A110
9	SPST	10A	.250” QC (6.35)	Plunger Only	—	866	CH304-ND	10.91	9.70	6.59	F81A-A120
9	SPST	10A	.187” QC (4.75)	Barrier	—	866	CH305-ND	11.21	9.96	6.77	F81A-B110
9	SPST	10A	.250” QC (6.35)	Barrier	—	866	CH306-ND	11.21	9.96	6.77	F81A-B120
9	SPST	16A	.250” QC (6.35)	Plunger Only	—	866	CH307-ND	12.45	11.07	7.52	F82A-A120
9	SPST	16A	.250” QC (6.35)	Barrier	—	866	CH308-ND	12.64	11.24	7.64	F82A-B120
9	SPST	.1A	.250” QC (6.35)	Barrier	—	866	CH309-ND	16.58	14.74	10.02	F83A-B120
Standard Force Switches — E Series											
10A	SPDT	.1A	.187” QC (4.75)	Plunger Only	—	75	CH331-ND	4.10	3.65	2.49	E21-00A
10D	SPDT	.1A	.187” QC (4.75)	Short Roller	.810 (20.57)	75	CH332-ND	6.16	5.48	3.72	E21-00K
10B	SPDT	.1A	.187” QC (4.75)	Long Lever	1.400 (35.56)	35	CH333-ND	5.67	5.04	3.43	E21-50H
10C	SPDT	.1A	.187” QC (4.75)	Long Roller	1.340 (34.04)	35	CH334-ND	6.53	5.81	3.94	E21-50K
10A	SPDT	3A	.187” QC (4.75)	Plunger Only	—	15	CH335-ND	3.35	2.98	2.02	E22-00AX
10D	SPDT	3A	.187” QC (4.75)	Short Roller	.810 (20.57)	75	CH336-ND	4.10	3.65	2.49	E22-00K
10B	SPDT	3A	.187” QC (4.75)	Long Lever	1.400 (35.56)	8	CH337-ND	3.75	3.34	2.26	E22-50HX
10B	SPDT	3A	.187” QC (4.75)	Long Lever	1.400 (35.56)	35	CH338-ND	3.48	3.10	2.11	E22-50H
10C	SPDT	3A	.187” QC (4.75)	Long Roller	1.340 (34.04)	35	CH339-ND	4.10	3.65	2.49	E22-50K
10B	SPDT	3A	.187” QC (4.75)	Long Lever	2.757 (70.03)	4	CH340-ND	3.75	3.34	2.26	E22-55HX
10B	SPDT	3A	.187” QC (4.75)	Long Lever	2.932 (74.47)	2	CH341-ND	3.92	3.48	2.37	E22-85HX
10A	SPDT	5A	.187” QC (4.75)	Plunger Only	—	45	CH342-ND	3.05	2.72	1.85	E23-00AX
10A	SPDT	5A	.187” QC (4.75)	Plunger Only	—	170	CH343-ND	2.84	2.52	1.72	E23-00A
10D	SPDT	5A	.187” QC (4.75)	Short Roller	.810 (20.57)	170	CH344-ND	4.19	3.72	2.54	E23-00K
10B	SPDT	5A	.187” QC (4.75)	Long Lever	1.400 (35.56)	22	CH345-ND	4.02	3.58	2.14	E23-50HX
10C	SPDT	5A	.187” QC (4.75)	Long Roller	1.340 (34.04)	86	CH346-ND	4.19	3.72	2.54	E23-50K
10B	SPDT	5A	.187” QC (4.75)	Long Lever	2.757 (70.03)	10	CH347-ND	3.86	3.44	2.33	E23-55HX
10B	SPDT	5A	.187” QC (4.75)	Long Lever	2.932 (74.47)	6	CH348-ND	3.86	3.44	2.33	E23-85HX
10A	SPDT	10A	.187” QC (4.75)	Plunger Only	—	285	CH349-ND	2.73	2.43	1.65	E33-00A
10D	SPDT	10A	.187” QC (4.75)	Short Roller	.810 (20.57)	285	CH350-ND	3.51	3.12	2.13	E33-00K
10B	SPDT	10A	.187” QC (4.75)	Long Lever	1.400 (35.56)	144	CH351-ND	3.13	2.79	1.89	E33-50H
10C	SPDT	10A	.187” QC (4.75)	Long Roller	1.340 (34.04)	144	CH352-ND	3.62	3.22	2.20	E33-50K
10B	SPDT	10A	.187” QC (4.75)	Long Lever	2.757 (70.03)	17	CH353-ND	3.35	2.98	2.02	E33-55HX
10C	SPDT	10A	.187” QC (4.75)	Long Roller	1.580 (40.13)	22	CH354-ND	3.35	2.98	2.02	E33-75HX
10B	SPDT	10A	.187” QC (4.75)	Long Lever	1.516 (38.51)	10	CH355-ND	3.83	3.41	2.32	E33-85GX
10A	SPDT	15A	.187” QC (4.75)	Plunger Only	—	400	CH356-ND	3.13	2.79	1.89	E34-00A
10D	SPDT	15A	.187” QC (4.75)	Short Roller	.810 (20.57)	400	CH357-ND	4.02	3.58	2.44	E34-00K
10B	SPDT	15A	.187” QC (4.75)	Long Lever	1.400 (35.56)	50	CH358-ND	3.46	3.08	2.09	E34-50HX
10B	SPDT	15A	.187” QC (4.75)	Long Lever	1.400 (35.56)	200	CH359-ND	3.46	3.08	2.09	E34-50H
10C	SPDT	15A	.187” QC (4.75)	Long Roller	1.340 (34.04)	200	CH360-ND	3.97	3.53	2.40	E34-50K
10B	SPDT	15A	.187” QC (4.75)	Plastic Lever	1.382 (35.10)	200	CH361-ND	3.32	2.96	2.01	E34-50N
10B	SPDT	15A	.187” QC (4.75)	Long Lever	2.757 (70.03)	22	CH362-ND	3.51	3.12	2.13	E34-55HX
10B	SPDT	15A	.187” QC (4.75)	Long Lever	2.932 (74.47)	13	CH363-ND	3.70	3.29	2.23	E34-85HX
Miniature International — D4 Series											
11A	SPDT	.1A	.187” QC (4.75)	Button	—	75	CH115-ND	4.54	4.04	2.74	D41C-R1AA
11A	SPDT	.1A	.187” QC (4.75)	Button	—	15	CH119-ND	4.78	4.25	2.90	D41L-R1AA
11B	SPDT	.1A	.187” QC (4.75)	Lever Std. Ratio	1.400 (35.56)	35	CH297-ND	4.97	4.42	3.00	D41C-R1LD
11B	SPDT	.1A	.187” QC (4.75)	Lever High Ratio	2.93 (74.47)	2	CH118-ND	4.97	4.42	3.00	D41L-R1XL
11C	SPDT	.1A	.187” QC (4.75)	Roller Std. Ratio	.810 (20.57)	75	CH117-ND	5.18	4.61	3.14	D41C-R1RA
11C	SPDT	.1A	.187” QC (4.75)	Roller Std. Ratio	1.340 (34.04)	35	CH298-ND	5.18	4.61	3.14	D41C-R1RD
11A	SPDT	3A	.187” QC (4.75)	Button	—	75	CH120-ND	2.48	2.21	1.51	D42C-R1AA
11A	SPDT	3A	.187” QC (4.75)	Button	—	15	CH124-ND	2.92	2.60	1.77	D42L-R1AA
11B	SPDT	3A	.187” QC (4.75)	Lever High Ratio	2.93 (74.47)	2	CH123-ND	4.40	3.92	2.66	D42L-R1XL
11C	SPDT	3A	.187” QC (4.75)	Roller Std. Ratio	.810 (20.57)	75	CH122-ND	3.43	3.05	2.08	D42C-R1RA
11A	SPDT	5A	.187” QC (4.75)	Button	—	170	CH125-ND	2.46	2.19	1.49	D43C-R1AA
11A	SPDT	5A	.187” QC (4.75)	Button	—	45	CH129-ND	2.78	2.48	1.68	D43L-R1AA
11B	SPDT	5A	.187” QC (4.75)	Lever High Ratio	2.93 (74.47)	6	CH128-ND	3.46	3.08	2.09	D43L-R1ML
11C	SPDT	5A	.187” QC (4.75)	Roller Std. Ratio	.810 (20.57)	170	CH127-ND	3.56	3.17	2.16	D43C-R1RA
11A	SPDT	10A	.187” QC (4.75)	Button	—	285	CH130-ND	2.48	2.21	1.51	D44C-R1AA
11A	SPDT	10A	.187” QC (4.75)	Button	—	75	CH134-ND	2.73	2.43	1.65	D44L-R1AA
11B	SPDT	10A	.187” QC (4.75)	Lever Std. Ratio	.865 (21.97)	285	CH131-ND	2.97	2.64	1.80	D44C-R1LA
11B	SPDT	10A	.187” QC (4.75)	Lever Std. Ratio	1.400 (35.56)	35	CH299-ND	3.00	2.67	1.82	D44L-R1LD
11B	SPDT	10A	.187” QC (4.75)	Lever High Ratio	2.93 (74.47)	10	CH133-ND	3.24	2.88	1.96	D44L-R1ML
11C	SPDT	10A	.187” QC (4.75)	Roller Std. Ratio	.810 (20.57)	285	CH132-ND	3.27	2.91	1.97	D44C-R1RA
11C	SPDT	10A	.187” QC (4.75)	Roller Std. Ratio	—	75	CH301-ND	3.62	3.22	2.20	D44L-R1RA
11A	SPDT	15A	.187” QC (4.75)	Button	—	400	CH135-ND	2.97	2.64	1.80	D45C-R1AA
11A	SPDT	15A	.187” QC (4.75)	Button	—	100	CH139-ND	2.97	2.64	1.80	D45L-R1AA
11B	SPDT	15A	.187” QC (4.75)	Lever Std. Ratio	.865 (21.97)	400	CH136-ND	3.27	2.91	1.97	D45C-R1LA
11B	SPDT	15A	.187” QC (4.75)	Lever High Ratio	2.93 (74.47)	13	CH138-ND	3.13	2.79	1.89	D45L-R1ML
11B	SPDT	15A	.187” QC (4.75)	Lever Std. Ratio	2.93 (74.47)	17	CH302-ND	2.97	2.64	1.80	D45L-R1LL
11C	SPDT	15A	.187” QC (4.75)	Roller Std. Ratio	.810 (20.57)	400	CH137-ND	3.54	3.15	2.14	D45C-R1RA

molex GC/Waldom Switch Connector and Terminal

(TO BE USED WITH D4 and E SERIES)



Switch Connector:
• 94V-2 Nylon • U.L. Approved • Accepts 14-28 AWG • No. of Circuits: 3 • Maximum Current Rating: 10 • Maximum Voltage Rating: 250 • Mounting Ears: No • Maximum Panel Thickness: N/A • Eng. No.: 2191

WM2553-ND Connector .... **$.53**/1; **$3.83**/10; **$34.00**/100

Terminal:
Without Detent, Loose Form

WM2514-ND Terminal...................... **$.20**/1; **$1.49**/10; **$13.20**/100

Fig. 6
Series E70

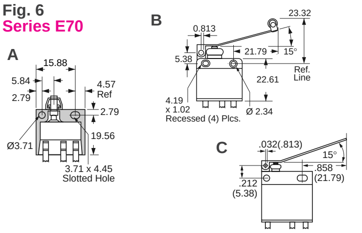


Fig. 7
Series DB

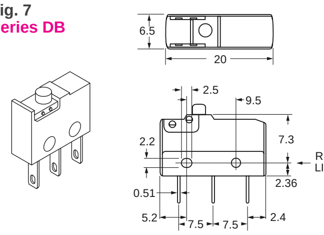


Fig. 8
Series E79, E68

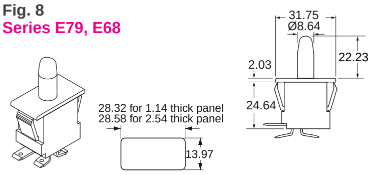


Fig. 9
Series F80

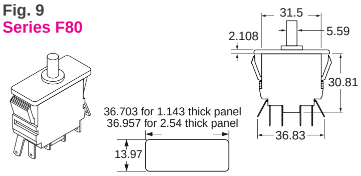
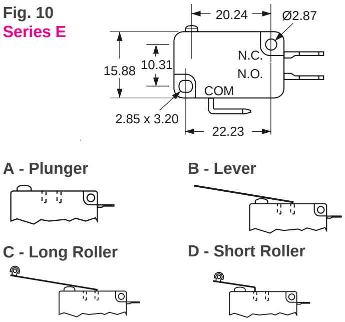
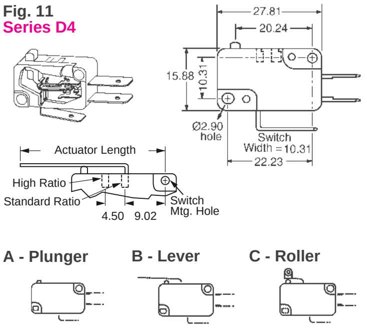


Fig. 10
Series E



Ratings: E21: 0.1 amp 125VAC, Gold contacts. **E22:** 3 amps 250VAC. **E23:** 5 amps 250VAC. **E33:** 10 amps 250VAC. **E34:** 15 amps 250VAC, UL94HB

Fig. 11
Series D4

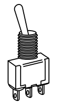


Ratings: 187 QC terminals.
D41: 0.1 amps 125VAC, Gold crosspoint contacts. **D42:** 3 amps 125/250VAC. **D43:** 5 amps, 1/4 H.P., 125/250VAC. **D44:** 10 amps, 1.2 H.P., 125/250VAC. **D45:** 15 amps. 1/2 H.P., 125/250VAC.

C&K Toggle Switches

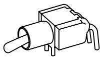
9138B-ND	C&K Switch Data Book	$2.95

Fig. 1



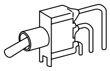
Vertical

Fig. 2



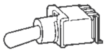
Right Angle

Fig. 3



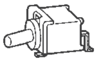
Vertical Rt. Angle

Fig. 4



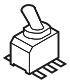
Mini SMT

Fig. 5



Ultra-Mini SMT

Fig. 6



Ultra-Mini SMT

Contact Material Options

B Contacts and Terminals: Copper alloy, with gold plate over nickel plate. Rating: 0.4 VA max. @ 20 VAC or DC max.

Q End Contacts: Coin silver, silver plated. Center Contact & All Terminals: Copper alloy, silver plated. Rating: 7000 Series: 5A @ 120 VAC or 2A @ 250 VAC; E-Series: 7.5A @ 125 VAC or 3A @ 250 VAC; T-Series: 3A @ 120 VAC.

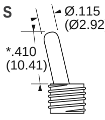
G End Contacts: Coin silver, with gold plate over nickel plate. Center Contact & All Terminals: Copper alloy, with gold plate over nickel plate. Rating: 0.4 VA max. @ 20 VAC or DC max. or 5 amps @ 120 VAC or 28 VDC; 2 amps @ 250 VAC.

Circuit	Switching Function	Options (see diagrams)			Contact Material	Dimensions Inch (mm) L x W x H	Digi-Key Part No.	Price Each			C & K Part No.
		Actuator	Bushing	Termination				1	25	100	
Fig. 1 — Vertical											
SPDT	On-On	S	D9	C	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1002-ND	5.16	4.13	3.27	7101SD9CQE
	On-On	S	Y	C	B	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1003-ND	4.20	3.36	2.66	7101SYCBE
	On-On	S	Y	C	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1004-ND	3.90	3.12	2.47	7101SYCQE
	On-On	S	H3	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1020-ND	6.00	4.80	3.80	7101SH3ZQE
	On-On	S	Y	Z	B	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1021-ND	3.75	3.00	2.38	7101SYZBE
SPDT	On-On	S	Y	Z	G	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1022-ND	4.35	3.48	2.76	7101SYZGE
	On-On	S	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1023-ND	3.75	3.00	2.38	7101SYZQE
	On-On	S	Y	C	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1014-ND†	5.16	4.13	3.27	U11SYCQE
	On-On	S	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1040-ND†	5.01	4.01	3.18	U11SYZQE
	On-Off-On	S	Y	C	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1005-ND	4.50	3.60	2.85	7103SYCQE
SPDT	On-Off-On	S	Y	Z	B	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1025-ND	4.26	3.41	2.70	7103SYZBE
	On-Off-On	S	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1026-ND	4.26	3.41	2.70	7103SYZQE
	On-Off-Mom	S	Y	C	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1008-ND	5.79	4.64	3.67	7107SYCQE
	On-Off-Mom	S	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1028-ND	4.35	3.48	2.76	7107SYZQE
	Mom-Off-Mom	S	Y	C	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1007-ND	4.35	3.48	2.76	7105SYCQE
SPDT	Mom-Off-Mom	S	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1027-ND	4.35	3.48	2.76	7105SYZQE
	On-Mom	S	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1029-ND	5.64	4.52	3.58	7108SYZQE
	On-On	S	Y	W6	B	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1213-ND	6.72	5.38	4.26	7101SYW6BE
	On-On	S	Y	W	B	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1379-ND	5.76	4.61	3.65	7101SYWBE
	On-On	S	Y	W	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1381-ND	5.76	4.61	3.65	7101SYWQE
	On-On	S	H	C	Q	.320 x .200 x .340 (8.13 x 5.08 x 8.64)	CKN1091-ND	5.22	4.18	3.31	T101SHCQE
	On-On	S	H	Z	Q	.320 x .200 x .340 (8.13 x 5.08 x 8.64)	CKN1066-ND	5.40	4.32	3.42	T101SHZQE
SPDT	On-Off-On	S	H	C	Q	.320 x .200 x .340 (8.13 x 5.08 x 8.64)	CKN1092-ND	6.27	5.02	3.98	T103SHCQE
	On-Off-On	S	H	Z	Q	.320 x .200 x .340 (8.13 x 5.08 x 8.64)	CKN1087-ND	6.45	5.16	4.09	T103SHZQE
	On-Off-Mom	S	H	Z	Q	.320 x .200 x .340 (8.13 x 5.08 x 8.64)	CKN1181-ND	6.66	5.33	4.22	T107SHZQE
	Mom-Off-Mom	S	H	Z	Q	.320 x .200 x .340 (8.13 x 5.08 x 8.64)	CKN1088-ND	6.45	5.16	4.09	T105SHZQE
	On-On	M	D	C	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1000-ND	5.16	4.13	3.27	7101MDCQE
SPDT	On-On	M	D	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1016-ND	5.01	4.01	3.18	7101MDZQE
	On-On	M	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1017-ND	5.01	4.01	3.18	7101MYZQE
	On-On	M	D9	V3	B	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1042-ND	6.00	4.80	3.80	7101MD9V3BE
	On-On	M	D9	V3	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1175-ND	6.27	5.02	3.98	7101MD9V3QE
	On-0ff-On	M	D9	V3	B	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1169-ND	6.78	5.43	4.30	7103MD9V3BE
SPDT	On-Off-On	M	D9	V3	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1176-ND	6.78	5.43	4.30	7103MD9V3QE
	On-On	S	D9	V3	B	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1043-ND	5.91	4.73	3.75	7101SD9V3BE
	On-On	P3	Y	C	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1001-ND	6.87	5.50	4.36	7101P3YCQE
	On-On	P3	Y	Z	B	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1018-ND	6.72	5.38	4.26	7101P3YZBE
	On-On	P3	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1019-ND	4.65	3.72	2.95	7101P3YZQE
SPDT	On-Off-On	P3	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1024-ND	7.38	5.91	4.68	7103P3YZQE
	On-Off-Mom	P3	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1142-ND	7.50	6.00	4.75	7107P3YZQE
	On-Mom	P3	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1143-ND	7.50	6.00	4.75	7108P3YZQE
	Mom-Off-Mom	P3	Y	C	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1006-ND	7.65	6.12	4.85	7105P3YCQE
	On-On	K2	—	C	B	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1215-ND	9.18	7.35	5.82	7101K2CBE
SPDT	On-On	K2	—	C	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1216-ND	9.18	7.35	5.82	7101K2CQE
	On-On	K2	—	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1125-ND	6.30	5.04	3.99	7101K2ZQE
	On-On	K2	—	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1126-ND†	8.58	6.87	5.44	U11K2ZQE
	On-Off-On	K2	—	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1151-ND	9.09	7.28	5.76	7103K2ZQE
	Mom-Off-Mom	K2	—	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1152-ND	9.21	7.37	5.84	7105K2ZQE
SPDT	On-On	L1	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1147-ND	5.01	4.01	3.18	7101L1YZQE
	On-Off-On	L1	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1148-ND	5.52	4.42	3.50	7103L1YZQE
	On-On	L41(wht)	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1219-ND	7.53	6.03	4.77	7101L41YZQE1
	On-On	L41(blk)	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1220-ND	7.53	6.03	4.77	7101L41YZQE2
	On-On	L41(red)	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1221-ND	7.53	6.03	4.77	7101L41YZQE3
SPDT	On-On	K12	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1212-ND	9.03	7.23	5.72	7101K12ZQE
	On-Off-On	K12	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1155-ND	9.09	7.28	5.76	7103K12ZQE
	Mom-Off-Mom	K12	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1156-ND	9.21	7.37	5.84	7105K12ZQE
	On-On	T	—	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1164-ND	7.77	6.22	4.93	7101TZQE
	On-Off-On	T	—	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1165-ND	8.28	6.63	5.25	7103TZQE
SPDT	On-On	S	CW	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1159-ND	6.51	5.21	4.13	7101SCWZQE
	On-Off-On	S	CW	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1160-ND	7.02	5.62	4.45	7103SCWZQE
	Mom-Off-Mom	S	CW	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1161-ND	7.14	5.72	4.53	7105SCWZQE
DPDT	On-On	S	Y	C	B	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1010-ND	7.62	6.10	4.83	7201SYCBE
	On-On	S	Y	C	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1011-ND	5.55	4.44	3.52	7201SYCQE
	On-On	S	Y	Z	B	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1034-ND	7.38	5.91	4.68	7201SYZBE
	On-On	S	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1035-ND	5.25	4.20	3.33	7201SYZQE
	On-On	S	Y	W	B	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1380-ND	8.67	6.94	5.50	7201SYWBE
	On-On	S	Y	W	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1382-ND	8.67	6.94	5.50	7201SYWQE
	On-Off-On	S	Y	C	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1012-ND	6.36	5.09	4.03	7203SYCQE
DPDT	On-Off-On	S	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1036-ND	6.30	5.04	3.99	7203SYZQE
	Mom-Off-Mom	S	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1129-ND	8.28	6.63	5.25	7205SYZQE
	On-Off-Mom	S	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1130-ND	8.49	6.80	5.38	7207SYZQE
	On-Mom	S	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1131-ND	8.49	6.80	5.38	7208SYZQE
	On-On	S	H	Z	Q	.320 x .360 x .340 (8.13 x 9.14 x 8.64)	CKN1089-ND	8.43	6.75	5.34	T201SHZQE
DPDT	On-On	S	H	C	Q	.320 x .360 x .340 (8.13 x 9.14 x 8.64)	CKN1182-ND	8.04	6.44	5.10	T201SHCQE
	On-Off-On	S	H	Z	Q	.320 x .360 x .340 (8.13 x 9.14 x 8.64)	CKN1090-ND	9.54	7.64	6.05	T203SHZQE
	On-On	M	D	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1031-ND	7.38	5.91	4.68	7201MDZQE
	On-On	M	D9	V3	B	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1170-ND	8.94	7.16	5.67	7201MD9V3BE
	On-Off-On	M	D9	V3	B	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1171-ND	9.84	7.88	6.24	7203MD9V3BE
DPDT	On-On	P3	Y	Z	B	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1032-ND	9.24	7.40	5.86	7201P3YZBE
	On-On	P3	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1033-ND	6.15	4.92	3.90	7201P3YZQE
	Mom-Off-Mom	P3	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1144-ND	10.11	8.09	6.41	7205P3YZQE
	On-Off-Mom	P3	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1145-ND	10.35	8.28	6.56	7207P3YZQE
	On-Mom	P3	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1146-ND	10.35	8.28	6.56	7208P3YZQE
DPDT	On-On	K2	—	C	B	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1217-ND	11.76	9.41	7.45	7201K2CBE
	On-On	K2	—	C	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1127-ND	7.71	6.17	4.89	7201K2CQE
	On-On	K2	—	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1128-ND	7.50	6.00	4.75	7201K2ZQE
	On-Off-On	K2	—	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1153-ND	11.82	9.46	7.49	7203K2ZQE
	On-On	L1	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1149-ND	7.38	5.91	4.68	7201L1YZQE
DPDT	On-Off-On	L1	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1150-ND	8.28	6.63	5.25	7203L1YZQE
	On-Off-On	K12	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1157-ND	11.82	9.46	7.49	7203K12ZQE
	On-On	T	—	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1166-ND	10.14	8.12	6.43	7201TZQE

(Continued)

Actuator Options

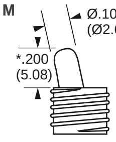
S



* Add .070 (1.78) for D, D9 bushings.

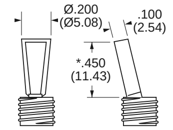
* Subtract .020 (.51) for H3 bushings.

M



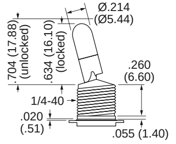
* Add .070 (1.78) for D, D9 bushings.

P3 with Antirotation

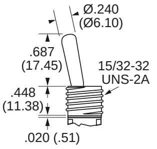


* Add .070 (1.78) for D, D9 bushings.

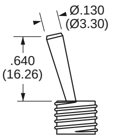
K2 Locking Lever



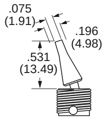
T



L1

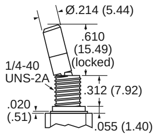


L41

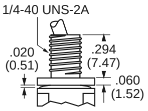


Plastic lever handle antirotation

K12 Locking Lever



CW Splashproof

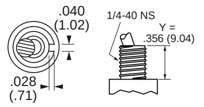


Internal actuator seal and external bushing seal washer standard.

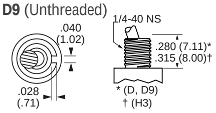
C&K Toggle Switches *(Cont.)*

Bushing Options

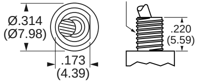
Y



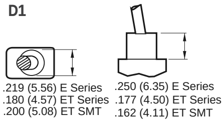
D, H3 (Threaded)
D9 (Unthreaded)



H 10-48 UNS
H9 (Unthreaded)

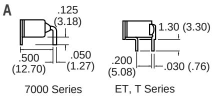


D1

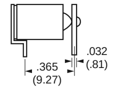


Termination Options

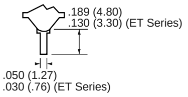
A



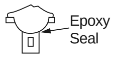
R



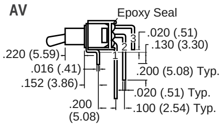
C



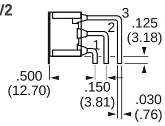
Z
Solder
Eyelet



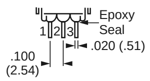
AV



AV2

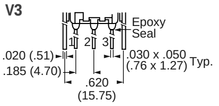


V3

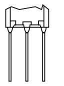


*** ET Series Only**

V3



W, W6



Wire -Wrap Terminal

Circuit	Switching Function	Options (see diagrams)			Contact Material	Dimensions Inch (mm) L x W x H	Digi-Key Part No.	Price Each			C & K Part No.
		Actuator	Bushing	Termination				1	25	100	
DPDT	On-Off-On	T	—	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1167-ND	11.04	8.84	7.00	7203TZQE
	On-On	S	CW	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1162-ND	8.85	7.08	5.61	7201SCWZQE
	On-Off-On	S	CW	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1163-ND	9.75	7.80	6.18	7203SCWZQE
3PDT	On-On	S	Y	C	Q	.500 x .650 x .415 (12.70 x 16.51 x 10.54)	CKN1013-ND	9.00	7.20	5.70	7301SYCQE
	On-On	S	Y	Z	Q	.500 x .650 x .415 (12.70 x 16.51 x 10.54)	CKN1037-ND	9.12	7.30	5.78	7301SYZQE
	On-Off-On	S	Y	Z	Q	.500 x .650 x .415 (12.70 x 16.51 x 10.54)	CKN1135-ND	13.29	10.64	8.42	7303SYZQE
	Mom-Off-Mom	S	Y	Z	Q	.500 x .650 x .415 (12.70 x 16.51 x 10.54)	CKN1136-ND	16.47	13.18	10.44	7305SYZQE
	On-Off-On	K2	Y	Z	Q	.500 x .650 x .415 (12.70 x 16.51 x 10.54)	CKN1154-ND	10.80	8.64	6.84	7303K2ZQE
	On-Off-On	K12	Y	Z	Q	.500 x .650 x .415 (12.70 x 16.51 x 10.54)	CKN1158-ND	16.83	13.47	10.66	7303K12ZQE
4PDT	On-On	S	Y	Z	Q	.500 x .850 x .415 (12.70 x 21.59 x 10.54)	CKN1038-ND	12.60	10.08	7.98	7401SYZQE
	On-Off-On	S	Y	Z	Q	.500 x .850 x .415 (12.70 x 21.59 x 10.54)	CKN1137-ND	18.42	14.74	11.67	7403SYZQE
	Mom-Off-Mom	S	Y	Z	Q	.500 x .850 x .415 (12.70 x 21.59 x 10.54)	CKN1138-ND	19.98	15.99	12.66	7405SYZQE
3-Way Toggle Switches											
DPDT	On-On-On	S	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1132-ND	8.91	7.13	5.65	7211SYZQE
	On-On-Mom	S	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1133-ND	9.57	7.66	6.07	7213SYZQE
	Mom-On-Mom	S	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1134-ND	9.57	7.66	6.07	7215SYZQE
4PDT	On-On-On	S	Y	Z	Q	.500 x .850 x .415 (12.70 x 21.59 x 10.54)	CKN1139-ND	21.12	16.90	13.38	7411SYZQE
	On-On-Mom	S	Y	Z	Q	.500 x .850 x .415 (12.70 x 21.59 x 10.54)	CKN1140-ND	21.12	16.90	13.38	7413SYZQE
	Mom-On-Mom	S	Y	Z	Q	.500 x .850 x .415 (12.70 x 21.59 x 10.54)	CKN1141-ND	21.12	16.90	13.38	7415SYZQE
Fig. 2 — Right Angle											
SPDT	On-On	S	D9	A	B	.500 x .500 x .270 (12.70 x 12.70 x 6.86)	CKN1049-ND	4.50	3.60	2.85	7101SD9ABE
	On-Off-On	S	D9	A	B	.500 x .500 x .270 (12.70 x 12.70 x 6.86)	CKN1051-ND	6.21	4.97	3.94	7103SD9ABE
	On-On	M	D	R	B	.365 x .500 x .284 (9.27 x 12.70 x 7.21)	CKN1044-ND	10.20	8.16	6.46	7101MDRBE
	On-On	M	D9	A	B	.500 x .500 x .270 (12.70 x 12.70 x 6.86)	CKN1045-ND	4.50	3.60	2.85	7101MD9ABE
	On-On	M	D9	A	G	.500 x .500 x .270 (12.70 x 12.70 x 6.86)	CKN1046-ND	6.06	4.85	3.84	7101MD9AGE
	On-On	M	D9	A	Q	.500 x .500 x .270 (12.70 x 12.70 x 6.86)	CKN1047-ND	5.70	4.56	3.61	7101MD9AQE
SPDT	On-Off-On	M	D9	A	B	.500 x .500 x .270 (12.70 x 12.70 x 6.86)	CKN1050-ND	5.10	4.08	3.23	7103MD9ABE
	Mom-Off-Mom	M	D9	A	B	.365 x .500 x .284 (9.27 x 12.70 x 7.21)	CKN1172-ND	6.33	5.07	4.01	7105MD9ABE
	On-Off-Mom	M	D9	A	B	.500 x .500 x .270 (12.70 x 12.70 x 6.86)	CKN1053-ND	6.33	5.07	4.01	7107MD9ABE
	On-On	M	H9	A	B	.320 x .200 x .352 (8.13 x 5.08 x 8.94)	CKN1067-ND	5.79	4.64	3.67	T101MH9ABE
	On-Off-On	M	H9	A	B	.320 x .200 x .352 (8.13 x 5.08 x 8.94)	CKN1068-ND	6.84	5.48	4.34	T103MH9ABE
	Mom-Off-Mom	M	H9	A	B	.320 x .200 x .352 (8.13 x 5.08 x 8.94)	CKN1386-ND	7.20	5.76	4.56	T105MH9ABE
	On-Off-Mom	M	H9	A	B	.320 x .200 x .352 (8.13 x 5.08 x 8.94)	CKN1387-ND	7.44	5.96	4.72	T107MH9ABE
	On-Mom	M	H9	A	B	.320 x .200 x .352 (8.13 x 5.08 x 8.94)	CKN1388-ND	7.44	5.96	4.72	T108MH9ABE
	On-On	P3	D9	A	B	.500 x .500 x .270 (12.70 x 12.70 x 6.86)	CKN1048-ND	7.56	6.05	4.79	7101P3D9ABE
DPDT	On-On	M	D9	A	B	.500 x .500 x .450 (12.70 x 12.70 x 11.43)	CKN1055-ND	6.60	5.28	4.18	7201MD9ABE
	On-On	M	D9	A	Q	.500 x .500 x .450 (12.70 x 12.70 x 11.43)	CKN1056-ND	8.64	6.92	5.48	7201MD9AQE
	On-On	M	H9	A	B	.320 x .360 x .352 (8.13 x 9.14 x 8.94)	CKN1069-ND	9.06	7.25	5.74	T201MH9ABE
3PDT	On-On	S	D9	A	B	.500 x .500 x .500 (12.70 x 12.70 x 12.70)	CKN1383-ND	15.21	12.17	9.64	7301MD9ABE
Fig. 3 — Vertical Right Angle											
SPDT	On-On	M	D9	AV2	B	.500 x .270 x .500 (12.70 x 6.86 x 12.70)	CKN1059-ND	4.50	3.60	2.85	7101MD9AV2BE
	On-Off-On	M	D9	AV2	B	.500 x .270 x .500 (12.70 x 6.86 x 12.70)	CKN1173-ND	6.54	5.24	4.15	7103MD9AV2BE
	On-Off-Mom	M	D9	AV2	B	.500 x .270 x .500 (12.70 x 6.86 x 12.70)	CKN1174-ND	6.63	5.31	4.20	7107MD9AV2BE
	On-On	M	H9	AV	B	.320 x .200 x .352 (8.13 x 5.08 x 8.94)	CKN1070-ND	6.00	4.80	3.80	T101MH9AVBE
DPDT	On-On	M	D9	AV2	B	.500 x .650 x .565 (12.70 x 16.51 x 14.35)	CKN1384-ND	15.48	12.39	9.81	7201MD9AV2BE
Optional Hardware and Accessories											
Dress Nut 10-48, .070” (1.78mm) high, for Series T and TP, nickel plated							CKN1183-ND	.42	.34	.27	465701201
Dress Nut 1/4 x 40, .325” (8.26mm) high, for Series 7000, 8020, 8060, 8500, E, TP and E010							CKN1184-ND	.42	.34	.27	702501201
Dress Nut 1/4 x 40, .118” (3.00mm) high, for Series 7000, 8020, 8060, 8500, E, TP and E010							CKN1201-ND	.30	.24	.19	780701201
Dress Nut 15/32-32, .120” (3.05mm) high, for Series 7000 and 8500, nickel plated							CKN1202-ND	1.20	.96	.76	895101201
Hex Nut 1/4 x 40, for Series 7000, 8020, 8060, 8500, and T, nickel plated							CKN1185-ND	.27	.22	.18	700201201
Vinyl Toggle Cap, White, .383” (9.73mm) long, for color coding option “S” actuators, Series 7000							CKN1203-ND	.78	.63	.50	896801000
Vinyl Toggle Cap, Black, .383” (9.73mm) long, for color coding option “S” actuators, Series 7000							CKN1204-ND	.45	.36	.29	896802000
Vinyl Toggle Cap, Red, .383” (9.73mm) long, for color coding option “S” actuators, Series 7000							CKN1205-ND	.78	.63	.50	896803000
Vinyl Toggle Cap, White, .687” (17.45mm) long, for color coding option “L1” actuators, Series 7000							CKN1206-ND	.27	.22	.18	763701000
Vinyl Toggle Cap, Black, .687” (17.45mm) long, for color coding option “L1” actuators, Series 7000							CKN1207-ND	.27	.22	.18	763702000
Vinyl Toggle Cap, Red, .687” (17.45mm) long, for color coding option “L1” actuators, Series 7000							CKN1208-ND	.27	.22	.18	763703000

Fig.	Circuit	Switching Function	Options (see diagrams)			Contact Material	Dimensions Inch (mm) L x W x H	Digi-Key Part No.	Price Each			C & K Part No.
			Actuator	Bushing	Termination				1	25	100	
Process Sealed Toggle Switches (withstands soldering and cleaning processes)												
1	SPDT	On-On	S	D1	C	B	.500 x .219 x .350 (12.70 x 5.56 x 8.89)	CKN1074-ND	5.25	4.20	3.33	E101SD1CBE
		On-Off-On	S	D1	C	B	.500 x .219 x .350 (12.70 x 5.56 x 8.89)	CKN1075-ND	6.30	5.04	3.99	E103SD1CBE
		Mom-Off-Mom	S	D1	C	B	.500 x .219 x .350 (12.70 x 5.56 x 8.89)	CKN1076-ND	6.30	5.04	3.99	E105SD1CBE
		On-On	S	D1	C	B	.320 x .200 x .350 (8.13 x 5.08 x 8.89)	CKN1071-ND†	5.76	4.61	3.65	ET01SD1CBE
		On-Off-On	S	D1	C	B	.320 x .200 x .350 (8.13 x 5.08 x 8.89)	CKN1080-ND†	6.51	5.21	4.13	ET03SD1CBE
		On-Mom	S	D1	C	B	.320 x .200 x .350 (8.13 x 5.08 x 8.89)	CKN1081-ND†	6.51	5.21	4.13	ET08SD1CBE
		On-On	M	D1	V3	B	.320 x .200 x .350 (8.13 x 5.08 x 8.89)	CKN1072-ND†	6.30	5.04	3.99	ET01MD1V3BE
1	DPDT	On-On	S	D1	C	B	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1077-ND	8.04	6.44	5.10	E201SD1CBE
		On-On	S	D1	C	B	.320 x .200 x .350 (8.13 x 5.08 x 8.89)	CKN1082-ND†	8.61	6.89	5.46	ET21SD1CBE
		On-Off-On	S	D1	C	B	.320 x .200 x .350 (8.13 x 5.08 x 8.89)	CKN1083-ND†	9.72	7.78	6.16	ET23SD1CBE
		On-On	M	D1	A	B	.320 x .200 x .350 (8.13 x 5.08 x 8.89)	CKN1086-ND†	9.63	7.71	6.10	ET21MD1ABE
		On-Off-On	M	D1	A	B	.320 x .200 x .350 (8.13 x 5.08 x 8.89)	CKN1177-ND	10.74	8.60	6.81	ET23MD1ABE
2	SPDT	On-On	S	D1	A	B	.500 x .260 x .500 (12.70 x 6.60 x 12.70)	CKN1061-ND†	5.79	4.64	3.67	E101SD1ABE
		On-On	M	D1	A	B	.500 x .260 x .500 (12.70 x 6.60 x 12.70)	CKN1060-ND†	5.79	4.64	3.67	E101MD1ABE
		Mom-Off-Mom	M	D1	A	B	.500 x .260 x .500 (12.70 x 6.60 x 12.70)	CKN1062-ND†	6.84	5.48	4.34	E105MD1ABE
		On-On	M	D1	A	B	.365 x .320 x .249 (9.27 x 8.13 x 6.32)	CKN1073-ND†	6.30	5.04	3.99	ET01MD1ABE
		On-Off-On	M	D1	A	B	.365 x .320 x .249 (9.27 x 8.13 x 6.32)	CKN1084-ND†	7.05	5.64	4.47	ET03MD1ABE
		On-Mom	M	D1	A	B	.365 x .320 x .249 (9.27 x 8.13 x 6.32)	CKN1085-ND†	7.05	5.64	4.47	ET08MD1ABE
3	SPDT	On-On	M	D1	AV2	B	.500 x .260 x .500 (12.70 x 6.60 x 12.70)	CKN1065-ND†	6.00	4.80	3.80	E101MD1AV2BE
		On-Off-On	M	D1	AV2	B	.500 x .260 x .500 (12.70 x 6.60 x 12.70)	CKN1078-ND	7.14	5.72	4.53	E103MD1AV2BE
		Mom-Off-Mom	M	D1	AV2	B	.500 x .260 x .500 (12.70 x 6.60 x 12.70)	CKN1079-ND	7.14	5.72	4.53	E105MD1AV2BE
		On-On	M	D1	AV	B	.320 x .200 x .350 (8.13 x 5.08 x 8.89)	CKN1385-ND	7.17	5.74	4.55	ET01MD1AVBE
		On-Off-Mom	M	D1	AV2	B	.500 x .260 x .500 (12.70 x 6.60 x 12.70)	CKN1178-ND	7.14	5.72	4.53	E107MD1AV2BE
3	DPDT	On-On	M	D1	AV2	B	.500 x .260 x .500 (12.70 x 6.60 x 12.70)	CKN1179-ND	9.54	7.64	6.05	E201MD1AV2BE
		On-Off-On	M	D1	AV2	B	.500 x .260 x .500 (12.70 x 6.60 x 12.70)	CKN1180-ND	10.71	8.57	6.79	E203MD1AV2BE

Fig.	Circuit	Switching Function	Options (see diagrams)		Cont. Mat’l.	Dimensions Inch (mm) L x W x H	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing	C & K Part No.
			Actuator	Bushing				1	25	100			
Surface Mount (withstands soldering and cleaning processes)													
4	SPDT	On-On	M	D1	B	.462 x .320 x .200 (11.73 x 8.13 x 5.08)	CKN1093CT-ND	7.80	6.72	5.40	CKN1093TR-ND	2592.00/600	ET01MD1SAKE(T&R)
	SPDT	On-Off-On	M	D1	B	.462 x .320 x .200 (11.73 x 8.13 x 5.08)	CKN1094CT-ND	8.61	7.42	5.97	CKN1094TR-ND	2862.00/600	ET03MD1SAKE(T&R)
	SPDT	Mom-Off-Mom	M	D1	B	.462 x .320 x .200 (11.73 x 8.13 x 5.08)	CKN1095CT-ND	8.61	7.42	5.97	CKN1095TR-ND	2862.00/600	ET05MD1SAKE(T&R)
5	SPDT	On-On	M	None	B	.340 x .276 x .215 (8.64 x 7.01 x 5.46)	CKN1096CT-ND	6.83	5.88	4.73	CKN1096TR-ND	2268.00/600	GT11MSAKE(T&R)
	SPST	Off-On	M	None	B	.340 x .276 x .215 (8.64 x 7.01 x 5.46)	CKN1097CT-ND	7.28	6.28	5.04	CKN1097TR-ND	2419.20/600	GT12MSAKE(T&R)
	SPDT	On-Off-On	M	None	B	.340 x .276 x .215 (8.64 x 7.01 x 5.46)	CKN1098CT-ND	7.87	6.78	5.45	CKN1098TR-ND	2613.60/600	GT13MSAKE(T&R)
6	SPDT	On-On	M	None	B	.340 x .215 x .276 (8.64 x 5.46 x 7.01)	CKN1099-ND	6.40	5.52	4.44	—	—	GT11MSCKE
	SPST	Off-On	M	None	B	.340 x .215 x .276 (8.64 x 5.46 x 7.01)	CKN1100-ND	6.99	6.02	4.84	—	—	GT12MSCKE
	SPDT	On-Off-On	M	None	B	.340 x .215 x .276 (8.64 x 5.46 x 7.01)	CKN1101-ND	7.41	6.39	5.13	—	—	GT13MSCKE
	DPDT	On-On	M	None	B	.340 x .215 x .276 (8.64 x 5.46 x 7.01)	CKN1102-ND	8.55	7.37	5.92	—	—	GT21MSCKE

† UL Approved   Note: All threaded bushings include mounting hardware.

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C&K Pushbutton Switches

Fig.	Circuit	Switching Function	Options (see diagrams) Termination	Bushing†	Cont. Mat'l.	Dimensions Inch (mm) L x W x D	Digi-Key Part No.	Price Each 1	25	100	C & K Part No.
Tiny Pushbutton Switches											
1	SPST	Mom (N/O)	C	H9	B	.320 x .200 x .340 (8.13 x 5.08 x 8.64)	CKN4000-ND	4.14	3.32	2.63	TP11SH9CBE
1	SPST	Mom (N/O)	Z	H7	Q	.320 x .200 x .340 (8.13 x 5.08 x 8.64)	CKN4001-ND	3.96	3.17	2.51	TP11SHZQE
2	SPST	Mom (N/O)	A	H8	B	.320 x .200 x .352 (8.13 x 5.08 x 8.94)	CKN4002-ND	4.68	3.75	2.97	TP11SH8ABE
2	SPST	Mom (N/O)	A	H9	B	.320 x .200 x .352 (8.13 x 5.08 x 8.94)	CKN4003-ND	4.68	3.75	2.97	TP11SH9ABE
2	SPDT	On-Mom	A	H8	Q	.320 x .200 x .352 (8.13 x 5.08 x 8.94)	CKN4004-ND	6.09	4.88	3.86	TP12SH8AQE
3	SPDT	On-Mom	AV	H8	B	.320 x .200 x .352 (8.13 x 5.08 x 8.94)	CKN4005-ND	6.45	5.16	4.09	TP12SH8AVBE
1	SPST	Mom (N/O)	C	D1	B	.320 x .200 x .350 (8.13 x 5.08 x 8.89)	CKN4006-ND	4.29	3.44	2.72	EP11SD1CBE
2	SPST	Mom (N/O)	A	D1	B	.320 x .200 x .365 (8.13 x 5.08 x 9.27)	CKN4007-ND	4.92	3.94	3.12	EP11SD1ABE
3	SPST	Mom (N/O)	AV	D1	B	.320 x .200 x .365 (8.13 x 5.08 x 9.27)	CKN4009-ND	5.16	4.13	3.27	EP11SD1AVBE
2	SPDT	On-Mom	A	D1	B	.320 x .200 x .365 (8.13 x 5.08 x 9.27)	CKN4008-ND	6.27	5.02	3.98	EP12SD1ABE
1	SPDT	On-Mom	C	D1	B	.320 x .200 x .365 (8.13 x 5.08 x 9.27)	CKN4043-ND	5.79	4.64	3.67	EP12SD1CBE
1	DPST	Mom (N/O)	C	D1	B	.320 x .200 x .365 (8.13 x 5.08 x 9.27)	CKN4044-ND	7.95	6.36	5.04	EP21SD1CBE
1	DPST	Mom (N/O)	A	D1	B	.320 x .200 x .365 (8.13 x 5.08 x 9.27)	CKN4045-ND	9.03	7.23	5.72	EP21SD1ABE
3	DPST	Mom (N/O)	AV	D1	B	.320 x .200 x .365 (8.13 x 5.08 x 9.27)	CKN4046-ND	9.27	7.42	5.88	EP21SD1AVBE
1	SPDT	On-Mom	Z	SH	Q	.340 x .360 x .340 (8.64 x 9.14 x 8.64)	CKN4053-ND	5.43	4.35	3.44	TP12SHZQE
1	DPST	Mom (N/O)	Z	SH	Q	.340 x .360 x .340 (8.64 x 9.14 x 8.64)	CKN4054-ND	8.49	6.80	5.38	TP21SHZQE
Snap-Acting Momentary Pushbutton Switches											
1	SPDT	On-Mom	C	H	G	.500 x .270 x .410 (12.70 x 6.86 x 10.41)	CKN4010-ND	8.31	6.65	5.27	8121SHCGE
1	SPDT	On-Mom	Z	H	G	.500 x .270 x .410 (12.70 x 6.86 x 10.41)	CKN4011-ND	8.19	6.56	5.19	8121SHZGE
2	SPDT	On-Mom	A	D9	G	.500 x .270 x .410 (12.70 x 6.86 x 10.41)	CKN4013-ND	8.85	7.08	5.61	8121SD9AGE
2	SPDT	On-Mom	A	D9	B	.500 x .270 x .410 (12.70 x 6.86 x 10.41)	CKN4014-ND	6.03	4.83	3.82	8125SD9ABE
3	SPDT	On-Mom	AV2	D9	G	.500 x .270 x .410 (12.70 x 6.86 x 10.41)	CKN4015-ND	9.03	7.23	5.72	8121SD9AV2GE
1	SPDT	On-Mom	V3	D3	B	.500 x .270 x .410 (12.70 x 6.86 x 10.41)	CKN4012-ND	6.00	4.80	3.80	8125SD3V3BE
1	SPDT	On-Mom	Z	H	B	.500 x .270 x .410 (12.70 x 6.86 x 10.41)	CKN4022-ND	5.40	4.32	3.42	8125SHZBE
1	DPDT	On-Mom	Z	H	G	.500 x .450 x .410 (12.70 x 11.43 x 10.41)	CKN4023-ND	12.63	10.11	8.00	8221SHZGE
1	DPDT	On-Mom	Z	H	B	.500 x .450 x .410 (12.70 x 11.43 x 10.41)	CKN4024-ND	7.59	6.08	4.81	8225SHZBE
5	SPDT	On-Mom	Z	—	G	.500 x .270 x .410 (12.70 x 6.86 x 10.41)	CKN4025-ND	9.33	7.47	5.91	8121J81ZGE22
5	SPDT	On-Mom	Z	—	B	.500 x .270 x .410 (12.70 x 6.86 x 10.41)	CKN4026-ND	6.54	5.24	4.15	8125J81ZBE22
5	DPDT	On-Mom	Z	—	G	.500 x .450 x .410 (12.70 x 11.43 x 10.41)	CKN4027-ND	13.77	11.02	8.73	8221J81ZGE22
5	DPDT	On-Mom	Z	—	B	.500 x .450 x .410 (12.70 x 11.43 x 10.41)	CKN4028-ND	8.73	6.99	5.53	8225J81ZBE22
5	SPDT	On-On	Z	—	G	.500 x .450 x .410 (12.70 x 11.43 x 10.41)	CKN4033-ND	7.77	6.22	4.93	8161J81ZGE22
5	SPDT	On-Mom	Z	—	G	.500 x .450 x .410 (12.70 x 11.43 x 10.41)	CKN4034-ND	7.77	6.22	4.93	8168J81ZGE22
5	DPDT	On-On	Z	—	G	.500 x .450 x .410 (12.70 x 11.43 x 10.41)	CKN4035-ND	13.50	10.80	8.55	8261J81ZGE22
1	SPDT	On-Mom	C	H	B	.500 x .450 x .410 (12.70 x 11.43 x 10.41)	CKN4029-ND	5.52	4.42	3.50	8125SHCBE
3	SPDT	On-Mom	AV2	D9	B	.500 x .450 x .410 (12.70 x 11.43 x 10.41)	CKN4030-ND	6.24	5.00	3.96	8125SD9AV2BE
1	SPDT	On-Mom	C	D1	G	.500 x .219 x .350 (12.70 x 5.56 x 8.89)	CKN4041-ND	8.79	7.04	5.57	E121SD1CGE
1	DPDT	On-Mom	C	D1	G	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN4042-ND	14.10	11.28	8.93	E221SD1CGE
Alternate-Action & Momentary Pushbutton Switches											
4	SPDT	On-On	Z	H	Q	.500 x .270 x .450 (12.70 x 6.86 x 11.43)	CKN4016-ND	5.82	4.66	3.69	8161SHZQE2
4	SPDT	On-Mom	Z	H	Q	.500 x .270 x .450 (12.70 x 6.86 x 11.43)	CKN4018-ND	5.82	4.66	3.69	8168LHZQE2
5	SPDT	On-Mom	Z	—	Q	.500 x .270 x .450 (12.70 x 6.86 x 11.43)	CKN4017-ND	7.20	5.76	4.56	8168J81ZQE22
4	SPDT	On-Mom	Z	H	G	.500 x .270 x .450 (12.70 x 6.86 x 11.43)	CKN4031-ND	6.21	4.97	3.94	8168SHZGE2
4	DPDT	On-On	Z	H	G	.500 x .270 x .450 (12.70 x 6.86 x 11.43)	CKN4032-ND	11.94	9.56	7.57	8261SHZGE2
6	SPST	Mom (N/O)	—	Blk Cap	Q	.620 x .469 Dia. (15.75 x 11.91 Dia.)	CKN1121-ND	5.10	4.08	3.23	8532T1ZQE2
6	SPST	Mom (N/O)	—	Blk Cap	B	.620 x .469 Dia. (15.75 x 11.91 Dia.)	CKN1122-ND	5.10	4.08	3.23	8532T1ZBE2
6	SPST	Mom (N/O)	—	Red Cap	Q	.620 x .469 Dia. (15.75 x 11.91 Dia.)	CKN1123-ND	5.10	4.08	3.23	8532T1ZQE3
6	SPST	Mom (N/O)	—	Red Cap	B	.620 x .469 Dia. (15.75 x 11.91 Dia.)	CKN1124-ND	5.10	4.08	3.23	8532T1ZBE3
6	SPST	Mom (N/O)	—	Wht Cap	Q	.620 x .469 Dia. (15.75 x 11.91 Dia.)	CKN1222-ND	5.37	4.30	3.41	8532T1ZQE1
6	SPST	Mom (N/O)	—	Wht Cap	B	.620 x .469 Dia. (15.75 x 11.91 Dia.)	CKN1223-ND	5.37	4.30	3.41	8532T1ZBE1
Subminiature Pushbutton Switches											
7	SPST	Mom (N/O)	C	H	Q	.427 x .375 Dia. (10.85 x 9.53 Dia.)	CKN4036-ND	4.35	3.48	2.76	8531MCQE2
7	SPST	Mom (N/C)	C	H	Q	.427 x .375 Dia. (10.85 x 9.53 Dia.)	CKN4037-ND	4.89	3.92	3.10	8533MCQE2
7	SPST	Mom (N/C)	C	H	Q	.427 x .375 Dia. (10.85 x 9.53 Dia.)	CKN1389-ND	4.47	3.58	2.84	8533MZQE2
7	SPST	Mom (N/C)	C	H	B	.427 x .375 Dia. (10.85 x 9.53 Dia.)	CKN1390-ND	5.01	4.01	3.18	8533MZBE2
7	SPST	Mom (N/O)	—	8-40 uns	Q	.248 x .250 Dia. (6.30 x 6.35 Dia.)	CKN4038-ND	5.19	4.16	3.29	8631ZQD2
7	SPST	Mom (N/O)	—	8-40 uns	B	.248 x .250 Dia. (6.30 x 6.35 Dia.)	CKN4039-ND	5.19	4.16	3.29	8631ZBD2
7	SPST	Mom (N/O)	C	8-40 uns	B	.248 x .250 Dia. (6.30 x 6.35 Dia.)	CKN4040-ND	5.34	4.28	3.39	8631CBD2
7	SPST	Mom (N/O)	C	H	Q	.427 x .375 Dia. (10.85 x 9.53 Dia.)	CKN4019-ND	4.35	3.48	2.76	8531SCQE2
7	SPST	Mom (N/O)	—	H	Q	.427 x .375 Dia. (10.85 x 9.53 Dia.)	CKN4020-ND	4.26	3.41	2.70	8531MZQE2
7	SPST	Mom (N/O)	—	H	Q	.315 x .375 Dia. (8.00 x 9.53 Dia.)	CKN4021-ND	4.23	3.39	2.68	8532MZQE2
7	SPST	Mom (N/O)	05	H	B	.68 x .388 Dia. (17.27 x 9.86 Dia.)	CKN4057-ND	3.60	2.88	2.28	KM1101RR05B
7	SPST	Mom (N/O)	05	H	Q	.68 x .388 Dia. (17.27 x 9.86 Dia.)	CKN4058-ND	2.61	2.09	1.66	KM1101RR05Q
7	SPST	Mom (N/O)	C	H	B	.68 x .388 Dia. (17.27 x 9.86 Dia.)	CKN4059-ND	3.60	2.88	2.28	KM1101RR02B
7	SPST	Mom (N/O)	C	H	Q	.68 x .388 Dia. (17.27 x 9.86 Dia.)	CKN4060-ND	2.61	2.09	1.66	KM1101RR02Q
8	SPDT	Mom (N/O)	C	—	B	.52 x .54 x .385 (13.21 x 13.72 x 9.78)	CKN4062-ND	4.35	3.48	2.76	KM1202A08BE
8	SPDT	Mom (N/O)	C	—	Q	.52 x .54 x .385 (13.21 x 13.72 x 9.78)	CKN4061-ND	3.36	2.69	2.13	KM1202A08QE
7	SPST	Mom (N/C)	05	H	Q	.68 x .388 Dia. (17.27 x 9.86 Dia.)	CKN4064-ND	2.61	2.09	1.66	KM3301RR05Q
Ultra-miniature Pushbutton Switches (washable)											
—	SPDT	Mom (N/O)	—	D1	G	.260 x .276 x .215 (6.60 x 7.01 x 5.46)	CKN4048-ND	5.16	4.13	3.27	GP11MCKE
—	SPDT	On-Mom	—	D1	G	.260 x .276 x .215 (6.60 x 7.01 x 5.46)	CKN4049-ND	5.82	4.66	3.69	GP11MAKE
Panel Mount Detector Switch											
10	SPST	Mom (N/O)	Wires	—	B	.715 x .500 x .380 (18.16 x 12.70 x 9.65)	CKN4067-ND	4.50	3.60	2.85	KDS1102RSWC12CB
10	SPST	Mom (N/C)	Wires	—	B	.715 x .500 x .380 (18.16 x 12.70 x 9.65)	CKN4068-ND	4.50	3.60	2.85	KDS3302RSWC12CB
Pushbutton Caps for 8X2X, 8X6X, EX1X/X2X											
11	White Gloss Cap for .122” (3.10mm) Diameter Plungers, .375” (9.53mm) Diameter						CKN1103-ND	.69	.56	.44	752701000
11	Black Gloss Cap for .122” (3.10mm) Diameter Plungers, .375” (9.53mm) Diameter						CKN1104-ND	.39	.32	.25	752702000
11	Red Gloss Cap for .122” (3.10mm) Diameter Plungers, .375” (9.53mm) Diameter						CKN1105-ND	.69	.56	.44	752703000
11	Orange Gloss Cap for .122” (3.10mm) Diameter Plungers, .375” (9.53mm) Diameter						CKN1106-ND	.69	.56	.44	752704000
11	Yellow Gloss Cap for .122” (3.10mm) Diameter Plungers, .375” (9.53mm) Diameter						CKN1107-ND	.69	.56	.44	752705000
11	Green Gloss Cap for .122” (3.10mm) Diameter Plungers, .375” (9.53mm) Diameter						CKN1108-ND	.54	.44	.35	752706000
11	Blue Gloss Cap for .122” (3.10mm) Diameter Plungers, .375” (9.53mm) Diameter						CKN1109-ND	.69	.56	.44	752707000
11	Brown Gloss Cap for .122” (3.10mm) Diameter Plungers, .375” (9.53mm) Diameter						CKN1110-ND	.69	.56	.44	752708000
11	Gray Gloss Cap for .122” (3.10mm) Diameter Plungers, .375” (9.53mm) Diameter						CKN1111-ND	.54	.44	.35	752709000
Pushbutton Caps EP, TP Series											
11	White Gloss Cap for .100” (2.54mm) Diameter Plungers, .3” (7.62mm) Diameter						CKN1112-ND	.81	.65	.52	465801000
11	Black Gloss Cap for .100” (2.54mm) Diameter Plungers, .3” (7.62mm) Diameter						CKN1113-ND	.45	.36	.29	465802000
11	Red Gloss Cap for .100” (2.54mm) Diameter Plungers, .3” (7.62mm) Diameter						CKN1114-ND	.81	.65	.52	465803000
11	Orange Gloss Cap for .100” (2.54mm) Diameter Plungers, .3” (7.62mm) Diameter						CKN1115-ND	.81	.65	.52	465804000
11	Yellow Gloss Cap for .100” (2.54mm) Diameter Plungers, .3” (7.62mm) Diameter						CKN1116-ND	.81	.65	.52	465805000
11	Green Gloss Cap for .100” (2.54mm) Diameter Plungers, .3” (7.62mm) Diameter						CKN1117-ND	.81	.65	.52	465806000
11	Blue Gloss Cap for .100” (2.54mm) Diameter Plungers, .3” (7.62mm) Diameter						CKN1118-ND	.81	.65	.52	465807000
11	Brown Gloss Cap for .100” (2.54mm) Diameter Plungers, .3” (7.62mm) Diameter						CKN1119-ND	.81	.65	.52	465808000
11	Gray Gloss Cap for .100”(2.54mm) Diameter Plungers, .3” (7.62mm) Diameter						CKN1120-ND	.81	.65	.52	465809000
Pushbutton Caps, Snap-Fitting, for Fig. 4 and Other Snap-Fit Plungers											
—	White Gloss Cap for Snap-Fit Plungers, .395” (10.03mm) Diameter						CKN1209-ND	1.14	.92	.73	894101000
—	Black Gloss Cap for Snap-Fit Plungers, .395” (10.03mm) Diameter						CKN1210-ND	.48	.39	.31	894102000
—	Red Gloss Cap for Snap-Fit Plungers, .395” (10.03mm) Diameter						CKN1211-ND	.96	.77	.61	894103000

Fig.	Circuit	Switching Function	Actuator Height In. (mm)	Terminals	Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	Tape & Reel Pricing 600	C & K Part No.
Surface Mount (Process Sealed, Washable)											
9	SPST	Mom (N/O)	.215 (5.46)	Gull Lead	CKN4055CT-ND	6.34	5.46	4.39	CKN4055TR-ND	2106.00	EP11SD1SAKE
9	SPDT	Mom (N/O)	.215 (5.46)	Gull Lead	CKN4056CT-ND	7.77	6.70	5.38	CKN4056TR-ND	2581.20	EP12SD1SAKE

† All threaded bushings include hardware

Fig. 1

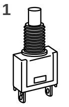


Fig. 2

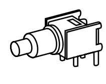


Fig. 3

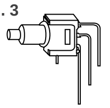


Fig. 4

Comes standard with black cap

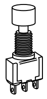


Fig. 5

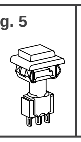


Fig. 6

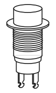


Fig. 7

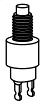


Fig. 8

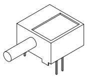


Fig. 9

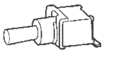


Fig. 10

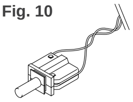
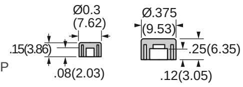
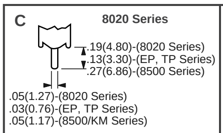


Fig. 11 — Round Caps

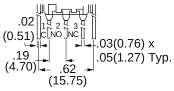


Termination Options

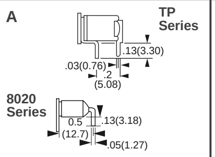
C



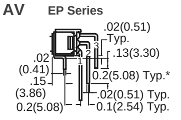
V3



A

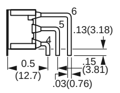


AV

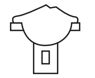


• Middle terminal missing on CKN4009-ND

AV2

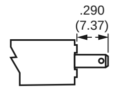


Z



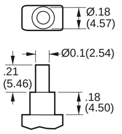
Solder Eyelet

05

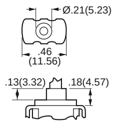


Bushing Options

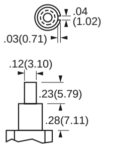
D1 (Unthreaded)



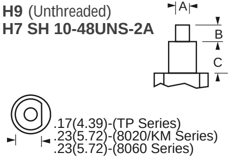
D3 (Unthreaded)



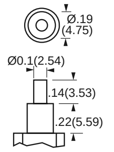
D9 (Unthreaded)



H 1/4-40 NS
H9 (Unthreaded)
H7 SH 10-48UNS-2A



H8 (Unthreaded)



Bushing Option	C & K Series	Dimensions – In. (mm) A	B	C
H, H9	TP	.100 (2.54)	.139 (3.53)	.220 (5.59)
H	8020	.122 (3.10)	.218 (5.54)	.250 (6.35)
H	8060	.122 (3.10)	.280 (7.11)	.300 (7.62)
SH	TP	.100 (2.54)	.155 (3.94)	.220 (5.59)

Contact Materials Options

B	Contacts & Terminals: Copper alloy, with gold plate over nickel plate. Rating: 0.4 VA max. @ 20 VAC or DC max.
Q	Contacts: Coin silver, silver plated. Terminals: Copper alloy, silver plated. Rating: 1A @ 120 VAC; 8060 Series — 6A @ 120 VAC or 3A @ 250 VAC; 8500 Series — 1A @ 120 VAC.
G	Contacts: Coin silver, with gold plate over nickel plate. Terminals: Copper alloy, with gold plate over nickel plate. Rating: 0.4 VA max. @ 20 VAC or DC max. or 1 amp @ 120 VAC or 28 VDC.

NEW! NKK® switches Miniature Toggle Switches

M Series: Over 350,000 different configurations possible, with the most popular listed here. Epoxy sealed terminals, high torque bushings, antijamming levers. Available as PCB mount or solder lug terminal for ease of wiring. **Electrical Capacity:** 6A @ 125V AC or 30VDC. **Dielectric strength:** 1,500V AC min. **Mechanical Life:** 100,000 operations min., 50,000 operations min. for flat and locking lever. **Electrical Life:** 25,000 operations min. **Operating Temperature:** -30°C to + 85°C. **Angle of Throw:** 25° **Standard Hardware:** 2 hex nuts, 1 locking ring, 1 lockwasher

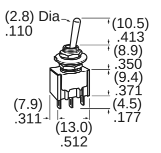
Dim. in (mm) Inch

Fig.	Circuit	Switching Function	Options (see diagrams)				Digi-Key Part No.	Price Each			NKK Part No.
			Actuator	Bushing	Contact Material*	Terminal Option		1	25	100	
Bat Lever, Threaded Bushing, Solder Lug											
1	SPDT	On-On	S	S1	W	01	360-1057-ND	4.20	3.36	2.66	M2012SS1W01
	SPDT	On-Off-On	S	S1	W	01	360-1058-ND	4.92	3.94	3.12	M2013SS1W01
	SPDT	On-Mom	S	S1	W	01	360-1059-ND	5.52	4.42	3.50	M2015SS1W01
	SPDT	Mom-Off-Mom	S	S1	W	01	360-1060-ND	5.64	4.52	3.58	M2018SS1W01
	SPDT	On-Off-Mom	S	S1	W	01	360-1061-ND	5.64	4.52	3.58	M2019SS1W01
	SP3T	On-On-On	S	S1	W	01	360-1062-ND	9.00	7.20	5.70	M2024SS1W01
	SP3T	Mom-On-Mom	S	S1	W	01	360-1063-ND	9.48	7.59	6.01	M2026SS1W01
	SP3T	On-On-Mom	S	S1	W	01	360-1064-ND	9.48	7.59	6.01	M2027SS1W01
	DPDT	On-On	S	S1	W	01	360-1065-ND	6.30	5.04	3.99	M2022SS1W01
	DPDT	On-Off-On	S	S1	W	01	360-1066-ND	7.32	5.86	4.64	M2023SS1W01
	DPDT	On-Mom	S	S1	W	01	360-1067-ND	8.40	6.72	5.32	M2025SS1W01
	DPDT	Mom-Off-Mom	S	S1	W	01	360-1068-ND	8.76	7.01	5.55	M2028SS1W01
	DPDT	On-Off-Mom	S	S1	W	01	360-1069-ND	8.76	7.01	5.55	M2029SS1W01
	DP3T	On-On-On	S	S1	W	01	360-1070-ND	21.00	16.80	13.30	M2044SS1W01
	DP3T	Mom-On-Mom	S	S1	W	01	360-1071-ND	21.00	16.80	13.30	M2046SS1W01
	DP3T	On-On-Mom	S	S1	W	01	360-1072-ND	21.00	16.80	13.30	M2047SS1W01
	3PDT	On-On	S	S1	W	01	360-1073-ND	10.50	8.40	6.65	M2032SS1W01
	3PDT	On-Off-On	S	S1	W	01	360-1074-ND	13.20	10.56	8.36	M2033SS1W01
	3PDT	Mom-Off-Mom	S	S1	W	01	360-1075-ND	16.20	12.96	10.26	M2038SS1W01
	4PDT	On-On	S	S1	W	01	360-1076-ND	14.46	11.57	9.16	M2042SS1W01
	4PDT	On-Off-On	S	S1	W	01	360-1077-ND	17.28	13.83	10.95	M2043SS1W01
Bat Lever, Threaded Bushing, PC Terminals											
2	SPDT	On-On	S	S1	W	03	360-1078-ND	4.35	3.48	2.76	M2012SS1W03
	SPDT	On-Off-On	S	S1	W	03	360-1079-ND	5.07	4.06	3.22	M2013SS1W03
	SPDT	On-Mom	S	S1	W	03	360-1080-ND	5.67	4.54	3.60	M2015SS1W03
	SPDT	Mom-Off-Mom	S	S1	W	03	360-1081-ND	5.79	4.64	3.67	M2018SS1W03
	SPDT	On-Off-Mom	S	S1	W	03	360-1082-ND	5.79	4.64	3.67	M2019SS1W03
	SP3T	On-On-On	S	S1	W	03	360-1083-ND	9.30	7.44	5.89	M2024SS1W03
	DPDT	On-On	S	S1	W	03	360-1084-ND	6.60	5.28	4.18	M2022SS1W03
	DPDT	On-Off-On	S	S1	W	03	360-1085-ND	7.62	6.10	4.83	M2023SS1W03
	3PDT	On-On	S	S1	W	03	360-1086-ND	10.95	8.76	6.94	M2032SS1W03
	4PDT	On-On	S	S1	W	03	360-1087-ND	15.03	12.03	9.52	M2042SS1W03
Bat Lever, Large Threaded Bushing, Solder Lug											
1	SPDT	On-On	B	B1	W	01	360-1029-ND	6.84	5.48	4.34	M2012BB1W01
	SPDT	On-Off-On	B	B1	W	01	360-1030-ND	7.56	6.05	4.79	M2013BB1W01
	SPDT	On-Mom	B	B1	W	01	360-1031-ND	8.16	6.53	5.17	M2015BB1W01
	SPDT	Mom-Off-Mom	B	B1	W	01	360-1032-ND	8.28	6.63	5.25	M2018BB1W01
	SPDT	On-Off-Mom	B	B1	W	01	360-1033-ND	8.28	6.63	5.25	M2019BB1W01
	DPDT	On-On	B	B1	W	01	360-1034-ND	8.94	7.16	5.67	M2022BB1W01
	DPDT	On-Off-On	B	B1	W	01	360-1035-ND	9.96	7.97	6.31	M2023BB1W01
	3PDT	On-On	B	B1	W	01	360-1036-ND	13.14	10.52	8.33	M2032BB1W01
	4PDT	On-On	B	B1	W	01	360-1037-ND	17.10	13.68	10.83	M2042BB1W01
Flat Lever, Threaded Bushing, Solder Lug											
1	SPDT	On-On	E	S1	W	01	360-1043-ND	5.40	4.32	3.42	M2012ES1W01
	SPDT	On-Off-On	E	S1	W	01	360-1044-ND	6.12	4.90	3.88	M2013ES1W01
	SPDT	On-Mom	E	S1	W	01	360-1045-ND	6.72	5.38	4.26	M2015ES1W01
	SPDT	Mom-Off-Mom	E	S1	W	01	360-1046-ND	6.84	5.48	4.34	M2018ES1W01
	SPDT	On-Off-Mom	E	S1	W	01	360-1047-ND	6.84	5.48	4.34	M2019ES1W01
	SP3T	On-On-On	E	S1	W	01	360-1048-ND	10.20	8.16	6.46	M2024ES1W01
	DPDT	On-On	E	S1	W	01	360-1049-ND	7.50	6.00	4.75	M2022ES1W01
	DPDT	On-Off-On	E	S1	W	01	360-1050-ND	8.52	6.82	5.40	M2023ES1W01
	DPDT	On-Mom	E	S1	W	01	360-1051-ND	9.60	7.68	6.08	M2025ES1W01
	DPDT	On-Off-Mom	E	S1	W	01	360-1052-ND	9.96	7.97	6.31	M2029ES1W01
	3PDT	On-On	E	S1	W	01	360-1053-ND	11.70	9.36	7.41	M2032ES1W01
	3PDT	On-Off-On	E	S1	W	01	360-1054-ND	14.40	11.52	9.12	M2033ES1W01
	4PDT	On-On	E	S1	W	01	360-1055-ND	15.66	12.53	9.92	M2042ES1W01
	4PDT	On-Off-On	E	S1	W	01	360-1056-ND	18.48	14.79	11.71	M2043ES1W01
Bat Lever, Threaded Keyway Bushing, Solder Lug											
1	SPDT	On-On	S2	S1	W	01	360-1172-ND	4.20	3.36	2.66	M2012S2S1W01
Large Bat Lever, Large Threaded Bushing, Solder Lug											
1	SPDT	On-On	B2	B1	W	01	360-1038-ND	7.08	5.67	4.49	M2012B2B1W01
	SPDT	On-Off-On	B2	B1	W	01	360-1039-ND	7.80	6.24	4.94	M2013B2B1W01
	SPDT	Mom-Off-Mom	B2	B1	W	01	360-1040-ND	8.52	6.82	5.40	M2018B2B1W01
	DPDT	On-On	B2	B1	W	01	360-1041-ND	9.18	7.35	5.82	M2022B2B1W01
	DPDT	On-Off-On	B2	B1	W	01	360-1042-ND	10.20	8.16	6.46	M2023B2B1W01

*W=Silver rated 6A @ 125V AC & 3A @ 250V AC

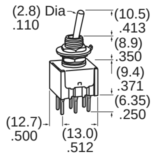
(Continued)

Fig. 1



(SPDT Shown)

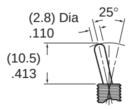
Fig. 2



(DPDT Shown)

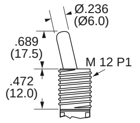
Actuators

S



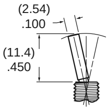
(Standard)

B



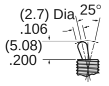
(Large)

E



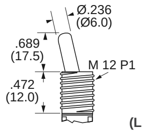
(Flat)

S2



(Mini)

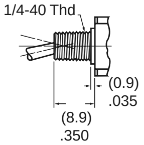
B2



(Long Large)

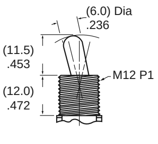
Bushings

S1



(Standard)

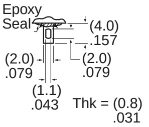
B1



(Large)

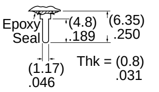
Terminals

01



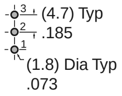
(Solder)

03

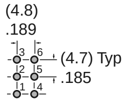


(PCB)

Footprints



(SPDT)



(DPDT)

NEW! NKK switches Miniature Toggle Switches *(Cont.)*

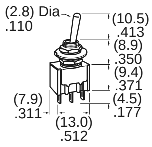
Dim. in (mm) Inch

			Options (see diagrams)					Price Each			
Fig.	Circuit	Switching Function	Act-uator	Bush-ing	Contact Material*	Terminal Option	Digi-Key Part No.	1	25	100	NKK Part No.
Bat Lever, Threaded Splashproof Bushing, Solder Lug											
1	SPDT	On-On	S	D3	W	01	360-1088-ND	5.40	4.32	3.42	M2012SD3W01
	SPDT	On-Off-On	S	D3	W	01	360-1089-ND	6.12	4.90	3.88	M2013SD3W01
	SPDT	On-Mom	S	D3	W	01	360-1090-ND	6.72	5.38	4.26	M2015SD3W01
	SPDT	Mom-Off-Mom	S	D3	W	01	360-1091-ND	6.84	5.48	4.34	M2018SD3W01
	SPDT	On-Off-Mom	S	D3	W	01	360-1092-ND	6.84	5.48	4.34	M2019SD3W01
	DPDT	On-On	S	D3	W	01	360-1093-ND	7.50	6.00	4.75	M2022SD3W01
	DPDT	On-Off-On	S	D3	W	01	360-1094-ND	8.52	6.82	5.40	M2023SD3W01
	DPDT	Mom-Off-Mom	S	D3	W	01	360-1095-ND	9.96	7.97	6.31	M2028SD3W01
Bat Lever, Threaded Splashproof Bushing, Solder Lug											
1	SPDT	On-On	S	D3	G	01	360-1140-ND	6.06	4.85	3.84	M2012SD3G01
	SPDT	On-Off-On	S	D3	G	01	360-1141-ND	6.78	5.43	4.30	M2013SD3G01
	SPDT	On-Mom	S	D3	G	01	360-1142-ND	7.38	5.91	4.68	M2015SD3G01
	SPDT	Mom-Off-Mom	S	D3	G	01	360-1143-ND	7.50	6.00	4.75	M2018SD3G01
	DPDT	On-On	S	D3	G	01	360-1144-ND	8.79	7.04	5.57	M2022SD3G01
Bat Lever, Threaded Bushing, Solder Lug											
1	SPDT	On-On	S	S1	G	01	360-1118-ND	4.86	3.89	3.08	M2012SS1G01
	SPDT	On-Off-On	S	S1	G	01	360-1119-ND	5.58	4.47	3.54	M2013SS1G01
	SPDT	On-Mom	S	S1	G	01	360-1120-ND	6.18	4.95	3.92	M2015SS1G01
	SPDT	Mom-Off-Mom	S	S1	G	01	360-1121-ND	6.30	5.04	3.99	M2018SS1G01
	SPDT	On-Off-Mom	S	S1	G	01	360-1122-ND	6.30	5.04	3.99	M2019SS1G01
	SP3T	On-On-On	S	S1	G	01	360-1123-ND	10.29	8.24	6.52	M2024SS1G01
	SP3T	Mom-On-Mom	S	S1	G	01	360-1124-ND	10.77	8.62	6.83	M2026SS1G01
	SP3T	On-On-Mom	S	S1	G	01	360-1125-ND	10.77	8.62	6.83	M2027SS1G01
	DPDT	On-On	S	S1	G	01	360-1126-ND	7.59	6.08	4.81	M2022SS1G01
	DPDT	On-Off-On	S	S1	G	01	360-1127-ND	8.61	6.89	5.46	M2023SS1G01
	3PDT	On-On	S	S1	G	01	360-1128-ND	12.45	9.96	7.89	M2032SS1G01
	4PDT	On-On	S	S1	G	01	360-1129-ND	17.04	13.64	10.80	M2042SS1G01
Bat Lever, Threaded Bushing, PC Terminal											
2	SPDT	On-On	S	S1	G	03	360-1130-ND	4.98	3.99	3.16	M2012SS1G03
	SPDT	On-Off-On	S	S1	G	03	360-1131-ND	5.70	4.56	3.61	M2013SS1G03
	SPDT	On-Mom	S	S1	G	03	360-1132-ND	6.30	5.04	3.99	M2015SS1G03
	SPDT	Mom-Off-Mom	S	S1	G	03	360-1133-ND	6.42	5.14	4.07	M2018SS1G03
	SPDT	On-Off-Mom	S	S1	G	03	360-1134-ND	6.42	5.14	4.07	M2019SS1G03
	SP3T	On-On-On	S	S1	G	03	360-1135-ND	10.59	8.48	6.71	M2024SS1G03
	DPDT	On-On	S	S1	G	03	360-1136-ND	7.89	6.32	5.00	M2022SS1G03
	DPDT	On-Off-On	S	S1	G	03	360-1137-ND	8.91	7.13	5.65	M2023SS1G03
	3PDT	On-On	S	S1	G	03	360-1138-ND	12.87	10.30	8.16	M2032SS1G03
	4PDT	On-On	S	S1	G	03	360-1139-ND	17.64	14.12	11.18	M2042SS1G03
Locking Lever, Threaded Bushing, Solder Lug											
1	SPDT	On-On	L	L1	W	01	360-1096-ND	7.29	5.84	4.62	M2012LL1W01
	SPDT	On-Off-On	L	L1	W	01	360-1097-ND	8.01	6.41	5.08	M2013LL1W01
	SPDT	On-Mom	L	L1	W	01	360-1098-ND	8.61	6.89	5.46	M2015LL1W01
	SPDT	Mom-Off-Mom	L	L1	W	01	360-1099-ND	8.73	6.99	5.53	M2018LL1W01
	SPDT	On-Off-Mom	L	L1	W	01	360-1100-ND	8.73	6.99	5.53	M2019LL1W01
	DPDT	On-On	L	L1	W	01	360-1101-ND	9.39	7.52	5.95	M2022LL1W01
	DPDT	On-Off-On	L	L1	W	01	360-1102-ND	10.41	8.33	6.60	M2023LL1W01
	3PDT	On-On	L	L1	W	01	360-1103-ND	13.59	10.88	8.61	M2032LL1W01
	3PDT	On-Off-On	L	L1	W	01	360-1104-ND	16.29	13.04	10.32	M2033LL1W01
	4PDT	On-On	L	L1	W	01	360-1105-ND	17.55	14.04	11.12	M2042LL1W01
Locking Lever, Threaded Bushing, Solder Lug											
1	SPDT	On-On	L	L1	G	01	360-1145-ND	7.95	6.36	5.04	M2012LL1G01
	SPDT	On-Off-On	L	L1	G	01	360-1146-ND	8.67	6.94	5.50	M2013LL1G01
	SPDT	On-Mom	L	L1	G	01	360-1147-ND	9.27	7.42	5.88	M2015LL1G01
	SPDT	On-Off-Mom	L	L1	G	01	360-1148-ND	9.39	7.52	5.95	M2019LL1G01
	DPDT	On-On	L	L1	G	01	360-1149-ND	10.68	8.55	6.77	M2022LL1G01
Bat Lever, Large Threaded Bushing, Solder Lug											
1	SPDT	On-On	B	B1	G	01	360-1106-ND	7.50	6.00	4.75	M2012BB1G01
	SPDT	On-Off-On	B	B1	G	01	360-1107-ND	8.22	6.58	5.21	M2013BB1G01
Large Bat Lever, Large Threaded Bushing, Solder Lug											
1	SPDT	On-On	B2	B1	G	01	360-1108-ND	7.74	6.20	4.91	M2012B2B1G01
	DPDT	On-On	B2	B1	G	01	360-1109-ND	10.50	8.40	6.65	M2022B2B1G01

*W=Silver rated 6A @ 125V AC & 3A @ 250V AC G=Gold rated 0.4VA max. @ 28V AC/DC max.

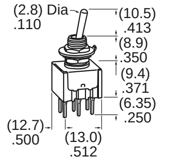
(Continued)

Fig. 1



(SPDT Shown)

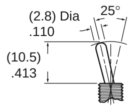
Fig. 2



(DPDT Shown)

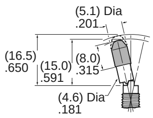
Actuators

S



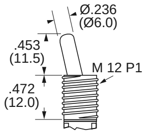
(Standard)

L



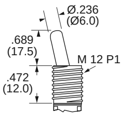
(Locking)

B



(Large)

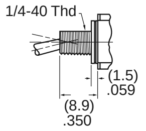
B2



(Long Large)

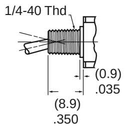
Bushings

D3



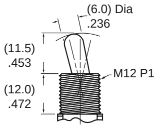
(Splashproof)

S1



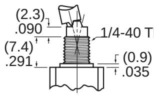
(Standard)

B1



(Large)

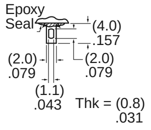
L1



(Locking)

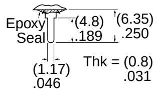
Terminals

01



(Solder)

03



(PCB)

NEW! **NKK® switches**

Miniature Toggle Switches *(Cont.)*

M2T Series: Interior bushing is sealed with o-ring which surrounds the actuator. Bushing and top of the housing are one molded piece, achieving the exterior seal. Ultransonic welding is used to seal the bushing unit to the base. Terminals are epoxy sealed for safeguarding the switch at the base
Features: Electrical Capacity: Logic Level (code G): 0.4VA maximum @ 28V AC/DC maximum **Dielectric Strength:** 1,000V AC minimum between contacts; 1,500V AC minimum between contacts and case **Mechanical Life:** 100,000 operations minimum **Electrical Life:** 50,000 operations minimum for gold; 25,000 operations minimum for silver **Operating Temp Range:** -30°C through +85°C

B Series: Sealed body construction permits switches to be subjected to time-and money-saving automated soldering techniques. Can be safely cleaned of flux without fear of compromising operating characteristics.
Features: Electrical Capacity: Logic Level: 0.4VA maximum @ 28V AC/DC maximum **Dielectric Strength:** 500V AC minimum **Mechanical Life:** 100,000 operations min. for On-On and On-Off-On **Electrical Life:** 50,000 operations min. **Operating Temp Range:** -30°C through +85°C

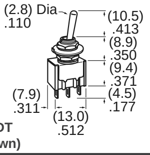
Dim. in (mm) Inch

Fig.	Circuit	Switching Function	Options (see diagrams)				Digi-Key Part No.	Price Each			NKK Part No.
			Act-uator	Bush-ing	Contact Material*	Terminal Option		1	25	100	
Flattened Lever, Threaded Bushing, Solder Lug											
3	SPDT	On-On	E	S1	G	01	360-1110-ND	6.06	4.85	3.84	M2012ES1G01
	SPDT	On-Off-On	E	S1	G	01	360-1111-ND	6.78	5.43	4.30	M2013ES1G01
	SP3T	On-On-On	E	S1	G	01	360-1112-ND	11.49	9.20	7.28	M2024ES1G01
	DPDT	On-On	E	S1	G	01	360-1113-ND	8.79	7.04	5.57	M2022ES1G01
	DPDT	On-Off-On	E	S1	G	01	360-1114-ND	9.81	7.85	6.22	M2023ES1G01
	3PDT	On-On	E	S1	G	01	360-1115-ND	13.65	10.92	8.65	M2032ES1G01
	4PDT	On-On	E	S1	G	01	360-1116-ND	18.24	14.60	11.56	M2042ES1G01
	4PDT	On-Off-On	E	S1	G	01	360-1117-ND	21.06	16.85	13.34	M2043ES1G01
Flattened Bat Lever, Threaded Bushing, PC Terminal											
3	SPDT	On-On	E	S1	W	03	360-1150-ND	5.55	4.44	3.52	M2012ES1W03
	SPDT	On-Off-On	E	S1	W	03	360-1151-ND	6.27	5.02	3.98	M2013ES1W03
	SPDT	Mom-Off-Mom	E	S1	W	03	360-1152-ND	6.99	5.60	4.43	M2018ES1W03
Bat Lever, Smooth Keyway Bushing, Vertical PC Terminal											
4	SPDT	On-On	S2	A2	G	40	360-1165-ND	5.94	4.76	3.77	M2012S2A2G40
	SPDT	On-Off-On	S2	A2	G	40	360-1166-ND	6.66	5.33	4.22	M2013S2A2G40
	SPDT	On-Off-Mom	S2	A2	G	40	360-1167-ND	7.38	5.91	4.68	M2019S2A2G40
	DPDT	On-On	S2	A2	G	40	360-1168-ND	9.81	7.85	6.22	M2022S2A2G40
Bat Lever, Smooth Keyway Bushing, Straight PC Terminal											
—	SPDT	On-On	S2	A2	W	13	360-1169-ND	4.65	3.72	2.95	M2012S2A2W13
—	SPDT	On-On	S2	A2	G	13	360-1158-ND	5.31	4.25	3.37	M2012S2A2G13
Bat Lever, Smooth Keyway Bushing, Right Angle PC Terminal											
4	SPDT	On-On	S2	A2	G	30	360-1159-ND	5.64	4.52	3.58	M2012S2A2G30
	SPDT	On-Off-On	S2	A2	G	30	360-1160-ND	6.36	5.09	4.03	M2013S2A2G30
	SPDT	Mom-Off-Mom	S2	A2	G	30	360-1161-ND	7.08	5.67	4.49	M2018S2A2G30
	SPDT	On-Off-Mom	S2	A2	G	30	360-1162-ND	7.08	5.67	4.49	M2019S2A2G30
	DPDT	On-On	S2	A2	G	30	360-1163-ND	9.12	7.30	5.78	M2022S2A2G30
	3PDT	On-On	S2	A2	G	30	360-1164-ND	14.82	11.86	9.39	M2032S2A2G30
	SPDT	On-On	S2	A2	W	30	360-1170-ND	4.98	3.99	3.16	M2012S2A2W30
	DPDT	On-On	S2	A2	W	30	360-1171-ND	7.83	6.27	4.96	M2022S2A2W30
	SPDT	On-On	S	A2	G	30	360-1153-ND	5.64	4.52	3.58	M2012SA2G30
	SPDT	On-Off-On	S	A2	G	30	360-1154-ND	6.36	5.09	4.03	M2013SA2G30
Bat Lever, Threaded Keyway Bushing, Solder Lug											
3	SPDT	On-On	S	A1	W	01	360-1155-ND	4.20	3.36	2.66	M2012S2A1W01
	DPDT	On-On	S	A1	W	01	360-1156-ND	6.30	5.04	3.99	M2022S2A1W01
Bat Lever, Threaded Keyway Bushing, Straight PC Terminal											
3	SPDT	On-On	S2	A1	W	03	360-1157-ND	4.35	3.48	2.76	M2012S2A1W03
Washable Mini Toggle Switches											
5	SPDT	On-On	—	—	G	30	360-1173-ND	6.24	5.00	3.96	M2T12S4A5G30
	SPDT	On-Off-On	—	—	G	30	360-1174-ND	6.78	5.43	4.30	M2T13S4A5G30
	SPDT	Mom-Off-Mom	—	—	G	30	360-1175-ND	7.44	5.96	4.72	M2T18S4A5G30
6	SPDT	On-On	—	—	G	40	360-1176-ND	6.72	5.38	4.26	M2T12S4A5G40
	SPDT	On-Off-On	—	—	G	40	360-1177-ND	7.26	5.81	4.60	M2T13S4A5G40
	SPDT	Mom-Off-Mom	—	—	G	40	360-1178-ND	7.92	6.34	5.02	M2T18S4A5G40
7	DPDT	On-On	—	—	G	40	360-1179-ND	11.13	8.91	7.05	M2T22S4A5G40
	SPDT	On-On	—	—	G	30	360-1180-ND	5.22	4.18	3.31	M2T12SA5G03
	SPDT	On-Off-On	—	—	G	30	360-1181-ND	5.76	4.61	3.65	M2T13SA5G03
	SPDT	Mom-Off-Mom	—	—	G	03	360-1182-ND	6.42	5.14	4.07	M2T18SA5G03
5	DPDT	On-On	—	—	G	30	360-1183-ND	8.16	6.53	5.17	M2T22SA5G03
	SPDT	On-On	—	—	G	30	360-1184-ND	6.24	5.00	3.96	M2T12SA5G30
Washable Sub-Mini Antistatic Toggle Switches											
8	SPDT	On-On	A	—	G	—	360-1012-ND	4.20	3.36	2.66	B12AP
	SPDT	On-Off-On	A	—	G	—	360-1013-ND	4.38	3.51	2.78	B13AP
	SPDT	On-Mom	A	—	G	—	360-1014-ND	4.50	3.60	2.85	B15AP
	DPDT	On-On	A	—	G	—	360-1015-ND	5.46	4.37	3.46	B22AP
	DPDT	On-Off-On	A	—	G	—	360-1016-ND	5.88	4.71	3.73	B23AP
	SPDT	On-On	A	—	G	—	360-1017-ND	4.56	3.65	2.89	B12JB
9	SPDT	On-On	J	—	G	—	360-1018-ND	4.92	3.94	3.12	B12JH
	SPDT	On-Off-On	J	—	G	—	360-1019-ND	5.10	4.08	3.23	B13JH
	SPDT	On-Mom	J	—	G	—	360-1020-ND	5.22	4.18	3.31	B15JH
	DPDT	On-On	J	—	G	—	360-1021-ND	6.54	5.24	4.15	B22JH
	DPDT	On-Off-On	J	—	G	—	360-1022-ND	6.96	5.57	4.41	B23JH
—	SPDT	On-On	J	—	G	—	360-1023-ND	4.92	3.94	3.12	B12JV
Washable Ultra Mini SMT Toggle Switches											
10	SPDT	On-On	A	—	G	—	360-1026-ND	5.70	4.56	3.61	G3T12AP
	SPDT	On-Off-On	A	—	G	—	360-1027-ND	6.12	4.90	3.88	G3T13AP
	DPDT	On-On	A	—	G	—	360-1028-ND	7.62	6.10	4.83	G3T22AP

Fig.	Circuit	Switching Function	Digi-Key Part No.	Price Each			Digi-Key Part No.	T&R Pricing	NKK Part No.
				1	25	100		500	
Washable Ultra-Miniature SMT Toggle Switch									
11	SPDT	On-On	360-1024-1-ND	6.00	4.80	3.80	360-1024-2-ND	1400.00	G3T12AH-R
	SPDT	On- Off-Mom	360-1025-1-ND	6.42	5.14	4.07	360-1025-2-ND	1498.00	G3T13AH-R

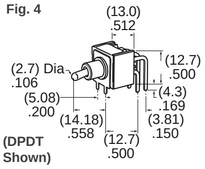
*W=Silver rated 6A @ 125V AC & 3A @ 250V AC G=Gold rated 0.4VA max. @ 28V AC/DC max.

Fig. 3



(SPDT Shown)

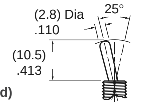
Fig. 4



(DPDT Shown)

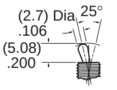
Actuators

S



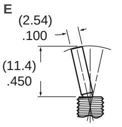
(Standard)

S2



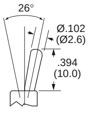
(Mini)

E



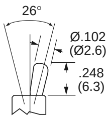
(Flat)

A



(Std. Wash)

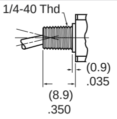
J



(Mini Wash)

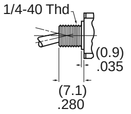
Bushings

S1



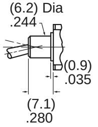
(Standard)

A1



(Short Bushing)

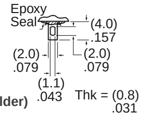
A2



(Unthreaded)

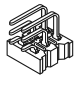
Terminals

01



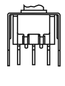
(Solder)

40



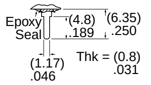
(Vert. Rt. Angle)

13



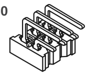
(Vert. Bracket)

03



(PCB)

30



(Rt Angle)

Fig. 5

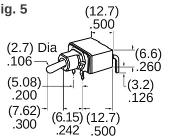


Fig. 6

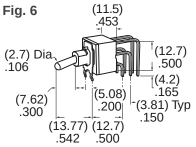


Fig. 7

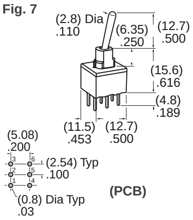


Fig. 8

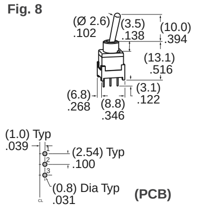


Fig. 9

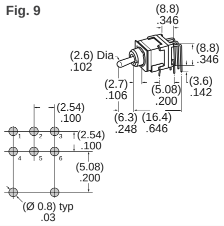


Fig. 10

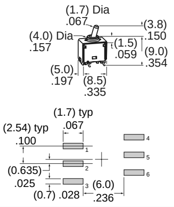
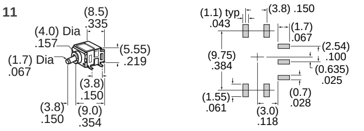


Fig. 11



NEW! nkk switches Power Toggle and Rocker Switches

Fig.	Circuit	Function	Switch Current (125VAC)	Digi-Key Part No.	Price Each 1	25	100	NKK Part No.
Medium and High Capacity, Solder Lug								
1	SPST	On-Off	15A	360-1185-ND*	5.28	4.23	3.35	S301
	SPDT	On-On	15A	360-1186-ND*	5.28	4.23	3.35	S302
	SPDT	On-Off-On	15A	360-1187-ND*	5.73	4.59	3.63	S303
	SPDT	On-Mom	15A	360-1188-ND*	5.88	4.71	3.73	S305
	SPDT	Mom-Off-Mom	15A	360-1189-ND*	6.00	4.80	3.80	S308
	SPDT	On-Off-Mom	15A	360-1190-ND*	6.21	4.97	3.94	S309
	DPST	On-Off	25A	360-1191-ND*	7.98	6.39	5.06	S331
	DPDT	On-On	25A	360-1192-ND*	7.98	6.39	5.06	S332
	DPDT	On-Off-On	25A	360-1193-ND*	9.39	7.52	5.95	S333
	DPDT	On-Mom	15A	360-1194-ND*	9.45	7.56	5.99	S335
	DPDT	Mom-Off-Mom	15A	360-1195-ND†	10.32	8.26	6.54	S338
	DPDT	On-Off-Mom	15A	360-1196-ND†	10.32	8.26	6.54	S339
	3PST	On-Off	25A	360-1197-ND‡	11.43	9.15	7.24	S31
	3PDT	On-On	25A	360-1198-ND‡	11.76	9.41	7.45	S32
	3PDT	On-Off-On	25A	360-1199-ND‡	12.69	10.16	8.04	S33
	3PDT	On-Mom	15A	360-1200-ND‡	12.69	10.16	8.04	S35
	3PDT	Mom-Off-Mom	15A	360-1201-ND‡	12.69	10.16	8.04	S38
	4PST	On-Off-Mom	25A	360-1202-ND‡	13.56	10.85	8.59	S41
	4PDT	On-Off	25A	360-1203-ND‡	13.56	10.85	8.59	S42
	4PDT	On-On	25A	360-1204-ND‡	14.64	11.72	9.28	S43
	4PDT	On-Mom	15A	360-1205-ND‡	14.64	11.72	9.28	S45
Medium and High Capacity, Quick Connect								
2	SPST	On-Off	15A	360-1206-ND	4.53	3.63	2.87	S1F
	SPDT	On-On	15A	360-1207-ND	5.34	4.28	3.39	S2F
	SPDT	On-Off-On	15A	360-1208-ND	5.55	4.44	3.52	S3F
	DPST	On-Off	15A	360-1209-ND	6.75	5.40	4.28	S21F
	DPDT	On-On	20A	360-1210-ND	8.31	6.65	5.27	S6F
	DPDT	On-Off-On	20A	360-1211-ND	8.37	6.70	5.31	S7F
	3PST	On-Off	25A	360-1212-ND‡	12.36	9.89	7.83	S31F
	3PDT	On-On	25A	360-1213-ND‡	12.69	10.16	8.04	S32F
	3PDT	On-Off-On	25A	360-1214-ND‡	13.65	10.92	8.65	S33F
	4PST	On-Off	25A	360-1215-ND†	14.37	11.50	9.11	S41F
	4PDT	On-On	25A	360-1216-ND†	14.79	11.84	9.37	S42F
	4PDT	On-Off-On	25A	360-1217-ND†	15.87	12.70	10.06	S43F
Medium and High Capacity, Solder Lug, Locking Lever								
3	SPST	On-Off	15A	360-1218-ND	15.39	12.32	9.75	S1AL
	SPDT	On-On	15A	360-1219-ND	17.04	13.64	10.80	S2AL
	SPDT	On-Off-On	15A	360-1220-ND	17.40	13.92	11.02	S3AL
	DPDT	On-On	20A	360-1221-ND	20.40	16.32	12.92	S6AL
	DPDT	On-Off-On	20A	360-1222-ND	20.55	16.44	13.02	S7AL
Medium Capacity, Screw Lug								
4	SPST	On-Off	15A	360-1223-ND*	5.82	4.66	3.69	S301T
	SPDT	On-On	15A	360-1224-ND*	6.00	4.80	3.80	S302T
	SPDT	On-Off-On	15A	360-1225-ND*	6.36	5.09	4.03	S303T
	SPDT	On-Mom	15A	360-1226-ND‡	6.21	4.97	3.94	S305T
	SPDT	Mom-Off-Mom	15A	360-1227-ND‡	6.90	5.52	4.37	S308T
	SPDT	On-Off-Mom	15A	360-1228-ND‡	6.90	5.52	4.37	S309T
	DPST	On-Off	15A	360-1229-ND†	8.91	7.13	5.65	S331T
	DPDT	On-On	15A	360-1230-ND†	9.39	7.52	5.95	S332T
	DPDT	On-Off-On	15A	360-1231-ND†	10.59	8.48	6.71	S333T
	DPDT	On-Mom	15A	360-1232-ND†	10.86	8.69	6.88	S335T
	DPDT	Mom-Off-Mom	15A	360-1233-ND†	11.40	9.12	7.22	S338T
	DPDT	On-Off-Mom	15A	360-1234-ND†	11.76	9.41	7.45	S339T
High Capacity, Screw Lug								
5	DPST	On-Off	30A	360-1235-ND*	20.90	18.91	16.42	S821
	DPDT	On-On	30A	360-1236-ND*	21.74	19.67	17.08	S822
	DPDT	On-Off-On	30A	360-1237-ND*	21.53	19.48	16.92	S823
	3PST	On-Off	30A	360-1238-ND*	31.25	28.28	24.56	S831
	3PDT	On-On	30A	360-1239-ND*	37.91	34.30	29.79	S832
	3PDT	On-Off-On	30A	360-1240-ND*	37.97	34.36	29.84	S833
	DPDT	On-On	50A	360-1241-ND	51.77	46.84	40.68	S732
Power Toggle Accessories								
6A	On-Off-Plate, 12mm, Nickel, Brass			360-1001-ND	.72	.58	.46	AT201
6B	On-Off-Plate, 12mm, Red/Black			360-1002-ND	2.16	1.73	1.37	AT202
6A	On-Off-Plate, 12mm, Red/Black			360-1003-ND	2.16	1.73	1.37	AT214
Standard Size Rocker Switches								
7	DPDT	On-On	20A	360-1498-ND*	4.91	4.45	3.87	SW3006A
	DPDT	On-Off-On	15A	360-1499-ND‡	5.21	4.72	4.10	SW3007A
	DPDT	Mom-Off-Mom	15A	360-1500-ND	6.34	5.74	4.99	SW3008A
8	DPST	On-Off	30A	360-1501-ND*	20.85	18.87	16.39	SW3821
	DPDT	On-On	30A	360-1502-ND*	21.63	19.57	17.00	SW3822
	DPDT	On-Off-On	30A	360-1503-ND*	22.05	19.95	17.33	SW3823
	3PST	On-Off	30A	360-1504-ND*	31.25	28.28	24.56	SW3831
	3PDT	On-On	30A	360-1505-ND*	37.97	34.36	29.84	SW3832
	3PDT	On-Off-On	30A	360-1506-ND*	37.97	34.36	29.84	SW3833

* UL/CSA † UL ‡ CSA

NKK offers one of the most extensive line of power toggle switches. Standard switching currents of 15, 25 and 30 Amps. Locking lever type is ideal for preventing accidental switching, lever must be pulled out then switched. All toggles come complete with mounting hardware. **Dielectric Strength:** 2000V AV min. **Mechanical Life:** 50,000 operations min. **Operating Temperature:** -10°C through 70°C

Dim. in (mm) Inch

Fig. 1

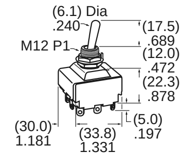


Fig. 2

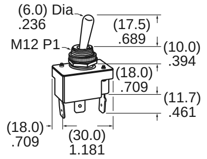


Fig. 3

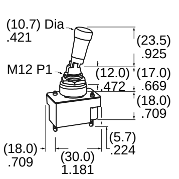


Fig. 4

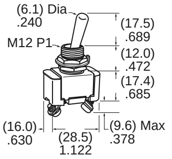
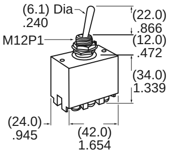


Fig. 5



Panel Cutout for Figs. 1-5

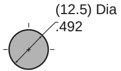
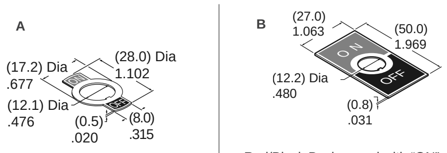
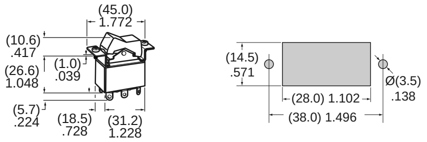


Fig. 6



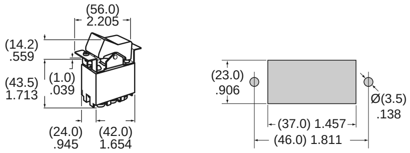
Red/Black Background with “ON” and “OFF” in White Lettering

Fig. 7



All rockers have white actuator. Solder lugs accommodate 12 AWG wire. 30,000 operations min. Operating Temp. -10°C — +70°C

Fig. 8



All rockers have white actuator. M4.5 screw terminals. 30,000 operations min. Operating temp: -10°C — +70°C

NEW! NKK® switches

Environmentally Sealed Switches

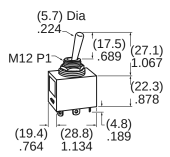
For use in outdoor or harsh applications. Toggles: Single and double pole. Rockers and pushbuttons: Single pole. Silver contacts, epoxy sealed solder lug or screw terminals or 7” wire leads, meets IP67 of IEC529 standards. Solder lug terminals have .094” dia. holes. Solder lug and screw models are dust tight and water protected at front panel, wire lead models also dust tight and water protected behind panel. **Electrical Capacity:** Toggle and pushbuttons: 10A @ 125V AC, Rockers: 15A @ 125V AC. **Dielectric Strength:** Toggles and pushbuttons: 1,500V AC minimum. Rockers: 3.750V AC minimum between contacts and case. **Mechanical Life:** Toggles: 15,000 operations min. Rockers: 30,000 operations min. Pushbuttons: 50,000 operations min. for On-On. 30,000 operations min. for On-Mom. **Electrical Life:** 15,000 operations min. (10,000 for momentary rockers). **Operating Temperature:** -30°C through +70°C (toggles and pushbutton): -25°C - +85°C (rockers) **Angle of Throw:** 24° (toggles & rockers). **Panel Thickness:**.157” **Standard Hardware:** 1 hex nut, 1 locking ring, 1 0-ring (toggles & pushbuttons)

Fig.	Switching Circuit	Function	Digi-Key Part No.	Price Each 1	25	100	NKK Part No.
			Sealed Toggles				
1	SPST	On-Off	360-1242-ND	10.50	9.50	8.25	WT11S
2	SPST	On-Off	360-1243-ND	11.24	10.17	8.83	WT11T
3	SPST	On-Off	360-1244-ND	25.20	22.80	19.80	WT11L
1	SPDT	On-On	360-1245-ND	11.13	10.07	8.75	WT12S
2	SPDT	On-On	360-1246-ND	11.87	10.74	9.33	WT12T
3	SPDT	On-On	360-1247-ND	25.83	23.37	20.30	WT12L
1	SPDT	On-Off-On	360-1248-ND	11.72	10.61	9.21	WT13S
2	SPDT	On-Off-On	360-1249-ND	12.45	11.27	9.79	WT13T
3	SPDT	On-Off-On	360-1250-ND	26.42	23.91	20.76	WT13L
1	DPST	On-Off	360-1251-ND	15.39	13.93	12.10	WT21S
2	DPST	On-Off	360-1252-ND	16.86	15.26	13.25	WT21T
3	DPST	On-Off	360-1253-ND	36.39	32.93	28.60	WT21L
1	DPDT	On-On	360-1254-ND	16.02	14.50	12.59	WT22S
2	DPDT	On-On	360-1255-ND	17.49	15.83	13.75	WT22T
3	DPDT	On-On	360-1256-ND	37.02	33.50	29.09	WT22L
1	DPDT	On-Off-On	360-1257-ND	17.43	15.77	13.70	WT23S
2	DPDT	On-Off-On	360-1258-ND	18.90	17.10	14.85	WT23T
3	DPDT	On-Off-On	360-1259-ND	38.43	34.77	30.20	WT23L
			Sealed Rockers				
4	SPST	On-Off	360-1507-ND	12.87	11.65	10.12	WR11AS
5	SPST	On-Off	360-1508-ND	13.55	12.26	10.65	WR11AT
6	SPST	On-Off	360-1509-ND	26.25	23.75	20.63	WR11AL
4	SPST	On-Off	360-1510-ND	12.87	11.65	10.12	WR11BS
5	SPST	On-Off	360-1511-ND	13.55	12.26	10.65	WR11BT
6	SPST	On-Off	360-1512-ND	26.25	23.75	20.63	WR11BL
4	SPDT	On-On	360-1513-ND	13.65	12.35	10.73	WR12AS
5	SPDT	On-On	360-1514-ND	14.34	12.98	11.27	WR12AT
6	SPDT	On-On	360-1515-ND	27.05	24.48	21.26	WR12AL
4	SPDT	On-On	360-1516-ND	13.65	12.35	10.73	WR12BS
5	SPDT	On-On	360-1517-ND	14.34	12.98	11.27	WR12BT
6	SPDT	On-On	360-1518-ND	27.05	24.48	21.26	WR12BL
4	SPDT	On-Off-On	360-1519-ND	14.45	13.08	11.36	WR13AS
5	SPDT	On-Off-On	360-1520-ND	15.12	13.68	11.88	WR13AT
6	SPDT	On-Off-On	360-1521-ND	27.83	25.18	21.87	WR13AL
4	SPDT	On-Off-On	360-1522-ND	14.45	13.08	11.36	WR13BS
5	SPDT	On-Off-On	360-1523-ND	15.12	13.68	11.88	WR13BT
6	SPDT	On-Off-On	360-1524-ND	27.83	25.18	21.87	WR13BL
			Sealed Pushbuttons				
7	SPDT	On-On	360-1421-ND	24.39	19.52	15.45	WB12S
8	SPDT	On-On	360-1422-ND	25.44	20.36	16.12	WB12T
9	SPDT	On-On	360-1423-ND	45.39	36.32	28.75	WB12L
7	SPDT	On-Mom	360-1424-ND	25.44	20.36	16.12	WB15S
8	SPDT	On-Mom	360-1425-ND	26.49	21.20	16.78	WB15T
9	SPDT	On-Mom	360-1426-ND	46.44	37.16	29.42	WB15L

S=Solder Lug: T=Screw Lug: L= 8” Wire Lead

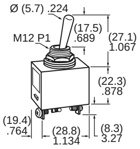
Dim. in (mm) Inch

Fig. 1



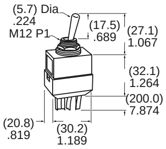
Toggle - Solder Term.

Fig. 2



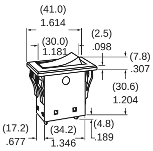
Toggle - Screw Term.

Fig. 3



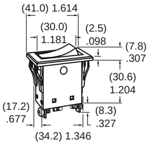
Toggle - 7” Wireleads

Fig. 4



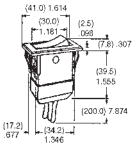
Rocker - Solder Term.

Fig. 5



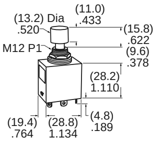
Rocker - Screw Term.

Fig. 6



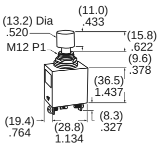
Rocker - 7” Wireleads

Fig. 7



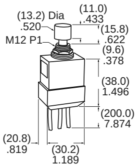
Pushbutton - Solder Term.

Fig. 8



Pushbutton - Screw Term.

Fig. 9



Pushbutton - 7” Wireleads

Internationally Approved Rocker Switches

JW Series: Industry’s first molded rockers with TV rating (JWM: TV-5; JWL TV-8). UL, CSA, VDE, SEMKO & SEV aproved. Silver contacts, epoxy sealed solder lug terminals. **Electrical Capacity:** JWM; 10A @ 125/250V AC: JWL: 16A @ 125/250V AC. **Dielectric Strength:** 2,000V AC min. between contacts: 4,000V AC min. between contacts & case. **Electrical Life:** 25,000 operations min. **Operating Temperature:** -25°C - +70°C. **Angle of Throw:** 26° **Terminals:** JWM-Solder lugs, JWL=.187” QC All switches are black body with black actuator.

Fig.	Switching Circuit	Function	Marking	Digi-Key Part No.	Price Each 1	25	100	NKK Part No.
				Rocker Switches				
1	SPST	On-Off	None	360-1482-ND	7.05	5.64	4.47	JWM11RAA
	SPST	On-Off	A	360-1483-ND	7.65	6.12	4.85	JWM11RA1A
	SPST	On-Off	B	360-1484-ND	7.65	6.12	4.85	JWM11RA2A
	SPDT	On-On	None	360-1485-ND	8.55	6.84	5.42	JWM12RAA
2	DPST	On-Off	None	360-1486-ND	9.39	7.52	5.95	JWM21RAA
	DPST	On-Off	A	360-1487-ND	9.99	8.00	6.33	JWM21RA1A
	DPST	On-Off	B	360-1488-ND	9.99	8.00	6.33	JWM21RA2A
	DPDT	On-On	None	360-1489-ND	11.19	8.96	7.09	JWM22RAA
1	SPST	On-Off	None	360-1490-ND	9.39	7.52	5.95	JWL11RAA
	SPST	On-Off	A	360-1491-ND	9.99	8.00	6.33	JWL11RA1A
	SPST	On-Off	B	360-1492-ND	9.99	8.00	6.33	JWL11RA2A
	SPDT	On-On	None	360-1493-ND	11.19	8.96	7.09	JWL12RAA
2	DPST	On-Off	None	360-1494-ND	12.99	10.40	8.23	JWL21RAA
	DPST	On-Off	A	360-1495-ND	13.59	10.88	8.61	JWL21RA1A
	DPST	On-Off	B	360-1496-ND	13.59	10.88	8.61	JWL21RA2A
	DPDT	On-Off-On	None	360-1497-ND	16.14	12.92	10.23	JWL22RAA
—	Switch Boot Waterproof JWL Series			360-1011-ND	3.39	2.72	2.15	AT4126

Fig. 1

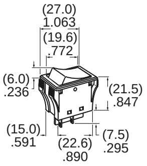
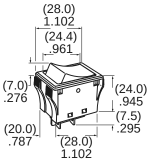
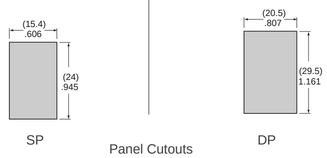


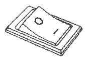
Fig. 2





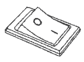
Panel Cutouts

A



Inscription for Horizontal Mounting

B

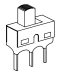


Inscription for Vertical Mounting

H

C&K Slide Switches

9138B-ND C&K Switch Data Book **$2.95**

Fig. 1


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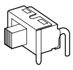

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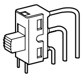

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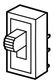

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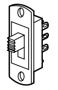

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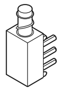

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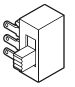
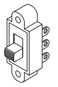


Fig. 8

Snap-In

Fig. 9


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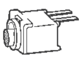

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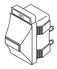
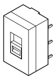


Snap-In

Fig. 12


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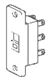

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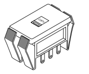
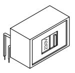


Snap-In

Fig. 15


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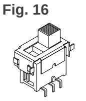


Contact Material Options

B Contacts & Terminals: Copper alloy, with gold plate over nickel plate. Terminals for the ES Series: Copper alloy, with tin-lead alloy over nickel plate. Rating: 0.4 VA max. @ 20 VAC or DC max. (For 1100, 1200, L200 Series).

Q 1100, 1200: End Contacts: Coin silver, silver plated. Center Contact and All Terminals: Copper alloy, silver plated. Rating: 6 amps @ 120 VAC or 28 VDC; 3 amps @ 250 VAC (UL/CSA). S602 Series: 12 amps @ 125 VAC

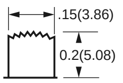
L200, LP Series: Contacts and Terminals: Copper, silver plated. (Std. with all termination options.) Rating: 4 amps @ 125 VAC or 28 VDC; 2 amps @ 250 VAC; 0.5 amp @ 125 VDC (UL/CSA).

L Contact Rating: 4 AMPS @ 125 V AC or 28 V DC; 2 AMPS. Electrical Life: 10,000 make-and-break cycles at full load. Mechanical Life: 100,000 cycles min. Contact Resistance: Below 10 milliohms

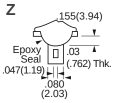
S Contact Rating: 15 AMPS @ 125 V AC or 28 V DC. Electrical Life: 10,000 make-and-break cycles at full load. Mechanical Life: 100,000 cycles min. Contact Resistance: Below 10 milliohms

V Contact Rating: 10.1 AMPS @ 125 V AC or 4 amps @ 28 V DC; 5 AMPS @ 250 V AC. Electrical Life: 10,000 make-and-break cycles. Mechanical Life: 100,000 cycles min. Contact Resistance: Below 10 milliohms

X Actuator



Termination Options

Z


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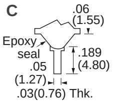

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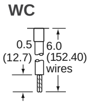

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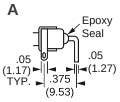

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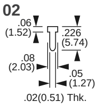

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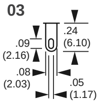

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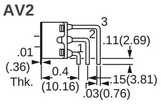
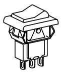


Fig.	Circuit	Switching Function	Options (see diag.)			Dimensions Inches (mm) L x W x D	Digi-Key Part No.	Price Each			C & K Part No.
			Actuator	Termination	Contact Mat'l			1	25	100	
1	SPDT	On-On	X	C	B	.5 x .26 x .25 (12.70 x 6.60 x 6.35)	CKN5000-ND	3.75	3.00	2.38	1101M2S3CBE2
1	SPDT	On-On	X	C	Q	.5 x .26 x .25 (12.70 x 6.60 x 6.35)	CKN5001-ND	3.75	3.00	2.38	1101M2S3CQE2
1	DPDT	On-On	X	C	B	.5 x .26 x .25 (12.70 x 6.60 x 6.35)	CKN5002-ND	7.32	5.86	4.64	1201M2S3CBE2
1	DPDT	On-On	X	C	Q	.5 x .26 x .25 (12.70 x 6.60 x 6.35)	CKN5003-ND	7.32	5.86	4.64	1201M2S3CQE2
1	SPDT	On-On	X	Z	Q	.5 x .26 x .25 (12.70 x 6.60 x 6.35)	CKN5004-ND	3.66	2.93	2.32	1101M1S3ZQE2
2	SPDT	On-On	X	A	B	.5 x .26 x .25 (12.70 x 6.60 x 6.35)	CKN5005-ND	4.29	3.44	2.72	1101M2S3ABE2
2	SPDT	On-On	X	A	Q	.5 x .26 x .25 (12.70 x 6.60 x 6.35)	CKN5006-ND	4.29	3.44	2.72	1101M2S3AQE2
3	SPDT	On-On	X	AV2	B	.5 x .26 x .25 (12.70 x 6.60 x 6.35)	CKN5007-ND	4.29	3.44	2.72	1101M2S3AV2BE2
3	SPDT	On-On	X	AV2	Q	.5 x .26 x .25 (12.70 x 6.60 x 6.35)	CKN5008-ND	4.29	3.44	2.72	1101M2S3AV2QE2
4	DPDT	On-Off	X	02	Q	.76 x .43 x .36 (19.30 x 10.80 x 9.09)	CKC5100-ND	1.85	1.60	1.35	L202011MSO2Q
5	DPST	On-Off	X	03	Q	.76 x .43 x .36 (19.30 x 10.80 x 9.09)	CKC5101-ND	1.69	1.47	1.24	L201011SSO3Q
5	DPDT	On-On	X	03	Q	1.38 x .53 x .28 (34.93 x 13.46 x 7.11)	CKC5013-ND	2.82	2.26	1.79	S602031SS03Q
6	DPDT	Mom (N/O)	—	02	L	.76 x .42 x .33 (19.30 x 10.79 x 8.38)	CKC5104-ND	2.85	2.28	1.81	L212132MV02Q
7	SPDT	On-On	—	02	L	.76 x .42 x .33 (19.30 x 10.79 x 8.38)	CKC5102-ND	1.56	1.25	.99	L102021ML04Q
7	DPDT	On-On	—	02	S	.76 x .42 x .33 (19.30 x 10.79 x 8.38)	CKC5103-ND	2.61	2.09	1.66	L202021MA04Q
8	DPDT	On-On	Blk	03	V	1.24 x .68 x .68 (31.50 x 17.27 x 17.27)	CKC5105-ND	3.63	2.91	2.30	S802C21S207Q
8	DPDT	On-On	Blk	WC	S	1.24 x .68 x .68 (31.50 x 17.27 x 17.27)	CKC5011-ND	5.67	4.54	3.60	S802C21S2WCQ
8	DPDT	On-On	Red	WC	S	1.24 x .68 x .68 (31.50 x 17.27 x 17.27)	CKC5012-ND	6.00	4.80	3.80	S802C31S2WCQ
9	DPDT	On-On	X	03	Q	1.42 x .53 x .64 (36.07 x 13.46 x 16.13)	CKC5014-ND	3.15	2.52	2.00	S602031TS03Q
10	SPDT	On-On	—	C	B	.28 x .16 x .28 (7.01 x 4.06 x 7.06)	CKN5009-ND	5.46	4.37	3.46	GS01MCKE
10	SPST	Off-On	—	C	B	.28 x .16 x .28 (7.01 x 4.06 x 7.06)	CKN5010-ND	6.00	4.80	3.80	GS02MCKE
11	SPDT	On-On	Blk	03	Q	.84 x .62 x .70 (21.34 x 15.75 x 17.68)	CKC5015-ND	2.82	2.26	1.79	LP02C21T203DQ
11	DPDT	On-On	Blk	03	Q	.84 x .62 x .70 (21.34 x 15.75 x 17.68)	CKC5016-ND	3.69	2.96	2.34	LP22C21T203DQ
11	SPDT	On-On	Red	03	Q	.84 x .62 x .70 (21.34 x 15.75 x 17.68)	CKC5017-ND	3.00	2.40	1.90	LP02C31T203DQ
11	DPDT	On-On	Red	03	Q	.84 x .62 x .70 (21.34 x 15.75 x 17.68)	CKC5018-ND	3.84	3.08	2.44	LP22C31T203DQ
115V/230V Volt Select											
12	DPDT	On-On	—	C	V	1.03 x .65 x .49 (26.16 x 16.51 x 12.57)	CKC3001-ND	3.75	3.00	2.38	V80212MS02Q
13	DPDT	On-On	—	03	V	1.61 x .65 x .49 (41.00 x 16.51 x 12.57)	CKC3002-ND	3.75	3.00	2.38	V80212SS05Q
14	DPDT	On-On	—	03	V	1.3 x .75 x .54 (33.02 x 19.05 x 13.72)	CKC3003-ND	3.75	3.00	2.38	V20212S205Q
15	DPDT	On-On	—	C	V	1.03 x .65 x .63 (26.16 x 16.51 x 16.00)	CKC3004-ND	3.50	3.03	2.55	V802-12MA08Q
Fully Sealed Miniature Slide Switches											
1	SPDT	On-On	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1245-ND	5.58	4.47	3.54	ES01MCKE
1	SPST	On-Off	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1246-ND	6.15	4.92	3.90	ES02MCKE
1	SP3T	On-Off-On	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1247-ND	5.76	4.61	3.65	ES03MCKE
1	DPDT	On-On	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1248-ND	7.32	5.86	4.64	ES21MCKE
1	DPST	On-Off	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1249-ND	8.04	6.44	5.10	ES22MCKE
1	DP3T	On-Off-On	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1250-ND	7.53	6.03	4.77	ES23MCKE
2	SPDT	On-On	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1251-ND	6.27	5.02	3.98	ES01MAKE
2	SPST	On-Off	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1252-ND	6.81	5.45	4.32	ES02MAKE
2	SP3T	On-Off-On	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1253-ND	6.42	5.14	4.07	ES03MAKE
16	SPDT	On-On	X	SMT	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1254-ND	5.67	4.54	3.60	ES01MSAKE
2	DPDT	On-On	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1267-ND	7.98	6.39	5.06	ES21MAKE
2	DPST	On-Off	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1268-ND	8.73	6.99	5.53	ES22MAKE
2	DP3T	On-Off-On	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1269-ND	8.22	6.58	5.21	ES23MAKE
3	SPDT	On-On	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1270-ND	6.48	5.19	4.11	ES01MAVKE
3	SPST	On-Off	X	C	B	39 x .24 x .36 (10 x 6 x 9.14)	CKN1271-ND	7.05	5.64	4.47	ES02MAVKE
3	SP3T	On-Off-On	X	C	B	39 x .24 x .36 (10 x 6 x 9.14)	CKN1272-ND	6.48	5.19	4.11	ES03MAVKE
3	DPDT	On-On	X	C	B	39 x .24 x .36 (10 x 6 x 9.14)	CKN1273-ND	8.22	6.58	5.21	ES21MAVKE
3	DPST	On-Off	X	C	B	39 x .24 x .36 (10 x 6 x 9.14)	CKN1274-ND	8.43	6.75	5.34	ES22MAVKE
3	DP3T	On-Off-On	X	C	B	39 x .24 x .36 (10 x 6 x 9.14)	CKN1275-ND	8.43	6.75	5.34	ES23MAVKE
16	SPST	On-On	X	SMT	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1255-ND	6.42	5.14	4.07	ES02MSAKE
16	SP3T	On-Off-On	X	SMT	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1256-ND	5.85	4.68	3.71	ES03MSAKE

Rocker Switches

Fig. 1


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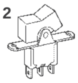

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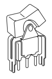

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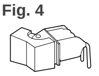

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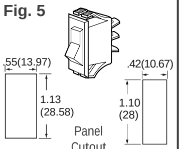

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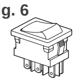

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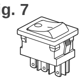
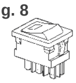


Vert. White Marking

Fig. 8


Illuminated

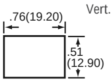


Fig. 9

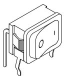
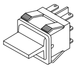
PC Mount


Fig. 10

Paddle Type


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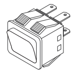
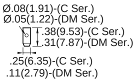


Termination Options

05


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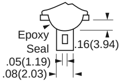

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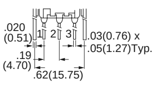

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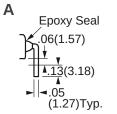


Contact Materials

B Contacts & Terminals: Copper alloy, with gold plate over nickel plate. Rating: 0.4 VA max. @ 20 VAC or DC max.

Q Contacts: Coin silver, silver plated. Center Contact & All Terminals: Copper alloy, silver plated. Rating: 5 amps @ 120 VAC or 28 VDC; 2 amps @ 250 VAC; C Series — 15A @ 125 VAC or 10A @ 250 VAC (UL/CSA); DM Series — 10A @ 125 VAC or 5A @ 250 VAC (UL/CSA).

9138B-ND C&K Switch Data Book **$2.95**

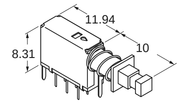
Fig.	Circuit	Actuator Color	Switching Function	Options (see diag.)		Digi-Key Part No.	Price Each			C & K Part No.
				Termination	Contact Material		1	25	100	
Rocker Switches										
1	SPDT	Blk	On-On	Z	Q	CKN2002-ND	7.05	5.64	4.47	U11J51ZQE22
2	SPDT	Blk	On-On	Z	Q	CKN2007-ND	6.12	4.90	3.88	7101J1ZQE2
2	SPDT	Blk	On-Off-On	Z	Q	CKN2008-ND	6.63	5.31	4.20	7103J1ZQE2
2	4PDT	Blk	On-On	Z	Q	CKN2001-ND	18.51	14.81	11.73	7401J1ZQE2
2	DPDT	Blk	On-On	Z	Q	CKN2000-ND	8.49	6.80	5.38	7201J1ZQE2
3	SPDT	Blk	On-Off-On	V3	B	CKN2003-ND	7.53	6.03	4.77	7103J1V3BE2
4	DPDT	Blk	On-On	A	Q	CKN2006-ND	6.75	5.40	4.28	7201J1AQE2
4	SPDT	Blk	On-On	A	B	CKN2004-ND	6.81	5.45	4.32	7101J1ABE2
4	SPDT	Blk	On-On	A	Q	CKN2005-ND	4.86	3.89	3.08	7101J1AQE2
—	SPDT	Blk	On-On	A	Q	CKC2021-ND	3.57	2.86	2.27	JA01J12AQ
Power Rocker Switches										
5	SPDT	Blk	On-On	05	Q	CKC2008-ND	4.03	2.32	1.96	C121J12S205QF
5	SPDT	Red	On-On	05	Q	CKC2025-ND	3.96	3.17	2.51	C121J13S205QF
5	DPDT	Blk	On-On	05	Q	CKC2026-ND†	4.56	3.65	2.89	C221J12S205QF
5	DPDT	Red	On-On	05	Q	CKC2027-ND†	4.86	3.89	3.08	C221J13S205QF
5	SPDT	Blk	On-On	05	Q	CKC1238-ND	1.98	1.14	.96	CA01J12207Q
5	SPDT	Red	On-On	05	Q	CKC1239-ND	2.34	1.35	1.14	CA01J13207Q
5	SPDT	Wht	On-On	05	Q	CKC1240-ND	2.34	1.35	1.14	CA01J11207Q
5	SPDT	Grn	On-On	05	Q	CKC1241-ND	2.34	1.35	1.14	CA01J16207Q
5	SPDT	Illum/Red	On-On	05	Q	CKC1242-ND	2.84	1.64	1.38	CA04J137207Q
5	SPDT	Illum/Ylw	On-On	05	Q	CKC1244-ND	2.84	1.64	1.38	CA04J157207Q
6	SPDT	Blk	On-Off-On	05	Q	CKC2012-ND	4.05	3.24	2.57	D503J12S205QA
6	SPDT	Blk	On-Mom	05	Q	CKC2013-ND	3.27	2.62	2.08	D508J12S205QA
6	SPDT	Blk	Mom-Off-Mom	05	Q	CKC2022-ND	3.93	3.15	2.49	D105J12S205QA
6	DPDT	Blk	On-On	05	Q	CKC2009-ND	3.67	3.18	2.68	DM61J12S205Q
7	SPST	Blk	On-Off	05	Q	CKC2011-ND‡	3.42	2.74	2.17	D502J12S215PQF
7	DPDT	Blk	On-On	05	Q	CKC2018-ND‡	5.43	4.35	3.44	DM61J12S205PQ
7	DPST	Blk	On-Off	05	Q	CKC2019-ND‡	4.95	3.96	3.14	DM62J12S205PQ
8	SPST	Blk	On-Off	05	Q	CKC2017-ND	4.86	3.89	3.08	DM54J72S205Q3
8	DPST	Blk	On-Off	05	Q	CKC2020-ND	5.49	4.40	3.48	DM64J72S205Q3
—	DPST	Blk	On-Off	05	Q	CKC2016-ND‡	4.32	3.46	2.74	DF62J12S215PQF
9	SPDT	Blk	On-On (Vert.)	A	Q	CKC2010-ND‡	4.71	3.77	2.99	D501J12S2APQF
9	SPDT	Blk	On-On (Horz.)	A	Q	CKC2023-ND‡	4.71	3.77	2.99	D501J12S2AHQF
10	DPDT	Blk	On-On	05	Q	CKC2024-ND	3.90	3.12	2.47	D201J52S215QA
11	DPDT	Blk	On-Mom	05	Q	CKC2015-ND*	6.54	5.24	4.15	D608J12S205QA
11	DPST	Blk	On-Off	05	Q	CKC2014-ND*‡	4.92	3.94	3.12	D602J12S215PQF
11	DPDT	Blk	On-Off-On	05	Q	CKC2028-ND*	5.61	4.49	3.56	D603J12S205QA

† Panel Cutout is 1.00” x 1.125” (25.40mm x 28.58mm) * Panel Cutout is .756” x .887” (19.20mm x 22.53mm) ‡ White Vertical Marking

ITT Industries
Engineered for life

C&K PN Series Pushbutton Switches

Specifications: • **Contact Rating:** 0.2 Amp @ 30 VDC max. • **Electrical Life:**10,000 Make-and-Break Cycles at Full Load • **Operating/Storage Temp.:** -10°C to 60°C.
Materials: • **Frame:** Tin Plated Steel • **Terminals:** Silver Plated Brass • **Movable Contacts:** Silver Plated (or Clad) Phosphor Bronze • **Terminal Seal:** Epoxy



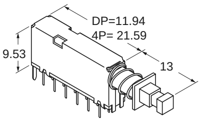


Fig. 1

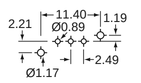


Fig. 2

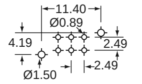


Fig. 3

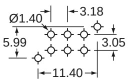
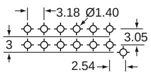


Fig. 4



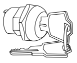
Pushbutton Switches

Fig.	Circuit	Description	Digi-Key Part No.	Price Each 1	100	500	C & K Part No.
1	SPDT	Momentary, 230gf, Nonshorting	CKN1188-ND	.55	.48	.42	PN11SHNA03QE
1	SPDT	Alt. Action, 230 gf, Nonshorting	CKN1189-ND	.58	.50	.44	PN12SHNA03QE
2	DPDT	Momentary, 330gf, Nonshorting	CKN1190-ND	.63	.54	.47	PN21SJNA03QE
2	DPDT	Alt. Action, 330gf, Nonshorting	CKN1191-ND	.64	.56	.48	PN22SJNA03QE
3	DPDT	Momentary, 300gf, Nonshorting	CKN1192-ND	.63	.54	.47	PN21LENA03QE
3	DPDT	Alt. Action, 300gf, Nonshorting	CKN1193-ND	.64	.56	.48	PN22LENA03QE
4	4PDT	Momentary, 300gf, Nonshorting	CKN1194-ND	.93	.80	.70	PN41LENA02QE
4	4PDT	Alt. Action, 300gf, Nonshorting	CKN1195-ND	.96	.82	.72	PN42LENA02QE

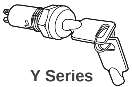
Switch Caps

Size	Color	Description	Digi-Key Part No.	Price Each 1	10	100	C & K Part No.
4.6 mm Sq.	Black	Fits CKN1188 - 1191-ND	CKN1196-ND	.27	.25	.21	979A02000
5.86 mm Dia.	Black	Fits CKN1188 - 1191-ND	CKN1197-ND	.27	.25	.21	981A02000
7.7 mm Sq.	Black	Fits CKN1192 - 1195-ND	CKN1198-ND	.27	.25	.21	980A02000
7.21 mm Dia.	Black	Fits CKN1192 - 1195-ND	CKN1199-ND	.27	.25	.21	982A02000
12.2 mm Rect.	Black	Fits CKN1192 - 1195-ND	CKN1200-ND	.27	.25	.21	983A02000

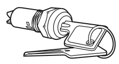
Key Switch — Switchlocks



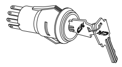
**Y Series
4 Tumbler**



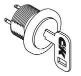
**Y Series
6 Tumbler**



**YM Series
YF Series**



P Series



**P Series,
Low Profile**

Termination Options

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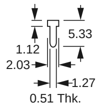

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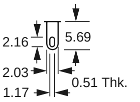

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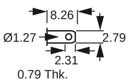

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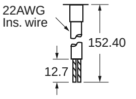


Fig. 1

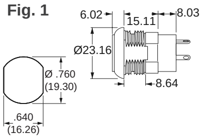


Fig. 2

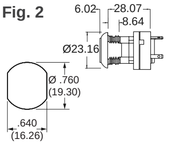


Fig. 3

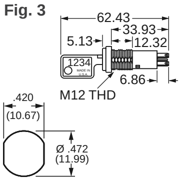
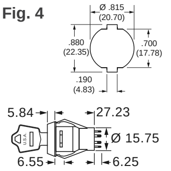
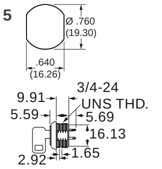


Fig. 4



Plastic housing

Fig. 5



Plastic housing

Fig. 6

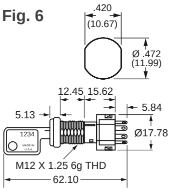


Fig.	No. Poles	Keypull Possible	Switch Type	Amp Rtg. @ 125 VAC	Term-ination	Connected Terminals Pos. 1	Pos. 2	Digi-Key Part No.	Price Each 1	10	100	C & K Part No.
1	SP	1 & 2	On-On	4	B	8-1	1-3	CKC8000-ND	8.45	7.30	6.15	Y1011U2C203NQ
1	DP	1 & 2	On-On	4	B	8-1, 4-5	1-3, 5-7	CKC8001-ND	9.88	8.54	7.19	Y2011U2C203NQ
1	SP	1 & 2	On-On	4	A	8-1	1-3	CKC8002-ND	8.45	7.30	6.15	Y1011U2C202NQ
1	DP	1 & 2	On-On	4	A	8-1, 4-5	1-3, 5-7	CKC8003-ND	9.88	8.54	7.19	Y2011U2C202NQ
1	SP	1 only	On-Mom	4	B	8,1	1-2	CKC1230-ND	12.69	10.97	9.24	Y108122A203NQ
1	DP	1 only	On-Mom	4	B	8-1, 4-5	1-2, 5-6	CKC1231-ND	13.44	11.61	9.78	Y208122A203NQ
1	SP	2 only	On-Off-Mom	4	B	8-1, 1-2, 7-8		CKC1232-ND	9.48	8.19	6.90	Y108822A203NQ
2	SP	1 & 2	On-On	12	C	7-8	8-2	CKC8004-ND	10.34	8.93	7.52	H1011U2C205NQ
2	DP	1 & 2	On-On	12	C	7-8, 3-4	8-2, 4-6	CKC8005-ND	12.08	10.44	8.79	H2011U2C205NQ
1	SP	1 & 2	On-On	4	B	8-1	1-3	CKC8006-ND†	15.64	13.51	11.38	Y1011U2V203NQ
1	DP	1 & 2	On-On	4	B	8-1, 4-5	1-3, 5-7	CKC8007-ND†	13.93	12.03	10.13	Y2011U2V203NQ
3	SP	1 & 2	On-Off	4	C	1-2		CKC8008-ND	8.58	7.41	6.24	YM061U2C205NQ
3	SP	1 & 2	On-Off	4	D	1-2		CKC8009-ND	9.77	8.44	7.11	YM061U2C2WCNQ
3	SP	1 only	On-Off	4	C	1-2		CKC8010-ND	8.58	7.41	6.24	YM06132C205NQ
3	SP	1 only	On-Off	4	D	1-2		CKC8011-ND	9.92	8.57	7.22	YM06132C2WCNQ
4	SP	1 only	On-On	4	B	1-8		CKC8012-ND	8.78	7.59	6.39	P10113TCM03Q22
4	DP	1 only	On-On	4	B	1-8, 4-5	1-3, 5-7	CKC8013-ND	12.14	10.49	8.84	P20113TCM03Q22
4	SP	1 & 2	On-On	4	B	1-8		CKC8014-ND	11.29	9.75	8.21	P1011UTCM03Q22
4	DP	1 & 2	On-On	4	B	1-8, 4-5	1-3, 5-7	CKC8015-ND	12.14	10.49	8.84	P2011UTCM03Q22
5	SP	1 & 2	On-On	4	B	1-8		CKC8016-ND	4.58	3.96	3.33	P1011U2WM03NQ2
5	DP	1 & 2	On-On	4	B	1-8, 4-5	1-3, 5-7	CKC8017-ND	5.06	4.37	3.68	P2011U2WM03NQ2
5	SP	1 only	On-On	4	B	1-8		CKC8018-ND	4.47	3.86	3.25	P101132WM03NQ2
5	DP	1 only	On-On	4	B	1-8, 4-5	1-3, 5-7	CKC8019-ND	5.17	4.47	3.76	P201132WM03NQ2
6	SP	1 only	On-On	4	B	8-1	1-3	CKC1234-ND	9.46	8.17	6.88	YF01132C203NQ
6	DP	1 only	On-On	4	B	8-1, 4-5	1-3, 5-7	CKC1235-ND	10.34	8.93	7.52	YF21132C203NQ
6	SP	1 & 2	On-On	4	B	8-1	1-3	CKC1236-ND	9.46	8.17	6.88	YF011U2C203NQ
6	DP	1 & 2	On-On	4	B	8-1, 4-5	1-3, 5-7	CKC1237-ND	10.34	8.93	7.52	YF211U2C203NQ

† 6 Tumbler Version

NOTE: All switchlocks come with hardware and 2 keys.

Thumbwheel Switches

Fig. 1 — Series 3

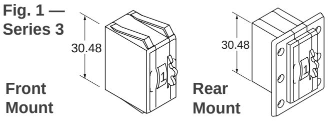


Fig. 2 — Series 3U

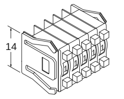


Fig. 3 —Series 3P

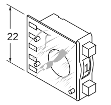
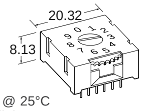


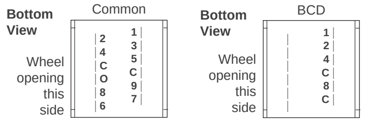
Fig.	Description	No. of Pos.	Color	Digi-Key Part No.	Price Each 1	25	100	C & K Part No.
1	Decimal Output Switch, Front Mount	0-9	Blk. Gloss	CKN5013-ND	8.91	7.13	5.65	301109000
1	BCD Output Switch, Front Mount	0-9	Blk. Gloss	CKN5014-ND	8.91	7.13	5.65	302109000
1	Decimal Output Switch, Rear Mount	0-9	Blk. Gloss	CKN1186-ND	8.91	7.13	5.65	301119000
1	BCD Output Switch, Rear Mount	0-9	Blk. Gloss	CKN1187-ND	8.91	7.13	5.65	302119000
—	Front Mounted End Cap for Series 3 (2 required)			CKN5015-ND	1.77	1.42	1.13	413402000
—	Front Mounted Spacer for Series 3 (optional)			CKN5016-ND	2.13	1.71	1.35	413502000
—	Rear Mounted End Cap for Series 3 (2 required)			CKN5017-ND	.51	.41	.33	400402000
—	Rear Mounted Spacer for Series 3 (optional)			CKN5018-ND	1.59	1.28	1.01	400802000
—	Rod Assembly for 1 Module (Series 3)			CKN5019-ND	2.58	2.07	1.64	412707000
—	Rod Assembly for 2-4 Modules (Series 3)			CKN5020-ND	2.58	2.07	1.64	412701000
—	Rod Assembly for 5-7 Modules (Series 3)			CKN5021-ND	2.58	2.07	1.64	412702000
—	Rod Assembly for 8-10 Modules (Series 3)			CKN5022-ND	2.58	2.07	1.64	412703000
—	Fastener Nut for Rod Assemblies (Series 3)			CKN5023-ND	.27	.22	.18	403500000
—	Nut Driver hand tool for CKN5023-ND Fasteners			CKN5024-ND*	9.12	7.30	5.78	406100652
2	BCD Output without Dust Lens	0-9	Blk. Gloss	CKN5025-ND	9.36	7.49	5.93	3U0210000
2	BCD Output with Dust Lens	0-9	Blk. Gloss	CKN5026-ND	9.78	7.83	6.20	3U0210002
—	Left End Cap for 3U Series			CKN5027-ND	.39	.32	.25	113B02000
—	Right End Cap for 3U Series			CKN5028-ND	.39	.32	.25	114B02000
3	BCD type with Straight Board	0-9	Blk. Gloss	CKN5029-ND	9.87	7.90	6.26	3P0210000
3	Decimal type with Right Angle Board	0-9	Blk. Gloss	CKN5030-ND	10.80	8.64	6.84	3P0110L00
—	Left End Cap for 3P Series			CKN5031-ND	.51	.41	.33	623502000
—	Right End Cap for 3P Series			CKN5032-ND	.51	.41	.33	623602000

* Xcelite hand tool

Mini-thumbwheel Switches



SPECIFICATIONS:• **Contact Rating:** Carry — 1 amp continuous @ 28 V DC. Switch —100mA max. @ 28 VDC • **Electrical Life:** 10^5 detent operations @ 25°C • **Contact Resistance:** Below 100 milliohms typ. initial @ 2-4 VDC, 100mA • **Insulation Resistance:** 10^8 ohms min. (dry) • **Dielectric Strength:** 250 V RMS min. @ sea level • **Operating Temperature:** –10°C to +65°C
MATERIALS:• **Cover:** Thermoplastic polyester • **Base:** Glass filled nylon • **Thumbwheel:** Nylon • **Rotor Contacts:** Hard gold over nickel over copper on epoxy fiberglass • **Stator Contacts:** Copper alloy with gold over nickel • **Terminals:** Solder clad over copper alloy, insert molded.



Function Code	Digi-Key Part No.	Price Each 1	25	100	C & K Part No.
Decimal	CKN6000-ND•	8.28	6.63	5.25	3M120
BCD	CKN6001-ND★	8.82	7.06	5.59	3M223
BCD Comp	CKN5033-ND★	10.59	8.48	6.71	3M243
BCD	CKN5034-ND†	9.27	7.42	5.88	3M123

Wheel markings • None ★Horizontal †Vertical

NEW! NKK® switches

Keylock Switches

12mm Miniature Low and Medium Security: SK bushing mount keylock switches are available in single pole, double throw with 12mm dia. bushing, silver contacts, UL recognition. CSA certification, short behind panel dimension and epoxy sealed solder lug terminals. Terminals have .043" x .079" holes. Face and bezel have bushed chrome finish. 2 keys of chromate over zinc alloy provided. **Electrical Capacity:** 3A @ 125V AC **Dielectric Strength:** 1,500V AC min. between contacts and case **Mechanical Life:** 30,000 cycles min. **Electrical Life:** 10,000 cycles min. **Operating Torque:** 270 grams-cm **Operating Temperature:** -10°C through +70°C **Angle of Throw:** 90° for on-none-on models, 45° for on-off-on models **Panel Thickness:** .315" **Standard Hardware:** 1 hex nut and 1 locking ring

16mm High Security Antistatic: CKM bushing mount keylock switches are available in single pole, double throw with 16mm dia. bushing, silver contacts, high insulating material (15kV ESD) and epoxy sealed solder lug terminals. Terminals have .047" x .094" holes. Face and bezel have black matte finish. 1 key with PBT handle provided. **Electrical Capacity:** 3A @ 250V AC. **Dielectric Strength:** 1,500V AC min. between contacts and case. **Mechanical Life:** 30,000 cycles min. **Electrical Life:** 10,000 cycles min. **Operating Torque:** .04 milliNewton/meter (5.67 ounce-in) for flat key: (F code) .08 milliNewton/meter (11.33 ounce-in) for tubular key (T code). **Operating Temperature:** -10°C through +70°C. **Angle of Throw:** 90° for on-on models, 45° for on-off-on models. **Panel Thickness:** .496". **Standard Hardware:** 1 hex nut.

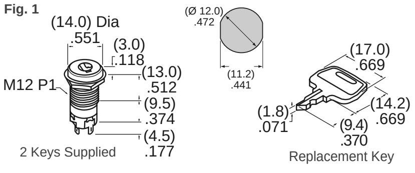
19mm High Security: CKL keylock switches are available in single pole, double throw with 19mm dia. bushing, silver contacts, and epoxy sealed solder lug terminals. Terminals have .055" x .0217" holes. Face and bezel have a brass with chrome or nickel finish. 1 key of chrome over brass provided. **Electrical Capacity:** 3A @ 250V AC. **Dielectric Strength:** 1,500V AC min. between contacts and case. **Mechanical Life:** 30,000 cycles min. **Electrical Life:** 10,000 cycles min. **Operating Torque:** .05 milliNewton/meter (7.08 ounce-in) for flat key (F Code); .07 milliNewton/meter (9.91 ounce-in) for tubular key (T Code). **Operating Temperature:** -25°C through +70°C. **Angle of Throw:** 90° for on-on models and 45° for on-off-on models. **Panel Thickness:** .496" **Standard Hardware:** 1 hex nut

Antistatic PC SP3T and SPST Low Security: SK PCB mount keylock switches are available in single pole (SK13 models 3 throw, SK15 models 5 throw). Straight PC with bracket. Gold contacts, 2 polyacetal keys supplies. **Electrical Capacity:** 0.4A @ 28V AC/DC. **Dielectric Strength:** 500V AC min. **Mechanical Life:** 30,000 cycles min. **Electrical Life:** 20,000 cycles min. **Operating Torque:** 2.039 grams-cm. **Operating Temperature:** -25°C through +70°C. **Angle of Throw:** 90° for 3 Position models, 45° for 5 Position models.

PC Miniature Low Security: SK series PCB mount switches in single and double pole. Straight or right angle PC with bracket. Gold contacts, 2 keys supplied. **Electrical Capacity:** 0.4A @ 28V AC/DC. **Dielectric Strength:** 500V AC min. **Mechanical Life:** 30,000 cycles min. **Electrical Life:** 10,000 cycles min. **Operating Torque:** 270 grams-cm for momentary action models, 210 grams-cm for maintained action models. **Operating Temperature:** -25°C through +70°C. **Angle of Throw:** 90° for 2 Position models, 45° for 3 Position models.

Dim. in (mm) Inch

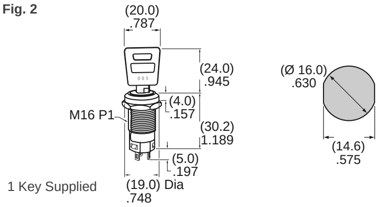
Fig. 1



2 Keys Supplied

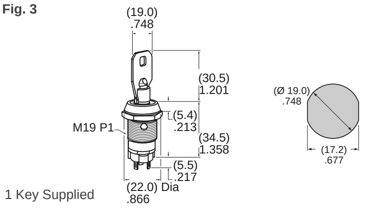
Replacement Key

Fig. 2



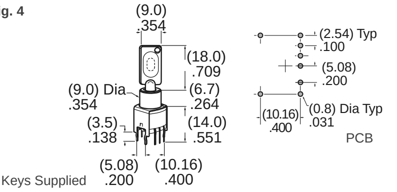
1 Key Supplied

Fig. 3



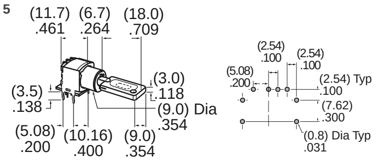
1 Key Supplied

Fig. 4



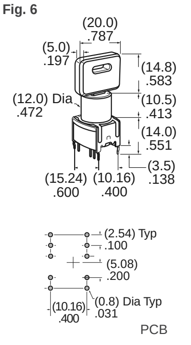
2 Keys Supplied

Fig. 5



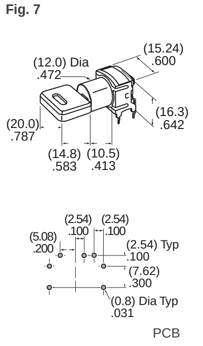
2 Keys Supplied

Fig. 6



2 Keys Supplied

Fig. 7



2 Keys Supplied

Fig.	Key Positions Pos. 1	Key Positions Pos. 2	Key Positions Pos. 3	Key Removable Positions	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 100	NKK Part. No.
12mm Miniature Low and Medium Security									
1	On	None	On	1 & 3	360-1459-ND	16.95	13.56	10.74	SK12AAW01
	On	None	On	1	360-1460-ND	16.95	13.56	10.74	SK12BAW01
	On	Off	On	1, 2, 3	360-1461-ND	17.85	14.28	11.31	SK13DAW01
	On	Off	On	2	360-1462-ND	17.85	14.28	11.31	SK13EAW01
	On	None	On	1 & 3	360-1463-ND	33.30	26.64	21.09	SK12ADW01
	On	None	On	1	360-1464-ND	33.30	26.64	21.09	SK12BDW01
	On	Off	On	1, 2, 3	360-1465-ND	34.20	27.36	21.66	SK13EDW01
Replacement Key for SK12..AW01 Switches, Chrome/Zinc Alloy					360-1010-ND	2.40	1.92	1.52	AT4081
16mm High Security Antistatic									
2	On	None	On	1 & 3	360-1447-ND*	16.68	13.35	10.57	CKM12AFW01
	On	None	On	1	360-1448-ND*	16.68	13.35	10.57	CKM12BFW01
	On	Off	On	2	360-1449-ND*	18.42	14.74	11.67	CKM13EFW01
	On	None	On	1 & 3	360-1450-ND†	16.68	13.35	10.57	CKM12ATW01
	On	None	On	1	360-1451-ND†	16.68	13.35	10.57	CKM12BTW01
	On	Off	On	2	360-1452-ND†	18.42	14.74	11.67	CKM13ETW01
19mm High Security									
3	On	None	On	1 & 3	360-1453-ND*	16.89	13.52	10.70	CKL12AFW01
	On	None	On	1	360-1454-ND*	16.89	13.52	10.70	CKL12BFW01
	On	Off	On	2	360-1455-ND*	18.63	14.91	11.80	CKL13EFW01
	On	None	On	1 & 3	360-1456-ND†	16.89	13.52	10.70	CKL12ATW01
	On	None	On	1	360-1457-ND†	16.89	13.52	10.70	CKL12BTW01
	On	Off	On	2	360-1458-ND†	18.63	14.91	11.80	CKL13ETW01

Fig.	Key Positions Pos. 1	Key Positions Pos. 2	Key Positions Pos. 3	Key Positions Pos. 4	Key Positions Pos. 5	Key Removable Positions	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 100	NKK Part. No.
Antistatic PC SP3T and SP5T Low Security											
4	On	On	On	—	—	1, 2, 3	360-1466-ND	16.50	13.20	10.45	SK13AEG13
5	On	On	On	—	—	1, 2, 3	360-1467-ND	17.25	13.80	10.93	SK13AEG30
4	On	On	On	On	On	1, 2, 3, 4, 5	360-1468-ND	17.40	13.92	11.02	SK15AEG13
5	On	On	On	On	On	1, 2, 3, 4, 5	360-1469-ND	18.15	14.52	11.50	SK15AEG30

Fig.	Pole	Key Positions Pos. 1	Key Positions Pos. 2	Key Positions Pos. 3	Key Removable Positions	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 100	NKK Part. No.
PC Miniature Low Security										
6	SPDT	On	None	On	1 & 3	360-1470-ND	17.25	13.80	10.93	SK12AG13
6	SPDT	On	None	On	1	360-1471-ND	17.25	13.80	10.93	SK12BG13
6	SPDT	On	None	Mom	1	360-1472-ND	18.69	14.96	11.84	SK15BG13
6	SP3T	On	On	On	1, 2, 3	360-1473-ND	18.69	14.96	11.84	SK14DG13
6	SP3T	On	On	On	2	360-1474-ND	18.69	14.96	11.84	SK14EG13
6	DPDT	On	None	On	1 & 3	360-1475-ND	18.60	14.88	11.78	SK22AG13
6	DP3T	On	On	On	1, 2, 3	360-1476-ND	20.49	16.40	12.98	SK24DG13
6	DP3T	On	On	On	2	360-1477-ND	20.49	16.40	12.98	SK24EG13
7	SPDT	On	None	On	1 & 3	360-1478-ND	17.70	14.16	11.21	SK12AG30
7	SPDT	On	None	On	1	360-1479-ND	17.70	14.16	11.21	SK12BG30
7	SPDT	On	None	Mom	1	360-1480-ND	19.14	15.32	12.13	SK15BG30
7	SP3T	On	On	On	1, 2, 3	360-1481-ND	19.14	15.32	12.13	SK14DG30
Replacement Key, Plastic Coated for Above Switches						360-1009-ND	2.16	1.73	1.37	AT4080

* Flat Key † Tubular Key

E-SWITCH®

Slide Switches - EG Series

9157B-ND E-Switch Data Book **$2.95**

Specifications:
- **Initial Contact Resistance:** Less than 20 minimum
- **Withstand Voltage:** 500V AC for 1 minute between any terminal and frame
- **Operating Temp.:** -20°C to +70°C
- **Life:** 10,000 cycles minimum
- **Contact:** Silver plated copper alloy
- **Timing:** Non-shorting contacts

Dimensions: inches (mm)

Fig. 1

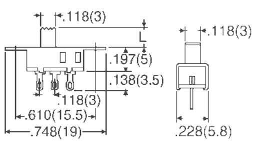


Fig. 2

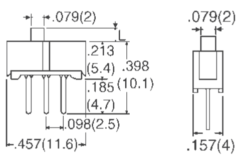


Fig. 3

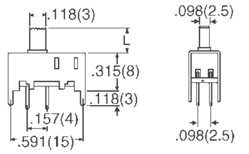


Fig. 4

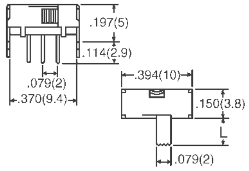


Fig. 5

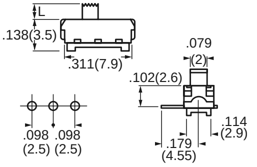
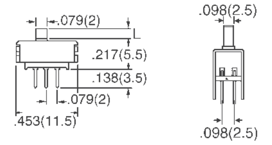


Fig. 6



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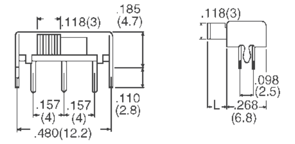

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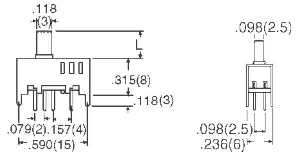
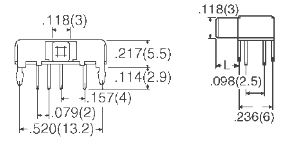


Fig. 9



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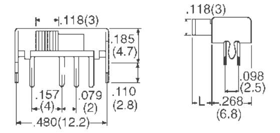

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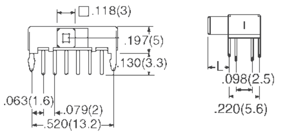

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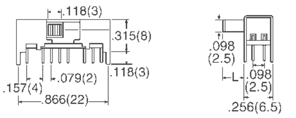

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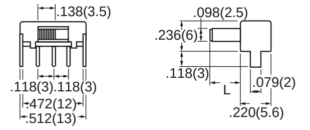

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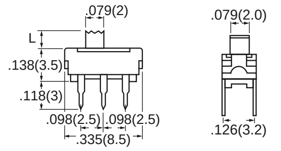

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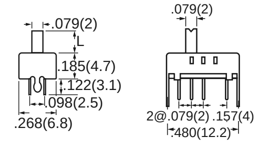

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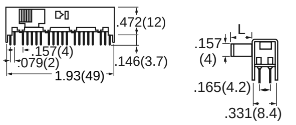

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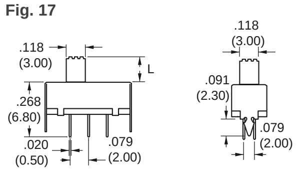


Fig. 18

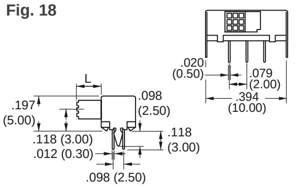
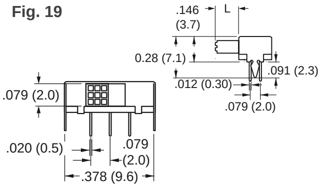


Fig. 19



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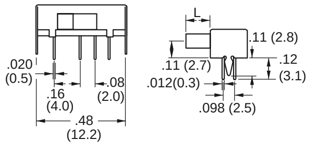
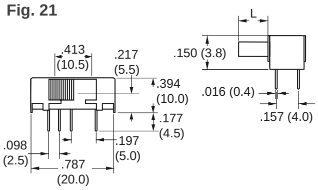


Fig. 21



H

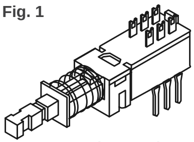
Fig.	Description	Rating	Circuit	"L" Dim. In. (mm)	Switching Function	Terminal	Digi-Key Part No.	Price Each 1	10	100	250	E-Switch Part No.
1	Straight	0.2A @ 30VDC	SPDT	.16 (4)	On-On	Solder Lugs	EG1901-ND	.71	.64	.55	.46	EG1201
1	Straight	0.2A @ 30VDC	SPDT	.22 (5.5)	On-On	Solder Lugs	EG1902-ND	.71	.64	.55	.46	EG1201A
2	Straight	0.2A @ 30VDC	SPDT	.08 (2)	On-On	PC Board	EG1903-ND	.71	.64	.55	.46	EG1218
3	Straight	0.2A @ 30VDC	DPDT	.12 (3)	On-On	PC Board	EG1904-ND	.98	.88	.75	.62	EG2201
3	Straight	0.2A @ 30VDC	DPDT	.24 (6)	On-On	PC Board	EG1905-ND	.98	.88	.75	.62	EG2201A
4	Right Angle	0.2A @ 30VDC	SPDT	.20 (5)	On-On	PC Board	EG1906-ND	.71	.64	.55	.46	EG1213
5	Right Angle	0.2A @ 30VDC	SPDT	.08 (2)	On-On	PC Board	EG1847-ND	1.11	.89	.81	.69	EG1270
6	Straight	0.2A @ 30VDC	DPDT	.08 (2)	On-On	PC Board	EG1907-ND	.98	.88	.75	.62	EG2209
6	Straight	0.2A @ 30VDC	DPDT	.16 (4)	On-On	PC Board	EG1908-ND	1.16	1.04	.89	.74	EG2209A
7	Right Angle	0.2A @ 30VDC	DPDT	.14 (3.5)	On-On	PC Board	EG1909-ND	.89	.80	.69	.57	EG2215
8	Straight	0.2A @ 30VDC	DP3T	.12 (3)	On-On-On	PC Board	EG1910-ND	.89	.80	.69	.57	EG2301
8	Straight	0.2A @ 30VDC	DP3T	.24 (6)	On-On-On	PC Board	EG1944-ND	.90	.81	.69	.57	EG2301A
9	Right Angle	0.1A @ 12VDC	DP3T	.16 (4)	On-On-On	PC Board	EG1911-ND	.93	.84	.72	.60	EG2308
9	Right Angle	0.1A @ 12VDC	DP3T	.24 (6)	On-On-On	PC Board	EG1945-ND	.90	.81	.69	.57	EG2308A
10	Right Angle	0.2A @ 30VDC	DP3T	.14 (3.5)	On-On-On	PC Board	EG1913-ND	.98	.88	.75	.62	EG2315
11	Right Angle	0.2A @ 30VDC	4PDT	.24 (6)	On-On	PC Board	EG1949-ND	1.47	1.32	1.13	.93	EG4208A
11	Right Angle	0.2A @ 30VDC	4PDT	.16 (4)	On-On	PC Board	EG1914-ND	1.60	1.45	1.23	1.02	EG4208
12	Right Angle	0.2A @ 30VDC	4P3T	.20 (5)	On-On-On	PC Board	EG1915-ND	1.78	1.61	1.37	1.13	EG4319
13	Right Angle	0.2A @ 30VDC	SPDT	.12 (3)	On-On	PC Board	EG1916-ND	.71	.64	.55	.46	EG1206
13	Right Angle	0.2A @ 30VDC	SPDT	.24 (6)	On-On	PC Board	EG1917-ND	.71	.64	.55	.46	EG1206A
14	Straight	0.3A @ 30VDC	IC-2P	.08 (2)	On-On	PC Board	EG1918-ND	.80	.72	.62	.51	EG1271
14	Straight	0.3A @ 30VDC	IC-2P	.16 (4)	On-On	PC Board	EG1919-ND	.80	.72	.62	.51	EG1271A
15	Straight	0.2A @ 30VDC	DP3T	.16 (4)	On-On-On	PC Board	EG1920-ND	1.07	.96	.82	.68	EG2305
15	Straight	0.2A @ 30VDC	DP3T	.08 (2)	On-On-On	PC Board	EG1921-ND	1.07	.96	.82	.68	EG2305A
16	Right Angle	0.3A @ 30VDC	8P4T	.40 (10)	On-On	PC Board	EG1928-ND	3.49	3.14	2.68	2.21	EG8402
17	Straight	0.2A @ 30VDC	DPDT	.16 (4)	On-On	PC Board	EG1940-ND	.82	.74	.63	.52	EG2207
18	Right Angle	0.2A @ 30VDC	DPDT	.16 (4)	On-On	PC Board	EG1941-ND	.82	.74	.63	.52	EG2208
18	Right Angle	0.2A @ 30VDC	DPDT	.24 (6)	On-On	PC Board	EG1942-ND	.82	.74	.63	.52	EG2208A
19	Right Angle	0.2A @ 30VDC	DPDT	.16 (4)	On-On	PC Board	EG1943-ND	.82	.74	.63	.52	EG2211
20	Right Angle	0.2A @ 30VDC	DP3T	.24 (6)	On-On-On	PC Board	EG1946-ND	.76	.69	.59	.49	EG2310
20	Right Angle	0.2A @ 30VDC	DP3T	.16 (4)	On-On-On	PC Board	EG1947-ND	.86	.77	.66	.55	EG2310A
21	Right Angle	0.2A @ 30VDC	DP3T	.28 (7)	On-On-On	PC Board	EG1948-ND	.90	.81	.69	.57	EG2322

9157B-ND E-Switch Data Book **$2.95**

Push Button Switches TA SERIES

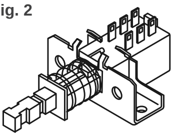
The industry standard used in applications such as audio, instrumentation, telecommunications, and test equipment. Featuring momentary or alternate action switching. P.C. lugs available with or without solder lugs for hand wiring. **Contacts:** Gold or Tin Plated 15µi. **Contact Resistance:** Initial – 5 milliohms max.; Current and Voltage Ratings – 0.5A @ 100VAC, 0.2A @ 250VAC, 1A @ 25VDC. Test – 100,000 cycles min. *Caps sold separately.*

Fig. 1



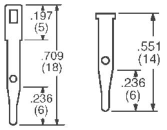
No Mounting Bracket

Fig. 2

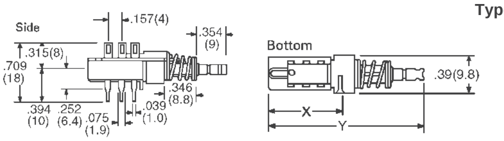


Chassis Mount Version

Terminal Types



Type A Type B



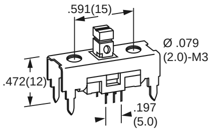
	Y in.(mm)
2PDT	1.66(42.15)
4PDT	2.13(54.15)
6PDT	2.60(66.15)
10PDT	3.55(90.15)

Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
	Gold Plating					
1	Alternate Action, DPDT, Terminal A	EG1001-ND	3.99	3.20	2.88	TA2UEEAAU
	Momentary, DPDT, Terminal A	EG1002-ND	3.83	3.07	2.76	TA2UOAAAUPN
	Alternate Action, DPDT, Terminal B	EG1003-ND	3.99	3.20	2.88	TA2UEECAU
	Alternate Action, 4PDT, Terminal A	EG1004-ND	6.35	5.08	4.57	TA4UEEAAUPN
	Momentary Action, 4PDT, Terminal A	EG1005-ND	6.17	4.94	4.45	TA4UDAAAU
	Silver Plating					
1	Alt. Action, DPDT, Terminal A	EG1000-ND	1.80	1.45	1.30	TA2UEEAAGPN
	Momentary, DPDT, Terminal A	EG1006-ND	1.67	1.34	1.21	TA2UOAAAGPN
	Alt. Action, DPDT, Terminal B	EG1007-ND	1.80	1.45	1.30	TA2UEECAGPN
	Alt. Action, 4PDT, Terminal A	EG1008-ND	2.21	1.77	1.60	TA4UEEAAGPN
	Momentary, 4PDT, Terminal A	EG1009-ND	2.28	1.83	1.65	TA4UOAA AGPN
	Alt. Action, 6PDT, Terminal A	EG1543-ND	2.60	2.09	1.88	TA6UEEAAGPN
	Momentary, 6PDT, Terminal A	EG1544-ND	2.48	1.98	1.79	TA6UOAAAGPN
	Alt. Action, 10PDT, Terminal A	EG1545-ND	6.64	5.31	4.78	TA10UEEAAGPN
	Momentary, 10PDT, Terminal A	EG1546-ND	6.60	5.28	4.75	TA10UOAAAGPN
2	Chassis Mt, Alt. Action, DPDT Terminal A	EG1010-ND	2.14	1.93	1.65	1XTA000302/2UEEAAG
	Chassis Mt, Alt. Action, 4PDT Terminal A	EG1011-ND	2.51	2.26	1.93	1XTA000302/4UEEAAG

Push Button Switches

JN SERIES

Stand-up version of the TA Series. Has the same ratings as TA Series and uses the same caps. *Caps sold separately.*



Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
Chassis Mt, Stand Up, Alternate Action DPDT	EG1016-ND	1.60	1.44	1.23	1XJN002UEE
Chassis Mt, Stand Up, Momentary Action DPDT	EG1017-ND	1.60	1.44	1.23	1XJN002U0A

Power Switches P227/P197 SERIES

P227 Series: Rating 125VAC @ 7A/ 250VAC @ 4A. DPDT Alternate Action Panel Mount. Approvals: UL, CSA, Demko, Semko, SEV, Femko, Nemko. **P197 Series:** Rating 5A @ AC250V. Approvals: UL, CSA, VDE, Semko, Nemko, Demko. *Caps sold separately.*

Fig. 1

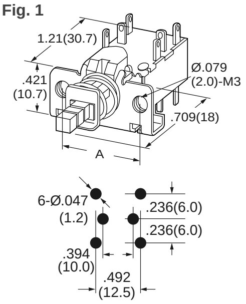


Fig. 2

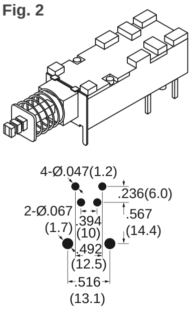


Fig. 3

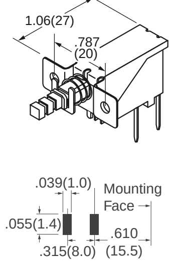


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
1	Push Button, DPDT, Alt. Act., Dim. A = .79” (20mm)	EG1018-ND	3.38	3.05	2.60	P227EEB20
	Push Button, DPDT, Alt. Act., Dim. A = .71” (18mm)	EG1020-ND	3.38	3.05	2.60	P227EEB18
2	Push Button, DPST, Alt. Act., PCB Mnt., 7A	EG1026-ND	3.29	2.97	2.53	P227EE1C
3	Push Button, SPST, Alt. Act., PCB Mnt., 5A	EG1021-ND	2.93	2.65	2.25	P197PBEE
	Push Button, SPST, Alt. Act., Panel Mnt., 5A	EG1022-ND	2.93	2.65	2.25	P197SBEE

Push Button Switches TL SERIES

Rating: DC 30V 0.1A
Circuit: DPDT
Timing: Non-Shorting
Travel Stroke: Full 2.5, Lock 1.5
Operating Force: 180±50gf only
Life: 10,000 cycles min.

Caps sold separately.

TL2285 Series: use MTH caps
TL4201 Series: use 4J/6J caps

Fig. 1

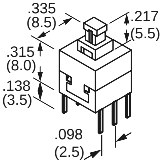


Fig. 2

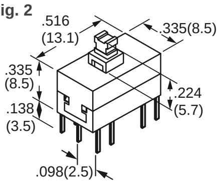


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
1	Momentary Action, DPDT, PCB Mount, Silver Plating	EG1871-ND	1.22	.98	.89	TL2285OA
	Alternate Action, DPDT, PCB Mount, Silver Plating	EG1872-ND	1.22	.98	.89	TL2285EE
2	Momentary Action, 4PDT, PCB Mount, Silver Plating	EG1873-ND	2.57	2.06	1.85	TL4201OAYA
	Alternate Action, 4PDT, PCB Mount, Silver Plating	EG1874-ND	2.57	2.06	1.85	TL4201EEYA

Switch Caps

For TA, JN, TL4201 Series and Power Switches

All caps are gloss finish.

Fig. 1

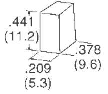


Fig. 2

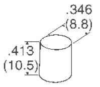
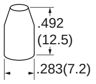


Fig. 3



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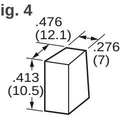


Fig. 5

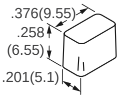


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
1	Rectangle Cap, White	EG1088-ND	.33	.30	.26	TAC WHT
	Rectangle Cap, Black	EG1081-ND	.33	.30	.26	TAC BLK
	Rectangle Cap, Red	EG1085-ND	.33	.30	.26	TAC RED
	Rectangle Cap, Grey	EG1082-ND	.33	.30	.26	TAC GRY
2	Round Cap, White	EG1098-ND	.33	.30	.26	TAG WHT
	Round Cap, Black	EG1091-ND	.33	.30	.26	TAG BLK
	Round Cap, Gray	EG1092-ND	.33	.30	.26	TAG GRY
	Round Cap, Red	EG1095-ND	.33	.30	.26	TAG RED
	Round Cap, Chrome	EG1099-ND	.63	.57	.49	TAG CHROME
3	Bullet Shaped Cap, Black	EG1012-ND	.33	.30	.26	TAM BLK
	Bullet Shaped Cap, White	EG1013-ND	.33	.30	.26	TAM WHT
	Bullet Shaped Cap, Grey	EG1014-ND	.33	.30	.26	TAM GRY
4	Rectangle Cap, Red	EG1019-ND	.33	.30	.26	TAD RED
	Rectangle Cap, Black	EG1877-ND	.33	.30	.26	TAD BLK
	Rectangle Cap, White	EG1878-ND	.33	.30	.26	TAD WHT
	Rectangle Cap, Grey	EG1879-ND	.33	.30	.26	TAD GRY
5	Rectangle Cap, w/Chamfered Edges, Black	EG1875-ND	.44	.40	.35	TAK BLK
	Rectangle Cap, w/Chamfered Edges, Grey	EG1876-ND	.44	.40	.35	TAK GRY

Miniature Push Button Switches

MTH SERIES

Miniature switches that feature an ultra light feel with a short stroke. Ideal for telecommunications and test equipment, and wherever miniaturization is required. **Contact Material:** Silver Plated. **Contact Resistance:** <0.1 ohm. **Voltage Rating:** 30V DC. **Switching Current Max:** 100mA. **Life:** ≥1 x 10^5 cycles. **Moving Contacts:** Phosphor bronze – 1 micron silver. **Force:** 170 ±100g. **Travel To Lock:** .08” (2mm). **Operating Temperature Range:** -10°C to 60°C. *Caps sold separately.*

Fig. 1
No Mounting Bracket

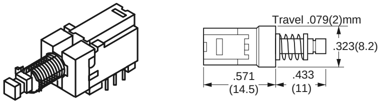


Fig. 2
Chassis Mount Version

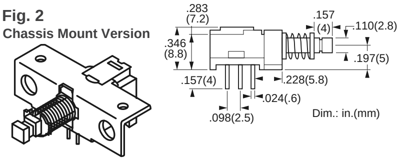


Fig. 3

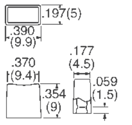


Fig. 4

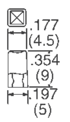


Fig. 5

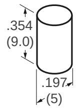


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
1	Right Angle, Momentary, DPDT	EG1101-ND	1.14	1.03	.88	MTH2UOANAGX
	Right Angle, Alternate Action DPDT	EG1102-ND	1.26	1.14	.97	MTH2UEENAGX
2	Chassis Mt, Rt Angle, Alternate Action DPDT	EG1015-ND	1.73	1.56	1.33	1XMTH002UEE
3	Rectangle Cap, Red	EG1185-ND	.25	.23	.19	1C101
	Rectangle Cap, Black	EG1181-ND	.25	.23	.19	1C911
	Rectangle Cap, Light Grey	EG1182-ND	.25	.23	.19	1C951
4	Long Square Cap, Red	EG1195-ND	.25	.23	.19	1D101
	Long Square Cap, Black	EG1191-ND	.25	.23	.19	1D911
	Long Square Cap, Light Grey	EG1192-ND	.25	.23	.19	1D951
5	Round Cap, .20” (5mm) Diameter, Red	EG1880-ND	.25	.23	.19	1R RED
	Round Cap, .20” (5mm) Diameter, White	EG1881-ND	.25	.23	.19	1R WHT
	Round Cap, .20” (5mm) Diameter, Black	EG1882-ND	.25	.23	.19	1R BLK
	Round Cap, .20” (5mm) Diameter, Light Grey	EG1883-ND	.25	.23	.19	1R LGR
	Round Cap, .20” (5mm) Diameter, Dark Grey	EG1884-ND	.25	.23	.19	1R DGR

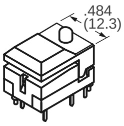
9157B-ND E-Switch Data Book $2.95

Push Button Switches

5500/5511 SERIES Narrow and Wide Body

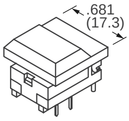
These miniature, momentary switches have a crisp tactile feel and are available in a wide range of colors, available in two widths: the 5500 .47" (12mm) wide and the 5511 .67" (17mm) wide, meet all ESD protection requirements and are available with or without LED. **Operating Travel:** 1.8mm. **Function:** Momentary SPDT. **Contact Bounce:** <5m sec. **Operating Life:** 5 x 10^5 Cycles. **Operating Force:** <200 gf. **Voltage Rating:** 24V. **Current Rating:** 12mA. **Contact Resistance:** <50mΩ.

Fig. 1

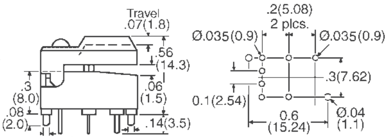


Narrow Body

Fig. 2



Wide Body



(Above PCB is for Two LED Series)

Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
	5500 Series - Narrow Body					
1	Momentary, SPDT, Black Cap, no LED	EG1701-ND	4.06	3.66	3.12	5501M1X
	Momentary, SPDT, Grey Cap, no LED	EG1702-ND	4.06	3.66	3.12	5501M2X
	Momentary, SPDT, Red Cap, no LED	EG1704-ND	4.06	3.66	3.12	5501M5X
	Momentary, SPDT, White Cap, no LED	EG1708-ND	4.06	3.66	3.12	5501M8X
1	Momentary, SPDT, Black Cap, w/Red LED	EG17151-ND	5.30	4.78	4.07	5501M11
	Momentary, SPDT, Black Cap, w/Green LED	EG17171-ND	5.84	5.26	4.48	5501M12
	Momentary, SPDT, Grey Cap, w/Red LED	EG17152-ND	5.30	4.78	4.07	5501M21
	Momentary, SPDT, Grey Cap, w/Green LED	EG17172-ND	5.84	5.26	4.48	5501M22
	Momentary, SPDT, Red Cap, w/Red LED	EG17155-ND	5.30	4.78	4.07	5501M51
	Momentary, SPDT, Red Cap, w/Green LED	EG17175-ND	5.84	5.26	4.48	5501M52
	Momentary, SPDT, White Cap, Red LED	EG17158-ND	5.30	4.78	4.07	5501M81
	Momentary, SPDT, White Cap, w/Green LED	EG17178-ND	5.84	5.26	4.48	5501M82
1	Momentary, SPDT, Black Cap, w/Red and Green LED	EG171571-ND	6.62	5.96	5.08	5501M11/2
	Momentary, SPDT, Grey Cap, w/Red and Green LED	EG171572-ND	6.62	5.96	5.08	5501M21/2
	5511 Series - Wide Body					
2	Momentary, SPDT, Black Cap, no LED	EG1709-ND	4.06	3.66	3.12	5511M1X
	Momentary, SPDT, Grey Cap, no LED	EG1710-ND	4.06	3.66	3.12	5511M2X
	Momentary, SPDT, Blue Cap, no LED	EG1711-ND	4.06	3.66	3.12	5511M4X
	Momentary, SPDT, Red Cap, no LED	EG1712-ND	4.06	3.66	3.12	5511M5X
	Momentary, SPDT, White Cap, no LED	EG1714-ND	4.06	3.66	3.12	5511M8X
2	Momentary, SPDT, Black Cap, w/Red LED	EG1715-ND	5.30	4.78	4.07	5511M11
	Momentary, SPDT, Black Cap, w/Green LED	EG1719-ND	5.30	4.78	4.07	5511M12
	Momentary, SPDT, Grey Cap, w/Red LED	EG1716-ND	5.30	4.78	4.07	5511M21
	Momentary, SPDT, Grey Cap, w/Green LED	EG1720-ND	5.30	4.78	4.07	5511M22
	Momentary, SPDT, Red Cap, w/Red LED	EG1717-ND	5.30	4.78	4.07	5511M51
	Momentary, SPDT, Red Cap, w/Green LED	EG1721-ND	5.30	4.78	4.07	5511M52
	Momentary, SPDT, White Cap, w/Red LED	EG1718-ND	5.30	4.78	4.07	5511M81
	Momentary, SPDT, White Cap, w/Green LED	EG1722-ND	5.30	4.78	4.07	5511M82
2	Momentary, SPDT, Black Cap, w/Red and Green LED	EG1723-ND	5.84	5.26	4.48	5511M11/2
	Momentary, SPDT, Grey Cap, w/Red and Green LED	EG1724-ND	5.84	5.26	4.48	5511M21/2

Push Button Switches

Fig. 1

Circuit: SPST (Momentary On)
Rating: 3A 125V AC
Initial Contact Resistance: ≤ 50mΩ
Hole Cutout: .49" (12.4mm)
Hardware Included.

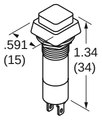


Fig. 2

Circuit: SPST (Momentary On)
Rating: 3A 125V AC
Initial Contact Resistance: ≤ 50mQ
Hole Cutout: .28" (7.2mm)
Hardware Included.

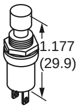


Fig. 3

Circuit: SPST (Momentary On)
Rating: 3A 125V AC
Initial Contact Resistance: ≤ 50mΩ
Hole Cutout: .49" (12.4mm)
Hardware Included.

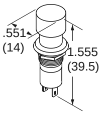
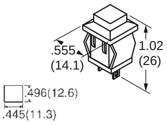


Fig. 4

Circuit: SPST
(Momentary On)
Rating: 1A 125V AC
Initial Contact Resistance: ≤ 20mΩ



Panel Cutout

Fig. 5

Circuit: SPST (N/C or N/O)
Rating: 3A 125V AC / 1.5A 250V AC
Initial Contact Resistance: ≤ 50mΩ
Hole Cutout: .50" (12.7mm)
Hardware Included.

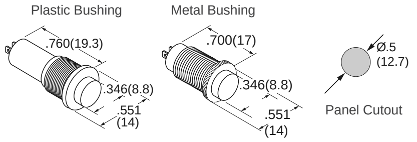


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
	Momentary Switches					
1	SPST, Red, Cap .59" (15mm) Sq.	EG2005-ND	2.32	2.09	1.78	PS1023AT-RED
	SPST, Black, Cap .59" (15mm) Sq.	EG2001-ND	2.32	2.09	1.78	PS1023AT-BLK
2	SPST, Red, Cap .24" (6mm) Dia.	EG2015-ND	1.24	1.09	1.00	PS1024AT-RED
	SPST, Black, Cap .24" (6mm) Dia.	EG2011-ND	1.24	1.09	1.00	PS1024AT-BLK
	SPST, Red, Cap .39" (10mm) Dia.	EG2025-ND	1.56	1.40	1.20	PS1024AL-RED
	SPST, Black, Cap .39" (10mm) Dia.	EG2021-ND	1.56	1.40	1.20	PS1024AL-BLK
3	SPST, Red, Cap .55" (14mm) Dia.	EG2035-ND	2.31	2.09	1.78	PS1040A-RED
	SPST, Black, Cap .55" (14mm) Dia.	EG2031-ND	2.31	2.09	1.78	PS1040A-BLK
4	SPST, Red, Cap .55" (14mm) Sq.	EG2045-ND	1.69	1.53	1.30	PS1057A-RED
	SPST, Black, Cap .55" (14mm) Sq.	EG2041-ND	1.69	1.53	1.30	PS1057A-BLK
5	SPST-N/O Black Cap, Plastic Bushing	EG1900-ND	2.01	1.82	1.55	RP3502A-BLK
	SPST-N/C Black Cap, Plastic Bushing	EG1929-ND	2.27	2.05	1.75	RP3502B-BLK
	SPST-N/O Red Cap, Plastic Bushing	EG1930-ND	2.01	1.82	1.55	RP3502A-RED
	SPST-N/C Red Cap, Plastic Bushing	EG1931-ND	2.27	2.05	1.75	RP3502B-RED
	SPST-N/O Black Cap, Metal Bushing	EG1932-ND	2.98	2.68	2.29	RP3502MA-BLK
	SPST-N/C Black Cap, Metal Bushing	EG1933-ND	3.33	3.00	2.56	RP3502MB-BLK
	SPST-N/O Green Cap, Metal Bushing	EG1934-ND	2.98	2.68	2.29	RP3502MA-GRN
	SPST-N/C Green Cap, Metal Bushing	EG1935-ND	2.98	2.68	2.29	RP3502MB-GRN
	SPST-N/O Yellow Cap, Metal Bushing	EG1936-ND	2.98	2.68	2.29	RP3502MA-YEL
	SPST-N/C Yellow Cap, Metal Bushing	EG1937-ND	2.98	2.68	2.29	RP3502MB-YEL
	SPST-N/O Red Cap, Metal Bushing	EG1938-ND	2.98	2.68	2.29	RP3502MA-RED
	SPST-N/C Red Cap, Metal Bushing	EG1939-ND	2.98	2.68	2.29	RP3502MB-RED

Push Button Switches 320 and 520 SERIES

320 Series switches are being used in a variety of applications in a great number of industries such as; Instrumentation, Test Equipment, Telecommunications, Audio Visual, and Computers. **Travel:** .028" (.7mm). **Operating Force:** 120 grams. **Type Of Contact:** SPST. **Contact Rating:** 25mA/50V (DC). **Initial Resistance:** 50m ohms. **Life:** 1 X 10^6 switching cycles. • **Snap Time:** Closing: <50µs; Opening: <200µs. **Materials:** Housing: PC-CF; Knob: ABS or equivalent; Contacts (Fixed): CuZn Ag (gold available); Dome Contact: CrNi Au.

520 Series switches designed for digital electronics, offer a smooth, tactile feel. They feature built-in square or round buttons and are available in seven colors. **Travel:** .03" (.8mm). **Operating Force:** 130 grams. **Type of Contact:** SPST n/o. **Contact Rating:** 10mA, 35 V DC; 100mA, 100 V AC. **Initial Contact Resistance:** < 20mΩ. **Life:** 500,000 cycles. **Operating Temperature Range:** 20°C to +85°C. **Materials:** Base: Valox; Button: Polycarbonate; Switch Contact: Laminated silver, self-cleaning.

Fig. 1

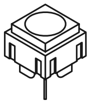


Fig. 2

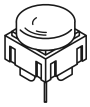


Fig. 3

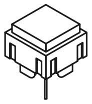


Fig. 4

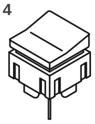


Fig. 5

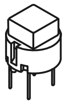


Fig. 6

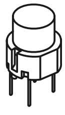


Fig. 7

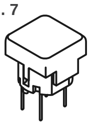


Fig. 8

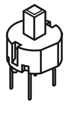


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
	320 Series – Momentary Push Button, Sold With Caps					
1	Square, Recessed SPST, Black	EG1301-ND	2.23	2.02	1.72	320E1-1BLK
	Square, Recessed SPST, Grey	EG1303-ND	2.23	2.02	1.72	320E1-1GRY
	Square, Recessed SPST, Red	EG1305-ND	2.23	2.02	1.72	320E1-1RED
	Square, Recessed SPST, White	EG1308-ND	2.23	2.02	1.72	320E1-1WHT
2	Round, SPST, Black	EG1311-ND	2.02	1.74	1.50	320.02E1-1.08BLK
	Round, SPST, Grey	EG1312-ND	2.02	1.74	1.50	320.02E1-1.08GRY
	Round, SPST, Red	EG1315-ND	2.02	1.74	1.50	320.02E1-1.08RED
	Round, SPST, White	EG1318-ND	2.02	1.74	1.50	320.02E1-1.08WHT
3	Flat Square, SPST, Black	EG1321-ND	2.23	2.02	1.72	320.01E1-1BLK
	Flat Square, SPST, Grey	EG1322-ND	2.23	2.02	1.72	320.01E1-1GRY
	Flat Square, SPST, Red	EG1325-ND	2.23	2.02	1.72	320.01E1-1RED
	Flat Square, SPST, White	EG1328-ND	2.23	2.02	1.72	320.01E1-1WHT
4	Tilted Square, SPST, Black	EG1341-ND	2.23	2.02	1.72	320.22E1-1BLK
	Tilted Square, SPST, Grey	EG1342-ND	2.23	2.02	1.72	320.22E1-1GRY
	Tilted Square, SPST, Red	EG1345-ND	2.23	2.02	1.72	320.22E1-1RED
	Tilted Square, SPST, White	EG1348-ND	2.23	2.02	1.72	320.22E1-1WHT
	520 Series – Momentary Push Button, Sold With Caps					
5	Square, SPST, Black	EG1401-ND	.98	.89	.76	520.01-BLK
	Square, SPST, Yellow	EG1403-ND	.98	.89	.76	520.01-YEL
	Square, SPST, White	EG1408-ND	.98	.89	.76	520.01-WHT
	Square, SPST, Blue	EG1404-ND	.98	.89	.76	520.01-BLU
	Square, SPST, Red	EG1405-ND	.98	.89	.76	520.01-RED
	Square, SPST, Green	EG1407-ND	.98	.89	.76	520.01-GRN
	Square, SPST, Grey	EG1402-ND	.98	.89	.76	520.01-GRY
6	Round, SPST, Black	EG1411-ND	.98	.89	.76	520.02-BLK
	Round, SPST, Yellow	EG1413-ND	.98	.89	.76	520.02-YEL
	Round, SPST, White	EG1418-ND	.98	.89	.76	520.02-WHT
	Round, SPST, Blue	EG1414-ND	.98	.89	.76	520.02-BLU
	Round, SPST, Red	EG1415-ND	.98	.89	.76	520.02-RED
	Round, SPST, Green	EG1417-ND	.98	.89	.76	520.02-GRN
	Round, SPST, Grey	EG1412-ND	.98	.89	.76	520.02-GRY
7	Square, SPST, Black	EG1419-ND	1.31	1.18	1.01	520.03-BLK
	Square, SPST, Grey	EG1420-ND	1.31	1.18	1.01	520.03-GRY
	Square, SPST, Red	EG1421-ND	1.31	1.18	1.01	520.03-RED
	Square, SPST, White	EG1422-ND	1.31	1.18	1.01	520.03-WHT
	Square, SPST, Blue	EG1423-ND	1.31	1.18	1.01	520.03-BLU
	Square, SPST, Yellow	EG1424-ND	1.31	1.18	1.01	520.03-YEL
	Square, SPST, Green	EG1425-ND	1.31	1.18	1.01	520.03-GRN
8	SPST (Use TA/JN Caps)	EG1426-ND	1.31	1.18	1.01	520.04

E-SWITCH® Rocker Switches

Rocker Switches and Paddle Switches for mounting in a round hole instead of a rectangular or square punch. Easy to gang together for panels or consoles. Offered in various switching options with white ink stamping or LED illumination. All switches are black in color.

9157B-ND E-Switch Data Book **$2.95**

Fig. 1

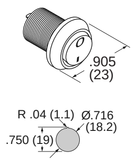


Fig. 2

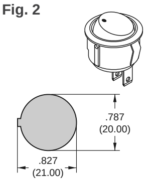


Fig. 3

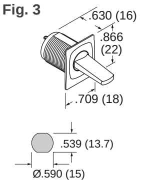


Fig. 4

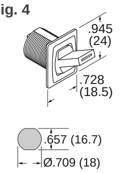
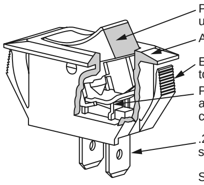


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
	Rocker Switches					
1	SPST (On-Off) 10A with I/O Marking	EG1889-ND	3.15	2.84	2.42	RR3130A
	DPDT (On-On) 10A with I/O Marking	EG1890-ND	4.73	4.26	3.63	RR3130B
	SPDT (On-On) 10A with I/O Marking	EG1891-ND	3.50	3.16	2.69	RR3130C
2	SPST (On-Off) 10A Snap-In	EG1542-ND	1.75	1.58	1.35	RR3112A
	Paddle Switches					
3	Mini, SPST (On-Off) 6A	EG1892-ND	2.80	2.53	2.15	RR3402A
	Mini, SPDT (On-On) 6A	EG1893-ND	3.15	2.84	2.42	RR3402C
	Mini, SPDT (On-Off-On) 6A	EG1894-ND	3.41	3.08	2.62	RR3402D
4	Standard, SPST (On-Off) 10A	EG1895-ND	4.34	3.91	3.33	RR3405A
	Red Illum., SPST (On-Off) 10A	EG1896-ND	5.87	5.28	4.50	RR3405AL-RED
	Green Illum., SPST (On-Off) 10A	EG1897-ND	5.87	5.28	4.50	RR3405AL-GRN
	Red Illum., SPDT (On-On) 10A	EG1898-ND	6.73	6.06	5.17	RR3405CL-RED
	Green Illum., SPDT (On-On) 10A	EG1899-ND	6.73	6.06	5.17	RR3405CL-GRN

CW INDUSTRIES IndicON Rocker Switches

IndicON rocker switches are the right choice wherever you want performance combined with style. Provides users with a positive indication whether switch is "On" or "Off". Unlike lighted rocker switches which may burn out over time, there's never a safety concern with IndicON switches.

Features: • Economical alternative to lighted switches • Fast and secure mounting - no hardware required • Long life, reliable operation • Two color molding process provides permanent legends • Compatible appearance with other CW switches **Electrical Specifications:** 16A @ 125V AC rating without precious metals **Agency Certifications:** UL, CSA, and VDE



Positive indication of electrical status using two-color rocker knob

Attractive, soft matte finish

Easy self-lock panel mounting without tools or additional hardware

Patented unique sliding and rotating action of moving contact ensures contact cleanliness and extended life

.250 (6.35) terminals permit use of standard female connectors

Shallow housing design provides optimum terminal wiring space

Fig. 1

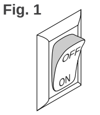
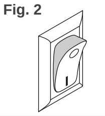


Fig. 2



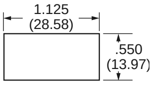


Fig.	Switch Color	Actuator Color	Circuit Funct.	Switch Type	Term. Type In. (mm)	Digi-Key Part No.	Price Each 1	10	100	500	CW Industries Part No.
1	Black	Red	SPST	On-Off	.250QC (6.35)	SW344-ND	1.20	1.08	.81	.54	NAA-111-BI11-00
1	Black	Red	SPDT	On-On	.250QC (6.35)	SW349-ND	1.28	1.15	.87	.58	NBA-111-BI11-00
2	Black	Red	SPST	On-Off	.250QC (6.35)	SW354-ND	1.20	1.08	.81	.54	NAA-111-BI21-00

JUDCO Manufacturing Inc. Plastic Push Button Switches

(Dimensions: inches)

- 3/8-27 Thread (Nut is included)
- 4 amp @ 14V
- 1 amp @ 110V

Fig. 1

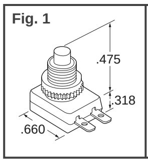


Fig. 2

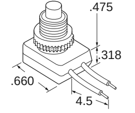


Fig. 3

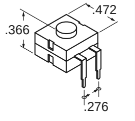
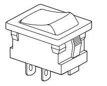


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100
	Black Body with Red Button				
1	Push On-Push Off, Solder Terminal	501PB-ND	.94	.80	.72
1	Normally Open, Solder Terminal	502PB-ND	.94	.80	.72
1	Normally Closed, Solder Terminal	503PB-ND	.94	.80	.72
2	Push On-Push Off, 4.5" (114.30mm) Wire Leads	505PB-ND	.86	.73	.65
2	Normally Open, 4.5" (114.30mm) Wire Leads	506PB-ND	.86	.73	.65
	Black Body with Black Button				
1	Push On-Push Off, Solder Terminal	508PB-ND	.94	.80	.72
1	Normally Open, Solder Terminal	509PB-ND	.94	.80	.72
1	Normally Closed, Solder Terminal	510PB-ND	.94	.80	.72
2	Push On-Push Off, 4.5" (114.30mm) Wire Leads	504PB-ND	.86	.73	.65
2	Normally Open, 4.5" (114.30mm) Wire Leads	507PB-ND	.86	.73	.65
	UL Approved Push Button w/Tactile Feel, Black Body w/Black Button				
2	On-Off PB, 4.5" (114.30mm) Wire Leads, UL Approv. at 125VAC at 6A	511PB-ND	1.17	1.00	.89
2	On-Off PB, 4.5" (114.30mm) Wire Leads, UL Approv. at 14VDC at 10A	512PB-ND	1.17	1.00	.89
	Low Profile PB Switch				
3	On-Off Side Actuated PB, PC Mount Leads, SPST, .3A	518PB-ND	1.59	1.35	1.20
3	On-Off Top Actuated PB, Rt. Angle, PC Mount Leads, SPST, .3A	519PB-ND	1.59	1.35	1.20
—	Rubber Waterproof Boot w/molded in nut, Black, for above switches	513PB-ND	.56	.47	.42

E-SWITCH® Rocker Switches

RATINGS: RA Series - 125VAC, 10A. RC Series - 125VAC, 12A. R1966 Series - 125VAC, 15A **Contact Resistance:** 100mΩ max. **Electrical Life:** 10,000 Cycle **Terminals:** .187 Faston (QC) or Solder Term. **Approvals:** UL, CSA, VDE, NEMKO, SEMKO, FEMKO, DEMKO



Panel Cutout

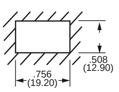


Fig. 1

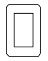


Fig. 2

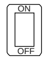


Fig. 3

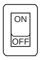


Fig. 4

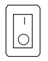


Fig. 5

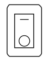
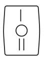


Fig. 6



Termination Options

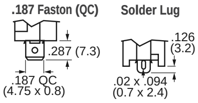


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
	RA/RC Series (Black Matte Finish)					
2	SPST, 10A W/ Marking	EG1500-ND	1.78	1.61	1.37	RA1066AFC
3	SPST, 10A W/ Marking	EG1501-ND	1.78	1.61	1.37	RA1066AFF
4	SPST, 10A W/ Marking	EG1502-ND	1.78	1.61	1.37	RA1066AFK
5	SPST, 10A W/ Marking	EG1503-ND	1.78	1.61	1.37	RA1066AFH
1	SPST, 10A Black No Marking	EG1504-ND	1.78	1.61	1.37	RA1066AFX
4	DPST, 12A W/ Marking	EG1505-ND	2.95	2.66	2.27	RC1073K
5	DPST, 12A W/ Marking	EG1506-ND	2.95	2.66	2.27	RC1073H
1	DPST, 12A Black No Marking	EG1507-ND	2.95	2.66	2.27	RC1073X
	R1966 Series (Black Semi-Gloss Finish)					
1	SPST, 15A Black No Marking .187 QC	EG1508-ND	1.56	1.40	1.20	R1966ABLKBLKEF
1	SPST, 15A Black No Marking Solder	EG1843-ND	1.94	1.56	1.40	R1966ABLKBLKES
3	SPST, 15A W/ Marking .187 QC Term.	EG1509-ND	1.56	1.40	1.20	R1966ABLKBLKIF
3	SPST, 15A W/ Marking Solder Term.	EG1844-ND	1.94	1.56	1.40	R1966ABLKBLKIS
4	SPST, 15A W/ Marking .187 QC Term.	EG1510-ND	1.56	1.40	1.20	R1966ABLKBLKFF
4	SPST, 15A W/ Marking Solder Term.	EG1845-ND	1.94	1.56	1.40	R1966ABLKBLKFS
5	SPST, 15A W/ Marking .187 QC Term.	EG1511-ND	1.56	1.40	1.20	R1966ABLKBLKGF
5	SPST, 15A W/ Marking Solder Term.	EG1846-ND	1.94	1.56	1.40	R1966ABLKBLKGS
6	SPDT, 15A On-Off-On, .187 QC Term.	EG1841-ND	3.21	2.57	2.32	R1966DBLKBLKCF
1	SPST, 15A OFF-Mom .187 QC Term.	EG1512-ND	2.21	2.00	1.70	R1966FBLKBLKEF
1	SPST, 15A, Red LED Illumination, .187 QC	EG1514-ND	2.96	2.67	2.27	R1966ABLKBLKEFRED
1	SPST, 15A, Green LED Illumination .187 QC	EG1515-ND	2.96	2.67	2.27	R1966ABLKBLKEFGRN
1	SPST, 15A, Yellow LED Illumination .187 QC	EG1842-ND	2.96	2.67	2.27	R1966ABLKBLKEFYEL
1	SPST, 15A, Red LED Illum. Solder Term.	EG1858-ND	2.96	2.67	2.27	R1966ABLKBLKESRED
1	SPST, 15A, Green LED Illum. Solder Term.	EG1859-ND	2.96	2.67	2.27	R1966ABLKBLKESGRN
1	SPST, 15A, Yellow LED Illum. Solder Term.	EG1860-ND	2.96	2.67	2.27	R1966ABLKBLKESYEL

RATINGS: R5 Series: 10A 250V, 15A 125VAC.
R6 Series: 6A 250VAC (UL/CSA)
Contact Resistance: <20mΩ (initial)
Electrical Life: ≥10,000 Cycle
Approvals: UL, CSA, VDE, NEMKO, SEMKO, FIMKO, DEMKO

Fig. 1

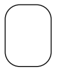


Fig. 2

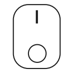


Fig. 3

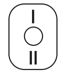
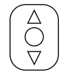
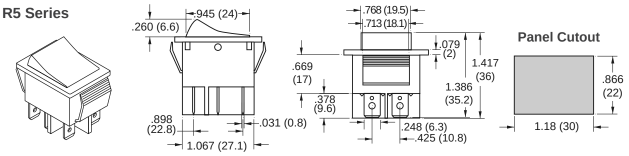


Fig. 4



R5 Series



R6 Series

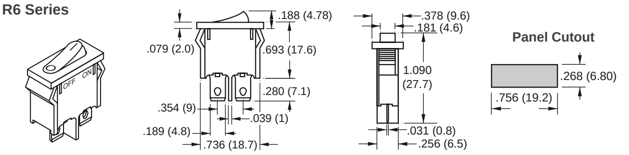
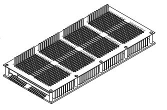


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
	R5 Non-Illuminated					
1	DPST, On-Off, 15A Black	EG1527-ND	1.82	1.64	1.40	R5ABLKBLKEF0
1	DPDT, On-On, 15A Black	EG1528-ND	2.27	2.04	1.74	R5CBLKBLKEF0
2	DPST, On-Off, 15A Black	EG1529-ND	1.82	1.64	1.40	R5ABLKBLKFF0
1	DPDT, On-Off-On, 15A Black	EG1539-ND	2.95	2.66	2.26	R5DBLKBLKEF0
3	DPDT, On-Off-On, 15A Black	EG1540-ND	2.95	2.66	2.26	R5DBLKBLKCF0
4	DPDT, On-Off-On, 15A Black	EG1541-ND	2.95	2.66	2.26	R5DBLKBLKHF0
	R5 Illuminated					
1	DPST, 125V Red Illum., 15A Black	EG1530-ND	2.95	2.66	2.26	R5BBLKREDEF1
2	DPST, 125V Red Illum., 15A Black	EG1531-ND	2.95	2.66	2.26	R5BBLKREDFF1
1	DPST, 125V Green Illum., 15A Black	EG1533-ND	2.95	2.66	2.26	R5BBLKGRNEF1
2	DPST, 125V Green Illum., 15A Black	EG1534-ND	2.95	2.66	2.26	R5BBLKGRNFF1
2	DPST, 230V Red Illum., 15A Black	EG1535-ND	2.95	2.66	2.26	R5BBLKREDFF2
2	DPST, 230V Green Illum., 15A Black	EG1536-ND	2.95	2.66	2.26	R5BBLKGRNFF2
2	DPST, 12VDC Red Illum., 15A Black	EG1537-ND	2.95	2.66	2.26	R5BBLKREDFF3
2	DPST, 12VDC Green Illum., 15A Black	EG1538-ND	2.95	2.66	2.26	R5BBLKGRNFF3
	R6 Mini-Rocker					
1	SPST 6A, Black W/out Marking	EG1525-ND	1.67	1.51	1.28	R6ABLKBLKEF
2	SPST 6A, Black With Marking	EG1526-ND	1.67	1.51	1.28	R6ABLKBLKFF

Communication Devices
a division of EDAC Inc.

Matrix Selector Switches



Size*	Digi-Key Part No.	Price Each	Mfg. Part No.
20 x 40	151-1054-ND	341.46	C10-04A
10 x 20	151-1055-ND	215.14	C10-42A
10 x 50	151-1056-ND	341.46	C10-45A
48 x 58	151-1057-ND	763.51	C10-56A

* Positions x Slider Rails

Grayhill

Adjustable Stop Rotary Switches

Series 42, 44, 56 & 71

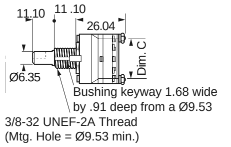
42 and 44 Series: **Adjustable Stop:** Two removable stop washers allow you to limit the number of switch positions as needed. A knurled nut is supplied to secure the washers if desired. **Electrical Ratings:** Nonshorting 1 amp, carry 10 amps continuously. **Contact Resistance:** After 25,000 cycles of operation 20 milliohms max. **Insulation Resistance:** 50,000 megohms min. (initially). **Voltage Breakdown:** 1,000VAC initially (500VAC or better after most environmental tests). **Materials & Finishes: Terminals:** Brass, lead-tin plated & fused. **Common Plate, Including Solder Lug:** Brass, silver plated .0003" min.

56 Series: **Electrical Ratings:** Nonshorting 200mA, carry 6 amps continuously. **Contact Resistance:** 100 milliohms max. (15 milliohms initially). **Insulation Resistance & Voltage Breakdown:** 10,000 megohms min. **Materials & Finishes: Terminals:** Brass, gold over silver over nickel plated.

71 Series: **Electrical Ratings:** Nonshorting 1/4 amp, carry 4 amps continuously. **Contact Resistance:** 50 milliohms max. (20 milliohms initially). **Insulation Resistance:** 10,000 megohms min. between mutually insulated parts (50,000 megohms initially). **Materials & Finishes: Base Contacts, Common Plate & Terminals:** Brass, gold plate 5 microinches min. over silver plate 50 microinches min. over nickel 20 microinches min.

9154B-ND **Grayhill Engineering Catalog** **$4.95**

Fig. 1


11.10
11 .10
26.04
Dim. C
Ø6.35
Bushing keyway 1.68 wide by .91 deep from a Ø9.53
3/8-32 UNEF-2A Thread (Mtg. Hole = Ø9.53 min.)

Series 42		
A	**B**	**C**
14.27	25.40	21.08
Series 44		
16.31	29.51	25.40

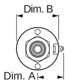
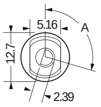


Fig. 2



Angle Of Throw	
30°	36°
Angle "A"	
105°	108°

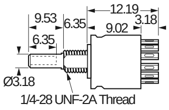


Fig. 3

Dim. A	**Dim. B**
1 Deck	
19.33	.79
2 Decks	
24.87	.79

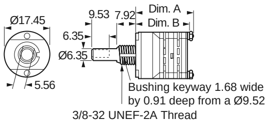
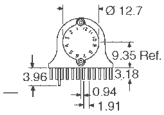


Fig. 4



PC Mount — Rear view

56 & 71 Series

Adjustable Stop: Allows you to change number of positions per pole. Simply remove and relocate stop pins in the holes in front of switch. Pins are held in place by a self-adhesive sticker which fits over the front plate.

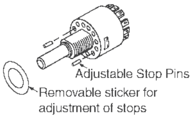


Fig.	Angle Of Throw	Terminals	No. of Poles	Pos. per Pole	No. of Decks	Current Rating Amps	Digi-Key Part No.	Pricing* 1	25	100	Grayhill Part No.
1	36	Solder Lug	1	10	1	1	GH4201-ND	34.70	694.00	2081.99	42D36-01-1-AJN
1	36	Solder Lug	2	5	1	1	GH4202-ND	36.18	723.57	2170.70	42D36-01-2-AJN
1	30	Solder Lug	1	12	1	1	GH4401-ND	35.61	712.12	2136.40	44D30-01-1-AJN
1	30	Solder Lug	2	6	1	1	GH4402-ND	37.11	742.15	2226.49	44D30-01-2-AJN
2	30	Solder Lug	1	12	1	200mA	GH5601-ND	10.20	203.97	611.90	56D30-01-1-AJN
2	30	Solder Lug	2	6	1	200mA	GH5602-ND	11.31	226.15	678.40	56D30-01-2-AJN
2	36	Solder Lug	1	10	1	200mA	GH5603-ND	9.87	197.38	592.10	56D36-01-1-AJN
2	36	Solder Lug	2	5	1	200mA	GH5604-ND	10.98	219.68	659.00	56D36-01-2-AJN
3	30	Solder Lug	1	12	1	250mA	GH7101-ND	14.37	287.39	862.17	71BD30-01-1-AJN
3	30	Solder Lug	2	6	1	250mA	GH7102-ND	14.93	298.55	895.60	71BD30-01-2-AJN
3	30	Solder Lug	1	12	2	250mA	GH7103-ND	18.61	372.17	1116.50	71BD30-02-1-AJN
3	30	Solder Lug	2	6	2	250mA	GH7104-ND	19.77	395.35	1186.10	71BD30-02-2-AJN
4	30	PC	1	12	1	250mA	GH7105-ND	22.33	468.94	1335.90	71BDF30-01-1-AJN
4	30	PC	2	6	1	250mA	GH7106-ND	23.16	486.36	1385.54	71BDF30-01-2-AJN
4	30	PC	1	12	2	250mA	GH7107-ND	30.62	643.19	1832.30	71BDF30-02-1-AJN
4	30	PC	2	6	2	250mA	GH7108-ND	32.23	677.01	1928.66	71BDF30-02-2-AJN

* Call for pricing of larger quantities

Cannon

ITT Industries
Engineered for life

C&K Rotary Switches

Specifications: • **Contact Rating:** Switch-2.5 AMPS @ 125 V AC or 28 V DC; 150 mA @ 250 V AC or DC. Carry - 5 AMPS • **Electrical Life:** 15,000 make-and-break cycles • **Contact Resistance:** 20 milliohms typ. • **Operating Temperature:** -30°C to 85°C

Materials: • **Housing:** Glass filled nylon, red • **Movable Contact:** coin silver, silver plated • **Stationary Contacts & Terminals:** Brass, silver plated • **Hardware:** Nut, Lockwasher, Stop Ring Included

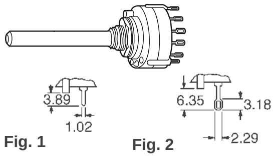


Fig. 1 **Fig. 2**

Fig.	Poles	No. of Pos.	Digi-Key Part No.	Pricing 1	25	100	250	C&K Part No.
1	SP	12	CKC7001-ND	5.31	106.20	336.30	663.75	A11215RNCQ
2	SP	12	CKC7002-ND	5.31	106.20	336.30	663.75	A11215RNZQ
1	DP	6	CKC7003-ND	5.61	112.20	355.30	701.25	A20615RNCQ
2	DP	6	CKC7004-ND	5.61	112.20	355.30	701.25	A20615RNZQ
1	3P	4	CKC7005-ND	5.52	110.40	349.60	690.00	A30415RNCQ
2	3P	4	CKC7006-ND	5.52	110.40	349.60	690.00	A30415RNZQ
1	4P	3	CKC7007-ND	6.06	121.20	383.80	757.50	A40315RNCQ
2	4P	3	CKC7008-ND	6.06	121.20	383.80	757.50	A40315RNZQ

CTS Rotary Switches

SPECIFICATIONS: • Adjustable stop allows you to limit the number of switch positions as needed • **Rotor Contact:** Standard with Silver plated Brass • **Rotor:** Standard with Nylon maximum temperature requirements of 125°C • **Voltage and Current ratings:** UL ratings are 3/4 amp at 125 volts AC; 1/4 amp at 250 volts DC; 1/2 amp at 125 volts DC (non-shorting contacts) • **Contact Resistance:** .008 to .010 ohms • **Contact Life:** Silver plated brass, solid silver rotor contacts, and silver plated brass stator contacts provide a minimum reliable life of over 1,100,000 operations or of 50,000 cycles through twelve positions and return without appreciable rise in contact resistance.

Fig. 1

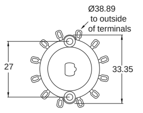
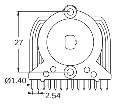


Fig. 2



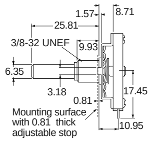
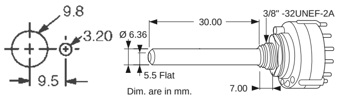


Fig.	Angle of Throw	Type	Terminals	No. Poles	No. Pos.	No. Decks	Current Rating Amps	Digi-Key Part No.	Pricing 1	10	50
1	30°	Non-Short	Solder Lug	1	12	1	3/4A-125VAC	CT2121-ND	7.59	70.60	292.99
1	30°	Shorting	Solder Lug	1	11	1	3/4A-125VAC	CT2122-ND	7.59	70.60	292.99
2	30°	Non-Short	Printed Circuit	1	12	1	3/4A-125VAC	CT2123-ND	8.28	77.00	319.55
2	30°	Shorting	Printed Circuit	1	11	1	3/4A-125VAC	CT2124-ND	8.23	76.60	317.89

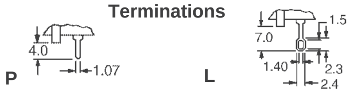
E-SWITCH® Rotary Switches KC Series

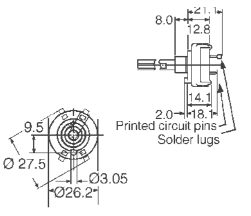
With applications ranging for test & measurement equipment to telephone base stations to hospital controls. These rotary switches have performed exceptionally well.
Contacts (Non-Shorting). Available with solder lugs or printed circuit boards pins with adjustable stops to select any number of positions. **Operating Force:** 570 Grams. **Indexing:** 30° Index. **Contact Rating (Switching):** 150mA 250V AC/DC; 350mA 110V AC/DC. **Contact Rating (Non-Switching):** 5 Amps. **Initial Contact Resistance:** Silver = 50 milliohms max. **Operating Temperature:** –30°C to +85°C. **Moving and Fixed Contact:** Silver plated brass.



Dim. are in mm.

Terminations





No. of Pole	No. of Pos.	Termination	Digi-Key Part No.	Pricing 1	10	100	250	E-Switch Part No.
1	12	P	EG1951-ND	5.07	45.66	388.93	803.23	KC-52-A-01-N-P-S
1	12	L	EG1952-ND	5.07	45.66	388.93	803.23	KC-52-A-01-N-L-S
2	6	P	EG1953-ND	5.07	45.66	388.93	803.23	KC-26-A-01-N-P-S
2	6	L	EG1954-ND	5.07	45.66	388.93	803.23	KC-26-A-01-N-L-S
3	4	P	EG1955-ND	5.07	45.66	388.93	803.23	KC-34-A-01-N-P-S
3	4	L	EG1956-ND	5.07	45.66	388.93	803.23	KC-34-A-01-N-L-S
4	3	P	EG1957-ND	5.07	45.66	388.93	803.23	KC-43-A-01-N-P-S
4	3	L	EG1958-ND	5.07	45.66	388.93	803.23	KC-43-A-01-N-L-S

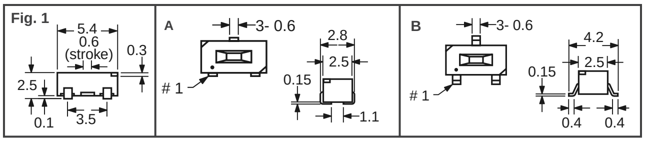
BC BEYSCHLAG CENTRALAB COMPONENTS

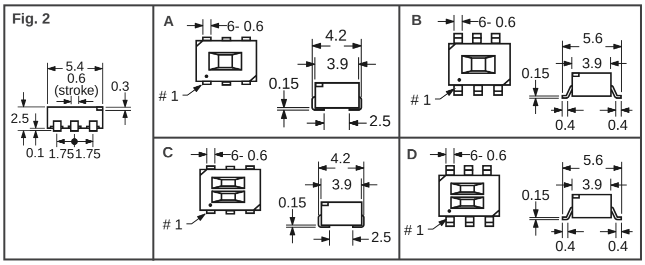
Surface Mount Slide Switches CAS Series

Electrical Characteristics: • **Contact Rating:** Non-switching DC50 V 100mA, Switching DC6V, 100mA DC24 V, 25mA, Minimum DC20mV 1μa, • **Contact Resistance:** 50mΩ maximum (1.5mA, 1kHz, 20mV) • **Insulation resistance:** 1000MΩ (DC 100V) minimum • **Dielectric strength:** AC500 V, 50Hz, 60s

Fig.	No. of Pos.	No. of Poles	Description	Digi-Key Part No.	Cut Tape Price Each 10	100	Tape & Reel Pricing* 1,000	BC Components Part No.
1A	1	1	SPDT, J Hook	CAS120JCT-ND	1.76	1.27	585.00	CAS120TA
1B	1	1	SPDT, Gullwing	CAS120GCT-ND	1.76	1.27	585.00	CAS120TB
2A	1	2	DPDT, J Hook	CAS220JCT-ND	3.38	2.44	1125.00	CAS220TA
2B	1	2	DPDT, Gullwing	CAS220GCT-ND	3.38	2.44	1162.50	CAS220TB
2C	2	1	SPDT 2 pos. J Hook	CASD20JCT-ND	3.38	2.44	1125.00	CASD20TA
2D	2	1	SPDT 2 pos. Gullwing	CASD20GCT-ND	3.38	2.44	1125.00	CASD20TB

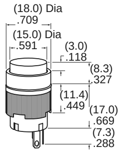
* For Tape & Reel Part No. change CT to TR

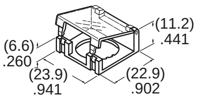




NEW! **nkk® switches**

Illuminated Large Body Pushbutton Switches





Dim. in (mm) Inch

YB Series with Panel Seal:

Improved LED illumination offers a bright full face illuminated area for easy identification in both lit and unlit conditions. High density design with less than 1" behind panel depth. Silver contacts with .110" quick connect solder lug terminals. Meets IP65 of IEC529 standards. **Electrical Capacity:** 3A @ 125/250V AC or 30V DC. **Dielectric Strength:** 1,000V AC min. between contacts; 1,500V AC min. between contacts and case. **Mechnical Life:** 1,000,000 operations min. for momentary: 200,000 operations min. for alternate action. **Electrical Life:** 100,000 operations min. **Total Travel:** .118" **Operating Force:** 170 grams for single pole: 300 grams for double pole. **Operating Temperature:** -25°C through +50°C. **UL recognized & CSA certified.**

Fig.	Circuit	Switching Function	Color	Digi-Key Part No.	Price Each 1	25	100	NKK Part No.
YB Series with Panel Seal								
1	SPDT	On - Mom	Red	360-1427-ND	23.37	18.70	14.81	YB15WCKW01-C04-JC
	SPDT	On - Mom	Yellow	360-1428-ND	23.37	18.70	14.81	YB15WCKW01-D04-JD
	SPDT	On - Mom	Green	360-1429-ND	23.37	18.70	14.81	YB15WCKW01-F04-JF
	SPDT	On - Mom	Blue	360-1430-ND	26.34	21.08	16.69	YB15WCKW01-6G-JB
	SPDT	On - On	Red	360-1431-ND	25.26	20.21	16.00	YB16WCKW01-C04-JC
1	SPDT	On - On	Yellow	360-1432-ND	25.26	20.21	16.00	YB16WCKW01-D04-JD
	SPDT	On - On	Green	360-1433-ND	25.26	20.21	16.00	YB16WCKW01-F04-JF
	SPDT	On - On	Blue	360-1434-ND	28.23	22.59	17.88	YB16WCKW01-6G-JB
	DPDT	On - Mom	Red	360-1435-ND	26.49	21.20	16.78	YB25WCKW01-C04-JC
	DPDT	On - Mom	Yellow	360-1436-ND	26.49	21.20	16.78	YB25WCKW01-D04-JD
1	DPDT	On - Mom	Green	360-1437-ND	26.49	21.20	16.78	YB25WCKW01-F04-JF
	DPDT	On - Mom	Blue	360-1438-ND	29.46	23.57	18.66	YB25WCKW01-6G-JB
	DPDT	On - On	Red	360-1439-ND	27.75	22.20	17.58	YB26WCKW01-C04-JC
	DPDT	On - On	Yellow	360-1440-ND	27.75	22.20	17.58	YB26WCKW01-D04-JD
	DPDT	On - On	Green	360-1441-ND	27.75	22.20	17.58	YB26WCKW01-F04-JF
1	DPDT	On - On	Blue	360-1442-ND	30.72	24.58	19.46	YB26WCKW01-6G-JB
	SPDT	On - Mom	Red/Green	360-1443-ND	27.15	21.72	17.20	YB15WCKW01-2CF02-JB
	SPDT	On - On	Red/Green	360-1444-ND	29.07	23.26	18.42	YB16WCKW01-2CF02-JB
	DPDT	On - Mom	Red/Green	360-1445-ND	30.30	24.24	19.19	YB25WCKW01-2CF02-JB
	DPDT	On - On	Red/Green	360-1446-ND	31.53	25.23	19.97	YB26WCKW01-2CF02-JB
2	Protective Polycarbonate Guard			360-1008-ND	2.97	2.38	1.89	AT4072

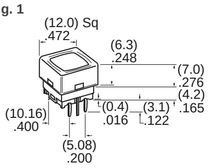
Illuminated Washable Tactile Switches

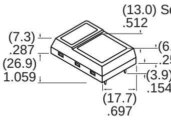
JB Series Illuminated Low Profile Switches:

Bright full face LED illumination for extremely long life. Completely sealed for extreme operating environments and automated soldering processes. Higher operating force provides more pronounced operating feel. All lenses come standard with diffused colored lens unless noted as clear. Terminal spacing conforming to .100" PCB grid. Straight, molded-in PC terminals. Single pole, single throw, variety of cap colors. Red, yellow or green LEDs. **Electrical Capacity:** 50mA @ 24V DC, max. **Dielectric Strength:** 250V AC min. **Mechanical Life:** 5,000,000 operations min. **Electrical Life:** 5,000,000 operations min. **Operating Temperature:** -25°C through +70°C. **Total Travel:** .010"

JF Series Illuminated Ultra-Thin Switches:

JF Series are washable tactile switches with crisp tactile feedback. Terminal spacing conforming to .100" PCB grid. Single pole, single throw, variety of cap colors. Red, yellow or green LEDs. **Electrical Capacity:** 50mA @ 24V DC max. **Dielectric Strength:** 250V AC min. **Mechanical LIfe:** 500,000 operations min. **Electrical Life:** 500,000 operations min. **Operating Temperature:** -25°C through +50°C. **Total Travel:** .016".





Dim. in (mm) Inch

Fig.	Circuit	Switching Function	Color	Digi-Key Part No.	Price Each 1	25	100	NKK Part No.
JB Series Illuminated Low Profile Switches								
1	SPST	Momentary	Red	360-1260-ND	4.62	3.70	2.93	JB15LPC-JB
	SPST	Momentary	Red Clear	360-1261-ND	4.62	3.70	2.93	JB15LPC-JC
	SPST	Momentary	Yellow	360-1262-ND	4.62	3.70	2.93	JB15LPE-JB
	SPST	Momentary	Yellow Clear	360-1263-ND	4.62	3.70	2.93	JB15LPE-JE
	SPST	Momentary	Green	360-1264-ND	4.62	3.70	2.93	JB15LPF-JB
	SPST	Momentary	Green Clear	360-1265-ND	4.62	3.70	2.93	JB15LPF-JF
JF Series Illuminated Ultra Thin Switches								
2	SPST	Momentary	Red	360-1266-ND	7.68	6.15	4.87	JF15AP1CC
	SPST	Momentary	Yellow	360-1267-ND	9.24	7.40	5.86	JF15AP1EE
	SPST	Momentary	Green	360-1268-ND	8.01	6.41	5.08	JF15AP1FF

NEW! nkk® switches

Illuminated Low Profile Pushbutton Switches

Snap-action contact mechanism. Alternate action models with latchdown for indication of circuit status. Snap-in mount (W01) with solder lug terminals and silver contacts: PCB mount (G03) with straight PC terminals and gold contacts. **Electrical Capacity: Power Level (code W):** 5A @ 125/250V AC or 5A @ 30V DC **Logic Level (code G):** 0.4VA maximum @ 28V AC/DC maximum. **Dielectric Strength:** 1,000V AC min. between contacts. **Mechanical Life:** 1,000,000 operations min. (momentary): 200,000 operations min. (alternate action). **Electrical Life:** 10,000 operations min. (silver): 200,000 operations min. (gold). **Total Travel:** .091”. **Operation Force:** 160 grams for single pole, 260 grams for double pole. **Contact Timing:** Break before make. **Operating Temperature:** -25°C through +50°C. UB models **UL recognized & CSA certified.** UB 2 models. **UL recognized**. No UL/CSA mark on switch.

Dim. in (mm) Inch

Fig. 1

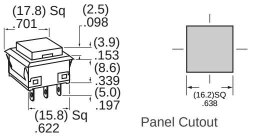


Fig. 2

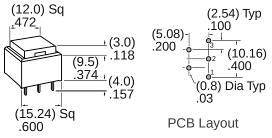


Fig. 3

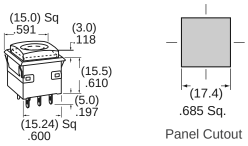


Fig.4

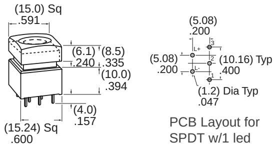


Fig.	Circuit	Switching Function	Color	Digi-Key Part No.	Price Each 1	25	100	NKK Part No.
Square Snap-in Mount, Single Element LED (UB Series) — 5A								
1	SPDT	On-Mom	Red	360-1525-ND	11.91	9.53	7.55	UB15KKW015C-CC
	SPDT	On-Mom	Yellow	360-1526-ND	11.91	9.53	7.55	UB15KKW015D-DD
	SPDT	On-Mom	Green	360-1527-ND	11.91	9.53	7.55	UB15KKW015F-FF
	SPDT	On-On	Red	360-1528-ND	13.05	10.44	8.27	UB16KKW015C-CC
	SPDT	On-On	Yellow	360-1529-ND	13.05	10.44	8.27	UB16KKW015D-DD
	SPDT	On-On	Green	360-1530-ND	13.05	10.44	8.27	UB16KKW015F-FF
	DPDT	On-Mom	Red	360-1531-ND	15.12	12.10	9.58	UB25KKW015C-CC
	DPDT	On-Mom	Yellow	360-1532-ND	15.12	12.10	9.58	UB25KKW015D-DD
	DPDT	On-Mom	Green	360-1533-ND	15.12	12.10	9.58	UB25KKW015F-FF
	DPDT	On-On	Red	360-1534-ND	15.93	12.75	10.09	UB26KKW015C-CC
	DPDT	On-On	Yellow	360-1535-ND	15.93	12.75	10.09	UB26KKW015D-DD
	DPDT	On-On	Green	360-1536-ND	15.93	12.75	10.09	UB26KKW015F-FF
Square PCB Mount, Single Element LED (UB Series) — .4VA								
2	SPDT	On-Mom	Red	360-1537-ND	11.43	9.15	7.24	UB15SKG035C-CC
	SPDT	On-Mom	Yellow	360-1538-ND	11.43	9.15	7.24	UB15SKG035D-DD
	SPDT	On-Mom	Green	360-1539-ND	11.43	9.15	7.24	UB15SKG035F-FF
	SPDT	On-On	Red	360-1540-ND	12.60	10.08	7.98	UB16SKG035C-CC
	SPDT	On-On	Yellow	360-1541-ND	12.60	10.08	7.98	UB16SKG035D-DD
	SPDT	On-On	Green	360-1542-ND	12.60	10.08	7.98	UB16SKG035F-FF
	DPDT	On-Mom	Red	360-1543-ND	15.30	12.24	9.69	UB25SKG035C-CC
	DPDT	On-Mom	Yellow	360-1544-ND	15.30	12.24	9.69	UB25SKG035D-DD
	DPDT	On-Mom	Green	360-1545-ND	15.30	12.24	9.69	UB25SKG035F-FF
	DPDT	On-On	Red	360-1546-ND	16.14	12.92	10.23	UB26SKG035C-CC
	DPDT	On-On	Yellow	360-1547-ND	16.14	12.92	10.23	UB26SKG035D-DD
	DPDT	On-On	Green	360-1548-ND	16.14	12.92	10.23	UB26SKG035F-FF
Square Snap-in Mount, Multi Element LED (UB2 Series) — 5A								
3	SPDT	On-Mom	Red - White Diff. Lens	360-1549-ND	16.56	13.25	10.49	UB215KKW015C-1JB
	SPDT	On-Mom	Red - Clear Lens	360-1550-ND	16.56	13.25	10.49	UB215KKW015C-1JC
	SPDT	On-Mom	Yellow - White Diff. Lens	360-1551-ND	16.56	13.25	10.49	UB215KKW015D-1JB
	SPDT	On-Mom	Yellow - Clear Lens	360-1552-ND	16.56	13.25	10.49	UB215KKW015D-1JD
	SPDT	On-Mom	Green - White Diff. Lens	360-1553-ND	16.56	13.25	10.49	UB215KKW015F-1JB
	SPDT	On-Mom	Green - Clear Lens	360-1554-ND	16.56	13.25	10.49	UB215KKW015F-1JF
	SPDT	On-Mom	Red/Green - White Diff. Lens	360-1555-ND	22.98	18.39	14.56	UB215KKW01CF-1JB
	SPDT	On-On	Red - Clear Lens	360-1556-ND	17.70	14.16	11.21	UB216KKW015C-1JB
	SPDT	On-On	Red - White Diff. Lens	360-1557-ND	17.70	14.16	11.21	UB216KKW015C-1JC
	SPDT	On-On	Yellow - Clear Lens	360-1558-ND	17.70	14.16	11.21	UB216KKW015D-1JB
	SPDT	On-On	Yellow - White Diff. Lens	360-1559-ND	17.70	14.16	11.21	UB216KKW015D-1JD
	SPDT	On-On	Green - Clear Lens	360-1560-ND	17.70	14.16	11.21	UB216KKW015F-1JB
	SPDT	On-On	Green - White Diff. Lens	360-1561-ND	17.70	14.16	11.21	UB216KKW015F-1JF
	SPDT	On-On	Red/Green - Clear Lens	360-1562-ND	24.15	19.32	15.30	UB216KKW01CF-1JB
	DPDT	On-Mom	Red - White Diff. Lens	360-1563-ND	19.92	15.94	12.62	UB225KKW015C-1JB
	DPDT	On-Mom	Red - Clear Lens	360-1564-ND	19.92	15.94	12.62	UB225KKW015C-1JC
	DPDT	On-Mom	Yellow - White Diff. Lens	360-1565-ND	19.92	15.94	12.62	UB225KKW015D-1JB
	DPDT	On-Mom	Yellow - Clear Lens	360-1566-ND	19.92	15.94	12.62	UB225KKW015D-1JD
	DPDT	On-Mom	Green - White Diff. Lens	360-1567-ND	19.92	15.94	12.62	UB225KKW015F-1JB
	DPDT	On-Mom	Green - Clear Lens	360-1568-ND	19.92	15.94	12.62	UB225KKW015F-1JF
	DPDT	On-Mom	Red/Green - White Diff. Lens	360-1569-ND	26.37	21.10	16.71	UB225KKW01CF-1JB
	DPDT	On-On	Red - Clear Lens	360-1570-ND	21.57	17.26	13.67	UB226KKW015C-1JB
	DPDT	On-On	Red - White Diff. Lens	360-1571-ND	21.57	17.26	13.67	UB226KKW015C-1JC
	DPDT	On-On	Yellow - Clear Lens	360-1572-ND	21.57	17.26	13.67	UB226KKW015D-1JB
	DPDT	On-On	Yellow - White Diff. Lens	360-1573-ND	21.57	17.26	13.67	UB226KKW015D-1JD
	DPDT	On-On	Green - Clear Lens	360-1574-ND	21.57	17.26	13.67	UB226KKW015F-1JB
	DPDT	On-On	Green - White Diff. Lens	360-1575-ND	21.57	17.26	13.67	UB226KKW015F-1JF
	DPDT	On-On	Red/Green - Clear Lens	360-1576-ND	28.02	22.42	17.75	UB226KKW01CF-1JB
Square PCB Mount, Multi Element LED (UB2 Series) — .4VA								
4	SPDT	On-Mom	Red - White Diff. Lens	360-1577-ND	17.22	13.78	10.91	UB215SKG035C-1JB
	SPDT	On-Mom	Red - Clear Lens	360-1578-ND	17.22	13.78	10.91	UB215SKG035C-1JC
	SPDT	On-Mom	Yellow - White Diff. Lens	360-1579-ND	17.22	13.78	10.91	UB215SKG035D-1JB
	SPDT	On-Mom	Yellow - Clear Lens	360-1580-ND	17.22	13.78	10.91	UB215SKG035D-1JD
	SPDT	On-Mom	Green - White Diff. Lens	360-1581-ND	17.22	13.78	10.91	UB215SKG035F-1JB
	SPDT	On-Mom	Green - Clear Lens	360-1582-ND	17.22	13.78	10.91	UB215SKG035F-1JF
	SPDT	On-Mom	Red/Green - White Diff. Lens	360-1583-ND	23.64	18.92	14.98	UB215SKG03CF-1JB
	SPDT	On-On	Red - Clear Lens	360-1584-ND	18.36	14.69	11.63	UB216SKG035C-1JB
	SPDT	On-On	Red - White Diff. Lens	360-1585-ND	18.36	14.69	11.63	UB216SKG035C-1JC
	SPDT	On-On	Yellow - Clear Lens	360-1586-ND	18.36	14.69	11.63	UB216SKG035D-1JB
	SPDT	On-On	Yellow - White Diff. Lens	360-1587-ND	18.36	14.69	11.63	UB216SKG035D-1JD
	SPDT	On-On	Green - Clear Lens	360-1588-ND	18.36	14.69	11.63	UB216SKG035F-1JB
	SPDT	On-On	Green - White Diff. Lens	360-1589-ND	18.36	14.69	11.63	UB216SKG035F-1JF
	SPDT	On-On	Red/Green - Clear Lens	360-1590-ND	24.81	19.85	15.72	UB216SKG03CF-1JB
	DPDT	On-Mom	Red - White Diff. Lens	360-1591-ND	21.24	17.00	13.46	UB225SKG035C-1JB
	DPDT	On-Mom	Red - Clear Lens	360-1592-ND	21.24	17.00	13.46	UB225SKG035C-1JC
	DPDT	On-Mom	Yellow - White Diff. Lens	360-1593-ND	21.24	17.00	13.46	UB225SKG035D-1JB
	DPDT	On-Mom	Yellow - Clear Lens	360-1594-ND	21.24	17.00	13.46	UB225SKG035D-1JD
	DPDT	On-Mom	Green - White Diff. Lens	360-1595-ND	21.24	17.00	13.46	UB225SKG035F-1JB
	DPDT	On-Mom	Green - Clear Lens	360-1596-ND	21.24	17.00	13.46	UB225SKG035F-1JF
	DPDT	On-Mom	Red/Green - White Diff. Lens	360-1597-ND	27.69	22.16	17.54	UB225SKG03CF-1JB
	DPDT	On-On	Red - Clear Lens	360-1598-ND	22.89	18.32	14.50	UB226SKG035C-1JB
	DPDT	On-On	Red - White Diff. Lens	360-1599-ND	22.89	18.32	14.50	UB226SKG035C-1JC
	DPDT	On-On	Yellow - Clear Lens	360-1600-ND	22.89	18.32	14.50	UB226SKG035D-1JB
	DPDT	On-On	Yellow - White Diff. Lens	360-1601-ND	22.89	18.32	14.50	UB226SKG035D-1JD
	DPDT	On-On	Green - Clear Lens	360-1602-ND	22.89	18.32	14.50	UB226SKG035F-1JB
	DPDT	On-On	Green - White Diff. Lens	360-1603-ND	22.89	18.32	14.50	UB226SKG035F-1JF
	DPDT	On-On	Red/Green - Clear Lens	360-1604-ND	29.34	23.48	18.59	UB226SKG03CF-1JB

NEW! **NKK switches**

Illuminated Pushbutton Switches

KB Series Miniature Bushing Mount:

The pushbutton is an SPDT snap acting type contact mechanism, providing long electrical life and pronounced sensitivity. Comes complete with nut. 12mm diameter makes this switch ideal for stacking into a panel using minimal room. LED illumination for long service life.

Electrical Capacity: 1A @ 125/250V AC or 30V DC for silver contacts. **Dielectric Strength:** 1,500V AC min. between contacts and case. **Mechanical Life:** 100,000 operations min. **Electrical Life:** 50,000 operations min. (silver). **Total Travel:** .118" **Operating Temperature:** -25°C through +50°C. **UL Recognized & CSA Certified** @ 1A rating.

LB Series Standard Size Snap-in Mount:

The pushbutton switch is a standard size illuminated panel mount switch that includes two rubber seal construction that protects the contact mechanism from oil, dust, water and other contaminants. This construction also features LED illumination along with a quick make and break contact design which limits arcing and prolongs electrical life.

Electrical Capacity: 3A @ 125/250V AC or 30V DC for silver contacts. **Dielectric Strength:** 1,500 V AC min. between contacts and case. **Mechanical Life:** 1,000,000 operations min for momentary: 200,000 operations min. for maintained. **Electrical Life:** 100,000 operations min. **Total Travel:** .118" **Operating Temperature:** -25°C through +50°C. **UL recognized & CSA certified** @ 3A rating.

Fig.	Circuit	Switching Function	Color	Digi-Key Part No.	Price Each 1	25	100	NKK Part No
KB Series Square Bezel Switches								
1	SPDT	On-Mom	Red	360-1269-ND	12.87	10.30	8.16	KB15SKW01-C-JC
	SPDT	On-Mom	Yellow	360-1270-ND	12.87	10.30	8.16	KB15SKW01-D-JD
	SPDT	On-Mom	Green	360-1271-ND	12.87	10.30	8.16	KB15SKW01-F-JF
	SPDT	On-On	Red	360-1272-ND	13.77	11.02	8.73	KB16SKW01-C-JC
	SPDT	On-On	Yellow	360-1273-ND	13.77	11.02	8.73	KB16SKW01-D-JD
	SPDT	On-On	Green	360-1274-ND	13.77	11.02	8.73	KB16SKW01-F-JF
	DPDT	On-Mom	Red	360-1275-ND	15.84	12.68	10.04	KB25SKW01-C-JC
	DPDT	On-Mom	Yellow	360-1276-ND	15.84	12.68	10.04	KB25SKW01-D-JD
	DPDT	On-Mom	Green	360-1277-ND	15.84	12.68	10.04	KB25SKW01-F-JF
	DPDT	On-On	Red	360-1278-ND	16.68	13.35	10.57	KB26SKW01-C-JC
	DPDT	On-On	Yellow	360-1279-ND	16.68	13.35	10.57	KB26SKW01-D-JD
	DPDT	On-On	Green	360-1280-ND	16.68	13.35	10.57	KB26SKW01-F-JF
KB Series Round Bezel Switches								
2	SPDT	On-Mom	Red	360-1281-ND	12.87	10.30	8.16	KB15CKW01-C-JC
	SPDT	On-Mom	Yellow	360-1282-ND	12.87	10.30	8.16	KB15CKW01-D-JD
	SPDT	On-Mom	Green	360-1283-ND	12.87	10.30	8.16	KB15CKW01-F-JF
	SPDT	On-On	Red	360-1284-ND	13.77	11.02	8.73	KB16CKW01-C-JC
	SPDT	On-On	Yellow	360-1285-ND	13.77	11.02	8.73	KB16CKW01-D-JD
	SPDT	On-On	Green	360-1286-ND	13.77	11.02	8.73	KB16CKW01-F-JF
	DPDT	On-Mom	Red	360-1287-ND	15.84	12.68	10.04	KB25CKW01-C-JC
	DPDT	On-Mom	Yellow	360-1288-ND	15.84	12.68	10.04	KB25CKW01-D-JD
	DPDT	On-Mom	Green	360-1289-ND	15.84	12.68	10.04	KB25CKW01-F-JF
	DPDT	On-On	Red	360-1290-ND	16.68	13.35	10.57	KB26CKW01-C-JC
	DPDT	On-On	Yellow	360-1291-ND	16.68	13.35	10.57	KB26CKW01-D-JD
	DPDT	On-On	Green	360-1292-ND	16.68	13.35	10.57	KB26CKW01-F-JF
KB Series Rectangular Bezel Switches								
3	SPDT	On-Mom	Red	360-1293-ND	12.87	10.30	8.16	KB15RKW01-C-JC
	SPDT	On-Mom	Yellow	360-1294-ND	12.87	10.30	8.16	KB15RKW01-D-JD
	SPDT	On-Mom	Green	360-1295-ND	12.87	10.30	8.16	KB15RKW01-F-JF
	SPDT	On-On	Red	360-1296-ND	13.77	11.02	8.73	KB16RKW01-C-JC
	SPDT	On-On	Yellow	360-1297-ND	13.77	11.02	8.73	KB16RKW01-D-JD
	SPDT	On-On	Green	360-1298-ND	13.77	11.02	8.73	KB16RKW01-F-JF
	DPDT	On-Mom	Red	360-1299-ND	15.84	12.68	10.04	KB25RKW01-C-JC
	DPDT	On-Mom	Yellow	360-1300-ND	15.84	12.68	10.04	KB25RKW01-D-JD
	DPDT	On-Mom	Green	360-1301-ND	15.84	12.68	10.04	KB25RKW01-F-JF
	DPDT	On-On	Red	360-1302-ND	16.68	13.35	10.57	KB26RKW01-C-JC
	DPDT	On-On	Yellow	360-1303-ND	16.68	13.35	10.57	KB26RKW01-D-JD
	DPDT	On-On	Green	360-1304-ND	16.68	13.35	10.57	KB26RKW01-F-JF
KB Accessories								
4	Socket Wrench for Panel Mount KB Series			360-1000-ND	2.34	1.88	1.49	AT108
	Protective Guard for Square/Round KB Series			360-1004-ND	1.98	1.59	1.26	AT494
	Protective Guard for Rectangular KB Series			360-1006-ND	2.16	1.73	1.37	AT4024
LB Series Square Bezel Switches								
5	SPDT	On-Mom	Red	360-1305-ND	18.00	14.40	11.40	LB15SKW01-C-JC
	SPDT	On-Mom	Yellow	360-1306-ND	18.00	14.40	11.40	LB15SKW01-D-JD
	SPDT	On-Mom	Green	360-1307-ND	18.00	14.40	11.40	LB15SKW01-F-JF
	SPDT	On-On	Red	360-1308-ND	19.98	15.99	12.66	LB16SKW01-C-JC
	SPDT	On-On	Yellow	360-1309-ND	19.98	15.99	12.66	LB16SKW01-D-JD
	SPDT	On-On	Green	360-1310-ND	19.98	15.99	12.66	LB16SKW01-F-JF
	DPDT	On-Mom	Red	360-1311-ND	21.30	17.04	13.49	LB25SKW01-C-JC
	DPDT	On-Mom	Yellow	360-1312-ND	21.30	17.04	13.49	LB25SKW01-D-JD
	DPDT	On-Mom	Green	360-1313-ND	21.30	17.04	13.49	LB25SKW01-F-JF
	DPDT	On-On	Red	360-1314-ND	23.28	18.63	14.75	LB26SKW01-C-JC
	DPDT	On-On	Yellow	360-1315-ND	23.28	18.63	14.75	LB26SKW01-D-JD
	DPDT	On-On	Green	360-1316-ND	23.28	18.63	14.75	LB26SKW01-F-JF
LB Series Round Bezel Switches								
6	SPDT	On-Mom	Red	360-1317-ND	18.00	14.40	11.40	LB15CKW01-C-JC
	SPDT	On-Mom	Yellow	360-1318-ND	18.00	14.40	11.40	LB15CKW01-D-JD
	SPDT	On-Mom	Green	360-1319-ND	18.00	14.40	11.40	LB15CKW01-F-JF
	SPDT	On-On	Red	360-1320-ND	19.98	15.99	12.66	LB16CKW01-C-JC
	SPDT	On-On	Yellow	360-1321-ND	19.98	15.99	12.66	LB16CKW01-D-JD
	SPDT	On-On	Green	360-1322-ND	19.98	15.99	12.66	LB16CKW01-F-JF
	DPDT	On-Mom	Red	360-1323-ND	21.30	17.04	13.49	LB25CKW01-C-JC
	DPDT	On-Mom	Yellow	360-1324-ND	21.30	17.04	13.49	LB25CKW01-D-JD
	DPDT	On-Mom	Green	360-1325-ND	21.30	17.04	13.49	LB25CKW01-F-JF
	DPDT	On-On	Red	360-1326-ND	23.28	18.63	14.75	LB26CKW01-C-JC
	DPDT	On-On	Yellow	360-1327-ND	23.28	18.63	14.75	LB26CKW01-D-JD
	DPDT	On-On	Green	360-1328-ND	23.28	18.63	14.75	LB26CKW01-F-JF
LB Series Rectangular Bezel Switches								
7	SPDT	On-Mom	Red	360-1329-ND	18.00	14.40	11.40	LB15RKW01-C-JC
	SPDT	On-Mom	Yellow	360-1330-ND	18.00	14.40	11.40	LB15RKW01-D-JD
	SPDT	On-Mom	Green	360-1331-ND	18.00	14.40	11.40	LB15RKW01-F-JF
	SPDT	On-On	Red	360-1332-ND	19.98	15.99	12.66	LB16RKW01-C-JC
	SPDT	On-On	Yellow	360-1333-ND	19.98	15.99	12.66	LB16RKW01-D-JD
	SPDT	On-On	Green	360-1334-ND	19.98	15.99	12.66	LB16RKW01-F-JF
	DPDT	On-Mom	Red	360-1335-ND	21.30	17.04	13.49	LB25RKW01-C-JC
	DPDT	On-Mom	Yellow	360-1336-ND	21.30	17.04	13.49	LB25RKW01-D-JD
	DPDT	On-Mom	Green	360-1337-ND	21.30	17.04	13.49	LB25RKW01-F-JF
	DPDT	On-On	Red	360-1338-ND	23.28	18.63	14.75	LB26RKW01-C-JC
	DPDT	On-On	Yellow	360-1339-ND	23.28	18.63	14.75	LB26RKW01-D-JD
	DPDT	On-On	Green	360-1340-ND	23.28	18.63	14.75	LB26RKW01-F-JF
LB Accessories								
8	Protective Guard for Square LB Series			360-1005-ND	2.82	2.26	1.79	AT499
	Protective Guard for Rectangular LB Series			360-1007-ND	2.82	2.26	1.79	AT4057

Dim. in (mm) Inch

Fig. 1

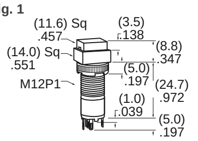
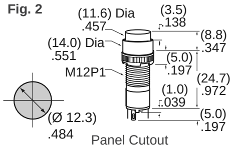


Fig. 2



Panel Cutout

Fig. 3

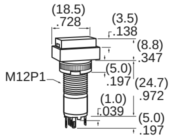
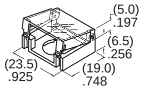
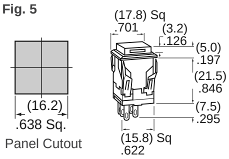


Fig. 4



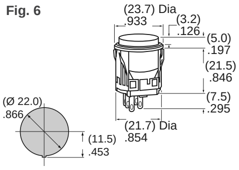
KB Switch Guard

Fig. 5



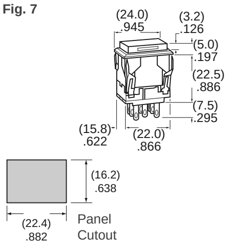
Panel Cutout

Fig. 6



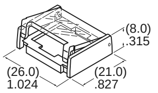
Panel Cutout

Fig. 7



Panel Cutout

Fig. 8



CTS DIP Switches

Electrical Specifications:

Initial Contact Resistance: 25 milliohms (209, 219 Series); 50 milliohms (193, 194, 204, and 206 Series); 100 milliohms (195, 208, and 218 Series).

Max. Contact Resistance: 100 milliohms after 10,000 cycles switching 50mA @ 24VDC (206 Series); 100 milliohms after 7,000 cycles switching 50mA @ 24VDC (193 and 194 Series); 500 milliohms after 2,000 cycles switching 50mA @ 24VDC (195 Series); 500 milliohms after 2,000 cycles switching 50mA @ 15VDC or 100mΩ after 1,000 cycles switching 25mA @ 24VDC (208 Series); 50 milliohms max. at end of life (209 and 219 Series).

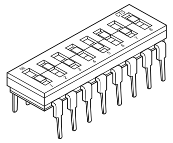
Gold finish refers to internal contact area of the switch, terminals are solder coated.

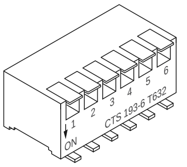
Max. Non-Switching Rating: 100mA or 50VDC.

Insulation Resistance: Across open switch and between adjacent closed switches - 1 x 10^9 ohms (218 Series: 100mΩ min.).

Dielectric Breakdown: 500VDC max. for 1 min. (218 Series – 300VDC max.).

Switch Capacitance: Between adjacent switches max. - 5.0pF (218 Series: 10pF).





Shock: Per MIL-STD-202F, method 213B, condition A with no contact inconsistencies greater than 1µsec (206, 208, 209 and 219 Series); no mechanical damage or changes of switch settings with 25G applied (193, 194, 195, 204 and 218 Series).

Vibration: Per MIL-STD-202F, method 204D, condition B (.06" or 15G's between 10Hz to 2KHz) with no contact inconsistencies greater than 1µsec (204, 206, 208, 209, 218, and 219 Series). No mechanical damage or changes of switch settings during or after testing when tested in three mutually perpendicular planes at 10-50Hz sweep or at 60Hz constant vibration (193, 194 and 195 Series).

Fig.	No. of Pos.	Dim. A (mm)	Digi-Key Part No.	Pricing			CTS Part No.
				1	10	100	
206 Series — SPST, Gold Finish, Lt. Blue Body							
1	2	7.26	CT2062-ND	1.28	11.73	106.65	206-2
	3	9.80	CT2063-ND	1.01	9.28	84.38	206-3
	4	12.34	CT2064-ND	.93	8.56	77.85	206-4
	5	14.88	CT2065-ND	1.12	10.30	93.60	206-5
	6	17.42	CT2066-ND	1.09	9.97	90.68	206-6
	7	19.96	CT2067-ND	1.10	10.05	91.35	206-7
	8	22.50	CT2068-ND	1.01	9.23	83.93	206-8
	9	25.04	CT2069-ND	1.06	9.73	88.43	206-9
	10	27.58	CT20610-ND	1.08	9.90	90.00	206-10
	12	32.66	CT20612-ND	1.24	11.39	103.50	206-12
206-ST Series — SPST, Gold Finish, Sealed, Lt. Blue Body							
1	2	7.26	CT2062ST-ND	1.36	12.47	113.40	206-2ST
	3	9.80	CT2063ST-ND	1.09	9.95	90.45	206-3ST
	4	12.34	CT2064ST-ND	1.03	9.45	85.95	206-4ST
	5	14.88	CT2065ST-ND	1.30	11.93	108.45	206-5ST
	6	17.42	CT2066ST-ND	1.25	11.48	104.40	206-6ST
	7	19.96	CT2067ST-ND	1.27	11.61	105.53	206-7ST
	8	22.50	CT2068ST-ND	1.10	10.07	91.58	206-8ST
	9	25.04	CT2069ST-ND	1.21	11.09	100.80	206-9ST
	10	27.58	CT20610ST-ND	1.25	11.43	103.95	206-10ST
	12	32.66	CT20612ST-ND	1.45	13.27	120.60	206-12ST
208 Series — SPST, Tin Finish, Black Body							
1	2	7.26	CT2082-ND	1.05	9.65	87.75	208-2
	3	9.80	CT2083-ND	.97	8.91	81.00	208-3
	4	12.34	CT2084-ND	.76	6.93	63.00	208-4
	5	14.88	CT2085-ND	.78	7.18	65.25	208-5
	6	17.42	CT2086-ND	.81	7.43	67.50	208-6
	7	19.96	CT2087-ND	.86	7.92	72.00	208-7
	8	22.50	CT2088-ND	.89	8.17	74.25	208-8
	9	25.04	CT2089-ND	.92	8.42	76.50	208-9
	10	27.58	CT20810-ND	1.00	9.16	83.25	208-10
	12	32.66	CT20812-ND	1.11	10.15	92.25	208-12
206-124 — SPDT, Gold Finish, Lt. Blue Body							
1	4	22.50	CT206124-ND	2.08	19.03	173.03	206-124
206-214 — DPST, Gold Finish, Lt. Blue Body							
1	4	22.50	CT206214-ND	1.62	14.87	135.23	206-214
194-MST Series — SPST, Gold Finish, Sealed, Lt. Blue Body							
2	2	7.26	CT1942MST-ND	1.40	12.87	117.00	194-2MST
	3	9.80	CT1943MST-ND	1.46	13.37	121.50	194-3MST
	4	12.34	CT1944MST-ND	1.19	10.89	99.00	194-4MST
	5	14.88	CT1945MST-ND	1.46	13.37	121.50	194-5MST
	6	17.42	CT1946MST-ND	1.35	12.38	112.50	194-6MST
	7	19.96	CT1947MST-ND	1.59	14.60	132.75	194-7MST
	8	22.50	CT1948MST-ND	1.43	13.12	119.25	194-8MST
	9	25.04	CT1949MST-ND	1.70	15.59	141.75	194-9MST
	10	27.58	CT19410MST-ND	1.54	14.11	128.25	194-10MST
	12	32.66	CT19412MST-ND	1.89	17.33	157.50	194-12MST
195-MST Series — SPST, Tin Finish, Sealed, Black Body							
2	2	7.26	CT1952MST-ND	1.32	12.13	110.25	195-2MST
	3	9.80	CT1953MST-ND	1.38	12.62	114.75	195-3MST
	4	12.34	CT1954MST-ND	1.05	9.65	87.75	195-4MST
	5	14.88	CT1955MST-ND	1.30	11.88	108.00	195-5MST
	6	17.42	CT1956MST-ND	1.16	10.64	96.75	195-6MST
	7	19.96	CT1957MST-ND	1.40	12.87	117.00	195-7MST
	8	22.50	CT1958MST-ND	1.22	11.14	101.25	195-8MST
	9	25.04	CT1959MST-ND	1.51	13.86	126.00	195-9MST
	10	27.58	CT19510MST-ND	1.32	12.13	110.25	195-10MST
	12	32.66	CT19512MST-ND	1.59	14.60	132.75	195-12MST
CT206-RAST Series — SPST, Gold Finish, Sealed, Lt. Blue Body							
3	2	7.26	CT2062RAST-ND	1.82	16.66	151.43	206-2RAST
	3	9.80	CT2063RAST-ND	1.43	13.12	119.25	206-3RAST
	4	12.34	CT2064RAST-ND	1.37	12.60	114.53	206-4RAST
	5	14.88	CT2065RAST-ND	1.55	14.18	128.93	206-5RAST
	6	17.42	CT2066RAST-ND	1.50	13.74	124.88	206-6RAST
	7	19.96	CT2067RAST-ND	1.52	13.91	126.45	206-7RAST
	8	22.50	CT2068RAST-ND	1.62	14.83	134.78	206-8RAST
	9	25.04	CT2069RAST-ND	1.67	15.30	139.05	206-9RAST
	10	27.58	CT20610RAST-ND	1.93	17.65	160.43	206-10RAST
	12	32.66	CT20612RAST-ND	1.92	17.62	160.20	206-12RAST
209-LPST Series — SPST, Gold Finish, Flush, Sealed, Black Body							
4	2	6.55	CT2092LPST-ND	.68	6.19	56.25	209-2LPST
	3	9.09	CT2093LPST-ND	.73	6.68	60.75	209-3LPST
	4	11.63	CT2094LPST-ND	.81	7.43	67.50	209-4LPST
	5	14.17	CT2095LPST-ND	.92	8.42	76.50	209-5LPST
	6	16.71	CT2096LPST-ND	1.00	9.16	83.25	209-6LPST
4	7	19.25	CT2097LPST-ND	1.08	9.90	90.00	209-7LSTPT
	8	21.79	CT2098LPST-ND	1.16	10.64	96.75	209-8LPST
	9	24.33	CT2099LPST-ND	1.27	11.63	105.75	209-9LPST
	10	26.87	CT20910LPST-ND	1.35	12.38	112.50	209-10LPST
	12	31.95	CT20912LPST-ND	1.51	13.86	126.00	209-12LPST
209-MS Series — SPST, Gold Finish, Extended, Sealed, Black Body							
4	2	6.55	CT2092MS-ND	.65	5.94	54.00	209-2MS
	3	9.09	CT2093MS-ND	.70	6.44	58.50	209-3MS
	4	11.63	CT2094MS-ND	.78	7.18	65.25	209-4MS
	5	14.17	CT2095MS-ND	.89	8.17	74.25	209-5MS
	6	16.71	CT2096MS-ND	.97	8.91	81.00	209-6MS
	7	19.25	CT2097MS-ND	1.05	9.65	87.75	209-7MS
	8	21.79	CT2098MS-ND	1.13	10.40	94.50	209-8MS
	9	24.33	CT2099MS-ND	1.24	11.39	103.50	209-9MS
	10	26.87	CT20910MS-ND	1.32	12.13	110.25	209-10MS
	12	31.95	CT20912MS-ND	1.49	13.61	123.75	209-12MS
219-LPST Series — SPST, Gold Finish, Flush, Sealed, Brown Body							
5	2	6.55	CT2192LPST-ND	.73	6.68	60.75	219-2LPST
	3	9.09	CT2193LPST-ND	.78	7.18	65.25	219-3LPST
	4	11.63	CT2194LPST-ND	.86	7.92	72.00	219-4LPST
	5	14.17	CT2195LPST-ND	.95	8.66	78.75	219-5LPST
	6	16.71	CT2196LPST-ND	1.03	9.41	85.50	219-6LPST
	7	19.25	CT2197LPST-ND	1.13	10.40	94.50	219-7LPST
	8	21.79	CT2198LPST-ND	1.19	10.89	99.00	219-8LPST
	9	24.33	CT2199LPST-ND	1.30	11.88	108.00	219-9LPST
	10	26.87	CT21910LPST-ND	1.35	12.38	112.50	219-10LPST
	12	31.95	CT21912LPST-ND	1.54	14.11	128.25	219-12LPST
219-MST Series — SPST, Gold Finish, Extended, Sealed, Brown Body							
5	2	6.55	CT2192MST-ND	.73	6.68	60.75	219-2MST
	3	9.09	CT2193MST-ND	.78	7.18	65.25	219-3MST
	4	11.63	CT2194MST-ND	.86	7.92	72.00	219-4MST
	5	14.17	CT2195MST-ND	.95	8.66	78.75	219-5MST
	6	16.71	CT2196MST-ND	1.03	9.41	85.50	219-6MST
	7	19.25	CT2197MST-ND	1.13	10.40	94.50	219-7MST
	8	21.79	CT2198MST-ND	1.19	10.89	99.00	219-8MST
	9	24.33	CT2199MST-ND	1.30	11.88	108.00	219-9MST
	10	26.87	CT21910MST-ND	1.35	12.38	112.50	219-10MST
	12	31.95	CT21912MST-ND	1.54	14.11	128.25	219-12MST
193 Series — SPST, Gold Finish, Brown Body							
6	2	7.26	CT1932MS-ND	1.95	15.57	137.61	193-2MS
	3	9.80	CT1933MS-ND	2.02	16.18	143.06	193-3MS
	4	12.34	CT1934MS-ND	1.78	14.25	130.63	193-4MS
	5	14.88	CT1935MS-ND	2.06	16.50	151.25	193-5MS
	6	17.42	CT1936MS-ND	2.09	16.74	148.01	193-6MS
	7	19.96	CT1937MS-ND	2.28	18.20	160.88	193-7MS
	8	22.50	CT1938MS-ND	1.97	15.79	139.59	193-8MS
204 Series — SPST, Tape Sealed, Gold Finish, Brown Body							
7	2	7.26	CT2042ST-ND	2.10	18.00	165.00	204-2ST
	3	9.80	CT2043ST-ND	1.79	14.28	126.23	204-3ST
	4	12.34	CT2044ST-ND	1.51	12.90	118.25	204-4ST
	5	14.88	CT2045ST-ND	1.58	13.50	123.75	204-5ST
	6	17.42	CT2046ST-ND	1.61	13.80	126.50	204-6ST
	7	19.96	CT2047ST-ND	1.68	14.40	132.00	204-7ST
	8	22.50	CT2048ST-ND	1.72	14.70	134.75	204-8ST
	9	25.04	CT2049ST-ND	1.79	15.30	140.25	204-9ST
	10	27.58	CT20410ST-ND	1.89	16.20	148.50	204-10ST
	12	32.66	CT20412ST-ND	2.07	17.70	162.25	204-12ST
204 Series — SPDT, Tape Sealed, Gold Finish, Brown Body							
7	1	7.26	CT204121ST-ND	2.03	17.40	159.50	204-121ST
	1	7.26	CT204121LPST-ND	2.17	18.60	170.50	204-121LPST
204 Series — DPST, Tape Sealed, Gold Finish, Brown Body							
7	1	7.26	CT204211ST-ND	1.54	12.32	108.90	204-211ST
	2	12.34	CT204212ST-ND	1.89	15.12	133.65	204-212ST
	3	17.42	CT204213ST-ND	2.03	17.40	159.50	204-213ST
	4	22.50	CT204214ST-ND	2.17	17.36	153.45	204-214ST
	5	27.58	CT204215ST-ND	2.20	18.30	167.75	204-215ST
	6	32.66	CT204216ST-ND	2.42	22.43	207.00	204-216ST
204 Series — DPDT, Tape Sealed, Gold Finish, Brown Body							
7	1	12.34	CT204221ST-ND	2.99	25.65	235.13	204-221ST
	2	22.50	CT204222ST-ND	1.89	15.12	133.65	204-222ST
	3	32.66	CT204223ST-ND	2.17	17.36	153.45	204-223ST
218 Series — SPST, Tape Sealed, Gold Finish, Brown Body							
8	2	3.71	CT2182LPST-ND	1.90	15.18	134.15	218-2LPST
	4	6.25	CT2184LPST-ND	2.30	18.37	162.36	218-4LPST
	6	8.79	CT2186LPST-ND	2.80	22.37	197.75	218-6LPST
	8	11.33	CT2188LPST-ND	3.25	25.98	229.68	218-8LPST
	10	13.87	CT21810LPST-ND	3.77	30.13	266.31	218-10LPST

Fig. 1 - Top Actuated Slide

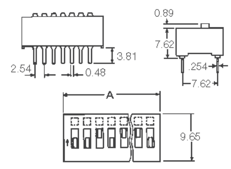


Fig. 2 - Side Actuated

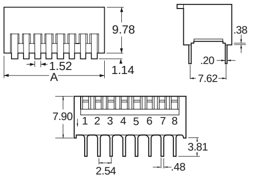


Fig. 3 - Right Angle Slide

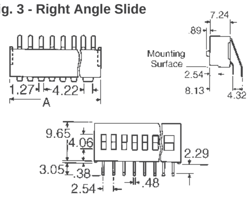


Fig. 4 - Top Actuated - Auto Dip

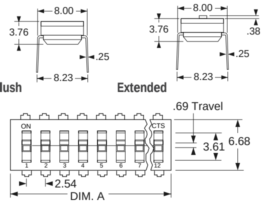


Fig. 5 - Surface Mount

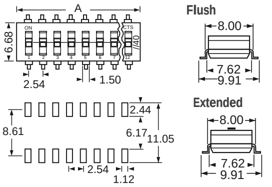


Fig. 6 - SMT Side Actuated

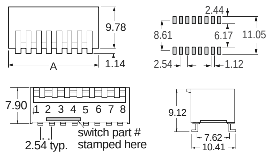
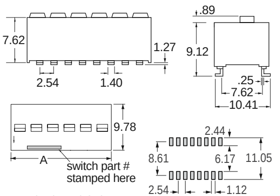
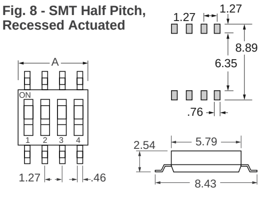


Fig. 7 - SMT Top Slide, Extended Act.



Standard model shown.
Low Profile also available (CT204121LPST-ND)

Fig. 8 - SMT Half Pitch, Recessed Actuated



ITT Industries
Engineered for life

C&K Dip Switches

Specifications: • **Contact Rating:** 25mA @ 24VDC or 100mA @ 50VDC • **Operating Temperature:** -20°C to +85°C • **Operating Force:** 800 grams max.

Materials: • **Housing:** PPA color: Red (UL94V-0) • **Actuator:** Nylon (UL 94V-0) • **Contacts:** Gold-plated BeCu • **Terminals:** SnPb-plated brass.

Dim. in mm

Fig. 1

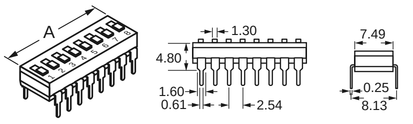


Fig. 2

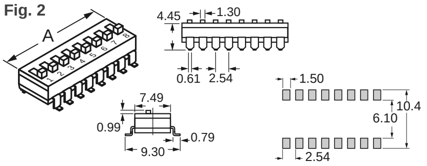


Fig. 3

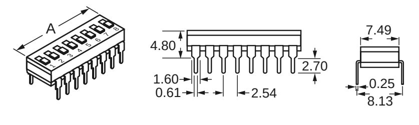


Fig. 4

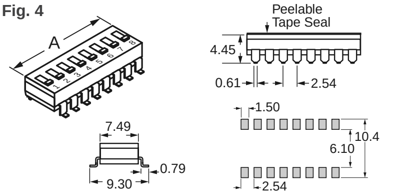


Fig. 5

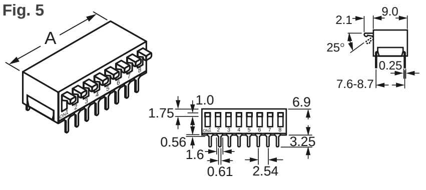


Fig. 6

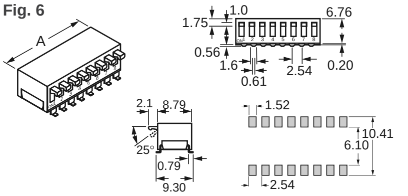
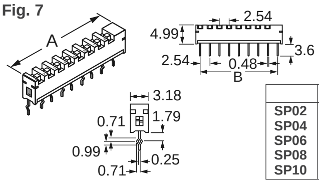
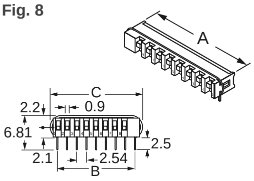


Fig. 7



	Dim. B (mm)
SP02	2.54
SP04	7.62
SP06	12.70
SP08	17.78
SP10	22.86

Fig. 8



	Dim. (mm)	
	B	C
SP02A	2.54	8.58
SP04A	7.62	13.66
SP06A	12.70	18.74
SP08A	17.78	23.82
SP10A	22.86	28.90

Fig. 9 – PC Mount

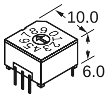


Fig. 10 – Right Angle

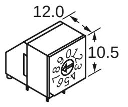


Fig. 11 – SMT

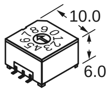


Fig.	No. of Pos.	Dim. A In. (mm)	Digi-Key Part No.	Price Each				C&K Part No.
				1	25	100	250	
Dip Top Slide with Extended Actuator — Unsealed								
1	2	.278 (7.06)	CKN1276-ND	.87	.70	.56	.44	SDA02H1KD
	3	.378 (9.60)	CKN1277-ND	.90	.72	.57	.45	SDA03H1KD
	4	.476 (12.10)	CKN1278-ND	.90	.72	.57	.45	SDA04H1KD
	5	.578 (14.68)	CKN1279-ND	.93	.75	.59	.47	SDA05H1KD
	6	.676 (17.18)	CKN1280-ND	.96	.77	.61	.48	SDA06H1KD
	7	.778 (19.76)	CKN1281-ND	1.08	.87	.69	.54	SDA07H1KD
	8	.876 (22.26)	CKN1282-ND	1.11	.89	.71	.56	SDA08H1KD
	9	.978 (24.84)	CKN1283-ND	1.17	.94	.75	.59	SDA09H1KD
	10	1.076 (27.34)	CKN1284-ND	1.26	1.01	.80	.63	SDA10H1KD
	12	1.279 (32.50)	CKN1285-ND	1.38	1.11	.88	.69	SDA12H1KD
SMT Top Slide with Extended Actuator — Unsealed								
2	2	.278 (7.06)	CKN1286-ND	1.41	1.13	.90	.71	SDA02H1SKD
	3	.378 (9.60)	CKN1287-ND	1.47	1.18	.94	.74	SDA03H1SKD
	4	.476 (12.10)	CKN1288-ND	1.47	1.18	.94	.74	SDA04H1SKD
	5	.578 (14.68)	CKN1289-ND	1.59	1.28	1.01	.80	SDA05H1SKD
	6	.676 (17.18)	CKN1290-ND	1.65	1.32	1.05	.83	SDA06H1SKD
	7	.778 (19.76)	CKN1291-ND	1.74	1.40	1.11	.87	SDA07H1SKD
	8	.876 (22.26)	CKN1292-ND	1.77	1.42	1.13	.89	SDA08H1SKD
	9	.978 (24.84)	CKN1293-ND	1.95	1.56	1.24	.98	SDA09H1SKD
	10	1.076 (27.34)	CKN1294-ND	2.25	1.80	1.43	1.13	SDA10H1SKD
	12	1.279 (32.50)	CKN1295-ND	2.49	2.00	1.58	1.25	SDA12H1SKD
Dip Top Slide with Flush Actuator — Unsealed								
3	2	.278 (7.06)	CKN1296-ND	.87	.70	.56	.44	SDA02H0KD
	3	.378 (9.60)	CKN1297-ND	.90	.72	.57	.45	SDA03H0KD
	4	.476 (12.10)	CKN1298-ND	.90	.72	.57	.45	SDA04H0KD
	5	.578 (14.68)	CKN1299-ND	.93	.75	.59	.47	SDA05H0KD
	6	.676 (17.18)	CKN1300-ND	.96	.77	.61	.48	SDA06H0KD
	7	.778 (19.76)	CKN1301-ND	1.08	.87	.69	.54	SDA07H0KD
	8	.876 (22.26)	CKN1302-ND	1.11	.89	.71	.56	SDA08H0KD
	9	.978 (24.84)	CKN1303-ND	1.17	.94	.75	.59	SDA09H0KD
	10	1.076 (27.34)	CKN1304-ND	1.26	1.01	.80	.63	SDA10H0KD
	12	1.279 (32.50)	CKN1305-ND	1.38	1.11	.88	.69	SDA12H0KD
Dip Top Slide with Flush Actuator — Tape Sealed								
3	2	.278 (7.06)	CKN1306-ND	2.40	1.92	1.52	1.20	SDA02H0K
	3	.378 (9.60)	CKN1307-ND	2.64	2.12	1.68	1.32	SDA03H0K
	4	.476 (12.10)	CKN1308-ND	1.02	.82	.65	.51	SDA04H0K
	5	.578 (14.68)	CKN1309-ND	1.05	.84	.67	.53	SDA05H0K
	6	.676 (17.18)	CKN1310-ND	1.05	.84	.67	.53	SDA06H0K
	7	.778 (19.76)	CKN1311-ND	1.08	.87	.69	.54	SDA07H0K
	8	.876 (22.26)	CKN1312-ND	1.11	.89	.71	.56	SDA08H0K
	9	.978 (24.84)	CKN1313-ND	1.23	.99	.78	.62	SDA09H0K
	10	1.076 (27.34)	CKN1314-ND	1.26	1.01	.80	.63	SDA10H0K
	12	1.279 (32.50)	CKN1315-ND	1.32	1.06	.84	.66	SDA12H0K
SMT Top Slide with Flush Actuator — Unsealed								
4	2	.278 (7.06)	CKN1316-ND	1.41	1.13	.90	.71	SDA02H0SKD
	3	.378 (9.60)	CKN1317-ND	1.53	1.23	.97	.77	SDA03H0SKD
	4	.476 (12.10)	CKN1318-ND	1.59	1.28	1.01	.80	SDA04H0SKD
	5	.578 (14.68)	CKN1319-ND	1.68	1.35	1.07	.84	SDA05H0SKD
	6	.676 (17.18)	CKN1320-ND	1.71	1.37	1.09	.86	SDA06H0SKD
	7	.778 (19.76)	CKN1321-ND	1.89	1.52	1.20	.95	SDA07H0SKD
	8	.876 (22.26)	CKN1322-ND	2.19	1.76	1.39	1.10	SDA08H0SKD
	9	.978 (24.84)	CKN1323-ND	2.43	1.95	1.54	1.22	SDA09H0SKD
	10	1.076 (27.34)	CKN1324-ND	1.20	.96	.76	.60	SDA10H0SKD
	12	1.279 (32.50)	CKN1325-ND	1.26	1.01	.80	.63	SDA12H0SKD

Fig.	No. of Pos.	Dim. A In. (mm)	Digi-Key Part No.	Price Each				C&K Part No.
				1	25	100	250	
SMT Top Slide with Flush Actuator — Tape Sealed								
4	2	.278 (7.06)	CKN1326-ND	1.41	1.13	.90	.71	SDA02H0SK
	3	.378 (9.60)	CKN1327-ND	1.47	1.18	.94	.74	SDA03H0SK
	4	.476 (12.10)	CKN1328-ND	1.47	1.18	.94	.74	SDA04H0SK
	5	.578 (14.68)	CKN1329-ND	1.59	1.28	1.01	.80	SDA05H0SK
	6	.676 (17.18)	CKN1330-ND	1.65	1.32	1.05	.83	SDA06H0SK
	7	.778 (19.76)	CKN1331-ND	1.74	1.40	1.11	.87	SDA07H0SK
	8	.876 (22.26)	CKN1332-ND	1.77	1.42	1.13	.89	SDA08H0SK
	9	.978 (24.84)	CKN1333-ND	1.95	1.56	1.24	.98	SDA09H0SK
	10	1.076 (27.34)	CKN1334-ND	2.25	1.80	1.43	1.13	SDA10H0SK
	12	1.279 (32.50)	CKN1335-ND	2.49	2.00	1.58	1.25	SDA12H0SK
Side Actuated Dip — Unsealed								
5	2	.280 (7.11)	CKN1336-ND	1.26	1.01	.80	.63	BPA02K
	4	.480 (12.19)	CKN1337-ND	1.32	1.06	.84	.66	BPA04K
	5	.578 (14.68)	CKN1338-ND	1.44	1.16	.92	.72	BPA05K
	6	.680 (17.30)	CKN1339-ND	1.50	1.20	.95	.75	BPA06K
	7	.778 (19.76)	CKN1340-ND	1.62	1.30	1.03	.81	BPA07K
	8	.878 (22.30)	CKN1341-ND	1.65	1.32	1.05	.83	BPA08K
	9	.978 (24.84)	CKN1342-ND	1.80	1.44	1.14	.90	BPA09K
	10	1.078 (27.43)	CKN1343-ND	1.83	1.47	1.16	.92	BPA10K
SMT Side Actuated Dip — Unsealed								
6	2	.280 (7.11)	CKN1344-ND	1.38	1.11	.88	.69	BPA02SK
	4	.480 (12.19)	CKN1345-ND	1.44	1.16	.92	.72	BPA04SK
	5	.578 (14.68)	CKN1346-ND	1.56	1.25	.99	.78	BPA05SK
	6	.680 (17.30)	CKN1347-ND	1.62	1.30	1.03	.81	BPA06SK
	7	.778 (19.76)	CKN1348-ND	1.74	1.40	1.11	.87	BPA07SK
	8	.878 (22.30)	CKN1349-ND	1.77	1.42	1.13	.89	BPA08SK
	9	.978 (24.84)	CKN1350-ND	1.92	1.54	1.22	.96	BPA09SK
	10	1.078 (27.43)	CKN1351-ND	1.95	1.56	1.24	.98	BPA10SK
Top Slide Single In-Line Sip — Unsealed								
7	2	.298 (7.58)	CKN1352-ND	2.25	1.80	1.43	1.13	SP02
	4	.498 (12.66)	CKN1353-ND	2.55	2.04	1.62	1.28	SP04
	6	.698 (17.74)	CKN1354-ND	2.97	2.38	1.89	1.49	SP06
	8	.898 (22.82)	CKN1355-ND	3.45	2.76	2.19	1.73	SP08
	10	1.098 (27.9)	CKN1356-ND	4.35	3.48	2.76	2.18	SP10
Rt. Angle Single In-Line Sip — Unsealed								
8	2	.298 (7.58)	CKN1357-ND	3.15	2.52	2.00	1.58	SP02A
	4	.498 (12.66)	CKN1358-ND	3.36	2.69	2.13	1.68	SP04A
	6	.698 (17.74)	CKN1359-ND	4.05	3.24	2.57	2.03	SP06A
	8	.898 (22.82)	CKN1360-ND	4.44	3.56	2.82	2.22	SP08A
	10	1.098 (27.9)	CKN1361-ND	4.80	3.84	3.04	2.40	SP10A

Fig.	Type	Actuator	Digi-Key Part No.	Price Each				C&K Part No.
				1	25	100	250	
10mm Rotary Dip - PC Mount - Process Sealed								
9	BCD	Flush	CKN1367-ND	2.86	2.64	2.20	1.65	CRD10RM0CK
	BCD Comp	Flush	CKN1368-ND	2.86	2.64	2.20	1.65	CRD10CM0CK
	HEX	Flush	CKN1369-ND	3.07	2.84	2.36	1.77	CRD16RM0CK
	HEX Comp	Flush	CKN1370-ND	3.07	2.84	2.36	1.77	CRD16CM0CK
10mm Rotary Dip - Right Angle Mount - Process Sealed								
10	BCD	Flush	CKN1371-ND	3.25	3.00	2.50	1.88	CRD10RM0AK
	BCD Comp	Flush	CKN1372-ND	3.25	3.00	2.50	1.88	CRD10CM0AK
	HEX	Flush	CKN1373-ND	3.35	3.10	2.58	1.94	CRD16RM0AK
	HEX Comp	Flush	CKN1374-ND	3.35	3.10	2.58	1.94	CRD16CM0AK
10mm Rotary Dip - Surface Mount - Process Sealed								
11	BCD	Flush	CKN1375-ND	3.15	2.91	2.42	1.82	CRD10RM0SK
	BCD Comp	Flush	CKN1376-ND	3.15	2.91	2.42	1.82	CRD10CM0SK
	HEX	Flush	CKN1377-ND	3.46	3.20	2.66	2.00	CRD16RM0SK
	HEX Comp	Flush	CKN1378-ND	3.46	3.20	2.66	2.00	CRD16CM0SK

Cannon

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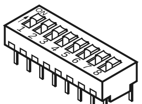
C&K DIP Switches



SPECIFICATIONS: • **Switch Function:** SPST • **Contact Rating:** Switch: 100mA max @ 5VDC or 25 mA max. at 25 VDC • **Mechanical & Electrical Life:** 2,000 make-and-break cycles at full load, each circuit • **Contact Resistance:** Below 50 milliohms typ. • **Dielectric Strength:** 500V RMS • **Operating Temp.:** -40°C to 85°C

MATERIALS: • **Case & Cover:** Glass filled polyester (UL 94V-0), Flame retardant, Red in color • **Actuator:** Glass filled nylon 6/6, flame retardant (UL 94V-0) • **Contacts:** Copper alloy, with gold plate over nickel plate • **Terminals:** Copper alloy, with tin-lead alloy over nickel plate • **Terminal Seal:** Epoxy • **Tape Seal:** Polyimide • Proven washable design — open base design allows cleaners to flush through • High temperature materials (UL 94V-0) withstands soldering and cleaning temperatures and processes • Slide actuators with positive detent — prevent accidental actuation • Reliable wiping contact mechanism • Tin-lead alloy coats all sides of terminals for joint integrity

Fig. 1

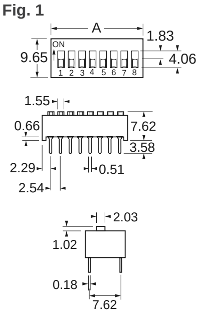


Fig. 2

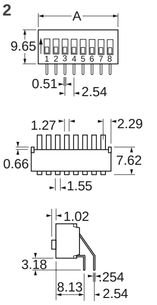


Fig. 3

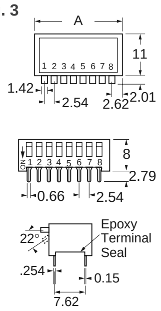


Fig. 4

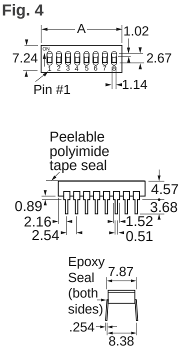
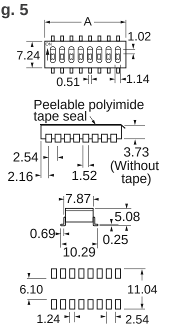


Fig. 5



PCB Land Pattern

Fig. 6

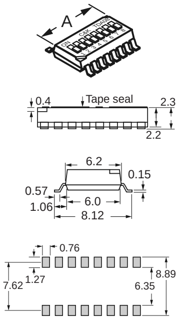


Fig.	No. of Pos.	Dim. A In. (mm)	Digi-Key Part No.	Price Each 1	25	100	250	C&K Part No.
Top Slide, Extended Actuator — Unsealed								
1	2	.280 (7.11)	CKN3001-ND	1.35	1.08	.86	.68	BD02
	3	.380 (9.65)	CKN3002-ND	1.38	1.11	.88	.69	BD03
	4	.480 (12.19)	CKN3003-ND	1.35	1.08	.86	.68	BD04
	5	.580 (14.73)	CKN3004-ND	1.47	1.18	.94	.74	BD05
	6	.680 (17.27)	CKN3005-ND	1.50	1.20	.95	.75	BD06
	7	.780 (19.81)	CKN3006-ND	1.56	1.25	.99	.78	BD07
	8	.880 (22.35)	CKN3007-ND	1.59	1.28	1.01	.80	BD08
	9	.980 (24.89)	CKN3008-ND	1.59	1.28	1.01	.80	BD09
	10	1.080 (27.43)	CKN3009-ND	1.68	1.35	1.07	.84	BD10
	12	1.280 (32.51)	CKN3010-ND	1.80	1.44	1.14	.90	BD12
Right Angle Slide, Extended Actuator — Unsealed								
2	2	.280 (7.11)	CKN3011-ND	2.10	1.68	1.33	1.05	BD02AV
	3	.380 (9.65)	CKN3012-ND	2.19	1.76	1.39	1.10	BD03AV
	4	.480 (12.19)	CKN3013-ND	2.19	1.76	1.39	1.10	BD04AV
	5	.580 (14.73)	CKN3014-ND	2.25	1.80	1.43	1.13	BD05AV
	6	.680 (17.27)	CKN3015-ND	2.28	1.83	1.45	1.14	BD06AV
	7	.780 (19.81)	CKN3016-ND	2.34	1.88	1.49	1.17	BD07AV
	8	.880 (22.35)	CKN3017-ND	2.37	1.90	1.51	1.19	BD08AV
	9	.980 (24.89)	CKN3018-ND	2.40	1.92	1.52	1.20	BD09AV
	10	1.080 (27.43)	CKN3019-ND	2.49	2.00	1.58	1.25	BD10AV
	12	1.280 (32.51)	CKN3020-ND	2.58	2.07	1.64	1.29	BD12AV
Side Actuated — Tape Sealed								
3	2	.315 (8.00)	CKN3021-ND	1.56	1.25	.99	.78	BP02YT
	3	.413 (10.49)	CKN3022-ND	1.59	1.28	1.01	.80	BP03YT
	4	.512 (13.00)	CKN3023-ND	1.62	1.30	1.03	.81	BP04YT
	5	.610 (15.49)	CKN3024-ND	1.68	1.35	1.07	.84	BP05YT
	6	.709 (18.01)	CKN3025-ND	1.74	1.40	1.11	.87	BP06YT
	7	.807 (20.50)	CKN3026-ND	1.77	1.42	1.13	.89	BP07YT
	8	.906 (23.01)	CKN3027-ND	1.77	1.42	1.13	.89	BP08YT
	10	1.102 (27.99)	CKN3028-ND	1.98	1.59	1.26	.99	BP10YT
	12	1.299 (32.99)	CKN3029-ND	2.34	1.88	1.49	1.17	BP12YT
Low Profile — SD Series — Tape Sealed								
4	2	.258 (6.55)	CKN3064-ND	.93	.75	.59	.47	SD02H0K
	3	.358 (9.09)	CKN3065-ND	.99	.80	.63	.50	SD03H0K
	4	.458 (11.63)	CKN3066-ND	1.02	.82	.65	.51	SD04H0K
	5	.558 (14.17)	CKN3067-ND	1.11	.89	.71	.56	SD05H0K
	6	.658 (16.71)	CKN3068-ND	1.14	.92	.73	.57	SD06H0K
	7	.758 (19.25)	CKN3069-ND	1.20	.96	.76	.60	SD07H0K
	8	.858 (21.79)	CKN3070-ND	1.23	.99	.78	.62	SD08H0K
	9	.958 (24.33)	CKN3071-ND	1.38	1.11	.88	.69	SD09H0K
	10	1.058 (26.87)	CKN3072-ND	1.44	1.16	.92	.72	SD10H0K
	12	1.258 (31.95)	CKN3073-ND	2.25	1.80	1.43	1.13	SD12H0K
Low Profile Surface Mount — SD Series — Tape Sealed								
5	2	.258 (6.55)	CKN3054-ND	1.29	1.04	.82	.65	SD02H0SK
	3	.358 (9.09)	CKN3055-ND	1.38	1.11	.88	.69	SD03H0SK
	4	.458 (11.63)	CKN3056-ND	1.41	1.13	.90	.71	SD04H0SK
	5	.558 (14.17)	CKN3057-ND	1.50	1.20	.95	.75	SD05H0SK
	6	.658 (16.71)	CKN3058-ND	1.56	1.25	.99	.78	SD06H0SK
	7	.758 (19.25)	CKN3059-ND	1.65	1.32	1.05	.83	SD07H0SK
	8	.858 (21.79)	CKN3060-ND	1.68	1.35	1.07	.84	SD08H0SK
	9	.958 (24.33)	CKN3061-ND	1.89	1.52	1.20	.95	SD09H0SK
	10	1.058 (26.87)	CKN3062-ND	1.98	1.59	1.26	.99	SD10H0SK
	12	1.258 (31.95)	CKN3063-ND	2.16	1.73	1.37	1.08	SD12H0SK
Half Pitch Surface Mount — TDA Series — Tape Sealed								
6	2	.144 (3.67)	CKN1362-ND	2.10	1.68	1.33	1.05	TDA02H0SK1
	4	.244 (6.21)	CKN1363-ND	2.22	1.78	1.41	1.11	TDA04H0SK1
	6	.344 (8.75)	CKN1364-ND	2.64	2.12	1.68	1.32	TDA06H0SK1
	8	.444 (11.29)	CKN1365-ND	3.03	2.43	1.92	1.52	TDA08H0SK1
	10	.544 (13.83)	CKN1366-ND	4.47	3.58	2.84	2.24	TDA10H0SK1

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C&K 8mm DIP Coded Rotary Switches

Specifications: • **Contact Ratings:** 0.4 VA max. @ 20 V AC or V DC max. • **Mechanical & Electrical Life:** 20,000 position changes • **Contact Resistance:** 50 milliohms max. initial • **Operating Temperature:** –25°C to 85°C. **Materials:** • **Cover & Base:** Glass filled nylon, flame retardant, heat stabilized (UL 94V-0) • **Actuator:** LCP (UL 94V-0), internal o-ring seal standard with all actuators • **Movable Contacts:** Copper alloy, with gold plate over nickel plate • **Terminals:** Copper alloy, with tin-lead alloy over nickel plate. All terminals are insert molded.

Fig. 1 – Vertical

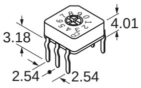


Fig. 2 – Right Angle

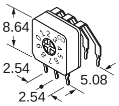
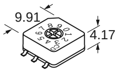


Fig. 3 – SMT



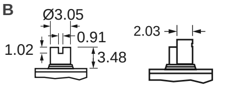
Actuator Options

A

Flush Actuator*

*Designed for
#0 phillips screwdriver.

B



C

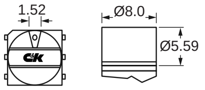


Fig.	Type	Actuator	Digi-Key Part No.	Price Each 1	25	100	250	C&K Part No.
1	BCD	A	CKN3044-ND	4.50	4.16	3.46	2.60	CD10RM0CK
1	BCD	B	CKN3045-ND	5.17	4.78	3.98	2.99	CD10RL1CK
1	BCD	C	CKN1224-ND	6.34	5.86	4.88	3.66	CD10RK1CK
2	BCD	A	CKN3046-ND	5.30	4.90	4.08	3.06	CD10RM0AK
2	BCD	B	CKN3047-ND	5.95	5.50	4.58	3.44	CD10RL1AK
2	BCD	C	CKN1226-ND	7.18	6.63	5.52	4.14	CD10RK1AK
3	BCD	A	CKN3048-ND	5.07	4.68	3.90	2.93	CD10RM0SK
3	BCD	C	CKN1228-ND	6.99	6.46	5.38	4.04	CD10RK1SK
1	Hex.	A	CKN3049-ND	5.10	4.71	3.92	2.94	CD16RM0CK
1	Hex.	B	CKN3050-ND	5.82	5.38	4.48	3.36	CD16RL1CK
1	Hex.	C	CKN1225-ND	6.86	6.34	5.28	3.96	CD16RK1CK
2	Hex.	A	CKN3051-ND	5.69	5.26	4.38	3.29	CD16RM0AK
2	Hex.	B	CKN3052-ND	6.50	6.00	5.00	3.75	CD16RL1AK
2	Hex.	C	CKN1227-ND	7.75	7.16	5.96	4.47	CD16RK1AK
3	Hex.	A	CKN3053-ND	6.29	5.81	4.84	3.63	CD16RM0SK
3	Hex.	C	CKN1229-ND	7.54	6.96	5.80	4.35	CD16RK1SK

OMRON Rotary DIP Switches

LIFE EXPECTANCY: • **Mechanical** – 10,000 operations min. • **Electrical** – 2,000 operations min. • **Contact Resistance** – 200mΩ.

BCD Output Codes

BCD Type

Pos-ition	Terminal No. 1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●

Note: "●" in the tables show the output terminal No. that can be connected to the common terminal.

Hexadecimal Type

Pos-ition	Terminal No. 1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●
A		●		●
B	●	●		●
C			●	●
D	●		●	●
E		●	●	●
F	●	●	●	●

Fig. 1

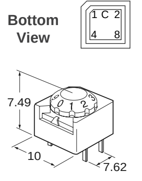


Fig. 2

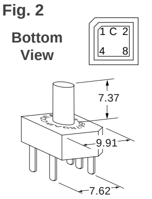


Fig. 3

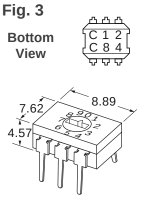


Fig. 4

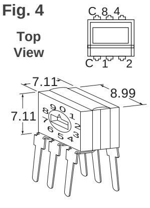
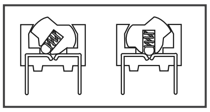


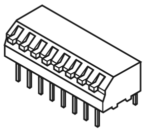
Fig.	No. of Pos.	Output Code Type	Switching Capacity mA	VDC	Operating Temp.	Digi-Key Part No.	Price Each 1	25	50	100	250	Omron Part No.
1	10	BCD	100	28	-10° to 70°C	SW220-ND	3.75	3.38	3.00	2.70	2.55	A6A-10R
1	16	Hexdec.	100	28	-10° to 70°C	SW221-ND	3.88	3.49	3.10	2.79	2.64	A6A-16R
2	10	BCD	100	28	-10° to 70°C	SW214-ND	4.13	3.72	3.30	2.97	2.81	A6A-10RS
2	16	Hexdec.	100	28	-10° to 70°C	SW215-ND	4.38	3.94	3.50	3.15	2.98	A6A-16RS
2	10	BCD	100	28	-10° to 70°C	SW222-ND	4.50	4.05	3.60	3.24	3.06	A6A-10RW
2	16	Hexdec.	100	28	-10° to 70°C	SW223-ND	4.63	4.17	3.70	3.33	3.15	A6A-16RW
3	10	BCD	100	30	-20° to 70°C	SW216-ND	2.88	2.59	2.30	2.07	1.96	A6C-10R(N)
3	16	Hexdec.	100	30	-20° to70°C	SW217-ND	3.00	2.70	2.40	2.16	2.04	A6C-16R(N)
4	10	BCD	100	30	-20° to 70°C	SW218-ND	3.88	3.49	3.10	2.79	2.64	A6CV-10R
4	16	Hexdec.	100	30	-20° to 70°C	SW219-ND	4.13	3.72	3.30	2.97	2.81	A6CV-16R

Grayhill DIP Switches



Grayhill's unique spring and ball contact design offers unparalleled reliability compared to conventional wiping contact designs. When actuated the ball rests between two contacts allowing multiple points of contact while the spring compression is at maximum pressure. Temperature, humidity and vibration have minimal affect on this design.

Specifications: • **Mechanical Life per switch position:** 76/78 – 20,000; 90B – 5,000 • **Contact Resistance:** Initially ≤ 30 mΩ • **Insulation Resistance:** 5,000 • **Dielectric Strength:** 750V • **Current Carry:** 3A • **Switch Capacitance:** 2pF • **Operating Temperature:** -40°C to +85°C • **SMT Processing Temperature (90HBW, 90HBJ):** 260°C Max.



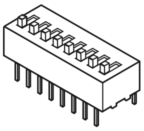


Fig. 1 – Series 76 Rocker and Recessed Rocker

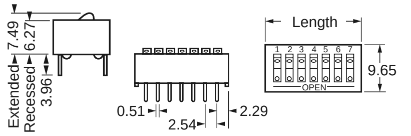


Fig. 3 – Series 78

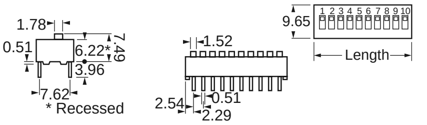


Fig. 5 – Series 90HBW, 90HBJ

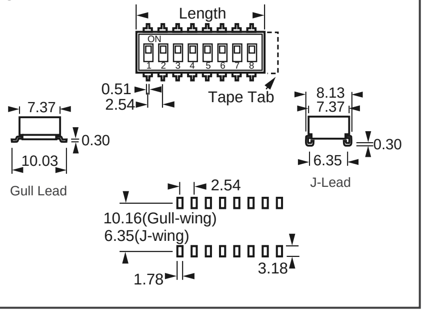


Fig. 2 – Series 76 Piano DIP

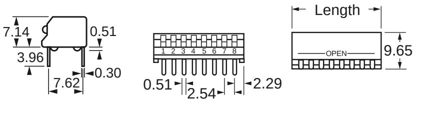


Fig. 4 – Series 90

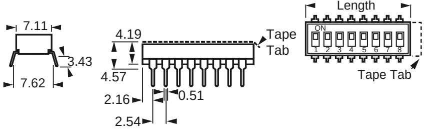


Fig.	No. of Pos.	Length (mm)	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Grayhill Part No.
Raise Rocker Unsealed							
1	2	7.11	GH1102-ND	.92	.85	.77	76SB02
	3	9.65	GH1103-ND	.92	.85	.77	76SB03
	4	12.19	GH1104-ND	.92	.85	.77	76SB04
	5	14.73	GH1105-ND	1.38	1.27	1.15	76SB05
	6	17.27	GH1106-ND	1.35	1.24	1.13	76SB06
	7	19.81	GH1107-ND	1.43	1.32	1.20	76SB07
	8	22.35	GH1109-ND	1.43	1.32	1.20	76SB08
	9	24.89	GH1110-ND	1.43	1.32	1.20	76SB09
	10	27.43	GH1112-ND	1.51	1.39	1.26	76SB10
	12	32.51	GH1202-ND	1.62	1.49	1.35	76SB12
Raise Rocker Sealed							
1	2	7.11	GH1002-ND	1.05	.97	.88	76SB02S
	3	9.65	GH1003-ND	1.05	.97	.88	76SB03S
	4	12.19	GH1004-ND	1.05	.97	.88	76SB04S
	5	14.73	GH1005-ND	1.46	1.34	1.22	76SB05S
	6	17.27	GH1006-ND	1.49	1.37	1.24	76SB06S
	7	19.81	GH1007-ND	1.51	1.39	1.26	76SB07S
	8	22.35	GH1008-ND	1.46	1.34	1.22	76SB08S
	9	24.89	GH1009-ND	1.59	1.46	1.33	76SB09S
	10	27.43	GH1010-ND	1.62	1.49	1.35	76SB10S
	12	32.51	GH1012-ND	1.70	1.56	1.42	76SB12S
Recessed Rocker Unsealed							
1	2	7.11	GH1272-ND	1.24	1.14	1.04	76RSB02
	3	9.65	GH1273-ND	1.30	1.19	1.08	76RSB03
	4	12.19	GH1274-ND	1.35	1.24	1.13	76RSB04
	5	14.73	GH1275-ND	1.43	1.32	1.20	76RSB05
	6	17.27	GH1276-ND	1.46	1.34	1.22	76RSB06
	7	19.81	GH1277-ND	1.46	1.34	1.22	76RSB07
	8	22.35	GH1278-ND	1.49	1.37	1.24	76RSB08
	9	24.89	GH1279-ND	1.57	1.44	1.31	76RSB09
	10	27.43	GH1280-ND	1.57	1.44	1.31	76RSB10
	12	32.51	GH1281-ND	1.62	1.49	1.35	76RSB12
Recessed Rocker Sealed							
1	2	7.11	GH1262-ND	1.27	1.17	1.06	76RSB02S
	3	9.65	GH1263-ND	1.32	1.22	1.11	76RSB03S
	4	12.19	GH1264-ND	1.38	1.27	1.15	76RSB04S
	5	14.73	GH1265-ND	1.46	1.34	1.22	76RSB05S
	6	17.27	GH1266-ND	1.49	1.37	1.24	76RSB06S
	7	19.81	GH1267-ND	1.49	1.37	1.24	76RSB07S
	8	22.35	GH1268-ND	1.51	1.39	1.26	76RSB08S
	9	24.89	GH1269-ND	1.59	1.46	1.33	76RSB09S
	10	27.43	GH1270-ND	1.59	1.46	1.33	76RSB10S
	12	32.51	GH1271-ND	1.65	1.51	1.38	76RSB12S
PIANO DIP® Unsealed							
2	2	7.11	GH1213-ND	1.30	1.19	1.08	76PSB02
	3	9.65	GH1214-ND	1.32	1.22	1.11	76PSB03
2	4	12.19	GH1215-ND	1.08	.99	.90	76PSB04
	5	14.73	GH1216-ND	1.38	1.27	1.15	76PSB05
	6	17.27	GH1217-ND	1.22	1.12	1.02	76PSB06
	7	19.81	GH1218-ND	1.38	1.27	1.15	76PSB07
	8	22.35	GH1219-ND	1.27	1.17	1.06	76PSB08
	9	24.89	GH1220-ND	1.54	1.42	1.29	76PSB09
	10	27.43	GH1221-ND	1.30	1.19	1.08	76PSB10
	12	32.51	GH1222-ND	1.89	1.74	1.58	76PSB12
PIANO DIP® Sealed							
2	2	7.11	GH1203-ND	1.40	1.29	1.17	76PSB02S
	3	9.65	GH1204-ND	1.43	1.32	1.20	76PSB03S
	4	12.19	GH1205-ND	1.16	1.07	.97	76PSB04S
	5	14.73	GH1206-ND	1.46	1.34	1.22	76PSB05S
	6	17.27	GH1207-ND	1.32	1.22	1.11	76PSB06S
	7	19.81	GH1208-ND	1.59	1.46	1.33	76PSB07S
	8	22.35	GH1209-ND	1.40	1.29	1.17	76PSB08S
	9	24.89	GH1210-ND	1.70	1.56	1.42	76PSB09S
	10	27.43	GH1211-ND	1.49	1.37	1.24	76PSB10S
	12	32.51	GH1212-ND	1.97	1.81	1.65	76PSB12S
Raised Slide Switch, Unsealed							
3	2	7.11	GH1233-ND	1.05	.97	.88	78B02
	3	9.65	GH1234-ND	1.05	.97	.88	78B03
	4	12.19	GH1235-ND	.89	.82	.75	78B04
	5	14.73	GH1236-ND	1.08	.99	.90	78B05
	6	17.27	GH1237-ND	1.08	.99	.90	78B06
	7	19.81	GH1238-ND	1.08	.99	.90	78B07
	8	22.35	GH1239-ND	1.00	.92	.84	78B08
	9	24.89	GH1240-ND	1.03	.95	.86	78B09
	10	27.43	GH1241-ND	1.05	.97	.88	78B10
	12	32.51	GH1242-ND	1.24	1.14	1.04	78B12
Raised Slide Switch, Sealed							
3	2	7.11	GH1223-ND	1.05	.97	.88	78B02S
	3	9.65	GH1224-ND	1.05	.97	.88	78B03S
	4	12.19	GH1225-ND	.95	.87	.79	78B04S
	5	14.73	GH1226-ND	1.30	1.19	1.08	78B05S
	6	17.27	GH1227-ND	1.24	1.14	1.04	78B06S
	7	19.81	GH1228-ND	1.27	1.17	1.06	78B07S
	8	22.35	GH1229-ND	1.05	.97	.88	78B08S
	9	24.89	GH1230-ND	1.13	1.04	.95	78B09S
	10	27.43	GH1231-ND	1.24	1.14	1.04	78B10S
	12	32.51	GH1232-ND	1.46	1.34	1.22	78B12S
Recessed Slide Switch, Unsealed							
3	2	7.11	GH1252-ND	1.05	.97	.88	78RB02
	3	9.65	GH1253-ND	1.05	.97	.88	78RB03
	4	12.19	GH1254-ND	.89	.82	.75	78RB04
	5	14.73	GH1255-ND	1.08	.99	.90	78RB05
3	6	17.27	GH1256-ND	1.08	.99	.90	78RB06
	7	19.81	GH1257-ND	1.08	.99	.90	78RB07
	8	22.35	GH1258-ND	1.00	.92	.84	78RB08
	9	24.89	GH1259-ND	1.03	.95	.86	78RB09
	10	27.43	GH1260-ND	1.05	.97	.88	78RB10
	12	32.51	GH1261-ND	1.24	1.14	1.04	78RB12
Recessed Slide Switch, Sealed							
3	2	7.11	GH1243-ND	1.05	.97	.88	78RB02S
	3	9.65	GH1244-ND	1.05	.97	.88	78RB03S
	4	12.19	GH1245-ND	.95	.87	.79	78RB04S
	5	14.73	GH1246-ND	1.30	1.19	1.08	78RB05S
	6	17.27	GH1247-ND	1.24	1.14	1.04	78RB06S
	7	19.81	GH1248-ND	1.27	1.17	1.06	78RB07S
	8	22.35	GH1249-ND	1.05	.97	.88	78RB08S
	9	24.89	GH1250-ND	1.13	1.04	.95	78RB09S
	10	27.43	GH1251-ND	1.24	1.14	1.04	78RB10S
Auto-Insertable Auto DIP Sealed							
4	2	6.86	GH1282-ND	.76	.70	.63	90B02S
	3	9.40	GH1283-ND	.84	.77	.70	90B03S
	4	11.94	GH1284-ND	.95	.87	.79	90B04S
	5	14.48	GH1285-ND	1.00	.92	.84	90B05S
	6	17.02	GH1286-ND	1.19	1.09	.99	90B06S
	7	19.56	GH1287-ND	1.24	1.14	1.04	90B07S
	8	22.10	GH1288-ND	1.16	1.07	.97	90B08S
	9	24.64	GH1289-ND	1.46	1.34	1.22	90B09S
	10	27.18	GH1290-ND	1.57	1.44	1.31	90B10S
SMT Gull Lead Sealed							
5	2	6.86	GH1291-ND	.86	.80	.72	90HBW02P
	3	9.40	GH1292-ND	.89	.82	.75	90HBW03P
	4	11.94	GH1293-ND	1.00	.92	.84	90HBW04P
	5	14.48	GH1294-ND	1.11	1.02	.93	90HBW05P
	6	17.02	GH1295-ND	1.16	1.07	.97	90HBW06P
	7	19.56	GH1296-ND	1.27	1.17	1.06	90HBW07P
	8	22.10	GH1297-ND	1.19	1.09	.99	90HBW08P
	9	24.64	GH1298-ND	1.49	1.37	1.24	90HBW09P
	10	27.18	GH1299-ND	1.51	1.39	1.26	90HBW10P
SMT J-Lead Sealed							
5	2	6.86	GH1300-ND	1.59	1.46	1.33	90HBJ02P
	3	9.40	GH1301-ND	1.65	1.51	1.38	90HBJ03P
	4	11.94	GH1302-ND	1.40	1.29	1.17	90HBJ04P
	5	14.48	GH1303-ND	1.59	1.46	1.33	90HBJ05P
	6	17.02	GH1304-ND	1.65	1.51	1.38	90HBJ06P
	7	19.56	GH1305-ND	1.67	1.54	1.40	90HBJ07P
	8	22.10	GH1306-ND	1.38	1.27	1.15	90HBJ08P
	9	24.64	GH1307-ND	1.73	1.59	1.44	90HBJ09P
	10	27.18	GH1308-ND	1.86	1.71	1.56	90HBJ10P

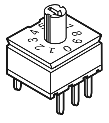
Rotary DIP Switches

Specifications: • **Mechanical Life:** 10,000 cycles • **Make and Break Current Rating:** 30 mA at 30 Vdc for 10,000 cycles of operation • **Carrying Current Rating:** 100mA at 50 Vdc • **Contact Resistance:** 50 milliohms maximum • **Operating Temperature Range:** -25°C to +85°C

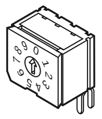
Materials and Finishes: • **Rotor and Switch Body:** Plastic, rated at UL 94V-0 • **Contact Material:** Copper alloy gold over 30 microinches nickel • **Terminals:** Copper alloy plated 150 microinches tin lead solder over nickel • **Internal O-ring:** Silicon rubber

Flux Cleaning: • Acceptable cleaning solutions include 1-1-1 Trichlorethane, Freon (TF, TE, or TMS), Isopropyl Alcohol, and detergent (140°F (60°C) maximum). Solutions which are not recommended include Acetone, Methylene Chloride, and Freon TMC.

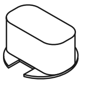
*All Grayhill Dip Switches are shipped in tubes.



Perp./Extended

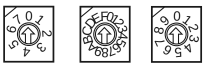


Rt. Angle/Flush



Knob for Extended Actuators

Switch Markings



Octal Hex BCD

Code & Positions	Type of Mounting	Type of Actuator	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Grayhill Part No.
Rotary Switches							
Octal	SMT	Flush	GH1309-ND	3.02	2.78	2.52	94HAB08W
Octal	Perp.	Flush	GH1310-ND	3.02	2.78	2.52	94HAB08
Octal	Perp.	Extended	GH1311-ND	3.02	2.78	2.52	94HBB08
Octal	Rt. Ang.	Flush	GH1312-ND	3.38	3.10	2.82	94HAB08RA
Octal	Rt. Ang.	Extended	GH1313-ND	3.38	3.10	2.82	94HBB08RA
BCD	SMT	Flush	GH1314-ND	3.02	2.78	2.52	94HAB10W
BCD	Perp.	Flush	GH1315-ND	3.02	2.78	2.52	94HAB10
BCD	Perp.	Extended	GH1316-ND	3.02	2.78	2.52	94HBB10
BCD	Rt. Ang.	Flush	GH1317-ND	3.38	3.10	2.82	94HAB10RA
BCD	Rt. Ang.	Extended	GH1318-ND	3.38	3.10	2.82	94HBB10RA
HEX	SMT	Flush	GH1319-ND	3.02	2.78	2.52	94HAB16W
HEX	Perp.	Flush	GH1320-ND	3.02	2.78	2.52	94HAB16
HEX	Perp.	Extended	GH1321-ND	3.02	2.78	2.52	94HBB16
HEX	Rt. Ang.	Flush	GH1322-ND	3.38	3.10	2.82	94HAB16RA
HEX	Rt. Ang.	Extended	GH1323-ND	3.38	3.10	2.82	94HBB16RA
Knobs for Extended Actuators Only							
Black Knob, open window type			GH5005-ND	.76	—	.64	947705-001
Gray Knob, open window type			GH5006-ND	.76	—	.64	947705-012
Gray Knob, black arrowhead			GH5007-ND	.76	—	.64	947705-017

tyco / Electronics AMP

DIP Switches

Fig. 1 – Side Actuated

Max. Cycle Life: up to 7,000 cycles per pole. SPST. **Contacts:** Beryllium copper with 30µ gold over 50µ nickel plating in contact area. **Materials: Housing:** Glass-filled polyester, 94V-0 rated, black. **Rocker:** Thermoplastic, 94V-0 rated, white. **Current Rating:** Nonswitching —1.5 amp max. at 50 VDC.

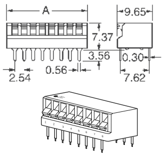
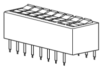
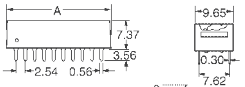
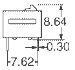


Fig. 2 – Top Actuated







Max. Cycle Life: up to 2,000 cycles per pole. SPST. **Contacts:** Copper alloy 30µ gold over 50µ nickel plating in contact area. **Current Rating:** Nonswitching—1.0 amp max. at 40 VDC. **Materials:** Same as 7000 Series

Fig. 3 – Dip Shunts

Materials: Housing: Glass-filled thermoplastic, 94V-0 rated. **Current Rating:** Standard pressure - 2 amp. **Resistance to Soldering Heat:** Cut straps can be reconnected by soldering bridging.

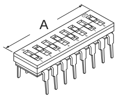


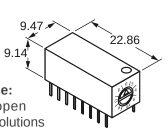
Fig.	No. of Cir.	Dim. A (mm)	Digi-Key Part No.	Price Each 1	Price Each 10	AMP Part No.
7000 Series – SPST, Side Actuated, Unsealed						
1	2	7.11	A5002-ND	1.95	1.79	1-435802-0
	3	9.65	A5003-ND	2.82	2.59	435802-2
	4	12.19	A5004-ND	1.68	1.54	435802-3
	5	14.73	A5005-ND	1.80	1.65	435802-4
	6	17.27	A5006-ND	2.19	2.01	435802-5
	7	19.81	A5007-ND	1.89	1.74	435802-6
	8	22.35	A5008-ND	1.89	1.84	435802-1
	9	24.89	A5009-ND	1.95	1.79	435802-7
	10	27.43	A5010-ND	1.92	1.76	435802-8
7000 Series – SPST, Side Actuated, Plastisol Sealed						
1	4	12.19	A5104-ND	1.74	1.60	1-435802-5
	5	14.73	A5105-ND	1.92	1.76	1-435802-6
	6	17.27	A5106-ND	1.98	1.82	1-435802-7
	7	19.81	A5107-ND	2.04	1.87	1-435802-8
	8	22.35	A5108-ND	2.04	1.87	435802-9
	9	24.89	A5109-ND	2.19	2.01	1-435802-9
	10	27.43	A5110-ND	2.16	1.98	2-435802-0
	12	32.51	A5112-ND	2.22	2.04	2-435802-2
7000 Series – SPST, Side Actuated, UV Sealed						
1	2	7.11	A5602-ND	2.97	2.73	1-435802-3
	4	12.19	A5604-ND	1.98	1.82	1-382394-5
	5	14.73	A5605-ND	2.10	1.93	1-382394-6
	6	17.27	A5606-ND	2.16	1.98	1-382394-7

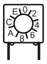
Fig.	No. of Cir.	Dim. A (mm)	Digi-Key Part No.	Price Each 1	Price Each 10	AMP Part No.
1	8	22.35	A5608-ND	2.16	1.98	382394-9
	10	27.43	A5610-ND	2.34	2.15	2-382394-0
7100 Series – SPST, Standard Profile, Unsealed						
2	2	7.11	A5202-ND	2.43	2.23	2-435640-9
	3	9.65	A5203-ND	2.67	2.45	3-435640-0
	4	12.19	A5204-ND	1.08	1.06	435640-2
	5	14.73	A5205-ND	1.56	1.43	435640-3
	6	17.27	A5206-ND	1.59	1.46	435640-4
	7	19.81	A5207-ND	1.65	1.52	435640-1
	8	22.35	A5208-ND	1.68	1.54	435640-5
	9	24.89	A5209-ND	1.68	1.54	435640-6
	10	27.43	A5210-ND	1.80	1.65	435640-7
	12	32.51	A5212-ND	2.07	1.90	3-435640-2
7100 Series – SPST, Standard Profile, Plastisol Sealed						
2	4	12.19	A5304-ND	1.23	1.13	3-435640-5
	5	14.73	A5305-ND	1.77	1.63	3-435640-6
	6	17.27	A5306-ND	1.80	1.65	3-435640-7
	7	19.81	A5307-ND	1.83	1.68	3-435640-8
	8	22.35	A5308-ND	1.73	1.68	3-435640-9
	9	24.89	A5309-ND	2.34	2.15	4-435640-0
	10	27.43	A5310-ND	1.92	1.76	4-435640-1
7100 Series – SPST, Standard Profile, UV Sealed						
2	2	7.11	A5702-ND	2.43	2.23	3-435640-3
	3	9.65	A5703-ND	2.49	2.29	3-435640-4

Fig.	No. of Cir.	Dim. A (mm)	Digi-Key Part No.	Price Each 1	Price Each 10	AMP Part No.
7100 Series – SPST, Low Profile, Unsealed						
2	4	12.19	A5404-ND	1.89	1.74	435668-3
	5	14.73	A5405-ND	1.71	1.57	435668-4
	6	17.27	A5406-ND	1.65	1.52	435668-5
	8	22.35	A5408-ND	1.68	1.54	435668-7
	10	27.43	A5410-ND	1.80	1.65	435668-9
7100 Series – SPST, Low Profile, Tape Sealed						
2	4	12.19	A5504-ND	1.59	1.46	3-435668-4
	5	14.73	A5505-ND	1.80	1.65	3-435668-5
	6	17.27	A5506-ND	1.74	1.60	2-435668-5
	7	19.81	A5507-ND	1.71	1.57	2-435668-7
	8	22.35	A5508-ND	1.74	1.60	2-435668-8
	9	24.89	A5509-ND	1.83	1.68	2-435668-9
	10	27.43	A5510-ND	1.81	1.66	3-435668-0
7600 Series – Dip Shunt, Std Pressure						
3	4	10.16	A26235-ND	1.62	1.49	435704-4
	6	15.24	A26236-ND	2.16	1.98	435704-6
	7	17.78	A26237-ND	2.25	2.07	435704-7
	8	20.32	A26238-ND	2.25	2.07	435704-8
	10	25.40	A26239-ND	2.61	2.40	1-435704-0
	12	30.48	A26240-ND	2.70	2.48	1-435704-2
Prog. Hand Tool			A5800-ND	50.40	—	435862-1

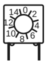
Dip Switches—Preprogrammed

Material: Glass-filled polyester, 94V-0 rated, black. **Contact:** Copper alloy with gold over nickel plating. **Voltage Rating:** 120V ms max. **Current Rating:** 1 amp max. **Contact Resistance:** 750 milliohms max. at 50mV open circuit. **Life Expectancy:** 500 revolutions **Actuator:** Screwdriver slot.

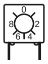




Style I
16 Position



Style II
16 Position



Style III
10 Position

Switch Type	Tape Seal	Stamping Legend	Digi-Key Part No.	Price Each 1	Price Each 10	AMP Part No.
Hexadecimal w/Complement	No	Style I	A26219-ND	12.33	11.31	53137-5
Hexadecimal w/Complement	Yes	Style I	A26221-ND	12.84	11.77	54792-1
Hexadecimal w/Complement	No	Style II	A26220-ND	12.33	11.31	53137-6
Hexadecimal w/Complement	Yes	Style II	A26222-ND	12.84	11.77	54792-2
BCD w/Complement	No	Style III	A26223-ND	12.33	11.31	53919-2
BCD w/Complement	Yes	Style III	A26224-ND	12.84	11.77	54778-1

Rotary Switches

Fig. 1

Materials: Contacts: phosphor bronze, gold over nickel plated. **Dielectric Breakdown Volt:** 500 VDC min. **Insulation Res:** 1x10^{8} ohms. **Initial Contact Res.:** 25 milliohms. **Circuit Cap.:** 5 picofarads (at 100 KHz). **Durability:** 1000 cycles

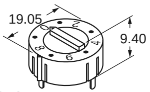


Fig. 2

Material: Housing: Polyester, black. **Detent Ball and Spring:** Stainless steel. **Printed Circuit Board:** Flame retardant, glass epoxy laminate, copper clad. **Contacts:** Phosphor bronze, gold over nickel. **Current Rating:** Nonswitching—2.0 amp at 115 VAC max. **Contact Life Expectancy:** 25,000 rotations.

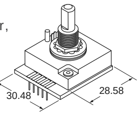


Fig.	Description	No. of Pos.	Output Code Type	Digi-Key Part No.	Price Each 1	Price Each 10	AMP Part No.
6000 Series Rotary Switch							
1	Screwdriver/ Coin Actuated	10	Single Pole	A26200-ND	23.49	21.54	1-435097-1
	Bar-Type Knob	10	BCD	A26201-ND	15.90	14.58	435123-1
	Bar-Type Knob	16	Hexadecimal	A26202-ND	16.77	15.38	1-435167-1
3100 Series Rotary Switch							
2	Right Angle	10	36 deg Throw BCD	A26203-ND	64.14	58.80	435984-7

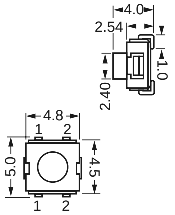
SMD Momentary Key Switches

Electrical Characteristics: • **Contact Rating: Max. Current:** 100mA; **Max. Voltage:** 24V • **Contact Resistance:** 100 milliohms max. • **Insulation Resistance:** 100 megohms min. (DC500V)

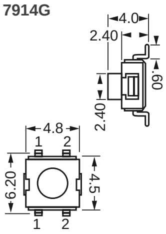
General Characteristics: • **Switch Type:** Normally Open • **Operating Temperature Range:** -55°C to +125°C • **Dielectric Strength:** 250 VAC.

Mechanical Characteristics: • **Cycle Life, Loaded:** 10,000 actuations.

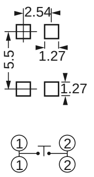
7914J



7914G



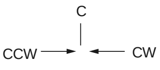
PCB Layout



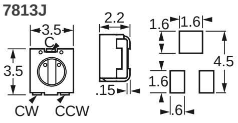
Type	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	1,000	5,000
J-Hook	7914J-000ECT-ND	.95	.84	.71	7914J-000ETR-ND	270.00	473.00	405.00/M
Gull Wing	7914G-000ECT-ND	.95	.84	.71	7914G-000ETR-ND	270.00	473.00	405.00/M

Sealed Selector Switches

Electrical Characteristics: • **Contact Rating: Maximum Current:** 100mA **Maximum Voltage:** 24V • **Contact Timing:** Non-Shorting • **Contact Resistance:** 2 ohms max. • **Insulation Resistance:** 100 megohms min. (DC500V) • **Dielectric Strength:** 250 VAC • ***General Characteristics:*** • **Switch Type:** SPDT • **Operating Temperature Range:** -55°C to +125°C

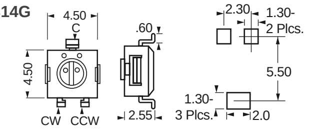


7813J



• **Mechanical Angle:** 245°C ±15° • **Positions:** 2 • **Adjustment Torque:** 50g. cm max. • **Stop Strength:** 200g. cm min. • **Switching Angle:** 45° ± 5° • **Seal Test:** 85°C Flouriner • **Rotational Life: -051:** 50 cycles; **-023:** 2000 cycles • **Max. Soldering Heat:** 260°C, 5 seconds

7814G



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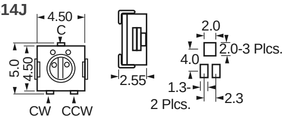


• **Mechanical Angle:** 240°C ±15° • **Positions:** 2 • **Adjustment Torque:** 180g. cm max. • **Stop Strength:** 300g. cm min. • **Switching Angle:** 45° ± 5° • **Pushover Strength (S Style):** 2 kilograms min. • **Rotational Life: -051:** 50 cycles **023:** 2000 cycles • **Max Soldering Heat:** 260°C, 10 seconds

Size (mm)	Life	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	1,000
3	50	7813J-051ECT-ND	2.10	1.86	1.56	7813J-051ETR-ND	—	1050.00
3	2000	7813J-023ECT-ND	2.31	2.05	1.72	7813J-023ETR-ND	—	1155.00
4	50	7814G-051ECT-ND	2.10	1.86	1.56	7814G-051ETR-ND	600.00	1050.00
4	2000	7814G-023ECT-ND	2.31	2.05	1.72	7814G-023ETR-ND	660.00	1155.00
4	50	7814J-051ECT-ND	2.10	1.86	1.56	7814J-051ETR-ND	600.00	1050.00
4	2000	7814J-023ECT-ND	2.31	2.05	1.72	7814J-023ETR-ND	660.00	1155.00

Grayhill Optical Rotary Encoders

Series 61C

Features: • Competitively priced to similar electromechanical switches • Optically coupled for more than a million trouble-free operations • Has data entry pushbutton switch activated by switch shaft • Compatible with CMOS, TTL and HCMOS Logic • Operationally used to move display icon and input data • Used to set radio frequency, drill depth, RPM, etc. Plastic shaft and bushing.

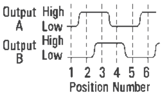
Dimensions: • **Shaft:** .250" (6.35mm) dia., .375" (9.52mm) long • **Pin Spacing:** .1" x .025" (2.54mm x .64mm) diameter • **Thread:** 3/8 – 32 • **Overall Diameter:** .750" (19.05mm)

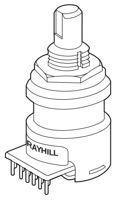
Encoder Ratings: • **Operating Voltage:** 5 ±.25 VDC • **Supply Current:** 30ma max. at 5VDC • **Life:** 1 million cycles of operation, 1 cycle is rotation through all positions and a full return • **Rotational Torque:** 1.5 inch-ounces ± 30% • **Load Current:** 5mA max. per channel • **Turn-On Time:** ≤30 mSec at 16.6 RPM • **Turn-Off Time:** ≤30 mSec at 16.6 RPM

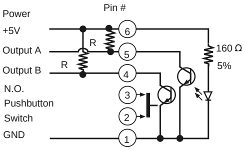
Pushbutton Switch Ratings: • **Rating:** at 5VDC, 10 mA, resistive • **Contact Resistance:** <10Ω • **Life Expectancy:** 3 million operations • **Contact Bounce:** <4 mSec at make <10 mSec at break • **Operating Temperature Range:** -40°C to +70°C.

Clockwise Rotation		
	Output	Output
Position	A	B
1	❍	❍
2	●	❍
3	●	●
4	❍	●

● indicates logic high.
❍ indicates logic low.
Code repeats every 4 positions







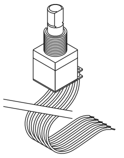
Description	Digi-Key Part No.	Price Each 1	25	100	250	Grayhill Part No.
16-Position	GH6101-ND	20.54	16.44	12.33	10.28	61C22-01-04-02
32-Position	GH6102-ND	20.54	16.44	12.33	10.28	61C11-01-08-02

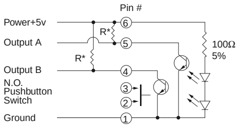
Optical Rotary Encoders

Series 62A

These low cost encoders offer long life (over 1 million operations) with small size and optional integrated pushbutton. These encoders are ideal for radio frequency setting, drill depth setting and other applications where detents are desired for operator feedback. Rugged metal shaft and bushing for long life.

Electrical Ratings:
- **Operating Voltage:** 5 ±.25 Vdc
- **Supply Current:** 30mA max. at 5 Vdc.
- **Operating Torque:** 1.5 in-oz ±50% initially
- **Rotational Life:** >1 million cycles of operation (cycle is rotation through all positions and return)





*External pull-up resistors required for operation. 8.2kΩ is suggested for TTL; 3.3kΩ is suggested for CMOS.

Description	Digi-Key Part No.	Price Each 1	25	100	250	Grayhill Part No.
32-Position, 2" Cable	GH3046-ND	33.20	26.56	19.92	16.60	62A11-01-020S
32-Position w/Switch 2"	GH3047-ND	36.29	29.02	21.77	18.14	62A11-02-020S
32-Position, 5" Cable	GH3048-ND	33.89	28.48	20.28	16.94	62A11-01-050S
32 Position w/Switch 5"	GH3049-ND	37.01	22.21	17.03	15.92	62A11-02-050S

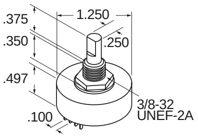
Industrial Optical Rotary Encoders

Series 61K, 61R, 63R

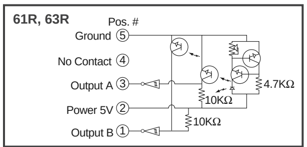
These rugged encoders are designed for continuous operations with high resolution. Made with stainless steel shaft and bushing for exceedingly long life (10 million life cycles). No detents.

Features:
• High resolution • Rugged construction • Cable or pinned version • 10 million life cycles • 300 RPM shaft rotation • 61K is a 4 pin output • 61R is a 5 pin output • 63R is a 5 pin output with 500 million life cycles

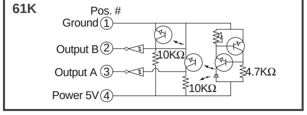
Specifications:
• **Operating Voltage:** 5 ± .25 Vdc • **Supply Current:** 30 mA maximum at 5 Vdc • **Logic Output Characteristics:** Output Type: Open collector with integrated Schmitt Trigger and 10KΩ pull-up resistor. Maximum Sink Current: 16mA at .40 Volts. • **Power Consumption:** 150 mW maximum • **Optical Rise Time:** 500 ns • **Optical Fall Time:** 16 ns • **Mechanical Life:** 10 million revolutions • **Time Life:** Guaranteed for 10 years of continuous operation (calculated from emitter degradation data) • **Operating Temperature Range:** -40°C to 85°C



61R, 63R



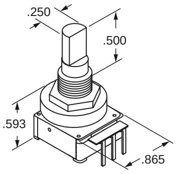
61K



Description	Pulse Per Revolution	Digi-Key Part No.	Price Each 1	25	100	250	Grayhill Part No.
4 Pin PC Mount	64	GH3064-ND	40.02	35.70	31.23	27.66	61K64
4 Pin PC Mount	128	GH3065-ND	40.02	35.70	31.23	27.66	61K128
5" Cable	128	GH3066-ND	41.71	38.82	33.96	30.08	61K128-050
5 Pin PC Mount	64	GH3067-ND	40.02	35.70	31.23	27.66	61R64
5 Pin PC Mount	128	GH3068-ND	40.02	35.70	31.23	27.66	61R128
5 Pin PC Mount	128	GH3069-ND	49.83	39.86	34.88	30.89	63R128
5 Pin PC Mount	256	GH3070-ND	51.63	41.30	36.14	32.02	63R256

Grayhill Mechanical Rotary Encoders

Series 25L



The 25L series of encoders are inexpensive single deck mechanical encoders designed for human interface terminals. Has detents.

Features: • Quality construction and contact materials • 100,000 life cycles

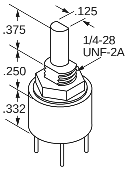
Specifications: • **Switching Loads:** 1.5mA @ 115Vac, resistive; 150mA @ 14Vdc , resistive • **Life Expectancy:** 100,000 cycles of operation @ rated loads; one cycle of operation is a rotation through all of the active positions and a return to the starting position • **Operating Temperature:** -65°C to +85°C

Description	Digi-Key Part No.	Price Each 1	25	100	250	Grayhill Part No.
36 Position, 2 Bit - 3 Pin PC Mount	GH3071-ND	4.70	3.77	2.83	2.35	25LB10-Q
24 Position, 2 Bit - 3 Pin PC Mount	GH3072-ND	4.70	3.77	2.83	2.35	25LB15-Q
16 Position, 2 Bit - 3 Pin PC Mount	GH3073-ND	4.70	3.77	2.83	2.35	25LB22-Q
16 Position, Hex - 3 Pin PC Mount	GH3074-ND	4.70	3.77	2.83	2.35	25LB22-H

Mechanical Rotary Encoders

Series 26

The series 26 rotary encoders are pc mounted mechanical encoders that come complete with a threaded shaft (mounting hardware included) and internal detents for user feedback. User selectable for either continues rotation or present stops (two supplied). Fully sealed with panel and shaft seal for use in the harshest environments.



Specifications:
- **Electrical Rating:** 25,000 cycles with logic compatible loads. Make and break 200mA.
- **Detent Balls:** Carbon steel, nickel plated
- **Terminals:** Brass, gold plated nickel plate; Contacts: Copper alloy, gold plated over nickel plate

Code And Truth Table

Switch Position	Code Position	BCD Output* 1	2	4	8	Gray Output* 1	2	4	8
1	0								
2	1	●				●			
3	2		●			●	●		
4	3	●	●				●		
5	4			●			●	●	
6	5	●		●		●	●	●	
7	6		●	●		●		●	
8	7	●	●	●				●	
9	8				●			●	●
10	9	●			●	●		●	●
11	10		●		●	●	●	●	●
12	11	●	●		●		●	●	●
13	12			●	●		●		●
14	13	●		●	●	●	●		●
15	14		●	●	●	●			●
16	15	●	●	●	●				●

*Dot indicates terminal tied to common.

Description	Digi-Key Part No.	Price Each 1	25	100	250	Grayhill Part No.
8 Position, BCD - 5 Pin PC Mount	GH3075-ND	13.87	11.10	8.32	6.83	26ASD45-01-1-AJS
16 Position, BCD - 5 Pin PC Mount	GH3076-ND	13.87	11.10	8.32	6.83	26ASD22-01-1-AJS
16 Position, Grey Code - 5 Pin PC Mount	GH3077-ND	21.26	17.00	12.75	10.63	26GS22-01-1-16S-C

CTS Mechanical Rotary Encoders

Series 288

Features: Miniature 16mm style. Low cost. Metal shaft. **Specifications:** • **Power Rating:** .1W • **Operating Temp.:** -25°C to 100°C • **Rotational Life:** 10K cycles • **Contact Resistance:** 5000Ω static closed circuit maximum and 1 MΩ open circuit maximum • Continuous rotation

Fig. 1 - Binary Switching Codes

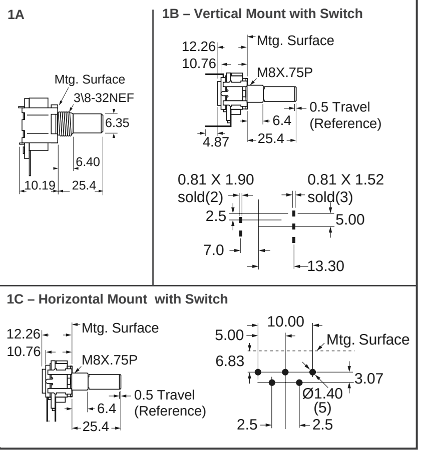


Fig. 2 -
Gray Switching Code

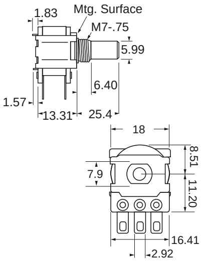


Fig.	Description	Digi-Key Part No.	Price Each 1	10	50	100	CTS Part No.
1A	2 Bit Non-Detented 16 Position	CT3001-ND	2.58	2.40	2.00	1.80	288T232R161A1
1A	2 Bit Detented 16 Position	CT3002-ND	2.58	2.40	2.00	1.80	288T232R161A2
1B	2 Bit Binary w/Switch, Vertical, 16 Pos.	CT2999-ND	5.42	5.04	4.19	3.78	288V232R161B2
1C	2 Bit Binary w/Switch, Horizontal, 16 Pos.	CT3000-ND	5.42	5.04	4.19	3.78	288X232R161B2
2	4 Bit Non-Detented 16 Position	CT3003-ND	3.50	3.26	2.71	2.45	288T232R162A1

Optical Encoders

- Long life • High resolution • Metal shaft • Digital output

Fig. 1 Vertical

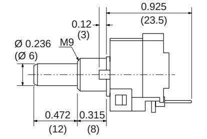
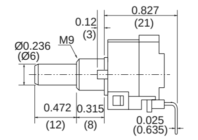


Fig. 2 Right Angle



Power: 5VDC @ 50mA **Life:** 2.5 million cycles min. **Cycles/Rev.:** 50/75/100/128/200 **Output:** TTL compatible

All models are quadrature (dual channel), rugged and may be panel or pc board mounted. Maximum 300 RPM for integral applications; 1kHz max frequency response.

Shaft turning clockwise viewed from front

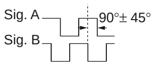


Fig.	CPR	Digi-Key Part No.	Price Each 1	10	Iwatsu Part No.
1	50	102-1001-ND	39.85	27.90	EC202A050A-2TD
2	50	102-1002-ND	39.85	27.90	EC202A050A-2SD
1	75	102-1003-ND	39.85	27.90	EC202A075A-2TD
2	75	102-1004-ND	39.85	27.90	EC202A075A-2SD
1	100	102-1005-ND	39.85	27.90	EC202A100A-2TD
2	100	102-1006-ND	39.85	27.90	EC202A100A-2SD
1	128	102-1007-ND	39.85	27.90	EC202A128A-2TD
2	128	102-1008-ND	39.85	27.90	EC202A128A-2SD
1	200	102-1009-ND	59.85	49.95	EC202C200A-2TD
2	200	102-1010-ND	59.85	49.95	EC202C200A-2SD

Optical Encoders

- Smallest in the world
- Lowest current draw
- Extremely economical

Fig. 1

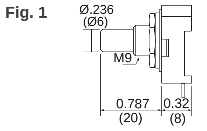


Fig. 2

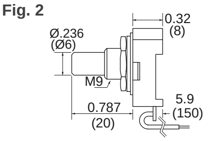


Fig. 3

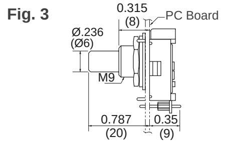


Fig. 4

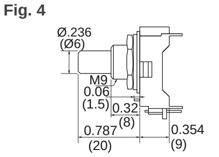


Fig. 5

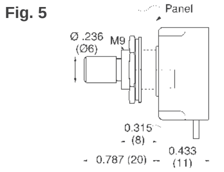


Fig. 6

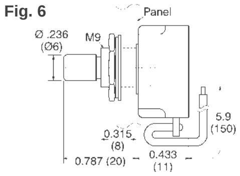
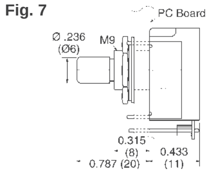


Fig. 7



Power: 5VDC @ 8mA **Life:** 1.0 million cycles min. **Cycles/Rev.:** 25 **Output:** TTL compatible **Body Size:** .709"x.965" (18.01mmx24.51mm)

Fig.	CPR	Detent	Digi-Key Part No.	Price Each 1	10	Tosoku Part No.
1	25	N	102-1015-ND	30.00	21.00	RE20NS2520RA
1	25	Y	102-1016-ND	30.00	21.00	RE20NS25C20RA
2	25	N	102-1011-ND	34.15	23.90	RE20NC2520RA
2	25	Y	102-1012-ND	34.15	23.90	RE20NC25C20RA
3	25	N	102-1013-ND	30.00	21.00	RE20NF2520RA
3	25	Y	102-1014-ND	30.00	21.00	RE20NF25C20RA
4	25	N	102-1017-ND	30.00	21.00	RE20NV2520RA
4	25	Y	102-1018-ND	30.00	21.00	RE20NV25C20RA
5	25	Y	102-1021-ND	42.30	38.55	RE21NS25C20R
6	25	Y	102-1019-ND	48.10	43.80	RE21NC25C20R
7	25	Y	102-1020-ND	42.30	38.55	RE21NF25C20R

Optical Encoders

Sense or control speed, direction, volume, tuning; digital replacement for precision potentiometers.

Sub-Miniature Precision Integral Encoders

• Dual ball bearing • Up to 2048 CPR • 10^8 RPM / HRS life • Precision mechanics • 6000 RPM capability • 150kHz frequency response

Fig. 1

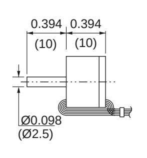


Fig. 2

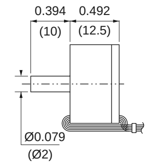
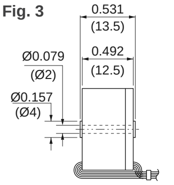
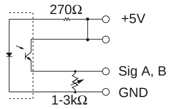


Fig. 3



Sine Wave Output Type

Output Circuit



Output Waveform (Clockwise viewed from front)

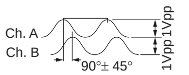


Fig.	CPR	Channel Output	Digi-Key Part No.	Price Each	MTL Part No.
1	200	A	102-1022-ND	87.30	SES-10-200 (A)
1	200	AB	102-1023-ND	105.00	SES-10-200 (AB)
2	360	A	102-1024-ND	48.50	SES-17-360 (A)
2	360	AB	102-1025-ND	55.10	SES-17-360 (AB)
3	300	A	102-1026-ND	50.95	SEH-17-300 (A)
3	300	AB	102-1027-ND	62.30	SEH-17(2)-300 (AB)

Square Wave Output Type

Fig. 1

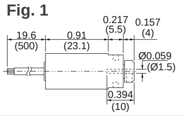


Fig. 2

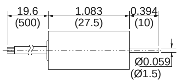


Fig. 3

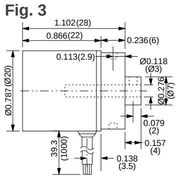


Fig. 4

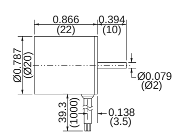


Fig. 5

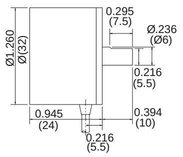


Fig. 6

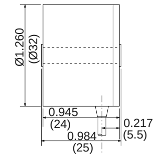


Fig. 7

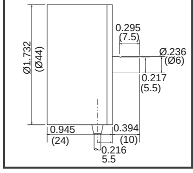
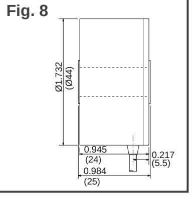
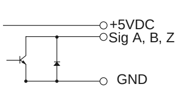


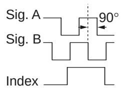
Fig. 8



Output Circuit



A pull-up resistor must be placed between the output signal lead and the +5VCD lead. Suggested value for TTL output is 2.2kΩ. Other values may be used to obtain the desired output voltage.



Output Waveform (Clockwise rotation viewed from front)

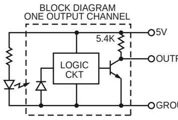
Fig.	CPR	Digi-Key Part No.	Price Each	MTL Part No.
1	360	102-1028-ND	290.00	MEH-9-360PC
2	360	102-1029-ND	290.00	MES-9-360PC
3	500	102-1030-ND	232.00	MEH-12-500PC
4	500	102-1031-ND	232.00	MES-12-500PC
3	900	102-1032-ND	340.00	MEH-12-900PC
4	900	102-1033-ND	340.00	MES-12-900PC
6	200	102-1034-ND	105.00	MEH-20-200PC
5	200	102-1035-ND	105.00	MES-20-200PC
6	500	102-1036-ND	160.00	MEH-20-500PC
5	500	102-1037-ND	160.00	MES-20-500PC
6	1024	102-1038-ND	220.00	MEH-20-1024PC
5	1024	102-1039-ND	220.00	MES-20-1024PC
6	1500	102-1040-ND	298.00	MEH-20-1500PC
5	1500	102-1041-ND	298.00	MES-20-1500PC
6	2000	102-1042-ND	350.00	MEH-20-2000PC
5	2000	102-1043-ND	350.00	MES-20-2000PC
8	360	102-1044-ND	160.00	MEH-30-360PC
7	360	102-1045-ND	160.00	MES-30-360PC
8	1024	102-1046-ND	220.00	MEH-30-1024PC
7	1024	102-1047-ND	220.00	MES-30-1024PC
8	2048	102-1048-ND	298.00	MEH-30-2048PC
7	2048	102-1049-ND	298.00	MES-30-2048PC

Optical Rotary Encoders Series: 600, 601H, 601V

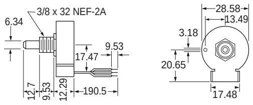
Electrical Specifications: Description: The Series 600 and 601 controls are manually operated, rotary, optical encoders that output two square waves in quadrature at a rate of 128 pulses per channel per revolution as a standard with other resolutions down to 60 pulses available. The outputs are TTL compatible. The variation by series is the terminal configuration, with the Model 600 having (4) cable leads, and the Model 601 having (4) pin leads and internal resistors. **Input Power:** 4 volts DC ±5% @ 30 MA maximum plus external requirements. **Output Rate:** 128 pulses/revolution per channel-standard. **Channels:** Two separate output channels in quadrature. 90° ±45°. **Output Voltage:** High level voltage: 2.4 volts min. with 10KΩ load to ground. Low level voltage: .4 volt maximum

Environmental Characteristics: Operating Temp.: -20°C to 65°C. **Mechanical Characteristics: Shaft Rotation:** Continuous in either direction, 300 RPM max. **Terminals: P/C Type:** .025" (.64mm) by 0.12" (3.05mm) thick brass, gold plated to facilitate soldering. **Cable Type:** Four lead ribbon cable, color-coded, with .050" (1.27mm) spacing. 28 AWG stranded copper wire, .039" (.99mm) diameter. **Strength:** Terminals withstand 2 lb. push and pull and a 90° bend.

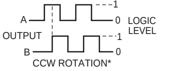
BLOCK DIAGRAM
ONE OUTPUT CHANNEL



Model 600 - Cable Style

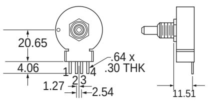


OUTPUT WAVEFORM

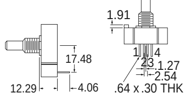


CABLE CODE		
Term#	**Color**	**Function**
1	Red	5VDC ±5% @ 30 MA max.
2	Yellow	A Out
3	Green	Ground
4	Orange	B Out

Model 601 - PC Terminal (Horizontal)



Model 601 - PC Terminal (Vertical)



Description	Digi-Key Part No.	Price Each	Clarostat Part No.
Cable Version	600CS-ND	44.79	600EN-128-CBL
Horizontal Version	601HCS-ND	44.18	600EN-128-B66
Vertical PC Version	601VCS-ND	43.77	600EN-128-C24

Panasonic® Mechanical Rotary Encoders

EVQ-VEM Series:

Specifications: Mechanical:

• Rotation Angle: 360° (endless) • Detent Points: 24 (each detent angle: 15 ±3°) **Electrical:** • Output Signal: A, B 2 signal. 24 Pulse/360° (phase difference) • Switch Rating: DC 10V - 1mA (each bit) • ON Resistance Between Terminal: 1Ω max. • Insulation Resistance: at DC 50V, 10MΩ min. (between terminals at detent position) • Chattering: 5ms max. Rotation Speed: 60 r/min. Measurement circuit: See diagram • Detent Position: Output Signal "A" OFF and Output SIgnal "B" Off or On. **Physical, Environment Life:** • Temperature Range: -10°C to 70°C • Soldering Temperature: 300°C 3 sec~max. • Rotation Life: 50,000

EVEG/J/L/H Series:

Specifications: Mechanical:

• Rotation Angle: 360° (endless) • Shaft Inclination: 0.7 x H/30 mm p-p max. • Detent Points: 24 • Rotation Torque: standard type, 3mN-m to 20mN-m **Electrical:** • Output Signals: Phase A and B • Resolution: 24 pulses/360° • Rating: DC 5V 1mA • Contact Resistance: 1Ω max. • Insulation Resistance: DC 50V 10MΩ min. • Dielectric Withstanding Voltage: 1 minute at 50 VAC • Bouncing: 3 ms max. **Physical, Environment Life:** • Operating Life: standard life, 30,000 cycles min. • Operating Temperature: -10°C to +70°C • Storage Temperature: -40°C to +85°C

Fig.	Description	Dim. C	Dim. D	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Panasonic Part No.
1	14 MM	12.5	7	P80685-ND	3.53	2.95	2.48	EVQ-VEMF0124B
	14 MM	17.5	12	P80695-ND	3.53	2.95	2.48	EVQ-VEMF0224B
	14 MM	22.5	12	P80705-ND	3.53	2.95	2.48	EVQ-VEMF0324B
2	12 MM	17.5	—	P10859-ND	1.52	1.35	.97	EVE-GA1F1724B
	12 MM	20	—	P10860-ND	1.52	1.35	.97	EVE-GA1F2024B

Fig. 1— EVQ-VEM Series

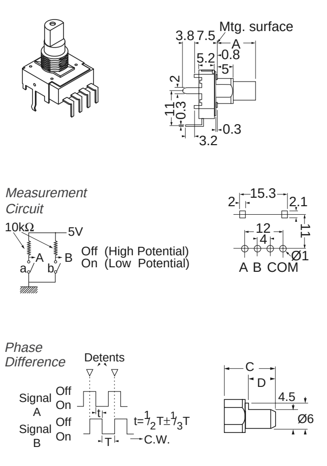
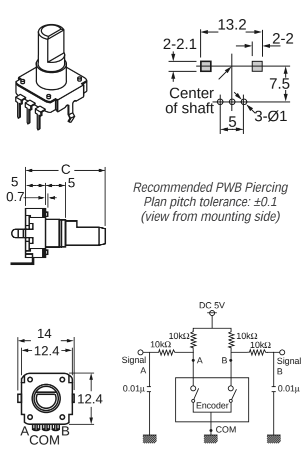


Fig. 2 — EVEG/J/L/H Series



9mm Square/Sealed Encoders

Electrical Characteristics:

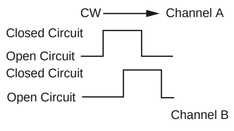
• **Output:** 2-bit gray code, Channel A leads Channel B by 90° electrically turning clockwise (CW): 6 pulses per resolution • **Closed Circuit Resistance:** 2 ohms maximum • **Open Circuit Resistance:** 100K ohms minimum • **Contact Rating:** 10 milliamp @ 10 VDC or 0.1 watt maximum • **Insulation Resistance (500 VDC):** 1,000 megohms minimum • **Dielectric Withstanding Voltage: (Sea Level)** 900 VAC minimum; **(Electrical Travel)** Continuous • **Contact Bounce (15 RPM):** 5 milliseconds maximum • **RPM (Operating):** 120 maximum

Environmental Characteristics:

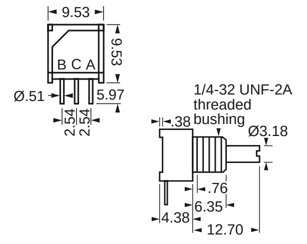
- **Temperature Range:** -55°C to +125°C
- **Rotational LIfe:** 100,000 cycles

Mechanical Characteristics:

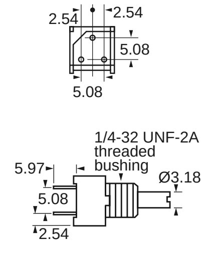
- **Mechanical Angle:** Continuous
- **Torque:** 5 oz-in. maximum



3315C



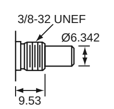
3315Y



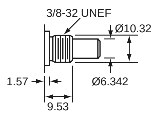
Description	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 50	Price Each 100
9mm Square Right Angle Encoder	3315C-1-006-ND	2.59	2.30	1.93	1.65
9mm Square Vertical Encoder	3315Y-1-006-ND	2.59	2.30	1.93	1.65

Rotary Optical Encoders

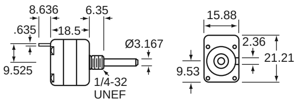
ENA



ENS



ENC



Electrical Characteristics:

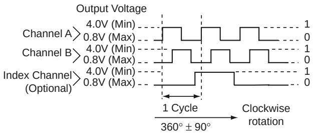
• **Output:** 2-bit gray code, Channel A leads Channel B by 90° electrically turning clockwise • **Supply Voltage:** 5.0 VDC ±0.25 VDC • **Supply Current:** 26 mA maximum • **Output Voltage:** 0.8V maximum for low output & 4V minimum for high output • **Output Current (Low Output):** 25 mA minimum • **Insulation Resistance (500 VDC):** 1,000 megohms • **Rise/Fall Time:** 200ns (typical) • **Shaft RPM (Ball Bearing):** 3,000 rpm maximum • **Power Consumption:** 136 mW maximum • **Pulse Width (Electrical Degrees, Each Channel):** 180° ±45° TYP. • **Pulse Width (Index Channel):** 360° ±90° • **Phase (Electrical Degrees, Channel A to Channel B):** 90° ±45° TYP. • **Index Channel Centered on 1-1 State Combination of A and B Channels:** 0° ±45°

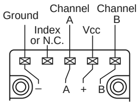
Environmental Characteristics:

• **Operating Temp. Range (Standard):** -40°C to +85°C

Mechanical Characteristics:

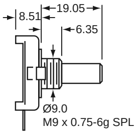
• **Mechanical Rotation:** Continuous • **Torque (Starting and Running):** A & C Bushings (Spring Loaded for Optimum Feel); 1.5 oz-in. maximum and W,S & T Bushings (Ball Bearing Shaft Support): 0.1 oz-in. maximum

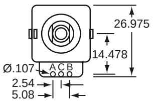




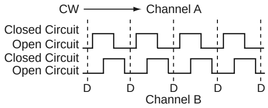
Cycles/ Revol.	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 50
64	ENA1JB28L00064-ND	51.37	40.00	32.67
100	ENA1JB28L00100-ND	51.37	40.00	32.67
128	ENA1JB28L00128-ND	51.37	40.00	32.67
128	ENC1JD28L00128-ND	51.37	40.00	32.67
256	ENS1JB28L00256-ND	82.74	64.43	52.62

Digital Contacting Encoders

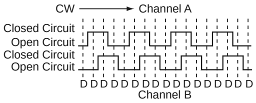




Full Cycle Per Detent
(Normally Open in Detent Shown)



1/4 Cycle Per Detent



Electrical Characteristics: • **Output:** 2-bit gray code, Channel A leads Channel B by 90° electrically turning clockwise (CW) • **Closed Circuit Resistance:** 5 ohms maximum • **Open Circuit Resistance:** 100K ohms minimum • **Contact Rating:** 10 milliamp @ 10 VDC or 0.1 watt maximum • **Insulation Resistance (500 VDC):** 1,000 megohms minimum • **Dielectric Withstanding Voltage:** MIL-STD-202 Method 301 (Sea Level; 1,000 VAC minimum) • **Electrical Travel:** Continuous • **Contact Bounce (15 RPM):** 5 milliseconds maximum • **RPM (Operating):** 120 maximum

Environmental Characteristics: • **Operating Temperature Range:** +1°C to +125°C

Mechanical Characteristics: • **Mechanical Angle:** Continuous • **Torque (Detented):** 0.75 to 2.25 oz-in.

Anti-Rotation Lug Position	Cycles Per Revolution	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 50
None	24	ECW1DB24BC0024-ND	4.86	3.78	3.09
9:00	24	ECW1JB24BC0024-ND	4.86	3.78	3.09

HAMLIN Magnetic Reed Switches

The basic reed switch consists of two ferromagnetic reeds, hermetically sealed in a gas filled capsule. When these reeds are introduced to a magnetic field, they assume opposite polarities and attract toward each other closing the contacts. When the magnetic field is reduced beyond the spring force of the reeds the contacts again spring open. Hamlin's reed switches are ideal in auto, marine and moist environment applications and operating environments can be almost anywhere from air, submerged in water or fuels, to dust-laden atmospheres.

Fig. 1

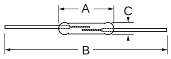


Fig. 2

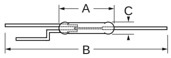
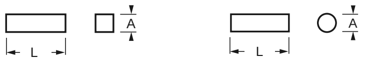


Fig.	Circuit	Ampere Turns	Max. DC Contact Rating Watts	Max. DC Contact Rating Volts	Switching Current (Amp)	Carry Current (Amp)	Operate/ Release (ms)	Dimensions (mm) A	B	C	Digi-Key Part No.	Pricing 1	10	50	Hamlin Part No.
1	SPST	10-20	10	200	0.5	0.8	.6/.2	12.70	40.39	1.83	HE500-ND	1.63	13.75	57.50	MDSR-7 10-20
1	SPST	17-28	10	300	0.5	1.5	.6/.2	15.24	40.39	2.29	HE501-ND	2.47	20.90	87.40	MDRR-6 17-28
1	SPST	12-23	10	200	0.5	1.2	.6/.2	15.24	40.39	2.29	HE502-ND	1.27	10.73	44.85	MDSR-4 12-23
1	SPST	12-33	10	200	0.5	1.8	.6/.25	15.24	40.39	2.29	HE503-ND	1.20	10.18	42.55	MDCG-4 12-33
1	SPST	22-33	10	1000	0.5	1.5	.75/.2	20.32	56.64	2.67	HE504-ND	3.54	29.98	125.35	MARR-5 22-33
1	SPST	22-38	50	250	1.5	2.5	.75/.5	20.32	56.64	2.84	HE505-ND	2.15	18.15	75.90	MRPR-8 22-38
2	SPDT	15-25	5	175	0.25	1.5	.7/1	14.73	52.32	2.67	HE506-ND	4.58	38.78	162.15	MDRR-DT 15-25
2	SPDT	50-65	50	500	1.5	2.0	5.5/8	39.62	85.85	5.54	HE508-ND	12.14	105.08	449.49	DRT-DTH 50-65
1	SPST	47-68	100	400	3.0	6.0	4.5/2.5	50.80	82.55	5.26	HE509-ND	6.34	53.63	224.25	DRR-129 47-68

HAMLIN Magnets



A permanent magnet is the most common source for operating the magnetic reed switch. The method used to position the magnet depends upon the switching requirement but can be used in one of four basic techniques; perpendicular or parallel motion (up and down, side to side) rotation (revolving magnet or switch), shielding (passing a ferromagnetic material between the switch and magnet) or biasing which is using one magnet of opposite polarity to cancel another magnet's lines of force.

Dim. (mm) A x L	Use w/ A.T. Range	Gauss at Pole	Digi-Key Part No.	Pricing 1	10	50	Hamlin Part No.
1.57 Sq. x 12.70	10-38	700	HE510-ND	1.20	10.18	42.55	H-31
4.83 Sq. x 25.40	10-38	1400	HE511-ND	3.02	25.58	106.95	H-32
3.05 Sq. x 19.05	10-38	1200	HE512-ND	1.66	14.03	58.65	H-33
6.10 Sq. x 24.89	10-68	1300	HE513-ND	3.41	28.88	120.75	H-34
3.81 Dia. x 19.81	10-38	1150	HE514-ND	1.59	13.48	56.35	420
5.84 Dia. x 24.89	10-68	1500	HE515-ND	4.55	38.50	161.00	625

CLARE

Magnetic Reed Switches

Reed switches have been used in thousands of applications from non-contact switches to sensing direction, speed and position.

Reed switches are a reliable, low cost, low current switch that are hermitically sealed for operation in the most demanding environments.

Fig. 1

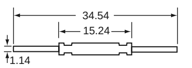
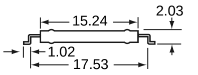


Fig. 2 — SMT



Circuit	Operate AT• (min.-max.)	Release AT• (min.-max.)	Switching Volt. (max.)	Switching Current	Carry Current	Digi-Key Part No.	Pricing 1	10	50	100	Clare Part No.
Fig. 1 — Magnetic Reed Switches											
SPST	10-15	5-15	200VDC/VAC	0.5A	1.5A	CLA122-ND	.91	7.70	32.20	52.50	FR2S1015-051500
SPST	10-20	5-20	200VDC/VAC	0.5A	1.5A	CLA123-ND	.85	7.15	29.90	48.75	FR2S1020-052000
SPST	15-20	5-20	200VDC/VAC	0.5A	1.5A	CLA124-ND	.91	7.70	32.20	52.50	FR2S1520-052000
SPST	15-25	5-20	200VDC/VAC	0.5A	1.5A	CLA125-ND	.85	7.15	29.90	48.75	FR2S1525-0525
SPST	20-25	5-25	200VDC/VAC	0.5A	1.5A	CLA126-ND	.91	7.70	32.20	52.50	FR2S2025-052500
SPST	20-30	5-30	200VDC/VAC	0.5A	1.5A	CLA127-ND	1.14	9.63	40.25	65.63	FR2S2030-053000

Circuit	Operate AT• (min.-max.)	Release AT• (min.-max.)	Switching Volt. (max.)	Switching Current	Carry Current	Digi-Key Part No.	Cut Tape Pricing 1	10	50	T & R Pricing* 3,000	6,000	Clare Part No.
Fig. 2 — SMT Reed Switches on Tape												
SPST	15-25	5-22	200VDC/VAC	0.5A	1.5A	CLA128CT-ND	1.27	11.31	45.83	507.00/M	477.75/M	FR2249
SPST	10-20	5-18	200VDC/VAC	0.5A	1.5A	CLA129CT-ND	1.27	11.31	45.83	507.00/M	477.75/M	FR2259

• Operate and Release values are given in Ampere-Turns.

* For Tape & Reel part number, change CT to TR.

HAMLIN Magnetic Position Sensors

Specifications:

- Switching Voltage: SPST-N/O- 200VDC,
  SPST- HV- 300VDC,
  SPDT- 175VDC.
- Initial Contact Resistance: 0.200Ω.
- Typical Operate Time: 1.00 ms.
- Shock w/o False Operation: 100 G's, 11 ms, 1/2 sine wave.
- Operate & Storage Temp: -40°C to +105°C.

Fig. 1

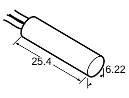


Fig. 2

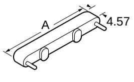
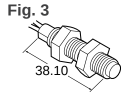


Fig. 3



3A = 5/16 - 24 Thread
3B = M8 x 1.25 Thread

Fig. 4

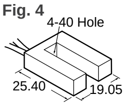


Fig. 5

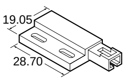


Fig. 6

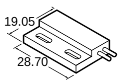


Fig. 7

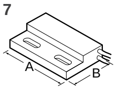


Fig. 8

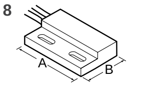


Fig. 5 mates with Digi-Key part number WM2900 (connector), WM2510 (contact)

Fig.	Dim. (mm) A	B	Must Operate/Release Distance (mm)	Termination or Wiring	Digi-Key Part No.	Pricing 1	10	50	Matching Actuator Part No.	Pricing 1	10	50
SPST-N/0												
1	—	—	3.81/28.32	304.8mm PVC Leads	59025-010-ND•	4.58	38.78	162.15	57025-000-ND•	3.93	33.28	139.15
2	17.78	—	1.90/13.97	PCB Pins	59045-010-ND	2.96	25.03	104.65	57045-000-ND	4.75	40.15	167.90
2	22.86	—	3.81/19.05	PCB pins	59050-010-ND•	2.44	20.63	86.25	57050-000-ND•	5.20	44.00	184.00
3A	—	—	3.81/28.32	304.8mm PVC Leads	59065-010-ND•	5.82	49.23	205.85	57065-000-ND•	4.94	41.80	174.80
3B	—	—	3.81/28.32	304.8mm PVC Leads	59070-010-ND	5.82	49.23	205.85	57070-000-ND	4.94	41.80	174.80
4	—	—	2.54/6.35	304.8mm PVC Leads	59085-010-ND	10.17	87.98	376.34	VANE	—	—	—
5	—	—	3.81/28.32	Connector	59105-010-ND	6.01	50.88	212.75	57105-000-ND	4.16	35.20	147.20
6	—	—	3.81/28.32	Pins	59125-010-ND•	5.17	43.73	182.85	57125-000-ND•	4.16	35.20	147.20
8	28.58	19.05	8.89/29.21	304.8mm Teflon Leads	59135-010-ND	7.85	67.95	290.68	57135-000-ND	5.56	47.03	196.65
7	23.01	14.00	4.44/20.32	304.8mm PVC Leads	59140-010-ND	5.23	44.28	185.15	57140-000-ND•	4.88	41.25	172.50
7	28.58	19.05	5.71/20.32	304.8mm PVC Leads	59145-010-ND•	5.23	44.28	185.15	57145-000-ND•	4.16	35.20	147.20
8	29.85	19.05	5.71/20.32	304.8mm PVC Leads	59150-010-ND•	5.17	43.73	182.85	57150-000-ND•	4.16	35.20	147.20
SPST-HV-N/0												
1	—	—	3.81/28.32	304.8mm PVC Leads	59025-020-ND†	5.23	44.28	185.15	57025-000-ND†	3.93	33.28	139.15
2	—	—	3.81/19.05	PCB Pins	59050-020-ND†	3.28	27.78	116.15	57050-000-ND†	5.20	44.00	184.00
3A	—	—	3.81/28.32	304.8mm PVC Leads	59065-020-ND†	6.47	54.73	228.85	57065-000-ND†	4.94	41.80	174.80
3B	—	—	3.81/28.32	304.8mm PVC Leads	59070-020-ND†	6.47	54.73	228.85	57070-000-ND†	4.94	41.80	174.80
5	—	—	3.81/28.32	Connector	59105-020-ND†	6.66	56.38	235.75	57105-000-ND†	4.16	35.20	147.20
6	—	—	3.81/28.32	Pins	59125-020-ND†	5.82	49.23	205.85	57125-000-ND†	4.16	35.20	147.20
8	28.58	19.05	8.89/29.21	304.8mm Teflon Leads	59135-020-ND	8.37	72.45	309.93	57135-000-ND	5.56	47.03	196.65
7	23.01	14.00	4.44/20.32	304.8mm PVC Leads	59140-020-ND†	5.88	49.78	208.15	57140-000-ND†	4.88	41.25	172.50
7	28.58	19.05	5.71/20.32	304.8mm PVC Leads	59145-020-ND†	5.88	49.78	208.15	57145-000-ND†	4.16	35.20	147.20
8	28.58	19.05	5.71/20.32	304.8mm PVC Leads	59150-020-ND†	5.82	49.23	205.85	57150-000-ND†	4.16	35.20	147.20
SPDT-N/C-N/0												
1	—	—	3.81/28.32	304.8mm PVC Leads	59025-030-ND•	7.54	63.80	266.80	57025-000-ND	3.93	33.28	139.15
3A	—	—	3.81/28.32	304.8mm PVC Leads	59065-030-ND•	7.02	60.75	259.88	57065-000-ND	4.94	41.80	174.80
3B	—	—	3.81/28.32	304.8mm PVC Leads	59070-030-ND	7.05	60.98	260.84	57070-000-ND	4.94	41.80	174.80
4	—	—	2.54/6.35	304.8mm PVC Leads	59085-030-ND	10.89	94.28	403.29	VANE	—	—	—
8	28.58	19.05	8.89/29.21	304.8mm Teflon Leads	59135-030-ND	10.22	88.43	378.26	57135-000-ND	5.56	47.03	196.65
7	23.01	14.00	4.44/20.32	304.8mm PVC Leads	59140-030-ND•	6.55	56.70	242.55	57140-000-ND	4.88	41.25	172.50
7	28.58	19.05	5.71/20.32	304.8mm PVC Leads	59145-030-ND•	6.55	56.70	242.55	57145-000-ND	4.16	35.20	147.20
8	28.58	19.05	5.71/20.32	304.8mm PVC Leads	59150-030-ND•	6.92	59.85	256.03	57150-000-ND	4.16	35.20	147.20

• **HE1-KIT-ND** ***Digi-Key® Magnetic Switches Kit*** Assortment of switches denoted. (22 total pieces) Includes notebook style standard case........**$69.95**

† **HE2-KIT-ND** ***Digi-Key® Magnetic Switches Kit*** One each of switches denoted. (18 total pieces) Includes notebook style standard case.........**$49.95**

Cannon

ITT Industries
Engineered for life

C&K Magnetic Sensors

Fig. 1

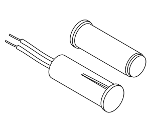


Fig. 2

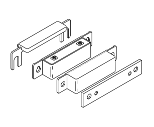


Fig. 3

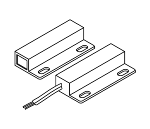


Fig. 4

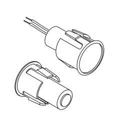


Fig. 5

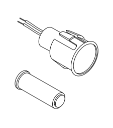


Fig. 6

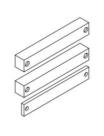
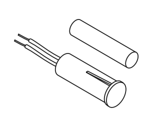


Fig. 7



C&K's MPS Series Magnetic Proximity Sensors operate when a magnetic field approaches two magnetic reed blades. The magnetic field overcomes the spring tension of the blades and brings the contacts together. When the magnetic actuator is removed, the reeds separate by their own spring tension. Comes complete with reed switch and matching actuator.

FEATURES: • Long Life Expectancy — 10 million operations • Housing made of rugged impact resistant ABS plastic that meets or exceeds UL requirements for fire retardation • Sealed Contacts allowing the reed to operate in damp and dusty environments • Wide gap performance makes magnet and switch alignment less critical.

SPECIFICATIONS: • **Contact Ratings:** 100 VDC or 100 VAC max. @ 0.3 Amp Max.; 1.0 Amp Max. Carry Current • **Operating Temperature:** -40°C to 100°C • **Mechanical & Electrical Life:** 10 Million Operations

MATERIALS: • **Housing/Spacer/Cover:** ABS Plastic (UL94V-0), white • **Wire Leads:** UL1061, 22 AWG: stranded, made of copper or aluminum; Length: 12" (30.48cm) with ends stripped; Color: white • **Magnets:** Alnico V and Ceramic Ferrite 8 (MPS80WG model only).

NOTE: Wide gap contacts are polarity sensitive. Use alignment dots for proper installation of surface mount contacts.

Fig.	Make Gap (mm)	Release Gap (mm)	Digi-Key Part No.	Pricing 1	10	100	250	C & K Part No.
1	31.75	40.64	CKN6002-ND	6.16	53.20	448.00	1015.00	MPS9WGW
2	31.75	31.75	CKN6003-ND	6.58	56.81	478.40	1083.88	MPS20WGW
3	25.40	33.02	CKN6004-ND	5.65	48.83	411.20	931.63	MPS45WGW
4	31.75	40.64	CKN6005-ND	6.27	54.15	456.00	1033.13	MPS70WGW
5	31.75	40.64	CKN6006-ND	6.27	54.15	456.00	1033.13	MPS73WGW
6	50.80	50.80	CKN6007-ND	6.58	56.81	478.40	1083.88	MPS80WGW
7	31.75	40.64	CKN6008-ND	6.16	53.20	448.00	1015.00	MPS95WGW

COTO TECHNOLOGY

Reed Relays

SPECIFICATIONS: • **Life Expectancy:** Varies with each series from a minimum of 100 x 10^6 operations to 1000 x 10^6 operations • **Insulation Resistance:** $10^{12}\Omega$ • **Storage Temperature:** -35°C to +100°C • **Operating Temperature:** -20°C to +85°C • **Vibration:** 20 G's to 2000 Hz; Shock: 50 G's

Dimensions: inches (mm)

Fig. 1

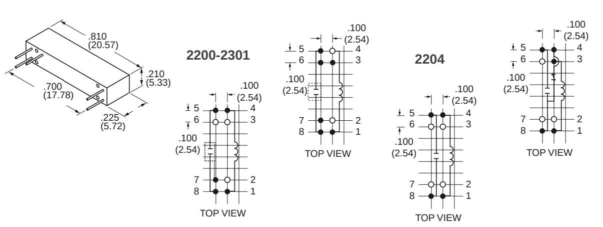
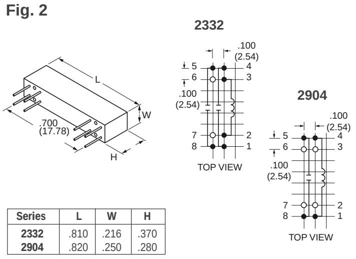


Fig. 2



Series	L	W	H
2332	.810	.216	.370
2904	.820	.250	.280

Fig. 3

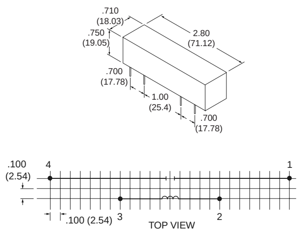


Fig. 4

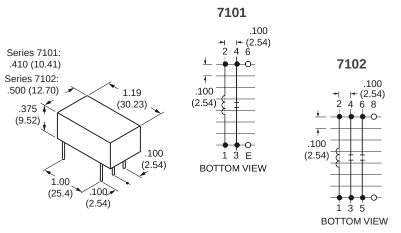


Fig. 5

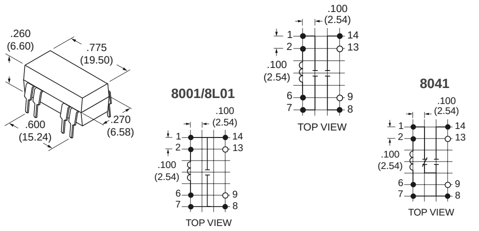
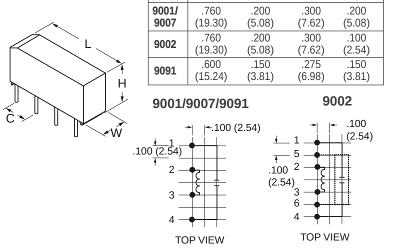


Fig. 6



Series	L	W	H	C
	Dimensions-inches (mm)			
9001/ 9007	.760 (19.30)	.200 (5.08)	.300 (7.62)	.200 (5.08)
9002	.760 (19.30)	.200 (5.08)	.300 (7.62)	.100 (2.54)
9091	.600 (15.24)	.150 (3.81)	.275 (6.98)	.150 (3.81)

Fig. 7

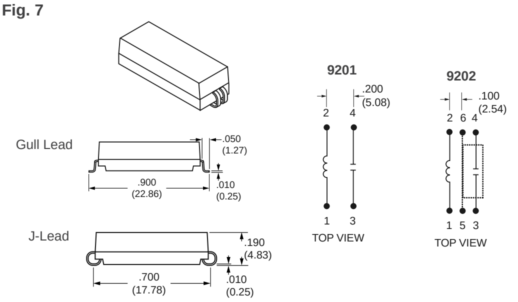


Fig. 8

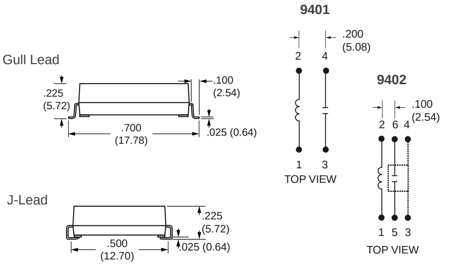


Fig. 9

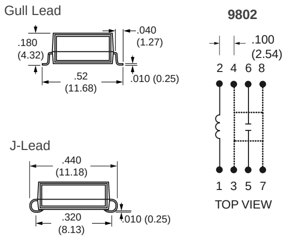
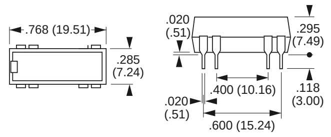


Fig.	Circuit	Coil Voltage (DC)	Coil Current (mA)	Switching Current (A)	Carry Current (A)	Additional Features	Digi-Key Part No.	Price Each 1	10	50	100	Coto Part No.
1	SPST	5	33.3	.5	1	With Electrostatic Shield	306-1001-ND	8.19	7.09	6.07	5.20	2200-2301
	SPST	5	33.3	.5	1	With Coaxial Shield	306-1002-ND	8.40	7.27	6.22	5.33	2200-2302
	SPST	5	13.5	.5	1	—	306-1003-ND	7.44	6.44	5.51	4.72	2204-05-401
	SPST	5	13.5	.5	1	With Electrostatic Shield	306-1004-ND	7.64	6.62	5.66	4.86	2204-05-411
	SPST	12	8	.5	1	—	306-1005-ND	7.77	6.73	5.76	4.94	2204-12-311
	SPDT	5	21.8	.25	.5	—	306-1006-ND	12.84	11.12	9.51	8.16	2211-05-301
	SPDT	12	8	.25	.5	—	306-1007-ND	10.58	9.33	8.19	7.44	2211-12-301
2	DPST	12	12	.5	1.5	—	306-1008-ND	7.64	6.62	5.66	4.86	2332-12-000
	SPST	12	8	.5	1.5	—	306-1009-ND	7.93	6.87	5.88	5.04	2904-12-301
3	SPST	12	68.6	3.0	5	High Voltage - 7500V	306-1010-ND	19.09	17.25	16.39	15.53	5501-12-1
	SPST	24	41.7	3.0	5	High Voltage - 7500V	306-1011-ND	19.44	17.57	16.69	15.81	5501-24-1
4	SPST	12	16.7	.5	2	High Reliability w/E. S.	306-1012-ND	3.77	3.19	2.67	2.18	7101-12-1010
	SPST	12	16.7	.5	2	High Reliability w/E. S. & Diode	306-1013-ND	3.93	3.33	2.79	2.27	7101-12-1011
	DPST	12	16.7	.5	2	High Reliability w/E.S.	306-1014-ND	5.56	4.71	3.94	3.21	7102-12-1010
	DPST	12	16.7	.5	2	High Reliability w/E. S. & Diode	306-1015-ND	5.72	4.84	4.05	3.30	7102-12-1011
5	SPST	5	10	.5	1	Extended Lifetime	306-1016-ND	3.77	3.19	2.67	2.18	8001-05-001
	SPST	5	10	.5	1	Extended Lifetime	306-1017-ND	5.23	4.43	3.71	3.02	8002-05-10
	SPDT	5	10	.25	.5	Extended Lifetime	306-1018-ND	6.44	5.45	4.56	3.72	8041-05-001
	SPST	5	10	.5	1	Economy	306-1019-ND	2.05	1.74	1.45	1.19	8L01-05-001
	SPST	5	10	.5	1	Economy w/Diode	306-1020-ND	2.21	1.87	1.57	1.28	8L01-05-011
	SPST	5	10	.5	1	Economy w/E. S.	306-1021-ND	2.21	1.87	1.57	1.28	8L01-05-101
	SPST	5	10	.5	1	Economy w/E. S. & Diode	306-1022-ND	2.41	2.04	1.71	1.39	8L01-05-111
	SPST	12	24	.5	1	Economy	306-1023-ND	2.05	1.74	1.45	1.19	8L01-12-001
	SPST	12	24	.5	1	Economy w/Diode	306-1024-ND	2.21	1.87	1.57	1.28	8L01-12-011
	SPST	12	24	.5	1	Economy w/E. S.	306-1025-ND	2.21	1.87	1.57	1.28	8L01-12-101
	SPST	12	24	.5	1	Economy w/E. S. & Diode	306-1026-ND	2.41	2.04	1.71	1.39	8L01-12-111
	SPST	24	11.1	.5	1	Economy	306-1027-ND	2.21	1.87	1.57	1.28	8L01-24-001
	SPST	24	11.1	.5	1	Economy w/Diode	306-1028-ND	2.41	2.04	1.71	1.39	8L01-24-011
	SPST	24	11.1	.5	1	Economy w/E. S.	306-1029-ND	2.41	2.04	1.71	1.39	8L01-24-101
	SPST	24	11.1	.5	1	Economy w/E. S. & Diode	306-1030-ND	2.57	2.18	1.82	1.49	8L01-24-111
	DPST	5	10	.5	1	Economy	306-1031-ND	3.09	2.62	2.19	1.79	8L02-05-00
	DPST	5	10	.5	1	Economy w/Diode	306-1032-ND	3.25	2.75	2.30	1.88	8L02-05-01
	DPST	5	10	.5	1	Economy w/E. S.	306-1033-ND	3.25	2.75	2.30	1.88	8L02-05-10
	DPST	5	10	.5	1	Economy w/E. S. & Diode	306-1034-ND	3.41	2.89	2.42	1.97	8L02-05-11
	DPST	12	24	.5	1	Economy	306-1035-ND	3.09	2.62	2.19	1.79	8L02-12-00
	DPST	12	24	.5	1	Economy w/Diode	306-1036-ND	3.25	2.75	2.30	1.88	8L02-12-01
	DPST	12	24	.5	1	Economy w/E. S.	306-1037-ND	3.25	2.75	2.30	1.88	8L02-12-10
	DPST	12	24	.5	1	Economy w/E. S. & Diode	306-1038-ND	3.41	2.89	2.42	1.97	8L02-12-11
	DPST	24	11.1	.5	1	Economy	306-1039-ND	3.25	2.75	2.30	1.88	8L02-24-00
	DPST	24	11.1	.5	1	Economy w/Diode	306-1040-ND	3.41	2.89	2.42	1.97	8L02-24-01

Fig.	Circuit	Coil Voltage (DC)	Coil Current (mA)	Switching Current (A)	Carry Current (A)	Additional Features	Digi-Key Part No.	Price Each				Coto Part No.
								1	10	50	100	
5	DPST	24	11.1	.5	1	Economy w/E. S.	306-1041-ND	3.41	2.89	2.42	1.97	8L02-24-10
	DPST	24	11.1	.5	1	Economy w/E. S. & Diode	306-1042-ND	3.58	3.03	2.53	2.07	8L02-24-11
	SPDT	5	10	.25	.5	Economy	306-1043-ND	4.45	3.77	3.16	2.57	8L41-05-001
	SPDT	5	10	.25	.5	Economy w/Diode	306-1044-ND	4.62	3.91	3.27	2.67	8L41-05-011
	SPDT	5	10	.25	.5	Economy w/E. S.	306-1045-ND	4.62	3.91	3.27	2.67	8L41-05-101
	SPDT	5	10	.25	.5	Economy w/E. S. & Diode	306-1046-ND	4.78	4.05	3.39	2.76	8L41-05-111
	SPDT	12	24	.25	.5	Economy	306-1047-ND	4.45	3.77	3.16	2.57	8L41-12-001
	SPDT	12	24	.25	.5	Economy w/Diode	306-1048-ND	4.62	3.91	3.27	2.67	8L41-12-011
	SPDT	12	24	.25	.5	Economy w/E. S.	306-1050-ND	4.62	3.91	3.27	2.67	8L41-12-101
	SPDT	12	24	.25	.5	Economy w/E. S. & Diode	306-1051-ND	4.78	4.05	3.39	2.76	8L41-12-111
	SPDT	24	11.1	.25	.5	Economy	306-1052-ND	4.62	3.91	3.27	2.67	8L41-24-001
	SPDT	24	11.1	.25	.5	Economy w/E. S.	306-1053-ND	4.78	4.05	3.39	2.76	8L41-24-101
	SPDT	24	11.1	.25	.5	Economy w/E. S. & Diode	306-1054-ND	4.94	4.18	3.50	2.85	8L41-24-111
6	SPST	5	10	.5	1.5	Extended Lifetime	306-1055-ND	3.41	2.89	2.42	1.97	9001-05-00
	SPST	5	10	.5	1.5	Extended Lifetime w/Diode	306-1056-ND	3.58	3.03	2.53	2.07	9001-05-01
	SPST	12	12	.5	1.5	Extended Lifetime	306-1057-ND	3.41	2.89	2.42	1.97	9001-12-00
	SPST	12	12	.5	1.5	Extended Lifetime w/Diode	306-1058-ND	3.58	3.03	2.53	2.07	9001-12-01
	SPST	5	10	.5	1.5	50Ω Coaxial Shield	306-1059-ND	4.45	3.77	3.16	2.57	9002-05-00
	SPST	5	10	.5	1.5	50Ω Coaxial Shield w/Diode	306-1060-ND	4.62	3.91	3.27	2.67	9002-05-01
	SPST	12	12	.5	1.5	50Ω Coaxial Shield w/Diode	306-1061-ND	4.62	3.91	3.27	2.67	9002-12-01
	SPST	5	10	.5	1	Economy	306-1062-ND	1.37	1.16	.97	.79	9007-05-00
	SPST	5	10	.5	1	Economy w/Diode	306-1063-ND	1.46	1.24	1.04	.85	9007-05-01
	SPST	12	12	.5	1	Economy	306-1064-ND	1.37	1.16	.97	.79	9007-12-00
	SPST	5	10	.25	1	Miniature Sip	306-1065-ND	4.26	3.61	3.02	2.46	9091-05-00
	SPST	5	10	.25	1	Miniature Sip w/Diode	306-1066-ND	4.45	3.77	3.16	2.57	9091-05-01
	SPST	12	12	.25	1	Miniature Sip	306-1067-ND	4.45	3.77	3.16	2.57	9091-12-01
Surface Mount												
7	SPST	5	20	.5	1.5	SMT- J-Lead	306-1068-ND	5.98	5.06	4.24	3.45	9201-05-20
	SPST	5	20	.5	1.5	SMT- Coaxial Shield, Gull Lead	306-1069-ND	6.18	5.23	4.37	3.57	9202-05-00
	SPST	5	20	.5	1.5	50Ω Coaxial Shield, J-Lead	306-1070-ND	6.18	5.23	4.37	3.57	9202-05-20
8	SPST	5	20	.5	1.0	SMT - Gull Lead	306-1071-ND	6.83	5.78	4.83	3.94	9401-05-00
	SPST	12	14.5	.5	1.0	SMT - Gull Lead	306-1072-ND	6.83	5.78	4.83	3.94	9401-12-00
	SPST	5	20	.5	1.0	50Ω Coaxial Shield, J-Lead	306-1073-ND	7.35	6.22	5.20	4.24	9402-05-20
	SPST	12	14.5	.5	1.0	50Ω Coaxial Shield, Gull Lead	306-1074-ND	7.35	6.22	5.20	4.24	9402-12-00
9	SPST	5	33.3	.25	.5	50Ω Coaxial Shield, Gull Lead	306-1075-ND	8.48	7.34	6.28	5.38	9802-05-00
	SPST	5	33.3	.25	.5	50Ω Coaxial Shield, J-Lead	306-1076-ND	8.48	7.34	6.28	5.38	9802-05-20

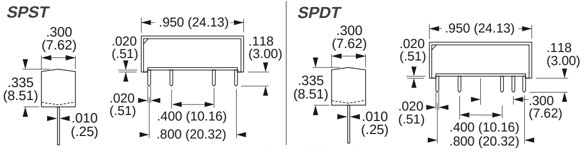
HAMLIN Reed Relays

Fig. 1



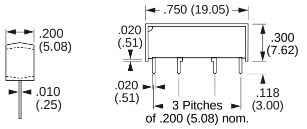
- Transfer Molded Body

Fig. 2

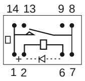
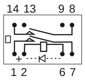
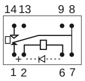
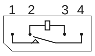
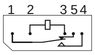
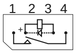


- Transfer Molded Body

Fig. 3



- Transfer Molded Body • Maximum Space Utilization

Top View	Coil Volt. (VDC)	Coil Res. (Ω)	Pickup/ Dropout (VDC@ 25°C)	Switch. Volt. (VDC)	Switch Current (Amps)	Carry Current (Amps)	Cont. Res. (Ω)	Oper./ Rel. Time (msec)	Ins. Res. (Ω)	Digi-Key Part No.	Pricing				Hamlin Part No.
											1	10	50	100	
Fig. 1 — 700 Series DIP Reed Relays															
1A SPST-NO † With Diode Suppressor 	5	500	3.75/0.5	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE100-ND	2.44	20.63	86.25	140.63	HE721A0500
	5	500	3.75/0.5	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE101-ND†	2.70	22.83	95.45	155.63	HE721A0510
	12	1000	8.0/1.0	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE102-ND	2.70	22.83	95.45	155.63	HE721A1200
	12	1000	8.0/1.0	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE103-ND†	2.96	25.03	104.65	170.63	HE721A1210
	24	2150	16.0/2.0	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE104-ND	3.35	28.33	118.45	193.13	HE721A2400
	24	2150	16.0/2.0	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE105-ND†	3.61	30.53	127.65	208.13	HE721A2410
2A DPST-NO † With Diode Suppressor 	5	150	3.75/0.5	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE106-ND	4.06	34.38	143.75	234.38	HE722A0600
	5	150	3.75/0.5	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE107-ND†	4.32	36.58	152.95	249.38	HE722A0610
	12	500	8.0/1.0	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE108-ND	4.32	36.58	152.95	249.38	HE722A1200
	12	500	8.0/1.0	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE109-ND†	4.58	38.78	162.15	264.38	HE722A1210
	24	2150	16.0/2.0	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE110-ND	5.36	45.38	189.75	309.38	HE722A2400
	24	2150	16.0/2.0	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE111-ND†	5.62	47.58	198.95	324.38	HE722A2410
1C SPDT-CO † With Diode Suppressor 	5	200	3.75/0.5	175	0.25	1	0.200	3.0/3.0	10^9	HE112-ND	5.56	47.03	196.65	320.63	HE721C0500
	5	200	3.75/0.5	175	0.25	1	0.200	3.0/3.0	10^9	HE113-ND†	5.82	49.23	205.85	335.63	HE721C0510
	12	500	8.0/1.0	175	0.25	1	0.200	3.0/3.0	10^9	HE114-ND	5.82	49.23	205.85	335.63	HE721C1200
	12	500	8.0/1.0	175	0.25	1	0.200	3.0/3.0	10^9	HE115-ND†	6.11	51.70	216.20	352.50	HE721C1210
	24	2000	16.0/2.0	175	0.25	1	0.200	3.0/3.0	10^9	HE116-ND	6.66	56.38	235.75	384.38	HE721C2400
	24	2000	16.0/2.0	175	0.25	1	0.200	3.0/3.0	10^9	HE117-ND†	6.96	58.85	246.10	401.25	HE721C2410
Fig. 2 — 3300 Series SIP Reed Relays															
1A SPST-NO 	5	500	3.75/0.5	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE200-ND	2.37	20.08	83.95	136.88	HE3321A0400
	12	500	9.0/1.0	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE201-ND	2.37	20.08	83.95	136.88	HE3321A1200
	24	2000	18.0/2.0	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE202-ND	2.99	25.30	105.80	172.50	HE3321A2400
1C SPDT-CO 	5	125	3.75/0.5	175	0.25	1	0.200	3.0/3.0	10^9	HE203-ND	4.81	40.70	170.20	277.50	HE3321C0500
	12	500	9.0/1.0	175	0.25	1	0.200	3.0/3.0	10^9	HE204-ND	5.07	42.90	179.40	292.50	HE3321C1200
	24	2000	18.0/2.0	175	0.25	1	0.200	3.0/3.0	10^9	HE205-ND	5.53	46.75	195.50	318.75	HE3321C2400
Fig. 3 — 3600 Series Ultra Miniature Reed Relays															
1A SPST-NO † With Diode Suppressor 	5	500	3.75/0.5	200	0.5	1.25	0.200	1.0/0.5	10^{10}	HE206-ND	2.15	18.15	75.90	123.75	HE3621A0500
	5	500	3.75/0.5	200	0.5	1.25	0.200	1.0/0.5	10^{10}	HE207-ND†	2.41	20.35	85.10	138.75	HE3621A0510
	12	1000	8.0/1.0	200	0.5	1.25	0.200	1.0/0.5	10^{10}	HE208-ND	2.44	20.63	86.25	140.63	HE3621A1200
	12	1000	8.0/1.0	200	0.5	1.25	0.200	1.0/0.5	10^{10}	HE209-ND†	2.73	23.10	96.60	157.50	HE3621A1210
	24	2150	16.0/2.0	200	0.5	1.25	0.200	1.0/0.5	10^{10}	HE210-ND	3.06	25.85	108.10	176.25	HE3621A2400
	24	2150	16.0/2.0	200	0.5	1.25	0.200	1.0/0.5	10^{10}	HE211-ND†	3.32	28.05	117.30	191.25	HE3621A2410

CROSS REFERENCE CHART

HAMLIN Part No.	ELEC-TROL Part No.
HE721A0500	RA30451051
HE721A0510	RA30461051
HE721A1200	RA30451121
HE721A1210	RA30461121
HE721A2400	RA30451241
HE721A2410	RA30461241
HE722A0600	—
HE722A0610	—
HE722A1200	RA30981121
HE722A1210	RA31231121
HE722A2400	RA30981241
HE722A2410	RA31231241
HE721C0500	RA30421051
HE721C0510	RA30441051
HE721C1200	RA30421121
HE721C1210	RA30441121
HE721C2400	RA30421241
HE721C2410	RA30441241
HE3321A0400	BBS1A05A10
HE3321A1200	BBS1A12A10
HE3321A2400	BBS1A24A10
HE3321C0500	BBS1C05A10
HE3321A1200	BBS1C12A10
HE3321C2400	BBS1C24A10
HE3621A0500	RA32041051
HE3621A0510	RA32051051
HE3621A1200	RA32041121
HE3621A1210	RA32051121
HE3621A2400	RA32041241
HE3621A2410	RA32051241

EAC Electronic Applications Company **Reed Relays**

Fig. 1 Dip Reed Relays, Epoxy Molded

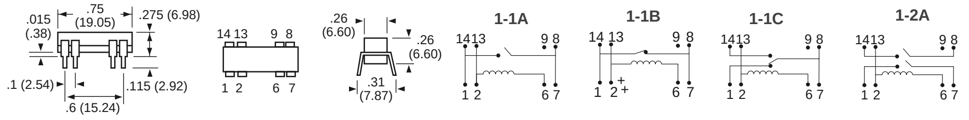


Fig. 2 Series 10 Reed Relays

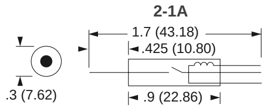


Fig. 3 Series 30 Reed Relays

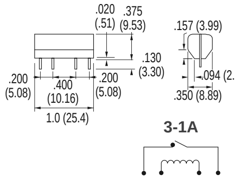


Fig. 4 Open-Line Reed Relays

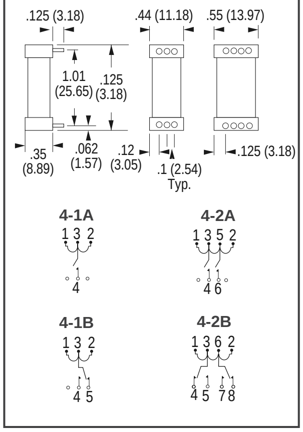


Fig. Form	Coil Volt. (VDC)	Coil Res. (Ω)	Pickup/ Dropout (VDC)	Max. Volt. (VDC)	Cur. Rtg. (A)	Cont. Res. (Ω)	Oper./ Release / Bounce Time (msec.)	Power Rtg. (W)	Ins. Res. (Ω)	Digi-Key Part No.	Price Each				EAC Part No.
											1	10	50	100	
Dip Reed Relays, Epoxy Molded															
1-1A	5	500	4.0/0.5	100	.50	.20	.5/.5/.5	10	10^{10}	Z660-ND	3.61	3.06	2.56	2.09	D1A05A
	12	1000	9.6/1.2	100	.50	.20	.5/.5/.5	10	10^{10}	Z661-ND	3.61	3.06	2.56	2.09	D1A12A
	24	2200	19.2/2.4	100	.50	.20	.5/.5/.5	10	10^{10}	Z612-ND	3.64	3.08	2.58	2.10	D1A24A
1-2A	5	150	4.0/0.5	100	.50	.20	.5/.5/.5	10	10^{10}	Z662-ND	5.30	4.49	3.75	3.06	D2A05A
	12	500	9.6/1.2	100	.50	.20	.5/.5/.5	10	10^{10}	Z614-ND	5.30	4.49	3.75	3.06	D2A12A
	24	1750	19.2/2.4	100	.50	.20	.5/.5/.5	10	10^{10}	Z615-ND	5.46	4.62	3.87	3.15	D2A24A
1-1B	5	450	4.0/0.5	100	.50	.20	.35/.5/.5	10	10^{10}	Z616-ND	5.30	4.49	3.75	3.06	D1B05A
	12	450	9.6/1.2	100	.50	.20	.35/.5/.5	10	10^{10}	Z617-ND	5.30	4.49	3.75	3.06	D1B12A
	24	1750	19.2/2.4	100	.50	.20	.35/.5/.5	10	10^{10}	Z618-ND	5.30	4.49	3.75	3.06	D1B24A
1-1C	5	200	4.0/0.5	28	.25	.20	.5/.5/NO = .5, NC = 1.5	3	10^{9}	Z663-ND	6.47	5.48	4.58	3.74	D1C05C
	12	500	4.0/0.5	28	.25	.20	.5/.5/NO = .5, NC = 1.5	3	10^{9}	Z664-ND	6.47	5.48	4.58	3.74	D1C12C
	24	1750	19.2/2.4	28	.25	.20	.5/.5/NO = .5, NC = 1.5	3	10^{9}	Z621-ND	6.66	5.64	4.72	3.85	D1C24C
Series 10 Reed Relays															
2-1A	3	250	2.25/0.3	200	.5	.10	.5/.25/—	5	10^{10}	Z622-ND	3.84	3.25	2.72	2.22	R1A3AHH
	5	700	3.75/0.5	200	.5	.10	.5/.25/—	5	10^{10}	Z623-ND	3.84	3.25	2.72	2.22	R1A5AHH
	12	2000	9.0/1.2	200	.5	.10	.5/.25/—	5	10^{10}	Z624-ND	3.84	3.25	2.72	2.22	R1A12AHH
	24	4000	18.0/2.4	200	.5	.10	.5/.25/—	5	10^{10}	Z625-ND	4.81	4.07	3.41	2.78	R1A24AHH
	3	30	2.25/0.3	300	2	.10	.5/.25/—	50	10^{10}	Z626-ND	3.84	3.25	2.72	2.22	P1A3A
	5	100	3.75/0.5	300	2	.10	.5/.25/—	50	10^{10}	Z627-ND	3.84	3.25	2.72	2.22	P1A5A
	12	500	9.0/1.2	300	2	.10	.5/.25/—	50	10^{10}	Z628-ND	3.84	3.25	2.72	2.22	P1A12A
	24	1000	18.0/2.4	300	2	.10	.5/.25/—	50	10^{10}	Z629-ND	4.81	4.07	3.41	2.78	P1A24A
Series 30 Reed Relays															
3-1A	5	500	3.8/0.5	200	.5	.20	0.4/0.1/0.3	10	10^{9}	Z530-ND	3.61	3.06	2.56	2.09	SD1A05A
	12	500	8.0/1.0	200	.5	.20	0.4/0.1/0.3	10	10^{9}	Z531-ND	3.61	3.06	2.56	2.09	SD1A12A
	24	2000	16.0/2.0	200	.5	.20	0.4/0.1/0.3	10	10^{9}	Z532-ND	3.84	3.25	2.72	2.22	SD1A24A
	5	500	3.8/0.5	250	1	.20	0.5/0.3/0.3	50	10^{9}	Z533-ND	4.13	3.50	2.93	2.39	SD1A05D
	12	500	8.0/1.0	250	1	.20	0.5/0.3/0.3	50	10^{9}	Z534-ND	3.90	3.30	2.76	2.25	SD1A12D
	24	2000	16.0/2.0	250	1	.20	0.5/0.3/0.3	50	10^{9}	Z535-ND	3.84	3.25	2.72	2.22	SD1A24D
Open-Line Reed Relays															
4-1A	5	500	3.8/0.5	250	1	.10	0.4/0.2/0.25	20	10^{10}	Z638-ND	5.82	4.93	4.12	3.36	20-1051-10
	12	500	8.0/1.0	250	1	.10	0.4/0.2/0.25	20	10^{10}	Z639-ND	5.82	4.93	4.12	3.36	20-1121-10
	24	2000	16.0/2.0	250	1	.10	0.4/0.2/0.25	20	10^{10}	Z640-ND	6.53	5.53	4.63	3.77	20-1241-10
4-2A	5	200	3.8/0.5	250	1	.10	0.5/0.2/0.25	20	10^{10}	Z641-ND	7.38	6.25	5.23	4.26	20-2051-10
	12	440	8.0/1.0	250	1	.10	0.5/0.2/0.25	20	10^{10}	Z642-ND	7.41	6.27	5.25	4.28	20-2121-10
	24	1750	16.0/2.0	250	1	.10	0.5/0.2/0.25	20	10^{10}	Z643-ND	7.80	6.60	5.52	4.50	20-2241-10
4-1B	5	500	3.8/0.5	200	.5	.10	0.5/0.4/1.5	10	10^{10}	Z644-ND	6.92	5.99	5.13	4.39	20-1051-30
	12	500	8.0/1.0	200	.5	.10	0.5/0.4/1.5	10	10^{10}	Z645-ND	6.92	5.99	5.13	4.39	20-1121-30
	24	2000	16.0/2.0	200	.5	.10	0.5/0.4/1.5	10	10^{10}	Z646-ND	7.33	6.35	5.43	4.66	20-1241-30
4-2B	5	200	3.8/0.5	200	.5	.10	0.6/0.4/1.5	10	10^{10}	Z647-ND	10.24	8.87	7.59	6.51	20-2051-30
	12	310	8.0/1.0	200	.5	.10	0.6/0.4/1.5	10	10^{10}	Z648-ND	10.27	8.89	7.61	6.52	20-2121-30
	24	1250	16.0/2.0	200	.5	.10	0.6/0.4/1.5	10	10^{10}	Z649-ND	10.48	9.07	7.76	6.65	20-2241-30

Surface Mount Reed Relays

Fig. 1

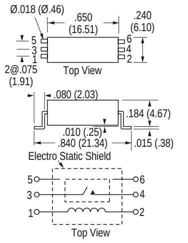


Fig. 2

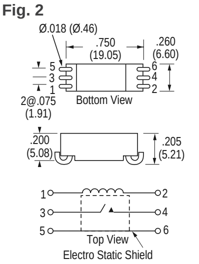


Fig. 3

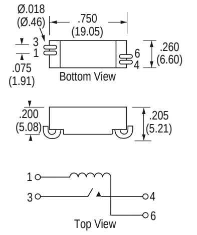


Fig. 4

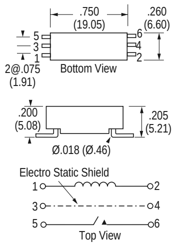


Fig. 5

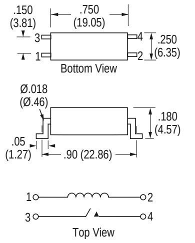


Fig. 6

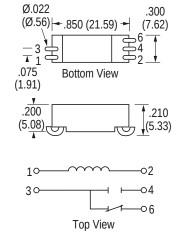


Fig.	Coil Voltage (VDC)	Coil Resistance (Ω)	Pickup/ Dropout (VDC)	Maximum Voltage (VDC)	Current Rating mA	Cont. Resistance (Ω)	Operate Time (msec.)	Ins. Resistance (Ω)	Digi-Key Part No.	Price Each			EAC Part No.
										1	10	50	
1	4.5	150	3.5/0.5	250	500	.1	.35	$7x10^{12}$	Z650-ND	8.66	7.50	6.42	SMRR1-5-150C
2	5	150	3.75/0.4	200	500	.150	.35	$7x10^{12}$	Z651-ND	8.66	7.50	6.42	SMRR2-5-150C
3	5	150	3.75/0.4	200	500	.150	.35	$7x10^{12}$	Z652-ND	7.93	6.71	5.62	SMRR2-5-150E
4	5	150	3.8/0.5	250	500	.150	.35	$7x10^{12}$	Z653-ND	8.58	7.43	6.36	SMRR2-5-150F
5	5	250	3.75/0.4	200	500	.150	.35	$7x10^{12}$	Z654-ND	8.06	6.82	5.71	SMRR2-5-250
6	5	150	3.8/0.5	28	250	.2	.5	$7x10^{12}$	Z655-ND	9.07	7.86	6.72	SMRR3-5-150

CHERRY

Magnetic Position Sensors

Features: • **Operating Temperature:** -40° to 105°C • **Leads:** 24 AWG PVC, Pre-tinned, 12" long

Fig. 1 *NEW!*

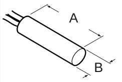


Fig. 2 *NEW!*

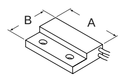


Fig. 3 *NEW!*

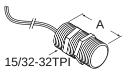


Fig. 4

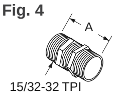


Fig.	Description	Dim. - Inch A	B	Digi-Key Part No.	Price Each 1	10	100	Cherry Part No.
1	Magnetic Position Sensor, 10W, SPST-NO, .5A	1.00	ø.243	CH402-ND *NEW!*	3.16	2.81	2.20	MP201701
1	Magnetic Position Sensor, 3W, SPST-NC, .2A	1.00	ø.243	CH403-ND *NEW!*	4.75	4.23	3.31	MP201702
1	Magnetic Position Sensor, 3W, SPDT-CO, .2A	1.00	ø.243	CH404-ND *NEW!*	5.21	4.64	3.63	MP201703
—	Smooth Barrel Actuator	—	—	CH411-ND *NEW!*	2.97	2.64	2.07	AS201701
2	Mini Flange Mount Proximity Sensors,10W, SPST-NO, .5A	.906	.550	CH405-ND *NEW!*	3.46	3.08	2.41	MP201801
2	Mini Flange Mount Proximity Sensors, 3W, SPST-NC, .2A	.906	.550	CH406-ND *NEW!*	5.21	4.64	3.63	MP201802
—	Mini Flange Mount Actuator	—	—	CH412-ND *NEW!*	3.11	2.76	2.17	AS201801
2	Flange Mount Proximity Sensors, 10W, SPST-NO, .5A	1.125	.750	CH407-ND* *NEW!*	3.59	3.20	2.51	MP201901
2	Flange Mount Proximity Sensors, 3W, SPST-NC, .2A	1.125	.750	CH408-ND* *NEW!*	5.37	4.78	3.75	MP201902
2	Flange Mount Proximity Sensors, 3W, SPST-CO, .2A	1.125	.750	CH409-ND* *NEW!*	5.89	5.24	4.10	MP201903
—	Flange Mount Actuator	—	—	CH413-ND *NEW!*	3.38	3.00	2.35	AS201901
3	Magnetic Position Sensor 10W, SPST-NO, .5A	1.00	—	CH410-ND *NEW!*	10.13	9.00	7.05	MP200701
4	Threaded Actuator, South pole magnet.	1.00	—	CH397-ND	14.01	12.46	8.62	HE61-0400

*Wire leads extend from opposite side of switch

OMRON® Power PCB Relays

9135B-ND **Omron Relay Data Book........................$2.95**

Fig.	Contact Form	Coil Volt. (VDC)	Coil Res. (Ω)	Contact Rtg's. Resistive (A) 24 VDC	Contact Rtg's. Resistive (A) 115 VAC	Oper. Volt. (% of Rated) Pull/Drop/Max. On/Out/Cont.	Oper./Rel. Time/Time (msec.)	Dim. (mm) H x L x W	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 50	Price Each 100	Omron Part No.
	PC Mount Power Relays with Quick-Connect Terminals													
1	SPST-NO	12	160	20	20	70/10/110	20/10	23.5 x 30.5 x 16	Z952-ND	5.78	5.20	4.62	4.16	G4A-1A-E-DC12
	SPST-NO	24	640	20	20	70/10/110	20/10	23.5 x 30.5 x 16	Z953-ND	5.78	5.20	4.62	4.16	G4A-1A-E-DC24
2	SPDT	12	135	15	15	80/10/110	20/20	29 x 50 x 29	Z956-ND	9.33	8.40	7.46	6.72	G4B-112T1CUS-DC12
	SPDT	24	480	15	15	80/10/110	20/20	29 x 50 x 29	Z957-ND	9.33	8.40	7.46	6.72	G4B-112T1CUS-DC24
	SPDT	24VAC	260	15	15	80/30/110	20/20	29 x 50 x 29	Z958-ND	9.33	8.40	7.46	6.72	G4B-112T1CUS-AC24
	SPDT	120VAC	6500	15	15	80/30/110	20/20	29 x 50 x 29	Z959-ND	9.33	8.40	7.46	6.72	G4B-112T1CUS-AC120
2	SPST-NO	12	135	15	15	80/10/110	20/20	29 x 50 x 29	Z196-ND	8.75	7.88	7.00	6.30	G4B-112TUS-DC12
	SPST-NO	24	480	15	15	80/10/110	20/20	29 x 50 x 29	Z197-ND	8.75	7.88	7.00	6.30	G4B-112TUS-DC24
	SPST-NO	120VAC	6500	15	15	80/30/110	20/20	29 x 50 x 29	Z198-ND	8.75	7.88	7.00	6.30	G4B-112TUS-AC120
—	SPDT	5	47	10	10	70/15/110	15/5	29 x 29 x 13	Z850-ND	4.83	4.35	3.86	3.48	G2R-1S-DC5
	SPDT	12	275	10	10	70/15/110	15/5	29 x 29 x 13	Z851-ND	4.83	4.35	3.86	3.48	G2R-1S-DC12
	SPDT	24	1100	10	10	70/15/110	15/5	29 x 29 x 13	Z852-ND	4.83	4.35	3.86	3.48	G2R-1S-DC24
	SPDT	24VAC	260	10	10	80/30/110	15/10	29 x 29 x 13	Z853-ND	6.43	5.79	5.14	4.63	G2R-1S-AC24
	SPDT	120VAC	6500	10	10	80/30/110	15/10	29 x 29 x 13	Z854-ND	7.03	6.33	5.62	5.06	G2R-1S-AC120
—	DPDT	5	47	5	5	70/15/110	15/5	29 x 29 x 13	Z199-ND	5.65	5.09	4.52	4.07	G2R-2S-DC5
	DPDT	12	275	5	5	70/15/110	15/5	29 x 29 x 13	Z200-ND	5.50	4.95	4.40	3.96	G2R-2S-DC12
	DPDT	24	1100	5	5	70/15/110	15/5	29 x 29 x 13	Z201-ND	5.50	4.95	4.40	3.96	G2R-2S-DC24
	DPDT	48	4170	5	5	70/15/110	15/5	29 x 29 x 13	Z202-ND	5.65	5.09	4.52	4.07	G2R-2S-DC48
	DPDT	24VAC	260	5	5	80/30/110	15/10	29 x 29 x 13	Z203-ND	7.15	6.44	5.72	5.15	G2R-2S-AC24
	DPDT	120VAC	6500	5	5	80/30/110	15/10	29 x 29 x 13	Z204-ND	7.70	6.93	6.16	5.55	G2R-2S-AC120
	DPDT	220VAC	22000	5	5	80/30/110	15/5	29 x 29 x 13	Z205-ND	12.75	11.48	10.20	9.18	G2R-2S-AC220
—	Track Mounted Socket for G2R-1S Series							59 x 85 x 15	Z855-ND	3.65	3.29	2.92	2.63	P2RF-05-E
—	Track Mounted Socket for G2R-2S Series							59 x 85 x 15	Z207-ND	6.03	5.43	4.82	4.34	P2RF-08-E
—	PC Mount Relay Socket for G2R-1S Series							35.5 x 14.47 x 7.11	Z995-ND	2.05	1.85	1.64	1.48	P2R-05P
	PC Mount Power Relays													
3	SPST-NO	5	62.5	12	12	70/10/130	7/2	29 x 16 x 13	Z139-ND	2.70	2.43	2.16	1.95	G2RL-1A-DC5
	SPST-NO	12	360	12	12	70/10/130	7/2	29 x 16 x 13	Z140-ND	2.70	2.43	2.16	1.95	G2RL-1A-DC12
	SPST-NO	24	1440	12	12	70/10/130	7/2	29 x 16 x 13	Z141-ND	2.70	2.43	2.16	1.95	G2RL-1A-DC24
3	SPDT	5	62.5	12	12	70/10/130	7/2	29 x 16 x 13	Z142-ND	3.40	3.06	2.72	2.45	G2RL-14-DC5
	SPDT	12	360	12	12	70/10/130	7/2	29 x 16 x 13	Z143-ND	3.40	3.06	2.72	2.45	G2RL-14-DC12
	SPDT	24	1440	12	12	70/10/130	7/2	29 x 16 x 13	Z144-ND	3.40	3.06	2.72	2.45	G2RL-14-DC24
	SPDT	48	5358	12	12	70/10/130	7/2	29 x 16 x 13	Z145-ND	3.78	3.40	3.02	2.72	G2RL-14-DC48
3	DPDT	5	62.5	8	8	70/10/130	7/2	29 x 16 x 13	Z146-ND	4.03	3.63	3.22	2.90	G2RL-24-DC5
	DPDT	12	360	8	8	70/10/130	7/2	29 x 16 x 13	Z147-ND	4.03	3.63	3.22	2.90	G2RL-24-DC12
	DPDT	24	1440	8	8	70/10/130	7/2	29 x 16 x 13	Z148-ND	4.03	3.63	3.22	2.90	G2RL-24-DC24
	DPDT	48	5358	8	8	70/10/130	7/2	29 x 16 x 13	Z149-ND	4.38	3.94	3.50	3.15	G2RL-24-DC48
3	SPDT†	5	47	10	10	70/15/110	15/5	25.5 x 29 x 13	Z743-ND	3.40	3.06	2.72	2.45	G2R-14-DC5
	SPDT†	12	275	10	10	70/15/110	15/5	25.5 x 29 x 13	Z744-ND	3.38	3.04	2.70	2.43	G2R-14-DC12
	SPDT†	24	1100	10	10	70/15/110	15/5	25.5 x 29 x 13	Z745-ND	3.38	3.04	2.70	2.43	G2R-14-DC24
	SPDT†	24VAC	260	10	10	80/30/110	15/10	25.5 x 29 x 13	Z843-ND	5.73	5.16	4.58	4.13	G2R-14-AC24
	SPDT†	120VAC	6500	10	10	80/30/110	15/10	25.5 x 29 x 13	Z844-ND	6.30	5.67	5.04	4.54	G2R-14-AC120
4	DPDT†	5	47	5	5	70/15/110	15/5	25.5 x 29 x 13	Z746-ND	3.93	3.54	3.14	2.83	G2R-24-DC5
	DPDT†	12	275	5	5	70/15/110	15/5	25.5 x 29 x 13	Z747-ND	3.93	3.54	3.14	2.83	G2R-24-DC12BYKUM
	DPDT†	24	1100	5	5	70/15/110	15/5	25.5 x 29 x 13	Z748-ND	3.93	3.54	3.14	2.83	G2R-24-DC24BYKUM
	DPDT	24VAC	260	5	5	80/30/110	15/10	25.5 x 29 x 13	Z845-ND	6.55	5.90	5.24	4.72	G2R-24-AC24
	DPDT	120VAC	6500	5	5	80/30/110	15/10	25.5 x 29 x 13	Z846-ND	7.15	6.44	5.72	5.15	G2R-24-AC120
5	SPDT	5	47	16	16	70/15/110	15/5	25.5 x 29 x 13	Z847-ND	3.48	3.13	2.78	2.51	G2R-1-E-DC5
	SPDT	12	275	16	16	70/15/110	15/5	25.5 x 29 x 13	Z848-ND	3.48	3.13	2.78	2.51	G2R-1-E-DC12
	SPDT	24	1100	16	16	70/15/110	15/5	25.5 x 29 x 13	Z849-ND	3.48	3.13	2.78	2.51	G2R-1-E-DC24
6	SPST-NO	12	160	20	20	70/10/110	20/10	23.5 x 30.5 x 16	Z954-ND	6.18	5.56	4.94	4.45	G4A-1A-P-E-DC12
	SPST-NO	24	640	20	20	70/10/110	20/10	23.5 x 30.5 x 16	Z955-ND	6.18	5.56	4.94	4.45	G4A-1A-P-E-DC24
7	SPST-NO†	12	180	15	15	80/10/110	20/5	30.5 x 30.5 x 19.5	Z961-ND	5.43	4.89	4.34	3.91	G4W1114PUSTV8HPDC12
	SPST-NO†	24	720	15	15	80/10/110	20/5	30.5 x 30.5 x 19.5	Z962-ND	5.43	4.89	4.34	3.91	G4W1114PUSTV8HPDC24
8	DPST-NO†	12	180	10	10	80/10/110	20/5	30.5 x 30.5 x 19.5	Z963-ND	6.45	5.81	5.16	4.65	G4W-2214PUSHP-DC12
	DPST-NO†	24	720	10	10	80/10/110	20/5	30.5 x 30.5 x 19.5	Z964-ND	6.45	5.81	5.16	4.65	G4W-2214PUSHP-DC24
9	SPDT†*	5	63	10	10	75/10/130	10/5	19.0 x 22.5 x 16.5	Z1011-ND	1.88	1.69	1.50	1.35	G5LE-14-DC5
	SPDT†*	12	360	10	10	75/10/130	10/5	19.0 x 22.5 x 16.5	Z1012-ND	1.88	1.69	1.50	1.35	G5LE-14-DC12
	SPDT†*	24	1440	10	10	75/10/130	10/5	19.0 x 22.5 x 16.5	Z1013-ND	1.88	1.69	1.50	1.35	G5LE-14-DC24
9	SPDT	5	63	10	10	75/10/130	10/5	19.0 x 22.5 x 16.5	Z1014-ND	1.70	1.53	1.36	1.23	G5LE-1-DC5
	SPDT	12	360	10	10	75/10/130	10/5	19.0 x 22.5 x 16.5	Z1015-ND	1.70	1.53	1.36	1.23	G5LE-1-DC12
	SPDT	24	1440	10	10	75/10/130	10/5	19.0 x 22.5 x 16.5	Z1016-ND	1.70	1.53	1.36	1.23	G5LE-1-DC24
10	SPDT†	5	114	5	8	70/10/110	15/5	15 x 28.5 x 10	Z987-ND	2.35	2.12	1.88	1.70	G6RN-1-DC5
	SPDT†	12	665	5	8	70/10/110	15/5	15 x 28.5 x 10	Z988-ND	2.35	2.12	1.88	1.70	G6RN-1-DC12
	SPDT†	24	2620	5	8	70/10/110	15/5	15 x 28.5 x 10	Z990-ND	2.35	2.12	1.88	1.70	G6RN-1-DC24
11	SPST	12	720	10	10	75/5/190	10/5	15.8 x 20.3 x 10.3	Z219-ND	2.15	1.94	1.72	1.55	G5Q-1A-DC12
	SPST	24	2880	10	10	75/5/190	10/5	15.8 x 20.3 x 10.3	Z220-ND	2.15	1.94	1.72	1.55	G5Q-1A-DC24
	SPDT	12	720	10	10	75/5/190	10/5	15.8 x 20.3 x 10.3	Z221-ND	2.25	2.03	1.80	1.62	G5Q-1-DC12
	SPDT	24	2880	10	10	75/5/190	10/5	15.8 x 20.3 x 10.3	Z222-ND	2.25	2.03	1.80	1.62	G5Q-1-DC24
	SPST†	12	720	10	10	75/5/190	10/5	15.8 x 20.3 x 10.3	Z223-ND	2.30	2.07	1.84	1.66	G5Q-1A4-DC12
	SPST†	24	2880	10	10	75/5/190	10/5	15.8 x 20.3 x 10.3	Z224-ND	2.30	2.07	1.84	1.66	G5Q-1A4-DC24
	SPDT†	12	720	10	10	75/5/190	10/5	15.8 x 20.3 x 10.3	Z225-ND	2.40	2.16	1.92	1.73	G5Q-14-DC12
	SPDT†	24	2880	10	10	75/5/190	10/5	15.8 x 20.3 x 10.3	Z226-ND	2.40	2.16	1.92	1.73	G5Q-14-DC24

† Sealed case   * Meets FCC Part 68 standards.   All Relays UL/CSA approved

Mtg. Hole Pattern & Connection Diagram
"Bottom view unless otherwise noted"

Fig. 1

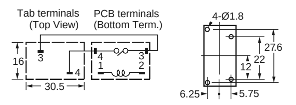


Fig. 2

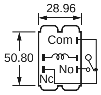
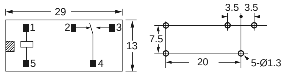


Fig. 3



Pin 2 missing on G4X Series

Fig. 4

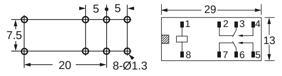


Fig. 5

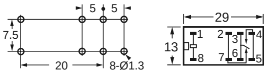


Fig. 6

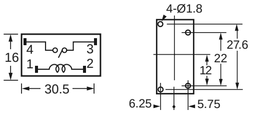


Fig. 7

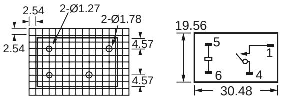


Fig. 8

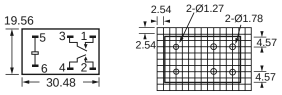


Fig. 9

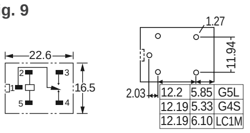


Fig. 10

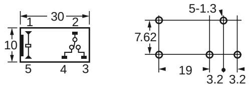
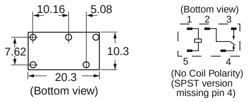
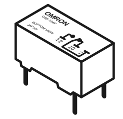
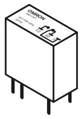


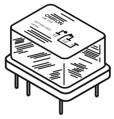
Fig. 11



OMRON® Low Signal • Power PCB Relays







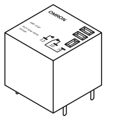


Fig.	Contact Form	Coil Volt. (VDC)	Coil Res. (Ω)	Contact Rtg's. Resistive (A) 24 VDC	Contact Rtg's. Resistive (A) 115 VAC	Oper. Volt. (% of Rated) Pull/Drop/Max. On/Out/Cont.	Oper./Rel. Time/Time (msec.)	Dim. (mm) H x L x W	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 50	Price Each 100	Omron Part No.
						PC Mount Low — Signal Relays								
1	DPDT†*	5	50	2	0.5	75/5/120	7/3	11.5 x 20.5 x 10.1	Z767-ND	2.88	2.59	2.30	2.07	G5V-2-DC5
	DPDT†*	12	288	2	0.5	75/5/120	7/3	11.5 x 20.5 x 10.1	Z768-ND	2.88	2.59	2.30	2.07	G5V-2-DC12
	DPDT†*	24	1152	2	0.5	75/5/120	7/3	11.5 x 20.5 x 10.1	Z769-ND	2.88	2.59	2.30	2.07	G5V-2-DC24
1	DPDT†*	5	70	2	0.5	75/5/120	7/3	11.5 x 20.5 x 10.1	Z770-ND	3.08	2.77	2.46	2.22	G5V-2-H-DC5
	DPDT†*	12	400	2	0.5	75/5/120	7/3	11.5 x 20.5 x 10.1	Z771-ND	3.08	2.77	2.46	2.22	G5V-2-H-DC12
	DPDT†*	24	1600	2	0.5	75/5/120	7/3	11.5 x 20.5 x 10.1	Z772-ND	3.08	2.77	2.46	2.22	G5V-2-H-DC24
1	DPDT	5	166.7	2	0.5	75/5/120	7/3	11.5 x 20.5 x 10.1	Z108-ND	3.18	2.86	2.54	2.29	G5V-2-H1-DC5
	DPDT	12	960	2	0.5	75/5/120	7/3	11.5 x 20.5 x 10.1	Z109-ND	3.18	2.86	2.54	2.29	G5V-2-H1-DC12
	DPDT	24	2880	2	0.5	75/5/120	7/3	11.5 x 20.5 x 10.1	Z110-ND	3.18	2.86	2.54	2.29	G5V-2-H1-DC24
2	SPDT†	5	167	1	0.5	80/10/200	5/5	10 x 12.5 x 7.5	Z773-ND	2.33	2.10	1.86	1.68	G5V-1-DC5
	SPDT†	12	960	1	0.5	80/10/200	5/5	10 x 12.5 x 7.5	Z774-ND	1.63	1.47	1.30	1.17	G5V-1-DC12
	SPDT†	24	3840	1	0.5	80/10/200	5/5	10 x 12.5 x 7.5	Z775-ND	2.33	2.10	1.86	1.68	G5V-1-DC24
1	DPDT†*	5	125	1	0.6	70/10/150	5/5	8.4 x 20.3 x 10.1	Z105-ND	4.68	4.21	3.74	3.37	G6A-234P-ST-US-DC5
	DPDT†*	12	720	1	0.6	70/10/150	5/5	8.4 x 20.3 x 10.1	Z106-ND	4.68	4.21	3.74	3.37	G6A-234P-ST-US-DC12
	DPDT†*	24	2880	1	0.6	70/10/150	5/5	8.4 x 20.3 x 10.1	Z107-ND	4.68	4.21	3.74	3.37	G6A-234P-ST-US-DC24
1	DPDT†*	3	45	2	0.5	70/10/150	5/3	8.4 x 20.3 x 10.1	Z122-ND	4.58	4.12	3.66	3.30	G6A-274P-ST-US-DC3
	DPDT†*	5	125	2	0.5	70/10/150	5/3	8.4 x 20.3 x 10.1	Z123-ND	4.58	4.12	3.66	3.30	G6A-274P-ST-US-DC5
	DPDT†*	12	720	2	0.5	70/10/150	5/3	8.4 x 20.3 x 10.1	Z124-ND	4.58	4.12	3.66	3.30	G6A-274P-ST-US-DC12
	DPDT†*	24	2880	2	0.5	70/10/150	5/3	8.4 x 20.3 x 10.1	Z125-ND	4.58	4.12	3.66	3.30	G6A-274P-ST-US-DC24
3	DPDT	5	125	1	0.5	70/10/150	5/5	7.9 x 16.0 x 9.9	Z706-ND	4.00	3.60	3.20	2.88	G5A-237P-DC5
	DPDT	12	720	1	0.5	70/10/150	5/5	7.9 x 16.0 x 9.9	Z707-ND	4.00	3.60	3.20	2.88	G5A-237P-DC12
	DPDT	24	2880	1	0.5	70/10/150	5/5	7.9 x 16.0 x 9.9	Z708-ND	4.13	3.72	3.30	2.97	G5A-237P-DC24
3	DPDT	5	125	1	0.5	70/10/150	5/5	8.0 x 16.0 x 9.9	Z942-ND	4.33	3.90	3.46	3.12	G5A-234P-DC5
	DPDT	12	720	1	0.5	70/10/150	5/5	8.0 x 16.0 x 9.9	Z943-ND	4.33	3.90	3.46	3.12	G5A-234P-DC12
	DPDT	24	2880	1	0.5	70/10/150	5/5	8.0 x 16.0 x 9.9	Z944-ND	4.33	3.90	3.46	3.12	G5A-234P-DC24
4	SPDT	5	63	2	0.4	70/10/190	5/5	8.0 x 16.0 x 9.9	Z761-ND	3.85	3.47	3.08	2.78	G6E-134P-L-ST-US-DC5
	SPDT	12	360	2	0.4	70/10/190	5/5	8.0 x 16.0 x 9.9	Z762-ND	3.85	3.47	3.08	2.78	G6E-134P-L-ST-US-DC12
	SPDT	24	1440	2	0.4	70/10/190	5/5	8.0 x 16.0 x 9.9	Z763-ND	3.85	3.47	3.08	2.78	G6E-134P-L-ST-US-DC24
4	SPDT†*	5	125	2	0.4	70/10/190	5/5	7.9 x 16.0 x 9.9	Z830-ND	4.03	3.63	3.22	2.90	G6E-134P-ST-US-DC5
	SPDT†*	12	720	2	0.4	70/10/190	5/5	7.9 x 16.0 x 9.9	Z831-ND	4.03	3.63	3.22	2.90	G6E-134P-ST-US-DC12
	SPDT†*	24	2880	2	0.4	70/10/190	5/5	7.9 x 16.0 x 9.9	Z832-ND	4.03	3.63	3.22	2.90	G6E-134P-ST-US-DC24
5	4PDT†*	5	69	1	0.3	70/10/150	7/5	8.4 x 35.4 x 10.1	Z940-ND	10.10	9.09	8.08	7.28	G6A-434P-STUS-DC5
	4PDT†*	12	400	1	0.3	70/10/150	7/5	8.4 x 35.4 x 10.1	Z206-ND	10.10	9.09	8.08	7.28	G6A-434P-ST-US-DC12
	4PDT†*	24	1600	1	0.3	70/10/150	7/5	8.4 x 35.4 x 10.1	Z941-ND	10.10	9.09	8.08	7.28	G6A-434P-STUS-DC24
						PC Mount Low-Signal Relays — Latching Type								
6	DPDT*	5	139	1	0.3	70/70/200	5/5	8.4 x 20.2 x 10.1	Z749-ND	5.85	5.27	4.68	4.22	G6AK-234P-ST-US-DC5
	DPDT*	12	800	1	0.3	70/70/200	5/5	8.4 x 20.2 x 10.1	Z750-ND	4.68	4.21	3.74	3.37	G6AK-234P-ST-US-DC12
	DPDT*	24	3200	1	0.3	70/70/200	5/5	8.4 x 20.2 x 10.1	Z751-ND	5.85	5.27	4.68	4.22	G6AK-234P-ST-US-DC24
—	SPDT†*	5	125	1	0.3	70/70/190	5/5	7.9 x 16.0 x 9.9	Z833-ND	5.20	4.68	4.16	3.75	G6EK-134P-ST-US-DC5
	SPDT†*	12	720	1	0.3	70/70/190	5/5	7.9 x 16.0 x 9.9	Z834-ND	5.20	4.68	4.16	3.75	G6EK-134P-ST-US-DC12
	SPDT†*	24	2880	1	0.3	70/70/190	5/5	7.9 x 16.0 x 9.9	Z835-ND	5.40	4.86	4.32	3.89	G6EK-134P-ST-US-DC24
7	DPDT†	5	125	1	0.5	75/75/190	3/2	5.0 x 14.0 x 9	Z965-ND	4.85	4.37	3.88	3.50	G6HK-2-DC5
	DPDT†	12	720	1	0.5	75/75/190	3/2	5.0 x 14.0 x 9	Z966-ND	4.85	4.37	3.88	3.50	G6HK-2-DC12
	DPDT†	24	1920	1	0.5	75/75/190	3/2	5.0 x 14.0 x 9	Z967-ND	5.23	4.71	4.18	3.77	G6HK-2-DC24
						High Efficiency Power Relays (Low Power Consumption with High Coil Resistance)								
8	SPST-NO†	5	125	8	8	70/10/130	10/10	9.9 x 20.0 x 9.9	Z712-ND	4.95	4.46	3.96	3.57	G6B-1174P-US-DC5
	SPST-NO†	12	720	8	8	70/10/130	10/10	9.9 x 20.0 x 9.9	Z713-ND	4.95	4.46	3.96	3.57	G6B-1174P-US-DC12
	SPST-NO†	24	2880	8	8	70/10/130	10/10	9.9 x 20.0 x 9.9	Z714-ND	5.13	4.62	4.10	3.69	G6B-1174P-US-DC24
9	SPST-NO†	5	125	10	10	70/10/130	10/10	10.2 x 20.0 x 15.0	Z715-ND	4.98	4.48	3.98	3.59	G6C-1114P-US-DC5
	SPST-NO†	12	720	10	10	70/10/130	10/10	10.2 x 20.0 x 15.0	Z716-ND	4.98	4.48	3.98	3.59	G6C-1114P-US-DC12
	SPST-NO†	24	2880	10	10	70/10/130	10/10	10.2 x 20.0 x 15.0	Z948-ND	5.13	4.62	4.10	3.69	G6C-1114P-US-DC24
10	SPST-NO/NC	5	125	8	8	70/10/130	10/10	9.9 x 20.0 x 15.0	Z949-ND	5.73	5.16	4.58	4.13	G6C-2114P-US-DC5
	SPST-NO/NC	12	720	8	8	70/10/130	10/10	9.9 x 20.0 x 15.0	Z950-ND	5.73	5.16	4.58	4.13	G6C-2114P-US-DC12
	SPST-NO/NC	24	2880	8	8	70/10/130	10/10	9.9 x 20.0 x 15.0	Z951-ND	5.90	5.31	4.72	4.25	G6C-2114P-US-DC24
—	PC Mount Relay Socket for G6C Series							15 x 23 x 10.79	Z126-ND	1.90	1.71	1.52	1.37	P6C-06P
11	SPST-NO*	5	125	10	15	75/10/110	10/10	11 x 22 x 16	Z960-ND	3.43	3.09	2.74	2.47	G5CE-1-DC5
	SPST-NO*	12	720	10	15	75/10/110	10/10	11 x 22 x 16	Z779-ND	3.43	3.09	2.74	2.47	G5CE-1-DC12
	SPST-NO*	24	2880	10	15	75/10/110	10/10	11 x 22 x 16	Z780-ND	3.55	3.20	2.84	2.56	G5CE-1-DC24

† Sealed case. * Meets FCC Part 68 standards.

(Continued)

All Relays UL/CSA approved

9135B-ND Omron Relay Data Book $2.95

Mounting Hole Pattern & Connection Diagram
“Bottom view unless otherwise noted”

Fig. 1
Pin #1 is Positive

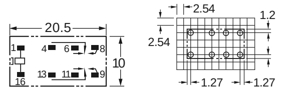


Fig. 2

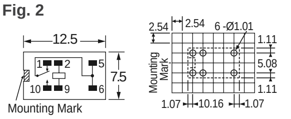
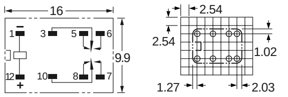


Fig. 3



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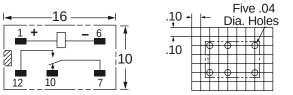

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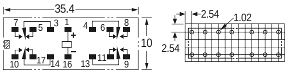
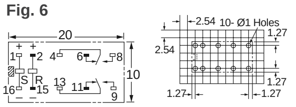


Fig. 6



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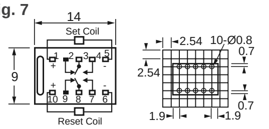


Fig. 8

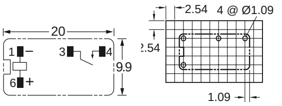


Fig. 9

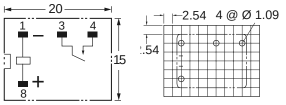


Fig. 10

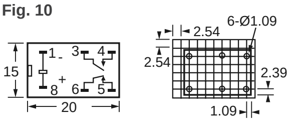
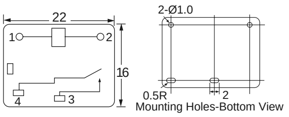


Fig. 11



OMRON Low Signal • Power PCB Relays *(Cont.)*

Fig.	Contact Form	Coil Volt. (VDC)	Coil Res. (Ω)	Contact Rtg's. Resistive (A) 24 VDC	115 VAC	Oper. Volt. (% of Rated) Pull/Drop/Max. On/Out/Cont.	Oper./Rel. Time/Time (msec.)	Dim. (mm) H x L x W	Digi-Key Part No.	Price Each 1	25	50	100	Omron Part No.
12	SPST-NO†*	5	125	5	5	70/10/130	10/10	9.9 x 20.1 x 9.9	Z945-ND	4.13	3.72	3.30	2.97	G6B-1114P-US-DC5
	SPST-NO†*	6	180	5	5	70/10/130	10/10	9.9 x 20.1 x 9.9	Z752-ND	4.13	3.72	3.30	2.97	G6B-1114P-US-DC6
	SPST-NO†*	12	720	5	5	70/10/130	10/10	9.9 x 20.1 x 9.9	Z753-ND	4.13	3.72	3.30	2.97	G6B-1114P-US-DC12
	SPST-NO†*	24	2880	5	5	70/10/130	10/10	9.9 x 20.1 x 9.9	Z754-ND	4.25	3.83	3.40	3.06	G6B-1114P-US-DC24
13	SPST-NO, SPST-NC†*	5	83	5	5	80/10/110	10/10	9.9 x 20.1 x 9.9	Z946-ND	5.05	4.55	4.04	3.64	G6B-2114P-US-DC5
		6	120	5	5	80/10/110	10/10	9.9 x 20.1 x 9.9	Z755-ND	5.05	4.55	4.04	3.64	G6B-2114P-US-DC6
		12	480	5	5	80/10/110	10/10	9.9 x 20.1 x 9.9	Z756-ND	5.05	4.55	4.04	3.64	G6B-2114P-US-DC12
		24	1920	5	5	80/10/110	10/10	9.9 x 20.1 x 9.9	Z757-ND	5.28	4.75	4.22	3.80	G6B-2114P-US-DC24
13	DPST-NO	5	83	5	5	80/10/110	10/10	9.9 x 20.1 x 9.9	Z947-ND	5.05	4.55	4.04	3.64	G6B-2214P-US-DC5
		6	120	5	5	80/10/110	10/10	9.9 x 20.1 x 9.9	Z758-ND	5.05	4.55	4.04	3.64	G6B-2214P-US-DC6
		12	480	5	5	80/10/110	10/10	9.9 x 20.1 x 9.9	Z759-ND	5.05	4.55	4.04	3.64	G6B-2214P-US-DC12
		24	1920	5	5	80/10/110	10/10	9.9 x 20.1 x 9.9	Z760-ND	5.28	4.75	4.22	3.80	G6B-2214P-US-DC24
—	PC Mount Relay Socket for G6B Series SPST							23 x 9.9 x 10.16	Z993-ND	1.50	1.35	1.20	1.08	P6B-04P
—	PC Mount Relay Socket for G6B Series DPST							23 x 9.9 x 10.16	Z994-ND	1.93	1.74	1.54	1.39	P6B-26P
—	SPST-NO†	5	125	5	5	70/10/130	10/5	12.5 x 17.5 x 6.5	Z856-ND	4.40	3.96	3.52	3.17	G6D-1A-DC5
	SPST-NO†	12	720	5	5	70/10/130	10/5	12.5 x 17.5 x 6.5	Z857-ND	4.40	3.96	3.52	3.17	G6D-1A-DC12
	SPST-NO†	24	2880	5	5	70/10/130	10/5	12.5 x 17.5 x 6.5	Z858-ND	4.73	4.26	3.78	3.41	G6D-1A-DC24
14	SPDT	12	360	5	5	75/5/110	10/5	15.5 x 20 x 10	Z991-ND	1.40	1.26	1.12	1.01	G5S-1-DC12
	SPDT	24	1440	5	5	75/5/110	10/5	15.5 x 20 x 10	Z992-ND	1.55	1.40	1.24	1.12	G5S-1-DC24
Ultracompact — TELECOM (SMT)														
15	DPDT	4.5	194	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z111-ND	3.80	3.42	3.04	2.74	G6K-2F-DC4.5
	DPDT	5	237	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z112-ND	3.80	3.42	3.04	2.74	G6K-2F-DC5
	DPDT	12	1407	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z113-ND	3.80	3.42	3.04	2.74	G6K-2F-DC12
	DPDT	24	5220	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z114-ND	4.30	3.87	3.44	3.10	G6K-2F-DC24
15	DPDT	4.5	194	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z127-ND	3.70	3.33	2.96	2.67	G6K-2F-Y-DC4.5
	DPDT	5	237	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z128-ND	3.70	3.33	2.96	2.67	G6K-2F-Y-DC5
	DPDT	12	1407	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z129-ND	3.70	3.33	2.96	2.67	G6K-2F-Y-DC12
	DPDT	24	5220	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z130-ND	3.70	3.33	2.96	2.67	G6K-2F-Y-DC24
15	DPDT	4.5	194	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z135-ND	3.70	3.33	2.96	2.67	G6K-2G-Y-DC4.5
	DPDT	5	237	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z136-ND	3.70	3.33	2.96	2.67	G6K-2G-Y-DC5
	DPDT	12	1407	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z137-ND	3.70	3.33	2.96	2.67	G6K-2G-Y-DC12
	DPDT	24	5220	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z138-ND	3.70	3.33	2.96	2.67	G6K-2G-Y-DC24
Ultracompact — TELECOM (Thru-hole)														
15	DPDT	4.5	194	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z115-ND	4.30	3.87	3.44	3.10	G6K-2P-DC4.5
	DPDT	5	237	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z116-ND	3.80	3.42	3.04	2.74	G6K-2P-DC5
	DPDT	12	1407	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z117-ND	3.80	3.42	3.04	2.74	G6K-2P-DC12
	DPDT	24	5220	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z118-ND	4.30	3.87	3.44	3.10	G6K-2P-DC24
15	DPDT	4.5	194	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z131-ND	3.70	3.33	2.96	2.67	G6K-2P-Y-DC4.5
	DPDT	5	237	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z132-ND	3.70	3.33	2.96	2.67	G6K-2P-Y-DC5
	DPDT	12	1407	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z133-ND	3.70	3.33	2.96	2.67	G6K-2P-Y-DC12
	DPDT	24	5220	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z134-ND	3.70	3.33	2.96	2.67	G6K-2P-Y-DC24
Ultracompact, Ultrasensitive DPDT Relays (Low Power Consumption with High Coil Resistance)														
16	DPDT*	5	178	1	0.5	75/10/170	2/1	5.0 x 14.0 x 9.0	Z740-ND	4.00	3.60	3.20	2.88	G6H-2-DC5
	DPDT*	12	1028	1	0.5	75/10/170	2/1	5.0 x 14.0 x 9.0	Z741-ND	4.00	3.60	3.20	2.88	G6H-2-DC12
	DPDT*	24	2880	1	0.5	75/10/170	2/1	5.0 x 14.0 x 9.0	Z742-ND	5.03	4.53	4.02	3.62	G6H-2-DC24
Surface Mountable (IR, Vapor Phase and DWS Solderable) L-Style Leads														
17	DPDT†*	5	125	1	0.2	75/10/130	5/3	8.0 x 16.0 x 10.0	Z709-ND‡	4.44	4.19	3.95	3.70	G6G-234FL-DC5
18	DPDT	5	178			75/10/120	3/2	5.2 x 14.0 x 9.0	Z827-ND	5.93	5.34	4.74	4.27	G6H-2F-DC5
	DPDT	12	1028	0.5A@125VAC		75/10/120	3/2	5.2 x 14.0 x 9.0	Z828-ND	5.93	5.34	4.74	4.27	G6H-2F-DC12
	DPDT	24	2880	& 1A@30VDC		75/10/120	3/2	5.2 x 14.0 x 9.0	Z829-ND	6.73	6.06	5.38	4.85	G6H-2F-DC24
19	DPDT	5	178	0.5A@125VAC		75/10/200	4/4	7.3 x 14.8 x 9.2	Z888-ND	4.48	4.03	3.58	3.23	G6S-2F-DC5
	DPDT	12	1028			75/10/200	4/4	7.3 x 14.8 x 9.2	Z889-ND	4.48	4.03	3.58	3.23	G6S-2F-DC12
	DPDT	24	2880	2A@30VDC		75/10/200	4/4	7.3 x 14.8 x 9.2	Z890-ND	5.10	4.59	4.08	3.68	G6S-2F-DC24
19	DPDT	5	178	0.5A@125VAC		75/10/200	4/4	7.3 x 14.8 x 9.2	Z891-ND	4.48	4.03	3.58	3.23	G6S-2G-DC5
	DPDT	12	1028			75/10/200	4/4	7.3 x 14.8 x 9.2	Z892-ND	4.48	4.03	3.58	3.23	G6S-2G-DC12
	DPDT	24	2880	2A@30VDC		75/10/200	4/4	7.3 x 14.8 x 9.2	Z893-ND	5.10	4.59	4.08	3.68	G6S-2G-DC24
High Frequency — Isolation of 68dB (typ.), Insertion Loss of .20dB (typ.) VSWR of 1.30 (typ.) @ 900MHz														
20	SPDT†*	5	83	0.1@30AC/DC		75/10/130	10/5	10.0 x 20.5 x 11.5	Z723-ND	6.14	5.67	5.32	4.71	G5Y-1-DC5
	SPDT†*	12	480	0.1@30AC/DC		75/10/130	10/5	9.0 x 20.5 x 11.5	Z724-ND	6.14	5.67	5.32	4.71	G5Y-1-DC12
	SPDT†*	24	1920	0.1@30AC/DC		75/10/130	10/5	9.0 x 20.5 x 11.5	Z725-ND	6.14	5.67	5.32	4.71	G5Y-1-DC24
High Frequency — Isolation of 65dB, Insertion Loss of 0.2dB, VSWR of 1.5 max. @ 900MHz														
21	SPDT	5	125	.01	.01	75/10/150	10/5	20 x 11.7 x 9.2	Z119-ND	4.20	3.78	3.36	3.03	G6Y-1-DC5
	SPDT	12	720	.01	.01	75/10/150	10/5	20 x 11.7 x 9.2	Z120-ND	4.20	3.78	3.36	3.03	G6Y-1-DC12
	SPDT	24	2880	.01	.01	75/10/150	10/5	20 x 11.7 x 9.2	Z121-ND	4.20	3.78	3.36	3.03	G6Y-1-DC24

† Sealed case. * Meets FCC. Part 68 standards. ‡ Not Recommended for New Design

All Relays UL/CSA approved

9135B-ND Omron Relay Data Book $2.95

Mounting Hole Pattern & Connection Diagram
"Bottom view unless otherwise noted"

Fig. 12

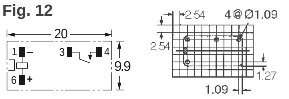


Fig. 13

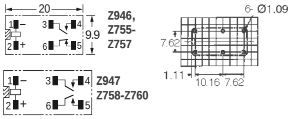


Fig. 14

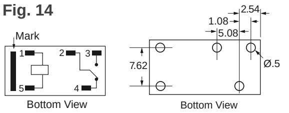


Fig. 15

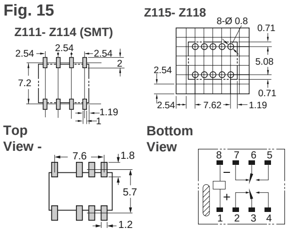


Fig. 16

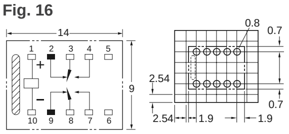


Fig. 17
Surface Mount

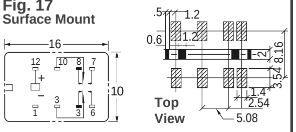


Fig. 18
Surface Mount

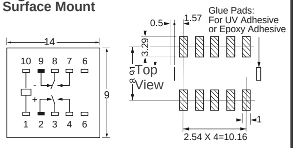


Fig. 19
Surface Mount

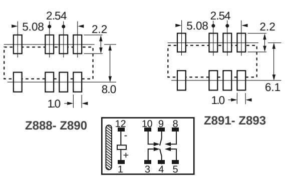


Fig. 20

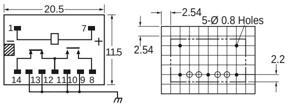
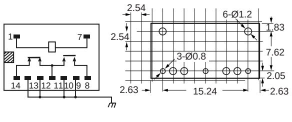
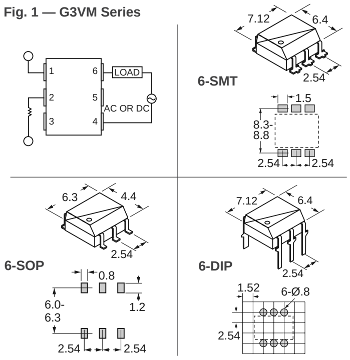


Fig. 21



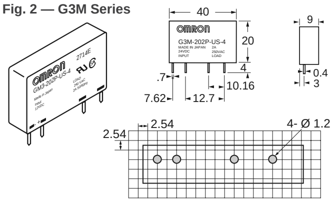
OMRON Solid State Relays

Fig. 1 — G3VM Series



MOS FET relays boast performance with long life, low input drive, and high-speed response to handle minute analog signals with minimum current leakage. The standard G3VM MOS FET relays have dielectric strength of 2,500 VAC between I/O terminals (except SOP relays).

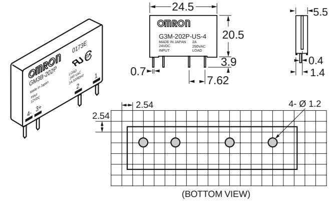
Fig. 2 — G3M Series



Features: • Zero-cross type or random turn-on • Thin design for high-density PCB applications • DC input — AC output for 2 A load • Footprint compatible with industry standard I/O modules • Low cost

Characteristic Data: • Operate time: 1 ms max. • Output ON voltage drop: 1.6 V (RMS) max. • Leakage Current: 2mA max. (at 100 VAC); 5mA max. (at 200 VAC) • Operating Temperature: -30° to 80°C

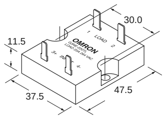
Fig. 3 — G3MB Series



Features: • Low-cost, subminiature, PCB-mounting, solid-state relay switching 2A • DC input: AC output for 2A load at 25°C • Mono-block lead frame facilitates heat dissipation without use of heat sink

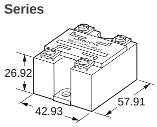
Characteristic Data: • Leakage Current: 1.5mA max. • Operating Temperature: -30° to 80°C

Fig. 4 — G3NE Series



Features: • Ideal for panel mounted applications • Compact aluminum PCB and power elements used • Quick-connect #110 input terminals and #250 output connections

Fig. 5 — G3NA Series

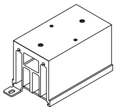


Features: • Built-in varistor effectively absorbs external surges • Protective cover for greater safety is standard • Built-in varistor • Operation indicator (red LED) is standard • Zero-cross or phase control functions

Characteristic Data: • Leakage Current: 5mA max. (at 100 VAC), 10mA max. (at 200 VAC) • Operating Temperature: -30° to 80°C

Fig. 6 — Accessories

Omron heat sinks are designed to dissipate heat buildup during normal operation. Pretapped holes allow exact placement. Heatsink grease or a similar product should be used at the time of placement.



Omron's G3VM series are PCB mounted solid state switches available in a variety of packages and configurations. Extremely low input current and small package make these ideal for microprocessor and logic switching relays. G3M and G3MB relays are larger current relays but offered in a SIP package to reduce board space. Perfect for controlling pumps, alarms, solenoids, etc. G3NE series are larger current relays with QC terminals (.110" QC [2.79] Input, .250" QC [6.35] output) for easy connection. Built in varistor effectively absorbs external surges. G3NA are large power relays with screw terminals and a visible LED (operation indicator). Built-in MOV assembles external surges. Comes with protective cover for safety. Phase controlled outputs are ideal for use in light dimming, motor-speed control, and other power control applications. Approved by UL and CSA

Fig.	Contact Arrange.	Input Voltage	Input Current (mA)	Output Volt. (Peak)	Output Current	Pkg.	Digi-Key Part No.	Price Each			Omron Part No.
								1	25	50	
MOS FET-Solid State Relays											
1	SPST-NO	1.15V	5-25	350V	120mA	4-Dip	Z150-ND	3.10	2.79	2.48	G3VM-2-S
	SPST-NO	1.15V	5-25	350V	120mA	4-SMT	Z151-ND	3.10	2.79	2.48	G3VM-2F-S
	SPST-NO	1.15V	5-25	350V	120mA	6-Dip	Z152-ND	3.10	2.79	2.48	G3VM-3-S
	SPST-NO	1.15V	5-25	350V	120mA	6-SMT	Z153-ND	3.10	2.79	2.48	G3VM-3F-S
	SPST-NO	1.15V	5-25	350V	100mA	8-Dip	Z154-ND	6.28	5.65	5.02	G3VM-W-S
	SPST-NO	1.15V	5-25	350V	100mA	8-SMT	Z155-ND	6.28	5.65	5.02	G3VM-WF-S
1	SPST-NO	1.15V	7.5-25	60V	300mA	6-Dip	Z156-ND	3.10	2.79	2.48	G3VM-V-S
	SPST-NO	1.15V	7.5-25	60V	300mA	6-SMT	Z157-ND	3.10	2.79	2.48	G3VM-VF-S
	SPST-NO	1.15V	7.5-25	60V	300mA	6-Dip	Z227-ND	9.03	8.13	7.22	G3VM-XN-S
	SPST-NO	1.15V	7.5-25	60V	300mA	6-SMT	Z228-ND	9.03	8.13	7.22	G3VM-XNF-S
	SPST-NO	1.15V	7.5-25	400V	150mA	6-Dip	Z229-ND	9.03	8.13	7.22	G3VM-4N-S
	SPST-NO	1.15V	7.5-25	400V	150mA	6-SMT	Z230-ND	9.03	8.13	7.22	G3VM-4NF-S
1	SPST-NO	1.15V	5-25	400V	150mA	6-Dip	Z158-ND	5.68	5.11	4.54	G3VM-6-S
	SPST-NO	1.15V	5-25	400V	150mA	6-SMT	Z159-ND	5.68	5.11	4.54	G3VM-6F-S
	SPST-NO	1.15V	5-25	350V	120mA	4-SOP	Z160-ND	3.58	3.22	2.86	G3VM-S2-S
	SPST-NO	1.15V	5-25	350V	120mA	6-SOP	Z161-ND	6.00	5.40	4.80	G3VM-S3-S
	SPST-NO	1.15V	5-25	200V	150mA	4-SOP	Z162-ND	3.58	3.22	2.86	G3VM-S5-S
	DPST-NO	1.15V	5-25	350V	120mA	8-SOP	Z163-ND	7.95	7.16	6.36	G3VM-SW-S
	DPST-NO	1.15V	5-25	60V	300mA	8-SOP	Z164-ND	7.95	7.16	6.36	G3VM-SY-S
Zero-Cross Output											
2	SPST-NO	4 - 6 VDC	—	75 to 264 VAC	.1 to 2A	Std. Sip	Z900-ND	9.00	8.10	7.20	G3M-202P-US-4-DC5
	SPST-NO	9.6 - 14.4 VDC	—	75 to 264 VAC	.1 to 2A	Std. Sip	Z901-ND	9.00	8.10	7.20	G3M-202P-US-4-DC12
	SPST-NO	19.2 - 28.8 VDC	—	75 to 264 VAC	.1 to 2A	Std. Sip	Z902-ND	9.90	8.91	7.92	G3M-202P-US-4-DC24
Phase Controlled Output											
2	SPST-NO	4 - 6 VDC	—	75 to 132 VAC	.1 to 2A	Std. Sip	Z903-ND	7.38	6.64	5.90	G3M-102PL-US-4-DC5
	SPST-NO	9.6 - 14.4 VDC	—	75 to 132 VAC	.1 to 2A	Std. Sip	Z904-ND	7.38	6.64	5.90	G3M-102PL-US-4-DC12
	SPST-NO	19.2 - 28.8 VDC	—	75 to 132 VAC	.1 to 2A	Std. Sip	Z905-ND	7.38	6.64	5.90	G3M-102PL-US-4-DC24
	SPST-NO	4 - 6 VDC	—	75 to 264 VAC	.1 to 2A	Std. Sip	Z906-ND	9.08	8.17	7.26	G3M-202PL-US-4-DC5
	SPST-NO	9.6 - 14.4 VDC	—	75 to 264 VAC	.1 to 2A	Std. Sip	Z907-ND	9.08	8.17	7.26	G3M-202PL-US-4-DC12
	SPST-NO	19.2 - 28.8 VDC	—	75 to 264 VAC	.1 to 2A	Std. Sip	Z908-ND	9.08	8.17	7.26	G3M-202PL-US-4-DC24
Zero-Cross Output											
3	SPST-NO	4 - 6 VDC	—	75 to 264 VAC	.1 to 2A	Mini Sip	Z909-ND	4.33	3.90	3.46	G3MB-202P-DC5
	SPST-NO	9.6 - 14.4 VDC	—	75 to 264 VAC	.1 to 2A	Mini Sip	Z910-ND	4.33	3.90	3.46	G3MB-202P-DC12
	SPST-NO	19.2 - 28.8 VDC	—	75 to 264 VAC	.1 to 2A	Mini Sip	Z911-ND	4.33	3.90	3.46	G3MB-202P-DC24
Random Turn-On Output											
3	SPST-NO	4 - 6 VDC	—	75 to 132 VAC	.1 to 2A	Mini Sip	Z912-ND	3.53	3.18	2.82	G3MB-102PL-DC5
	SPST-NO	9.6 - 14.4 VDC	—	75 to 132 VAC	.1 to 2A	Mini Sip	Z913-ND	3.53	3.18	2.82	G3MB-102PL-DC12
	SPST-NO	19.2 - 28.8 VDC	—	75 to 132 VAC	.1 to 2A	Mini Sip	Z914-ND	3.53	3.18	2.82	G3MB-102PL-DC24
	SPST-NO	4 - 6 VDC	—	75 to 264 VAC	.1 to 2A	Mini Sip	Z915-ND	3.93	3.54	3.14	G3MB-202PL-DC5
	SPST-NO	9.6 - 14.4 VDC	—	75 to 264 VAC	.1 to 2A	Mini Sip	Z916-ND	3.93	3.54	3.14	G3MB-202PL-DC12
	SPST-NO	19.2 - 28.8 VDC	—	75 to 264 VAC	.1 to 2A	Mini Sip	Z917-ND	3.93	3.54	3.14	G3MB-202PL-DC24
Zero-Cross Output											
4	SPST-NO	4 - 6 VDC	—	75 to 264 VAC	.1 to 10A	QC Style	Z175-ND	16.58	14.92	13.26	G3NE-210T-US-DC5
	SPST-NO	9.6 - 14.1 VDC	—	75 to 264 VAC	.1 to 10A	QC Style	Z176-ND	16.58	14.92	13.26	G3NE-210T-US-DC12
	SPST-NO	19.2 - 28.8 VDC	—	75 to 264 VAC	.1 to 10A	QC Style	Z177-ND	16.58	14.92	13.26	G3NE-210T-US-DC24
4	SPST-NO	4 - 6 VDC	—	75 to 264 VAC	.1 to 20A	QC Style	Z178-ND	19.43	17.49	15.54	G3NE-220T-US-DC5
	SPST-NO	9.6 - 14.1 VDC	—	75 to 264 VAC	.1 to 20A	QC Style	Z179-ND	19.43	17.49	15.54	G3NE-220T-US-DC12
	SPST-NO	19.2 - 28.8 VDC	—	75 to 264 VAC	.1 to 20A	QC Style	Z180-ND	19.43	17.49	15.54	G3NE-220T-US-DC24
Zero-Cross Output											
5	SPST-NO	5 - 24 VDC	—	19 to 264 VAC	.1 to 5A	Screw Style	Z165-ND	18.38	16.54	14.70	G3NA-205B-DC5-24
	SPST-NO	100 - 120 VAC	—	19 to 264 VAC	.1 to 5A	Screw Style	Z166-ND	23.13	20.82	18.50	G3NA-205B-AC100-120
	SPST-NO	200 - 240 VAC	—	19 to 264 VAC	.1 to 5A	Screw Style	Z167-ND	23.13	20.82	18.50	G3NA-205B-AC200-240
5	SPST-NO	4 - 32 VDC	—	19 to 264 VAC	.1 to 10A	Screw Style	Z918-ND	18.80	16.92	15.04	G3NA-210B-DC5-24
	SPST-NO	75 - 132 VAC	—	19 to 264 VAC	.1 to 10A	Screw Style	Z919-ND	25.93	23.34	20.74	G3NA-210B-AC100-120
	SPST-NO	150 - 264 VAC	—	19 to 264 VAC	.1 to 10A	Screw Style	Z920-ND	25.93	23.34	20.74	G3NA-210B-AC200-240
	SPST-NO	4 - 32 VDC	—	19 to 264 VAC	.1 to 25A	Screw Style	Z921-ND	24.45	22.01	19.56	G3NA-225B-DC5-24
	SPST-NO	75 - 132 VAC	—	19 to 264 VAC	.1 to 25A	Screw Style	Z922-ND	29.45	26.51	23.56	G3NA-225B-AC100-120
	SPST-NO	150 - 264 VAC	—	19 to 264 VAC	.1 to 25A	Screw Style	Z923-ND	32.33	29.10	25.86	G3NA-225B-AC200-240
5	SPST-NO	5 - 24 VDC	—	180 to 528 VAC	.1 to 25A	Screw Style	Z170-ND	52.88	47.59	42.30	G3NA-425B-DC5-24
	SPST-NO	100 - 120 VAC	—	180 to 528 VAC	.1 to 25A	Screw Style	Z171-ND	55.23	49.71	44.18	G3NA-425B-AC100-120
5	SPST-NO	5 - 24 VDC	—	19 to 264 VAC	.1 to 40A	Screw Style	Z172-ND	38.08	34.27	30.46	G3NA-240B-DC5-24
	SPST-NO	100 - 120 VAC	—	19 to 264 VAC	.1 to 40A	Screw Style	Z173-ND	42.43	38.19	33.94	G3NA-240B-AC100-240
	SPST-NO	200 - 240 VAC	—	19 to 264 VAC	.1 to 40A	Screw Style	Z174-ND	42.43	38.19	33.94	G3NA-240B-AC200-240
Phase Controlled Output											
5	SPST-NO	5 - 24 VDC	—	19 to 264 VAC	.1 to 10A	Screw Style	Z168-ND	33.45	30.11	26.76	G3NA-D210B-DC5-24
	SPST-NO	100 - 120 VAC	—	19 to 264 VAC	.1 to 10A	Screw Style	Z169-ND	34.83	31.35	27.86	G3NA-D210B-AC100-240
Accessories											
6	Track Mount Heat Sink for 10A Relays (77 x 44mm)						Z924-ND	13.98	12.58	11.18	Y92B-N50
	Track Mount Heat Sink for 10A/25A Relays (88.90 x 77mm)						Z925-ND	22.60	20.34	18.08	Y92B-N100
	Track Mount Heat Sink for 25A Relays (100 x 104mm)						Z926-ND	30.85	27.77	24.68	Y92B-N150
	Chassis Mount Heat Sink for 10A (100 x 100mm)						Z927-ND	15.15	13.64	12.12	Y92B-A100
	Chassis Mount Heat Sink for 25A (150 x 100.5mm)						Z928-ND	20.60	18.54	16.48	Y92B-A150N

OMRON General Purpose Relays

9135B-ND	Omron Relay Data Book	$2.95

Max. Operating Voltage:
LY SERIES: 250VAC/125VDC, MK SERIES: 500VAC/250VDC,
MY SERIES: 250VAC/125VDC, G7L SERIES: 250VAC,
G8P SERIES: 250VAC/28VDC

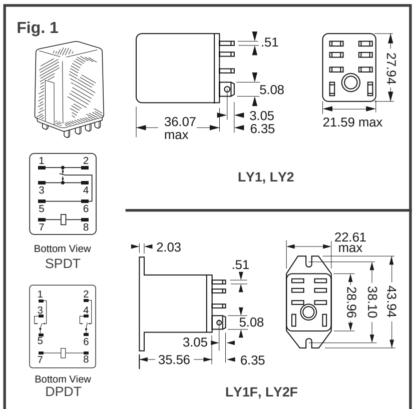
Fig.	Contact Form	Coil Volt.	Coil Res. (Ω)	Contact Ratings Resistive (A)	Oper. Volt. (% of Rated) Pull/Drop/Max. On/Out/Cont.	Oper./Rel. Time/Time (msec.)	Digi-Key Part No.	Price Each 1	25	50	100	Omron Part No.
					Power Relays — Plug-In Terminals							
1	SPDT	120AC	4430	15A @ 110VAC 15A @ 24VDC	80/30/110	25/25	Z781-ND	6.75	6.08	5.40	4.86	LY1-AC110/120
	SPDT	24AC	180		80/30/110	25/25	Z783-ND	6.75	6.08	5.40	4.86	LY1-AC24
	SPDT	24DC	650		80/10/110	25/25	Z784-ND	6.45	5.81	5.16	4.65	LY1-DC24
	SPDT	12DC	160		80/10/110	25/25	Z785-ND	6.45	5.81	5.16	4.65	LY1-DC12
1	DPDT	120AC	4430	10A @ 110VAC 7A @ 24VDC	80/30/110	25/25	Z786-ND	7.58	6.82	6.06	5.46	LY2-AC110/120
	DPDT	24AC	180		80/30/110	25/25	Z788-ND	7.58	6.82	6.06	5.46	LY2-AC24
	DPDT	24DC	650		80/10/110	25/25	Z789-ND	7.58	6.82	6.06	5.46	LY2-DC24
	DPDT	12DC	160		80/10/110	25/25	Z790-ND	7.58	6.82	6.06	5.46	LY2-DC12
1	SPDT	12DC	160	15A @ 110VAC 15A @ 24VDC	80/10/110	25/25	Z193-ND	6.85	6.17	5.48	4.94	LY1F-DC12
	SPDT	24DC	650		80/10/110	25/25	Z194-ND	6.85	6.17	5.48	4.94	LY1F-DC24
	SPDT	24AC	180		80/30/110	25/25	Z195-ND	6.85	6.17	5.48	4.94	LY1F-AC24
	SPDT	120AC	4430		80/30/110	25/25	Z782-ND	6.85	6.17	5.48	4.94	LY1F-AC110/120
1	DPDT	12DC	160	10A @ 110VAC 7A @ 24VDC	80/10/110	25/25	Z190-ND	7.73	6.96	6.18	5.57	LY2F-DC12
	DPDT	24DC	650		80/10/110	25/25	Z191-ND	7.73	6.96	6.18	5.57	LY2F-DC24
	DPDT	24AC	180		80/30/110	25/25	Z192-ND	7.73	6.96	6.18	5.57	LY2F-AC24
	DPDT	120AC	4430		80/30/110	25/25	Z787-ND	7.73	6.96	6.18	5.57	LY2F-AC110/120
					Power Relays — PC Mount							
1	SPDT	12DC	160	15A @ 110VAC 15A @ 24VDC	80/10/110	25/25	Z974-ND	6.75	6.08	5.40	4.86	LY1-0-DC12
	SPDT	24DC	650		80/10/110	25/25	Z973-ND	6.75	6.08	5.40	4.86	LY1-0-DC24
	SPDT	24AC	180		80/30/110	25/25	Z972-ND	6.75	6.08	5.40	4.86	LY1-0-AC24
	SPDT	120AC	4430		80/30/110	25/25	Z971-ND	6.75	6.08	5.40	4.86	LY1-0-AC110/120
1	DPDT	12DC	160	10A @ 110VAC 10A @ 24VDC	80/10/110	25/25	Z978-ND	7.58	6.82	6.06	5.46	LY2-0-DC12
	DPDT	24DC	650		80/10/110	25/25	Z977-ND	7.58	6.82	6.06	5.46	LY2-0-DC24
	DPDT	100DC	6900		80/10/110	25/25	Z979-ND	7.90	7.11	6.32	5.69	LY2-0-DC100/110
	DPDT	24AC	180		80/30/110	25/25	Z976-ND	7.58	6.82	6.06	5.46	LY2-0-AC24
	DPDT	120AC	4430		80/30/110	25/25	Z975-ND	7.58	6.82	6.06	5.46	LY2-0-AC110/120
					Power Relays — Plug-In Terminals							
2	DPDT	12DC	95	10A @ 220VAC 10A @ 28VDC	80/10/110	30/20	Z800-ND	10.68	9.61	8.54	7.69	MK2P-S-DC12
	DPDT	24DC	430		80/10/110	30/20	Z799-ND	10.68	9.61	8.54	7.69	MK2P-S-DC24
	DPDT	24AC	88		80/30/110	20/20	Z798-ND	10.68	9.61	8.54	7.69	MK2P-S-AC24
	DPDT	120AC	2300		80/30/110	20/20	Z797-ND	11.60	10.44	9.28	8.36	MK2P-S-AC120
2	3PDT	12DC	95	10A @ 220VAC 10A @ 28VDC	80/10/110	30/20	Z804-ND	12.20	10.98	9.76	8.79	MK3P5-S-DC12
	3PDT	24DC	430		80/10/110	30/20	Z803-ND	12.20	10.98	9.76	8.79	MK3P5-S-DC24
	3PDT	24AC	88		80/30/110	20/20	Z802-ND	12.20	10.98	9.76	8.79	MK3P5-S-AC24
	3PDT	120AC	2300		80/30/110	20/20	Z801-ND	13.05	11.75	10.44	9.40	MK3P5-S-AC120
3	DPDT	12DC	160	5A @ 220VAC 5A @ 24VDC	80/10/110	20/20	Z181-ND	5.38	4.84	4.30	3.87	MY2-DC12(S)
	DPDT	24DC	636		80/10/110	20/20	Z182-ND	5.38	4.84	4.30	3.87	MY2-DC24(S)
	DPDT	48DC	2560		80/10/110	20/20	Z183-ND	5.60	5.04	4.48	4.04	MY2-DC48(S)
	DPDT	24AC	180		80/30/110	20/20	Z184-ND	5.38	4.84	4.30	3.87	MY2-AC24(S)
	DPDT	120AC	4430		80/30/110	20/20	Z185-ND	5.60	5.04	4.48	4.04	MY2-AC110/120(S)
3	4PDT	24DC	650	3A @ 220VAC 3A @ 24VDC	80/10/110	20/20	Z809-ND	6.45	5.81	5.16	4.65	MY4-DC24
	4PDT	24AC	180		80/30/110	20/20	Z808-ND	6.73	6.06	5.38	4.85	MY4-AC24
	4PDT	120AC	4430		80/30/110	20/20	Z807-ND	6.73	6.06	5.38	4.85	MY4-AC110/120
3	4PDT	12DC	160	3A @ 220VAC 3A @ 24VDC	80/30/110	20/20	Z186-ND	6.48	5.83	5.18	4.67	MY4-DC12(S)
	4PDT	24DC	636		80/30/110	20/20	Z187-ND	6.48	5.83	5.18	4.67	MY4-DC24(S)
	4PDT	24AC	180		80/30/110	20/20	Z188-ND	6.48	5.83	5.18	4.67	MY4-AC24(S)
	4PDT	120AC	4430		80/30/110	20/20	Z189-ND	6.63	5.97	5.30	4.77	MY4-AC110/120(S)
4	SPST	24DC	303	30A @ 220VAC	75/15/110	30/30	Z817-ND	10.53	9.48	8.42	7.58	G7L-1A-TUB-J-CB-DC24
	SPST	24AC	270		75/15/110	30/30	Z815-ND	11.30	10.17	9.04	8.14	G7L-1A-TUB-J-CB-AC24
	SPST	120AC	5260		65/15/110	30/30	Z814-ND	11.30	10.17	9.04	8.14	G7L-1A-TUB-J-CB-AC100/120
	SPST	220AC	21000		70/20/120	30/30	Z816-ND	11.93	10.74	9.54	8.59	G7L-1A-TUB-J-CB-AC200/240
4	DPST	24DC	303	25A @ 220VAC	75/15/110	30/30	Z821-ND	10.95	9.86	8.76	7.89	G7L-2A-TUB-J-CB-DC24
	DPST	24AC	270		75/15/110	30/30	Z820-ND	11.70	10.53	9.36	8.43	G7L-2A-TUB-J-CB-AC24
	DPST	120AC	5260		65/15/110	30/30	Z818-ND	11.70	10.53	9.36	8.43	G7L-2A-TUB-J-CB-AC100/120
	DPST	220AC	21000		70/20/120	30/30	Z819-ND	12.28	11.05	9.82	8.84	G7L-2A-TUB-J-CB-AC200/240

All Relays UL/CSA approved

Relay Sockets and Accessories

Fig.	Use With Series	Description	Digi-Key Part No.	Price Each 1	25	50	100	Omron Part No.
5	LY	Track mounted relay socket	Z791-ND	4.95	4.46	3.96	3.57	PTF08A-E
—	LY	Back connecting socket - PCB mount	Z792-ND	1.80	1.62	1.44	1.30	PT08-0
—	LY	Back connecting socket - solder ear	Z793-ND	1.80	1.62	1.44	1.30	PT08
—	LY/MY	Socket mounting plate for back connect sockets	Z794-ND	.30	.27	.24	.22	PYP-1
—	LY/MY	Relay hold-down clip for track mounted sockets	Z795-ND	.28	.25	.22	.20	PYC-A1
—	LY/MY	Relay hold-down clip for back connecting sockets	Z796-ND	.28	.25	.22	.20	PYC-P
—	MY	DPDT track mount relay socket	Z882-ND	5.20	4.68	4.16	3.75	PYF08A-E
—	MY	4PDT track mounted relay sockets	Z811-ND	7.55	6.80	6.04	5.44	PYF14A-E
—	MY	4PDT back connecting socket -panel mount	Z812-ND	1.80	1.62	1.44	1.30	PY14
—	MY	4PDT back connecting socket - PCB mount	Z813-ND	1.80	1.62	1.44	1.30	PY14-02
—	MK	DPDT track mounted relay sockets	Z805-ND	4.65	4.19	3.72	3.35	PF083A-E
—	MK	DPDT connecting socket - panel mount	Z836-ND	1.75	1.58	1.40	1.26	PL08
—	MK	DPDT connecting socket - PCB mount	Z837-ND	2.90	2.61	2.32	2.09	PLE08-0
—	MK	3PDT track mounted relay sockets	Z806-ND	6.65	5.99	5.32	4.79	PF113A-E
—	MK	3PDT connecting socket - panel mount	Z838-ND	2.05	1.85	1.64	1.48	PL11
—	MK	3PDT connecting socket - PCB mount	Z839-ND	2.90	2.61	2.32	2.09	PLE11-0
6	MY/LY/MK	40" (101.60cm) DIN Rail socket mounting track	Z840-ND	6.43	5.79	5.14	4.63	PFP100N
6	MY/LY/MK	20" (50.80cm) DIN Rail socket mounting track	Z841-ND	5.23	4.71	4.18	3.77	PFP50N
—	—	End stop plate for din track rail	Z887-ND	.70	.63	.56	.51	PFP-M

Fig. 1



LY1, LY2

LY1F, LY2F

Fig. 2

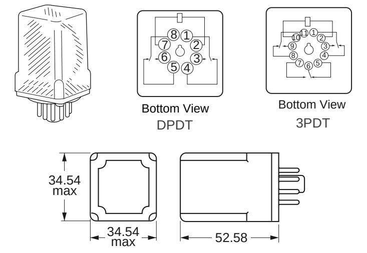
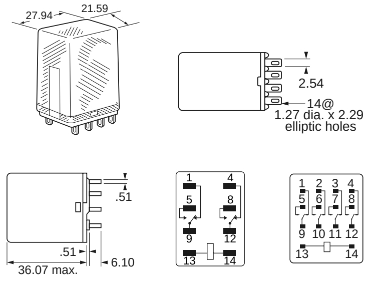


Fig. 3



DPDT

4PDT

Fig. 4

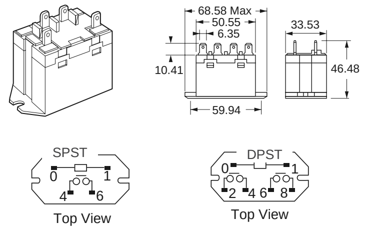


Fig. 5

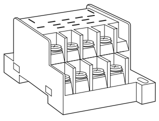
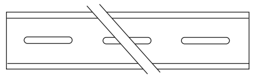


Fig. 6



OMRON General Purpose Relays

Fig.	Contact Form	Coil Volt.	Coil Res. (Ω)	Contact Ratings Resistive (A)	Oper. Volt. (% of Rated) Pull/Drop/Max. On/Out/Cont.	Oper./Rel. Time/Time (msec.)	Digi-Key Part No.	Price Each				Omron Part No.
								1	25	50	100	
G8P Relay – PC Mount and QC Style												
1	SPST	12DC	155	30A@250VAC 20A@28VDC	75/10/120	15/10	Z934-ND	2.97	2.68	2.38	2.15	G8P-1111P-US-DC12
1	SPST	5DC	27	30A@250VAC 20A@28VDC	75/10/120	15/10	Z1002-ND	3.36	3.03	2.69	2.42	G8P-1AP-DC5
	SPST	12DC	155		75/10/120	15/10	Z1003-ND	3.76	3.38	3.01	2.71	G8P-1AP-DC12
	SPST	24DC	660		75/10/120	15/10	Z1004-ND	3.36	3.03	2.69	2.42	G8P-1AP-DC24
Dust Cover for Open Frame G8P Series Above							Z1005-ND	.13	.12	.10	.09	R99-C02-G8PN
2	SPST-NO	5DC	27	30A@250VAC	75/10/120	15/10	Z211-ND	5.16	4.76	4.47	3.95	G8P-1114P-US-DC5
	SPST-NO	5DC	27	30A@250VAC	75/10/120	15/10	Z1006-ND	3.43	3.16	2.97	2.63	G8P-1A4P-DC5
	SPST-NO	12DC	155	20A@28VDC	75/10/120	15/10	Z1007-ND	3.14	2.90	2.72	2.40	G8P-1A4P-DC12
2	SPST-NO	24DC	660	1hp@125VAC & 2hp@250VAC	75/10/120	15/10	Z1008-ND	3.43	3.16	2.97	2.63	G8P-1A4P-DC24
	SPDT	12DC	155	10A @ 250VAC	75/10/120	15/10	Z1009-ND	3.43	3.16	2.97	2.63	G8P-1C4P-DC12
3	SPST	12VDC	155	30	75/10/120	15/10	Z208-ND	3.70	3.33	2.96	2.67	G8P-1A4TP-DC12
	SPST	24VDC	155	30	75/10/120	15/10	Z209-ND	3.70	3.33	2.96	2.67	G8P-1A4TP-DC24
	SPDT	12VDC	155	20	75/10/120	15/10	Z210-ND	3.80	3.42	3.04	2.74	G8P-1C4TP-DC12
	SPDT	24VDC	155	20	75/10/120	15/10	Z214-ND	3.80	3.42	3.04	2.74	G8P-1C4TP-DC24
4	SPST	12VDC	155	30	75/10/120	15/10	Z215-ND	4.00	3.60	3.20	2.88	G8P-1A2T-F-DC12
	SPST	24VDC	155	30	75/10/120	15/10	Z216-ND	4.00	3.60	3.20	2.88	G8P-1A2T-F-DC24
	SPDT	12VDC	155	20	75/10/120	15/10	Z217-ND	4.10	3.69	3.28	2.96	G8P-1C2T-F-DC12
	SPDT	24VDC	155	20	75/10/120	15/10	Z218-ND	4.10	3.69	3.28	2.96	G8P-1C2T-F-DC24
G8JN-ISO Footprint Automotive Relay												
5	SPST-NO	12DC	78	30	75/10/120	5/4	Z980-ND*	4.90	4.41	3.92	3.53	G8JN-1A7P-DC12
	SPDT	12DC	78	35NO/20NC	75/10/120	5/4	Z981-ND	5.20	4.68	4.16	3.75	G8JN-1C7T-DC12
	SPDT	12DC	78	35NO/20NC	75/10/120	5/4	Z982-ND†	5.10	4.59	4.08	3.68	G8JN-1C7T-MF-DC12
	SPDT	12DC	78	35NO/20NC	75/10/120	5/4	Z983-ND‡	5.23	4.71	4.18	3.77	G8JN-1C6T-DC12
	SPDT	12DC	78	35NO/20NC	75/10/120	5/4	Z984-ND§	6.45	5.81	5.16	4.65	G8JN-1C6T-F-DC12
MJN Relay – Plug-In Style												
6	DPDT	12VDC	120	10	85/10/120	15/6	Z237-ND	11.70	10.53	9.36	8.43	MJN2C-DC12
	DPDT	24VDC	470	10	85/10/120	15/6	Z236-ND	11.70	10.53	9.36	8.43	MJN2C-DC24
	DPDT	24VAC	75	10	85/10/120	15/6	Z235-ND	12.45	11.21	9.96	8.97	MJN2C-AC24
	DPDT	120VAC	2250	10	85/10/120	15/6	Z238-ND	12.25	11.03	9.80	8.82	MJN2C-AC120
	3PDT	12VDC	120	10	85/10/120	15/6	Z233-ND	12.10	10.89	9.68	8.72	MJN3C-DC12
	3PDT	24VDC	470	10	85/10/120	15/6	Z232-ND	12.10	10.89	9.68	8.72	MJN3C-DC24
	3PDT	24VAC	72	10	85/10/120	15/6	Z231-ND	12.95	11.66	10.36	9.33	MJN3C-AC24
	3PDT	120VAC	1700	10	85/10/120	15/6	Z234-ND	13.63	12.27	10.90	9.81	MJN3C-AC120
MJN Relay with mounting flange												
6	DPDT	12VDC	120	10	85/10/120	15/6	Z244-ND	11.38	10.24	9.10	8.19	MJN2CF-DC12
	DPDT	24VDC	470	10	85/10/120	15/6	Z245-ND	11.25	10.13	9.00	8.10	MJN2CF-DC24
	DPDT	24VAC	75	10	85/10/120	15/6	Z243-ND	12.08	10.87	9.66	8.70	MJN2CF-AC24
	DPDT	120VAC	2250	10	85/10/120	15/6	Z246-ND	12.08	10.87	9.66	8.70	MJN2CF-AC120
	DPDT	12VDC	120	10	85/10/120	15/6	Z241-ND	12.40	11.16	9.92	8.93	MJN3CF-DC12
	DPDT	24VDC	470	10	85/10/120	15/6	Z240-ND	13.03	11.73	10.42	9.38	MJN3CF-DC24
	DPDT	24VAC	72	10	85/10/120	15/6	Z239-ND	13.78	12.40	11.02	9.92	MJN3CF-AC24
	DPDT	120VAC	1700	10	85/10/120	15/6	Z242-ND	14.03	12.63	11.22	10.10	MJN3CF-AC120
	DPDT	12VDC	120	20	85/10/120	15/6	Z249-ND	15.00	13.50	12.00	10.80	MJN2CE-DC12
	DPDT	24VDC	470	20	85/10/120	15/6	Z250-ND	15.00	13.50	12.00	10.80	MJN2CE-DC24
	DPDT	24VAC	75	20	85/10/120	15/6	Z248-ND	15.38	13.84	12.30	11.07	MJN2CE-AC24
	DPDT	120VAC	2250	20	85/10/120	15/6	Z247-ND	15.80	14.22	12.64	11.38	MJN2CE-AC120
MGN Relay – Heavy Duty Power Type												
7	SPDT	12VDC	72	30	75/10/100	30/30	Z257-ND	23.50	21.15	18.80	16.92	MGN1C-DC12
	SPDT	24VDC	290	30	75/10/100	30/30	Z258-ND	21.05	18.95	16.84	15.16	MGN1C-DC 24
	SPDT	24VAC	11.5	30	85/10/100	30/30	Z255-ND	23.38	21.04	18.70	16.83	MGN1C-AC24
	SPDT	120VAC	295	30	75/10/100	30/30	Z256-ND	23.38	21.04	18.70	16.83	MGN1C-AC120
	SPST	12VDC	72	30	75/10/100	30/30	Z261-ND	20.15	18.14	16.12	14.51	MGN1X-DC12
	SPST	24VDC	290	30	75/10/100	30/30	Z262-ND	21.15	19.04	16.92	15.23	MGN1X-DC24
	SPST	24VAC	11.5	30	85/10/100	30/30	Z260-ND	18.93	17.04	15.14	13.63	MGN1X-AC24
	SPST	120VAC	295	30	85/10/100	30/30	Z259-ND	18.95	17.06	15.16	13.65	MGN1X-AC120
	DPST	12VDC	72	30	75/10/100	30/30	Z265-ND	24.05	21.65	19.24	17.32	MGN2A-DC12
	DPST	24VDC	290	30	75/10/100	30/30	Z266-ND	22.78	20.50	18.22	16.40	MGN2A-DC24
	DPST	24VAC	11.5	30	85/10/100	30/30	Z264-ND	25.75	23.18	20.60	18.54	MGN2A-AC24
	DPST	120VAC	295	30	85/10/100	30/30	Z263-ND	27.93	25.14	22.34	20.11	MGN2A-AC120
	DPDT	12VDC	72	30	75/10/100	30/30	Z269-ND	34.25	30.83	27.40	24.66	MGN2C-DC12
	DPDT	24VDC	290	30	75/10/100	30/30	Z270-ND	33.15	29.84	26.52	23.87	MGN2C-DC24
	DPDT	24VAC	11.5	30	85/10/100	30/30	Z268-ND	34.65	31.19	27.72	24.95	MGN2C-AC24
	DPDT	120VAC	295	30	85/10/100	30/30	Z267-ND	29.70	26.73	23.76	21.39	MGN2C-AC120

All Relays UL/CSA approved

Relay Sockets and Accessories

Fig.	Use With Series	Description	Digi-Key Part No.	Price Each				Omron Part No.
				1	25	50	100	
8	MJN	Din rail socket w/screw terminals	Z251-ND	8.03	7.23	6.42	5.78	PTF11PC
9	MJN	Chassis mount w/QC terminals	Z252-ND	1.70	1.53	1.36	1.23	PTF11QDC
8	MJN	Chassis mount w/screw terminals	Z253-ND	7.80	7.02	6.24	5.62	PTF21PC
9	MJN	Chassis mount w/PCB terminals	Z254-ND	1.58	1.42	1.26	1.14	PTFPCB

Fig. 1

Open Frame

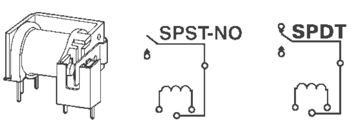


Fig. 2

Sealed Case

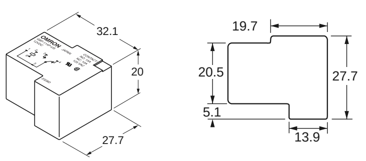
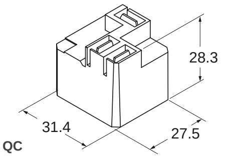
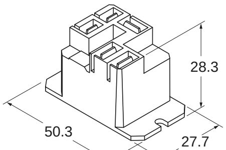


Fig. 3



PCB & QC

Fig. 4



Chassis Mount

Fig. 5

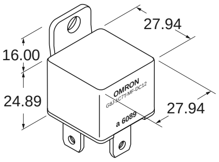
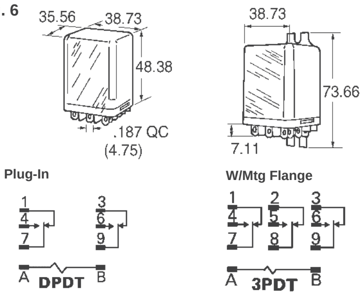


Fig. 6



Plug-In

W/Mtg Flange

Fig. 7

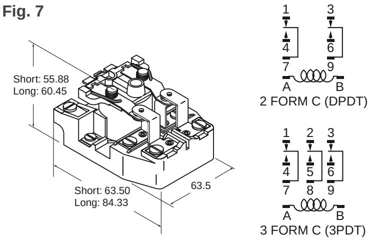


Fig. 8

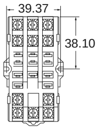
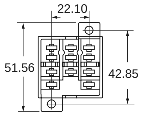


Fig. 9



Aromat Corporation

NAiS *Your Partner for the 21st Century*

PC Mount Relays

***** All relays are UL, CSA approved*

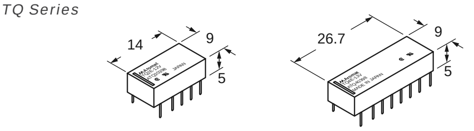
9277B-ND	Aromat Relay Guide	$2.95

Aromat's T-Series is a family of compact, high sensitivity relays that combine all the relay technologies accumulated over the past 20 years.

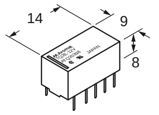
T-Series relays are widely used in communications, instrumentation and control interface equipment.

The proven quality of our T-Series relays will be maintained because of our commitment to cutting edge technology and a willingness to listen to our customer needs.

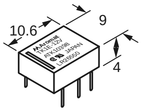
TQ Series



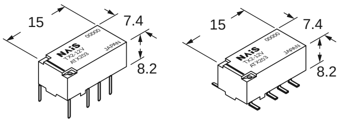
TF Series



TK Series



TX Series



AGN Series

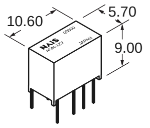


Fig.	Cont. Arrange.	Coil Volt	Coil Res.	Coil Curr. (mA)	Contact Ratings (A)		Pickup/Dropout Max. Voltage	Digi-Key Part No.	Price Each				Aromat Part No.
					30 VDC	125 VAC			1	25	50	100	
TQ Series Telcom Relays													
1	DPDT	3VDC	64.3	46.7	1	.5	2.25/0.3/4.5	255-1225-ND	2.65	2.43	2.16	1.84	TQ2-3V
	DPDT	4.5VDC	144	31.1	1	.5	3.38/.45/6.7	255-1226-ND	2.65	2.43	2.16	1.84	TQ2-4.5V
	DPDT	5VDC	178	28.1	1	.5	3.75/0.5/7.5	255-1001-ND	2.65	2.43	2.16	1.84	TQ2-5V
	DPDT	12VDC	1,028	11.7	1	.5	9/1.2/18	255-1002-ND	2.65	2.43	2.16	1.84	TQ2-12V
	DPDT	24VDC	2,880	8.3	1	.5	18/2.4/36	255-1003-ND	3.16	2.91	2.58	2.20	TQ2-24V
2	4PDT	5VDC	89	56.2	1	.5	3.75/0.5/7.5	255-1013-ND	17.64	16.20	14.40	12.24	TQ4-5V
	4PDT	12VDC	514	23.3	1	.5	12/9/18	255-1014-ND	17.64	16.20	14.40	12.24	TQ4-12V
	4PDT	24VDC	2,056	11.7	1	.5	24/18/36	255-1015-ND	19.11	17.55	15.60	13.26	TQ4-24V
TQ Series Telcom Single Coil Latching Relays													
3	DPDT	5VDC	250	20	1	.5	3.75/3.75/7.5	255-1004-ND	3.16	2.91	2.58	2.20	TQ2-L-5V
	DPDT	12VDC	1,440	8.3	1	.5	9/9/18	255-1005-ND	3.16	2.91	2.58	2.20	TQ2-L-12V
	DPDT	24VDC	1,920	12.5	1	.5	18/18/28.8	255-1006-ND	3.58	3.29	2.92	2.49	TQ2-L-24V
TQ Series Telcom Dual Coil Latching Relays													
4	DPDT	5VDC	125	40	1	.5	3.75/3.75/7.5	255-1007-ND	3.31	3.04	2.70	2.30	TQ2-L2-5V
	DPDT	12VDC	720	16.2	1	.5	9/9/18	255-1008-ND	3.31	3.04	2.70	2.30	TQ2-L2-12V
	DPDT	24VDC	1,920	12.5	1	.5	18/18/28.8	255-1009-ND	3.75	3.45	3.06	2.61	TQ2-L2-24V
TQ Series Telcom Relays SMT													
5	DPDT	1.5VDC	16	93.8	2	.5	1.13/.15/2.2	255-1224-ND	3.01	2.77	2.46	2.10	TQ2SA-1.5V
	DPDT	3VDC	64.3	46.7	2	.5	2.25/.30/4.5	255-1228-ND	3.01	2.77	2.46	2.10	TQ2SA-3V
	DPDT	4.5VDC	145	31	2	.5	3.38/.45/6.7	255-1229-ND	3.01	2.77	2.46	2.10	TQ2SA-4.5V
	DPDT	5VDC	178	28.1	2	.5	3.75/0.5/7.5	255-1010-ND	3.01	2.77	2.46	2.10	TQ2SA-5V
	DPDT	12VDC	1,028	11.7	2	.5	9/1.2/18	255-1011-ND	3.01	2.77	2.46	2.10	TQ2SA-12V
	DPDT	24VDC	2,880	8.3	2	.5	18/2.4/36	255-1012-ND	3.58	3.29	2.92	2.49	TQ2SA-24V
TF Series Telcom Relays													
6	DPDT	5VDC	312.5	16	1	.5	3.75/0.5/7.5	255-1016-ND	5.41	4.98	4.42	3.76	TF2-5V
	DPDT	12VDC	1,800	6.7	1	.5	9/1.2/18	255-1017-ND	5.41	4.98	4.42	3.76	TF2-12V
	DPDT	24VDC	4,100	5.8	1	.5	18/2.4/36	255-1018-ND	6.32	5.81	5.16	4.39	TF2-24V
TF Series Telcom Dual Coil Latching Relays													
7	DPDT	5VDC	227.3	22	1	.5	3.75/3.75/7.5	255-1019-ND	7.03	6.46	5.74	4.88	TF2-L2-5V
	DPDT	12VDC	1,309	9.2	1	.5	9/9/18	255-1020-ND	7.03	6.46	5.74	4.88	TF2-L2-12V
	DPDT	24VDC	2,880	8.3	1	.5	18/18/36	255-1021-ND	7.15	6.57	5.84	4.97	TF2-L2-24V
TN Series Telcom Relays													
8	DPDT	5VDC	178	28.1	1	.5	3.75/0.5/7.5	255-1022-ND	3.90	3.58	3.18	2.71	TN2-5V
	DPDT	12VDC	1,028	11.7	1	.5	9/1.2/18	255-1023-ND	3.90	3.58	3.18	2.71	TN2-12V
	DPDT	24VDC	2,880	8.3	1	.5	18/2.4/36	255-1024-ND	4.63	4.26	3.78	3.22	TN2-24V
TN Series Telcom Dual Coil Latching Relays													
9	DPDT	5VDC	125	40	1	.5	3.75/3.75/7.5	255-1025-ND	4.85	4.46	3.96	3.37	TN2-L2-5V
	DPDT	12VDC	720	16.7	1	.5	9/9/18	255-1026-ND	4.85	4.46	3.96	3.37	TN2-L2-12V
	DPDT	24VDC	1,920	12.5	1	.5	18/18/36	255-1027-ND	5.49	5.04	4.48	3.81	TN2-L2-24V
TK Series Telcom Relays													
10	SPDT	5VDC	178	28.1	2	.5	3.75/0.5/7.5	255-1028-ND	4.43	4.08	3.62	3.08	TK1-5V
	SPDT	12VDC	1,028	11.7	2	.5	9/1.2/18	255-1029-ND	4.43	4.08	3.62	3.08	TK1-12V
	SPDT	24VDC	2,133	11.3	2	.5	18/2.4/28.8	255-1030-ND	5.10	4.68	4.16	3.54	TK1-24V
TX Series Telcom Relays													
11	DPDT	5VDC	178	28.1	2	.5	3.75/0.5/7.5	255-1031-ND	2.92	2.68	2.38	2.03	TX2-5V
	DPDT	12VDC	1,028	11.7	2	.5	9/1.2/18	255-1032-ND	2.92	2.68	2.38	2.03	TX2-12V
	DPDT	24VDC	2,133	11.3	2	.5	18/2.4/28.8	255-1033-ND	3.45	3.18	2.82	2.40	TX2-24V
TX Series Telcom Relays SMT													
12	DPDT	5VDC	178	28.1	2	.5	3.75/0.5/7.5	255-1034-ND	3.01	2.77	2.46	2.10	TX2SA-5V
	DPDT	12VDC	1,028	11.7	2	.5	9/1.2/18	255-1035-ND	3.01	2.77	2.46	2.10	TX2SA-12V
	DPDT	24VDC	2,133	11.3	2	.5	18/2.4/28.8	255-1036-ND	3.55	3.27	2.90	2.47	TX2SA-24V
AGN Series Compact Telcom Relays													
13	DPDT	4.5VDC	145	31	1	.3	3.38/.45/6.75	255-1230-ND	3.38	3.11	2.76	2.35	AGN2004H
	DPDT	12VDC	1,028	11.7	1	.3	9/1.2/18	255-1231-ND	3.38	3.11	2.76	2.35	AGN20012
	DPDT	24VDC	2,504	9.6	1	.3	18/2.4/28.8	255-1232-ND	3.97	3.65	3.24	2.76	AGN20024
AGN Series Compact Telcom Relays SMT													
14	DPDT	4.5VDC	145	31	1	.3	3.38/.45/6.75	255-1233-ND	3.50	3.22	2.86	2.44	AGN200A4H
	DPDT	12VDC	1,028	11.7	1	.3	9/1.2/18	255-1234-ND	3.50	3.22	2.86	2.44	AGN200A12
	DPDT	24VDC	2,504	9.6	1	.3	18/2.4/28.8	255-1235-ND	4.12	3.78	3.36	2.86	AGN200A24
HX Series Compact Telcom Relays													
15	DPDT	5VDC	78.1	64	1	.3	3.75/.5/5.5	255-1236-ND	3.43	3.15	2.80	2.38	HX2-5V
	DPDT	12VDC	450	26.7	1	.3	9/1.2/13.2	255-1237-ND	3.43	3.15	2.80	2.38	HX2-12V
	DPDT	24VDC	1,800	13.4	1	.3	18/2.4/26.4	255-1238-ND	3.55	3.27	2.90	2.47	HX2-24V

Fig. 1 *TQ Series*

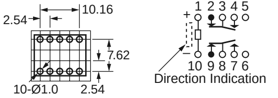


Fig. 2

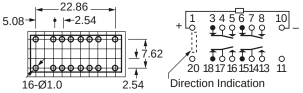


Fig. 3

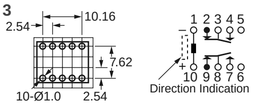


Fig. 4

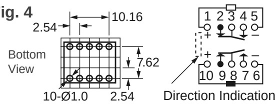


Fig. 5 *TQ Series SMT*

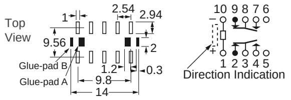


Fig. 6 *TF Series*

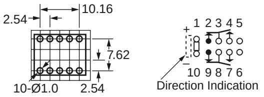


Fig. 7

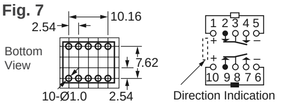


Fig. 8 *TN Series*

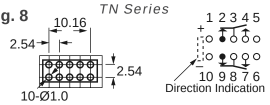


Fig. 9

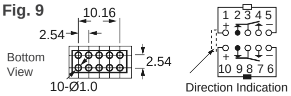


Fig. 10 *TK Series*

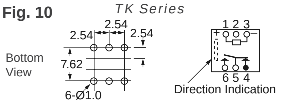


Fig. 11 *TX Series*

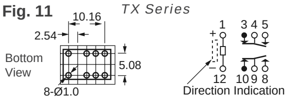


Fig. 12 *TX Series SMT*

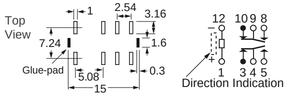


Fig. 13 *AGN Series*

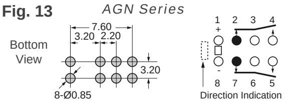


Fig. 14 *AGN Series SMT*

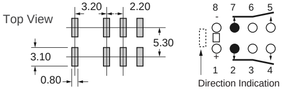
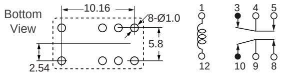


Fig. 15 *HX Series*



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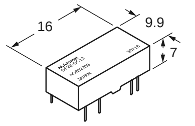
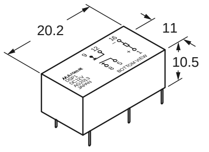
**** All relays are UL, CSA approved***

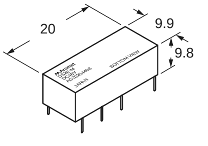
DF Series



DSP Series



DS2E Series



DS2Y Series

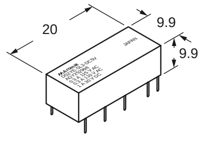


Fig.	Cont. Arrange.	Coil Volt	Coil Res.	Coil Curr. (mA)	Contact Ratings (A) 30 VDC	125 VAC	Pickup/ Dropout Max. Voltage	Digi-Key Part No.	Price Each 1	25	50	100	Aromat Part No.
DF Series General Purpose Relays													
1	DPDT	5VDC	125	40	1	.3	3.5/0.5/6	255-1037-ND	4.85	4.46	3.96	3.37	DF2E-DC5V
	DPDT	12VDC	720	16.7	1	.3	8.4/1.2/14.4	255-1038-ND	4.85	4.46	3.96	3.37	DF2E-DC12V
	DPDT	24VDC	2,880	8.3	1	.3	16.8/2.4/28.8	255-1039-ND	4.85	4.46	3.96	3.37	DF2E-DC24V
DF Series Dual Coil Latching Relays													
2	DPDT	3VDC	45	66.7	1	.3	2.1/2.1/3.6	255-1040-ND	5.86	5.38	4.78	4.07	DF2E-L2-DC3V
	DPDT	5VDC	125	40	1	.3	4/4/6	255-1041-ND	5.86	5.38	4.78	4.07	DF2E-L2-DC5V
	DPDT	6VDC	180	33.3	1	.3	4.2/4.2/7.2	255-1042-ND	5.86	5.38	4.78	4.07	DF2E-L2-DC6V
	DPDT	9VDC	405	22.2	1	.3	6.3/6.3/10.8	255-1043-ND	5.86	5.38	4.78	4.07	DF2E-L2-DC9V
	DPDT	12VDC	720	16.7	1	.3	9.6/9.6/18	255-1044-ND	5.86	5.38	4.78	4.07	DF2E-L2-DC12V
	DPDT	24VDC	2,880	8.3	1	.3	19.2/19.2/28.8	255-1045-ND	5.86	5.38	4.78	4.07	DF2E-L2-DC24V
DSP Series General Purpose Relays													
3	DPST-NO/NC	5VDC	83	60	5	5	4/0.5/6.5	255-1046-ND	6.98	6.42	5.70	4.85	DSP1-DC5V
	DPST-NO/NC	12VDC	480	25	5	5	9.6/1.2/15.6	255-1047-ND	6.98	6.42	5.70	4.85	DSP1-DC12V
	DPST-NO/NC	24VDC	1,920	12.5	5	5	19.2/2.4/31.2	255-1048-ND	6.98	6.42	5.70	4.85	DSP1-DC24V
4	SPST-NO	5VDC	83	60	8	8	4/0.5/6.5	255-1049-ND	6.20	5.70	5.06	4.31	DSP1A-DC5V
	SPST-NO	12VDC	480	25	8	8	9.6/1.2/15.6	255-1050-ND	6.20	5.70	5.06	4.31	DSP1A-DC12V
	SPST-NO	24VDC	1,920	12.5	8	8	19.2/2.4/31.2	255-1051-ND	6.20	5.70	5.06	4.31	DSP1A-DC24V
5	DPST-NO	5VDC	83	60	5	5	4/0.5/6.5	255-1052-ND	6.86	6.30	5.60	4.76	DSP2A-DC5V
	DPST-NO	12VDC	480	25	5	5	9.6/1.2/15.6	255-1053-ND	6.86	6.30	5.60	4.76	DSP2A-DC12V
	DPST-NO	24VDC	1,920	12.5	5	5	19.2/2.4/31.2	255-1054-ND	6.86	6.30	5.60	4.76	DSP2A-DC24V
DSP Series Dual Latching General Purpose Relays													
6	DPST	5VDC	83	60	5	5	4/4/6.5	255-1055-ND	7.37	6.78	6.02	5.12	DSP1-L2-DC5V
	DPST	12VDC	480	25	5	5	9.6/9.6/15.6	255-1056-ND	7.37	6.78	6.02	5.12	DSP1-L2-DC12V
	DPST	24VDC	1,920	12.5	5	5	19.2/19.2/31.2	255-1057-ND	7.37	6.78	6.02	5.12	DSP1-L2-DC24V
DSP Relay Sockets													
—	PCB Mount Relay Socket for DSP1A Relays							255-1058-ND	2.57	2.37	2.10	1.79	DSP1A-PS
	PCB Mount Relay Socket for DSP1A-L2 Relays							255-1059-ND	3.01	2.77	2.46	2.10	DSP1A-PSL2
	PCB Mount Relay Socket for DSP2A & DSP1 Relays							255-1060-ND	3.53	3.24	2.88	2.45	DSP2A-PS
	PCB Mount Relay Socket for DSP2A-L2 & DSP1-L2 Relays							255-1061-ND	3.77	3.47	3.08	2.62	DSP2A-PSL2
DS2E Series Telcom Relays (High Sensitivity and Standard Coils)													
7	DPDT	5VDC	125	40	2	.6	4/3.5/7.5	255-1062-ND	4.04	3.72	3.30	2.81	DS2E-S-DC5V
	DPDT	12VDC	720	16.6	2	.6	8.4/1.2/18	255-1063-ND	4.04	3.72	3.30	2.81	DS2E-S-DC12V
	DPDT	24VDC	2,880	8.3	2	.6	16.8/2.4/36	255-1064-ND	4.04	3.72	3.30	2.81	DS2E-S-DC24V
	DPDT	48VDC	11,520	4.1	2	.6	33.6/4.8/76.8	255-1065-ND	5.49	5.04	4.48	3.81	DS2E-S-DC48V
7	DPDT	5VDC	62.5	80	2	.6	3.5/0.5/7.5	255-1070-ND	3.26	3.00	2.66	2.27	DS2E-M-DC5V
	DPDT	12VDC	360	33.2	2	.6	8.4/1.2/18	255-1071-ND	3.26	3.00	2.66	2.27	DS2E-M-DC12V
	DPDT	24VDC	1,440	16.6	2	.6	16.8/2.4/36	255-1072-ND	3.26	3.00	2.66	2.27	DS2E-M-DC24V
	DPDT	48VDC	5,760	8.3	2	.6	33.6/4.8/76.8	255-1073-ND	4.07	3.74	3.32	2.83	DS2E-M-DC48V
DS2E Series Telcom Dual Coil Latching Relays (High Sensitivity and Standard Coils)													
8	DPDT	5VDC	125	35.9	2	.6	3.5/3.5/10	255-1066-ND	4.78	4.39	3.90	3.32	DS2E-SL2-DC5V
	DPDT	12VDC	720	15	2	.6	8.4/8.4/24	255-1067-ND	4.78	4.39	3.90	3.32	DS2E-SL2-DC12V
	DPDT	24VDC	2,880	7.5	2	.6	16.8/16.8/48	255-1068-ND	4.78	4.39	3.90	3.32	DS2E-SL2-DC24V
	DPDT	48VDC	11,520	3.25	2	.6	33.6/33.6/96	255-1069-ND	5.71	5.25	4.66	3.97	DS2E-SL2-DC48V
8	DPDT	5VDC	62.5	72	2	.6	3.5/3.5/7.5	255-1074-ND	3.87	3.56	3.16	2.69	DS2E-ML2-DC5V
	DPDT	12VDC	360	30	2	.6	8.4/8.4/18	255-1075-ND	3.87	3.56	3.16	2.69	DS2E-ML2-DC12V
	DPDT	24VDC	1440	15	2	.6	16.8/16.8/36	255-1076-ND	3.87	3.56	3.16	2.69	DS2E-ML2-DC24V
	DPDT	48VDC	5,760	7.5	2	.6	33.6/33.6/72	255-1077-ND	5.17	4.75	4.22	3.59	DS2E-ML2-DC48V
DS2Y Series Telcom Relays													
9	DPDT	5VDC	125	40	2	.3	3.5/0.5/10	255-1078-ND	2.65	2.43	2.16	1.84	DS2Y-S-DC5V
	DPDT	12VDC	720	16.7	2	.3	8.4/1.2/24	255-1079-ND	2.65	2.43	2.16	1.84	DS2Y-S-DC12V
	DPDT	24VDC	2,880	8.3	2	.3	16.8/2.4/48	255-1080-ND	2.74	2.52	2.24	1.91	DS2Y-S-DC24V
	DPDT	48VDC	7,680	6.3	2	.3	33.6/4.8/86	255-1081-ND	3.68	3.38	3.00	2.55	DS2Y-S-DC48V
DS2Y Series Telcom Dual Coil Latching Relays													
10	DPDT	5VDC	139	36	2	.3	3.5/3.5/10	255-1082-ND	3.04	2.79	2.48	2.11	DS2Y-SL2-DC5V
	DPDT	12VDC	800	15	2	.3	8.4/8.4/24	255-1083-ND	3.04	2.79	2.48	2.11	DS2Y-SL2-DC12V
	DPDT	24VDC	3,200	7.5	2	.3	16.8/16.8/48	255-1084-ND	3.04	2.79	2.48	2.11	DS2Y-SL2-DC24V
LK Series Slim High Inrush Power Relays													
11	SPST-NO	12VDC	272	44.2	5	5	8.4/1.2/15.6	255-1266-ND	1.59	1.47	1.30	1.11	LK1AF-12V
	SPST-NO	24VDC	1,087	22.1	5	5	16.8/2.4/31.2	255-1267-ND	1.69	1.56	1.38	1.18	LK1AF-24V
LKS Series High Sensitivity Power Relays													
11	SPST-NO	5VDC	100	50	5	5	3.5/0.5/6.5	255-1268-ND	1.37	1.26	1.12	.96	LKS1AF-5V
	SPST-NO	12VDC	576	20.8	5	5	8.4/1.2/15.6	255-1269-ND	1.37	1.26	1.12	.96	LKS1AF-12V
	SPST-NO	24VDC	2,304	10.4	5	5	16.8/2.4/31.2	255-1270-ND	1.45	1.33	1.18	1.01	LKS1AF-24V
LKP Series Slim Power Relays													
11	SPST	12VDC	400	30	10	5	8.4/1.2/15.6	255-1271-ND	1.62	1.49	1.32	1.13	LKP1AF-12V
	SPST	24VDC	1,600	15	10	5	16.8/2.4/31.2	255-1272-ND	1.64	1.51	1.34	1.14	LKP1AF-24V
LA Series Slim Power Relays													
12	DPST	5VDC	100	50	3	3	3.5/0.5/6.5	255-1273-ND	1.52	1.40	1.24	1.06	ALA2F05
	DPST	12VDC	272	44.2	3	3	9.0/0.6/15.6	255-1274-ND	1.52	1.40	1.24	1.06	ALA2F12
	DPST	24VDC	1,087	22.1	3	3	18/1.2/31.2	255-1275-ND	1.54	1.42	1.26	1.08	ALA2F24
ST Series IC Drivable Power Relays													
13	DPST-O/C	5VDC	105	47	8	8	4.0/0.5/7.5	255-1288-ND	11.96	10.98	9.76	8.30	ST1-DC5V
	DPST-O/C	12VDC	600	20	8	8	9.6/1.2/18	255-1289-ND	11.96	10.98	9.76	8.30	ST1-DC12V
	DPST-O/C	24VDC	2,400	10	8	8	19.2/2.4/36	255-1290-ND	11.96	10.98	9.76	8.30	ST1-DC24V
	DPST-NO	5VDC	105	47	8	8	4.0/0.5/7.5	255-1291-ND	12.62	11.59	10.30	8.76	ST2-DC5V
	DPST-NO	12VDC	600	20	8	8	9.6/1.2/18	255-1292-ND	12.62	11.59	10.30	8.76	ST2-DC12V
	DPST-NO	24VDC	2,400	10	8	8	19.2/2.4/36	255-1293-ND	12.62	11.59	10.30	8.76	ST2-DC24V
—	PCB Mount Relay Socket for ST Series Relays							255-1294-ND	2.45	2.25	2.00	1.70	ST-PS

Fig. 1 DF Series

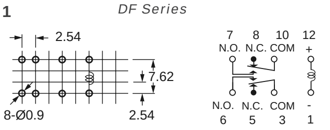


Fig. 2

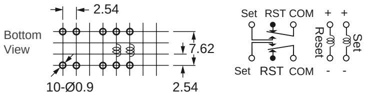


Fig. 3 DSP Series

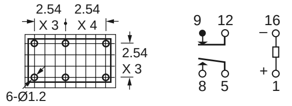


Fig. 4

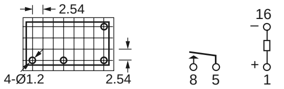
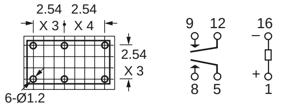


Fig. 5



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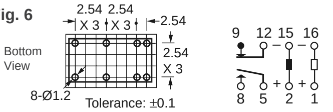


Fig. 7 DS2E Series

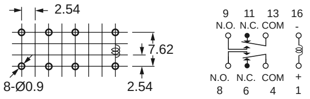


Fig. 8

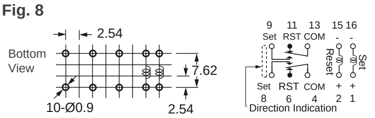


Fig. 9 DS2Y Series

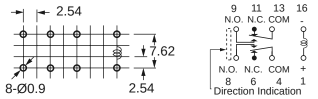


Fig. 10

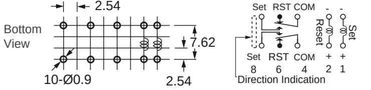


Fig. 11 LK Series

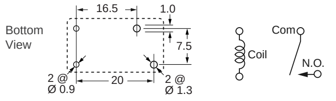


Fig. 12 LA Series

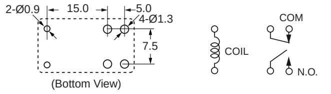
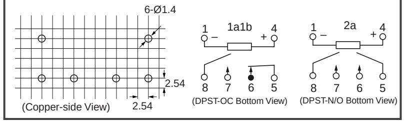


Fig. 13 ST Series



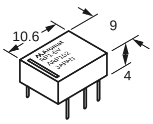
Aromat Corporation

NAiS *Your Partner for the 21st Century*

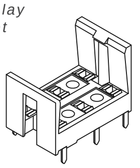
High Frequency and Power Relays

** All relays are UL, CSA approved*

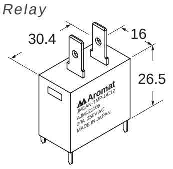
RP Series



DK Relay Socket



JM Relay



JA Relay

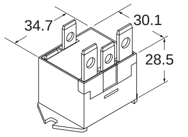


Fig.	Cont. Arrange.	Coil Volt	Coil Res.	Coil Curr. (mA)	Contact Ratings (A) 30 VDC	Contact Ratings (A) 125 VAC	Pickup/Dropout Max. Voltage	Digi-Key Part No.	Price Each 1	25	50	100	Aromat Part No.
							RK Series High Frequency Relays						
1	SPDT	5VDC	125	40	.01	—	3.75/0.5/5.5	255-1085-ND	9.26	8.51	7.56	6.43	RK1-5V
	SPDT	6VDC	180	34	.01	—	4.5/0.6/6.6	255-1086-ND	9.26	8.51	7.56	6.43	RK1-6V
	SPDT	12VDC	720	17	.01	—	9/1.2/13.2	255-1087-ND	9.26	8.51	7.56	6.43	RK1-12V
	SPDT	24VDC	2,880	9	.01	—	18/2.4/26.4	255-1088-ND	9.53	8.76	7.78	6.62	RK1-24V
							RP Series High Frequency Low Profile Relays						
2	SPDT	5VDC	178	28	.1	—	3.75/0.5/7.5	255-1089-ND	21.78	20.01	17.78	15.12	RP1-5V
	SPDT	12VDC	1,028	11.7	.1	—	9/1.2/18	255-1090-ND	21.78	20.01	17.78	15.12	RP1-12V
	SPDT	24VDC	2,133	11.3	.1	—	18/2.4/28.8	255-1091-ND	22.39	20.57	18.28	15.54	RP1-24V
							HY Series General Purpose Relays						
3	SPDT	5VDC	166	30.1	1	—	3.75/0.5/6.5	255-1092-ND	3.16	2.91	2.58	2.20	HY1-5V
	SPDT	12VDC	960	12.5	1	—	9/1.2/15.6	255-1093-ND	3.16	2.91	2.58	2.20	HY1-12V
	SPDT	24VDC	3,840	6.25	1	—	18/2.4/31.2	255-1094-ND	3.97	3.65	3.24	2.76	HY1-24V
							DK Series General Purpose Relays						
4	SPST	5VDC	125	40	10	10	3.5/0.5/6.5	255-1095-ND	7.37	6.78	6.02	5.12	DK1A-5V
	SPST	12VDC	720	16.6	10	10	8.4/8.4/15.6	255-1096-ND	7.37	6.78	6.02	5.12	DK1A-12V
	SPST	24VDC	2,880	8.3	10	10	16.8/2.4/31.2	255-1097-ND	7.37	6.78	6.02	5.12	DK1A-24V
5	DPST	5VDC	125	40	8	8	3.5/0.5/6.5	255-1098-ND	10.83	9.95	8.84	7.52	DK1A1B-5V
	DPST	12VDC	720	16.6	8	8	8.4/1.2/15.6	255-1099-ND	10.83	9.95	8.84	7.52	DK1A1B-12V
	DPST	24VDC	2,880	8.3	8	8	16.8/2.4/31.2	255-1100-ND	10.83	9.95	8.84	7.52	DK1A1B-24V
—	PCB Mount Relay Socket for DK1A Relays							255-1101-ND	4.02	3.69	3.28	2.79	DK1A-PS
	PCB Mount Relay Socket for DK1A1B Relays							255-1102-ND	3.99	3.67	3.26	2.78	DK2A-PS
							JQ Series High Noise Immunity Power Relays						
6	SPDT	5VDC	62.5	80	5	5	3.75/.25/7.5	255-1263-ND	3.28	3.02	2.68	2.28	JQ1-5V
	SPDT	12VDC	360	33	5	5	9.6/1.2/20	255-1264-ND	3.28	3.02	2.68	2.28	JQ1-12V
	SPDT	24VDC	1,440	16.7	5	5	19.2/2.4/36	255-1265-ND	3.28	3.02	2.68	2.28	JQ1-24V
							JS Series Power Relays						
7	SPDT	5VDC	69.4	72	5	10	3.5/0.5/6.5	255-1103-ND	1.20	1.11	.98	.84	JS1-5V
	SPDT	12VDC	400	30	5	10	8.4/1.2/15.6	255-1104-ND	1.20	1.11	.98	.84	JS1-12V
	SPDT	24VDC	1,600	15	5	10	16.8/2.4/36	255-1105-ND	1.30	1.20	1.06	.91	JS1-24V
8	SPST-NO	5VDC	69.4	72	5	10	3.5/0.5/7.5	255-1106-ND	1.15	1.06	.94	.80	JS1A-5V
	SPST-NO	12VDC	400	30	5	10	8.4/1.2/18	255-1107-ND	1.15	1.06	.94	.80	JS1A-12V
	SPST-NO	24VDC	1,600	15	5	10	16.8/2.4/36	255-1108-ND	1.18	1.08	.96	.82	JS1A-24V
							JSM Series Automotive Power Relays						
9	SPDT	12VDC	225	53.3	10	—	6.3/.9/16	255-1239-ND	1.30	1.20	1.06	.91	JSM1-12V-4
	SPDT	12VDC	225	53.3	15	—	6.3/.9/16	255-1240-ND	1.42	1.31	1.16	.99	JSM1-12V-5
							JR Series Power Relays						
10	SPST-NO	6VDC	68	88	16	16	4.8/0.6/6.6	255-1109-ND	3.92	3.60	3.20	2.72	JR1AF-DC6V
	SPST-NO	12VDC	270	44	16	16	9.6/1.2/13.2	255-1110-ND	3.92	3.60	3.20	2.72	JR1AF-DC12V
	SPST-NO	24VDC	1,100	22.1	16	16	19.2/2.4/26.4	255-1111-ND	3.92	3.60	3.20	2.72	JR1AF-DC24V
	SPST-NO	48VDC	4,350	11	16	.16	38.4/4.8/52.8	255-1112-ND	3.92	3.60	3.20	2.72	JR1AF-DC48V
							JW Series Power Relays						
11	SPDT	5VDC	47	106	10	10	3.5/0.5/6.5	255-1113-ND	2.06	1.89	1.68	1.43	JW1FSN-DC5V
	SPDT	12VDC	270	44	10	10	8.4/1.2/15.6	255-1114-ND	2.06	1.89	1.68	1.43	JW1FSN-DC12V
	SPDT	24VDC	1,100	16.8	10	10	16.8/2.4/31.2	255-1115-ND	2.16	1.98	1.76	1.50	JW1FSN-DC24V
12	DPDT	5VDC	47	106	5	5	3.5/0.5/6.5	255-1116-ND	2.33	2.14	1.90	1.62	JW2SN-DC5V
	DPDT	12VDC	270	44	5	5	8.4/1.2/15.6	255-1117-ND	2.33	2.14	1.90	1.62	JW2SN-DC12V
	DPDT	24VDC	1,100	16.8	5	5	16.8/2.4/31.2	255-1118-ND	2.47	2.28	2.02	1.72	JW2SN-DC24V
	DPDT	48VDC	4,400	11	5	5	33.6/4.8/62.4	255-1119-ND	2.55	2.34	2.08	1.77	JW2SN-DC48V
13	SPST-NO	12VDC	270	44	10	10	8.4/1.2/15.6	255-1120-ND	1.94	1.78	1.58	1.35	JW1AFSN-DC12V
	SPST-NO	24VDC	1,100	16.8	10	10	16.8/2.4/31.2	255-1121-ND	2.01	1.85	1.64	1.40	JW1AFSN-DC24V
							JM Series Power Relays						
14	SPST-NO	5VDC	27.8	180	20	20	3.5/0.5/5.5	255-1122-ND	8.94	8.22	7.30	6.21	JM1AN-TMP-DC5V
	SPST-NO	12VDC	160	75	20	20	8.4/1.2/13.2	255-1123-ND	8.94	8.22	7.30	6.21	JM1AN-TMP-DC12V
	SPST-NO	24VDC	640	37.5	20	20	16.8/2.4/26.4	255-1124-ND	8.94	8.22	7.30	6.21	JM1AN-TMP-DC24V
							JC Series Power Relays						
15	SPST-NO	6VDC	40	150	15	15	4.8/0.6/6.6	255-1125-ND	5.61	5.16	4.58	3.90	JC1AF-DC6V
	SPST-NO	12VDC	160	75	15	15	9.6/1.2/13.2	255-1126-ND	5.61	5.16	4.58	3.90	JC1AF-DC12V
	SPST-NO	24VDC	640	37.5	15	15	19.2/2.4/26.4	255-1127-ND	5.61	5.16	4.58	3.90	JC1AF-DC24V
—	PCB Mount Relay Socket for JC1AF Relay							255-1128-ND	1.52	1.40	1.24	1.06	JC1-PS
							JA Series Power Relays (15A Steady State Inductive, 55A Inrush)						
16	SPDT	12VDC	120	100	15	15	9.6/1.2/13.2	255-1129-ND	9.43	8.67	7.70	6.55	JA1C-TM-DC12V
	SPDT	24VDC	480	50	15	15	19.2/2.4/26.4	255-1130-ND	9.43	8.67	7.70	6.55	JA1C-TM-DC24V
	SPDT	12VAC	—	108	15	15	9.6/3.6/13.2	255-1131-ND	9.43	8.67	7.70	6.55	JA1C-TM-AC12V
	SPDT	24VAC	—	54	15	15	19.2/7.2/26.4	255-1132-ND	9.43	8.67	7.70	6.55	JA1C-TM-AC24V
	SPDT	115VAC	—	11	15	15	92/34.5/126.5	255-1133-ND	10.41	9.57	8.50	7.23	JA1C-TM-AC115V
	SPDT	240VAC	—	13	15	15	192/72/264	255-1134-ND	11.66	10.71	9.52	8.10	JA1C-TM-AC240V
	SPDT	12VDC	120	100	25	25	9.6/1.2/13.2	255-1135-ND	9.85	9.05	8.04	6.84	JA1C-TM-DC12V-P
	SPDT	115VAC	—	11	25	25	92/34.5/126.5	255-1136-ND	11.05	10.15	9.02	7.67	JA1C-TM-AC115V-P
	SPDT	240VAC	—	13	25	25	192/72/264	255-1137-ND	12.30	11.30	10.04	8.54	JA1C-TM-AC240V-P
16	SPST-NO	6VDC	30	200	15	15	4.8/0.6/6.6	255-1138-ND	8.62	7.92	7.04	5.99	JA1A-TM-DC6V
	SPST-NO	12VDC	120	100	15	15	9.6/1.2/13.2	255-1139-ND	8.62	7.92	7.04	5.99	JA1A-TM-DC12V
	SPST-NO	24VDC	480	50	15	15	19.2/2.4/26.4	255-1140-ND	8.62	7.92	7.04	5.99	JA1A-TM-DC24V
	SPST-NO	24VAC	—	54	15	15	19.2/7.2/26.4	255-1141-ND	8.62	7.92	7.04	5.99	JA1A-TM-AC24V
	SPST-NO	115VAC	—	11	15	15	92/34.5/126.5	255-1142-ND	9.70	8.91	7.92	6.74	JA1A-TM-AC115V

Fig. 1 RK Series

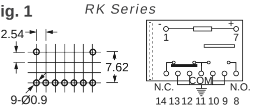


Fig. 2 RP Series

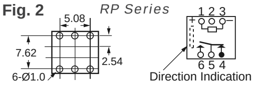


Fig. 3 HY Series

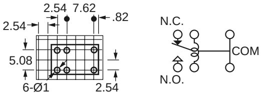


Fig. 4 DK Series

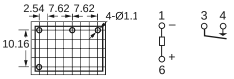


Fig. 5

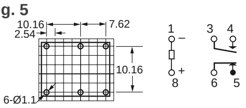


Fig. 6 JQ Series

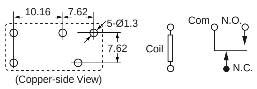


Fig. 7 JS Series

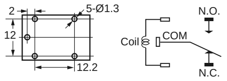


Fig. 8

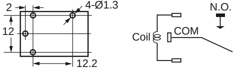


Fig. 9 JSM Series

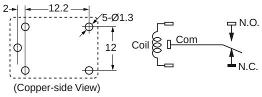


Fig. 10 JR Series

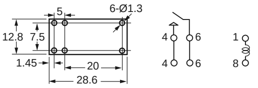


Fig. 11 JW Series

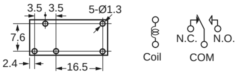


Fig. 12

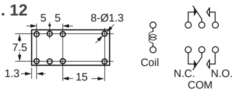


Fig. 13

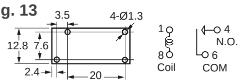


Fig. 14 JM Series

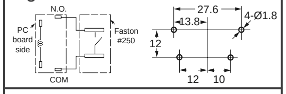


Fig. 15 JC Series

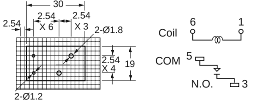
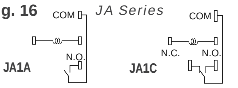


Fig. 16 JA Series



General Purpose PC Mount Relays

**All relays are UL, CSA approved*

Mounting hole connection diagrams are all bottom view unless otherwise noted

Fig. 1 — T7C Series

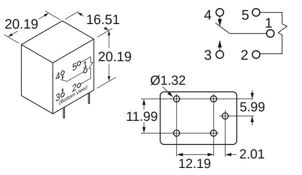


Fig. 2 — T7N Series

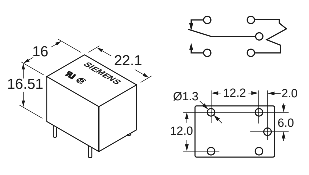


Fig. 3 — T73 Series

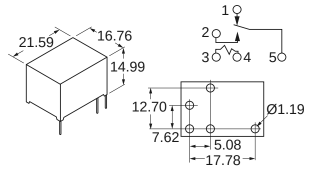


Fig. 4 — T75 Series *NEW!*

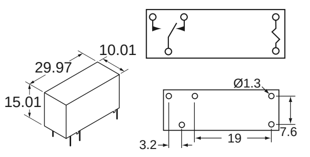


Fig. 5 — T77 Series

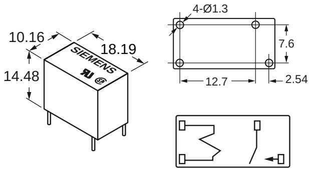


Fig. 6 — T81 Series *NEW!*

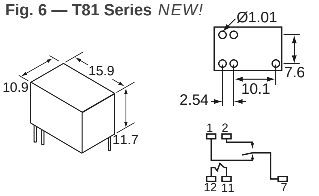


Fig. 7 — T84 Series

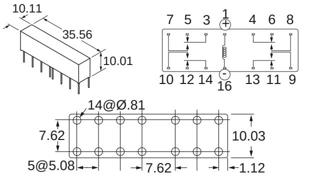


Fig. 8— V23079 Series

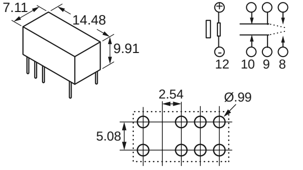


Fig. 9 — V23105 Series

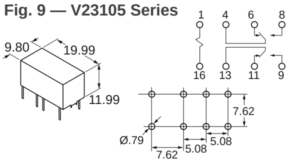


Fig. 10 — V23026 Series (Through Hole)

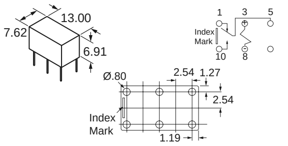


Fig. 11 — V23026 Series (Surface Mount)

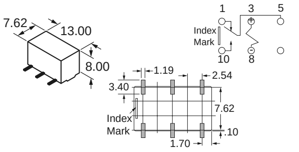


Fig. 12 — RT Series

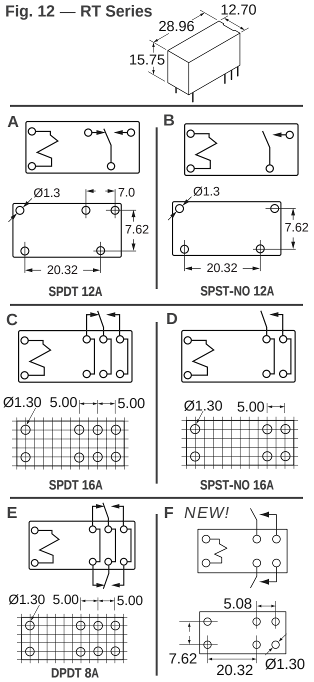


Fig.	Contact Arrange-ment	Coil Voltage	Coil Current (mA)	Coil Power (mW)	Contact Rating (A)	Operate Volt Release Volt pull/drop/max	Turn-on Turn-off (mSec)	Digi-Key Part No.	Price Each 1	25	50	Potter & Brumfield Part No.
						T7C Series — Economical (Ideal for Appliance and Automotive Applications)						
1	SPDT	5 VDC	71.4	360	12	3.5/0.5/5.5 VDC	10 / 5	PB335-ND	1.49	1.31	1.18	T7CS5D-05
	SPDT	6 VDC	60	360	12	4.5/0.3/6.6 VDC	10 / 5	PB336-ND	1.49	1.31	1.18	T7CS5D-06
	SPDT	12 VDC	30	360	12	9/0.6/13.2 VDC	10 / 5	PB337-ND	1.49	1.31	1.18	T7CS5D-12
	SPDT	24 VDC	15	360	12	18/1.2/26.4 VDC	10 / 5	PB338-ND	1.49	1.31	1.18	T7CS5D-24
	SPDT	12VDC	30	360	12	9/0.6/13.2VDC	10 / 5	PB441-ND• *NEW!*	1.46	1.29	1.16	T7CV5D-12
						T7N Series Power Relay						
2	SPDT	5 VDC	71.5	360	10	3.5/.25/5	10 / 5	PB379-ND	1.30	1.14	1.03	T7NS5D1-05
	SPDT	12 VDC	30	360	10	8.4/.60/12	10 / 5	PB380-ND	1.30	1.14	1.03	T7NS5D1-12
	SPDT	24 VDC	15	360	10	16.8/1.2/24	10 / 5	PB381-ND	1.30	1.14	1.03	T7NS5D1-24
	SPDT	48 VDC	7.5	360	10	33.6/2.4/48	10 / 5	PB382-ND	1.97	1.73	1.56	T7NS5D1-48
						T73 Series — Low Profile Relay - Meets 3,500 Volt Surge						
3	SPDT	5 VDC	89	450	10	3.25/.25/5 VDC	10 / 5	PB364-ND	2.23	1.96	1.77	T73S5D15-05
	SPDT	12 VDC	37.5	450	10	7.8/.6/12 VDC	10 / 5	PB365-ND	2.23	1.96	1.77	T73S5D15-12
	SPDT	24 VDC	20.9	450	10	15.6/1.2/24 VDC	10 / 5	PB366-ND	2.23	1.96	1.77	T73S5D15-24
						T75 Series — Miniature Relay						
4	SPDT	5VDC	42.4	230	14	3.6/0.5/5VDC	6 / 2.5	PB442-ND *NEW!*	2.95	2.59	2.34	T75S5D112-05
	SPDT	12VDC	18.5	230	14	8.64/1.2/12VDC	6 / 2.5	PB443-ND *NEW!*	4.90	4.29	3.88	T75S5D112-12
	SPDT	24VDC	10.6	230	14	17.28/2.4/24VDC	6 / 2.5	PB444-ND *NEW!*	4.90	4.29	3.88	T75S5D112-24
						T77 Series Power Relay — Sealed and Semi-sealed						
5	SPST-NO	5 VDC	90	450	10	3.75/.25/5	10 / 4	PB367-ND	1.63	1.43	1.30	T77S1D10-05
	SPST-NO	12 VDC	37.5	450	10	9.0/.6/12	10 / 4	PB368-ND	1.63	1.43	1.30	T77S1D10-12
	SPST-NO	24 VDC	18.75	450	10	18/1.2/24	10 / 4	PB369-ND	1.63	1.43	1.30	T77S1D10-24
	SPST-NO	24VDC	18.75	450	10	18/1.2/24VDC	10 / 4	PB445-ND• *NEW!*	1.63	1.43	1.30	T77V1D10-24
	SPST-NO	5 VDC	40	200	3	3.75/.25/5	10 / 4	PB370-ND	1.63	1.43	1.30	T77S1D3-05
	SPST-NO	12 VDC	16.7	200	3	9.0/.6/12	10 / 4	PB371-ND	1.63	1.43	1.30	T77S1D3-12
	SPST-NO	24 VDC	8.3	200	3	18/1.2/24	10 / 4	PB372-ND	1.63	1.43	1.30	T77S1D3-24
						T81 Series — High Density Telcom Relay						
6	SPDT	5VDC	89.5	450	0.5	3.5/.25/5VDC	5 / 2	PB446-ND *NEW!*	2.62	2.29	2.08	T81H5D312-05
	SPDT	12VDC	37.5	450	0.5	8.4/0.6/12VDC	5 / 2	PB447-ND *NEW!*	3.19	2.80	2.53	T81N5D312-12
	SPDT	24VDC	18.75	450	0.5	16.8/1.2/24VDC	5 / 2	PB448-ND *NEW!*	2.52	2.21	2.00	T81N5D312-24
						T84 Series — 4-Pole Relay (Ideal for Audio Circuits and Process Control)						
7	4PDT	5 VDC	40	200	2	3.5/0.5/5 VDC	6 / 4	PB273-ND	9.38	8.22	7.43	T84S17D214-05
	4PDT	24 VDC	8.3	200	2	16.8/2.4/24 VDC	6 / 4	PB275-ND	9.38	8.22	7.43	T84S17D214-24
	4PDT	5 VDC	80	400	2	3.5/0.5/5 VDC	6 / 4	PB276-ND	9.14	8.01	7.24	T84S17D414-05
						V23079 Series — FCC Part 68, High Dielectric Relay						
8	DPDT	5 VDC	28	140	2	3.75/0.5/10.9 VDC	2 / 2	PB288-ND	3.38	2.97	2.68	V23079A1001B301
	DPDT	12 VDC	11.6	140	2	8.4/1.2/26.1 VDC	2 / 2	PB289-ND	3.38	2.97	2.68	V23079A1003B301
						V23105 Series — Nonpolarized Dip Package Relay						
9	DPDT	5 VDC	30	150	2	3.5/.25/5	4.5 / 1.5	PB383-ND	1.94	1.71	1.54	V23105A5001A201
	DPDT	12 VDC	12.5	150	2	8.4/.60/12	4.5 / 1.5	PB384-ND	1.97	1.73	1.56	V23105A5003A201
	DPDT	24 VDC	6.25	150	2	16.8/1.2/24	4.5 / 1.5	PB385-ND	2.02	1.77	1.60	V23105A5005A201
	DPDT	5 VDC	40	200	2	3.5/.25/5	4.5 / 1.5	PB386-ND	1.87	1.64	1.49	V23105A5301A201
	DPDT	12 VDC	16.7	200	2	8.4/.60/12	4.5 / 1.5	PB387-ND	1.90	1.66	1.51	V23105A5303A201
	DPDT	24 VDC	8.33	200	2	16.8/1.2/24	4.5 / 1.5	PB388-ND	1.97	1.73	1.56	V23105A5305A201
	DPDT	48 VDC	4.16	200	2	33.6/2.4/48	4.5 / 1.5	PB389-ND	2.76	2.42	2.19	V23105A5307A201
	DPDT	24VDC	10.8	260	2	16.8/1.2/24	4.5 / 1.5	PB344-ND	3.00	2.63	2.38	V23105A3005B201
						V23026 Series — Miniature Sealed Relay (Up to 1 Billion Operations!)						
10	SPDT	5 VDC	13.5	68	1	3.75/0.5/14.5 VDC	1 / 1	PB282-ND	3.67	3.22	2.91	V23026A1001B201
	SPDT	12 VDC	5.3	68	1	8.4/1.2/12 VDC	1 / 1	PB283-ND	3.60	3.15	2.85	V23026A1002B201
	SPDT	24 VDC	5.3	68	1	16.8/2.4/50 VDC	1 / 1	PB284-ND	4.18	3.66	3.31	V23026A1004B201
11	SPDT	5 VDC	16	80	1	3.75/0.5/13.3 VDC	1 / 1	PB285-ND	3.96	3.47	3.14	V23026D1021B201
	SPDT	12 VDC	6.6	80	1	8.4/1.2/32 VDC	1 / 1	PB286-ND	3.96	3.47	3.14	V23026D1022B201
	SPDT	24 VDC	5.3	80	1	16.8/2.4/50 VDC	1 / 1	PB287-ND	4.46	3.91	3.54	V23026D1024B201
						RT Series — Low Profile Power PCB Relay						
12-A	SPDT	5 VDC	80	400	12	3.5/0.5/5 VDC	7 / 3	PB359-ND	2.35	2.06	1.87	RTB14005F
	SPDT	12 VDC	33.3	400	12	8.4/1.2/12 VDC	7 / 3	PB360-ND	4.22	3.70	3.35	RTB14012F
	SPDT	12VDC	33.3	400	12	8.4/1.2/12VDC	7 / 3	PB449-ND• *NEW!*	4.22	3.70	3.35	RT114012F
	SPDT	24 VDC	16.7	400	12	16.8/1.2/24 VDC	7 / 3	PB361-ND	4.22	3.70	3.35	RTB14024F
12-B	SPST-NO	12 VDC	33.3	400	12	8.4/1.2/12 VDC	7 / 3	PB362-ND	4.22	3.70	3.35	RTB34012F
	SPST-NO	24 VDC	16.7	400	12	16.8/1.2/24 VDC	7 / 3	PB363-ND	3.86	3.39	3.06	RTB34024F
12-C	SPDT	5 VDC	80	400	16	3.5/0.5/5 VDC	7 / 3	PB291-ND	2.81	2.46	2.23	RTD14005F
	SPDT	12 VDC	33.3	400	16	8.4/1.2/12 VDC	7 / 3	PB292-ND	4.22	3.70	3.35	RTD14012F
12-D	SPST-NO	12 VDC	33.3	400	16	8.4/1.2/12 VDC	7 / 3	PB293-ND	4.22	3.70	3.35	RTD34012F
	SPST-NO	24 VDC	16.7	400	16	16.8/2.4/24 VDC	7 / 3	PB294-ND	4.22	3.70	3.35	RTD34024F
12-E	DPDT	5 VDC	80	400	8	3.5/0.5/5 VDC	7 / 3	PB295-ND	2.86	2.50	2.27	RTE24005F
	DPDT	12 VDC	33.3	400	8	8.4/1.2/12 VDC	7 / 3	PB296-ND	3.67	3.22	2.91	RTE24012F
	DPDT	24 VDC	16.7	400	8	16.8/1.2/24 VDC	7 / 3	PB297-ND	2.81	2.46	2.23	RTE24024F
12-F	DPST-NO	12VDC	33.3	400	8	8.4/1.2/12VDC	7 / 3	PB450-ND *NEW!*	4.22	3.70	3.35	RTE44012F

• Flux-Tight Version

PC Mount and General Purpose Relays

** All relays are UL, CSA approved*

Mounting hole connection diagrams are all bottom view unless otherwise noted

Fig. 1 — PE Series

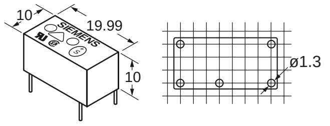


Fig. 2 — RE Series

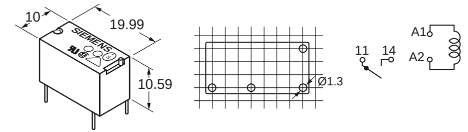


Fig. 3 — K10 Series

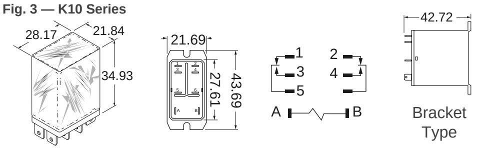


Fig. 4 — R10 Series

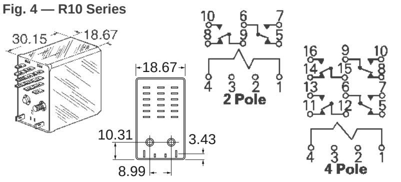


Fig. 5 — KHA/KHS Series

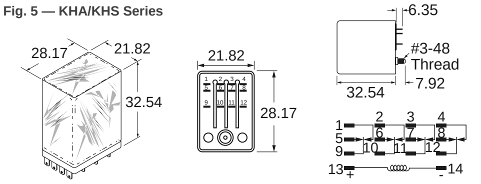


Fig. 6 — KUP Series

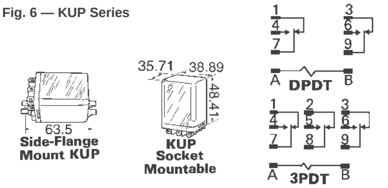


Fig.	Contact Arrange-ment	Coil Voltage	Coil Current (mA)	Contact Rating (A)	Operate Volt Release Volt pull/drop/max	Terminal Type Inch (mm)	Additional Features	Digi-Key Part No.	Price Each				Potter & Brumfield Part No.
									1	25	50	100	
PE Series Miniature Cadmium Free Contacts Relay													
1	SPDT	5 VDC	40	5	3.75/3.75/5 VDC	PC Mount	—	PB353-ND	3.91	3.43	3.10	2.45	PE014005
		12 VDC	16.7	5	9/1.25/12 VDC	PC Mount	—	PB354-ND	3.91	3.43	3.10	2.45	PE014012
		24 VDC	8.3	5	18/2.45/24 VDC	PC Mount	—	PB355-ND	3.91	3.43	3.10	2.45	PE014024
RE Series Lower Profile Power Relay													
2	SPST-NO	5 VDC	40	6	3.75/3.75/5 VDC	PC Mount	—	PB356-ND	5.11	4.48	4.05	3.20	RE030005
		12 VDC	16.7	6	9/1.25/12 VDC	PC Mount	—	PB357-ND	5.11	4.48	4.05	3.20	RE030012
		24 VDC	8.3	6	18/2.45/24 VDC	PC Mount	—	PB358-ND	5.11	4.48	4.05	3.20	RE030024
K10 Series - General Purpose Miniature Power Relay													
3	DPDT	12 VAC	100	15	10.2/2.4/12 VAC	.187 (4.75) QC	—	PB319-ND	9.46	8.28	7.49	5.91	K10P-11A15-12
		24 VAC	52	15	20.4/4.8/24 VAC	.187 (4.75) QC	—	PB320-ND	9.46	8.28	7.49	5.91	K10P-11A15-24
		120 VAC	11	15	102/24/120 VAC	.187 (4.75) QC	—	PB321-ND	9.46	8.28	7.49	5.91	K10P-11A15-120
		6 VDC	150	15	4.5/0.6/6 VDC	.187 (4.75) QC	—	PB323-ND	8.86	7.75	7.02	5.54	K10P-11D15-6
		12 VDC	75	15	9/1.2/12 VDC	.187 (4.75) QC	—	PB324-ND	8.86	7.75	7.02	5.54	K10P-11D15-12
		24 VDC	37	15	18/2.4/24 VDC	.187 (4.75) QC	—	PB325-ND	8.86	7.75	7.02	5.54	K10P-11D15-24
		110 VDC	10	15	82.5/11/110 VDC	.187 (4.75) QC	—	PB326-ND	10.18	8.91	8.06	6.36	K10P-11D15-110
		12 VDC	75	15	9/1.2/12 VDC	PC Mount	—	PB327-ND	8.86	7.75	7.02	5.54	K10P-11D55-12
		24 VDC	37	15	18/2.4/24 VDC	PC Mount	—	PB328-ND	8.86	7.75	7.02	5.54	K10P-11D55-24
		110 VDC	10	15	82.5/11/110VDC	PC Mount	—	PB451-ND *NEW!*	5.35	4.69	4.24	3.35	K10P-11D55-110
		12 VDC	75	15	9/1.2/12 VDC	.187 (4.75) QC	With Bracket	PB329-ND	8.86	7.75	7.02	5.54	K10P-11DT5-12
		24 VDC	37	15	18/2.4/24 VDC	.187 (4.75) QC	With Bracket	PB330-ND	8.86	7.75	7.02	5.54	K10P-11DT5-24
		120 VAC	11	15	102/24/120 VAC	.187 (4.75) QC	With Bracket	PB322-ND	9.46	8.28	7.49	5.91	K10P-11AT5-120
R10 Series — General Purpose Power Relay													
4	DPDT	6 VDC	115	3	4.5/0.5/6.6 VDC	Plug-In	—	PB116-ND	13.66	11.95	10.82	8.54	R10-E1Y2-V52
		12 VDC	64	3	9/1.2/13.2 VDC	Plug-In	—	PB117-ND	13.66	11.95	10.82	8.54	R10-E1Y2-V185
		24 VDC	34	3	18/2.4/26.4 VDC	Plug-In	—	PB118-ND	13.66	11.95	10.82	8.54	R10-E1Y2-V700
		48 VDC	19	3	36/4.8/52.8 VDC	Plug-In	—	PB119-ND	13.66	11.95	10.82	8.54	R10-E1Y2-V2.5K
	4PDT	6 VDC	115	3	4.5/0.5/6.6 VDC	Plug-In	—	PB120-ND	14.64	12.81	11.59	9.15	R10-E1Y4-V52
		12 VDC	64	3	9/1.2/13.2 VDC	Plug-In	—	PB121-ND	14.64	12.81	11.59	9.15	R10-E1Y4-V185
		24 VDC	34	3	18/2.4/26.4 VDC	Plug-In	—	PB122-ND	14.64	12.81	11.59	9.15	R10-E1Y4-V700
		48 VDC	19	3	36/4.8/52.8 VDC	Plug-In	—	PB123-ND	14.64	12.81	11.59	9.15	R10-E1Y4-V2.5K
	DPDT	6 VDC	115	5	4.5/0.5/6.6 VDC	Plug-In	—	PB124-ND	13.37	11.70	10.59	8.36	R10-E1X2-V52
		12 VDC	64	5	9/1.2/13.2 VDC	Plug-In	—	PB125-ND	13.37	11.70	10.59	8.36	R10-E1X2-V185
		24 VDC	34	5	18/2.4/26.4 VDC	Plug-In	—	PB126-ND	13.37	11.70	10.59	8.36	R10-E1X2-V700
		48 VDC	19	5	36/4.8/52.8 VDC	Plug-In	—	PB127-ND	13.37	11.70	10.59	8.36	R10-E1X2-V2.5K
		24 VDC	34	5	18/2.4/26.4VDC	Plug-In	—	PB452-ND *NEW!*	13.37	11.70	10.59	8.36	R10-E2X2-V700
	4PDT	12 VDC	64	5	9/1.2/13.2 VDC	Plug-In	—	PB129-ND	15.62	13.68	12.37	9.77	R10-E1X4-V185
		24 VDC	34	5	18/2.4/26.4 VDC	Plug-In	—	PB130-ND	15.62	13.68	12.37	9.77	R10-E1X4-V700
		48 VDC	19	5	36/4.8/52.8 VDC	Plug-In	—	PB131-ND	15.62	13.68	12.37	9.77	R10-E1X4-V2.5K
		24 VDC	34	5	18/2.4/26.4VDC	Plug-In	—	PB453-ND *NEW!*	22.49	19.68	17.81	14.06	R10-E1M4-V700
		24 VDC	34	7.5	18/2.4/26.4VDC	Plug-In	—	PB454-ND *NEW!*	14.42	12.63	11.42	9.02	R10-E1W2-V700
KHA/KHS Series — General Purpose Low Cost Power Relay													
5	DPDT	12 VDC	75	5	9/1.2/12VDC	Plug-In	—	PB455-ND *NEW!*	7.13	6.24	5.65	4.46	KHAU-11D12-12
	4PDT	24 VAC	—	3	20.4/2.4/24 VAC	Plug-In	—	PB139-ND	8.11	7.10	6.43	5.07	KHAU-17A11-24
		120 VAC	—	3	102/22/120 VAC	Plug-In	—	PB140-ND	8.52	7.46	6.75	5.33	KHAU-17A11-120
		120 VAC	—	3	102/22/120 VAC	Plug-In	With Indicator Light	PB141-ND	11.88	10.40	9.41	7.43	KHAU-17A11N-120
		120 VAC	—	5	102/12/120VAC	Plug-In	—	PB456-ND *NEW!*	8.52	7.46	6.75	5.33	KHAU-17A12-120
		24 VAC	—	1	20.4/2.4/24VAC	Plug-In	—	PB457-ND *NEW!*	9.29	8.13	7.36	5.81	KHAU-17A16-24
		12 VDC	75	3	9/2.4/12 VDC	Plug-In	—	PB142-ND	7.39	6.47	5.86	4.62	KHAU-17D11-12
		24 VDC	37	3	18/2.4/24 VDC	Plug-In	—	PB143-ND	7.39	6.47	5.86	4.62	KHAU-17D11-24
		24 VDC	37	5	18/2.4/24VDC	Plug-In	—	PB458-ND *NEW!*	7.39	6.47	5.86	4.62	KHAU-17D12-24
		24 VDC	37	3	18/2.4/24VDC	Solder	Hermetically Sealed	PB459-ND *NEW!*	46.06	40.30	36.47	28.79	KHS-17D11-24
		120 VAC	—	3	102/12/120VAC	Solder	Hermetically Sealed	PB460-ND *NEW!*	50.23	43.96	39.77	31.40	KHS-17A11-120
		24 VDC	37	5	18/2.4/24VDC	Solder	Hermetically Sealed	PB461-ND *NEW!*	46.06	40.30	36.47	28.79	KHS-17D12-24
		120 VAC	—	5	102/12/120VAC	Solder	Hermetically Sealed	PB462-ND *NEW!*	50.23	43.96	39.77	31.40	KHS-17A12-120
KUP Series — Enclosed Relays													
6	DPDT	24 VAC	—	10	20.4/2.4/24 VAC	.187 (4.75) QC	—	PB151-ND	13.99	12.25	11.08	8.75	KUP-11A15-24
		120 VAC	—	10	102/12/120 VAC	.187 (4.75) QC	—	PB152-ND	13.82	12.10	10.95	8.64	KUP-11A15-120
		12 VDC	100	10	9/1.2/12 VDC	.187 (4.75) QC	—	PB153-ND	12.38	10.84	9.81	7.74	KUP-11D15-12
		24 VDC	51	10	18/2.4/24 VDC	.187 (4.75) QC	—	PB154-ND	12.38	10.84	9.81	7.74	KUP-11D15-24
		12 VDC	100	10	9/1.2/12 VDC	.187 (4.75) QC	Side Flange	PB155-ND	12.05	10.55	9.54	7.53	KUP-11D55-12
		24 VDC	51	10	18/2.4/24 VDC	.187 (4.75) QC	Side Flange	PB156-ND	12.05	10.55	9.54	7.53	KUP-11D55-24
		24 VAC	—	10	20.4/2.4/24 VAC	.187 (4.75) QC	Side Flange	PB222-ND	13.39	11.72	10.61	8.37	KUP-11A55-24
		120 VAC	—	10	102/12/120VAC	.187 (4.75) QC	Side Flange	PB463-ND *NEW!*	13.39	11.72	10.61	8.37	KUP-11A55-120
	DPST	24 VDC	75	10	18/2.4/24 VDC	.187 (4.75) QC	Side Flange	PB223-ND	14.52	12.71	11.50	9.08	KUGP-7D55-24
	3PDT	24 VAC	—	10	20.4/2.4/24 VAC	.187 (4.75) QC	—	PB157-ND	14.42	12.63	11.42	9.02	KUP-14A15-24
		120 VAC	—	10	102/12/120 VAC	.187 (4.75) QC	—	PB158-ND	14.42	12.63	11.42	9.02	KUP-14A15-120
		12 VDC	100	10	9/1.2/12 VDC	.187 (4.75) QC	—	PB159-ND	14.69	12.86	11.63	9.18	KUP-14D15-12
		24 VDC	51	10	18/2.4/24 VDC	.187 (4.75) QC	—	PB160-ND	14.69	12.86	11.63	9.18	KUP-14D15-24
		24 VAC	—	10	18/2.4/24VAC	.187 (4.75) QC	With Indicator Light	PB464-ND *NEW!*	16.08	14.07	12.73	10.05	KUP-14A35-24
		24 VDC	51	10	18/2.4/24VDC	.187 (4.75) QC	With Indicator Light	PB465-ND *NEW!*	17.02	14.89	13.48	10.64	KUP-14D35-24
		120 VAC	—	10	102/12/120 VAC	.187 (4.75) QC	With Indicator Light	PB161-ND	16.08	14.07	12.73	10.05	KUP-14A35-120
		120 VAC	—	10	102/12/120 VAC	.187 (4.75) QC	With Test Button	PB162-ND	18.91	16.55	14.98	11.82	KUP-14A45-120
		24 VAC	—	10	20.4/2.4/24 VAC	.187 (4.75) QC	Side Flange	PB163-ND	15.00	13.13	11.88	9.38	KUP-14A55-24
		120 VAC	—	10	102/12/120 VAC	.187 (4.75) QC	Side Flange	PB164-ND	15.00	13.13	11.88	9.38	KUP-14A55-120

(Continued)

Fig. 7 — KRP/KRPA/KR Series

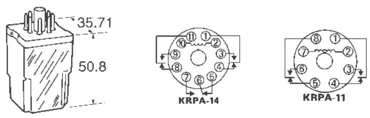


Fig. 8 — T90 Series

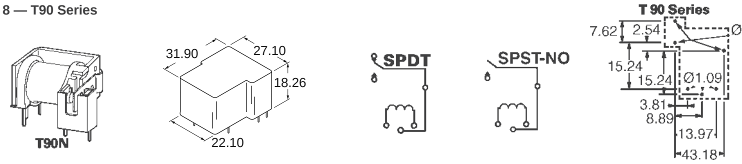


Fig. 9 — T9A Series

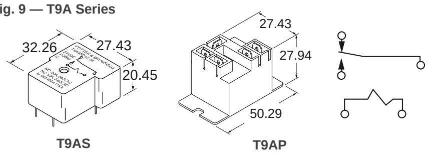


Fig. 10 — T92 Series

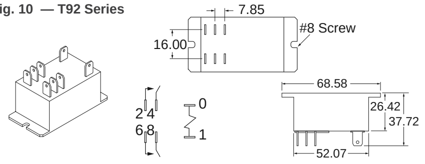


Fig. 11 — *NEW!* **PRD Series**

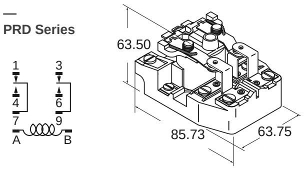


Fig.	Contact Arrangement	Coil Voltage	Coil Current (mA)	Contact Rating (A)	Operate Volt Release Volt pull/drop/max	Terminal Type Inch (mm)	Additional Features	Digi-Key Part No.	Price Each				Potter & Brumfield Part No.
									1	25	50	100	
6	SPST-NO	24 VDC	51	10	18/2.4/24VDC	.187 (4.75) QC	—	PB466-ND *NEW!*	14.78	12.94	11.71	9.24	KUEP-3D15-24
	DPDT	24 VDC	51	10	18/2.4/24VDC	.187 (4.75) QC	—	PB467-ND *NEW!*	16.75	14.66	13.27	10.47	KUEP-11D15-24
	3PDT	24 VDC	51	15	18/2.4/24VDC	.187 (4.75) QC	—	PB468-ND *NEW!*	16.18	14.16	12.81	10.11	KUMP-14D18-24
	DPDT	120 VAC	—	10	102/12/120VAC	.187 (4.75) QC	Top Flange	PB469-ND *NEW!*	17.11	14.98	13.55	10.70	KUIP-11AT5-120
		24 VAC	—	20	18/2.4/24VAC	.250 (6.35) QC	Side Flange	PB470-ND *NEW!*	15.02	13.15	11.90	9.39	KUHP-11A51-24
		24 VDC	51	10	18/2.4/24VDC	.187 (4.75) QC	Latching Relay	PB471-ND *NEW!*	43.94	38.46	34.79	27.47	KUL-11D15D-24
		120 VAC	—	10	102/12/120VAC	.187 (4.75) QC	Latching Relay	PB472-ND *NEW!*	33.82	29.59	26.78	21.14	KUL-11A15S-120
KRP/KRPA/KR Series — Octal Plug Termination General Purpose Relay													
7	DPDT	110 VDC	11.5	10	82.5/11/110VDC	8 Pin Octal	—	PB473-ND *NEW!*	48.55	42.49	38.44	30.35	KRP-11DG-110
		120 VAC	—	10	102/12/120VAC	8 Pin Octal	—	PB474-ND *NEW!*	46.99	41.12	37.21	29.37	KRP-11AG-120
		24 VAC	—	10	20.4/2.4/24 VAC	8 Pin Octal	—	PB167-ND	19.49	17.06	15.43	12.18	KRPA-11AG-24
		120 VAC	—	10	102/12/120 VAC	8 Pin Octal	—	PB168-ND	19.49	17.06	15.43	12.18	KRPA-11AG-120
		12 VDC	100	10	9/1.2/12 VDC	8 Pin Octal	—	PB169-ND	19.49	17.06	15.43	12.18	KRPA-11DG-12
		24 VDC	51	10	18/2.4/24 VDC	8 Pin Octal	—	PB170-ND	19.49	17.06	15.43	12.18	KRPA-11DG-24
		24 VDC	51	10	18/2.4/24VDC	8 Pin Octal	With Indicator Light	PB475-ND *NEW!*	22.42	19.62	17.75	14.01	KRPA-11DN-24
		110 VDC	11.5	10	82.5/11/110VDC	8 Pin Octal	—	PB476-ND *NEW!*	21.48	18.80	17.01	13.43	KRPA-11DG-110
	3PDT	24 VAC	—	10	20.4/2.4/24 VAC	11 Pin Octal	—	PB171-ND	24.36	21.32	19.29	15.23	KRPA-14AG-24
		120 VAC	—	10	102/12/120 VAC	11 Pin Octal	—	PB172-ND	24.36	21.32	19.29	15.23	KRPA-14AG-120
		12 VDC	100	10	9/1.2/12 VDC	11 Pin Octal	—	PB173-ND	24.19	21.17	19.16	15.12	KRPA-14DG-12
		24 VDC	51	10	18/2.4/24 VDC	11 Pin Octal	—	PB174-ND	24.19	21.17	19.16	15.12	KRPA-14DG-24
	DPDT	120 VAC	—	10	102/12/120 VAC	8 Pin Octal	With Indicator Light	PB175-ND	21.48	18.80	17.01	13.43	KRPA-11AN-120
	3PDT	120 VAC	—	10	102/12/120 VAC	11 Pin Octal	With Indicator Light	PB176-ND	27.48	24.05	21.76	17.18	KRPA-14AN-120
	DPDT	12 VDC	100	20	9/1.2/12VDC	8 Pin Octal	—	PB477-ND *NEW!*	91.15	79.76	72.17	56.97	KR-11DGE-12
		24 VDC	51	20	18/2.4/24VDC	8 Pin Octal	—	PB478-ND *NEW!*	91.15	79.76	72.17	56.97	KR-11DGE-24
	3PDT	24 VDC	51	20	18/2.4/24VDC	11Pin Octal	—	PB479-ND *NEW!*	127.44	111.51	100.89	79.65	KR-14DGE-24
		120 VAC	—	20	102/12/120VAC	11 Pin Octal	—	PB480-ND *NEW!*	124.15	108.64	98.29	77.60	KR-14AGE-120
T90 Series — Low Cost PC Mount Power Relay													
8	SPST-NO	12 VDC	77	30	9/1.2/12 VDC	PC Mount	—	PB104-ND	2.69	2.36	2.13	1.68	T90N1D12-12
		24 VDC	36	30	18/2.4/24 VDC	PC Mount	—	PB105-ND	2.69	2.36	2.13	1.68	T90N1D12-24
	SPDT	12 VDC	77	20	9/1.2/12 VDC	PC Mount	—	PB107-ND	2.83	2.48	2.25	1.77	T90N5D12-12
		24 VDC	36	20	18/2.4/24 VDC	PC Mount	—	PB108-ND	2.83	2.48	2.25	1.77	T90N5D12-24
Dust Cover for Open-Style T90 Series (Snaps onto Relay)								PB216-ND	.67	.59	.54	.42	35C620A
8	SPST-NO	5 VDC	185	30	3.5/0.5/5 VDC	PC Mount	—	PB109-ND	3.84	3.36	3.04	2.40	T90S1D12-5
		12 VDC	77	30	8.4/1.2/12 VDC	PC Mount	—	PB110-ND	3.84	3.36	3.04	2.40	T90S1D12-12
		24 VDC	36	30	16.8/2.4/24 VDC	PC Mount	—	PB111-ND	3.84	3.36	3.04	2.40	T90S1D12-24
	SPDT	5 VDC	185	20	3.5/0.5/5 VDC	PC Mount	—	PB113-ND	3.98	3.49	3.16	2.49	T90S5D12-5
		12 VDC	77	20	8.4/1.2/12 VDC	PC Mount	—	PB114-ND	3.98	3.49	3.16	2.49	T90S5D12-12
		24 VDC	36	20	16.8/2.4/24 VDC	PC Mount	—	PB115-ND	3.98	3.49	3.16	2.49	T90S5D12-24
T9A Series — Low Cost Industrial Relays													
9	SPST-NO	12 VDC	83	30	9/1.2/12 VDC	PC Mount	—	PB302-ND	3.19	2.80	2.53	2.00	T9AS1D12-12
		24 VDC	42	30	18/2.4/24 VDC	PC Mount	—	PB303-ND	3.19	2.80	2.53	2.00	T9AS1D12-24
		12 VDC	83	30	9/1.2/12 VDC	PC Mount	With .250” QC Term.	PB304-ND	3.43	3.01	2.72	2.15	T9AS1D22-12
		24 VDC	42	30	18/2.4/24 VDC	PC Mount	With .250” QC Term.	PB305-ND	3.43	3.01	2.72	2.15	T9AS1D22-24
	SPDT	12 VDC	83	15	9/1.2/12 VDC	PC Mount	—	PB306-ND	3.19	2.80	2.53	2.00	T9AS5D12-12
		24 VDC	42	15	18/2.4/24 VDC	PC Mount	—	PB307-ND	3.19	2.80	2.53	2.00	T9AS5D12-24
		12 VDC	83	15	9/1.2/12 VDC	PC Mount	With .250” QC Term.	PB308-ND	3.43	3.01	2.72	2.15	T9AS5D22-12
		24 VDC	42	15	18/2.4/24 VDC	PC Mount	With .250” QC Term.	PB309-ND	3.43	3.01	2.72	2.15	T9AS5D22-24
		12 VDC	83	15	9/1.2/12 VDC	.250 (6.35) QC	Chassis Mount	PB310-ND	3.91	3.43	3.10	2.45	T9AP5D52-12
		24 VDC	42	15	18/2.4/24 VDC	.250 (6.35) QC	Chassis Mount	PB311-ND	3.91	3.43	3.10	2.45	T9AP5D52-24
T92 Series — Power Relays with Quick Connect Terminals, Sealed and Unsealed													
10	DPST-NO	12 VDC	139	30	9/1.2/12VDC	PC Mount	Sealed Case	PB481-ND *NEW!*	9.22	8.07	7.30	5.76	T92S7D12-12
		24 VDC	68	30	18/2.4/24VDC	PC Mount	Sealed Case	PB482-ND *NEW!*	9.22	8.07	7.30	5.76	T92S7D12-24
		240 VAC	—	30	192/24/240VAC	PC Mount	Sealed Case	PB483-ND *NEW!*	12.19	10.67	9.66	7.62	T92S7A12-240
		12 VDC	139	30	9/1.2/12VDC	PC Mount	Unsealed Case	PB484-ND *NEW!*	8.33	7.29	6.60	5.21	T92P7D12-12
		24 VDC	68	30	18/2.4/24VDC	PC Mount	Unsealed Case	PB485-ND *NEW!*	8.33	7.29	6.60	5.21	T92P7D12-24
		12 VDC	139	30	9/1.2/12 VDC	.250 (6.35) QC	Sealed Case	PB298-ND	9.22	8.07	7.30	5.76	T92S7D22-12
		12 VDC	139	30	9/1.2/12VDC	.250 (6.35) QC	Unsealed Case	PB486-ND *NEW!*	8.33	7.29	6.60	5.21	T92P7D22-12
		24 VDC	68	30	18/2.4/24 VDC	.250 (6.35) QC	Sealed Case	PB299-ND	9.22	8.07	7.30	5.76	T92S7D22-24
		24 VAC	—	30	19.2/2.4/24VAC	.250 (6.35) QC	Unsealed Case	PB487-ND *NEW!*	9.55	8.36	7.57	5.97	T92P7A22-24
		24 VAC	—	30	19.2/2.4/24VAC	.250 (6.35) QC	Sealed Case	PB488-ND *NEW!*	10.61	9.29	8.40	6.63	T92S7A22-24
		120 VAC	—	30	96/12/120 VAC	.250 (6.35) QC	Sealed Case	PB301-ND	10.61	9.29	8.40	6.63	T92S7A22-120
		120 VAC	—	30	96/12/120VAC	.250 (6.35) QC	Unsealed Case	PB489-ND *NEW!*	9.55	8.36	7.57	5.97	T92P7A22-120
	DPDT	12 VDC	139	30	9/1.2/12 VDC	PC Mount	Sealed Case	PB351-ND	10.15	8.89	8.04	6.35	T92S11D12-12
		24 VDC	68	30	18/2.4/24 VDC	PC Mount	Sealed Case	PB352-ND	10.15	8.89	8.04	6.35	T92S11D12-24
		12 VDC	139	30	9/1.2/12 VDC	.250 (6.35) QC	Unsealed Case	PB349-ND	9.17	8.03	7.26	5.73	T92P11D22-12
		12 VDC	139	30	9/1.2/12VDC	.250 (6.35) QC	Sealed Case	PB490-ND *NEW!*	10.15	8.89	8.04	6.35	T92S11D22-12
		24 VDC	68	30	18/2.4/24 VDC	.250 (6.35) QC	Unsealed Case	PB350-ND	9.17	8.03	7.26	5.73	T92P11D22-24
		24 VAC	—	30	19.2/2.4/24 VAC	.250 (6.35) QC	Sealed Case	PB300-ND	11.69	10.23	9.26	7.31	T92S11A22-24
		24 VDC	68	30	18/2.4/24VDC	.250 (6.35) QC	Sealed Case	PB491-ND *NEW!*	10.15	8.89	8.04	6.35	T92S11D22-24
		120 VAC	—	30	96/12/120VAC	.250 (6.35) QC	Unsealed Case	PB492-ND *NEW!*	10.56	9.24	8.36	6.60	T92P11A22-120
		240 VAC	—	30	192/24/240 VAC	.250 (6.35) QC	Unsealed Case	PB348-ND	12.19	10.67	9.66	7.62	T92P11A22-240
PRD Series — Heavy Duty Power Relay													
11	SPDT	12 VAC	—	25	10.2/1.2/12VAC	Screw	—	PB493-ND *NEW!*	22.08	19.32	17.48	13.80	PRD-5DY0-12
		24 VAC	—	25	20.4/2.4/24VAC	Screw	—	PB494-ND *NEW!*	22.78	19.93	18.04	14.24	PRD-5AY0-24
		120 VAC	—	25	102/12/120VAC	Screw	—	PB495-ND *NEW!*	22.78	19.93	18.04	14.24	PRD-5AY0-120

(Continued)

Fig. 12 — *NEW!* **PM Series**

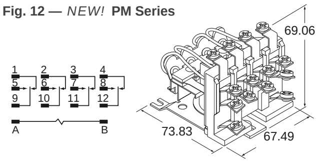


Fig. 13 — *NEW!* **S86R, S87R Series**

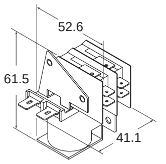


Fig. 14 — *NEW!* **S89 Series**

Potter & Brumfield S89 Series relay features a simple pulse latch/unlatch function without the need to reverse polarity or continuously energize the coil.

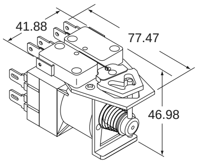


Fig. 15 — *NEW!* **P25, P30, P40 Series**

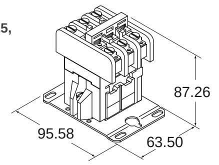
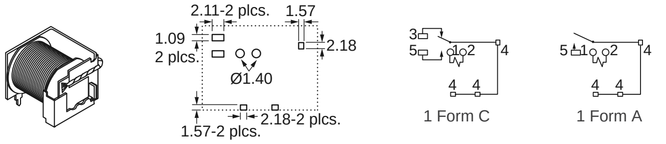


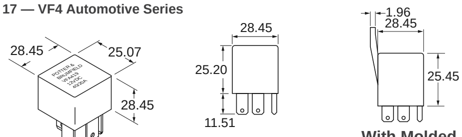
Fig. 16 — VKP Automotive Series



1 Form C

1 Form A

Fig. 17 — VF4 Automotive Series



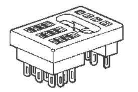
VF4

With Molded Bracket

Fig.	Contact Arrange-ment	Coil Voltage	Coil Current (mA)	Contact Rating (A)	Operate Volt Release Volt pull/drop/max	Terminal Type Inch (mm)	Additional Features	Digi-Key Part No.	Price Each				Potter & Brumfield Part No.
									1	25	50	100	
11	DPST-NO	120 VAC	—	25	102/12/120VAC	Screw	—	PB496-ND *NEW!*	24.65	21.57	19.52	15.41	PRD-7AY0-120
		24 VDC	84	25	18/2.4/24VDC	Screw	—	PB497-ND *NEW!*	23.88	20.90	18.91	14.93	PRD-7DY0-24
	DPDT	12 VDC	169	25	9/1.2/12VDC	Screw	—	PB498-ND *NEW!*	29.90	26.17	23.68	18.69	PRD-11DY0-12
		24 VDC	84	25	18/2.4/24VDC	Screw	—	PB499-ND *NEW!*	29.90	26.17	23.68	18.69	PRD-11DY0-24
		24 VDC	84	20	18/2.4/24VDC	Screw	With Magnetic Blow Out	PB500-ND *NEW!*	33.29	29.13	26.36	20.81	PRD-11DH0-24
		24 VDC	84	30	18/2.4/24VDC	Screw	—	PB501-ND *NEW!*	29.86	26.13	23.64	18.66	PRD-11DG0-24
		110 VDC	18.2	20	82.5/11/110VDC	Screw	With Magnetic Blow Out	PB502-ND *NEW!*	36.31	31.78	28.75	22.70	PRD-11DH0-110
		120 VAC	—	30	102/12/120VAC	Screw	—	PB503-ND *NEW!*	30.48	26.67	24.13	19.05	PRD-11AG0-120
		120 VAC	—	20	102/12/120VAC	Screw	With Magnetic Blow Out	PB504-ND *NEW!*	34.10	29.85	27.00	21.32	PRD-11AH0-120
		120 VAC	—	25	102/12/120VAC	Screw	—	PB505-ND *NEW!*	30.60	26.78	24.23	19.13	PRD-11AY0-120
		240 VAC	—	25	204/24/240VAC	Screw	—	PB506-ND *NEW!*	31.13	27.24	24.65	19.46	PRD-11AY0-240
PM Series — Heavy Duty Multicontact Power Relay													
12	4PDT	12 VDC	364	25	9/1.2/12VDC	Screw	—	PB507-ND *NEW!*	79.32	69.41	62.80	49.58	PM-17DY-12
		24 VDC	182	25	18/2.4/24VDC	Screw	—	PB508-ND *NEW!*	79.32	69.41	62.80	49.58	PM-17DY-24
		110 VDC	40	25	82.5/11/110VDC	Screw	—	PB509-ND *NEW!*	84.10	73.59	66.58	52.56	PM-17DY-110
S86R, S87R, S89R Series Industrial Relays													
13	DPDT	120 VAC	—	20	102/12/120VAC	.250 (6.35) QC	—	PB510-ND *NEW!*	27.91	24.43	22.10	17.45	S86R11A1B1D1120
		120 VAC	—	20	102/12/120VAC	.250 (6.35) QC	—	PB511-ND *NEW!*	26.47	23.17	20.96	16.55	S87R11A2B1D1120
14	SPDT	24 VAC	—	15	20.4/2.4/24VAC	.250 (6.35) QC	Impulse	PB512-ND *NEW!*	30.00	26.25	23.75	18.75	S89R5ABD1-24
	DPDT	12 VDC	533	15	9/1.2/12VDC	.187 (4.75) QC	Impulse	PB513-ND *NEW!*	34.44	30.14	27.27	21.53	S89R11DAC1-12
		12 VDC	533	15	9/1.2/12VDC	.250 (6.35) QC	Impulse	PB514-ND *NEW!*	34.44	30.14	27.27	21.53	S89R11DBD1-12
		120 VAC	—	15	102/12/120VAC	8 Pin Octal	Enclosed	PB515-ND *NEW!*	41.42	36.25	32.80	25.89	S89R11APP1-120
P25, P30, P40 Series — Heavy Duty Contactor													
15	3PST-NO	24 VDC	180	25	18/2.4/24VDC	.250 (6.35) QC	—	PB516-ND *NEW!*	59.95	52.46	47.47	37.47	P25P42D22P1-24
		24 VDC	286	30	18/2.4/24VDC	.250 (6.35) QC	—	PB517-ND *NEW!*	70.68	61.85	55.96	44.18	P30P42D12P1-24
		24 VDC	286	40	18/2.4/24VDC	.250 (6.35) QC	—	PB518-ND *NEW!*	74.35	65.06	58.87	46.47	P40P42D12P1-24
		120 VAC	—	40	102/12/120VAC	.250 (6.35) QC	—	PB519-ND *NEW!*	95.23	83.33	75.40	59.52	P40C42A12D1-120
VKP Series — Open Frame Automotive Relay													
16	SPST-NO	12 VDC	133	40	6.8/1.2/12 VDC	PC Mount	—	PB312-ND	3.34	2.92	2.65	2.09	VKP-11F42
	SPDT	12 VDC	133	40	6.8/1.2/12 VDC	PC Mount	—	PB313-ND	3.38	2.97	2.68	2.12	VKP-15F42
VF4 Series — Enclosed Automotive Relay													
17	SPST-NO	12 VDC	133	40	7.2/1.2/20.2 VDC	.250 (6.35) QC	—	PB314-ND	4.27	3.74	3.39	2.67	VF4-11F11
	SPDT	12 VDC	133	40	7.2/1.2/20.2 VDC	.250 (6.35) QC	—	PB224-ND	4.49	3.93	3.56	2.81	VF4-15F11
	SPST-NO	12 VDC	133	40	7.2/1.2/20.2 VDC	.250 (6.35) QC	With Metal Bracket	PB225-ND	4.42	3.87	3.50	2.76	VF4-41F11
	SPDT	12 VDC	133	40	7.2/1.2/20.2 VDC	.250 (6.35) QC	With Metal Bracket	PB226-ND	4.68	4.10	3.71	2.93	VF4-45F11
	SPST-NO	12 VDC	133	40	7.2/1.2/20.2 VDC	.250 (6.35) QC	With Molded Bracket	PB315-ND	4.68	4.10	3.71	2.93	VF4-81F11
	SPST-NO	12 VDC	133	40	7.2/1.2/20.2 VDC	PC Mount	—	PB229-ND	4.27	3.74	3.39	2.67	VF4-11F13
	SPDT	12 VDC	133	40	7.2/1.2/20.2 VDC	PC Mount	—	PB230-ND	4.49	3.93	3.56	2.81	VF4-15F13
	SPDT	24 VDC	66.6	40	7.2/1.2/20.2 VDC	.250 (6.35) QC	—	PB231-ND	4.49	3.93	3.56	2.81	VF4-15H11

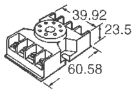
Relay Sockets and Accessories

Fig. 1



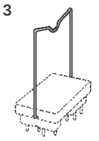
Solder Terminal Socket

Fig. 2



Panel Mount Socket (KRPA shown)

Fig. 3



Wire Hold Down Spring

Fig.	Description	Use With Series	Digi-Key Part No.	Price Each				Potter & Brumfield Part No.
				1	25	50	100	
1	Solder Terminal Socket, DPDT	K10	PB331-ND	2.28	2.00	1.81	1.43	27E488
2	DIN Rail Screw Mount Socket, DPDT	K10	PB332-ND	7.99	7.00	6.33	5.00	27E895
3	Wire Hold Down Spring, DPDT for DIN Rail Socket	K10	PB333-ND	.50	.45	.40	.32	20C297
1	PCB Mount Socket, DPDT	K10	PB334-ND	2.38	2.08	1.89	1.49	27E489
1	Solder Terminal Socket, DPDT	R10	PB132-ND	1.51	1.33	1.20	.95	27E125
1	Solder Terminal Socket, 4PDT	R10	PB133-ND	1.90	1.66	1.51	1.19	27E126
1	PCB Mount Socket, DPDT	R10	PB134-ND	1.51	1.33	1.20	.95	27E128
1	PCB Mount Socket, 4PDT	R10	PB135-ND	1.90	1.66	1.51	1.19	27E129
3	Wire Hold Down Spring, DPDT	R10	PB136-ND	.26	.24	.21	.17	20C249
3	Wire Hold Down Spring, 4PDT	R10	PB137-ND	.26	.24	.21	.17	20C250
3	Wire Hold Down Strap (for P.C. Socket Only), all poles	R10	PB138-ND	.26	.24	.21	.17	20C259
1	Solder Terminal Socket, 4PDT	KHA	PB144-ND	1.85	1.62	1.47	1.16	27E006
1	PCB Mount Socket Socket, 4PDT	KHA	PB145-ND	1.73	1.52	1.37	1.08	27E007
3	Wire Hold Down Spring, KHA-4PDT/K10-DPDT	KHA/K10	PB146-ND	.50	.45	.40	.32	20C217
—	Chassis Mount Screw Mount Socket, 4PDT	KHA	PB147-ND	12.96	11.34	10.26	8.10	27E166
2	DIN Rail Mount Screw Term Socket, 4PDT	KHA	PB148-ND	15.72	13.76	12.45	9.83	27E894
2	PCB Terminal Socket, 4PDT	KH	PB523-ND *NEW!*	1.49	1.31	1.18	.93	27E023
—	Chassis Mount Screw Term Socket, all poles	KUP	PB165-ND	8.47	7.42	6.71	5.30	27E121
2	DIN Rail Mount Screw Term Socket, all poles	KUP	PB166-ND	10.32	9.03	8.17	6.45	27E893
—	PCB Terminal Socket with Mounting Ears, DP, 3P	KU	PB522-ND *NEW!*	2.71	2.38	2.15	1.70	27E046
2	8-Pin Octal Screw Term Socket, all poles	KRPA	PB177-ND	5.52	4.83	4.37	3.45	27E122
2	11-Pin Octal Screw Term Socket, all poles	KRPA	PB178-ND	8.04	7.04	6.37	5.03	27E123
—	Spacer for KRPA Series Relay	KRPA	PB179-ND	.74	.66	.59	.47	21B212
2	DIN Rail Mount Socket, DPDT	KRPA	PB520-ND *NEW!*	6.48	5.67	5.13	4.05	27E891
2	DIN Rail Mount Socket, 3PDT	KRPA	PB521-ND *NEW!*	9.77	8.55	7.74	6.11	27E892
2	DIN Screw Terminal Socket (for all RT Series)	RT	PB524-ND *NEW!*	5.69	4.98	4.51	3.56	RT78624
2	PCB Terminal Socket (for all RT Series)	RT	PB525-ND *NEW!*	2.16	1.89	1.71	1.35	RP78602
—	DIN Rail Track, 36" (91.44cm) for DIN Rail Sockets, Aluminum	ALL	PB345-ND	10.37	9.08	8.21	6.48	24A110
—	Hold Down Clip, for use with DIN Rail	ALL	PB346-ND	.60	.53	.48	.38	24A071
—	Plastic Spacer for DIN Rail Sockets	ALL	PB347-ND	.70	.61	.56	.44	40G432
—	Plastic Dust Cover, Snap On	PM	PB526-ND *NEW!*	4.80	4.20	3.80	3.00	35D203
—	VF4 Relay Socket, PCB Mount	VF4	PB232-ND	1.46	1.29	1.16	.92	VCF4-1000
—	VF4 Relay Socket (Wire Harness Style)	VF4	PB316-ND	.55	.49	.44	.35	VCF4-1001
—	VF4 Crimp Term 12-16 AWG for PB316-ND	VF4	PB317-ND	—	.13	.12	.09	26A1349A
—	VF4 Crimp Term 14-18 AWG for PB316-ND	VF4	PB318-ND	—	.13	.12	.09	26A1349B

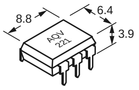
Aromat Corporation

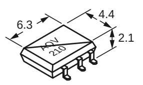
NAiS Your Partner for the 21st Century

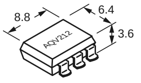
PhotoMos Relays and SSRs

PhotoMos relays combine the advantages of standard electromechanical relays with that of solid state products. This combination allows very fast response times with very low leakage and exceedingly long lifetimes. Reliability and lower input currents are also improved over conventional relays. Aromat's AQV210, 212 and 214 series are SPST solid state switches for applications such as high speed inspection machines, telecom and data communication equipment, instrumentation and security. Capable of switching both AC and DC voltages.

AQW214 and 414 series are independently triggered dual switches available in either dip, smt or sop pkg. AQV221 series are solid state switches designed for switching high frequencies (RF) such as audio/visual signals as well as CD, VCR, and scanners, etc. Aromat's AQ2 sip SSRs are designed as suitable drivers for AC motors, solenoids, valves, etc. These offer excellent noise resistance with an integrated snubber circuit and ultra thin body (only 9mm) for maintenance-free, long life switching. Zero-Cross is a low noise switching output whereas Phase Controlled are ideal for phase controlled applications such as motor speed control and light dimming.


6-DIP


6-SOP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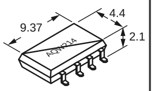

8-SOP

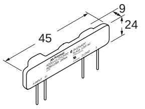

4-SIP – AQ2 Series

Fig. No.	Cont. Arrange.	Load Current (max.)	Load Volt (max.)	Isolation Volt	On Resistance (min./max.)	Input Current (mA)	T-On/T-Off Time (mSec)	Pkg.	Digi-Key Part No.	Price Each				Aromat Part No.
										1	25	50	100	
AQV210 Series Solid State Relays														
1	SPST-NO	130mA	350V	1,500	23/35	5-50mA	2/1	6-Dip	255-1143-ND	2.43	2.23	1.98	1.69	AQV210E
	SPST-NO	130mA	350V	1,500	23/35	5-50mA	2/1	6-SMT	255-1144-ND	2.45	2.25	2.00	1.70	AQV210EA
	SPST-NO	130mA	350V	5,000	23/35	5-50mA	2/1	6-Dip	255-1145-ND	2.62	2.41	2.14	1.82	AQV210EH
	SPST-NO	130mA	350V	5,000	23/35	5-50mA	2/1	6-SMT	255-1146-ND	2.67	2.46	2.18	1.86	AQV210EHA
	SPST-NO	120mA	350V	1,500	23/35	5-50mA	2/1	6-SOP	255-1147-ND	4.09	3.76	3.34	2.84	AQV210S
AQV212 Series Solid State Relays														
1	SPST-NO	400mA	60V	1,500	.83/2.5	5-50mA	2/0.2	6-Dip	255-1148-ND	3.87	3.56	3.16	2.69	AQV212
	SPST-NO	400mA	60V	1,500	.83/2.5	5-50mA	2/0.2	6-SMT	255-1149-ND	3.87	3.56	3.16	2.69	AQV212A
	SPST-NO	350mA	60V	1,500	.83/2.5	5-50mA	2/0.2	6-SOP	255-1150-ND	4.09	3.76	3.34	2.84	AQV212S
AQV214 Series Solid State Relays														
1	SPST-NO	120mA	400V	1,500	30/50	5-50mA	.5/0.2	6-Dip	255-1151-ND	3.87	3.56	3.16	2.69	AQV214
	SPST-NO	120mA	400V	5,000	30/50	5-50mA	.5/0.2	6-Dip	255-1152-ND	4.14	3.81	3.38	2.88	AQV214H
	SPST-NO	120mA	400V	1,500	30/50	5-50mA	.5/0.2	6-Dip	255-1153-ND	2.43	2.23	1.98	1.69	AQV214E
	SPST-NO	120mA	400V	5,000	30/50	5-50mA	.5/0.2	6-Dip	255-1154-ND	2.62	2.41	2.14	1.82	AQV214EH
	SPST-NO	120mA	400V	1,500	30/50	5-50mA	.5/0.2	6-SMT	255-1155-ND	3.87	3.56	3.16	2.69	AQV214A
	SPST-NO	100mA	400V	1,500	30/50	5-50mA	.5/0.2	6-SOP	255-1156-ND	4.09	3.76	3.34	2.84	AQV214S
	SPST-NO	500mA	40V	1,500	.6/1	5-50mA	1.7/.07	6-Dip	255-1352-ND	4.90	4.50	4.00	3.40	AQV251
	SPST-NO	400mA	60V	1,500	.74/1.4	5-50mA	1.4/.07	6-Dip	255-1353-ND	4.90	4.50	4.00	3.40	AQV252
	SPST-NO	250mA	200V	1,500	2.6/4	5-50mA	1.5/.1	6-Dip	255-1354-ND	4.90	4.50	4.00	3.40	AQV257
	SPST-NC	120mA	400V	1,500	26/50	5-50mA	1/1	6-Dip	255-1157-ND	4.29	3.94	3.50	2.98	AQV414
	SPST-NC	120mA	400V	5,000	26/50	5-50mA	.47/.28	6-Dip	255-1348-ND	4.14	3.81	3.38	2.88	AQV414EH
AQW210 and AQW214 Series Solid State Relays														
2	DPST-NO	120mA	350V	5,000	23/35	5-50mA	.25/.05	8-Dip	255-1349-ND	5.29	4.86	4.32	3.68	AQW210EH
	DPST-NO	100mA	400V	1,500	30/50	5-50mA	.31/0.5	8-Dip	255-1158-ND	6.47	5.94	5.28	4.49	AQW214
	DPST-NO	100mA	400V	1,500	30/50	5-50mA	.31/0.5	8-SMT	255-1159-ND	6.47	5.94	5.28	4.49	AQW214A
	DPST-NO	80mA	400V	1,500	30/50	5-50mA	.31/0.5	8-SOP	255-1160-ND	6.91	6.35	5.64	4.80	AQW214S
AQW414 Series Solid State Relays														
2	DPST-NC	100mA	400V	1,500	26/50	5-50mA	1/1	8-Dip	255-1161-ND	8.09	7.43	6.60	5.61	AQW414
	DPST-NC	100mA	400V	5,000	26/50	5-50mA	.46/.40	8-Dip	255-1350-ND	6.98	6.42	5.70	4.85	AQW414EH
	DPST-O/C	100mA	400V	5,000	27/50	5-50mA	.28/.04	8-Dip	255-1351-ND	5.76	5.29	4.70	4.00	AQW614EH
	DPST-NC	100mA	400V	1,500	26/50	5-50mA	1/1	8-SMT	255-1162-ND	8.09	7.43	6.60	5.61	AQW414A
AQV221 Series Radio Frequency Solid State Relays														
1	SPST-NO	80mA	40V	1,500	22/35	5-50mA	.3/0.1	6-Dip	255-1163-ND	4.34	3.99	3.54	3.01	AQV221
	SPST-NO	80mA	40V	1,500	22/35	5-50mA	.3/0.1	6-SMT	255-1164-ND	4.34	3.99	3.54	3.01	AQV221A

Fig. 1

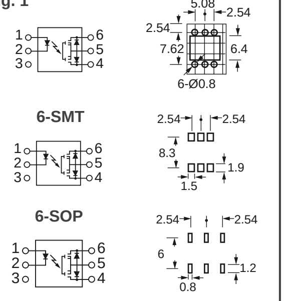

6-SMT
6-SOP

Fig. 2

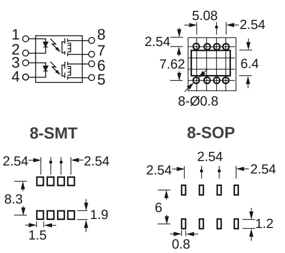

8-DIP
8-SMT
8-SOP

Fig. 3

AQ2 SIP Series

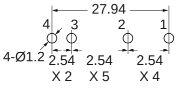
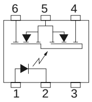


Fig. No.	Cont. Arrange.	Input Voltage (min-max.)	Dropout Voltage (min.)	Output Current (min-max.)	Output Voltage (min./max.)	Type	Digi-Key Part No.	Price Each				Aromat Part No.
								1	25	50	100	
AQ2 Sip Series Conformal Coated SSR												
3	SPST-NO	4-6VDC	.5V	.025-2A	75-125VAC	Zero-Cross	255-1165-ND	12.17	11.23	9.98	8.52	AQ2A1-C1-ZT5VDC
	SPST-NO	9.6-14.4VDC	1.2V	.025-2A	75-125VAC	Zero-Cross	255-1166-ND	12.17	11.23	9.98	8.52	AQ2A1-C1-ZT12VDC
	SPST-NO	21.6-26.4VDC	2.4V	.025-2A	75-125VAC	Zero-Cross	255-1167-ND	12.17	11.23	9.98	8.52	AQ2A1-C1-ZT24VDC
3	SPST-NO	4-6VDC	.5V	.025-2A	75-250VAC	Zero-Cross	255-1168-ND	13.43	12.33	10.96	9.32	AQ2A2-C1-ZT5VDC
	SPST-NO	9.6-14.4VDC	1.2V	.025-2A	75-250VAC	Zero-Cross	255-1169-ND	13.43	12.33	10.96	9.32	AQ2A2-C1-ZT12VDC
	SPST-NO	21.6-26.4VDC	2.4V	.025-2A	75-250VAC	Zero-Cross	255-1170-ND	13.43	12.33	10.96	9.32	AQ2A2-C1-ZT24VDC
3	SPST-NO	9.6-14.4VDC	1.2V	.025-2A	75-125VAC	Phase Controlled	255-1172-ND	9.45	8.71	7.74	6.62	AQ2A1-C1-T12VDC
	SPST-NO	21.6-26.4VDC	2.4V	.025-2A	75-125VAC	Phase Controlled	255-1173-ND	9.45	8.71	7.74	6.62	AQ2A1-C1-T24VDC
3	SPST-NO	4-6VDC	.5V	.025-2A	75-250VAC	Phase Controlled	255-1174-ND	10.56	9.70	8.62	7.33	AQ2A2-C1-T5VDC
	SPST-NO	9.6-14.4VDC	1.2V	.025-2A	75-250VAC	Phase Controlled	255-1175-ND	10.56	9.70	8.62	7.33	AQ2A2-C1-T12VDC
	SPST-NO	21.6-26.4VDC	2.4V	.025-2A	75-250VAC	Phase Controlled	255-1176-ND	10.56	9.70	8.62	7.33	AQ2A2-C1-T24VDC

NEC

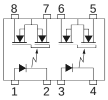
OCMOS FET Solid State Relays

Fig. 1



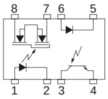
1 LED Anode
2 LED Cathode
3 NC
4 MOSFET Drain
5 MOSFET Source
6 MOSFET Drain

Fig. 2



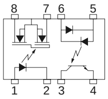
1 LED Anode
2 LED Cathode
3 LED Anode
4 LED Cathode
5 MOSFET
6 MOSFET
7 MOSFET
8 MOSFET

Fig. 3



1 LED Anode
2 LED Cathode
3 Tr Collector
4 Tr Emitter
5 LED Anode
6 LED Cathode
7 MOSFET
8 MOSFET

Fig. 4



1 LED Anode
2 LED Cathode
3 Tr Collector
4 Tr Collector
5 LED Anode/Cathode
6 LED Anode/Cathode
7 MOSFET
8 MOSFET

Fig.	BV V	IL mA	PD mW	Ron Ohms	t_{on} ms	t_{off} ms	Output Type	Digi-Key Part No.	Price Each		
									1	10	100
2	100	100	375	6	0.4	0.2	2ch NO	PS7111-2A-ND	5.00	4.50	3.84
2	100	100	375	6	0.4	0.2	2ch NO	PS7111L-2A-ND*	5.03	4.53	3.86
1	100	200	560	6	0.4	0.2	1ch NO	PS7112-1A-ND	2.75	2.48	2.11
1	100	200	560	6	0.4	0.2	1ch NO	PS7112L-1A-ND*	2.75	2.48	2.11
1	100	350	560	2.5	3	0.2	1ch NO	PS7113-1A-ND	3.33	3.00	2.55
1	100	350	560	2.5	3	0.2	1ch NO	PS7113L-1A-ND*	3.35	3.02	2.57
2	100	350	375	2.5	3	0.2	2ch NO	PS7113-2A-ND	6.65	5.99	5.10
2	100	350	375	2.5	3	0.2	2ch NO	PS7113L-2A-ND*	6.70	6.03	5.14
1	200	200	560	5	2	0.2	1ch NO	PS7122-1A-ND	3.63	3.27	2.78
1	200	200	560	5	2	0.2	1ch NO	PS7122L-1A-ND*	3.68	3.31	2.82
2	200	200	375	5	2	0.2	2ch NO	PS7122-2A-ND	7.28	6.55	5.58
2	200	200	375	5	2	0.2	2ch NO	PS7122L-2A-ND*	7.30	6.57	5.60
1	400	150	560	30	1	0.2	1ch NO	PS7141-1A-ND	2.13	1.92	1.63
1	400	150	560	30	1	0.2	1ch NO	PS7141L-1A-ND*	2.15	1.94	1.65
1	400	150	560	24	0.02	0.2	1ch NC	PS7141-1B-ND	2.43	2.19	1.86
1	400	150	560	24	0.02	0.2	1ch NC	PS7141L-1B-ND*	2.45	2.21	1.88
2	400	150	375	24	0.02	0.2	1A & 1B	PS7141-1C-ND	4.70	4.23	3.61
2	400	150	375	24	0.02	0.2	1A & 1B	PS7141L-1C-ND*	4.73	4.26	3.63
2	400	150	375	30	1	0.2	2ch NO	PS7141-2A-ND	4.23	3.81	3.24
2	400	150	375	30	1	0.2	2ch NO	PS7141L-2A-ND*	4.28	3.85	3.28
2	400	150	375	24	0.02	0.2	2ch NC	PS7141-2B-ND	5.30	4.77	4.07
2	400	150	375	24	0.02	0.2	2ch NC	PS7141L-2B-ND*	5.33	4.80	4.09
1	400	200	560	10	5	0.2	1ch NO	PS7142-1A-ND	2.13	1.92	1.63
1	400	200	560	10	5	0.2	1ch NO	PS7142L-1A-ND*	2.15	1.94	1.65
1	600	90	560	50	1.5	0.2	1ch NO	PS7160-1A-ND	3.93	3.54	3.01
1	600	90	560	50	1.5	0.2	1ch NO	PS7160L-1A-ND*	3.95	3.56	3.03
2	600	90	375	50	1.5	0.2	2ch NO	PS7160-2A-ND	7.88	7.09	6.04
2	600	90	375	50	1.5	0.2	2ch NO	PS7160L-2A-ND*	7.90	7.11	6.06
2	100	100	150	6	2	0.2	2ch NO	PS7211-2A-ND†	7.88	7.09	6.04
4	400	120	430	30	1	0.2	1A & PS2701	PS7241-AT1-ND†	3.03	2.73	2.32
3	400	120	430	30	1	0.2	1A & PS2705	PS7241-AT5-ND†	3.33	3.00	2.55
1	400	150	560	10	2	0.2	1ch NO	PS7341-1A-ND	2.28	2.05	1.75
1	400	150	560	10	2	0.2	1ch NO	PS7341L-1A-ND*	2.30	2.07	1.77
1	400	200	560	5	5	0.2	1ch NO	PS7342-1A-ND	5.00	4.50	3.84
1	400	200	560	5	5	0.2	1ch NO	PS7342L-1A-ND*	2.90	2.61	2.23
1	600	90	560	50	2	0.2	1ch NO	PS7360-1A-ND	3.63	3.27	2.78
1	600	90	560	50	2	0.2	1ch NO	PS7360L-1A-ND*	3.65	3.29	2.80
1	200	200	560	5	12	6.5	1ch NO	PS7522-1A-ND	4.85	4.37	3.72
2	200	200	375	5	12	6.5	2ch NO	PS7522-2A-ND	9.68	8.71	7.42

* Lead-Bent † SOP-8

CLARE

OptoMOS Solid State Switches

Figure 1 through 4:

Single and dual output solid state switches housed in a 6 or 8 pin dip package. Highly reliable bounce-free, arc-free switching with over 15 billion operations possible. UL, CSA approved and FCC compatible.

"TS" Series Telecom Switches (Fig. 5):

Incorporates an isolated solid state relay for hookswitch and dial pulse or loop start switching with a bi-directional Opto-coupler for ring detection and on-hook/off-hook detection. Eliminates up to eight discrete components.

CP Clare's "LDA" Series Current Sensors (Fig. 6, 7):

Provides optical isolation between control and switching circuits. Available in a single transistor output (33hfe min) or darlington output (300 hfe min.). Applications include Telecom, Industrial Control and Instrumentation.

Industrial Control and Instrumentation:

Figure 8: Dual linear optocouplers with a wide bandwidth and high gain (55 - 142%), available in either Dip, SMT, OR Flat package.

CP Clare's PLCA110 (Figure 9):

Features a 1-Form-A Solid State Relay integrated with a Solid State Surge Arrester. The Solid State Surge Arrester is designed for secondary telecom line protection, meets FCC Part 68 and provides breakover voltage and repetitive surges with no degradation. The relay portion offers reliable bounce free switching. Ideal for handling hook switch/dial pulse functions.

Specifications:

Operating temperature: -40 to 85° C. Isolation voltage input to output; 2500 vrms. Input power dissipation at 25°C; 150mW. Reverse voltage; 5V max.

Fig.	Circuit	Pkg.	Input* Current Min/Max	Output Current Max.	Load Voltage	Turn On/ Turn Off (mS)	Digi-Key Part No.	Cut Tape Price Each 1	25	50	T&R† Pricing 1,000	Clare Part No.
1	SPST-NO	6 Dip	2/100	200mA	350	5/3	CLA101-ND	3.19	2.70	2.21	—	LCA110
1	SPST-NO	SMT-6	2/100	200mA	350	5/3	CLA102CT-ND‡	3.51	2.97	2.43	1296.00	LCA110STR
1	SPST-NC	6 Dip	5/100	200mA	350	3/3	CLA105-ND	3.19	2.70	2.21	—	LCB110
1	SPST-NO	6 Dip	5/100	150mA	400	1/.25	CLA107-ND	3.48	2.95	2.41	—	PLA110
2	DPST-NO	8 Dip	5/100	120mA	350	3/3	CLA103-ND	6.34	5.37	4.39	—	LAA110
3	DPST-NC/NO	8 Dip	5/100	120mA	350	3/3	CLA104-ND	6.34	5.37	4.39	—	LBA110
4	DPST-NC/NO	8 Dip	8/100	120mA	350	4/4	CLA106-ND	6.34	5.37	4.39	—	LCC110
5	TELCOM	8 Dip	2/6	120mA	350	3/3	CLA108-ND	6.47	5.48	4.48	—	TS117
5	TELCOM	Flat Pk.	2/6	120mA	350	3/3	CLA109CT-ND‡	8.71	7.37	6.03	—	TS117PTR
5	TELCOM	SMT-8	2/6	120mA	350	3/3	CLA110CT-ND‡	6.79	5.75	4.71	2508.00	TS117STR
6	DARLINGTON	6 Dip	2/6	100mA	100	3/3	CLA111-ND	3.15	2.67	2.19	—	LDA110
7	DUAL TRANS	8 Dip	2/6	100mA	100	3/3	CLA112-ND	3.38	2.86	2.34	—	LDA200
8	DUAL TRANS	8 Dip	1/2	120mA	350	5/2	CLA113-ND	4.55	3.85	3.15	—	LOC110
8	DUAL TRANS	SMT-8	1/2	120mA	350	5/2	CLA114CT-ND‡	4.88	4.13	3.38	1950.00	LOC110STR
8	DUAL TRANS	8 Dip	2/50	120mA	350	5/2	CLA116-ND	5.10	4.32	3.54	—	LOC111
8	DUAL TRANS	Flat Pk.	2/50	120mA	350	5/2	CLA118CT-ND‡	5.27	4.46	3.65	2106.00	LOC111PTR
9	TELCOM	8 Dip	2/50	120mA	350	5/2	CLA119-ND	6.96	5.89	4.82	—	PLCA110
9	TELCOM	SMT-8	2/50	120mA	350	5/2	CLA120CT-ND‡	7.28	6.16	5.04	2912.00	PLCA110STR
10	QUAD TRANS	Flat Pk.	1/35	120mA	100	5/2	CLA130-ND	12.42	10.51	8.60	—	LOC211P
11	TELCOM	Flat Pk.	2/6	120mA	350	1/3	CLA131-ND	9.23	7.81	6.39	—	ITC117P

* Input Voltage - 1.2V Typical, 1.4V Max. † Replace CT with TR in part number for Tape & Reel part number. ‡ CT- Cut Tape package

Fig. 1

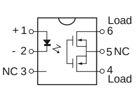


Fig. 2

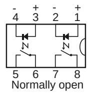


Fig. 3

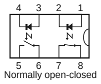


Fig. 4

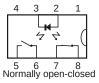


Fig. 5

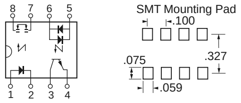


Fig. 6

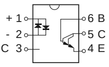


Fig. 7

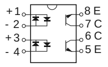


Fig. 8

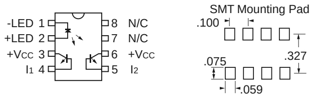


Fig. 9

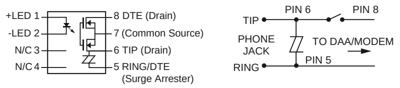


Fig. 10

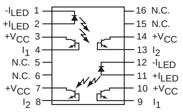
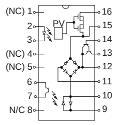


Fig. 11



International
IOR Rectifier

Microelectronic Power IC Relays

Fig. 1

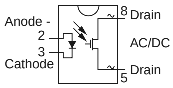


Fig. 2

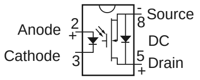


Fig. 3

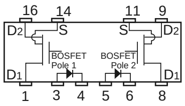


Fig. 4

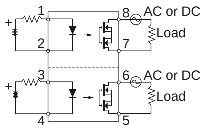


Fig. 5

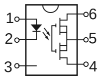


Fig. 6

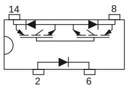


Fig. 7

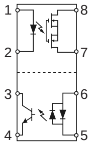


Fig.	Input Circuit Vf (led)	Imin (mA)	Imax	Vrange	Output Circuit Imax	Ton/ Toff	Package	Digi-Key Part No.	Price Each 1	10	100
1	1.2	10	25	0-60V AC/DC	1000mA	2ms/0.5ms	8-Dip	PVAZ172N-ND	10.00	8.00	7.00
	1.25	2	25	0-100V AC/DC	300mA	300us/50us	8-Dip	PVA1352-ND	6.00	4.80	4.20
	1.2	5	25	0-100V AC/DC	300mA	300µs/50µs	8-Dip	PVA1354-ND	6.50	5.20	4.55
	1.25	2	25	0-200V AC/DC	130mA	100µs/50us	8-Dip	PVA2352-ND	5.38	4.30	3.77
	1.25	2	25	0-300V AC/DC	40mA	25µs/15us	8-Dip	PVA3054-ND	6.50	5.20	4.55
	1.25	2	25	0-300V AC/DC	40mA	25µs/15us	8-Dip	PVA3055-ND	7.50	6.00	5.25
	1.25	2	25	0-300V AC/DC	130mA	100µs/50us	8-Dip	PVA3324-ND	7.50	6.00	5.25
	1.2	5	25	0-300V AC/DC	130mA	100µs/50µs	8-Dip	PVA3354-ND	6.50	5.20	4.55
2	1.2	20	25	0-60V DC	1500mA	2ms/0.5ms	8-Dip	PVDZ172N-ND	8.50	6.80	5.95
	1.25	5	25	0-60V DC	1500mA	2ms/0.5ms	8-SMT	PVDZ172NS-ND	8.65	6.92	6.05
	1.25	2	25	0-100V DC	500mA	300us/50us	8-Dip	PVD1352-ND	6.38	5.10	4.46
	1.25	2	25	0-100V DC	500mA	300us/50us	8-Dip	PVD1354-ND	6.88	5.50	4.82
	1.25	2	25	0-200V DC	220mA	100us/50us	8-Dip	PVD2352-ND	5.75	4.60	4.02
	1.25	5	25	0-300V DC	220mA	100us/50us	8-Dip	PVD3354-ND	6.88	5.50	4.82
3	1.25	1	25	0-100V AC/DC	400mA	300us/50us	16-Dip	PVR1300-ND	13.13	10.50	9.19
	1.25	1	25	0-100V AC/DC	400mA	300us/50us	16-Dip	PVR1301-ND	14.00	11.20	9.80
	1.25	2	25	0-200V AC/DC	180mA	150us/50us	16-Dip	PVR2300-ND	11.88	9.50	8.32
	1.2	10	25	0-300V AC/DC	180mA	100µs/50µs	16-Dip	PVR3300-ND	13.13	10.50	9.19
	1.25	2	25	0-300V AC/DC	180mA	150us/50us	16-Dip	PVR3301-ND	14.00	11.20	9.80
4	1.25	2	25	0-250V AC/DC	170mA	3ms/0.5ms	8-Dip	PVT322-ND	5.35	4.28	3.75
	1.25	2	25	250V AC/DC	170mA	3.0 - 0.5ms	8-SMT	PVT322S-ND	5.38	4.30	3.76
	1.2	2	25	0-400V AC/DC	120mA	2ms/2ms	8-Dip	PVT422-ND	5.20	4.16	3.64
	1.25	2	25	0-400V AC/DC	120mA	2ms/2ms	SMT Thin-Pak	PVT422P-ND	5.68	4.54	3.98
5	1.2	5	25	0-60V AC/DC	1000mA	2ms/0.5ms	6-Dip	PVG612-ND	5.85	4.68	4.10
	1.25	5	25	1.0A AC/2.0A DC	1.0A	2.0 - 0.5ms	6-SMT	PVG612S-ND	6.00	4.80	4.20
	1.2	3	25	0-20V AC/DC	2500mA	5ms/0.5ms	6 Dip	PVN012-ND	5.85	4.68	4.10
	1.25	3	25	0-±20V AC/DC	2.5A	5.0ms/0.5ms	6-SMT	PVN012S-ND	6.00	4.80	4.20
	1.2	2	25	0-250V AC/DC	190mA	3ms/0.5ms	6-Dip	PVT312-ND	2.55	2.04	1.79
	1.2	2	25	0-250V AC/DC	170mA	3ms/0.5ms	6-Dip	PVT312L-ND†	2.60	2.08	1.82
	1.2	5	25	0-400V AC/DC	140mA	2ms/0.5ms	6-Dip	PVT412-ND	2.55	2.04	1.79
	1.2	5	25	0-400V AC/DC	120mA	2ms/0.5ms	6-Dip	PVT412L-ND	2.60	2.08	1.82
	1.25	3	25	0-±400V AC/DC	140mA	2.0ms/0.5ms	6-SMT	PVT412LS-ND	2.65	2.12	1.85
	1.25	3	25	0-±400V AC/DC	140mA	2.0ms/0.5ms	6-SMT	PVT412S-ND	2.58	2.06	1.81
	1.2	5	25	0-400V AC/DC	140mA	500µs/200µs	6-Dip	PVU414-ND	4.55	3.64	3.19
6	1.25	5	25	0-280V(AC) RMS 0-400V (DC)	1.0A	7ms/1ms	14-Dip	PVX6012-ND	10.88	8.70	6.69
7	1.25	3	25	0-400V AC/DC	120mA	2.0ms/0.5ms	Thin-Pak	PVO402P-ND	5.55	4.44	3.89

† Employs current limiting circuitry to withstand current transients.

Input/Output Modules and Racks

9154B-ND Grayhill Engineering Catalog................**$4.95**

Our line of pluggable input and output modules provide a low cost, versatile method for interconnecting real world analog and digital signals to data acquisition, monitoring, or control systems. All modules provide an optically isolated barrier between sensitive microprocessor or digital logic circuits and field power devices. The case color of these modules identify their function: Digital AC Output Module = Black Case; Digital DC Output Module = Red Case; Digital AC Input Module = Yellow Case; Digital DC Input Module = White Case; Analog Output Module = Orange Case; Analog Input Module = Blue Case.

Features: • Transient protection meets the requirements of IEEE472 "Surge Withstanding Capability Test". • 4000 Vac optical isolation.

General Characteristics: • **Operating Temp. Range:** -40°C to +100°C. • **UL File No.:** E58632. **CSA File No.:** L38763.

General Specifications: • **Operating Temp.:** 0°C to 60°C • **Short Circuit Protection:** Output signal can be shorted to ground without damaging the module.

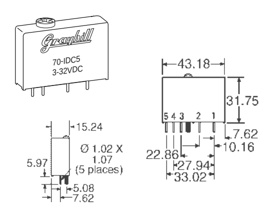
Voltage Output Modules: • **Supply Voltage (Vcc) Range:** 4.5 - 5.5 Vdc • **Supply Current at 5 Vdc:** 140 mA max. • **Output Current (Sourcing):** 73G-OV5: -20mA max. at 5 Vdc, 73G-OV10: -10mA max. at 10Vdc, 73G-OV10B: -10mA max. at 10 Vdc.

Current Output Modules: • **Supply Voltage:** 4.5 - 5.5 Vdc • **Supply Current at 5 VDC:** 240 mA max. • **Output Current (Sourcing):** 20mA max.

Voltage Input Modules: • **Supply Voltage:** 4.5 - 5.5 Vdc • **Supply Current at 5 Vdc:** 150mA max. • **Output Frequency:** 14.4 to 72.0 KHz squarewave • **Squarewave Duty Cycle:** 40% to 60% • **Accuracy:** ±0.1% (DC Version), ±0.3% (AC Versions).

Thermocouple Input Modules: • **Supply Voltage:** 4.5-5.5 Vdc • **Supply Current at 5 Vdc:** 150 mA max. • **Output Frequency:** 14.4 to 72.0 KHz squarewave • **Squarewave Duty Cycle:** 40% to 60% • **Accuracy, Across Range at 25°C:** ±3.0°C

Fig. 1 — Standard



Output modules have only Terminals 1-4

Fig. 2 — Mini

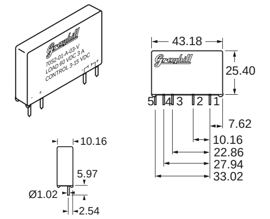


Fig. 3 — Mounting Board
(4 Pos. Board Shown)

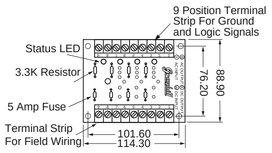

9 Position Terminal Strip For Ground and Logic Signals
Status LED
3.3K Resistor
5 Amp Fuse
Terminal Strip For Field Wiring
101.60
114.30
76.20
88.90

Fig. 4 — G5 Full Size

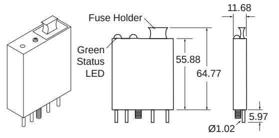


Fig. 5

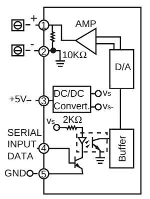


Fig. 6

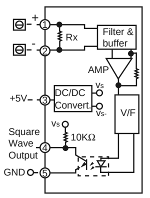


Fig. 7

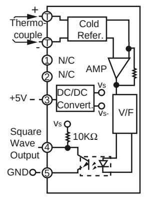


Fig.	Input Circuit Vdc. Nom.	Input Circuit Range	Output Circuit Volt. Nom.	Output Circuit Range	Output Circuit Load Cur.(Rms)	T on Time	T off Time	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Grayhill Part No.
Digital I/O Modules — Standard Size												
1	5 VDC	2.5-10	120 VAC	24-140	.030-3.5A	8.3ms	8.3ms	GH7018-ND	9.13	8.22	7.77	70-OAC5
	5 VDC	2.5-10	60 VDC	3-60	.020-3.5A	20µs	50µs	GH7019-ND	9.13	8.22	7.77	70-ODC5
	120 VAC	90-140	5 VDC	3-60	1-50mA	20ms	20ms	GH7020-ND	9.13	8.22	7.77	70-IAC5
	5 VDC	3-32 VDC	5 VDC	3-60	1-50mA	250µs	400µs	GH7021-ND	9.13	8.22	7.77	70-IDC5
Digital I/O Modules — Miniature Size												
2	5 VDC	2.5-10	120 VAC	24-140	.030-3A	8.3ms	8.3ms	GH7022-ND	9.13	8.22	7.77	70M-OAC5
	5 VDC	2.5-10	240 VAC	24-140	.030-3A	8.3ms	8.3ms	GH7023-ND	10.10	9.09	8.59	70M-OAC5A
	5 VDC	2.5-10	60 VDC	3-60	.020-3A	20µs	50µs	GH7024-ND	9.13	8.22	7.77	70M-0DC5
	15 VDC	10-18	60 VDC	3-60	.020-3A	20µs	50µs	GH7025-ND	9.13	8.22	7.77	70M-0DC15
	120 VAC	90-140	5 VDC	3-60	1-50mA	20ms	20ms	GH7026-ND	9.13	8.22	7.77	70M-IAC5
	5 VDC	3-32 VDC	5 VDC	3-60	1-50mA	250µs	400µs	GH7027-ND	9.13	8.22	7.77	70M-IDC5
Mounting Boards for Digital Modules Above												
3	Mtg. Bd. for 4 Std I/O Modules - Negative Logic Only							GH7028-ND	19.26	18.30	—	70RCK4
	Mtg. Bd. for 4 Std I/O Modules - Negative or Positive Logic							GH3035-ND	20.27	19.26	—	70RCK4R
	Mtg. Bd. for 8 Std I/O Modules - Card Edge Connector Only							GH7029-ND	38.18	36.28	—	70RCK8
	Mtg. Bd. for 8 Std I/O Modules - Long Latch Socket Connector							GH3044-ND	41.89	39.80	—	70RCK8-HL
	Mtg. Bd. for 8 Mini I/O Modules - Card Edge Connector Only							GH7030-ND	41.55	39.48	—	70MRCK8-EC
	Mtg. Bd. for 16 Std I/O Modules - Card Edge Connector Only							GH7031-ND	61.82	58.73	—	70RCK16
	Mtg. Bd. for 16 Std I/O Modules - Long Latch Socket Connector							GH3045-ND	65.54	62.27	—	70RCK16-HL
	Mtg. Bd. for 24 Std I/O Modules - Card Edge Connector Only							GH3007-ND	102.70	97.57	—	70RCK24
	Mtg. Bd. for 24 Mini I/O Modules - Card Edge Connector Only							GH3008-ND	111.82	106.23	—	70MRCK24-EC
Digital I/O Modules — G5 Full Size with Status LED												
4	5 VDC	2.5-10	120 VAC	24-140	.030-3.5A	8.3ms	8.3ms	GH3037-ND	10.58	9.53	9.00	70G-OAC5
	5 VDC	2.5-10	240 VAC	24-280	.030-3.5A	8.3ms	8.3ms	GH3038-ND	11.50	10.35	9.78	70G-OAC5A
	15 VDC	8-20	120 VAC	24-140	.030-3.5A	8.3ms	8.3ms	GH3039-ND	10.58	9.53	9.00	70G-OAC15
	5 VDC	2.5-10	60 VDC	3-60	.030-3.5A	20µs	50µs	GH3040-ND	10.58	9.53	9.00	70G-ODC5
	15 VDC	10-18	60 VDC	3-60	.030-3.5A	20µs	20µs	GH3041-ND	10.58	9.53	9.00	70G-ODC15
	120 VAC	90-140	5 VDC	3-60	1-50mA	20µs	20µs	GH3042-ND	9.62	8.66	8.18	70G-IAC5
	5 VDC	2.5-10	5 VDC	3-60	1-50mA	250µs	400µs	GH3043-ND	9.62	8.66	8.18	70G-IDC5

Fig.	Output Type	Output Range	Output Resolution	Input Type	Digi-Key Part No.	Price Each 1	Price Each 5	Price Each 50	Grayhill Part No.
Analog Output Modules									
5	Voltage	0-5Vdc	1.22mV	12 bit serial	GH3009-ND	90.01	79.21	74.71	73G-OV5
	Voltage	0-10Vdc	2.44mV	12 bit serial	GH3010-ND	90.01	79.21	74.71	73G-OV10
	Voltage	-10 to 10Vdc	4.88mV	12 bit serial	GH3011-ND	90.01	79.21	74.71	73G-OV10B
	Current	4-20mA	3.9µA	12 bit serial	GH3012-ND	112.51	99.01	93.39	73G-OI420
	Current	0-20mA	4.9µA	12 bit serial	GH3013-ND	112.51	99.01	93.39	73G-OI020

Fig.	Input Type	Input Range	Input Resolution	Output Type	Digi-Key Part No.	Price Each 1	Price Each 5	Price Each 50	Grayhill Part No.
Analog Input Modules									
6	Voltage	0-50mV	12.2µV	12 bit serial	GH3014-ND	90.01	79.21	74.71	73G-IV50M
	Voltage	0-100mV	24.4µV	12 bit serial	GH3015-ND	90.01	79.21	74.71	73G-IV100M
	Voltage	0-1Vdc	244.1µV	12 bit serial	GH3016-ND	90.01	79.21	74.71	73G-IV1
	Voltage	0-5Vdc	1.22mV	12 bit serial	GH3017-ND	90.01	79.21	74.71	73G-IV5
	Voltage	0-10Vdc	2.44mV	12 bit serial	GH3018-ND	90.01	79.21	74.71	73G-IV10
	Voltage	-5 to 5Vdc	2.44mV	12 bit serial	GH3019-ND	90.01	79.21	74.71	73G-IV5B
	Voltage	-10 to 10Vdc	4.88mV	12 bit serial	GH3020-ND	90.01	79.21	74.71	73G-IV10B
	Voltage	28-140Vac	27.34mV	12 bit serial	GH3021-ND	100.00	88.01	83.01	73G-IVAC120
	Voltage	28-280Vac	65.52mV	12 bit serial	GH3022-ND	100.00	88.01	83.01	73G-IVAC240
	Current	4-20mA	3.91µA	12 bit serial	GH3023-ND	90.01	79.21	74.71	73G-II420
	Current	0-5A	1.22mA	12 bit serial	GH3024-ND	112.51	99.01	93.39	73G-II5000
Thermocouple Input Modules									
7	J Type	0-700C	.18C	12 bit serial	GH3025-ND	112.51	99.01	93.39	73G-ITCJ
	K Type	-100 to 924C	.25C	12 bit serial	GH3026-ND	112.51	99.01	93.39	73G-ITCK
	R Type	0-960C	.23C	12 bit serial	GH3027-ND	112.51	99.01	93.39	73G-ITCR
	T Type	-200 to 224C	.10C	12 bit serial	GH3028-ND	112.51	99.01	93.39	73G-ITCT
	AD590	-188 to 150C	.08C	12 bit serial	GH3029-ND	90.01	79.21	74.71	73G-ITP590
	Plt. RTD	-50 to 350C	.10C	12 bit serial	GH3030-ND	137.50	121.00	114.13	73G-ITR100
Mounting Boards for Analog and 70G Series I/O Modules									
3	Mtg. Bd. for 4 Analog I/O Modules- Neg. or Pos. Logic				GH3031-ND	20.27	—	18.25	70GRCK4R
	Mtg. Bd. for 8 Analog I/O Modules Short Latch Socket Conn.				GH3032-ND	43.92	—	39.53	70GRCK8-HS
	Mtg. Bd. for 24 Analog I/O Modules Short Latch Socket Conn.				GH3033-ND	110.81	—	99.73	70GRCQ24-HS
	Mtg. Bd. for 32 Analog I/O Modules Long Latch Socket Conn.				GH3034-ND	148.65	—	133.79	70GRCP32-HL

OpenLine
Dual Package I/O Modules

OpenLine modules are dual density and shrink the space required for traditional racks by 50%. The OpenLine racks accept OpenLine modules which snap into place. Each dual module is controlled independently with filtered inputs and optical isolation.

Fig. 1

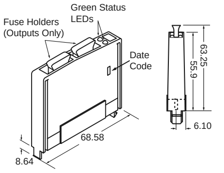


Fig. 2

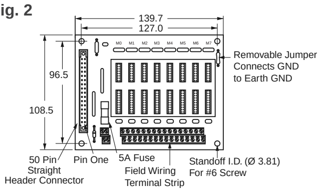

139.7
127.0
M0 M1 M2 M3 M4 M5 M6 M7
Removable Jumper Connects GND to Earth GND
96.5
108.5
50 Pin Straight Header Connector
Pin One
5A Fuse
Field Wiring Terminal Strip
Standoff I.D. (Ø 3.81) For #6 Screw

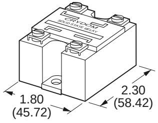
Fig.	Input Voltage	Input mA	Output Nom.	Output Range	Load Current	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Grayhill Part No.
OpenLine Dual Package I/O Modules										
1	4.5-28VDC	7	120	24-140VAC	.03-2.0A/CH	GH3053-ND	20.00	18.00	17.00	70L-OAC
	4.5-28VDC	7	240	24-280VAC	.03-2.0A/CH	GH3054-ND	20.00	18.00	17.00	70L-OACA
	4.5-28VDC	7	60	3-60VDC	.03-2.0A/CH	GH3055-ND	20.00	18.00	17.00	70L-ODC
	4.5-28VDC	7	200	4-200VDC	.03-2.0A/CH	GH3056-ND	26.00	23.40	22.11	70L-ODCA
	4.5-28VDC	7	60	3-60VDC	.03-2.0A/CH	GH3057-ND†	20.00	18.00	17.00	70L-ODCB
	0-140VAC	8	5VDC	4.5-28VDC	6mA/CH	GH3058-ND	16.00	14.40	13.60	70L-IAC
	0-280VAC	6	5VDC	4.5-28VDC	6mA/CH	GH3059-ND	16.00	14.40	13.60	70L-IACA
	35-60VDC	6	5VDC	4.5-28VDC	6mA/CH	GH3060-ND	16.00	14.40	13.60	70L-IDCG
	10-32VDC	25	5VDC	4.5-28VDC	6mA/CH	GH3061-ND	16.00	14.40	13.60	70L-IDCNP
	0-32VDC	18	5VDC	4.5-28VDC	6mA/CH	GH3062-ND	16.00	14.40	13.60	70L-IDC
	0-32VDC	18	5VDC	4.5-28VDC	6mA/CH	GH3063-ND†	16.00	14.40	13.60	70L-IDCB
Mounting Boards for 70L OpenLine I/O Modules										
2	Mounting Board for 8 OpenLine I/O Modules, Long Latch Conn.					GH3050-ND	42.00	39.90	—	70LRCK8-HL
	Mounting Board for 16 OpenLine I/O Modules, Long Latch Conn.					GH3051-ND	63.00	59.85	—	70LRCK16-HL
	Mounting Board for 24 OpenLine I/O Modules, Long Latch Conn.					GH3052-ND	100.00	95.00	—	70LRCK24-HL

† Low Leakage Outputs

Solid State Relays

9213B-ND Solid State Relay Design Guide **$19.95**

Fig. 1



Series 1, HD, HA: • These SPST-NO relays deliver proven reliability in the most demanding applications. Output consists of an SCR AC switch, available in either zero voltage turn-on or random turn-on, phase controlled models. (-10 versions are phase controlled. Crydom part numbers ending in "B" are normally closed versions.)

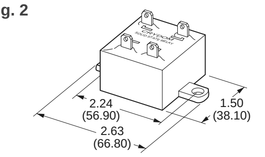
Series T: • Industry Standard Package • Snubbers are included for high DV/DT applications and inductive loads, together with zero-voltage switching to reduce inrush currents and electrical noise.

Series H12: • High voltage relays use IC driven circuits for switching loads up to 660 VAC with 1200 Volts blocking standard.

Series 1-DC: • Low On-State Resistance • Paralleling Capability for Higher Currents • DC output relays feature MOSFET technology for low on-state resistance, assuring easy paralleling and switching capabilities to 40 amps at 100 VDC.

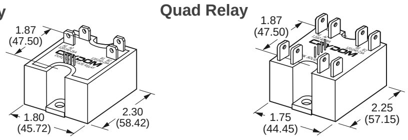
Series CS: • Low Leakage • SCR AC switch output models feature low off-state leakage (snubberless), zero-voltage switching and have a broadened operating range at both 120V/240VAC line voltages.

Fig. 2



Series EZ: • Low Leakage • Quick Connect Terminals • Offers a low profile package with the convenience of quick connect terminals • 4000 Vrms opto-isolation and low off-state leakage are standard.

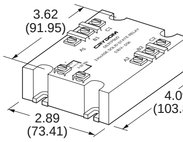
Fig. 3


Dual Relay

Quad Relay

Two (Dual) or four (Quad) totally independent AC output relays come in a single standard panel-mount package. Utilizing an AC switch output with internal snubber, relays provide greater protection against false triggering.

Fig. 4



• SCR Output • AC or DC Control • LED Status IndicatorThree-phase solid state relays switch up to 530 Vrms directly to loads such as motors, transformers, heating elements, etc. Models are available with either AC or DC input (coil). For heatsink use part number CC1114-ND.

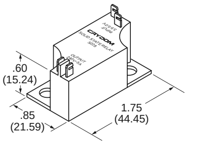
Fig.	Input Volt.	Operate Volt.	Release Volt.	Output Volt.	Load Current (Arms)	Digi-Key Part No.	Price Each			Crydom Part No.
							1	10	25	
Series 1 — DC Input, AC Output — SCR Type										
1	3-32VDC	3.0VDC	1.0VDC	24-140VAC	.04-2.5	CC1000-ND	18.24	17.98	16.33	D1202
	3-32VDC	3.0VDC	1.0VDC	24-140VAC	.04-10	CC1001-ND	26.89	24.99	24.30	D1210
	3-32VDC	3.0VDC	1.0VDC	24-140VAC	.04-25	CC1002-ND	27.32	25.36	23.77	D1225
	3-32VDC	3.0VDC	1.0VDC	24-140VAC	.04-40	CC1003-ND	34.01	30.61	29.34	D1240
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-2.5	CC1004-ND	20.32	18.47	17.57	D2402
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-10	CC1005-ND	30.50	27.60	26.27	D2410
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-25	CC1006-ND	30.88	27.91	26.69	D2425
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-40	CC1071-ND	31.54	31.08	28.24	D2440
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-50	CC1007-ND	35.02	32.25	30.02	D2450
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-75	CC1008-ND	57.45	52.02	48.28	D2475
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-90	CC1067-ND	63.17	57.33	54.57	D2490
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-110	CC1142-ND	56.10	55.27	50.22	D24110
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-125	CC1143-ND	65.87	64.90	58.96	D24125
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-25	CC1072-ND	34.63	34.12	31.00	D4825
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-40	CC1073-ND	39.48	38.90	35.34	D4840
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-50	CC1074-ND	38.46	37.89	34.43	D4850
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-75	CC1075-ND	56.24	55.41	50.34	D4875
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-90	CC1076-ND	62.13	61.22	55.62	D4890
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-10	CC1088-ND	29.44	29.01	26.36	D2410B
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-25	CC1089-ND	30.53	30.09	27.34	D2425B
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-40	CC1090-ND	34.19	33.69	30.61	D2440B
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-75	CC1091-ND	54.67	53.87	48.94	D2475B
	3.5-26VDC	3.5VDC	1.0VDC	24-140VAC	.04-10	CC1077-ND	29.67	29.24	26.56	D1210-10
	3.5-26VDC	3.5VDC	1.0VDC	24-140VAC	.04-40	CC1078-ND	32.48	32.00	29.07	D1240-10
	3.5-26VDC	3.5VDC	1.0VDC	48-280VAC	.04-10	CC1079-ND	30.32	29.88	27.15	D2410-10
	3.5-26VDC	3.5VDC	1.0VDC	48-280VAC	.04-25	CC1080-ND	30.61	30.16	27.40	D2425-10
	3.5-26VDC	3.5VDC	1.0VDC	48-280VAC	.04-40	CC1081-ND	34.26	33.76	30.67	D2440-10
	3.5-26VDC	3.5VDC	1.0VDC	48-280VAC	.04-50	CC1082-ND	35.28	34.76	31.58	D2450-10
	3.5-26VDC	3.5VDC	1.0VDC	48-280VAC	.04-90	CC1083-ND	59.99	59.11	53.71	D2490-10
	3.5-26VDC	3.5VDC	1.0VDC	80-530VAC	.04-25	CC1084-ND	37.27	36.73	33.37	D4825-10
	3.5-26VDC	3.5VDC	1.0VDC	80-530VAC	.04-40	CC1085-ND	39.51	38.94	35.37	D4840-10
	3.5-26VDC	3.5VDC	1.0VDC	80-530VAC	.04-75	CC1086-ND	58.88	58.02	52.71	D4875-10
	3.5-26VDC	3.5VDC	1.0VDC	80-530VAC	.04-90	CC1087-ND	64.77	63.82	57.99	D4890-10
Series 1 — AC Input, AC Output — SCR Type										
1	90-280VAC	90VAC	10VAC	24-140VAC	.04-25	CC1011-ND	31.86	28.72	27.90	A1225
	90-280VAC	90VAC	10VAC	24-140VAC	.04-40	CC1012-ND	36.02	32.47	31.08	A1240
	90-280VAC	90VAC	10VAC	48-280VAC	.04-10	CC1013-ND	32.52	29.28	28.12	A2410
	90-280VAC	90VAC	10VAC	48-280VAC	.04-25	CC1014-ND	33.10	29.81	28.60	A2425
	90-280VAC	90VAC	10VAC	48-280VAC	.04-50	CC1015-ND	37.57	33.79	32.42	A2450
	18-36VAC	18VAC	2VAC	48-280VAC	.04-50	CC1068-ND	37.57	33.79	32.42	A2450-E
	90-280VAC	90VAC	10VAC	48-280VAC	.04-75	CC1016-ND	60.43	54.38	52.22	A2475
	90-280VAC	90VAC	10VAC	48-280VAC	.04-110	CC1144-ND	65.55	64.59	58.68	A24110
	90-280VAC	90VAC	10VAC	48-280VAC	.04-125	CC1145-ND	68.41	67.40	61.24	A24125
	90-280VAC	90VAC	10VAC	80-530VAC	.04-25	CC1092-ND	39.48	38.90	35.34	A4825
	90-280VAC	90VAC	10VAC	80-530VAC	.04-40	CC1093-ND	43.41	42.78	38.86	A4840
	90-280VAC	90VAC	10VAC	80-530VAC	.04-50	CC1094-ND	45.11	44.45	40.38	A4850
	90-280VAC	90VAC	10VAC	80-530VAC	.04-90	CC1095-ND	65.13	64.17	58.30	A4890
Series HD — DC Input, AC Output — SCR Type										
1	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-12	CC1017-ND	37.34	33.57	32.30	HD4812
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-25	CC1018-ND	39.63	35.65	34.28	HD4825
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-50	CC1019-ND	44.02	39.57	38.03	HD4850
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-50	CC1096-ND	42.12	41.51	37.71	HD4850-10
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-75	CC1020-ND	70.18	63.07	60.57	HD4875
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-90	CC1021-ND	71.18	64.04	61.46	HD4890
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-110	CC1146-ND	69.47	68.45	62.19	HD48110
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-125	CC1147-ND	73.54	72.46	65.83	HD48125
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-25	CC1097-ND	36.97	36.43	33.10	HD6025
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-50	CC1098-ND	41.17	40.57	36.86	HD6050
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-90	CC1099-ND	54.28	53.48	48.59	HD6090
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-125	CC1100-ND	76.49	75.36	68.47	HD60125
Series HA — AC Input, AC Output — SCR Type										
1	90-280VAC	90VAC	10VAC	80-530VAC	.04-25	CC1022-ND	45.46	40.75	39.09	HA4825
	90-280VAC	90VAC	10VAC	80-530VAC	.04-50	CC1023-ND	52.88	46.42	44.63	HA4850
	90-280VAC	90VAC	10VAC	80-530VAC	.04-75	CC1024-ND	71.47	64.20	61.65	HA4875
1	90-280VAC	90VAC	10VAC	80-530VAC	.04-90	CC1025-ND	74.90	67.15	64.46	HA4890
	90-280VAC	90VAC	10VAC	80-530VAC	.04-110	CC1148-ND	72.91	71.84	65.26	HA48110
	90-280VAC	90VAC	10VAC	80-530VAC	.04-125	CC1149-ND	77.02	75.89	68.94	HA48125
	90-280VAC	90VAC	10VAC	48-660VAC	.04-25	CC1101-ND	38.56	38.00	34.52	HA6025
	90-280VAC	90VAC	10VAC	48-660VAC	.04-50	CC1102-ND	42.76	42.13	38.28	HA6050
	90-280VAC	90VAC	10VAC	48-660VAC	.04-90	CC1103-ND	58.51	57.65	52.38	HA6090
	90-280VAC	90VAC	10VAC	48-660VAC	.04-125	CC1104-ND	78.07	76.93	69.89	HA60125
Series H12 — DC Input, AC Output — SCR Type										
1	4-32VDC	4.0VDC	1.0VDC	48-660VAC	.04-50	CC1032-ND	53.64	41.18	39.57	H12WD4850
	4-32VDC	4.0VDC	1.0VDC	48-660VAC	.04-90	CC1033-ND	71.42	54.34	52.10	H12WD4890
	4-32VDC	4.0VDC	1.0VDC	48-530VAC	.04-50	CC1105-ND	51.84	51.08	46.41	H12D4850
	4-32VDC	4.0VDC	1.0VDC	48-530VAC	.04-90	CC1106-ND	73.74	72.65	66.01	H12D4890
Series H12 — AC Input, AC Output — SCR Type										
1	90-140VAC	90VAC	10VAC	48-660VAC	.04-50	CC1034-ND	54.67	41.96	40.42	H12CA4850
	90-140VAC	90VAC	10VAC	48-660VAC	.04-90	CC1035-ND	72.83	55.37	53.11	H12CA4890
Series T — DC Input, AC Output — Triac Type										
1	3-32VDC	3.0VDC	1.0VDC	24-140VAC	.05-10	CC1026-ND	35.92	34.03	31.96	TD1210
	3-32VDC	3.0VDC	1.0VDC	24-140VAC	.05-25	CC1027-ND	39.86	38.36	37.78	TD1225
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.05-10	CC1028-ND	28.51	27.77	27.02	TD2410
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.05-25	CC1029-ND	33.15	32.29	31.40	TD2425
Series T — AC Input, AC Output — Triac Type										
1	90-280VAC	90VAC	10VAC	24-140VAC	.05-10	CC1107-ND	27.80	27.40	24.89	TA1210
	90-280VAC	90VAC	10VAC	24-140VAC	.05-25	CC1030-ND	32.59	31.21	30.74	TA1225
	90-280VAC	90VAC	10VAC	48-280VAC	.05-10	CC1108-ND	29.19	28.77	26.14	TA2410
	90-280VAC	90VAC	10VAC	48-280VAC	.05-25	CC1031-ND	28.83	28.08	27.32	TA2425
Series 1 DC — DC Input, DC Output — MOSFET Type										
1	3.5-32VDC	3.5VDC	1.0VDC	0-100VDC	0-7	CC1036-ND	44.34	39.89	38.36	D1D07
	3.5-32VDC	3.5VDC	1.0VDC	0-100VDC	0-12	CC1037-ND	49.01	44.12	42.32	D1D12
	3.5-32VDC	3.5VDC	1.0VDC	0-100VDC	0-20	CC1038-ND	53.26	47.96	45.99	D1D20
	3.5-32VDC	3.5VDC	1.0VDC	0-100VDC	0-40	CC1039-ND	66.74	60.05	57.60	D1D40
	3.5-32VDC	3.5VDC	1.0VDC	0-200VDC	0-7	CC1040-ND	51.23	46.15	44.30	D2D07
	3.5-32VDC	3.5VDC	1.0VDC	0-200VDC	0-12	CC1041-ND	59.11	53.22	51.05	D2D12
	3.5-32VDC	3.5VDC	1.0VDC	0-400VDC	0-7	CC1042-ND	59.08	53.20	51.02	D4D07
	3.5-32VDC	3.5VDC	1.0VDC	0-400VDC	0-12	CC1109-ND	72.89	71.82	65.25	D4D12
Series CS — DC Input, AC Output — SCR Type										
1	3.5-15VDC	3.5VDC	1.0VDC	24-280VAC	.1-10	CC1043-ND	23.20	21.60	20.17	CSD2410
	3.5-15VDC	3.5VDC	1.0VDC	24-280VAC	.1-25	CC1044-ND	29.56	27.49	25.69	CSD2425
	3.5-15VDC	3.5VDC	1.0VDC	24-280VAC	.1-50	CC1045-ND	33.95	31.73	30.40	CSD2450
	15-32VDC	15VDC	1.0VDC	24-280VAC	.1-10	CC1110-ND	22.19	21.87	19.87	CSE2410
	15-32VDC	15VDC	1.0VDC	24-280VAC	.1-25	CC1111-ND	27.15	26.75	24.31	CSE2425
	15-32VDC	15VDC	1.0VDC	24-280VAC	.1-50	CC1112-ND	31.91	31.44	28.57	CSE2450
Series DC60 — DC or AC Input, DC Output — Bipolar Type										
1	3-32VDC	3.0VDC	1.0VDC	3-60VDC	.02-3	CC1126-ND	11.98	11.81	10.73	DC60S3
	3-32VDC	3.0VDC	1.0VDC	3-60VDC	.02-5	CC1127-ND	18.80	18.53	16.84	DC60S5
	3-32VDC	3.0VDC	1.0VDC	3-60VDC	.02-7	CC1128-ND	23.48	23.14	21.02	DC60S7
	90-280VAC	90VAC	10VAC	3-60VDC	.02-3A	CC1150-ND	13.85	13.65	12.40	DC60SA3
	90-280VAC	90VAC	10VAC	3-60VDC	.02-5A	CC1151-ND	20.67	20.37	18.51	DC60SA5
	90-280VAC	90VAC	10VAC	3-60VDC	.02-7A	CC1152-ND	25.35	24.98	22.70	DC60SA7
Series EZ — DC Input, AC Output — SCR Type										
2	4-15VDC	4.0VDC	1.0VDC	24-280VAC	.06-12	CC1047-ND	13.58	13.32	13.00	EZ240D12
	4-15VDC	4.0VDC	1.0VDC	24-280VAC	.06-18	CC1048-ND	17.50	17.03	16.61	EZ240D18
Dual-Quad — DC Input, AC Output — SCR Type										
3	4-15VDC	4.0VDC	1.0VDC	24-280VAC	.05-25	CC1121-ND	50.15	49.42	44.90	D2425D
	4-15VDC	4.0VDC	1.0VDC	24-280VAC	.05-40	CC1122-ND	56.80	55.97	50.85	D2440D
	4-15VDC	4.0VDC	1.0VDC	24-280VAC	.05-20	CC1123-ND	79.17	78.01	70.87	TD2420Q
Series 53TP — DC or AC Input — SCR Type (for 3 Phase applications)										
4	3-32VDC	3.0VDC	1.0VDC	48-530VAC	.05-25	CC1135-ND	109.02	107.41	97.59	D53TP25D
	3-32VDC	3.0VDC	1.0VDC	48-530VAC	.05-50	CC1136-ND	119.30	117.55	106.79	D53TP50D
	90-280VAC	90VAC	10VAC	48-530VAC	.05-25	CC1137-ND	113.69	112.02	101.77	A53TP25D
	90-280VAC	90VAC	10VAC	48-530VAC	.05-50	CC1138-ND	123.97	122.15	110.98	A53PT50D

(Continued)

Solid State Relays, *(Cont.)*

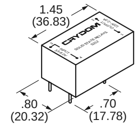
9213B-ND Solid State Relay Design Guide **$19.95**

Fig. 5



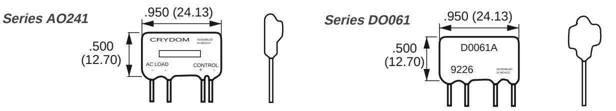
Relays combine small size and high ratings in a package designed for easy heat sink or panel mounting. Standard .187 push-on terminals assure quick connection and are arranged to provide maximum isolation between signal and power circuits. Model S228C is a snubberless design for applications that require low off-state leakage.

Fig. 6



These solid state relays combine small size and high ratings in a PC-board-mounted SPST-NO design. Available with (S30 types) or without snubber network (S3 types), Series 3 is an ideal replacement for power reed relays in microprocessor or computer-based logic level systems. Designed for long, reliable service in demanding industrial environments.

Fig. 7



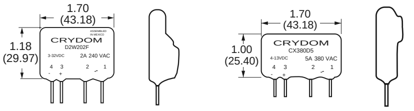
Series AO241

• SPST-NO miniature SIP solid state relays • Designed for switching highly inductive, low current loads such as solenoids. Also suitable for all loads up to 1.5A. R suffix are random turn-on versions.

Series DO061

• SPST-NO DC bipolar transistor output relays in epoxy-coated packages utilize the popular .10" grid lead spacing. DMO063 is mosfet output rated at 3A/60VDC.

Fig. 8



Series D2W *Series CX - CMX*

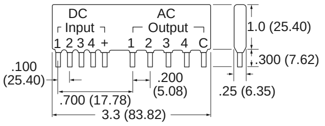
Series D2W

• Printed Circuit Board Mounting • Features an epoxy-coated package for exceptional environmental protection. Pinouts are compatible with OAC type I/O modules.

Series CX - CMX

• Ultra High Surge • Printed Circuit Board Mounting • SPST-NO relays achieve the highest power switching capability in a PC-mounted air-cooled package. Advanced features include exceptional steady state current, plus ultra-high surge ratings. New DC output SPST-NO solid state relays use MOSFET output for high switching capabilities in a PC-mount air-cooled package. Pinouts are compatible with Series 6 and ODC type I/O modules.

Fig. 9

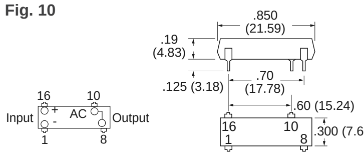


Series CTX - 4 Relay's in one Sip Pkg. — Triac Output

CTX240D3Q offers four independently controlled SSR's in one compact PCB mount package. The CTX exhibits exceptional steady-state ratings utilizing highly efficient thermal management for increased cycle life. CTX240D3Q is a zero-cross type and the CTX240D3QR is a random turn-on:

1 section on: .1 - 6.0A   2 sections on : .1 - 4.0A
3 sections on: .1 - 3.0A   4 sections on: .1 - 2.5A

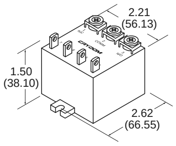
Fig. 10



Series DPA/SDV/SDI Dip Relays — SCR Output

The series DPA is offered in your choice of voltage or current operated versions and are rated at 1A. The series SDV/SDI's are rated at 1.5A at ambient temperatures of 40˚C. Available in either zero-cross or random turn-on (R) versions and current or voltage operated (controlled) versions. SDV series are voltage controlled and SDI series are current controlled.

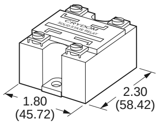
Fig. 11



Form C SPDT True Break Before Make (BBM) - SCR Type

The Form C Solid State Relays combine a precision timing control system and two solid state relays in one package. Internal logic, switches off one load before switching on the other load. Available in either AC output or DC output up to 40 amps. Dry closure inputs require a switch or electromechanical relay contact to trigger inputs.

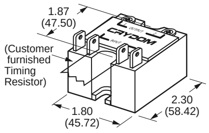
Fig. 12



Series PCV Analog Power Controller

The Series PCV Analog Input Power Controllers are 0-100% variable power controllers for 120 or 240 VAC loads which vary with an analog input of 2 to 10 Volts DC. The input and output are proportional by integrating a complete phase fired logic system and a solid state relay in the same package. Applications include heaters and lighting, motors and feeders, etc.

Fig. 13



Typical Turn-On Delay For Various Timing Resistances

Resistor	Time (DSD)	Time (DLD)
0 (Short)	0.10 sec.	1.6 sec.
10KΩ	0.19 sec.	3.1 sec.
100KΩ	0.94 sec.	15 sec.
470KΩ	4.0 sec.	64 sec.
1.0MΩ	8.3 sec.	133 sec.

Series DSD, DLD Time Delay Relay

These Delay-On time delay relays offer customers to externally adjust their delay time by selecting the value of the external customer supplied resistor. DSD are short time delays and DLD are longer time delay durations. Timing resistors should be 1/4 watt or higher.

Fig. 14

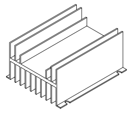
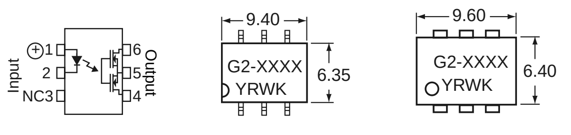


Fig.	Input Volt.	Operate Volt.	Release Volt.	Output Volt.	Load Current (Arms)	Digi-Key Part No.	Price Each 1	10	25	Crydom Part No.
Series 2 — DC Input, AC Output										
5	3.5-8VDC	3.5VDC	1.0VDC	20-140VAC	.02-8	CC1129-ND	26.76	26.37	23.96	S218
	3.5-8VDC	3.5VDC	1.0VDC	40-280VAC	.02-8	CC1130-ND	28.17	27.76	25.22	S228
	3.5-8VDC	3.5VDC	1.0VDC	40-280VAC	.02-8	CC1131-ND	23.67	23.33	21.19	S228C
Series 3 — DC Input, AC Output										
6	3.5-8VDC	3.5VDC	1.0VDC	20-140VAC	.02-3	CC1132-ND	22.17	21.85	19.85	S312
	3.5-8VDC	3.5VDC	1.0VDC	20-140VAC	.02-3	CC1133-ND	21.15	20.84	18.94	S3012A
	3.5-8VDC	3.5VDC	1.0VDC	40-280VAC	.02-3	CC1134-ND	23.02	22.69	20.61	S3022A
Series AO241 — DC Input, AC Output — SCR Type Mini-SIP										
7	4-10VDC	4.0VDC	1.0VDC	24-280VAC	.02-1.0	CC1049-ND	7.45	7.05	6.87	AO241
	4-10VDC	4.0VDC	1.0VDC	24-280VAC	.02-1.0	CC1115-ND	7.87	7.76	7.05	AO241R
	4-10VDC	4.0VDC	1.0VDC	12-280VAC	.01-1.5	CC1050-ND	7.43	7.01	6.86	ASO241
	4-10VDC	4.0VDC	1.0VDC	12-280VAC	.01-1.5	CC1116-ND	7.87	7.76	7.05	AS0241R
Series DO061 — DC Input, DC Output — Bipolar Type Mini-SIP										
7	3-9VDC	3.0VDC	1.0VDC	3-60VDC	.02-1.0	CC1060-ND	7.96	7.16	6.90	DO061A
	1.7-9VDC	1.7VDC	0.8VDC	3-60VDC	.02-1.0	CC1061-ND	7.96	7.16	6.90	DO061B
	3-10VDC	3.0VDC	1.0VDC	0-60VDC	0-3A	CC1139-ND	13.85	13.65	12.40	DMO063
Series D2W — DC Input, AC Output — Triac Type SIP										
8	3-32VDC	3.0VDC	1.0VDC	24-280VAC	.06-2.0	CC1069-ND	6.68	6.47	6.26	D2W202F
	3-32VDC	3.0VDC	1.0VDC	24-280VAC	.06-3.0	CC1118-ND	8.13	8.02	7.28	D2W203F
	3-32VDC	3.0VDC	1.0VDC	24-280VAC	.06-3.5	CC1062-ND	7.48	7.27	7.06	D2W203F-11
Series CX — DC Input, DC or AC Output — SCR Type SIP										
8	3-15VDC	3.0VDC	1.0VDC	12-280VAC	.06-5.0	CC1063-ND	9.02	8.60	8.33	CX240D5
	15-32VDC	15VDC	1.0VDC	12-280VAC	.06-5.0	CC1064-ND	9.02	8.60	8.33	CXE240D5
	3-15VDC	3.0VDC	1.0VDC	12-280VAC	.06-5.0	CC1119-ND	11.82	11.65	10.58	CX240D5R
	4-13VDC	4.0VDC	1.0VDC	48-530VAC	.06-5.0	CC1120-ND	12.17	12.00	10.90	CX380D5
	3-10VDC	3.0VDC	1.0VDC	0-100VDC	0-6.0A	CC1124-ND	26.20	25.81	23.45	CMX100D6
	3-10VDC	3.0VDC	1.0VDC	0-60VDC	0-10A	CC1125-ND	26.20	25.81	23.45	CMX60D10
	4-13VDC	4.0VDC	1.0VDC	48-660VAC	.06-5.0	CC1065-ND	12.61	12.03	11.66	CX480D5
	15-32VDC	15VDC	1.0VDC	48-660VAC	.06-5.0	CC1066-ND	12.61	12.03	11.66	CXE480D5
Series CTX - 4 Relays In One Sip Pkg. — Triac Output										
9	4-10VDC	4.0VDC	1.0VDC	24-280VAC	.1-6.0A	CC1140-ND	35.16	34.64	31.47	CTX240D3Q
	4-10VDC	4.0VDC	1.0VDC	24-280VAC	.1-6.0A	CC1141-ND	38.07	37.51	34.08	CTX240D3QR

Fig.	Input Volt.	Operate Volt.	Release Volt.	Output Volt.	Load Current (Arms)	Digi-Key Part No.	Price Each 1	10	25	Crydom Part No.
Series DPA/SDV/SDI Dip Relays — SCR Output										
10	10-50mA	10mA	1.0mA	20-140VAC	.01-1.0A	CC1153-ND	4.52	4.45	4.05	DPA4111
	3.5-10VDC	3.5VDC	1.0VDC	20-140VAC	.01-1.0A	CC1154-ND	5.57	5.50	4.99	DPA4119
	10-50mA	10mA	1.0mA	20-280VAC	.01-1.0A	CC1155-ND	5.57	5.50	4.99	DPA6111
	3.5-10VDC	3.5VDC	1.0VDC	20-280VAC	.01-1.0A	CC1156-ND	6.62	6.52	5.93	DPA6119
	3.5-10VDC	3.5VDC	1.0VDC	12-280VAC	.01-1.5A	CC1157-ND	7.71	7.60	6.91	SDV2415
	3.5-10VDC	3.5VDC	1.0VDC	12-280VAC	.01-1.5A	CC1158-ND	7.71	7.60	6.91	SDV2415R
	10-50mA	10mA	1.0mA	12-280VAC	.01-1.5A	CC1159-ND	6.77	6.68	6.07	SDI2415
	10-50mA	10mA	1.0mA	12-280VAC	.01-1.5A	CC1160-ND	6.77	6.68	6.07	SDI2415R
Form C SPDT True Break Before Make (BBM) - SCR Type										
11	Dry Closure	—	—	90-300VAC	.1-15A	CC1166-ND	93.77	92.40	83.94	A2415-C
	Dry Closure	—	—	90-300VAC	.2-40A	CC1167-ND	117.59	115.86	105.26	A2440-C
	4.7-29VDC	4.7VDC	1.0VDC	2-300VDC	.3-6A	CC1168-ND	161.04	158.67	144.15	DC300S6-C
Series PCV Analog Power Controller										
12	2-10VDC	2.0VDC	1.0VDC	100-240VAC	.15-15A	CC1161-ND	68.80	67.79	61.59	10PCV2415
	2-10VDC	2.0VDC	1.0VDC	100-240VAC	.15-25A	CC1162-ND	76.20	75.09	68.22	10PCV2425
	2-10VDC	2.0VDC	1.0VDC	100-240VAC	.15-40A	CC1163-ND	89.96	88.64	80.53	10PCV2440
Series DSD, DLD Time Delay Relay										
13	3.5-15VDC	3.5VDC	1.0VDC	48-280VAC	.04-10A	CC1174-ND	34.91	34.40	31.25	DSD2410
	3.5-15VDC	3.5VDC	1.0VDC	48-280VAC	.04-25A	CC1175-ND	36.02	35.49	32.25	DSD2425
	3.5-15VDC	3.5VDC	1.0VDC	48-280VAC	.04-50A	CC1176-ND	38.00	37.44	34.02	DSD2450
	3.5-15VDC	3.5VDC	1.0VDC	48-280VAC	.04-10A	CC1177-ND	34.91	34.40	31.25	DLD2410
	3.5-15VDC	3.5VDC	1.0VDC	48-280VAC	.04-25A	CC1178-ND	36.02	35.49	32.25	DLD2425
	3.5-15VDC	3.5VDC	1.0VDC	48-280VAC	.04-50A	CC1179-ND	38.00	37.44	34.02	DLD2450
Solid State Relay Accessories										
14	Heatsink for Relays up to 10A (3.3 "x 2.06") (8.38cm x 5.23cm)					CC1113-ND	16.69	15.50	14.42	HS-1
	Heatsink for Relays up to 25A (3.3" x 4.1") (8.38cm x 10.41cm)					CC1207-ND	17.94	16.67	15.50	HS-2
	Heatsink for Relays up to 75A (5.5" x 4.8") (13.97cm x 12.19cm)					CC1208-ND	26.32	24.52	22.82	HE-54
	Heatsink for Relays up to 90A (6.0" x 6.0") (15.24cm x 15.24cm)					CC1114-ND	74.31	68.91	64.12	HE-90
—	Protective Cover for Series 1 Relays					CC1070-ND	2.35	2.23	2.15	KS-100
	Protective Cover for 53TP Series Relays					CC1171-ND	4.00	3.95	3.59	KS-300
	EMI Filters for 1 Phase Relay to Reduce Gen. Noise					CC1172-ND	8.47	8.35	7.58	1F25
	EMI Filters for 3 Phase Relay to Reduce Gen. Noise					CC1173-ND	13.23	13.04	11.85	3F20

(Continued)

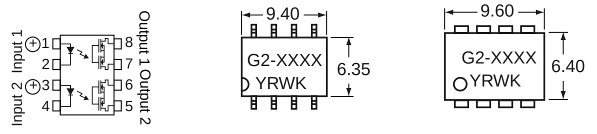
Fig. 1



6-SOP

6-Dip

Fig. 2



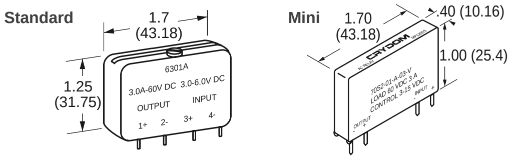
8-SOP

8-Dip

Crydoms G2 series of SSR's feature extremely low RDSon, low leakage and long lifetimes. Crydoms SSR's typically comprise an optical coupler, the output of which either drives the line directly or is used to switch a high-power device, such as a silicon-controlled rectifier (SCR) or thyristor. Whatever the drive component, it's the optical-isolation and no-moving-part aspects of the device that grant its many performance features. These features include high I/O isolation (though leakage current is a problem), long life (measured in millions of cycles), low acoustic noise, no contact bounce/arcing, mechanical ruggedness, and low drive-current requirements. They are available in tube packaging for small quantities and prototype work. Tape and reel packaging for automated insertion equipment.

Fig.	Con-tact	Input Volt.	Input I (mA)	Switch Volt.	Switch I (mA)	Pkg.	Digi-Key Part No.	Tube Price Each			Crydom Part No.	Digi-Key Part No.	T&R Pricing 2,000	Crydom Part No.
								1	10	25				
NEW! G2 Series Solid State Mosfet														
1	SPST	1.4V	10-30	400V	150	6-Dip	CC1300-ND	2.48	2.25	1.80	G2-1A02-TT	—	—	—
	SPST	1.4V	10-30	400V	150	6-SOP	CC1301-ND	2.48	2.25	1.80	G2-1A02-ST	CC1301TR-ND	1255.50/M	G2-1A02-SR
	SPST	1.4V	10-30	400V	150	6-Dip	CC1302-ND	2.48	2.25	1.80	G2-1A03-TT	—	—	—
	SPST	1.4V	10-30	400V	150	6-SOP	CC1303-ND	2.48	2.25	1.80	G2-1A03-ST	CC1303TR-ND	1255.50/M	G2-1A03-SR
	SPST	1.4V	10-30	400V	120	6-Dip	CC1304-ND	2.26	2.05	1.64	G2-1A05-TT	—	—	—
	SPST	1.4V	10-30	400V	120	6-SOP	CC1305-ND	2.26	2.05	1.64	G2-1A05-ST	CC1305TR-ND	1147.50/M	G2-1A05-SR
	SPST	1.4V	10-30	250V	150	6-Dip	CC1306-ND	2.48	2.25	1.80	G2-1A06-TT	—	—	—
	SPST	1.4V	10-30	250V	150	6-SOP	CC1307-ND	2.48	2.25	1.80	G2-1A06-ST	CC1307TR-ND	1255.50/M	G2-1A06-SR
	SPST	1.4V	10-30	150V	450	6-Dip	CC1308-ND	3.03	2.75	2.20	G2-1A07-TT	—	—	—
	SPST	1.4V	10-30	150V	450	6-SOP	CC1309-ND	3.03	2.75	2.20	G2-1A07-ST	CC1309TR-ND	1525.50/M	G2-1A07-SR
	SPST	1.4V	10-30	350V	330	6-Dip	CC1310-ND	3.03	2.75	2.20	G2-1B01-TT	—	—	—
	SPST	1.4V	10-30	350V	330	6-SOP	CC1311-ND	3.03	2.75	2.20	G2-1B01-ST	CC1311TR-ND	1525.50/M	G2-1B01-SR
	SPST	1.4V	10-30	250V	400	6-Dip	CC1312-ND	3.03	2.75	2.20	G2-1B02-TT	—	—	—
	SPST	1.4V	10-30	250V	400	6-SOP	CC1313-ND	3.03	2.75	2.20	G2-1B02-ST	CC1313TR-ND	1525.50/M	G2-1B02-SR
NEW! G2 Series Multi-output Solid State														
2	DPST	1.4V	15-40	15V	150	8-Dip	CC1314-ND	6.19	5.63	4.50	G2-2A03-TT	—	—	—
	DPST	1.4V	15-40	15V	150	8-SOP	CC1315-ND	6.19	5.63	4.50	G2-2A03-ST	CC1315TR-ND	3078.00/M	G2-2A03-SR
	DPDT	1.4V	10-30	400V	110	8-Dip	CC1316-ND	5.23	4.75	3.80	G2-AB01-TT	—	—	—
	DPDT	1.4V	10-30	400V	110	8-SOP	CC1317-ND	5.23	4.75	3.80	G2-AB01-ST	CC1317TR-ND	2605.50/M	G2-AB01-SR
	DPDT	1.4V	10-30	250V	150	8-Dip	CC1318-ND	5.23	4.75	3.80	G2-AB02-TT	—	—	—
	DPDT	1.4V	10-30	250V	150	8-SOP	CC1319-ND	5.23	4.75	3.80	G2-AB02-ST	CC1319TR-ND	2605.50/M	G2-AB02-SR
	DPST	1.4V	10-30	400V	110	8-Dip	CC1320-ND	4.95	4.50	3.60	G2-DA01-TT	—	—	—
	DPST	1.4V	10-30	400V	110	8-SOP	CC1321-ND	4.95	4.50	3.60	G2-DA01-ST	CC1321TR-ND	2470.50/M	G2-DA01-SR
	DPST	1.4V	10-30	400V	70	8-Dip	CC1322-ND	4.73	4.30	3.44	G2-DA02-TT	—	—	—
	DPST	1.4V	10-30	400V	70	8-SOP	CC1323-ND	4.73	4.30	3.44	G2-DA02-ST	CC1323TR-ND	2362.50/M	G2-DA02-SR
	DPST	1.4V	10-30	400V	125	8-Dip	CC1324-ND	4.95	4.50	3.60	G2-DA03-TT	—	—	—
	DPST	1.4V	10-30	400V	125	8-SOP	CC1325-ND	4.95	4.50	3.60	G2-DA03-ST	CC1325TR-ND	2470.50/M	G2-DA03-SR
	DPST	1.4V	10-30	250V	125	8-Dip	CC1326-ND	4.95	4.50	3.60	G2-DA06-TT	—	—	—
	DPST	1.4V	10-30	250V	125	8-SOP	CC1327-ND	4.95	4.50	3.60	G2-DA06-ST	CC1327TR-ND	2470.50/M	G2-DA06-SR
	DPST	1.4V	10-30	350V	120	8-Dip	CC1328-ND	5.36	4.88	3.90	G2-DB01-TT	—	—	—
	DPST	1.4V	10-30	350V	120	8-SOP	CC1329-ND	5.36	4.88	3.90	G2-DB01-ST	CC1329TR-ND	2673.00/M	G2-DB01-SR
	DPST	1.4V	10-30	250V	140	8-Dip	CC1330-ND	5.36	4.88	3.90	G2-DB02-TT	—	—	—
	DPST	1.4V	10-30	250V	140	8-SOP	CC1331-ND	5.36	4.88	3.90	G2-DB02-ST	CC1331TR-ND	2673.00/M	G2-DB02-SR

Fig. 3



Series IAC, IDC, OAC, ODC

- Opto-Isolated • Solid state I/O switching modules deliver an electrically clean, photo-isolated, noise free "output" interface from logic level control systems to external loads such as motors, valves, solenoids, etc. DMP versions are epoxy conformal coated for fast heat transfer.

Series 6

Series 6 buffered output modules contain additional internal amplification to reduce drive requirements to a level suitable for the Mos devices used in many microprocessor systems. Models are available with either inverting or no-inverting inputs, for 5 and 15 volt logic.

Fig.	Input Volt.	Input I (mA)	Output Current @	Output Voltage	Turn On Time	Turn Off Time	Digi-Key Part No.	Price Each			Crydom Part No.
								1	10	25	
I/O Modules — 5VDC System Voltage											
3	90-140VAC	7	.1-100 mA	.4-30VDC	20ms	20ms	CC1200-ND	7.33	6.88	6.65	IAC-5
	180-280VAC	5	.1-100 mA	.4-30VDC	20ms	20ms	CC1201-ND	8.28	7.77	7.51	IAC-5A
	10-36VDC	8	.1-100 mA	.4-30VDC	5ms	5ms	CC1202-ND	7.33	6.88	6.65	IDC-5
	3-6VDC	19	.02-3A	12-140VAC	.5 cycle	.5 cycle	CC1203-ND	7.33	6.88	6.65	OAC-5
	3-6VDC	19	.02-3A	24-280VAC	.5 cycle	.5 cycle	CC1204-ND	8.28	7.77	7.51	OAC-5A
	3-6VDC	14	.02-3A	5-60VDC	.3 ms	.3 ms	CC1205-ND	7.33	6.88	6.65	ODC-5
	3-32VDC	13	.1-100mA	.4-30VDC	1ms	1ms	CC1244-ND	16.92	15.77	14.67	IDC-5B
	10-36VDC	4	.1-100mA	.4-30VDC	5ms	5ms	CC1234-ND	11.51	10.68	9.94	DMP6101A
	90-140VDC	6	.1-100mA	.4-30VDC	20ms	20ms	CC1235-ND	11.70	10.86	10.10	DMP6201A
	180-280VDC	4	.1-100mA	.4-30VDC	20ms	20ms	CC1236-ND	12.64	11.73	10.91	DMP6202A
	3-6VDC	3	.02-3A	5-60VDC	.5ms	.5ms	CC1237-ND	11.82	10.97	10.21	DMP6301A
	3-6VDC	4	.02-3A	24-280VAC	.5 cycle	.5 cycle	CC1238-ND	12.64	11.73	10.91	DMP6402A
I/O Modules — 15VDC System Voltage											
3	90-140VAC	7	.1-100mA	.4-30VDC	20ms	20ms	CC1210-ND	10.70	9.97	9.28	IAC-15
	10-36VDC	8	.1-100mA	.4-30VDC	5ms	5ms	CC1211-ND	11.67	10.88	10.12	IDC-15
	9-18VDC	20	.02-3A	12-140VAC	.5 cycle	.5 cycle	CC1212-ND	11.67	10.88	10.12	OAC-15
	9-18VDC	14	.02-3A	5-60VDC	.3ms	.3ms	CC1213-ND	10.70	9.97	9.28	ODC-15
I/O Modules — 24VDC System Voltage											
3	90-140VAC	7	.1-100mA	4-30VDC	20ms	20ms	CC1214-ND	9.73	9.06	8.43	IAC-24
	10-36VDC	8	.1-100mA	.4-30VDC	5ms	5ms	CC1215-ND	10.70	9.97	9.28	IDC-24
	18-28VDC	10	.02-3A	12-140VAC	.5 cycle	.5 cycle	CC1216-ND	10.70	9.97	9.28	OAC-24
	18-28VDC	10	.02-3A	5-60VDC	.3ms	.3ms	CC1217-ND	10.21	9.52	8.86	ODC-24

Fig.	Input Volt.	Input I (mA)	Output Current @	Output Voltage	Turn On Time	Turn Off Time	Digi-Key Part No.	Price Each			Crydom Part No.
								1	10	25	
Series 6 — AC & DC Buffered Modules											
3	0-.8VDC	100µA	.02-3A	3-60VDC	100µS	100µS	CC1239-ND	19.17	17.78	16.54	6311
	2.4-6VDC	250µA	.02-3.5A	3-60VDC	100µS	100µS	CC1240-ND	19.60	18.18	16.92	6321
	0-.8VDC	100µA	.02-3A	12-140VAC	.5 cycle	.5 cycle	CC1241-ND	17.72	16.44	15.30	6411
	0-.8VDC	100µA	.02-3.5A	24-280VAC	.5 cycle	.5 cycle	CC1242-ND	19.70	18.27	17.00	6412
	2.4-6VDC	250µA	.02-3.5A	12-140VAC	.5 cycle	.5 cycle	CC1243-ND	17.51	16.24	15.11	6421
Mounting Board for 4-pos. Std. I/O Modules (Screw Term.)							CC1206-ND	26.86	25.56	24.94	PB-4
Mounting Board for 4-pos. Std. I/O Modules (Screw Term.)							CC1218-ND	29.32	27.91	27.22	PB-4R
Mounting Board for 8-pos. Std. I/O Modules (Card Edge Conn.)							CC1219-ND	52.46	49.93	48.70	PB-8
Mounting Board for 16-pos. Std. I/O Modules (Screw Term.)							CC1220-ND	121.61	115.75	112.90	PB-16T
Mounting Board for 16-pos. Std. I/O Modules (Card Edge Conn.)							CC1221-ND	95.92	91.30	89.05	PB-16A
Mini I/O Module — 5VDC System Voltage											
3	90-140VAC	7	.1-100mA	.4-30VDC	20ms	20ms	CC1222-ND	8.99	8.34	7.76	MIAC-5
	10-36VDC	8	.1-100mA	.4-30VDC	5ms	5ms	CC1223-ND	8.99	8.34	7.76	MIDC-5
	3-6VDC	19	.02-3A	12-140VAC	.5 cycle	.5 cycle	CC1224-ND	8.99	8.34	7.76	MOAC-5
	3-6VDC	19	.02-3A	24-280VAC	.5 cycle	.5 cycle	CC1225-ND	10.16	9.43	8.77	MOAC-5A
	3-6VDC	14	.02-3A	5-60VDC	.3ms	.3ms	CC1226-ND	8.99	8.34	7.76	MODC-5
Mini I/O Module — 24VDC System Voltage											
3	10-36VDC	8	.1-100mA	.4-30VDC	5ms	5ms	CC1227-ND	10.16	9.43	8.77	MIDC-24
	18-28VDC	15	.02-3A	12-140VAC	.5 cycle	.5 cycle	CC1228-ND	10.75	9.97	9.28	MOAC-24
	18-28VDC	10	.02-3A	5-60VDC	.3ms	.3ms	CC1229-ND	10.16	9.43	8.77	MODC-24
Mounting Board for 4-pos. Mini I/O Modules (Screw Term.)							CC1230-ND	26.86	25.56	24.94	MS-4
Mounting Board for 8-pos. Mini I/O Modules (Card Edge Conn.)							CC1231-ND	52.46	49.93	48.70	MS-8H
Mounting Board for 16-pos. Mini I/O Modules (Card Edge Conn.)							CC1232-ND	95.92	91.30	89.05	MS-16H
Mounting Board for 24-pos. Mini I/O Modules (Card Edge Conn.)							CC1233-ND	162.25	154.42	150.62	MS-24H

BICCGeneral

Hook-Up Wire

Conductor: • Fully annealed tinned copper per ASTM B-33. Insulation: • Premium grade color coded PVC • Temperature range: -40°C to +80°C • Voltage Rating: 300 volts • 0.016 (0.41mm) Nom. Insulation Thickness. Industry Approvals: • **UL Style 1007** • **CSA TR-64** • Passes UL VW-1 Vertical Flame Test • OSHA acceptable.

Cond. Size (AWG)	Cond. Strand	Ins. O.D. (mm)	Digi-Key* Part No. for 100 ft.	Price 100 ft.†	Mfg. Part No.
Solid Conductors					
24	Solid	1.32	C2003☐ -100-ND	7.36	C2003
22	Solid	1.45	C2004☐ -100-ND	7.69	C2004
20	Solid	1.63	C2028☐ -100-ND	8.49	C2028
18	Solid	1.83	C2052☐ -100-ND	9.40	C2052
16	Solid	2.11	C2053☐ -100-ND	10.47	C2053
Stranded Conductors					
24	7/32	1.42	C2015☐ -100-ND	8.00	C2015
22	7/30	1.57	C2016☐ -100-ND	8.35	C2016
20	10/30	1.78	C2040☐ -100-ND	9.02	C2040
18	16/30	2.03	C2064☐ -100-ND	10.20	C2064
16	26/30	2.34	C2065☐ -100-ND	11.76	C2065

Cond. Size (AWG)	Cond. Strand	Ins. O.D. (mm)	Digi-Key* Part No. for 1000 ft.	Price 1,000 ft.†	Mfg. Part No.
Solid Conductors					
24	Solid	1.32	C2003☐ -1000-ND	33.88	C2003
22	Solid	1.45	C2004☐ -1000-ND	37.18	C2004
20	Solid	1.63	C2028☐ -1000-ND	45.16	C2028
18	Solid	1.83	C2052☐ -1000-ND	54.23	C2052
16	Solid	2.11	C2053☐ -1000-ND	64.96	C2053
Stranded Conductors					
24	7/32	1.42	C2015☐ -1000-ND	40.21	C2015
22	7/30	1.57	C2016☐ -1000-ND	43.78	C2016
20	10/30	1.78	C2040☐ -1000-ND	50.66	C2040
18	16/30	2.03	C2064☐ -1000-ND	62.21	C2064
16	26/30	2.34	C2065☐ -1000-ND	78.44	C2065

Hookup Wire, Stranded, PVC Insulation UL Style 1015, TEW, PVC, 600V 105°C, VW-1

Conductor Size (AWG)	Strand	Nom. O.D. (mm)	Insulation Thick.	Digi-Key* Part No. for 100 ft.	Price 100 ft.†	Mfg. Part No.
24	7/32	2.24	0.81	C2100☐ -100-ND	8.38	C2100
22	7/30	2.39	0.81	C2101☐ -100-ND	8.99	C2101
20	10/30	2.59	0.81	C2102☐ -100-ND	9.95	C2102
18	16/30	2.84	0.81	C2103☐ -100-ND	11.02	C2103
16	26/30	3.15	0.81	C2104☐ -100-ND	13.25	C2104
14	41/30	3.58	0.81	C2105☐ -100-ND	18.07	C2105
10	105/30	4.67	0.81	C2107☐ -100-ND	30.20	C2107

Conductor Size (AWG)	Strand	Nom. O.D. (mm)	Insulation Thick.	Digi-Key* Part No. for 1000 ft.	Price 1,000 ft.†	Mfg. Part No.
24	7/32	2.24	0.81	C2100☐ -1000-ND	44.61	C2100
22	7/30	2.39	0.81	C2101☐ -1000-ND	50.66	C2101
20	10/30	2.59	0.81	C2102☐ -1000-ND	60.29	C2102
18	16/30	2.84	0.81	C2103☐ -1000-ND	71.01	C2103
16	26/30	3.15	0.81	C2104☐ -1000-ND	93.29	C2104
14	41/30	3.58	0.81	C2105☐ -1000-ND	127.66	C2105
10	105/30	4.67	0.81	C2107☐ -1000-ND	248.94	C2107

Hookup Wire, Solid, PVC Insulation UL Style 1015, TEW, PVC, 600V 105°C, VW-1

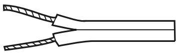
Conductor Size (AWG)	Strand	Nom. O.D. (mm)	Insulation Thick.	Digi-Key* Part No. for 100 ft.	Price 100 ft.†	Mfg. Part No.
22	1	2.26	0.81	C2117☐ -100-ND	8.49	C2117
20	1	2.44	0.81	C2118☐ -100-ND	9.26	C2118
18	1	2.64	0.81	C2119☐ -100-ND	10.28	C2119

Conductor Size (AWG)	Strand	Nom. O.D. (mm)	Insulation Thick.	Digi-Key* Part No. for 1000 ft.	Price 1,000 ft.†	Mfg. Part No.
22	1	2.26	0.81	C2117☐ -1000-ND	45.16	C2117
20	1	2.44	0.81	C2118☐ -1000-ND	52.86	C2118
18	1	2.64	0.81	C2119☐ -1000-ND	63.59	C2119

* For ☐ in Digi-Key Part No. choose letter which represents color of your choice: **B**=Black; **W**=White; **R**=Red; **G**=Green; **A**=Orange; **Y**=Yellow; **L**=Blue; **N**=Brown; **S**=Slate Gray; **V**=Violet.
† Length tolerance is ±1% • Wire is ordered per EIA-359-A color specification which allows for some variation in shade.

BICCGeneral

PVC Coated Speaker Cable



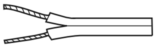
- **Conductor:** Fully annealed 1 bare, 1 tin stranded copper per ASTM B-174; Fully annealed stranded bare copper per ASTM B- 33 (C1364 style only)**
- **Insulation:** Clear; Premium grade PVC Premium grade Superflex PVC (C1364 style only)**
- **Jacket:** PVC Clear
- **Temperature Range**: -20°C to +60°C
- **Voltage Rating:** 90 Volts (UL)*, 300 Volts SPT-1
- **Industry Approvals:** UL wires misc. 90 volts* (except C1364 series); UL recognized 300 volts SPT-1 (except C1364 series); OSHA acceptable (except C1364 series)

No. of Cond.	Cond. Size (AWG)	Strand	Nom. Insulation Thickness (mm)	Nominal O.D. (mm)	Suggested Working Voltage	Digi-Key Part No.	(X = No. of Ft. Per Roll) Price Per Roll 500 ft.	1,000 ft.	Mfg. Part No.
2	24	7/32	0.41	1.40 x 2.79	250	C1356-X-ND	10.95	20.40	C1356
2	22	7/30	0.51	1.78 x 3.68	300	C1362-X-ND	15.30	28.95	C1362*
2	20	10/30	0.51	2.16 x 4.06	300	C1360-X-ND	20.55	39.45	C1360*
2	18	16/30	0.64	2.54 x 4.75	300	C1357-X-ND	23.85	46.20	C1357*
2	16	26/30	0.64	2.84 x 5.33	300	C1358-X-ND	33.00	63.00	C1358
2	14	41/30	0.64	3.05 x 5.84	300	C1361-X-ND	49.65	97.65	C1361
2	12	65/30	0.76	4.06 x 8.51	300	C1363-X-ND	81.00	157.05	C1363
2	12	7 x 37/36	1.52	5.84 x 11.94	300	C1364-X-ND	155.40	301.05	C1364**

# Length tolerance is ±10%

DABURN

PVC Coated Speaker Cable



- Conductors are parallel, stranded copper
- Suited for Hi-Fi speaker cable
- Clear insulation
- **Temp. Rating:** -20°C to +60°C
- **Operating Voltage:** 300V

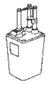
Cond.	Size	Strand	Digi-Key Part No.	(X = No. of Ft. Per Roll) Price Per Roll 100 ft.	1,000 ft.	Daburn Part No.
2*	22	7/30	W200-X-ND	6.34	49.62	2753
2*	18	16/30	W201-X-ND	10.97	90.61	2759
2*	16	26/30	W202-X-ND	14.28	131.80	2760

* 1 Conductor Tinned Copper; 1 Conductor Bare Copper

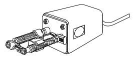
PATCO SERVICE INC.

Thermal Wire Strippers

PTS-10-ND
PTS-20-ND
PTS-50-ND



PTS-30-ND



• Nichrome, heating element: 450°F (232°C) in less than 5 seconds. • Teflon stripper 1700°F (927°C) in less than 5 seconds. • Eliminates nicks and broken strands of conductors. • Handles solid, stranded and shielded wires. • Does not burn skin. • AC line power or rechargeable battery power versions. • Complete with cleaning brush and operating instructions.

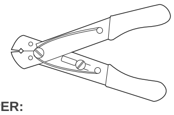
	Part No.	Description	Price
⋆	**PTS-20-ND**	Thermal Wire Stripper, Battery Powered with Cleaning Brush	**$96.00**
	PTS-201-ND	Replacement Blade for PTS-20	**$3.60**
⋆	**PTS-10-ND**	Thermal Wire Stripper with Cleaning Brush	**$58.00**
	PTS-101-ND	Replacement Blade for PTS-10-ND	**$3.75**
	PTS-30-ND	Teflon Wire Stripper for 16-30 AWG	**$89.00**
	PTS-302-ND	Replacement Blade for PTS-30-ND	**$3.90**
⋆	**PTS-50-ND**	Thermal Coax Stripper for RG 58, RG 59, RG 62	**$93.00**
	PTS-501-ND	Replacement Blade for PTS-50-ND	**$4.80**

⋆ Will not strip Teflon wire.

Klauss

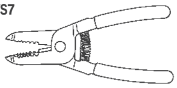
Wire Strippers

WS4



WS4 STRIPPER:
Handy, lightweight, universal stripping tool cuts and strips common wire sizes. Hardened blades. Vinyl grips. Spring action to speed work. Full length: 4"/102mm.

WS5, WS6, WS7



WS5, WS6, WS7 WIRE STRIPPER:
Strip and cut commonly used wire, single or stranded, AWG or metric. Each tool will strip several different wire sizes. Plier nose is an extra feature along with cushion grips and spring release. Hardened pivot joint for longer life. A perfect tool for solder benches or assembly areas.

Part No.	Description	Price
WS4-ND	AWG 10 - 22	**$8.05**
WS5-ND	AWG 10 - 20 (Yellow)	**$13.10**
WS6-ND	AWG 16 - 26 (Red)	**$13.10**
WS7-ND	AWG 22 - 30 (Blue)	**$14.35**

tyco Electronics AMP

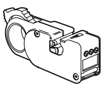
Cable Stripper

A1110-ND	Cable Stripping Tool for RG/58, 59 (AMP Part No. 603995-1)	**$131.14**

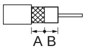
Weidmüller
Paladin Tools

Cable Stripping Tools

Fig. 1

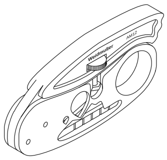


Coaxial stripping tool producing 2 and 3 level strips in cables from .100" to .315" (2.54 to 8mm) dia. Replacement blades and easy adjustment, make this tool the perfect choice.



Cassette Type	Dim. (mm) A	B
Green Cassette	7.09	5.11
Brown Cassette	7.49	3.48

Fig. 2



AM12 Multi-level adjustable cable stripper.

Fig.	Description	Digi-Key Part No.	Price Each
3 Level Coaxial Cable Stripper			
1	Adj. w/ green cassette	PA1240-ND	69.64
1	Adj. w/ brown cassette	PA1243-ND	69.64
—	Repl. Blade for PA1240	PA2240-ND	26.63
—	Repl. Blade for PA1243	PA2243-ND	26.63
2 Level Coaxial Cable Stripper			
2	Cable Stripper	PAL1112-ND	20.71

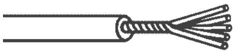
DABURN

Plastic Kinkless Test Lead Wire

Soft formulation vinyl maximum flexibility. Temperature stability from -80°C to +105°C. Exceed requirements for MIL-I-3930A Type JP(PVC). Suitable for text leads, etc. Resistant to gasoline and oil. Excellent abrasion resistance. **Description:** One conductor tinned copper stranded, special formulation vinyl insulation - smooth surface. **Operating Temperature:** –80°C to +105°C, 5000V rating.

Ft.	Size	Strand	Ins. (mm)	O.D. Nom.	Digi-Key Part Number Red	Black	Yellow	Green	Price Per Roll
100	22	26/36	.81	2.54	W2722R-100-ND	W2722B-100-ND	W2722Y-100-ND	W2722G-100-ND	12.95
1000	22	26/36	.81	2.54	W2722R-1000-ND	W2722B-1000-ND	W2722Y-1000-ND	W2722G-1000-ND	85.60
100	18	65/36	.81	2.84	W2718R-100-ND	W2718B-100-ND	W2718Y-100-ND	W2718G-100-ND	22.02
1000	18	65/36	.81	2.84	W2718R-1000-ND	W2718B-1000-ND	W2718Y-1000-ND	W2718G-1000-ND	164.65

Rubber Kinkless Test Lead Wire

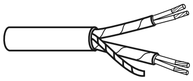


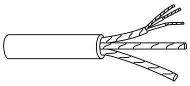
Suitable as Test Lead Wire in analyzers, instruments, oscillators, meters, etc. Wherever extra flexibility and limpness are necessary. Single conductor, extra flexible stranded soft tinned copper, color-coded rubber, smooth wax finish. **Operating Temperature:** -20°C to +60°C.

Ft.	Size	Nom. Strand	Breakdown Insul. Wall	Voltage	Nom. Voltage	O.D. Nom.	Digi-Key Part Number Red	Black	Price Per Roll
100	20	41/36	1.19mm	12,000V	3,000	3.48mm	W2715R-100-ND	W2715B-100-ND	41.16
1000	20	41/36	1.19mm	12,000V	3,000	3.48mm	W2715R-1000-ND	W2715B-1000-ND	271.95

BICCGeneral

Instrumentation Control Cable





COLOR CODE CHART NO. 1

No.	Color	No.	Color
1	Black	3	White
2	Red	4	Green

COLOR CODE CHART NO. 2

No.	Color	No.	Color
1	Black, Red	2	Green, White

COLOR CODE CHART NO. 3

No.	Color	No.	Color
1	Black, Red	4	Black, Blue
2	Black, White	5	Black, Yellow
3	Black, Green	6	Black, Brown

COLOR CODE CHART NO. 4

No.	Color	No.	Color
1	Black	3	Brown
2	Red	4	Blue

Notes:

1. UL Style 2464 (UL: 60°C, 600V)
2. CSA PCC (CSA: 60°C)
3. Passes UL 70,000 BTU Vertical Tray Flame Test
4. Passes CSA FT4 Flame Test
5. California State Fire Marshal
6. Passes CSA FT6 Flame Test
7. NEC Article 725 Power-Limited Tray Cable (UL: 105°C, 300V)
8. NEC Article 800 Type CM
9. UL Style 2835 (UL:60°C, 30V)
10. NEC Article 800 Type CM
11. UL Style 2919 (UL: 80°C, 30V)
12. Passes CSA FT1 Flame Test
13. UL Type FPLR (UL: 60°C, 300V)
14. NEC Article 760
15. Passes UL 1666 Flame Test
16. NEC Article 725 Type CL3R (UL: 75°C, 150V)
17. NEC Article 800 Type CMR (UL: 75°C, 300V)
18. NEC Type CL3R
19. NEC Article 725 Type CL3P (UL: 60°C, 150V)
20. NEC Article 800 Type CMP (UL: 60°C, 300V)
21. UL Style 2464 (UL:80°C, 300V)
22. UL Type FPLP (UL: 60°C, 300V)
23. NEC CL3R

A. Capacitance between conductors

B. Cap. between 1 conductor & other conductors connected to shield

Communications and Control Cable C0561

Conductor:
- Fully annealed stranded tinned copper per ASTM B-33
- Twisted Pairs

Insulation:
- Premium grade color-coded PVC
- Color code: each pair black and red numbered at one inch intervals

Shield:
- 100% Flexfoil aluminum/polyester, 25% overlap, foil facing out
- Stranded tinned copper drain wire

Jacket:
- PVC, gray
- Temperature Range: -20°C to +105°C

Computer Cable

C6047, C6048

Conductor:
- Fully annealed stranded tinned copper per ASTM B-33
- Twisted Pairs

Insulation:
- Premium grade color-coded polyethylene

Shield:
- Individually shielded pairs
- 100% Flexfoil aluminum/polyester, 25% overlap, foil facing in
- Stranded tinned copper drain wire each pair

Jacket:
- PVC, gray
- Temperature Range: -20°C to +80°C

Fire Alarm Cable

Conductor:
- Fully annealed solid bare copper per ASTM B-33

Insulation:
- Premium grade color-coded S-R PVC

Shield:
- Overall polyester supported aluminum foil, plus a stranded tinned copper drain wire to facilitate grounding

Jacket:
- Premium grade, Red PVC
- Suitable for use from -20°C to +60°C
- Round constructions have sequential footabe markings to facilitate installation
- Includes ripcord on round constructions

Sound and Security Cable

Conductor:
- Stranded bare copper to ASTM B-3, B-8 and B-286

Insulation:
- Premium grade color-coded S-R PVC (E2202S Series: Premium grade color-coded Flexguard)

Shield:
- Overall polyester supported aluminum foil, plus a stranded tinned copper drain wire to facilitate grounding

Jacket:
- Premium grade, Gray PVC (E2202S: Premium grade Natural Flexguard)
- Sequential footage markings to facilitate installation
- Suitable for use from -20°C to +75°C (E2202S: 0°C to +60°C)
- Includes ripcord

No. of Pairs	Color Chart	Cond. Size (AWG)	Cond. Strand	Nominal Insulation Thickness Inch (mm)	Nominal Jacket Thickness Inch (mm)	Suggested Working Voltage	Nominal O.D. Inch (mm)	Nominal Cap. pF/FT (See Notes A /B)		Notes	Digi-Key Part No.	(X = No. of Ft. Per Roll) Price Per Roll 100 ft.	500 ft.	1,000 ft.	Mfg. Part No.
NON-PLENUM															
Shielded - Communication and Control Cable															
2	2	22	7/30	0.008 (0.20)	0.020 (0.51)	300V	0.165 (4.19)	35.0	63.0	2,3,4,8,9	C1352-X-ND	25.41	75.83	139.50	C1352
3	3	22	7/30	0.011 (0.28)	0.032 (0.81)	30V	0.292 (7.42)	15.0	11.3	2,3,10,11,12	C6040-X-ND	46.31	156.38	293.40	C6040
3	Black/Red	18	16/30	0.015 (0.38)	0.053 (1.35)	300V	0.403 (10.24)	33.5	60.3	2,3,4,7,21	C0561-1000-ND	—	—	270.00	C0561
3	3	18	16/30	0.016 (0.41)	0.032 (0.81)	30V	0.395 (9.75)	6.4	8.3	2,3,8,11,12	C6047-1000-ND	—	—	290.40	C6047
6	3	18	16/30	0.016 (0.41)	0.048 (1.19)	30V	0.556 (14.07)	6.4	8.3	2,3,8,11,12	C6048-1000-ND	—	—	609.45	C6048

No. of Cond.	Color Chart	Cond. Size (AWG)	Cond. Strand	Nominal Insulation Thickness Inch (mm)	Nominal Jacket Thickness Inch (mm)	Suggested Working Voltage	Nominal O.D. Inch (mm)	Nominal Cap. pF/FT	Notes	Digi-Key Part No.	Price Per Roll 1,000 ft.	Mfg. Part No.
NON-PLENUM												
Unshielded - Fire Alarm Cable												
2	4	14	Solid	0.013 (0.33)	—	300V	0.210 (5.33)	Standard	5,13,14,15	E1522S-1000-ND	102.60	E1522S
4	4	14	Solid	0.013 (0.33)	—	300V	0.248 (6.30)	Standard	5,13,14,15	E1524S-1000-ND	181.80	E1524S
Unshielded - Riser Sound and Security Cable												
2	1	18	7/26	0.009 (0.23)	0.015 (0.38)	300V	0.156 (3.96)	—	16,17	E1032S-1000-ND	55.05	E1032S
4	1	18	7/26	0.009 (0.23)	0.015 (0.38)	300V	0.187 (4.75)	—	16,17	E1034S-1000-ND	97.95	E1034S
2	1	16	19/.0117	0.010 (0.25)	0.015 (0.38)	300V	0.178 (4.52)	—	16,17	E1042S-1000-ND	80.10	E1042S
4	1	16	19/.0117	0.010 (0.25	0.015 (0.38)	300V	0.209 (5.31)	—	16,17	E1044S-1000-ND	143.85	E1044S
2	1	14	19/.0147	0.013 (0.33)	0.015 (0.38)	300V	0.223 (5.66)	—	16,17,23	E1052S-1000-ND	109.20	E1052S
2	1	12	19/.0185	0.009 (0.23)	0.015 (0.38)	300V	0.260 (6.60)	—	16,17,23	E1062S-1000-ND	159.45	E1062S
Shielded - Fire Alarm Cable												
2	4	14	Solid	0.013 (0.33)	0.015 (0.38)	300V	0.218 (5.54)	Standard	5,13,14,15	E2532S-1000-ND	125.55	E2532S
Shielded - Riser Sound and Security Cable												
2	1	22	7/30	0.008 (0.20)	0.015 (0.38)	300V	0.127 (3.23)	—	16,17	E2002S-1000-ND	50.10	E2002S
4	1	22	7/30	0.008 (0.20)	0.015 (0.38)	300V	0.146 (3.71)	—	16,17	E2004S-1000-ND	72.00	E2004S
2	1	18	7/26	0.009 (0.23)	0.015 (0.38)	300V	0.164 (4.17)	—	16,17	E2032S-1000-ND	73.20	E2032S
3	1	18	7/26	0.009 (0.23)	0.015 (0.38)	300V	0.173 (4.39)	—	16,17	E2033S-1000-ND	92.25	E2033S
4	1	18	7/26	0.009 (0.23)	0.015 (0.38)	300V	0.191 (4.85)	—	16,17	E2034S-1000-ND	115.95	E2034S
2	1	16	19/.0117	0.010 (0.25)	0.015 (0.38)	300V	0.189 (4.80)	—	16,17	E2042S-1000-ND	100.95	E2042S
2	1	14	19/.0147	0.013 (0.33)	0.015 (0.38)	300V	0.245 (6.22)	—	16,17	E2052S-1000-ND	131.10	E2052S
PLENUM												
Shielded - Fire Alarm Cable												
2	4	14	Solid	0.012 (0.30)	0.015 (0.38)	300V	0.218 (5.54)	Standard	5,14,22	E3622S-1000-ND	153.60	E3622S
Shielded - Riser Sound and Security Cable												
2	2	18	7/26	0.008 (0.20)	0.015 (0.38)	300V	0.164 (4.17)	—	19,20	E2202S-1000-ND	95.10	E2202S

Category 1 - Compatible Station Wire

Suitable for commercial and residential wiring from the protector to telephone equipment.

UL Listed Type MPR/CMR-CMX Outdoor, Conforms with FCC Rules and Regulation, Part 68

• **Conductors:** 22AWG solid bare annealed copper • **Insulation:** Semi-rigid, flame retardant PVC • **Solid Color Coding:** CDR#1 - Red, CDR#2 - Green, CDR#3 - Yellow, CDR#4 - Black • **Jacket:** Flame retardant PVC Suitable for installations at or above -20°C • **Packaging:** 1000 ft PULL-PAC Carton

No. of Cond	Cond. Size (AWG)	Jacket Color	O.D. In. (mm)	DC Resistance (max) Ohms/1000 ft @ 20C	Digi Key Part No.	Price Per Roll# 1,000 ft.	Mfg. Part No.
4	22	Beige	.13 (3.30)	18.0	C2139034-1000-ND	54.68	2139034

# Length tolerance is ±10%

Category 2 - Compatible Cross-Connect Wire

Intended for cross-connecting between terminals of a distribution frame or other premis equipment; suitable for Data/Voice Transmission up to 4 Mbps.

UL Listed Communications Cable

• **Conductors:** 24 AWG solid bare annealed copper • **Insulation:** Semi-rigid, flame retardant PVC • **Color coding:** BL/W-W/BL • Pairing: Two twists per foot (min) • **Packaging:** 1000 ft spool

No. of Pairs	Cond. Size (AWG)	O.D. In. (mm)	DC Resistance (max) Ohms/1000 ft @ 20C	Characteristics Impedance Ohms @ 1MHz (nom)	Digi Key Part No.	Price Per Roll# 1,000 ft.	Mfg. Part No.
1	24	.06 (1.52)	28.6	100	C7023708-1000-ND	20.16	7023708

# Length tolerance is ±10%

BICCGeneral

Multi-Conductor Cable

LL46351 E26174

UL Style 2464
80° 300/V.

COLOR CODE CHART NO. 1

No.	Color	No.	Color	No.	Color
1	Black	11	Pink	21	White/Brown
2	White	12	Tan	22	White/Orange
3	Red	13	Red/Green	23	White/Gray
4	Green	14	Red/Yellow	24	White/Violet
5	Brown	15	Red/Black	25	Wht/Blk/Red
6	Blue	16	White/Black	26	Wht/Blk/Grn
7	Orange	17	White/Red	27	Wht/Blk/Yel
8	Yellow	18	White/Green	28	Wht/Blk/Blu
9	Violet	19	White/Yellow	29	Wht/Blk/Brn
10	Gray	20	White/Blue	30	Wht/Blk/Org

COLOR CODE CHART NO. 2

No.	Color	No.	Color	No.	Color
1	Black	11	Blue/Black	21	Orange/Green
2	White	12	Black/White	22	Blk/Wht/Red
3	Red	13	Red/White	23	Wht/Blk/Red
4	Green	14	Green/White	24	Red/Blk/Wht
5	Orange	15	Blue/White	25	Grn/Blk/Wht
6	Blue	16	Black/Red	26	Org/Blk/Wht
7	White/Black	17	White/Red	27	Blu/Blk/Wht
8	Red/Black	18	Orange/Red	28	Blk/Red/Grn
9	Green/Black	19	Blue/Red	29	Wht/Red/Grn
10	Orange/Black	20	Red/Green	30	Red/Blk/Grn

COLOR CODE CHART NO. 3

No.	Color	No.	Color
1	Black	3	Red
2	Natural	4	Green

COLOR CODE CHART NO. 4

No.	Color	No.	Color
1	Black	3	White
2	Red	4	Green

Notes:

1. UL-2092 (UL: 60°C, 300V)
2. UL-2093 (UL: 60°C, 300V)
3. UL-2106 (UL: 60°C, 600V)
4. NEC Article 725 Type CL2 (UL: 75°C)
5. UL Style 2464 (UL: 80°C, 300V)
6. NEC Article 800 Type CM (UL: 75°C)
7. CSA PCC (60°C)
8. Passes UL 70,000 BTU Vertical Tray Flame Test
9. Passes CSA FT1 Flame Test
10. OSHA acceptable
11. NEC Article 725 (UL: 60°C)
12. California State Fire Marshal
13. Passes CSA FT6 Flame Test
14. NEC Article 725 Type CL3 (UL: 75°C)
15. NEC Article 800 (UL: 60°C)
16. CM-CSA PCC FT4, non UL2464
17. NEC Article 725 Power-Limited Tray Cable (UL: 105°C, 300V)
19. NEC Type CL3P only
20. Passes CSA FT4 Flame Test

A. Capacitance between conductors
B. Cap. between 1 conductor & other conductors connected to shield

Non-Plenum

General Specifications: • Temperature Range: -20°C to +80°C (UL +80°C) • Voltage Rating: 150V (UL) • Each conductor stranded tinned copper • Color coded PVC insulation • Nominal Ins. Thickness: .010" (.25mm) • Gray PVC jacket • Conductors: 22AWG 7 x 30 Tinned Copper; 24 AWG 7 x 32 Tinned Copper • Insulation: SR PVC • Construction: Conductors cabled with Foil Shield 22/24 AWG stranded tin drain wire • Jacket: Chrome Vinyl 80°C • Application: For use with computers & instrumentation. 80°C, 300 V, CSA, SR-PC. Also for use in Class 2 and 3 circuits as described in Art of NEDC

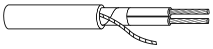
Series C2514, C2534: • Conductor: fully annealed solid or stranded tinned copper per ASTM B-33 • Shield: 100% Flexfoil aluminum/polyester, 25% overlap, foil facing out; Stranded tinned copper drain wire • Jacket: Gray PVC; Temperature Range: -20°C to +75°C

Series C0454: • Conductor: 22-12AWG fully annealed stranded tinned copper per ASTM B-33 • Insulation: Premium grade color coded PVC • Shield: 100% Flexfoil aluminum/polyester, 25% overlap, foil facing out; Stranded tinned copper drain wire • Jacket: Gray PVC; Temperature Range: -20°C to +105°C

Series C2543: • Conductor: 18 AWG fully annealed stranded tinned copper per ASTM B-33 • Insulation: Premium grade color coded S-R PVC • Shield: 100% Flexfoil aluminum/polyester, 25% overlap, foil facing out; Stranded tinned copper drain wire • Jacket: Gray PVC; Temperature Range: -20°C to +80°C

Series C2830/C2404/C2412: • Conductor: 18 AWG fully annealed stranded tinned copper per ASTM B-33 • Insuation: Premium grade color coded PVC per UL 1007 • Jacket: Gray PVC; Temperature Range: -20°C to +80°C

Plenum



Series C2534 / C2535 / C2536: • Conductor: Fully annealed stranded tinned copper per ASTM B-33 • Shield: 100% Flexfoil aluminum/polyester, 25% overlap, foil facing out, stranded tinned copper drain wire • Insulation: Premium grade color coded polyethylen • Jacket: Gray PVC • Temperature Range: -20°C to +75°C

Series C0755: • Conductor: Fully annealed stranded tinned copper per ASTM B-33 • Shield: 100% Flexfoil aluminum/polyester, 25% overlap, foil facing out, stranded tinned copper drain wire • Insulation: Premium grade color coded semi-rigid PVC per UL 1061 • Jacket: Gray PVC • Temperature Range: -20°C to +80°C

Series C3062 / C3159 / C3063 / C3068 / C3068: • Conductor: Fully annealed stranded tinned copper per ASTM B-3, B8, or B33 • Insulation: Premium grade color coded Flexguard • Shield: 100% Flexfoil aluminum/polyester foil, 25% overlap, stranded tinned copper drain wire • Jacket: Flexguard, Natural • Temperature Range: 0°C to +60°C • Sequential footage marked to facilitate installations • Includes ripcord

Series C3162: • Conductor: Fully annealed stranded tinned copper per ASTM B-3, B8 or B33 • Insulation: Premium grade color coded Flexguard • Shield: 100% Flexfoil aluminum/polyester, 25% overlap, foil facing out, stranded tinned copper drain wire • Jacket: Natural Fluoropolymer • Temperature Range: -20°C to +60°C

Series C2428: • Conductor: Fully annealed stranded tinned copper per ASTM B-33 • Insulation: Premium grade color coded PVC • Jacket: Gray PVC • Temperature Range: -20°C to +80°C

Series C3112/C3113/C3120/C3121/C3122/C2127/C3128: • Conductor: Fully annealed stranded tinned copper or bare copper to ASTM B3, B8 or B33 • Insulation: Premium grade color coded Flexguard • Jacket: Flexguard, Natural • Temperature Range: 0°C to +60°C • Sequential footage marked to facilitate installation • Includes ripcord

No. of Cond	Color Chart	Cond. Size (AWG)	Cond. Strand	Size of Drain WIre	Nominal Insulation Thickness Inches (mm)	Nominal Jacket Thickness Inches (mm)	Suggested Working Voltage	Nominal O.D. Inches (mm)	Nominal Cap. pF/FT (See Notes A /B)		Nominal Ohms/M @ 20°C Conductor/Shield		Notes	Digi-Key Part No.	(X = No. of Ft. Per Roll) Price Per Roll 100 ft.†	500 ft. #	1,000 ft. #	Mfg. Part No.
NON-PLENUM																		
Unshielded — 22AWG-7/30 Stranded																		
2	Red/Blk	22	7/30	—	0.010 (0.25)	0.025 (0.64)	300V	0.150 (3.81)	25.5	—	—		9	W120-X-ND	15.08	35.10	63.45	C6348-X-10
3	Blk/Rd/Gn	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.176 (4.47)	25.5	—	—		5, 6, 7, 8, 9, 10	W121-X-ND	19.20	52.88	93.83	C4062-X-10
4	1	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.189 (4.80)	25.5	—	—		5, 6, 7, 8, 9, 10	W122-X-ND	22.75	66.83	119.93	C4063-X-10
5	1	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.203 (5.16)	25.5	—	—		5, 6, 7, 8, 9, 10	W123-X-ND	24.43	71.10	132.30	C4064-X-10
6	1	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.218 (5.54)	25.5	—	—		5, 6, 7, 8, 9, 10	W124-X-ND	27.39	73.40	137.00	C4066-X-10
7	1	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.218 (5.54)	25.5	—	—		5, 6, 7, 8, 9, 10	W125-X-ND	30.75	87.40	159.00	C4088-X-10
8	1	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.234 (5.94)	25.5	—	—		5, 6, 7, 8, 9, 10	W126-X-ND	33.41	92.40	176.40	C4065-X-10
9	1	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.249 (6.32)	25.5	—	—		5, 6, 7, 8, 9, 10	W127-X-ND	38.45	123.98	235.58	C4070-X-10
10	1	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.268 (6.81)	25.5	—	—		5, 6, 7, 8, 9, 10	W128-X-ND	42.03	121.00	232.80	C4071-X-10
12	1	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.276 (7.01)	25.5	—	—		5, 6, 7, 8, 9, 10	W129-X-ND	46.44	131.40	258.00	C4067-X-10
15	2	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.303 (7.70)	25.5	—	—		5, 6, 7, 8, 9, 10	W130-X-ND	70.12	213.60	413.00	C4073-X-10
20	2	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.334 (8.48)	25.5	—	—		5, 6, 7, 8, 9, 10	W131-X-ND	94.50	295.60	572.60	C4075-X-10
25	2	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.368 (9.35)	25.5	—	—		5, 6, 7, 8, 9, 10	W132-X-ND	112.90	359.00	693.00	C4076-X-10
30	2	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.389 (9.88)	25.5	—	—		5, 6, 7, 8, 9, 10	W133-X-ND	138.93	452.80	863.40	C4077-X-10
Overall Foil Shielded (100% Aluminum Mylar Foil) — 22AWG-7/30 Stranded																		
4	2	22	7/30	22	0.010 (0.25)	0.032 (0.81)	300V	0.190 (4.83)	36.0	65.0	15.0	12.0	5, 6, 7, 8, 9, 10	W504-X-ND	26.32	78.30	146.25	C0762-X-10
6	2	22	7/30	22	0.010 (0.25)	0.032 (0.81)	300V	0.219 (5.56)	34.0	61.0	15.0	12.0	5, 6, 7, 8, 9, 10	W506-X-ND	32.07	90.80	167.60	C0763-X-10
8	2	22	7/30	22	0.010 (0.25)	0.032 (0.81)	300V	0.235 (5.97)	34.0	61.0	15.0	10.7	5, 6, 7, 8, 9, 10	W508-X-ND	41.05	117.60	226.40	C0764-X-10
10	2	22	7/30	22	0.010 (0.25)	0.032 (0.81)	300V	0.269 (6.83)	34.0	61.0	15.0	10.7	5, 6, 7, 8, 9, 10	W510-X-ND	50.19	150.00	286.20	C0765-X-10
15	2	22	7/30	22	0.010 (0.25)	0.032 (0.81)	300V	0.304 (7.72)	34.0	61.0	15.0	10.7	5, 6, 7, 8, 9, 10	W515-X-ND	74.28	225.20	440.20	C0766-X-10
20	2	22	7/30	22	0.010 (0.25)	0.032 (0.81)	300V	0.335 (8.51)	34.0	61.0	15.0	9.1	5, 6, 7, 8, 9, 10	W520-X-ND	95.66	302.80	580.20	C0767-X-10
25	2	22	7/30	22	0.010 (0.25)	0.032 (0.81)	300V	0.369 (9.37)	34.0	61.0	15.0	9.1	5, 6, 7, 8, 9, 10	W525-X-ND	115.74	368.60	711.60	C0768-X-10
Overall Foil Shielded (100% Aluminum Mylar Foil) — 24AWG-7/32 Stranded																		
4	1	24	7/32	24	0.010 (0.25)	0.032 (0.81)	300V	0.175 (4.45)	33.0	59.4	26.0	18.0	5, 6, 7, 8, 9, 10	W404-X-ND	22.87	67.50	120.83	C0742-X-10
6	1	24	7/32	24	0.010 (0.25)	0.032 (0.81)	300V	0.201 (5.11)	33.0	59.4	26.0	16.0	5, 6, 7, 8, 9, 10	W406-X-ND	27.42	83.25	154.35	C0743-X-10
8	1	24	7/32	24	0.010 (0.25)	0.032 (0.81)	300V	0.215 (5.46)	33.0	59.4	26.0	16.0	5, 6, 7, 8, 9, 10	W408-X-ND	32.59	90.00	171.00	C0744-X-10
10	1	24	7/32	24	0.010 (0.25)	0.032 (0.81)	300V	0.245 (6.22)	30.0	59.4	26.0	14.0	5, 6, 7, 8, 9, 10	W410-X-ND	37.48	108.80	203.00	C0745-X-10
15	2	24	7/32	24	0.010 (0.25)	0.032 (0.81)	300V	0.276 (7.01)	30.0	59.4	26.0	14.0	5, 6, 7, 8, 9, 10	W415-X-ND	61.92	190.20	317.63	C0746-X-10
20	2	24	7/32	24	0.010 (0.25)	0.032 (0.81)	300V	0.303 (7.70)	30.0	59.4	26.0	14.0	5, 6, 7, 8, 9, 10	W420-X-ND	82.76	258.00	499.40	C0747-X-10
25	2	24	7/32	24	0.010 (0.25)	0.032 (0.81)	300V	0.333 (8.46)	30.0	59.4	26.0	12.0	5, 6, 7, 8, 9, 10	W425-X-ND	99.88	318.00	607.80	C0748-X-10
30	2	24	7/32	24	0.010 (0.25)	0.032 (0.81)	300V	0.351 (8.92)	30.0	59.4	26.0	12.0	5, 6, 7, 8, 9, 10	W430-X-ND	123.59	395.00	763.00	C0749-X-10
Multi-Conductor Foil Shield																		
2	3	22	7/30	—	0.016 (0.41)	0.026 (0.66)	300V	0.179 (4.55)	26.0	47.0	—		1,2,3,4,5,6,7,8,9,10	C2514-1000-ND	—	—	69.90	C2514
2	Blk/Red	18	16/30	—	0.013 (0.33)	0.037 (0.94)	300V	0.227 (5.77)	50.0	90.0	—		8, 17	C0454-1000-ND	—	—	118.50	C0454
2	3	18	16/30	20.00	0.018 (0.46)	0.030 (0.76)	300V	0.229 (5.82)	24.0	43.0	—		1	C2534-X-ND	27.15	76.73	152.33	C2534
3	3	18	16/30	20.00	0.018 (0.46)	0.030 (0.76)	300V	0.247 (6.27)	22.0	40.0	—		2	C2535-X-ND	32.87	—	190.35	C2535
4	4	18	19/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.238 (6.05)	50.0	90.0	—		5, 6, 7, 8, 19	C2543-1000-ND	—	—	179.10	C2543
2	3	16	19/.0117	18.00	0.032 (0.81)	0.032 (0.81)	600V	0.314 (7.98)	27.0	49.0	—		3, 4	C2536-X-ND	37.00	—	220.73	C2536
9	1	24	7/32	—	0.010 (0.25)	0.032 (0.81)	300V	0.228 (5.79)	30.0	59.4	26.0	16.0	5, 6, 7, 8, 9, 10	C0755-X-ND	35.26	—	184.80	C0755
Multi-Conductor Unshielded																		
2	Blk/Red	18	16/30	—	0.016 (0.41)	0.025 (0.64)	300V	0.210 (5.33)	28.0	—	—		5, 6, 7, 8, 16, 19	C2830-1000-ND	—	—	79.95	C2830
4	2	18	16/30	—	0.016 (0.41)	0.032 (0.81)	300V	0.258 (6.55)	28.0	—	—		5, 6, 7, 8, 19	C2404-1000-ND	—	—	140.70	C2404
12	2	18	16/30	—	0.016 (0.41)	0.032 (0.81)	300V	0.401 (10.19)	28.0	—	—		5, 6, 7, 8, 19	C2412-1000-ND	—	—	406.80	C2412
15	2	16	19/.0117	—	0.021 (0.53)	0.032 (0.81)	300V	0.534 (13.56)	28.0	—	—		5, 6, 7, 8, 9, 10, 14	C2428-X-ND	—	—	1190.70	C2428
PLENUM																		
Multi-Conductor Foil Shield — Plenum																		
4	1	22	7/30 TC	—	0.008 (0.20)	0.015 (0.38)	150V	0.146 (3.71)	44.0	79.2	—		11, 15	C3159-1000-ND	—	—	109.80	C3159
2	1	18	7/26 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.164 (4.17)	61.0	109.8	—		11, 15	C3062-1000-ND	—	—	147.15	C3062
2	1	18	7/26 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.147 (3.73)	53.0	95.4	—		6, 11, 12, 13	C3162-X-ND	37.82	—	226.80	C3162

† Length tolerance is ±1%. Spools are not UL/CSA marked # Length tolerance is ±10%

(Continued)

BICCGeneral

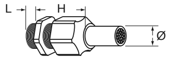
Multi-Conductor Cable *(Cont.)*

No. of Cond	Color Chart	Cond. Size (AWG)	Cond. Strand	Size of Drain WIre	Nominal Insulation Thickness Inches (mm)	Nominal Jacket Thickness Inches (mm)	Suggested Working Voltage	Nominal O.D. Inches (mm)	Nominal Cap. pF/FT (See Notes A /B)	Nominal Ohms/M @ 20°C Conductor/Shield	Notes	Digi-Key Part No.	(X = No. of Ft. Per Roll) Price Per Roll 100 ft.†	500 ft. #	1,000 ft. #	Mfg. Part No.
4	1	18	7/26 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.186 (4.72)	54.0 97.2	—	11, 15	C3063-1000-ND	—	—	149.85	C3063
6	1	18	7/26 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.223 (5.66)	54.0 97.2	—	11, 15	C3065-1000-ND	—	—	211.80	C3065
2	1	16	19/0117 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.187 (4.75)	70.0 126.0	—	11, 15	C3068-1000-ND	—	—	139.65	C3068
Multi-Conductor Unshielded — Plenum																
2	1	18	7/26 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.130 (3.30)	35.0 —	—	11, 12, 15	C3112-1000-ND	—	—	120.60	C3112
3	1	18	7/26 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.166 (4.22)	35.0 —	—	11, 15	C3120-1000-ND	—	—	109.35	C3120
4	1	18	7/26 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.178 (4.52)	35.0 —	—	11, 12, 15	C3113-1000-ND	—	—	191.48	C3113
6	1	18	7/26 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.219 (5.56)	35.0 —	—	11, 15	C3121-1000-ND	—	—	191.25	C3121
8	1	18	7/26 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.239 (6.07)	35.0 —	—	11, 15	C3122-1000-ND	—	—	243.60	C3122
2	1	16	19/.0117 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.147 (3.73)	39.0 —	—	11, 15	C3127-1000-ND	—	—	108.45	C3127
2	1	14	19/.0117 BC	—	0.010 (0.25)	0.015 (0.38)	150V	0.182 (4.62)	39.0 —	—	11, 15, 18	C3128-1000-ND	—	—	152.10	C3128

† Length tolerance is ±1%. Spools are not UL/CSA marked # Length tolerance is ±10%

AMERICAN ELECTRICAL INC.
MFG. for AMERICAN ELECTRICAL INC. by AGRO

NEW! Tight Seal IP68 Nylon Cable Grips (Glands) with Lock Nuts



Application: The use of synthetic cable grips is almost unlimited within the electrical and electronics industry. Installations where cables must be led safely through a wall of an enclosure will be specified with cable grips. Synthetic cable grips are specified to: • Secure the cable to the enclosure's wall to provide excellent pull-out resistance. • Seal and protect the inside of the enclosure from the unwanted affects of the environment. These contaminants may be water, gas, chemical vapors, or fumes. • Reduce material cost due to use of lighter, less expensive materials, as well as, eliminating the need for running conduit.

Technical Data:
- **Material:** Polyamide PA 6, Self-Extinguishing, Halogen-free
- **Seal:** Neoprene, Oil, and Petroleum Resistant
- **Operating Temperature:** Static (-40°C to 100°C), Dynamic (-30°C to 80°C)
- **Safety Class:** IP68, Waterproof (5 Bar)
- **VDE Test Report:** 12 796-9000-4001/A 2 J

Color	Thread Type	Cable Dia. (mm)	Dim. (mm) H	L	Digi-Key Part No.	Price Each 1	10	100	American Electrical Part No.
Black	7-PG	2.5-6.5	21	8	288-1164-ND	1.18	1.06	.83	1545.07.06
	9-PG	3.0-8.0	23	8	288-1165-ND	1.40	1.26	.98	1545.09.08
	11-PG	4.0-10.0	22	8	288-1166-ND	1.50	1.35	1.05	1545.11.10
	11-PG	2.0-7.0	22	8	288-1167-ND	1.73	1.56	1.21	1545.11.07
	13-PG	5.5-12.0	26	9	288-1168-ND	1.80	1.62	1.26	1545.13.12
	13-PG	3.0-7.0	26	9	288-1169-ND	2.00	1.80	1.40	1545.13.07
	16-PG	8.5-14.0	30	10	288-1170-ND	1.95	1.76	1.37	1545.16.14
	16-PG	5.0-11.0	30	10	288-1171-ND	2.23	2.01	1.56	1545.16.11
	21-PG	11.0-18.0	35	11	288-1172-ND	3.20	2.88	2.24	1545.21.18
	21-PG	6.5-14.0	35	11	288-1173-ND	3.50	3.15	2.45	1545.21.14
	29-PG	17.0-25.0	36	11	288-1174-ND	4.25	3.83	2.98	1545.29.25
	36-PG	22.0-33.0	48	15	288-1175-ND	15.93	14.34	11.15	1545.36.33
	42-PG	28.0-38.0	48	15	288-1176-ND	26.63	23.97	18.64	1545.42.38
	48-PG	32.0-44.0	48	15	288-1177-ND	31.18	28.06	21.83	1545.48.44
	3/8-NPT	3.0-8.0	23	8	288-1178-ND	1.20	1.08	.84	1545.N0375.08
	1/2-NPT	5.5-12.0	26	9	288-1179-ND	1.65	1.49	1.16	1545.N0500.12
	1/2-NPT	3.0-7.0	26	9	288-1180-ND	1.80	1.62	1.26	1545.N0500.07
	3/4-NPT	11.0-18.0	35	11	288-1181-ND	2.63	2.37	1.84	1545.N0750.18
	3/4-NPT	6.5-14.0	35	11	288-1182-ND	2.85	2.57	2.00	1545.N0750.14
	1-NPT	17.0-22.0	36	15	288-1183-ND	4.03	3.63	2.82	1545.N1000.22

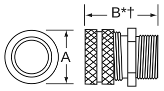
Color	Thread Type	Cable Dia. (mm)	Dim. (mm) H	L	Digi-Key Part No.	Price Each 1	10	100	American Electrical Part No.
Gray	7-PG	2.5-6.5	21	8	288-1184-ND	1.18	1.06	.83	1555.07.06
	9-PG	3.0-8.0	23	8	288-1185-ND	1.40	1.26	.98	1555.09.08
	11-PG	4.0-10.0	22	8	288-1186-ND	1.50	1.35	1.05	1555.11.10
	11-PG	2.0-7.0	22	8	288-1187-ND	1.73	1.56	1.21	1555.11.07
	13-PG	5.5-12.0	26	9	288-1188-ND	1.80	1.62	1.26	1555.13.12
	13-PG	3.0-7.0	26	9	288-1189-ND	2.00	1.80	1.40	1555.13.07
	16-PG	8.5-14.0	30	10	288-1190-ND	1.95	1.76	1.37	1555.16.14
	16-PG	5.0-11.0	30	10	288-1191-ND	2.23	2.01	1.56	1555.16.11
	21-PG	11.0-18.0	35	11	288-1192-ND	3.20	2.88	2.24	1555.21.18
	21-PG	6.5-14.0	35	11	288-1193-ND	3.50	3.15	2.45	1555.21.14
	29-PG	17.0-25.0	36	11	288-1194-ND	4.25	3.83	2.98	1555.29.25
	36-PG	22.0-33.0	48	15	288-1195-ND	15.93	14.34	11.15	1555.36.33
	42-PG	28.0-38.0	48	15	288-1196-ND	26.63	23.97	18.64	1555.42.38
	48-PG	32.0-44.0	48	15	288-1197-ND	31.18	28.06	21.83	1555.48.44
	3/8-NPT	3.0-8.0	23	8	288-1198-ND	1.20	1.08	.84	1555.N0375.08
	1/2-NPT	5.5-12.0	26	9	288-1199-ND	1.65	1.49	1.16	1555.N0500.12
	1/2-NPT	3.0-7.0	26	9	288-1200-ND	1.80	1.62	1.26	1555.N0500.07
	3/4-NPT	11.0-18.0	35	11	288-1201-ND	2.63	2.37	1.84	1555.N0750.18
	3/4-NPT	6.5-14.0	35	11	288-1202-ND	2.85	2.57	2.00	1555.N0750.14
	1-NPT	17.0-22.0	36	15	288-1203-ND	4.03	3.63	2.82	1555.N1000.22

Amphenol®

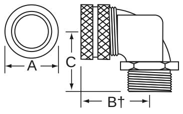
NEW! Cord Grips

Aluminum Body and Compression Nut with Washer and Single Hole Oil-Resistant Grommet
This small body connector is ideal for internal uses, as well as conduit hub and panelboard mounting into threaded bodies or with locknuts. Complete units listed require no other parts except cable. Suitable for use in hazardous locations per National Electric Code Class 1, Div.2; Class II, Div. 1 & 2; Class III, Div. 1 & 2. UL listed File No. E53509 and Certified File No. LR-64107.

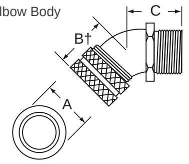
Straight Body



90° Elbow Body



45° Elbow Body

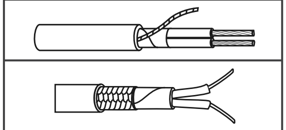


Conduit Hub Size - Inch	Panel Hole Size - Inch	Cord Dia. Range	Dimensions - Inches A	B	C	Digi-Key Part No.	Price Each 1	10	50	Amphenol Part No.
Small Straight Body, Male Thread										
3/8	11/16 NPT	.187-.250	0.88	1.53†	—	DB-414-ND	8.21	4.66	3.43	DB-414
3/8	11/16 NPT	.375-.437	0.88	1.53†	—	DB-4 -ND	8.21	4.66	3.43	DB-4
1/2	7/8 NPT	.187-.250	0.88	1.53†	—	DB-314-ND	8.11	4.60	3.39	DB-314
1/2	7/8 NPT	.250-.312	0.88	1.53†	—	DB-3516-ND	8.11	4.60	3.39	DB-3516
1/2	7/8 NPT	.312-.375	0.88	1.53†	—	DB-338-ND	8.11	4.60	3.39	DB-338
1/2	7/8 NPT	.375-.437	0.88	1.53†	—	DB-3-ND	8.11	4.60	3.39	DB-3
1/2	7/8 NPT	.125-.250	1.13	1.84†	—	DB-7-ND	8.97	5.39	4.19	DB-7
1/2	7/8 NPT	.250-.375	1.13	1.84†	—	DB-8-ND	8.97	5.39	4.19	DB-8
1/2	7/8 NPT	.312-.437	1.13	1.84†	—	DB-9716-ND	9.03	5.42	4.22	DB-9716
1/2	7/8 NPT	.375-.500	1.13	1.84†	—	DB-9-ND	8.97	5.39	4.19	DB-9
1/2	7/8 NPT	.500-.625*	1.13	1.84†	—	DB-10-ND	8.97	5.39	4.19	DB-10
1/2	7/8 NPT	.687-.750*	1.25	2.06†	—	DB-934-ND	14.08	9.86	7.32	DB-934
3/4	1 1/8 NPT	.500-.625	1.13	1.84†	—	DB-6-ND	9.39	5.64	4.39	DB-6
1	1 3/8 NPT	.875-1.00*	1.63	2.69†	—	DB-14-ND	16.03	11.22	8.34	DB-14
90° Elbow Body, Male Thread										
1/2	7/8 NPT	.125-.250	1.13	1.88†	1.44	DB-790-ND	13.23	9.26	6.88	DB-790
1/2	7/8 NPT	.250-.375	1.13	1.88†	1.44	DB-890-ND	13.28	9.30	6.91	DB-890
1/2	7/8 NPT	.375-.500	1.13	1.88†	1.44	DB-990-ND	13.23	9.26	6.88	DB-990
1/2	7/8 NPT	.500-.625*	1.13	1.88†	1.44	DB-1090-ND	13.23	9.26	6.88	DB-1090
45° Elbow Body, Male Thread										
1/2	7/8 NPT	.375-.500	1.13	1.31†	1.31	DB-945-ND	17.29	11.29	9.47	DB-945
1/2	7/8 NPT	.500-.625	1.13	1.31†	1.31	DB-1045-ND	17.29	11.29	9.47	DB-1045

* Maximum cord size will not pass through body without removing outer jacket.
† With nut snug, grommet not compressed.

BICCGeneral

Shielded Microphone Cable



CONDUCTOR:

Type 1: Fully annealed stranded tinned copper/ ASTM B-33.
Type 2: Fully annealed stranded bare copper per ASTM B-33.

INSULATION:

Type 1: Premium grade color coded polypropylene.
Type 2: Premium grade color coded rubber.

COLOR CODES: See chart.

SHIELD:

Type 1: Conductive tape applied over the core; 100% Flexfoil aluminum/polyester 25% overlap, foil facing in; stranded tinned copper drain wire.
Type 2: 80% tinned copper braid.

JACKET:

Type 1: PVC, Black -20°C to +75°C, 200 voltage rating
Type 2: Black Rubber -20°C to +60°C, 300 voltage rating
Type 3: Carolprene, Black -20°C to +60°C, 300 voltage rating

FEATURES:

Note 1: Excellent shielding to reduce noise
Note 2: Precision engineered to transmit clear, noise-free signals
Note 3: Eliminates hum pick-up
Note 4: Resistant to oil, acid, sunlight, abrasion, and aging
Note 5: Extreme noise reflection
Note 6: Provides extra limpness
Note 7: Low impedance
Note 8: High impedance

COLOR CODE CHART NO. 1			
Conductor	**Color**	**Conductor**	**Color**
1	Black	2	Red
COLOR CODE CHART NO. 2			
Conductor	**Color**	**Conductor**	**Color**
1	White	2	Black

Cond. Type	Cond. Size (AWG.)	Cond. Strand	Insul. Type	Color Chart #	Shield Type	Jacket Type	Features Note No.	No. of Cond.	Nom. Jacket Thickness Inch (mm)	Nom. Insulation Thickness Inch (mm)	Nominal O.D. In. (mm)	Nom. Cap. pF/ft. A/B	Digi-Key Part No.	(X = No. of Ft. Per Roll) Price Per Roll 100 ft.†	500 ft.#	1,000 ft.#	Mfg. Part No.
1	24	19/36	1	1	1	1	1	2	0.020 (.51)	0.008 (.20)	0.135 (3.43)	30/58	C1228-X-ND	29.59	56.85	113.55	C1228
2	20	26/34	2	2	2	2	2, 3, 6, 8	1	0.035 (.89)	0.040 (1.02)	0.230 (5.84)	B = 42	C1300-X-ND	44.90	—	188.70	C1300
2	20	26/34	2	2	2	2	2, 3, 6, 7	2	0.035 (.89)	0.020 (.51)	0.270 (6.86)	B = 50	C1302-X-ND*	64.79	143.55	286.35	C1302
2	18	41/34	2	2	2	3	2, 3, 4, 5, 8	1	0.035 (.89)	0.040 (1.02)	0.240 (6.10)	B = 46	C1201-X-ND*	44.69	96.30	187.65	C1201
2	18	41/34	2	2	2	3	2, 3, 4, 5, 7	2	0.035 (.89)	0.020 (.51)	0.295 (7.49)	B = 61	C1202-X-ND*	67.91	153.90	301.65	C1202
2	16	65/34	2	2	2	3	2, 3, 4, 5, 7	2	0.035 (.89)	0.025 (.64)	0.335 (8.51)	B = 55	C1602-X-ND*	73.54	—	326.55	C1602

† Length tolerance is ±1% # Length tolerance is ±10% * High and low impedance cable. A = conductor to conductor. B = One conductor and other conductor connected to shield.

BICCGeneral

Coaxial Cable

- For CATV, MATV, CB and HAM applications.
- All jackets are made of black PVC.

(X = No. of Feet Per Roll)

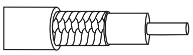
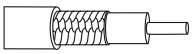
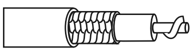
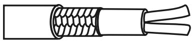
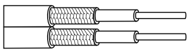
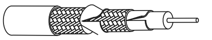
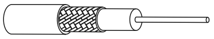
Digi-Key Part No.	(X = No. of Ft. per Roll) Price Per Roll 100 ft.†	500 ft.#	1,000 ft.#	Mfg. Part No.
W300-X-ND	27.06	79.20	151.65	C1166
W301-X-ND	28.34	81.68	161.10	C1104
W302-X-ND	26.41	95.63	190.13	C1164
W303-X-ND	44.97	160.00	313.80	C8000
C8005-X-ND	—	211.73	410.85	C8005
C5785-1000-ND	—	—	132.00	C5785
C5025-1000-ND	—	—	258.30	C5025

# Length tolerance is ±10%
† Length tolerance is ±1%

See "How to Order" for note concerning shipping charges on prepaid orders.

*Percent signal remaining ** loss per 100 ft.

db	1	2	3	4-1/2	6	8	10-1/2	14	20
%	90	80	70	60	50	40	30	20	10

Digi-Key Part No.	RG Type	Cond. Size (AWG)	Dielec. O.D. Inch (mm)	Shield	Nom. O.D. In. (mm)	Nom. Imp.	Vel. Prop.	Nom. Cap./ Ft. (M)	Nom. MHz*	Atten. dB**
W300-X-ND 	58/U	20 AWG Solid BC	Poly .116 (2.95)	1 TC Braid 95%	.195 (4.95)	50	66%	28.5 (8.7)	50 100 200 400 900	3.0 4.5 6.2 9.5 14.5
W301-X-ND 	59/U	22 AWG Solid BC Clad Steel	Poly .144 (3.66)	1 Mil. C17 BC Braid 95%	.242 (6.15)	73	66%	21.0 (6.4)	50 100 200 400 900	2.4 3.4 4.8 7.1 10.9
W302-X-ND 	62A/U	22 AWG Solid BC Clad Steel	Semi Poly .146 (3.71)	1 BC Braid 95%	.242 (6.15)	93	84%	13.5 (4.1)	50 100 200 400 900	1.9 2.7 3.8 5.4 8.3
W303-X-ND  IBM Eqv: #7362211	Twin Coaxial	20 AWG 7 x 28 Solid 1 BC 1TC	Poly .240 (6.10)	1 TC Braid 95%	.320 (8.13) .320 (8.13)	100	66%	15.5 (4.7)	— —	— —
C8005-X-ND 	59/U Dual	.023 AWG Solid Bare Copper-weld	Poly .144 (3.66)	100% Flexfoil over Dielectric & TC 85%	.242 (6.15) .478 (12.14)	73	66%	20.5 (6.2)	100 200 400 700 900 1000	3.5 5.1 7.5 11.4 12.0 12.7
C5785-X-ND 	6/U NEC CL2 CATV	18 AWG Solid Copper Clad Steel 31.0Ω/M	Cellular Polyethylene 0.18 (4.57)	(2) 100% Flexfoil (2) 55% Aluminum Braid	0.308 (6.86) Black PVC	75	78%	17.30 (5.27)	1 10 50 100 200 500 1000	0.22 0.77 1.56 2.12 3.00 4.80 6.84
C5025-X-ND 	11/U	14 AWG Solid Bare Copper 2.6Ω/M	Cellular Polyethylene 0.285 (7.24)	95% Bare Copper Braid 1.24Ω/M	0.405 (10.29) Black Polyethylene	75	78%	17.30 (5.27)	1 10 50 100 200 500 1000	0.20 0.50 1.00 1.50 2.20 3.70 5.30

BICCGeneral

Coaxial Cable

Fig. 1

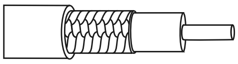
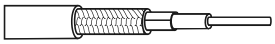


Fig. 2



Nominal Attenuation MHz (dB)

Series	Length in Feet (Meters) 10 (3.0)	50 (15.2)	100 (30.5)	200 (61.0)	400 (121.9)
C3500	0.97	2.21	3.18	4.60	6.72
C3520	0.85	1.90	2.70	3.80	5.30
C3521	0.70	1.57	2.17	3.10	4.68

Series	Length in Feet (Meters) 50 (15)	100 (30)	200 (61)	300 (91)	400 (122)	500 (152)	900 (274)
C1112	2.2	3.0	4.2	5.6	6.9	—	—
C5770	2.3	3.3	4.7	—	—	7.0	10.0
C5775	1.5	2.1	3.1	—	—	5.0	6.9

Fig.	Size	Conductor Size (AWG)	Jacket Color/ Type	Core O.D. Inch (mm)	Shield Type	Nom. O.D. Inch (mm)	Impedance Ohms	V.P. %	Capacitance pF/FT (pF/M)	Digi-Key Part No.	(X = No. of Ft. Per Roll) Price Per Roll 100 ft.†•	500 ft.#	1,000 ft.#	Mfg. Part No.
High Speed Data/LAN FLEXGUARD Jacketed Type MPP/CMP Plenum														
1	RG59/U	20 (Solid BCCS)	Flexguard/Natural	0.138 (3.5)	95% BC braid	0.195 (4.95)	75	82	16.0 (52.5)	C3500-X-ND	57.42	—	465.08	C3500
1	RG62/U	22 (Solid BCCS)	Flexguard/Natural	0.140 (3.56)	95% BC braid	0.195 (4.95)	93	84	13.5 (44.3)	C3520-X-ND	62.42	—	510.08	C3520
1	RG6/U	18 (Solid BCCS)	Flexguard/Natural	0.178 (4.52)	100% Flexfoil plus 95% TC braid	0.235 (5.97)	75	82	16.0 (52.5)	C3521-X-ND	83.37	—	698.63	C3521
High Speed Data/LAN Type MPR/CMR														
1	RG59/U	22 (Solid Bare Copperweld 55 Ω/M)	Black PVC	0.114 (3.65)	70% Bare Copper Braid 4.5 Ω/M	0.242 (6.15)	80	78	16.3	C1112-X-ND	15.49	62.33	—	C1112
2	RG59/U§	22 (Solid Bare Copperweld 55 Ω/M)	Black PVC	0.144 (3.66)	100% Flexfoil plus 40% Alum. braid 55.8 Ω/M	0.238 (6.05)	80*	78*	16.5*	C5770-X-ND	13.99	51.30	—	C5770
2	RG6/U‡	18 (Solid Bare Copper 75Ω/M)	Black PVC	0.180 (4.57)	100% Flexfoil plus 55% Alum. braid	0.270 (6.85)	75*+	78*+	17.3*+	C5775-X-ND	13.17	66.83	—	C5775

† Length tolerance is ±1% # Length tolerance is ±10% § NEC Type CL2-CATV UL Style 1354 ‡ NEC Type CL2-CATV
***** 100% Sweep Tested @ Frequency Band: 0-400MHz **+** Recommended for CATV applications • 100 ft. spools are not UL marked

BICCGeneral

Category 3 - UTP High Speed Data/LAN Type

Suitable for High Speed Data/LAN Transmission up to 16 Mbps. *10BASE-T *4Mbps Token Ring

UL Listed Type MPR/CMR (2133017), UL Listed Type MPP/CMP (2131245), IBM Type 3, EIA/TIA 568 and TSB-36

IEEE 802.3 (10BASE-T), IEEE 802.5 (Token Ring), NEMA (Standard Cable)

- **Conductor:** 24 AWG solid bare annealed copper
- **Insulation:** Flame Retardant PVC
- **Jacket:** Tough, flame retardant PVC (2133017), Tough FLEXGUARD Compound (2131245)
- **Packaging:** 1000 ft PULL-PAC Carton

- **Color Code:** PR#1 = Blue/White - White/Blue,
  PR#2 = Orange/White - White/Orange,
  PR#3 = Green/White - White/Green,
  PR#4 = Brown/White - White/Brown
- **Pairing:** Two twists per foot (min)

No. of Pairs	Cond. Size (AWG)	Jacket Color	O.D. In. (mm)	DC Resistance (max) Ohms/1000 ft @ 20C	Mutual Capacitance (nom) pF/ft @ 1kHz	Characteristics Impedance Ohms @ 772kHz (min-max)	Characteristics Impedance Ohms @ 1-16MHz (min-max)	Attenuation dB/1000ft (max) @ 772kHz	Near-End Crosstalk dB(min) @ 772kHz	Attenuation db/1000ft (max) @16MHz	Near-End Crosstalk dB(min) @ 16MHz	Digi-Key Part No.	Price Per Roll# 1,000 ft.	Mfg. Part No.
High Speed Data/LAN Type MPR/CMR														
4	24	Gray	.16 (4.06)	28.4	18	87-117	85-115	6.8	43.0	40.0	23.0	C2133017-1000-ND	67.82	2133017
High Speed Data/LAN FLEXGUARD Jacketed Type MPP/CMP Plenum														
4	24	White	.15 (3.81)	28.4	18	87-117	85-115	6.8	43.0	40.0	23.0	C2131245-1000-ND	105.82	2131245

# Length tolerance is ±10%

Plenum and Riser Rated Category 5 - UTP High Speed Data/LAN Type

4 Pair, 24 AWG

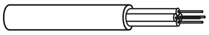
Excellent attenuation and crosstalk characteristics for extended distance runs in 4/16 Mbps LAN's; varying short pair lay reduces the effect of EMI *10BASE-T *4/16 Mbps Token Ring *100 Mbps TPDDI

- **Conductor:** 24 AWG solid bare annealed copper
- **Pairing:** Varying short pair lay
- **DC Resistance (max) Ω/1000ft @1kHz:** 27.0
- **Mutual Capacitance (nom) pF/ft @1kHz:** 14
- **Characteristics Impedance Ω @772kHz (min-max):** 87-117
- **Characteristics Impedance Ω @1-100MHz (min-max):** 85-115
- **Attenuation dB/1000ft (max) @772kHz:** 5.5
- **Near-End Crosstalk dB (min) @ 772kHz:** 64
- **Attenuation dB/1000ft (max) @16MHz:** 67
- **Near-End Crosstalk dB (min) @ 100MHz:** 32
- **Approvals:**
  EIA/TIA TSB-36 (Category 5), IEEE 802.3 (Token Ring), NEMA (Extended Frequency), Proposed ANSIX3T9.5 TP-PMD
- **Color Code:** PR#1 = Blue/White - White/Blue,
  PR#2 = Orange/White - White/Orange,
  PR#3 = Green/White - White/Green,
  PR#4 = Brown/White - White/Brown

Jacket Color	O.D. Inch (mm)	Insulation	UL Listed Type	Type	Packaging	Digi-Key Part No.	Price Per Roll# 1,000 ft.	Mfg. Part No.
Gray PVC	0.20 (5.08)	Polyolefin	MPR/CMR	Riser	PULL-PAC	C5133200E-1000-ND	119.43	5133200E
Gray PVC	0.20 (5.08)	Polyolefin	MPR/CMR	Riser	SPOOL-PAC	C5133329E-1000-ND	119.43	5133329E
Blue Flexguard	0.16 (4.06)	FEP	MPP/CMP	Plenum	PULL-PAC	C5131431-1000-ND	376.47	5131431
Blue Flexguard	0.16 (4.06)	FEP	MPP/CMP	Plenum	SPOOL-PAC	C5131278-1000-ND	376.47	5131278

# Length tolerance is ±10%

Telephone and Datacom Category Cables

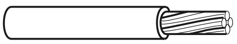


• **Conductor:** Solid, bare, copper conductors to ASTM B-3 • **Insulation:** Premium grade, color coded PVC • **Jacket:** Premium grade PVC, Suit-able for use from -20°C to +60°C, Suggested voltage rating of 300 volts • **Compliance:** UL Listed Type CMR/CMX-Indoor/Outdoor. NEC Article 800 Type CMR (UL: 60°C, 300V) • **Packaging:** 500 ft. Spool, 1000 ft. EZ OUT Carton

No. of Cond.	Cond. Size (AWG)	Jacket Color	Cond. Strand	Nominal Insulation Thickness Inch (mm)	Nominal Jacket Thickness Inch (mm)	Nominal O.D. In. (mm)	Digi-Key Part No.	(X = No. of Ft. Per Roll) Price Per Roll 100 ft.†	500 ft.#	1,000 ft.#	Mfg. Series No.
4	22	Beige	Solid	.006 (.15)	.015 (.38)	.129 (3.28)	C4412-X-ND	14.91	30.60	58.05	C4412

† Length tolerance is ±1% # Length tolerance is ±10%

Plenum Cable Unshielded



Power limited remote control signal cable.

Features: Installation in air plenums without the use of conduit. Outstanding oil and moisture resistance.

Industry Approvals: UL listed for low smoke and fire characteristics per NEC Code Article 725-2 (b). UL Subject 13 and 910, CL2P.

No. of Cond.	Cond. Size (AWG)	Cond. Strand.	Nominal Jacket Thickness	Nominal O.D. Inch (mm)	Digi-Key Part No.	Pricing 1,000 ft.#	Mfg. Series No.
2	22	7 / 30	.008" (.20mm)	.085 (2.16)	C3105-1000-ND	119.70	C3105
4	22	7 / 30	.008" (.20mm)	.117 (2.97)	C3106-1000-ND	164.48	C3106
2	18	7 / 26	.008" (.20mm)	.120 (3.05)	C3102-1000-ND	177.98	C3102
4	18	7 / 26	.008" (.20mm)	.166 (4.22)	C3103-1000-ND	261.45	C3103
2	18	7 / 26	.008" (.20mm)	.120 (3.05)	C9522-1000-ND	257.40	C9522

# Length tolerance is ±10%

Plenum Cable Shielded

Fig. 1

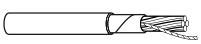


Fig. 2

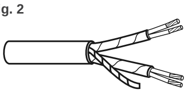
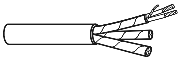


Fig. 3



Color Code Chart for C3156-1000-ND and C3157-1000-ND

No. of Pairs	Color
1	Black & Red
2	Black & White
3	Black & Green

Applications:

- Power limited circuits
- Communication and signal applications
- Cash registers
- Computer systems interfaces
- Intercom systems
- Burglar alarms
- Remote controls
- Low voltage applications.

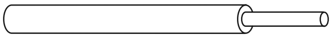
Features: Installation in air plenums without the use of conduit.

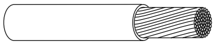
Industry Approvals: UL listed for low smoke and fire characteristics per NEC Code Article 725-2 (b) CL2P.

Fig.	No. of Cond.	No. of Pairs	Cond. Size (AWG)	Cond. Strand.	Nom. Jacket Thickness Inch (mm)	Nom. O.D. In. (mm)	Nom. Cap. Ft. (M)	Digi-Key Part No.	Pricing 1,000 ft.#	Mfg. Series No.
Multi-Conductor, Foil Shielded										
1	4	—	22	7 / 30	.008 (.20)	.125 (3.18)	35 (10.7)	C3155-1000-ND	186.53	C3155
1	4	—	18	7 / 26	.008 (.20)	.176 (4.47)	43 (13.1)	C3163-1000-ND	314.33	C3163
1	2	—	16	7 / .0192	.008 (.20)	.177 (4.50)	35 (10.7)	C3169-1000-ND	262.35	C3169
Multi-Paired, Individually Shielded										
2	—	2	22	7 / 30	.008 (.20)	.145 (3.68)	31 (9.4)	C3156-1000-ND	355.73	C3156
3	—	3	22	7 / 30	.008 (.20)	.160 (4.06)	31 (9.4)	C3157-1000-ND	503.10	C3157

# Length tolerance is ±10%

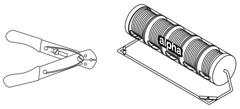
Hook-Up Wire





Description:
- Stranded or solid tinned copper conductor
- Color coded PVC insulation
- Flammability: Passes UL VW-1 flame test
- Wire is ordered per EIA-359-A color specifications which allows for some variation in shade.

Operating Temperature:
300 Volt: -40°C to +90°C (CSA TR-64), -40°C to +80° (UL AWM 1007).
600 Volt: -20°C to +80°C (MIL-W-76B Type HW), -20°C to +105°C (UL1015, CSA TEW-105)



‡ HU-KIT-20-ND
Five 100-ft. spools, 22AWG, 300V stranded wire (black, white, red, green and blue) **$100.05**

§ HU-KIT-40-ND
Five 100-ft. spools, 24AWG, 300V stranded wire (black, white, red, green and blue) **$100.05**

Each kit comes in convenient wall dispenser and includes wire cutter.

Conductor Size (AWG)	Conductor Strand	Insulation Thickness Inch (mm)	Diameter Inch (mm)	Digi-Key Part No. for 100 ft.*	Price Per 100 ft.	Alpha Part No.**	Digi-Key Part No. for 1000 ft.*	Price Per 1,000 ft.	Alpha Part No.**
Stranded — 300 Volt Rating									
30	7/38	.016 (.41)	.043 (1.09)	A3047☐-100-ND•	13.77	3047 ☐ ☐005	A3047☐-1000-ND•	69.39	3047 ☐☐001
28	7/36	.016 (.41)	.047 (1.19)	A3048☐-100-ND•	12.40	3048 ☐ ☐005	A3048☐-1000-ND•	63.04	3048 ☐☐001
26	7/34	.016 (.41)	.051 (1.30)	A3049☐-100-ND•	13.28	3049 ☐ ☐005	A3049☐-1000-ND•	65.25	3049 ☐☐001
24	7/32	.016 (.41)	.057 (1.45)	A2015☐-100-ND§	13.70	3050 ☐ ☐005	A2015☐-1000-ND	66.04	3050 ☐☐001
22	7/30	.016 (.41)	.065 (1.65)	A2016☐-100-ND‡	15.43	3051 ☐ ☐005	A2016☐-1000-ND	72.81	3051 ☐☐001
20	10/30	.016 (.41)	.071 (1.80)	A2040☐-100-ND	18.90	3053 ☐ ☐005	A2040☐-1000-ND	92.37	3053 ☐☐001
18	16/30	.016 (.41)	.080 (2.03)	A2064☐-100-ND	20.06	3055 ☐ ☐005	A2064☐-1000-ND	98.62	3055 ☐☐001
16	26/30	.016 (.41)	.095 (2.41)	A2065☐-100-ND	29.05	3057 ☐ ☐005	A2065☐-1000-ND	140.71	3057 ☐☐001
Solid — 300 Volt Rating									
24	Solid	.016 (.41)	.057 (1.45)	A3050☐-100-ND•	9.94	3050/1 ☐ ☐005	—	—	—
22	Solid	.016 (.41)	.065 (1.65)	A3051☐-100-ND•	11.25	3051/1 ☐ ☐005	—	—	—
20	Solid	.016 (.41)	.071 (1.80)	A3053☐-100-ND•	13.69	3053/1 ☐ ☐005	—	—	—
16	Solid	.016 (.41)	.095 (2.41)	A3057☐-100-ND•	20.62	3057/1 ☐ ☐005	—	—	—
Stranded — 600 Volt Rating									
24	7/32	.032 (.81)	.088 (2.24)	A3070☐-100-ND	13.86	3070 ☐ ☐005	—	—	—
22	7/30	.032 (.81)	.094 (2.39)	A2101☐-100-ND	16.58	3071 ☐ ☐005	A2101☐-1000-ND	87.53	3071 ☐☐001
20	10/30	.032 (.81)	.100 (2.54)	A2102☐-100-ND	18.46	3073 ☐ ☐005	A2102☐-1000-ND	98.24	3073 ☐☐001
18	16/30	.032 (.81)	.112 (2.84)	A2103☐-100-ND	22.83	3075 ☐ ☐005	A2103☐-1000-ND	117.34	3075 ☐☐001
16	26/30	.032 (.81)	.124 (3.15)	A2104☐-100-ND	27.57	3077 ☐ ☐005	A2104☐-1000-ND	169.31	3077 ☐☐001
14	41/30	.032 (.81)	.134 (3.61)	A3079☐-100-ND•	39.35	3079/1 ☐ ☐005	—	—	—
12	65/30	.032 (.81)	.162 (3.93)	A3080☐-100-ND†	64.11	3080/1 ☐ ☐005	—	—	—
10	105/30	.032 (.81)	.180 (4.83)	A3081☐-100-ND†	92.34	3081/1 ☐ ☐005	—	—	—

* For ☐ in Digi-Key Part No. choose letter which represents color of your choice:
A = Orange **B** = Black **G** = Green **L** = Blue **N** = Brown
R = Red **S** = Gray **V** = Violet **W** = White **Y** = Yellow
E = Green/Yellow (Stranded wire only)

† 3080 and 3081 Series available in White, Black, Red, or Green only.

** For ☐☐ in Alpha Part No. choose letters which represents color of your choice:
OR = Orange **BK** = Black **GR** = Green **BL** = Blue **BR** = Brown
RD = Red **SL** = Gray **VI** = Violet **WH** = White **YL** = Yellow
GY = Green/Yellow (Stranded wire only)

- • Not available in green/yellow

Multiconductor Cable

Fig.	No. of Cond.	Jacket Thickness In. (mm)	Diameter Thickness In. (mm)	Digi-Key Part No.	Note: X in Part No. = Ft. Per Roll Price Per Roll 100 ft.	500 ft.	1,000 ft.	Alpha Part No.
Multiconductor Unshielded Cable								
1	2	.032 (.81)	.16 (4.06)	A120-X-ND	17.86	58.07	96.86	1172C-X
1	3	.032 (.81)	.17 (4.32)	A121-X-ND	23.25	78.10	129.94	1173C-X
1	4	.032 (.81)	.19 (4.83)	A122-X-ND	25.68	88.81	163.01	1174C-X
1	5	.032 (.81)	.20 (5.08)	A123-X-ND	31.26	113.33	205.54	1175C-X
1	6	.032 (.81)	.21 (5.33)	A124-X-ND	33.33	130.10	246.88	1176C-X
1	7	.032 (.81)	.21 (5.33)	A125-X-ND	36.78	137.80	281.14	1177C-X
1	8	.032 (.81)	.22 (5.59)	A126-X-ND	40.61	158.29	318.94	1178C-X
1	9	.032 (.81)	.25 (6.35)	A127-X-ND	43.38	170.10	328.39	1179C-X
1	10	.032 (.81)	.26 (6.60)	A128-X-ND	46.87	193.35	385.09	1180C-X
1	12	.032 (.81)	.28 (7.11)	A129-X-ND	53.79	266.06	507.94	1181C-X
1	15	.032 (.81)	.30 (7.62)	A130-X-ND	82.43	386.43	609.53	1181/15C-X

Fig.	No. of Pair	Jacket Thickness In. (mm)	Diameter Thickness In. (mm)	Digi-Key Part No.	Note: X in Part No. = Ft. Per Roll Price Per Roll 100 ft.	500 ft.	1,000 ft.	Alpha Part No.
Multipair Individually Shielded Cable								
2	2	.019 (.48)	.16 (4.06)	A131-X-ND	23.34	91.73	137.59	2466C-X
Individually Foil Shielded Multipair Cable								
3	3	.045 (1.14)	.31 (7.87)	A132-X-ND	35.94	144.82	260.40	6010C-X
3	6	.045 (1.14)	.39 (9.91)	A133-X-ND	61.71	254.81	487.20	6012C-X
3	9	.045 (1.14)	.46 (11.68)	A134-X-ND	123.36	569.13	935.76	6014C-X
3	11	.045 (1.14)	.48 (12.19)	A135-X-ND	137.59	633.78	999.60	6016C-X
3	12	.045 (1.14)	.48 (12.19)	A136-X-ND	185.42	791.28	1243.20	6017C-X
3	15	.060 (1.52)	.56 (14.22)	A137-X-ND	176.47	867.15	1481.76	6018C-X
3	17	.060 (1.52)	.61 (15.49)	A138-X-ND	294.00	1374.32	2192.40	6019C-X
3	19	.060 (1.52)	.63 (16.00)	A139-X-ND	240.49	1101.51	1839.60	6020C-X
3	27	.060 (1.52)	.68 (17.27)	A140-X-ND	442.98	1880.86	2913.12	6022C-X

Fig.	No. of Cond.	Jacket Thickness In. (mm)	Diameter Thickness In. (mm)	Digi-Key Part No.	Note: X in Part No. = Ft. Per Roll Price Per Roll 100 ft.	500 ft.	1,000 ft.	Alpha Part No.
Multiconductor Foil/Braid Shielded Cable								
4	6	.035 (.89)	.19 (5.0)	A3466C-X-ND	96.97	—	501.65	3466C-X
4	7	.035 (.89)	.19 (5.0)	A3467C-X-ND	106.44	—	550.61	3467C-X
4	15	.035 (.89)	.26 (6.6)	A3470/15C-X-ND	187.29	—	968.79	3470/15C-X
4	25	.035 (.89)	.30 (7.7)	A3470/25C-X-ND	347.21	—	885.53	3470/25C-X
Multiconductor Braid Shielded Cable								
5	2	.012 (.30)	.12 (3.1)	A3302-X-ND	138.44	—	715.68	3302-X
5	3	.012 (.30)	.13 (3.3)	A3303-X-ND	210.69	—	955.92	3303-X
5	4	.012 (.30)	.14 (3.5)	A3304-X-ND	257.04	—	1165.92	3304-X
5	6	.015 (.38)	.17 (4.3)	A3306-X-ND	328.62	—	1491.84	3306-X
5	8	.015 (.38)	.17 (4.4)	A3308-X-ND	374.05	—	1698.48	3308-X
5	15	.020 (.50)	.23 (5.8)	A3315-X-ND	592.99	—	2966.88	3315-X

Fig.	No. of Cond.	Conductor AWG	Conductor Strand	Jacket Thickness In. (mm)	Diameter In. (mm)	Digi-Key Part No.	Note: X in Part No. = Ft. Per Roll Price Per Roll 100 ft.	1,000 ft.	Alpha Part No.
Multiconductor Braid Shielded Cable									
6	3	24	19/36	.016 (0.41)	.16 (4.0)	A3212-X-ND	101.49	440.46	3212-X
6	4	24	19/36	.017 (0.43)	.18 (4.6)	A3213-X-ND	121.34	509.64	3213-X
6	2	22	19/34	.016 (0.41)	.18 (4.6)	A3221-X-ND	65.46	277.20	3221-X
6	3	22	19.34	.017 (0.43)	.18 (4.6)	A3222-X-ND	77.88	346.08	3222-X
6	4	22	19/34	.019 (0.48)	.20 (5.1)	A3223-X-ND	87.73	399.84	3223-X
6	2	20	19/32	.019 (0.48)	.19 (4.8)	A3231-X-ND	74.70	329.28	3231-X
6	3	20	19/32	.019 (0.48)	.21 (5.3)	A3232-X-ND	88.36	399.84	3232-X
6	4	20	19/32	.021 (0.53)	.23 (5.9)	A3233-X-ND	105.37	490.56	3233-X

Fig. 1 — Multiconductor Unshielded

Description: 22 AWG (0.35mm²), 7/30 (7 x 0.25mm), Insulation thickness: 0.010” (0.25mm)

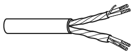
Characteristics: • Temp. Range: -20°C to +80°C (AWM), 75°C (CL2) • Voltage Rating: 150 Volt (AWM, CL2) • Conductor: Stranded tinned copper • Insulation: Color coded PVC • Tape: Clear polyester wrap • Jacket: Gray PVC

Specifications: • Flammability: Passes UL Subject 13 vertical tray flame test

Color Code Chart

Cond. No.	Color	Cond. No.	Color	Cond. No.	Color
1	Black	6	Blue	11	Pink
2	Red	7	Brown	12	Tan
3	White	8	Yellow	13	Red/Green
4	Green	9	Violet	14	Red/Yellow
5	Orange	10	Gray	15	Red/Black

Fig. 2 — Multipair Individually Shielded



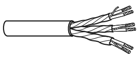
Description: • CL2 rated, 75°C, 150V • 22 AWG (0.36 mm²), 7/30 (7 x 0.25mm), Insulation thickness: 0.008” (0.20mm)

Characteristics: • Temperature Range: -20°C to +105°C • Voltage Rating: 400 Volt • Conductor: Stranded tinned copper • Insulation: Polyproylene (PP) • Shield: Aluminum/polyester tape • Drain Wire: Stranded tinned copper No. 24 • Gray PVC jacket

Color Code

Pair No.	Color
1	Red/Black
2	Green/White

Fig. 3 — Individually Foil Shielded Multi Pair



Description: 22 AWG (0.35mm²), 7/30 (7 x 0.25mm), Insulation thickness 0.010” (0.25mm)

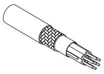
Characteristics: • Temperature Range: -20°C to +60°C (AWM, CL2) • Voltage Rating: 300 Volts (150 Volts - CL2) • Conductor: Stranded tinned copper • Insulation: Color-coded polypropylene (PP) • Shield: (Individual pairs) Aluminum/polyester tape, foil facing inward • Drain Wire: 22 AWG stranded tinned copper • Jacket: PVC, gray

Specifications: • Flammability: Passes UL Subject 13 vertical tray flame test

Color Code Chart

Pair No.	Color	Pair No.	Color	Pair No.	Color
1	Black/Red	10	Red/Blue	19	White/Blue
2	Black/White	11	Red/Yellow	20	White/Brown
3	Black/Green	12	Red/Brown	21	White/Orange
4	Black/Blue	13	Red/Orange	22	White/Yellow
5	Black/Brown	14	Green/Blue	23	Blue/Brown
6	Black/Yellow	15	Green/White	24	Blue/Orange
7	Black/Orange	16	Green/Brown	25	Blue/Yellow
8	Red/Green	17	Green/Orange	26	Brown/Orange
9	Red/White	18	Green/Yellow	27	Brown/Yellow

Fig. 4 — Multiconductor Foil/Braid Shielded



Description: 28 AWG (0.089mm²), 7/36 (7 x 0.13mm), Insulation thickness: 0.010” (0.25mm)

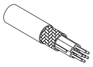
Characteristics: • Operating Temperature Range: -20°C to +80°C (AWM), +75°C (CL2) • Voltage Rating: 300 volts (AWM), 150 volts (CL2) • Conductor: Stranded tinned copper • Insulation: Color-coded semi-rigid PVC • Shield: Aluminum/polyester/aluminum plus overall braid of tinned copper • Drain Wire: 28 AWG 7/36 tinned copper • Jacket: PVC, chrome gray

Specifications: • UL Type CL2, AWM 2464 • CSA PCC FT4 • Flammability: Passes UL vertical tray flame test

Color Code Chart

Cond. No.	Color	Cond. No.	Color	Cond. No.	Color
1	Black	10	Gray	19	White/Yellow
2	Red	11	Pink	20	White/Blue
3	White	12	Tan	21	White/Brown
4	Green	13	Red/Green	22	White/Orange
5	Orange	14	Red/Yellow	23	White/Gray
6	Blue	15	Red/Black	24	White/Violet
7	Brown	16	White/Black	25	White/Black/Red
8	Yellow	17	White/Red		
9	Violet	18	White/Green		

Fig. 5 — Multiconductor Braid Shielded



Description: 28 AWG (0.09mm²), 7/36 (7 x 0.13mm), Insulation thickness: 0.010” (0.25mm) PVC - Type B

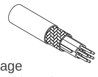
Characteristics: • Operating Temp. Range: -55°C to +105°C • Voltage Rating: 600 Volt • Conductor: Stranded tinned copper • Shield: Braided tinned copper (90% coverage) • Insulation: Color-coded PVC • Jacket: PVC, gray

Specifications: • MIL-W-16878D Type B

Color Code

Cond. No.	Color	Cond. No.	Color	Cond. No.	Color
1	Black	6	Blue	11	Blue/Black
2	White	7	White/Black	12	Black/White
3	Red	8	Red/Black	13	Red/White
4	Green	9	Green/Black	14	Green/White
5	Orange	10	Orange/Black	15	Blue/White

Fig. 6 — Multiconductor Braid Shielded



Description: Insulation thickness: 0.010” (0.25mm) PVC, 0.003” (0.08mm) Nylon-Type B/N

Characteristics: • Operating Temperature Range: -55°C to +105°C • Voltage Rating: 600 volts • Conductor: Stranded tinned copper • Shield: Braided tinned copper (90% coverage) • Insulation: Color-coded PVC • Jacket: PVC,, gray

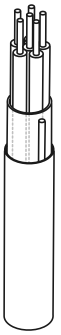
Specifications: • MIL-W-16878D Type B/N

Color Code

Cond. No.	Color
1	White
2	Black
3	Red
4	Green

NEW! Multiconductor Cable — XTRA-Guard® 1

Operating Temperature: • -20°C to 80°C - AWM; -20°C to 75°C - CM
Voltage Rating: 300 Volt
Jacket Color: Gray
Description: • Conductor: Stranded tinned copper • Insulation: Color-coded premium PVC • **SUPRA**SHIELD: Aluminum/Polyester/Aluminum Foil with stranded tinned copper drain wire equal in size to insulated conductors of cable plus 70% overall braid of tinned copper • Nylon rip cord for ease of jacket stripping • Jacket: Premium PVC • Insulation Thickness: 22 AWG: 0.010: (0.25mm); 20AWG, 18AWG and 16 AWG: 0.017” (0.43mm)
Specifications: • UL Type CM, AWM Style 2464 • CSA PCC FT4 • Passes UL VW-1 Flame Test • Passes CSA FT4 Flame Test



Color Code Chart A

Cond. No.	Base Color	1st Stripe	2nd Stripe	Cond. No.	Base Color	1st Stripe	2nd Stripe	Cond. No.	Base Color	1st Stripe	2nd Stripe
1	Black	—	—	21	White	Brown	—	41	White	Green	Red
2	Red	—	—	22	White	Orange	—	42	White	Green	Green
3	White	—	—	23	White	Gray	—	43	White	Green	Blue
4	Green	—	—	24	White	Violet	—	44	White	Green	Brown
5	Orange	—	—	25	White	Black	Red	45	White	Green	Violet
6	Blue	—	—	26	White	Black	Green	46	White	Blue	Black
7	Brown	—	—	27	White	Black	Yellow	47	White	Blue	Red
8	Yellow	—	—	28	White	Black	Blue	48	White	Blue	Green
9	Violet	—	—	29	White	Black	Brown	49	White	Blue	Blue
10	Gray	—	—	30	White	Black	Orange	50	White	Blue	Brown
11	Pink	—	—	31	White	Black	Gray	51	White	Blue	Violet
12	Tan	—	—	32	White	Black	Violet	52	White	Brown	Black
13	Red	Green	—	33	White	Black	Black	53	White	Brown	Red
14	Red	Yellow	—	34	White	Red	Black	54	White	Brown	Green
15	Red	Black	—	35	White	Red	Red	55	White	Brown	Blue
16	White	Black	—	36	White	Red	Green	56	White	Brown	Brown
17	White	Red	—	37	White	Red	Blue	57	White	Brown	Violet
18	White	Green	—	38	White	Red	Brown	58	White	Violet	Red
19	White	Yellow	—	39	White	Red	Violet	59	White	Violet	Green
20	White	Blue	—	40	White	Green	Black	60	White	Violet	Blue

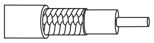
Color Code Chart B

Cond. No.	Base Color	1st Stripe	2nd Stripe	3rd Stripe	Cond. No.	Base Color	1st Stripe	2nd Stripe	3rd Stripe	Cond. No.	Base Color	1st Stripe	2nd Stripe	3rd Stripe
1	Black	—	—	—	25	White	Black	Blue	—	49	White	Yellow	Gray	—
2	Brown	—	—	—	26	White	Black	Violet	—	50	White	Green	Blue	—
3	Red	—	—	—	27	White	Black	Gray	—	51	White	Green	Violet	—
4	Orange	—	—	—	28	White	Brown	Red	—	52	White	Green	Gray	—
5	Yellow	—	—	—	29	White	Brown	Orange	—	53	White	Blue	Violet	—
6	Green	—	—	—	30	White	Brown	Yellow	—	54	White	Blue	Gray	—
7	Blue	—	—	—	31	White	Brown	Green	—	55	White	Violet	Gray	—
8	Violet	—	—	—	32	White	Brown	Blue	—	56	White	Black	Brown	Red
9	Gray	—	—	—	33	White	Brown	Violet	—	57	White	Black	Brown	Orange
10	White	—	—	—	34	White	Brown	Gray	—	58	White	Black	Brown	Yellow
11	White	Black	—	—	35	White	Red	Orange	—	59	White	Black	Brown	Green
12	White	Brown	—	—	36	White	Red	Yellow	—	60	White	Black	Brown	Blue
13	White	Red	—	—	37	White	Red	Green	—	61	White	Black	Brown	Violet
14	White	Orange	—	—	38	White	Red	Blue	—	62	White	Black	Brown	Gray
15	White	Yellow	—	—	39	White	Red	Violet	—	63	White	Black	Red	Yellow
16	White	Green	—	—	40	White	Red	Gray	—	64	White	Black	Red	Green
17	White	Blue	—	—	41	White	Orange	Yellow	—	65	White	Black	Red	Blue
18	White	Violet	—	—	42	White	Orange	Green	—	66	White	Black	Red	Violet
19	White	Gray	—	—	43	White	Orange	Blue	—	67	White	Black	Red	Gray
20	White	Black	Brown	—	44	White	Orange	Violet	—	68	White	Black	Orange	Yellow
21	White	Black	Red	—	45	White	Orange	Gray	—	69	White	Black	Orange	Green
22	White	Black	Orange	—	46	White	Yellow	Green	—	70	White	Black	Orange	Blue
23	White	Black	Yellow	—	47	White	Yellow	Blue	—					
24	White	Black	Green	—	48	White	Yellow	Violet	—					

Color Chart	No. of Cond.	Jacket Thickness Inch (mm)	Diameter Thickness Inch (mm)	Digi-Key Part No.	Price Per Roll (Roll Size = 100 ft.)		Alpha Part No.
					1 Roll	5 Rolls	
Multiconductor, Unshielded							
16 AWG (1.23mm^2) 19/0.0117 (19 x 0.29mm)							
A	2	.032 (.81)	.26 (6.5)	A5072C-100-ND	173.64	154.35	5072C SL005
	2	.032 (.81)	.26 (6.5)	A5072/1C-100-ND	173.64	154.35	5072/1C SL005
	3	.032 (.81)	.29 (7.4)	A5073C-100-ND	230.70	205.07	5073C SL005
	3	.032 (.81)	.29 (7.4)	A5073/1C-100-ND	230.70	205.07	5073/1C SL005
	4	.032 (.81)	.32 (8.1)	A5074C-100-ND	287.75	255.78	5074C SL005
	6	.032 (.81)	.37 (9.3)	A5076C-100-ND	382.02	339.57	5076C SL005
	8	.032 (.81)	.41 (10.4)	A5078C-100-ND	513.49	456.44	5078C SL005
	10	.032 (.81)	.44 (11.3)	A5080C-100-ND	706.98	628.43	5080C SL005
	15	.032 (.81)	.52 (13.2)	A5080/15C-100-ND	878.14	780.57	5080/15C SL005
	20	.053 (1.35)	.63 (15.9)	A5080/20C-100-ND	1245.27	1106.91	5080/20C SL005
	25	.053 (1.35)	.68 (17.3)	A5080/25C-100-ND	1545.43	1373.72	5080/25C SL005
	30	.053 (1.35)	.73 (18.6)	A5080/30C-100-ND	1833.18	1629.50	5080/30C SL005
	40	.083 (2.11)	.88 (22.5)	A5080/40C-100-ND	2629.46	2337.30	5080/40C SL005
	50	.083 (2.11)	.96 (24.5)	A5080/50C-100-ND	3257.06	2895.17	5080/50C SL005
18 AWG (0.81mm^2) 16/30 (16 x 0.25mm)							
A	2	.032 (.81)	.23 (5.8)	A5062C-100-ND	136.43	121.28	5062C SL005
	2	.032 (.81)	.23 (5.8)	A5062/1C-100-ND	136.43	121.28	5062/1C SL005
	3	.032 (.81)	.24 (6.1)	A5063C-100-ND	163.72	145.53	5063C SL005
	3	.032 (.81)	.24 (6.1)	A5063/1C-100-ND	173.64	154.35	5063/1C SL005
	4	.032 (.81)	.26 (6.6)	A5064C-100-ND	205.89	183.02	5064C SL005
	6	.032 (.81)	.31 (7.9)	A5066C-100-ND	297.68	264.60	5066C SL005
	8	.032 (.81).	33 (8.4)	A5068C-100-ND	357.21	317.52	5068C SL005
	10	.032 (.81)	.39 (9.8)	A5070C-100-ND	419.23	372.65	5070C SL005
	15	.032 (.81)	.45 (11.5)	A5070/15C-100-ND	637.52	566.69	5070/15C SL005
	20	.032 (.81)	.51(12.9)	A5070/20C-100-ND	801.24	712.22	5070/20C SL005
	25	.032 (.81)	.56 (14.1)	A5070/25C-100-ND	1049.30	932.72	5070/25C SL005
	30	.053(1.35)	.64 (16.3)	A5070/30C-100-ND	1280.00	1137.78	5070/30C SL005
	40	.053 (1.35)	.72 (18.2)	A5070/40C-100-ND	1756.28	1561.14	5070/40C SL005
	50	.053 (1.35)	.79 (20.0)	A5070/50C-100-ND	2175.51	1933.79	5070/50C SL005
	60	.083 (2.11)	.91 (23.1)	A5070/60C-100-ND	2689.00	2390.22	5070/60C SL005
20 AWG (0.56mm^2) 7/28 (7 x 0.32mm)							
A	2	.032 (.81)	.21 (5.3)	A5052C-100-ND	114.11	101.43	5052C SL005
	3	.032 (.81)	.23 (5.9)	A5053C-100-ND	143.88	127.89	5053C SL005
	4	.032(.81)	.25 (6.5)	A5054C-100-ND	171.16	152.15	5054C SL005
	6	.032 (.81)	.29(7.4)	A5056C-100-ND	228.22	202.86	5056C SL005
	8	.032(.81)	.32(8.2)	A5058C-100-ND	267.91	238.14	5058C SL005
	10	.032 (.81)	.35 (8.8)	A5060C-100-ND	310.08	275.63	5060C SL005
	15	.032 (.81)	.40 (10.3)	A5060/15C-100-ND	478.76	425.57	5060/15C SL005
	20	.032 (.81)	.45 (11.5)	A5060/20C-100-ND	615.20	546.84	5060/20C SL005
	25	.032(.81)	.49 (12.6)	A5060/25C-100-ND	734.27	652.68	5060/25C SL005
	30	.032 (.81)	.53 (13.5)	A5060/30C-100-ND	907.91	807.03	5060/30C SL005
	40	.053 (1.35)	.64 (16.3)	A5060/40C-100-ND	1299.85	1155.42	5060/40C SL005
	50	.053 (1.35)	.70 (17.8)	A5060/50C-100-ND	1600.00	1422.23	5060/50C SL005
22 AWG (0.35mm^2) 7/30 (7 x 0.25mm)							
B	2	.032 (.81)	.17 (4.3)	A5002C-100-ND	101.71	90.41	5002C SL005
	3	.032 (.81)	.19 (4.8)	A5003C-100-ND	121.55	108.05	5003C SL005
	4	.032 (.81)	.20 (5.2)	A5004C-100-ND	151.32	134.51	5004C SL005
	6	.032 (.81)	.23 (5.8)	A5006C-100-ND	171.16	152.15	5006C SL005
	8	.032 (.81)	.25 (6.4)	A5008C-100-ND	223.26	198.45	5008C SL005
	10	.032 (.81)	.27 (6.9)	A5010C-100-ND	245.58	218.30	5010C SL005
	15	.032 (.81)	.31 (7.9)	A5010/15C-100-ND	367.13	326.34	5010/15C SL005
	20	.032 (.81)	.35 (8.8)	A5010/20C-100-ND	488.68	434.39	5010/20C SL005
	25	.032 (.81)	.38 (9.6)	A5010/25C-100-ND	570.54	507.15	5010/25C SL005
	30	.032 (.81)	.41 (10.3)	A5010/30C-100-ND	706.98	628.43	5010/30C SL005
	40	.032 (.81)	.46 (11.6)	A5010/40C-100-ND	967.44	859.95	5010/40C SL005
	50	.032 (.81)	.50 (12.7)	A5010/50C-100-ND	1203.10	1069.43	5010/50C SL005
	60	.032 (.81)	.55 (13.7)	A5010/60C-100-ND	1431.32	1272.29	5010/60C SL005

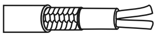
Color Chart	No. of Cond.	Jacket Thickness Inch (mm)	Diameter Thickness Inch (mm)	Digi-Key Part No.	Price Per Roll (Roll Size = 100 ft.)		Alpha Part No.
					1 Roll	5 Rolls	
Multiconductor, SUPRASHIELD							
16 AWG (1.23mm^2) 19/0.0117 (19 x 0.29mm)							
A	2	.032 (.81)	.28 (7.2)	A5172C-100-ND	285.27	253.58	5172C SL005
	2	.032 (.81)	.28 (7.2)	A5172/1C-100-ND	285.27	253.58	5172/1C SL005
	3	.032 (.81)	.32 (8.0)	A5173C-100-ND	367.13	326.34	5173C SL005
	3	.032 (.81)	.32 (8.0)	A5173/1C-100-ND	367.13	326.34	5173/1C SL005
	4	.032 (.81)	.34 (8.8)	A5174C-100-ND	404.34	359.42	5174C SL005
	6	.032 (.81)	.39 (10.0)	A5176C-100-ND	543.26	482.90	5176C SL005
	8	.032 (.81)	.43 (11.0)	A5178C-100-ND	721.86	641.66	5178C SL005
	10	.032 (.81)	.47 (11.9)	A5180C-100-ND	880.62	782.78	5180C SL005
	15	.032 (.81)	.55 (13.9)	A5180/15C-100-ND	1232.87	1095.89	5180/15C SL005
	20	.053 (1.35)	.65 (16.6)	A5180/20C-100-ND	1624.81	1444.28	5180/20C SL005
	25	.053 (1.35)	.71 (18.0)	A5180/25C-100-ND	1954.73	1737.54	5180/25C SL005
18 AWG (0.81mm^2) 16/30 (16 x 0.25mm)							
A	2	.032 (.81)	.25 (6.5)	A5162C-100-ND	248.06	220.50	5162C SL005
	2	.032 (.81)	.25 (6.5)	A5162/1C-100-ND	248.06	220.50	5162/1C SL005
	3	.032 (.81)	.28 (7.2)	A5163C-100-ND	290.23	257.99	5163C SL005
	3	.032 (.81)	.28 (7.2)	A5163/1C-100-ND	290.23	257.99	5163/1C SL005
	4	.032 (.81)	.31 (7.8)	A5164C-100-ND	324.96	288.86	5164C SL005
	6	.032 (.81)	.35 (8.9)	A5166C-100-ND	429.15	381.47	5166C SL005
	8	.032 (.81)	.38 (9.7)	A5168C-100-ND	523.41	465.26	5168C SL005
	10	.032 (.81)	.41 (10.5)	A5170C-100-ND	622.64	553.46	5170C SL005
	15	.032 (.81)	.48 (12.1)	A5170/15C-100-ND	895.51	796.01	5170/15C SL005
	20	.032 (.81)	.53 (13.5)	A5170/20C-100-ND	1133.65	1007.69	5170/20C SL005
	25	.053 (1.35)	.62 (15.8)	A5170/25C-100-ND	1416.44	1259.06	5170/25C SL005
	30	.053 (1.35)	.67 (16.9)	A5170/30C-100-ND	1642.17	1459.71	5170/30C SL005
	40	.053 (1.35)	.74 (18.9)	A5170/40C-100-ND	2036.59	1810.31	5170/40C SL005
20 AWG (0.56mm^2) 7/28 (7 x 0.32mm)							
A	2	.032 (.81)	.23 (5.9)	A5152C-100-ND	157.00	147.19	5152C SL005
	3	.032 (.81)	.26 (6.6)	A5153C-100-ND	179.93	168.69	5153C SL005
	4	.032 (.81)	.28 (7.1)	A5154C-100-ND	195.80	183.57	5154C SL005
	6	.032(.81)	.32 (8.0)	A5156C-100-ND	255.78	239.80	5156C SL005
	8	.032 (.81)	.35 (8.8)	A5158C-100-ND	280.48	262.95	5158C SL005
	10	.032 (.81)	.37 (9.5)	A5160C-100-ND	349.27	327.45	5160C SL005
	15	.032 (.81)	.43 (10.9)	A5160/15C-100-ND	493.92	463.05	5160/15C SL005
	20	.032 (.81)	.48 (12.1)	A5160/20C-100-ND	617.40	578.82	5160/20C SL005
	25	.032 (.81)	.52 (13.2)	A5160/25C-100-ND	760.28	712.77	5160/25C SL005
	30	.032 (.81)	.56 (14.2)	A5160/30C-100-ND	880.24	825.23	5160/30C SL005
	40	.053 (1.35)	.67 (17.0)	A5160/40C-100-ND	1208.34	1132.82	5160/40C SL005
	50	.053 (1.35)	.73 (18.5)	A5160/50C-100-ND	1448.24	1357.73	5160/50C SL005
	60	.053 (1.35)	.78 (19.8)	A5160/60C-100-ND	1704.02	1597.53	5160/60C SL005
22 AWG (0.35mm^2) 7/30 (7 x 0.25mm)							
B	2	.032 (.81)	.20 (5.0)	A5102C-100-ND	135.83	127.34	5102C SL005
	3	.032 (.81)	.21 (5.4)	A5103C-100-ND	151.70	142.23	5103C SL005
	4	.032 (.81)	.22 (5.6)	A5104C-100-ND	160.52	150.50	5104C SL005
	6	.032 (.81)	.25 (6.4)	A5106C-100-ND	195.80	183.57	5106C SL005
	8	.032 (.81)	.27 (6.9)	A5108C-100-ND	227.56	213.34	5108C SL005
	10	.032 (.81)	.30 (7.6)	A5110C-100-ND	266.36	249.72	5110C SL005
	15	.032 (.81)	.33 (8.4)	A5110/15C-100-ND	375.73	352.25	5110/15C SL005
	20	.032 (.81)	.36 (9.2)	A5110/20C-100-ND	460.40	431.63	5110/20C SL005
	25	.032 (.81)	.39 (9.8)	A5110/25C-100-ND	569.77	534.17	5110/25C SL005
	30	.032 (.81)	.42 (10.9)	A5110/30C-100-ND	661.50	620.16	5110/30C SL005
	40	.032 (.81)	.47 (11.8)	A5110/40C-100-ND	874.94	820.26	5110/40C SL005
	50	.032 (.81)	.51 (12.9)	A5110/50C-100-ND	1065.46	998.87	5110/50C SL005
	60	.053 (1.35)	.60 (15.4)	A5110/60C-100-ND	1169.53	1096.44	5110/60C SL005
	70	.053 (1.35)	.63 (16.0)	A5110/70C-100-ND	1467.65	1375.92	5110/70C SL005

Coaxial, Ethernet, Thinnet, Twinaxial Cable



Coaxial Cables, Non-Plenum
Coaxial and Data Systems

Thinnet — Plenum and Non-Plenum
Ethernet Cables



Non-Plenum
Twinaxial Cable

RG Type	Cond. Size (AWG)	Inner Cond. Strand.	Inner Cond. Mat'l†	Dielec. Dia. Inch (mm)	Dielec. Material†	Shield Nom. Coverage	Shield Material†	Jacket Dia. Inch (mm)	Jacket Material†	Impe-dance (Ω)	Cap tance pF/ft	Temperature Rate (°C)	Volt Rate	NEC/UL (See Below)	Digi-Key Part No.	Note: X in Part No. = Ft. Per Roll Price per roll 100 ft.	500 ft.	1,000 ft.	Alpha Part No.
Coaxial Cable																			
58 A/U	20	19/0.0071"	TC	.116 (2.95)	PE	95%	TC Braid	.195 (4.95)	V Black	50	30.5	60	150	1	A305-X-ND	34.39	120.40	218.28	9058AC-X
58 C/U	20	19/0.0071"	TC	.116 (2.95)	PE	95%	TC Braid	.195 (4.95)	NCV Black	50	30.5	60	—	—	A306-X-ND	65.46	158.81	301.74	9058C-X
59/U	22	Solid	CW	.146 (3.71)	PE	95%	BC Braid	.242 (6.15)	V Black	75	21.4	60	150/CL2, 30/AWM	1, 7	A301-X-ND	34.99	—	201.16	9059C-X
62 A/U	22	Solid	CW	.146 (3.71)	SSP	95%	BC Braid	.242 (6.15)	V Black	93	13.2	60	150/CL2, 30/AWM	1, 8	A302-X-ND	32.33	128.26	176.66	9062A-X
174/U	26	7/34	CW	.060 (1.52)	PE	88%	TC Braid	.100 (2.54)	V Black	50	31.1	—	—	9	A307-X-ND	32.12	112.35	199.02	9174-X
178 B/U	30	7/38	SC/CW	.034 (.86)	TFE	96%	SC Braid	.071 (1.80)	FEP Natural	50	28.4	—	—	—	A316-X-ND	135.49	519.80	540.50	9178B-X
179 B/U	30	7/38	SC/CW	.063 (1.60)	TFE	93%	SC Braid	.100 (2.54)	Tint FEP Brown	75	19.6	—	—	—	A317-X-ND	141.20	471.50	639.40	9179B-X
214/U	13	7/0.0296"	SC	.285 (7.24)	PE	99%	SC Braid Dbl	.425 (10.79)	NCV Black	50	30.8	—	—	—	A308-X-ND•	669.54	2551.16	4596.72	9214-X
223/U	19	Solid	SC	.116 (2.95)	PE	99%	SC Braid Dbl	.212 (5.38)	NCV Black	50	31.5	—	—	—	A309-X-ND•	222.32	905.05	1741.96	9223-X
316/U	26	7/0.0067"	SCCS	.060 (1.52)	TFE	93%	SC	.098 (2.49)	FEP	50	30.0	—	—	—	A315-X-ND	111.94	559.71	839.59	9316-X
8/U	13	7/21	BC	.285 (7.24)	PE	96%	BC Braid	.405 (10.29)	V Black	52	29.5	—	—	—	A318-X-ND	87.80	356.99	667.68	9008-X
Ethernet Cable																			
Thinnet**	20	19/0.0075"	TC	.112 (2.84)	FEP Teflon	95%	A/M/A + TC Braid	.182 (4.62)	F Gray	50	30.5	125	300	3, 4, 6	A311-X-ND*	—	482.79	877.80	9871F-X
Thinnet ‡	20	19/32	TC	.102 (2.59)	FPE	95%	A/M/A + TC Braid	.180 (4.57)	V Black	50	25.5	60	300	2, 4, 5	A312-1000-ND	—	—	317.79	9881C-1000
Twinaxial Cable																			
Twinax #	20	7/28	BC/TC	.236 (5.99)	PE	95%	TC Braid	.330 (8.38)	V Black	100	15.5	75/CL2, 80/AWM	150/CL2, 30/AWM	1, 10	A303-X-ND	—	283.06	537.14	9818C-X
Twinax	16	Solid	BC	.150 (3.81)	FPE	90%	A/M/A + TC Braid	.440 (11.18)	V Black	124	10.9	60	150/CL2, 30/AWM	1, 11	A314-X-ND	178.05	—	1290.85	9820C-X

† Code Description:

A/M/A	Aluminum/Polyester/Aluminum Tape
BC	Bare Copper
CW	Copper Coated Steel
F	Fluoropolymer
FEP	Fluorinated ethylene-propylene
FPE	Cellular (foam) Polyethylene
NCV	Non-contaminating Polyvinylchloride - Type II
PE	Solid Polyethylene
SC	Silver Coated Copper
SCCS	Silver-Coated Copper Clad Steel
SSP	Semi-solid Polyethylene
TC	Tinned Copper
TFE	Tetrafluoroethylene
V	Polyvinylchloride - Type I

* Plenum

** ETHERNET IEEE 802.3 10base2 10Mbps.

‡ THIN-NET 10Mbps.

# IBM SYSTEM (34/36/38/AS 400).

• MIL-C-170D Type

NEC Rating —

1. CL2 **2.** CM **3.** CMP
4. CXC **5.** FT4 **6.** FT6

UL Style —

7. UL AWM 1354 **8.** UL AWM 1478 **9.** UL 1354
10. UL AWM 2498 **11.** UL AWM 2704

FIT® Shrinkable Tubing FIT® 221B

- Economical bulk packaging
- Flexibility
- Excellent flame retardancy
- Military, UL/CSA requirements

Characteristics:

- Operating Temperature: -55°C to +135°C
- Shrinkage Ratio: Approximately 2 to 1 at 121°C
- Color: Black, Clear

Physical Properties:

- Tensile Strength: 1800 psi, (127 kg/cm^2)
- Ultimate Elongation: 400%
- Longitudinal Shrinkage: 5%
- Specific Gravity: 1.35
- Secant Modulus: 2.5 x 10^4 max.
- Flammability: Self-extinguishing

Electrical Properties:

- Dielectric Strength: 500V/mil (197 kV/cm)
- Volume Resistivity: 10^{14} ohm-cm

Chemical Properties:

- Corrosive Effect: Passes copper stability test
- Fungus Resistance: No growth

Specifications:

- MIL-I-23053/5B
- UL Standard 224 (black only)
- CSA Standard 198 (black only)

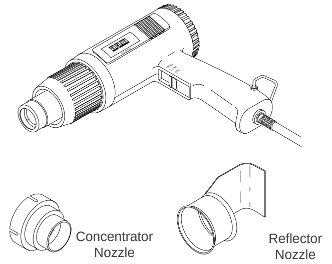
Color	Minimum Supplied I.D. Inch (mm)	Maximum Rec. I.D. Inch (mm)	Nom. Rec. Wall Thickness Inch (mm)	Digi-Key Part No.	Pricing Sold in 4' Lengths 4' (1 pc.)	20' (5 pcs.)	Digi-Key Part No.	Spool Size	Price Per Spool	Alpha Part No.
FIT® 221B — Irradiated Polyolefin										
Black	0.046 (1.17)	0.023 (0.58)	0.016 (0.41)	A364B-4-ND	.57	2.55	A364B-1000-ND	1000'	143.33	FIT-221B-3/64 BKXXX
Clear				A364C-4-ND	.57	2.55	A364C-1000-ND	1000'	143.33	FIT-221B-3/64 CLXXX
Black	0.063 (1.60)	0.031 (0.78)	0.017 (0.43)	A116B-4-ND	.58	2.60	A116B-1000-ND	1000'	146.03	FIT-221B-1/16 BKXXX
Clear				A116C-4-ND	.58	2.60	A116C-1000-ND	1000'	146.03	FIT-221B-1/16 CLXXX
Black	0.093 (2.36)	0.046 (1.17)	0.020 (0.50)	A332B-4-ND	.62	2.75	A332B-500-ND	500'	77.29	FIT-221B-3/32 BKXXX
Clear				A332C-4-ND	.62	2.75	A332C-500-ND	500'	77.29	FIT-221B-3/32 CLXXX
Black	0.125 (3.18)	0.062 (1.58)	0.020 (0.50)	A018B-4-ND	.56	2.48	A018B-500-ND	500'	83.36	FIT-221B-1/8 BKXXX
Clear				A018C-4-ND	.67	2.96	A018C-500-ND	500'	83.36	FIT-221B-1/8 CLXXX
Black	0.187 (4.75)	0.093 (2.36)	0.020 (0.50)	A316B-4-ND	.81	3.60	A316B-500-ND	500'	101.36	FIT-221B-3/16 BKXXX
Clear				A316C-4-ND	.81	3.60	A316C-500-ND	500'	101.36	FIT-221B-3/16 CLXXX
Black	0.250 (6.35)	0.125 (3.18)	0.025 (0.63)	A014B-4-ND	1.01	4.50	A014B-250-ND	250'	63.28	FIT-221B-1/4 BKXXX
Clear				A014C-4-ND	1.01	4.50	A014C-250-ND	250'	63.28	FIT-221B-1/4 CLXXX
Black	0.375 (9.53)	0.187 (4.75)	0.025 (0.63)	A038B-4-ND	1.13	5.03	A038B-200-ND	200'	56.57	FIT-221B-3/8 BKXXX
Clear				A038C-4-ND	1.13	5.03	A038C-200-ND	200'	56.57	FIT-221B-3/8 CLXXX
Black	0.500 (12.70)	0.250 (6.35)	0.025 (0.63)	A012B-4-ND	1.28	5.67	A012B-150-ND	150'	46.70	FIT-221B-1/2 BKXXX
Clear				A012C-4-ND	1.28	5.67	A012C-150-ND	150'	46.70	FIT-221B-1/2 CLXXX
Black	0.750 (19.10)	0.375 (9.53)	0.030 (0.76)	A034B-4-ND	1.70	7.56	A034B-250-ND	250'	106.27	FIT-221B-3/4 BKXXX
Clear				A034C-4-ND	1.70	7.56	A034C-250-ND	250'	106.27	FIT-221B-3/4 CLXXX
Black	1.000 (25.40)	0.500 (12.70)	0.035 (0.88)	A100B-4-ND	2.16	9.60	A100B-250-ND	250'	158.85	F221B1IN BKXXX
Clear				A100C-4-ND	2.54	11.30	A100C-250-ND	250'	158.85	F221B1IN CLXXX
FIT MGKIT 1 (Heat Gun plus FIT-221 Variety Pack)							FITMGKIT1-ND *NEW!*	90.09 each		FITMGKIT1 NC032
FIT-221 Variety Pack (60, 6 inch cut pieces, see chart to the right for contents)							FIT221R-ND *NEW!*	29.14 each		FIT-221-R MC213

FIT® Multi-Functional Heat Gun

The economical and multi-functional FIT GUN-3 is a two-temperature heat gun that is lightweight in design. The low setting is at 400°C (750°F) while the high temperature is rated at 585°C (1090°F).

It features a durable plastic housing with a built-in ring stand and hanger, concentrator nozzle and hook reflector nozzle attachments.

FITGUN3-ND Heat Gun **$66.19**



CONTENTS for FIT-221 Variety Pack

Tubing Size	Number of Cut Pieces Black	White	Red	Blue	Yellow	Green
1/8"	4	3	2	2	2	1
3/16"	4	3	2	2	2	1
1/4"	4	3	2	2	2	1
3/8"	3	2	1	1	1	1
1/2"	3	2	1	1	1	1

NEW! Heat Shrink Fabric

Characteristics: • Operating Temp. -40°C to 125°C • Shrink Ratio: approx. 2 to 1 or 3 to 1 at 135°C depending on size • Color Description: All standard packages: black **Physical Properties:** • Longitudinal Shrinkage: up to 20%@ 2:1 shrink ratio, up to 25%@ 3:1 shrink ratio • Flammability: Meets MVSS 302 horizontal burn test **Chemical Properties:** • Corrosive Effect: non-corrosive • Fungus Resistance: no growth • Chemical Resistance: antifreeze (50% ethylene glycol), engine oil, mineral hydraulic fluid, detergent (1% teepol), brake fluid (DOT 4), unleaded gasoline, diesel fuel, battery acid

Color	Minimum Supplied I.D. Inch (mm)	Maximum Recovered I.D. Inch (mm)	Nom. Recovered Wall Thickness Inch (mm)	Digi-Key Part No.	Spool Size	Price Per Spool	Alpha Part No.
Black	0.47 (12.0)	0.24 (6.0)	0.039 (0.99)	A0471B-200-ND	200'	97.11	FITFAB-1 BK004
Black	0.79 (20.0)	0.39 (10.0)	0.039 (0.99)	A0792B-200-ND	200'	113.45	FITFAB-2 BK004
Black	1.18 (30.0)	0.59 (15.0)	0.039 (0.99)	A1183B-200-ND	200'	397.80	FITFAB-3 BK004
Black	1.57 (40.0)	0.79 (20.0)	0.039 (0.99)	A1574B-200-ND	200'	479.70	FITFAB-4 BK004
Black	1.97 (50.0)	0.98 (25.0)	0.039 (0.99)	A1975B-100-ND	100'	294.54	FITFAB-5 BK005
Black	2.36 (60.0)	1.18 (30.0)	0.039 (0.99)	A2366B-100-ND	100'	320.86	FITFAB-6 BK005
Black	2.76 (70.0)	1.38 (35.0)	0.039 (0.99)	A2767B-100-ND	100'	437.86	FITFAB-7 BK005
Black	0.71 (18.0)	0.24 (6.0)	0.039 (0.99)	A0718B-200-ND	200'	133.70	FITFAB-8 BK004
Black	1.18 (30.0)	0.39 (10.0)	0.039 (0.99)	A1189B-200-ND	200'	459.81	FITFAB-9 BK004
Black	2.36 (60.0)	0.79 (20.0)	0.039 (0.99)	A23610B-100-ND	100'	339.60	FITFAB-10 BK005

3M Heat Shrinkable Tubing

KYNAR®, EPS-300, SFTW202 GYS, SFTW203, 8420, 8440, & SSC-100x Series

KYNAR® Series-Modified Polyvinylidene Fluoride: Shrink Temperature: 175°C (347°F). **Color:** Clear. **Shrink Ratio:** 2:1. Cross-linked, thin-walled tubing offers a high degree of mechanical strength and high temperature resistance. This has outstanding abrasion resistance and cut-through properties in combination with high dielectric strength. It is inherently flame retardant, semi-rigid and highly resistant to most industrial fuels, chemicals and solvents. Kynar® is a registered trademark of Elf Atochem North America, Inc.

EPS-300 Series-Adhesive-Lined Flexible Polyolefin: Shrink Temperature: 121°C (250°F). **Color:** Black. **Shrink Ratio:** 3:1. Rapidly shrinks to a skintight fit, forcing the melted adhesive to flow and cover the substrate. The adhesive forms a flexible bond with a wide variety of rubbers, plastics and metals. Upon cooling, the adhesive solidifies forming a permanent, non-drying, flexible and waterproof barrier.

SFTW202 GYS Series-Very Flexible Polyolefin: Shrink Temperature: 100°C (212°F). **Color:** Green and yellow striped. **Shrink Ratio:** 2:1. Meets performance requirements of MIL-I-23053/5 Class 1, and is UL Recognized (File No. E48398) for flame retardance. Can be easily surface painted.

SFTW203 Series-Very Flexible Polyolefin: Shrink Temperature: 100°C (212°F). **Color:** Black. **Shrink Ratio:** 3:1. Meets performance requirements of MIL-I-23053/5 Class 1, and is UL Recognized (File No. E48398) for flame retardance. Can be easily surface painted.

8420 Series-EPDM and 8440 Series-Silicone Rubber Tubes: Color: Black (8420 Series) and Gray (8440 Series). **Cold Shrink™ Insulators-**Open-ended, tubular rubber sleeves that are factory expanded and assembled onto a removable plastic core. Provides a reliable seal without the use of heat, a torch or adhesive - simply position and unwind the core allowing the tube to shrink and form a water-resistant seal.

SSC-100x Series-Solder Splice Connector: Shrink Temperature: 175°C (347°F). **Color:** Identified by tint color of tubing. **Shrink Ratio:** 2:1. Simple, one-piece design. The outer layer is a tube of tinted, translucent, polyolefin heat-shrinkable tubing lined with hot melt sealant, which provides both insulation and a moisture seal, and allows easy inspection of the solder connection. Inside the tubing is a wire locking metal (tin-plated cartridge brass) barrel that holds a fluxed solder disk.

Tubing Size Dia.* In. (mm)	Expand. I.D. (Min.) (mm)	Recov. I.D. (Max.) (mm)	Nominal Recov. Wall Thick (mm)	Digi-Key Part No.	Sold in 4' Lengths Only 4' (1pc.)	8' (2pc.)	20' (5pc.)	48' (12pc.)	100' (25pc.)
KYNAR® Series - Modified Polyvinylidene Fluoride									
3/64 (1.19)	1.17	0.58	0.25	KY364C-ND	4.71	8.16	18.05	37.66	61.88
1/16 (1.60)	1.60	0.79	0.25	KY116C-ND	4.92	8.53	18.86	39.37	64.66
3/32 (2.38)	2.36	1.17	0.25	KY332C-ND	5.17	8.96	19.81	41.34	67.90
1/8 (3.18)	3.18	1.57	0.25	KY018C-ND	5.59	9.69	21.42	44.71	73.46
3/16 (4.78)	4.75	2.36	0.25	KY316C-ND	7.88	13.93	30.29	57.34	—
1/4 (6.35)	6.35	3.18	0.30	KY014C-ND	9.72	17.19	37.37	70.73	—
3/8 (9.52)	9.53	4.75	0.30	KY038C-ND	11.70	20.70	45.00	85.16	—
1/2 (12.70)	12.70	6.35	0.30	KY012C-ND	15.53	27.00	53.23	—	—

Tubing Size Dia.* In. (mm)	Expand. I.D. (Min.) (mm)	Recov. I.D. (Max.) (mm)	Nominal Recov. Wall Thick (mm)	Meltable Recov. Wall Thick (mm)	Digi-Key Part No.	Sold in 4' Lengths Only 4' (1pc.)	8' (2pc.)	20' (5pc.)	48' (12pc.)	100' (25pc.)
EPS-300 Series - Adhesive-lined, Flexible, Polyolefin										
1/8 (3.18)	3.18	1.02	1.02	0.51	EPS3018K-ND	8.55	14.82	32.78	68.42	101.93
3/16 (4.78)	4.75	1.57	1.02	0.51	EPS3316K-ND	8.13	14.38	31.25	58.03	—
1/4 (6.35)	6.35	2.03	1.02	0.51	EPS3014K-ND	10.06	17.80	38.69	71.85	—
3/8 (9.52)	9.53	3.05	1.40	0.62	EPS3038K-ND	11.38	20.13	43.77	81.29	—
1/2 (12.70)	12.70	4.06	1.78	0.76	EPS3012K-ND	13.30	23.53	51.15	95.00	—

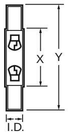
Tubing Size Dia* In. (mm)	Expanded I.D. (Min.) (mm)	Recovered I.D (Max.) (mm)	Nominal Recovered Wall Thick. (mm)	(NOTE: "X" in Part No. Represents Number of Feet) Digi-Key Part No.	Price Per Length 5'	25'	50'	Reel Size	Price Per Full Reel
SFTW202 GYS Series - Very Flexible Polyolefin									
1/8 (3.18)	3.18	1.5	0.51	SFTW2018E-X-ND	6.57	26.27	37.65	500	293.97
3/16 (4.78)	4.76	2.5	0.55	SFTW2316E-X-ND	9.11	36.42	52.20	250	203.84
1/4 (6.35)	6.35	3.0	0.65	SFTW2014E-X-ND	10.05	40.21	57.63	200	180.03
3/8 (9.52)	9.53	4.5	0.76	SFTW2038E-X-ND	11.16	44.65	63.99	200	199.93
1/2 (12.70)	12.70	6.0	0.76	SFTW2012E-X-ND	12.54	50.15	71.87	200	224.52
SFTW203 Series - Very Flexible Polyolefin									
1/16 (1.59)	1.5	0.5	0.45	SFTW2116K-X-ND	2.26	9.04	12.95	1,000	202.29
1/8 (3.18)	3.0	1.0	0.55	SFTW2018K-X-ND	2.58	10.31	14.78	500	115.43
1/4 (6.35)	6.0	2.0	0.65	SFTW2014K-X-ND	3.92	15.66	22.45	200	70.14
3/8 (9.52)	9.0	3.0	0.75	SFTW2038K-X-ND	4.37	17.50	25.08	200	78.34
1/2 (12.70)	12.0	4.0	0.75	SFTW2012K-X-ND	4.93	19.73	28.28	200	88.37

* Indicates size BEFORE shrinking occurs.

Diameter Range In. (mm)	Relaxed Tube Length In. (mm)	Digi-Key Part No.	Pricing 1	10
8420 - EPDM Cold Shrink Tubes				
0.31 - 0.56 (7.87 - 14.22)	6.0 (152.40)	8423-6-ND	10.60	96.78
0.10 - 0.82 (2.54 - 20.83)	8.0 (203.20)	8424-8-ND	13.62	124.35
0.40 - 0.82 (10.16 - 20.83)	8.0 (203.20)	8425-8-ND	11.92	108.83
0.55 - 1.18 (13.97 - 29.97)	9.0 (228.60)	8426-9-ND	14.22	129.83
0.55 - 1.18 (13.97 - 29.97)	11.0 (279.40)	8426-11-ND	17.04	155.58
0.67 - 1.38 (17.02 - 35.05)	6.0 (152.40)	8427-6-ND	10.72	97.87
0.67 - 1.38 (17.02 - 35.05)	12.0 (304.80)	8427-12-ND	21.26	194.10
0.67 - 1.38 (17.02 - 35.05)	16.0 (406.40)	8427-16-ND	28.36	258.93
0.95 - 1.94 (24.13 - 49.28)	6.0 (152.40)	8428-6-ND	15.14	138.23
0.95 - 1.94 (24.13 - 49.28)	12.0 (304.80)	8428-12-ND	30.24	276.09
0.95 - 1.94 (24.13 - 49.28)	18.0 (457.20)	8428-18-ND	45.46	415.05
1.27 - 2.67 (32.26 - 67.82)	6.0 (152.40)	8429-6-ND	16.56	151.19
1.27 - 2.67 (32.26 - 67.82)	9.0 (228.60)	8429-9-ND	24.82	226.61
1.27 - 2.67 (32.26 - 67.82)	12.0 (304.80)	8429-12-ND	34.02	310.60
1.27 - 2.67 (32.26 - 67.82)	18.0 (457.20)	8429-18-ND	49.68	453.58
1.68 - 3.69 (42.67 - 93.73)	9.0 (228.60)	8430-9-ND	34.30	313.16
1.68 - 3.69 (42.67 - 93.73)	18.0 (457.20)	8430-18-ND	54.22	495.03
8440 - Silicone Cold Shrink Tubes				
.27 - .56 (6.86 - 14.22)	2.0 (50.80)	8443-2-ND	6.48	59.16
.27 - .56 (6.86 - 14.22)	6.5 (165.10)	8443-6.5-ND	8.96	81.80
.35 - .72 (8.89 - 18.29)	2.5 (63.50)	8445-2.5-ND	6.70	61.17
.35 - .72 (8.89 - 18.29)	7.5 (190.50)	8445-7.5-ND	9.82	89.66
.48 - .95 (12.19 - 24.13)	3.2 (81.28)	8447-3.2-ND	8.26	75.41
.48 - .95 (12.19 - 24.13)	8.0 (203.20)	8447-8-ND	11.84	108.10

Wire Size (AWG)	Color	Nominal Dimensions-mm X	Y	ID	Digi-Key Part No.	Pricing 1	10	25
SSC 100x Series - Solder Splice Connector								
24-14	Red	21.08	34.80	4.57	SSC1001-ND	.68	5.45	12.44
22-10	Blue	25.40	42.67	6.60	SSC1002-ND	.79	6.32	14.42
20-8	Yellow	31.75	50.80	8.38	SSC1003-ND	1.04	8.34	19.05

SSC 100x Series



SR-350 EPS-200, CP-221,& VFP-876, Series

SR-350 Series-Semi-Rigid Polyolefin: Shrink Temperature: 135°C, **Color:** Black, **Shrink Ratio:** 2:1. Ideally suited for strain-relief applications, wire marking, protective covering and packaging of delicate components.

EPS-200 Series: Shrink Temperature: 121°C, **Color:** Black, **Shrink Ratio:** 2:1 Rapidly shrinks to a skintight fit, forcing the melted adhesive lining to flow and cover the substrate. The adhesive forms a flexible bond with a wide variety of rubbers, plastics and metals. Upon cooling, the adhesive solidifies forming a permanent, non-drying, flexible and waterproof barrier. Rated for operation at -55°C (-67°F) to 110°C (230°F).

CP-221 Series-Commercial Grade Polyolefin: Shrink Temperature: 121°C, **Color:** Black, **Shrink Ratio:** 2:1. Recommended as a general purpose heat shrinkable tubing for new commercial applications where other types of tubing are now used.

VFP-876 Series-Very Flexible Polyolefin: Shrink Temperature: 100°C, **Color:** Black, **Shrink Ratio:** 2:1. Most flexible of the heat shrinkable, polyolefin tubings. Ideal for jacketing and insulation of flexible wire bundles and sensitive components.

Tubing Size Dia.* Inch (mm)	Expand. I.D. (Min.) (mm)	Recov. I.D. (Max.) (mm)	Nom. Recov. Wall Thick (mm)	Digi-Key Part No.	Sold in 4' Lengths Only 4' (1pc.)	8' (2pc.)	20' (5pc.)	48' (12pc.)	100' (25pc.)	200' (50pc.)
SR-350 Series - Semi-rigid Polyolefin										
3/64 (1.19)	1.17	.58	.51	SR364-ND	1.27	2.21	4.88	10.19	18.57	32.94
1/16 (1.59)	1.60	.79	.51	SR116-ND	1.32	2.28	5.05	10.54	19.22	34.09
3/32 (2.38)	2.36	1.17	.51	SR332-ND	1.40	2.42	5.35	11.16	20.35	36.11
1/8 (3.18)	3.18	1.57	.51	SR018-ND	1.49	2.58	5.71	11.92	21.74	38.56
3/16 (4.76)	4.75	2.36	.64	SR316-ND	1.83	3.17	7.02	14.64	26.69	47.35
1/4 (6.35)	6.35	3.18	.64	SR014-ND	2.27	3.93	8.69	18.13	29.33	—
3/8 (9.53)	9.52	4.75	.76	SR038-ND	2.53	4.38	9.68	20.21	32.68	—
1/2 (12.70)	12.70	6.35	.76	SR012-ND	2.88	4.98	11.02	23.00	37.20	—
EPS-200 Series - Adhesive-lined, Flexible, Polyolefin										
1/8 (3.18)	3.18	1.60	.69	EPS2018-ND	4.79	8.31	18.38	38.35	61.83	—
3/16 (4.76)	4.75	2.36	.69	EPS2316-ND	4.52	8.00	17.40	32.31	—	—
1/4 (6.35)	6.35	3.18	.76	EPS2014-ND	5.66	10.02	21.78	40.44	—	—
3/8 (9.53)	9.52	4.75	.79	EPS2038-ND	6.37	11.27	24.51	45.53	—	—
1/2 (12.70)	12.70	6.35	.81	EPS2012-ND	7.33	12.96	28.18	52.33	—	—
3/4 (19.05)	19.05	9.52	.94	EPS2034-ND	8.86	15.41	29.82	—	—	—
1 (25.40)	25.40	12.70	1.17	EPS2100-ND	13.03	22.66	43.83	—	—	—
1-1/2 (38.10)	38.10	19.05	1.24	EPS2112-ND	22.79	39.63	76.67	—	—	—
2 (50.80)	50.80	25.40	1.52	EPS2200-ND	31.71	49.07	—	—	—	—

Tubing Size Dia.* Inch (mm)	Expand. I.D. (Min.) (mm)	Recov. I.D. (Max.) (mm)	Nom. Recov. Wall Thick (mm)	Digi-Key Part No.	(NOTE: "X" in Part No. Represents Number of Feet) Price Per Length 5'	25'	50'	100'	200'
CP-221 Series - Commercial Grade Polyolefin									
3/64 (1.19)	1.17	.58	.41	CP364-X-ND	1.66	7.40	13.26	23.87	—
1/16 (1.59)	1.60	.79	.43	CP116-X-ND	1.70	7.57	13.56	24.41	—
3/32 (2.38)	2.36	1.17	.51	CP332-X-ND	1.79	8.01	12.91	20.55	—
1/8 (3.18)	3.18	1.57	.51	CP018-X-ND	1.91	8.55	13.78	21.95	—
3/16 (4.76)	4.75	2.36	.51	CP316-X-ND	2.29	9.14	13.10	23.16	—
1/4 (6.35)	6.35	3.18	.64	CP014-X-ND	2.88	11.52	16.51	29.18	51.57
3/8 (9.53)	9.52	4.75	.64	CP038-X-ND	3.28	13.10	18.78	33.19	58.65
1/2 (12.70)	12.70	6.35	.64	CP012-X-ND	3.92	15.66	22.45	39.67	70.14
3/4 (19.05)	19.05	9.52	.76	CP034-X-ND	5.28	21.14	30.29	53.54	94.64
1 (25.40)	25.40	12.70	.89	CP100-X-ND	7.95	31.79	45.56	71.15	—
1-1/2 (38.10)	38.10	19.05	1.02	CP112-X-ND	13.84	55.36	79.35	123.92	—
2 (50.80)	50.80	25.40	1.14	CP200-X-ND	18.94	75.75	108.58	169.58	—
VFP-876 Series - Very Flexible Polyolefin, Self-extinguishing									
3/64 (1.19)	1.17	.58	.41	VFP364-X-ND	1.45	6.49	11.63	20.93	—
1/16 (1.59)	1.60	.79	.43	VFP116-X-ND	1.48	6.61	11.84	21.30	—
3/32 (2.38)	2.36	1.17	.51	VFP332-X-ND	1.56	6.98	11.26	17.93	—
1/8 (3.18)	3.18	1.57	.51	VFP018-X-ND	1.69	7.54	12.15	19.35	—
3/16 (4.76)	4.75	2.36	.51	VFP316-X-ND	2.06	8.22	11.78	20.82	—
1/4 (6.35)	6.35	3.18	.64	VFP014-X-ND	2.57	10.26	14.71	25.99	42.48
3/8 (9.53)	9.52	4.75	.64	VFP038-X-ND	2.86	11.45	16.42	29.01	47.41
1/2 (12.70)	12.70	6.35	.64	VFP012-X-ND	3.23	12.92	18.52	32.74	53.50
3/4 (19.05)	19.05	9.52	.76	VFP034-X-ND	4.31	17.24	24.70	43.66	71.35
1 (25.40)	25.40	12.70	.89	VFP100-X-ND	6.44	25.76	36.93	53.33	—
1-1/2 (38.10)	38.10	19.05	1.02	VFP112-X-ND	12.00	48.02	68.82	99.39	—
2 (50.80)	50.80	25.40	1.14	VFP200-X-ND	16.59	66.35	95.11	137.35	—

MASTERMITE® Heat Gun

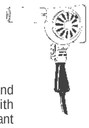
Certified

Quiet running. Comes standard with bench stand, heat shrink attachment, and interchangeable heating element. High impact plastic housing, lightweight, draws only 4.0 amps max., continuous duty brushless motor, temperature: 650°F (343°C), 120V, 60Hz, 4.0A.

MA1006-ND	Heat Gun	$76.82
MA1007-ND	Replacement Heat Element	$24.28

MASTER APPLIANCE Heat Gun

Certified



Features universal motor, high air velocity, volume and temperatures. Rugged die cast aluminum housing with externally replaceable carbon brushes, 3 wire oil resistant cord set, and reinforced ceramic heating element, temperature: 500-750°F (260-399°C), 120V, 14A.

Description	Digi-Key Part No.	Price Each
Heat Gun	MA1001-ND	104.00
Heat Shrink Attachment -		
Shrink Tubing from 3/4" to 2" (19-51mm) O.D.	MA1002-ND	15.85
Shrink Wrap Attachment - 8" (203mm) Wide	MA1003-ND	41.82
Heat Reducer Attachment - 3/4" (19mm)	MA1004-ND	8.56
Replacement Heat Element	MA1005-ND	20.92

3M Colored Heat Shrinkable Tubing (FP-301 Series)

Available in 7 Colors: (K = Black, C = Clear, B = Blue, G = Green, R = Red, W = White, Y = Yellow)
Shrink Temperature: 121°C. **Shrink Ratio:** 2:1. Tubing is split resistant, mechanically tough, easily marked and resist cold flow, for UL, CSA and Mil-I-23053/5 applications at 600V @ 125°C.

Tubing Size Dia. * Inch (mm)	Expand. I.D. (Min.) (mm)	Recov. I.D. (Max.) (mm)	Nom. Recov. Wall Thick (mm)	Digi-Key Part No.	(NOTE: "X" in Part No. Represents Number of Feet) Price Per Length 5'	25'	50'	100'	200'	250'
FP-301 Series - Flexible Polyolefin, Self-extinguishing, Flame Retardant, Color										
3/64 (1.19)	1.17	.58	.41	FP364☐-X-ND†	1.55	6.93	12.42	22.36	—	44.51
1/16 (1.59)	1.60	.79	.43	FP116☐-X-ND	1.55	6.93	12.41	22.33	—	44.45
3/32 (2.38)	2.36	1.17	.51	FP332☐-X-ND	1.64	7.33	11.81	18.81	—	41.56
1/8 (3.18)	3.18	1.57	.51	FP018☐-X-ND	1.73	7.74	12.47	19.87	—	43.89
3/16 (4.76)	4.75	2.36	.51	FP316☐-X-ND	2.02	8.09	11.59	20.48	—	45.26
1/4 (6.35)	6.35	3.18	.64	FP014☐-X-ND	2.52	10.10	14.47	25.57	45.17	—
3/8 (9.53)	9.52	4.75	.64	FP038☐-X-ND	2.82	11.27	16.16	28.56	50.46	—
1/2 (12.70)	12.70	6.35	.64	FP012☐-X-ND	3.39	13.55	19.41	34.31	60.64	—
3/4 (19.05)	19.05	9.52	.76	FP034☐-X-ND	4.51	18.05	25.86	45.71	80.80	—
1 (25.40)	25.40	12.70	.89	FP100☐-X-ND	6.75	26.99	38.68	60.10	—	—
1-1/2 (38.10)	38.10	19.05	1.02	FP112☐-X-ND†	12.70	50.81	72.82	113.74	—	—
2 (50.80)	50.80	25.40	1.14	FP200☐-X-ND†	17.55	70.21	100.63	157.18	—	—

Note: For complete number, substitute ☐ with appropriate color (K = Black, C = Clear, B = Blue, G = Green, R = Red, W = White, Y = Yellow) and substitute "X" with length choice.

* Indicates size BEFORE shrinking occurs. † Not available in green.

FPC-KIT-ND ***Digi-Key® FP-301 Series Kit*** One 5 foot tubing of each color in the following series: FP364, FP116, FP332, FP018, FP316, FP014, FP038 and FP012 (55 pieces total of 8 sizes)....................................... **$34.95**

3M Heat Shrink Precut Lengths and Kits

CP-221 Series-Commercial Grade Polyolefin: Shrink Temp.: 121°C, Color: Black, Shrink Ratio: 2:1, recommended as a general purpose heat shrinkable tubing for new commercial applications where other types of tubing are now used.

FP-301 Series-Flexible Polyolefin: Shrink Temp.: 121°C, Color: Black, Shrink Ratio: 2:1, Tubing is split resistant, mechanically tough, easily marked and resist cold flow, for UL, CSA and Mil-I-23053/5 applications at 600V @ 125°C.

VFP-876 Series-Very Flexible Polyolefin: Shrink Temp.: 100°C, Color: Black, Shrink Ratio: 2:1, Most flexible of the heat shrinkable, polyolefin tubings, Ideal for jacketing and insulation of flexible wire bundles and sensitive components.

Tubing Size Dia.* x Length Inch (mm)	Expanded I.D. (Min.) (mm)	Recovered I.D. (Max.) (mm)	Nom. Recovered Wall Thick. (mm)	Digi-Key Part No.	Pricing (50 pcs./ bag) 1 Bag	5 Bags
CP-221 Series						
3/64 x 1/2 (1.19 x 12.70)	1.19	0.58	0.41	CP364-R50-ND	.88	3.51
1/16 x 1/2 (1.59 x 12.70)	1.60	0.79	0.43	CP116-R50-ND**	.89	3.57
3/32 x 1/2 (2.38 x 12.70)	2.38	1.19	0.51	CP332-R50-ND**	.93	3.74
1/8 x 3/4 (3.18 x 19.05)	3.18	1.57	0.51	CP018-R75-ND**	1.38	5.54
3/16 x 3/4 (4.76 x 19.05)	4.76	2.38	0.51	CP316-R75-ND**	1.62	6.46
1/4 x 1 (6.35 x 25.40)	6.35	3.18	0.64	CP014-1R0-ND**	2.59	10.35
1/4 x 1-1/2 (6.35 x 38.10)	6.35	3.18	0.64	CP014-1R5-ND**	3.79	15.15
3/8 x 1-1/2 (9.53 x 38.10)	9.53	4.76	0.64	CP038-1R5-ND	4.28	17.13
1/2 x 1-1/2 (12.70 x 38.10)	12.70	6.35	0.64	CP012-1R5-ND	5.08	20.33
FP-301 Series — Self-extinguishing						
3/64 x 1/2 (1.19 x 12.70)	1.19)	0.58	0.41	FP364K-R50-ND	.83	3.34
1/16 x 1/2 (1.59 x 12.70)	1.60	0.79	0.43	FP116K-R50-ND‡	.83	3.33
3/32 x 1/2 (2.38 x 12.70)	2.38	1.19	0.51	FP332K-R50-ND‡	.87	3.48
1/8 x 3/4 (3.18 x 19.05)	3.18	1.57	0.51	FP018K-R75-ND‡	1.27	5.08
3/16 x 3/4 (4.76 x 19.05)	4.76	2.38	0.51	FP316K-R75-ND‡	1.45	5.80
1/4 x 1 (6.35 x 25.40)	6.35	3.18	0.64	FP014K-1R0-ND‡	2.29	9.16
1/4 x 1-1/2 (6.35 x 38.10)	6.35	3.18	0.64	FP014K-1R5-ND‡	3.34	13.37
3/8 x 1-1/2 (9.53 x 38.10)	9.53	4.76	0.64	FP038K-1R5-ND	3.71	14.84
1/2 x 1-1/2 (12.70 x 38.10)	12.70	6.35	0.64	FP012K-1R5-ND	4.42	17.68
VFP-876 Series — Self-extinguishing						
3/64 x 1/2 (1.19 x 12.70)	1.19	0.58	0.41	VFP364-R50-ND	.79	3.17
1/16 x 1/2 (1.59 x 12.70)	1.60	0.79	0.41	VFP116-R50-ND†	.80	3.22
3/32 x 1/2 (2.38 x 12.70)	2.38	1.19	0.51	VFP332-R50-ND†	.84	3.36
1/8 x 3/4 (3.18 x 19.05)	3.18	1.57	0.51	VFP018-R75-ND†	1.24	4.97
3/16 x 3/4 (4.76 x 19.05)	4.76	2.38	0.58	VFP316-R75-ND†	1.47	5.89
1/4 x 1 (6.35 x 25.40)	6.35	3.18	0.71	VFP014-1R0-ND†	2.33	9.30
1/4 x 1-1/2 (6.35 x 38.10)	6.35	3.18	0.71	VFP014-1R5-ND†	3.39	13.58
3/8 x 1-1/2 (9.53 x 38.10)	9.53	4.76	0.71	VFP038-1R5-ND	3.77	15.07
1/2 x 1-1/2 (12.70 x 38.10)	12.70	6.35	0.71	VFP012-1R5-ND	4.23	16.90

* Indicates size BEFORE shrinking occurs.

** **CP-KIT-ND** ***Digi-Key® CP-221 Series Kit*** 50 each of pieces denoted (Exception: CP116-R50-ND has 100 pieces), 350 total pieces Plastic box and label card included.. **$9.95**

‡ **FP-KIT-ND** ***Digi-Key® FP-301 Series Kit*** 50 each of pieces denoted (Exception: FP116-R50-ND has 100 pieces), 350 total pieces. Black. Plastic box and label card included.. **$10.94**

† **VFP-KIT-ND** ***Digi-Key® VFP-876 Series Kit*** 50 each of pieces denoted (Exception: VFP116-R50-ND has 100 pieces), 350 total pieces. Plastic box and label card included.. **$11.95**

STEINEL® Heat Guns

Fig. 1

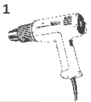


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Fig. 2

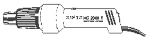


Fig.	Description	Digi-Key Part No.	Price Each
1	3 Speed Fixed Temp Heat Gun	SDL1100-ND	89.95
—	Heat Shrink Attachment for SDL1100-ND	SDL1300-ND	10.95
1	Variable Temp Indust. Heat Gun	SDL1200-ND	159.95
1	Variable, LCD Readout Heat Gun	SDL1350-ND	189.95
2	Variable Ergonomic Heat Gun	SDL1250-ND	159.95
—	Heat Gun Stand Benchtop	SDL1400-ND	24.95
—	Reducer-Reflector Nozzle 3/8" (9mm)	SDL1303-ND	15.95
—	Reducer Nozzle Attachment 3/8" (9mm)	SDL1301-ND	10.95
—	Reducer Nozzle Attachment 5/8" (14mm)	SDL1302-ND	10.95
—	Reflector Nozzle 3" (75mm)	SDL1304-ND	14.95
—	Refl. Nozzle 5/8" (14mm) (does not fit SDL1100)	SDL1305-ND	12.95

HL1502S (SDL1100-ND): Three temp. levels can be selected conveniently with one hand during use. **Specifications:** • Volt.: 120V AC • Output: 1400W • Temp.: • Step 1: 120°F (49°C) • Step 2: 800°F (427°C) • Step 3: 1050°F (566°C) • Air Flow: min. 8.8cfm, max. 17.6cfm. **HL1802E (SDL1200-ND), HG3002LCD (SDL1350-ND), HG2000E (SDL1250-ND):** Continuously adjustable, electronically controlled hot air. The electronic temp. regulator allows ideal temp. setting. Model HG3002LCD has a LCD continuous temp. display. **Specifications:** • Volt.: 120VAC • Output: 1500W • Temp.: 120°– 1100°F (49°– 593°C) • Air Flow: min. 8.8, max. 17.6cfm (HL1802E), min. 7, max. 17.6cfm (HG3002LCD) & min. 11.3, max. 17.6cfm (HG2000E).

DABURN Shrinkable Tubing, Polyolefin: Black

The most widely used, general purpose heat shrinkable tubing. An irradiated flexible, flame-retardant polyolefin tubing with a wide scope of applications. These include: harnessing, wire bundling, strain reliefs, or any application where components or cables must be insulated or packaged. • UL E-38155 • CSA LR-31929 • MIL-I-23053/5A • MSFC-276B • AMS 3636B

Operating Temperature: –55°C to +135°C. **Shrinkage Ratio:** To 50% of supplied diameter at 121°C. **Electrical Properties:** Dielectric Strength: 1300 V/mil (512 kV/cm). Volume Resistivity: 10^{15} ohm-cm. **Physical Properties:** Tensile Strength: 2500 PSI, nominal (176 kg/cm²). Ultimate Elongation: 400% nominal.

DABURN Shrink Tubing

Digi-Key® Assortment Kit

Contains the following:

5 ft./W181-ND	5 ft./W184-ND
5 ft./W182-ND	5 ft./W185-ND
5 ft./W183-ND	5 ft./W186-ND

STA-KIT-ND....... **$10.95**

Min. Supp I.D. In. (mm)	Maximum Recov. I.D. In. (mm)	Nom. Recov. Wall Thick. In. (mm)	Digi-Key Part. No.	(NOTE: "X" in Digi-Key Part No. Represents No. of Feet) Price Per Length 5'	25'	50'	100'	200'	500'	1,000'
.06 (1.60)	.03 (.78)	.017 (.43)	W181-X-ND	2.25	10.05	18.00	32.40	51.60	114.00	198.37
.09 (2.36)	.05 (1.17)	.020 (.50)	W182-X-ND	2.48	11.06	19.80	35.64	56.76	125.40	209.16
.13 (3.18)	.06 (1.58)	.020 (.50)	W183-X-ND	2.65	11.85	21.23	38.21	76.06	134.43	223.27
.19 (4.75)	.09 (2.36)	.020 (.50)	W184-X-ND	3.14	14.03	25.13	45.23	72.03	159.13	265.60
.25 (6.35)	.13 (3.18)	.025 (.63)	W185-X-ND	3.94	17.59	31.50	56.70	90.30	199.50	—
.38 (9.53)	.19 (4.75)	.025 (.63)	W186-X-ND	4.35	19.43	34.80	62.64	95.03	—	—
.50 (12.7)	.25 (6.35)	.025 (.63)	W187-X-ND	4.99	22.28	39.90	71.82	108.36	—	—
.75 (19.1)	.38 (9.53)	.030 (.76)	W188-X-ND	6.86	30.65	54.90	98.82	146.20	—	—
1.00 (25.4)	.50 (12.70)	.035 (.88)	W189-X-ND	9.80	43.76	78.38	130.50	—	—	—
3.00 (76.2)	1.50 (38.10)	.050 (1.27)	W192-X-ND	41.30	185.85	321.75	—	—	—	—
4.0 (101.6)	2.00 (50.80)	.055 (1.40)	W193-X-ND	51.00	229.50	420.17	—	—	—	—

DABURN Irradiated Polyolefin Heat Shrink

DAFLEX SH277 shrinkable irradiated polyolefin tubing is flame retardant and will withstand up to 300°C (572°F) for short durations and can be hot stamped.

Specifications: • **Shrink Ratio**: 4:1 • **Longitudinal Shrinkage**: 10% maximum • **Shrink Temperature**: 120°C (250°F) • **Continuous Operation Temperature**: -55°C to +135°C • Meets or exceeds MIL-I-23053/5 Class 1 and 3.

Descrip.	Minimum Supplied I.D. Inch (mm)	Maximum Recovery I.D. Inch (mm)	Nom. Recov. Wall Thickness Inch (mm)	Digi-Key Part No.	Sold in 4' Lengths Only 4' (1pc.)	8' (2pc.)	20' (5pc.)	48' (12pc.)	100' (25pc.)
BLK 1" x 4'	1.0 (25.4)	.26 (6.5)	.060 (1.5)	W203-ND	54.60	72.80	163.80	327.60	591.50
BLK 2" x 4'	2.0 (50.8)	.50 (12.7)	.060 (1.5)	W204-ND	78.60	104.80	235.80	471.60	851.50

DABURN Polyolefin Heat Shrink

DAFLEX SM278 is a flexible, large ratio, heat shrinkable tubing with a meltable adhesive liner. As the outer wall shrinks, the inner adhesive liner melts and flows. When cooled, it offers protection for a variety of electrical applications as well as "sealed-in" protection from chemicals and oils.

Specifications: • **Shrink Ratio**: 4:1 • **Longitudinal Shrinkage**: 10% maximum • **Shrink Temperature**: 120°C (250°F) • **Continuous Operation Temperature**: -55°C to +135°C • Meets or exceeds MIL-I-23053/4 Class 3 • UL VW-1, CSA OFT (outer wall only)

Description	Min. Supp. I.D. In. (mm)	Max. Recov. I.D. In. (mm)	Nom. Recov'd Wall Thick. In. (mm)	Digi-Key Part No.	(NOTE: "X" in Digi-Key Part No. Represents No. of Feet) Price Per Length 5'	25'	50'	100'	200'
Dual Wall 3/16" BLK	.16 (4.0)	.04 (1.0)	.035 (.9)	W207-X-ND	9.25	39.54	67.30	114.41	212.56
Dual Wall 5/16" BLK	2.0 (50.8)	.50 (12.7)	.035 (.9)	W208-X-ND	15.53	66.36	112.95	178.35	—

Description	Min. Supplied I.D. Inch (mm)	Max. Recovery I.D. Inch (mm)	Nom. Recov. Wall Thickness Inch (mm)	Digi-Key Part No.	Sold in 4' Lengths Only 4' (1pc.)	8' (2pc.)	20' (5pc.)	48' (12pc.)	100' (25pc.)
Dual Wall 1/2" BLK	.47 (12.0)	.12 (3.0)	.051 (1.3)	W206-ND	11.74	22.30	52.81	119.71	231.60
Dual Wall 3/4" BLK	.63 (16.0)	.16 (4.0)	.062 (1.6)	W209-ND	13.96	26.52	62.82	142.39	275.55
Dual Wall 1" BLK	.94 (24.0)	.24 (6.0)	.082 (2.1)	W205-ND	22.46	42.68	101.09	229.13	443.40
Dual Wall 1 1/4" BLK	1.26 (32.0)	.31 (8.0)	.091 (2.3)	W210-ND	27.88	52.97	125.46	284.38	550.25

DABURN Butyl Rubber Shrink Tape

DAFLEX ST250 cold shrinking Stretch-N-Seal tape requires no heat to provide a secure covering where the size and/or shape of an object does not permit the use of shrinkable tubing. Simply remove 2" to 3" of tape from the roll, remove the liner, stretch tape to 50% of the supplied width and wrap it spirally around the object, with 50% overlap. In minutes the tape will react with itself to form a mass which will provide protection from moisture, most chemicals, over 1KV per mil. **DAFLEX ST250** can be removed easily without leaving any residue since the tape does not use a mastic or adhesive liner. Shelf life is over 5 years. It is helpful for covering, sealing, splicing, holding bundles, joining and repair applications.

Specifications: • **Operating Temperature:** -40°C to +130°C • UL Approved for 80°C

Description	Nominal Width Inch (mm)	Nominal Thickness Inch (mm)	Roll Length Feet	Digi-Key Part No.	Price Per Roll 1	5	10
Black 1"	1.0 (25.4)	.015 (0.38)	15	W211-ND	8.50	38.25	71.29
White 1"	1.0 (25.4)	.015 (0.38)	15	W212-ND	8.50	38.25	71.29
Black 1"	1.0 (25.4)	.015 (0.38)	8	W213-ND	6.10	27.45	53.80
Black .75"	.75 (19.05)	.015 (0.38)	30	W214-ND	16.20	72.90	142.88

AC Line Cords

- **Temperature Rating:** 60°C
- **Volt Rating:** 125 V/AC.
- **Small Appliance Line Cord:** NEMA 1-15 P Polarized Plug
- **Male Plug Power Cord:** NEMA 5-15 P Plug
- **Detachable Power Cord:** NEMA 5-15 P Plug, IEC 320 Connector

SPT-1: All thermoplastic, parallel-jacketed, with or without third conductor for grounding purposes only. Light duty cord for pendant or portable use in damp locations. 300V.

SVT: Two or three-conductor, all plastic construction with or without third conductor for grounding purposes only. 300V, 60° C.

SJT: Junior hard service thermoplastic or rubber-insulated conductors with overall thermoplastic jacket. 300V, 60°C to 105°C

Fig. 1

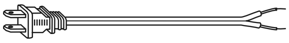


Fig. 2

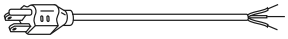


Fig. 3

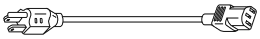


Fig. 4

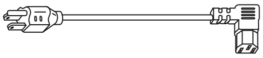


Fig. 5

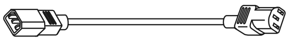


Fig. 6

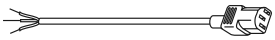


Fig. 7

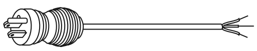


Fig. 8

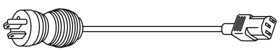


Fig. 9

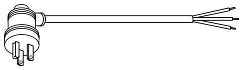


Fig. 10

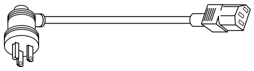


Fig. 11

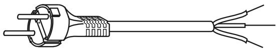


Fig. 12

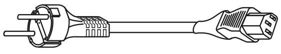


Fig. 13

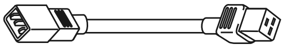


Fig. 14

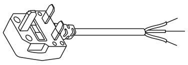
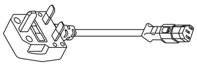


Fig. 15



Description	Fig.	Length Feet (Meter)	Cord/Plug Color	AWG	Rating Amps @ 125V	Cord Type	Digi-Key Part No.	Price Each				Qualtek Part No.
								1	10	100	250	
Small Appliance Line Cord UL Listed	1	6'0" (1.83)	Brown/Brown	18/2	10	SPT-1	Q100-ND	1.58	1.43	1.15	.97	221001-03
		6'0" (1.83)	White/White	18/2	10	SPT-1	Q101-ND	2.29	2.08	1.67	1.41	221001-08
		6'0" (1.83)	Black/Black	18/2	10	SPT-1	Q114-ND	1.61	1.46	1.17	.99	221001-01
		9'0" (2.74)	Black/Black	18/2	10	SPT-1	Q121-ND	1.77	1.60	1.29	1.09	221002-01
Male Plug Power Cord UL Listed CSA Certified CEE Color Code	2	6'7" (2.01)	Black/Black	18/3	10	SVT	Q106-ND	3.78	3.42	2.75	2.32	311007-01
		9'10" (3.00)	Black/Black	18/3	10	SVT	Q107-ND	4.62	4.18	3.36	2.84	311010-01
		6'7" (2.01)	Black/Black	18/3	10	SJT	Q108-ND	4.22	3.81	3.06	2.59	311013-01
		9'10" (3.00)	Black/Black	18/3	10	SJT	Q109-ND	5.52	4.99	4.01	3.39	311016-01
		6'7" (2.01)	Black/Black	16/3	13	SJT	Q110-ND	5.05	4.57	3.67	3.10	311019-01
		9'10" (3.00)	Black/Black	16/3	13	SJT	Q111-ND	6.60	5.97	4.80	4.05	311022-01
		6'7" (2.01)	Black/Black	14/3	15	SJT	Q112-ND	5.58	5.04	4.05	3.42	311024-01
		9'10" (3.00)	Black/Black	14/3	15	SJT	Q113-ND	7.56	6.84	5.49	4.64	311027-01
N. Amer. Color Code	2	8'0" (2.44)	Gray/Gray	18/3	10	SVT	Q122-ND	4.06	3.67	2.95	2.49	211012-06
		8'0" (2.44)	Gray/Gray	18/3	10	SJT	Q123-ND	4.31	3.90	3.13	2.65	211018-06
Detachable Power Cord UL Listed CSA Certified CEE Color Code	3	6'7" (2.01)	Black/Black	18/3	10	SJT	Q102-ND	5.02	4.54	3.65	3.08	312007-01
		9'10" (3.00)	Black/Black	18/3	10	SJT	Q103-ND	7.04	6.36	5.11	4.32	312010-01
		6'7" (2.01)	Black/Black	16/3	13	SJT	Q115-ND	6.11	5.52	4.44	3.75	312011-01
		9'10" (3.00)	Black/Black	16/3	13	SJT	Q116-ND	7.32	6.61	5.31	4.49	312014-01
		9'10" (3.00)	Black/Black	16/3	13	SJT	Q120-ND†	10.11	9.13	7.34	6.20	312040-01
		7'6" (2.29)	Black/Black	16/3	13	SJT	Q124-ND	6.14	5.55	4.46	3.77	212013-01
		7'6" (2.29)	Black/Black	18/3	10	SVT	Q125-ND	5.02	4.54	3.65	3.08	312003-01
		7'6" (2.29)	Black/Black	18/3	10	SVT	Q126-ND*	5.92	5.35	4.30	3.63	312021-01
	4	6'7" (2.01)	Black/Black	18/3	10	SJT	Q104-ND	5.95	5.38	4.32	3.65	313006-01
		6'7" (2.01)	Black/Black	16/3	13	SJT	Q117-ND	6.39	5.77	4.64	3.92	313010-01
		9'10" (3.00)	Black/Black	18/3	10	SJT	Q105-ND	6.85	6.19	4.98	4.20	313009-01
		9'10" (3.00)	Black/Black	16/3	13	SJT	Q118-ND	7.66	6.92	5.56	4.70	313014-01
		9'10" (3.00)	Black/Black	16/3	13	SJT	Q119-ND†	10.14	9.16	7.36	6.22	313026-01
	5	3'3" (.99)	Black/Black	18/3	10	SVT	Q127-ND	5.36	4.85	3.90	3.29	318002-01
		3'3" (.99)	Black/Black	18/3	10	SJT	Q128-ND	4.84	4.37	3.51	2.97	318005-01
	13	9'10" (3.00)	Black/Black	14/3	15	SJT	Q258-ND	1.07	.97	.78	.66	331010-01
	6	9'10" (3.00)	Black/Black	18/3	10	SJT	Q129-ND	5.80	5.24	4.21	3.56	315008-01
Hospital Grade UL Listed CSA Certified N. Amer. Color Code	7	10'0" (3.05)	Gray/Clear	18/3	10	SJT	Q130-ND	10.70	9.66	7.77	6.56	232003-06
		10'0" (3.05)	Gray/Gray	18/3	10	SJT	Q131-ND	10.70	9.66	7.77	6.56	232011-06
	8	10'0" (3.05)	Gray/Clear	18/3	10	SJT	Q132-ND	11.50	10.39	8.35	7.05	233003-06
		10'0" (3.05)	Gray/Gray	18/3	10	SJT	Q133-ND	11.50	10.39	8.35	7.05	233009-06
	9	10'0" (3.05)	Gray/Clear	18/3	10	SJT	Q262-ND	12.86	11.62	9.34	7.89	242003-06
	10	10'0" (3.05)	Gray/Clear	18/3	10	SJT	Q263-ND	13.51	12.20	9.81	8.28	243003-06

† Shielded with Mylar Foil • Temperature Rating: 105° C VW-1

Description	Fig.	Length Feet (Meter)	Color	Cordage	Conductors (MM2)	Rating Amps @ 250V	Digi-Key Part No.	Price Each				Qualtek Part No.
								1	10	100	250	
International Power Cords												
Continental Europe	11	8'2" (2.5)	Black	H05VV-F	3 X 1.00	10	Q134-ND	5.36	4.85	3.90	3.29	363012-D01
	12	8'2" (2.5)	Black	H05VV-F	3 X 1.00	10	Q135-ND	6.29	5.69	4.57	3.86	364002-D01
	5	8'2" (2.5)	Black	H05VV-F/SJT	3 X 1.00	10	Q136-ND	5.36	4.85	3.90	3.29	319004-T01
United Kingdom	14	8'2" (2.5)	Black	H05VV-F	3 X 1.00	10	Q137-ND	11.04	9.97	8.01	6.77	369003-E01
	15	8'2" (2.5)	Black	H05VV-F	3 X 1.00	10	Q138-ND	13.67	12.35	9.93	8.38	370001-E01

AC Receptacles

Fig. 1

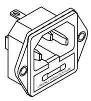


Fig. 2

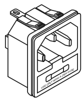


Fig. 3

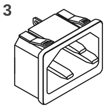


Fig. 4

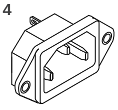


Fig. 5

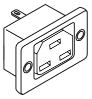


Fig. 6

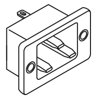


Fig. 7

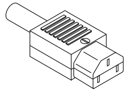


Fig. 8

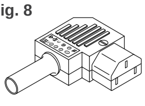


Fig. 9

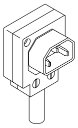


Fig. 10

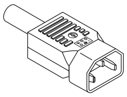


Fig. 11

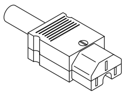
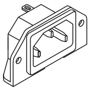
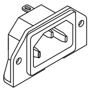


Fig. 12



7mm Terminal Pitch

Fig. 13



9mm Terminal Pitch

Fig. 14

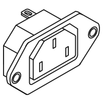


Fig. 15

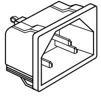


Fig. 16

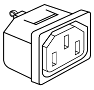


Fig. 17

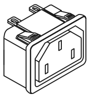


Fig. 18

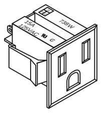


Fig. 19

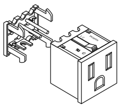


Fig. 20

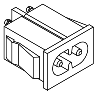


Fig. 21

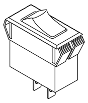


Fig. 22

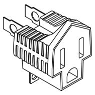


Fig. 23

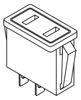
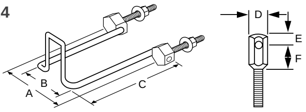


Fig. 24



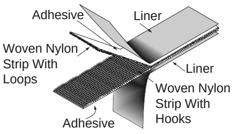
Approvals: 701W-15/XX and 716W-15/XX: IEC 320. **736W-B-101, -102:** UL, CSA, VDE, FIMKO, DEMKO, NEMKO, SEMKO. **738W-CX2-01:** UL, CSA. **743W-00/0X:** UL, CSA, VDE, SEV, DEMKO, NEMKO, SEMKO, FIMKO, CB. **744W-00/0X and 745W-XX/YY:** UL, CSA, VDE, SEV, SEMKO, DEMKO, FIMKO, NEMKO **770W-X2/03, /04, /05:** UL, CSA, VDE, SEV, SETI, DEMKO, NEMKO, SEMKO, ÖVE, CB. **770W-X2/09, /11, /12:** UL, CSA, VDE, SEV, FIMKO, DEMKO, NEMKO, SEMKO, ÖVE. **770W-X2/10:** UL, CSA, VDE, NEMKO. **771W-X2/01, /02:** ULR, CSA, VDE, SEV, DEMKO, NEMKO, SEMKO.

Fig.	Description	Mount Type	Contact Type	Digi-Key Part No.	Price Each 1	10	100	250	Qualtek Part No.
	Power Inlets with Single 5x20mm Fuseholder								
1	AC Receptacle, Straight, Male	Screw	Solder Tab	Q201-ND	2.50	2.26	1.82	1.54	719W-00/02
	AC Receptacle, Straight, Male	Screw	.187" (4.75mm) Fast-On	Q202-ND	2.50	2.26	1.82	1.54	719W-00/03
	AC Receptacle, Straight, Male	Screw	.248" (6.35mm) Fast-On	Q203-ND	2.50	2.26	1.82	1.54	719W-00/04
2	AC Receptacle, Straight, Male, .031" (0.8mm)	Snap-In	Solder Tab	Q204-ND	2.50	2.26	1.82	1.54	723W-X2/02
	AC Receptacle, Straight, Male, .031" (0.8mm)	Snap-In	.187" (4.75mm) Fast-On	Q205-ND	2.50	2.26	1.82	1.54	723W-X2/03
	AC Receptacle, Straight, Male, .031" (0.8mm)	Snap-In	.248" (6.35mm) Fast-On	Q206-ND	2.50	2.26	1.82	1.54	723W-X2/04
	AC Power Inlets								
3	Power Receptacle, .039" (1.0mm)	Snap-In	.110" (2.8mm) Solder Terminal	Q236-ND	2.55	2.31	1.86	1.57	745W-10/01
	Power Receptacle, .039" (1.0mm)	Snap-In	.157" (4.0mm) Solder Tabs	Q237-ND	2.55	2.31	1.86	1.57	745W-10/02
	Power Receptacle, .039" (1.0mm)	Snap-In	.189" (4.8mm) Quick Connect	Q238-ND	2.55	2.31	1.86	1.57	745W-10/03
	Power Receptacle, .039" (1.0mm)	Snap-In	.248" (6.3mm) Quick Connect	Q239-ND	2.55	2.31	1.86	1.57	745W-10/04
	Power Receptacle, .059" (1.5mm)	Snap-In	.110" (2.8mm) Solder Terminal	Q240-ND	2.55	2.31	1.86	1.57	745W-15/05
	Power Receptacle, .059" (1.5mm)	Snap-In	.157" (4.0mm) Solder Tabs	Q241-ND	2.55	2.31	1.86	1.57	745W-15/06
	Power Receptacle, .059" (1.5mm)	Snap-In	.189" (4.8mm) Quick Connect	Q242-ND	2.55	2.31	1.86	1.57	745W-15/07
	Power Receptacle, .059" (1.5mm)	Snap-In	.248" (6.3mm) Quick Connect	Q243-ND	2.55	2.31	1.86	1.57	745W-15/08
	Power Receptacle, .078" (2.0mm)	Snap-In	.110" (2.8mm) Solder Terminals	Q244-ND	2.55	2.31	1.86	1.57	745W-20/09
	Power Receptacle, .078" (2.0mm)	Snap-In	.157" (4.0mm) Solder Tabs	Q245-ND	2.55	2.31	1.86	1.57	745W-20/10
	Power Receptacle, .078" (2.0mm)	Snap-In	.189" (4.8mm) Quick Connect	Q246-ND	2.55	2.31	1.86	1.57	745W-20/11
	Power Receptacle, .078" (2.0mm)	Snap-In	.248" (6.3mm) Quick Connect	Q247-ND	2.55	2.31	1.86	1.57	745W-20/12
	Power Receptacle, .098" (2.5mm)	Snap-In	.110" (2.8mm) Solder Terminals	Q248-ND	2.55	2.31	1.86	1.57	745W-25/13
	Power Receptacle, .098" (2.5mm)	Snap-In	.157" (4.0mm) Solder Tabs	Q249-ND	2.55	2.31	1.86	1.57	745W-25/14
	Power Receptacle, .098" (2.5mm)	Snap-In	.189" (4.8mm) Quick Connect	Q250-ND	2.55	2.31	1.86	1.57	745W-25/15
	Power Receptacle, .098" (2.5mm)	Snap-In	.248" (6.3mm) Quick Connect	Q251-ND	2.55	2.31	1.86	1.57	745W-25/16
	Power Receptacle, .126" (3.0mm)	Snap-In	.110" (2.8mm) Solder Terminals	Q252-ND	2.55	2.31	1.86	1.57	745W-30/17
	Power Receptacle, .126" (3.0mm)	Snap-In	.157" (4.0mm) Solder Tabs	Q253-ND	2.55	2.31	1.86	1.57	745W-30/18
	Power Receptacle, .126" (3.0mm)	Snap-In	.189" (4.8mm) Quick Connect	Q254-ND	2.55	2.31	1.86	1.57	745W-30/19
	Power Receptacle, .126" (3.0mm)	Snap-In	.248" (6.3mm) Quick Connect	Q255-ND	2.55	2.31	1.86	1.57	745W-30/20
4	AC Receptacle, Straight, Male	Screw	Solder Tab	Q210-ND	.89	.81	.65	.55	703W-00/02
	AC Receptacle, Straight, Male	Screw	.187" (4.75mm) Fast-On	Q211-ND	.89	.81	.65	.55	703W-00/03
	AC Receptacle, Straight, Male	Screw	.248" (6.35mm) Fast-On	Q212-ND	.97	.88	.71	.60	703W-00/04
5	Power Outlet	Screw	.157" (4.0mm) Solder Tab	Q230-ND	2.55	2.31	1.86	1.57	743W-00/01
	Power Outlet	Screw	.189" (4.8mm) Solder Tab	Q231-ND	2.55	2.31	1.86	1.57	743W-00/02
	Power Outlet	Screw	.248" (6.3mm) Fast-On	Q229-ND	2.55	2.31	1.86	1.57	743W-00/03
6	Power Receptacle	Screw	.110" (2.8mm) Solder Terminal	Q233-ND	2.55	2.31	1.86	1.57	744W-00/01
	Power Receptacle	Screw	.157" (4.0mm) Solder Tabs	Q232-ND	2.55	2.31	1.86	1.57	744W-00/02
	Power Receptacle	Screw	.189" (4.8mm) Quick Connect	Q234-ND	2.55	2.31	1.86	1.57	744W-00/03
	Power Receptacle	Screw	.248" (6.3mm) Quick Connect	Q235-ND	2.55	2.31	1.86	1.57	744W-00/04
	AC Power Plug Assemblies								
7	In-Line Plug, Straight, Female	Cord	Screw Terminals	Q213-ND	3.93	3.55	2.86	2.41	704-00/00
8	In-Line Plug, Right Angle, Female	Cord	Screw Terminals	Q214-ND	5.08	4.59	3.69	3.12	705-00/00
9	In-Line Plug, Right Angle, Male	Cord	Screw Terminals	Q215-ND	6.53	5.90	4.75	4.01	711-00/00
10	In-Line Plug, Straight, Male	Cord	Screw Terminals	Q216-ND	6.53	5.90	4.75	4.01	712-00/00
11	In-Line Plug, Straight, Female	Cord	Screw Terminals	Q217-ND	4.45	4.03	3.24	2.73	709-00/00
	Angled Inlet PCB Mount								
12	AC Receptacle, Right Angle, Male	Screw	Round PC Terminals	Q218-ND	1.28	1.16	.93	.79	703W-00/52
	AC Receptacle, Right Angle, Male	Screw	Flat PC Terminals	Q219-ND	1.33	1.20	.97	.82	703W-00/53
13	AC Receptacle, Right Angle, Male	Screw	Flat PC Terminals	Q220-ND	1.33	1.20	.97	.82	703W-00/54
	AC Power Inlets IEC 320								
14	AC Receptacle, Straight, Female	Screw	Solder Tab	Q221-ND	.89	.81	.65	.55	710W-00/01
	AC Receptacle, Straight, Female	Screw	.187" (4.75mm) Fast-On	Q222-ND	.89	.81	.65	.55	710W-00/02
	AC Receptacle, Straight, Female	Screw	.248" (6.35mm) Fast-On	Q223-ND	.97	.88	.71	.60	710W-00/03
15	AC Receptacle, Straight, Male, .031" (0.8mm)	Snap-In	Solder Tab	Q207-ND	.89	.81	.65	.55	701W-X2/02
	AC Receptacle, Straight, Male, .031" (0.8mm)	Snap-In	.187" (4.75mm) Fast-On	Q208-ND	.89	.81	.65	.55	701W-X2/03
	AC Receptacle, Straight, Male, .031" (0.8mm)	Snap-In	.248" (6.35mm) Fast-On	Q209-ND	.97	.88	.71	.60	701W-X2/04
15	Power Receptacle, .059" (1.5mm), Male	Snap-In	Solder Tab	Q256-ND	1.00	.90	.73	.61	701W-15/21
	Power Receptacle, .059" (1.5mm), Male	Snap-In	.187" (4.7mm) Fast-On/Solder Tab	Q257-ND	1.00	.90	.73	.61	701W-15/26
	Power Receptacle, .059" (1.5mm), Male	Snap-In	.250" (16.35mm) Fast-On	Q258-ND	1.07	.97	.78	.66	701W-15/31
16	Power Outlet, .059" (1.5mm), Female	Snap-In	Solder Tab	Q259-ND	1.00	.90	.73	.61	716W-15/05
	Power Outlet, .059" (1.5mm), Female	Snap-In	.187" (4.7mm) Fast-On/Solder Tab	Q260-ND	1.00	.90	.73	.61	716W-15/10
	Power Outlet, .059" (1.5mm), Female	Snap-In	.250" (16.35mm) Fast-On	Q261-ND	1.07	.97	.78	.66	716W-15/15
17	AC Receptacle, Straight, Female, .031" (0.8mm)	Snap-In	Solder Tab	Q224-ND	.89	.81	.65	.55	716W-X2/01
	AC Receptacle, Straight, Female, .031" (0.8mm)	Snap-In	.187" (4.75mm) Fast-On	Q225-ND	.89	.81	.65	.55	716W-X2/02
	AC Receptacle, Straight, Female, .031" (0.8mm)	Snap-In	.248" (6.35mm) Fast-On	Q226-ND	.97	.88	.71	.60	716W-X2/03
	NEMA 5-15R Power Outlets								
18	AC Receptacle, Straight, Female, .031" (0.8mm)	Snap-In	.187" (4.75mm) Fast-On	Q227-ND	.95	.86	.69	.58	738W-X2/03
19	AC Receptacle, Straight, Female, .031" (0.8mm)	Snap-In	IDC Crimp Terminals	Q228-ND	.95	.86	.69	.58	739W-X2/03
	Power Receptacle								
20	Power Receptacle	Screw	Solder Tab	Q269-ND	.59	.54	.43	.37	770W-X2/03
	Power Receptacle	Screw	Solder Tab	Q270-ND	.59	.54	.43	.37	770W-X2/04
	Power Receptacle	Snap-In	Solder Tab	Q271-ND	.56	.51	.41	.35	770W-X2/05
	Power Receptacle	Snap-In	Right Angle, PCB Pins	Q272-ND	.51	.47	.38	.32	770W-X2/09
	Power Receptacle	Panel	Right Angle, PCB Pins	Q273-ND	.51	.47	.38	.32	770W-X2/10
	Power Receptacle	Screw	Right Angle, PCB Pins	Q274-ND	.56	.51	.41	.35	770W-X2/11
	Power Receptacle	Snap-In	PCB Pins	Q275-ND	.56	.51	.41	.35	770W-X2/12
	Power Receptacle	Snap-In	Solder Tab	Q276-ND	1.28	1.16	.93	.79	771W-X2/01
	Power Receptacle	Snap-In	PCB Pins	Q277-ND	1.28	1.16	.93	.79	771W-X2/02
23	Power Receptacle, 2 Con.	Snap-In	4.8mm Tab	Q281-ND	.51	.47	.38	.32	738W-CX2-01
	Circuit Breaker Switch								
21	Illuminated, Black Body w/Red Actuator	Panel	Solder Tab	Q278-ND	2.15	1.94	1.56	1.32	736W-B-101
	Non-illuminated, Black Body w/Red Actuator	Panel	Solder Tab	Q279-ND	1.89	1.72	1.38	1.17	736W-B-102
	AC Adapter								
22	AC Adapter 3 Prong/2 Prong	—	Wall Plug	Q280-ND	.77	.70	.56	.47	738W-E-01

Fig.	Description	Dimensions - Inch (mm) A	B	C	D	E	F	Digi-Key Part No.	Price Each 1	25	50	100	Qualtek Part No.
	Retainer Clips												
24	Power Plug Retainer Clip	1.80 (45.72)	1.11 (28.19)	1.40 (35.56)	.250 (6.35)	.125 (3.18)	.196 (4.98)	Q264-ND	2.02	1.65	1.47	1.40	730-00/00
	Power Plug Retainer Clip	1.80 (45.72)	1.11 (28.19)	1.40 (35.56)	.218 (5.54)	.125 (3.18)	.196 (4.98)	Q265-ND	2.56	2.09	1.86	1.77	732-00/00
	Power Plug Retainer Clip	1.80 (45.72)	1.11 (28.19)	1.32 (33.53)	.250 (6.35)	.125 (3.18)	.196 (4.98)	Q266-ND	2.02	1.65	1.47	1.40	730-00/05
	Power Plug Retainer Clip	1.80 (45.72)	1.11 (28.19)	1.40 (35.56)	.250 (6.35)	.125 (3.18)	.352 (8.94)	Q267-ND	2.19	1.79	1.60	1.51	731-00/00

3M Fastening Systems

Scotchmate™ Hook and Loop Fastening Systems



When the two sides of a Scotch-mate Hook and Loop Fastener are pressed together, hundreds of tiny, stiff hooks mesh with a surface of pliable loops. Simply press together to fasten and pull apart to open. And do it thousands of times during the life of your product. Depending on the application, select either plain-backed or adhesive-backed versions. Plain-backed versions are easily sewn or stapled in place. Adhesive-backed fasteners are available for bonding to bare or painted metal, many plastics including plasticized vinyl, plus wood, glass and more.

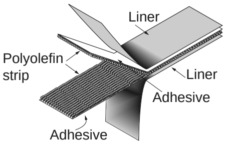
Plain, standard sew on: Wash or dry clean • Operating Temperature: Up to 250°F (121°C) continuous • Features: Tailored appearance for garments

Pressure sensitive rubber adhesive: • **Features:** General purpose adhesion to most smooth surfaces • **Operating Temp.:** -20°F to 120°F (-29°C to 49°C)

Note: Roll length is 50 yards (45.72 meters)

Description	Digi-Key Part No.	Price Each
Hook & Loop Fastening Systems - 50 yds. (45.72meters)		
Loop, plain back sew on, 5/8" (15.88mm), black	SJ340158-0-ND	11.88
Hook, plain back sew on, 5/8" (15.88mm), black	SJ340258-0-ND	11.88
Loop, plain back sew on, 5/8" (15.88mm), white	SJ340158-9-ND	11.88
Hook, plain back sew on, 5/8" (15.88mm), white	SJ340258-9-ND	11.88
Loop, plain back sew on, 1" (25.40mm), black	SJ340110-0-ND	16.95
Hook, plain back sew on, 1" (25.40mm), black	SJ340210-0-ND	16.95
Loop, plain back sew on, 1" (25.40mm), white	SJ340110-9-ND	16.95
Hook, plain back sew on, 1" (25.40mm), white	SJ340210-9-ND	16.95
Hook, adhesive back, 5/8" (15.88mm), black	SJ352658-0-ND	56.22
Loop, adhesive back, 5/8" (15.88mm), black	SJ352758-0-ND	56.22
Hook, adhesive back, 1" (25.40mm), black	SJ352610-0-ND	70.32
Loop, adhesive back, 1" (25.40mm), black	SJ352710-0-ND	70.32

Dual Lock™ Reclosable Fastening Systems



When Dual Lock brand Reclosable Fasteners are pressed together, hundreds of mushroom-shaped stems interlock with one another. An audible snap announces that the fastener is locked. Compared to hook and loop fasteners, you get improved tensile strength with five times more holding power. Open and close hundreds of times during the life of your product. Depending on the applications, you can select either plain-backed or adhesive-backed versions. Plain-backed versions can be easily sewn, stapled or ultrasonically bonded in place. Adhesive-backed versions are available for bonding to bare or painted metal, many plastics including plasticized vinyl, plus wood, glass and more. Mating Type 400 and Type 170 stems provides the most universal Dual Lock fastener combination. As an alternative when the closure involves two flexible surfaces, Type 400 can be mated with itself. For even greater strength closures with limited openings and closing, Type 170 can be mated with Scotchmate Loop Products. **Plain-backed:** Sew on or staple. Wash or dry clean. • Operating Temperature: -20°F - 200°F (-29°C - 93°C) **Pressure sensitive rubber adhesive:** General purpose. Bonds to most surfaces. • Operating Temperature: -20°F - 120°F (-29°C - 49°C) continuous. **Pressure sensitive very high bond Scotch™ VHB™ acrylic adhesive:** High performance for aircraft, automotive, business equipment, electronics. Resists harsh wet/dry, hot/cold cycles. • Operating Temperature: -20°F -158°F (-29°C - 70°C) continuous

Note: Roll length is 50 yards (45.72 meters)

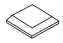
Description	Digi-Key Part No.	Price Each
Dual-Lock Fastening Systems		
Loop, plain back sew on, .5" (12.70mm), black	SJ344112-ND†	62.32
Hook, plain back sew on, .5" (12.70mm), black	SJ344212-ND•	62.48
Loop, plain back sew on, 1" (25.40mm), black	SJ344110-ND†	104.15
Hook, plain back sew on, 1" (25.40mm), black	SJ344210-ND•	104.15
Loop, pressure sensitive adhesive back, .5" (12.70mm), black	SJ354112-ND†	80.49
Hook, pressure sensitive adhesive back, .5" (12.70mm), black	SJ354212-ND•	80.47
Loop, pressure sensitive adhesive back, 1" (25.40mm), black	SJ354110-ND†	134.14
Hook, pressure sensitive adhesive back, 1" (25.40mm), black	SJ354210-ND•	134.14
Dual-Lock High Bond Fastening Systems		
Loop, pressure sensitive adhesive back, .5" (12.70mm), black	SJ355112-ND†	113.40
Hook, pressure sensitive adhesive back, .5" (12.70mm), black	SJ355212-ND•	113.40
Loop, pressure sensitive adhesive back, 1" (25.40mm), black	SJ355110-ND†	181.23
Hook, pressure sensitive adhesive back, 1" (25.40mm), black	SJ355210-ND•	181.23
Hook, plain back sew on, .5" (12.70mm), clear	SJ346012-ND	72.55
Loop, pressure sensitive very hi bond back, .5" (12.70mm), clear	SJ356012-ND	129.44
Hook, plain back sew on, 1" (25.40mm), clear	SJ346010-ND	120.92
Loop, pressure sensitive very hi bond back, 1" (25.40mm), clear	SJ356010-ND	206.87

† Mating Type 400 • Mating Type 170

3M Bumpons® Protective Products

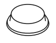
Available in: White, Gray, Brown, Black. Dimensions in inches (mm).

Fig. 1



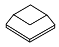
W: .50 (12.70)
H: .12 (3.05)

Fig. 2



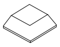
W: .50 (12.70)
Ht: .14 (3.56)

Fig. 3



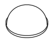
W: .50 (12.70)
Ht: .23 (5.84)

Fig. 4



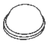
W: .81 (20.57)
Ht: .30 (7.62)

Fig. 5



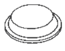
W: .63 (16.00)
Ht: .31 (7.87)

Fig. 6



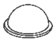
W: .44 (11.18)
Ht: .20 (5.08)

Fig. 7



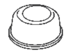
W: .50 (12.70)
Ht: .14 (3.56)

Fig. 8



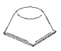
W: .44 (11.18)
Ht: .20 (5.08)

Fig. 9



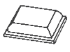
W: .88 (22.35)
Ht: .40 (10.16)

Fig. 10



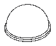
W: .81 (20.57)
Ht: .52 (13.21)

Fig. 11



W: .40 (10.16)
Ht: .10 (2.54)

Fig. 12



W: .75 (19.05)
Ht: .38 (9.65)

Fig.	Digi-Key Part No.*	Pricing			
1	SJ5508-☐-ND	**64** 4.73	**640** 40.57	**1,024** 52.83/M	**3,072** 36.45/M
2	SJ5012-☐-ND	**56** 4.51	**560** 38.64	**1,008** 57.50/M	**3,024** 39.68/M
3	SJ5518-☐-ND	**64** 8.18	**640** 70.10	**1,024** 91.28/M	**3,072** 62.98/M
4	SJ5523-☐-ND	**4** .78	**36** 5.98	**504** 69.77	**1,008** 95.52/M
5	SJ5027-☐-ND	**40** 8.10	**520** 90.29	**1,040** 99.85/M	**5,200** 94.26/M
6†	SJ5303-7-ND	**56** 5.09	**560** 43.61	**1,008** 64.91/M	**3,024** 44.79/M
7†	SJ5312-7-ND	**56** 5.11	**560** 43.78	**1,008** 65.15/M	**3,024** 44.96/M
8	SJ5003-☐-ND	**56** 4.10	**560** 35.18	**1,008** 52.36/M	**3,024** 36.13/M
9	SJ5009-☐-ND	**24** 7.96	**72** 20.46	**504** 119.36	**1,008** 163.42/M
10	SJ5514-☐-ND	**4** 1.81	**36** 13.98	**504** 163.11	**1,008** 223.31/M
11	SJ5007-0-ND	**54** 3.88	**540** 33.23	**1,080** 51.28/M	**3,024** 35.39/M
12	SJ5017-☐-ND	**40** 10.17	**520** 113.37	**1,040** 125.36/M	**5,200** 119.07/M

* *To designate color, use the following numbers:*
9–white, **8**–gray, **1**–brown, **0**–black, in the ☐ of each part #. † Transparent.

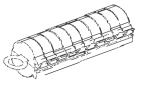
3M Tape

Foil Shielding Tape

Scotch® EMI/RFI Copper Foil Shielding Tapes provide an easy-to-apply, time saving, cost-effective way to shield against EMI/RFI radiation. Foil tapes are conductive through the adhesive, and offer mechanical, electrical and thermal values to meet your shielding effectiveness/frequency requirements.

Description	Digi-Key Part No.	Price Each 1	5
1/4" x 18 yds. (6.35mm x 16.46 meters)	3M1181A-ND	10.50	9.00
1/2" x 18 yds. (12.70mm x 16.46 meters)	3M1181B-ND	20.98	17.99
1" x 18 yds.(25.40mm x 16.46 meters)	3M1181C-ND	44.07	37.77

Scotchcode Wire Marker Tape Dispenser



BK = Black
BL = Blue
BN = Brown
GN = Green
GY = Gray
OR = Orange
RD = Red
VL = Violet
WH = White
YL = Yellow

Description	Digi-Key Part No.	Price Each
Dispenser Only	STD-ND	10.86
Dispenser with 0-9 Marker Tape	STD-0-9-ND	33.04
Dispenser with Colored Marker Tape	STD-C-ND	33.04
Refill, 1 roll, number - ☐ = 0 thru 9	SDR-☐-ND*	2.42
Refill, 1 roll, colors - ☐☐ = Color Designation	SDR-☐☐-ND*	2.42

* Refill Rolls 8 Feet (2.44 Meters) in Length

Scotch™ Adhesive Transfer Tapes 9703

Scotch Adhesive Transfer Tapes aren't really "tapes" at all. They're actually thin strips of pressure sensitive adhesive pre-applied on special release liners. This allows you to quickly and easily apply a neat, precise strip of clean, dry adhesive exactly where you want it. **Mounts flat, flexible circuits:** Features electrical conductivity only through the adhesive thickness. Completely eliminates the need for soldering, solvents, messy cleanup. • Thickness: 0.002" (.05mm) • Adhesive: Acrylic A-40 **Applications:** • Attach EMI/RFI shields • Connect flat flexible circuits • Attach electronic components

Description	Digi-Key Part No.	Price Each
Width, 0.75 (19.05)	3M970334-ND	86.48
Width, 0.5 (12.70)	3M970312-ND	63.59

Scotch™ 130C-mil Linerless Rubber Splicing Tape

3M's premier rubber-based, high-voltage insulating tape. Its thermally conductive design eliminates hot spots in splicing and terminating 600V to 69k V. Meets requirements of HH-I-553C, Grade A and B, and ASTM D-4388, Type III.

Description	Digi-Key Part No.	Price Each
3/4" x 30 ft. (19.05mm x 9.1m)	3M130C-ND	11.38

Scotch™ 35 7-mil Vinyl Electrical Color Coding Tape

Agile and versatile performer that stretches to conform to virtually any shape that requires color-coded insulation. Its excellent elongation, flexibility and strength make it easy to handle. The eight fade-resistant colors are easily distinguished for fast identification of electrical phases, leads, piping and safety areas. Meets requirements of UL 510 & CSA 22.2 **Features:** • Aggressive pressure-sensitive, rubber-based adhesive • Excellent electrical insulating properties • Resists weather, abrasion, corrosion, alkalies and acids • Flame retardant

Description	Digi-Key Part No.	Price Each
3/4 inch x 66 feet (19mm x 20.1m) Color Designation ☐☐	3M35-☐☐-ND	4.64

BL = Blue
GN = Green
GY = Gray
OR = Orange
RD = Red
VL = Violet
WH = White
YL = Yellow

Scotch™ 70 Self- Fusing Silicone Rubber Electrical Tape

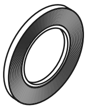
High-temperature, arc- and track-resistant self-fusing tape. It's composed of long-lasting silicone rubber with an easy-tear, easy-strip liner. Scotch 70 Tape is well-suited to protect high-voltage cable terminations against arcing and tracking. Operating Termperature: 180°C.

Description	Digi-Key Part No.	Price Each 1	10
1" x 30 ft. (25.4mm x 9.1 meters)	3M70-ND	36.42	31.87

Electrical Tape

Description	Digi-Key Part No.	Price Each
Super 33` Vinyl Plastic Electrical Tape, 3/4" x 66 ft. (19.05mm x 20.12m)	3M33+A-ND	5.00/Roll
Super 88 Vinyl Plastic Electrical Tape, 3/4" x 66 ft. (19.05mm x 20.12m)	3M88A-ND	5.64/Roll
Highland Vinyl Plastic Tape, 3/4" x 66 ft. (19.05mm x 20.12m)	3M1700-ND	.94/Roll
Vinyl Mastic Pad, 3-1/4" x 4-1/2" (82.55mm x 114.30mm)	3M11008-ND	2.90/Roll
Vinyl Mastic Pad, 2-1/2" x 2-1/2" (63.50mm x 63.50mm)	3M06149-ND	7.42/25

Scotch-Mount™ No. 4008 & 4026 Double Coated Foam Tapes



The foam carrier makes them flexible and conformable, great for filling space and ideal for joining rough and irregular surfaces. • Adhesive: Acrylic A-20 **Applications:** • Bond mirrors to walls or furniture • Bond acoustic panels to walls

Description	Digi-Key Part No.	Price Each
Thickness, 0.125 (3.18)	3M4008-ND	46.69
Thickness,0.062 (1.57)	3M4026-ND	27.01

Scotch-Mount™ Double-Coated Foam Tape

Urethane Foam: Soft, conformable, and high in internal strength which makes it ideal for general purpose mounting and joining. The excellent cold temperature properties make it suited for application on snowmobiles, freezers, etc. Vinyl Foam: Designed for general purpose mounting and joining, they offer one-piece removal. Their high degree of conformability makes them well suited for joining rough, miss-matched surfaces and the closed-cell foam makes excellent water and air seal in certain applications.

Description	Digi-Key Part No.	Price Each
Urethane 1/16" Thick, 1" x 36 yards, white (1.59mm x 25.40mm x 32.92meters)	3M40161-ND	31.43
Vinyl 1/8" Thick, 1" x 36 yards (3.18mm x 25.40mm x 32.92meters)	3M44081-ND	61.12
Vinyl 1/16" Thick, 1" x 36 yards, black (1.59mm x 25.40mm x 32.92meters)	3M44161B-ND	49.74
Vinyl 1/16" Thick, 1" x 36 yards, white (1.59mm x 25.40mm x 32.92meters)	3M44161W-ND	49.74

6969 Duct Tape

3M Highland 6969 is a 10.8-mil (0.27mm) commercial grade polyethylene coated cloth tape with rubber adhesive for moisture proofing plumbing, duct sealing, protecting, holding and other general purpose uses. It is silver colored, high tack, conformable, strong and easily torn. 6969 resists backing distortion at temperatures up to 150°F (65°C) for one hour.

Description	Digi-Key Part No.	Price Each
2" x 60 yd roll (50.8mm x 54.8m), Black	3M69692B-ND	9.42
2" x 60 yd roll (50.8mm x 54.8m), Silver	3M69692S-ND	9.42

SERPAC
Electronic Enclosures

Plastic Electronic Enclosures

Models available with or without 9-volt battery compartments. All models come with vertical card guides and are bossed for mounting horizontal circuit boards. All enclosures are made from ABS GSM UL Rated 94 HB plastic. **Colors Available:** Black (B), Gray (G), and Almond (A). ***Translucent Colors:** Blue (L), Green (G), Gray (S), Red (R).

Fig. 1 — “A” Series

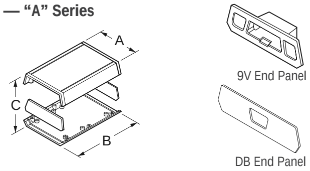


Fig. 2 — Standard/ Standard with Insert

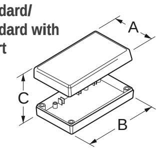


Fig. 3 — Standard Enclosure Copper Clad Board

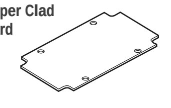


Fig. 4 — Gasket

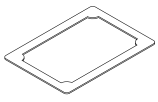


Fig. 5 — 9V Standard/ 9V Standard with Insert

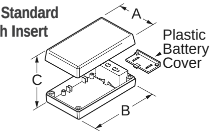


Fig. 6 — Slanted

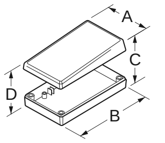


Fig. 7 — 9V Slanted

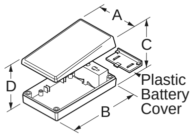


Fig. 8 — “C” Series

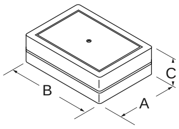


Fig. 9 — M4, M6, M8 Series

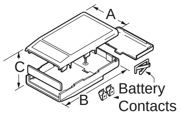
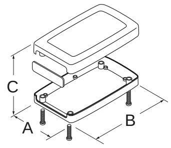
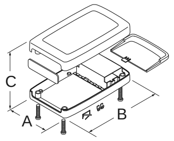


Fig. 10 — “H” Series



9V “H” Series



Dimensions — Inch (mm)				Digi-Key	Price Each			Serpac
A	B	C	D	Part No.	1	25	50	Series No.
Fig. 1 — “A” Series								
2.60 (66.04)	4.25 (107.95)	.88 (22.35)	—	SRA20□-ND	5.76	4.58	3.94	A-20
2.60 (66.04)	4.25 (107.95)	1.12 (28.45)	—	SRA21□-ND	5.95	4.73	4.07	A-21
3.35 (85.09)	5.30 (134.62)	1.50 (38.10)	—	SRA27□-ND	8.66	6.88	5.92	A-27
5.10 (129.54)	5.30 (134.62)	1.71 (43.43)	—	SRA31□-ND	10.99	8.73	7.51	A-31
5.00 (127.00)	7.10 (180.34)	1.30 (33.02)	—	SRA41□-ND	12.29	9.75	8.39	A-41
5.00 (127.00)	7.10 (180.34)	1.62 (41.15)	—	SRA42□-ND	13.26	10.53	9.06	A-42
Fig. 1 — “A” Series - 9V								
2.60 (66.04)	4.30 (109.22)	1.10 (27.94)	—	SRA21-9V□-ND	7.47	5.93	5.10	A-219V
3.35 (85.09)	5.30 (134.62)	1.50 (38.10)	—	SRA27-9V□-ND	11.62	9.23	7.94	A-279V
5.10 (129.54)	5.30 (134.62)	1.80 (45.72)	—	SRA31-9V□-ND	14.40	11.43	9.83	A-319V
5.00 (127.00)	7.10 (180.34)	1.30 (33.02)	—	SRA41-9V□-ND	14.33	11.38	9.79	A-419V
5.00 (127.00)	7.10 (180.34)	1.60 (40.64)	—	SRA42-9V□-ND	15.31	12.15	10.45	A-429V
Fig. 1 — “A” Series Optional End Panels								
A20 Series End Panel				SRA20-□□-ND	2.14	1.70	1.47	2003
A20 Series End Panel with DB9				SR2003-DB9B-ND	1.64	1.30	1.12	2003 DB9 BK
A20 Series End Panel with DB25				SR2003-DB25B-ND	1.64	1.30	1.12	2003 DB25 BK
A21 Series End Panel				SRA21-□□-ND	2.14	1.70	1.47	2005
A21 9V Series Black End Panel				SRA21-9VBK-ND	4.38	3.48	2.99	2006 BK
A21 Series End Panel with DB9				SR2005-DB9B-ND	1.64	1.30	1.12	2005 DB9 BK
A21 Series End Panel with DB25				SR2005-DB25B-ND	1.64	1.30	1.12	2005 DB25 BK
A27 Series End Panel				SRA27-□□-ND	2.30	1.83	1.57	2010
A27 9V Series Black End Panel				SRA27-9VBK-ND	4.54	3.60	3.10	2011 BK
A27 Series End Panel with DB9				SR2010-DB9B-ND	1.73	1.38	1.19	2010 DB9 BK
A27 Series End Panel with DB25				SR2010-DB25B-ND	1.73	1.38	1.19	2010 DB25 BK
A31 Series End Panel				SRA31-□□-ND	3.37	2.68	2.31	2015
A31 9V Series Black End Panel				SRA31-9VBK-ND	4.54	3.60	3.10	2016 BK
A31 Series End Panel with DB9				SR2015-DB9B-ND	2.58	2.05	1.77	2015 DB9 BK
A31 Series End Panel with DB25				SR2015-DB25B-ND	2.58	2.05	1.77	2015 DB25 BK
A41 Series End Panel				SRA41-□□-ND	3.15	2.50	2.15	2020
A41 9V Series Black End Panel				SRA41-9VBK-ND	4.79	3.80	3.27	2021 BK
A41 Series End Panel with DB9				SR2020-DB9B-ND	2.30	1.83	1.57	2020 DB9 BK
A41 Series End Panel with DB25				SR2020-DB25B-ND	2.30	1.83	1.57	2020 DB25 BK
A42 Series End Panel				SRA42-□□-ND	3.37	2.68	2.31	2024
A42 9V Series Black End Panel				SRA42-9VBK-ND	4.98	3.95	3.40	2025 BK
A42 Series End Panel with DB9				SR2024-DB9B-ND	2.58	2.05	1.77	2024 DB9 BK
A42 Series End Panel with DB25				SR2024-DB25B-ND	2.58	2.05	1.77	2024 DB25 BK
Fig. 2 — Standard								
2.25 (57.15)	3.60 (91.44)	1.50 (38.10)	—	SR111□-ND	4.22	3.35	2.89	SR111
2.27 (57.67)	3.63 (92.20)	2.01 (51.05)	—	SR112□-ND	4.50	3.58	3.08	112
2.27 (57.67)	3.63 (92.20)	2.51 (63.75)	—	SR113□-ND	4.69	3.73	3.21	113
2.60 (66.04)	4.10 (104.14)	0.91 (23.11)	—	SR021□-ND	4.06	3.23	2.78	021
3.25 (82.55)	4.38 (111.25)	0.90 (22.86)	—	SR031□-ND	4.88	3.88	3.34	SR031
3.25 (82.55)	4.38 (111.25)	1.50 (38.10)	—	SR131□-ND	5.36	4.25	3.66	SR131
3.25 (82.55)	4.38 (111.25)	1.41 (35.81)	—	SR032□-ND	5.36	4.25	3.66	032
3.25 (82.55)	4.38 (111.25)	2.01 (51.05)	—	SR132□-ND	5.73	4.55	3.92	132
3.25 (82.55)	4.38 (111.25)	1.90 (48.26)	—	SR033□-ND	5.73	4.55	3.92	SR033
3.25 (82.55)	4.38 (111.25)	2.50 (63.50)	—	SR133□-ND	6.05	4.80	4.13	SR133
3.25 (82.55)	5.63 (143.00)	1.50 (38.10)	—	SR151□-ND	6.30	5.00	4.30	SR151
3.25 (82.55)	5.63 (143.00)	1.40 (35.56)	—	SR052□-ND	6.14	4.88	4.20	SR052
3.25 (82.55)	5.63 (143.00)	2.00 (50.80)	—	SR152□-ND	6.62	5.25	4.52	SR152
3.25 (82.55)	5.63 (143.00)	1.90 (48.26)	—	SR053□-ND	6.62	5.25	4.52	SR053
3.25 (82.55)	5.63 (143.00)	2.51 (63.75)	—	SR153□-ND	7.15	5.68	4.89	153
3.26 (82.80)	5.63 (143.00)	0.91 (23.11)	—	SR051□-ND	5.76	4.58	3.94	051
4.88 (123.95)	6.88 (174.75)	0.90 (22.86)	—	SR071□-ND	8.35	6.63	5.70	071
4.88 (123.95)	6.88 (174.75)	1.50 (38.10)	—	SR171□-ND	9.14	7.25	6.24	171
4.88 (123.95)	6.88 (174.75)	1.41 (35.81)	—	SR072□-ND	9.89	7.85	6.76	072
4.88 (123.95)	6.88 (174.75)	2.00 (50.80)	—	SR172□-ND	10.02	7.95	6.84	SR172
4.88 (123.95)	6.88 (174.75)	1.91 (48.51)	—	SR073□-ND	9.77	7.75	6.67	073
4.88 (123.95)	6.88 (174.75)	2.50 (63.50)	—	SR173□-ND	10.52	8.35	7.19	SR173
5.93 (150.62)	13.96 (354.58)	2.01 (51.05)	—	SR182□-ND	15.40	12.23	10.52	182
6.34 (161.04)	9.50 (241.30)	1.50 (38.10)	—	SR191□-ND	13.70	10.88	9.36	191
6.34 (161.04)	9.50 (241.30)	2.50 (63.50)	—	SR193□-.ND	14.30	11.35	9.77	193
6.35 (161.29)	9.50 (241.30)	0.91 (23.11)	—	SR091□-ND	12.76	10.13	8.71	091
6.35 (161.29)	9.50 (241.30)	1.90 (48.26)	—	SR093□-ND	13.45	10.68	9.19	093
Fig. 2 — Standard with Insert (Non-Textured Top)								
2.25 (57.15)	3.60 (91.44)	1.00 (25.40)	—	SR110-I□-ND	3.65	2.90	2.50	SR110-I
2.25 (57.15)	3.60 (91.44)	1.50 (38.10)	—	SR111-I□-ND	4.22	3.35	2.89	111-I
2.60 (66.04)	4.10 (104.14)	0.91 (23.11)	—	SR021-I□-ND	4.06	3.23	2.78	021-I
3.25 (82.55)	4.38 (111.25)	0.90 (22.86)	—	SR031-I□-ND	4.88	3.88	3.34	SR031-I
3.25 (82.55)	4.38 (111.25)	1.50 (38.10)	—	SR131-I□-ND	5.36	4.25	3.66	SR131-I
3.25 (82.55)	4.38 (111.25)	1.91 (48.51)	—	SR033-I□-ND	5.73	4.55	3.92	033-I
3.25 (82.55)	4.38 (111.25)	2.50 (63.50)	—	SR133-I□-ND	6.05	4.80	4.13	133-I
3.25 (82.55)	5.63 (143.00)	1.51 (38.35)	—	SR151-I□-ND	6.30	5.00	4.30	SR151-I
3.25 (82.55)	5.63 (143.00)	2.51 (63.75)	—	SR153-I□-ND	7.15	5.68	4.89	153-I
3.26 (82.80)	5.63 (143.00)	0.91 (22.86)	—	SR051-I□-ND	5.76	4.58	3.94	SR051-I
3.26 (82.80)	5.63 (143.00)	1.91 (48.51)	—	SR053-I□-ND	6.62	5.25	4.52	053-I
4.88 (123.95)	6.88 (174.75)	0.90 (22.86)	—	SR071-I□-ND	8.35	6.63	5.70	071-I
4.88 (123.95)	6.88 (174.75)	1.50 (38.10)	—	SR171I□-ND	9.14	7.25	6.24	171I

Note: **Box color** □: B = Black, G = Gray, A = Almond **Lens color** □□ IR = Infrared, CL = Clear, BK= Black

Dimensions — Inch (mm)				Digi-Key	Price Each			Serpac
A	B	C	D	Part No.	1	25	50	Series No.
Fig. 2 — Standard with Insert (Non-Textured Top)								
4.88 (123.95)	6.88 (174.75)	1.41 (35.81)	—	SR072-I□-ND	9.89	7.85	6.76	072-I
4.88 (123.95)	6.88 (174.75)	2.00 (50.80)	—	SR172-I□-ND	10.02	7.95	6.84	SR172-I
4.88 (123.95)	6.88 (174.75)	1.91 (48.51)	—	SR073-I□-ND	9.77	7.75	6.67	073-I
4.88 (123.95)	6.88 (174.75)	2.50 (63.50)	—	SR173-I□-ND	10.52	8.35	7.19	SR173-I
4.88 (123.95)	14.21 (360.93)	2.01 (51.05)	—	SR182I□-ND	15.40	12.23	10.52	182I
6.34 (161.04)	9.50 (241.30)	1.50 (38.10)	—	SR191I□-ND	13.70	10.88	9.36	191-I
6.34 (161.04)	9.50 (241.30)	2.50 (63.50)	—	SR193I□-ND	14.30	11.35	9.77	193I
6.35 (161.29)	9.50 (241.30)	0.91 (23.11)	—	SR091-I□-ND	12.76	10.13	8.71	091-I
6.35 (161.29)	9.50 (241.30)	1.90 (48.26)	—	SR093I□-ND	13.45	10.68	9.19	093I
Fig. 2 — Standard Wall Mount								
3.25 (82.55)	4.38 (111.25)	0.91 (23.11)	—	SR031-W□-ND	6.11	4.85	4.18	031-W
3.25 (82.55)	4.38 (111.25)	1.41 (35.81)	—	SR032-W□-ND	6.55	5.20	4.48	032-W
3.25 (82.55)	4.38 (111.25)	1.91 (48.51)	—	SR033-W□-ND	6.90	5.48	4.71	033-W
3.25 (82.55)	5.63 (143.00)	1.51 (38.35)	—	SR151-W□-ND	8.38	6.65	5.72	151-W
3.25 (82.55)	5.63 (143.00)	2.01 (51.05)	—	SR152-W□-ND	9.01	7.15	6.15	152-W
3.25 (82.55)	5.63 (143.00)	2.51 (63.75)	—	SR153-W□-ND	9.45	7.50	6.45	153-W
3.26 (82.80)	5.63 (143.00)	0.91 (23.11)	—	SR051-W□-ND	8.38	6.65	5.72	051-W
3.26 (82.80)	5.63 (143.00)	1.41 (35.81)	—	SR052-W□-ND	9.01	7.15	6.15	052-W
3.26 (82.80)	5.63 (143.00)	1.91 (48.51)	—	SR053-W□-ND	9.26	7.35	6.33	053-W
Fig. 2 — Standard Wall Mount with Insert								
3.25 (82.55)	4.38 (111.25)	0.91 (23.11)	—	SR031-WI□-ND	6.11	4.85	4.18	231-WI
3.25 (82.55)	4.38 (111.25)	1.91 (48.51)	—	SR033-WI□-ND	6.90	5.48	4.71	033-WI
3.25 (82.55)	5.63 (143.00)	1.51 (38.35)	—	SR151-WI□-ND	8.38	6.65	5.72	151-WI
3.25 (82.55)	5.63 (143.00)	2.51 (63.75)	—	SR153-WI□-ND	9.45	7.50	6.45	153-WI
3.26 (82.80)	5.63 (143.00)	0.91 (23.11)	—	SR051-WI□-ND	8.38	6.65	5.72	051-WI
3.26 (82.80)	5.63 (143.00)	1.91 (48.51)	—	SR053-WI□-ND	9.26	7.35	6.33	053-WI
Fig. 3 — Standard Enclosure Prototyping Boards — .1” (2.54mm) Grid Perfboard								
For Box #'s “SRx1x”				SR310-ND	2.74	2.18	1.88	310SR
For Box #'s “SRx3x”				SR330-ND	11.62	9.23	7.94	330SR
For Box #'s “SRx5x”				SR350-ND	11.47	9.10	7.83	350SR
For Box #'s “SRx7x”				SR370-ND	24.92	19.78	17.01	370SR
Fig. 3 — Standard Enclosure Prototyping Boards — Copper Clad Board (1 Side)								
For Box #'s “SRx1x”				SR410-ND	4.03	3.20	2.76	410SR
For Box #'s “SRx3x”				SR430-ND	4.25	3.38	2.91	430SR
For Box #'s “SRx5x”				SR450-ND	4.63	3.68	3.17	450SR
For Box #'s “SRx7x”				SR470-ND	10.11	8.03	6.91	470SR
Fig. 4 — Gaskets								
Gasket, 3.63” x 2.27” (92.20mm x 57.66mm)				SRPS-11-ND	3.53	2.80	2.41	PS-11
Gasket, 4.38” x 3.25” (111.25mm x 82.55mm)				SRPS-13-ND	3.94	3.13	2.69	PS-13
Gasket, 5.63” x 3.25” 143.00mm x 82.55mm)				SRPS-15-ND	4.60	3.65	3.14	PS-15
Fig. 5 — 9-Volt Standard								
2.60 (66.04)	4.10 (104.14)	1.51 (38.10)	—	SR211□-ND	5.13	4.08	3.51	SR211
3.25 (82.55)	4.38 (111.25)	1.51 (38.35)	—	SR231□-ND	6.30	5.00	4.30	231
3.25 (82.55)	4.38 (111.25)	2.00 (50.80)	—	SR232□-ND	7.37	5.85	5.04	SR232
3.25 (82.55)	4.38 (111.25)	2.51 (63.75)	—	SR233□-ND	6.96	5.53	4.76	233
3.25 (82.55)	5.63 (143.00)	1.51 (38.35)	—	SR251□-ND	7.69	6.10	5.25	251
3.25 (82.55)	5.63 (143.00)	2.00 (50.80)	—	SR252□-ND	8.19	6.50	5.59	SR252
3.25 (82.55)	5.63 (143.00)	2.51 (63.75)	—	SR253□-ND	8.57	6.80	5.85	253
4.88 (123.95)	6.88 (174.75)	1.51 (38.35)	—	SR271□-ND	10.21	8.10	6.97	271
4.88 (123.95)	6.88 (174.75)	2.00 (50.80)	—	SR272□-ND	10.93	8.68	7.47	SR272
4.88 (123.95)	6.88 (174.75)	2.51 (63.75)	—	SR273□-ND	11.12	8.83	7.59	273
Fig. 5 — 9-Volt Standard with Insert (Non-Textured Top)								
2.60 (66.04)	4.10 (104.14)	1.51 (38.35)	—	SR221-I□-ND	5.13	4.08	3.51	211-I
3.25 (82.55)	4.38 (111.25)	1.51 (38.35)	—	SR231-I□-ND	6.30	5.00	4.30	SR231-I
3.25 (82.55)	4.38 (111.25)	2.51 (63.75)	—	SR233-I□-ND	6.96	5.53	4.76	233-I
3.25 (82.55)	5.63 (143.00)	1.51 (38.35)	—	SR251-I□-ND	7.69	6.10	5.25	SR251-I
3.25 (82.55)	5.63 (143.00)	2.51 (63.75)	—	SR253-I□-ND	8.57	6.80	5.85	253-I
4.88 (123.95)	6.88 (174.75)	1.51 (38.35)	—	SR271-I□-ND	10.21	8.10	6.97	271-I
4.88 (123.95)	6.88 (174.75)	2.00 (50.80)	—	SR272-I□-ND	10.93	8.68	7.47	SR272-I
4.88 (123.95)	6.88 (174.75)	2.51 (63.75)	—	SR273-I□-ND	11.12	8.83	7.59	273-I
Fig. 5 — 9-Volt Standard Wall Mount								
3.25 (82.55)	4.38 (111.25)	1.51 (38.35)	—	SR231-W□-ND	6.93	5.50	4.73	231-W
3.25 (82.55)	4.38 (111.25)	2.01 (51.05)	—	SR232-W□-ND	7.37	5.85	5.04	232-W
3.25 (82.55)	4.38 (111.25)	2.51 (63.75)	—	SR233-W□-ND	7.69	6.10	5.25	233-W
3.25 (82.55)	5.63 (143.00)	1.51 (38.35)	—	SR251-W□-ND	9.20	7.30	6.28	251-W
3.25 (82.55)	5.63 (143.00)	2.01 (51.05)	—	SR252-W□-ND	9.83	7.80	6.71	252-W
3.25 (82.55)	5.63 (143.00)	2.51 (63.75)	—	SR253-W□-ND	9.99	7.93	6.82	253-W
Fig. 5 — 9-Volt Standard Wall Mount with Insert (Non-Textured Top)								
3.25 (82.55)	4.38 (111.25)	1.51 (38.35)	—	SR231-WI□-ND	6.93	5.50	4.73	231-WI
3.25 (82.55)	4.38 (111.25)	2.51 (63.75)	—	SR233-WI□-ND	7.69	6.10	5.25	233-WI
3.25 (82.55)	5.63 (143.00)	1.51 (38.35)	—	SR251-WI□-ND	9.20	7.30	6.28	251-WI
3.25 (82.55)	5.63 (143.00)	2.51 (63.75)	—	SR253-WI□-ND	9.99	7.93	6.82	253-WI
Fig. 6 — Standard Slant								
3.25 (82.55)	5.63 (143.00)	0.90 (22.86)	0.39 (9.91)	SR05S□-ND	5.76	4.58	3.94	05S
3.25 (82.55)	5.63 (143.00)	1.50 (38.10)	0.97 (24.64)	SR15-S□-ND	6.30	5.00	4.30	SR15-S

Note: **Box color** □: B = Black, G = Gray, A = Almond **Lens color** □□ IR = Infrared, CL = Clear, BK= Black

(Continued)

SERPAC *Electronic Enclosures* Plastic Electronic Enclosures *(Cont.)*

Dimensions — Inch (mm)				Digi-Key	Price Each			Serpac
A	B	C	D	Part No.	1	25	50	Series No.
Fig. 6 — Standard Slant								
6.88 (174.75)	4.88 (123.95)	1.88 (47.75)	0.90 (22.86)	SR07S□-ND	8.35	6.63	5.70	07-S
6.88 (174.75)	4.88 (123.95)	2.48 (62.99)	1.50 (38.10)	SR17S□-ND	9.14	7.25	6.24	17-S
Fig. 6 — Standard Slant Wall Mount								
3.25 (82.55)	5.63 (143.00)	0.90 (22.86)	0.39 (9.91)	SR05SW□-ND	6.11	4.85	4.18	05-SW
3.25 (82.55)	5.63 (143.00)	1.51 (38.35)	1.0 (25.4)	SR15SW□-ND	6.90	5.48	4.71	15-SW
Fig. 6 — 9 Volt Standard Slant Wall Mount								
3.25 (82.55)	5.63 (143.00)	1.51 (38.35)	1.0 (25.4)	SR25SW□-ND	8.28	6.58	5.66	25-SW
Fig. 7 — 9-Volt Slanted								
3.25 (82.55)	5.63 (143.00)	1.50 (38.10)	0.97 (24.64)	SR25-S□-ND	7.69	6.10	5.25	SR25-S
6.88 (174.75)	4.88 (123.95)	2.48 (62.99)	1.50 (38.10)	SR27S□-ND	10.21	8.10	6.97	27-S
Fig. 8 — "C" Series								
1.38 (35.05)	2.13 (54.10)	0.58 (14.73)	—	SCR4□-ND	3.06	2.43	2.09	C-4
1.61 (40.89)	2.26 (57.40)	0.75 (19.05)	—	SCR6□-ND	3.06	2.43	2.09	C-6
1.85 (46.99)	2.40 (60.96)	0.93 (23.62)	—	SCR8□-ND	3.06	2.43	2.09	C-8
1.85 (46.99)	5.00 (127.00)	1.00 (25.40)	—	SCR28□-ND	3.97	3.15	2.71	C-28
2.30 (58.42)	3.25 (82.55)	0.8 (20.32)	—	SCR10□-ND	3.53	2.80	2.41	C-10
2.40 (60.96)	3.75 (95.25)	1.00 (25.40)	—	SCR12□-ND	3.87	3.08	2.65	C-12
Fig. 8 — "C" Series Translucent								
1.38 (35.05)	2.13 (54.10)	0.58 (14.73)	—	SCR4T□-ND* *NEW!*	5.04	4.00	3.44	C-4 TR
1.61 (40.89)	2.26 (57.40)	0.75 (19.05)	—	SCR6T□-ND* *NEW!*	5.04	4.00	3.44	C-6 TR
1.85 (46.99)	2.40 (60.96)	0.93 (23.62)	—	SCR8T□-ND* *NEW!*	5.04	4.00	3.44	C-8 TR
2.30 (58.42)	3.25 (82.55)	0.8 (20.32)	—	SCR10T□-ND* *NEW!*	5.89	4.68	4.03	C-10 TR
Fig. 8 — "C" Series with Key Holder								
1.38 (35.05)	2.13 (54.10)	0.58 (14.73)	—	SCR4KH□-ND	4.32	3.43	2.95	C-4 KH
1.61 (40.89)	2.26 (57.40)	0.75 (19.05)	—	SCR6KH□-ND	4.32	3.43	2.95	C-6 KH
1.85 (46.99)	2.40 (60.96)	0.93 (23.62)	—	SCR8KH□-ND	4.32	3.43	2.95	C-8 KH
Fig. 8 — "C" Series with Pocket Clip								
1.38 (35.05)	2.13 (54.10)	0.58 (14.73)	—	SCR4PC□-ND	5.64	4.48	3.85	C-4 PC
1.61 (40.89)	2.26 (57.40)	0.75 (19.05)	—	SCR6PC□-ND	5.64	4.48	3.85	C-6 PC
1.85 (46.99)	2.40 (60.96)	0.93 (23.62)	—	SCR8PC□-ND	5.64	4.48	3.85	C-8 PC
1.85 (46.99)	5.00 (127.00)	1.00 (25.40)	—	SCR28PC□-ND	6.55	5.20	4.48	C-28 PC
2.30 (58.42)	3.25 (82.55)	0.8 (20.32)	—	SCR10PC□-ND	6.11	4.85	4.18	C-10 PC
2.40 (60.96)	3.75 (95.25)	1.00 (25.40)	—	SCR12PC□-ND	6.46	5.13	4.41	C-12 PC
Fig. 9 — "Remote" M Series								
2.20 (55.88)	2.80 (71.12)	0.71 (18.03)	—	SRM4□-ND	5.48	4.35	3.75	M-4
2.40 (60.96)	4.15 (105.41)	0.85 (21.59)	—	SRM6□-ND	6.77	5.38	4.63	M-6
2.40 (60.96)	6.97 (177.04)	0.86 (21.84)	—	SRM8□-ND	8.00	6.35	5.47	M-8
Fig. 9 — "Remote" M Series Translucent								
2.20 (55.88)	2.80 (71.12)	0.71 (18.03)	—	SRM4T□-ND* *NEW!*	9.42	7.48	6.43	M-4 TR
2.40 (60.96)	4.15 (105.41)	0.85 (21.59)	—	SRM6T□-ND* *NEW!*	11.75	9.33	8.02	M-6 TR
Fig. 9 — "Remote" M Series with Pocket Clip								
2.20 (55.88)	2.80 (71.12)	0.71 (18.03)	—	SRM4PC□-ND	8.06	6.40	5.51	M-4 PC
2.40 (60.96)	4.15 (105.41)	0.85 (21.59)	—	SRM6PC□-ND	9.36	7.43	6.39	M-6 PC
2.40 (60.96)	6.97 (177.04)	0.85 (21.59)	—	SRM8PC□-ND	10.93	8.68	7.47	M-8 PC
Fig. 9 — "Remote" M Series with External Screws								
2.40 (60.96)	4.15 (105.41)	0.85 (21.59)	—	SRM6IND□-ND	7.78	6.18	5.32	M-6 IND
2.40 (60.96)	6.97 (177.04)	0.85 (21.59)	—	SRM8IND□-ND	9.01	7.15	6.15	M-8 IND
M Series Lenses								
M4 Series Clear				SRM4-FPC-ND	2.02	1.60	1.38	4004CL
M4 Series Infrared				SRM4-FPI-ND	2.14	1.70	1.47	4004IR
M6/8 Series Clear				SRM6/8-FPC-ND	2.02	1.60	1.38	4008CL
M6/8 Series Infrared				SRM6/8-FPI-ND	2.14	1.70	1.47	4008IR
Fig. 10 — "H" Series (Standard, AC, 9V, or AA)								
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65□-ND	6.36	5.05	4.35	H-65
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65-AA□-ND	7.18	5.70	4.91	H-65 AA
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65-AC□-ND	6.36	5.05	4.35	H-65 AC
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65-9V□-ND	6.99	5.55	4.78	H-65 9V
2.75 (69.85)	4.94 (125.48)	1.28 (32.51)	—	SRH67□-ND	6.52	5.18	4.46	H-67
2.75 (69.85)	4.94 (125.48)	1.28 (32.51)	—	SRH67-AA□-ND	7.37	5.85	5.04	H-67 AA
2.75 (69.85)	4.94 (125.48)	1.28 (32.51)	—	SRH67-AC□-ND	6.52	5.18	4.46	H-67 AC
2.75 (69.85)	4.94 (125.48)	1.28 (32.51)	—	SRH67-9V□-ND	7.15	5.68	4.89	H-67 9V
3.65 (92.71)	7.2 (182.88)	1.26 (32.00)	—	SRH75□-ND	8.10	6.43	5.53	H-75
3.65 (92.71)	7.2 (182.88)	1.26 (32.00)	—	SRH75-9V□-ND	8.98	7.13	6.13	H-75 9V
Fig. 10 — "H" Series Translucent								
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65T□-ND* *NEW!*	10.99	8.73	7.51	H-65 TR
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65-AAT□-ND* *NEW!*	12.47	9.90	8.52	H-65 AA TR
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65-9VT□-ND* *NEW!*	12.13	9.63	8.28	H-65 9V TR
Fig. 10 — "H" Series with Pocket Clip								
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65-PC□-ND	8.95	7.10	6.11	H-65 PC
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65-AAPC□-ND	9.77	7.75	6.67	H-65 AA-PC
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65-ACPC□-ND	8.95	7.10	6.11	H-65 AC-PC
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65-9VPC□-ND	9.58	7.60	6.54	H-65 9V-PC
2.75 (69.85)	4.94 (125.48)	1.28 (32.51)	—	SRH67-AAPC□-ND	9.95	7.90	6.80	H-67 AA-PC
2.75 (69.85)	4.94 (125.48)	0.28 (7.11)	—	SRH67-ACPC□-ND	9.10	7.23	6.22	H-67 AC-PC
2.75 (69.85)	4.94 (125.48)	0.28 (7.11)	—	SRH67-PC□-ND	9.10	7.23	6.22	H-67 PC
2.75 (69.85)	4.94 (125.48)	1.28 (32.51)	—	SRH67-9VPC□-ND	9.73	7.73	6.65	H-67 9V-PC
EMI Enclosures (No Battery Clips)								
Fig. 1 — "A" Series - EMI - 9V								
3.35 (85.09)	5.30 (134.62)	1.50 (38.10)	—	SRA27E-B-ND	17.39	13.80	11.87	A-219V
Fig. 2 — Standard								
2.25 (57.15)	3.60 (91.44)	1.50 (38.10)	—	SR111E-B-ND	6.52	5.18	4.46	111-EMI-BLACK
3.25 (82.55)	4.38 (111.25)	1.50 (38.10)	—	SR131E-B-ND	8.16	6.48	5.57	131-EMI-BLACK
3.25 (82.55)	5.62 (142.75)	1.50 (38.10)	—	SR151E-B-ND	9.58	7.60	6.54	151-EMI-BLACK
4.88 (123.95)	6.88 (174.75)	2.00 (50.80)	—	SR172E-B-ND	15.03	11.93	10.26	172-EMI-BLACK
6.34 (161.04)	9.50 (241.30)	1.50 (38.10)	—	SR191E-B-ND	20.44	16.23	13.96	191-EMI-BLACK
Fig. 5 — 9-Volt Standard								
2.60 (66.04)	4.10 (104.14)	1.50 (38.10)	—	SR211E-B-ND	7.84	6.23	5.36	211-EMI-BLACK
Fig. 5 — 9 Volt with Insert (Non-Textured Top)								
3.25 (82.55)	4.38 (111.25)	1.50 (38.10)	—	SR231E-B-ND	9.58	7.60	6.54	231-I-EMI-BLACK
Fig. 6 — Standard Slant								
3.25 (82.55)	5.62 (142.75)	1.50 (38.10)	.968 (24.59)	SR015E-B-ND	10.14	8.05	6.93	15-S-EMI-BLACK
Fig. 9 — Remote "M" Series								
2.40 (60.96)	4.15 (105.41)	.85 (21.59)	—	SRM6E-9VB-ND	10.27	8.15	7.01	M-6-EMI-BLACK

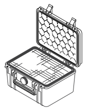
NOTE: Box color □: **B** = Black, **G** = Gray, **A** = Almond **Lens color □□ IR** = Infrared, **CL** = Clear, **BK**= Black
***Translucent Box color □**: **L** = Translucent Blue, **G** = Translucent Green, **S** = Translucent Gray, **R** = Translucent Red

NOTE: Box color □: **B** = Black, **G** = Gray, **A** = Almond **Lens color □□** IR = Infrared, CL = Clear, BK= Black
***Translucent Box color □**: **L** = Translucent Blue, **G** = Translucent Green, **S** = Translucent Gray, **R** = Translucent Red

Accessories

Description	Digi-Key Part No.	Price Each 1	25	50	Serpac Model No.
H-65 Series Optional End Panel, Clear	SRH65-FPC-ND	2.02	1.60	1.38	2105CL
H-65 Series Optional End Panel, Infrared	SRH65-FPI-ND	2.14	1.70	1.47	2105IR
Rubber Feet 1xx, 2xx	SR50-ND	.76/4	3.60/24	—	SR50
Rubber Feet, Bumpon, Black	SR51-ND	.25	5.00/25	—	51
Rubber Feet For A Series	SR52-ND	1.01/4	4.80/24	—	52
100pc Standoff/Screws	SR60KIT-ND	57.87	45.93	39.50	60 KIT
100pc Standoff Posts	SR61KIT-ND	56.51	44.85	38.58	61 KIT
Standoff with Hole	SR60-ND	.35	.28	.24	60
Standoff with Post	SR61-ND	.28	.23	.20	61
Glue for SR60 and SR61	SR65-ND	10.93	8.68	7.47	65
Battery Clip	SR71-ND	.57	.46	.40	71
Battery Clip	SR72-ND	.57	.46	.40	72
Battery Clip	SR74-ND	.57	.46	.40	74
Battery Clip	SR75-ND	.57	.46	.40	75
Screw #0 x 9/16 Flat	SR6001-ND	.19	.15	.13	6001
Screw #2 x 1/2 Flat	SR6003-ND	.19	.15	.13	6003
Screw #4 x 1/4 H/L Pan	SR6004-ND	.19	.15	.13	6004
Screw #4 x 3/8 H/L Pan	SR6005-ND	.19	.15	.13	6005
Screw #4 x 1/2 Flat	SR6006-ND	.19	.15	.13	6006
Screw #2 x 3/4 Flat	SR6007-ND	.19	.15	.13	6007
Screw #2 x 5/8 Flat	SR6008-ND	.19	.15	.13	6008

SERPAC *Electronic Enclosures* R-Series Enclosures



Features:

• Unbreakable light-weightstructural resin • O-Ring watertight/airtight seal • Pressure purge valve • Ergonomic handle • Corrosion proof

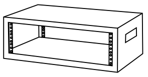
Dimensions — W x L x H (Inch)			Digi-Key	Price Each		Serpac
Internal	External	Color	Part No.	1	10	Model No.
"R" Series Case Without Foam Insert						
4.75 x 7.5 x 3.125	6.5 x 8.5 x 3.25	Black	SRR100-B-ND	20.86	17.39	R-100 Black
7.7 x 5.25 x 3.1	8.7 x 7.45 x 3.89	Black	SR-R120-B-ND• *NEW!*	18.42	15.36	R-120 Black
6.0 x 8.5 x 3.75	7.75 x 9.25 x 4.5	Black	SRR200-B-ND	26.38	21.99	R-200 Black
7.5 x 9.5 x 4.5	9.75 x 10.75 x 5.0	Black	SR-R300-B-ND•	26.84	22.37	R300-Black
10.5 x 15.0 x 6.0	13.0 x 16.0 x 7.0	Black	SRR600-B-ND	88.76	73.97	R-600 Black
12.875 x 18.0 x 6.75	15.5 x 19.25 x 7.5	Black	SRR700-B-ND	111.16	92.64	R-700 Black
7.7 x 5.25 x 3.1	8.7 x 7.45 x 3.89	Black	SR-RX120-B-ND• *NEW!*	30.76	25.64	RX-120 Black
7.5 x 9.5 x 4.5	9.75 x 10.75 x 5.0	Black	SR-RX300-B-ND• *NEW!*	47.00	39.17	RX-300 Black
7.7 x 5.25 x 3.1	8.7 x 7.45 x 3.89	Gray	SR-R120-GM-ND•† *NEW!*	18.42	15.36	R-120 GM
6.0 x 8.5 x 3.75	7.75 x 9.25 x 4.5	Gray	SRR200-G-ND	26.38	21.99	R-200 Gray
7.5 x 9.5 x 4.5	9.75 x 10.75 x 5.0	Gray	SR-R300-GM-ND•†	31.56	26.31	R300 GM
9.25 x 12.25 x 5.25	12.0 x 13.0 x 6.0	Gray	SRR500-G-ND	68.02	56.69	R-500 Gray
10.5 x 15.0 x 6.0	13.0 x 16.0 x 7.0	Gray	SRR600-G-ND	88.76	73.97	R-600 Gray
12.875 x 18.0 x 6.75	15.5 x 19.25 x 7.5	Gray	SRR700-G-ND	111.16	92.64	R-700 Gray
4.75 x 7.5 x 3.125	6.5 x 8.5 x 3.25	Yellow	SRR100-Y-ND *NEW!*	21.78	18.16	R-100 Yellow
7.7 x 5.25 x 3.1	8.7 x 7.45 x 3.89	Yellow	SR-R120-Y-ND• *NEW!*	18.42	15.36	R-120 Yellow
6.0 x 8.5 x 3.75	7.75 x 9.25 x 4.5	Yellow	SRR200-Y-ND *NEW!*	27.60	23.01	R-200 Yellow
7.5 x 9.5 x 4.5	9.75 x 10.75 x 5.0	Yellow	SR-R300-Y-ND• *NEW!*	28.14	23.46	R-300 Yellow
9.25 x 12.25 x 5.25	12.0 x 13.0 x 6.0	Yellow	SRR500-Y-ND *NEW!*	71.78	59.82	R-500 Yellow
10.5 x 15.0 x 6.0	13.0 x 16.0 x 7.0	Yellow	SRR600-Y-ND *NEW!*	93.80	78.17	R-600 Yellow
12.875 x 18.0 x 6.75	15.5 x 19.25 x 7.5	Yellow	SRR700-Y-ND *NEW!*	117.56	97.97	R-700 Yellow
4.75 x 7.5 x 3.125	6.5 x 8.5 x 3.25	Orange	SRR100-O-ND *NEW!*	21.78	18.16	R-100 Orange
7.7 x 5.25 x 3.1	8.7 x 7.45 x 3.89	Orange	SR-R120-O-ND• *NEW!*	18.42	15.36	R-120 Orange
6.0 x 8.5 x 3.75	7.75 x 9.25 x 4.5	Orange	SRR200-O-ND *NEW!*	27.60	23.01	R-200 Orange
7.5 x 9.5 x 4.5	9.75 x 10.75 x 5.0	Orange	SR-R300-O-ND• *NEW!*	28.14	23.46	R-300 Orange
9.25 x 12.25 x 5.25	12.0 x 13.0 x 6.0	Orange	SRR500-O-ND *NEW!*	71.78	59.82	R-500 Orange
10.5 x 15.0 x 6.0	13.0 x 16.0 x 7.0	Orange	SRR600-O-ND *NEW!*	93.80	78.17	R-600 Orange
12.875 x 18.0 x 6.75	15.5 x 19.25 x 7.5	Orange	SRR700-O-ND *NEW!*	117.56	97.97	R-700 Orange

Dimensions — W x L x H (Inch)			Digi-Key	Price Each		Serpac
Internal	External	Color	Part No.	1	10	Model No.
"R" Series Case With Foam Insert						
4.75 x 7.5 x 3.125	6.5 x 8.5 x 3.25	Black	SRR100-FB-ND	24.30	20.26	R-100 Black Foam
7.7 x 5.25 x 3.1	8.7 x 7.45 x 3.89	Black	SR-R120-FB-ND• *NEW!*	20.34	16.96	R-120 Black Foam
7.7 x 5.25 x 3.1	8.7 x 7.45 x 3.89	Black	SR-RX120-FB-ND• *NEW!*	33.98	28.32	RX-120 Black Foam
6.0 x 8.5 x 3.75	7.75 x 9.25 x 4.5	Black	SRR200-FB-ND	30.48	25.41	R-200 Black Foam
7.5 x 9.5 x 4.5	9.75 x 10.75 x 5.0	Black	SR-R300-FB-ND•	31.56	26.31	R300-Black Foam
7.5 x 9.5 x 4.5	9.75 x 10.75 x 5.0	Black	SR-RX300-FB-ND• *NEW!*	54.84	45.71	RX-300 Black Foam
9.25 x 12.25 x 5.25	12.0 x 13.0 x 6.0	Black	SRR500-FB-ND	78.22	65.19	R-500 Black Foam
10.5 x 15.0 x 6.0	13.0 x 16.0 x 7.0	Black	SRR600-FB-ND	100.98	84.16	R-600 Black Foam
12.875 x 18.0 x 6.75	15.5 x 19.25 x 7.5	Black	SRR700-FB-ND	129.52	107.94	R-700 Black Foam
7.7 x 5.25 x 3.1	8.7 x 7.45 x 3.89	Gray	SR-R120-FGM-ND•† *NEW!*	20.34	16.96	R-120 GM Foam
6.0 x 8.5 x 3.75	7.75 x 9.25 x 4.5	Gray	SRR200-FG-ND	30.48	25.41	R-200 Gray Foam
7.5 x 9.5 x 4.5	9.75 x 10.75 x 5.0	Gray	SR-R300-FGM-ND•†	31.56	26.31	R300 GM Foam
9.25 x 12.25 x 5.25	12.0 x 13.0 x 6.0	Gray	SRR500-FG-ND	78.22	65.19	R-500 Gray Foam
10.5 x 15.0 x 6.0	13.0 x 16.0 x 7.0	Gray	SRR600-FG-ND	100.98	84.16	R-600 Gray Foam
12.875 x 18.0 x 6.75	15.5 x 19.25 x 7.5	Gray	SRR700-FG-ND	129.52	107.94	R-700 Gray Foam
4.75 x 7.5 x 3.125	6.5 x 8.5 x 3.25	Yellow	SRR100-FY-ND *NEW!*	25.40	21.17	R-100 Yellow Foam
7.7 x 5.25 x 3.1	8.7 x 7.45 x 3.89	Yellow	SR-R120-FY-ND• *NEW!*	20.34	16.96	R-120 Yellow Foam
6.0 x 8.5 x 3.75	7.75 x 9.25 x 4.5	Yellow	SRR200-FY-ND *NEW!*	31.96	26.64	R-200 Yellow Foam
7.5 x 9.5 x 4.5	9.75 x 10.75 x 5.0	Yellow	SR-R300-FY-ND• *NEW!*	32.84	27.37	R-300 Yellow Foam
9.25 x 12.25 x 5.25	12.0 x 13.0 x 6.0	Yellow	SRR500-FY-ND *NEW!*	82.06	68.39	R-500 Yellow Foam
10.5 x 15.0 x 6.0	13.0 x 16.0 x 7.0	Yellow	SRR600-FY-ND *NEW!*	106.06	88.39	R-600 Yellow Foam
12.875 x 18.0 x 6.75	15.5 x 19.25 x 7.5	Yellow	SRR700-FY-ND *NEW!*	136.14	113.46	R-700 Yellow Foam
4.75 x 7.5 x 3.125	6.5 x 8.5 x 3.25	Orange	SRR100-FO-ND *NEW!*	25.40	21.17	R-100 Orange Foam
7.7 x 5.25 x 3.1	8.7 x 7.45 x 3.89	Orange	SR-R120-FO-ND• *NEW!*	20.34	16.96	R-120 Orange Foam
6.0 x 8.5 x 3.75	7.75 x 9.25 x 4.5	Orange	SRR200-FO-ND *NEW!*	31.96	26.64	R-200 Orange Foam
7.5 x 9.5 x 4.5	9.75 x 10.75 x 5.0	Orange	SR-R300-FO-ND• *NEW!*	32.84	27.37	R-300 Orange Foam
9.25 x 12.25 x 5.25	12.0 x 13.0 x 6.0	Orange	SRR500-FO-ND *NEW!*	82.06	68.39	R-500 Orange Foam
10.5 x 15.0 x 6.0	13.0 x 16.0 x 7.0	Orange	SRR600-FO-ND *NEW!*	106.06	88.39	R-600 Orange Foam
12.875 x 18.0 x 6.75	15.5 x 19.25 x 7.5	Orange	SRR700-FO-ND *NEW!*	136.14	113.46	R-700 Orange Foam
"R" Series Case Accessories						
Top plate for SR-R120-X-ND 8.0 x 5.5 x .06			SR7150T-ND *NEW!*	14.62	—	7150T
Waterproof bottom plate for SR-R120-X-ND 8.31 x 5.75 x .06 with perimeter seal o-ring			SR7150B-ND *NEW!*	16.80	—	7150B

• Pressure purge valve under latch † Gun Metal Gray
NOTE: SR-RX = Flame Retardant, UV protected, Chemical resistant

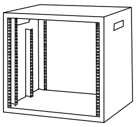
Racks and Accessories

Fig. 1



Desk Top Rack (Light-Duty)- RCBS Series - 18-gauge steel economy 19" table top rack. Rails are fixed at both front and rear. Includes rubber feet, 2 lifting handles and 10-32 clip nuts. Overall width 20", overall height 1" over panel space. Finish textured; black or gray/beige (Ral7032) powder paint.

Fig. 2



Desk Top Rack (Heavy-Duty) - RCHS Series- 18 gauge steel 19" table top rack. Rails are fixed at both front and rear. Includes 2 pair of fixed accessory rails (for rear support of heavier equipment), rubber feet, 2 lifting handles and 10-32 clip nuts. Overall height: 2" larger than panel height. Finish textured; black, gray/beige (RAL7032) or gulf blue powder paint.

Fig. 3

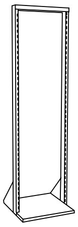
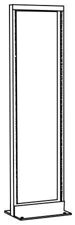


Fig. 4



Open Relay Rack DNRR Series- welded 19" racks (20" wide overall) are available in both light (12-gauge steel) and heavy duty (10-gauge steel) versions. No assembly required. Front flange is drilled and tapped (10-32) EIA .5-1.25" spacing. For use as a single, free standing unit for sturdy support of standard 19" rack mount devices. Finished in textured black powder paint.

Fig. 5

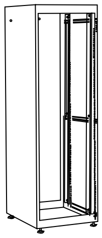


Fig. 6

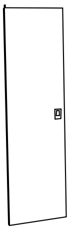
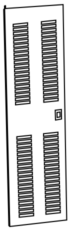


Fig. 7



Knockdown Racks REFK Series - offer a standard 19" panel width (22" overall), 24" usable depth (24.5" overall). Unit is shipped complete with 4 infinitely adjustable (front to back) combination rack mount rails, drilled and tapped 10-32 (full EIA spacing) and 4 leveling feet. Shipped in a flat pack container for damage-free receipt. Simple assembly using one bolt in each corner to lock the sides to the top and bottom Heavy duty 16-gauge steel tip, bottom and sides. Rails are made of 10-gauge steel finished in black powder paint. Rack is finished in a textured black or gray/beige (RAL7032) powder paint. Order doors separately below.

Color	Dimensions–Inch (mm) Panel H	Panel W	Panel D	Digi-Key Part No.	Price Each 1	3	5	Hammond Part No.
Fig. 1 RCBS Desk Top Racks (Light Duty)								
Black	3.50 (89)	19.00 (483)	13.00 (330)	HM624-ND	85.55	78.97	68.44	RCBS1900313BK1
	5.25 (133)	19.00 (483)	13.00 (330)	HM625-ND	92.05	84.97	73.64	RCBS1900513BK1
	7.00 (178)	19.00 (483)	13.00 (330)	HM626-ND	99.49	91.84	79.59	RCBS1900713BK1
	8.75 (222)	19.00 (483)	13.00 (330)	HM627-ND	112.78	104.10	90.22	RCBS1900813BK1
	10.50 (267)	19.00 (483)	13.00 (330)	HM628-ND	117.97	108.90	94.38	RCBS1901013BK1
	12.25 (311)	19.00 (483)	13.00 (330)	HM629-ND	128.34	118.47	102.67	RCBS1901213BK1
	14.00 (356)	19.00 (483)	13.00 (330)	HM630-ND	160.75	148.38	128.60	RCBS1901413BK1
	5.25 (133)	19.00 (483)	17.50 (445)	HM631-ND	110.19	101.71	88.15	RCBS1900517BK1
	7.00 (178)	19.00 (483)	17.50 (445)	HM632-ND	128.34	118.47	102.67	RCBS1900717BK1
	8.75 (222)	19.00 (483)	17.50 (445)	HM633-ND	152.95	141.19	122.36	RCBS1900817BK1
	10.50 (267)	19.00 (483)	17.50 (445)	HM634-ND	162.05	149.58	129.64	RCBS1901017BK1
	12.25 (311)	19.00 (483)	17.50 (445)	HM635-ND	177.61	163.95	142.09	RCBS1901217BK1
	14.00 (356)	19.00 (483)	17.50 (445)	HM636-ND	181.48	167.52	145.18	RCBS1901417BK1
Gray	3.50 (89)	19.00 (483)	13.00 (330)	HM637-ND	85.55	78.97	68.44	RCBS1900313CG1
	5.25 (133)	19.00 (483)	13.00 (330)	HM638-ND	92.05	84.97	73.64	RCBS1900513CG1
	7.00 (178)	19.00 (483)	13.00 (330)	HM639-ND	99.54	91.88	79.63	RCBS1900713CG1
	8.75 (222)	19.00 (483)	13.00 (330)	HM640-ND	112.78	104.10	90.22	RCBS1900813CG1
	10.50 (267)	19.00 (483)	13.00 (330)	HM641-ND	117.97	108.90	94.38	RCBS1901013CG1
	12.25 (311)	19.00 (483)	13.00 (330)	HM642-ND	128.34	118.47	102.67	RCBS1901213CG1
	14.00 (356)	19.00 (483)	13.00 (330)	HM643-ND	160.75	148.38	128.60	RCBS1901413CG1
	5.25 (133)	19.00 (483)	17.50 (445)	HM644-ND	110.19	101.71	88.15	RCBS1900517CG1
	7.00 (178)	19.00 (483)	17.50 (445)	HM645-ND	128.34	118.47	102.67	RCBS1900717CG1
	8.75 (222)	19.00 (483)	17.50 (445)	HM646-ND	152.95	141.19	122.36	RCBS1900817CG1
	10.50 (267)	19.00 (483)	17.50 (445)	HM647-ND	162.05	149.58	129.64	RCBS1901017CG1
	12.25 (311)	19.00 (483)	17.50 (445)	HM648-ND	177.61	163.95	142.09	RCBS1901217CG1
	14.00 (356)	19.00 (483)	17.50 (445)	HM649-ND	181.48	167.52	145.18	RCBS1901417CG1
Fig. 2 RCHS Desk Top (Heavy Duty)								
Black	8.75 (222)	19.00 (483)	17.50 (445)	HM650-ND	165.86	153.10	132.68	RCHS1900817BK1
	10.50 (267)	19.00 (483)	17.50 (445)	HM651-ND	191.81	177.05	153.44	RCHS1901017BK1
	14.00 (356)	19.00 (483)	17.50 (445)	HM652-ND	196.37	181.27	157.10	RCHS1901417BK1
	17.50 (445)	19.00 (483)	17.50 (445)	HM653-ND	203.91	188.22	163.13	RCHS1901717BK1
	22.75 (578)	19.00 (483)	17.50 (445)	HM654-ND	222.04	204.96	177.63	RCHS1902217BK1
	28.00 (711)	19.00 (483)	17.50 (445)	HM655-ND	260.99	240.72	208.79	RCHS1902817BK1
	10.50 (267)	19.00 (483)	24.50 (622)	HM656-ND	258.28	238.41	206.62	RCHS1901024BK1
	14.00 (356)	19.00 (483)	24.50 (622)	HM657-ND	271.87	250.95	217.49	RCHS1901424BK1
	17.50 (445)	19.00 (483)	24.50 (622)	HM658-ND	280.94	259.33	224.75	RCHS1901724BK1
	22.75 (578)	19.00 (483)	24.50 (622)	HM659-ND	290.00	267.69	232.00	RCHS1902224BK1
	28.00 (711)	19.00 (483)	24.50 (622)	HM660-ND	302.06	278.83	241.65	RCHS1902824BK1
Gray	8.75 (222)	19.00 (483)	17.50 (445)	HM661-ND	165.86	153.10	132.68	RCHS1900817CG1
	10.50 (267)	19.00 (483)	17.50 (445)	HM662-ND	191.81	177.05	153.44	RCHS1901017CG1
	14.00 (356)	19.00 (483)	17.50 (445)	HM663-ND	196.37	181.27	157.10	RCHS1901417CG1
	17.50 (445)	19.00 (483)	17.50 (445)	HM664-ND	203.91	188.22	163.13	RCHS1901717CG1
	22.75 (578)	19.00 (483)	17.50 (445)	HM665-ND	222.04	204.96	177.63	RCHS1902217CG1
	28.00 (711)	19.00 (483)	17.50 (445)	HM666-ND	260.99	240.92	208.79	RCHS1902817CG1
	10.50 (267)	19.00 (483)	24.50 (622)	HM667-ND	258.28	238.41	206.62	RCHS1901024CG1
	14.00 (356)	19.00 (483)	24.50 (622)	HM668-ND	271.87	250.95	217.49	RCHS1901424CG1
	17.50 (445)	19.00 (483)	24.00 (622)	HM669-ND	280.94	259.33	224.75	RCHS1901724CG1
	22.75 (578)	19.00 (483)	24.50 (622)	HM670-ND	290.00	267.69	232.00	RCHS1902224CG1
	28.00 (711)	19.00 (483)	24.50 (622)	HM671-ND	302.06	278.83	241.65	RCHS1902824CG1
Blue	8.75 (222)	19.00 (483)	17.50 (445)	HM672-ND	165.86	153.10	132.68	RCHS1900817GF1
	10.50 (267)	19.00 (483)	17.50 (445)	HM673-ND	191.81	177.05	153.44	RCHS1901017GF1
	14.00 (356)	19.00 (483)	17.50 (445)	HM674-ND	196.37	181.27	157.10	RCHS1901417GF1
	17.50 (445)	19.00 (483)	17.50 (445)	HM675-ND	203.91	188.22	163.13	RCHS1901717GF1
	22.75 (578)	19.00 (483)	17.50 (445)	HM676-ND	222.04	204.96	177.63	RCHS1902217GF1
	28.00 (711)	19.00 (483)	17.50 (445)	HM677-ND	260.99	240.92	208.79	RCHS1902817GF1
	10.50 (267)	19.00 (483)	24.50 (622)	HM678-ND	258.28	238.41	206.62	RCHS1901024GF1
	14.00 (356)	19.00 (483)	24.50 (622)	HM679-ND	271.87	250.95	217.49	RCHS1901424GF1
	17.50 (445)	19.00 (483)	24.50 (622)	HM680-ND	280.94	259.33	224.75	RCHS1901724GF1
	22.75 (578)	19.00 (483)	24.50 (622)	HM681-ND	290.00	267.69	232.00	RCHS1902224GF1
	28.00 (711)	19.00 (483)	24.50 (622)	HM682-ND	302.06	278.83	241.65	RCHS1902824GF1

Dimensions–Inch (mm) Panel H	Panel W	Panel Units	Overall Height	Wt. (Lbs.)	Digi-Key Part No.	Price Each 1	3	5	Hammond Part No.
*Fig. 3 DNRR Open Welded (Light-Duty) Relay Rack**									
42 (1067)	19 (483)	24	48.13 (1223)	38	HM683-ND	164.67	152.01	131.74	DNRR42LDW
63 (1600)	19 (483)	36	69.13 (1756)	41	HM684-ND	183.16	169.07	146.53	DNRR63LDW
70 (1778)	19 (483)	40	76.13 (1934)	42	HM685-ND	185.59	171.31	148.47	DNRR70LDW
77 (1956)	19 (483)	44	83.13 (2112)	45	HM686-ND	193.73	178.83	154.99	DNRR77LDW
84 (2134)	19 (483)	48	90.13 (2289)	47	HM687-ND	197.66	182.45	158.12	DNRR84LDW
*Fig. 4 DNRR Open Welded (Heavy-Duty) Relay Rack**									
42 (1067)	19 (483)	24	48.13 (1223)	65	HM688-ND	199.38	184.05	159.51	DNRR42HDW
63 (1600)	19 (483)	36	69.13 (1756)	77	HM689-ND	222.83	205.69	178.27	DNRR63HDW
70 (1778)	19 (483)	40	76.13 (1934)	80	HM690-ND	226.27	208.87	181.02	DNRR70HDW
77 (1956)	19 (483)	44	83.13 (2112)	82	HM691-ND	234.57	216.53	187.66	DNRR77HDW
84 (2134)	19 (483)	48	90.13 (2289)	87	HM692-ND	237.85	219.56	190.28	DNRR84HDW

* Due to weight and size, product will be drop shipped from Hammond direct to our customers. Contact Digi-Key Specialty Sales at 1-888-671-1741.

Color	Dim.–In. (mm) Panel H	Panel Units	Overall Height	Wt. (Lbs.)	Digi-Key Part No.	Price Each 1	3	5	Hammond Part No.
*Fig. 5 REFK Knockdown Rack**									
Black	35 (889)	20	40.19 (1021)	103	HM693-ND	359.38	331.74	287.51	REFK1903524BK1
	42 (1067)	24	47.19 (1199)	111	HM694-ND	386.50	356.77	309.20	REFK1904224BK1
	49 (1245)	28	54.19 (1376)	126	HM696-ND	440.75	406.85	352.60	REFK1904924BK1
	56 (1422)	32	61.19 (1554)	136	HM697-ND	467.87	431.88	374.29	REFK1905624BK1
	63 (1600)	36	68.19 (1732)	145	HM698-ND	467.87	431.88	374.30	REFK1906324BK1
	70 (1778)	40	75.19 (1910)	160	HM699-ND	542.48	500.75	433.98	REFK1907024BK1
	77 (1956)	44	82.19 (2088)	185	HM700-ND	566.88	523.27	453.50	REFK1907724BK1
Lt. Gray	35 (889)	20	40.19 (1021)	103	HM701-ND	359.38	331.74	287.51	REFK1903524CG1
	42 (1067)	24	47.19 (1199)	111	HM702-ND	386.50	356.77	309.20	REFK1904224CG1
	49 (1245)	28	54.19 (1376)	126	HM703-ND	440.75	406.85	352.60	REFK1904924CG1
	56 (1422)	32	61.19 (1554)	136	HM704-ND	467.87	431.88	374.29	REFK1905624CG1
	63 (1600)	36	68.19 (1732)	145	HM705-ND	467.87	431.88	374.30	REFK1906324CG1
	70 (1778)	40	75.19 (1910)	160	HM706-ND	542.48	500.75	433.98	REFK1907024CG1
	77 (1956)	44	82.19 (2088)	185	HM707-ND	566.88	523.27	453.50	REFK1907724CG1

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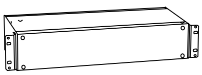
Color	Dim.–Inch (mm) Panel H	Panel Units	Wt. (Lbs.)	Digi-Key Part No.	Price Each 1	3	5	Hammond Part No.
*Fig. 6 - RSDF Solid Door**								
Black	35 (889)	20	13	HM708-ND	94.93	87.63	75.94	RSDF19035BK1
	42 (1067)	24	18	HM709-ND	111.91	103.30	89.53	RSDF19042BK1
	49 (1245)	28	26	HM710-ND	124.07	114.53	99.26	RSDF19049BK1
	56 (1422)	32	30	HM711-ND	135.62	125.18	108.49	RSDF19056BK1
	63 (1600)	36	33	HM712-ND	143.77	132.72	115.02	RSDF19063BK1
	70 (1778)	40	37	HM713-ND	151.89	140.21	121.51	RSDF19070BK1
	77 (1956)	44	41	HM714-ND	164.11	151.48	131.29	RSDF19077BK1
Lt. Gray	35 (889)	20	13	HM715-ND	94.93	87.63	75.94	RSDF19035CG1
	42 (1067)	24	18	HM716-ND	111.91	103.30	89.53	RSDF19042CG1
	49 (1245)	28	26	HM717-ND	124.07	114.53	99.26	RSDF19049CG1
	56 (1422)	32	30	HM718-ND	135.62	125.18	108.49	RSDF19056CG1
	63 (1600)	36	33	HM719-ND	143.77	132.72	115.02	RSDF19063CG1
	70 (1778)	40	37	HM720-ND	151.89	140.21	121.51	RSDF19070CG1
	77 (1956)	44	41	HM721-ND	164.11	151.48	131.29	RDSF19077CG1
*Fig. 7 - RSDL Louvered Door**								
Black	35 (889)	20	13	HM722-ND	107.63	99.35	86.11	RSDL19035BK1
	42 (1067)	24	18	HM723-ND	122.99	113.53	98.39	RSDL19042BK1
	49 (1245)	28	26	HM724-ND	138.42	127.77	110.74	RSDL19049BK1
	56 (1422)	32	30	HM725-ND	151.59	139.93	121.27	RSDL19056BK1
	63 (1600)	36	33	HM726-ND	164.76	152.09	131.81	RSDL19063BK1
	70 (1778)	40	37	HM727-ND	175.75	162.23	140.60	RSDL19070BK1
	77 (1956)	44	41	HM728-ND	186.75	172.38	149.40	RSDL19077BK1
Lt. Gray	35 (889)	20	13	HM729-ND	107.63	99.35	86.11	RSDL19035CG1
	42 (1067)	24	18	HM730-ND	122.99	113.53	98.39	RSDL19042CG1
	49 (1245)	28	26	HM731-ND	138.42	127.77	110.74	RSDL19049CG1
	56 (1422)	32	30	HM732-ND	151.59	139.93	121.27	RSDL19056CG1
	63 (1600)	36	33	HM733-ND	164.76	152.09	131.81	RSDL19063CG1
	70 (1778)	40	37	HM734-ND	175.75	162.23	140.60	RSDL19070CG1
	77 (1956)	44	41	HM735-ND	186.75	172.38	149.40	RSDL19077CG1

* Due to weight and size, product will be drop shipped from Hammond direct to our customers. Contact Digi-Key Specialty Sales at 1-888-671-1741.

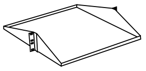
(Continued)

Fig. 8



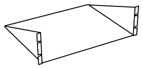
Rack Mount/Desk Top Enclosure RMCS & RMCV Series- mounts in standard 19" rack space or can be used table top. Aluminum panels can be removed from any of all 6 sides with only 4 screws. Shipped knocked down and includes all hardware, rack mount ears and rubber feet. Finished in textured black powder paint.

Fig. 9



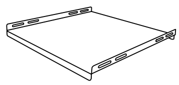
Dual Modem Shelf DNDMS Series- permits front and rear access to modems on 19" relay racks.Formed 16-gauge steel construction. Overall 19.5" deep. Finished in textured black powder paint finish.

Fig. 10



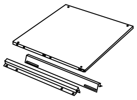
Rack Mount Shelf RASU & RASV Series- 14 gauge steel, 19" relay rack mount shelf available either solid or ventilated. Finished in textured black powder paint.

Fig. 11



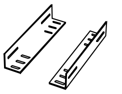
Rail Mount Shelf RFUS & RFVS Series - 14 gauge steel, 19" rack mount shelf available either solid or ventilated. Side slotted for easy front to back adjustment. Finished in textured black powder paint.

Fig. 12



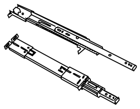
Fixed / Pull-Out Shelf RASC Series - 18 gauge steel with 14 gauge brackets. Mounts to internal rails. 19" relay rack mount shelf available either solid or ventilated. Brackets are side slotted for easy front to back adjustment. Shelf is finished in smooth white.

Fig. 13



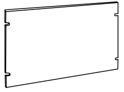
Rail Mount Support Angles RASA Series- 14 gauge steel, 1.75" x 1.75" to support heavy equipment and reduce load on front panel. Slots allow up/down or front back adjustment. Finished in textured black powder paint.

Fig. 14



Equipment slides RSLIDE Series - 19" rack panel mount (to front and back panel rails). Occupies only 1U(1.75") of panel height. Heavy duty, ball bearing mechanism. Also converts RASC slides to a pull out shelf. Sold in packages of 2.

Fig. 15



19" Aluminum Rack Panels PBPA - .125" thick, 19" rack mount panels. Finished in smooth black or gray/beige (RAL7032) powder paint and paper covered (one side) natural finish.

	Dimensions–Inch (mm)			Digi-Key	Price Each			Hammond
Type	Panel H	Depth	Panel Units	Part No.	1	3	5	Part No.
Fig. 8 RMCS & RMCV Rack Mount/Desk Top								
Solid	1.75 (45)	8 (203)	1	HM736-ND	56.67	52.31	45.33	RMCS19018BK1
	1.75 (45)	13 (330)	1	HM737-ND	66.67	61.54	53.33	RMCS190113BK1
	3.50 (89)	8 (203)	2	HM738-ND	63.33	58.46	50.67	RMCS19038BK1
	3.50 (89)	13 (330)	2	HM739-ND	80.00	73.85	64.00	RMCS190313BK1
	5.25 (133)	13 (330)	3	HM740-ND	91.67	84.62	73.33	RMCS190513BK1
	7.00 (178)	13 (330)	4	HM741-ND	105.00	96.92	84.00	RMCS190713BK1
	8.75 (222)	13 (330)	5	HM742-ND	126.67	116.92	101.33	RMCS190813BK1
	10.50 (267)	13 (330)	6	HM743-ND	140.00	129.23	112.00	RMCS191013BK1
	10.50 (267)	15 (381)	6	HM744-ND	138.33	127.69	110.67	RMCS191015BK1
Vented	1.75 (45)	8 (203)	1	HM745-ND	62.33	57.54	49.87	RMCV19018BK1
	1.75 (45)	13 (330)	1	HM746-ND	73.33	67.69	58.67	RMCV190113BK1
	3.50 (89)	8 (203)	2	HM747-ND	69.67	64.31	55.73	RMCV19038BK1
	3.50 (89)	13 (330)	2	HM748-ND	88.00	81.23	70.40	RMCV190313BK1
	5.25 (133)	13 (330)	3	HM749-ND	100.83	93.08	80.67	RMCV190513BK1
	7.00 (178)	13 (330)	4	HM750-ND	115.50	106.62	92.40	RMCV190713BK1
	8.75 (222)	13 (330)	5	HM751-ND	139.33	128.62	111.47	RMCV190813BK1
	10.50 (267)	13 (330)	6	HM752-ND	154.00	142.15	123.20	RMCV191013BK1
	10.50 (267)	15 (381)	6	HM753-ND	152.17	140.46	121.73	RMCV19015BK1

Dimensions - Inch (mm)	Digi-Key	Price Each			Hammond
Depth	Part No.	1	3	5	Part No.
Fig. 9 DNDMS Dual Modem Shelf					
19.5 (495)	HM754-ND	54.75	50.54	43.80	DNDMS19BK1

	Dimensions–Inch (mm)			Digi-Key	Price Each			Hammond
Type	Panel H	Shelf Depth	Panel Units	Part No.	1	3	5	Part No.
Fig. 10 RASU & RASV Panel Mount Shelf								
Solid	5.25 (133)	15 (381)	3	HM755-ND	58.83	54.30	47.06	RASU190515BK1
Vented	5.25 (133)	15 (381)	3	HM756-ND	66.44	61.32	53.15	RASV190515BK1

	Dimensions - Inch (mm)		Digi-Key	Price Each			Hammond
Type	Panel W	Shelf Depth	Part No.	1	3	5	Part No.
Fig. 11 RFUS & RFVS Rail Shelf							
Solid	19 (483)	19 (483)	HM757-ND	34.79	32.12	27.83	RFUS1918BK1
	19 (483)	21 (533)	HM758-ND	36.88	34.05	29.51	RFUS1921BK1
	19 (483)	26 (660)	HM759-ND	39.49	36.46	31.60	RFUS1926BK1
Vented	19 (483)	19 (483)	HM760-ND	34.79	32.12	27.83	RFVS1918BK1
	19 (483)	21 (533)	HM761-ND	36.88	34.05	29.51	RFVS1921BK1
	19 (483)	26 (660)	HM762-ND	39.49	36.46	31.60	RFVS1926BK1

	Dimensions - Inch (mm)		Digi-Key	Price Each			Hammond
Panel W	Shell Depth	Bracket Depth	Part No.	1	3	5	Part No.
Fig. 12 RASC Fixed/Pull Out Shelf							
19 (483)	11.9 (302)	13.2 (335)	HM763-ND	56.06	51.75	44.85	RASC1912WH2
19 (483)	15.9 (404)	14.9 (378)	HM764-ND	62.98	58.14	50.39	RASC1916WH2
19 (483)	21.9 (556)	20.9 (531)	HM765-ND	71.71	66.29	57.45	RASC1922WH2

Dimensions - Inch (mm)	Digi-Key	Price Each			Hammond
Depth	Part No.	1	3	5	Part No.
Fig. 13 RASA Rack Support Angles					
9.97 (253)	HM766-ND	21.07	19.45	16.86	RASA12BK3
14.95 (380)	HM767-ND	22.97	21.21	18.38	RASA16BK3
20.95 (532)	HM768-ND	25.93	23.93	20.74	RASA22BK3

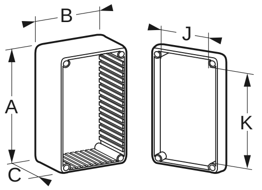
Dimensions - Inch (mm)		Digi-Key	Price Each			Hammond
Side Length	Capacity (Pair)	Part No.	1	3	5	Part No.
Fig. 14 RSLIDE Chassis Slide						
12 (305)	120 lbs.	HM769-ND	52.76	48.70	42.21	RSLIDE12
16 (406)	130 lbs.	HM770-ND	54.98	50.75	43.98	RSLIDE16
22 (559)	120 lbs.	HM771-ND	58.31	53.82	46.65	RSLIDE22

	Dimensions - Inch (mm)		Digi-Key	Price Each			Hammond
Color	Panel H	Panel Units	Part No.	1	3	5	Part No.
Fig. 15 PBPA Aluminum 19" Rack Panels							
Black	1.75 (45)	1	HM772-ND	8.41	7.76	6.73	PBPA19001BK2
	3.50 (89)	2	HM773-ND	12.39	11.44	9.91	PBPA19003BK2
	5.25 (133)	3	HM774-ND	17.69	16.33	14.15	PBPA19005BK2
	7.00 (178)	4	HM775-ND	22.11	20.41	17.69	PBPA19007BK2
	8.75 (222)	5	HM776-ND	26.16	24.15	20.93	PBPA19008BK2
	10.50 (267)	6	HM777-ND	29.48	27.21	23.59	PBPA19010BK2
	12.25 (311)	7	HM778-ND	35.36	32.64	28.29	PBPA19012BK2
	14.00 (356)	8	HM779-ND	39.79	36.73	31.84	PBPA19014BK2
	15.75 (400)	9	HM780-ND	42.75	39.46	34.20	PBPA19015BK2
	17.50 (445)	10	HM781-ND	48.67	44.92	38.93	PBPA19017BK2
	19.25 (489)	11	HM782-ND	56.39	52.05	45.11	PBPA19019BK2
	21.00 (533)	12	HM783-ND	60.44	55.79	48.35	PBPA19021BK2
	22.75 (578)	13	HM784-ND	64.13	59.20	51.31	PBPA19022BK2
	24.50 (622)	14	HM785-ND	70.03	64.64	56.02	PBPA19024BK2
	26.25 (667)	15	HM786-ND	75.20	69.41	60.16	PBPA19026BK2
	28.00 (711)	16	HM787-ND	80.34	74.16	64.27	PBPA19028BK2
	29.75 (756)	17	HM788-ND	84.03	77.57	67.22	PBPA19029BK2
	31.00 (787)	18	HM789-ND	86.26	79.62	69.01	PBPA19031BK2
Lt. Gray	1.75 (45)	1	HM790-ND	8.41	7.76	6.73	PBPA19001CG2
	3.50 (89)	2	HM791-ND	12.39	11.44	9.91	PBPA19003CG2
	5.25 (133)	3	HM792-ND	17.69	16.33	14.15	PBPA19005CG2
	7.00 (178)	4	HM793-ND	22.11	20.41	17.69	PBPA19007CG2
	8.75 (222)	5	HM794-ND	26.16	24.15	20.93	PBPA19008CG2
	10.50 (267)	6	HM795-ND	29.48	27.21	23.59	PBPA19010CG2
	12.25 (311)	7	HM796-ND	35.36	32.64	28.29	PBPA19012CG2
	14.00 (356)	8	HM797-ND	39.80	36.73	31.84	PBPA19014CG2
	15.75 (400)	9	HM798-ND	42.75	39.46	34.20	PBPA19015CG2
	17.50 (445)	10	HM799-ND	48.67	44.92	38.93	PBPA19017CG2
	19.25 (489)	11	HM800-ND	56.39	52.05	45.11	PBPA19019CG2
	21.00 (533)	12	HM801-ND	60.44	55.79	48.35	PBPA19021CG2
	22.75 (578)	13	HM802-ND	64.13	59.20	51.31	PBPA19022CG2
	24.50 (622)	14	HM803-ND	70.03	64.64	56.02	PBPA19024CG2
	26.25 (667)	15	HM804-ND	75.20	69.41	60.16	PBPA19026CG2
	28.00 (711)	16	HM805-ND	80.34	74.16	64.27	PBPA19028CG2
	29.75 (756)	17	HM806-ND	84.03	77.57	67.22	PBPA19029CG2
	31.50 (787)	18	HM807-ND	86.26	79.62	69.01	PBPA19031CG2
Unfin-ished	1.75 (45)	1	HM808-ND	8.41	7.76	6.73	PBPA19001UNF
	3.50 (89)	2	HM809-ND	12.39	11.44	9.91	PBPA19003UNF
	5.25 (133)	3	HM810-ND	17.69	16.33	14.15	PBPA19005UNF
	7.00 (178)	4	HM811-ND	22.11	20.41	17.69	PBPA19007UNF
	8.75 (222)	5	HM812-ND	26.16	24.15	20.93	PBPA19008UNF
	10.50 (267)	6	HM813-ND	29.48	27.21	23.59	PBPA19010UNF
	12.25 (311)	7	HM814-ND	35.36	32.64	28.29	PBPA19012UNF
	14.00 (356)	8	HM815-ND	39.80	36.73	31.84	PBPA19014UNF
	15.75 (400)	9	HM816-ND	42.75	39.46	34.20	PBPA19015UNF
	17.50 (445)	10	HM817-ND	48.67	44.92	38.93	PBPA19017UNF
	19.25 (489)	11	HM818-ND	56.39	52.05	45.11	PBPA19019UNF
	21.00 (533)	12	HM819-ND	60.44	55.79	48.35	PBPA19021UNF
	22.75 (578)	13	HM820-ND	64.13	59.20	51.31	PBPA19022UNF
	24.50 (622)	14	HM821-ND	70.03	64.64	56.02	PBPA19024UNF
	26.25 (667)	15	HM822-ND	75.20	69.41	60.16	PBPA19026UNF
	28.00 (711)	16	HM823-ND	80.34	74.16	64.27	PBPA19028UNF
	29.75 (756)	17	HM824-ND	84.03	77.57	67.22	PBPA19029UNF
	31.50 (787)	18	HM825-ND	86.26	79.62	69.01	PBPA19031UNF

	Qty. Per	Digi-Key	Price Each			Hammond
Description	Pack	Part No.	1	3	5	Part No.
19" Rack Mount Hardware						
10-32 x 0.75" Phillips oval head screw/plastic washer	4	HM826-ND	2.39	2.21	1.91	1421A
Nickel plated 10-32 x 0.625" countersunk Phillips head	100	HM827-ND	13.88	12.81	11.10	1421A100B
Black plastic cup washer for countersunk 10-32 screws	100	HM828-ND	25.21	23.28	20.17	1421A100W
Nickel plated cup washer for countersunk 10-32 screws	100	HM829-ND	10.22	9.44	8.18	1421E100W
10-32 clip nuts for all panel rails	25	HM830-ND	10.98	10.14	8.78	1421N25

Plastic and Aluminum Enclosures

Fig. 1 – Plastic Instrument Enclosures - 1591 Series

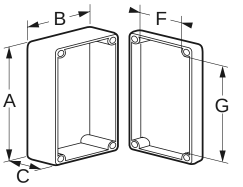


Lid adds 4mm to height of box. For dimensions A, B and C, see charts below.

Part No.	Dim. Inch (mm) J	K
1591L	1.4 (36)	2.5 (64)
1591A	1.1 (28)	3.1 (79)
1591B	1.6 (41)	3.5 (89)
1591C	1.7 (43)	3.9 (99)
1591D	2.3 (58)	5.0 (127)
1591E	3.5 (89)	6.6 (168)
1591G	2.8 (71)	3.9 (99)
1591H	1.9 (48)	5.6 (142)
1591M	1.3 (33)	2.5 (64)
1591S	2.4 (61)	3.5 (89)
1591T	2.3 (58)	3.9 (99)
1591U	3.9 (99)	3.9 (99)
1591V	3.9 (99)	3.9 (99)

Available in both High Impact Polystyrene (black) and in Flame Retardant ABS (black, blue, or light grey). Economical styrene versions come with four self-tapping #4 x 1/2" (12.7mm) flat head screws countersunk into the lid. ABS versions carry a UL flammability rating of 94V-0 at 1.47mm thickness and a continuous use temperature rating of 60°C. ABS versions come with M3 x .5 x 10mm Philips head screws, countersunk lid, and integral tapped brass bushings. Both versions have interlocking flanged lid and integral card guides to accept .062" (1.57mm) PC cards.

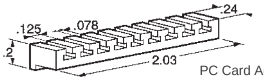
Fig. 2 – Diecast Aluminum Enclosures



Lid adds 4mm to height of box (except for 1500Z series). For dimensions A, B, and C, see charts below.

Part No.	Lid Height for 1590 Heavy DutyWatertight Diecast Aluminum Alloy Enclosure Dim. Inch (mm)
1590Z100	0.47 (12)
1590Z110	0.47 (12)
1590Z120	0.62 (16)
1590Z130	0.47 (12)
1590Z135	0.79 (20)
1590Z150	0.79 (20)
1590Z160	0.79 (20)

Part No.	Dim. - Inch (mm) F	G
1590A	.89 (23)	3.01 (76)
1590B	1.71 (43)	3.76 (96)
1590BB	3.05 (77)	4.04 (103)
1590C	3.07 (78)	4.09 (104)
1590D	4.07 (103)	6.75 (171)
1590DD	4.07 (103)	6.77 (172)
1590E	4.07 (103)	6.75 (171)
1590F	6.75 (171)	6.75 (171)
1590H	.86 (22)	1.41 (36)
1590J	3.09 (78)	5.06 (129)
1590K	4.27 (108)	4.27 (108)
1590LB	1.36 (35)	1.36 (35)
1590P1	2.87 (73)	5.38 (137)
1590S	2.58 (66)	3.72 (94)
1590T	2.5 (64)	4.11 (104)
1590U	4.07 (103)	4.07 (103)
1590V	4.07 (103)	4.07 (103)



PC Card Adapter

1590 Series: Drilled and tapped with lid and 6-32 x 1/2" (12.7mm) countersunk Philips screws. Choice of standard, flanged or watertight lid. Interlocking flanged lid provides complete RF shielding. Watertight lid has a clear bead of rubberlike silicon around the perimeter to provide protection against dust and water. Designed to meet IP54.

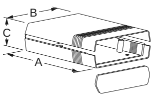
1590Z Series: Watertight, heavy duty - thick wall. Two piece "tongue & groove" construction with a neoprene gasket provides protection against dust and water. Four recessed stainless steel machine screws and individual neoprene "O" rings secure lid. Optional M4x6mm copper grounding screws with designated enclosures. Designed to meet IP65.

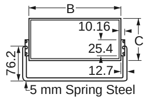
Color	Dimensions - Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	100	Hammond Part No.
Fig. 1 - 1591 Economy Styrene Plastic Enclosures								
Black	3.3 (84)	2.2 (56)	1.4 (36)	HM100-ND	3.32	2.77	2.55	1591LSBK
	3.3 (84)	2.2 (56)	0.8 (21)	HM361-ND	2.80	2.34	2.16	1591MSBK
	3.9 (100)	2.0 (50)	0.8 (21)	HM102-ND	3.08	2.57	2.37	1591ASBK
	4.4 (112)	2.4 (62)	1.1 (28)	HM103-ND	3.34	2.78	2.57	1591BSBK
	4.7 (120)	2.6 (65)	1.4 (36)	HM104-ND	3.54	2.95	2.72	1591CSBK
	5.9 (150)	3.2 (81)	1.8 (46)	HM105-ND	5.26	4.38	4.05	1591DSBK
	7.5 (191)	4.3 (110)	2.2 (56)	HM106-ND	6.30	5.25	4.85	1591ESBK
	4.8 (121)	3.7 (94)	1.2 (30)	HM107-ND	4.20	3.50	3.23	1591GSBK
	6.5 (165)	2.8 (71)	1.0 (25)	HM108-ND	4.18	3.48	3.22	1591HSBK
	4.3 (110)	3.2 (81)	1.6 (41)	HM109-ND	4.50	3.75	3.46	1591SSBK
	4.7 (120)	3.2 (81)	2.2 (56)	HM110-ND	4.96	4.13	3.82	1591TSBK
	4.7 (120)	4.7 (120)	2.2 (56)	HM111-ND	5.31	4.43	4.09	1591USBK
	4.7 (120)	4.7 (120)	3.5 (90)	HM112-ND	6.36	5.30	4.89	1591VSBK
Fig. 1 - 1591 ABS Flame Retardant Plastic Enclosures								
Black	3.3 (84)	2.2 (56)	1.4 (36)	HM113-ND	5.30	4.42	4.08	1591LBK
	3.3 (84)	2.2 (56)	0.8 (21)	HM362-ND	4.20	3.51	3.23	1591MBK
	3.9 (100)	2.0 (50)	0.8 (21)	HM114-ND	4.94	4.12	3.80	1591ABK
	4.4 (112)	2.4 (62)	1.1 (28)	HM115-ND	5.34	4.45	4.11	1591BBK
	4.7 (120)	2.6 (65)	1.4 (36)	HM116-ND	5.68	4.73	4.37	1591CBK
	5.9 (150)	3.2 (81)	1.8 (46)	HM117-ND	8.40	7.00	6.46	1591DBK
	7.5 (191)	4.3 (110)	2.2 (56)	HM118-ND	10.08	8.40	7.75	1591EBK
	4.8 (121)	3.7 (94)	1.2 (30)	HM119-ND	6.72	5.60	5.17	1591GBK
	6.5 (165)	2.8 (71)	1.0 (25)	HM120-ND	6.68	5.57	5.14	1591HBK
	4.3 (110)	3.2 (81)	1.6 (41)	HM121-ND	7.18	5.98	5.52	1591SBK
	4.7 (120)	3.2 (81)	2.2 (56)	HM122-ND	7.94	6.62	6.11	1591TBK
	4.7 (120)	4.7 (120)	2.2 (56)	HM123-ND	8.50	7.08	6.54	1591UBK
	4.7 (120)	4.7 (120)	3.5 (90)	HM124-ND	10.18	8.48	7.83	1591VBK
Blue	3.3 (84)	2.2 (56)	1.4 (36)	HM125-ND	5.30	4.42	4.08	1591LBU
	3.3 (84)	2.2 (56)	0.8 (21)	HM363-ND	4.20	3.50	3.23	1591MBU
	3.9 (100)	2.0 (50)	0.8 (21)	HM126-ND	4.94	4.12	3.80	1591ABU
	4.4 (112)	2.4 (62)	1.1 (28)	HM127-ND	5.34	4.45	4.11	1591BBU
	4.7 (120)	2.6 (65)	1.4 (36)	HM128-ND	5.68	4.73	4.37	1591CBU
	5.9 (150)	3.2 (81)	1.8 (46)	HM129-ND	8.40	7.00	6.46	1591DBU
	7.5 (191)	4.3 (110)	2.2 (56)	HM131-ND	10.08	8.40	7.75	1591EBU
	4.8 (121)	3.7 (94)	1.2 (30)	HM132-ND	6.72	5.60	5.17	1591GBU
	6.5 (165)	2.8 (71)	1.0 (25)	HM133-ND	6.68	5.57	5.14	1591HBU
	4.3 (110)	3.2 (81)	1.6 (41)	HM134-ND	7.18	5.98	5.52	1591SBU
	4.7 (120)	3.2 (81)	2.2 (56)	HM135-ND	7.94	6.62	6.11	1591TBU
	4.7 (120)	4.7 (120)	2.2 (56)	HM136-ND	8.50	7.08	6.54	1591UBU
	4.7 (120)	4.7 (120)	3.5 (90)	HM137-ND	10.18	8.48	7.83	1591VBU
Lt. Grey	3.3 (84)	2.2 (56)	1.4 (36)	HM138-ND	5.30	4.42	4.08	1591LGY
	3.3 (84)	2.2 (56)	0.8 (21)	HM364-ND	4.20	3.50	3.23	1591MGY
	3.9 (100)	2.0 (50)	0.8 (21)	HM139-ND	4.94	4.12	3.80	1591AGY
	4.4 (112)	2.4 (62)	1.1 (28)	HM140-ND	5.34	4.45	4.10	1591BGY
	4.7 (120)	2.6 (65)	1.4 (36)	HM141-ND	5.68	4.73	4.37	1591CGY
	5.9 (150)	3.2 (81)	1.8 (46)	HM142-ND	8.40	7.00	6.46	1591DGY
	7.5 (191)	4.3 (110)	2.2 (56)	HM143-ND	10.08	8.40	7.75	1591EGY
	4.8 (121)	3.7 (94)	1.2 (30)	HM144-ND	6.72	5.60	5.17	1591GGY
	6.5 (165)	2.8 (71)	1.0 (25)	HM145-ND	6.68	5.57	5.14	1591HGY
	4.3 (110)	3.2 (81)	1.6 (41)	HM146-ND	7.18	5.99	5.52	1591SGY
	4.7 (120)	3.2 (81)	2.2 (56)	HM147-ND	7.94	6.62	6.11	1591TGY
	4.7 (120)	4.7 (120)	2.2 (56)	HM148-ND	8.50	7.08	6.54	1591UGY
	4.7 (120)	4.7 (120)	3.5 (90)	HM149-ND	10.18	8.48	7.83	1591VGY
Fig. 2 - PC Card Adapter								
PC Card Adapter for 1591 Boxes				HM204-ND	2.40	2.00	1.85	1591Z6
Fig. 2 - 1590 Diecast Aluminum Alloy Enclosures								
Natural	3.64 (92.5)	1.52 (38.5)	1.06 (27.0)	HM150-ND	7.00	5.83	5.38	1590A
	4.39 (111.5)	2.34 (59.5)	1.06 (27.0)	HM151-ND	8.00	6.67	6.15	1590B
Natural	4.67 (118.5)	3.68 (93.5)	1.18 (30.0)	HM152-ND	10.40	8.67	8.00	1590BB
	4.72 (120.0)	3.70 (94.0)	2.07 (52.5)	HM153-ND	11.70	9.75	9.00	1590C
	7.38 (187.5)	4.70 (119.5)	2.05 (52.0)	HM154-ND	19.16	15.97	14.74	1590D
	7.40 (188)	4.70 (120)	1.30 (33)	HM347-ND	16.86	14.05	12.97	1590DD
	7.38 (187.5)	4.70 (119.5)	3.07 (78.0)	HM155-ND	20.50	17.08	15.77	1590E
	7.38 (187.5)	7.38 (187.5)	2.48 (63.0)	HM156-ND	27.56	22.97	21.20	1590F
	1.99 (50.5)	1.99 (50.5)	1.06 (27.0)	HM157-ND	7.22	6.02	5.55	1590LB
	2.07 (53)	1.50 (38)	1.06 (27)	HM365-ND	6.22	5.19	4.78	1590H
	5.71 (145)	3.74 (95)	1.77 (45)	HM366-ND	12.30	10.25	9.46	1590J
	4.92 (125)	4.92 (125)	2.95 (75)	HM367-ND	20.00	16.67	15.38	1590K
	6.01 (153)	3.24 (82)	1.81 (46)	HM348-ND	14.30	11.92	11.00	1590P1
	4.35 (110.5)	3.21 (81.5)	1.57 (40.0)	HM158-ND	10.56	8.80	8.12	1590S
	4.74 (120.5)	3.13 (79.5)	2.17 (55.0)	HM159-ND	10.90	9.08	8.38	1590T
	4.70 (119.5)	4.70 (119.5)	2.17(55.0)	HM160-ND	16.00	13.33	12.31	1590U
	4.70 (119.5)	4.70 (119.5)	3.54 (90.0)	HM161-ND	22.00	18.33	16.92	1590V
Fig. 2 - 1590 Flanged Lid Diecast Aluminum Alloy Enclosures								
Un-painted	1.99 (51)	1.99 (51)	1.06 (27)	HM570-ND	7.94	6.62	6.11	1590LBFL
	3.64 (93)	1.52 (39)	1.06 (27)	HM571-ND	7.70	6.42	5.92	1590AFL
	4.39 (112)	2.34 (60)	1.06 (27)	HM572-ND	8.80	7.33	6.77	1590BFL
	4.67 (119)	3.68 (94)	1.18 (30)	HM573-ND	11.44	9.53	8.80	1590BBFL
	7.40 (188)	4.70 (119)	1.30 (33)	HM574-ND	18.54	15.45	14.26	1590DDFL
	4.35 (111)	3.21 (82)	1.57 (40)	HM575-ND	11.62	9.68	8.94	1590SFL
	6.01 (153)	3.24 (82)	1.81 (46)	HM576-ND	15.73	13.11	12.10	1590P1FL
	7.38 (188)	4.70 (119)	2.05 (52)	HM577-ND	21.08	17.56	16.21	1590DFL
	4.72 (120)	3.70 (94)	2.07 (53)	HM578-ND	12.87	10.73	9.90	1590CFL
	4.74 (120)	3.13 (80)	2.17 (55)	HM579-ND	11.99	9.99	9.22	1590TFL
	4.70 (119)	4.70 (119)	2.17 (55)	HM580-ND	17.60	14.67	13.54	1590UFL
	7.38 (188)	7.38 (188)	2.48 (63)	HM581-ND	30.32	25.26	23.32	1590FFL
	7.38 (188)	4.70 (119)	3.07 (78)	HM582-ND	22.55	18.79	17.36	1590EFL
	4.70 (119)	4.70 (119)	3.54 (90)	HM583-ND	24.20	20.17	18.62	1590VFL
Fig. 2 - 1590 Watertight Diecast Aluminum Alloy Enclosures								
Un-painted	1.99 (51)	1.99 (51)	1.06 (27)	HM584-ND	7.90	6.58	6.08	1590WLB
	3.64 (93)	1.52 (39)	1.06 (27)	HM585-ND	8.08	6.73	6.22	1590WA
	4.39 (112)	2.34 (60)	1.06 (27)	HM586-ND	9.16	7.63	7.05	1590WB
	4.67 (119)	3.68 (94)	1.18 (30)	HM587-ND	11.60	9.67	8.92	1590WBB
	7.40 (188)	4.70 (119)	1.30 (33)	HM588-ND	18.46	15.38	14.20	1590WDD
	4.35 (111)	3.21 (82)	1.57 (40)	HM589-ND	16.96	14.13	13.05	1590WS
	6.01 (153)	3.24 (82)	1.81 (46)	HM590-ND	15.74	13.12	12.11	1590WP1
	7.38 (188)	4.70 (119)	2.05 (52)	HM591-ND	20.74	17.28	15.95	1590WD
	4.72 (120)	3.70 (94)	2.07 (53)	HM592-ND	12.82	10.68	9.86	1590WC
	4.74 (120)	3.13 (80)	2.17 (55)	HM593-ND	12.02	10.02	9.25	1590WT
	4.70 (119)	4.70(119)	2.17 (55)	HM594-ND	17.40	14.50	13.38	1590WU
	7.38 (188)	7.38 (188)	2.48 (63)	HM595-ND	29.68	24.73	22.83	1590WF
	7.38 (188)	4.70 (119)	3.07 (78)	HM596-ND	22.08	18.40	16.98	1590WE
	4.70 (119)	4.70 (119)	3.54 (90)	HM597-ND	23.38	19.48	17.98	1590WV
Fig. 2 - 1590 Heavy Duty Watertight Diecast Aluminum Alloy Enclosures								
Un-painted	2.94 (75)	3.14 (80)	1.57 (40)†	HM598-ND*	17.80	14.83	13.28	1590Z100
	2.94 (75)	3.14 (80)	1.57 (40)†	HM599-ND	17.80	14.83	13.28	1590Z110
	4.92 (125)	3.15 (80)	1.72 (44)†	HM600-ND*	21.60	18.00	16.12	1590Z120
	6.89 (175)	3.15 (80)	1.61 (41)†	HM601-ND	25.60	21.33	19.10	1590Z130
	6.89 (175)	3.15 (80)	1.61 (41)†	HM602-ND‡	26.00	21.67	19.40	1590Z135
	8.70 (220)	4.76 (120)	2.39 (61)†	HM603-ND*	47.00	39.17	35.07	1590Z150
	6.30 (160)	6.30 (160)	2.76 (70)†	HM604-ND*‡	52.00	43.33	38.81	1590Z160

* With mounting shelf ‡ With lid ground screw † Dimension "C" does not include lid height

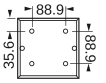
(Continued)

Fig. 3 – Plastic Instrument Cases - 1598 Series





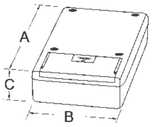
Example of case with optional tilt handle.



Example of Digi-Key Part #1598E mounting bosses.

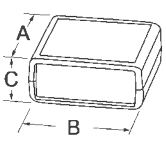
Available in both Flame Retardant ABS (black or light grey) and High Impact Polystyrene (light grey). Both versions have a matte textured finish, .064" (1.63mm) thick brushed aluminum front and rear panels, integral horizontal PC board mounts on Eurocard centers, front and rear vertical PC board slots. Both versions accept optional tilt handles. ABS versions carry a UL flammability rating of 94V-0 and are secured with M3 x .5 x 10mm Philips head screws into integral brass bushings. Styrene versions are secured with #4 x 1/2" (12.7mm) self-tapping screws.

Fig. 4 – Plastic Hand Held Cases - 1599 Series

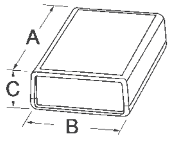


Available in both High Impact Polystyrene (light grey) and Flame Retardant ABS (black or light grey). Both versions have these features: attractively styled and ergonomically designed for use as a hand held enclosure; ends sized for infra-red applications; extra deep top and ultra shallow base; two piece lap joint construction; recessed top area ideal for membrane display; internal universal battery compartment; user friendly 10mm x 10mm reference grid is molded into the top interior; six PC board mounting bosses molded into both the top and the base; vertical mounting slots molded into the top for PC boards or optional dividers. ABS versions carry UL flammability rating of 94V-0 and are secured with integral tapped brass bushings. Styrene versions are secured with self-tapping screws.

Fig. 5 – Plastic Hand Held Instrument Boxes -1593 Series



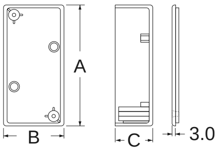
1593K



1593Q

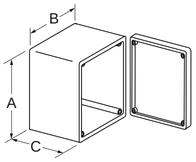
Electronic instrument enclosures. Two-piece lap joint construction. ABS plastic. Unit is secured with self-tapping screws.

Fig. 6 – Miniature General Purpose Enclosures - 1551 Series



Two piece lap joint constuction. Choice of black or grey ABS plastic. Designed to meet IP54.

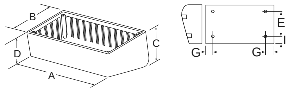
Fig. 7 – Plastic Instrument Boxes - 1594 Series



Cover adds 12mm to height

Available in both High Impact Polystyrene (light grey) and Flame Retardant ABS (black or light grey). Both versions feature lap joint construction, interlocking flange on lid, and a rugged and robust design.

Fig. 8 – Plastic Instrument Consoles - 1595 Series



For dimensions A, B and C, see charts below.

Part No.	Dimensions D	E	G	I
1595C	39.62	62.23	21.84	10.16
1595E	51.59	85.09	21.84	10.16

Aluminum lid and rubber feet included.

Available in Flame Retardant ABS (black or light grey) which meets UL 94V-0 flammability tests. Unique sloped front design comes with 0.04" (1.02mm) thick brushed aluminum front panel, four self-adhesive rubber feet, and four M3 x .5 x 10mm machine screws threaded into integral brass bushings. Integral card guides accept .062" (1.57mm) PC boards. Base has four internal 0.20" (5.08mm) stand-off bosses.

Color	Dimensions - Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	100	Hammond Part No.
Fig. 3 - 1598 ABS Flame Retardant 2-Piece Plastic Instrument Case								
Black	6.18 (157)	3.70 (94)	1.42 (36)	HM162-ND	9.73	8.11	7.49	1598ABK
	5.28 (134)	5.31 (135)	1.96 (50)	HM163-ND	10.68	8.90	8.22	1598BBK
	7.05 (179)	6.06 (154)	1.42 (36)	HM368-ND	10.83	9.03	8.33	1598BBBK
	7.09 (180)	6.10 (155)	2.04 (52)	HM164-ND	13.35	11.13	10.27	1598CBK
	7.09 (180)	8.11 (206)	2.52 (64)	HM165-ND	16.31	13.59	12.54	1598DBK
	6.30 (160)	6.30 (160)	3.38 (86)	HM166-ND	16.04	13.36	12.33	1598EBK
	9.84 (250)	6.30 (160)	1.58 (40)	HM167-ND	17.13	14.27	13.18	1598FBK
	9.84 (250)	6.30 (160)	3.00 (76)	HM168-ND	20.08	16.73	15.44	1598GBK
	11.02 (280)	7.87 (200)	1.58 (40)	HM169-ND	21.08	17.56	16.21	1598HBK
	11.02 (280)	7.87 (200)	3.00 (76)	HM170-ND	26.12	21.76	20.10	1598JBK
Lt. Grey	6.18 (157)	3.70 (94)	1.42 (36)	HM171-ND	9.73	8.11	7.49	1598AGY
	5.28 (134)	5.31 (135)	1.96 (50)	HM172-ND	10.68	8.90	8.22	1598BGY
	7.05 (179)	6.06 (154)	1.42 (36)	HM369-ND	10.83	9.03	8.33	1598BBGY
	7.09 (180)	6.10 (155)	2.04 (52)	HM173-ND	13.35	11.13	10.27	1598CGY
	7.09 (180)	8.11 (206)	2.52 (64)	HM174-ND	16.31	13.59	12.54	1598DGY
	6.30 (160)	6.30 (160)	3.38 (86)	HM175-ND	16.03	13.36	12.33	1598EGY
	9.84 (250)	6.30 (160)	1.58 (40)	HM176-ND	17.13	14.27	13.18	1598FGY
	9.84 (250)	6.30 (160)	3.00 (76)	HM177-ND	20.09	16.74	15.45	1598GGY
	11.02 (280)	7.87 (200)	1.58 (40)	HM178-ND	21.07	17.56	16.21	1598HGY
	11.02 (280)	7.87 (200)	3.00 (76)	HM179-ND	26.11	21.76	20.09	1598JGY
Fig. 3 - 1598 Styrene 2-Piece Plastic Instrument Cases								
Lt. Grey	6.18 (157)	3.70 (94)	1.42 (36)	HM245-ND	7.14	5.95	5.49	1598ASGY
	5.28 (134)	5.31 (135)	1.96 (50)	HM246-ND	8.00	6.66	6.15	1598BSGY
	7.05 (179)	6.06 (154)	1.42 (36)	HM370-ND	8.64	7.20	6.65	1598BBSGY
	7.09 (180)	6.10 (155)	2.04 (52)	HM247-ND	9.38	7.81	7.21	1598CSGY
	7.09 (180)	8.11 (206)	2.52 (64)	HM248-ND	11.23	9.36	8.64	1598DSGY
	6.30 (160)	6.30 (160)	3.38 (86)	HM249-ND	11.19	9.33	8.61	1598ESGY
	9.84 (250)	6.30 (160)	1.58 (40)	HM250-ND	10.95	9.13	8.42	1598FSGY
	9.84 (250)	6.30 (160)	3.00 (76)	HM251-ND	12.84	10.70	9.88	1598GSGY
	11.02 (280)	7.87 (200)	1.58 (40)	HM252-ND	12.81	10.68	9.85	1598HSGY
	11.02 (280)	7.87 (200)	3.00 (76)	HM253-ND	14.93	12.44	11.48	1598JSGY
Chrome Plated Tilt Handles for Instrument Cases								
Handle for 1598C, E, F, G Series				HM255-ND	11.15	9.29	8.57	1598TH1
Handle for 1598D, H, J Series				HM256-ND	11.15	9.29	8.57	1598TH2
Fig. 4 - 1599 Styrene Hand Held Cases								
Lt. Grey	5.12 (130)	2.56 (65)	0.98 (25)	HM209-ND	5.24	4.36	4.03	1599BSGY
	6.70 (170)	3.35 (85)	1.33 (34)	HM210-ND	5.90	4.91	4.53	1599ESGY
	8.66 (220)	4.33 (110)	1.73 (44)	HM211-ND	6.78	5.65	5.22	1599HSGY
Fig. 4 - 1599 ABS Hand Held Cases								
Black	5.12 (130)	2.56 (65)	0.98 (25)	HM212-ND	6.90	5.75	5.31	1599BBK
	6.70 (170)	3.35 (85)	1.33 (34)	HM213-ND	8.38	6.99	6.45	1599EBK
	8.66 (220)	4.33 (110)	1.73 (44)	HM214-ND	10.27	8.56	7.90	1599HBK
Lt. Grey	5.12 (130)	2.56 (65)	0.98 (25)	HM215-ND	6.90	5.75	5.31	1599BGY
	6.70 (170)	3.35 (85)	1.33 (34)	HM216-ND	8.38	6.99	6.45	1599EGY
	8.66 (220)	4.33 (110)	1.73 (44)	HM217-ND	10.27	8.56	7.90	1599HGY

Color	Dimensions - Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	100	Hammond Part No.
Fig. 4 - 1599 ABS Hand Held Case w/Battery Box								
Black	5.12 (130)	2.56 (65)	0.98 (25)	HM351-ND	8.70	7.25	6.69	1599BBKBAT
	6.70 (170)	3.35 (85)	1.33 (34)	HM353-ND	10.35	8.63	7.96	1599EBKBAT
Grey	5.12 (130)	2.56 (65)	0.98 (25)	HM352-ND	8.70	7.25	6.69	1599BGYBAT
	6.70 (170)	3.35 (85)	1.33 (34)	HM354-ND	10.35	8.63	7.96	1599EGYBAT
Fig. 4 - 1599 Styrene Plastic Case w/Battery Box								
Grey	5.12 (130)	2.56 (65)	0.98 (25)	HM349-ND	6.65	5.54	5.11	1599BSGYBAT
	6.70 (170)	3.35 (85)	1.33 (34)	HM350-ND	7.68	6.40	5.91	1599ESGYBAT
Fig. 5 - 1593 ABS Plastic Hand Held Boxes								
Black	2.60 (66)	2.60 (66)	1.10 (28)	HM355-ND	2.10	1.75	1.62	1593KBK
	3.60 (91)	2.60 (66)	1.10 (28)	HM357-ND	3.00	2.50	2.31	1593PBK
	4.40 (111)	2.60 (66)	1.10 (28)	HM359-ND	3.38	2.81	2.60	1593QBK
	3.60 (91)	2.60 (66)	.83 (21)	HM371-ND	2.80	2.33	2.15	1593SBK
	4.40 (112)	2.60 (66)	.83 (21)	HM372-ND	3.18	2.65	2.45	1593TBK
Grey	2.60 (66)	2.60 (66)	1.10 (28)	HM356-ND	2.10	1.75	1.62	1593KGY
	3.60 (91)	2.60 (66)	1.10 (28)	HM358-ND	3.00	2.50	2.31	1593PGY
	4.40 (111)	2.60 (66)	1.10 (28)	HM360-ND	3.38	2.81	2.60	1593QGY
	3.60 (91)	2.60 (66)	.83 (21)	HM373-ND	2.80	2.33	2.15	1593SGY
	4.40 (112)	2.60 (66)	.83 (21)	HM374-ND	3.18	2.65	2.45	1593TGY
Fig. 6 - 1551 ABS Plastic General Purpose Boxes								
Black	1.97 (50)	1.38 (35)	.67 (17)	HM375-ND	1.00	.83	.77	1551GBK
	2.36 (60)	1.38 (35)	.67 (17)	HM376-ND	1.14	.95	.88	1551HBK
	3.15 (80)	1.57 (40)	.67 (17)	HM377-ND	1.20	1.00	.92	1551KBK
Lt. Grey	1.97 (50)	1.38 (35)	.67 (17)	HM378-ND	1.00	.83	.77	1551GGY
	2.36 (60)	1.38 (35)	.67 (17)	HM379-ND	1.14	.95	.88	1551HGY
	3.15 (80)	1.57 (40)	.67 (17)	HM380-ND	1.20	1.00	.92	1551KGY
Fig. 7 - 1594 Styrene Plastic Instrument Boxes								
Lt. Grey	2.2 (56)	2.2 (56)	1.1 (28)	HM221-ND	3.62	3.01	2.78	1594ASGY
	3.2 (81)	2.2 (56)	1.1 (28)	HM222-ND	3.81	3.18	2.93	1594BSGY
	4.1 (105)	2.6 (66)	1.3 (33)	HM223-ND	4.16	3.46	3.20	1594CSGY
	5.2 (131)	2.6 (66)	1.7 (43)	HM224-ND	4.44	3.70	3.42	1594DSGY
	6.6 (167)	4.2 (107)	2.1 (53)	HM225-ND	5.79	4.83	4.45	1594ESGY
Fig. 7 - 1594 ABS Plastic Instrument Boxes								
Black	2.2 (56)	2.2 (56)	1.1 (28)	HM226-ND	6.30	5.25	4.85	1594ABK
	3.2 (81)	2.2 (56)	1.1 (28)	HM227-ND	6.59	5.49	5.07	1594BBK
	4.1 (105)	2.6 (66)	1.3 (33)	HM228-ND	8.10	6.75	6.23	1594CBK
	5.2 (131)	2.6 (66)	1.7 (43)	HM229-ND	9.63	8.03	7.41	1594DBK
Lt. Grey	6.6 (167)	4.2 (107)	2.1 (53)	HM230-ND	11.86	9.89	9.13	1594EBK
	2.2 (56)	2.2 (56)	1.1 (28)	HM231-ND	6.30	5.25	4.85	1594AGY
	3.2 (81)	2.2 (56)	1.1 (28)	HM232-ND	6.59	5.49	5.07	1594BGY
	4.1 (105)	2.6 (66)	1.3 (33)	HM233-ND	8.10	6.75	6.23	1594CGY
	5.2 (131)	2.6 (66)	1.7 (43)	HM234-ND	9.63	8.03	7.41	1594DGY
	6.6 (167)	4.2 (107)	2.1 (53)	HM235-ND	11.86	9.89	9.13	1594EGY
Fig. 8 - 1595 ABS Plastic Instrument Consoles								
Lt. Grey	6.34 (161)	3.78 (96)	2.29 (58)	HM241-ND	10.05	8.38	7.50	1595CGY
	8.47 (215)	5.12 (130)	2.96 (75.1)	HM242-ND	12.45	10.38	9.29	1595EGY
Black	6.34 (161)	3.78 (96)	2.29 (58)	HM243-ND	10.05	8.37	7.50	1595CBK
	8.47 (215)	5.12 (130)	2.96 (75.1)	HM244-ND	12.45	10.38	9.29	1595EBK

(Continued)

Fig. 9 – Aluminum Utility Cases - 1411 Series

.040" (1.02mm) thick aluminum.
Four self-tapping screws included.
Choice of unpainted or ASA 61 grey baked enamel finish (outside only).

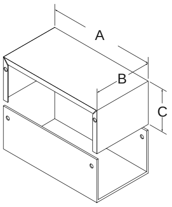
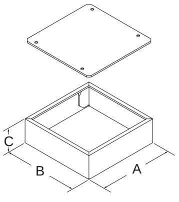


Fig. 10 – Heavy Duty Chassis Case and Cover Plates - 1444 Series

Cover No.	Use with Digi-Key #	Use with Hammond #
HM275-ND	HM257-ND	1444-6
HM276-ND	HM258-ND	1444-8
HM277-ND	HM259-ND	1444-9
	HM260-ND	1444-10
HM278-ND	HM261-ND	1444-12
HM279-ND	HM262-ND	1444-14
HM280-ND	HM263-ND	1444-15
	HM264-ND	1444-16
HM281-ND	HM265-ND	1444-18

Cover No.	Use with Digi-Key #	Use with Hammond #
HM282-ND	HM266-ND	1444-20
HM283-ND	HM267-ND	1444-22
	HM268-ND	1444-24
HM284-ND	HM269-ND	1444-26
	HM270-ND	1444-28
HM285-ND	HM271-ND	1444-29
HM286-ND	HM272-ND	1444-30
	HM273-ND	1444-32
	HM274-ND	1444-33



Spot welded heavy duty construction chassis. Cover holes are punched with 4 holes (hardware not provided). Natural finish.

Cover sold separately.

Fig. 11 – Metal Utility Cases - 1415 Series

Sizes A to E are 20 gauge 0.036" (.91mm) thick steel. Sizes F to J are 18 gauge 0.048" (1.22mm) thick steel. Self-tapping screws included. ASA 61 grey baked enamel finish (outside only). Models A to D have 4 mounting holes. Models E to J have 6 mounting holes

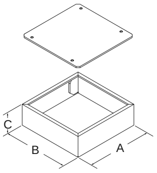


Fig. 12 – Ventilated Low Profile Instrument Cases - 1426 Series

20 gauge steel enclosure finished in satin off-white. 0.064" (1.63mm) thick aluminum panels front and rear. Front panel is satin black, rear panel matches case color.

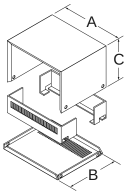


Fig. 13 – LowProfile Instrument Cases - 1458 Series

20 gauge steel case with black satin finish. 0.064" (1.63mm) thick aluminum panels (one satin black and one satin white for each case). Symmetrical design so either end can be front. 6-32 Philips nickel plated screws and self-adhesive rubber feet included.

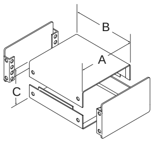
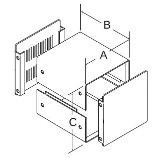


Fig. 14 – Ventilated High Profile Instrument Cases - 1401 Series

20 gauge steel case finished in satin off-white. 0.064" (1.63mm) thick aluminum panels, front finished in satin black; vented back finished in satin off-white. Rear panel is vented top and bottom 6-32 Philips nickel plated screws and self-adhesive rubber feet included.



Color	Dimensions - Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	100	Hammond Part No.
Fig. 9 - 1411 Aluminum Utility Cases								
Lt. Grey	2.7 (69)	2.2 (56)	1.6 (41)	HM315-ND	5.00	4.16	3.84	1411B
	3.2 (81)	2.2 (56)	1.1 (28)	HM316-ND	5.07	4.23	3.90	1411C
	3.2 (81)	2.2 (56)	1.6 (41)	HM317-ND	5.10	4.25	3.92	1411D
	4.0 (102)	2.2 (56)	3.0 (76)	HM318-ND	5.60	4.66	4.30	1411F
	4.0 (102)	2.2 (56)	1.6 (41)	HM319-ND	5.30	4.41	4.07	1411G
	4.0 (102)	2.2 (56)	2.2 (56)	HM320-ND	5.39	4.49	4.14	1411H
	5.0 (127)	2.2 (56)	2.2 (56)	HM321-ND	6.18	5.15	4.75	1411K
	5.0 (127)	4.0 (102)	3.0 (76)	HM322-ND	8.04	6.70	6.18	1411L
	6.0 (152)	3.0 (76)	3.0 (76)	HM323-ND	9.00	7.50	6.92	1411M
	5.0 (127)	3.0 (76)	2.2 (56)	HM324-ND	6.57	5.48	5.05	1411N
Fig. 9 - 1411 Aluminum Utility Cases								
Lt. Grey	6.0 (152)	5.0 (127)	4.0 (102)	HM325-ND	11.27	9.39	8.67	1411P
	7.0 (178)	5.0 (127)	3.0 (76)	HM326-ND	10.98	9.15	8.45	1411Q
	8.0 (203)	6.0 (152)	3.5 (89)	HM327-ND	18.00	15.00	13.85	1411R
	8.0 (203)	4.0 (102)	3.0 (76)	HM328-ND	16.50	13.75	12.69	1411S
	10.0 (254)	2.2 (56)	1.6 (41)	HM329-ND	18.08	15.06	13.90	1411T
	10.0 (254)	6.0 (152)	3.5 (89)	HM330-ND	21.92	18.26	16.86	1411U
	12.0 (305)	3.0 (76)	2.2 (56)	HM331-ND	21.00	17.50	16.16	1411W
	12.0 (305)	7.0 (178)	4.0 (102)	HM332-ND	26.25	21.88	20.19	1411X
	17.0 (432)	5.0 (127)	4.0 (102)	HM333-ND	28.50	23.75	21.93	1411Z
Un-painted	2.7 (69)	2.2 (56)	1.6 (41)	HM605-ND	3.24	2.70	2.49	1411BU
	3.2 (81)	2.2 (56)	1.1 (28)	HM606-ND	3.45	2.88	2.65	1411CU
	3.2 (81)	2.2 (56)	1.6 (41)	HM607-ND	3.72	3.10	2.86	1411DU
	4.0 (102)	2.2 (56)	3.0 (76)	HM608-ND	4.17	3.48	3.21	1411FU
	4.0 (102)	2.2 (56)	1.6 (41)	HM609-ND	4.02	3.35	3.09	1411GU
	4.0 (102)	2.2 (56)	2.2 (56)	HM610-ND	4.32	3.60	3.32	1411HU
	5.0 (127)	2.2 (56)	2.2 (56)	HM611-ND	5.36	4.46	4.12	1411KU
	5.0 (127)	4.0 (102)	3.0 (76)	HM612-ND	6.66	5.55	5.12	1411LU
	6.0 (152)	3.0 (76)	3.0 (76)	HM613-ND	7.50	6.25	5.77	1411MU
	5.0 (127)	3.0 (76)	2.2 (56)	HM614-ND	5.29	4.41	4.07	1411NU
	6.0 (152)	5.0 (127)	4 .0(102)	HM615-ND	9.51	7.92	7.32	1411PU
	7.0 (178)	5.0 (127)	3.0 (76)	HM616-ND	6.39	5.33	4.92	1411QU
	8.0 (203)	6.0 (152)	3.5 (89)	HM617-ND	13.43	11.19	10.33	1411RU
	8.0 (203)	4.0 (102)	3.0 (76)	HM618-ND	12.00	10.00	9.23	1411SU
	10.0 (254)	2.2 (56)	1.6 (41)	HM619-ND	13.50	11.25	10.38	1411TU
	10.0 (254)	6.0 (152)	3.5 (89)	HM620-ND	16.86	14.05	12.97	1411UU
	12.0 (305)	3.0 (76)	2.2 (56)	HM621-ND	16.50	13.75	12.69	1411WU
	12.0 (305)	7.0 (178)	4.0 (102)	HM622-ND	21.36	17.80	16.43	1411XU
	17.0 (432)	5.0 (127)	4.0 (102)	HM623-ND	24.00	20.00	18.46	1411ZU
Fig. 10 - 1444 Heavy Duty Chassis Cases								
Natural	4.0 (102)	4.0 (102)	2.0 (51)	HM257-ND	7.91	6.69	6.21	1444-6
	6.0 (152)	4.0 (102)	2.0 (50)	HM258-ND	8.11	6.87	6.38	1444-8
	8.0 (203)	4.0 (102)	1.0 (25)	HM259-ND	8.45	7.15	6.64	1444-9
	8.0 (203)	4.0 (102)	2.0 (50)	HM260-ND	8.66	7.33	6.80	1444-10
	7.0 (178)	5.0 (127)	2.0 (50)	HM261-ND	8.86	7.50	6.96	1444-12
	9.0 (229)	5.0 (127)	2.0 (50)	HM262-ND	10.69	9.05	8.40	1444-14
	10.0 (254)	6.0 (152)	1.0 (25)	HM263-ND	9.33	7.89	7.33	1444-15
	10.0 (254)	6.0 (152)	2.0 (50)	HM264-ND	11.59	9.81	9.11	1444-16
Natural	13.5 (343)	5.0 (127)	2.0 (50)	HM265-ND	12.27	10.38	9.64	1444-18
	17.0 (432)	4.0 (102)	3.0 (76)	HM266-ND	20.32	17.19	15.96	1444-20
	12.0 (305)	8.0 (203)	2.0 (50)	HM267-ND	20.22	17.11	15.89	1444-22
	12.0 (305)	8.0 (203)	3.0 (76)	HM268-ND	20.45	17.31	16.07	1444-24
	16.0 (406)	8.0 (203)	2.0 (50)	HM269-ND	20.39	17.25	16.02	1444-26
	16.0 (406)	8.0 (203)	3.0 (76)	HM270-ND	24.27	20.54	19.07	1444-28
	12.0 (305)	10.0 (254)	2.0 (50)	HM271-ND	20.35	17.22	15.99	1444-29
	17.0 (432)	10.0 (254)	2.0 (50)	HM272-ND	23.59	19.96	18.54	1444-30
Fig. 10 - 1444 Heavy Duty Chassis Cases								
Natural	17.0 (432)	10.0 (254)	3.0 (76)	HM273-ND	27.61	23.37	21.70	1444-32
	17.0 (432)	10.0 (254)	4.0 (102)	HM274-ND	39.82	33.69	31.29	1444-33

Color	Dimensions - Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	100	Hammond Part No.
Fig. 10 - Cover Plates (See Fig. 9 Dia.)								
Natural	4.0 (102)	4.0 (102)	Panel Thickness	HM275-ND	3.82	3.23	3.00	1434-6
	6.0 (152)	4.0 (102)		HM276-ND	4.09	3.46	3.21	1434-8
	8.0 (203)	4.0 (102)		HM277-ND	3.89	3.29	3.05	1434-10
	7.0 (178)	5.0 (127)		HM278-ND	4.01	3.39	3.15	1434-12
	9.0 (229)	5.0 (127)		HM279-ND	4.09	3.46	3.21	1434-14
	10.0 (254)	6.0 (152)		HM280-ND	6.14	5.19	4.82	1434-16
	13.5 (343)	5.0 (127)		HM281-ND	6.55	5.54	5.14	1434-18
	17.0 (432)	4.0 (102)		HM282-ND	6.61	5.60	5.20	1434-20
	12.0 (305)	8.0 (203)		HM283-ND	8.66	7.33	6.80	1434-22
	16.0 (406)	8.0 (203)		HM284-ND	8.66	7.33	6.80	1434-26
	12.0 (305)	10.0 (254)		HM285-ND	8.66	7.33	6.80	1434-29
	17.0 (432)	10.0 (254)		HM286-ND	9.18	7.77	7.21	1434-30
Fig. 11 - 1415 Metal Utility Cases								
Grey	4.0 (102)	2.0 (50)	4.0 (102)	HM305-ND	10.87	9.20	8.54	1415A
	4.0 (102)	3.0 (76)	5.0 (127)	HM306-ND	11.05	9.35	8.68	1415B
	6.0 (152)	4.0 (102)	5.0 (127)	HM307-ND	14.05	11.88	11.04	1415C
	6.0 (152)	6.0 (152)	6.0 (152)	HM308-ND	21.55	18.23	16.93	1415D
	9.0 (229)	5.0 (127)	6.0 (152)	HM309-ND	23.32	19.73	18.32	1415E
	10.0 (254)	7.0 (178)	8.0 (203)	HM310-ND	35.29	29.86	27.73	1415F
	12.0 (305)	6.0 (152)	7.0 (178)	HM311-ND	35.10	29.70	27.58	1415G
	10.0 (254)	8.0 (203)	10.0 (254)	HM312-ND	45.44	38.45	35.70	1415H
	12.0 (305)	8.0 (203)	11.0 (279)	HM313-ND	51.22	43.34	40.24	1415I
	15.0 (383)	7.0 (179)	9.0 (230)	HM314-ND	50.15	42.44	39.42	1415J
Fig. 12 - 1426 Ventilated Low Profile Cases								
Off-White	6.0 (152)	5.0 (127)	4.0 (102)	HM297-ND	34.36	29.08	27.00	1426K
	8.0 (203)	6.0 (152)	4.0 (102)	HM298-ND	35.80	30.29	28.13	1426M
	10.0 (254)	7.0 (178)	4.0 (102)	HM299-ND	40.09	33.92	31.50	1426O
	11.0 (279)	11.7 (297)	5.5 (140)	HM300-ND	40.09	33.92	31.50	1426Q
	12.0 (305)	6.0 (152)	4.0 (102)	HM301-ND	42.95	36.35	33.75	1426S
	12.0 (305)	8.0 (203)	4.0 (102)	HM302-ND	42.95	36.35	33.75	1426V
	12.0 (305)	10.0 (254)	4.0 (102)	HM303-ND	45.82	38.77	36.00	1426W
	12.0 (305)	6.0 (152)	5.5 (140)	HM304-ND	42.95	36.35	33.75	1426Y
Fig. 13 - 1458 Low Profile Instrument Cases								
Black	4.0 (102)	4.0 (102)	3.0 (76)	HM334-ND	28.64	24.23	22.50	1458A3
	6.0 (152)	4.0 (102)	4.0 (102)	HM335-ND	31.75	26.86	24.95	1458B4
	6.0 (152)	6.0 (152)	3.0 (76)	HM336-ND	28.64	24.23	22.50	1458C3
	6.0 (152)	6.0 (152)	4.0 (102)	HM337-ND	29.59	25.04	23.25	1458C4
	8.0 (203)	8.0 (203)	3.0 (76)	HM338-ND	34.61	29.29	27.20	1458D3
	8.0 (203)	8.0 (203)	4.0 (102)	HM339-ND	36.52	30.90	28.70	1458D4
	8.0 (203)	8.0 (203)	5.0 (127)	HM340-ND	39.38	33.33	30.95	1458D5
	8.0 (203)	10.0 (254)	3.0 (76)	HM341-ND	37.47	31.71	29.44	1458E3
	8.0 (203)	10.0 (254)	4.0 (102)	HM342-ND	39.61	33.52	31.13	1458E4
	8.0 (203)	10.0 (254)	5.0 (127)	HM343-ND	41.77	35.34	32.82	1458E5
	10.0 (254)	8.0 (203)	3.0 (76)	HM344-ND	39.61	33.52	31.13	1458G3
	10.0 (254)	8.0 (203)	4.0 (102)	HM345-ND	42.95	36.35	33.75	1458G4
	10.0 (254)	8.0 (203)	5.0 (127)	HM346-ND	40.57	34.33	31.88	1458G5
Fig. 14 - 1401 Ventilated High Profile Cases								
Off-White	4.0 (102)	6.0 (152)	4.0 (102)	HM287-ND	45.11	38.17	35.44	1401AAA
	6.0 (152)	6.0 (152)	5.0 (127)	HM288-ND	42.10	35.62	33.08	1401AA
	6.0 (152)	10.0 (254)	5.0 (127)	HM289-ND	39.10	33.08	30.72	1401A
	8.0 (203)	10.0 (254)	9.0 (229)	HM290-ND	52.62	44.53	41.35	1401C
	8.0 (203)	8.0 (203)	8.0 (203)	HM291-ND	49.61	41.98	38.98	1401E
	10.0 (254)	12.0 (305)	9.0 (229)	HM292-ND	66.15	55.97	51.98	1401G
	10.0 (254)	14.0 (356)	6.5 (165)	HM293-ND	67.65	57.24	53.15	1401K
	12.0 (305)	8.0 (203)	9.0 (229)	HM294-ND	70.66	59.79	55.52	1401M
	14.0 (356)	8.0 (203)	9.0 (229)	HM295-ND	72.16	61.06	56.70	1401N
	14.0 (356)	10.0 (254)	5.0 (127)	HM296-ND	64.65	54.70	50.80	1401P

LMB HEEGER Aluminum Enclosures

Fig. 1 - Aluminum Boxes: • .040” (1.02mm) Plain aluminum • Screw fastening, punched and tapped

Fig. 2 - Snap Together Aluminum Boxes: • .040” (1.02mm) Plain aluminum • An ideal box for construction where screws cannot be used and where access to the box must be quick and often. the catches hold the box together tightly

Fig. 2 - Crown Royal Series Chassis: • Versatile and rugged construction • Constructed of .050” (1.27mm) aluminum, Type 3003-H14 • Plain aluminum • Screws included

Fig. 3 - Aluminum Consoles: • Plain aluminum • The length of the Flat Top of the MDC Series is 1/2 the total depth

Figs. 3 and 4 - Uni-Cab Universal Cabinet System: • Bases are .090 (2.29mm) aluminum. Covers are .063” (1.60mm) aluminum, Type 3003-H14 metal • Pem nuts used throughout for longer life and ease of assembly and disassembly • All parts are primed to protect the metal against the elements and to serve as a paint base. Bases are finished in textured blue, covers are finished in semi-gloss white • The base is approximately 1/4” (6.35mm) larger than the cover dimensions

Fig. 5 - Small Cabinets: • Finished in Grey • By removing four screws in bottom, cover slides off for easy access to interior of enclosure • A housing for small instruments, amplifiers, intercoms, public address systems, and for any small or medium sized item that is being prepared for the market and where price and appearance is a major factor

Fig. 6 - Die Cast Enclosures: Easily machined units useful as instrument and meter cases • Close-fitted flange lids fasten to bosses in the body with counter sunk screws • Aluminum alloy (380) offers excellent screening properties. • Lid adds .156” (3.96mm) to height of enclosure.

Fig. 7 - LMB Perforated Box Chassis: • LMB perforated boxes are adaptable wherever heat dissipation is required, as well as utmost shielding • Plain aluminum

Fig. 8 - UNI-PAC Universal Packaging System: A quality cabinet, engineered for versatility and value, at an affordable price. The Uni-Pac is constructed with .063” (1.60mm) aluminum, with .125” (3.18mm) aluminum sides and four adhesive rubber feet. The top, bottom, and sides are finished in textured blue, the front and rear panels are finished in semi-gloss white • Interchangeable front, back, top and bottom panels

Fig. 9 - Cap Cover Chassis: • Cap cover construction enables the builder to use either the top or the bottom of the chassis for construction • Chassis can also be mounted on its side and construction can be on both top and bottom at the same time • Built from Aircraft quality .040” (1.02mm) aluminum, Type 3003-H14 • Plain aluminum

Fig. 10 - Drawn Miniature Box: • Cold rolled steel, with mounting ears • Made of steel only • Covers are soldered-in when used in assembly • Not fabricated (holes punched in the box) • Plain steel

Fig. 1

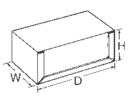
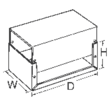


Fig. 2



Snap Together Box Shown

Fig. 3

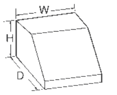


Fig. 4

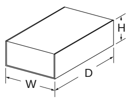


Fig. 5

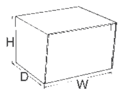


Fig. 6

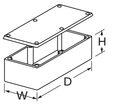


Fig. 7

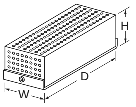


Fig. 8

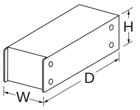


Fig. 9

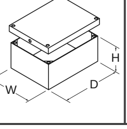
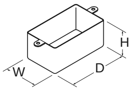


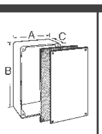
Fig. 10



Dimensions – Inches (mm) D x W x H	Digi-Key Part No.	Pricing 1	10	100
Fig. 1 - Aluminum Boxes				
2.75 x 2.13 x 2.75 (69.85 x 53.98 x 69.85)	L100-ND	4.84	40.17	363.00
3.50 x 2.13 x 1.63 (88.90 x 53.98 x 41.28)	L101-ND	4.60	38.18	345.00
4.00 x 2.25 x 2.25 (101.60 x 57.15 x 57.15)	L102-ND	5.82	48.31	436.50
5.00 x 2.25 x 2.25 (127.00 x 57.15 x 57.15)	L103-ND	6.26	51.96	469.50
5.00 x 4.00 x 3.00 (127.00 x 101.60 x 76.20)	L104-ND	8.72	72.38	654.00
6.00 x 5.00 x 4.00 (152.40 x 127.00 x 101.60)	L105-ND	12.20	101.26	915.00
7.00 x 5.00 x 3.00 (177.80 x 127.00 x 76.20)	L106-ND	12.34	102.42	925.50
8.00 x 6.00 x 3.50 (203.20 x 152.40 x 88.90)	L107-ND	15.02	124.67	1126.50
10.00 x 6.00 x 3.50 (254.00 x 152.40 x 88.90)	L108-ND	17.78	147.57	1333.50
12.00 x 7.00 x 4.00 (304.80 x 177.80 x 101.60)	L109-ND	24.68	204.84	1851.00
17.00 x 5.00 x 4.00 (431.80 x 127.00 x 101.60)	L110-ND	27.10	224.93	2032.50
Fig. 2 - Aluminum Boxes (Snap Together)				
2.75 x 2.13 x 1.63 (69.85 x 53.98 x 41.28)	L111-ND	4.28	35.52	321.00
2.75 x 2.13 x 2.75 (69.85 x 53.98 x 69.85)	L112-ND	4.84	40.17	363.00
3.25 x 2.13 x 1.13 (82.55 x 53.98 x 28.58)	L113-ND	4.28	35.52	321.00
4.00 x 2.13 x 1.63 (101.60 x 53.98 x 41.28)	L114-ND	4.84	40.17	363.00
4.00 x 2.00 x 2.75 (101.60 x 50.80 x 69.85)	L115-ND	5.84	48.47	438.00
5.00 x 2.25 x 2.25 (127.00 x 57.15 x 57.15)	L116-ND	6.26	51.96	469.50
5.00 x 4.00 x 3.00 (127.00 x 101.60 x 76.20)	L117-ND	8.72	72.38	654.00
6.00 x 5.00 x 4.00 (152.40 x 127.00 x 101.60)	L118-ND	12.20	101.26	915.00
7.00 x 5.00 x 3.00 (177.80 x 127.00 x 76.20)	L119-ND	12.34	102.42	925.50
8.00 x 6.00 x 3.50 (203.20 x 152.40 x 88.90)	L120-ND	15.02	124.67	1126.50
10.00 x 6.00 x 3.50 (254.00 x 152.40 x 88.90)	L121-ND	17.78	147.57	1333.50
Fig. 2 - Crown Royal Series Aluminum Boxes				
2.25 x 1.50 x 1.38 (57.15 x 38.10 x 35.05)	L198-ND	5.12	42.50	384.00
4.25 x 2.25 x 1.25 (107.95 x 57.15 x 31.75)	L199-ND	6.98	57.93	523.50
5.50 x 3.00 x 1.25 (139.70 x 76.20 x 31.75)	L200-ND	9.64	80.01	723.00
5.25 x 3.00 x 2.13 (133.35 x 76.20 x 53.98)	L201-ND	10.10	83.83	757.50
6.25 x 3.50 x 2.13 (158.75 x 88.90 x 53.98)	L202-ND	12.70	105.41	952.50
7.00 x 5.00 x 3.00 (177.80 x 127.00 x 76.20)	L203-ND	19.16	159.03	1437.00
8.00 x 6.00 x 4.50 (203.20 x 152.40 x 114.30)	L204-ND	25.84	214.47	1938.00
Fig. 3 - Aluminum Consoles				
4.00 x 3.00 x 2.00 (101.60 x 76.20 x 50.80)	L122-ND	7.94	65.90	595.50
5.00 x 3.00 x 2.00 (127.00 x 76.20 x 50.80)	L123-ND	9.16	76.03	687.00
6.00 x 4.00 x 2.25 (152.40 x 101.60 x 57.15)	L124-ND	10.94	90.80	820.50
7.00 x 5.00 x 2.50 (177.80 x 127.00 x 63.50)	L125-ND	12.62	104.75	946.50
8.00 x 6.00 x 2.75 (203.20 x 152.40 x 69.85)	L126-ND	16.58	137.61	1243.50
9.00 x 7.00 x 3.00 (228.60 x 177.80 x 76.20)	L127-ND	18.24	151.39	1368.00
10.00 x 4.50 x 2.50 (254.00 x 114.30 x 63.50)	L128-ND	16.36	135.79	1227.00
11.00 x 8.00 x 3.50 (279.40 x 203.20 x 88.90)	L129-ND	27.28	226.42	2046.00
13.00 x 10.00 x 4.00 (330.20 x 254.00 x 101.60)	L130-ND	37.04	307.43	2778.00
15.00 x 15.00 x 5.00 (381.00 x 381.00 x 127.00)	L131-ND	60.40	501.29	4529.70
Fig. 3 - Uni-Cab Universal Cabinet System				
5.00 x 5.00 x 1.75 (127.00 x 127.00 x 44.45)	L155-ND	27.18	225.59	2038.50
6.00 x 6.00 x 2.75 (152.40 x 152.40 x 69.85)	L156-ND	31.60	262.28	2370.00
7.00 x 6.00 x 3.50 (177.80 x 152.40 x 88.90)	L157-ND	33.68	279.54	2526.00
5.00 x 7.00 x 3.00 (127.00 x 177.80 x 76.20)	L158-ND	31.24	259.29	2343.00
6.00 x 6.00 x 5.00 (152.40 x 152.40 x 127.00)	L159-ND	36.16	300.13	2712.00
10.00 x 10.00 x 3.00 (254.00 x 254.00 x 76.20)	L161-ND	49.86	413.84	3739.50
10.00 x 12.00 x 4.00 (254.00 x 304.80 x 101.60)	L162-ND	61.78	512.77	4633.50
Fig. 4 - Uni-Cab Universal Cabinet System				
6.00 x 4.00 x 2.00 (152.40 x 101.60 x 50.80)	L154-ND	28.22	234.23	2116.50
10.00 x 6.00 x 4.00 (254.00 x 152.40 x 101.60)	L160-ND	39.90	331.17	2992.50
Fig. 5 - Small Cabinets				
5.00 x 6.00 x 4.00 (127.00 x 152.40 x 101.60)	L147-ND	24.80	205.84	1860.00
6.00 x 8.00 x 5.00 (152.40 x 203.20 x 127.00)	L148-ND	36.40	302.12	2730.00

Dimensions – Inches (mm) D x W x H	Digi-Key Part No.	Pricing 1	10	100
Fig. 6 - Die Cast Enclosures				
3.63 x 1.50 x 1.06 (92.20 x 38.10 x 26.99)	L149-ND	7.50	62.25	562.50
4.38 x 2.38 x 1.06 (111.13 x 60.33 x 26.99)	L150-ND	8.48	70.38	636.00
4.69 x 3.69 x 2.06 (119.08 x 93.65 x 52.40)	L151-ND	13.54	112.38	1015.50
7.39 x 4.70 x 2.06 (187.73 x 119.46 x 52.40)	L152-ND	21.54	178.78	1615.50
7.39 x 4.70 x 3.06 (187.73 x 119.46 x 77.80)	L153-ND	23.24	192.89	1743.00
Fig. 7 - LMB Perforated Box Chassis				
2.75 x 2.13 x 2.63 (69.85 x 53.98 x 66.68)	L163-ND	7.60	63.08	570.00
4.25 x 2.25 x 1.25 (107.95 x 57.15 x 31.75)	L164-ND	7.16	59.43	537.00
4.00 x 2.00 x 2.75 (101.60 x 50.80 x 69.85)	L165-ND	9.28	77.02	696.00
2.75 x 2.13 x 2.13 (69.85 x 53.98 x 53.98)	L166-ND	9.76	81.01	732.00
4.00 x 2.25 x 2.25 (101.60 x 57.15 x 57.15)	L167-ND	8.70	72.21	652.50
5.00 x 2.25 x 2.25 (127.00 x 57.15 x 57.15)	L168-ND	10.12	84.00	759.00
3.75 x 3.00 x 2.13 (95.25 x 76.20 x 53.98)	L169-ND	9.94	82.50	745.50
5.25 x 3.00 x 2.13 (133.35 x 76.20 x 53.98)	L170-ND	11.26	93.46	844.50
8.00 x 3.00 x 2.75 (203.20 x 76.20 x 69.85)	L171-ND	16.48	136.78	1236.00
6.25 x 3.50 x 2.13 (158.75 x 88.90 x 53.98)	L172-ND	14.20	117.86	1065.00
5.50 x 3.00 x 1.25 (139.70 x 76.20 x 31.75)	L173-ND	10.88	90.30	816.00
3.00 x 4.00 x 5.00 (76.20 x 101.60 x 127.00)	L174-ND	14.56	120.85	1092.00
6.00 x 4.00 x 3.00 (152.40 x 101.60 x 76.20)	L175-ND	16.92	140.44	1269.00
6.00 x 4.00 x 5.00 (152.40 x 101.60 x 127.00)	L176-ND	20.56	170.65	1542.00
4.00 x 4.00 x 2.00 (101.60 x 101.60 x 50.80)	L177-ND	11.02	91.47	826.50
10.00 x 4.00 x 2.50 (254.00 x 101.60 x 63.50)	L178-ND	21.32	176.96	1599.00
7.00 x 5.00 x 3.00 (177.80 x 127.00 x 76.20)	L179-ND	21.14	175.46	1585.50
8.00 x 6.00 x 4.50 (203.20 x 152.40 x 114.30)	L180-ND	29.64	246.01	2223.00
Fig. 8 - UNI-PAC Universal Packaging System				
7.00 x 12.00 x 1.75 (177.80 x 304.80 x 44.45)	L181-ND	67.26	558.26	5044.50
9.00 x 12.00 x 3.50 (228.60 x 304.80 x 88.90)	L182-ND	82.54	685.08	6190.50
9.00 x 17.00 x 3.50 (228.60 x 431.80 x 88.90)	L183-ND	96.22	798.63	7216.50
12.00 x 17.00 x 3.50 (304.80 x 431.80 x 88.90)	L184-ND	112.46	933.42	8434.50
7.00 x 14.00 x 5.25 (177.80 x 355.60 x 133.35)	L185-ND	88.74	736.54	6655.50
9.00 x 17.00 x 5.25 (228.60 x 431.80 x 133.35)	L186-ND	107.12	889.10	8034.00
12.00 x 17.00 x 5.25 (304.80 x 431.80 x 133.35)	L187-ND	126.28	1048.12	9471.00
12.00 x 17.00 x 7.00 (304.80 x 431.80 x 177.80)	L188-ND	141.32	1172.96	10599.00
14.00 x 17.00 x 7.00 (355.60 x 431.80 x 177.80)	L189-ND	154.28	1280.52	11571.00
Fig. 9 - Cap Cover Chassis				
5.00 x 7.00 x 2.00 (127.00 x 177.80 x 50.80)	L190-ND	18.02	149.57	1351.50
5.00 x 7.00 x 3.00 (127.00 x 177.80 x 76.20)	L191-ND	19.42	161.19	1456.50
6.00 x 4.00 x 3.00 (152.40 x 101.60 x 76.20)	L192-ND	17.30	143.59	1297.50
7.00 x 10.00 x 3.00 (177.80 x 254.00 x 76.20)	L193-ND	27.76	230.41	2082.00
8.00 x 10.00 x 2.00 (203.20 x 254.00 x 50.80)	L194-ND	25.36	210.49	1902.00
8.00 x 10.00 x 3.00 (203.20 x 254.00 x 76.20)	L195-ND	29.00	240.70	2175.00
8.00 x 10.00 x 4.00 (203.20 x 254.00 x 101.60)	L196-ND	31.30	259.79	2347.50
8.00 x 12.00 x 3.00 (203.20 x 304.80 x 76.20)	L197-ND	32.18	267.09	2413.50
Fig. 10 - Drawn Miniature Box with Ears (Lids Sold Separately)				
1.75 x 1.25 x .88 (44.45 x 31.75 x 22.23)	L206-ND	1.60	13.28	120.00
2.00 x 1.75 x .75 (50.80 x 44.45 x 19.05)	L208-ND	1.60	13.28	120.00
2.00 x 1.75 x 1.00 (50.80 x 44.45 x 25.40)	L210-ND	1.60	13.28	120.00
2.00 x 2.00 x 1.25 (50.80 x 50.80 x 31.75)	L212-ND	1.60	13.28	120.00
Optional Lids for Drawn Miniature Boxes				
Lid for L206-ND Box..............................	L205-ND	1.10	9.13	82.50
Lid for L208-ND Box..............................	L207-ND	1.10	9.13	82.50
Lid for L210-ND Box..............................	L209-ND	1.10	9.13	82.50
Lid for L212-ND Box..............................	L211-ND	1.10	9.13	82.50

KEYSTONE ELECTRONICS CORP. Instrument Boxes



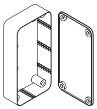
• **Panels:** Mount flush inside of case, holes drilled in panel positioned for the inserts • **Phenolic Panel:** ≤ 3/32” (2.38mm) thick glossy black MIL-P-3115C • **Aluminum Panel:** .055” (1.40mm) thick, #5052-H34 per QQ 318 C • **Boxes:** Precision molded with rounded outside corners, and ≤ 3/16” x 3/16” (4.76mm x 4.76mm) deep threaded brass inserts in base.

Note 1: 703 & 704 have 4-40 tapped hole in each corner - no inserts
Note 2: 705 mounting holes untapped - Use #4 self tapping screw.

Dimensions Inches (mm)			Case Only		Black Phenolic Panel Only		Aluminum Panel Only	
A	B	C	Digi-Key Part No.	Price Each	Digi-Key Part No.	Price Each	Digi-Key Part No.	Price Each
2.88 (73.15)	3.94 (100.08)	1.44 (36.58)	703K-ND	2.12	2042K-ND	.82	2044K-ND	1.32
2.88 (73.15)	3.94 (100.08)	1.44 (36.58)	705K-ND	1.94	2042K-ND	.82	2044K-ND	1.32
3.06 (77.72)	5.88 (149.35)	2.25 (57.15)	704K-ND	4.93	2043K-ND	1.37	2045K-ND	2.14
3.75 (95.25)	6.25 (158.75)	2.00 (50.80)	700K-ND	4.79	2037K-ND	2.06	2046K-ND	1.94
5.25 (133.35)	6.75 (171.45)	2.31 (58.67)	701K-ND	8.78	2038K-ND	3.10	2047K-ND	2.88
7.38 (187.45)	8.38 (212.85)	3.00 (76.20)	702K-ND	15.28	2039K-ND	6.72	2048K-ND	6.43

Instrument Boxes

Economical cases molded of high impact material. Mating cover has interlocking flange on lid, countersunk holes for flush mounting. Internal grooved guides to hold PC boards and circuit cards from .062 to .093 thick. Ideal for prototype or production usage.
• Low cost • Choice of 7 sizes • Sturdy construction

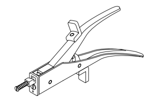


Cases supplied with cover and mounting screws

Dimensions Inches (mm) A	B	C	Color/Material	Digi-Key Part No.	Price Each 1	10	100
2.00 (50.80)	4.00 (101.60)	.812 (20.62)	Blue Styrene	760K-ND	3.35	3.09	1.82
2.44 (61.90)	4.38 (111.13)	1.06 (26.97)	Blue Styrene	761K-ND	4.06	3.75	2.20
2.50 (63.50)	4.75 (120.65)	1.40 (35.56)	Blue Styrene	762K-ND	4.36	4.02	2.36
2.88 (73.03)	4.00 (101.60)	1.56 (39.67)	Black ABS	706K-ND	6.44	5.94	3.69
3.15 (80.01)	6.00 (152.40)	1.84 (46.74)	Blue Styrene	763K-ND	6.79	6.27	3.70
3.75 (95.25)	6.25 (158.75)	2.00 (50.80)	Black ABS	707K-ND	10.08	9.30	5.79
4.33 (109.98)	7.50 (190.50)	2.22 (56.39)	Blue Styrene	764K-ND	8.61	7.95	4.70

GC ELECTRONICS™ Nibbler Tool

For Panels, Boxes

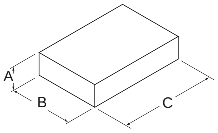


Spring loaded nibbling tool for cutting plastic and metal. Cut from the side or from a single .375” (9.52mm) hole. Will cut up to 18 AWG steel or .062” (1.57mm) copper, brass, aluminum or plastics.

GC395-ND Nibbler Tool....**$13.94**

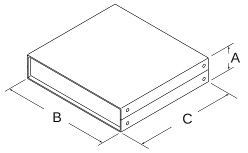
Enclosures

Fig. 1



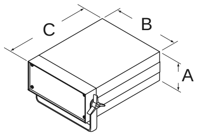
Welded at stress points for assured, maximum strength and rigidity. Sides folded in at bottom for additional support. Bottom plate easily attached. Natural finish.

Fig. 2



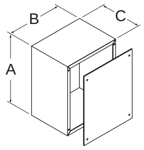
Cover .05" aluminum, panels 12" "Surface Shield" Aluminum. Sides vented for cooling.

Fig. 3



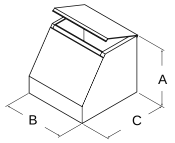
Top and bottom, .05" aluminum; front panel, .09" aluminum. Extruded aluminum frame. Corner gussets for added support. Carrying handle may be used as tilting bail. Front panel, self-adhesive rubber feet and handle/bail included. Royal blue texture body with white frame and bail.

Fig. 4



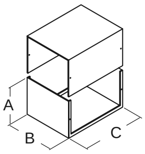
Available in 20 gauge steel or .04" aluminum. Sturdy, all-welded body. "CU" prefix: Steel with Metallic Gray, "AU" prefix; Aluminum alloy in Natural.

Fig. 5



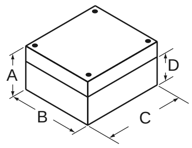
Removable front panel. Hinged top opens completely for access to components mounted on chassis.

Fig. 6



04" aluminum alloy. Two sections slip together and may be joined by either built-in snap lock or sheet metal screws (included).

Fig. 7



Style 1: Light gray polycarbonate body and cover. UV stabilized, UL94V-2 flammability rating, suggested service temperature -40°C to +120°C.

Style 2: Light gray polycarbonate body and clear polycarbonate cover. UV stabilized, UL94V-2 flammability rating, suggested service temperature 40°C to +120°C.

Style 3: Dark gray ABS body and cover. UL94-HB flammabiliy rating, suggested service temperature -40°C to +80°C.

Style 4: Body ABS, UL94-HB flammability rating, Cover panel .05" aluminum

Style 5: ABS plastic, UL 94-HB flammability rating. Service temperature -40°C to +80°C

Style 6: ABS Plastic UL94V-0 flammability rating. Service temperature -20°C to +70°C

Desc.	Dimensions - Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	50	Bud Ind. Part No.
Fig. 1 – Chassis								
Alum./ Natural	1.50 (38.1)	4.00 (100.4)	6.00 (152.4)	377-1000-ND	8.90	7.45	6.70	AC-1405
	2.00 (50.8)	6.00 (152.4)	8.00 (203.2)	377-1001-ND	11.30	9.40	8.45	AC-1413
	2.50 (63.5)	8.00 (203.2)	10.00 (254)	377-1002-ND	18.30	15.30	13.75	AC-1418
	2.50 (63.5)	8.00 (203.2)	12.00 (304.8)	377-1003-ND	22.70	18.90	17.00	AC-1419
	5.00 (127)	10.00 (254)	17.00 (431.8)	377-1004-ND	52.10	43.50	39.15	AC-1422
	5.00 (127)	13.00 (330.2)	17.00 (431.8)	377-1005-ND	60.00	50.10	45.10	AC-1426
	3.00 (76.2)	14.00 (355.6)	17.00 (431.8)	377-1006-ND	43.70	36.45	32.80	AC-1427
	4.00 (101.6)	15.00 (381)	17.00 (431.8)	377-1007-ND	59.30	49.50	44.55	AC-1428
	6.00 (152.4)	15.00 (381)	17.00 (431.8)	377-1008-ND	84.00	70.15	63.15	AC-1429
	3.00 (76.2)	17.00 (431.8)	17.00 (431.8)	377-1009-ND	50.90	42.50	38.25	AC-1430
	4.00 (101.6)	17.00 (431.8)	17.00 (431.8)	377-1010-ND	59.60	49.75	44.81	AC-1431
	2.00 (50.8)	5.00 (127)	7.00 (177.8)	377-1011-ND	9.90	8.20	7.40	AC-402
	2.00 (50.8)	5.00 (127)	9.50 (241.3)	377-1012-ND	12.00	9.95	8.95	AC-403
	3.00 (76.2)	5.00 (127)	10.00 (254)	377-1013-ND	15.20	12.65	11.40	AC-404
	2.00 (50.8)	7.00 (177.8)	7.00 (177.8)	377-1014-ND	10.40	8.60	7.75	AC-405
	2.00 (50.8)	7.00 (177.8)	9.00 (228.6)	377-1015-ND	12.50	10.40	9.35	AC-406
	2.00 (50.8)	7.00 (177.8)	11.00 (279.4)	377-1016-ND	14.50	12.05	10.85	AC-407
	3.00 (76.2)	7.00 (177.8)	12.00 (304.8)	377-1017-ND	19.20	16.05	14.45	AC-408
	2.00 (50.8)	7.00 (177.8)	13.00 (330.2)	377-1018-ND	15.80	13.25	11.95	AC-409
	3.00 (76.2)	7.00 (177.8)	15.00 (381)	377-1019-ND	25.00	20.85	18.75	AC-411
	3.00 (76.2)	8.00 (203.2)	17.00 (431.8)	377-1020-ND	26.00	21.80	19.60	AC-412
	3.00 (76.2)	10.00 (254)	12.00 (304.8)	377-1021-ND	29.20	24.45	22.00	AC-413
	3.00 (76.2)	10.00 (254)	14.00 (355.6)	377-1022-ND	29.70	24.90	22.40	AC-414
	2.00 (50.8)	10.00 (254)	17.00 (431.8)	377-1023-ND	26.50	22.15	19.95	AC-415
	3.00 (76.2)	10.00 (254)	17.00 (431.8)	377-1024-ND	31.00	25.85	23.25	AC-416
	3.00 (76.2)	12.00 (304.8)	17.00 (431.8)	377-1025-ND	32.80	27.35	24.60	AC-418
	2.00 (50.8)	13.00 (330.2)	17.00 (431.8)	377-1026-ND	33.50	27.90	25.10	AC-419
	3.00 (76.2)	13.00 (330.2)	17.00 (431.8)	377-1027-ND	38.70	32.35	29.10	AC-420
	3.00 (76.2)	5.00 (127)	9.50 (241.3)	377-1028-ND	15.10	12.60	11.35	AC-421
	3.00 (76.2)	8.00 (203.2)	12.00 (304.8)	377-1029-ND	23.00	19.20	17.30	AC-424
	4.00 (101.6)	10.00 (254)	17.00 (431.8)	377-1030-ND	44.70	37.35	33.60	AC-427
	4.00 (101.6)	13.00 (330.2)	17.00 (431.8)	377-1031-ND	47.00	39.20	35.30	AC-428
	3.00 (76.2)	5.00 (127)	7.00 (177.8)	377-1032-ND	12.70	10.60	9.55	AC-429
	3.00 (76.2)	4.00 (101.6)	6.00 (152.4)	377-1033-ND	11.20	9.30	8.35	AC-430
	2.00 (50.8)	4.00 (101.6)	6.00 (152.4)	377-1034-ND	9.10	7.60	6.85	AC-431

Chassis Bottom Plates

Desc.	Fits Width Inch (mm)	Chassis Length Inch (mm)	Digi-Key Part No.	Price Each 1	10	100	Bud Ind. Part No.
Alum./ Natural	4.00 (101.6)	6.00 (152.4)	377-1035-ND	4.60	3.85	3.45	BPA-1505
	6.00 (152.4)	8.00 (203.2)	377-1036-ND	6.50	5.35	4.80	BPA-1513
	8.00 (203.2)	10.00 (254)	377-1037-ND	8.00	6.65	6.00	BPA-1518
	8.00 (203.2)	12.00 (304.8)	377-1038-ND	9.70	8.10	7.30	BPA-1519
	8.00 (203.2)	17.00 (431.8)	377-1039-ND	10.00	8.40	7.55	BPA-1520
	10.00 (254)	12.00 (304.8)	377-1040-ND	9.70	8.10	7.30	BPA-1523
	10.00 (254)	14.00 (355.6)	377-1041-ND	9.70	8.10	7.30	BPA-1524
	12.00 (304.8)	17.00 (431.8)	377-1042-ND	13.90	11.65	10.50	BPA-1528
	14.00 (355.6)	17.00 (431.8)	377-1043-ND	14.70	12.30	11.05	BPA-1529
	15.00 (381)	17.00 (431.8)	377-1044-ND	18.40	15.35	13.80	BPA-1530
	17.00 (431.8)	17.00 (431.8)	377-1045-ND	20.40	17.05	15.35	BPA-1531
	5.00 (127)	7.00 (177.8)	377-1046-ND	4.50	3.75	3.40	BPA-1589
	5.00 (127)	9.50 (241.3)	377-1047-ND	4.60	3.85	3.45	BPA-1590
	5.00 (127)	10.00 (254)	377-1048-ND	4.50	3.75	3.40	BPA-1591
	7.00 (177.8)	7.00 (177.8)	377-1049-ND	4.50	3.75	3.40	BPA-1592
	7.00 (177.8)	9.00 (228.6)	377-1050-ND	5.50	4.60	4.15	BPA-1593
	7.00 (177.8)	11.00 (279.4)	377-1051-ND	5.70	4.75	4.30	BPA-1594
	7.00 (177.8)	12.00 (304.8)	377-1052-ND	6.30	5.25	4.75	BPA-1595
	10.00 (254)	17.00 (431.8)	377-1053-ND	10.30	8.65	7.80	BPA-1597
	13.00 (330.2)	17.00 (431.8)	377-1054-ND	14.30	11.90	10.70	BPA-1598

Small Cabinets

Desc.	Dimensions - Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	Bud Ind. Part No.
Fig. 2 – SLIMCAB™ Desktop Cabinets							
Alum. Sand Text.	1.75 (44.45)	8.50 (215.9)	8.0 (203.2)	377-1187-ND	63.40	52.90	CS-11221-S
Fig. 3 – TR Series							
Alum. Blue/Wht.	7.00 (177.8)	11.06 (280.9)	13.25 (336.55)	377-1055-ND	253.60	211.75	TR-6102
Fig. 4 – Utility Cabinets							
Alum. Natural	5.00 (127)	6.00 (152.4)	4.00 (101.6)	377-1056-ND	14.10	11.75	AU-1029
	6.00 (152.4)	6.00 (152.4)	6.00 (152.4)	377-1057-ND	20.60	17.20	AU-1039
	9.00 (228.6)	6.00 (152.4)	5.00 (127)	377-1058-ND	22.40	18.70	AU-1040
Steel/Natural	6.00 (152.4)	6.00 (152.4)	6.00 (152.4)	377-1059-ND	25.40	21.15	CU-1098
	9.00 (228.6)	6.00 (152.4)	5.00 (127)	377-1060-ND	27.50	22.95	CU-1099
	12.00 (304.8)	7.00 (177.8)	6.00 (152.4)	377-1061-ND	41.40	34.60	CU-1124
	4.00 (101.6)	5.00 (127)	3.00 (76.2)	377-1062-ND	12.40	10.45	CU-728
	5.00 (127)	6.00 (152.4)	4.00 (101.6)	377-1063-ND	15.80	13.15	CU-729
	10.00 (254)	8.00 (203.2)	7.00 (177.8)	377-1064-ND	41.60	34.75	CU-879
	15.00 (381)	9.00 (228.6)	7.00 (177.8)	377-1065-ND	59.10	49.40	CU-882
Fig. 5 – Sloping Panel Cabinets							
Alum. Metallic Gray	6.50 (165.1)	7.06 (179.3)	7.31 (185.7)	377-1066-ND	44.10	36.90	C-1584
	6.50 (165.1)	9.06 (230.1)	7.31 (185.7)	377-1067-ND	42.50	35.45	C-1585
	6.50 (165.1)	11.06 (280.9)	7.31 (185.7)	377-1068-ND	47.60	39.70	C-1586
	8.00 (203.2)	10.06 (255.5)	8.00 (203.2)	377-1069-ND	53.40	44.60	C-1588
	8.00 (203.2)	13.06 (331.7)	8.50 (215.9)	377-1070-ND	61.80	51.65	C-1892
	10.00 (254)	18.06 (458.37)	10.50 (266.7)	377-1071-ND	91.20	76.10	C-1893
	8.00 (203.2)	14.06 (357.1)	8.00 (203.2)	377-1072-ND	56.30	47.00	C-1894
	9.00 (228.6)	18.06 (458.7)	8.18 (207.78)	377-1073-ND	78.40	65.50	C-1896

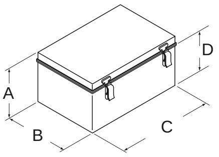
Color	Dimensions - Inch (mm)			Digi-Key Part No.	Price Each 1	5	Bud Ind. Part No.
Slope Enclosures (.09" Base, .05" Cover with Rubber Feet)							
Black/White	4.25 (107.95)	4.93 (125.22)	5.00 (127)	377-1074-ND*	37.30	31.15	SC-12100
	3.25 (82.55)	11.93 (303.02)	10.00 (254)	377-1075-ND	67.00	55.95	SC-12101

Color	Dimensions - Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	Bud Ind. Part No.
Fig. 6 - Miniboxes							
Alum./ Gray	1.62 (41.15)	2.12 (53.85)	2.75 (69.85)	377-1076-ND	4.60	3.80	CU-2100-B
	1.62 (41.15)	2.12 (53.85)	3.25 (82.55)	377-1077-ND	4.75	3.90	CU-2101-B
	1.62 (41.15)	2.12 (53.85)	4.00 (101.6)	377-1078-ND	4.95	4.05	CU-2102-B
	2.25 (57.15)	2.25 (57.15)	4.00 (101.6)	377-1079-ND	5.00	4.15	CU-2103-B
	3.00 (76.2)	4.00 (101.6)	5.00 (127)	377-1080-ND	7.40	6.15	CU-2105-B
	2.12 (53.85)	3.00 (76.2)	5.25 (133.35)	377-1081-ND	6.00	4.95	CU-2106-B
	4.00 (101.6)	5.00 (127)	6.00 (152.4)	377-1082-ND	10.40	8.75	CU-2107-B
	3.00 (76.2)	5.00 (127)	7.00 (177.8)	377-1083-ND	10.10	8.45	CU-2108-B
	3.50 (88.9)	6.00 (152.4)	8.00 (203.2)	377-1084-ND	20.30	17.00	CU-2109-B
	3.50 (88.9)	6.00 (152.4)	10.00 (254)	377-1085-ND	21.50	17.95	CU-2110-B
	4.00 (101.6)	7.00 (177.8)	12.00 (304.8)	377-1086-ND	28.40	23.75	CU-2111-B
Alum./ Natural	1.62 (41.15)	2.12 (53.85)	2.75 (69.85)	377-1087-ND	3.00	2.50	CU-3000-A
	1.62 (41.15)	2.12 (53.85)	3.25 (82.55)	377-1088-ND	3.40	2.85	CU-3001-A
	1.62 (41.15)	2.12 (53.85)	4.00 (101.6)	377-1089-ND	3.70	3.10	CU-3002-A
	2.25 (57.15)	2.25 (57.15)	4.00 (101.6)	377-1090-ND	4.00	3.30	CU-3003-A
	2.25 (57.15)	2.25 (57.15)	5.00 (127)	377-1091-ND	4.80	4.00	CU-3004-A
	3.00 (76.2)	4.00 (101.6)	5.00 (127)	377-1092-ND	6.10	5.10	CU-3005-A
	2.12 (53.85)	3.00 (76.2)	5.25 (133.35)	377-1093-ND	4.95	4.05	CU-3006-A
	4.00 (101.6)	5.00 (127)	6.00 (152.4)	377-1094-ND	8.70	7.30	CU-3007-A
	3.00 (76.2)	5.00 (127)	7.00 (177.8)	377-1095-ND	7.80	6.50	CU-3008-A
	3.50 (88.9)	6.00 (152.4)	8.00 (203.2)	377-1096-ND	12.30	10.25	CU-3009-A
	3.50 (88.9)	6.00 (152.4)	10.00 (254)	377-1097-ND	15.50	12.90	CU-3010-A
	4.00 (101.6)	7.00 (177.8)	12.00 (304.8)	377-1098-ND	19.60	16.35	CU-3011-A
Fig. 7 - Sealed Die-Cast Enclosures (Aluminum Alloy #ADC-10, Gasket-EPDM)							
Alum./ Natural	1.38 (35.05)	2.28 (57.91)	2.52 (64.01)	377-1100-ND	6.00	5.00	AN-1301
	1.18 (29.98)	2.56 (65.02)	4.53 (115.06)	377-1101-ND	8.70	7.25	AN-1302
	2.17 (55.19)	2.56 (65.02)	4.53 (115.06)	377-1102-ND	10.60	8.85	AN-1303
	2.17 (55.19)	3.54 (89.92)	4.53 (115.06)	377-1103-ND	12.40	10.35	AN-1304

* Single knockout only — centered

(Continued)

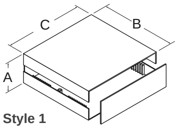
Fig. 8



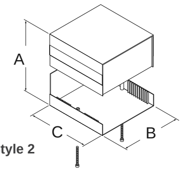
Indoor Version: ABS/PC blended plastic with UL94-5VB flammability rating. Suggested service temperature range -40°C to +70°C. Clear doors are polycarbonate with UL94V-0 flammability rating.

Fig. 9

PC-11402 – PC-11416: Impact resistant polystyrene. UL94-HB flammability rating. Molded-in card guides and mounting bosses. Double-textured PC Bone Gray.



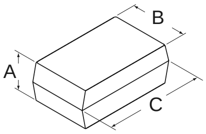
Style 1



Style 2

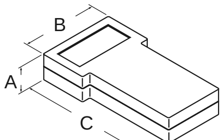
PC-11432: Black ABS covers. UL94-HB flammability rating. Clear anodized aluminum front and rear panels. Internal steel channels provide extra strength and ease of assembly. Formed guide tabs accept vertical or horizontal circuit boards.
PC-11482-A: Dark gray ABS covers with natural finish aluminum end panels. UL94V-0 flammability rating, suggested service temp -40°C to +80°C.

Fig. 10



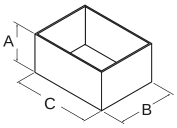
ABS plastic, UL94-HB flammability rating, suggested service temperature -40°C to +60°C.

Fig. 11

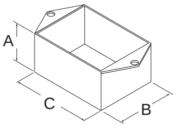


ABS plastic in a light gray finish, with UL94V-0 flammability rating.

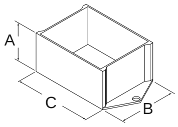
Fig. 12



Style A



Style B



Style C

ABS thermoplastic. Flammability rating: UL94V-0. Service temperatue -20°C to +70°C. Optional close-fitting covers are available in all sizes.

Color	Dimensions - Inch (mm)			Digi-Key	Price Each		Bud Ind.
	A	B	C	Part No.	1	10	Part No.
Alum./ Natural	2.17 (55.19)	5.75 (146.05)	8.75 (222.25)	377-1106-ND	23.80	19.85	AN-1307
	1.18 (29.98)	1.42 (36.07)	3.54 (89.92)	377-1099-ND*	5.80	4.85	AN-1300
	2.95 (74.93)	4.25 (107.95)	5.83 (148.08)	377-1104-ND*	22.20	18.50	AN-1305
	2.17 (55.19)	4.76 (120.90)	6.73 (170.94)	377-1105-ND*	22.60	18.85	AN-1306
Fig. 7 - Econobox Enclosure (Aluminum Alloy #ADC-10)							
Alum./ Natural	1.21 (30.73)	1.50 (38.1)	3.62 (91.95)	377-1107-ND	6.90	5.75	CU-123
	1.21 (30.73)	2.37 (60.198)	4.37 (177.8)	377-1108-ND	7.20	6.05	CU-124
	2.21 (56.13)	3.68 (93.47)	4.68 (118.87)	377-1109-ND	11.60	9.65	CU-234
	2.21 (56.13)	4.70 (119.38)	7.39 (187.71)	377-1110-ND	19.60	16.35	CU-247
	3.21 (81.53)	4.70 (119.38)	7.39 (187.71)	377-1111-ND	23.00	19.20	CU-347

* No wallmounting holes

NEMA 4X Sealed Polycarbonate and ABS Enclosures

Dimensions - Inch (mm)				Digi-Key	Price Each			Bud Ind.
A	B	C	D	Part No.	1	10	100	Part No.
Fig. 7 — Style 1								
1.38 (35.05)	2.56 (65.02)	2.28 (57.91)	0.99 (25.146)	377-1112-ND	7.40	6.15	5.55	PN-1320
1.57 (39.88)	4.53 (115.06)	2.56 (65.02)	0.99 (25.146)	377-1114-ND	10.30	8.60	7.75	PN-1321
2.17 (55.19)	4.53 (115.06)	2.56 (65.02)	1.58 (40.13)	377-1116-ND	11.10	9.25	8.35	PN-1322
2.17 (55.19)	4.53 (115.06)	3.54 (89.92)	1.58 (40.13)	377-1119-ND	12.80	10.65	9.60	PN-1323
2.17 (55.19)	6.73 (170.94)	4.76 (120.90)	1.58 (40.13)	377-1122-ND	17.90	14.90	13.40	PN-1324
2.17 (55.19)	8.74 (221.99)	5.75 (146.05)	1.58 (40.13)	377-1125-ND	23.70	19.75	17.80	PN-1325
3.15 (80.01)	6.73 (170.94)	4.76 (120.90)	1.58 (40.13)	377-1127-ND	19.40	16.15	14.55	PN-1327
3.15 (80.01)	4.53 (115.06)	3.54 (89.92)	2.56 (65.02)	377-1129-ND	14.90	12.40	11.15	PN-1328
2.95 (74.93)	8.74 (221.99)	5.75 (146.05)	1.58 (40.13)	377-1131-ND	26.00	21.65	19.50	PN-1329
3.35 (85.09)	6.30 (160.02)	3.15 (80.01)	2.76 (70.10)	377-1134-ND	16.50	13.75	12.40	PN-1333
2.95 (74.93)	7.87 (199.90)	4.72 (119.89)	2.37 (60.199)	377-1136-ND	23.40	19.50	17.55	PN-1334
Fig. 7 — Style 2								
2.17 (55.19)	4.53 (115.06)	2.56 (65.02)	1.58 (40.13)	377-1117-ND	11.40	9.50	8.55	PN-1322-C
2.17 (55.19)	4.53 (115.06)	3.54 (89.92)	1.58 (40.13)	377-1120-ND	13.20	11.00	9.90	PN-1323-C
2.17 (55.19)	6.73 (170.94)	4.76 (120.90)	1.58 (40.13)	377-1123-ND	18.50	15.40	13.85	PN-1324-C
2.17 (55.19)	6.30 (160.02)	3.15 (80.01)	1.58 (40.13)	377-1133-ND	15.70	13.10	11.80	PN-1332-C
Fig. 7 — Style 3								
1.38 (35.05)	2.56 (65.02)	2.28 (57.91)	0.99 (25.146)	377-1113-ND	5.90	4.90	4.40	PN-1320-DG
1.57 (39.88)	4.53 (115.06)	2.56 (65.02)	0.99 (25.146)	377-1115-ND	7.20	6.00	5.40	PN-1321-DG
2.17 (55.19)	4.53 (115.06)	2.56 (65.02)	1.58 (40.13)	377-1118-ND	8.10	6.75	6.10	PN-1322-DG
2.17 (55.19)	4.53 (115.06)	3.54 (89.92)	1.58 (40.13)	377-1121-ND	9.80	8.15	7.35	PN-1323-DG
2.17 (55.19)	6.73 (170.94)	4.76 (120.90)	1.58 (40.13)	377-1124-ND	14.20	11.85	10.65	PN-1324-DG
2.17 (55.19)	8.74 (221.99)	5.75 (146.05)	1.58 (40.13)	377-1126-ND	19.20	16.00	14.40	PN-1325-DG
3.15 (80.01)	6.73 (170.94)	4.76 (120.90)	1.58 (40.13)	377-1128-ND	13.40	11.15	10.05	PN-1327-DG
3.15 (80.01)	4.53 (115.06)	3.54 (89.92)	2.56 (65.02)	377-1130-ND	10.10	8.40	7.55	PN-1328-DG
2.95 (74.93)	8.74 (221.99)	5.75 (146.05)	1.58 (40.13)	377-1132-ND	16.40	13.65	12.30	PN-1329-DG
3.35 (85.09)	6.30 (160.02)	3.15 (80.01)	2.76 (70.10)	377-1135-ND	13.00	10.85	9.75	PN-1333-DG
2.95 (74.93)	7.87 (199.90)	4.72 (119.89)	2.37 (60.199)	377-1137-ND	17.30	14.40	12.95	PN-1334-DG

UL/NEMA/IEC Gasketed Enclosures

Dimensions - Inch (mm)				Digi-Key	Price Each			Bud Ind.
A	B	C	D	Part No.	1	5	15	Part No.
Fig. 8 - NBA Series - Stainless Steel Hinges								
7.09 (180.09)	11.80 (299.72)	7.85 (199.39)	5.90 (149.86)	377-1138-ND†	55.50	46.25	41.65	NBA-10144
7.09 (180.09)	15.75 (400.05)	11.80 (299.72)	5.90 (149.86)	377-1139-ND†	81.80	68.15	61.35	NBA-10148
5.97 (151.64)	11.80 (299.72)	7.85 (199.39)	4.80 (121.92)	377-1140-ND‡	52.80	44.00	39.60	NBA-10162
Fig. 8 - NBB Series - Plastic Hinges								
3.57 (90.68)	5.90 (149.86)	5.90 (149.86)	2.75 (69.85)	377-1141-ND†	17.50	14.60	13.15	NBB-10240
5.50 (141.35)	11.28 (286.512)	7.47 (189.79)	4.33 (109.98)	377-1142-ND†	36.30	30.25	27.25	NBB-10243
7.04 (178.82)	13.00 (330.2)	13.00 (330.2)	5.86 (148.84)	377-1143-ND†	50.10	41.75	37.60	NBB-10245
6.30 (160.02)	15.68 (398.27)	11.73 (297.94)	5.11 (129.79)	377-1144-ND†	50.60	42.15	37.95	NBB-10247

† Solid doors ‡ Clear doors

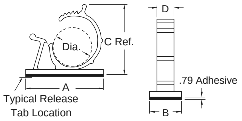
Dimensions - Inch (mm)				Digi-Key	Price Each			Bud Ind.
A	B	C	D	Part No.	1	5	15	Part No.
Fig. 8 - NBD Series - Non-Metallic Phillips Drive Fasteners								
5.03 (127.76)	7.48 (189.99)	11.02 (279.91)	3.85 (97.79)	377-1145-ND†	36.90	30.75	27.70	NBD-10442
Fig. 8 - NBE Series - Plastic Hinges/Aluminum Swing-out Panel								
5.50 (141.35)	7.47 (189.79)	11.28 (286.512)	4.33 (109.98)	377-1146-ND‡	68.20	56.95	51.25	NBE-10563
6.30 (160.02)	11.73 (297.94)	15.68 (398.27)	5.11 (129.79)	377-1147-ND‡	89.20	74.50	67.05	NBE-10567
7.85 (199.39)	14.64 (371.86)	19.17 (486.92)	6.67 (169.42)	377-1148-ND‡	135.10	112.80	101.50	NBE-10573

† Solid doors ‡ Clear doors

Style	Color	Dimensions - Inch (mm)			Digi-Key	Price Each		Bud Ind.
		A	B	C	Part No.	1	10	Part No.
Fig. 9 - Plasticase								
1	Gray	1.53 (38.86)	5.08 (129.03)	5.30 (134.62)	377-1149-ND	13.30	11.10	PC-11402
	Gray	2.52 (64.01)	8.10 (205.74)	6.32 (160.53)	377-1150-ND	20.40	17.00	PC-11408
2	Gray	3.30 (83.82)	6.12 (155.49)	6.32 (160.53)	377-1151-ND	21.00	17.50	PC-11410
	Gray	3.30 (83.82)	8.10 (205.74)	6.32 (160.53)	377-1152-ND	24.30	20.30	PC-11412
	Gray	4.04 (102.62)	6.12 (155.49)	6.32 (160.53)	377-1153-ND	22.10	18.45	PC-11414
	Gray	4.04 (102.62)	8.10 (205.74)	6.32 (160.53)	377-1154-ND	25.80	21.55	PC-11416
1	Black	4.02 (102.11)	9.72 (246.89)	8.66 (219.96)	377-1155-ND	52.90	44.15	PC-11438
	Gray	2.56 (65.02)	10.24 (260.10)	7.09 (180.09)	377-1156-ND	32.80	27.35	PC-11482-A
Fig. 10 - Plasticase								
—	Gray	1.50 (38.1)	2.25 (57.15)	3.62 (91.95)	377-1161-ND	5.40	4.50	PT-11308-G
		1.50 (38.1)	3.25 (82.55)	5.62 (142.75)	377-1157-ND	10.30	8.60	PBS-11327-G
		2.48 (62.99)	3.25 (82.55)	5.62 (142.75)	377-1162-ND	9.80	8.20	PT-11388-G
		1.52 (38.61)	3.25 (82.55)	4.37 (110.99)	377-1158-ND	4.80	4.00	PBS-11532-G
		1.52 (38.61)	3.25 (82.55)	5.62 (142.75)	377-1159-ND	5.50	4.60	PS-11543-G
		1.52 (38.61)	4.87 (123.70)	6.87 (174.50)	377-1160-ND	6.80	5.65	PS-11553-G
		2.52 (64.01)	4.87 (123.70)	6.87 (174.50)	377-1163-ND	7.20	6.00	PT-11557-G
Fig. 7 - Utilibox								
4	Black	2.95 (74.93)	5.32 (135.13)	8.66 (219.96)	377-1164-ND	21.70	18.10	CU-1495
5	Black	1.95 (49.53)	2.94 (74.68)	5.30 (134.62)	377-1165-ND	2.70	2.25	CU-1874-B
	Gray	1.95 (49.53)	2.94 (74.68)	5.30 (134.62)	377-1166-ND	2.70	2.25	CU-1874-G
6	Black	2.00 (50.8)	2.23 (57.40)	4.10 (104.14)	377-1167-ND	4.10	3.40	CU-793
	Black	1.84 (46.77)	4.34 (110.27)	5.59 (141.99)	377-1168-ND	7.20	6.00	CU-387
	Black	1.46 (37.08)	3.06 (77.72)	4.31 (109.47)	377-1169-ND	5.80	4.85	CU-388
Fig. 11 - Grabbers								
—	Gray	1.71 (43.43)	5.16 (131.06)	9.33 (236.98)	377-1170-ND	19.00	15.85	HH-3420
Accessories for Grabbers								
Tilt Stand for HH-3420					377-1171-ND	.90	.75	HH-3440-TS
Gasket for HH-3420					377-1172-ND	1.00	.85	HH-3441-G
Fig. 12 - Potting Boxes								
A	Black	1.00 (25.4)	2.00 (50.8)	1.50 (38.1)	377-1173-ND	1.16	.97	PB-1558
	Black	1.50 (38.1)	3.00 (76.2)	2.00 (50.8)	377-1176-ND	1.69	1.41	PB-1559
	Black	.75 (19.05)	1.00 (25.4)	1.00 (25.4)	377-1180-ND	.68	.57	PB-1577
B	Black	1.00 (25.4)	2.00 (50.8)	1.50 (38.1)	377-1175-ND	1.27	1.06	PB-1558-TF
	Black	1.50 (38.1)	3.00 (76.2)	2.00 (50.8)	377-1178-ND	1.82	1.52	PB-1559-TF
	Black	1.50 (38.1)	3.00 (76.2)	3.00 (76.2)	377-1179-ND	1.83	1.53	PB-1576-TF
C	Black	1.00 (25.4)	2.00 (50.8)	1.50 (38.1)	377-1174-ND	1.27	1.06	PB-1558-BF
	Black	1.50 (38.1)	3.00 (76.2)	2.00 (50.8)	377-1177-ND	1.82	1.52	PB-1559-BF
Optional Close-Fitting Covers								
Cover for PB-1558-BF					377-1181-ND	.67	.56	PBC-1558-C
Cover for PB-1558/1558-TF					377-1182-ND	.67	.56	PBC-1558-CN
Cover for PB-1559-BF					377-1183-ND	.78	.65	PBC-1559-C
Cover for PB-1559/1559-TF					377-1184-ND	.76	.64	PBC-1575-C
Cover for PB-1576-TF					377-1185-ND	.99	.83	PBC-1576-C
Cover for PB-1577					377-1186-ND	.40	.34	PBC-1577-C

Richco Adjustable Kwik Klip

- 4 sizes adjust to any holding diameter from 5/16" to 1" (7.9-25.4mm)
- Locks securely, easily reopened for routing changes. Adhesive back
- Material: Nylon 6/6
- Color: Natural



Dia. Range (mm)	Dimensions (mm) A	B	C	D	Digi-Key Part No.	Pricing 10	100	500	Richco Part No.
7.87-10.16	25.40	19.05	22.10	10.16	RP309-ND	7.79	64.93	259.70	AKKL-3140A-RT
11.68-14.22	31.75	19.05	27.69	10.16	RP310-ND	9.74	81.17	324.68	AKKL-4756A-RT
14.48-19.05	38.10	19.05	31.75	12.70	RP311-ND	13.43	111.91	447.64	AKKL-5775A-RT
22.10-25.40	50.80	25.40	44.45	12.70	RP312-ND	15.20	126.66	506.62	AKKL-8710A-RT

Tie Holders

Fig. 1 • Multi-directional • Material: Nylon 6/6, UV Stabilized Nylon 6/6

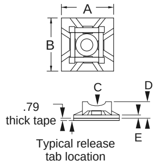
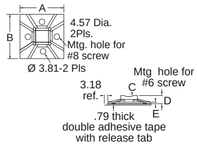


Fig. 2 • Ramp feature allows ties to pass through easily • 4-way entry • Material: Nylon 6/6, Adhesive, UV Stabilized Nylon 6/6



A
B
4.57 Dia. 2Pls. Mtg. hole for #8 screw
Ø 3.81-2 Pls
Mtg hole for #6 screw
3.18 ref.
C
D
E
.79 thick double adhesive tape with release tab

Digi-Key Part No.	Digi-Key Part No.	Description (mm) A	B	C	D	E	Tensile Force (kg)
RP301-ND	RP305-ND	19.05	19.05	6.35	6.10	1.52	6.72/11.20
RP302-ND	RP306-ND	25.40	25.40	11.68	7.11	1.78	18.66/22.39
RP303-ND	RP307-ND	38.10	38.10	10.92	7.62	2.03	44.79
RP304-ND	RP308-ND	50.80	50.80	10.92	7.62	2.03	44.79

Fig.	Digi-Key Part No.	Pricing 10	100	500	Richco Part No.
Nylon					
1	RP301-ND	4.19	34.95	139.78	FTH-5A-RT
1	RP302-ND	5.25	43.79	175.16	FTH-7A-RT
2	RP303-ND	12.70	105.81	423.22	FTH-8A-RT
2	RP304-ND	16.93	141.08	564.32	FTH-10A-RT
Ultra Violet – Exterior or Outdoor Use (Black)					
1	RP305-ND	4.61	38.44	153.76	FTH-5A-RT-UVB
1	RP306-ND	5.78	48.17	192.68	FTH-7A-RT-UVB
2	RP307-ND	13.97	116.39	465.54	FTH-8A-RT-UVB
2	RP308-ND	18.62	155.19	620.76	FTH-10A-RT-UVB

LED Spacers

- Spaces LED from surface of board
- Easily installed by hand
- Insulates and spaces leads
- Slots and holes for choice of mount
- Material for LEDS1E and LEDS2E: Nylon 6/6
- Color: Natural

Fig. 1

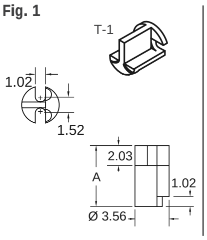


Fig. 2

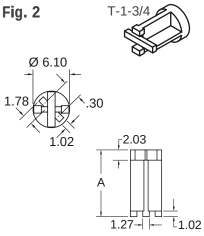
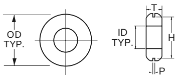


Fig.	Dim. A (mm)	Digi-Key Part No.	Pricing 10	100	500	Richco Part No.
1	4.57	RP500-ND	3.47	28.93	115.72	LEDS1E-3-01
	6.35	RP501-ND	3.67	30.57	122.28	LEDS1E-4-01
	12.70	RP502-ND	4.05	33.79	135.16	LEDS1E-8-01
	15.75	RP503-ND	4.15	34.62	138.46	LEDS1E-10-01
	19.05	RP504-ND	4.23	35.23	140.90	LEDS1E-12-01
2	4.57	RP505-ND	4.39	36.61	146.42	LEDS2E-3-01
	6.35	RP506-ND	4.59	38.24	152.94	LEDS2E-4-01
	12.70	RP507-ND	4.97	41.44	165.76	LEDS2E-8-01
	15.75	RP508-ND	5.06	42.13	168.50	LEDS2E-10-01
	19.05	RP509-ND	5.13	42.75	170.98	LEDS2E-12-01

Hole Grommet

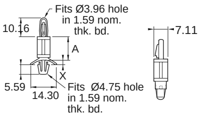
- Installs instantly
- Material: Flexible vinyl
- Color: Black



Inside Dia. ID (mm)	Hole Size H (mm)	Panel Thick. P (mm)	Outside Dia. OD (mm)	Grommet Thick. T (mm)	Digi-Key Part No.	Pricing 10	100	500	Richco Part No.
3.05	4.57	1.52	7.87	6.35	RP450-ND	1.53	12.73	50.90	HG-2
3.81	6.35	1.52	9.40	6.35	RP451-ND	1.57	13.11	52.44	HG-2.5
4.57	7.87	.76	10.92	4.57	RP452-ND	1.73	14.40	57.58	HG-3
5.33	7.87	1.52	10.92	5.33	RP453-ND	1.93	16.05	64.20	HG-3.5
6.35	9.40	2.29	14.22	7.11	RP454-ND	2.12	17.68	70.72	HG-4
9.40	12.70	1.52	17.27	7.11	RP455-ND	3.53	29.46	117.82	HG-6
14.22	17.27	1.52	22.10	4.57	RP456-ND	4.48	37.32	149.28	HG-9
17.27	19.05	1.52	23.62	4.57	RP457-ND	4.95	41.23	164.92	HG-11

Locking Circuit Board Supports

- Both ends lock by hand; no tools required
- Strong, dependable grip
- Material: Nylon 6/6
- Color: Natural

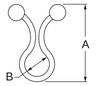


Fits Ø3.96 hole in 1.59 nom. thk. bd.
10.16
A
X
5.59
14.30
Fits Ø4.75 hole in 1.59 nom. thk. bd.
7.11

Dim. A (mm)	Digi-Key Part No.	Pricing 10	100	500	1,000	Richco Part No.
4.57	RP425-ND	2.24	18.67	74.68	112.02	LCBS-3
6.35	RP426-ND	2.38	19.87	79.48	119.22	LCBS-4
9.40	RP428-ND	2.50	20.87	83.48	125.22	LCBS-6
10.92	RP429-ND	2.60	21.71	86.82	130.23	LCBS-7
12.70	RP430-ND	2.69	22.45	89.78	134.67	LCBS-8
15.75	RP431-ND	2.88	24.01	96.02	144.03	LCBS-10
19.05	RP432-ND	3.07	25.59	102.36	153.54	LCBS-12
25.40	RP434-ND	3.45	28.77	115.08	172.62	LCBS-16

Twist-Lok (TL Series)

- Twist to secure wire bundles
- Material: Nylon 6/6, RMS-01
- Color: Natural

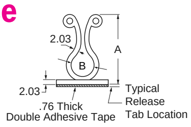


"A" Overall Height (mm)	"B" Wire Bundle Dia. (mm)	Digi-Key Part No.	Pricing 25	100	1,000	Richco Part No.
22.86	5.08-7.62	RP600-ND	2.81	9.64	57.82	TL-250
26.16	7.62-10.16	RP601-ND	3.01	10.31	61.85	TL-350
30.48	10.16-12.70	RP602-ND	3.24	11.11	66.67	TL-450
33.78	13.97-16.51	RP603-ND	3.38	11.60	69.62	TL-600
39.37	17.78-20.32	RP604-ND	3.93	13.47	80.82	TL-750
43.18	Max. 25.40	RP605-ND	4.04	13.86	83.16	TL-950
55.63	Max. 30.23	RP606-ND	5.47	18.77	112.61	TL-1125
68.07	Max. 36.58	RP607-ND	6.51	22.33	133.99	TL-1375
74.42	Max. 39.62	RP608-ND	8.08	27.71	166.28	TL-1500
87.63	Max. 45.97	RP609-ND	8.57	29.39	176.33	TL-1750

Kurly-Lok On Base

(KLB Series)

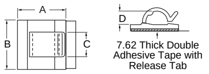
- Adhesive backing, RMS-15
- Material: Nylon 6/6, RMS-01
- Color: Natural



"A" Overall Height (mm)	"B" Wire Bundle (mm)	Digi-Key Part No.	Pricing 25	100	1,000	Richco Part No.
27.18	7.62-.10.16	RP610-ND	12.57	43.08	258.48	KLB-350A-RT
31.24	10.16-12.70	RP611-ND	13.89	47.63	285.77	KLB-450A-RT
40.13	17.78-20.32	RP612-ND	14.60	50.04	300.24	KLB-750A-RT

Wire Cord Klip

(WCK Series)



- Adhesive backing for quick mounting
- Material: Nylon 6/6, RMS-01
- Color: Natural

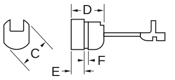
Hole Dia.	Dimensions (mm) A	B	C	D
4.57	16.00	15.75	7.87	4.06
11.43	25.15	25.15	11.94	7.11
18.29	25.40	25.40	12.70	13.46

Description	Digi-Key Part No.	Pricing 25	100	1,000	Richco Part No.
4.57mm. Dia., w/Tape	RP617-ND	13.90	47.66	285.95	WCK-180-01A-RT
11.43mm. Dia., w/Tape	RP618-ND	24.40	83.64	501.84	WCK-460-01A-RT
18.29mm. Dia., w/Tape	RP619-ND	30.33	103.99	623.92	WCK-720-01A-RT
4.57mm. Dia., w/oTape	RP620-ND	4.69	15.10	130.18	WCK-180-01
11.43mm. Dia., w/oTape	RP621-ND	9.45	30.45	262.50	WCK-460-01
18.29mm. Dia., w/oTape	RP622-ND	11.68	37.64	324.50	WCK-720-01

Strain Relief Bushings

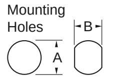
(SRB-D/F/R Series)

Bushing Dimensions



- Bushing eliminates strain and wear on wires and cords
- Withstands temperatures to 150°F (65°C)
- Material: Nylon 6/6, RMS-40
- Color: Black
- UL #E40234, CSA #LR52044

Mounting Holes



Style A Style B

Digi-Key Part No.	Approx. Wire Size (mm)	Mntg. Hole (mm) Style A	Style B	Dimensions (mm) C	D	E	F*
RP460-ND	3.05 x .5.59	11.10	10.03	11.68	10.41	4.06	1.57
RP461-ND	2.79 x 5.33	9.52	8.76	10.79	10.41	3.94	1.57
	2.29 x 4.57						
RP462-ND	4.09 x 7.62	13.08	11.81	14.48	12.70	4.34	2.54
	3.81 x 7.11	12.70					
RP463-ND	4.06 x 9.40	14.27	13.46	15.49	15.24	6.10	3.30
	3.81 x 8.64						
	5.08 x 9.40						
	4.57 x 8.89						
RP464-ND	4.83 x 7.62	12.70	11.58	13.84	10.19	3.61	1.80
	3.81 x 7.11						
	4.06 x 7.62						
RP465-ND	6.35	12.70	11.81	14.22	10.92	4.19	2.54
	6.73	13.08					
	7.37	13.08					
	6.86	12.70					
RP466-ND	8.25	16.66	14.48	18.45	17.27	6.98	3.18
	7.62						
	9.02	17.45					
	8.38						

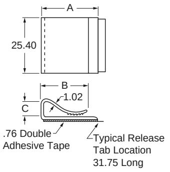
* Maximum Panel Thickness

Digi-Key Part No.	Pricing 25	100	1,000	5,000	Richco Part No.
RP460-ND	3.25	11.15	66.92	53.92/M	SRB-D-3
RP461-ND	9.74	33.40	200.41	161.45/M	SRB-F-2
RP462-ND	4.14	14.20	85.21	68.65/M	SRB-F-4
RP463-ND	13.15	45.07	270.43	217.85/M	SRB-F-5
RP464-ND	3.37	11.57	69.41	55.92/M	SRB-F-7
RP465-ND	3.59	12.30	73.80	59.45/M	SRB-R-5
RP466-ND	7.97	27.31	163.87	132.01/M	SRB-R-6
RPSRPL-ND	SRB Pincher Tool ....$88.26 each				SRPL-2

C-Type Flat Cable Clamps

(CFCC Series)

- Designed for routing flat ribbon cable
- Serrated grip to prevent slippage
- Adhesive backing for quick mount in any direction
- Material: Noryl-White, RMS-05; PVC-Gray RMS-04



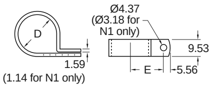
Digi-Key Part No.	Dimensions (mm) A	B	C	Material
RP391-ND	14.27	12.45	4.57	Noryl (White)
RP392-ND	14.27	10.16	6.35	Noryl (White)
RP393-ND	26.97	22.35	6.35	Noryl (White)
RP394-ND	26.97	22.35	6.35	Rigid PVC (Gray)

Digi-Key Part No.	Pricing 25	100	1,000	Richco Part No.
RP391-ND	11.95	40.97	245.84	CFCC-3-05A-RT
RP392-ND	15.17	52.00	311.98	CFCC-4-05A-RT
RP393-ND	18.93	64.89	389.34	CFCC-8-05A-RT
RP394-ND	14.60	50.05	300.28	CFCC-8-04A-RT

Cable Clamps

(N Series)

- Material: Nylon 6/6, RMS-01
- Colors: Natural and Black



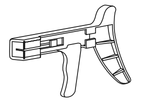
Description	Dim. (mm) D	E	Digi-Key Part No.	Pricing 25	100	1,000	Richco Part No.
Black, RMS-49	1.60	6.86	RP322-ND	1.74	5.95	35.71	N-1-BK
Black, RMS-49	3.18	8.33	RP323-ND	1.77	6.07	36.40	N-2-BK
Black, RMS-49	4.78	9.91	RP324-ND	2.03	6.97	41.83	N-3-BK
Black, RMS-49	6.35	10.69	RP325-ND	2.11	7.24	43.42	N-4-BK
Black, RMS-49	7.95	11.51	RP326-ND	2.14	7.32	43.92	N-5-BK
Black, RMS-49	9.52	12.29	RP327-ND	2.32	7.94	47.63	N-6-BK
Black, RMS-49	11.13	11.99	RP328-ND	2.40	8.23	49.39	N-7-BK
Black, RMS-49	12.70	14.27	RP329-ND	2.43	8.33	49.97	N-8-BK
Natural, RMS-01	1.60	6.86	RP314-ND	1.93	6.62	39.71	N-1
Natural, RMS-01	3.18	8.33	RP315-ND	1.97	6.74	40.43	N-2
Natural, RMS-01	4.78	9.91	RP316-ND	2.26	7.75	46.48	N-3
Natural, RMS-01	6.35	10.69	RP317-ND	2.35	8.04	48.24	N-4
Natural, RMS-01	7.95	11.51	RP318-ND	2.37	8.14	48.82	N-5
Natural, RMS-01	9.52	12.29	RP319-ND	2.57	8.82	52.92	N-6
Natural, RMS-01	11.13	11.99	RP320-ND	2.67	9.15	54.90	N-7
Natural, RMS-01	12.70	14.27	RP321-ND	2.70	9.25	55.51	N-8

Richco

Wrap-It-Ties

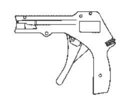
- Easy to use permanent lock
- Strong, one-piece construction
- Serviceable to 185°F (85°C)
- UL recognized #E71558

Wire Tie Gun



RPWTA-ND $12.09

Economy Installation Tool



RPWTG-ND $52.80

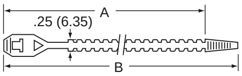
Replace ☐ with "C" for package of 100, "M" for package of 1,000.

Max. Bundle Dia. (in.)	Approx. Length (in.)	Tensile Strength (Lbs.)	Approx. Width (in.)	Color	Digi-Key Part No.	Package Size Price Per Pkg. C = 100	Price Per Pkg. M = 1000	Richco Part No.
Nylon 6/6								
0.6	3.25	18	.10	Natural	RP101☐-ND	3.29	16.70	WIT-18SF
0.6	3.25	18	.10	Blue	RP101BL☐-ND	4.42	16.88	WIT-18SF-BL
0.6	3.25	18	.10	Green	RP101GN☐-ND	4.42	16.88	WIT-18SF-GN
0.6	3.25	18	.10	Red	RP101RD☐-ND	4.42	16.88	WIT-18SF-RD
0.6	3.25	18	.10	Yellow	RP101YL☐-ND	4.42	16.88	WIT-18SF-YL
0.7	4.5	18	.10	Natural	RP102☐-ND	3.59	18.22	WIT-18R
0.7	4.5	18	.10	Blue	RP102BL☐-ND	3.88	18.36	WIT-18R-BL
0.7	4.5	18	.10	Green	RP102GN☐-ND	3.88	18.40	WIT-18R-GN
0.7	4.5	18	.10	Red	RP102RD☐-ND	3.88	18.40	WIT-18R-RD
0.7	4.5	18	.10	Yellow	RP102YL☐-ND	3.88	18.40	WIT-18R-YL
1.3	5.75	18	.10	Natural	RP213☐-ND	4.19	21.60	WIT-18L
2.1	8.0	18	.10	Natural	RP103☐-ND	6.83	34.74	WIT-18V
2.1	8.0	18	.10	Blue	RP103BL☐-ND	9.06	34.63	WIT-18V-BL
2.1	8.0	18	.10	Green	RP103GN☐-ND	9.06	34.63	WIT-18V-GN
2.1	8.0	18	.10	Red	RP103RD☐-ND	9.06	34.63	WIT-18V-RD
2.1	8.0	18	.10	Yellow	RP103YL☐-ND	9.06	34.63	WIT-18V-YL
1.2	5.75	30	.14	Natural	RP104☐-ND	6.64	33.77	WIT-30R
1.2	5.75	30	.14	Blue	RP104BL☐-ND	6.97	34.56	WIT-30R-BL
1.2	5.75	30	.14	Green	RP104GN☐-ND	6.97	34.56	WIT-30R-GN
1.2	5.75	30	.14	Red	RP104RD☐-ND	6.97	34.56	WIT-30R-RD
1.2	5.75	30	.14	Yellow	RP104YL☐-ND	6.97	34.56	WIT-30R-YL
1.8	7.3	30	.14	Natural	RP105☐-ND	7.16	36.32	WIT-30L
1.8	7.3	30	.14	Blue	RP105BL☐-ND	9.62	36.76	WIT-30L-BL
1.8	7.3	30	.14	Green	RP105GN☐-ND	9.62	36.76	WIT-30L-GN
1.8	7.3	30	.14	Red	RP105RD☐-ND	9.62	36.76	WIT-30L-RD
1.8	7.3	30	.14	Yellow	RP105YL☐-ND	9.62	36.76	WIT-30L-YL
0.7	4.5	40	.14	Natural	RP214☐-ND	5.86	32.76	WIT-40S
1.2	5.75	40	.14	Natural	RP106☐-ND	7.70	39.10	WIT-40R
1.2	5.75	40	.14	Blue	RP106BL☐-ND	10.51	40.14	WIT-40R-BL
1.2	5.75	40	.14	Green	RP106GN☐-ND	10.51	40.14	WIT-40R-GN
1.2	5.75	40	.14	Red	RP106RD☐-ND	10.51	40.14	WIT-40R-RD
1.2	5.75	40	.14	Yellow	RP106YL☐-ND	10.51	40.14	WIT-40R-YL
1.8	7.3	40	.14	Natural	RP107☐-ND	9.59	48.71	WIT-40L
1.8	7.3	40	.14	Blue	RP107BL☐-ND	12.81	50.00	WIT-40L-BL
1.8	7.3	40	.14	Green	RP107GN☐-ND	12.81	50.00	WIT-40L-GN
1.8	7.3	40	.14	Red	RP107RD☐-ND	12.81	50.00	WIT-40L-RD
1.8	7.3	40	.14	Yellow	RP107YL☐-ND	12.81	50.00	WIT-40L-YL
3.1	11.1	40	.15	Natural	RP215☐-ND	19.19	107.60	WIT-40VL
1.5	6.0	50	.19	Natural	RP108☐-ND	7.84	39.82	WIT-50S
1.5	6.0	50	.19	Blue	RP108BL☐-ND	10.69	40.86	WIT-50S-BL
1.5	6.0	50	.19	Green	RP108GN☐-ND	10.69	40.86	WIT-50S-GN
1.5	6.0	50	.19	Red	RP108RD☐-ND	10.69	40.86	WIT-50S-RD
1.5	6.0	50	.19	Yellow	RP108YL☐-ND	10.69	40.86	WIT-50S-YL
2.0	8.0	50	.19	Natural	RP109☐-ND	9.23	46.87	WIT-50R
2.0	8.0	50	.19	Blue	RP109BL☐-ND	9.97	47.27	WIT-50R-BL
2.0	8.0	50	.19	Green	RP109GN☐-ND	9.97	47.27	WIT-50R-GN
2.0	8.0	50	.19	Red	RP109RD☐-ND	9.97	47.27	WIT-50R-RD
2.0	8.0	50	.19	Yellow	RP109YL☐-ND	9.97	47.27	WIT-50R-YL
4.5	15.3	50	.18	Natural	RP110☐-ND	15.95	80.93	WIT-50L
4.5	15.3	50	.18	Blue	RP110BL☐-ND	21.74	83.09	WIT-50L-BL
4.5	15.3	50	.18	Green	RP110GN☐-ND	21.74	83.09	WIT-50L-GN
4.5	15.3	50	.18	Red	RP110RD☐-ND	21.74	83.09	WIT-50L-RD
4.5	15.3	50	.18	Yellow	RP110YL☐-ND	21.74	83.09	WIT-50L-YL
2.7	10.7	60	.18	Natural	RP216☐-ND	13.74	69.84	WIT-60R
4.2	15.06	120	.30	Natural	RP111C-ND	37.18	—	WIT-120R
UV Stabilized Nylon 6/6 – Exterior or Outdoor Use								
0.6	3.25	18	.10	Black	RP201☐-ND	3.61	18.36	WIT-18SF-UVB
0.7	4.5	18	.10	Black	RP202☐-ND	3.95	20.02	WIT-18R-UVB
2.1	8.0	18	.10	Black	RP203☐-ND	7.51	38.20	WIT-18V-UVB
1.2	5.75	30	.14	Black	RP204☐-ND	7.31	37.15	WIT-30R-UVB
1.8	7.3	30	.14	Black	RP205☐-ND	7.88	40.00	WIT-30L-UVB
1.2	5.75	40	.14	Black	RP206☐-ND	8.47	43.02	WIT-40R-UVB
1.8	7.3	40	.14	Black	RP207☐-ND	10.55	53.57	WIT-40L-UVB
1.5	6.0	50	.19	Black	RP208☐-ND	8.62	43.78	WIT-50S-UVB
2.0	8.0	50	.19	Black	RP209☐-ND	10.15	51.55	WIT-50R-UVB
4.5	15.3	50	.18	Black	RP210☐-ND	17.55	89.06	WIT-50L-UVB
4.2	15.06	120	.30	Black	RP211C-ND	40.89	—	WIT-120R-UVB
Nylon 6/6, Size 10 / Screw Mount								
1.5	6.75	50	.19	Natural	RP224☐-ND	18.11	91.94	WITSH-10-50MS
2	8.69	50	.19	Natural	RP225☐-ND	20.47	103.90	WITSH-10-50MRL
3	11.25	50	.19	Natural	RP226☐-ND	21.69	110.12	WITSH-10-50MR
Nylon 6/6 Release Tab								
1.25	5.5	40	.21	Natural	RP217☐-ND	16.84	85.43	WIT-RT-0550
2	8.0	40	.21	Natural	RP218☐-ND	18.55	94.18	WIT-RT-0800
2.5	10.5	40	.21	Natural	RP219☐-ND	28.05	142.31	WIT-RT-1050

Max. Bundle Dia. (In.)	Approx. Length (In.)	Tensile Strength (Lbs.)	Approx. Width (In.)	Color	Digi-Key Part No.	Pricing 25	100	Richco Part No.
Nylon 6/6 Release Tab (Large Size)								
4	15.25	250	.52	Natural	RP221-ND	37.37	128.12	WIT-RT-1525
6	21.5	250	.52	Natural	RP222-ND	44.84	153.74	WIT-RT-2150
8	27.75	250	.52	Natural	RP223-ND	51.21	175.57	WIT-RT-2775

Hanking Ties

- Wrap electrical cords for shipping and packaging
- Material: Polyethylene
- Color: Natural



Max. Bundle Dia. Inch (mm)	Dimension Inch (mm) A	B	Digi-Key Part No.	Price Per Package 100	1,000	Richco Part No.
.9 (22.86)	3.2 (81.28)	3.9 (99.06)	RP701-ND	23.22	139.32	HT-3.9
1.1 (27.94)	4.2 (106.68)	4.9 (124.46)	RP702-ND	25.57	153.43	HT-4.9
1.4 (35.56)	5.2 (132.08)	5.9 (149.86)	RP703-ND	29.18	175.07	HT-5.9

Beaded Ties

- Easy to install and release
- Material: Nylon 6/6
- Color: Natural

Fig. 1

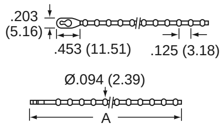


Fig. 2

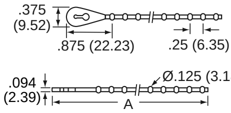
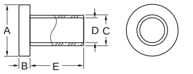


Fig.	Dim "A" (approx.) Inch (mm)	Digi-Key Part No.	Price Per Package 100	1,000	Richco Part No.
1	4.0 (101.60)	RP731-ND	8.95	53.68	BT-4-01-NT
	5.0 (127.00)	RP732-ND	9.89	59.33	BT-5-01-NT
	6.0 (152.40)	RP733-ND	15.65	93.92	BT-6-01-NT
2	8.75 (222.25)	RP734-ND	21.68	130.10	BT-8-01-NT
	10.75 (273.05)	RP735-ND	27.06	162.36	BT-10-01-NT
	12.75 (323.85)	RP736-ND	30.86	185.18	BT-12-01-NT

Molded Nylon Insulators

(MNI Series)

- Use as screw insulators and in many bushing applications
- Lightweight
- High dielectric strength
- Resistant to corrosion and abrasion
- Material: Nylon 6/6, RMS-48
- Color: Natural



Screw Size	Approx. Met. Equiv.	Dimensions (Inch) A	B	C	D	E	Digi-Key Part No.	Pricing 25	100	1,000	Richco Part No.
#2	M2.2	.181	.047	.120	.090	.031	RP330-ND	5.92	20.30	121.79	MNI #2-2
		.181	.047	.120	.090	.063	RP331-ND	5.92	20.30	121.79	MNI #2-4
		.181	.047	.120	.090	.093	RP332-ND	5.92	20.30	121.79	MNI #2-6
		.181	.047	.120	.090	.125	RP333-ND	5.92	20.30	121.79	MNI #2-8
		.181	.047	.120	.090	.187	RP334-ND	5.92	20.30	121.79	MNI #2-12
		.181	.047	.120	.090	.250	RP335-ND	5.92	20.30	121.79	MNI #2-16
		.181	.047	.120	.090	.375	RP336-ND	5.92	20.30	121.79	MNI #2-24
#4	M3	.235	.047	.145	.115	.031	RP337-ND	5.92	20.30	121.79	MNI #4-2
		.252	.047	.140	.115	.046	RP338-ND	5.92	20.30	121.79	MNI #4-3
		.235	.047	.145	.115	.063	RP339-ND	5.92	20.30	121.79	MNI #4-4
		.252	.047	.140	.115	.084	RP340-ND	5.92	20.30	121.79	MNI #4-5
		.252	.047	.140	.115	.093	RP341-ND	5.92	20.30	121.79	MNI #4-6
		.235	.047	.145	.115	.125	RP342-ND	5.92	20.30	121.79	MNI #4-8
		.252	.047	.140	.115	.156	RP343-ND	5.92	20.30	121.79	MNI #4-10
		.235	.047	.145	.115	.187	RP344-ND	5.92	20.30	121.79	MNI #4-12
		.252	.047	.140	.115	.250	RP345-ND	5.92	20.30	121.79	MNI #4-16
		.235	.047	.145	.115	.375	RP346-ND	5.92	20.30	121.79	MNI #4-24
#5	M3	.370	.050	.236	.126	.050	RP347-ND	7.10	24.34	146.05	MNI #5.3
#6	M3.5	.290	.047	.170	.140	.031	RP348-ND	5.93	20.32	121.90	MNI #6-2
		.290	.047	.170	.140	.063	RP349-ND	5.93	20.32	121.90	MNI #6-4
		.290	.047	.170	.140	.093	RP350-ND	5.93	20.32	121.90	MNI #6-6
		.290	.047	.170	.140	.125	RP351-ND	5.93	20.32	121.90	MNI #6-8
		.290	.047	.170	.140	.187	RP352-ND	5.93	20.32	121.90	MNI #6-12
		.300	.047	.170	.138	.250	RP353-ND	5.93	20.32	121.90	MNI #6-16
		.290	.047	.170	.140	.375	RP354-ND	5.93	20.32	121.90	MNI #6-24
		.290	.047	.170	.140	.500	RP355-ND	5.93	20.32	121.90	MNI #6-32
#8	M4	.344	.063	.205	.173	.031	RP356-ND	6.22	21.32	127.94	MNI #8-2
		.344	.063	.205	.173	.063	RP357-ND	6.22	21.32	127.94	MNI #8-4
		.344	.063	.205	.173	.093	RP358-ND	6.22	21.32	127.94	MNI #8-6
		.344	.063	.205	.173	.125	RP359-ND	6.22	21.32	127.94	MNI #8-8
		.344	.063	.205	.173	.187	RP360-ND	6.22	21.32	127.94	MNI #8-12
		.344	.063	.205	.173	.250	RP361-ND	6.22	21.32	127.94	MNI #8-16
		.344	.063	.205	.173	.375	RP362-ND	6.22	21.32	127.94	MNI #8-24
		.344	.063	.205	.173	.500	RP363-ND	6.22	21.32	127.94	MNI #8-32
#10	M5	.399	.063	.260	.200	.031	RP364-ND	6.47	22.19	133.13	MNI #10-2
		.399	.063	.260	.200	.063	RP365-ND	6.47	22.19	133.13	MNI #10-4
		.399	.063	.260	.200	.093	RP366-ND	6.47	22.19	133.13	MNI #10-6
		.399	.063	.260	.200	.125	RP367-ND	6.47	22.19	133.13	MNI #10-8
		.399	.063	.260	.200	.187	RP368-ND	6.47	22.19	133.13	MNI #10-12
		.399	.063	.260	.200	.250	RP369-ND	6.47	22.19	133.13	MNI #10-16
		.399	.063	.260	.200	.375	RP370-ND	6.47	22.19	133.13	MNI #10-24
		.399	.063	.260	.200	.500	RP371-ND	6.47	22.19	133.13	MNI #10-32
1/4	M6	.513	.065	.312	.260	.031	RP376-ND	7.31	25.05	150.30	MNI 1/4-2
		.513	.065	.312	.260	.063	RP377-ND	7.31	25.05	150.30	MNI 1/4-4
		.513	.065	.312	.260	.093	RP378-ND	7.31	25.05	150.30	MNI 1/4-6
		.513	.065	.312	.260	.125	RP379-ND	7.31	25.05	150.30	MNI 1/4-8
		.513	.065	.312	.260	.187	RP380-ND	7.31	25.05	150.30	MNI 1/4-12
		.513	.065	.312	.260	.250	RP381-ND	7.31	25.05	150.30	MNI 1/4-16
		.535	.065	.315	.260	.375	RP382-ND	7.31	25.05	150.30	MNI 1/4-24
		.513	.065	.312	.260	.500	RP383-ND	7.31	25.05	150.30	MNI 1/4-32
5/16	M8	.620	.063	.360	.320	.031	RP384-ND	7.64	26.18	157.10	MNI 5/16-2
		.620	.063	.360	.320	.063	RP385-ND	7.64	26.18	157.10	MNI 5/16-4
		.620	.063	.360	.320	.093	RP386-ND	7.64	26.18	157.10	MNI 5/16-6
		.620	.063	.360	.320	.125	RP387-ND	7.64	26.18	157.10	MNI 5/16-8
		.620	.063	.360	.320	.187	RP388-ND	7.64	26.18	157.10	MNI 5/16-12
		.620	.063	.360	.320	.250	RP389-ND	7.64	26.18	157.10	MNI 5/16-16
		.620	.063	.360	.320	.375	RP390-ND	7.64	26.18	157.10	MNI 5/16-24

Wire Ties and Accessories

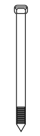
Fig. 1


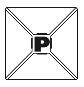
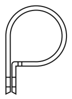
Fig. 2


Fig. 3


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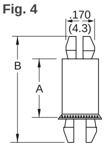


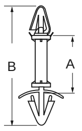
Fig. 5


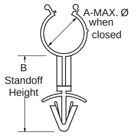
Fig. 6


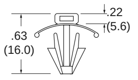
Fig. 7


Fig.	Min. #'s Loop Tensile Strength	Length In. (mm)	Width In. (mm)	Max. Bundle Dia. In. (mm)	Digi-Key Part No.	Pkg Size	Price/ Pkg	Panduit Part No.
PAN-TY® CLAMP TIE WITH MOUNTING HOLE — NYLON								
1	18	4.3 (109.2)	0.100 (2.5)	0.75 (19.1)	298-1000-ND	100	26.93	PLC1M-S4-C
	40	6.1 (154.9)	0.135 (3.4)	1.25 (31.8)	298-1001-ND	100	27.37	PLC1.5I-S8-C
	50	7.9 (200.7)	0.190 (4.8)	1.84 (46.7)	298-1002-ND	100	29.48	PLC2S-S10-C
	50	12.0 (304.8)	0.190 (4.8)	3.00 (76.2)	298-1003-ND	100	68.11	PLC3S-S10-C
	50	15.0 (381.0)	0.190 (4.8)	4.00 (101.6)	298-1004-ND	100	74.79	PLC4S-S10-C
PAN-TY® CLAMP TIE WITH MOUNTING HOLE — HEAT STABILIZED								
1	18	4.3 (109.2)	0.100 (2.5)	0.75 (19.1)	298-1005-ND	100	36.40	PLC1M-S4-C0
	40	6.1 (154.9)	0.135 (3.4)	1.25 (31.8)	298-1006-ND	100	34.22	PLC1.5I-S8-C0
	50	7.9 (200.7)	0.190 (4.8)	1.84 (46.7)	298-1007-ND	100	37.03	PLC2S-S10-C0
	50	12.0 (304.8)	0.190 (4.8)	3.00 (76.2)	298-1008-ND	100	78.93	PLC3S-S10-C0
	50	15.0 (381.0)	0.190 (4.8)	4.00 (101.6)	298-1009-ND	100	86.51	PLC4S-S10-C0
PAN-TY® CABLE TIE — NYLON								
1	12	2.8 (71.1)	0.070 (1.8)	0.60 (15.2)	298-1016-ND	100	11.56	PLT.6SM-C
	12	2.8 (71.1)	0.070 (1.8)	0.60 (15.2)	298-1017-ND	1,000	24.03	PLT.6SM-M
	18	3.1 (78.7)	0.090 (2.3)	0.68 (17.3)	298-1018-ND	100	12.09	PLT.7M-C
	18	3.1 (78.7)	0.090 (2.3)	0.68 (17.3)	298-1019-ND	1,000	22.86	PLT.7M-M
	18	3.9 (99.1)	0.098 (2.5)	0.87 (22.1)	298-1020-ND	100	12.99	PLT1M-C
	18	3.9 (99.1)	0.098 (2.5)	0.87 (22.1)	298-1021-ND	1,000	26.10	PLT1M-M
	40	5.6 (142.2)	0.142 (3.6)	1.38 (35.1)	298-1022-ND	100	15.05	PLT1.5I-C
	40	5.6 (142.2)	0.142 (3.6)	1.38 (35.1)	298-1023-ND	1,000	41.51	PLT1.5I-M
	18	5.6 (142.2)	0.098 (2.5)	1.25 (31.8)	298-1024-ND	100	15.79	PLT1.5M-C
	18	5.6 (142.2)	0.098 (2.5)	1.25 (31.8)	298-1025-ND	1,000	37.55	PLT1.5M-M
	40	8.0 (203.2)	0.142 (3.6)	2.00 (50.8)	298-1026-ND	100	22.47	PLT2I-C
	40	8.0 (203.2)	0.142 (3.6)	2.00 (50.8)	298-1027-ND	1,000	50.85	PLT2I-M
	18	8.0 (203.2)	0.098 (2.5)	2.00 (50.8)	298-1028-ND	100	17.94	PLT2M-C
	18	8.0 (203.2)	0.098 (2.5)	2.00 (50.8)	298-1029-ND	1,000	38.85	PLT2M-M
	50	7.4 (188.0)	0.190 (4.8)	1.88 (47.8)	298-1030-ND	100	19.01	PLT2S-C
	50	7.4 (188.0)	0.190 (4.8)	1.88 (47.8)	298-1031-ND	1,000	54.00	PLT2S-M
	40	11.4 (289.6)	0.145 (3.7)	3.00 (76.2)	298-1032-ND	100	27.97	PLT3I-C
	50	11.5 (292.1)	0.190 (4.8)	3.00 (76.2)	298-1033-ND	100	38.39	PLT3S-C
	50	11.5 (292.1)	0.190 (4.8)	3.00 (76.2)	298-1034-ND	1,000	142.02	PLT3S-M
	50	14.5 (368.3)	0.190 (4.8)	4.00 (101.6)	298-1035-ND	100	43.69	PLT4S-C
	50	14.5 (368.3)	0.190 (4.8)	4.00 (101.6)	298-1036-ND	1,000	160.23	PLT4S-M
PAN-TY® CABLE TIE — HEAT STABILIZED								
1	12	2.8 (71.1)	0.070 (1.8)	0.60 (15.2)	298-1037-ND	100	15.89	PLT.6SM-C0
	12	2.8 (71.1)	0.070 (1.8)	0.60 (15.2)	298-1038-ND	1,000	34.30	PLT.6SM-M0
	18	3.1 (78.7)	0.090 (2.3)	0.68 (17.3)	298-1039-ND	1,000	31.62	PLT.7M-M0
	18	3.9 (99.1)	0.098 (2.5)	0.87 (22.1)	298-1040-ND	100	16.88	PLT1M-C0
	18	3.9 (99.1)	0.098 (2.5)	0.87 (22.1)	298-1041-ND	1,000	40.50	PLT1M-M0
	40	5.6 (142.2)	0.142 (3.6)	1.38 (35.1)	298-1042-ND	100	18.51	PLT1.5I-C0
	40	5.6 (142.2)	0.142 (3.6)	1.38 (35.1)	298-1043-ND	1,000	54.45	PLT1.5I-M0
	18	5.6 (142.2)	0.098 (2.5)	1.25 (31.8)	298-1044-ND	100	18.37	PLT1.5M-C0
	18	5.6 (142.2)	0.098 (2.5)	1.25 (31.8)	298-1045-ND	1,000	53.96	PLT1.5M-M0
	40	8.0 (203.2)	0.142 (3.6)	2.00 (50.8)	298-1046-ND	100	27.02	PLT2I-C0
	40	8.0 (203.2)	0.142 (3.6)	2.00 (50.8)	298-1047-ND	1,000	68.40	PLT2I-M0
	18	8.0 (203.2)	0.098 (2.5)	2.00 (50.8)	298-1048-ND	100	23.84	PLT2M-C0
	18	8.0 (203.2)	0.098 (2.5)	2.00 (50.8)	298-1049-ND	1,000	56.21	PLT2M-M0
	50	7.4 (188.0)	0.190 (4.8)	1.88 (47.8)	298-1050-ND	100	20.30	PLT2S-C0
	50	7.4 (188.0)	0.190 (4.8)	1.88 (47.8)	298-1051-ND	1,000	60.30	PLT2S-M0
	40	11.4 (289.6)	0.145 (3.7)	3.00 (76.2)	298-1052-ND	100	37.36	PLT3I-C0
	50	11.5 (292.1)	0.190 (4.8)	3.00 (76.2)	298-1053-ND	100	41.15	PLT3S-C0
	50	11.5 (292.1)	0.190 (4.8)	3.00 (76.2)	298-1054-ND	1,000	162.45	PLT3S-M0
	50	14.5 (368.3)	0.190 (4.8)	4.00 (101.6)	298-1055-ND	100	44.96	PLT4S-C0
	50	14.5 (368.3)	0.190 (4.8)	4.00 (101.6)	298-1056-ND	1,000	181.04	PLT4S-M0
BARB-TY® CABLE TIE — NYLON TIE WITH METAL CLIP								
1	18	4.0 (101.6)	0.095 (2.4)	0.90 (22.9)	298-1063-ND	100	12.99	BT1M-C
	40	6.1 (154.9)	0.141 (3.6)	1.50 (38.1)	298-1064-ND	100	15.05	BT1.5I-C
	40	8.0 (203.2)	0.141 (3.6)	2.00 (50.8)	298-1065-ND	100	22.47	BT2I-C
	40	11.1 (281.9)	0.141 (3.6)	3.00 (76.2)	298-1066-ND	100	27.97	BT3I-C
	40	14.3 (363.2)	0.141 (3.6)	4.00 (101.6)	298-1067-ND	100	39.07	BT4I-C
	50	8.0 (203.2)	0.185 (4.7)	2.00 (50.8)	298-1068-ND	100	19.01	BT2S-C
	50	11.2 (284.5)	0.185 (4.7)	3.00 (76.2)	298-1069-ND	100	38.39	BT3S-C
	50	14.4 (365.8)	0.185 (4.7)	4.00 (101.6)	298-1070-ND	100	43.69	BT4S-C
	18	6.1 (154.9)	0.095 (2.4)	1.50 (38.1)	298-1071-ND	100	15.97	BT1.5M-C
	18	7.7 (195.6)	0.095 (2.4)	2.00 (50.8)	298-1072-ND	100	17.94	BT2M-C
	18	10.9 (276.9)	0.095 (2.4)	3.00 (76.2)	298-1073-ND	100	20.74	BT3M-C
	18	14.0 (355.6)	0.095 (2.4)	4.00 (101.6)	298-1074-ND	100	25.89	BT4M-C
	120	18.1 (459.7)	0.275 (7.0)	5.00 (127.0)	298-1075-ND	50	37.02	BT5LH-L
	120	21.2 (538.5)	0.275 (7.0)	6.00 (152.4)	298-1076-ND	50	48.27	BT6LH-L
	120	24.4 (619.8)	0.275 (7.0)	7.00 (177.8)	298-1077-ND	50	52.06	BT7LH-L
	120	27.5 (698.5)	0.275 (7.0)	8.00 (203.2)	298-1078-ND	50	65.50	BT8LH-L
	120	30.7 (799.8)	0.275 (7.0)	9.00 (228.6)	298-1079-ND	50	67.87	BT9LH-L

Fig.	Min. #'s Loop Tensile Strength	Length In. (mm)	Width In. (mm)	Max. Bundle Dia. In. (mm)	Digi-Key Part No.	Pkg Size	Price/ Pkg	Panduit Part No.
BARB-TY® CABLE TIE — HEAT STABILIZED TIE WITH METAL CLIP								
1	18	4.0 (101.6)	0.095 (2.4)	0.90 (22.9)	298-1080-ND	100	16.88	BT1M-C0
	40	6.1 (154.9)	0.141 (3.6)	1.50 (38.1)	298-1081-ND	100	18.51	BT1.5I-C0
	40	8.0 (203.2)	0.141 (3.6)	2.00 (50.8)	298-1082-ND	100	27.00	BT2I-C0
	40	11.1 (281.9)	0.141 (3.6)	3.00 (76.2)	298-1083-ND	100	37.36	BT3I-C0
	40	14.3 (363.2)	0.141 (3.6)	4.00 (101.6)	298-1084-ND	100	46.89	BT4I-C0
	50	8.0 (203.2)	0.185 (4.7)	2.00 (50.8)	298-1085-ND	100	20.30	BT2S-C0
	50	11.2 (284.5)	0.185 (4.7)	3.00 (76.2)	298-1086-ND	100	41.15	BT3S-C0
	50	14.4 (365.8)	0.185 (4.7)	4.00 (101.6)	298-1087-ND	100	46.89	BT4S-C0
	18	6.1 (154.9)	0.095 (2.4)	1.50 (38.1)	298-1088-ND	100	18.37	BT1.5M-C0
	18	7.7 (195.6)	0.095 (2.4)	2.00 (50.8)	298-1089-ND	100	22.80	BT2M-C0
	18	10.9 (276.9)	0.095 (2.4)	3.00 (76.2)	298-1090-ND	100	26.94	BT3M-C0
	18	14.0 (355.6)	0.095 (2.4)	4.00 (101.6)	298-1091-ND	100	32.41	BT4M-C0
	120	18.1 (459.7)	0.275 (7.0)	5.00 (127.0)	298-1092-ND	50	42.49	BT5LH-L0
	120	21.2 (538.5)	0.275 (7.0)	6.00 (152.4)	298-1093-ND	50	55.45	BT6LH-L0
	120	24.4 (619.8)	0.275 (7.0)	7.00 (177.8)	298-1094-ND	50	60.28	BT7LH-L0
	120	27.5 (698.5)	0.275 (7.0)	8.00 (203.2)	298-1095-ND	50	76.08	BT8LH-L0
	120	30.7 (779.8)	0.275 (7.0)	9.00 (228.6)	298-1096-ND	50	83.96	BT9LH-L0
PAN-TY® RELEASABLE TIE — NYLON								
1	50	7.4 (188.0)	0.190 (4.8)	1.88 (47.8)	298-1057-ND	100	33.30	PRT2S-C
	50	11.5 (292.1)	0.190 (4.8)	3.00 (76.2)	298-1058-ND	100	60.27	PRT3S-C
	50	14.5 (368.3)	0.190 (4.8)	4.00 (101.6)	298-1059-ND	100	68.54	PRT4S-C
PAN-TY® RELEASABLE TIE — HEAT STABILIZED								
1	50	7.4 (188.0)	0.190 (4.8)	1.88 (47.8)	298-1060-ND	100	36.62	PRT2S-C0
	50	11.5 (292.1)	0.190 (4.8)	3.00 (76.2)	298-1061-ND	100	67.40	PRT3S-C0
	50	14.5 (368.3)	0.190 (4.8)	4.00 (101.6)	298-1062-ND	100	76.70	PRT4S-C0
PAN-TY® MARKER TIE WITH WRITE ON AREA — NYLON								
1	18	4.3 (109.2)	0.098 (2.5)	0.87 (22.1)	298-1010-ND	100	28.34	PLF1M-C
	18	3.9 (99.1)	0.098 (2.5)	0.75 (19.1)	298-1011-ND	100	29.43	PLM1M-C
	50	7.4 (188.0)	0.098 (2.5)	2.00 (50.8)	298-1012-ND	100	55.67	PLM2S-C
PAN-TY® MARKER TIE WITH WRITE ON AREA — HEAT STABILIZED								
1	18	4.3 (109.2)	0.098 (2.5)	0.87 (22.1)	298-1013-ND	100	39.07	PLF1M-C0
	18	3.9 (99.1)	0.098 (2.5)	0.75 (19.1)	298-1014-ND	100	40.60	PLM1M-C0
	50	7.4 (188.0)	0.098 (2.5)	2.00 (50.8)	298-1015-ND	100	73.30	PLM2S-C0
METAL LOCKING TIE — STAINLESS STEEL								
1	100	5.0 (127.0)	0.180 (4.6)	1.00 (25.4)	298-1100-ND	100	68.89	MLT1S-CP
	100	7.9 (200.7)	0.180 (4.6)	2.00 (50.8)	298-1101-ND	100	74.08	MLT2S-CP
	100	14.2 (360.7)	0.180 (4.6)	4.00 (101.6)	298-1102-ND	100	86.94	MLT4S-CP
CUSHION SLEEVE FOR USE WITH METAL LOCKING TIE — BLACK								
—	—	100ft. (30.48m)	0.330 (8.0)	—	298-1103-ND	1 reel	167.73	PCSS-B-CR
	—	100ft. (30.48m)	0.470 (12.0)	—	298-1104-ND	1 reel	205.92	PCSH-B-CR
TAK TY® (VELCRO®) EASY RELEASE AND REUSE BRAND CABLE TIE — BLACK*								
1	50	12.0 (304.8)	0.75 (19.1)	3.00 (76.2)	298-1108-ND	10	15.73	HLC3S-X0
	50	18.0 (457.2)	0.75 (19.1)	5.00 (127.0)	298-1109-ND	10	19.27	HLC5S-X0
	50	6.0 (152.4)	0.75 (19.1)	1.50 (38.1)	298-1110-ND	10	9.29	HLS1.5S-X0
	50	12.0 (304.8)	0.75 (19.1)	3.00 (76.2)	298-1111-ND	10	15.20	HLS3S-X0
	50	18.0 (457.2)	0.75 (19.1)	5.00 (127.0)	298-1112-ND	10	22.16	HLS5S-X0
	40	8.0 (203.2)	0.50 (12.7)	1.90 (48.3)	298-1113-ND	10	10.51	HLT2I-X0
	40	12.0 (304.8)	0.50 (12.7)	3.20 (81.3)	298-1114-ND	10	13.65	HLT3I-X0
	50	15ft. (4.572m)	0.75 (19.1)	Various	298-1115-ND	1 reel	14.57	HLS-15R0
TIE HOLDER W/ADHESIVE — NYLON								
2	—	0.75 (19.1)	0.75 (19.1)	—	298-1116-ND	100	71.02	ABMM-A-C
	—	1.13 (28.7)	1.13 (28.7)	—	298-1117-ND	100	97.52	ABMS-A-C
	—	1.00 (25.4)	1.00 (25.4)	—	298-1118-ND	100	95.66	ABM100-A-C
	—	1.50 (38.1)	1.50 (38.1)	—	298-1119-ND	50	76.37	ABM3H-A-L
CABLE CLAMP — NYLON								
3	—	—	0.4 (9.5)	0.13 (3.2)	298-1120-ND	100	11.30	CCS12-S8-C
	—	—	0.4 (9.5)	0.25 (6.4)	298-1121-ND	100	11.73	CCS25-S8-C
	—	—	0.4 (9.5)	0.38 (9.7)	298-1122-ND	100	12.69	CCS38-S8-C
	—	—	0.4 (9.5)	0.50 (12.7)	298-1123-ND	100	13.48	CCS50-S8-C

Fig.	Length "A" In. (mm)	Dia. In. (mm)	Length "B" In. (mm)	Digi-Key Part No.	Pkg Size	Price/ Pkg	Panduit Part No.
CIRCUIT BOARD POST — NYLON							
4	0.125 (3.2)	0.19 (4.7)	0.4 (10.3)	298-1128-ND	100	20.94	CBP12-C
	0.250 (6.4)	0.19 (4.7)	0.5 (13.5)	298-1129-ND	100	21.44	CBP25-C
	0.375 (9.5)	0.19 (4.7)	0.7 (16.6)	298-1130-ND	100	21.82	CBP37-C
	0.500 (12.7)	0.19 (4.7)	0.8 (19.8)	298-1131-ND	100	22.23	CBP50-C
	0.750 (19.1)	0.19 (4.7)	1.0 (26.2)	298-1132-ND	100	23.88	CBP75-C
	1.000 (25.4)	0.19 (4.7)	1.3 (32.5)	298-1133-ND	100	25.67	CBP100-C
LOCK CIRCUIT BOARD SUPPORT .156" / .187" (3.96 / 4.750mm) DIAMETER — NYLON							
5	0.25 (6.4)	0.156 / 0.187 (3.960 /4.750)	0.980 (24.900)	298-1134-ND	100	19.81	CBLS25-C
	0.50 (12.7)		1.230 (31.200)	298-1135-ND	100	22.30	CBLS50-C
	0.75 (19.1)		1.480 (37.500)	298-1136-ND	100	25.33	CBLS75-C

* VELCRO is a registered trademark of the Velcro Companies

(Continued)

Wire Ties and Accessories *(Cont.)*

Fig.	Length “A” In. (mm)	Dia. In. (mm)	Length “B” In. (mm)	Digi-Key Part No.	Pkg Size	Price/ Pkg	Panduit Part No.
SPIRAL WRAP — NATURAL							
—	100ft. (30.48m)	0.125 (3.2)	—	298-1137-ND	1 reel	35.94	T12F-C
	100ft. (30.48m)	0.250 (6.4)	—	298-1138-ND	1 reel	48.51	T25F-C
	100ft. (30.48m)	0.500 (12.7)	—	298-1139-ND	1 reel	132.22	T50F-C
	100ft. (30.48m)	0.750 (19.1)	—	298-1140-ND	1 reel	161.07	T75F-C
CORRUGATED LOOM TUBING — BLACK							
—	100ft. (30.48m)	0.250 (6.4)	—	298-1141-ND	1 reel	31.11	CLT25F-C20
	100ft. (30.48m)	0.500 (12.7)	—	298-1142-ND	1 reel	38.93	CLT50F-C20

Fig.	Min. #’s Loop Tensile Strength	Length In. (mm)	Dia. In. (mm)	Hole Dia. In. (mm)	Digi-Key Part No.	Pkg Size	Price/ Pkg	Panduit Part No.
WIRE STANDOFF — NYLON								
6	—	0.25 (6.4)	0.25 (6.4)	0.187 - 0.192 (4.7 to 4.9)	298-1124-ND	100	30.71	WS25-25-C
	—	0.50 (12.7)	0.25 (6.4)		298-1125-ND	100	32.19	WS25-50-C
	—	0.25 (6.4)	0.48 (12.2)		298-1126-ND	100	35.73	WS50-25-C
	—	0.48 (12.2)	0.48 (12.2)		298-1127-ND	100	37.57	WS50-50-C
PUSH CABLE TIE MOUNT, STD — NATURAL								
7	18-50	0.6 (16.0)	0.230 (5.8)	0.25 (6.4)	298-1143-ND	100	37.98	PWMS-H25-C

Fig.	Min. #’s Loop Tensile Strength	Tie Length In. (mm)	Base Width In. (mm)	Base Length In. (mm)	Digi-Key Part No.	Pkg Size	Price/ Pkg	Panduit Part No.
MOUNT/TIE COMBINATION — NATURAL								
1 & 2	50	7.3 (185.0)	0.190 (4.8)	1.85 (47.0)	298-1144-ND	25	36.28	PLA2S-A-Q

Fig.	Length Ft. (m)	Width In. (mm)	Height In. (mm)	Digi-Key Part No.	Pkg Size	Price/ Pkg	Panduit Part No.
GROMMET EDGING -— NATURAL							
—	100ft. (30.48m)	0.106 (2.7)	0.12 (3.0)	298-1145-ND	1 reel	28.41	GEE36F-C
	100ft. (30.48m)	0.131 (3.3)	0.16 (4.1)	298-1146-ND	1 reel	30.25	GEE62F-C
	100ft. (30.48m)	0.131 (3.3)	0.16 (4.1)	298-1147-ND	1 reel	40.83	GEE62FR-C
	100ft. (30.48m)	0.169 (4.3)	0.19 (4.7)	298-1148-ND	1 reel	51.94	GEE99FR-C

TOOLS			
Gun Cable Tie Tool - Black Handle, Tensile Strength: ≤ 50 lbs.	298-1097-ND	23.23/each	STS2
Gun Cable Tie Tool - Black Plastic & Metal Body, Tensile Strength: ≤ 50 lbs.	298-1098-ND	138.05/each	GS2B
Gun Cable Tie Tool - Red Handle & Metal Body, Tensile Strength: ≤ 50 lbs.	298-1099-ND	268.71/each	GS4H
Metal Locking Tie Tool - Screwdriver Type, For Tension/Coil Tail of Tie	298-1105-ND	17.69/each	HTMT
Metal Locking Tie Tool - Ratchet Type, To Control Tension & Cutoff	298-1106-ND	296.28/each	ST2MT
Metal Locking Tie Tool - Gun Type	298-1107-ND	709.08/each	GS4MT

NEW! Thermal Transfer Printer and Labels

PTR2E Desktop Thermal Transfer Printer
Specifications:
- 203 dpi resolution
- 2” per second maximum print speed
- 4.6” maximum roll width
- 1.0” core diameter

Thermal Transfer Labels

Variety of materials available for labeling in harsh environments. Labels can be used with the PTR2E Printer or other desktop thermal transfer printers.

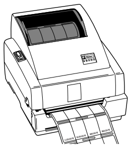


Fig. 1

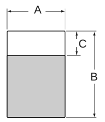


Fig. 2

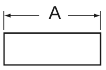
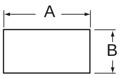


Fig. 3



Description	Digi-Key Part No.	Price/ Pkg	Panduit Part No.
PTR2E Printer and Accessories			
Printer, 120 VAC Power Cord, Operator’s Manual	298-1263-ND	1058.68	PTR2E
External Label Roll Stand for use with TTC Labels	298-1179-ND	53.83	PTR2-RS
Wax ribbon, Black, 4.33” x 262’, For use with self-laminating and heat shrink markers listed below	298-1213-ND	41.10	TTRW-BL
Resin ribbon, Black, 4.33” x 280’, For use with component labels listed below	298-1212-ND	40.32	TTR-BL

Fig.	Label Size A x B x C (In.)	Cable O.D. Range (In.)	For THHN Cable Size	Digi-Key Part No.	Pkg Size	Price/ Pkg	Panduit Part No.
Self-Laminating Wire Markers-White Vinyl (Roll)							
1	0.50 x 1.50 x 0.50	0.16-0.32	8-6 AWG	298-1214-ND	5,000	135.37	TTSL-1
	1.00 x 0.94 x 0.38	0.12-0.19	12-10 AWG	298-1216-ND	2,500	99.22	TTSL-251
	1.00 x 1.50 x 0.50	0.16-0.32	8-6 AWG	298-1266-ND	2,500	134.72	TTSL-2
	1.00 x 2.44 x 1.00	0.32-0.46	4-1 AWG	298-1267-ND	1,500	129.61	TTSL-4
	1.00 x 3.94 x 1.00	0.32-0.93	4 AWG-400 MCM	298-1223-ND	1,000	162.86	TTSL-6
	2.00 x 1.50 x 0.50	0.16-0.32	8-6 AWG	298-1217-ND	1,000	94.22	TTSL-3
	2.00 x 2.44 x 1.00	0.32-0.46	4-1 AWG	298-1218-ND	500	101.61	TTSL-5
	2.00 x 3.94 x 1.00	0.32-0.93	4 AWG-400 MCM	298-1224-ND	500	151.40	TTSL-7
Self-Laminating Wire Markers-White Tedlar (Roll)*							
1	0.50 x 1.50 x 0.50	0.16-0.32	8-6 AWG	298-1219-ND	5,000	165.91	TTSL-53
	1.00 x 0.94 x 0.38	0.12-0.19	12-10 AWG	298-1215-ND	2,500	260.22	TTSL-250
	1.00 x 1.50 x 0.50	0.16-0.32	8-6 AWG	298-1220-ND	2,500	139.07	TTSL-54
	1.00 x 2.44 x 1.00	0.32-0.46	4-1 AWG	298-1221-ND	1,500	229.29	TTSL-56
	1.00 x 3.94 x 1.00	0.32-0.93	4 AWG-400 MCM	298-1222-ND	1,000	246.84	TTSL-58

Fig.	Marker Width A (In.)	Cable O.D. Range (In.)	For THHN Cable Size	Digi-Key Part No.	Roll Size	Price/ Roll	Panduit Part No.
Heat Shrink Wire Markers - 3:1 Flattened White Polyolefin (Roll)							
2	0.50	0.04-0.13	18-12 AWG	298-1153-ND	2,000	220.46	LHS12W4
	1.00	0.04-0.13	18-12 AWG	298-1152-ND	1,000	220.46	LHS12W2
	2.00	0.04-0.13	18-12 AWG	298-1151-ND	500	209.97	LHS12W1
	0.50	0.06-0.18	18-10 AWG	298-1156-ND	2,000	284.75	LHS18W4
	1.00	0.06-0.18	18-10 AWG	298-1155-ND	1,000	284.75	LHS18W2
	2.00	0.06-0.18	18-10 AWG	298-1154-ND	500	271.20	LHS18W1
	0.50	0.08-0.25	18-8 AWG	298-1159-ND	2,000	349.07	LHS25W4
	1.00	0.08-0.25	18-8 AWG	298-1158-ND	1,000	349.07	LHS25W2
	2.00	0.08-0.25	18-8 AWG	298-1157-ND	500	332.46	LHS25W1
	1.00	0.17-0.50	8-1 AWG	298-1161-ND	1,000	578.78	LHS50W2
	2.00	0.17-0.50	8-1 AWG	298-1160-ND	500	551.23	LHS50W1
	1.00	0.33-1.00	3 AWG-500 MCM	298-1150-ND	1,000	723.49	LHS100W2
	2.00	0.33-1.00	3 AWG-500 MCM	298-1149-ND	500	689.01	LHS100W1

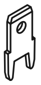
Fig.	Label Size A x B (In.)	Cable O.D. Range (In.)	For THHN Cable Size	Digi-Key Part No.	Pkg Size	Price/ Pkg	Panduit Part No.
Laser Self Laminated Wire Markers-White Polyester (Box)							
3	1.00 x 1.00 x 0.34	0.11-0.21	12-10 AWG	298-1162-ND	2,500	155.56	LJSL4-Y3-2.5
	1.00 X 1.33 X 0.50	0.16-0.26	8-6 AWG	298-1163-ND	2,500	185.35	LJSL5-Y3-2.5
	1.00 X 3.17 X 0.97	0.31-0.70	4-4/0 AWG	298-1164-ND	1,000	181.99	LJSL6-Y3-1
	2.00 X 3.17 X 1.00	0.32-0.69	4-4/0 AWG	298-1169-ND	1,000	406.05	LJSL8-Y3-1
	0.50 X 1.50 X 0.50	0.16-0.32	8-6 AWG	298-1174-ND	5,000	185.31	LJSL2-Y3-5
	2.00 X 1.50 X 0.50	0.16-0.32	8-6 AWG	298-1175-ND	1,000	203.01	LJSL7-Y3-1

Fig.	Label Size A x B (In.)	Material	Color	Digi-Key Part No.	Pkg Size	Price/ Pkg	Panduit Part No.
Laser Component Labels-Polyester (Box)							
3	1.50 X 0.25	Polyester	White	298-1165-ND	10,000	208.63	PLL-14-Y2-10
	1.88 X 0.25	Polyester	White	298-1166-ND	10,000	269.53	PLL-15-Y2-10
	3.00 X 0.38	Polyester	White	298-1167-ND	1,000	84.09	PLL-19-Y2-1
	0.80 X 0.20	Polyester	White	298-1168-ND	10,000	153.47	PLL-20-Y2-10
	0.38 X 0.38	Polyester	White	298-1170-ND	10,000	117.28	PLL-2-Y2-10
	0.25 X 0.25	Polyester	White	298-1171-ND	10,000	147.73	PLL-30-Y2-10
	0.50 X 0.44	Polyester	White	298-1172-ND	10,000	198.88	PLL-31-Y2-10
	0.65 X 0.20	Polyester	White	298-1173-ND	10,000	130.15	PLL-32-Y2-10
	0.80 X 0.25	Polyester	White	298-1176-ND	10,000	153.47	PLL-5-Y2-10
	1.00 X 0.38	Polyester	White	298-1177-ND	10,000	207.93	PLL-8-Y2-10
	1.00 X 0.50	Polyester	White	298-1178-ND	10,000	270.05	PLL-9-Y2-10

Fig.	Label Size A x B (In.)	Material	Color	Digi-Key Part No.	Pkg Size	Price/ Pkg	Panduit Part No.
Component Labels (Roll)†							
3	0.50 x 0.44	Polyester	Silver	298-1197-ND	10,000	115.54	TTC3YS-10
	0.50 x 0.44	Polyester	White	298-1196-ND	10,000	71.69	TTC3Y-10
	0.50 x 0.44	Polyimide	White	298-1195-ND	10,000	572.29	TTC3KW-10
	0.50 x 0.44	Polyimide	Tan	298-1194-ND	10,000	572.29	TTC3K-10
	0.90 x 0.25	Polyester	White	298-1203-ND	10,000	71.51	TTC6Y-10
	0.90 x 0.25	Tedlar*	White	298-1202-ND	10,000	169.82	TTC6T-10
	1.00 x 0.38	Polyester	Silver	298-1265-ND	10,000	192.62	TTC7YS-10
	1.00 x 0.38	Polyester	White	298-1206-ND	10,000	79.17	TTC7Y-10
	1.00 x 0.38	Polyimide	Tan	298-1204-ND	10,000	744.55	TTC7K-10
	1.00 x 0.38	Polyimide	White	298-1205-ND	10,000	744.55	TTC7KW-10
	1.00 x 0.50	Polyester	Silver	298-1211-ND	10,000	257.00	TTC8YS-10
	1.00 x 0.50	Polyester	White	298-1210-ND	10,000	119.36	TTC8Y-10
	1.00 x 0.50	Polyimide	Tan	298-1207-ND	10,000	992.32	TTC8K-10
	1.00 x 0.50	Polyimide	White	298-1208-ND	10,000	992.32	TTC8KW-10
	1.00 x 0.50	Tedlar*	White	298-1209-ND	10,000	274.40	TTC8T-10
	2.00 x 0.25	Polyester	White	298-1185-ND	2,500	34.58	TTC18Y-2.5
	2.00 x 0.25	Polyimide	Tan	298-1183-ND	2,500	310.98	TTC18K-2.5
	2.00 x 0.25	Polyimide	White	298-1184-ND	2,500	310.98	TTC18KW-2.5
	1.50 X 0.25	Polyimide	Tan	298-1180-ND	10,000	886.36	TTC11K-10
	1.50 X 0.25	Polyimide	White	298-1181-ND	10,000	886.36	TTC11KW-10
	1.50 X 0.25	Polyester	White	298-1182-ND	10,000	82.65	TTC11Y-10
	0.25 X 0.25	Polyimide	Tan	298-1186-ND	10,000	328.69	TTC1K-10
	0.25 X 0.25	Polyimide	White	298-1187-ND	10,000	328.69	TTC1KW-10
	0.25 X 0.25	Polyester	White	298-1188-ND	10,000	24.01	TTC1Y-10
	3.00 X 0.25	Polyimide	Tan	298-1189-ND	2,500	455.36	TTC23K-2.5
	3.00 X 0.20	Polyimide	White	298-1190-ND	2,500	455.36	TTC23KW-2.5
	3.00 X 0.25	Polyester	White	298-1191-ND	2,500	46.46	TTC23Y-2.5
	0.375 X 0.375	Polyimide	Tan	298-1192-ND	10,000	305.72	TTC2K-10
	0.375 X 0.375	Polyimide	White	298-1193-ND	10,000	305.72	TTC2KW-10
	0.38 X 0.38	Polyester	White	298-1264-ND	10,000	49.76	TTC2Y-10
	0.50 X 0.125	Polyimide	Tan	298-1198-ND	20,000	701.92	TTC47K-20
	0.50 X 0.125	Polyimide	White	298-1199-ND	20,000	657.37	TTC47KW-20
	0.7 X 0.375	Polyimide	Tan	298-1200-ND	10,000	455.18	TTC48K-10
	0.7 X 0.375	Polyimide	White	298-1201-ND	10,000	455.18	TTC48KW-10

*Tedlar is the registered trademark of E.I. Dupont Co. †TTC Component labels are supplied on 3” cores and must be rear fed from the PTR2E External Roll stand shown above when used with the PTR2E Printer

Terminals

Fig. 1


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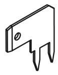

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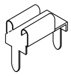

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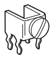

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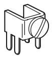

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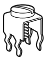

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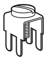

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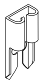

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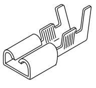

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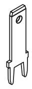

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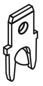

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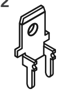

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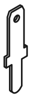

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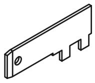
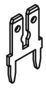


Fig. 15


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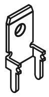

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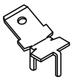

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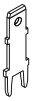


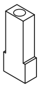
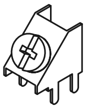
Fig. 19


Fig.	Description	Digi-Key Part No.	Pricing 10	100
	PC Quick-Fit Tab Terminal			
3	.110” Female, Horizontal	3545K-ND	3.09	24.30
3	.110” Female, Horizontal	3549K-ND	3.09	24.30
3	.205” Female, Horizontal	3546K-ND	3.22	25.40
3	.205” Female, Horizontal	3550K-ND	3.22	25.40
3	.250” Female, Horizontal	3547K-ND	3.38	26.60
8	.110” Female, Vertical	3534K-ND	1.46	8.90
8	.110” Female, Vertical	3544K-ND	1.46	8.90
8	.205” Female, Vertical	3525K-ND	1.46	8.90
8	.250” Female, Vertical	3528K-ND	1.46	8.90
8	.187” Female, Vertical	3548K-ND	2.73	22.70
8	.187” Female, Vertical	3551K-ND	2.73	22.70
8	.205” Quick-Fit Vert Terminal	3522K-ND	1.41	8.60
9	.110” Female, 18-22 Gage	1252K-ND	1.12	8.80
9	.187” Female, 16-22 Gage	1264K-ND	2.70	21.20
9	.205” Female, 16-20 Gage	4469K-ND	3.71	29.30
9	.250” Female, 16-20 Gage	4470K-ND	2.05	16.20
1	.205” Male, .020 Brass, Tin Plate, .046 Diameter	1286K-ND	.63	5.00
1	.205” Male, .032 Brass, Tin Plate, .052 Diameter	1213K-ND	.68	5.90
11	.205” Male, .020 Brass, Tin Plate, .046 Diameter	1286-STK-ND	2.24	12.20
11	.205” Male, .032 Brass, Tin Plate, .052 Diameter	1213-STK-ND	1.34	7.35
12	.187” Male, .020 Brass, Tin Plate, .043 Diameter	4900K-ND	1.03	8.10
1	.187” Male, .020 Brass, Tin Plate, .046 Diameter	1285K-ND	.60	4.80
1	.187” Male, .032 Brass, Tin Plate, .052 Diameter	1212K-ND	.65	5.80
11	.187” Male, .020 Brass, Tin Plate, .046 Diameter	1285-STK-ND	.60	4.80
11	.187” Male, .032 Brass, Tin Plate, .052 Diameter	1212-STK-ND	.65	5.80
13	.110” Male, .020 Brass, Tin Plate, .046 Diameter	1267K-ND	.77	6.20
13	.110” Male, .032 Brass, Tin Plate, .052 Diameter	1211K-ND	.81	6.80
2	.110” Male, .020 Brass, Tin Plate, .046 Diameter	4903K-ND	1.61	12.70
2	.110” Male, .032 Brass, Tin Plate, .052 Diameter	4906K-ND	1.65	12.80
2	.187” Male, .020 Brass, Tin Plate, .046 Diameter	4904K-ND	1.55	12.20
2	.187” Male, .032 Brass, Tin Plate, .052 Diameter	4907K-ND	1.58	12.30
2	.250” Male, .032 Brass, Tin Plate, .056 Diameter	4966K-ND	1.16	7.00
2	.250” Male, .032 Brass, Tin Plate, .052 Diameter	1266K-ND	1.16	7.00
14	.250” Male, .032 Brass, Tin Plate, .106 Diameter	1265K-ND	1.56	8.90
1	.250” Male, .032 Brass, Tin Plate, .052 Diameter	1287K-ND	.74	5.90
11	.250” Male, .032 Brass, Tin Plate, .052 Diameter	1287-STK-ND	.74	5.90
15	.110”/.250” Male, .032 Brass, Tin Plate, .052 Diameter	1282K-ND	.74	5.90
12	.250” Male, .032 Brass, Tin Plate, .067 Diameter	4901K-ND	1.03	8.10
16	.250” Male, .032 Brass, Tin Plate, .067 Diamter	4902K-ND	1.03	8.10
17	.250” Male, .032 Brass, Tin Plate, .052 Diameter	4908K-ND	2.19	17.30
10	.250” Male, .032 Brass, Tin Plate, .052 Diameter	1289K-ND	1.15	6.00
10	.250” Male, .032 Brass, Tin Plate, .052 Diameter	1289-STK-ND	1.60	8.75
18	.250” Male, .032 Brass, Tin Plate, .052 Diameter	1281K-ND	1.81	9.40
19	.250” Quick-Fit Vinyl Boot, Clear	4471K-ND	.82	6.60
19	.250” Quick-Fit Vinyl Boot, Red	4472K-ND	.82	6.60
19	.250” Quick-Fit Vinyl Boot, Blue	4473K-ND	.82	6.60
19	.250” Quick-Fit Vinyl Boot, Yellow	4474K-ND	.82	6.60
—	Terminal Hand Insertion Tool	1288K-ND	14.48 each	
	MT Screw Terminal			
4	Snap-In PC Horizontal	7690K-ND	—	20.50
4	Snap-In PC Horizontal, Captivated	7692K-ND*	—	24.30
5	PC Horizontal	8190K-ND	—	19.10
5	PC Horizontal, Captivated	7700K-ND*	—	21.10
6	Snap-In PC Vertical	7691K-ND	—	20.10
6	Snap-In PC Vertical, Captivated	7693K-ND*	—	23.10
7	PC Vertical	8191K-ND	—	18.80
7	PC Vertical, Captivated	7701K-ND*	—	21.70

* Screw Installed & Captivated

45° PC Mount Screw Terminal

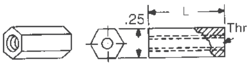


Specifications: • **Rated:** 15 Amps • **Terminal:** .032 Thick Brass, Tin Plate • **Binding Head Screw:** Brass, Nickel Plate

8189K-ND	Screw Supplied Unassembled	**$3.22/10**
7702K-ND	Screw Installed & Captivated	**$3.63/10**

Nylon Spacers

Economical for terminal or printed circuit board supports.



Hex Threaded Standoffs

Material: Nylon 6/6

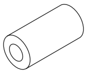
“L” Length (Inch)	4-40 Thread Part No.	6-32 Thread Part No.	8-32 Thread Part No.	Pricing 10	100
.250	1902AK-ND	1903AK-ND	1904AK-ND	4.77	24.50
.375	1902BK-ND	1903BK-ND	1904BK-ND	4.88	25.10
.500	1902CK-ND	1903CK-ND	1904CK-ND	5.09	26.20
.625	1902FK-ND	1903FK-ND	1904FK-ND	4.43	31.00
.750	1902DK-ND	1903DK-ND	1904DK-ND	6.54	33.60
.875	1902GK-ND	1903GK-ND	1904GK-ND	4.99	35.00
1.000	1902EK-ND	1903EK-ND	1904EK-ND	6.58	33.70

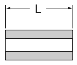
Hex Threaded Standoffs - Flame Retardant

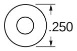
Material: Monsanto 340 FR UL 94V-0 rating

“L” Length (Inch)	4-40 Thread Part No.	6-32 Thread Part No.	8-32 Thread Part No.	Pricing 10	100
.250	8440AK-ND	8441AK-ND	8442AK-ND	5.28	36.90
.375	8440BK-ND	8441BK-ND	8442BK-ND	5.39	37.75
.500	8440CK-ND	8441CK-ND	8442CK-ND	5.61	39.20
.625	8440DK-ND	8441DK-ND	8442DK-ND	6.69	46.10
.750	8440EK-ND	8441EK-ND	8442EK-ND	6.71	46.90
.875	8440FK-ND	8441FK-ND	8442FK-ND	6.93	48.60
1.000	8440GK-ND	8441GK-ND	8442GK-ND	7.26	50.80

Round Thru-Hole Spacers







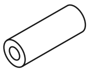
Material: Nylon 6/6

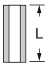
“L” Length (Inch)	#4 Screw .120 Hole Part No.	#6 Screw .140 Hole Part No.	#8 Screw .171 Hole Part No.	Pricing 10	100
.125	875K-ND	883K-ND	891K-ND	.89	8.10
.250	876K-ND	884K-ND	892K-ND	.97	8.90
.375	877K-ND	885K-ND	893K-ND	1.26	11.00
.500	878K-ND	886K-ND	894K-ND	1.33	12.20
.625	879K-ND	887K-ND	895K-ND	1.44	12.70
.750	880K-ND	888K-ND	896K-ND	1.46	13.70
.875	881K-ND	889K-ND	897K-ND	1.59	15.10
1.000	882K-ND	890K-ND	898K-ND	1.67	16.50

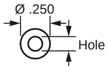
Round Clear Spacers (Non Threaded)

Materials: Brass: Nickel Plate (QQ-N-290) • **Aluminum:** Iridite Finish (MIL-C-5541)

Clearance Hole: • .120” for #4 Screw • .140 for #6 Screw • .171 for #8 Screw







Screw (Hole)	“L” Length (Inch)	Brass Spacers Part No.	Pricing 10	100	Aluminum Spacers Part No.	Pricing 10	100
#4 (.120)	.125	1909K-ND	1.85	15.80	2036K-ND	1.34	9.90
	.250	1454AK-ND	2.10	18.00	3457K-ND	1.56	10.10
	.375	1454BK-ND	2.24	19.20	3458K-ND	1.86	12.00
	.500	1454CK-ND	2.68	22.80	3459K-ND	2.03	13.60
	.625	1919K-ND	2.99	25.70	2314K-ND	2.24	15.00
	.750	1454DK-ND	3.03	26.10	3460K-ND	2.51	16.20
	.875	1920K-ND	4.69	40.40	3402K-ND	2.82	20.30
	1.000	1454EK-ND	4.83	41.55	3461K-ND	3.07	21.10
	1.500	1924K-ND	10.38	65.40	3462K-ND	6.83	43.20
	2.000	1925K-ND	13.75	86.70	3463K-ND	9.05	57.10
#6 (.140)	.125	1934K-ND	1.85	15.80	3403K-ND	1.34	9.90
	.250	1457AK-ND	2.10	18.00	3464K-ND	1.56	10.10
	.375	1457BK-ND	2.24	19.20	3465K-ND	1.86	12.00
	.500	1457CK-ND	2.68	22.80	3466K-ND	2.03	13.60
	.625	1935K-ND	2.99	25.70	3429K-ND	2.24	15.00
	.750	1457DK-ND	3.03	26.10	3467K-ND	2.51	16.20
	.875	1936K-ND	4.69	40.40	3438K-ND	2.82	20.30
	1.000	1457EK-ND	4.83	41.55	3468K-ND	3.07	21.10
	1.500	1937K-ND	10.38	65.40	3469K-ND	6.83	43.20
	2.000	1938K-ND	13.67	86.60	3470K-ND	9.05	57.10
#8 (.171)	.125	1942K-ND	1.85	15.80	4258K-ND	1.34	9.90
	.250	1480K-ND	2.10	18.00	3471K-ND	1.56	10.10
	.375	1481K-ND	2.24	19.20	3472K-ND	1.86	12.00
	.500	1482K-ND	2.68	22.80	3473K-ND	2.03	13.60
	.625	2032K-ND	2.99	25.70	4259K-ND	2.24	15.00
	.750	1483K-ND	3.03	26.10	3474K-ND	2.51	16.20
	.875	2033K-ND	4.69	40.40	4260K-ND	2.82	20.30
	1.000	1484K-ND	4.83	41.40	3475K-ND	3.07	21.10
	1.500	2034K-ND	10.38	65.40	3476K-ND	6.83	43.20
	2.000	2035K-ND	13.67	86.60	3477K-ND	9.05	57.10

Round Spacer Kits

Brass Nickel Plated - Assortment of 1500 pieces in 1/4”, 3/8”, 1/2”, 3/4” and 1” lengths with clearance holes for #4, #6, and #8. 100 pieces of each size complete with cabinet.
SPR-13KIT-ND **$236.98**

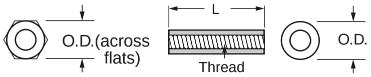
Aluminum Iridite - Assortment of 1500 pieces in 1/4”, 3/8”, 1/2”, 3/4” and 1” lengths with clearance holes for #4, #6, and #8. 100 pieces of each size complete with cabinet.
SPR-34KIT-ND **$223.06**

KEYSTONE ELECTRONICS CORP.

Threaded Standoffs

- **Brass:** ASTM-B16
- **Plating:** Zinc (ASTM B633)

- **Aluminum:** QQ-A-225/3, Alloy 2011-T3
- **Plating:** Clear Iridite (Mil-C-5541)



Thread	O.D.	"L" Length (Inch)	Hex Thread Part No.	Pricing 10	Pricing 100	Round Thread Part No.	Pricing 10	Pricing 100
Aluminum Iridite Finish								
2-56	.156	.187	1797AK-ND	3.68	34.30	1801AK-ND	3.74	32.20
		.250	1797BK-ND	3.95	36.80	1801BK-ND	3.70	32.00
		.312	1797CK-ND	4.11	38.30	1801CK-ND	4.01	34.60
		.375	1797DK-ND	3.12	29.10	1801DK-ND	4.63	39.90
4-40	.187	.250	1891K-ND	2.11	15.40	2025K-ND	2.09	15.00
		.375	1892K-ND	2.48	17.90	2026K-ND	2.41	17.70
		.500	1893K-ND	2.73	20.90	2027K-ND	2.67	19.30
		.625	1894K-ND	3.21	22.70	2028K-ND	3.15	21.10
		.750	1895K-ND	3.56	25.50	2029K-ND	3.51	24.50
		.875	1896K-ND	3.91	28.20	2030K-ND	3.84	26.40
		1.000	1897K-ND	4.29	36.90	2031K-ND	4.29	36.90
4-40	.250	.250	2201K-ND	2.04	15.10	3478K-ND	1.85	13.00
		.375	2202K-ND	2.28	16.60	3479K-ND	2.05	15.10
		.500	2203K-ND	2.53	18.40	3480K-ND	2.30	16.30
		.625	1808K-ND	2.73	20.20	1839K-ND	2.50	24.00
		.750	2204K-ND	3.08	22.00	3481K-ND	2.81	20.20
		.875	1809K-ND	3.80	30.40	1846K-ND	3.45	29.70
		1.000	2205K-ND	3.91	33.85	3482K-ND	3.82	32.90
		1.500	2206K-ND	6.67	57.30	3483K-ND	6.45	55.50
		2.000	2207K-ND	7.69	66.30	3484K-ND	7.47	64.30
6-32	.250	.250	2208K-ND	2.04	15.10	3485K-ND	1.85	13.00
		.375	2209K-ND	2.28	16.60	3486K-ND	2.05	15.10
		.500	2210K-ND	2.53	18.40	3487K-ND	2.30	16.30
		.625	1813K-ND	2.88	20.60	1847K-ND	2.74	23.60
		.750	2211K-ND	3.08	22.00	3488K-ND	2.81	20.20
		.875	1816K-ND	3.28	23.30	1848K-ND	3.08	22.10
		1.000	2212K-ND	3.91	33.85	3489K-ND	3.82	32.90
		1.250	1818K-ND	5.91	50.80	1853K-ND	5.79	49.80
		1.500	2213K-ND	6.67	57.30	3490K-ND	6.45	55.50
		1.750	1819K-ND	6.96	60.00	1855K-ND	6.84	59.00
		2.000	2214K-ND	7.69	66.30	3491K-ND	7.47	64.30
		2.250	1820K-ND	8.54	73.50	1856K-ND	8.31	71.55
		2.500	1825K-ND	9.34	80.50	1857K-ND	9.11	78.50
8-32	.250	.250	2215K-ND	2.04	15.10	3492K-ND	1.85	13.00
		.375	2216K-ND	2.28	16.60	3493K-ND	2.05	15.10
		.500	2217K-ND	2.53	18.40	3494K-ND	2.30	16.30
		.625	1827K-ND	2.79	24.00	1858K-ND	2.50	18.60
		.750	2218K-ND	3.01	25.80	3495K-ND	2.81	20.20
		.875	1828K-ND	3.74	32.10	1859K-ND	3.08	22.10
		1.000	2219K-ND	3.91	33.85	3496K-ND	3.82	32.90
		1.500	2220K-ND	6.67	57.30	3497K-ND	6.45	55.50
		2.000	2221K-ND	7.69	66.30	3498K-ND	7.47	64.30
8-32	.375	.375	1926AK-ND	3.45	29.70	2315AK-ND	5.09	46.50
		.500	1926BK-ND	3.61	31.00	2315BK-ND	5.72	49.20
		.625	1926CK-ND	4.72	40.60	2315CK-ND	6.16	53.00
		.750	1926DK-ND	5.49	47.20	2315DK-ND	6.61	56.90
		1.000	1926EK-ND	6.66	57.20	2315EK-ND	7.88	68.00
Brass Zinc Plate								
2-56	.156	.187	1798AK-ND	4.32	40.25	1802AK-ND	3.70	32.00
		.250	1798BK-ND	3.62	33.80	1802BK-ND	3.98	34.30
		.312	1798CK-ND	5.59	52.20	1802CK-ND	4.12	35.60
		.375	1798DK-ND	5.20	48.50	1802DK-ND	4.12	35.60
4-40	.187	.250	1450K-ND	2.18	16.30	1547K-ND	2.38	15.00
		.375	1803K-ND	2.77	18.70	1864K-ND	2.74	22.70
		.500	1656K-ND	3.00	22.15	1657K-ND	2.97	21.70
		.625	1804K-ND	3.96	29.80	1865K-ND	3.94	25.60
		.750	1656AK-ND	4.13	28.30	1657AK-ND	4.02	27.60
		.875	1805K-ND	5.48	36.60	1866K-ND	5.47	35.30
		1.000	1656BK-ND	5.32	36.60	1657BK-ND	5.27	35.10
4-40	.250	.250	1450AK-ND	2.04	15.10	1547AK-ND	2.55	21.90
		.375	1450BK-ND	2.56	17.50	1547BK-ND	2.98	25.60
		.500	1450CK-ND	2.96	22.00	1547CK-ND	3.64	31.20
		.625	1829K-ND	4.32	29.70	1867K-ND	4.10	35.30
		.750	1450DK-ND	4.57	34.70	1547DK-ND	4.60	39.60
		.875	1830K-ND	5.26	36.10	1876K-ND	5.18	44.60
		1.000	1450EK-ND	5.14	35.10	1547EK-ND	5.77	49.70
		1.500	1831K-ND	10.54	90.80	1877K-ND	10.23	88.00
		2.000	1832K-ND	10.80	93.10	1878K-ND	10.45	90.00
6-32	.250	.250	1451AK-ND	2.04	15.10	1548AK-ND	2.03	13.90
		.375	1451BK-ND	2.56	17.50	1548BK-ND	2.23	16.30
		.500	1451CK-ND	2.96	22.00	1548CK-ND	2.97	21.10
		.625	1451DK-ND	3.99	29.70	1548DK-ND	3.25	28.30
		.750	1451EK-ND	4.57	34.70	1548EK-ND	4.12	33.90
		.875	1833K-ND	5.26	36.10	1879K-ND	4.93	35.20
		1.000	1635K-ND	5.14	35.10	1548FK-ND	4.73	34.50
		1.250	1636K-ND	6.69	62.45	1881K-ND	7.11	61.30
		1.500	1637K-ND	7.73	72.10	1882K-ND	10.23	88.00
		1.750	1638K-ND	9.85	91.90	1883K-ND	10.36	89.20
		2.000	1639K-ND	9.97	93.10	1884K-ND	10.45	90.00
		2.250	1642K-ND	10.18	94.95	1885K-ND	10.72	92.20
		2.500	1643K-ND	10.47	97.55	1886K-ND	11.02	94.95

Thread	O.D.	"L" Length (Inch)	Hex Thread Part No.	Pricing 10	Pricing 100	Round Thread Part No.	Pricing 10	Pricing 100
8-32	.250	.250	1474AK-ND	2.04	16.85	1692AK-ND	2.81	26.20
		.375	1474BK-ND	2.56	17.50	1692BK-ND	2.95	27.60
		.500	1474CK-ND	2.96	22.00	1692CK-ND	3.76	35.05
		.625	1834K-ND	4.32	29.70	1887K-ND	4.65	40.00
		.750	1474DK-ND	4.57	34.70	1692DK-ND	5.09	47.40
		.875	1836K-ND	5.26	36.10	1888K-ND	5.27	45.55
		1.000	1474EK-ND	5.14	35.10	1692EK-ND	5.24	48.90
		1.500	1837K-ND	10.54	90.80	1889K-ND	10.23	88.00
		2.000	1838K-ND	10.80	93.10	1899K-ND	10.99	94.70
8-32	.375	.375	1452AK-ND	4.44	38.20	1549AK-ND	5.53	51.60
		.500	1452BK-ND	5.71	49.10	1549BK-ND	5.96	55.60
		.625	1452CK-ND	7.38	63.50	1549CK-ND	6.56	61.30
		.750	1452DK-ND	7.96	68.50	1549DK-ND	7.21	67.30
		1.000	1452EK-ND	10.27	88.30	1549EK-ND	8.86	82.60

Hex Threaded Standoff Kit

Brass - Assortment of 1500 in 1/4", 3/8", 1/2", 3/4" and 1" lengths with thread sizes of 4-40, 6-32 and 8-32. 100 pieces of each size complete with cabinet.
STH-14KIT-ND..**$383.39**

Aluminum - Assortment of 1500 pieces in 1/4", 3/8", 1/2", 3/4" and 1" lengths with thread sizes of 4-40, 6-32 and 8-32. 100 pieces of each size complete with cabinet.
STH-22KIT-ND..**$277.31**

Round Threaded Standoff Kit

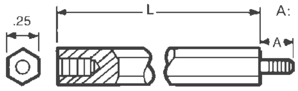
Brass - Assortment of 1500 pieces in 1/4", 3/8", 1/2", 3/4" and 1" lengths with thread sizes of 4-40, 6-32 and 8-32. 100 pieces of each size complete with cabinet.
STR-15KIT-ND..**$348.51**

Aluminum - Assortment of 1500 pieces in 1/4", 3/8", 1/2", 3/4" and 1" lengths with thread sizes of 4-40, 6-32 and 8-32. 100 pieces of each size complete with cabinet.
STR-35KIT-ND..**$271.86**

Male/Female .250" Hex Threaded Standoffs

- **Brass:** ASTM-B16
- **Plating:** Nickel (QQ-N-290)

- **Aluminum:** QQ-Q-225/3
- **Plating:** Clear Iridite (Mil-C-5541)



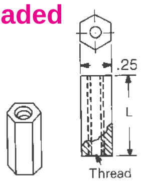
"L" Length (Inch)	4-40 Thread Part No.	Pricing 10	Pricing 100	6-32 Thread Part No.	Pricing 10	Pricing 100	8-32 Thread Part No.	Pricing 10	Pricing 100
Aluminum (Iridite MIL-C-5441)									
.250	8714K-ND*	2.37	20.10	8717K-ND*	2.63	22.40	—	—	—
.375	8400K-ND†	2.69	22.80	8413K-ND†	2.78	23.70	8426K-ND†	3.40	31.20
.500	8401K-ND	3.74	31.90	8414K-ND	2.82	23.90	8427K-ND	3.46	31.90
.625	8402K-ND	4.03	34.20	8415K-ND	3.56	30.20	8428K-ND	3.72	34.20
.750	8403K-ND	4.10	34.81	8416K-ND	3.58	30.50	8429K-ND	3.96	36.45
.875	8404K-ND	4.45	37.80	8417K-ND	3.90	33.20	8430K-ND	4.40	40.50
1.000	8405K-ND	4.71	40.00	8418K-ND	4.10	34.81	8431K-ND	4.67	42.95
1.125	8406K-ND	5.76	48.90	8419K-ND	4.23	35.91	8432K-ND	6.26	58.50
1.250	8407K-ND	5.82	49.50	8420K-ND	4.51	38.30	8433K-ND	6.49	60.50
1.375	8408K-ND	6.83	58.80	8421K-ND	5.12	43.50	8434K-ND	7.00	65.30
1.500	8409K-ND	6.98	60.10	8422K-ND	5.86	49.80	8435K-ND	7.07	66.00
1.625	8410K-ND	7.18	61.90	8423K-ND	5.95	50.50	8436K-ND	7.15	66.60
1.750	8411K-ND	7.35	63.20	8424K-ND	6.24	53.00	8437K-ND	7.22	67.40
2.000	8412K-ND	7.59	65.30	8425K-ND	6.37	54.20	8438K-ND	7.30	68.10
Brass									
.250	8713K-ND*	2.54	23.40	8716K-ND*	2.48	22.80	—	—	—
.375	7200K-ND†	2.81	25.80	7210K-ND†	2.90	26.70	7220K-ND†	3.37	30.90
.500	1944K-ND	3.97	33.75	1952K-ND	3.43	29.10	1957K-ND	3.68	31.20
.625	1945K-ND	4.03	34.20	1953K-ND	4.35	36.90	1958K-ND	5.12	43.50
.750	1946K-ND	4.80	40.80	1954K-ND	4.58	38.90	1959K-ND	5.38	45.80
.875	7201K-ND	4.49	41.30	7211K-ND	4.85	44.60	7221K-ND	5.44	50.00
1.000	1947K-ND	5.38	45.80	1644K-ND	4.99	46.00	1960K-ND	6.18	52.50
1.125	7202K-ND	5.38	49.50	7212K-ND	5.32	48.90	7222K-ND	6.12	57.00
1.250	1948K-ND	8.26	71.20	1955K-ND	6.82	57.90	1961K-ND	8.26	71.20
1.375	1949K-ND	8.46	72.85	1956K-ND	7.39	62.80	1962K-ND	8.46	72.85
1.500	1950K-ND	8.86	76.30	1645K-ND	6.91	63.60	1963K-ND	8.86	76.30
1.625	7203K-ND	8.25	77.00	7214K-ND	8.25	77.00	7224K-ND	8.25	77.00
1.750	7205K-ND	9.21	86.00	7215K-ND	9.21	86.00	7225K-ND	9.21	86.00
2.000	1951K-ND	10.06	86.60	1646K-ND	9.28	86.60	1964K-ND	10.06	86.60
Nylon 6/6									
.250	4800K-ND	2.98	23.80	4814K-ND*	2.98	23.80	4828K-ND*	3.40	23.80
.375	4801K-ND	3.03	24.30	4815K-ND	3.03	24.30	4829K-ND†	3.47	24.30
.500	4802K-ND	3.16	25.20	4816K-ND	3.16	25.20	4830K-ND	3.61	25.20
.625	4803K-ND	3.22	25.70	4817K-ND	3.22	25.70	4831K-ND	3.68	25.70
.750	4804K-ND	3.28	26.20	4818K-ND	3.28	26.20	4832K-ND	3.75	26.20
.875	4805K-ND	3.34	26.70	4819K-ND	3.34	26.70	4833K-ND	3.82	26.70
1.000	4806K-ND	3.40	27.20	4820K-ND	3.40	27.20	4834K-ND	3.89	27.20
1.125	4807K-ND	3.44	27.50	4821K-ND	3.44	27.50	4835K-ND	3.93	27.50
1.250	4808K-ND	3.47	27.70	4822K-ND	3.47	27.70	4836K-ND	3.96	27.70
1.375	4809K-ND	3.52	28.20	4823K-ND	3.52	28.20	4837K-ND	4.03	28.20
1.500	4810K-ND	3.59	28.60	4824K-ND	3.59	28.60	4838K-ND	4.10	28.60
1.625	4811K-ND	3.65	29.20	4825K-ND	3.65	29.20	4839K-ND	4.17	29.20
1.750	4812K-ND	3.71	29.70	4826K-ND	3.71	29.70	4840K-ND	4.24	29.70
2.000	4813K-ND	3.77	30.20	4827K-ND	3.77	30.20	4841K-ND	4.31	30.20

* Internal Thread .130/.150 deep. † Internal Thread .250 deep.

Hex Brass Standoff Kit

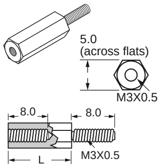
Assortment of 750 in 1/2", 3/4", 1", 1-1/4", and 1-1/2" lengths with thread sizes of 4-40, 6-32 and 8-32. 50 pieces of each size complete with cabinet.
STH-19KIT-ND..**$348.51**

Metric 5mm Hex Threaded Standoffs



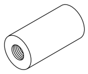
"L" Length (mm)	Digi-Key Part No.	Pricing 10	100
5	4390K-ND	2.80	26.20
10	4391K-ND	3.32	31.00
15	4392K-ND	3.70	34.40
20	4393K-ND	4.36	40.60
25	4394K-ND	4.78	44.60

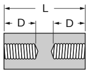
Metric Male/Female 5mm Hex Threaded Standoffs

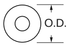


"L" Length (mm)	Digi-Key Part No.	Pricing 10	100
10	4313K-ND	4.27	39.80
12	4314K-ND	4.38	40.80
15	4315K-ND	4.57	42.60
18	4316K-ND	4.94	46.10
20	4317K-ND	5.08	47.40
25	4318K-ND	5.60	52.20

Ceramic Standoffs

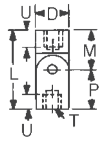




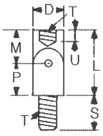


Thread	O.D.	"L" Length (Inch)	D (2) Depth	Digi-Key Part No.	Pricing 10	100
6-32	.250	.125	thru	7710K-ND	17.88	122.50
	.250	.500	.156	7711K-ND	20.31	136.90
	.375	.375	.156	7712K-ND	16.92	115.20
	.375	.500	.187	7713K-ND	17.40	118.90
	.500	.500	.140	7714K-ND	18.87	129.70
	.500	.750	.250	7715K-ND	19.83	136.90
	.500	1.000	.375	7716K-ND	21.27	144.10
	.500	1.500	.562	7717K-ND	25.14	172.90
	.500	2.500	.500	7718K-ND	32.40	219.75
1/4-20	.750	2.500	.750	7719K-ND	45.15	313.35
	.750	4.000	.750	7720K-ND	54.51	378.20

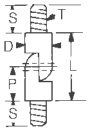
Hinged Standoffs



Female/Female



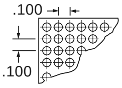
Male/Female



Male/Male

T Thread	D Dia. (In.)	Dimensions (Inch) L	S	U	M	P	Digi-Key Part No.	Pricing 10	100
Female/Female Hinge									
4-40	.187	.750	—	.172	.375	.375	351K-ND	6.67	54.51
4-40	.187	1.000	—	.250	.375	.625	352K-ND	7.11	58.10
6-32	.250	.750	—	.172	.375	.375	353K-ND	9.52	77.60
6-32	.250	1.000	—	.250	.375	.625	354K-ND	9.72	79.40
8-32	.250	.750	—	.172	.375	.375	355K-ND	8.60	70.40
8-32	.250	1.000	—	.250	.375	.625	356K-ND	9.05	74.00
Male/Female Hinge									
4-40	.187	.625	.250	.172	.375	.250	333K-ND	7.82	63.90
4-40	.187	.875	.250	.250	.625	.250	334K-ND	8.26	67.40
6-32	.250	.625	.312	.172	.375	.250	335K-ND	9.41	76.90
6-32	.250	.875	.312	.250	.625	.250	336K-ND	9.61	78.60
Male/Male Hinge									
4-40	.187	.500	.250	—	—	.250	357K-ND	8.97	73.40
6-32	.250	.500	.312	—	—	.250	358K-ND	9.31	76.00
8-32	.250	.500	.312	—	—	.250	359K-ND	10.45	85.30

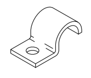
Prepunched Insulating Boards



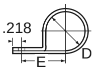
Dim. – Inch Width	Length	Digi-Key Part No.	Pricing 1	10	Mfg. Part No.
Perfboard — Holes .042" (1.07mm) Dia., Glass Epoxy					
2.00	4.50	3405K-ND	2.62	21.75	3405
2.00	6.00	3406K-ND	3.40	28.22	3406
2.75	17.00	3407K-ND	10.22	84.83	3407
3.00	4.50	3408K-ND	3.56	29.55	3408
4.50	6.00	3409K-ND	5.00	41.50	3409
4.50	6.50	3410K-ND	5.78	47.97	3410
4.50	8.50	3411K-ND	7.20	59.76	3411
4.50	17.00	3412K-ND	14.04	116.53	3412
6.00	17.00	3413K-ND	18.90	156.87	3413

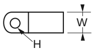
Metal Cable Clamps

Half Clamp



Clamp

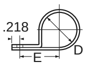


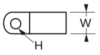


Dimensions – Inch D	E	W	H	Digi-Key Part No.	Pricing 10	100
Steel Half Clamps						
.125	.250	.500	.218	8140K-ND	1.11	8.90
.187	.250	.500	.218	8141K-ND	1.17	9.60
.250	.250	.500	.218	8142K-ND	1.25	10.00
.312	.250	.500	.218	8143K-ND	1.34	10.80
.375	.312	.625	.218	8144K-ND	1.57	12.50
.437	.312	.625	.218	8145K-ND	1.65	13.20
.500	.312	.625	.218	8146K-ND	2.07	16.50
.562	.312	.625	.218	8147K-ND	2.12	16.95
.625	.312	.625	.218	8148K-ND	2.22	17.80
.687	.312	.625	.218	8149K-ND	2.27	18.20
.750	.312	.625	.218	8150K-ND	2.36	18.90
.812	.312	.625	.218	8151K-ND	2.46	19.70
.875	.375	.750	.281	8152K-ND	2.68	21.40
.937	.437	.750	.281	8153K-ND	2.78	22.30
1.000	.437	.750	.281	8154K-ND	2.88	23.00
Insulated Steel Half Clamps						
.187	.250	.500	.218	8160K-ND	3.00	23.70
.250	.250	.500	.218	8161K-ND	3.40	26.80
.312	.312	.625	.218	8162K-ND	3.84	30.30
.375	.312	.625	.218	8163K-ND	4.02	31.70
.437	.312	.625	.218	8164K-ND	4.53	35.70
.500	.312	.625	.218	8165K-ND	3.33	26.30
.562	.312	.625	.218	8166K-ND	3.45	27.20
.625	.312	.625	.218	8167K-ND	3.54	28.00
.687	.312	.625	.218	8168K-ND	3.66	28.90
.750	.312	.625	.218	8169K-ND	3.99	31.50
.812	.375	.750	.281	8170K-ND	5.03	39.60
.875	.437	.750	.281	8171K-ND	5.22	41.10
.937	.437	.750	.281	8172K-ND	6.14	48.40
1.000	.437	.750	.281	8173K-ND	5.79	45.70
Steel Clamps						
.187	.218	.500	.203	8100K-ND	1.32	10.45
.250	.218	.500	.203	8101K-ND	1.37	11.00
.312	.218	.500	.203	8102K-ND	1.43	11.40
.375	.218	.500	.203	8103K-ND	1.48	11.90
.437	.218	.500	.203	8104K-ND	1.54	12.40
.500	.218	.500	.203	8105K-ND	1.62	12.95
.562	.218	.500	.203	8106K-ND	1.70	13.70
.625	.218	.500	.203	8107K-ND	1.76	14.10
.687	.218	.500	.203	8108K-ND	1.82	14.60
.750	.218	.500	.203	8109K-ND	1.88	15.00
.812	.218	.500	.203	8110K-ND	1.94	15.40
.875	.218	.500	.203	8111K-ND	2.00	16.00
.937	.218	.500	.203	8112KS-ND	2.07	16.60
1.000	.218	.500	.203	8113K-ND	2.12	17.00
Insulated Steel Clamps						
.125	.218	.500	.203	8120K-ND	2.46	19.80
.187	.218	.500	.203	8121K-ND	2.57	20.50
.250	.218	.500	.203	8122K-ND	2.65	21.20
.312	.218	.500	.203	8123K-ND	2.75	22.15
.375	.218	.500	.203	8124KS-ND	2.84	22.70
.437	.218	.500	.203	8125K-ND	2.95	23.80
.500	.218	.500	.203	8126K-ND	3.06	24.50
.562	.218	.500	.203	8127K-ND	3.17	25.50
.625	.218	.500	.203	8128K-ND	3.27	26.10
.687	.218	.500	.203	8129K-ND	3.36	26.90
.750	.218	.500	.203	8130K-ND	3.47	27.80
.812	.218	.500	.203	8131K-ND	3.55	28.40
.875	.218	.500	.203	8132K-ND	3.66	29.30
.937	.218	.500	.203	8133K-ND	3.76	29.90
1.000	.218	.500	.203	8134K-ND	3.85	30.90

Nylon Cable Clamps

Ideal for securing, insulating and routing cable wiring, piping, tubing, components and fibre optics. Made of .050" thick nylon 6/6, white.





Dimensions – Inch D	E	W	H	Digi-Key Part No.	Pricing 100	500	1,000
.125	.325	.375	.140	7620K-ND	4.00	17.50	20.10
.125	.325	.375	.203	7621K-ND	4.00	17.50	20.10
.187	.380	.375	.140	7622K-ND	4.10	18.00	20.40
.187	.380	.375	.203	7623K-ND	4.10	18.00	20.40
.250	.410	.375	.140	7624K-ND	4.20	18.00	21.10
.250	.410	.375	.203	7625K-ND	4.20	18.00	21.10
.312	.445	.375	.140	7626K-ND	4.20	18.50	21.60
.312	.445	.375	.203	7627K-ND	4.20	18.50	21.60
.375	.475	.375	.140	7628K-ND	4.50	19.25	23.20
.375	.475	.375	.203	7629K-ND	4.50	19.25	23.20
.437	.525	.375	.140	7630K-ND	4.80	20.50	24.10
.437	.525	.375	.203	7631K-ND	4.80	20.50	24.10
.500	.550	.375	.140	7632K-ND	4.80	21.00	24.70
.500	.550	.375	.203	7633K-ND	4.80	21.00	24.70
.562	.625	.500	.203	7634K-ND	7.50	32.25	37.90
.625	.660	.500	.203	7635K-ND	8.00	33.50	39.80
.750	.785	.500	.203	7636K-ND	8.90	38.00	45.70
.875	.845	.500	.203	7637K-ND	9.70	41.00	48.70
1.000	.910	.500	.203	7638K-ND	10.00	42.50	50.90
1.125	.970	.500	.203	7639K-ND	14.30	60.50	71.70
1.125	1.060	.500	.203	7640K-ND	15.30	65.25	77.90

Recessed Bumpers

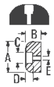


Fig. 1

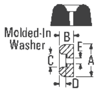


Fig. 2

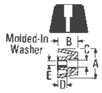


Fig. 3

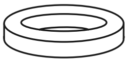
Provides excellent traction and shock absorbing qualities. Materials: Rubber, BUNA S, (fig. 1 & 2) Vinyl, (fig. 3).

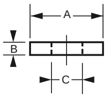
Fig.	Dimensions (Inch) A	B	C	D	E	Screw Size	Digi-Key Part No.	Pricing 10	100
1	.500	.250	.250	.125	.125	#4	720K-ND	1.49	11.90
1	.625	.312	.250	.187	.125	#4	721K-ND	2.36	18.90
1	.718	.437	.250	.218	.125	#4	722K-ND	4.74	37.90
2	.937	.375	.375	.187	.187	#8	723K-ND	4.54	36.45
3	.687	.250	.343	.125	.155	#6	724K-ND*	3.49	28.00
3	.875	.312	.406	.187	.187	#8	725K-ND*	6.45	51.60
3	1.062	.437	.468	.234	.200	#10	726K-ND*	8.03	64.20
3	.562	.375	.218	.187	.115	#4	727K-ND	4.22	33.80
3	.750	.437	.265	.250	.148	#6	728K-ND	4.76	38.10
3	.937	.625	.359	.297	.174	#8	729K-ND	7.04	56.30

* Gray — all others black.

Flat Washers

Fibre: Commercial per MIL-F-1148A, Grade CH Nylon: Grade 6/6 per ASTM D4066

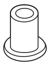


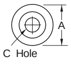


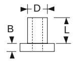
Dimensions – Inch A O.D.	B Thick	C I.D.	Digi-Key Part No.	Pricing 100	500	1,000
Fibre Material — #4 Screw Size						
.250	.032	.120	3116K-ND	2.65	11.50	—
.312	.032	.120	348K-ND	2.65	11.50	—
.375	.032	.120	3117K-ND	2.70	11.50	—
.250	.047	.120	3154K-ND	2.65	11.50	—
.312	.047	.120	3155K-ND	2.65	11.50	11.60
.375	.047	.120	3156K-ND	2.90	12.50	13.20
.250	.062	.120	3368K-ND	2.65	11.50	11.65
.312	.062	.120	3196K-ND	2.65	11.50	14.40
.375	.062	.120	3197K-ND	2.70	11.50	13.70
Nylon Material — #4 Screw Size						
.250	.032	.120	3348K-ND	2.55	11.00	—
.312	.032	.120	3359K-ND	3.00	13.00	15.40
.375	.032	.120	3118K-ND	3.21	14.06	16.57
.250	.047	.120	345K-ND	3.00	12.75	—
.312	.047	.120	3157K-ND	2.60	11.00	14.90
.375	.047	.120	3158K-ND	2.61	11.05	16.47
.250	.062	.120	3358K-ND	2.61	11.05	14.97
.312	.062	.120	3198K-ND	3.00	13.00	19.70
.375	.062	.120	3200K-ND	3.00	12.75	18.60
Fibre Material — #6 Screw Size						
.250	.032	.140	3119K-ND	2.65	11.50	—
.312	.032	.140	3120K-ND	2.65	11.50	—
.375	.032	.140	3121K-ND	2.70	11.50	—
.250	.047	.140	3159K-ND	2.65	11.50	—
.312	.047	.140	3160K-ND	2.65	11.50	11.60
.375	.047	.140	3161K-ND	2.90	12.50	13.20
.250	.062	.140	3369K-ND	2.65	11.50	11.65
.312	.062	.140	3370K-ND	2.66	11.56	12.67
.375	.062	.140	3201K-ND	2.70	11.50	13.70
Nylon Material — #6 Screw Size						
.250	.032	.140	3122K-ND	2.55	11.00	—
.312	.032	.140	3349K-ND	2.55	11.00	12.30
.375	.032	.140	3123K-ND	3.21	14.06	16.57
.250	.047	.140	3162K-ND	2.55	11.00	11.90
.312	.047	.140	346K-ND	3.20	13.50	14.90
.375	.047	.140	3163K-ND	2.61	11.05	16.47
.250	.062	.140	3360K-ND	2.56	11.05	14.97
.312	.062	.140	3361K-ND	3.00	13.00	19.70
.375	.062	.140	3202K-ND	3.00	12.75	18.60

Nylon Shoulder Washers/Bushings

Material:
Nylon, Grades 6/6 per ASTM D4066

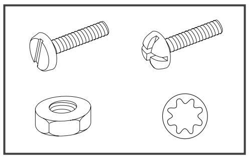


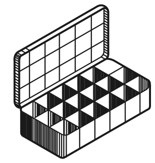




Dimensions – Inch L	A	B	C	D	Digi-Key Part No.	Pricing 100	500
#4 Screw Size							
.031	.218	.040	.115	.135	3049K-ND	3.70	15.50
.047	.250	.032	.115	.185	7681K-ND	4.80	21.00
.093	.235	.047	.115	.145	3053K-ND	7.00	29.50
.125	.235	.047	.115	.145	3102K-ND	7.00	29.50
.18	.235	.047	.115	.145	3103K-ND	7.00	29.50
.250	.235	.047	.115	.145	340K-ND	7.85	33.50
#6 Screw Size							
.032	.385	.062	.145	.240	7682K-ND	5.50	22.50
.032	.250	.062	.140	.187	7683K-ND	4.60	19.50
.032	.312	.062	.140	.187	7684K-ND	5.10	21.50
.125	.290	.047	.140	.170	3054K-ND	7.00	29.50
.187	.290	.047	.140	.170	3104K-ND	7.30	31.50
.250	.290	.047	.140	.170	341K-ND	7.85	33.50
.500	.290	.047	.140	.170	3055K-ND	8.00	34.00

BUILDING FASTENERS





Digi-Key® Electronic Hardware Kits come complete with a divided plastic box for easy storage.

Zinc Plated Nuts and Washers

Description	Digi-Key Part No.	Pricing 100	1,000
Hex Nuts			
No. 2 - 56	H212-ND†★	1.31	10.51
No. 4 - 40	H216-ND†★	.93	7.44
No. 6 - 32	H220-ND♦†★§	1.28	10.27
No. 8 - 32	H224-ND♦†★§	1.57	12.58
No. 10 - 32	H228-ND♦§	1.76	14.11
Internal Tooth Lock Washers			
No. 2	H232-ND†★	3.65	29.23
No. 4	H236-ND†★	1.07	8.59
No. 6	H240-ND♦†★§	1.13	9.07
No. 8	H244-ND♦†★§	1.20	9.60
No. 10	H248-ND♦§	1.47	11.76
Flat Washers			
No. 2	H776-ND	1.62	12.96
No. 4	H777-ND	2.81	22.46
No. 6	H778-ND	.97	7.78
No. 8	H779-ND	1.19	9.50
No. 10	H780-ND	1.62	12.96

Phillips Panhead Sheet Metal Screws

Steel, Zinc Plated

Description	Digi-Key Part No.	Pricing 100	1,000
4 x 3/8	H800-ND	1.37	10.99
4 x 1/2	H801-ND	2.40	19.20
4 x 3/4	H802-ND	2.55	20.40
6 x 3/8	H803-ND	1.68	13.44
6 x 1/2	H804-ND	2.46	19.68
6 x 3/4	H805-ND	2.60	20.83
8 x 3/8	H806-ND	2.10	16.80
8 x1/2	H807-ND	2.76	22.08
8 x 3/4	H808-ND	4.41	35.28

Hex Head Sheet Metal Screws

Steel, Zinc Plated

Description	Digi-Key Part No.	Pricing 100	1,000
4 x 3/8	H809-ND	9.72	77.76
4 x 1/2	H810-ND	10.73	85.87
4 x 3/4	H811-ND	13.38	107.04
6 x 3/8	H812-ND	5.58	44.64
6 x 1/2	H813-ND	7.60	60.82
6 x 3/4	H814-ND	9.54	76.32
8 x 3/8	H815-ND	7.84	62.74
8 x1/2	H816-ND	8.16	65.28
8 x 3/4	H817-ND	9.95	79.63

Phillips Panhead Machine Screws

Steel, Zinc Plated

Description	Digi-Key Part No.	Pricing 100	1,000
2-56 x 1/4	H330-ND†	4.12	32.93
2-56 x 1/2	H334-ND†	4.64	37.15
2-56 x 3/4	H338-ND	5.57	44.54
4-40 x 1/4	H342-ND†	1.11	8.88
4-40 x 5/16	H343-ND	1.21	9.70
4-40 x 3/8	H781-ND	1.62	12.96
4-40 x 1/2	H346-ND†	1.37	10.99
4-40 x 5/8	H348-ND	1.52	12.14
4-40 x 3/4)	H350-ND	1.68	13.44
6-32 x 1/4	H354-ND†	1.48	11.81
6-32 x 5/16	H355-ND	1.54	12.34
6-32 x 3/8	H356-ND♦	1.59	12.72
6-32 x 7/16	H357-ND	4.74	37.92
6-32 x 1/2	H360-ND†	1.69	13.54
6-32 x 5/8	H364-ND♦	1.84	14.69
6-32 x 3/4	H368-ND♦	1.95	15.60
6-32 x 1	H372-ND♦	2.29	18.34
8-32 x 1/4	H376-ND	2.01	16.08
8-32 x 3/8	H380-ND†	2.15	17.23
8-32 x 1/2	H384-ND♦	2.27	18.19
8-32 x 5/8	H388-ND†	2.50	19.97
8-32 x 3/4	H392-ND♦	2.71	21.70
8-32 x 1	H396-ND♦	3.23	25.87
10-32 x 1/2	H400-ND♦	3.30	26.40
10-32 x 3/4	H404-ND♦	4.06	32.45
10-32 x 1	H408-ND♦	5.48	43.87

Slotted Panhead Machine Screws

Steel, Zinc Plated

Description	Digi-Key Part No.	Pricing 100	1,000
2-56 x 1/4	H130-ND★	4.12	32.93
2-56 x 1/2	H134-ND★	4.64	37.15
2-56 x 3/4	H138-ND	5.55	44.40
4-36 x 1/2	H140-ND	2.40	19.20
4-40 x 1/4	H142-ND★	1.11	8.88
4-40 x 5/16	H143-ND	1.21	9.70
4-40 x 1/2	H146-ND★	1.37	10.99
4-40 x 5/8	H148-ND	1.52	12.14
4-40 x 3/4	H150-ND	1.68	13.44
6-32 x 1/4	H154-ND★	1.48	11.81
6-32 x 5/16	H155-ND	1.54	12.34
6-32 x 3/8	H156-ND§	1.59	12.72
6-32 x 7/16	H157-ND	1.65	13.20
6-32 x 1/2	H160-ND★	1.69	13.54
6-32 x 5/8	H164-ND§	1.84	14.69
6-32 x 3/4	H168-ND§	1.95	15.60
6-32 x 1	H172-ND§	2.29	18.34
8-32 x 1/4	H176-ND	2.01	16.08
8-32 x 3/8	H180-ND★	2.15	17.23
8-32 x 1/2	H184-ND§	2.27	18.19
8-32 x 5/8	H188-ND★	2.50	19.97
8-32 x 3/4	H192-ND§	2.71	21.70
8-32 x 1	H196-ND§	3.23	25.87
10-32 x 1/2	H200-ND§	3.30	26.40
10-32 x 3/4	H204-ND§	4.06	32.45
10-32 x 1	H208-ND§	5.48	43.87

Digi-Key® Zinc Plated Hardware Kits

Sizes #2, #4, #6, and #8.
1600 pieces total.
100 pieces each of the following:

★**1600-KIT-ND** (Slotted) . . . **$17.95**
†**1602-KIT-ND** (Phillips) . . . **$17.95**

Sizes #6, #8, and #10.
1600 pieces total.
100 pieces each of the following:

§**1601-KIT-ND** (Slotted) **$27.95**
♦**1603-KIT-ND** (Phillips) **$27.78**

Phillips Nylon Machine Screws

Nylon 66 - Melting Point is 500°F (260°C)

Description	Digi-Key Part No.	Pricing 100	1,000
2-56 x 1/4	H530-ND	8.86	70.90
2-56 x 1/2	H534-ND♦	9.10	72.82
2-56 x 3/4	H538-ND	9.26	74.11
4-40 x 1/4	H542-ND♦	8.86	70.90
4-40 x 3/8	H544-ND♦	9.00	72.00
4-40 x 1/2	H546-ND♦	9.10	72.82
4-40 x 5/8	H548-ND	9.19	73.54
4-40 x 3/4	H550-ND♦	9.26	74.11
6-32 x 1/4	H554-ND♦	9.26	74.11
6-32 x 3/8	H556-ND	9.43	75.46
6-32 x 1/2	H560-ND♦	9.51	76.08
6-32 x 5/8	H564-ND	9.57	76.56
6-32 x 3/4	H568-ND	9.59	76.75
6-32 x 1	H572-ND	9.66	77.28
8-32 x 1/4	H576-ND♦	9.17	73.34
8-32 x 3/8	H580-ND	9.24	73.92
8-32 x 1/2	H584-ND	9.04	72.34
8-32 x 5/8	H588-ND	9.46	75.70
8-32 x 3/4	H592-ND	9.42	75.36
8-32 x 1	H596-ND♦	9.46	75.65
10-32 x 1/2	H600-ND	10.19	81.55
10-32 x 3/4	H604-ND	10.20	81.60
10-32 x 1	H608-ND♦	10.38	83.04

Description	Digi-Key Part No.	Pricing 100	1,000
Nylon Hex Nuts			
2-56	H612-ND♦	10.55	84.38
4-40	H616-ND♦	10.50	84.00
6-32	H620-ND♦	10.80	86.40
8-32	H624-ND♦	11.06	88.46
10-32	H628-ND♦	11.30	90.43

Digi-Key® Nylon Hardware Kits

Sizes #2, #4, #6, #8 and #10.
1500 pieces total.
100 pieces each of the following:

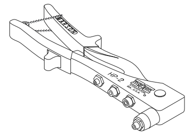
♦**1604-KIT-ND** (Phillips) **$53.94**

Rivets

Description	Digi-Key Part No.	Pricing 100	1,000
Aluminum Rivets			
3/32 x .250	H251-ND	7.56	60.48
3/32 x .375	H252-ND	7.60	60.80
1/8 x .212	H253-ND	6.15	49.20
1/8 x .275	H254-ND	4.65	37.20
1/8 x .337	H255-ND	5.03	40.20
1/8 x .400	H256-ND	5.18	41.40
1/8 x .462	H257-ND	8.40	67.20
1/8 x .650	H258-ND	10.28	82.20
Aluminum Large Flange Rivets			
1/8 x .275	H260-ND	8.65	69.20
1/8 x .400	H261-ND	9.00	72.00
1/8 x .525	H262-ND	11.00	88.00
Steel Rivets			
3/32 x .250	H263-ND	8.73	69.80
3/32 x .375	H264-ND	9.00	72.00
1/8 x .212	H265-ND	4.14	33.08
1/8 x .275	H266-ND	4.64	37.12
1/8 x .337	H267-ND	5.22	41.76
1/8 x .400	H268-ND	5.30	42.36
1/8 x .526	H269-ND	7.98	63.80
Steel Large Flange Rivets			
1/8 x .275	H270-ND	8.93	71.40
1/8 x .400	H271-ND	9.21	73.68
1/8 x .525	H272-ND	11.25	90.00

Hand Rivet Tools

HP-2®/39000



The HP-2 is the largest selling hand rivet tool in the industry. Its square shoulder fulcrum pin of cold-formed heat-treated steel prevents pin rotation that can elongate the engaging holes and cause premature tool failure in imitation tools. The HP-2 hand rivet tool sets up to 3/16" steel rivets and comes with four mounted nosepieces (3/32". 1/8". 5/32" and 3/16") and a service wrench.

H1001-ND. **$37.70**

200 Kit ™/39001

The deluxe hand riveter kit includes the HP-2 and 200 assorted Klik-Fast rivets in popular sizes.

H1002-ND. **$68.12**

Metric Phillips, Panhead Machine Screws

Zinc Plated

Description	Digi-Key Part No.	Pricing 100	1,000
No. 2 x 5mm	H738-ND§	5.38	43.06
No. 2 x 8mm	H739-ND§	5.76	46.08
No. 2 x 12mm	H740-ND§	5.90	47.23
No. 3 x 5mm	H742-ND§	5.94	47.52
No. 3 x 8mm	H743-ND§	6.60	52.80
No. 3 x 12mm	H744-ND§	6.90	55.20
No. 3 x 20mm	H745-ND§	8.40	67.20
No. 3 x 25mm	H746-ND§	8.70	69.60
No. 4 x 5mm	H747-ND★	7.20	57.60
No. 4 x 8mm	H748-ND★	7.56	60.48
No. 4 x 12mm	H749-ND★	8.76	70.08
No. 4 x 20mm	H750-ND★	11.55	92.40
No. 4 x 25mm	H751-ND★	12.60	100.80
No. 5 x 6mm	H752-ND	10.56	84.48
No. 5 x 8mm	H753-ND	10.80	86.40
No. 5 x 12mm	H754-ND	12.60	100.80
No. 5 x 20mm	H755-ND	17.70	141.60
No. 5 x 25mm	H756-ND	18.60	148.80
No. 6 x 8mm	H757-ND★	20.40	163.20
No. 6 x 12mm	H758-ND★	21.60	172.80
No. 6 x 20mm	H759-ND★	25.80	206.40
No. 6 x 25mm	H760-ND★	27.60	220.80

Metric Nuts and Washers

Zinc Plated

Description	Digi-Key Part No.	Pricing 100	1,000
Hex Nuts			
No. 2 Metric Hex Nut	H761-ND§	3.60	28.80
No. 3 Metric Hex Nut	H762-ND§	3.84	30.72
No. 4 Metric Hex Nut	H763-ND★	4.20	33.60
No. 5 Metric Hex Nut	H764-ND	4.80	38.40
No. 6 Metric Hex Nut	H765-ND★	5.34	42.72
Split Lock Washers			
No. 2 Lock Washers	H771-ND§	5.40	43.20
No. 3 Lock Washers	H772-ND§	4.26	34.08
No. 4 Lock Washers	H773-ND★	4.74	37.92
No. 5 Lock Washers	H774-ND	5.34	42.72
No. 6 Lock Washers	H775-ND★	6.30	50.40
Flat Washers			
No. 2 Flat Washers	H766-ND	3.30	26.40
No. 3 Flat Washers	H767-ND	3.60	28.80
No. 4 Flat Washers	H768-ND★§	3.66	29.28
No. 5 Flat Washers	H769-ND	3.75	30.00
No. 6 Flat Washers	H770-ND★§	4.80	38.40

Digi-Key® Metric Hardware Kits

Sizes #2 and #3. Zinc Plated.
1400 pieces total.
100 pieces each of the following:

§**1605-KIT-ND** (Phillips). **$59.95**

Sizes #4 and #6. Zinc Plated.
1500 pieces total.
100 pieces each of the following:

★**1606-KIT-ND** (Phillips) **$99.95**

Phillips, Panhead Machine Screws

Stainless Steel

Description	Digi-Key Part No.	Pricing 100	1,000
2-56 x 1/4	H700-ND★	2.64	21.12
2-56 x 1/2	H701-ND★	3.84	30.72
2-56 x 3/4	H702-ND★	4.98	39.84
4-40 x 1/4	H703-ND★	2.88	23.04
4-40 x 5/16	H704-ND★	3.34	26.74
4-40 x 1/2	H705-ND★	3.79	30.34
4-40 x 3/8	H782-ND	3.60	28.80
4-40 x 5/8	H706-ND★	4.16	33.31
4-40 x 3/4	H707-ND★	6.36	50.88
6-32 x 1/4	H708-ND†	4.08	32.64
6-32 x 5/16	H709-ND	4.39	35.09
6-32 x 3/8	H710-ND	4.51	36.10
6-32 x 1/2	H711-ND†	4.56	36.48
6-32 x 5/8	H712-ND	5.52	44.16
6-32 x 3/4	H713-ND†	5.38	43.01
6-32 x 1	H714-ND	6.64	53.09
8-32 x 3/8	H715-ND†	6.16	49.25
8-32 x 1/2	H716-ND†	6.70	53.62
8-32 x 5/8	H717-ND	7.33	58.66
8-32 x 3/4	H718-ND†	8.54	68.35
8-32 x 1	H719-ND	9.94	79.49
10-32 x 1/2	H720-ND†	9.31	74.50
10-32 x 3/4	H721-ND†	11.68	93.46
10-32 x 1	H722-ND†	14.74	117.89

Stainless Steel Nuts and Washers

Description	Digi-Key Part No.	Pricing 100	1,000
Hex Nuts			
No. 2 - 56 Hex Nut	H723-ND★	4.99	39.94
No. 4 - 40 Hex Nut	H724-ND★	4.13	33.02
No. 6 - 32 Hex Nut	H725-ND†	5.57	44.54
No. 8 - 32 Hex Nut	H726-ND†	5.95	47.62
No. 10 - 32 Hex Nut	H727-ND†	6.05	48.38
Internal Tooth Lock Washers			
No. 2 Lock Washer	H728-ND★	3.55	28.42
No. 4 Lock Washer	H729-ND★	2.50	19.97
No. 6 Lock Washer	H730-ND†	2.30	18.43
No. 8 Lock Washer	H731-ND†	2.88	23.04
No. 10 Lock Washer	H732-ND†	3.07	24.58
Flat Washers			
No. 2 Flat Washer	H733-ND★	2.30	18.43
No. 4 Flat Washer	H734-ND★	3.36	26.88
No. 6 Flat Washer	H735-ND	3.66	29.28
No. 8 Flat Washer	H736-ND	3.90	31.20
No. 10 Flat Washer	H737-ND	4.74	37.92

Digi-Key® Stainless Steel Hardware Kits

Sizes #2 and #4.
1400 pieces total.
100 pieces each of the following:

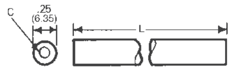
★**1607-KIT-ND** (Phillips) **$39.95**

Sizes #6, #8, and #10.
1500 pieces total.
100 pieces each of the following:

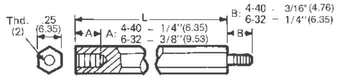
†**1608-KIT-ND** (Phillips) **$79.95**

JOHNSON Components Spacers

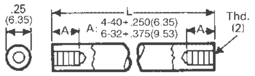
Round Tubular (Aluminum)



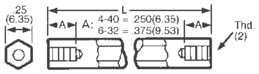
Hex Threaded M/F (Aluminum)



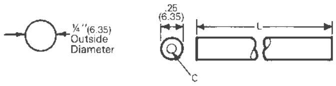
Round Threaded (Aluminum)



Hex Threaded (Aluminum)



Nylon Round Tubular



Thread Size	Clearance	Dim. L Inch (mm)	Digi-Key Part No.	Pricing 10	100	250
Round Tubular Spacers						
—	6(.140" / 3.56mm)	.125 (3.18)	J168-ND	1.45	13.05	30.45
—	6(.140" / 3.56mm)	.250 (6.35)	J169-ND	1.45	13.05	30.45
Hex Threaded Male/Female Spacers						
4-40	—	.250 (6.35)	J210-ND	3.75	33.75	78.75
4-40	—	.375 (9.52)	J211-ND	4.08	36.68	85.58
6-32	—	.500 (12.70)	J212-ND	4.08	36.68	85.58
6-32	—	.625 (15.88)	J213-ND	4.25	38.25	89.25
6-32	—	.750 (19.05)	J214-ND	4.25	38.25	89.25
6-32	—	.875 (22.23)	J215-ND	4.25	38.25	89.25
6-32	—	1.000 (25.40)	J216-ND	4.48	40.28	93.98
6-32	—	1.250 (31.75)	J217-ND	4.73	42.53	99.23
6-32	—	1.500 (38.10)	J218-ND	6.33	56.93	132.83
Round Threaded Spacers						
4-40	—	.500 (12.70)	J241-ND	2.40	21.60	50.40
4-40	—	.625 (15.88)	J242-ND	4.00	36.00	84.00
4-40	—	.750 (19.05)	J240-ND	3.60	32.40	75.60
4-40	—	.875 (22.23)	J171-ND	3.75	33.75	78.75
4-40	—	1.000 (25.40)	J243-ND	3.85	34.65	80.85
4-40	—	1.250 (31.75)	J172-ND	3.35	30.15	70.35
6-32	—	.500 (12.70)	J244-ND	2.40	21.60	50.40
6-32	—	.625 (15.88)	J173-ND	4.00	36.00	84.00
6-32	—	.875 (22.23)	J246-ND	3.75	33.75	78.75
6-32	—	1.000 (25.40)	J247-ND	3.85	34.65	80.85
8-32	—	.500 (12.70)	J248-ND	1.93	17.33	40.43
8-32	—	.750 (19.05)	J249-ND	3.60	32.40	75.60
8-32	—	1.000 (25.40)	J250-ND	3.85	34.65	80.85
Hex Threaded Spacers						
4-40	—	.375 (9.52)	J174-ND	1.93	17.33	40.43
4-40	—	.625 (15.88)	J175-ND	3.60	32.40	75.60
4-40	—	.875 (22.23)	J176-ND	3.75	33.75	78.75
6-32	—	.250 (6.35)	J177-ND	1.68	15.08	35.18
6-32	—	.500 (12.70)	J178-ND	2.15	19.35	45.15
6-32	—	.625 (15.88)	J179-ND	3.60	32.40	75.60
6-32	—	.750 (19.05)	J180-ND	3.68	33.08	77.18
6-32	—	1.000 (25.40)	J181-ND	3.85	34.65	80.85
Nylon Round Tubular Spacers						
—	4 (.115" / 2.92mm)	.125 (3.18)	J230-ND	.65	5.85	13.65
—	4 (.115" / 2.92mm)	.187 (4.75)	J231-ND	.65	5.85	13.65
—	4 (.115" / 2.92mm)	.250 (6.35)	J232-ND	.65	5.85	13.65
—	6 (.140" / 3.56mm)	.375 (9.52)	J234-ND	1.05	9.45	22.05
—	6 (.140" / 3.56mm)	.500 (12.70)	J235-ND	1.20	10.80	25.20
—	6 (.140" / 3.56mm)	.625 (15.88)	J236-ND	1.35	12.15	28.35
—	6 (.140" / 3.56mm)	.750 (19.05)	J237-ND	1.53	13.73	32.03

3M Super Strips and Circuit Strips

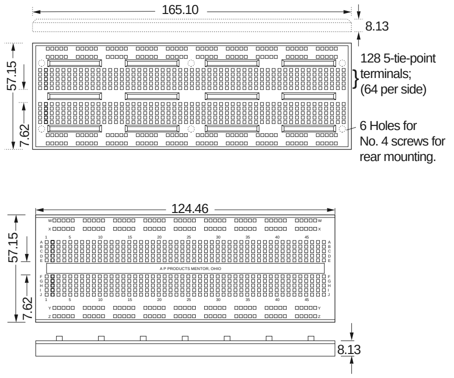
Universal Breadboarding Elements with Solderless Plug-In Tie Points

As with all solderless breadboarding units from 3M, components simply plug-in and are interconnected with ordinary solid hook-up wire; #22 AWG is recommended.

All sizes of DIPs and discrete components with lead diameters up to .032" (.82mm) can be accommodated.

These handy strips may be permanently mounted with the integral non-shorting instant-mounting backing, or for quick removal, they may be mounted with screws on panels up to 1/8" (3.18mm) thick.

Hardware and mounting templates are provided with every strip.

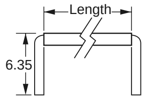

165.10
8.13
57.15
7.62
128 5-tie-point terminals; (64 per side)
6 Holes for No. 4 screws for rear mounting.
124.46
57.15
7.62
A P PRODUCTS MENTOR, OHIO
8.13

SPECIFICATIONS

	SUPER-STRIP	CIRCUIT-STRIP
Size:	2.25" x 6.50" x .32" (57.15mm x 165.10mm x 8.13mm)	2.25" x 4.90" x .32" (57.15mm x 124.46mm x 8.13mm)
Plug-In Tie-Points:	840	610
Materials: Body	Acetal Copolymer	Acetal Copolymer

SUPER-STRIP			CIRCUIT-STRIP		
Terminals	**Part No.**	**Price Each**	**Terminals**	**Part No.**	**Price Each**
Alloy 770	923252-ND	21.89	Alloy	923253-ND	15.44
Gold (10m)	923748-ND	69.21	Gold (10m)	923749-ND	57.89

3M Breadboard Jumper Wire Kit



• 350 wires • 14 different lengths • Wire is stripped • Leads bent 907 • Length is classified by color coding • Wire is solid tinned 22 gauge • PVC insulation.

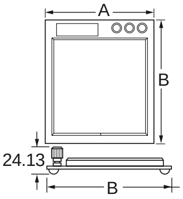
Kit contains 25 each of 14 different lengths.

923351-ND **$27.24**

Replacement Wire

Length In. (mm)	Qty./ Pkg.	Color	Digi-Key Part No.	Price/ Pkg.
0.1 (2.54)	200	(No Insulation)	923345-01-ND	$9.78 per Pkg.
0.2 (5.08)	200	Red	923345-02-ND	
0.3 (7.62)	200	Orange	923345-03-ND	
0.4 (10.16)	200	Yellow	923345-04-ND	
0.5 (12.70)	200	Green	923345-05-ND	
0.6 (15.24)	150	Blue	923345-06-ND	
0.7 (17.78)	150	Violet	923345-07-ND	
0.8 (20.32)	150	Gray	923345-08-ND	
0.9 (22.86)	150	White	923345-09-ND	
1.0 (25.40)	100	Brown	923345-10-ND	
2.0 (50.80)	100	Red	923345-20-ND	
3.0 (76.20)	75	Orange	923345-30-ND	
4.0 (101.60)	75	Yellow	923345-40-ND	
5.0 (127.00)	75	Green	923345-50-ND	

3M A•C•E Board™ Solderless Breadboards



FEATURES:

• 0.1" x 0.1" (2.54mm) solderless tie point matrix accepts all DIP sizes and a wide variety of discrete components with lead diameters up to .032" (.81mm) • Capacities range from 610 to 5424 tie points

• Accommodate from 6 to 54, 14 pin DIPs • Separate distribution bases for power, ground and signal lines • Molded alphanumeric grid for faster, easier tie point identification • Circuit elements are easily connected with #22 AWG solid wire • Strip bodies are constructed of durable Acetal Copolymer with Alloy 688 terminals • Durable baseplates keep boards stationary during use and help to minimize noise and voltage spikes in today's high speed circuits.

AxCxE Model	DIP Capacity (Size)	Base Dim. Inch (cm) A	B	Total Tie Points	Total 5-Tie Point Term.	Binding Posts	Digi-Key Part No.	Price Each
354	54(14-Pin)	14.69 (37.31)	9.75 (24.77)	5424	768	4	922354-ND	111.56
345	45(14-Pin)	12.44 (31.60)	9.75 (24.77)	4520	640	4	922345-ND	91.07
336	36 (14-Pin)	10.25 (26.04)	9.25 (23.50)	3648	512	4	922336-ND	72.65
327	27 (14-Pin)	8.0 (20.32)	9.25 (23.50)	2712	384	4	922327-ND	55.88
318	18 (14-Pin)	7.75 (19.69)	6.25 (15.88)	1824	256	3	922318-ND	43.71
309	9 (14-Pin)	7.0 (17.78)	4.0 (10.16)	840	128	3	922309-ND	21.89
306	6 (14-Pin)	5.4 (13.72)	4.0 (10.16)	610	94	2	922306-ND	22.19

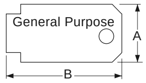
Prototype Boards

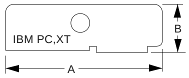
Vector Prototyping Boards with punched holes are convenient economical tools for assembling circuit components and cost effective alternatives to custom designs. Use general purpose Plugboards and Bus specific for edgeboard connection prototyping, while Circboards are ideal for cutting down to smaller board sizes.
• Holes on 0.1" (2.54mm) grid .042" (1.07mm) dia. (.043" [1.09mm] on V1018 and V1029) • Ejector Hole • Plating: Gold/Nickel • Board Material: Epoxy Glass Composite.

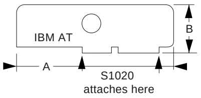
IBM PC, XT and AT Expansion Units. • Marked edge contact identification • Gold plated edge contacts on 0.1" centers • Power & ground buses terminate to connectors • Pads on board & bracket accepts DB9-, 15-, 25- or 37-Pin I/O connector • Accepts Vector's press-terminals for wiring & soldering • Holes are .042" (1.07mm) dia. or 0.1" (2.54mm) grid • 1/16" (1.59mm) thick epoxy glass material, gold/nickel contacts • Universal mounting bracket and card guide incl. • Layout planning sheets & instructions incl. • Plugs into any IBM AT slot with dual connectors (AT unit only) • Pads for mounting dual, row 0.1" (2.54mm) spaced header (AT unit only).

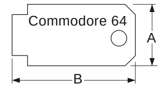
Circboards™ • .042" (1.07mm) dia. holes on 0.1" (2.54mm) grid • 1/16" (1.59mm) thick, epoxy glass composite boards • Flame retardant • Etched copper patterns are solder plated.

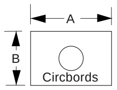
EISA • Accepts DIPs, PGAs, PLCC, most component geometries • Multilayer design ensures signal handling integrity • Mounting area for D-sub and ribbon header connectors • On-board I/O break out field at connector for circuit analysis • Solder coated

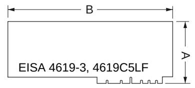


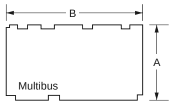


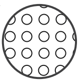


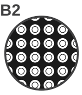


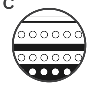


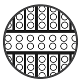


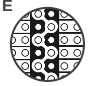


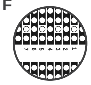
A

Bare Board

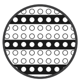
B1/B2

Pad per Hole

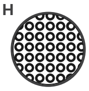
C

Buses only

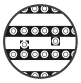
D

3 Hole Solder Pad

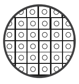
E

3 Hole w/Zig Zag

F

Voltage/Gnd. Planes

G

Interleaved Buses

H

Ground Plane

I

Volt/Gnd. Planes

J

Square Pad per Hole

PC BOARD PATTERNS

A.	Edgeboard Contacts Only
B1.	Pad Per Hole W/ Buses
B2.	Pad Per Hole Only
C.	Buses Only Around Bare Board
D.	3-Hole Solder Pad W/Buses
E.	3-Hole Solder Pad, Zig-Zag Buses & Ground Plane
F.	Voltage/Gnd. Planes
G.	Interleaved Buses
H.	Clearance-Hole Ground Plane
I.	Voltage/Ground Planes
J.	Pad-Per-Hole Only

PCB Pattern	Edge Contacts No.	Edge Contacts Spacing In. (mm)	Dimensions Inch (cm) A	Dimensions Inch (cm) B	16-Pin Dip Cap.	Digi-Key Part No.	Pricing 1	Pricing 10	Pricing 25	Accessories Connectors Solder Tail	Accessories Connectors Wire Wrap	Accessories Card Extender	Accessories Card Racks	Vector Part No.
General Purpose Plugboards														
A	44	.156" (3.96)	4.50 (11.43)	4.50 (11.43)	40	V1017-ND	17.80	156.64	349.50	V1062	V1196	V1024	V1050-52	3662-5
A			4.50 (11.43)	6.50 (16.51)	50	V1016-ND	21.18	186.24	413.22	V1062	V1196	V1024	V1050-52	3662
A			4.50 (11.43)	9.60 (24.38)	90	V1129-ND	26.50	233.28	520.50	V1062	V1196	V1024	V1050	3662-2
B1/B1			4.50 (11.43)	6.50 (16.51)	45	V1018-ND	41.30	363.36	811.25	V1062	V1196	V1024	V1050-52	3662-9
G			4.50 (11.43)	6.50 (16.51)	24	V1023-ND	27.34	240.32	533.21	V1062	V1196	V1024	V1050-52	3682-2
D			4.50 (11.43)	6.50 (16.51)	12	V1020-ND	24.26	213.28	473.22	V1062	V1196	V1024	V1050-52	3677-2
E			4.50 (11.43)	9.60 (24.38)	40	V1128-ND	39.02	343.36	766.50	V1062	V1196	V1024	V1050	4112
E			4.50 (11.43)	6.50 (16.51)	25	V1031-ND	31.10	273.60	610.50	V1062	V1196	V1024	V1050-52	4112-4
E			4.50 (11.43)	4.50 (11.43)	8	V1032-ND	28.83	253.76	566.25	V1062	V1196	—	—	4112-5
D			4.50 (11.43)	9.60 (24.38)	21	V1019-ND	27.34	240.32	533.21	V1062	V1196	V1080	V1053	3677
—			4.50 (11.43)	6.50 (16.51)	24	V1130-ND	37.88	333.44	744.25	V1062	V1196	V1024	V1050	3682-4
H			4.50 (11.43)	6.50 (16.51)	90	V1131-ND	34.37	302.40	675.00	V1062	V1196	V1024	V1050	3662A6
A	72	.100 (2.54)	4.50 (11.43)	6.50 (16.51)	50	V1027-ND	24.49	215.52	481.00	S1364	V1061	V1079	V1050-52	3719-1
B1			4.50 (11.43)	6.50 (16.51)	40	V1029-ND	45.04	396.32	884.75	S1364	V1061	V1079	V1050-52	3719-6
—			4.50 (11.43)	6.50 (16.51)	34	V1132-ND	30.18	265.28	588.59	S1364	V1061	V1024	V1050	4066-4
A			4.50 (11.43)	9.60 (24.38)	90	V1028-ND	27.34	240.32	533.21	S1364	V1061	V1079	V1053	3719-4
STD Bus														
D	56	.125	4.50 (11.43)	6.50 (16.51)	20	V1111-ND	34.37	302.40	675.00	S2284	—	V1115	V1050-52	4610V
A			4.50 (11.43)	6.50 (16.51)	59	V1112-ND	36.08	317.44	708.75	S2284	—	V1115	V1050-52	4610-1
B1/B2			4.50 (11.43)	6.50 (16.51)	52	V1114-ND	50.88	447.68	999.50	S2284	—	V1115	V1050-52	4610-3
IBM AT/ISA Expansion Units*														
C	62 (XT)	.100 (2.54)	13.23 (33.60)	4.20 (10.67)	84	V1036-ND	53.49	470.24	1043.35	S1314	—	V1025	—	4613-1
I			13.23 (33.60)	4.20 (10.67)	55	V1037-ND	63.60	604.80	1429.75	S1314	—	V1025	—	4613-2
B1			13.23 (33.60)	4.20 (10.67)	91	V1038-ND	53.99	475.04	1060.50	S1314	—	V1025	—	4613-3
D	62/36 (AT)	.100 (2.54)	13.25 (33.66)	4.80 (12.19)	—	V1039-ND	68.75	604.96	1350.50	—	—	V1026	—	4617
C			13.25 (33.66)	4.80 (12.19)	108	V1040-ND	56.15	493.60	1095.18	—	—	V1026	—	4617-1
B1			13.25 (33.66)	4.80 (12.19)	—	V1041-ND	68.75	604.96	1350.50	—	—	V1026	—	4617-3
H	98	.100 (2.54)	13.25 (33.66)	4.80 (12.19)	140	V1137-ND	68.75	604.96	1350.50	S1499-967	—	—	—	4617-4
—			13.25 (33.66)	4.80 (12.19)	140	V1138-ND	78.68	692.48	1545.50	S1499-967	—	—	—	4617-5
—	49/98	.1 (2.54)	—	—	—	S1020-ND•	3.12	24.75	—	PCB Expansion Port Edge Card				
CIRCBOARDS (Plugboard Patterns Without The Expense Of Edgeboard Connectors)														
D	—	—	4.50 (11.43)	6.50 (16.51)	20	V1044-ND	23.58	207.52	463.25	—	—	—	—	8001
G	—	—	4.50 (11.43)	6.50 (16.51)	35	V1045-ND	26.14	230.08	513.50	—	—	—	—	8002
J	—	—	4.50 (11.43)	6.50 (16.51)	60	V1046-ND	22.44	197.44	441.00	—	—	—	—	8003
H	—	—	4.50 (11.43)	6.50 (16.51)	50	V1047-ND	24.73	217.60	485.75	—	—	—	—	8004
B2/B2	—	—	5.00 (12.70)	13.25 (33.66)	154	V1048-ND	43.36	381.60	851.75	—	—	—	—	8006
B2/I	—	—	4.50 (11.43)	6.50 (16.51)	60	V1049-ND	25.13	221.12	493.50	—	—	—	—	8007
D	—	—	4.50 (11.43)	8.08 (20.52)	21	V1021-ND	18.17	159.84	357.00	—	—	—	—	3677-6
J/J	—	—	4.50 (11.43)	8.08 (20.52)	80	V1034-ND	27.42	241.28	538.50	—	—	—	—	45P80-1
B2/B2	—	—	10.60 (26.92)	10.60 (26.92)	275	V1001-ND	67.69	595.04	1320.25	—	—	—	—	106P106-1
—	—	—	18.00 (45.72)	10.69 (27.15)	—	V1116-ND†	139.77	1230.08	2745.50	—	—	—	—	106P180-4
B2/B2	—	—	12.86 (32.66)	4.00 (10.16)	124	V1117-ND	76.12	669.92	1495.25	—	—	—	—	8010
B2/B2	—	—	11.00 (27.94)	9.20 (23.37)	283	V1118-ND	65.03	572.16	1277.25	—	—	—	—	8012
EISA Prototyping Boards														
B1	188	.050 (1.27)	4.50 (11.43)	13.25 (33.66)	—	V1107-ND	256.32	2255.68	5034.99	—	—	V1108	—	4619-3
—			13.25 (33.66)	4.50 (11.43)	140	V1139-ND	281.17	2471.84	5484.40	—	—	—	—	4619-5
S-100 Prototyping Boards														
B2	50/100	.125 (3.18)	10.00 (25.40)	5.30 (13.46)	80	V1134-ND	60.66	533.76	1191.50	—	—	—	—	8801-6
A	50/100		10.00 (25.40)	5.30 (13.46)	110	V1135-ND	49.96	439.20	974.48	—	—	—	—	8801-1
F/F	50/100		10.00 (25.40)	5.30 (13.46)	—	V1136-ND	60.50	532.48	1188.50	—	—	—	—	8804

* IBM is a registered trademark of International Business Machines. Apple II & IIe are trademarks of Apple Computer, Inc
• Designates part is a Sullins product.
† V1116-ND has pad per hole with PTH, GND plane both sides.

PCI Development Boards

For fast development of adapter card to PCI bus.

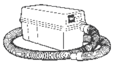
P/N V1163-ND Features:

- Multilayer board contains pad per hole patterns.
- Power and ground accessible throughout the board.
- For use in 5 Volt or 3.3 Volt applications.
- For use with Vector prototype accessories.

Description	Digi-Key Part No.	Pricing 1	Pricing 10	Pricing 25	Vector Part No.
PCI BUS, PCMCIA Prototype Kits					
PCI Plugboard +5V or 3.3V, Pad Per Hole, PTH	V1163-ND	226.68	1992.80	4421.53	4624-3
PCI Extender Test Card 5V for 32 or 64 Bit	V1166-ND	349.43	3075.04	6863.73	3690-34-5V
PCI Extender Test Card 3.3V for 32 or 64 Bit	V1167-ND	349.43	3075.04	6863.73	3690-34-3V
PCMCIA Adapter Board Assembly	V1168-ND	117.41	1033.28	2306.25	4625-1
PCMCIA Proto Board Kit 4.5" x 6.00" (11.43cm x 15.24cm) Pad Per Hole	V1169-ND	183.45	1614.40	3603.49	4625-3
PCMCIA Extender Test Card for Type II or III Slots	V1170-ND	171.71	1511.04	3373.00	3690-35

3M Electronics Vacuum and Accessories

Description	Digi-Key Part No.	Price Each 1	Price Each 10	3M Part No.
Electronic Vacuum Cleaner 115 Vac	SCP148-ND	220.88	206.15	SV-497AJM
Carrying Strap with Shoulder Pad	SCP149-ND	9.98	9.31	SV-CS1
Type 1 Filter, Small Particle	SCP150-ND	22.79	21.27	SV-SPF1
Type 2 Filter, Medium Particle	SCP151-ND	12.81	11.96	SV-MPF2
Tool Case Vacuum Cleaner 115 VAC	SCP227-ND	330.00	—	SV-497AJN
Replacement Hose for Electronic and Tool Case Vacuum Cleaners				
30" Hose, Stretches to Approx. 10'	SCP230-ND	33.00	—	SV-SH32
50" Hose, Stretches to Approx. 16'	SCP231-ND	60.00	—	SV-SH50



Electronic Vacuum

Complete with hose, 32" - 10 ft. (81.28cm - 3.05 meters), wand, crevice tool, crevice tool brush, dusting brush, needle nozzle, 3-year warranty.

OPTIONS: Shoulder strap with shoulder pad.

SPECIFICATIONS: Electrical: 115 VAC, 50/60Hz, 5.0 amps. **Dimensions:** Length: 17.80" (45.21cm). Width: 7.75" (19.69cm). Height: 9.25" (23.50cm). Weight: 9 lbs. 14 oz. (4.48kg). **Motor:** 1HP, continuous duty, thermally protected with automatic reset. Conducted RFI filtered (reduces EMI to be below FCC requirements).

Filter: Type 1, Small Particle: For trapping extremely fine particles. Typical applications color laser printers, color copiers and highly sensitive equipment. **Type 2, Medium Particle:** Designed to trap unwanted toner from copiers and laser printers, cleaning typewriters and data processing equipment.

Tool Case Vacuum

Complete with pallet for tools. Comes with: 25" to 10' stretch hose, wand, crevice tool, crevice tool brush, dusting brush and needle nozzle. Three year warranty.

VECTOR
ELECTRONIC COMPANY

Circuit Board Accessories

Contacts slip on .025” (.64mm) squared wrap or pins. Contacts are tin plated, and offered in a reel of contacts wired together, “daisy-chain” style, to 28 gauge blue insulated wire. Each contact is spaced 5” (127mm) apart. Sold in reels of 50.

Fig. 1

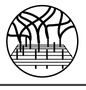


Fig. 2

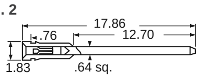


Fig. 3

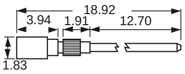


Fig. 4

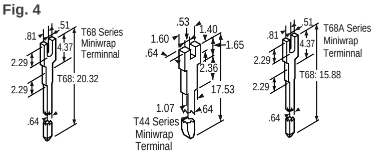


Fig. 5A

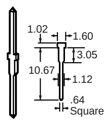


Fig. 5B

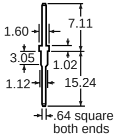


Fig. 6

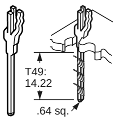
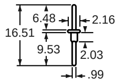


Fig. 7



Material: Phosphor bronze

Fig. 8

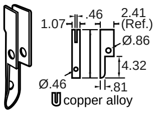


Fig. 9

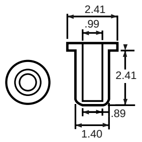


Fig. 10

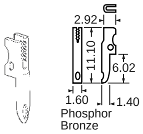
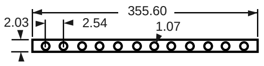
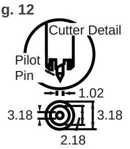


Fig. 11



Install on circuit boards as an alternative to etched bus lines.

Fig. 12



Makes insulating rings around pre-punched holes to insulate terminal points.

Fig. 13

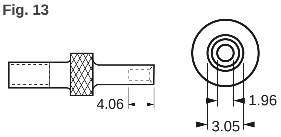


Fig. 14

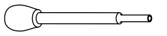


Fig. 15

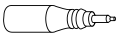


Fig. 16

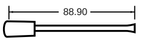


Fig. 17

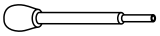


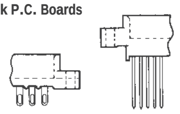
Fig. 18

Fig.	Description	Pkg. Qty.	Digi-Key Part No.	Price Each 1	Price Each 10	Vector Part No.
1	Slip-On contacts For Tab-To-Wire Connection	50	V1065-ND	143.41	126.20	T120-1/50
2	Lo-Profile IC Socket Pins for .055” (1.40mm) Dia. Holes, Wrap Post	100	V1058-ND	25.69	22.61	R31/C
3	Lo-Profile IC Socket Pins for .042” (1.07mm) Dia. Holes, Wrap Post	100	V1059-ND	30.75	27.06	R32/C
3	Lo-Profile IC Socket Pins for .042” (1.07mm) Dia. Holes, Wrap Post	1000	V1060-ND	225.32	198.08	R32/M
4	T44 Series Bifurcated Miniwrap Term. with .025” (.64mm) Sq. Posts	100	V1071-ND	9.04	7.96	T44/C
4	T44 Series Bifurcated Miniwrap Term. with .025” (.64mm) Sq. Posts	1000	V1072-ND	52.01	45.78	T44/M
4	T68 Series Bifurcated Miniwrap Term. with .025” (.64mm) Sq. Posts	100	V1077-ND	8.39	7.38	T68/C
4	T68 Series Bifurcated Miniwrap Term. with .025” (.64mm) Sq. Posts	1000	V1078-ND	49.39	43.46	T68/M
4	T68A Series Miniwrap Terminal	1000	V1110-ND	92.25	81.19	T68A/M
5A	Press-In Terminals with .025” (.64mm) Sq. Posts	1000	V1073-ND	81.72	71.92	T46-4-9/M
5B	Press-In Terminals with .025” (.64mm) Sq. Posts	100	V1074-ND	12.23	10.76	T46-5-9/C
6	Trifurcated Klipwrap Terminals with .025” (.64mm) Sq. Posts	100	V1075-ND	12.58	11.08	T49/C
6	Trifurcated Klipwrap Terminals with .025” (.64mm) Sq. Posts	1000	V1076-ND	111.07	97.75	T49/M
7	Inboard Pins for 1/16” (1.60mm) Boards with .042” (1.07mm) Dia. Holes, Gold	1000	V1054-ND	96.57	85.00	K24A/M
7	Inboard Pins for 1/16” (1.60mm) Boards with .042” (1.07mm) Dia. Holes, Tin	1000	V1055-ND	53.54	47.08	K24C/M
8	Micro-Klip Term. for 1/16” (1.60mm) Boards, .042” (1.07mm) Dia. Holes, Tin	100	V1069-ND	8.35	7.35	T42-1/C
8	Micro-Klip Term. for 1/16” (1.60mm) Boards, .042” (1.07mm) Dia. Holes, Tin	1000	V1070-ND	40.07	35.27	T42-1/M
9	Rolled Flange Eyelet	500	V1066-ND	28.59	25.16	T123/500
10	Mini-Klip Term. for 1/16” (1.60mm) Boards with .062” (1.574mm) Dia. Holes, Tin	100	V1067-ND	8.59	7.56	28/C
10	Mini-Klip Term. for 1/16” (1.60mm) Boards with .062” (1.574mm) Dia. Holes, Tin	1000	V1068-ND	45.83	40.29	T28/M
11	Bus Strips With Round Punched Holes	10	V1064-ND	8.52	7.50	T107/10
12	Pad Cutter Tool For Copper Clad Boards with Handle, .040” (1.02mm) Holes	1	V1056-ND	58.15	51.17	P138A
12	Pad Cutter Tool For Copper Clad Boards Shank only, .040” (1.02mm) Holes	1	V1057-ND	58.79	51.68	P138C
14	Hand Insertion Tool for T44		V1098-ND	21.06	18.53	A13
14	Hand Insertion Tool for T68		V1099-ND	22.40	19.70	A13-1
15	Hand Insertion Tool for T49		V1100-ND	20.53	18.05	P156V
16	Hand Insertion Tool for T42-1		V1101-ND	28.14	24.74	P149V
17	Hand Insertion Tool for K24A, T46		V1103-ND	58.89	51.83	P133A
18	Hand Insertion Tool for R31, R32		V1104-ND	99.63	87.59	P158V
13	Die for R32 Socket Pins		V1106-ND	55.02	48.37	D9
—	Die for R31 Socket Pins		V1173-ND	21.73	19.12	D10

Edgeboard Connectors

For 1/16" (1.60mm) Thick P.C. Boards

Solder Eyelet Type Insulator Material: Phenolic, UL-94V-0 or Glass filled diallyl; Phthalate UL-94V-1 or Ryton R10. **Wrap Tail Type Insulator Material:** Phenolic, UL-94V-0 or Glass filled diallyl; Phthalate UL-94V-1 or Polyester (VALOX) UL-94V-0. **Contact Material:** Phosphor bronze QQ-B-750 or Beryllium copper. **Contact Plating:** .000010” gold over .000050” nickel. **Test Voltage:** 650 VAC. **Rated Current:** 3 Amps. **Contact Res. Drop: 30 Mv Max** @ rated current. **Insulation Resistance:** 5000 megohms, mon. @ 500 VDC.



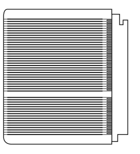
Solder-Eye **Wire-Wrap**

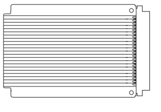
Ctrs. In. (mm)	No. Of Contacts	Termination Type	Mounting Ears	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 25	Vector Part No.
.100 (2.54)	72	Wrap Tail	Center	V1061-ND†*	17.16	15.11	13.49	R636-1
.156 (3.96)	44	Solder Eye	Flush	V1062-ND††	11.33	9.97	8.90	R644
.156 (3.96)	44	Wire Wrap	Flush	V1195-ND	9.63	8.47	7.52	R644-3F
.156 (3.96)	44	Wire Wrap	Center	V1196-ND	9.63	8.47	7.52	R644-3C

† Supplied with between-contact polarizing key. * Wrap Tail: 3-level, .025” (.64mm) Sq.
†† Supplied with between-contact polarizing key and in-contact polarizing key.

Card Extenders

Current rating: 5A @ 108°F temp. rise; Voltage rating: 200 RMS or 300 VDC. Circuit contacts are gold/nickel plated .000010” gold over .000050” nickel. Connector contacts: Gold inlay .000030” thick, on CA725 copper/nickel alloy base. Board: epoxy glass composite - 2 oz. copperclad or FR4 per MIL-P-13949.





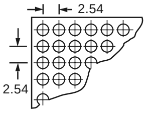
Vector Card Extenders are specifically designed to provide in-system testing of functioning circuit boards.

Contacts Total	Contacts Each Side	Contacts Ctrs. In. (mm)	Dimensions Width x Height Inch (cm)	Bus System Application	Digi-Key Part No.	Price Each 1	Price Each 10	Vector Part No.
44	22	.156 (3.96)	4.5 x 6.5 (11.43 x 16.51)	—	V1024-ND	37.74	33.22	3690
36/62	18/31	.100 (2.54)	6.7 x 5.6 (17.02 x 14.22)	IBM AT	V1026-ND	71.75	63.14	3690-26
62	31	.100 (2.54)	3.18 x 5.7 (8.08 x 14.48)	IBM PC	V1025-ND	70.07	61.60	3690-22
72	36	.100 (2.54)	4.5 x 11.5 (11.43 x 29.21)	—	V1143-ND	65.23	57.35	3690-2
60/86	30/43	.1/.156 (2.54/3.96)	12 x 7.65 (30.48 x 19.43)	Multibus I	V1095-ND	107.40	94.42	3690-18
188	94	.050 (1.27)	6.7 x 5.6 (17.02 x 14.22)	EISA	V1108-ND	279.08	245.59	3690-32
56	28	.125 (3.18)	4.5 x 6.5 (11.43 x 16.51)	SDTI	V1115-ND	46.73	41.12	3690-16
100	50	—	Hgt. 7.5 (19.05)	S-100	V1144-ND	71.75	63.14	3690-12

Prepunched Insulating Boards

- Epoxy glass, except as noted
- .062” (1.57mm) thick except

‡ V1122-ND .047” (1.19mm) thick
‡ V1123-ND .031” (.79mm) thick

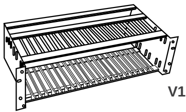


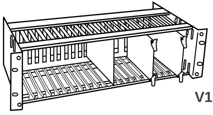
Dimensions - Inch (cm) Width x Length	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 25	Vector Part No.
Micro-Vectorboards — Holes .042” (1.07mm) Diameter; .100” (2.54mm) grid					
4.5 x 17 (11.43 x 43.18)	V1005-ND#	11.32	9.96	8.84	169P44XXXP
4.5 x 6.5 (11.43 x 16.51)	V1043-ND#	6.13	5.40	4.79	64P44XXXP
4.5 x 17 (11.43 x 43.18)	V1004-ND	16.25	14.29	12.69	169P44WE
8 x 17 (20.32 x 43.18)	V1007-ND	25.17	22.13	19.64	169P79WE
8.5 x 17 (21.59 x 43.18)	V1011-ND	23.02	20.24	17.97	169P84WE
8.5 x 17 (21.59 x 43.18)	V1012-ND*	27.34	24.04	21.33	169P84WEC1
4.5 x 6.5 (11.43 x 16.51)	V1042-ND	6.10	5.36	4.76	64P44WE
4.5 x 17 (11.43 x 43.18)	V1002-ND†	10.59	9.32	8.32	169P44
4.5 x 17 (11.43 x 43.18)	V1003-ND*†	19.75	17.36	15.41	169P44C1
8 x 17 (20.32 x 43.18)	V1006-ND†	27.72	24.37	21.63	169P79
8.5 x 17 (21.59 x 43.18)	V1008-ND†	27.72	24.37	21.63	169P84
8.5 x 17 (21.59 x 43.18)	V1009-ND*†	32.14	28.26	25.08	169P84C1
10 x 17 (25.40 x 43.18)	V1013-ND†	33.92	29.86	26.65	169P99
6.5 x 4.5 (16.51 x 11.43)	V1119-ND †	6.10	5.36	4.76	64P44
4.5 x 8.5 (11.43 x 21.59)	V1120-ND	9.63	8.47	7.52	84P44WE
6 x 17 (15.24 x 43.18)	V1122-ND‡	15.85	13.96	12.45	169P59-047
6 x 17 (15.24 x 43.18)	V1123-ND ‡	16.23	14.28	12.67	169P59-032
6 x 17 (15.24 x 43.18)	V1124-ND#	12.58	11.08	9.89	169P59XXXP
4.5 x 17 (11.43 x 43.18)	V1126-ND*	15.85	13.96	12.45	169P44WEC1
4.5 x 17 (11.43 x 43.18)	V1127-ND**	16.62	14.61	12.97	169P44C2
Vectorboard® — Holes .062” (1.57mm) Diameter; .100” (2.54mm) grid					
4.8 x 17 (12.19 x 43.18)	V1014-ND	24.06	21.16	18.78	170H48WE
8.51 x 17 (21.62 x 43.18)	V1015-ND	36.93	32.47	28.82	170H85WE
8.5 x 8.5 (21.59 x 21.59)	V1121-ND	24.92	21.92	19.58	85H85WE
4.8 x 8.5 (12.19 x 21.59)	V1125-ND	14.20	12.50	11.16	85H48WE
Vectorboard® — Holes .025” (.64mm) Diameter; .050 (1.27mm) grid					
4 x 6.5 (10.16 x 16.51)	V1140-ND	46.96	41.33	36.90	126M76-032
4 x 17 (10.16 x 43.18)	V1141-ND	61.72	54.26	48.16	336M76-032
4 x 17 (10.16 x 43.18)	V1142-ND*	50.45	44.36	39.37	336M76-032C1

# Material: Phenolic. * Copper clad, 1 side. ** Copper clad, 2 side. WE = Epoxy Glass. † Epoxy Glass Composite

VECTOR
ELECTRONIC COMPANY

Card Racks


V1050-51-53


V1052

Designed in accordance with EIA standard, these 19" (48.26cm) subracks are compatible with Vector prototyping boards. All racks are adjustable in both height and depth and can be used with snap-in, plastic or metal card guides. Available in kit form (CCK) or fully assembled (CCA) all models feature brushed aluminum construction with a full line of prototyping boards, extenders and backplanes available. Card racks include nylon snap-in card guides.

Card Size Range Inch (cm) Width x Height	Size Inch (cm) Width x Depth	Hgt*	Guide Method	Mtg. Mat.	Digi-Key Part No.	Price Each 1	10	Vector Part No.
3.00-5.00 x 4.5 (7.62-12.70 x 11.43)	19.00 x 9.00 (48.26 x 22.86)	3U	Snap-In	Nylon	V1145-ND	118.57	104.24	CCK12S/90
5.50-7.00 x 4.5 (13.97-17.78 x 11.43)	19.00 x 9.00 (48.26 x 22.86)	3U	Snap-In	Nylon	V1052-ND	113.37	99.67	CCK13S/90
5.50-7.00 x 4.5 (13.97-17.78 x 11.43)	19.00 x 9.00 (48.26 x 22.86)	3U	Snap-In	Nylon	V1051-ND	142.21	125.03	CCA13S/90
5.50-7.00 x 4.5 (13.97-17.78 x 11.43)	19.00 x 9.00 (48.26 x 22.86)	3U	Riveted	Zinc	V1050-ND	170.53	149.92	CCA13M/90
5.50-7.00 x 4.5 (13.97-17.78 x 11.43)	10.25 x 9.00 (26.04 x 22.86)	3U	Snap-In	Nylon	V1146-ND	94.62	83.27	CCA13S-H/90
5.50-7.00 x 4.5 (13.97-17.78 x 11.43)	19.00 x 9.00 (48.26 x 22.86)	3U	Snap-In	Nylon	V1147-ND	455.88	401.19	CCK13S-16/90
8.60-10.1 x 4.5 (21.84-25.65 x 11.43)	19.00 x 12.00 (48.26 x 30.48)	3U	Snap-In	Nylon	V1053-ND	148.44	130.50	CCA14S/90
8.60-10.1 x 8 (21.84-25.65 x 20.32)	19.00 x 12.00 (48.26 x 30.48)	5U	Snap-In	Nylon	V1148-ND	178.76	157.32	CCA17S/90
4.0-8.50 x 10.0 (10.16-21.59 x 25.40)	19.00 x 9.00 (48.26 x 22.86)	7U	Snap-In	Nylon	V1149-ND	136.46	129.65	CCK100S/90
4.5 X 6.5 (11.43 x 16.51)	10.00 X 9.00 (25.40 x 22.86)	3U	Guide Plate	Alum.	V2001-ND *NEW!*	153.61	135.04	CCA13C/90

* 3U = 5.25" (13.34cm); 5U = 8.75U (22.23cm); 7U= 12.25" (31.12cm)

EIA Backplanes

Description	Width x Length Inch (cm)	Plug-board Series	Digi-Key Part No.	Price Each 1	10	Vector Part No.
8 Slot CCK13 Series Backplane	4.35 x 7.00 (11.05 x 17.78)	4610	V1096-ND	205.95	181.06	4610-8-1A
16 Slot CCK13 Series Backplane	4.35 x 13.00 (11.05 x 33.02)	4610	V1097-ND	275.55	242.24	4610-16-1A

Card Rack Accessories

Accessories for card rack enclosures for customizing your application. Card guides are tapered slides for PCB cards to slide along. Snap-In versions provide easy installation without the need for tools. Screw mount versions (comes with hardware) allow card placement anywhere within .25" (6.35mm) spacing.

Description	Length Inch (cm)	Digi-Key Part No.	Price Each 1	10	Vector Part No.
Optional Assemblies					
Grab Handle with Hardware for Card Racks 5.25" (13.34cm) and 8.75" (22.23cm) height	—	V1161-ND	12.68	11.16	HA12
Ejector Handle with Hardware for Cards (4 pcs bag)	—	V1162-ND	8.29	7.30	HA9/4
T-Strut 1" wide for Customizing Card Rack	16.85 (42.80)	V2002-ND *NEW!*	7.64	6.72	TS169
T-Strut 1" wide for Customizing Card Rack	20.85 (52.96)	V2005-ND *NEW!*	8.46	7.44	TS209
Hardware Kit for Backplane Connector (42 pcs Total)	—	V2006-ND *NEW!*	10.17	8.95	HD34
Nut 4-40 Square Head for T-Strut (25 pcs bag)	—	V2007-ND *NEW!*	5.39	4.74	NT4-7PA
Flat Head Screw 4-40 THD for T-Struts (25 pcs bag)	.25 (.64)	V2004-ND *NEW!*	4.84	4.26	SC4-27/25
Bracket Kit for T-Struts (6 pcs part)	—	V2000-ND *NEW!*	8.48	7.46	BR16A
Card Guides — Plastic Screw Mount					
Plastic Screw Mount (Pkg. of 12)*	2.89 (7.34)	V1151-ND	20.53	18.07	CG2-45P
Plastic Screw Mount (Pkg. of 12)*	5.42 (13.77)	V1153-ND	19.27	16.96	CG2-65P
Plastic Screw Mount (Pkg. of 12)*	6.93 (17.60)	V1156-ND	27.34	24.07	CG2-80P
Plastic Screw Mount (Pkg. of 12)*	8.14 (20.68)	V1160-ND	21.25	18.71	CG2-95P
Card Guides — Nylon Snap-In Mount					
Nylon Snap-In Mount (Pkg. of 12)*	3.17 (8.05)	V1150-ND	12.47	10.96	CG2-45S
Nylon Snap-In Mount (Pkg. of 12)*	5.42 (13.77)	V1152-ND	10.98	9.67	CG2-65S
Nylon Snap-In Mount (Pkg. of 12)*	6.93 (17.60)	V1155-ND	16.14	14.21	CG2-80S
Nylon Snap-In Mount (Pkg. of 12)*	8.43 (21.41)	V1158-ND	13.99	12.32	CG2-95S
Card Guides — Metal Screw Mount					
Metal Screw Mount (Pkg. of 12)*	5.42 (13.77)	V1154-ND	24.86	21.88	CG2-65M
Metal Screw Mount (Pkg. of 12)*	6.93 (17.60)	V1157-ND	31.36	27.57	CG2-80M

* Note: 1 pkg = 12 pieces.

KEYSTONE
ELECTRONICS CORP.

SMT Test Points

Miniature • Ultra low profile ideally suited for advanced surface mount printed circuit board applications • Designed for long life and durability • Manufactured using flat wire to provide a large mounting surface area • Ideal for use with miniature probes, clips, and hooks • Efficient, safe, board level testing.

Compact • Unique design provides exceptional strength and durability • Simplifies testing on dense SMT circuit boards • Ideal for use with most standard probes, clips and hooks • Efficient, safe, board level testing

Fig. 1 Miniature

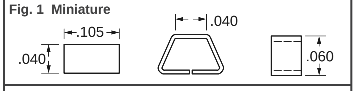


Fig. 2 Compact

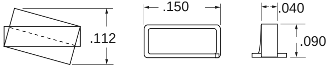
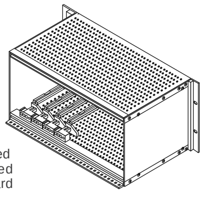


Fig.	Description	Digi-Key Part No.	Cut Tape Price Each 50	250	500	Digi-Key Part No.	Tape & Reel Pricing 1,000	Keystone Part No.
1	Miniature	5015KCT-ND	.25	.22	.18	5015KTR-ND	105.40	5015
2	Compact	5016KCT-ND	.23	.20	.17	5016KTR-ND	98.00	5016

VECTOR
ELECTRONIC COMPANY

CompactPCI® Card Racks

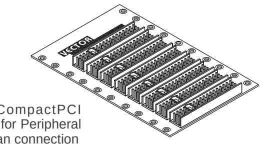


The newest specification for PCI-based computers is CompactPCI. It is electrically a superset of desktop PCI with a different physical form factor. CompactPCI utilizes the Eurocard form factor popularized by the VME bus. Card racks for CompactPCI Bus come completely assembled with card guides. Plug-in power supply and backplane are ordered separately. Standard 3U and 6U heights available with 4 or 8 slot card configurations. **• Vented top and bottoms are not included.**

Description	Dim. – Inch (cm) Width	Depth	Hgt	Digi-Key Part No.	Price Each 1	10	25	Vector Part No.
Card Rack cPCI	7.4 (18.80)	8.5 (21.59)	3U	V1176-ND	194.34	—	—	CCA26-36
Card Rack cPCI	9.0 (22.86)	8.5 (21.59)	3U	V1177-ND	207.63	—	—	CCA26-44
Card Rack cPCI	7.4 (18.80)	12 (30.48)	3U	V1174-ND	175.00	—	—	CCA27-36
Card Rack cPCI	9.0 (22.86)	12 (30.48)	3U	V1175-ND	246.61	216.80	192.41	CCA27-44
Card Rack cPCI	19 (48.26)	10 (25.40)	6U	V1178-ND	257.99	226.80	201.29	CCA28-84-00
Optional Hardware Kit for Above Racks, 24 pcs. Total				V2003-ND *NEW!*	7.74	6.80	6.04	HD91
Card Guides Snap -In Style for Above Racks				V2008-ND *NEW!*	2.73	2.40	2.13	3250-0001-01

VECTOR
ELECTRONIC COMPANY

CompactPCI® Backplane



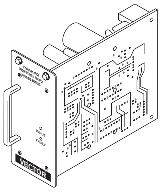
Features: • Backplane design is compliant with the CompactPCI specification 1.0 • CPU slot is on the right • A Drive connector for Peripheral Power is provided • A 4-pin Connector is provided for 12 VDC fan connection

Description	Digi-Key Part No.	Price Each	Vector Part No.
Backplane for CompactPCI, 8 Slot, 3U	V1185-ND	486.67	CPCIBPS18-3-32
Backplane for CompactPCI, 8 Slot, 6U	V1184-ND	600.00	CPCIBP8-6-64

VECTOR
ELECTRONIC COMPANY

CompactPCI® Power Supply

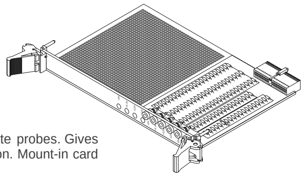
Available in 5 wattage outputs and 4 voltage outputs (5V, 3.3V, +12V, and –12V), this cPCI power supplies plug directly into the CompactPCI card rack and connect to the backplane to supply system voltages to all slots on backplane connectors. Supplies are hot swappable and redundant sharing with Overvoltage/Overtemperature/Short circuit protection on all outputs and inputs. Input voltage is 90-264VAC (47Hz to 440Hz)



Description	Part No.	Price Each	Vector Part No.
75 Watt cPCI, Closed Frame	V1186-ND	227.50	2600-075
75 Watt cPCI, Closed Frame	V1187-ND	236.60	2650-075
150 Watt cPCI, Closed Frame	V1188-ND	354.90	2600-150
150 Watt cPCI, Closed Frame	V1189-ND	364.00	2650-150
300 Watt cPCI, Open Frame	V1180-ND	746.20	2600-300
300 Watt cPCI, Closed Frame	V1190-ND	728.00	2650-300
350 Watt cPCI, Closed Frame	V1191-ND	819.00	2600-350
350 Watt cPCI, Closed Frame	V1192-ND	828.10	2650-350
Adapter Board for Aux. Power Supply	V1181-ND	280.43	4626

VECTOR
ELECTRONIC COMPANY

CompactPCI®
Test Load Boards



For enclosure and backplane monitoring without separate probes. Gives test loading for power supply for remote voltage calibration. Mount-in card slot and is fully assembled and tested.

Description	Digi-Key Part No.	Price Each 1	10	25	Vector Part No.
Resistive Load Board for 3U Systems	V1182-ND	273.00	240.00	213.00	CPCI-3U-25-L
Resistive Load Board for 6U Systems	V1183-ND	302.28	265.75	235.85	CPCI-6U-25-L

KEYSTONE
ELECTRONICS CORP.

PC Test Points

Features: • Color keyed for visibility and quick identification • Economical choice for PC test point terminations • Snap-fit mounting provides positive retention for wave soldering • Wire form loop for safe, non-slip testing • Space saving, ultra low and low profile designs • High profile for difficult to reach applications • Suitable for high density packaging on .062" (1.57mm) & .093" (2.36mm) PC boards • Practical replacement for wire-wrap posts and turrets • Secure grip for J hooks, EZ hooks, grabbers, alligator clips, tips or probes • Plastic base strengthens terminal for positive holding power • Ideal for reliable production testing and field service troubleshooting

Fig.	Base Color	Digi-Key Part No.	Price Each 10	100	500	Keystone Part No.
1	Red	5000K-ND	.22	.17	.15	5000
	Black	5001K-ND	.22	.17	.15	5001
	White	5002K-ND	.22	.17	.15	5002
	Orange	5003K-ND	.22	.17	.15	5003
	Yellow	5004K-ND	.22	.17	.15	5004
2	Red	5005K-ND	.22	.17	.16	5005
	Black	5006K-ND	.22	.17	.16	5006
	White	5007K-ND	.22	.17	.16	5007
	Orange	5008K-ND	.22	.17	.16	5008
	Yellow	5009K-ND	.22	.17	.16	5009
3	Red	5010K-ND	.22	.17	.16	5010
	Black	5011K-ND	.22	.17	.16	5011
	White	5012K-ND	.22	.17	.16	5012
	Orange	5013K-ND	.22	.17	.16	5013
	Yellow	5014K-ND	.22	.17	.16	5014

Fig. 1 Miniature

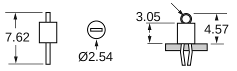


Fig. 2 Compact

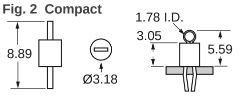
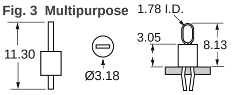


Fig. 3 Multipurpose

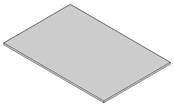


Injectorall Electronics

Positive Coated Sensitized Copper Clad Boards

Make your own professional looking prototype boards with trace widths as narrow as .005" (.13mm). All boards are FR4 material and come packaged individually in a black bag with blue header. *CAUTION: Do not open in direct sunlight, open in darkroom environment only.*

Developer and etchant solution available from Injectorall.

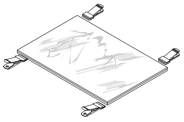


Coated Copper Clad PC Board

Dimensions Inch (cm)	Digi-Key Part No.	Price Each	Injectorall Part No.
Single Sided			
1/16" (.159cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC17P-ND	4.95	PC17P
4 x 6 (10.16 x 15.24)	PC18P-ND	7.93	PC18P
4.5 x 7 (11.43 x 17.78)	PC18P-C-ND	9.08	PC18P-C
6 x 6 (15.24 x 15.24)	PC18P-S-ND	10.36	PC18P-S
6 x 9 (15.24 x 22.86)	PC19P-ND	15.53	PC19P
12 x 12 (30.48 x 30.48)	PC19P-T-ND	35.05	PC19P-T
12 x 18 (30.48 x 45.72)	PC19AP-ND	52.55	PC19AP
18 x 18 (45.72 x 45.72)	PC19AP-E-ND	70.94	PC19AP-E
1/16" (.159cm) Thick, 2 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC9P-ND	5.71	PC9P
4 x 6 (10.16 x 15.24)	PC10P-ND	9.70	PC10P
4.5 x 7 (11.43 x 17.78)	PC10P-C-ND	11.70	PC10P-C
6 x 6 (15.24 x 15.24)	PC10P-S-ND	13.36	PC10P-S
6 x 9 (15.24 x 22.86)	PC11P-ND	20.04	PC11P
12 x 12 (30.48 x 30.48)	PC11P-T-ND	41.30	PC11P-T
12 x 18 (30.48 x 45.72)	PC12P-ND	61.94	PC12P
18 x 18 (45.72 x 45.72)	PC12P-E-ND	83.65	PC12P-E
Double Sided			
1/16" (.159cm) Thick, 1/2 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC74P-ND	7.06	PC74P
4 x 6 (10.16 x 15.24)	PC75P-ND	11.61	PC75P
4.5 x 7 (11.43 x 17.78)	PC75P-C-ND	14.39	PC75P-C
6 x 6 (15.24 x 15.24)	PC75P-S-ND	16.46	PC75P-S
6 x 9 (15.24 x 22.86)	PC76P-ND	24.69	PC76P
12 x 12 (30.48 x 30.48)	PC76P-T-ND	57.74	PC76P-T
12 x 18 (30.48 x 45.72)	PC77P-ND	86.62	PC77P
18 x 18 (45.72 x 45.72)	PC77P-E-ND	116.92	PC77P-E
1/16" (.159cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC40P-ND	7.06	PC40P
4 x 6 (10.16 x 15.24)	PC41P-ND	11.61	PC41P
4.5 x 7 (11.43 x 17.78)	PC41P-C-ND	14.39	PC41P-C
6 x 6 (15.24 x 15.24)	PC41P-S-ND	16.46	PC41P-S
6 x 9 (15.24 x 22.86)	PC42P-ND	24.69	PC42P
12 x 12 (30.48 x 30.48)	PC42P-T-ND	57.74	PC42P-T
12 x 18 (30.48 x 45.72)	PC43P-ND	86.62	PC43P
18 x 18 (45.72 x 45.72)	PC43P-E-ND	116.92	PC43P-E
1/16" (.159cm) Thick, 2 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC51P-ND	7.36	PC51P
4 x 6 (10.16 x 15.24)	PC52P-ND	12.16	PC52P
4.5 x 7 (11.43 x 17.78)	PC52P-C-ND	15.09	PC52P-C
6 x 6 (15.24 x 15.24)	PC52P-S-ND	17.26	PC52P-S
6 x 9 (15.24 x 22.86)	PC53P-ND	25.87	PC53P
12 x 12 (30.48 x 30.48)	PC53P-T-ND	60.89	PC53P-T
12 x 18 (30.48 x 45.72)	PC54P-ND	91.33	PC54P
18 x 18 (45.72 x 45.72)	PC54P-E-ND	123.32	PC54P-E
1/16" (.159cm) Thick, 4 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC79P-ND	10.13	PC79P
4 x 6 (10.16 x 15.24)	PC80P-ND	16.37	PC80P
4.5 x 7 (11.43 x 17.78)	PC80P-C-ND	19.54	PC80P-C
6 x 6 (15.24 x 15.24)	PC80P-S-ND	22.36	PC80P-S
6 x 9 (15.24 x 22.86)	PC81P-ND	30.47	PC81P
12 x 12 (30.48 x 30.48)	PC81P-T-ND	73.86	PC81P-T
12 x 18 (30.48 x 45.72)	PC82P-ND	100.75	PC82P
18 x 18 (45.72 x 45.72)	PC82P-E-ND	137.38	PC82P-E
Single Sided			
1/32" (.079cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC55P-ND	4.26	PC55P
4 x 6 (10.16 x 15.24)	PC56P-ND	7.16	PC56P
4.5 x 7 (11.43 x 17.78)	PC56P-C-ND	8.51	PC56P-C
6 x 6 (15.24 x 15.24)	PC56P-S-ND	9.75	PC56P-S
6 x 9 (15.24 x 22.86)	PC57P-ND	14.61	PC57P
12 x 12 (30.48 x 30.48)	PC57P-T-ND	30.72	PC57P-T
12 x 18 (30.48 x 45.72)	PC58P-ND	46.05	PC58P
18 x 18 (45.72 x 45.72)	PC58P-E-ND	62.19	PC58P-E
Double Sided			
1/32" (.079cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC44P-ND	5.90	PC44P
4 x 6 (10.16 x 15.24)	PC45P-ND	9.81	PC45P
4.5 x 7 (11.43 x 17.78)	PC45P-C-ND	11.66	PC45P-C
6 x 6 (15.24 x 15.24)	PC45P-S-ND	13.33	PC45P-S
6 x 9 (15.24 x 22.86)	PC46P-ND	19.98	PC46P
12 x 12 (30.48 x 30.48)	PC46P-T-ND	42.32	PC46P-T
12 x 18 (30.48 x 45.72)	PC47P-ND	63.47	PC47P
18 x 18 (45.72 x 45.72)	PC47P-E-ND	85.72	PC47P-E
1/32" (.079cm) Thick, 2 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC64P-ND	7.36	PC64P
4 x 6 (10.16 x 15.24)	PC65P-ND	12.15	PC65P
4.5 x 7 (11.43 x 17.78)	PC65P-C-ND	15.09	PC65P-C
6 x 6 (15.24 x 15.24)	PC65P-S-ND	17.26	PC65P-S
6 x 9 (15.24 x 22.86)	PC66P-ND	25.87	PC66P
12 x 12 (30.48 x 30.48)	PC66P-T-ND	60.89	PC66P-T
12 x 18 (30.48 x 45.72)	PC67P-ND	91.33	PC67P
18 x 18 (45.72 x 45.72)	PC67P-E-ND	123.32	PC67P-E
Single Sided			
.014" (.036cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC94P-ND	4.26	PC94P
4 x 6 (10.16 x 15.24)	PC95P-ND	7.16	PC95P
4.5 x 7 (11.43 x 17.78)	PC95P-C-ND	8.51	PC95P-C
6 x 6 (15.24 x 15.24)	PC95P-S-ND	9.75	PC95P-S
6 x 9 (15.24 x 22.86)	PC96P-ND	14.61	PC96P
12 x 12 (30.48 x 30.48)	PC96P-T-ND	30.72	PC96P-T
12 x 18 (30.48 x 45.72)	PC97P-ND	46.05	PC97P
18 x 18 (45.72 x 45.72)	PC97P-E-ND	62.19	PC97P-E
Double Sided			
.010" (.025cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC60P-ND	5.90	PC60P
4 x 6 (10.16 x 15.24)	PC61P-ND	9.81	PC61P
4.5 x 7 (11.43 x 17.78)	PC61P-C-ND	11.66	PC61P-C
6 x 6 (15.24 x 15.24)	PC61P-S-ND	13.33	PC61P-S
6 x 9 (15.24 x 22.86)	PC62P-ND	19.98	PC62P
12 x 12 (30.48 x 30.48)	PC62P-T-ND	42.32	PC62P-T
12 x 18 (30.48 x 45.72)	PC63P-ND	63.47	PC63P
18 x 18 (45.72 x 45.72)	PC63P-E-ND	85.36	PC63P-E
.005" (.013cm) Thick, .5 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC90P-ND	5.90	PC90P
4 x 6 (10.16 x 15.24)	PC91P-ND	9.81	PC91P
4.5 x 7 (11.43 x 17.78)	PC91P-C-ND	11.66	PC91P-C
6 x 6 (15.24 x 15.24)	PC91P-S-ND	13.33	PC91P-S
6 x 9 (15.24 x 22.86)	PC92P-ND	19.98	PC92P
12 x 12 (30.48 x 30.48)	PC92P-T-ND	42.32	PC92P-T
12 x 18 (30.48 x 45.72)	PC93P-ND	63.47	PC93P
18 x 18 (45.72 x 45.72)	PC93P-E-ND	85.72	PC93P-E

Positive PC Board Accessories

Use re-useable exposure guide for determining your exposure time to the distance of the exposure lamp for your application. The UV exposure lamp is a 15W lamp for exposing the presensitized board. Intended to be used with your fluorescent 18" bi-pin fixture. Glass exposure kit consists of two pieces of properly sized glass with spring clips. Used to position and hold mylar positive and board during the exposure process.



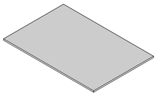
Glass Exposure Kit

Description	Digi-Key Part No.	Price Each	Injectorall Part No.
Reusable Exposure Guide Kit	PC50A-ND	2.78	PC50A
18" Fluorescent Exposure Lamp, Bi-Pin	PC557F-ND	20.74	PC557F
Glass Exposure Kit for 4x6" (10.16x15.24cm) and smaller, 6 Pcs.	PC-GL46-ND	4.78	PC-GL46
Glass Exposure Kit for 6x9" (15.24x22.86cm) and smaller, 6 Pcs.	PC-GL69-ND	7.78	PC-GL69
Glass Exposure Kit for 14x18" (35.56x45.72cm) and smaller, 8 Pcs.	PC-GL1218-ND	20.91	PC-GL1218
Clear Mylar Film, 4x6" (10.16x15.24cm) 2 Sheet Pack	PC36-ND	2.00	PC36
Clear Mylar Film, 6x9" (15.24x22.86cm) 2 Sheet Pack	PC37-ND	2.85	PC37
Clear Mylar Film, 12x18" (30.48x45.72cm) 2 Sheet Pack	PC38-ND	5.00	PC38

Injectorall Electronics

Uncoated Copper Clad Boards

All boards are made from FR4 material. 1/2 oz. copper is ideal for shorter etching times and very fine trace lines. Use 2 oz. and thicker for higher current applications and heatsinking. 1/16 inch thick boards are standard with thinner boards offering board flexibility and reduced weight.



Dimensions Inch (cm)	Digi-Key Part No.	Price Each	Injectorall Part No.
Single Sided			
1/16" (.159cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC5-ND	3.10	PC5
4 x 6 (10.16 x 15.24)	PC6-ND	4.85	PC6
4.5 x 7 (11.43 x 17.78)	PC6-C-ND	5.43	PC6-C
6 x 6 (15.24 x 15.24)	PC6-S-ND	6.20	PC6-S
6 x 9 (15.24 x 22.86)	PC7-ND	9.30	PC7
12 x 12 (30.48 x 30.48)	PC7-T-ND	19.58	PC7-T
12 x 18 (30.48 x 45.72)	PC8-ND	29.32	PC8
18 x 18 (45.72 x 45.72)	PC8-E-ND	37.85	PC8-E
1/16" (.159cm) Thick, 2 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC9-ND	3.13	PC9
4 x 6 (10.16 x 15.24)	PC10-ND	4.98	PC10
4.5 x 7 (11.43 x 17.78)	PC10-C-ND	5.81	PC10-C
6 x 6 (15.24 x 15.24)	PC10-S-ND	6.65	PC10-S
6 x 9 (15.24 x 22.86)	PC11-ND	9.95	PC11
12 x 12 (30.48 x 30.48)	PC11-T-ND	22.12	PC11-T
12 x 18 (30.48 x 45.72)	PC12-ND	33.17	PC12
18 x 18 (45.72 x 45.72)	PC12-E-ND	42.13	PC12-E
Double Sided			
1/16" (.159cm) Thick, 1/2 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC74-ND	4.26	PC74
4 x 6 (10.16 x 15.24)	PC75-ND	6.73	PC75
4.5 x 7 (11.43 x 17.78)	PC75-C-ND	7.93	PC75-C
6 x 6 (15.24 x 15.24)	PC75-S-ND	9.03	PC75-S
6 x 9 (15.24 x 22.86)	PC76-ND	14.31	PC76
12 x 12 (30.48 x 30.48)	PC76-T-ND	24.34	PC76-T
12 x 18 (30.48 x 45.72)	PC77-ND	36.50	PC77
18 x 18 (45.72 x 45.72)	PC77-E-ND	45.68	PC77-E
1/16" (.159cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC40-ND	4.26	PC40
4 x 6 (10.16 x 15.24)	PC41-ND	6.73	PC41
4.5 x 7 (11.43 x 17.78)	PC41-C-ND	7.93	PC41-C
6 x 6 (15.24 x 15.24)	PC41-S-ND	9.06	PC41-S
6 x 9 (15.24 x 22.86)	PC42-ND	14.31	PC42
12 x 12 (30.48 x 30.48)	PC42-T-ND	24.34	PC42-T
12 x 18 (30.48 x 45.72)	PC43-ND	36.50	PC43
18 x 18 (45.72 x 45.72)	PC43-E-ND	45.68	PC43-E
1/16" (.159cm) Thick, 2 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC51-ND	4.66	PC51
4 x 6 (10.16 x 15.24)	PC52-ND	7.45	PC52
4.5 x 7 (11.43 x 17.78)	PC52-C-ND	8.81	PC52-C
6 x 6 (15.24 x 15.24)	PC52-S-ND	10.08	PC52-S
6 x 9 (15.24 x 22.86)	PC53-ND	15.11	PC53
12 x 12 (30.48 x 30.48)	PC53-T-ND	28.46	PC53-T
12 x 18 (30.48 x 45.72)	PC54-ND	42.67	PC54
18 x 18 (45.72 x 45.72)	PC54-E-ND	54.64	PC54-E
1/16" (.159cm) Thick, 4 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC79-ND	4.56	PC79
4 x 6 (10.16 x 15.24)	PC80-ND	7.36	PC80
4.5 x 7 (11.43 x 17.78)	PC80-C-ND	9.66	PC80-C
6 x 6 (15.24 x 15.24)	PC80-S-ND	10.08	PC80-S
6 x 9 (15.24 x 22.86)	PC81-ND	15.11	PC81
12 x 12 (30.48 x 30.48)	PC81-T-ND	36.64	PC81-T
12 x 18 (30.48 x 45.72)	PC82-ND	54.96	PC82
18 x 18 (45.72 x 45.72)	PC82-E-ND	82.45	PC82-E
Single Sided			
1/32" (.079cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC55-ND	3.33	PC55
4 x 6 (10.16 x 15.24)	PC56-ND	4.35	PC56
4.5 x 7 (11.43 x 17.78)	PC56-C-ND	4.53	PC56-C
6 x 6 (15.24 x 15.24)	PC56-S-ND	5.18	PC56-S
6 x 9 (15.24 x 22.86)	PC57-ND	7.78	PC57
12 x 12 (30.48 x 30.48)	PC57-T-ND	15.59	PC57-T
12 x 18 (30.48 x 45.72)	PC58-ND	23.37	PC58
18 x 18 (45.72 x 45.72)	PC58-E-ND	29.34	PC58-E
Double Sided			
1/32" (.079cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC44-ND	3.23	PC44
4 x 6 (10.16 x 15.24)	PC45-ND	5.10	PC45
4.5 x 7 (11.43 x 17.78)	PC45-C-ND	6.06	PC45-C
6 x 6 (15.24 x 15.24)	PC45-S-ND	6.93	PC45-S
6 x 9 (15.24 x 22.86)	PC46-ND	10.36	PC46
12 x 12 (30.48 x 30.48)	PC46-T-ND	17.31	PC46-T
12 x 18 (30.48 x 45.72)	PC47-ND	25.97	PC47
18 x 18 (45.72 x 45.72)	PC47-E-ND	32.47	PC47-E

(Continued)

Injectorall Electronics
Uncoated Copper Clad Boards *(Cont.)*

Dimensions Inch (cm)	Digi-Key Part No.	Price Each	Injectorall Part No.
1/32” (.079cm) Thick, 2 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC64-ND	4.66	PC64
4 x 6 (10.16 x 15.24)	PC65-ND	7.45	PC65
4.5 x 7 (11.43 x 17.78)	PC65-C-ND	8.81	PC65-C
6 x 6 (15.24 x 15.24)	PC65-S-ND	10.08	PC65-S
6 x 9 (15.24 x 22.86)	PC66-ND	14.11	PC66
12 x 12 (30.48 x 30.48)	PC66-T-ND	28.46	PC66-T
12 x 18 (30.48 x 45.72)	PC67-ND	42.67	PC67
18 x 18 (45.72 x 45.72)	PC67-E-ND	54.64	PC67-E
Single Sided			
.014” (.036cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC94-ND	2.33	PC94
4 x 6 (10.16 x 15.24)	PC95-ND	4.35	PC95
4.5 x 7 (11.43 x 17.78)	PC95-C-ND	4.53	PC95-C
6 x 6 (15.24 x 15.24)	PC95-S-ND	5.18	PC95-S
6 x 9 (15.24 x 22.86)	PC96-ND	7.78	PC96
12 x 12 (30.48 x 30.48)	PC96-T-ND	15.59	PC96-T
12 x 18 (30.48 x 45.72)	PC97-ND	23.37	PC97
18 x 18 (45.72 x 45.72)	PC97-E-ND	29.34	PC97-E
Double Sided			
.010” (.025cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC60-ND	3.23	PC60
4 x 6 (10.16 x 15.24)	PC61-ND	5.10	PC61
4.5 x 7 (11.43 x 17.78)	PC61-C-ND	6.06	PC61-C
6 x 6 (15.24 x 15.24)	PC61-S-ND	6.93	PC61-S
6 x 9 (15.24 x 22.86)	PC62-ND	10.36	PC62
12 x 12 (30.48 x 30.48)	PC62-T-ND	17.31	PC62-T
12 x 18 (30.48 x 45.72)	PC63-ND	25.97	PC63
18 x 18 (45.72 x 45.72)	PC63-E-ND	32.47	PC63-E
.005” (.013cm) Thick, .5 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC90-ND	3.23	PC90
4 x 6 (10.16 x 15.24)	PC91-ND	5.10	PC91
4.5 x 7 (11.43 x 17.78)	PC91-C-ND	6.06	PC91-C
6 x 6 (15.24 x 15.24)	PC91-S-ND	6.93	PC91-S
6 x 9 (15.24 x 22.86)	PC92-ND	10.36	PC92
12 x 12 (30.48 x 30.48)	PC92-T-ND	17.31	PC92-T
12 x 18 (30.48 x 45.72)	PC93-ND	25.97	PC93
18 x 18 (45.72 x 45.72)	PC93-E-ND	32.47	PC93-E

Drill Bits

Diameter Inch (mm)	Digi-Key Part No.	Price Each 1	10	Injectorall Part No.
High Speed Steel				
.062” (1.57)	PC300-52-ND	1.77	1.29	PC300-52
.052” (1.32)	PC300-55-ND	1.96	1.43	PC300-55
.040” (1.02)	PC300-60-ND	1.96	1.43	PC300-60
.033” (.84)	PC300-66-ND	2.23	1.63	PC300-66
.029” (.74)	PC300-69-ND	2.51	1.83	PC300-69
.021” (.53)	PC300-75-ND	2.51	1.83	PC300-75
.0135” (.34)	PC300-80-ND	2.51	1.83	PC300-80
Carbide – All carbide bits have 1/8” (3.18mm) shank				
.062” (1.57)	PC300C-52-ND	9.26	8.11	PC300C-52
.052” (1.32)	PC300C-55-ND	7.55	6.61	PC300C-55
.040” (1.02)	PC300C-60-ND	7.55	6.61	PC300C-60
.033” (.84)	PC300C-66-ND	7.55	6.61	PC300C-66
.031” (.79)	PC300C-68-ND	7.55	6.61	PC300C-68
.029” (.74)	PC300C-69-ND	7.55	6.61	PC300C-69
.021” (.53)	PC300C-75-ND	12.01	10.51	PC300C-75
.0135” (.34)	PC300C-80-ND	12.01	10.51	PC300C-80

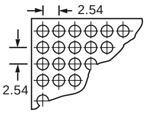
Unclad PC Boards

Unclad (no copper) pc boards made of FR4 fiberglass material. Ideal for isolation of point-to-point wiring and wire wrapping applications. 1/16” thick board.

Dimensions Inch (cm)	Digi-Key Part No.	Price Each	Injectorall Part No.
1/16” (.159cm) Thick, Unclad			
3 x 4.5 (7.62 x 11.43)	PC5-UNCLAD-ND	3.00	PC5-UNCLAD
4 x 6 (10.16 x 15.24)	PC6-UNCLAD-ND	4.66	PC6-UNCLAD
6 x 9 (15.24 x 22.86)	PC7-UNCLAD-ND	9.00	PC7-UNCLAD
12 x 18 (30.48 x 45.72)	PC8-UNCLAD-ND	23.99	PC8-UNCLAD

Drilled Copper Clad Breadboards

Double sided copper clad boards with drilled holes on .1” centers. Hole diameter of .042” fits most components. Perfect for use with pad cutting tool to customize your circuits. 1/16” thick board.



Dimensions Inch (cm)	Digi-Key Part No.	Price Each	Injectorall Part No.
3 x 4.5 (7.62 x 11.43)	B3426D-ND	9.05	B3426D
4 x 6 (10.16 x 15.24)	B3427D-ND	13.42	B3427D
5.75 x 8.5 (14.60 x 21.59)	B3428D-ND	22.80	B3428D
5.75 x 17 (14.60 x 43.18)	B3429D-ND	38.00	B3429D
11.5 x 17 (29.21 x 43.18)	B3429AD-ND	70.00	B3429AD

3M Terminal and Distribution Strips

Fig. 1

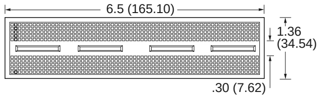


Fig. 2

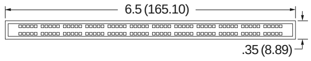


Fig. 3

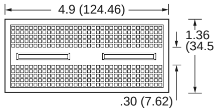


Fig. 4

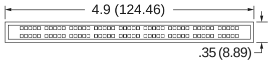


Fig. 5

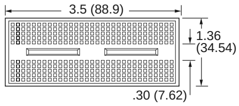


Fig. 6

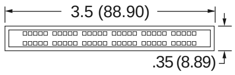


Fig. 7

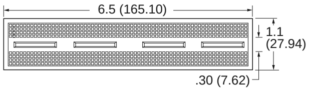


Fig. 8

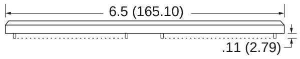


Fig. 9

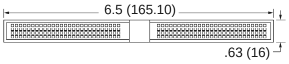


Fig. 10

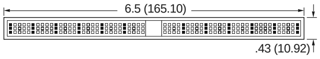
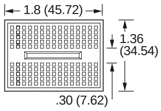


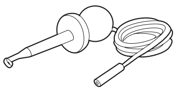
Fig.	Description	Digi-Key Part No.	Price Each
1	Terminal Strip, 128 five-tie-point terminals	923261-ND	13.52
2	Distribution Strip, 24 four-tie-point terminals	923277-ND	3.99
3	Terminal Strip, 96 five-tie-point terminals	923265-ND	10.74
4	Distribution Strip, 18 four-tie-point terminals	923281-ND	3.70
5	Terminal Strip, 68 five-tie-point terminals	923269-ND	7.88
6	Distribution Strip, 24 four-tie-point terminals	923285-ND	3.36
7	Terminal Strip, 128 four-tie-point terminals	923289-ND	12.39
8	Terminal Strip, 54 four-tie-point terminals w/solder tails, vinyl backed, mounting screws provided	923292-ND	9.62
9	Terminal Strip, 54 four-tie-point terminals	923291-ND	7.05
10	Distribution Strip, 36 four-tie-point terminals	923293-ND	6.06
11	Terminal Strip, 34 five-tie-point terminals	923273-ND	4.46

Fig. 11



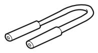
3M Patch Cords and Accessories

Compatible with 3M breadboards, terminal strips, super-strips, distribution strips, test clips, miniature 8-pin connectors and .025” (.64mm) square wrap posts.



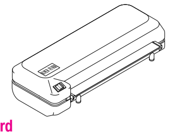
- Ideal for breadboarding and troubleshooting • Incorporate #26 AWG stranded wire with PVC insulation • Rugged, integral strain relief • Choices of two pin sizes — .019” and .030” (.48mm and .76mm), and two socket sizes — .019”-.028” and .028”-.028” (.48mm–.71mm and .71mm–.89mm) and E-Z Hook terminations

ASSORTMENT A (20 Pieces) — 9 pieces 2” (50.80mm) long yellow, 6 pieces 4” (101.60mm) long blue, 3 pieces 6” (152.40mm) long red, 2 pieces 9” (228.60mm) long black.



ASSORTMENT B (10 Pieces) — 5 pieces 15” (381mm) long red, 5 pieces 15” (381mm) long black.

Pin/Socket – Size Inch	mm	Color/Length Assortment	Pieces/ Pak	Recommended Applications	Digi-Key Part No.	Price Per Pak
Pin Plug to Pin Plug						
.019	.48	Assortment A	20	IC Sockets	924961-ND	48.48
.030	.76	Assortment A	20	A P Hardware	924962-ND	48.48
Socket to Socket						
.019/.028	.48 / .71	Assortment A	20	Extension for .019” (.48mm) Pin Plug	924963-ND	91.42
.028/.035	.71 / .89	Assortment A	20	TC to TC, TC to .025” (.64mm) Square Post	924964-ND	106.00
Pin Plug to Socket						
.019 (.019/.028)	48(.48 / .71)	Assortment A	20	IC Socket to .019” (.48m)m Pin Plug	924965-ND	71.08
.030 (.028/.035)	.76 (.71 / .89)	Assortment A	20	A P Hardware to TC, .025” (.64mm) Sq. Post	924966-ND	71.84
Pin Plug to E-Z Hook						
.019	.48	Assortment B	10	IC Socket to TC, .025” (.64mm) Sq. Post, etc.	924967-ND	45.18
.030	.76	Assortment B	10	A P Hardware to TC, .025” (.64mm) Post, etc.	924968-ND	45.84
Socket to E-Z Hook						
.019/.028	.48 / .71	Assortment B	10	.019” Pin Plug to TC, .025” (.64mm) Sq. Post, etc.	924969-ND	49.74
.028/.035	.71 / .89	Assortment B	10	TC, .025” Post to TC, .025” (.64mm) Post, etc.	924970-ND	51.90



NEW! Superfuser

Transferring the Image to the PCB Board

Transfers an image via an iron, (e.g. too much pressure, not enough pressure ect). The three elements, Time, Pressure and Temperature are paramount to attaining a perfect transfer.
Because you can use any type of toner in printing the image to the TTS paper, there is one adjustment that controls the high-end temperature setting, making it universally usable for a wide range of different toners.
Includes a 5-sheet pack of TTS paper, a sheet of prepared "sample" test images, and a sample of our 1/4oz blank circuit board.

182-1002-ND **$303.00**

TONER TRANSFER SYSTEM

by DynaArt Designs

Make instant circuit boards using any laser printer or photocopier!

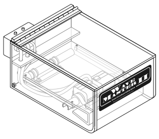
NO DARKROOM!
NO NEGATIVES!
NO CHEMICALS!
NO LOST TIME!

Simple 3-Step Process : *1. Print circuit layout directly to TTS paper; 2. Iron the image to copper-clad board; 3. Soak in water to remove paper;* ***now ready to etch!***

• Detailed instructions included for making single & double sided pcb's • Also shows how to make custom full color decals for any application • Available in 5 and 10 sheet packs — sheet size: 8-1/2" x 11" (21.59cm x 27.94cm)

182-1004-ND (5 sheet pack) **$14.95**
182-1003-ND (10 sheet pack) **$27.95**

NEW! Wavemaster



A revolutionary new etching tank design! Boards to be etched are placed horizontally into the tank. This allows you to watch the board being etched. A continuous flow of etchant bathes the board in a circular replenishment fashion providing a very clean etch pattern. New see through tank design allows for complete viewing during the etching process. Use only sodium persulfate etchant.

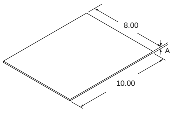
182-1005-ND **$303.00**

NEW! Plated Thru-Hole Kit

Registers double-sided artwork and for making plated thru-holes. Once the two images are attached to the board, it is run through the SuperFuser. Also it can be used for installing the eyelets after the PCB. The eyelets are so small they have to be inserted via a pin! Kit comes complete with bag of 250 eyelets, special forming tool, 10 carbide drill bits, mounting pins, scrubbing pad with full instructions.

182-1001-ND **$70.00**

NEW! Printed Circuit Boards



Copper Clad Boards 1/4oz. Copper

182-1006-ND	Single Sided 8"x10", .064" thick, 4 Panels	**$40.00**
182-1007-ND	Double Sided 8"x10", .064" thick, 4 Panels	**$45.00**
182-1008-ND	Single Sided 8"x10", .032" thick, 4 Panels	**$40.00**
182-1009-ND	Double Sided "8x10", .032" thick, 4 Panels	**$45.00**

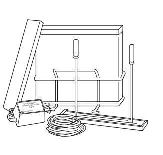
• Note: Must remove 1oz. Copper carrier before using, peel completely off and discard.

NEW! Silverlining Kit

This kit provides you with everything that you need to plate your PCB'S in minutes. You simply dampen a corner of a soft cloth, dip it into the powder and rub over the copper surface. Within a minute, the copper traces are coated with silver plating that will protect the copper from oxidation and provide a highly conductive pad for soldering.

182-1010-ND **$30.00**

Professional PC Board Power Etching System



A semi-automatic etching device for use in labs, schools, prototype shops and for limited PC board production. Air pump agitates etching solution for fast, very even etches. Handles up to two 8" x 10" (20.32cm x 25.40cm) PC boards at a time, either single or double sided.

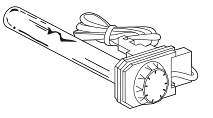
Kit contains: • 1 Etching Tank and Reservoir Lid, 12"H x 2 1/2"W x 10 1/2"L (30.48cm x 6.35cm x 26.67cm), (Molded Polyethylene — ABS PC Board Holder), Capacity — 1.25 Gallons (4.73 Liters) of Etching Solution • 1 Etch-O-Matic Power Agitating Pump, 120V AC Operation • 1 Permanent or Portable Tip-Free Base • 1 PC Board Holder and Handle • 4 Feet (1.22 Meters) of Supply Hose

GC394-ND **$106.70**

(Continued)

(Cont.)

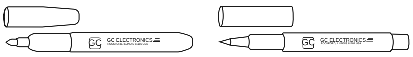
Etching Solution Heater



Fits in tank and heats solution up to 38°C (100°F). Used to further reduce etching time. Built-in adjustable thermostat controls temperature continuously to 100°F (38°C). 120V AC/100 W Max.

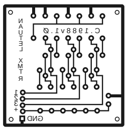
GC392-ND **$22.75**

Etch Resist Ink Pens



Black felt tip pen for making resist circuits directly on PC boards. Dries instantly for neat, easy application.

GC220-ND	Standard Size - draws lines approx. 1/32" (.79mm) wide	**$4.65**
GC222-ND	Fine Line - draws lines as thin as 1/64" (.40mm) wide	**$4.95**



Board Layout Software

An Effective and Low-Cost Software Tool for Creating Printed Circuit Artwork

PCBoards printed circuit layout software is ideal for creating high quality PCB artwork for your electronic projects. Its low cost and ease-of-use make it perfect for professional and hobbyist applications.

FEATURES: • Supports EGA, VGA, and Super VGA • Copper flooding for building ground planes • Gerber and Exellon output • Mirror imaging for laser and deskjet printers • Positive and negative artwork printouts • Single or double-sided boards up to 6" x 13" (15.24cm x 33.02cm) or 8" x 16" (20.32cm x 40.64cm) for Windows version • 0.05" (1.27mm) Grid/Snap; 0.001" to 0.05" (.03mm to 1.27mm) for Windows version • 1X Laser output - ideal for use with Toner Transfer System • Menu driven • Help screens • Silk screen layer • Parts library • Point A-B routing in Windows version

System Requirements: DOS
• IBM PC or Compatible • DOS 3.0 or later • 640K minimum RAM.
Windows: • Windows version 3.0 or later • 1Meg Memory

PCBL-ND (3.5" disk; supports only orthogonal traces) **$49.95**
PCWN-ND (3.5" disk) **$198.00**

SuperTools and SuperTools Plus for Windows™ 32-Bit Version

System Requirements: Windows™ 95, 98, or NT • **Graphics:** EGA, VGA, SVGA • **Printers:** Any printer supported with Windows™ driver • **Memory: 4M or greater** • Mouse: Windows™ compatible. required Microsoft and Windows are trademarks of Microsoft Corporation

SuperTools for Windows™

FEATURES: • **Schematic Capture:** SuperCad schematic program and autorouter included • **Visually Cued Command Entry:** Pull-down menus, dialog boxes, toolbar buttons • **On-Line Help Manual:** Pull-down HELP menu, corresponding help topic selection • **Draw-to-Fit and Zoom Operations:** Display entire layout, zoom any portion to normal size • **Object Entry Commands:** Entry of traces, pads, rectangles, ellipses, text • **Graphics Edit Commands:** Copy, move, rotate, stretch, erase, single and group edits • **Advanced Editing Features:** Rubberbanding, snap modes, auto-increment text • **Routing:** Point to point and incremental • **Board Layers:** Single and double sided boards with solder mask and silk screen • **Board Size/Resolution:** 8" x 16" (20.32cm x 40.64cm) boards, specify dimensions/traces down to 1 mil • **Flexible Artwork Output:** Dot-matrix, laser, postscript, plotter, Gerber file format output • **Library Support:** Dip, PGA, surface mount, discretes, format library parts from drawings • **Library:** 1500 schematic/component library parts with parts editor/build utility

PCBD3-ND SuperTools for Windows™ **$399.00**

SuperTools Plus for Windows™

Includes all the features of the PCBoards SuperTools with the following additions:

• **SuperCad Schematic Plus:** Schematic layout/capture, netlist conversion, autowire and autoplacement utilities • **Built-In Auto-router:** Point to point, incremental, batch routing (1-16 layers) • **Large Boards/High Resolution:** 32" x 32" (81.28cm x 81.28cm) boards, specify dimensions/traces to 1 mil • **Multiple Circuit Layers:** Up to 16 layers plus silk screen and solder mask layers • **Library:** 5000 schematic/component library parts with parts editor/ build utility

PCBD4-ND SuperTools Plus for Windows™ **$699.00**

MentalMAX Plus 32-Bit Version

Contains:
- **SuperTools Plus,** 32-bit version.
- **SuperSIM**, a digital simulation program which works directly with SuperTools Plus. Includes a library of TTL and CMOS part models. Up to 500 signal capacity.
- **MentalSPICE**, an analog simulator program which works directly with SuperTools Plus. 350 discrete part models, 500 op amp-comparator models, and 30 mixed mode digital models. 30 ready-to-use examples.

System Requirements: Windows™ 95, 98, or NT

PCBD5-ND **$1099.00**

Single-In-Line Universal Boards for Thru-Hole Components

Miniature Breadboard Modules feature pins on .1" (2.54mm) Centers

• Often useful hole patterns and pad designs • Greatly increase packaging density • Compatible with standard breadboards, sockets, and solderless breadboards using .1" (2.54mm) centerlines

From simple networks and component arrays to IC circuits using up to .600 wide Dips, UNI-SIP breadboards offer the perfect packaging solution for building both prototype and production thru-hole circuit modules. Use a solderless breadboard to test your idea, use a UNI-SIP breadboard to "KEEP IT." **Specifications:** • **Board Material:** G-10 FR-4 Glass Epoxy • **Thickness:** .032" (.81mm) • **Foils:** Solder coated 1 oz. copper 1-side • **Holes:** .036" (.91mm) Diameter • **Pins:** .1" (2.54mm) centers • **Pin Length:** .130" (3.30mm). Pins are soldered in position • **Board Tolerances:** ±.015" (.38mm) Typ. Overall

Fig. 1 – Series 1000
For basic networks and component arrays
Available in 6, 7, 8, 9, and 10 pin models. Excellent for prototype or production circuits.

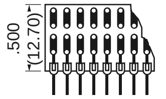


Fig. 2 – Series 2000
Accepts components on .1" (2.54mm), .2" (5.08mm), .3" (7.62mm), or .4" (10.16mm) centers
Available in 6, 7, 8, 10, and 12 pin models. Foil modifications expand layout options.

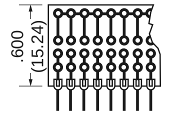


Fig. 3 – Series 3000
For Higher Density General Purpose Applications
Available in 8, 10, 12, and 14 pin models. For general use applications where compatibility with a large number of device sizes is desirable. Features 2 holes per pad on a .100" (2.54mm) matrix.

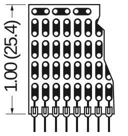


Fig. 4 – Series 4000
Accepts Dips on Standard .300" (7.62mm) Centerline
Available in 7, 8, 10, 12, 14, and 16 pin models. Make selection based on signal connections required. Example: 8 pin model can support 1-16 pin Dip, with 8 signal lines (pins).

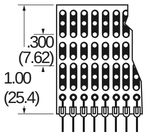


Fig. 5 – Series 5000
Accepts Standard .300" (7.62mm) or .600" (15.24mm) Centerline Dips
Available in 8, 10, 12, 14, 16, and 20 pin models. 20 pin model can hold 1-40 pin Dip with 20 signal lines to input/output pins.

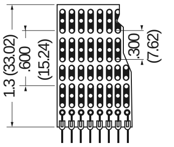


Fig.	No. of Pins	Board Width Inch (mm)	Digi-Key Part No.	Pricing 1	Pricing 10	Mfg. Part No.
			1000 Series			
1	6	.6 (15.24)	1006CA-ND	.92	7.02	US-1006
	7	.7 (17.78)	1007CA-ND	1.03	7.92	US-1007
	8	.8 (20.32)	1008CA-ND	1.15	8.82	US-1008
	9	.9 (22.86)	1009CA-ND	1.27	9.72	US-1009
	10	1.0 (25.40)	1010CA-ND	1.39	10.62	US-1010
			2000 Series			
2	6	.6 (15.24)	2006CA-ND	1.03	7.92	US-2006
	7	.7 (17.78)	2007CA-ND	1.15	8.82	US-2007
	8	.8 (20.32)	2008CA-ND	1.27	9.72	US-2008
	10	1.0 (25.40)	2010CA-ND	1.62	12.42	US-2010
	12	1.2 (30.48)	2012CA-ND	1.86	14.22	US-2012
			3000 Series			
3	8	.8 (20.32)	3008CA-ND	1.74	13.32	US-3008
	10	1.0 (25.40)	3010CA-ND	2.09	16.02	US-3010
	12	1.2 (30.48)	3012CA-ND	2.44	18.72	US-3012
	14	1.4 (35.56)	3014CA-ND	2.80	21.42	US-3014
			4000 Series			
4	7	.7 (17.78)	4007CA-ND	1.50	11.52	US-4007
	8	.8 (20.32)	4008CA-ND	1.74	13.32	US-4008
	10	1.0 (25.40)	4010CA-ND	2.09	16.02	US-4010
	12	1.2 (30.48)	4012CA-ND	2.44	18.72	US-4012
	14	1.4 (35.56)	4014CA-ND	2.80	21.42	US-4014
	16	1.6 (40.64)	4016CA-ND	3.15	24.12	US-4016
			5000 Series			
5	8	.8 (20.32)	5008CA-ND	1.97	15.12	US-5008
	10	1.0 (25.40)	5010CA-ND	2.33	17.82	US-5010
	12	1.2 (30.48)	5012CA-ND	2.80	21.42	US-5012
	14	1.4 (35.56)	5014CA-ND	3.15	24.12	US-5014
	16	1.6 (40.64)	5016CA-ND	3.50	26.82	US-5016
	20	2.0 (50.80)	5020CA-ND	4.32	33.12	US-5020

Master Assortment Kit for UNI-SIP: The MK260CA Assortment contains 2 each of all 26 types in the UNI-SIP Series, packaged in reclosable bags grouped by series number.

MK260CA-ND **$79.00**

SURFBOARDS® by CAPITAL ADVANCED TECHNOLOGIES INC.™ The Breadboarding Medium for Surface Mount

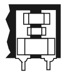
The Surfboard Concept: The concept behind SURFBOARDS is elegantly simple. Many models incorporate foil patterns that are designed to accommodate a wide variety of component mounting footprints. SURFBOARD® models for SOICs and PLCCs provide standard mounting footprints for the IC and depending on the model chosen, will include a prototyping area for additional components or provide a direct pin-out. Most SURFBOARD® models feature SIP (single in line) pins that make prototyping and interfacing with other circuits easy.

Specifications: • Material: G-10 FR-4 Fiberglass laminate, 1oz. Cu. .032" (.81mm). Thickness ±.005" (±.13mm) • Finish: Level 60/40 Solder alloy • S.I.P. Pins: On applicable models. Soldered on .100" (2.54mm) centers. SURFBOARDS® can be hand soldered and are compatible with most industrial soldering processes. (Suggested soldering and assembly guidelines included).

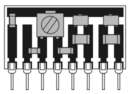
The universal circuit patterns allow for the mounting of 0603, 0805, 1206 and mini-melf packages as well as a wide variety of 3 terminal devices.

SOT-23

Trimmers


0805, 0603, 1206

6000 Series for Discrete Devices — .1" (2.54mm) Pin Spacing



For building:
- Resistor Networks
- Capacitor Networks
- R-C Networks
- Diode Arrays
- Transistor Arrays
- SMD Sub-Assemblies

Fig. 1

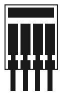


Fig. 2

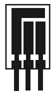


Fig. 3

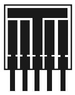


Fig. 4

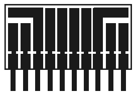


Fig. 5

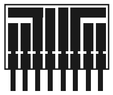


Fig. 6

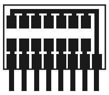
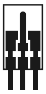


Fig. 7



All 6000 Series boards are .5" (12.7mm) high with .1" (2.54mm) pin spacing. SURFBOARDS® with a greater pin count repeat the same basic pattern as shown.

Fig.	No.of Pins	Digi-Key Part No.	Pricing 1	10
SURFBOARDS® for Discrete Components				
1	4	6004CA-ND	1.72	13.14
	6	6006CA-ND	2.04	15.66
	7	6007CA-ND	2.28	17.46
	8	6008CA-ND	2.51	19.26
	10	6010CA-ND	3.08	23.58
	12	6012CA-ND	3.67	28.08
2	3	6103CA-ND	1.48	11.34
	6	6106CA-ND	2.04	15.66
	9	6109CA-ND	2.63	20.16
	12	6112CA-ND	3.67	28.08
	15	6115CA-ND	4.23	32.40

Fig.	No.of Pins	Digi-Key Part No.	Pricing 1	10
3	5	6405CA-ND	1.93	14.76
	10	6410CA-ND	3.08	23.58
	15	6415CA-ND	4.23	32.40
4	10	6510CA-ND	3.08	23.58
	20	6520CA-ND	5.17	39.60
5	8	6808CA-ND	2.51	19.26
	16	6816CA-ND	4.11	31.50
6	8	6908CA-ND	2.51	19.26
	16	6916CA-ND	4.11	31.50
SURFBOARDS® for SOT-89				
7	3	6303CA-ND	1.48	11.34
	6	6306CA-ND	2.04	15.66
	9	6309CA-ND	2.63	20.16

Master Assortment Kit for Discretes: The MK-6000 assortment contains 2 each of all 23 models in the 6000 series of SURFBOARDS® for discrete components.

MK-6000CA-ND...**$99.00**

9000 Series for ICs

Build • prototype circuits • Evaluate ICs easily • Build circuit upgrades • Adapt SMD to thru-hole

Fig. 1 – Model 9081

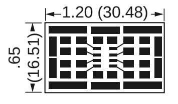


Fig. 2 – Model 9082

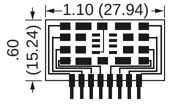


Fig. 3 – Model 9161

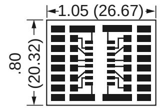


Fig. 4 – Model 9162

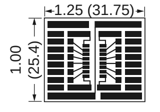


Fig. 5 – Model 9163

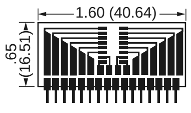


Fig. 6 – Model 9164

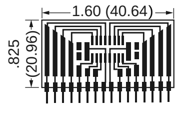


Fig. 7 – Model 9165

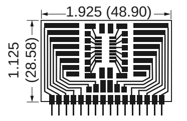


Fig. 8 – Model 9210

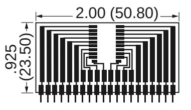


Fig. 9 – Model 9301

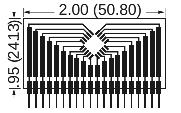


Fig. 10 – Model 9302

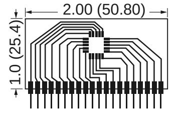


Fig.	Digi-Key Part No.	Pricing 1	10
8 Pin SOIC			
1	9081CA-ND	1.60	12.24
2	9082CA-ND	4.11	31.50
16 Pin SOIC			
3	9161CA-ND	2.04	15.66
4	9162CA-ND	2.16	16.56
5	9163CA-ND	6.32	48.42
6	9164CA-ND	6.53	50.04
7	9165CA-ND	6.89	52.74
20 Pin, .3" (7.62mm) WIde			
8	9210CA-ND	7.47	57.24
20 Pin PLCC			
9	9301CA-ND	7.47	57.24
10	9302CA-ND	7.47	57.24

Master Asst. Kit for ICs:
32 pcs total (5 each of 9081, 9082, 9161, 9162, and 2 each of 9163, 9164, 9165, 9210, 9301, 9302)
MK-9000CA-ND............**$99.00**

SURFBOARDS® by CAPITAL ADVANCED TECHNOLOGIES INC.™

Application-Specific Adapters

- **Accept Wide Range of Surface Mount Discrete Semiconductors and ICs**
- **Provide Convenient Medium for Prototyping, Test, and Development**

The 33000 Series of Surfboards® are application-specific adapters that convert surface mount component footprints to Single-In-Line (SIP) format. The boards feature pre-installed pins on .100" (2.54mm) centers making them compatible with conventional breadboards, solderless breadboards, and sockets. The SIP format provides ease of signal probing as well as higher densities when prototyping. Models are available to accept a wide range of surface mount semiconductors and integrated circuits.

Models 33113 and 33623 feature two SIP pins for each pad for higher current applications. Model 33213 features large soldering pads as connection points and SIP pins for measuring purposes. Boards are .031" ± .005" (.79mm ±.13mm) thick FR-4 and feature solder-coated 1-oz. Circuit Foils that can be hand-soldered or soldered by most conventional processes.

SIP pins are soldered in place on .100" (2.54mm) centers. All boards feature solder mask to limit flow of solder to pad area and aid assembly. Just add parts and plug in.

Fig.	Dimensions — Inch (mm) A	B	C	D	E	SIP Pins	Accepts These Devices	Digi-Key Part No.	Pricing 1	10
1	.400 (10.16)	.300 (7.62)	.100 (2.54)	.080 (2.03)	.0512 (1.30)	3	SC-70-3, SOT-323, *NEC* Pkg-30	33003CA-ND	1.01	7.74
2	.400 (10.16)	.600 (15.24)	.100 (2.54)	.090 (2.28)	.0256 (.650)	6	SC-70-6, SOT-363	33006CA-ND	2.07	15.84
3	.400 (10.16)	.800 (20.32)	.100 (2.54)	.180 (4.57)	.0375 (.9530)	8	SuperSOT-8™ *(Fairchild)*	33008CA-ND	2.80	21.42
4	.400 (10.16)	1.0 (25.4)	.100 (2.54)	.200 (5.08)	.0197 (.500)	10	Micromax-10 *(Maxim)*	33010CA-ND	3.22	24.66
5	.400 (10.16)	.500 (12.7)	.100 (2.54)	.165 (4.19)	.060 (1.50)	5	SOT-89-5	33105CA-ND	1.81	13.86
6	.400 (10.16)	.800 (20.32)	.100 (2.54)	.200 (5.08)	.0256 (.650)	8	MSOP-8, TSSOP-8, Micromax-8 *(Maxim)*, Micro-8 *(Int'l Rect.)*, Mini SO-8 *(Burr-Brown)*	33108CA-ND	2.80	21.42
7	.800 (20.32)	.600 (15.24)	.100 (2.54)	.625 (15.87)	.100 (2.54)	6	TO-263AB, 3-Lead D-Pkg	33113CA-ND•	2.84	21.78
8	.800 (20.32)	.500 (12.70)	.100 (2.54)	.625 (15.87)	.067 (1.70)	5	5-Lead DD Pkg., Surface Mount Device	33115CA-ND	2.37	18.18
9	.800 (20.32)	.700 (17.78)	.100 (2.54)	.625 (15.87)	.050 (1.27)	7	7-Lead DD Pkg., Surface Mount Device	33117CA-ND	3.22	24.66
10	.400 (10.16)	.400 (10.16)	.100 (2.54)	.100 (2.54)	.078 (1.99)	4	SOT-143, Surface Mount Device	33143CA-ND	1.53	11.70
11	.400 (10.16)	.500 (12.7)	.100 (2.54)	.110 (2.79)	.0375 (.953)	5	SOT-23-5, SC59-5, *Burr-Brown* Pkg. 331, Tinylogic™ *(Fairchild)*, Microgate *(Texas Inst.)*	33205CA-ND	1.86	14.22
12	.400 (10.16)	.600 (15.24)	.100 (2.54)	.110 (2.79)	.0375 (.953)	6	SOT-23-6, SOT-23-L, SC59-6, TSOP-6‡, SuperSot-6™ *(Fairchild)*, Micro-6™ *(Int'l Rect.)*	33206CA-ND	2.07	15.84
13	.400 (10.16)	.800 (20.32)	.100 (2.54)	.300 (7.62)	.025 (.650)	8	SSOP-8	33208CA-ND	2.80	21.42
14	1.125 (28.57)	.850 (21.59)	.100 (2.54)	.625 (15.87)	.100 (2.54)	3	TO-263AB, 3-Lead D-Pkg.	33213CA-ND•	3.45	26.46
15	.500 (12.70)	.300 (7.62)	.100 (2.54)	.275 (6.98)	.090 (2.28)	3	SOT-223, Surface Mount Device	33223CA-ND	1.27	9.72
16	.400 (10.16)	.400 (10.16)	.100 (2.54)	.080 (2.03)	.051 (1.3)	4	SOT-343	33343CA-ND	1.53	11.70
17	.500 (12.70)	.600 (15.24)	.100 (2.54)	.275 (6.98)	.090 (2.28)	6	SOT-223	33623CA-ND•	2.30	17.64

• Higher Current Applications ‡ Not exact device/pad match

Fig. 1 – Model 33003

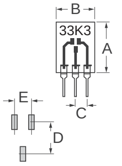


Fig. 2 – Model 33006

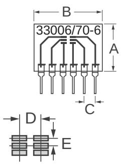


Fig. 3 – Model 33008

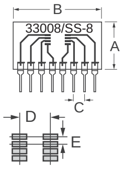


Fig. 4 – Model 33010

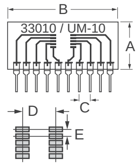


Fig. 5 – Model 33105

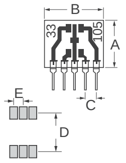


Fig. 6 – Model 33108

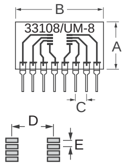


Fig. 7 – Model 33113

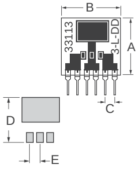


Fig. 8 – Model 33115

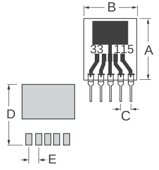


Fig. 9 – Model 33117

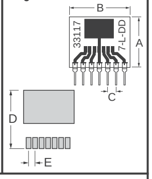


Fig. 10 – Model 33143

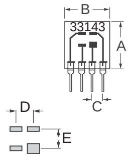


Fig. 11 – Model 33205

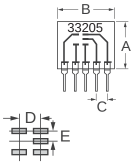


Fig. 12 – Model 33206

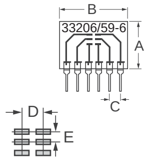


Fig. 13 – Model 33208

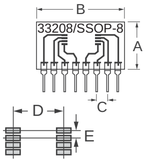


Fig. 14 – Model 33213

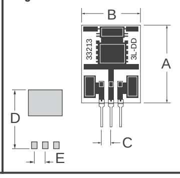


Fig. 15 – Model 33223

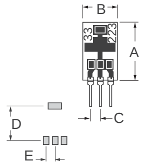


Fig. 16 – Model 33343

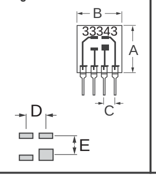
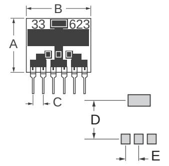
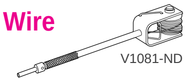


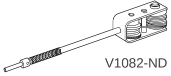
Fig. 17 – Model 33623



Slit-N-Wrap Tools & Wire

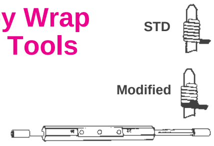
No Pre-cutting or Pre-stripping.
Fast, reliable, spool fed wire.
Slits and opens insulation exposing bare wire before wire is wrapped on post, forming actual wire wrapped gas tight joint as tool is rotated.


V1081-ND


V1082-ND

Description	Digi-Key Part No.	Price Each
Manual Slit-N-Wrap Tool(#28), Includes Bit, 50' (15.24m) Roll of Green Wire	V1081-ND	174.64
Replacement Wirewrap Bit #28	V1083-ND	57.03
Manual Slit-N-Wrap Tool(#30), Includes Bit, 200' (60.96m) Roll of Blue Wire	V1082-ND	179.54
Replacement Wirewrap Bit #30	V1084-ND	54.87
150' (45.72m) 28 AWG Tefzel Wire Green	V1085-ND	19.36
150' (45.72m) 28 AWG Tefzel Wire Red	V1086-ND	18.69
150' (45.72m) 28 AWG Tefzel Wire Blue	V1087-ND	18.69
150' (45.72m) 28 AWG Tefzel Wire White	V1088-ND	18.69
150' (45.72m) 28 AWG Tefzel Wire Yellow	V1089-ND	18.69
200' (60.96m) 30 AWG Tefzel Wire White	V1090-ND	22.03
200' (60.96m) 30 AWG Tefzel Wire Blue	V1091-ND	21.39
200' (60.96m) 30 AWG Tefzel Wire Orange	V1092-ND	21.47
200' (60.96m) 30 AWG Tefzel Wire Yellow	V1093-ND	21.74

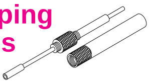
Hobby Wrap Hand Tools



Wire-wrapping, stripping, unwrapping tool for AWG 30 on .025˝ (0.63mm) Square Post

K104-ND	Regular Wrap	**$21.00**
K105-ND	Modified Wrap	**$22.00**

Precision Hand Wrapping and Unwrapping Tools



K463-ND	Combination Hand Wrap-Unwrap Tool, 30AWG	**$84.50**
K464-ND	Combination Hand Wrap-Unwrap Tool, 22-24AWG	**$72.25**
K465-ND	Hand Unwrap Tool, 20-26AWG	**$22.25**
K330-ND	Universal Wire Unwrap Hand Tool, 24-32 AWG	**$17.00**

Single Wire Dispenser

- With 50 ft. (15.24 meter) roll of AWG 30 KYNAR wire-wrapping wire
- Built-in Plunger cuts wire to desired length
- Built-In Stripper strips 1” (2.54cm) of insulation
- Refillable (for refills, see below)

Description	Digi-Key Part No.	Price Each
Blue Wire	K223-ND	15.00
Yellow Wire	K224-ND	15.00
White Wire	K225-ND	15.00
Red Wire	K226-ND	15.00
Dispenser Replacement Rolls		
30-AWG Blue 50 Ft. (15.24 meter) Roll	K229-ND	7.50
30-AWG Yellow 50 Ft. (15.24 meter) Roll	K230-ND	7.50

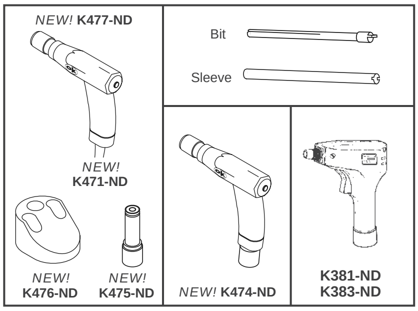
Wire Wrap Wire

30-AWG. Pre-Cut/Pre-Stripped — 50 Wires/Pkg.

1˝ (2.54cm) Stripped Ends

Description	Digi-Key Part No.	Price Each
Blue Wire, 3˝ (7.62cm) Overall Length	B3-ND	4.50
Yellow Wire, 3˝ (7.62cm) Overall Length	Y3-ND	4.50
White Wire, 3˝ (7.62cm) Overall Length	W3-ND	4.50
Red Wire, 3˝ (7.62cm) Overall Length	R3-ND	4.50
Blue Wire, 4˝ (10.16cm) Overall Length	B4-ND	5.00
Yellow Wire, 4˝ (10.16cm) Overall Length	Y4-ND	5.00
Blue Wire, 5˝ (12.70cm) Overall Length	B5-ND	5.50
Yellow Wire, 5˝ (12.70cm) Overall Length	Y5-ND	5.50
White Wire, 5˝ (12.70cm) Overall Length	W5-ND	5.50
Red Wire, 5˝ (12.70cm) Overall Length	R5-ND	5.50
Blue Wire, 7˝ (17.78cm) Overall Length	B7-ND	6.00
Yellow Wire, 7˝ (17.78cm) Overall Length	Y7-ND	6.00
White Wire, 7˝ (17.78cm) Overall Length	W7-ND	6.00
Red Wire, 7˝ (17.78cm) Overall Length	R7-ND	6.00

Wire Wrap Gun and Bits



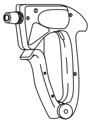
The PTX Series Wire Wrapping Tools for OK Industries bring revolutionary new benefits to installers, telcom technicians and other users. With worker safety in mind, OK Industries created an ergonomic tool which includes a lightweight, well-balanced construction, dual finger short throw trigger, and a long handle to mitigate pressure on the palm. These features help to prevent repetitive stresses and result in an industry leading design from a comfort and safety standpoint.

Choose either 115V powered wire wrap/unwrap gun or the portable battery powered wrap/unwrap tool. PTX wire wrapping kit includes the ergonomic battery wrap/unwrap tool, battery charger and 2 batteries for continuous wire wrapping jobs.

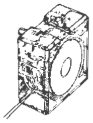
Description	Digi-Key Part No.	Price Each
Wire Wrap/Unwrap Gun 115V	K471-ND *NEW!*	235.00
Wire Wrap/Unwrap Gun w/ Backforce 115V	K472-ND *NEW!*	245.00
Cordura Tool Pouch for Battery Powered Tool	K473-ND *NEW!*	59.00
Battery Powered Wrap/Unwrap Gun	K474-ND *NEW!*	195.00
Replacement Battery for PTX Wire Wrap Gun	K475-ND *NEW!*	45.00
Battery Charger for PTX Wire Wrap Gun	K476-ND *NEW!*	57.50
Complete PTX Wire Wrap Kit, Gun, Charger, 2 Batteries	K477-ND *NEW!*	325.00
Heavy Duty Battery Wrap Gun (inc. batteries)	K381-ND	205.00
Wire Wrap Bit 30 AWG	K320-ND	39.75
Wire Wrap Bit 28 AWG	K321-ND	41.12
Wire Wrap Sleeve for 28 & 30 AWG Bit	K322-ND	24.50
Wire Wrap Bit 26 AWG	K323-ND	41.12
Wire Wrap Sleeve for 26 AWG Bit	K324-ND	24.50
Wire Wrap Wire 30 AWG 100' (30.48m) Blue	K325-ND	9.17
Wire Wrap Wire 30 AWG 100' (30.48m) Black	K394-ND	9.17
Wire Wrap Wire 30 AWG 100' (30.48m) Red	K395-ND	9.17
Wire Wrap Wire 30 AWG 100' (30.48m) Yellow	K396-ND	9.17
Wire Wrap Wire 30 AWG 100' (30.48m) White	K397-ND	9.17
Wire Wrap Wire 28 AWG 100' (30.48m) Blue	K326-ND	10.35
Wire Wrap Wire 28 AWG 100' (30.48m) Black	K390-ND	10.35
Wire Wrap Wire 28 AWG 100' (30.48m) Red	K391-ND	10.35
Wire Wrap Wire 28 AWG 100' (30.48m) Yellow	K392-ND	10.35
Wire Wrap Wire 28 AWG 100' (30.48m) White	K393-ND	10.35
Wire Wrap Wire 26 AWG 100' (30.48m) Blue	K327-ND	11.83
Wire Wrap Wire 26 AWG 100' (30.48m) Black	K386-ND	11.83
Wire Wrap Wire 26 AWG 100' (30.48m) Red	K387-ND	11.83
Wire Wrap Wire 26 AWG 100' (30.48m) Yellow	K388-ND	11.83
Wire Wrap Wire 26 AWG 100' (30.48m) White	K389-ND	11.83
Kynar Wire Blue 30 AWG 100' for Cut Bit	K329-ND	11.83
Kynar Wire White 30 AWG for Cut/Strip/Wrap Bit	K443-ND	11.83
Kynar Wire Red 30 AWG for Cut/Strip/Wrap Bit	K444-ND	11.83
Kynar Wire Black 30 AWG for Cut/Strip/Wrap Bit	K445-ND	11.83
Power Unwrap Bit/Sleeve for 20-26 AWG	K384-ND	45.00
Power Unwrap Bit/Sleeve for 26-32 AWG	K385-ND	45.00

Manual Wire Wrap Tools

Description	Digi-Key Part No.	Price Each
Manual Wrap Tool Lexan for use w/ bits and sleeves above	K398-ND	93.50
Manual Wrap Tool Aluminum for use w/ bits and sleeves above	K399-ND	129.00

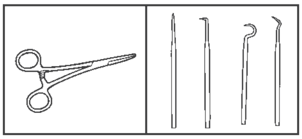

K398-ND
K399-ND

Tri-Color Dispenser



• 3 Rolls of wire in one dispenser • 3 Colors: Blue, white, red; 50 feet (15.24 meters) of each color • AWG 30 (0.25 mm) KYNAR insulated wire • Built-in plunger cuts wire to desired length • Built-In stripper strips 1” (25.40mm) of insulation • Refillable (for refills, see below)

Description	Digi-Key Part No.	Price Each
Tri-Color Dispenser	K227-ND	25.00
Replacement Rolls	K228-ND	14.95



5$^{1}/_{2}$” (13.97cm) Straight-Tip Hemoclamp/Hemostat

Professional grade hemo made of 410 A.I.S.I. stainless steel. Hand finished and polished. Hand serrated for extra gripping power. Has 3, not 2 locking positions.

ATM01-ND **$4.95**

Curved-Tip Hemoclamp/Hemostat

Professional grade hemo made of 410 A.I.S.I. stainless steel. Hand finished and polished. Hand serrated for extra gripping power. Has 3, not 2 locking positions.

ATM02-ND **$4.95**

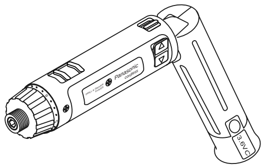
4-Piece Probe Set

Forged from 420 A.I.S.I. stainless steel. Set includes four probes and a plastic (vinyl) pouch.

ATM03-ND **$7.88**

Power Screwdriver

Accurate,
High Speed,
Powerful!



FEATURES:

• “Auto Shut-Off Clutch” extends battery and clutch life by immediately stopping rotation once torque setting is reached • 22-stage clutch offers you more precise torque setting • Clutch torque accuracy is ±5% • Maximum 600 rpm for high speed screw driving • Maximum 39 in.-lbs. torque (in low gear) even with compact size • 1/4” hex quick connect chuck • 15-minute charging system • Easily converts from straight to pistol form

TECHNICAL DATA:

• **Motor Voltage:** 3.6V DC • **Rotating Speed:** Low: 200 rpm; High: 600 rpm • **Max. Torque:** Low: 39 in.-lbs.; High: 13 in.-lbs. • **Clutch Torque/Auto Shut-Off Clutch:** 21 stage/2.6 to 26 in.-lb. • **Size in Straight Position:** 11-21/32” x 1-17/32” • **Weight (includes battery):** 1.15 lbs. • **Battery Capacity:** 1.2Ah • **Charging Time:** 15 minutes • **Working Capacity:** Screw (Ø5/32 x 3/8): 600 screws

INCLUDES:

Battery Pack, Battery Charger, #1 Phillips Bit, #2 Phillips Bit

P10861-ND	Screwdriver (EY6225CQ)	**$159.00**
P10862-ND	Extra Battery Pack (EY9025B)	**$39.00**

Utility and Snap Knives

Fig. 1 — Heavy Duty Utility Knife

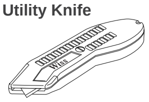


Fig. 2 — Retractable Utility Knife

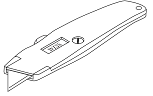


Fig. 3 — 2-piece Snap Knife Set

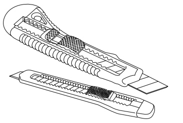


Fig.	Description	Digi-Key Part No.	Price Each
1	Heavy Duty Utility Knife w/3 Blades	WK5V-ND	5.82
2	Retractable Utility Knife w/3 Blades	WK8V-ND	4.36
3	Economy Snap Knife 2-Piece Combination Set	WSK34VCDP-ND	2.14

Xcelite® Cordless Rechargeable Screwdriver Kit

Kit contains: • Driver • Battery • Charger • 99PA adapter • 1 slotted, 2 Phillips bits

Features: • 3.6V power • 2 speeds • 1 hour full recharge • 8 stage torque adjustable • Easily converts from in-line to pistol form • Replaceable battery pack • 99PA adapter enables use with all Xcelite Series 99 blades

XP1-ND **$108.00**

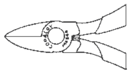
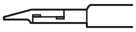
XP1B-ND Replacement Battery **$24.23**

Xcelite® Electronic Pliers

All pliers are furnished with coil spring and ESD safe cushioned grip handles.

Each plier is manufactured from extreme toughness and rigidity. Cutting edges are electronically hardened. Machining is to close tolerances, with individual finishing and testing for exact fit of jaws. All have polished heads with gun metal handles.

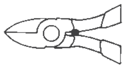
Full Flushed Relieved Tapered Cutter

Diagonal flush cutter, ground down on back side for reaching into confined places. Size: 4" (102.00mm).

MS54-3-ND **$14.54**

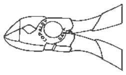
Semi-Flush Diagonal Cutter



Diagonal cutter with flush ground cutting edges. Size: 4". (102.00mm).

MS54-ND **$12.77**

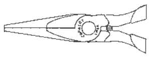
Angled Flush Cutter



Cutting blade is flush ground and angled at 29°. Cutting plier is designed to give long wear for cutting soft wire. Size: 4" (102.00mm).

GA54-ND.. **$22.83**

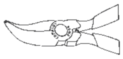
Long Nose Pliers



Miniature very fine point for delicate work in very confined areas. Has scored jaws. Size: 4" (102.00mm).

L4-ND... **$12.72**

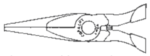
Curved Long Nose Pliers



For reaching into confined places. Nose bent approximately 60°. Smooth jaws. Size: 5" (127.00mm).

CN54-ND **$15.69**

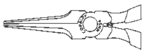
Long Nose Pliers



Has finely scored jaws. Size: 5" (127.00mm).

COO-LN54-ND... **$13.98**

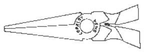
Needle Nose Pliers



Has scoring on jaws. Size: 5" (127.00mm).

NN54-2-ND **$16.55**

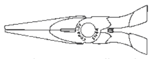
Duck Bill Pliers



Flat nose duck bill pliers with smooth jaws. Size: 5" (127.00mm).

DN54-G-ND.. **$12.77**

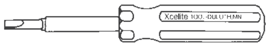
Long Nose Side Cutter



Similar to long nose pliers but with 7/32" (5.56mm) cutter near joint. Size: 5" (127.00mm).

SN54-ND.. **$15.69**

Xcelite® 4-in-1 Screwdriver



4 bits in one compact tool. Changes in seconds: pull out, reverse, snap back, 2 Phillips bits and 2 slotted bits are always ready. Alloy steel, heat treated for maximum strength, precision ground and polished. Large, 6-spline. easy-to-grip red Tenite handle.

FSD-1V-ND.. **$9.45**

Screwdrivers

5 Piece Phillips Set Includes: Point #0, 1, 2, 3 and Short #2, Packed in Pouch

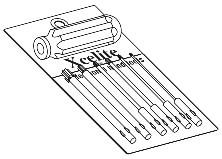
5 Piece Slotted Set Includes: 1/8", 5/32", 3/16", 1/4" and 5/16" Packed in Pouch

6 Piece Set Includes: 4 Round Blade for Slotted Screws & 2 Phillips Types, Slotted: 1/8", 3/16", 1/4" and 5/16", Phillips: 1 & 2 Pt. Size, Packed In Pouch

7 Piece PRO-SERIES Ergonomic Set Includes: 5 Slotted Screws & 2 Phillips Types, Slotted: 1/8", 5/32", 3/16", 1/4" and 5/16" Phillips: 1 & 2 Pt. Size, Packed In Box

Description	Digi-Key Part No.	Price Each	Xcelite Part No.
5 Piece Phillips Screwdriver Set	SDX-22-ND	22.67	SDX-22
5 Piece Slotted Screwdriver Set	SDR-11-ND	20.84	SDR-11
6 Piece Screwdriver Set	SRX-33-ND	28.26	SRX-33
7 Piece PRO-SERIES Ergonomic Set	XPE700-ND *NEW!*	32.90	XPE700

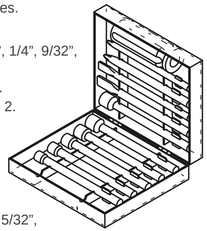
99-XTD7 Torx® Screwdriver Blade Kit



- Interchangeable blades
- Contains 6 blades (#10, 15, 20, 25, 27, 30), 4" (102.00mm) long and regular 99-1 handle
- 4" (102.00mm) approximate working length

Description	Digi-Key Part No.	Price Each	Xcelite Part No.
Torx Screwdriver Blade KIt - 7 PC	99-XTD7-ND	26.70	99-XTD7

Screwdriver & Nutdriver Sets - Inch Sizes



See-through stand-up plastic cases.

99PS-50

Regular Nutdrivers: 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8".

Slotted Screwdriver: 3/16", 1/4".

Phillips Screwdriver: No. 1, No. 2.

Extension. Regular Handle.

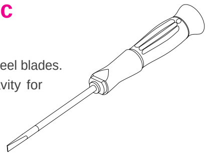
PS-120

Color-coded handles. Comes with black "piggyback" torque amplifier handle.

Regular Nutdrivers: 3/32", 1/8", 5/32", 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8".

Description	Digi-Key Part No.	Price Each	Xcelite Part No.
Screwdriver and Nutdriver Set, 13 pcs.........................	99PS50-ND	48.44	99PS-50
Nutdriver Set, 11 pcs............	PS120-ND	31.13	PS120

Precision Electronic Screwdriver Set



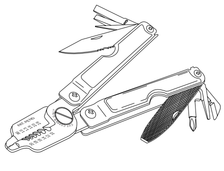
- Chrome-molybdenum vanadium steel blades.
- Fast-turning swivel caps with cavity for precise centering.
- Precision tolerance black tips.
- No-roll handle design.

XP600-ND Includes: 1.5mm x 60mm Slotted Screwdriver, 2.0mm x 60mm Slotted Screwdriver, 2.5mm x 60mm Slotted Screwdriver, 3.0mm x 60mm Slotted Screwdriver, #00 Point Size Phillips Screwdriver, #0 Point Size Phillips Screwdriver

XPTX600-ND Includes: #5pt. Standard Torx Screwdriver, #6pt. Standard Torx Screwdriver, #7pt. Tamper-proof Torx Screwdriver, #8pt. Tamper-proof Torx Screwdriver, #10pt. Tamper-proof Torx Screwdriver, #15pt. Tamper-proof Torx Screwdriver

Description	Digi-Key Part No.	Price Each	Xcelite Part No.
6 Piece Screwdriver Set	XP600-ND	21.03	XP600
6 Piece Torx Screwdriver Set	XPTX600-ND	24.74	XPTX600

Xcelite® ToolZall® Technician Multipurpose Tool



Tools included in the ToolZall Technician:

- Wire Stripper (20 to 10 AWG)
- Small, Medium, and Large Flat Head Screwdrivers
- Needle-Nose Pliers
- Phillips Screwdriver
- English and Metric Rulers
- Can and Bottle Openers
- Serrated Drop Point Knife
- Metal and Wood Files
- Wire Cutter
- Wire Bender
- Awl

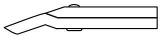
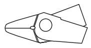
Additional Features:

- Comfort grip handles
- Stainless steel construction

XTZ1V-ND.. **$48.45**

Micro Series Shearcutters

General Purpose

• Low profile • Superior blade by-pass shear cutting action • Better cuts with half the effort • Greatly reduced mechanical shock delivered to the work • 170M, 175M feature light blue grips • 170D, 175D feature static-dissipative black grips • 175M, 175D feature safety clips • 170D, 175D especially hardened and plated

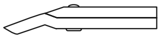
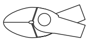
170M-ND.. **$4.94**

170D-ND.. **$5.46**

175M-ND.. **$6.05**

175D-ND.. **$6.65**

Heavy Duty

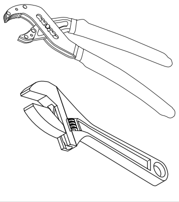
• Heavy-duty for IC pins, cables and harnesses • Maximum durability • Maximum operator safety • 1178M features light blue grips • 1178D features static-dissipative black grips • 1178D especially hardened and plated

1178M-ND... **$8.88**

1178D-ND... **$10.71**

Crescent® Pliers, Wrenches

DURA-PLYERS™



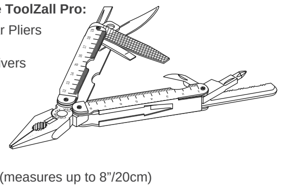
- Laminated and riveted "ply" construction
- Box-joint design
- Textured air-cushioned grips
- Multiple positions

Wrenches

- Adjustable
- Chrome finish

Description	Digi-Key Part No.	Price Each	Crescent Part No.
8" Dura-Plyers™.........	LB8-ND	8.06	LB8
10" Dura-Plyers™	LB10-ND	9.06	LB10
6" Crescent Wrench	AC16V-ND	19.96	AC16V
8" Crescent Wrench	AC18V-ND	20.54	AC18V
10" Crescent Wrench....	AC110V-ND	26.18	AC110V

ToolZall® Pro Multi-Purpose Tool



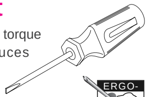
Tools included in the ToolZall Pro:

- Needle-Nose/Regular Pliers
- Wire Cutter
- 2 Flat Head Screwdrivers
- Metal/Wood File
- Phillips Screwdriver
- Drop Point Blade
- Serrated Sheepfoot Blade
- Ballistic Sheath
- Metric/English Ruler (measures up to 8"/20cm)
- Lanyard Ring
- Can/Bottle Opener

Comes with its own carrying sheath.

TZ2-ND **$70.80**

4 Piece Screwdriver Set



- No-slip grip handle stops slippage for higher torque
- Extra long, rounded tri-oval shape reduces pressure points to improve comfort
- Enlarged handle middle optimizes grip strength and turning efficiency to reduce fatigue
- Plated tool steel shafts specially hardened for strength and durability

ERGO-HANDLE

Includes: #1 and #2 Phillips, 1/4" x 4" Slotted, 3/16" x 3" Slotted

SDD4-ND **$10.76**

Swanstrom Tools USA

Cutters and Pliers

Standard or Ergonomic Handles

Fig. 1

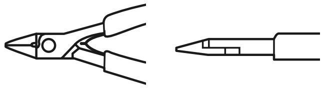


Fig. 2

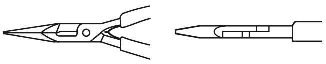


Fig. 3

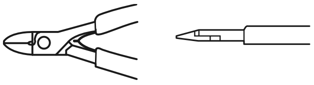


Fig. 4

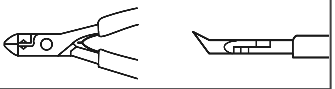
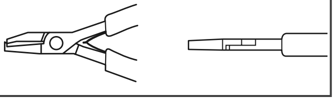
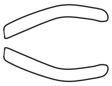


Fig. 5



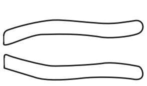
Spartan Standard:



- High carbon, alloy forged American steel—for long tool life. • Alloy steel rivets—for smooth action. • Machined and lapped joints. • Polished finish—for cleanliness and rust prevention. • Double stainless steel leaf spring. • Soft touch static dissipative foam grips—to minimize ESD & CTS.

Fig. No.	Description	Digi-Key Part No.	Price Each	Mfg. Part No.
	Cutter Tapered			
1	Flush Standard. Size: 4" (101.60mm) Flush Standard. Size: 5" (127.00mm)	232-1010-ND 232-1016-ND	25.00 27.00	415 515
	Long Nose Serrated Shear Cut			
2	Standard. Size: 6" (152.40mm)	232-1012-ND	30.00	351
	Long Slim Nose Smooth Jaw			
2	Standard. Size: 5" (127.00mm)	232-1017-ND	22.00	324
	Long Slim Nose Serrated Jaw			
2	Standard. Size: 5" (127.00mm) Standard. HD. Size: 6" (152.40mm)	232-1013-ND 232-1019-ND	22.00 24.00	325 631
	Cutter Oval			
3	Flush Standard. Size: 4" (101.60mm) Flush Standard. Size: 5" (127.00mm) Flush Standard. Size: 6" (152.40mm)	232-1009-ND 232-1015-ND 232-1018-ND	25.00 27.00 28.00	411 511 611
	Angle End Nipper			
4	Standard. Size: 4" (101.60mm) Flush	232-1011-ND	35.00	491

Super Ergonomic:

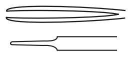


- Swedish American high chromium, alloy forged steel—for maximum tool life. • Electronic induction hardening—for maximum cutter life. • Hard alloy self-lubricating bearings—for perfect jaw alignment. • Precision machined and lapped joints. • Double stainless steel leaf springs. • Soft touch static dissipative foam grips—to minimize ESD and CTS.

Fig. No.	Description	Digi-Key Part No.	Price Each	Mfg. Part No.
	Cutter Tapered			
1	Flush Ergonomic Size: 4" (101.60mm) Flush Ergonomic Size: 5" (127.00mm)	232-1001-ND 232-1007-ND	50.00 50.00	S415E S515E
	Long Slim Nose Serrated Jaw			
2	Micro. Needle Nose. Size: 4" (101.60mm) Ergonomic Size: 5" (127.00mm)	232-1021-ND 232-1008-ND	25.00 30.00	S109 S325E
	Cutter Oval			
3	Flush Ergonomic Size: 4" (101.60mm) Flush Ergonomic Size: 5" (127.00mm)	232-1000-ND 232-1006-ND	50.00 50.00	S411E S511E
	Angle End Nipper			
4	Flush Ergonomic Size: 4" (101.60mm)	232-1002-ND	56.00	S491E
	Crimp & Bend Cutter			
5	Anti-Shock Shear Cut. .040" (1.02mm)	232-1022-ND	53.00	S205B.040

EREM® Tweezers

Straight Tapered Tip Tweezers



EROP 4.5" (114.30mm). Straight, round, tapered tip tweezers. Provide larger, flat gripping surface for handling a variety of small components.

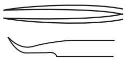
EROP2A-SA-ND **$3.00**

Straight Precision Tip Tweezers

EROP 4.25" (107.95mm). Straight Point Tweezers. For general use.

EROP3C-SA-ND **$3.00**

Curved Precision Tip Tweezers



EROP 4.5" (114.30mm). Curved precision tip tweezers improve visibility when used under magnification.

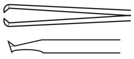
EROP7-SA-ND...................... **$3.00**

Straight Fine Tip Tweezers

EROP 5" (127.00mm). General use straight point tweezers with hardened tips.

EROPAA-SA-ND **$3.00**

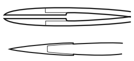
Angled Cutting Tip Tweezers



EREM 4.5" (114.30mm). Angled cutting tweezers. Tempered carbon steel, hard but low rust resistance.

15AGS-ND **$26.46**

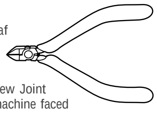
Straight Soft Carbon Tip Tweezers



EREM 5" (127.00mm). 304/305 stainless steel. Soft carbon tipped handling tweezers. Soft tips minimize scratching or nicking of fragile wires and parts. Temp. range is 250° to 300°F (121° to 149°C). Nonmagnetic and non-corrosive. Resistant to hydrochloric and nitric acids.

249-SA-ND **$40.82**

Diagonal Cutters



N Series - Magic Springs: • Superior to Leaf Springs • Invisible, internal EREM-Magic springs provide uniform, constant tension and ultimate performance • Linear closing and opening force • High Precision Inter-Lock Screw Joint System: Surfaces between the two halves are machine faced to provide smooth, wobble-free operation with no blade overlap

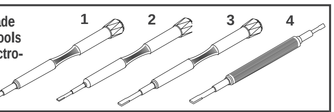
I Series: • ESD Safe foam grips • Forged stainless steel inhibits oxidation • Precision box joint for perfect jaw alignment • Dual leaf springs give you smooth, fast action

Description	Digi-Key Part No.	Price Each	EREM Part No.
"N" Series			
4" (101.6mm), Oval, Semi-Flush	612N-ND	48.09	612N
4" (101.6mm), Oval, Full-Flush	622N-ND	49.86	622N
4.75" (120.7mm), Large Oval, Semi-Flush	812N-ND *NEW!*	56.04	812N
4.75" (120.7mm), Large Oval, Full-Flush	822N-ND *NEW!*	56.85	822N
5" (127.0mm), Oval, Semi-Flush	512N-ND	50.84	512N
5" (127.0mm), Oval, Full-Flush	522N-ND	53.12	522N
"I" Series			
4.50" (114.3mm), Needle Nose Plier, Serr.	11DI-ND *NEW!*	21.00	11DI
4.25" (108.0mm), Hd. Flat-Flush	92EI-ND *NEW!*	27.00	92EI

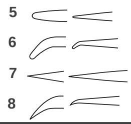
AVEN

Ceramic Tuning Tools, Tweezers, Knives & Blades

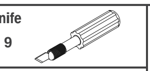
Ceramic blade alignment tools for zero electro-magnetic induction



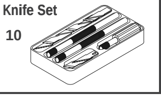
Plastic static dissipative tweezers



Knife



Knife Set



Blades

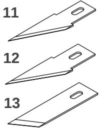


Fig.	Description	Digi-Key Part No.	Price Each
1	1.7 mm Phillips Blade	243-1011-ND	8.69
2	1.3 mm Flat Blade	243-1012-ND	8.69
3	2.6 mm Flat Blade	243-1013-ND	8.69
4	4-in-1 Reversible, (#0 & #1 Phillips, .9 mm & 1.8 mm Flat Blade)	243-1014-ND	28.97
5	Straight, Flat, Rounded Tips	243-1001-ND	3.75
6	Curved, Rounded Tips	243-1002-ND	3.75
7	Very Fine, Straight Tips	243-1003-ND	3.75
8	Very Fine, Curved Tips	243-1004-ND	3.75
—	Utility Knife with Rubber Grip	243-1005-ND	2.95
9	Heavy Duty Utility Knife	243-1006-ND	2.70
10	3-Piece Knife Set (Light, Med. & Hvy. Duty, 10 Asst. Blades)	243-1010-ND	9.50
11	No. 2 Med. to Heavy Blade, 5 Pc.	243-1007-ND	1.55
12	No. 11 Precision Blade, Stainless Steel, 5 Pc.	243-1015-ND	1.55
13	No. 24 Deburring Blade, 5 Pc.	243-1009-ND	1.45

PANAVISE®

Fig. 1

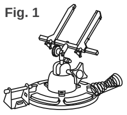


Fig. 2

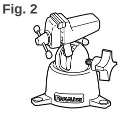


Fig. 3

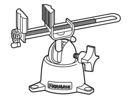


Fig. 4

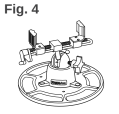


Fig. 5

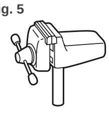


Fig. 6

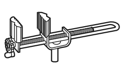


Fig. 7

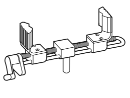


Fig. 8

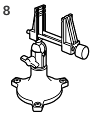


Fig. 9

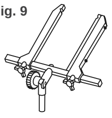


Fig. 10

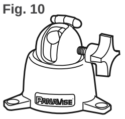


Fig. 11

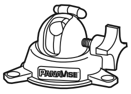


Fig. 12

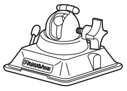


Fig. 13

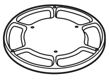


Fig. 14

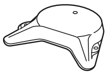


Fig. 15

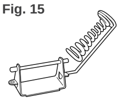


Fig. 16

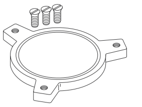


Fig. 17

Must be used with Fig. 6 or Fig. 7 (sold separately).

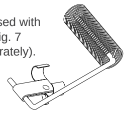


Fig.	Description	Digi-Key Part No.	Price Each
1	Deluxe Electronic Work Center - Solder wire & soldering station not included	324PV-ND	76.99
2	Standard Station (303 head/300 base)	301PV-ND	42.99
3	Wide Opening Station (366 head/300 base)	396PV-ND	45.99
4	Wide Opening-Self Centering Work Station (376 head/300 base/312 tray base mount)	350PV-ND	74.99
5	Standard Head - 2 1/2" (63.50mm) wide,) opens to 2 1/4" (57.15mm)	303PV-ND	23.99
6	Wide Opening Head - 1 3/4" (44.45mm) wide, opens to 6" (152.40mm)	366PV-ND	30.99
7	Wide Opening-Self Centering Head - 1 3/4" (44.45mm) wide, opens to 6" (152.40mm)	376PV-ND	41.99
8	Junior Universal Vise	201PV-ND	21.95
9	Circuit-Board Holder - 6" (152.40mm) arms, extends to 12" (304.80mm) wide	315PV-ND	29.99
10	Standard Base 3 3/4" (95.25mm) high	300PV-ND	19.99
11	Low-Profile Base - Only 2 1/2" (63.50mm) high	305PV-ND	19.99
12	Vacuum Base	380PV-ND	31.99
13	Tray Base Mount - 8 1/2" (215.90mm) diameter, base mount only	312PV-ND	19.99
14	Weighted Base Mount	308PV-ND	27.99
15	Solder Station - Solder iron holder, wire holder & 2 slit sponges, can be used for left or right hand use	371PV-ND	10.99
16	Magnetic Base - Adapts to 201, 300 & 305 bases	335PV-ND	17.40
17	Universal Wire Holder for 366 & 376 jaws	358PV-ND	21.33

Fig. 1 –
502 Precision PanaPress

A 501 Standard Pana-Press with four nylon gibs for precision directional control of the vertical ram.

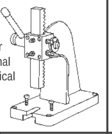


Fig. 2 – 506 Retrofit Kit

Converts a 502 Precision PanaPress into the 505 IDC Bench Assembly Press. The kit includes the assembly base, standard platen, modified ram, guide arm, and an allen wrench.

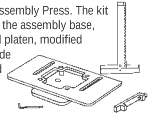


Fig. 3

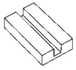


Fig. 4

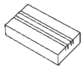


Fig. 5

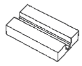


Fig. 6

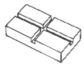


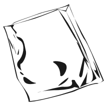
Fig.	Description	Digi-Key Part No.	Price Each
1	Hand Press Bench Mount	502PV-ND	109.99
2	Hand Press IDC Conversion Kit	506PV-ND	56.99
3	Standard IDC Card Edge Connector Base Plate	511PV-ND	26.99
4	Standard IDC Dip Plugs Base Plate	512PV-ND	26.99
5	Standard IDC D-Sub Connector Base Plate	513PV-ND*	26.99
6	Standard Female IDC Socket Base Plate	510PV-ND	26.99

* Do not use with CW Industries all plastic D-sub connectors.

DESCO CHARLESWATER

Static Control Products

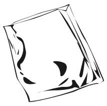
EMI Shielding Bags - Moisture Vapor Barrier



This bag combines the properties of MOISTURE-VAPOR-BARRIER with EMI-RFI-ESD shielding. Manufactured from a Type 1 Class N652-260M film which is qualified to MIL-B-81705- Rev C Type I.

Size Inch (cm)	Digi-Key Part No.	Price Each 25	 100	Mfg. Part No.
5 x 8 (12.70 x 20.32)	16-1015-ND	.23	.15	13806
6 x 10 (15.24 x 25.40)	16-1016-ND	.31	.20	13808
10 x 12 (25.40 x 30.48)	16-1018-ND	.56	.37	13816
12 x 16 (30.48 x 40.64)	16-1019-ND	.88	.58	13824
18 x 24 (45.72 x 60.96)	16-1020-ND	1.84	1.21	13832

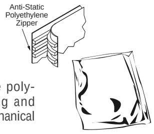
Static Shielding Bags – Metal In



ESD shielding bags for safely storing and transporting sensitive electronic components and assemblies. Meets the electrical and mechanical requirements of MIL-B-81705C. Superior durability at a low cost.

Size Inch (cm)	Digi-Key Part No.	Price Each 25	 100	Mfg. Part No.
3 x 5 (7.62 x 12.70)	16-1027-ND	.08	.05	13405
4 x 6 (10.16 x 15.24)	16-1028-ND	.09	.06	13415
5 x 8 (12.70 x 20.32)	16-1029-ND	.14	.09	13430
6 x 10 (15.24 x 25.40)	16-1030-ND	.17	.11	13445
8 x 10 (20.32 x 25.40)	16-1031-ND	.23	.16	13460

Zipper-Style Static Shielding Bags – Metal In



ESD shielding bags for safely storing and transporting sensitive electronic components and assemblies. Features a reclosable polyethylene zipper for safe and easy opening and reclosing of bag. Meets the electrical and mechanical requirements of MIL-B-81705C.

Size Inch (cm)	Digi-Key Part No.	Price Each 25	 100	Mfg. Part No.
3 x 5 (7.62 x 12.70)	16-1032-ND	.12	.08	13605
4 x 6 (10.16 x 15.24)	16-1033-ND	.16	.11	13615
5 x 8 (12.70 x 20.32)	16-1034-ND	.23	.16	13630
6 x 10 (15.24 x 25.40)	16-1035-ND	.28	.18	13645
8 x 10 (20.32 x 25.40)	16-1036-ND	.39	.26	13660

Static Label for Packaging

Static Attention labels used for sealing Shielding Bags and marking ESD Containers.

Color: Yellow/Black.

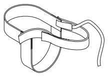
Description	Digi-Key Part No.	Price Each	Mfg. Part No.
2" x 2" (50.8mm x 50.8mm), 500 pcs	16-1001-ND	14.80	06722

BenchTop Grounding Mats

ESD Grounding Mats for use along benchtops and shelving. These 24" wide by 40' long bench mats are reversible single layer vinyl and can be easily cut to dimension — .100" thick. Their durability and general purpose construction make them ideal for benchtops, shelving and floor mats.

Description	Digi-Key Part No.	Price Each	Mfg. Part No.
24" x 40' (60.96cm x 12.2 M) ESD Bench Mat			
Blue, Lightly Textured	16-1009-ND	357.82	16350
Grey, Lightly Textured	16-1010-ND	357.82	16352
Universal Snap Kit for Mats, 6 pc. (connects wrist strap to mat)......	16-1012-ND	2.18	09864

Foot / Heel Grounders



- Exceptionally tear resistant dual layer rubber with inner scrim
- Hook and loop fastening assembly
- 8 strand nylon polyester grounding tab
- Will not mar shoes

Description	Digi-Key Part No.	Price Each	Mfg. Part No.
Adjustable Hook and Loop Heel Strap w/1 Meg Res.	16-1024-ND	7.64	17200
D-Ring Adjustable Heel Strap w/1 Meg Res.	16-1025-ND	10.80	07590

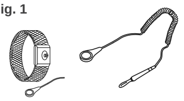
Field Service Kits: ESD Awareness Guide - Booklet:

An introduction to ESD. This booklet uses easy-to-understand language and drawings to describe the causes of static electricity and the importance of an ESD program. Ideal for training personnel who handle static sensitive components.

Description	Digi-Key Part No.	Price Each	Mfg. Part No.
ESD Awareness Guide - English	16-1013-ND	3.44	06821

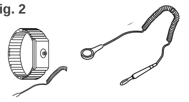
Adjustable Wrist Straps

Fig. 1



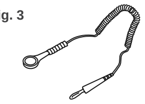
Elastic wrist straps have silver impregnated nylon knitted inside with a soft lightweight fabric, allowing softness, comfort and flexibility. May be fitted to any size.

Fig. 2



Speidel wrist straps are Twist-O-Flex metal wrist straps made of nonallergenic stainless steel for reducing reactions and providing long service life.

Fig. 3



Use for wrist straps, smocks and gloves. 4mm stainless steel contact snap to connect directly to wrist straps. Molded in one meg ohm series resistor at snap end to protect operator from line voltage.

Description	Digi-Key Part No.	Price Each	Mfg. Part No.
Fig. 1 — Elastic Band Wrist Strap			
With 6' (1.8M) Coiled Cord (blue)....	16-1003-ND	25.28	14810
With 10' (3.0M) Coiled Cord (blue)...	16-1004-ND	26.48	14830
Strap Only (no cord)	16-1005-ND	9.93	14840
Fig. 2 — Speidel Metal Band Wrist Strap			
With 6' (1.8M) Coiled Cord (black)...	16-1006-ND	26.42	09085
Strap Only (extra large, no cord).....	16-1008-ND	19.23	09042
Economy Adjustable Wrist Strap with 6' (1.8M) Coiled Cord..........	16-1021-ND	8.31	09039
Fig. 3 — Replacement Coiled Cords			
6' (1.8M) Economy Coiled Cord Only, Blk, 4mm Snap	16-1022-ND	10.78	09480
12' (3.66M) Economy Coiled Cord Only, Blk, 4mm Snap	16-1023-ND	13.82	09680

Chemtronics®

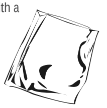
ESD Hand Lotion

Non-contaminating hand lotion for electronics. Contains no silicon. Non-greasy formula with a fresh natural fragrance in an 8 oz. (.24 liter) pump. Minimizes potential for static damage and build-up. Won't affect the solderability of components or PCBs.

Digi-Key Part No.	Price Each 1	 25	 100	 500	Chemtronics Part No.
C805-ND	6.04	5.46	5.10	4.65	C805

3M Static Control Products

Reusable Transparent Static-Shielding Bags



(2100 Series Metal-Out): 3M 2100R bags are produced with a proprietary "metal-out" construction in which the shielding layer is very near the exterior surface. A thin abrasion-resistant coating protects this metal surface from scratches, but still permits measurement of electrical continuity with common volt-ohmmeters for easy verification of shielding performance prior to reuse.

Economy Static-Shielding Bags

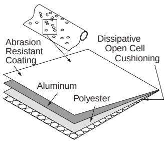
(1900 Series Metal-In): Use these more economical Static Shielding Bags for less demanding applications where reuse and high durability are not a prime consideration. The metal-in aluminum vapor coating is on a thinner 0.48 mil polyester as opposed to the 0.92 mil polyester in the 2100 series.

Economy ZipBag Static-Shielding Bags

(1910 Series Metal-In): The 1910 features a dual track closure for easy opening and closing.

Size Inch (cm)	Digi-Key Part No.	Price Each 25	 100	3M Part No.
2100R Series Metal-Out Transparent Shielding Bags, 3 mil				
3 x 5 (7.62 x 12.70)	SCP193-ND	.20	.18	2100R 3x5
4 x 6 (10.16 x 15.24)	SCP194-ND	.26	.23	2100R 4x6
5 x 8 (12.70 x 20.32)	SCP195-ND	.43	.38	2100R 5x8
6 x 10 (15.24 x 25.40)	SCP196-ND	.49	.44	2100R 6x10
7 x 15 (17.78 x 38.10)	SCP200-ND	.68	.61	2100R 7x15
8 x 10 (20.32 x 25.40)	SCP201-ND	.54	.49	2100R 8x10
1900 Series Metal-In Transparent Shielding Bags, 3.1 mil				
3 x 5 (7.62 x 12.70)	SCP153-ND	.10	.09	1900 3x5
4 x 6 (10.16 x 15.24)	SCP154-ND	.11	.10	1900 4x6
4 x 24 (10.16 x 60.96)	SCP155-ND	.29	.26	1900 4x24
4 x 30 (10.16 x 76.20)	SCP156-ND	.36	.33	1900 4x30
5 x 8 (12.70 x 20.32)	SCP157-ND	.16	.14	1900 5x8
6 x 10 (15.24 x 25.40)	SCP158-ND	.20	.18	1900 6x10
8 x 10 (20.32 x 25.40)	SCP159-ND	.25	.22	1900 8x10
8 x 12 (20.32 x 30.48)	SCP160-ND	.27	.24	1900 8x12
10 x 14 (25.40 x 35.56)	SCP161-ND	.38	.35	1900 10x14
12 x 16 (30.48 x 40.64)	SCP162-ND	.52	.47	1900 12x16
1910 Series Metal-In Shielding ZipBags, 3.1 mil				
3 x 5 (7.62 x 12.70)	SCP165-ND	.13	.12	1910 3x5
4 x 6 (10.16 x 15.24)	SCP166-ND	.15	.14	1910 4x6
5 x 8 (12.70 x 20.32)	SCP167-ND	.21	.19	1910 5x8
6 x 10 (15.24 x 25.40)	SCP168-ND	.27	.25	1910 6x10
8 x 10 (20.32 x 25.40)	SCP169-ND	.34	.30	1910 8x10
10 x 12 (25.40 x 30.48)	SCP170-ND	.45	.41	1910 10x12
12 x 16 (30.48 x 40.64)	SCP171-ND	.70	.63	1910 12x16

Cushioned Static Shielding Wrap



3M 2126R: Cushioned Wrap provides static shielding and physical protection for large or irregularly shaped circuit boards. It is made of the same open-cell cushioning construction used for the 2120R bag and is heat-sealable, but does not have the smooth inner liner. Supplied in rolls, it can be cut to fit various wrapping applications.

SCP205-ND 24" x 250' (60.96cm x 76.2m) $338.85

Labels

Fig.	Digi-Key Part No.	Size Inch (mm)
1	SCP129-ND	1.75 x 2.5 (44.45 x 63.5)
1	SCP128-ND	1.75 x 2.5 (44.45 x 63.5)
2	SCP127-ND	2 x 2 (50.80 x 50.80)
2	SCP126-ND	2 x 2 (50.80 x 50.80)
2	SCP130-ND	4 x 4 (101.60 x 101.60)

Fig. 1

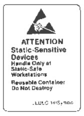
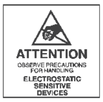


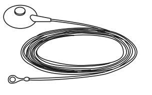
Fig. 2



Description	Quantities (per roll)	Digi-Key Part No.	Price Each	3M Part No.
(JEDEC-14) Orange†•	500	SCP129-ND	15.38	7101
(JEDEC-14) Yellow†*	500	SCP128-ND	17.10	7102
(Mil. Std. 129J) Yellow†•	500	SCP127-ND	19.45	7201
(Mil. Std. 129J) Yellow†*	500	SCP126-ND	19.45	7202
(Mil. Std. 129J) Yellow†•	250	SCP130-ND	31.73	7203

† With Black type • Reusable * Destructible

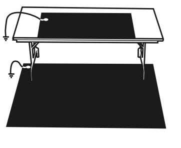
Grounding Cord



15 ft. (4.6 meter) Pre-installed male snap fastener with integral one megohm resistor on one end, solderless terminal on other end.

Description	Digi-Key Part No.	Price Each	3M Part No.
Grounding Cord	SCP114-ND	13.69	3040

Workstation Grounding Kits



Grounding Kits provide the basic items needed to create a static-safe work environment They include a floor mat, table mat, adjustable wrist strap with grounding cord and accessories to properly connect all of the kit components.

Kit includes:

- Table Mat, 2 ft. x 4 ft. (.6m x 1.2m)
- Floor Mat, 4 ft. x 6 ft. (1.2m x 1.8m)
- 3M 3040 Ground Cord, 15 ft. (4.6m)
- 3M 3048 Grounding System for Wrist Strap/Table Mat
- 3M 2214 Adjustable Wrist Strap.

8011 Workstation Grounding Kit:

A complete static control solution for the work environment that requires more rigid surfaces with higher conductivity. Both table (1872) and floor (1864) mats are made from black Velostat conductive material for static protection.

8020 Series Workstation Grounding Kit:

The 3M 8020 Workstation Grounding Kits provide the complete static protection offered by all the 3M kits. Both the floor and table (8200) mats are made from soft three layer static dissipative material.

8030 Series Workstation Grounding Kit:

These kits contain two different types of static control mats. The table mat is made of the soft three-layered, static dissipative 8200 material, while the floor (1864) mat is of the more rigid, conductive Velostat material.

Description	Digi-Key Part No.	Price Each	3M Part No.
Matching Table and Floor Mats			
Black, Velostat	SCP120-ND	215.78	8011
Brown, 3 Layer Construction	SCP121-ND	259.01	8021
Beige, 3 Layer Construction	SCP122-ND	259.01	8022
Gray, 3 Layer Construction	SCP123-ND	259.01	8023
Blue, 3 Layer Construction	SCP211-ND	283.89	8024
Granite, 3 Layer Construction	SCP178-ND	259.01	8025
Colored Table Mat With Black Velostat Floor Mat			
Gold, 3 Layer Table Mat	SCP212-ND	271.72	8030
Brown, 3 Layer Table Mat	SCP179-ND	247.91	8031
Gray, 3 Layer Table Mat	SCP180-ND	247.91	8033
Blue, 3 Layer Table Mat	SCP213-ND	271.72	8034
Granite, 3 Layer Table Mat	SCP181-ND	247.91	8035

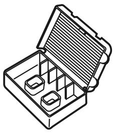
3M Static Control Products

Velostat™ Pin Insertion Grade Foam

Velostat™ 28 x 3 is approx. 3 lb. density and is primarily a cushioning foam, but can be used for pin insertion application with sturdier device leads.

Thickness In.	Size Feet	Digi-Key Part No.	Price Each	3M Part No.
1/8"	1' x 1'	SCP146-ND	5.41	—
1/4"	1' x 1'	SCP147-ND	9.45	—
1/8"	2' x 3'	SCP118-ND	22.00	2803(1/8")
1/4"	2' x 3'	SCP119-ND	38.51	2803(1/4")
1/8"	2' x 50'	SCP112-ND	326.15	2823(1/8")
1/4"	2' x 50'	SCP113-ND	652.23	2823(1/4")

Velostat™ Single Device Carrier



The rugged Velostat Single Device Carrier provides cost-effective physical and static protection for DIPS.

Dimensions (L x W x D):

1.55 in. x 1.01 in. x 0.46 in.
(39.37mm x 25.65mm x 11.68mm)

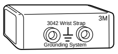
SCP131-ND 5701SP..$5.25/10

Single Card Carrier

Single card carriers protect individual PCB's from static and physical damage during storage and transport. Interiors are lined with dissipative foam cushioning. The lid of each carrier can be modified for identification labels or company logos. The 12 compartment tray is a molded ESD safe tray for transporting components within the plant or for storing components during PCB assembly.

Description	Digi-Key Part No.	Price Each	3M Part No.
12 compartment ESD safe molded tray for components	SCP236-ND	41.30	4063
Card carrier 10"x 8"x 1.25" w/hinged lid	SCP237-ND	22.44	8520
Card carrier 12"x 9"x 1.25" w/hinged lid	SCP238-ND	27.90	8521
Card carrier 18"x 17"x 2" w/hinged lid	SCP239-ND	56.91	8522
Card carrier 10"x 8"x 2" w/hinged lid	SCP190-ND	26.05	8523

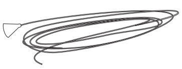
Wrist Strap Grounding System



Wrist Strap Grounding System with two banana jacks and one 10 ft. (3.0m) grounding cord.

SCP115-ND..$21.13 each

Grounding System for Wrist Strap/Table Mat



Easily snaps onto mats and runners; grounds two single conductor wrist straps. Comes complete with ring connector and 15 ft. (4.6 m) ground cord. Ground cord has 1-megohm resistor for mat connection only.

SCP206-ND..$18.25 each

Wrist Strap Workstation Monitor

The 3M 724 Wrist Strap Workstation Monitor continuously verifies the resistance of the operator and work surface ground connections. The monitor uses a reliable resistance method that actually includes the operator's skin resistance to determine if the system is operating properly. If the operator's resistance exceeds 10 megohms or 35 megohms, or the wiring connections exceed 3.7 megohms, audible and visible alarms are triggered. The unit will also warn of potentially dangerous low-resistance situations.

The monitor uses the light and compact dual conductor wrist strap. Dual conductors provide the resistance circuit that is monitored as well as provide grounding redundancy. If one conductor fails, the other will still function to prevent sensitive components from being exposed to static.

Comes complete with a quick connect/disconnect 732 Remote Jack and mounting hardware. 6.5 in. x 3.25 in. x 1.5 in. (162mm x 82mm x 38mm)

Description	Digi-Key Part No.	Price Each	3M Part No.
Workstation monitor kit w/HDWR........................	SCP226-ND	192.42	724
Dual Conductor Fabric Wrist Strap adjustable ...	SCP232-ND	16.54	2368
Dual Conductor Coiled Cord 5'....	SCP233-ND	23.68	2360
Dual Conductor Coiled Cord 10' ..	SCP234-ND	27.10	2370

SCP226-ND...$192.42 each

Velostat™ Table Mat

Velostat Table Mat. Conductive 1/15 in. (1.5mm) thick, 2 ft. x 4 ft. (0.6mm x 1.2 mm), with two female snap connectors installed, and one Table Mat Grounding System.

SCP102-ND ....$73.31 each

Dissipative Mats

8200 Series vinyl mats are soft table and floor mats with a unique three-layer construction. The top layer is durable static dissipative vinyl, which has sufficiently low resistance to discharge static-laden conductors, yet will prevent the shorting of pins on the backs of printed circuit boards laid on the mat.

8200 Series Floor Mats include one 15 ft (4.6m) 3040 Ground Cord and two 3050 Snap Fasteners (installed).

8210 Series Table Mats include two 3M 3050 Snap Fasteners (installed) and one 3M 3048 Wrist Strap Grounding System. Wrist Straps must be ordered separately.

8800 Series rubber mats consist of a top layer of static dissipative rubber laminated to a bottom layer of conductive rubber. Both layers are made from vulcanized synthetic rubber, which offers excellent resistance to oil, grease and most common solvents. They offer superior resistance to heat and hot solder as compared to vinyl or olefinic materials.

8810 Series Table Mats includes two 3034 Snap Fasteners (installed) and one 3048 Wrist Strap Grounding System.

Description	Digi-Key Part No.	Price Each	3M Part No.
Floor Mats			
Vinyl, Brown, 4 x 6 ft. Floor Mat	SCP214-ND	217.66	8201
Vinyl, Gray, 4 x 6 ft. Floor Mat	SCP215-ND	217.66	8203 FLOOR MAT
Vinyl, Blue, 4 x 6 ft. Floor Mat	SCP216-ND	217.66	8204 FLOOR MAT
Vinyl, Granite, 4 x 6 ft. Floor Mat	SCP217-ND	217.66	8205
Table Mats			
Vinyl, Gold, 2 x 4 ft.Table Mat	SCP218-ND	92.20	8210 TABLE MAT
Vinyl, Brown, 2 x 4 ft. Table Mat	SCP219-ND	92.20	8211 TABLE MAT
Vinyl, Beige, 2 x 4 ft. Table Mat	SCP220-ND	92.20	8212
Vinyl, Gray, 2 x 4 ft. Table Mat	SCP221-ND	92.20	8213
Vinyl, Blue, 2 x 4 ft. Table Mat	SCP222-ND	92.20	8214
Vinyl, Granite, 2 x 4 ft. Table Mat	SCP223-ND	92.20	8215
Rubber, Gray, 2 x 4 ft. Table Mat	SCP224-ND	92.20	8810
Rubber, Blue, 2 x 4 ft. Table Mat	SCP225-ND	92.20	8811

Conductive Mats and Runners

1864 Floor Mat is a semi-flexible conductive floor mat that contains a rubber filler for resilience. It also has a textured surface for better traction. It includes two 3034 Snap Fasteners (installed) and one 15 ft. (3.0m) Ground cord with a 1 megohm resistor.

1864R Floor Runner is a 50 ft. (15.24m) long runner of the 1864 mat material. It includes two 15 ft. (3.0m) 3040 Ground Cords with 1 megohm resistor, five 3034 Snap Fasteners and one Snap Fastener Installation Tool.

Description	Digi-Key Part No.	Price Each	3M Part No.
Floor Mat, Black, 0.125 in. (3mm) 4 x 6 ft. (1.2 x 1.8m)	SCP209-ND	228.61	1864 (1/8x4x6)
Floor Runner, Black, 0.125 in. (3mm) 2 x 50 ft. (0.6 x 15m)	SCP210-ND	857.81	1864R

Static Control Shoe Grounding Assemblies (Heel Straps)

Long lasting Static Control heel straps provide static protection while retaining worker mobility • Increase personnel mobility • One size fits most shoe • Extra long contact ribbon accommodates most boots.

Note: The Grounding Assemblies are not to be used in areas where the individual may come in contact with electrical circuitry exceeding 250 volts.

Description	Digi-Key Part No.	Price Each	3M Part No.
With 1meg ohm resistor	SCP163-ND	9.49	2051
With 240K ohm resistor	SCP164-ND	9.49	2052

Field Service Kit

Static-Dissipative Portable Field Service Kit: • Static-dissipative work mat with two pockets, .024 in. x 2 ft. x 2 ft. (0.6mm x 61cm x 61cm) • Grounding cord assembly with alligator clip • Charge-Guard™ Series adjustable wrist strap.

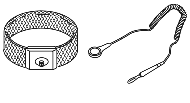
Lightweight Field Service Kit

The small lightweight kit offers the same level of static control as the full-sized 3M 8501 Field Service Kit, yet is small enough to fit in a shirt pocket.

Kit Includes: • Static-Dissipative Work Surface with Pocket 0.015 in. x 15 in. x 20 in. (.38mm x 38.10cm x 50.80cm) • 2204 Adjustable Wrist Band • Lightweight Heavy-Duty Coiled Ground Cords: 2240 Wrist strap ground cord, 5 ft. (1.52m); 2243 Extension ground cord, 5 ft. (1.52m); 3063 Work surface ground cord 5 ft. (1.52m) • 3038 Alligator Clip

Description	Digi-Key Part No.	Price Each	3M Part No.
Field Service Kit	SCP124-ND	59.17	8501
Lightweight Field Service Kit	SCP182-ND	61.91	8505

Charge-Guard™ Adjustable Wrist Strap



Flex life 1,000,000. Wrist straps are the front line of defense in all static control processes. Ensure a comfortable fit with the Charge-Guard™ Series Adjustable Wrist Strap. One size adjusts to any size wrist to provide reliable, 360 degree protection.

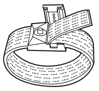
Charge-Guard™ Disposable Wrist Strap

The Charge-Guard™ Disposable Wrist Strap provides cost-effective and reliable static protection. The wrist strap is suited for shipping valuable products to ensure protection at the receiving end.

Highland Model™ 2272 Adjustable Static Control Wrist Strap

Flex life 350,000. **Conductive comfort band** — Silver-plated, continuous monofilament threads establish a 360° contact zone and a reliable path to ground. The banding gently contacts the skin and allows it to breathe for extreme comfort. The stainless steel backplate secures the end of the band in the clasp and ensures reliable electrical bond.

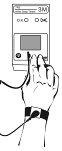
Highland Model™ 2259 Lay-In/Adjustable Static Control Wrist Strap



Flex life 600,000. **Unique lay-in adjustable design.** The 2259 features a unique clasp that can be adjusted to fit your wrist.

Description	Digi-Key Part No.	Price Each	3M Part No.
Adjustable Fabric Wrist Strap			
Wrist strap w/Coiled Cord, 5 ft.........	SCP141-ND	25.40	2214
Wrist strap w/Coiled Cord, 10 ft........	SCP142-ND	31.58	2224
Wrist strap w/Heavy-duty, Coiled, 5 ft.	SCP143-ND	26.72	2244
Replacement Wrist Bands.............	SCP144-ND	10.46	2204
Disposable Wrist Strap	SCP145-ND	1.10	2209
Adjustable Wrist Strap, w/5 ft Coiled Grounding Cord and Alligator Clip	SCP172-ND	8.05	2272
Adjustable Wrist Strap................	SCP173-ND	3.64	2271
5 ft. Coiled Grounding Cord and Alligator Clip	SCP174-ND	5.20	2270
Adjustable Lay-in Wrist Strap, w/5 ft Coiled Grounding Cord and Alligator Clip	SCP191-ND	12.21	2259
Adjustable Lay-in Wrist Strap........	SCP176-ND	4.10	2216
5 ft. Coiled Cord & Alligator Clip.......................	SCP192-ND	7.13	2250

Charge-Guard™ 746 Wrist Strap Tester



The 3M model 746 wrist strap tester is a compact unit much like the 745 but it operates on either battery or AC power. Can be used in production facilities to field service locations. Unit comes complete with an AC adapter, a lithium battery and a wall mounting kit.

SCP235-ND $351.38

Wall Mount Wrist Strap Tester

The 3M 740 Wrist Strap Tester is an AC-powered unit designed to be wall-mounted in a production facility for daily testing of employees' static control wrist straps. Simple to operate, with red and green LEDs giving a clear "go" or "no go" indication. Comes with the base unit, output connector, wall-mounting system and template, cover for the wrist strap plug-in jack and the AC/DC transformer. 5.43 x 7.48 x 2.09 in. (13.8 x 19.0 x 5.3cm).

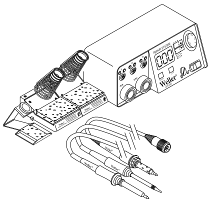
SCP204-ND $517.44

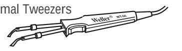
Ionized Air Blowers

The 963 neutralizes static charge on nonconductive materials and helps prevent static from damaging sensitive electronic components.

SCP207-ND 120V, 6x6x2.5 in. (963) ....$516.05 each

WRS3000S Soldering Station
(Through Hole and SMT Repair or Rework)



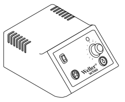

Thermal Tweezers

The WRS3000S combines all of the tools needed to cover most through hole and SMT repair or rework applications. The soldering tool is the powerful EC1204, featuring 54 watts of power to cover even the most difficult multi-layered applications. The desoldering tool is the DS58. This tool features an inline design and 60 watts of power. Finally, the HAP1 Hot Air tool features a static free air stream that is heated by 100 watts of power. A full complement of nozzles are available for fine solder reflow or removing PLCC packages. The system is completely ESD safe, U.L. Approved and meets the Mil-Specs.

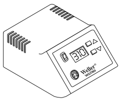
Features: • Self-contained • Closed loop controlled hand pieces • Digital display • Microprocessor control for the ultimate in accuracy • Lock-out equipped • Temperature setback • Separate control of air flow rate, time and temperature • Three independently controlled channels • Burn resistant cords • F/C degree selector • ESD safe • Meets U.L. requirements • Full range of tips for rework and repair available • Hot air and desoldering applications can be run without any separate switching • Temperature Range: 350°F to 850°F (177°C to 454°C)
Note: *Tweezers will also work with EC series units.*

Description	Digi-Key Part No.	Price Each	Weller Part No.
Rework Station w/Hot Air & Irons	WRS3000S-ND	1581.00	WRS3000S
SMT Thermal Tweezers w/Stand	0053313399-ND	316.19	WTA50SET
Tip, 1 mm Thermal Tweezers, 2 pc.	0054414199-ND	21.84	WT1
Tip, 3 mm Thermal Tweezers, 2 pc	0054414699-ND	21.84	WTA2
Tip, 6 mm Thermal Tweezers, 2 pc.	0054414799-ND	21.84	WTA3
Tip, 12.5 mm Thermal Tweezers, 2 pc.	0054414399-ND	51.66	WT4
Tip, 18.5 mm Thermal Tweezers, 2 pc.	0054414499-ND	51.66	WT5

WS "Silver Series" Soldering Station



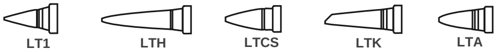
WS80 Features: • Analog control electronics • Temperature dial control from 300°F to 850°F (149°C to 454°C) • Temperature locking via key-operated switch • Accuracy ±2% of final value • Visual control with LED



WSD80 Features: • Digital control electronics • Temperature control from 100°F to 850°F (38°C to 454°C) adjustable via buttons • Calibration box may be connected for time (setback), locking functions (lock-out), and calibration • 3-position digital display for PRE-SET and READ VALUE • Accuracy ±2% from input

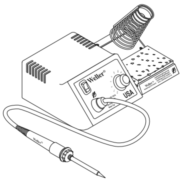
The WS80 (80 Watt analog dial station) and WSD80 (80 Watt digital dial station) irons heat up in one-third to one-fourth the time of regular irons. The patented Weller low-mass tip has a faster recovery time and very little temperature loss when compared to other conventional irons and tips. Perfect for the production line and any area where continuous soldering takes place. **Features:** • Pencil • Holder • Antistatic housing • Automatic tool recognition • All Weller accessories up to 80W may be connected • Solder tool holder • Dimensions (L x W x H): 165.10mm x 114.30mm x 101.60mm

Replacement Tips



Description	Digi-Key Part No.	Price Each	Weller Part No.
Solder Station, 80 Watt w/Iron	WS80-ND	262.56	WS80
DIG Solder Station, 80 Watt w/Iron	WSD80-ND	353.72	WSD80
Replacement Solder Pencil, 80 Watt	WSP80-ND	111.00	WSP80
Solder Pencil Stand	WPH80-ND	19.08	WPH
Replacement Tip, 0.25mm for WS	LT1-ND	5.39	LT1
Replacement Tip, 0.8mm for WS	LTH-ND	5.39	LTH
Replacement Tip, 3.2mm for WS	LTCS-ND	5.39	LTCS
Replacement Tip, 1.2mm for WS	LTK-ND	5.39	LTK
Replacement Tip, 1.6mm for WS	LTA-ND	5.39	LTA

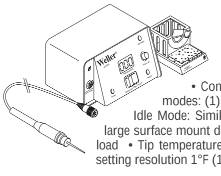
WES50 Soldering Station



Features and Benefits: • Cordless temperature lockout to prevent operators from raising the temperatures to levels higher than specified for the board or component. Gives you control over the process • Cordless Tip Temperature Calibration, which provides the user with the capability of resetting station temperature readings to variations in tip sizes and styles • Quick heat-up and temperature recovery — allows continuous production soldering • Slim, comfortable hand piece — reduces operator fatigue • Accuracy within 9°F (5°C) • Temperature range: 350°F to 850°F (177°C to 454°C) • ESD Safe to protect sensitive components • Uses ET Series Tips

WES50-ND 50 Watt Soldering Station **$117.74**

MT1500 Soldering Station (Microtouch)

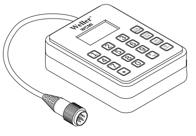


• Immediate, accurate tip temperature for faster soldering (MT202-3 seconds) • Quick tip change system, no tools required • Expanded tip selection: .010 point to PLCC68 (over 50 available) • Touch feature for extended tip life reduces operating cost • Excellent thermal capacity improves performance in all applications • Immediate response to thermal loads improves productivity • Complete control with adjustable temperature and digital display • Three basic modes: (1) Touch Mode: Intended for soldering very small components with microtips; (2) Idle Mode: Similar to Touch Mode, but uses large tips; (3) Continuous Mode: Suited for very large surface mount device tips • Average tip temperature is calibrated to ±9°F (±5°C) at idle with no load • Tip temperature range 400°F to 800°F (204°C to 427°C) • Stability ±10°F (±6°C) • Control setting resolution 1°F (1°C) • Unit not provided with tip: tips to be purchased separately

Description	Digi-Key Part No.	Price Each	Weller Part No.
Microtouch Soldering Station	MT1500-ND *	628.58	MT1500
Tip, Screwdriver, 1.19mm W x 5.08mm	MT301-ND	45.32	MT301
Tip, Conical, .38 dia. x 5.08mm	MT302-ND	45.32	MT302
Tip, Screwdriver, 1.78mm	MT601-ND	45.32	MT601
Tip, Bevel, .51mm	MT607-ND	45.32	MT607
Tip, SMT Blade, 10.41mm Long	MT617-ND	95.88	MT617
Tip, SMT Blade, 20.83mm Long	MT1205-ND	95.88	MT1205
Tip, PLCC68, 25.53mm Sq.	MT1208F-ND	153.20	MT1208

* 5 year unconditional warranty for "MT1500-ND".

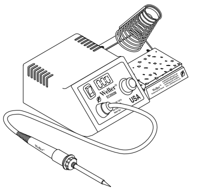
WS System Calibration Unit



• Designed to work with WS series soldering stations • Allows user to calibrate tip temperature of soldering iron to outside temperature reference • Enables timer setback mode (allows station to set back to 350°F (177°C) after period of inactivity) • Insert fixed temperature into station and turning off front panel control knob • Switching station display between °F or °C • Resetting station electronics to original factory calibration • Unit uses four "AA" alkaline batteries for power (included) • 3 month normal life expectancy of batteries • 16 button keypad • Three digit LED display • Connectors to attach to soldering station and iron

WCB1-ND Calibration Unit **$224.73**

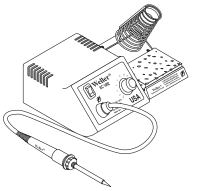
EC2002M Digital Soldering Station



• LED readout displays temperature settings and tip temperature with a resolution of 1°F (1°C) and stability of ±10°F (±6°C) • Display shows "Read" mode by default which displays current temperature of the tip • To switch to "Set" mode, turn knob slightly, display will show current set temperature • Handles delicate applications • Electrostatic discharge safe (ESD safe) • Water reservoir will keep the sponge moist • Externally fused • UL listed and FCC approved.

Description	Digi-Key Part No.	Price Each	Weller Part No.
Complete Station with EC1201A Iron & Stand	EC2002M-1-ND	343.11	EC2002M-1
Complete Station with EC1302A Iron & Stand	EC2002M-2-ND	343.11	EC2002M-2

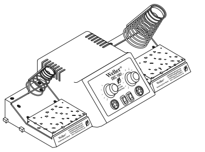
EC1002 Variable Soldering Station



• Dial calibrated in 10°F (6°C) increments • Power control with zero cross switching for tips free of high voltage spikes • Electrostatic discharge safe (ESD safe) • Available with 40, 20, 42 watt iron • Iron stand, with tip storage, position left, right or remote from main unit • Spec. Compliance: DOD-STD-2000, Mil-STD-2000, Mil-S-45743, W-S-6536, W-S-570 AND DOD-STD-1686 • Externally fused • UL Listed

Description	Digi-Key Part No.	Price Each	Weller Part No.
Complete Station with EC1201A Iron & Stand	EC1002-1-ND	250.62	EC1002-1
Complete Station with EC1302A Iron & Stand	EC1002-2-ND	250.62	EC1002-2

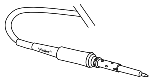
DEC1001 Dual Soldering Station



• Combined power of two temperature controlled stations in one • Dual dial temperature range of 350°F to 850°F (177°C to 454°C) • Ideal for multiple use situations • For use with 40, 20, 42 watt irons combining two at a time. **IRONS SOLD SEPARATELY (below)** • Electrostatic discharge safe (ESD safe) • Two iron stands included with tip storage, position left, right or remote from main unit • Water reservoir keeps sponge moist • SPEC. COMPLIANCE - DOD-STD-2000, Mil-STD-2000, Mil-S-45743, W-S-6536, W-S-570, DOD-STD-1686 • Externally fused • UL listed

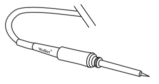
Description	Digi-Key Part No.	Price Each	Weller Part No.
Dual Iron Power Unit w/Two Iron Stands	DEC1001-ND	251.60	DEC1001

Soldering Irons



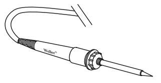
EC1503B

• Tool designed for difficult applications such as multilayer boards, large heat output from small tool. • Large tip iron for high wattage application



EC1302B

• Micro-soldering tool • Stainless steel heater element construction • Fine tip iron for light duty applications



EC1201A

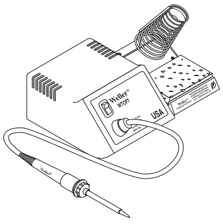
• General purpose soldering tool • Stainless steel plug-in heater element construction • General purpose iron for mid-range applications

- Specifically designed for use at electro static free work stations
- Non-burnable silicon rubber cord
- Lightweight, high impact plastic handle
- Blue plastic meets requirements for ESD, Electrostatic Dissipative Materials
- Uses Weller EM series tips made of copper with heavy iron, nickel and chromium plating for long life
- UL listed

NOTE: EC1503B, EC1302B and EC1201A work with DEC1001 and EC1002.

Description	Digi-Key Part No.	Price Each	Weller Part No.
42w Soldering Iron w/EMA Tip	EC1503B-ND	113.21	EC1503A
20w Iron w/EPH 101 Tip	EC1302B-ND	97.47	EC1302A
40w Soldering Iron w/ETA Tip	EC1201A-ND	97.35	EC1201A
Replacement Sponge	TC205-ND	1.62	TC205

Controlled-Output Soldering Station
WTCPT Weller's Work Horse



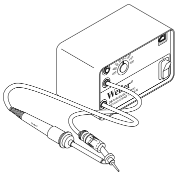
• Transformer powered soldering station complete with macro style, low voltage, temperature controlled soldering iron • Special "closed loop" method of controlling maximum tip temperature … to protect temperature sensitive components • Power unit housing features impact resistant plastic for durability • Quick disconnect plug for soldering iron and lighted on/off switch • Separate conductor grounds iron tip and terminates at third pin of power cord • PT series soldering tips come in a variety of shapes and sizes in three standard temperature ranges: 600°F (316°C), 700°F (371°C), and 800°F (427°C) • Uses PT series tips

Description	Digi-Key Part No.	Price Each	Weller Part No.
Complete Station-24V Output	WTCPT-ND	131.40	WTCPT
Replacement Soldering Iron	TC201T-ND	69.02	TC201T

Replacement Tips for Irons

Tip Dim. (Inch)	Description	Digi-Key Part No.	Price Each	Weller Part No.
EM Series Tips for EC1503A Iron				
.062	Chisel Tip	EMA-ND	12.80	EMA
.125	Chisel Tip, Long Reach	EMM-ND	12.80	EMM
.015	Conical Tip	EMD-ND	12.80	EMD
PT Series Tips For TC201T Iron				
.062	Screwdriver, 700°F (371°C)	PTA7-ND	5.72	PTA7
.062	Screwdriver, 800°F (427°C)	PTA8-ND	5.72	PTA8
.125	Screwdriver, 700°F (371°C)	PTC7-ND	5.72	PTC7
.125	Screwdriver, 800°F (427°C)	PTC8-ND	5.72	PTC8
.031	Conical Flat, 700°F (371°C)	PTF7-ND	5.72	PTF7
.031	Conical Flat, 800°F (427°C)	PTF8-ND	5.72	PTF8
.015	Long Conical, 700°F (371°C)	PTS7-ND	5.72	PTS7
.015	Long Conical, 800°F (427°C)	PTS8-ND	5.72	PTS8
EPH Series Tips for EC1302A Iron				
.015	Micropoint Tip	EPH101-ND	5.66	EPH101
.031	Bent Conical Tip	EPH102-ND	5.66	EPH102
.062	Screwdriver Tip	EPH106-ND	5.66	EPH106
	Replacement Barrel Nut Assortment for EPH Tip	EC231-ND	7.52	EC231
ET Series Tips For EC1201A				
.062	Screwdriver Tip	ETA-ND	5.39	ETA
.093	Screwdriver Tip	ETB-ND	5.39	ETB
.031	Screwdriver Tip	ETH-ND	5.39	ETH
.031	Conical Tip	ETP-ND	5.39	ETP
.015	Single Flat Tip	ETU-ND	5.39	ETU
.031	Long Conical Tip	ETO-ND	5.39	ETO
Tips For Professional Soldering Irons *ST Series Tips For WP25, WP30, WP35 Irons*				
.062	Screwdriver Tip	ST1-ND	5.06	ST1
.183	Screwdriver Tip	ST4-ND	5.06	ST4
.031	Single Flat Tip	ST5-ND	5.06	ST5
.031	Screwdriver Tip	ST6-ND	5.06	ST6

DS700M Electronically Controlled Desoldering Station

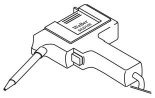


Features: • Lightweight desoldering tool with convenient index finger push button to control vacuum • Product designed as technicians portable unit (intermittent use) • Lightweight, compact electronic desoldering unit with **internal vacuum pump** • Fingertip control of desoldering vacuum • Special, large capacity air filter provided in power unit to back up small filter in tool's solder-collection reservoir • Air output for low volume heat shrinking and other hot air jobs • ESD safe

Description	Digi-Key Part No.	Price Each	Weller Part No.
Complete Station 24V Output	DS700M-ND	751.97	DS700M
In-Line Filter	DS205-ND	7.19	DS205
Replacement Tip, .79mm	DS112-ND	12.72	DS112
Replacement Tip, 1.85mm	DS114-ND	12.72	DS114

SCD100 Desoldering Gun

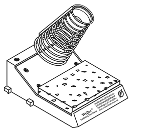
Description	Digi-Key Part No.	Price Each	Weller Part No.
Desoldering Gun, Self-contained	SCD100-ND	206.55	SCD100
Replacement DisposableTubes	SCD201-ND	9.17	SCD201
Replacement Tip, 0.9mm for SCD100	SCD112-ND	17.06	SCD112
Replacement Tip, 1.2mm for SCD100	SCD113-ND	17.06	SCD113
Replacement Tip, 1.8mm for SCD100	SCD114-ND	17.06	SCD114

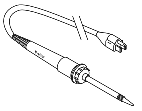


Self-contained desoldering gun draws solder into the disposable collector tube.

Professional Soldering Irons

WP25, WP30, WP35 Series Irons



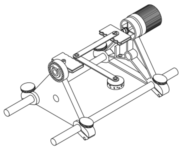


• Fixed temperature units • Ideal for a wide variety of electronic tasks. • Interchangeable heater elements - Single handle plus three different heating elements gives the user a trio of irons for different jobs. • Quick change knurled collar makes changing heater simple. • Lightweight handle with cushioned grip. • For additional safety, all irons come with 3-wire power cord. • Irons use ST series iron plated tips for long life and greater soldering efficiency. • Important: Use only Weller tips. • ST series tips. • UL Listed.

Description	Digi-Key Part No.	Price Each	Weller Part No.
Soldering Iron w/ST3 Tip, 25 watt*	WP25-ND	33.27	WP25
Soldering Iron w/ST3 Tip, 30 watt*	WP30-ND	35.96	WP30
Soldering Iron w/ST3 Tip, 35 watt*	WP35-ND	41.88	WP35
Soldering Iron Stand For WP Series*	PH60-ND	20.58	PH60

* Note that iron stand is sold separately.

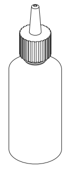
0051502699 Circuit Board Vise



• Complete work center for placing, soldering and desoldering printed circuit boards. • Spring clamps will hold workpiece in place securely. • Rotates through 360°, allowing work performance at any convenient angle. • Adjustable features allow handling of variety of circuit board sizes. • Maximum surface: 6-1/4"/160 mm x 9-1/8"/235 mm. • 0051502699 is ESD SAFE.

Description	Digi-Key Part No.	Price Each	Weller Part No.
Circuit Board Vise	0051502699-ND	90.95	0051502699

NEW! Flux and Scrub-It® Solvent Dispensers

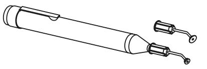


Flux Dispensers: • Both static safe and standard hold 2 ounces • Avoid spills and waste and place flux precisely where needed • Squeeze bottles dispense one drop of liquid resin, flux, oil solvent through stainless steel needles • Static dissipative models protect static-sensitive components.

Scrub-It® Solvent Dispensers: • Squeeze dispenser to distribute solvent through brush • For cleaning printed circuit boards and other connections • No mess, no waste • Available with nylon bristles or horsehair for static-safe applications • Dispenser holds 2 ounces

Description	Digi-Key Part No.	Price Each	Weller Part No.
Flux Dispenser, 0.020" (508mm) Needle	FD2-ND	2.48	FD2
Flux Dispenser, 0.008" (203mm) Needle	FD21-ND	2.48	FD21
Flux Dispenser, 0.050" (1.27mm) Needle	FD22-ND	2.48	FD22
Scrub-It Bottle, Nylon Bristle	SD74-ND	8.43	SD74
Scrub-It Bottle, Horse Hair	SD74H-ND	8.43	SD74H

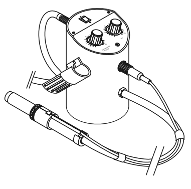
NEW! Vacuum Pickup Tool



• Vacuum pick up tool allows for easy and safe handling of components

Digi-Key Part No.	Price Each	Weller Part No.
WLSK200-ND	44.88	WLSK200

NEW! Hot Air Rework Station and Nozzles



Features: • Self-contained low cost hot air station with 700 watts of heating power to handle most bench top rework jobs • Extremely compact size uses less space on your rework bench • Temperature and air flow are controlled on the front panel - allows you to make settings quickly and easily • Air flow can be activated by either a finger switch on the hand piece or via an optional foot switch • Built-in hand piece holder saves bench space.

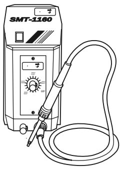
Description	Digi-Key Part No.	Price Each	Weller Part No.
Self-Contained Hot Air Station, 120V	WHA300-ND	698.24	WHA300
Hot Air Nozzle, 44 PIN PLCC	0058736814-ND	57.23	0058736814
Hot Air Nozzle, 84 PIN PLCC	0058736833-ND	71.75	0058736833
Hot Air Nozzle, 20 PIN PLCC	0058736839-ND	57.23	0058736839
Hot Air Nozzle, 68 PIN PLCC	0058736804-ND	57.23	0058736804
Hot Air Nozzle, 14 PIN SOIC-SO8	0058736843-ND	57.23	0058736843
Hot Air Nozzle, 20 PIN SOIC	0058736842-ND	57.23	0058736842
Hot Air Nozzle, SOT23	0058736870-ND	57.23	0058736870

Replacement Parts for Irons

Tip Dim. In. (mm)	Description	Digi-Key Part No.	Price Each	OK Int'l. Part No.
Micro Iron Replacement Tips				
.047 (1.19)	Double Flat	K303-ND	9.00	S4-305L
.047 (1.19)	Chisel	K305-ND	9.50	S4-105S
.047 (1.19)	Double Flat	K341-ND	9.00	S4-305S
.015 (.38)	Conical	K342-ND	9.00	S4-201L
.020 (.51)	Angled	K343-ND	9.00	S4-202B
.047 (1.19)	Dbl. Flat Long Life	K450-ND	12.00	S4-305SX
Macro Iron Replacement Tips				
.039 (.99)	Conical	K307-ND	9.00	S9-204L
.047 (1.19)	Double Flat	K344-ND	9.00	S9-305S
.015 (.38)	Conical	K345-ND	9.00	S9-201L
.047 (1.19)	Dbl. Flat Long Life	K449-ND	12.00	S9-305SX

Description	Digi-Key Part No.	Price Each	OK Int'l Part No.
Iron - Replacement Parts			
Repl. Heat Assembly for K295-ND	K420-ND	40.14	15589
Repl. Collar, Nut and Sleeve for K295-ND	K421-ND	13.84	15920
Repl. Heat Assembly for K296-ND	K422-ND	52.00	16226
Repl. Collar, Nut and Sleeve for K296-ND	K423-ND	14.79	16492

Surface Mount Hot Air Soldering System

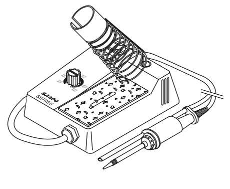


The SMT-1161-V is a non-contact hot air soldering system for most SMD's utilizing forced air convection. The SMT-1161-V is designed for low thermal-stress reflow. Primarily a soldering device, the SMT-1161-V can be utilized for SMT component removal also. **System includes:** • Base with pump • Variable temperature module • Handpiece • Hand-piece holder • 3-piece nozzle kit • Instruction manual. **Specifications:** • **Input:** 115VAC/60Hz • **Temperature Range:** 600° to 800°F (316° to 427°C) • **Airflow:** 1 to 6 liters/min. • **Dimensions:** 5.7" x 4.3" x 8.5" (14.48cm x 10.92cm x 21.59cm) • **Weight:** 8.8 lbs. (3.99kg)

Description	Digi-Key Part No.	Price Each	OK Int'l Part No.
SMT Hot Air Soldering System	K353-ND	825.00	SMT-1161-V

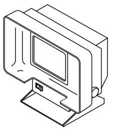
Fume Extract Solder Stations

OK International's SA-400 soldering station fitted with a fixed fume extraction adapter for clean, fume free soldering. Must be used with an external fume extraction unit. Comes complete with variable station, handpiece with integral fume extraction tube, sponge and tray. 115VAC.



Description	Digi-Key Part No.	Price Each
Micro Iron Solder Station w/ Fume Extraction, 40W	K454-ND	189.00
Macro Iron Solder Station w/ Fume Extraction, 90W	K455-ND	189.00
Macro Iron Solder Station w/ Fume Extract Iron	K337-ND	124.62

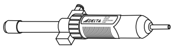
Benchtop Fume Absorber



Aerodynamic hood design effectively draws solder fumes away from the work area. Carbon filters traps up to 80% of the flux fumes. Compact size and adjustable for convenient placement near work area. Optional articulating arm with bench mount clamp converts benchtop fume absorber to suspended fume absorber for positioning directly over the work area. An inexpensive alternative to individual fume extraction.

Description	Digi-Key Part No.	Price Each
Benchtop fume absorber 115V with 3 filters	K416-ND	105.00
Benchtop ESD safe fume absorber 115V w/3 filters	K417-ND	135.00
Articulating arm assembly kit w/bench clamp	K418-ND	165.00
Replacement carbon filter set, 3 Pcs.	K419-ND	18.81

High Vacuum Desolder Pumps



Features durable corrosion resistant plastic construction and corrosion treated springs with uniform reset pressure and cushioned shock reduction. Fitted with replaceable teflon tips.

Description	Digi-Key Part No.	Price Each
High-Vac Desoldering Pump with Tip	K412-ND	18.95
Repl. Teflon Tip for K412-ND	K413-ND	2.95
ESD Safe Desoldering Pump with Tip	K414-ND	23.95
Repl. ESD Safe Teflon Tip for K414-ND	K415-ND	4.95

EASY BRAID CO.

Low Cost Fixed-Temp Soldering Irons and Holders

Compact, lightweight fixed-temp solder irons designed for the occasional user and hobbyist. Super quick heat up with replaceable tip and stainless steel heating core.

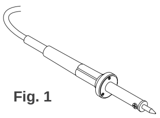


Fig. 1

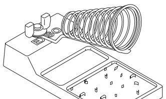
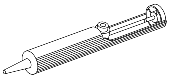


Fig. 2

Fig.	Description	Digi-Key Part No.	Price Each	Easy Braid Part No.
	Fixed Temp Iron			
1	Deluxe, 30W, 115VAC, Insulated Handle	EB1068-ND	23.95	DJY-10730S
	Micro, 30W, 115VAC	EB1069-ND	11.81	DJY-10330
	High Power, 40W, 115VAC	EB1070-ND	13.48	DJY-10340
	High Power Macro, 60W, 115VAC	EB1139-ND *NEW!*	16.77	DJY-10360
	Solder Iron Holder			
2	Small, with Sponge	EB1071-ND	15.52	DST58
	Large, with Sponge	EB1072-ND	28.87	DST68
	Replacement Tip (1 pc.)			
—	Conical for EB1068-ND (30W)	EB1073-ND	4.85	SIT-R30W
—	Conical for EB1069-ND (30W)	EB1074-ND	3.09	SIT-B30W
—	Conical for EB1070-ND (40W)	EB1075-ND	3.09	SIT-B40W

Weidmüller
Paladin Tools

Desoldering Pump



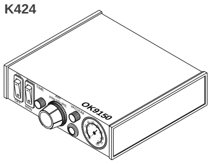
The desoldering tool removes solder with simple push-button operation. A conductive tool for anti-static operation. Replaceable tips available.

PAL1700-ND	Desoldering Pump	**$16.82**
PAL2712-ND	Replacement Tip	**$5.17**

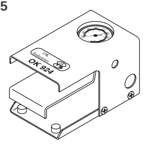
TECHCON SYSTEMS INC.
Division of OK International

Fluid Dispensing Systems

K424



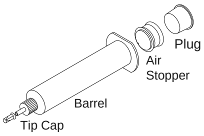
K425



OK International fluid dispensing equipment is well suited for all types of liquids and fluids, from water thin solvents to thick pastes to sticky syrups. Both dispensers require external air source. The **K424-ND** Analog dispenser has a vacuum control of all viscosities of fluids. The solid state timer provides accurate and repeatable dispensing cycles. This unit offers an adjustable vacuum feature for controlling drip of fluid or paste between dispense cycles. Three dispense time ranges are included to offer controlled time shots from .01 to 30 seconds with one-touch or interruptible actuation. **Features:** • Solid state digital integrated circuitry timer • 0.18 CV factor constant flow solenoid • Lighted function switches • Adjustable vacuum up to 15 inches Hg • Micro action foot switch The **K425-ND** foot valve dispenser is the ideal dispensing unit for most general applications of adhesives, sealants and compounds. **Features:** • Rugged and easy to use • Built-in pressure regulator • Connects to any OK syringe adapter • Fluid will flow as long as foot pedal is depressed The **K426-ND** dispense kit consists of 3 syringe assemblies complete with barrels; air stoppers, tip caps and barrel adapters. The kit also includes 50 tips (assorted sizes) and an in-line filter, shop air filter and syringe stand.

K424-ND	Analog Precision Fluid Dispenser 1-100PSI Solid State Timer 115 VAC	**$589.00**
K425-ND	Foot Valve Fluid Dispenser 20-100PSI with built-in pressure regulator	**$214.50**
K426-ND	Dispenser Kit for K424-ND & K425-ND (65 pieces total)	**$116.00**

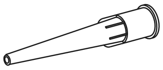
Air Powered Syringe Assemblies



Available in 3 popular sizes (6cc, 10cc, and 35cc). Air powered assemblies include syringe barrel and tip caps, air stoppers and end plugs for safety when transporting filled syringes.

K427-ND	5cc-6cc (pkg. of 20 assemblies)	**$11.30**
K428-ND	10cc-12cc (pkg. of 15 assemblies)	**$10.58**
K429-ND	30cc-35cc (pkg. of 10 assemblies)	**$11.30**

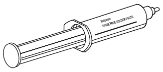
Dispensing Tips

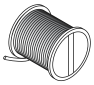


These tips are molded in high density polyethylene with color coding indicating tip inside diameter.

K435-ND	.063” (1.60mm) ID Tan Color (pkg. of 50)	**$18.00**
K436-ND	.047” (1.19mm) ID Grey Color (pkg. of 50)	**$18.00**
K437-ND	.033” (.84mm) ID Green Color (pkg. of 50)	**$18.00**
K438-ND	.024” (.61mm) ID Pink Color (pkg. of 50)	**$18.00**
K439-ND	.016” (.41mm) ID Blue Color (pkg. of 50)	**$18.00**

5-Core Solders





Multicore’s flux cored solder contains 5 separate cores of flux inside of the solder wire. This design helps assure even wetting action and prevents “cold” or “dry” solder joints due to a void in the flux. RA solder is a highly active solder that will clean with fast wetting action, used for hard to solder joints. No-Clean solder reduces or eliminates the need for cleaning after the soldering process, leaving very little residue. Crystal is a heat stable flux giving crystal clear residues with minimal fumes. Low Residue is a non-corrosive, halide free flux that leaves minimal residue. Water soluble solder is an active solder that is soluble when exposed to water, eliminating the need for solvent washes. Savbit is a copper containing alloy for reduced erosion of fine copper wires and copper based soldering tips. Used for copper based soldering and extending soldering tip life. Lead-Free Solder has similar soldering characteristics to standard lead based solders but without the health hazard associated with lead.

Dross-X is a solder bath dross reducer for solder baths and wave solder systems to reduce waste during the soldering process. Solder paste is a solder/flux cream intended for soldering surface mounted components. Available in RMA, No-Clean and Water Soluble flux formulations in both 25gm syringes for automatic or manual dispensing and 250gm jars for manual and automated stenciling.

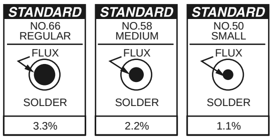
Pastes should be kept refrigerated until 8 hours before use. The 250gm jars should be stirred slightly before use. Pastes must be shipped overnight or 2nd-day-air only, to ensure product integrity.

Description	Digi-Key Part No.	Price Each 1	5	10
RA Flux 60/40 — Activated Solder, 1 Lb. (.45 kg)				
22 Gauge Rosin, .028” dia. (.71mm)	SN6022-ND	15.08	13.20	11.31
RA Flux 63/37 — Activated Solder , 1 Lb. (.45 kg)				
18 Gauge Rosin, .050” dia. (1.27mm)	SN6318-ND	13.22	11.57	9.92
21 Gauge Rosin, .032” dia. (.81mm)	SN6321-ND	14.82	12.97	11.12
22 Gauge Rosin, .025” dia. (.64mm)	SN6322-ND	15.78	13.81	11.84
24 Gauge Rosin, .020” dia. (.51mm)	SN6324-ND	17.70	15.49	13.28
No-Clean “Crystal” Flux 60/40 2.2%, 1 Lb. (.45 kg)				
18 Gauge, .050” dia. (1.27mm)	SN60CRYSTAL18-ND	10.02	8.77	7.52
No-Clean “Crystal” Flux 63/37 2.2%, 1 Lb. (.45 kg)				
18 Gauge, .050” dia. (1.27mm)	SN63CRYSTAL18-ND	10.32	9.03	7.74
21 Gauge, .032” dia. (.81mm)	SN63CRYSTAL21-ND	11.58	10.14	8.69
22 Gauge, .028” dia. (.71mm)	SN63CRYSTAL22-ND	12.32	10.78	9.24
No-Clean “Low Residue” Crystal 400, Flux 63/37 1.1%, 1 Lb. (.45 kg)				
16 Gauge, .063” dia. (1.60mm)	SN63CRYSTAL400116-ND	11.76	10.29	8.82
18 Gauge, .050” dia. (1.27mm)	SN63CRYSTAL400118-ND	11.90	10.42	8.93
22 Gauge, .028” dia. (.71mm)	SN63CRYSTAL400122-ND	14.26	12.48	10.70
24 Gauge, .020” dia. (.51mm)	SN63CRYSTAL400124-ND	16.04	14.04	12.03
Water Soluble Flux, 63/37, 1 Lb. (.45 kg)				
18 Gauge, .050” dia. (1.27mm)	SN63X18-ND	10.32	9.03	7.74
21 Gauge, .032” dia. (.81mm)	SN63X21-ND	11.58	10.14	8.69
24 Gauge, .022” dia. (.56mm)	SN63X24-ND	13.82	12.10	10.37

Description	Digi-Key Part No.	Price Each 1	5	10
Tin-Copper — Savbit Specialty, RA Flux, 1 Lb. (.45 kg)				
22 Gauge, .028” dia. (.71mm), 50/48.5/1.5	SAVBIT366-22-ND	11.72	10.26	8.79
Lead Free, RA Flux, 1 Lb. (.45 kg)				
18 Gauge, .050” dia. (1.27mm), 96/4	SN96WRAP318-ND	23.90	20.92	17.93
Silver, RA Flux, 1 Lb. (.45 kg)				
18 Gauge, .050” dia. (1.27mm), 62/36/2	SN62WRAP318-ND	17.36	15.19	13.02
22 Gauge, .028” dia. (.71mm), 62/36/2	SN62WRAP322-ND	19.10	16.72	14.33
High Melt Point, No-Clean 511, 1 Lb. (.45 kg)				
22 Gauge, .028” dia. (.71mm), 5/93.5/1.5	HMPCRYSTAL5112-22-ND	15.52	13.58	11.64
Solder Accessories				
Tinner/Cleaner for Solder Tips	TTC-1-ND	6.16	5.39	4.62
Solder Paste				
Water Soluble, 25gm Syringe (WS22) 63/37	SN63WS22AA-ND	11.58	10.14	8.69
Water Soluble, 250gm Jar (WS22) 63/37	SN63WS22AG-ND	54.00	47.25	40.50
RMA Paste, 25gm Syringe (RM10) 62/36/2	SN62RM10-ND	11.90	10.42	8.93
Copperset Through-Hole Plating Kit				
PTH Kit for PCBs, .062” (1.57mm) thick boards	CSS001-ND	239.40	—	—
Replacement Cores, .031” dia (.79mm), 500 Pcs.	CSS031-ND	49.90	43.67	37.43
Replacement Cores, .039” dia (.99mm), 500 Pcs.	CSS032-ND	49.90	43.67	37.43
Replacement Cores, .047” dia (1.19mm), 500 Pcs.	CSS033-ND	49.90	43.67	37.43

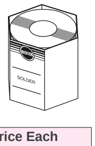
∗ 22 Gauge Weight is .5 Lb. (.23kg.)

Flux-Core Solders



Alloy	Melting Range (°F)	Recommended Use
		Tin-Lead
Sn63Pb37	361	Most common, tin-lead eutectic used in PCB assembly applications
Sn60Pb40	361-374	Used in single-sided board soldering and solder dipping operations
		Lead-Free
SAF-A-LLOY	426-454	Special alloy developed for general use where lead free solder is mandated
		Other Alloys
Sn62Pb36Ag02	354-372	Used on silver coated ceramics and PdAg substrates, prevents silver leeching
Sn43Pb43Bi14	291-325	Used in low temperature electronic assembly applications

"44" RA Solders



Kester "44" has virtually dominated the field of activated rosin core solders for well over four decades. An outstanding performance feature of this flux is the "instant wetting" action. The high mobility and fast spreading action of this flux results in more reliable production line soldering. Available in 1 Lb. and 1/2 Lb. spools. Gold Label.

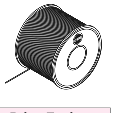
Description	Digi-Key Part No.	Price Each 1	5	10
RA Solder "44", 63/37, 1 Lb. (.45 kg) Spool				
16 Gauge Solder, 3.3% Flux, .062" (1.57mm) dia.	KE1100-ND	11.43	10.29	9.14
18 Gauge Solder, 3.3% Flux, .050" (1.27mm) dia.	KE1108-ND *NEW!*	14.50	13.05	11.60
19 Gauge Solder, 3.3% Flux, .040" (1.02mm) dia.	KE1101-ND	12.10	10.89	9.68
21 Gauge Solder, 3.3% Flux, .031" (.79mm) dia.	KE1102-ND	12.63	11.37	10.10
23 Gauge Solder, 3.3% Flux, .025" (.63mm) dia.	KE1109-ND *NEW!*	18.50	16.65	14.80
25 Gauge Solder, 3.3% Flux, .020" (.51mm) dia.	KE1103-ND	17.65	15.89	14.12
28 Gauge Solder, 3.3% Flux, .015" (.38mm) dia.	KE1110-ND *NEW!*	31.75	28.58	25.40
RA Solder "44", 63/37, 1/2 Lb. (.23 kg) Spool				
21 Gauge Solder, 3.3% Flux, .031" (.79mm) dia.	KE1111-ND *NEW!*	9.75	8.78	7.80
23 Gauge Solder, 3.3% Flux, .025" (.63mm) dia.	KE1112-ND *NEW!*	10.63	9.57	8.50
28 Gauge Solder, 3.3% Flux, .015" (.38mm) dia.	KE1113-ND *NEW!*	18.05	16.25	14.44
RA Solder "44", 60/40, 1 Lb. (.45 kg) Spool				
13 Gauge Solder, 3.3% Flux, .093" (2.36mm) dia.	KE1114-ND *NEW!*	13.38	12.04	10.70
16 Gauge Solder, 3.3% Flux, .062" (1.57mm) dia.	KE1104-ND	11.43	10.29	9.14
18 Gauge Solder, 3.3% Flux, .050" (1.27mm) dia.	KE1115-ND *NEW!*	14.25	12.83	11.40
19 Gauge Solder, 3.3% Flux, .040" (1.02mm) dia.	KE1105-ND	12.10	10.89	9.68
21 Gauge Solder, 3.3% Flux, .031" (.79mm) dia.	KE1106-ND	12.63	11.37	10.10
23 Gauge Solder, 3.3% Flux, .025" (.63mm) dia.	KE1116-ND *NEW!*	18.25	16.43	14.60
25 Gauge Solder, 3.3% Flux, .020" (.51mm) dia.	KE1107-ND	17.65	15.89	14.12
RA Solder "44", 60/40, 1/2 Lb. (.23 kg) Spool				
21 Gauge Solder, 3.3% Flux, .031" (.79mm) dia.	KE1117-ND *NEW!*	8.88	7.99	7.10
23 Gauge Solder, 3.3% Flux, .025" (.63mm) dia.	KE1118-ND *NEW!*	9.38	8.44	7.50
RA Solder "44", 62/36/2 1 Lb. (.45 kg) Spool				
18 Gauge Solder, 3.3% Flux, .050" (1.27mm) dia.	KE1119-ND *NEW!*	31.33	28.20	25.06
23 Gauge Solder, 3.3% Flux, .025" (.63mm) dia.	KE1120-ND *NEW!*	33.50	30.15	26.80

"285" RMA Solders

Kester "285" has been developed for the use in the electronics industry where difficult assemblies are to be soldered, but process requirements stipulate use of a mildly activated rosin flux. Kester "285" mildly activated rosin flux is classified as Type ROL1 flux under IPC ANSI/J-STD-004 Standards. Green Label.

Description	Digi-Key Part No.	Price Each 1	5	10
RMA Solder "285", 63/37, 1 Lb. (.45 kg) Spool				
16 Gauge Solder, 2.2% Flux, .062" (1.57mm) dia.	KE1199-ND	12.38	11.14	9.90
21 Gauge Solder, 2.2% Flux, .031" (.79mm) dia.	KE1200-ND	12.62	11.36	10.10
23 Gauge Solder, 2.2% Flux, .025" (.63mm) dia.	KE1202-ND *NEW!*	18.50	16.65	14.80
25 Gauge Solder, 2.2% Flux, .020" (.51mm) dia.	KE1201-ND	17.66	15.90	14.13
28 Gauge Solder, 2.2% Flux, .015" (.38mm) dia.	KE1203-ND *NEW!*	31.75	28.58	25.40

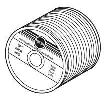
"245" No-Clean Solders



Kester "245" Low Residue Solder was developed to complement the newer generations of Low Residue Fluxes being used in the electronics industry. The use of "245" Low Residue Flux results in visually acceptable assemblies without the need for cleaning. Soldering quality and efficiency is comparable to that of a RMA flux. 1.1% flux standard, 2.2% and 3.3% for faster wetting action. Cream label.

Description	Digi-Key Part No.	Price Each 1	5	10
No Clean Solder "245", 63/37, 1 Lb. (.45 kg) Spool				
16 Gauge Solder, 1.1% Flux, .062" (1.57mm) dia.	KE1399-ND	12.38	11.14	9.90
18 Gauge Solder, 1.1% Flux, .050" (1.27mm) dia.	KE1402-ND *NEW!*	14.50	13.05	11.60
19 Gauge Solder, 1.1% Flux, .040" (1.02mm) dia.	KE1403-ND *NEW!*	15.50	13.95	12.40
21 Gauge Solder, 1.1% Flux, .031" (.79mm) dia.	KE1400-ND	12.62	11.36	10.10
23 Gauge Solder, 1.1% Flux, .025" (.63mm) dia.	KE1404-ND *NEW!*	18.50	16.65	14.80
25 Gauge Solder, 1.1% Flux, .020" (.51mm) dia.	KE1401-ND	17.66	15.90	14.13
28 Gauge Solder, 1.1% Flux, .015" (.38mm) dia.	KE1405-ND *NEW!*	31.75	28.58	25.40
No-Clean Solder "245", 63/37 1/2 Lb. (.23 kg) Spool				
25 Gauge Solder, 1.1% Flux, .020" (.51mm) dia.	KE1406-ND *NEW!*	16.38	14.74	13.10
28 Gauge Solder, 1.1% Flux, .015" (.38mm) dia.	KE1407-ND *NEW!*	18.08	16.27	14.46
No-Clean Solder "245", 63/37 1 Lb. (.45 kg) Spool				
25 Gauge Solder, 2.2% Flux, .030" (.76mm) dia.	KE1408-ND *NEW!*	16.75	15.08	13.40
28 Gauge Solder, 2.2% Flux, .020" (.51mm) dia.	KE1409-ND *NEW!*	24.75	22.28	19.80
No-Clean Solder "245", 63/37 1 Lb. (.45 kg) Spool				
25 Gauge Solder, 3.3% Flux, .020" (.51mm) dia.	KE1410-ND *NEW!*	16.75	15.08	13.40

"331" Organic Water Soluble Flux



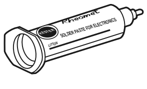
Kester "331" Organic Flux is a water soluble formula for use in flux-cored solder wire. Kester "331" flux is more effective than rosin fluxes in soldering difficult metals and allows a simple water wash for flux cleanup. The flux is more heat stable than most organic fluxes, resulting in minimal smoke and odor. The residue can be completely removed with a simple water rinse. Kester "331" is classified as type ORH1 per IPC ANSI/J-STD-004. Red Label.

Description	Digi-Key Part No.	Price Each 1	5	10
Water Soluble Solder "331", 63/37, 1 Lb. (.45 kg) Spool				
16 Gauge Solder, 3.3% Flux, .062" (1.57mm) dia.	KE1299-ND	12.38	11.14	9.90
21 Gauge Solder, 3.3% Flux, .031" (.79mm) dia.	KE1300-ND	12.62	11.36	10.10
23 Gauge Solder, 3.3% Flux, .025" (.63mm) dia.	KE1302-ND *NEW!*	18.50	16.65	14.80
25 Gauge Solder, 3.3% Flux, .020" (.51mm) dia.	KE1301-ND	17.66	15.90	14.13
28 Gauge Solder, 3.3% Flux, .015" (.38mm) dia.	KE1303-ND *NEW!*	31.75	28.58	25.40
Water Soluble Solder "331", 60/40, 1 Lb. (.45 kg) Spool				
16 Gauge Solder, 3.3% Flux, .062" (1.57mm) dia.	KE1304-ND *NEW!*	13.88	12.49	11.10
21 Gauge Solder, 3.3% Flux, .030 (.76mm) dia.	KE1305-ND *NEW!*	14.38	12.94	11.50

Specialty Solders and Accessories

Description	Digi-Key Part No.	Price Each 1	5	10
Solid Wire Solder (No Flux), 1 Lb. (.45 kg) Spool				
16 Gauge Solder 63/37, .062" (1.57mm) dia.	KE1603-ND	12.38	11.14	9.90
21 Gauge Solder 63/37, .031" (.79mm) dia.	KE1606-ND	12.63	11.37	10.10
21 Gauge Solder 60/40, .031" (.79mm) dia.	KE1604-ND	12.63	11.37	10.10
25 Gauge Solder 60/40, .020" (.51mm) dia.	KE1605-ND	17.65	15.89	14.12
Specialty Solders, 1 Lb. (.45 kg) Spool				
21 AWG Silver Solder, 62/36/2, RA Flux	KE1350-ND	17.25	15.53	13.80
21 AWG Low Temp Solder, 43/43/14, No-Clean	KE1353-ND	19.63	17.67	15.70
Specialty Solders, Lead-Free SAF-A-LLOY Solders, 1 Lb. (.45 kg) Spool				
21 AWG Lead-Free Solder, 97/.2/.8/2, RA Flux	KE1351-ND	19.88	17.89	15.90
21 AWG Lead Free Solder, 97/.2/.8/2, No-Clean	KE1352-ND	19.88	17.89	15.90
Bar Solder				
Oxide Free Solder (E-Bar), 63/37, 1 Lb. (.45 kg)	KE1600-ND	7.44	6.70	5.95
Oxide Free Solder (E-Bar), 60/40, 1 Lb. (.45 kg)	KE1601-ND	7.45	6.71	5.96
Premium Oxide Free Solder (Ultrapure), 63/37, 1.6 Lbs. (.73 kg)	KE1602-ND	13.67	12.30	10.94
Boxed Solder				
Pocket Pak Solder, No-Clean 21 Gauge 60/40	KE1801-ND	1.70	1.53	1.36
Elec. Silver Solder, RA Flux, 24 Gauge .35oz. (9.92g) Tube	KE1802-ND	.67	.61	.54

Solder Paste



Kester solder paste was developed for applications of surface mount PCB's and components. All pastes are SN63/PB37 with a mesh size of -325 to +500 (25 to 40 microns) and come in 35gm syringes for hand dispensing, 100gm syringe for hand or automated dispensing, 500gm jars for screen and stencil printing or 600gm cartridge that is Panasonic Panasert compatible. R276 No-Clean formulation provides optimal performance in all types of dispensing applications. Designed for reflow practices that don't require cleaning of the PCB. EP256 (Easy Profile) is an enhanced No-Clean solder paste designed for maximum robustness in reflow profiling and printing. It contains the widest possible reflow-processing window. R500 Water Soluble solder paste is aggressive enough to remove tenacious oxide layers and offers excellent wetting characteristics. R560 series Water Soluble solder is designed to reduce voiding in BGA solder connections and has an extremely stable stencil and tack life. **Pastes should be refrigerated to preserve their usable life.**

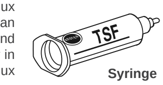
Note: To ensure customer satisfaction and product integrity, pastes must be shipped overnight or 2nd Day Air only.

Description	Digi-Key Part No.	Price Each 1	5	10
Plunger for 35gm Syringe	KE1505-ND	1.10	.99	.88
No-Clean Paste, 35gm Syringe (R276)	KE1507-ND *NEW!*	42.38	38.14	33.90
No-Clean Paste, 100gm Syringe (R276)	KE1508-ND *NEW!*	120.75	108.68	96.60
No-Clean Paste, 500gm Jar (EP256)	KE1509-ND *NEW!*	136.25	122.63	109.00
No-Clean Paste, 600gm Cartridge (EP256)	KE1510-ND *NEW!*	163.50	147.15	130.80
No-Clean Paste, 1000gm Cartridge (EP256)	KE1511-ND *NEW!*	272.50	245.25	218.00
Water Soluble Paste, 35gm Syringe (R500)	KE1512-ND *NEW!*	42.38	38.14	33.90
Water Soluble Paste, 100gm Syringe (R500)	KE1513-ND *NEW!*	103.50	93.15	82.80
Water Soluble Paste, 500gm Jar (R560)	KE1514-ND *NEW!*	136.25	122.63	109.00
Water Soluble Paste, 600gm Cartridge (R560)	KE1515-ND *NEW!*	163.50	147.15	130.80
Water Soluble Paste, 1000gm Cartridge (R560)	KE1516-ND *NEW!*	272.50	245.25	218.00

Paste Flux and Liquid Flux Pens

Flux - Pen

Rosin Paste



Syringe

Kester flux pens use a spring-loaded tip to dispense just the right amount of flux while preventing the flux inside from drying out. Tacky Solder Flux is a No-Clean paste flux that maintains its characteristics for up to 8 hours after dispensing and can be used in a wide range of temperature and humidity conditions. Can reflow in both air and nitrogen environments. SP244 is a mildly activated rosin paste flux designed to be used as a No-Clean formula for rework applications.

Description	Digi-Key Part No.	Price Each 1	5	10
SP44 Activated Rosin Paste Flux, 2 oz (56.70g) Can	KE1700-ND	1.28	1.15	1.02
SP44 Activated Rosin Paste Flux, 1 Lb. (.45 kg) Can	KE1701-ND	6.72	6.05	5.38
Flux Pen - Formula 186 RMA	KE1803-ND	3.70	3.33	2.96
Flux Pen - Formula 951 No-Clean	KE1804-ND	3.69	3.32	2.95
Flux Pen 2331-ZX Water-Soluble	KE1808-ND *NEW!*	3.70	3.33	2.96
Tacky Solder Flux No-Clean, 10gm Syringe	KE1806-ND *NEW!*	18.50	16.65	14.80
Tacky Solder Flux No-Clean, 30gm Syringe	KE1807-ND *NEW!*	55.50	49.95	44.40

EASY BRAID CO. Desoldering Braid

25% cleaner than most major brands (leaving less residue on the desoldered connection). Meets the requirements of Mil-F-14256F Type R, Mil STD. 2000 and in compliance with DOD Standard 1686A. Also meets the requirements of Bellcore spec. TR-T5Y-000078 and Ipc Test Method III. Easy Braid numbers ending in AS are antistatic bobbins.

Width Inch (mm)	Length Ft. (Meter)	Label Color	Digi-Key Part No.	Price Each 1	25	Easy Braid Part No.
Quick Braid						
.025 (.64)	5 (1.52)	Silver	EB1020-ND	1.96	1.68	Q-A-5
.050 (1.27)	5 (1.52)	Gold	EB1022-ND	1.96	1.68	Q-B-5
.075 (1.91)	5 (1.52)	Green	EB1024-ND	2.03	1.73	Q-C-5
.100 (2.54)	5 (1.52)	Blue	EB1026-ND	2.25	1.92	Q-D-5
.125 (3.18)	5 (1.52)	Brown	EB1028-ND	2.39	2.04	Q-E-5
.025 (.64)	5 (1.52)	Silver	EB1084-ND *NEW!*	2.17	1.85	Q-A-5AS
.050 (1.27)	5 (1.52)	Gold	EB1087-ND *NEW!*	2.17	1.85	Q-B-5AS
.075 (1.91)	5 (1.52)	Green	EB1090-ND *NEW!*	2.21	1.89	Q-C-5AS
.100 (2.54)	5 (1.52)	Blue	EB1093-ND *NEW!*	2.41	2.06	Q-D-5AS
.125 (3.18)	5 (1.52)	Brown	EB1096-ND *NEW!*	2.61	2.23	Q-E-5AS
.025 (.64)	10 (3.04)	Silver	EB1085-ND *NEW!*	3.37	2.87	Q-A-10
.050 (1.27)	10 (3.04)	Gold	EB1088-ND *NEW!*	3.37	2.87	Q-B-10
.075 (1.91)	10 (3.04)	Green	EB1091-ND *NEW!*	3.46	2.95	Q-C-10
.100 (2.54)	10 (3.04)	Blue	EB1094-ND *NEW!*	3.82	3.25	Q-D-10
.125 (3.18)	10 (3.04)	Brown	EB1097-ND *NEW!*	4.06	3.46	Q-E-10
.025 (.64)	25 (7.62)	Silver	EB1021-ND	8.75	7.45	Q-A-25
.050 (1.27)	25 (7.62)	Gold	EB1023-ND	8.75	7.45	Q-B-25
.075 (1.91)	25 (7.62)	Green	EB1025-ND	9.00	7.66	Q-C-25
.100 (2.54)	25 (7.62)	Blue	EB1027-ND	10.65	9.07	Q-D-25
.125 (3.18)	25 (7.62)	Brown	EB1029-ND	10.87	9.26	Q-E-25
.025 (.64)	100 (30.48)	Silver	EB1086-ND *NEW!*	31.14	26.51	Q-A-100
.050 (1.27)	100 (30.48)	Gold	EB1089-ND *NEW!*	31.14	26.51	Q-B-100
.075 (1.91)	100 (30.48)	Green	EB1092-ND *NEW!*	32.13	27.35	Q-C-100
.100 (2.54)	100 (30.48)	Blue	EB1095-ND *NEW!*	35.63	30.33	Q-D-100
.125 (3.18)	100 (30.48)	Brown	EB1098-ND *NEW!*	40.14	34.17	Q-E-100
No-Clean						
.025 (.64)	5 (1.52)	Silver	EB1050-ND	2.21	1.89	OS-A-5
.050 (1.27)	5 (1.52)	Gold	EB1052-ND	2.21	1.89	OS-B-5
.075 (1.91)	5 (1.52)	Green	EB1054-ND	2.28	1.94	OS-D-5
.100 (2.54)	5 (1.52)	Blue	EB1056-ND	2.63	2.25	OS-D-5
.125 (3.18)	5 (1.52)	Brown	EB1058-ND	3.04	2.59	OS-E-5
.025 (.64)	25 (7.62)	Silver	EB1051-ND	10.09	8.59	OS-A-25
.050 (1.27)	25 (7.62)	Gold	EB1053-ND	10.09	8.59	OS-B-25
.075 (1.91)	25 (7.62)	Green	EB1055-ND	10.40	8.86	OS-C-25
.100 (2.54)	25 (7.62)	Blue	EB1057-ND	11.65	9.92	OS-D-25
.125 (7.62)	25 (7.62)	Brown	EB1059-ND	13.35	11.37	OS-E-25
One Step (RMA No-Clean)						
.025 (.64)	5 (1.52)	Silver	EB1099-ND *NEW!*	2.37	2.02	OS-A-5AS
.050 (1.27)	5 (1.52)	Gold	EB1102-ND *NEW!*	2.37	2.02	OS-B-5AS
.075 (1.91)	5 (1.52)	Green	EB1105-ND *NEW!*	2.48	2.11	OS-C-5AS
.100 (2.54)	5 (1.52)	Blue	EB1108-ND *NEW!*	2.79	2.38	OS-D-5AS
.125 (3.18)	5 (1.52)	Brown	EB1111-ND *NEW!*	3.26	2.78	OS-E-5AS
.025 (.64)	10 (3.04)	Silver	EB1100-ND *NEW!*	3.64	3.10	OS-A-10
.050 (1.27)	10 (3.04)	Gold	EB1103-ND *NEW!*	3.64	3.10	OS-B-10
.075 (1.91)	10 (3.04)	Green	EB1106-ND *NEW!*	3.75	3.20	OS-C-10
.100 (2.54)	10 (3.04)	Blue	EB1109-ND *NEW!*	4.20	3.58	OS-D-10
.125 (3.18)	10 (3.04)	Brown	EB1112-ND *NEW!*	4.64	3.96	OS-E-10
One Step (RMA No-Clean)						
.025 (.64)	100 (30.48)	Silver	EB1101-ND *NEW!*	38.35	32.65	OS-A-100
.050 (1.27)	100 (30.48)	Gold	EB1104-ND *NEW!*	38.35	32.65	OS-B-100
.075 (1.91)	100 (30.48)	Green	EB1107-ND *NEW!*	39.58	33.69	OS-C-100
.100 (2.54)	100 (30.48)	Blue	EB1110-ND *NEW!*	44.27	37.68	OS-D-100
.125 (3.18)	100 (30.48)	Brown	EB1113-ND *NEW!*	51.03	43.44	OS-E-100
One Step 2 (Low Residue Synthetic Rosin No-Clean)						
.025 (.64)	5 (1.52)	Silver	EB1114-ND *NEW!*	3.15	2.68	OS2-A-5
.025 (.64)	5 (1.52)	Silver	EB1115-ND *NEW!*	3.39	2.89	OS2-A-5AS
.050 (1.27)	5 (1.52)	Gold	EB1119-ND *NEW!*	3.15	2.68	OS2-B-5
.050 (1.27)	5 (1.52)	Gold	EB1120-ND *NEW!*	3.39	2.89	OS2-B-5AS
.075 (1.91)	5 (1.52)	Green	EB1124-ND *NEW!*	3.26	2.78	OS2-C-5
.075 (1.91)	5 (1.52)	Green	EB1125-ND *NEW!*	3.53	3.01	OS2-C-5AS
.100 (2.54)	5 (1.52)	Blue	EB1129-ND *NEW!*	3.75	3.20	OS2-D-5
.100 (2.54)	5 (1.52)	Blue	EB1130-ND *NEW!*	4.00	3.41	OS2-D-5AS
.125 (3.18)	5 (1.52)	Brown	EB1134-ND *NEW!*	4.33	3.69	OS2-E-5
.125 (3.18)	5 (1.52)	Brown	EB1135-ND *NEW!*	4.67	3.98	OS2-E-5AS
.025 (.64)	10 (3.04)	Silver	EB1116-ND *NEW!*	5.20	4.43	OS2-A-10
.050 (1.27)	10 (3.04)	Gold	EB1121-ND *NEW!*	5.20	4.43	OS2-B-10
.075 (1.91)	10 (3.04)	Green	EB1126-ND *NEW!*	5.38	4.58	OS2-C-10
.100 (2.54)	10 (3.04)	Blue	EB1131-ND *NEW!*	6.01	5.12	OS2-D-10
.125 (3.18)	10 (3.04)	Brown	EB1136-ND *NEW!*	6.65	5.67	OS2-E-10
.025 (.64)	25 (7.62)	Silver	EB1117-ND *NEW!*	14.40	12.26	OS2-A-25
.050 (1.27)	25 (7.62)	Gold	EB1122-ND *NEW!*	14.40	12.26	OS2-B-25
.075 (1.91)	25 (7.62)	Green	EB1127-ND *NEW!*	14.87	12.66	OS2-C-25
.100 (2.54)	25 (7.62)	Blue	EB1132-ND *NEW!*	16.65	14.18	OS2-D-25
.125 (3.18)	25 (7.62)	Brown	EB1137-ND *NEW!*	19.07	16.23	OS2-E-25
.025 (.64)	100 (30.48)	Silver	EB1118-ND *NEW!*	54.79	46.63	OS2-A-100
.050 (1.27)	100 (30.48)	Gold	EB1123-ND *NEW!*	54.79	46.63	OS2-B-100
.075 (1.91)	100 (30.48)	Green	EB1128-ND *NEW!*	56.55	48.13	OS2-C-100
.100 (2.54)	100 (30.48)	Blue	EB1133-ND *NEW!*	63.25	53.83	OS2-D-100
.125 (3.18)	100 (30.48)	Brown	EB1138-ND *NEW!*	72.91	62.06	OS2-E-100
SEA BRAID (unfluxed)						
.025 (.64)	5 (1.52)	Silver	EB1170-ND *NEW!*	2.17	1.85	S-A-5AS
.050 (1.27)	5 (1.52)	Gold	EB1173-ND *NEW!*	2.17	1.85	S-B-5AS
.075 (1.91)	5 (1.52)	Green	EB1176-ND *NEW!*	2.21	1.89	S-C-5AS
.100 (2.54)	5 (1.52)	Blue	EB1179-ND *NEW!*	2.41	2.06	S-D-5AS
.125 (3.18)	5 (1.52)	Brown	EB1182-ND *NEW!*	2.61	2.23	S-E-5AS
.025 (.64)	10 (3.04)	Silver	EB1171-ND *NEW!*	3.37	2.87	S-A-10
.050 (1.27)	10 (3.04)	Gold	EB1174-ND *NEW!*	3.37	2.87	S-B-10
.075 (1.91)	10 (3.04)	Green	EB1177-ND *NEW!*	3.46	2.95	S-C-10
.100 (2.54)	10 (3.04)	Blue	EB1180-ND *NEW!*	3.82	3.25	S-D-10
.125 (3.18)	10 (3.04)	Brown	EB1183-ND *NEW!*	4.06	3.46	S-E-10
.025 (.64)	100 (30.48)	Silver	EB1172-ND *NEW!*	31.14	26.51	S-A-100
.050 (1.27)	100 (30.48)	Gold	EB1175-ND *NEW!*	31.14	26.51	S-B-100
.075 (1.91)	100 (30.48)	Green	EB1178-ND *NEW!*	32.13	27.35	S-C-100
.100 (2.54)	100 (30.48)	Blue	EB1181-ND *NEW!*	35.63	30.33	S-D-100
.125 (3.18)	100 (30.48)	Brown	EB1184-ND *NEW!*	40.14	34.17	S-E-100

63/37 Eutectic Solder

EasyBraid's No-Clean solder has excellent wetting action and is intended for applications where residue removal is not required or recommended. Available in .020" (.51mm) and .031" (.79mm) diameters and meets Bellcore Issue 3 TR-NWT-000078, IPC-SF-818 Type LR 3CN and IPC-SF-818 Type H3C specifications. Sea Step solder is water washable solder where flux residue becomes soluble in water. Available in regular bobbin or anti-static type bobbin.

Diameter Inch (mm)	Length Feet (Meter)	Digi-Key Part No.	Price Each 1	25	50	EasyBraid Part No.
No-Clean Solder - 2.2% Flux						
.020 (.51)	25 (7.62)	EB1060-ND	1.96	1.68	1.51	OS-S020
.020 (.51)	25 (7.62) antistatic	EB1061-ND	2.23	1.90	1.71	OS-S020AS
.031 (.79)	20 (6.10)	EB1062-ND	1.96	1.68	1.51	OS-S031
.031 (.79)	20 (6.10) antistatic	EB1063-ND	2.23	1.90	1.71	OS-S031AS
Sea Step Solder - 2.2% Flux						
.020 (.51)	25 (7.62)	EB1064-ND	1.96	1.68	1.51	SS-S020
.020 (.51)	25 (7.62) antistatic	EB1065-ND	2.23	1.90	1.71	SS-S020AS
.031 (.79)	20 (6.10)	EB1066-ND	1.96	1.68	1.51	SS-S031
.031 (.79)	20 (6.10) antistatic	EB1067-ND	2.23	1.90	1.71	SS-S031AS

Solder Sponges

Digi-Key Part No.	Size Inch (mm)
EB1001-ND	1.2 x 2.7 (30.48 x 68.58)
EB1002-ND	1.55 x 2.55 (39.37 x 64.77)
EB1003-ND	2 x 2.6 (50.80 x 66.04)
EB1004-ND	2.2 x 3.5 (55.88 x 88.90)
EB1005-ND	2.6 x 2.6 (66.04 x 66.04)
EB1006-ND	3.2 x 1.9 (81.28 x 48.26)
EB1007-ND	3.4 x 4.4 (86.36 x 111.76)
EB1008-ND	4 x 1.7 (101.60 x 43.18)
EB1009-ND	8.5 x 17 (215.90 x 431.80)
EB1010-ND	2.4 x 3.2 (60.96 x 81.28)

Replacements	Digi-Key Part No.	Price Each 1	25	50
OK Ind. 45803S	EB1001-ND	.71	.61	.55
Ungar 9901	EB1002-ND	.73	.63	.57
Weller MP	EB1003-ND	.81	.69	.62
Weller DS-100; EC-1000; EC-2000	EB1004-ND	.98	.84	.75
Weller WTCP; EC-3000; EC-4000; TC205	EB1005-ND	1.00	.85	.77
Metcal; Plato CS-46	EB1006-ND	.90	.77	.70
Hexacon 810; 812; 890; 891; 892	EB1007-ND	1.58	1.35	1.21
Hakko 926; Plato CS-43	EB1008-ND	.92	.79	.71
Sponge Sheet	EB1009-ND	16.66	14.18	12.77
EDSYN Models	EB1010-ND	.98	.84	.75

NEW! Swabs

Easybraid's swabs are designed for the electronics industry and are constructed for low contamination and lint levels. Plastic shaft models are made of high strength polypropylene while anti-static versions are made of static free polyolefin. Can be utilized with most electronic cleaning solvents.

Fig.	Package Amount	Shaft Description	Tip Description	Digi-Key Part No.	Price Each 1	25	50	Easy Braid Part No.
1	10 Pieces 100 Pieces	2" Solid Shaft	Tip 3/16" Diameter x 19/32" Length Foam Tip	EB1140-ND EB1155-ND	4.51 32.21	3.84 27.42	3.46 24.68	SW2PF-10 SW2PF-100
2	10 Pieces 100 Pieces	3" Solid Shaft	Tip 3/16" Diameter x 11/16" Length Foam Tip	EB1141-ND EB1156-ND	2.63 18.80	2.25 16.00	2.02 14.40	SW3PF-10 SW3PF-100
3	10 Pieces 100 Pieces	3" Wood Shaft	Tip 3/16" Diameter x 11/16" Length Foam Tip	EB1142-ND EB1157-ND	2.63 18.80	2.25 16.00	2.02 14.40	SW3WF-10 SW3WF-100
4	10 Pieces 100 Pieces	5" Solid Shaft	9/16" Diameter x 15/16" Length Rectangular Foam Tip	EB1143-ND EB1158-ND	5.11 36.59	4.36 31.15	3.92 28.03	SW5PF-10 SW5PF-100
5	10 Pieces 100 Pieces	5" Self-Saturating Foam Swab	91% Isoprophyl Alcohol 9% Water Foam Tip	EB1144-ND EB1159-ND	7.66 54.74	6.52 46.59	5.87 41.93	SW5PFA-10 SW5PFA-100
6	10 Pieces 100 Pieces	5" Static Dissipative Solid Shaft	Tip 3/16" Diameter x 11/16" Length Static Dissipative Foam Tip	EB1145-ND EB1160-ND	6.85 49.03	5.84 41.73	5.25 37.56	SW5PFAS-10 SW5PFAS-100
7	10 Pieces 100 Pieces	5" Solid Shaft	29/32" Width x 1 1/8" Length Round Foam Tip	EB1146-ND EB1161-ND	5.11 36.59	4.36 31.15	3.92 28.03	SW5PFR-10 SW5PFR-100
8	10 Pieces 100 Pieces	6" Blue Solid Shaft	3/8" Diameter x 1" Length Foam Tip	EB1147-ND EB1162-ND	5.36 38.29	4.56 32.59	4.11 29.33	SW6BPF-10 SW6BPF-100
9	10 Pieces 100 Pieces	6" Solid Shaft	3/16" Diameter x 15/16" Length Foam Over Cotton Tip	EB1148-ND EB1163-ND	3.39 24.18	2.89 20.58	2.60 18.52	SW6PF-10 SW6PF-100
10	10 Pieces 100 Pieces	6" Static Dissipative Solid Shaft	3/16" Diameter x 11/16 Length Static Dissipative Foam Tip	EB1149-ND EB1164-ND	6.76 48.33	5.76 41.14	5.19 37.03	SW6PFAS-10 SW6PFAS-100
11	10 Pieces 100 Pieces	6" Solid Shaft	3/8" Diameter x 1" Length Large Foam Tip	EB1150-ND EB1165-ND	3.62 25.85	3.08 22.01	2.78 19.81	SW6PFG-10 SW6PFG-100
12	10 Pieces 100 Pieces	6" Wood Shaft	3/16" Diameter x 5/8" Length Cotton Tip	EB1151-ND EB1166-ND	.54 5.40	.46 4.60	.42 4.14	SW6WC-10 SW6WC-100
13	10 Pieces 100 Pieces	6" Wood Shaft	3/8" Diameter x 13/16" Length Foam Tip	EB1152-ND EB1167-ND	3.39 24.18	2.89 20.58	2.60 18.52	SW6WF-10 SW6WF-100
14	10 Pieces 100 Pieces	6" Static Dissipative Wood Shaft	3/16" Diameter x 11/16" Length Static Dissipative Foam Tip	EB1153-ND EB1168-ND	4.60 32.91	3.92 28.01	3.53 25.21	SW6WFAS-10 SW6WFAS-100
15	10 Pieces 100 Pieces	6" Static Dissipative Wood Shaft	3/8" Diameter x 13/16" Length Static Dissipative Foam Over Cotton Tip	EB1154-ND EB1169-ND	4.60 32.91	3.92 28.01	3.53 25.21	SW6WFCAS-10 SW6WFCAS-100

Fig. 1

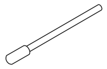


Fig. 2

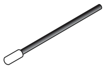


Fig. 3

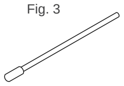


Fig. 4

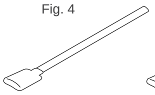


Fig. 5

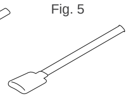


Fig. 6

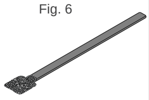


Fig. 7

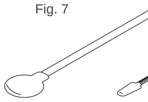


Fig. 8

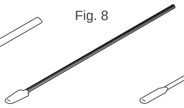


Fig. 9

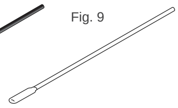


Fig. 10

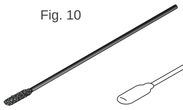


Fig. 11

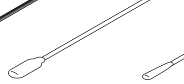


Fig. 12

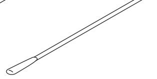


Fig. 13

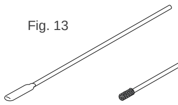


Fig. 14

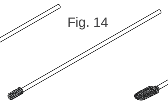
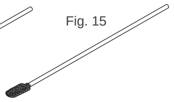
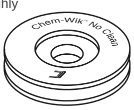


Fig. 15



Chemtronics® Desoldering Braid



Pure copper braid construction coated with high purity rosin, quickly and thoroughly removes solder. Use Chem-Wik or Soder-Wick to remove components, SMDs, ICs, blobs and clean up poor solder connections. **Meets or exceeds these requirements:** • Mil-F-14256F Type R • NASA NHB 5300.4(3A) Reliability and Quality Assurance publication • NASA SP-5002 Soldering Electrical Connections • NASA NPC200-4 Quality publication • DOD Standard 1686B and DOD Handbook 263 • Mil-B-81705C Static Decay Rate Provision • Mil-Std-2000A

Width Inch (mm)	Length Feet (Meter)	Label Color	Digi-Key Part No.	Price Each 1	25	100	Chemtronics Part No.
Chem-Wik® Desoldering Braid							
.035 (.89)	5 (1.52)	White	CW2-5-ND	2.38	2.15	1.73	2-5SD
.050 (1.27)	5 (1.52)	Yellow	CW5-5-ND	2.38	2.15	1.73	5-5SD
.025 (.64)	25 (7.62)	White	CW2-25-ND	10.40	9.36	7.54	2-25L
.050 (1.27)	25 (7.62)	Yellow	CW5-25-ND	10.40	9.36	7.54	5-25L
.075 (1.91)	25 (7.62)	Green	CW7-25-ND	10.82	9.74	7.85	7-25L
.100 (2.54)	25 (7.62)	Blue	CW10-25-ND	11.54	10.39	8.37	10-25L
.030 (.76)	100 (30.48)	Gray	2-100L-ND	41.62	37.46	30.18	2-100L
.050 (1.27)	100 (30.48)	Yellow	5-100L-ND	41.62	37.46	30.18	5-100L
.075 (1.91)	100 (30.48)	Green	7-100L-ND	43.18	38.87	31.31	7-100L
.100 (2.54)	100 (30.48)	Blue	10-100L-ND	46.30	41.67	33.57	10-100L
Soder-Wick® Desoldering Braid							
.030 (.76)	5 (1.52)	White	80-1-5-ND	2.50	2.25	1.82	80-1-5
.060 (1.52)	5 (1.52)	Yellow	80-2-5-ND	2.50	2.25	1.82	80-2-5
.080 (2.03)	5 (1.52)	Green	80-3-5-ND	2.60	2.34	1.89	80-3-5
.110 (2.79)	5 (1.52)	Blue	80-4-5-ND	2.92	2.63	2.12	80-4-5
.145 (3.68)	5 (1.52)	Brown	80-5-5-ND	3.26	2.94	2.37	80-5-5
.210 (5.33)	5 (1.52)	Red	80-6-5-ND	3.56	3.21	2.59	80-6-5
.030 (.76)	25 (7.62)	White	50-1-25-ND	11.90	10.71	8.63	50-1-25
.060 (1.52)	25 (7.62)	Yellow	50-2-25-ND	11.90	10.71	8.63	50-2-25
.080 (2.03)	25 (7.62)	Green	50-3-25-ND	12.22	11.00	8.86	50-3-25
.110 (2.79)	25 (7.62)	Blue	50-4-25-ND	13.52	12.17	9.81	50-4-25
.145 (3.68)	25 (7.62)	Brown	50-5-25-ND	15.14	13.63	10.98	50-5-25
.210 (5.33)	25 (7.62)	Red	50-6-25-ND	16.10	14.49	11.68	50-6-25
.060 (1.52)	100 (30.48)	Yellow	50-2-100-ND	46.18	41.57	33.49	50-2-100
.080 (2.03)	100 (30.48)	Green	50-3-100-ND	48.12	43.31	34.89	50-3-100
.110 (2.79)	100 (30.48)	Blue	50-4-100-ND	53.10	47.79	38.50	50-4-100
No-Clean Soder-Wick® Desoldering Braid							
.030 (.76)	5 (1.52)	White	60-1-5-ND	2.92	2.63	2.12	60-1-5
.060 (1.52)	5 (1.52)	Yellow	60-2-5-ND	2.92	2.63	2.12	60-2-5
.080 (2.03)	5 (1.52)	Green	60-3-5-ND	3.02	2.72	2.19	60-3-5
.110 (2.79)	5 (1.52)	Blue	60-4-5-ND	3.46	3.12	2.51	60-4-5
.145 (3.68)	5 (1.52)	Brown	60-5-5-ND	3.80	3.42	2.76	60-5-5
.210 (5.33)	5 (1.52)	Red	60-6-5-ND	4.12	3.71	2.99	60-6-5
.030 (.76)	10 (3.04)	White	60-1-10-ND	5.30	4.77	3.85	60-1-10
.060 (1.52)	10 (3.04)	Yellow	60-2-10-ND	5.30	4.77	3.85	60-2-10
.080 (2.03)	10 (3.04)	Green	60-3-10-ND	5.62	5.06	4.08	60-3-10
.110 (2.79)	10 (3.04)	Blue	60-4-10-ND	6.28	5.66	4.56	60-4-10
.145 (3.68)	10 (3.04)	Brown	60-5-10-ND	6.92	6.23	5.02	60-5-10

Ball Grid Array (BGA) Desoldering Braid

60-BGA-5-ND	Soder-Wick BGA, No-Clean, 5 Feet (1.52 Meter)	$3.87
80-BGA-5-ND	Soder-Wick BGA, Rosin, 5 Feet (1.52 Meter)	$3.50

Swabs and Applicators

For general purpose cleaning of magnetic heads, video heads and optical pickups.

Fig. 1 **Chamois Tip, ABS Handle**

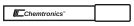


Fig. 2 **Cottontip, Wood Handle**

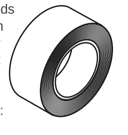
Fig. 3 **Cottontip, Double Ended**

Fig.	Qty. (Pcs)	Length Inch (mm)	Digi-Key Part No.	Price Each 1	25	100	Chemtronics Part No.
1	15	3.25 (82.55)	CC15-ND	9.79	8.85	8.26	CC15
1	50	3.25 (82.55)	CC50-ND	28.72	25.95	24.22	CC50
2	100	6.00 (152.40)	CT100-ND	2.84	2.57	2.40	CT100
3	100	6.00 (152.40)	CT200-ND	3.04	2.75	2.57	CT200
3	1000	6.00 (152.40)	CT2000-ND	25.08	22.67	21.16	CT2000
—	25	—	CS25-ND	23.19	20.96	19.56	CS25

Presaturated Wipes

Description	Digi-Key Part No.	Price Each 1	25	Chemtronics Part No.
Optic Prep High Quality Optical Cleaning and Polishing Pads (50 Pcs)	CP410-ND	16.80	15.18	CP410
Chempad General Purpose, Lint-free, Nonabrasive Cleaning Pads (50 Pcs)	CP400-ND	18.49	16.71	CP400
Screen-Prep Wet-and-Dry Wipes for Monitor Screens (25 Twin Packs)	CSP20-ND	19.82	17.91	CSP20
Gold Guard Pads for Cleaning Gold, Tin and Silver Contacts (50 Pcs)	CP420E-ND	32.42	29.30	CP420E

3M Scotch™ No. 1285 Plating Tapes



3M's family of Scotch™ brand Plating Tapes is the answer to your PWB industry needs • Scotch™ brand Plating Tapes each have a specially designed adhesive formulation for specific plating tape requirements • All plating tapes have a 1 mil polyester backing that resists plating and etching solutions to help you reduce your board reject rate. Scotch™ brand 1285 are silicone-free plating tapes designed to eliminate the clean-up associated with silicone adhesive residue. 1285 is recommended for all types of PWBs • Color: Blue • Adhesive Type: Rubber • Adhesive Thickness: 3 mils (.08mm) • Adhesive Strength: 25 oz./in. width (27N/100mm)

3M12851-ND	Plating Tape, 1.0" (25.40mm) wide	$27.85

Scotch™ No. 854 Polyester Tape

An opaque, cream-colored polyester tape with excellent chemical resistance in precious metal plating, especially gold. **General Information:** • Polyester film backing imparts excellent chemical and thermal stability • Remains flexible at -60°F (-50°C) and retains dimensional stability up to 300°F (149°C) • **Construction:** • Backing: Polyester • Adhesive: Rubber • Color: Cream • Standard Roll Length: 72 yds. (66m) • Elongation at Break: 123% • Backing Thickness: 1 mil (.02mm) • Total Tape Thickness: 2.7 mils (.065mm) • Water Vapor Transmission Rate: 1.6 gms H_20/100sq. in./24 hrs (24.8 g/m²/24hrs) • Resists many solvents found in photographic, electroplating and chemical milling processes. Hot caustics will weaken the backing after prolonged immersion. **Application Ideas:** • Excellent chemical resistance in precious metal plating, especially gold. • Excellent results in sodium hydroxide etching of aluminum • Chemical milling • General splicing

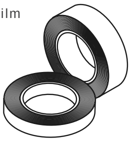
3M85402-ND	Polyester Tape, 2" (50.8mm) wide	$30.25
3M85401-ND	Polyester Tape, 1" (25.4mm) wide	$15.11

Scotch™ No. 5414 Water Soluble Tape

Get reliable protection for your circuit boards during wave soldering with this water soluble tape • Saves time and clean-up costs by completely dissolving during in-line, aqueous cleaning operations • Biodegradable, non-toxic tape has a neutral pH and leaves no residue • Eliminates static and labor usually associated with tape removal. • Packaged in a moisture impervious bag which ensures long term storage stability under extreme humidity **Construction:** • Backing: PVA film • Adhesive: Water soluble synthetic adhesive • Liner: Kraft paper • Color: Hazy, transparent • Standard Roll Length: 36 yds. (33m) • Tensile Strength: 6.2 lbs./in. width (115.6 N/100mm) • Total Thickness: 2.5 mils (.06mm) • Dissolution Time: 40 seconds at 140° with agitation

3M541434-ND	0.75" (19.05mm) wide	$34.32
3M541412-ND	0.5" (12.70mm) wide	$22.86

Scotch™ No. 5413 Polyimide Film Tape



Increase your productivity with this superior performing Kapton™ polyimide film tape. • Chemical and radiation resistant polyimide film is dimensionally stable at high temperatures, and flame retardant. • Strong, heat resistant silicone adhesive resists adhesive transfer at elevated temperatures, providing higher productivity. • Rated for continuous use at 500°F and intermittent use at 700°F, Scotch™ brand No. 5413 provides an excellent mask for high temperature powder coating. • Color: Amber • Roll Length: 36 yds. (33m). • Total Tape Thickness: 2.7 mils (.07mm) • Temperature Use Range: -100°F to 500°F (-73°C to 270°C)

3M541334-ND	0.75" (19.05mm) wide	$34.38
3M541312-ND	0.5" (12.70mm) wide	$22.92

Scotch™ No. 5419 Low Static Polyimide Film Tape

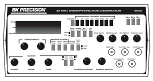
A translucent, polyimide film-backed silicone adhesive tape with unique and extremely low electrostatic discharge properties. For gold tab protection during wave soldering of printed circuit boards. **General Information:** • 5419 tape employs a proprietary technology that results in extremely low electrostatic discharge at unwind and removal from the PWB • Polyimide film does not soften at elevated temperatures, thus, the film provides and excellent release surface at elevated temperatures. **Construction:** • Backing: Polyimide • Adhesive: Silicone • Color: Gold • Standard Roll Length: 36 yds (33m) • Tensile Strength: 33 lbs./in. width (578N/100mm) • Total Tape Thickness: 2.7 mils (.07mm) • Temperature Use Range: -100°F to +500°F (-73°C to +260°C) • Insulation Resistance: >1*10⁶ ohms **Applications:** Mask for printed circuit boards during wave solder or solder dip process; used as release surface in fabrication of parts cured at elevated temperatures

3M591934-ND	0.75" (19.05mm) wide	$34.76
3M591912-ND	0.5" (12.70mm) wide	$23.21

Chemtronics® Prototyping & Rework Dispensing Pens

Description	Digi-Key Part No.	Price Each 1	25	Chemtronics Part No.
Conformal Coating Removal Pen for PCB's (.32 Oz.)	CW3500-ND	9.61	8.69	CW3500
Flux Remover Pen for No-Clean Fluxes (.32 Oz.)	CW9100-ND	7.45	6.74	CW9100
Flux Remover Pen for Rosin Based Fluxes (.32 Oz.)	CW9200-ND	7.14	6.45	CW9200
Conductive Trace Pen, Std. Tip for Repairing PCB's	CW2200STP-ND	15.26	13.79	CW2200STP
Conductive Trace Pen, Micro Tip for Repairing PCB's	CW2200MTP-ND	15.26	13.79	CW2200MTP
Conductive Trace Pen for Flexible Circuit Traces	CW2900-ND	20.20	18.26	CW2900
Overcoat Pen for Protecting Conductive Trace on PCB	CW3300G-ND	12.33	11.15	CW3300G
Conductive Silver Grease for Relays and Connectors	CW7100-ND	15.72	14.21	CW7100
Conductive Rubber Keypad Repair Kit	CW2605-ND	10.81	9.77	CW2605

Function Generators



FEATURES AND SPECIFICATIONS: Waveforms: Sine, Square, Triangle, ±Pulse, ±Ramp. Variable DC Offset and Duty Cycle. **Sweep LIN & LOG:** 100:1. **Frequency Counter Accuracy:** Time Base ±1 count. ***General:* Power:** 120-230VAC +10% 50/60Hz Internal jumper selectable. ***Accessories:*** BNC to Alligator Cable, Instruction Manuel. **2 Year Warranty.**

Model BK4001: Digital Display. 6 Ranges from 0.5Hz to 3MHz Range. Coarse and Fine Tuning. **Dimensions:** 10.83 x 3.54 x 11.81".

Model BK4010A: 4 Digit LED Digital Display. 7 Ranges from 0.2Hz to 2MHz Range. Coarse Tuning. **Dimensions:** 10.51 x 4.49 x 12.24".

Model BK4011A: Function Generator. 4 Digit LED Digital Display (4 digit Display Resolution). 7 Ranges from 0.5Hz to 5MHz Range. Variable Duty Cycle and DC Offset. Coarse and Fine Tuning. **Dimensions:** 10.51 x 4.49 x 12.24".

Model BK4017A: 5 Digit LED Digital Display (5 digit Display Resolution). 8 Ranges from 0.1Hz to 10MHz Range. Coarse and Fine Tuning. Extended Sweep/Modulation Input: 0-10V. **Dimensions:** 4.49 x 11.73 x 10.39".

Model BK4040A: Sweep/Function Generator with Frequency Counter. 5 Digit LED Display (5 digit Display Resolution). 8 Ranges from 0.2Hz to 20MHz Range. AM and FM Modulation. Burst Operation. 30MHz External Frequency Counter. Selectable Linear or Log Sweep. Extended Sweep/Modulation Input: 0-10V. Coarse and Fine Tuning. **Dimensions:** 10.51 x 4.49 x 12.24".

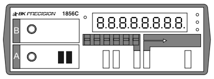
BK4001-ND	3MHz Function Generator	**$179.00**
BK4010A-ND	2MHz Function Generator	**$250.00**
BK4011A-ND	5MHz Function Generator with Digital Display	**$315.00**
BK4017A-ND	10MHz Sweep/Function Generator with Digital Display	**$398.97**
BK4040A-ND	20MHz Sweep/Function Generator with Frequency Counter and Digital Display	**$545.00**
LC-40-ND	*NEW!* Carrying Case (1 Year Warranty) (For all models except BK4001)	**$84.00**

NEW! Function and Arbitrary Waveform Generator

Model BK4070A: Function and Arbitrary Waveform Generator. ***Operating Modes:* Basic Sinewave (CW) Mode:** 0Hz to 21.5MHz, .01Hz steps. **Frequency Modulation (FM) Mode and Phase Modulation (PM) Mode:** Internal modulation frequency: 0Hz to 10kHz. External modulation frequency: DC to 35kHz. **Voltage Controlled Oscillator Mode (VCO):** Endpoint frequency: 0Hz to 21.5MHz, .01Hz steps. **Burst Mode:** Continuous or Triggered via Front Panes, RS232, or Ext. TTL. **Dual Tone Multi Frequency (DTMF) Generate Mode:** Dialing digits generated: 0 to 9, #, *, A, B, C, D. **Dual Tone Generation Mode:** Tone 1, Tone 2 Frequency: DC to 10kHz, 1Hz steps. **Sweep Mode:** Start/Stop frequency: 0Hz to 21.5MHz. **Function Generator Mode:** Waveforms: Positive/Negative Ramp, Triangle, Exponentials, Noise, Sine Repetition rate: 0Hz to 2MHz in 1Hz steps. **Binary Phase Shift Keying (BPSK) Mode. Amplitude Modulation (AM) Mode. Single Sideband (SSB) Mode. Frequency Shift Keying (FSK) Mode. Data Modulation Mode. Power and Voltage Measurement Mode. Dual Tone Multi Frequency (DTMF) Detect Mode. Arbitrary Waveform Generation Mode:** Vertical Resolution: 12 bits, Sample update rate: DC-40 MHz in .01Hz steps. Sample buffer depth: 32,768 points. **Pulse Generator Mode:** Frequency: 0Hz to 2MHz in 1Hz steps. Duty cycle: 0% to 100% in 1% steps. **Main Output:** Frequency: DC to 21.5MHz, .01Hz steps. Level: 4mVp-p to 10Vp-p. **External Modulation Input. RS232 port. Sync Output. Ext. Trigger/Gating/FSK/BPSK input.** ***General:* Power:** 100-240 VAC, 47-63Hz, 30W. **Display:** 2 line x 40 Character, LCD backlit. **Weight:** Approximately 3.5 lbs (1.6kg). **Dimensions:** 5.5 x 11.75 x 10.38" **Operating Temperature:** 32°F to 104°F (0°C to 40°C) ambient.

BK4070A-ND	Waveform Generator	**$1435.13**

Frequency Counters



Model BK1856C

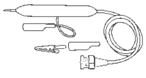
Model 1875: 2.5GHz Frequency Counter, handheld, portable **Frequency:** 10Hz to 2.5GHz ±4ppm +1 dgt **Period Characteristics: Range:** 10Hz to 10MHz **Input Characteristics: Sensitivity:** ≤50mV, 10Hz-10MHz; ≤10MHz – 35MHz; ≤100mV, 35MHz-2.5GHz **Impedance:** 1MΩ **Time Base Characteristics: Standard Type:** Crystal oscillator **Frequency:** 4.19MHz **Stability:** ±4ppm +1 dgt **Temperature Stability:** ±0.1ppm/°C. 8-Digit LCD display .5 inch high **Dimensions:** 6.8 x 3.1 x 1.4" **Power:** 4 x 1.5V AA batteries **Accessories Included:** Instruction Manual.

NEW! **Model 1856C:** 2.4GHz Multifunction Counter (Frequency, Period, Totalize), Benchtop with .56 inch high 8-Digit LED Display **Frequency:** 5Hz to 2.4GHz ±Time base accuracy +1 count **Period Characteristics: Range:** 0.285µs to 200,000µs **Input Characteristics: Sensitivity:** 20mVrms, 5Hz-30MHz; 50mVrms above 100MHz **Impedance:** 1MΩ (<40pF) **Sensitivity:** 10mVrms, 20MHz, 50MHz to 600MHz, 25mVrms, 600MHz to 1.3GHz, 50mV 1.3GHz to 2.4GHz **Totalize Start/Stop Input: Logic Levels:** Standard TTL levels **Time Base Characteristics: Standard Type:** TXCO **Frequency:** 10MHz **Stability:** ±0.1ppm ±1Hz **Temperature Stability:** ±0.1ppm (from 0°C to 28°C) 0°C to 50°C ambient, ±0.5ppm from 18°C to 28°C. **Dimensions:** 4.5 x 11.7 x 10.38" **Power:** 120/220/240VAC ±10%, 50/60Hz **Accessories Included:** Instruction Manual.

BK1875-ND	2.5GHz Portable Handheld Counter	**$249.00**
BK1856C-ND	*NEW!* 2.4GHz Benchtop Multifunction Counter	**$529.00**
BKADNB-24-ND	Adapter N/BNC Coax For BK1856C	**$15.00**

Oscilloscopes

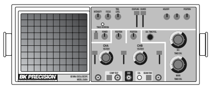
Demodulator Probe for Oscilloscopes



All purpose demodulator/detector probe with BNC Connector, usable with most oscilloscopes. Features include lightweight design and 1.2m coaxial cable. Probe bodies are constructed of rugged plastic and shielded. Ergonomically designed handle. **Input Voltage:** 200V Max. **HF Voltage:** 50Veff. Max. **Band Width:** 100kHz to 950MHz. **Input Impedance:** 5pF.

PR-32A-ND	**$59.00**

30, 60, 100 MHz Dual Trace Oscilloscope



***General Specifications:* Power Source:** 115/230VAC ±10%, 50/60Hz **Accessories Supplied:** Two 10:1 Probes, Power Cord, Instruction Manual.

Model BK2120B: 30MHz Dual-Trace operation. 1 mV/div. sensitivity. AUTO-NORM triggered sweep operation with AC, TVH, TVV, line coupling and DC. Calibrated 23 step timebase with x10 magnifier. Approx. 40W. **Dimensions:** 14.5 x 7 x 17.3". **2 Year Warranty.**

Model BK2160A: 60MHz Dual-Trace 1 mV/div sensitivity. Sweep to 5 nS/div. **Main Time Base:** 23 calibrated ranges. **Delayed Time Base:** 19 calibrated ranges. Signal delay line. V-mode displays two signals unrelated in frequency. Component tester. Z-axis input. Single sweep. Beam finder. **Dimensions:** 5.3 x 13 x 16". **3 Year Warranty.**

Model BK2190B: 100MHz Dual-Trace Dual Time Base Oscilloscope. 1mV/div sensitivity. Sweeps to 5nS/division. **Main Time Base:** 22 calibrated ranges. **Delayed Time Base:** 19 calibrated ranges. Calibrated delay time multiplier. **Signal Delay Line:** 15kV accelerating voltage. **Channel 1 output:** Output Voltage: Approx. 100mV/division open circuit. Approx. 50mV/division into 50Ω. Output Impedance: Approximately 50Ω. Approx. 60W. **Dimensions:** 5.5 x 12.6 x 16.9". **3 Year Warranty.**

BK2120B-ND	30MHz	**$499.00**
BK2160A-ND	60MHz	**$999.00**
BK2190B-ND	100MHz	**$1499.00**
LC-210A-ND	*NEW!* Carrying Case (1 Year Warranty) (For models BK2120B and BK2190B only)	**$92.00**

Oscilloscope Probes

Model BKPR33A: Bandwidth: 90MHz (15MHz) **Division Ratio:** x10 (x1). **Input R:** 10MΩ (1MΩ). **Input C:** 15pF (45pF). **Compensation:** 15 - 35pF. **Max Voltage:** 600V (200V). **Length:** 1.32 meters approx. **Connector:** BNC. **Three month warranty.**

Model BKPR-37AR: Bandwidth: 150MHz (6MHz). **Division Ratio:** x10 (x1). **Input R:** 10MΩ (1MΩ). **Input C:** 15pF (100pF). **Compensation:** 15 - 35pF. **Max Voltage:** 600V. **Length:** 1.32 meters approx. **Connector:** BNC. **Six month warranty.**

Model BKPR100A: Bandwidth: 250MHz. **Division Ratio:** x100. **Input R:** 100MΩ. **Input C:** 6.5pF. **Compensation:** 10 - 35pF. **Max Voltage:** 1200V. **Length:** 1.37 meters approx. **Connector:** BNC. **Six month warranty.**

NOTE: Specifications in ( ) refer to x1 position.

BKPR-33A-ND	**$33.00**
BKPR-37AR-ND	**$46.00**
BKPR-100A-ND	**$62.00**

DC Power Supplies

Regulated 28A DC Power Supply

Models BK1689, BK1690: Overload protection, High RFI stability, Multiple DC output terminals. ***Features:* Output Voltage:** DC 1-15V Variable. **Output Current:** 28A (at 13.8V). **Ripple and Noise:** 5mV (peak to peak). **Line Regulation:** 5mV (± 2% Load). **Load Regulation:** 50mV (0-100% Load).

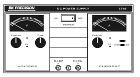
BK1689-ND	Precision Analog	**$275.00**
BK1690-ND	Digital LED	**$349.00**

High Current Linear Power Supply

Model BK1791: Current, limiting, reverse polarity, overvoltage, short circuit ***Features:* Output Voltage:** 0-64V. **Output Current:** 10A. **Metering:** LED.

BK1791-ND	**$1350.00**

DC Power Supplies to 240W Output



Short circuit protection, overload protection, reverse polarity protection, thermal protection, and current limiting. CV and CC operation, 0.02% +2mV line and 0.04%+2mV load regulation (zero to full load), adjustable current limits (five to 100%), low ripple (≤1mVrms), fast recovery time (≤100µS), and operate from 120VAC ±10%, 60Hz. **Dimensions:** 5.7 x 10.5 x 15". Test Lead Set TL-5A and TL-30 sold separately. **2 Year Warranty.**

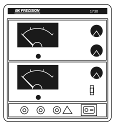
Model BK1746: Single 0-16V, 0-10A output. Two analog meters. **Voltmeter:** 0-16V ±2.5%. **Ammeter:** High Range = 0-11A, Low Range = 0-2.2A, Accuracy = ±2.5%. **Power Consumption:** 380W.

Model BK1740: Single 0-60V, 0-4A output. Two analog meters. **Voltmeter:** 64V ±2.5%. **Ammeter:** High Range = 0-4.4A, Low Range = 0-1.1A, Accuracy = ±2.5%. **Power Consumption:** 450W.

Model BK1743: Single 0-35V, 0-6A output. Two 3-digit LED meters. **Voltmeter:** 0-99.9V (green) ± (0.5% rdg + 2 digits). **Ammeter:** High Range = 0-99.9A (red), Accuracy = ±(0.5% rdg + 2 digits). **Power Consumption:** 420W.

BK1746-ND	**$515.00**
BK1740-ND	**$515.00**
BK1743-ND	**$515.00**

Single Output Power Supply



Short circuit protection, overload protection, reverse polarity protection, thermal protection, and current limiting. CV and CC operation, 0.01% +3mV line and load regulation (zero to full load), adjustable current limits (5 to 100%), low ripple (≤1mVrms), fast recovery time (≤100µS), and operate from 120 VAC ±10%, 60Hz. **Dimensions:** 6.2 x 5.5 x 12.5". Test Lead Set TL-5A and TL-30 sold separately. **2 Year Warranty.**

Model BK1710: Single 0-30V, 0-1A output. Two analog meters. **Voltmeter:** 0-32 ±2.5%. **Ammeter:** High Range = 0-1.04A, Low range = 0-0.26A, Accuracy = ±2.5%. **Power Consumption:** 70W.

Model BK1711: Single 0-60V, 0-2A output. Two analog meters. **Voltmeter:** 0-64 ±2.5%. **Ammeter:** High Range = 0-2.2A, Low range = 0-0.55A, Accuracy = ±2.5%. **Power Consumption:** 210W.

Model BK1715: Single 0-60V, 0-2A output. Two 3-digit LED meters. **Voltmeter:** 0-99.9V (green) ± (0.5% rdg + 2 digits). **Ammeter:** Range = 0-9.99A (red), Accuracy = (0.5% rdg + 2 digits). **Power Consumption:** 210W.

Model BK1730: Single 0-30V, 0-3A output. Two analog meters. **Voltmeter:** 0-32 ±2.5%. **Ammeter:** High Range = 0-3.2A, Low range = 0-0.53A, Accuracy = ±2.5%. **Power Consumption:** 180W.

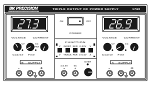
Model BK1735: Single 0-30V, 0-3A output. Two 3-digit LED meters. **Voltmeter:** 0-99.9V ±0.5%. **Ammeter:** Range = 0-9.99A, Accuracy = ±0.5%. **Power Consumption:** 180W.

BK1710-ND	**$235.00**
BK1711-ND	**$315.00**
BK1715-ND	**$388.97**
BK1730-ND	**$318.97**
BK1735-ND	**$388.97**

Power Supply Hook-up Cables

TL-5A-ND	5A Power Supply Leads	**$8.97**
BKTL-30-ND	30A Power Supply Leads	**$12.50**

Triple Output Power Supply



Two Main sections capable of independent or tracking operation (Master & Slave). One fixed section. Switchable series/parallel operation and adjustable current limit controls for Main sections. Two displays: one reads volts or amps of "slave" supply; one reads volts or amps of "master" supply or fixed supply. Constant current and voltage indicators for Main sections. **Power Source:** 120VAC, +10% 60Hz. **Accessories Supplied**: Spare fuse, Instruction Manual, Power Cord. Test Lead Set TL-5A is sold separately.

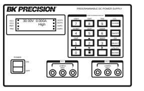
Model BK1760: Two 0-30VDC, 2A sections; One 4-6.5VDC 5A section. Switchable series/parallel operation for 24V sections. Two 3-Digit LED Displays. **Dimensions:** 5.7 x 10.5 x 15". **2 Year Warranty.**

NEW! **Model BK1651A:** Two 0-24VDC 500mA sections; One 5VDC 4A section. Switchable series/parallel operation for 24V sections. Two Analog Displays. **Accessories Included:** Test leads (3 Pairs). **Dimensions:** 5.5 x 11.75 x 10.975". **1 Year Warranty**.

Model BK1670: Produces three outputs simultaneously. #1=0-30VDC @ 2.5A, #2=12VDC @ 500mA and #3=5VDC @ 500mA. Two 3-digit LCD displays. **Dimensions:** 5.5 x 5.9 x 9.45". Flame retardant case. **1 Year Warranty.**

BK1760-ND		**$650.00**
BK1651A-ND	*NEW!*	**$435.00**
BK1670-ND		**$198.97**

Programmable Power Supplies



Model BK1770

Models BK1780, BK1775, BK1770

Standard GPIB Interface: Greater flexibility interfacing with a number of third party GPIB cards, computers and controllers. **Load Effect:** 0.001% +1mV; 1mA current. **Parallel and Series Operation:** (1775 & 1780) Increases useable voltage and current capabilities for a wider variety of applications. One power supply satisfies a greater number of applications. **Front Panel Keypad:** Easy entry to set voltage, current, overvoltage and over-current. **Remote Sensing:** Maintains set voltage regardless of lead loss. **Backlit LCD Display:** Vital output information, voltage, current and operating mode. **True RMS Reading Metering:** Reliable means of comparing dissimilar waveforms. **50k MTBF:** High reliability with no downtime.

***General Specifications:* Programming Accuracy:** Voltage: 0.05% +2LSB; Current: 0.15% +5LSB. **PARD:** Voltage: 01mVrms/10m Vp-p; Current: 1mArms. **AC Input:** 115/220 VAC. **Operating Temp. Ratings:** 0°C to 50°C. **Storage Temperature Ratings:** -40°C to 70°C. **GPIB Interface Capability:** SH1, AH1, T6, TED, L4, LED, AL1 SRD, DC1, DTD, C0, E1. **Weight:** 1780 & 1770: 18 lbs. (8.1kg); 1775: 20 lbs (9 kg). **Dimensions:** 8.4 x 5.2 x 15.7". **3 Year Warranty.**

Model BK1780: 0-18V, 0-4A DC output • Programming Resolution: 5mV, 1.5mA, 100mV DVP.

Model BK1775: 0-35V, 0-2A DC output • Programming Resolution: 10mV, 0.6mA, 200mV DVP.

Model BK1770: 0-17.5V; 0-35V, 0-6A; 0-3A DC output • Programming Resolution: 10mV, 2mA, 200mV DVP.

BK1780-ND	**$1350.00**
BK1775-ND	**$1295.00**
BK1770-ND	**$950.00**

Models BK1785, BK1786, BK1787

Ripple and Noise (RMS): 1mV. **Line Regulation:** 0.02% +5mV. **Load Regulation:** 0.02% +5mV. **PC Interface (included):** Computer serial interface. **Operating Voltage:** 120 VAC, 60Hz. **Dimensions:** 8.6 x 4.5 x 10.6". **Accessories Supplied:** User manual, serial cable, Windows™ and DOS software. **Weight:** Approximately 11 lbs. (5 kgs). **Display:** 3 Digit LED voltmeter and ampmeter.

BK1785-ND	0-18V, 5A DC output	**$375.00**
BK1786-ND	0-30V, 3A DC output	**$375.00**
BK1787-ND	0-60V, 1.5A DC output	**$375.00**

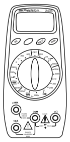
Multimeters

Pen Style DMM With Current Clamp and Temperature Adapter

DMM is a 3200 count multimeter that measures VDC, VAC resistance and checks continuity and diodes. The current clamp head attaches to the top of the DMM and reads out in VAC up to 300A. The temperature adapter also attaches to the top of the DMM and reads temperature out in millivolts.

Specifications: **VAC:** 3.2V to 600V, 1.7% accuracy. **VDC:** 320mV to 600V, 0.7% accuracy. **Resistance:** 320Ω to 30MΩ, 1.0% accuracy. **AC Current:** 0.1A to 300A (CH-100), 1.9% accuracy. **Temperature:** -58°F to 1834°F (-50°C to 1001°C), 0.5% accuracy.

BK2720-ND		**$165.00**
LC-29B-ND	*NEW!* Carrying Case (1 Year Warranty)	**$17.00**



Mini-pro Multimeter

Specifications: **Digits:** 2000. **Ranging:** Manual. **VDC:** 100mV-600V. **VAC:** 100mV-600V. **DC Current:** 0.1 mA-10A. **AC Current:** 0.1 mA-10A. **Resistance:** 200Ω - 20MΩ. ***Features:*** • Diode test • Continuity test • Non-contact voltage indicator • Data hold • MAX hold

BK2408-ND		**$45.00**
LC-24-ND	*NEW!* Carrying Case (1 Year Warranty)	**$14.00**

Clamp-on Multimeters

General Specifications: **Power Requirements:** One 9V battery. **Jaw Opening:** 2.24” (56.9mm) for Models 312A, 330B, 350B, and 369B; 1.75” (44.45mm) for Model 367. **Accessories Included:** Battery, test leads, instruction manual, carrying case.

Model BK312A: **AC Current:** 400A (10mA). **AC Voltage:** 600V (100mV). **DC Voltage:** 600V (100mV). **Resistance:** 400Ω (0.1Ω). **Count Resolution:** 2000. ***Features:*** • Continuity • Data Hold

Model BK330B: **AC Current:** 200A to 1000A, 2 ranges, ±(1.5% rdg + 5D) accuracy, 1200A overload protection. **AC Voltage:** 750V, ±(1.2% rdg +5D) accuracy, 1000V DC/750V RMS overload protection, 4.5MΩ input impedance. **DC Voltage:** 1000V, ±(0.5% rdg + 1D) accuracy, 1000V DC/750V RMS overload protection, 10MΩ input impedance. **Resistance:** 200Ω to 2000MΩ, 14 ranges. **Dimensions:** 10.8 x 3.6 x 1.7”. **Weight:** 17 oz. (481.9gm). ***Features:*** • Continuity • Diode • 2000 count resolution • Data hold • Max. hold • UL Listed

Model BK350B: **AC Current:** 32A to 1000A, 3 ranges, ±(1.5% rdg + 5D) accuracy, 1200A overload protection. **AC Voltage:** 320mV to 1000V, 5 ranges, ±(1.5% rdg + 4D) accuracy, 1000V DC/750V RMS overload protection, 10MΩ overload protection. **DC Voltage:** 320mV to 1000V, 5 ranges, ±(0.5% rdg + 1D) accuracy, 1000V DC/750V RMS overload protection, 10MΩ input impedance. **Resistance:** 320Ω to 2000MΩ, 14 ranges. **Frequency:** 320Hz to 32kHz, 3 ranges, ±(1% rdg + 2D) accuracy, 500V DC/AC RMS. **Dimensions:** 10.8 x 3.6 x 1.7”. **Weight:** 17 oz. (481.9gm). ***Features:*** • Continuity • Diode • 3200 count resolution • Bargraph • Data hold • Peak hold • Range hold • UL Listed

Model BK367: **AC and DC Current:** 200A to 2000A, 2 ranges, ±(1.5% rdg + 5D) accuracy, 2000A overload protection. **AC Voltage:** 750V, ±(1% rdg + 2D) accuracy, 800V overload protection, 10MΩ input impedance. **DC Voltage:** 200V, ±(.8% rdg + 1D) accuracy, 1000V overload protection, 10MΩ input impedance. **Resistance:** 2kΩ. **Dimensions:** 10 x 3.75 x 1.44”. **Weight:** 1.5 lbs. (.68kg). ***Features:*** • Diode • 2000 count resolution • Data hold • Peak hold

Model BK369B: **AC and DC Current:** 400A to 1000A, 2 ranges, ±(1.5% rdg + 5D) accuracy, 1200A overload protection. **AC Voltage:** 400mV to 1000V, 5 ranges, ±(1.5% rdg + 4D) accuracy, 1000V DC/750V RMS overload protection, 10MΩ input impedance. **DC Voltage:** 400mV to 1000V, 5 ranges, 0.5% accuracy, 1000V DC/750V RMS overload protection, 10MΩ input impedance. **Resistance:** 400Ω to 40MΩ. **Frequency:** 100Hz to 400kHz, 5 ranges. **Capacitance:** 4nF to 40µF. **Dimensions:** 10.8 x 3.6 x 1.7”. **Weight:** 18.3 oz. (518.8gm). ***Features:*** • True RMS • Continuity • Diode • 4000 count resolution • Bargraph • Data hold • Peak hold • Range hold • Max/Min • Relative • UL Listed

BK312A-ND	10mA/400A	**$79.00**
BK330B-ND	200/1000A	**$95.00**
BK350B-ND	32/320/1000A	**$155.00**
BK367-ND	200/2000A	**$175.00**
BK369B-ND	400/1000A	**$205.00**
LC-33-ND	*NEW!* Carrying Case (1 Year Warranty)	**$24.00**

High Performance Dual-Display Multimeters

General Specifications: • 4,000/40,000 selectable display counts • 6/750V AC • 6/1000V DC • ±(0.06% +3) basic DCV accuracy • 6/10A AC and DC current • 6Ω to 40MΩ resistance • Auto or manual ranging • Voltage range frequency of 5/200KHz on dual display • dB measurement • 7/9,999µF capacitance • Bargraph • Min./Max., Data and Refresh hold • Relative zero • RS232 output • Diode and continuity test • Auto-off

Model BK2880A: DMM with AC Coupled RMS.

Model BK2890: DMM with frequency counter to 10MHz. **True RMS**: AC + (AC + DC) Coupled. **Operating Temperature:** to 2502°F (1372°C). **Square Wave Output:** 16 / 4.8KHz @ 0 to +3V. **Timer + Signal Output:** Max. Timer 99Ksec. @ 0 to +3V. **Backlight**

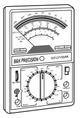
BK2880A-ND	**$198.97**
BK2890-ND	**$298.97**

NEW! Bench DMM True RMS

Model BK2831C: **DC Volt Ranges:** 200mV, 2V, 20V, 200V, 1200V. **AC Volt Ranges:** 200mV, 2V, 20V, 1000V True RMS. **DC/AC Basic Accuracy:** 0.1% +1 digit. **AC/DC Input Impedance:** 10MΩ (AC <100pF) **AC/DC Resolution:** 0.1mV, 1mV, 10mV 100mV, 1V. **AC/DC Basic Accuracy:** 0.1% rdg +1 dig. **AC/DC Current Ranges:** 200µA, 2mA, 20mA, 200mA, 2A, 20A. **AC/DC Resolution:** 100nA, 1µA, 10µA, 100µA, 1mA, 10mA. **DC Basic Accuracy:** 0.2% +1 digit. **AC Basic Accuracy:** 1.0% rdg +4 digits. **AC/DC Overload Protection:** 2A/250V fuse and 4A/500V fuse, 20A unfused. **Resistance Range:** 200Ω, 2kΩ, 20kΩ, 200kΩ, 2000kΩ, 20MΩ. **Resolution:** 0.1Ω, 1Ω, 10Ω, 100Ω, 1kΩ, 10kΩ. **Basic Accuracy:** 0.2% rdg +1 digit. **Diode Test:** Tested on 2kΩ range, 1mA test current. **Continuity Check:** Audio tone for resistance under 10Ω. **General Display:** 3-1/2 digit LCD, 0.5 inch LED. **Power:** 120/240 VAC, 50/60Hz (5W). **Operating Temperature:** 0ºC to 40ºC, 70%RH. **Dimensions:** 4.5 x 11.75 x 10.375”.

BK2831C-ND		**$298.97**
LC-40-ND	Carrying Case (1 Year Warranty)	**$84.00**

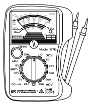
Analog Multimeter



Model BK114A: 20,000Ω/Volt Multimeter. 28 ranges. 88.90mm mirrored scale. Tests batteries under load. Test transistors. **Power Source:** Two 1.5 volt batteries and one 9V battery. **Size:** 5.7 x 3.9 x 1.4”. **Accessories Supplied:** Batteries, test leads, transistor test leads, instruction manual.

BK114A-ND	**$42.94**

Pocket Size Multimeter

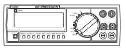


Measures DC & AC Voltage: 50/250/500VAC, 10/50/250/500VDC scales with ±5% accuracy (full scale). 2000Ω/V. **Measures DC current:** 25/250mA with ±5% accuracy (full scale). **Measures resistance:** 0-10k/1MΩ, ±5% degree arc of scale length. **Measures decibel:** +4dB to +56dB on AC voltage ranges. **Battery Test Range:** 1.5V/9V. **Power Supply:** One 1.5V, AA battery. **Dimensions:** 3.1 x 4.7 x 1.2”. **Accessories Supplied:** Battery, test leads, and instruction manual.

BK117B-ND	**$19.96**

Bench DMM

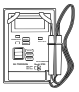
“Certificate of Traceability Supplied”



Model BK-5490: • RS-232 interface standard • 50,000 count • True RMS, AC or AC + DC • Capacitance to 50,000 µF • IE1010, class 2 safety compliance • 0.025% DCV • 0.07%Ω • 100 kHz AC response • Autoranging, bargraph with zoom • Frequency: Duty cycle, pulse width • dB Across: 1Ω to 10kΩ • Power Across: 1Ω to 1kΩ • Min./Max./Avg. • 100 to 253 VAC, 50/60 Hz • **3 Year Warranty**

BK5490-ND	**$650.00**

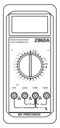
Pocket DMM



Pocket DMM. Analog bar graph with 32 segments. 3200 count LCD display. Auto power off. Low battery indicator. Range hold. Data hold. Integral test leads. **Power:** Two 1.5V button type batteries. **Dimensions:** 4.4 x 2.2 x .4”. **Accessories Supplied:** Batteries, instruction manual, case.

BK2700-ND	**$35.00**

3½ Digit Ruggedized DMM

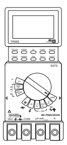


The Survivor™. High Energy Fused Ruggedized DMM. 3-1/2 digit 20.32mm high contrast LCD display. **Audible Continuity:** 20 Amp range. **Sampling:** 2.5 times/sec. (nominal). Heavy Duty 1500VDC, 1000VAC rating. Water resistant case. **Power Requirements:** Single 9V battery. **Auto Power Off:** approx. 30 min. **Dimensions:** 6.9 x 3.5 x 1.5”. **Accessories Supplied:** Battery, test leads, instruction manual, rubber boot. **5 Year Warranty.**

BK2860A-ND		**$98.97**
LC-29B-ND	*NEW!* Carrying Case (1 Year Warranty)	**$17.00**

Premium DMM

“Certificate of Traceability Supplied”



All Models: • 50,000 count • True RMS, AC or AC + DC • Capacitance to 50,000 µF • Splashproof sealed case • IEC1010, class 2 safety compliance • **3 Year Warranty**

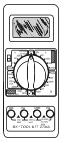
Model BK-5390: • 0.025% DCV • 0.07%Ω • 100KHz AC response • Autoranging, bargraph with zoom • Frequency: Duty cycle, pulse width • dB Across: 1Ω to 10kΩ • Power Across: 1Ω to 10kΩ • Disturbance indicator • Min./Max./Avg.

Model BK-5370: • 0.05% DCV • 0.07%Ω • 100 KHz AC response • Autoranging, bargraph with zoom • Frequency: duty cycle • Temperature: ±0.5°C • dB Across: 1Ω to 10kΩ • Disturbance indicator • Min./Max./Avg.

Model BK-5360: • 0.01% DCV • 0.1%Ω • 30KHz AC response • Autoranging, bargraph • Frequency: duty cycle

BK5390-ND	**$325.00**
BK5370-ND	**$288.97**
BK5360-ND	**$228.97**

“Tool Kit” Multimeters



Display: 3-1/2 digit, high-contrast 0.7” (17.78mm) LCD, 1999 counts. **Sampling:** 3 times/sec. (nominal). 0.5%DCV accuracy. **Operating Temp:** 0°C to +50°C, 0% to 70% RH. **Power Requirements:** 9V battery. **Accessories Supplied:** Battery, drop resistant case, test leads, and instruction manual. **1 Year Warranty.**

Model BK2708: **DC Volts:** 1000V Max. **AC Volts:** 750V Max. **DC Current:** 10A Max. **AC Current:** 10A Max. **Resistance:** 0.1Ω-43MΩ ***Features:*** • Auto Ranging • Logic probe

Model BK2707A: DMM, component tester, frequency counter, and logic probe. **Voltage Range:** 200mV to 1000VDC; 200mV to 750VAC frequency counter. **Current Range:** 200µA to 10A. **Resistance:** 0.1Ω to 200MΩ. **Capacitance:** to 20µF. **Frequency:** 2kHz to 5MHz. **Logic Probe Function:** (TTL). **Transistor Gain Measure:** (hFE). **Dimensions:** 5.9 x 3.1 x 1.3”.

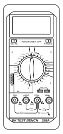
Model BK2706A: DMM, component tester, and temperature meter. **Voltage Range:** 200mV to 1000VDC; 200mV to 750VAC. **Current Range:** 200µA to 10A. **Resistance:** 0.1Ω to 20MΩ. **Capacitance:** to 20µF. **Frequency:** 10Hz to 15MHz. **Transistor Gain Measure:** (hFE). **Temperature:** 0°C to 750°C. Thermocouple probe included. **Dimensions:** 5.9 x 3.1 x 1.3”.

Model BK2704B: DMM, component tester. **Voltage Range:** 200mV to 1000VDC; 200mV to 750VAC. **Current Range:** 200µA to 10A. **Resistance:** 0.1Ω to 20MΩ. **Capacitance:** to 20µF. **Transistor Gain Measure:** (hFE). **Dimensions:** 5.9 x 3.1 x 1.3”.

Model BK2703B: DMM, **Voltage Range:** 200mV to 1000VDC; 200mV to 750VAC. **Current Range:** 200µA to 10A. **Resistance:** 0.1Ω to 20MΩ. **Frequency:** 10Hz to 15MHz. **Dimensions:** 5.9 x 3.1 x 1.3”.

BK2708-ND		**$99.00**
BK2707A-ND		**$88.97**
BK2706A-ND		**$78.97**
BK2704B-ND		**$58.97**
BK2703B-ND		**$38.97**
LC-29B-ND	*NEW!* Carrying Case (1 Year Warranty)	**$17.00**

NEW! “Test Bench” Multimeters



High quality, ruggedized, multi-function DMMs in a drop resistant case. Resistance and frequency measurement. Diode check. Auto power off. All current ranges fused. **Power Requirements:** Single 9V battery. **Dimensions:** 7.8 x 3.5 x 1.5”. **Accessories Supplied:** 9 Volt battery, test leads, instruction manual, rubber boot. **3 Year Warranty.**

Model BK388B-ND: 3-3/4 Digit LCD Display (4000 count). **DC Volts:** 400mV to 1000V. **AC Volts:** 400mV to 750V. **DC/AC Current:** 400µA to 10A. **Resistance:** 400Ω to 40MΩ. **Diode Test:** at 1mA, 3.2VDC max. typ. **Capacitance:** 4nF to 40µF. **Frequency:** 4kHz to 4MHz. Logic level measure (TTL) Transistor gain (hFE) and peak hold.

Model BK390A-ND: 3-3/4 Digit LCD Display (4000 count). **Analog Bar Graph:** 41 Segments. **DC Volts:** 400mV to 1000V. **AC Volts:** 400mV to 750V. **DC/AC Current:** 400µA to 10A. **Resistance:** 400Ω to 40MΩ. **Diode Test:** at 1.2mA, 3.0VDC max. typ. **Capacitance:** 4nF to 40mF. **Frequency:** 4kHz to 40MHz. **Temperature Range:** -50°C to +1300°C (1°C resolution). Auto/manual ranging. Relative mode. Min/Max hold. Data hold. Memory. RS-232. Audible continuity. Thermocouple Probe included.

Model BK389A-ND: 3-3/4 Digit LCD Display (4000 count). **Analog Bar Graph:** 41 Segments. **DC Volts:** 400mV to 1000V. **AC Volts:** 400mV to 750V. **DC/AC Current:** 400µA to 10A. **Resistance:** 400Ω to 40MΩ. **Diode Test:** at 1.2mA, 3.0VDC max. typ. **Capacitance:** 4nF to 40mF. **Frequency:** 4kHz to 40MHz. Auto/manual ranging. Relative mode. Min/max hold. Data hold. Memory. Audible continuity.

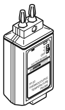
Model BK391A-ND: 4-1/2 Digit LCD Display (20,000 count). **DC Volts:** 200mV to 1000V. **AC Volts:** 200mV to 750V. **DC/AC Current:** 400µA to 10A True RMS reading. **Resistance:** 200Ω to 20MΩ. **Diode Test:** at 1mA, 3.2VDC max. typ. **Frequency:** 2kHz to 200kHz. **Duty Cycle**: .0 to 90% (0.1% resolution). Data hold. Logic level measure (TTL).

BK388B-ND		**$127.00**
BK390A-ND		**$167.00**
BK389A-ND		**$147.00**
BK391A-ND		**$187.00**
LC-29B-ND	Carrying Case (1 Year Warranty)	**$17.00**

BK PRECISION
SETTING NEW STANDARDS IN PERFORMANCE & VALUE

Accessories

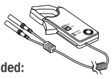
Temperature Adapter



Type K thermocouple. Measures from -50°C to +1000°C. 1mV per degree. Measures temperature of any surface, liquid or gas. Converts any voltmeter to measure temperature. Open probe warning. **Power:** Standard 9V battery. **Dimensions:** 4.8 x 1.8 x 1.2”. **Cable Length:** .914 meters. **Accessories Supplied:** TP-29.

TP-30B-ND **$68.97**

DC/AC Current Clamp Adapter



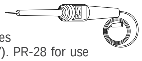
Measures current without disconnecting circuit under test. Measures to 400A DC or AC. Outputs 1 mV per Amp., operates on 2V range of any DMM. **Power Requirements:** 9V battery. **Operating Temp.:** 0° to 50°C, <70% RH. **Dimensions:** 7 x 2.8 x 1.3”. **Accessories Included:** Battery, instruction manual.

BKCP-3-ND **$86.00**

Probes and Test Lead Sets

TP-29-ND	Type K Bead Thermocouple Probe	**$9.00**
BKTL-4-ND	Universal Test Lead Set	**$7.94**
TL-2A-ND	Test Lead Set, Fully Shrouded SILIC, IEC61010-2-031 1,000V CATIII	**$20.00**
TL-1-ND	Test Lead Set, Fully Shrouded	**$7.94**
TL-3-ND	Test Lead Accessory Set for BKTL-4	**$16.00**

High-Voltage Probes



Model PR-28: Accessory for DMM’s Multiplies instrument ranges by 1000 (40V becomes 40,000V). PR-28 for use with any high impedance (10MΩ or greater) voltmeter. **Voltage Range:** 40kVDC and 20kVAC (60Hz). **Freq. Range:** DC-8Hz 20kVAC max. 60Hz. **Impedance:** 600MΩ accuracy: ±3% plus instrument accuracy. **Calibration:** Internal; factory calibrated at 25kV. **Size:** 14” long; 2.25” dia. (max.); 30” cord. **Connector:** Dual banana.

Model PR-28A: DMM Probe. Measures to 40,000VDC top-polarity. Measures to 28,000VAC 50/60Hz. 1000MΩ Input impedance. 1000:1 voltage divider. Compatible with most 10MΩ digital multimeters. DMM accessory.

Model HV-44A: Built in meter for stand-alone operation (No DMM required). Measures voltages up to 40,000VDC. Factory calibrated at 25kV (±2% accuracy); full scale ±3% accuracy. Conventional round needle type tip and flat spring type tip for easy access to CRT anode. **Size:** 16.5 x 2.1 x 2”. **Color:** Black & Red. **Positive Polarity Only –** *Not for microwave ovens.*

PR-28A-ND		**$58.93**
HV-44A-ND		**$108.97**
LC-32A-ND	*NEW!* Carrying Case (1 Year Warranty)	**$32.00**

Logic Probes

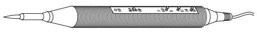
20MHz and 50MHz Logic Probes

Model DP-21: **(20MHz Logic Probe):** Tests TTL, DTL, RTL, HTL, CMOS and MOS. Displays pulse presence and logic states. Memory mode "freezes" pulse display. Catches pulses to 30ns or pulses trains to 20MHz. 1MΩ input impedance. **Operating Supply Voltage Range:** TTL–5V, CMOS 5-15V. **Dimensions:** .7 x .7 x 8.2”.

Model BKDP52: **(50 MHz Logic Probe):** Tests TTL and CMOS. Displays DC to 50MHz. Detects 10ns pulse width. Overload protected. 120kΩ input impedance. **Operating Supply Volt. Range:** 4-18VDC. **Dimensions:** .7 x .7 x 8.2”.

DP-21-ND	**$35.00**
BKDP52-ND	**$45.00**

Pulser Probe

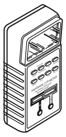


For TTL and CMOS. Produces 10µS pulse signal at 100mA. External square wave terminal. **Output Current:** Pulser mode-100mA sink/source square wave mode-5mA sink/source. **Operating Supply Voltage Range:** 5-15VDC. **Sync Input Impedance:** 1MΩ. **Dimensions:** .7 x .7 x 8.2”.

DP-31A-ND **$35.00**

Component Testers

Dual-Display LCR Bridge



Measures inductance, resistance, capacitance, DF & Q. Auto ranging. 4-digit LCD display. Auto calibrate. Tests at 120Hz or 1kHz. Relative mode. Tolerance mode. Basic accuracy 0.7%. **Dimensions:** 1.5 x 3.5 x 7.6”. **Accessories Included:** Test leads, AC adapter, instruction manual.

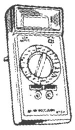
BK878-ND		**$275.00**
LC-29B-ND	*NEW!* Carrying Case (1 Year Warranty)	**$17.00**

LCR/ESR Meter

• Measurement parameters: Z, L, C, DCR, ESR, D, Q, and 0 • Test conditions: 100Hz, 120Hz, 1kHz, 10kHz, 1vrms, 0.25Vrms, 0.05Vrms • 0.5% basic accuracy • Dual LCD display • SMD surface mount tweezer probe included • Fully auto/manual selection • DC resistance measurement • Rechargeable battery/AC powered

BK885-ND		**$549.00**
LC-29B-ND	*NEW!* Carrying Case (1 Year Warranty)	**$17.00**

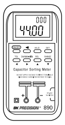
LCR Meter



Model 875B: Measures capacitance (200pF-20mF ±1%), resistance (2-20MΩ ±1%), and inductance (200µH-200mH ±1%). 3-1/2 digit LCD display. Low battery and overload indicator. **Power:** Single standard 9V battery. **Dimensions:** 1.4 x 3.5 x 7.5”. **Accessories Included:** Test leads, battery, instruction manual.

BK875B-ND		**$188.97**
LC-29B-ND	*NEW!* Carrying Case (1 Year Warranty)	**$17.00**

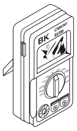
Auto Ranging Capacitance Meter



Nine ranges 0.1pF to 50mF. 0.1pF resolution. 4 digit LCD display. Dual display. RS-232 Output to PC. Data hold. Auto power off. Display zeroing. Audible alert mode (for sorting). High/Low limit sorting capability. **Power Source:** One 9V battery. **Dimensions:** 1.5 x 3.5 x 7.6”. **Accessories Included:** Protective holster, alligator clips, 9V battery, instruction manual.

BK890-ND		**$148.97**
LC-29B-ND	*NEW!* Carrying Case (1 Year Warranty)	**$17.00**

Capacitance Meter



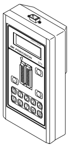
$3^{1}/_{2}$ digit LCD display. Nine ranges from 200pF to 20mF. 0.1pF resolution. Low battery and over-range indicator. **Power Source:** One 9V battery. **Dimensions:** 5.7 x 3 x 1.6”. **Accessories Included:** Test leads, battery, and manual.

BK810B-ND		**$98.97**
LC-29B-ND	*NEW!* Carrying Case (1 Year Warranty)	**$17.00**

IC Testers

Identify, test and verify unknown ICs, quickly and reliably. Batteries and operation manual included.

Model 570 — Linear IC Tester



• Tests all common analog ICs • Auto identification of unmarked/house-coded devices lists possible replacements • Conditional/unconditional loop testing modes • Functional test emulates passive circuitry to implement a comprehensive test in a variety of configurations • Displays diagnostic information down to individual component pins • Rugged, handheld, ergonomically designed case incorporates built-in membrane keypad, 2 x 16 dot matrix alpha-numeric, LCD and high quality 16-pin ZIF socket • Battery operated (2 x 9V) with low power design.

Model 575 — Digital IC Tester

• 40-pin wide-entry ZIF sockets test a broad range of TTL, CMOS, Memory, LSI, Interface and other devices (NAND gates to CPUs) • Identifies unmarked and house-coded devices • Detects intermittent and temperature related faults • Displays diagnostic information for individual pins • Battery operated (4 x 1.5AA batteries)

Model 898A — SIMM and DIMM Tester

Key Features: SIMM 72-pin, 32/36 bits (socket included). **Error Detection and Identification:** • Single data bits • Power and noise related failures • Solder opens and shorts • Timing related failures • Data retention errors • Intermittent failures. **User Configuration Test Modes:** Walking bits 0s • Walking bit 1s • Marching up • Checkerboard • Inversed checkerboard. ***Basic Technical Specifications:*** **Power Consumption:** • 898A 12VAC, 1.5A • Wall AC/AC adapter • Input: 120VAC @ 60Hz, 40W (USA) • Output: 12VAC, 2.0A, • Dimensions: 7 x 6 x 2.5”. **Environmental:** • Operating temperature: 10°C to 50°C • Relative humidity: 20% to 80% noncondensing

BK570-ND	Linear IC Tester	**$955.13**
BK575-ND	Digital IC Tester	**$795.00**
BK898A-ND	SIMM and DIMM Tester	**$1295.00**

EPROM Eraser

Model BK850: • Timer setting: 15 minutes • Supply voltage: 12VDC/500mA (AC/DC adapter included) • UV light source: 4 watt bulb • UV bulb life: > 4000 hours • Dimensions: 6.2 x 2.72 x 1.45”

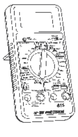
BK850-ND **$95.00**

Deluxe EPROM Eraser

Model BK851: Heavy duty EPROM eraser simultaneously erases up to 40 twenty-four pin EPROMs. Features a 60 minute timer.

BK851-ND **$169.00**

$3^{1}/_{2}$ Digit Hand-Held Parts Tester



26 user ranges for versatile test selection. Tests capacitance from 0.1pF—20mF. Tests resistance from 0.1Ω—20MΩ. Tests transistors, SCRs, diodes and LEDs. Tests batteries under actual loaded conditions.

Power: One 9V transistor battery. **Dimensions:** 6.9 x 3.6 x 1.3”. **Accessories Included:** Test leads, spare fuse, battery, instruction manual.

BK815-ND		**$98.97**
LC-29B-ND	*NEW!* Carrying Case (1 Year Warranty)	**$17.00**

Power Supply Leakage Tester

Model 1655A: • Variable isolated output—0-150VAC • 3 amp continuous, 4 amp intermittent output • Built-in soldering iron temperature control • Expanded leakage scale • Circuit breaker overload protection • Displays volts, amps, VA, leakage

BK1655A-ND **$529.00**

Cable/Harness Tester

A compact, stand-alone unit that can be used for any type of wired assembly. Opens, shorts and miswires are detected immediately. A universal adapter card offers outstanding flexibility and convenience, ready to accept any of industry’s most popular 22 connector styles. A crisp, easy-to-read LCD instantly indicates good or faulty connections and simplifies troubleshooting.

Connect Test Threshold: Resistance: Shorts <130Ω ±10%; Opens 130Ω ±10%; Capacitance: Shorts >0.6µf ±10%; Opens <0.6µf ±10%. **Test Conditions:** 5 volts at 6mA. **Max. Multiple Connection Display:** Up to 16 test points. **Test Cycle Time:** <0.5 sec. **Test Point Capacity:** Max. 128 points (64 connections). **Program Storage:** Lithium battery backs up memory for 50 cables. **Probe:** Single wire test probe with standard .175” (4.45mm) banana jack. **Display:** 2 line x 16 character LCD; 2 LEDs (green/red) for “PASS” or “FAIL” conditions. **Printer Port:** Standard Centronics type parallel interface. **Power:** DC 12V-14V, 500mA AC adapter. **Dimensions:** 2.1 x 13.8 x 9”. **Weight:** 6 lbs. (2.72kg).

Accepts These Connectors

Interface Qty. (Ea.)	Spacing/ Style	Connector Type	Max. Pins
8	0.1” (2.54mm)	Dual-Row	64
2	“D” Submini	Dual-Row	37
2	Delta	Centronics	80
2	0.6” (15.24mm)	DIP	40
2	RJ11	Phone Plug	6
2	RJ45	Phone Plug	8
2	0.156” (3.96mm) Header	Single-Row	20
2	0.1” (2.54mm) Header	Single-Row	32

BK205-ND **$895.00**

Network and PC Cable Testers

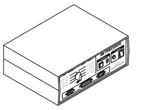
Model 204: • Tests most PC data cables and network cables, such as printer, monitor, modem, mouse extension, game, BNC coax, RJ45, I394, and USB cables • Detects open, short, miswire, continuity, and pin configuration • LED display for easy identification • DC battery compartment

Model 231: • Tests 10 BaseT, 100 Base2, RJ45, RJ11,356A, TIA-568A, TIA-568B, and token ring cables • Detects open, short, cross, and continuity • Tests Point-to-Point, rather than Pair-to-Pair • Tests cables on wall plate or patch panel up to 1000 ft. away with the remote kit • Easy to read LED display

Model 235: • Detects open, short, reversed, crossed and split • Clear LED display for the fault status • Test cable length: Minimum - 4ft. (1.2m) Maximum - 492ft. (150m) • Identify up to 4 different cables at one end by provided remote identifiers • Tests: 10BaseT, 100BaseTx, 10Base2 (coax), RJ45, 356A,TIA-568A, TIA-568B, and token ring ect.

BK204-ND	PC/Network Cable Tester	**$169.00**
BK231-ND	DLX Multi-network Cable Tester	**$89.00**
BK235-ND	Remote Network Cable Tester	**$225.00**

Video Monitor Testers



Model 1280A: Fully featured bench-top design to test both Mac and PC monitors. All patterns can be manually selected or placed in Auto for automatic cycling of each available pattern. Designed to test (burn-in) one to four monitors, the 1280A can also be used as a display generator. Full color, green, blue, red, black and white. **Features:** • PC and Mac patterns • 16 monitor types/resolution selections • Color bar, cross hatch, dot, raster, Windows™ selection • VGA, SVGA, RGB, HV, V and Four DB-15 (rear panel) for multiple monitor burn-in • AC adapter included • Available patterns: PC — 1280 x 1024, 1024 x 768, 8514A, SVGA, VGA, EGA, CGA, MDA; Mac — 1280 x 1024, 1152 x 870, 1024 x 768, 832 x 624, 640 x 480 (3 types), 512 x 384

Model 1275: Handheld unit to test PC and Mac monitors. Generates crosshatch, dots, color bars and raster patterns in green, blue, red, black and white. **Features:** • CGA, VGA, SVGA • Standard DB9, DB-15 and DB-15 Hi-res mini connectors • 9VDC battery • Available Patterns: PC — 1280 x 1024, 1024 x 768, 8514A, SVGA, VGA, EGA, CGA; Mac — 640 x 480

BK1280A-ND	Bench-top Video Generator	**$398.97**
BK1275-ND	Handheld Video Monitor Tester	**$188.97**

Telephone Line Checker

Model 201: • Quickly checks if the phone line is digital or analog, protecting your modem from damages • Detects over currents of the line • Identify safe line, polarity reverse, or open line • Line noise filter protection from RFI

BK201-ND Telephone Line Checker **$29.00**

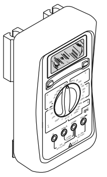
NTSC Generator

Model BK1257: This portable, handheld NTSC Pattern Generator with S-Video, composite video and audio outputs is powered by a 9-volt battery or AC adapter. It provides NTSC color bars, crosshatch, dot, staircase, circle, center cross, windows, and a full range of color raster patterns. The outputs available are composite video and audio via two RCA connectors or an S-Video mini-DIN output. Signals can be produced as an interlaced or progressive scanning mode. No modulated RF signal is provided.

BK1257-ND NTSC Generator **$198.97**

tpi Multimeters

C UL US LISTED



290-1133

Model 290-1133-ND (TPI 133): Meets UL, cUL, CE and IEC 1010 safety standards. **Specifications: Range DC:** 200mV-1000V and 200µA-10A. **Range AC:** 200mV-750V and 200µA-10A. **Resistance Range:** 200-20MΩ. Diode test. Continuity buzzer. Data hold. Extra large LCD. **Dimensions:** 1.22" x 3.5" x 7.44" (30.99mm x 88.90mm x 188.98mm). Rubber boot included. Three Year Limited Warranty.

Model 290-1153-ND (TPI 153): Meets UL, cUL, CE and IEC 1010 safety standards. **Specifications: Range DC:** 400mV-1000V and 400µA-10A. **Range AC:** 4V-750V and 400µA-10A. **Resistance Range:** 400-40MΩ. Auto or manual range. Diode test. Continuity buzzer. Extra large LCD. Data hold. Min/Max/Ave and Record. Auto power off. **Dimensions:** 1.22" x 3.5" x 7.44" (30.99mm x 88.90mm x 188.98mm). Rubber boot included. Three Year Limited Warranty.

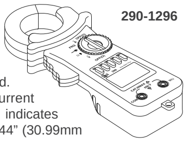
Model 290-1163-ND (TPI 163): Meets UL, cUL, CE and IEC 1010 safety standards. **Specifications: Range DC:** 400mV-1000V and 400µA-10A. **Range AC:** 4V-750V and 400µA-10A. **Resistance Range:** 400-40MΩ. Auto or manual range. Diode test. Continuity buzzer. Extra large LCD. Data hold. Min/Max/Ave and Record. Auto power off. **Dimensions:** 1.22" x 3.5" x 7.44" (30.99mm x 88.90mm x 188.98mm). Rubber boot included. Three Year Limited Warranty.

Model 290-1283-ND (TPI 183): Meets CE and IEC 1010 safety standards. **Specifications: Range DC:** 400mV-1000V and 400µA-10A. **Range AC:** 4V-1000V and 400µA-10A. **Resistance Range:** 400-40MΩ. **Capacitance Range:** 10uFj-10,000uf. **Frequency Range:** 200Hz-200KHz. Backlighted triple display with two-hold system. Record, compare and relative percentage modes. Auto or manual range. True RMS. Sleep mode. Transfer data directly to a PC with RS232 output. **Dimensions:** 1.22" x 3.5" x 7.44" (30.99mm x 88.90mm x 188.98mm). Rubber boot included. Three Year Limited Warranty.

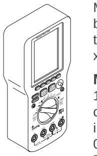
Model 290-1120-ND (TPI 120): DMM Manual range. cULus pending. Continuity buzzer. Data hold. **Specifications: Range DC:** 2V-600V. **Range AC:** 200-600V. **Resistance Range:** 2KΩ. **Accuracy:** 0.75% +3 digits VDC; 1.2% +3 digits VAC; 1.0% +3 digits Ohm. **LCD Counts:** 2,000. Test leads and rubber boot included. **(**Boot hook optional).

Model 290-1293-ND (TPI 293): Meets UL, cUL, CE and IEC 1010 safety standards. **Specifications: Range DC:** 40V-750V. **Range AC:** 40V-750V and 40A-700A. **Resistance Range:** 400-40KΩ. **Frequency Range:** 1KHz-10KHz. Diode test. Continuity buzzer. Auto range. True RMS. Peak hold. Data hold. Trim mode. Measures Frequency of the current being measured while the bar graph display simultaneously indicates the current level. Sleep mode. **Dimensions:** 1.22" x 3.5" x 7.44" (30.99mm x 88.90mm x 188.98mm). Three Year Limited Warranty.

290-1296



Model 290-1296-ND (TPI 296): Meets UL, cUL, CE and IEC 1010 safety standards. **Specifications: Range DC:** 40V-750V and 40A-700A. **Range AC:** 40V-750V and 40A-700A. **Resistance Range:** 400-40KΩ. **Frequency Range:** 1KHz-10KHz. HDR mode at line voltage and 60Hz. Auto or manual range. Diode test. Continuity buzzer. True RMS. Peak hold. Min/Max/Ave and Data hold. Measures frequency of the current being measured while the bar graph display simultaneously indicates the current level. Sleep mode. **Dimensions:** 1.22" x 3.5" x 7.44" (30.99mm x 88.90mm x 188.98mm). Three-Year Limited Warranty.

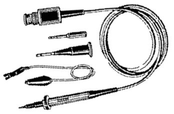


290-1440

Model 290-1440-ND (TPI 440 Scope plus True RMS DMM): Hand-held oscilloscope. 1MHz DC Bandwidth. 25 Megasamples per second. Auto range. True RMS DMM to 4000 count. Continuous autoset. Real Time display. Cursor measurements. Flexible triggering including glitch capture. Roll mode. Frequency counter to 10MHz. Basic DC accuracy to 0.3%. Opto-Isolated RS-232C Port. Designed to meet IEC 1010-1 600V Cat III Rating. **Dimensions:** 8.75" x 3.88" (222.25mm x 98.55mm). Test leads included.

Description	Digi-Key Part No.	Price Each	TPI Part No.
DMM 3-1/2 Digit, Model No. TPI 133	290-1133-ND	51.71	TPI 133
DMM 4 Digit, Model No. TPI 153	290-1153-ND	70.83	TPI 153
DMM 4 Digit, Model No. TPI 163	290-1163-ND	113.36	TPI 163
DMM 4 Digit, Model No. TPI 183	290-1283-ND	188.96	TPI 183
DMM 3 Digit, Model No. TPI 120	290-1120-ND	28.31	TPI 120
DMM 4 Digit, Model No. TPI 293	290-1293-ND	127.53	TPI 293
DMM 4 Digit, Model No. TPI 296	290-1296-ND	179.51	TPI 296
DMM Boot Hook	290-1103-ND	8.70	TPI A103
TPI 440 Hand-held Oscilloscope	290-1440-ND	350.93	TPI 440
Software for TPI 440	290-1075-ND	59.95	A402
Battery Charger for TPI 440	290-1441-ND	17.52	TPI A401
Carrying Case for TPI 440	290-1900-ND	19.95	TPI A900
Deluxe Test Lead Kit IEC1010	290-1041-ND	35.00	TLS2000B
R/A Deluxe Test Lead Kit IEC1010	290-1042-ND	29.78	TLS2000RB
Economy Test Lead Kit IEC1010	290-1043-ND	17.50	TL1000B
R/A Economy Test Lead Kit IEC1010	290-1044-ND	17.50	TL1000RB

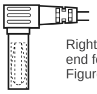
Oscilloscope Probe Line



Specifications	Replaces Stack	Digi-Key Part No.	Price Each	TPI Part No.
20MHz, x 1	—	290-1000-ND	29.95	1P20B
100MHz, x 10	CP-901, CP-223, CP-801	290-1001-ND	34.95	P100B
100MHz, x 10*	CP-902, CP-240, CP-802	290-1050-ND	39.95	P100BR
200MHz, x 10	—	290-1002-ND	39.95	P200B
250MHz, x 100	—	290-1051-ND	44.95	P250
250MHz, x 100*	—	290-1052-ND	49.95	P250R
250MHz, x 10	CP-241	290-1053-ND	44.95	P250B
250MHz, x 10*	CP-243	290-1054-ND	49.95	P250BR
60MHz, x 10	CP-210	290-1003-ND	34.95	SP60B
100MHz, x 1 x 10	CP-209	290-1004-ND	39.95	SP100B
150MHz, x 1 x 10	—	290-1005-ND	44.95	SP150B
200MHz, x 1 x 10	—	290-1006-ND	49.95	SP200B
250MHz, x 1 x 10	—	290-1007-ND	54.95	SP250B
300MHz, x 1 x 10	CP-261	290-1008-ND	59.95	SP300B
60MHz, x 1 x 10	CP-325	290-1055-ND	49.95	IP060
100MHz, x 1 x 10	—	290-1056-ND	59.95	IP100
250MHz, x 1 x 10	—	290-1057-ND	69.95	IP250

* With Readout

tpi Test Leads and Accessories



Right angle end for Figures 1-5

Fig. 1

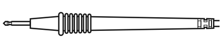


Fig. 2

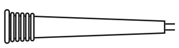


Fig. 3

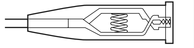


Fig. 4

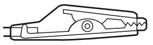


Fig. 5

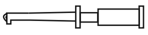


Fig. 6

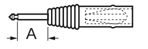
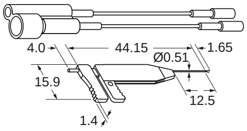


Fig.	Description	Digi-Key Part No.	Price Each 1	10
1	Test Lead Set Standard 46" (1168.40mm)	290-1059-ND	8.75	7.40
2	Test Lead Set Deluxe Extender	290-1060-ND	15.73	13.29
3	Test Lead Set Lg Clip 9" (228.60mm) Pigtail	290-1061-ND	6.05	5.12
4	Test Lead Set Sm Clip 9" (228.60mm) Pigtail	290-1062-ND	4.48	3.79
5	Probe Tip Red Mini Clip With 9" (228.60mm) Pigtail	290-1065-ND	6.73	5.69
5	Probe Tip Black Mini Clip With 9" (228.60mm) Pigtail	290-1066-ND	6.73	5.69
6	Probe Tip Set Short; Dimension A = 12.7mm	290-1063-ND	6.50	5.50
6	Probe Tip Set Long; Dimension A = 62mm	290-1064-ND	7.85	6.64
—	Kit Test Lead Set 7 Pair	290-1058-ND	29.95	—

Nano-Clip and Micro-Clip



NANO-CLIP SPECIFICATIONS: Accessible Lead Pitch: 0.3mm min. **Clip Retention:** 50g min. **Stroke:** 1.65mm **Operating Force:** 300g max. **Contact Resistance:** 30 Meg ohm **Conductor Resistance:** 300 Meg. ohm

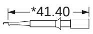
NANO-CLIP FEATURES: • Stacks side by side • Gold-plated hook and contact • Fluorine coated barrel extension

MICRO-CLIP SPECIFICATIONS: Accessible Lead Pitch: 1.27mm min. **Clip Retention:** 200g min. **Stroke:** 3.0mm **Operating Force:** 1.0kg max. **Contact Resistance:** 30 Meg ohm **Conductor Resistance:** 200 Meg. ohm

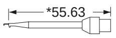
Description	Package Includes	Digi-Key Part No.	Price Each	TPI Part No.
Nano-Clip (.3mm, 1/4 Pitch)				
Black, Red	2 Clips, 2 Leads and Ground Lead	290-1096-ND	29.95	NC2BR
Black, Red	6 Clips, 3 Lead Sets (hot & grnd), Ground Lead & Hold Bar	290-1097-ND	99.95	NC6BR
Red	6 Clips, 3 Lead Sets (hot & grnd), Ground Lead & Hold Bar	290-1098-ND	99.95	NC6R
Black	6 Clips, 3 Lead Sets (hot & grnd), Ground Lead & Hold Bar	290-1099-ND	99.95	NC6B
Yellow	6 Clips, 3 Lead Sets (hot & grnd), Ground Lead & Hold Bar	290-1100-ND	99.95	NC6Y
Blue	6 Clips, 3 Lead Sets (hot & grnd), Ground Lead & Hold Bar	290-1101-ND	99.95	NC6BLUE
Green	6 Clips, 3 Lead Sets (hot & grnd), Ground Lead & Hold Bar	290-1102-ND	99.95	NC6G
Gray	6 Clips, 3 Lead Sets (hot & grnd), Ground Lead & Hold Bar	290-1104-ND	99.95	NC6GY
Assorted	12 Clips, 6 Lead Sets (hot & grnd), Ground Lead & Hold Bar	290-1105-ND	175.95	NC12
Black	Nano-Clip Only	290-1106-ND	7.95	NC1B
Gray	Nano-Clip Only	290-1107-ND	7.95	NC1GY
Red	Nano-Clip Only	290-1108-ND	7.95	NC1R
Yellow	Nano-Clip Only	290-1109-ND	7.95	NC1Y
Green	Nano-Clip Only	290-1110-ND	7.95	NC1G
Blue	Nano-Clip Only	290-1111-ND	7.95	NC1BLUE
Ground Lead	1 Lead	290-1112-ND	4.25	NCGROUND
Hot Lead	1 Lead	290-1113-ND	3.50	NCHOT
Dual Lead	1 Lead	290-1114-ND	6.38	NCDUAL
Lead Out Contact	Use with 24-28 AWG Wire (Solder-Type)	290-1115-ND	2.97	LC85
Lead Out Contact	Needs Crimp Tool for Nano-Clip & Micro-Clip	290-1116-ND	2.40	LC65
Micro-Clip (1.27mm Pitch)				
Black	1 Clip	290-1118-ND	6.38	MC1B
Gray	1 Clip	290-1119-ND	6.38	MC1GY
Red	1 Clip	290-1121-ND	6.38	MC1R
Assorted	6 Clips, 3 Lead Sets (hot & ground) and Ground Lead	290-1117-ND	29.99	MC6

3M Electronic Specialty Products

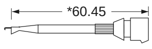
Probe-It



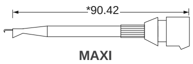
MICRO



MINI



STANDARD



MAXI

Specifications:

Contact: Phosphor bronze.

Body: Nylon.

3M new series of Probe-It™ plunger-actuated clips make test connections to individual component leads faster and easier.

Simply press cap to extend the hook contact, place on component lead or wire under test, and release for hands-free troubleshooting and circuit testing.

When removed from the lead the hook contact retracts into the plastic tip to minimize the possibility of shorting components.

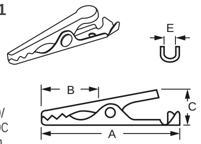
Description	Color	Digi-Key Part No.	Price / Pkg.
Micro Probe-It*	Red Black Blue Green Yellow White	923830-RD-ND 923830-BK-ND 923830-BU-ND 923830-GN-ND 923830-YL-ND 923830-WT-ND	8.04
Mini Probe-It*	Red Black Blue Green Yellow White	923835-RD-ND 923835-BK-ND 923835-BU-ND 923835-GN-ND 923835-YL-ND 923835-WT-ND	7.76
Standard Probe-It*	Red Black	923840-RD-ND 923840-BK-ND	10.76
Maxi Probe-It*	Red Black	923845-RD-ND 923845-BK-ND	9.30
Micro Probe-It Assort. †	1 of each	923848-ND	10.95
Mini Probe-It Assort. †	1 of each	923850-ND	11.39

* 2 per package † 6 per package

Test Equipment

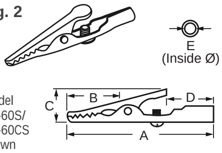
Clips

Fig. 1



Model
BU-30/
BU-30C
shown

Fig. 2



Model
BU-60S/
BU-60CS
shown

Fig. 3

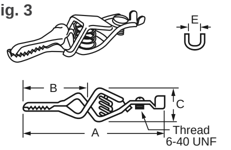
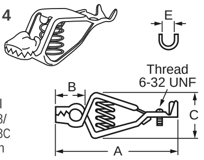


Fig. 4



Model
BU-48/
BU-48C
shown

Fig. 5

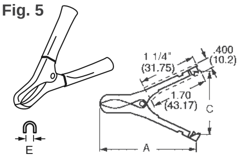


Fig	Description	Dimensions – Inch (mm) A	B	C	D	E	Jaw Opening Inch (mm)	Current Rating	Material	Connection Type	Digi-Key Part No.	Price Each	Mueller Part No.
1	Mini Alligator Clip	1-3/32 (27.78)	7/16 (11.11)	5/16 (7.94)	—	3/32 (2.38)	3/16 (4.8)	5A	Steel	Solder/Crimp	314-1010-ND	.31	BU-30
	Mini Alligator Clip	1-3/32 (27.78)	7/16 (11.11)	5/16 (7.94)	—	3/32 (2.38)	3/16 (4.8)	5A	Copper	Solder/Crimp	314-1012-ND	.39	BU-30C
	Micro Alligator Clip	1-3/32 (27.78)	3/8 (9.52)	5/16 (7.94)	—	3/32 (2.38)	7/32 (5.6)	5A	Steel	Solder/Crimp	314-1017-ND	.59	BU-34
	Micro Alligator Clip	1-3/32 (27.78)	3/8 (9.52)	5/16 (7.94)	—	3/32 (2.38)	7/32 (5.6)	5A	Copper	Solder/Crimp	314-1018-ND	.61	BU-34C
2	Mini Alligator Clip with Barrel	1-1/4" (31.75)	7/16 (11.11)	5/16 (7.94)	1/4 (6.35)	1/8 (3.17)	3/16 (4.8)	5A	Steel	Solder/Crimp	314-1011-ND	.31	BU-30BL
	Alligator Clip with Barrel	1-31/32 (50.00)	5/8 (15.88)	7/16 (11.11)	3/4 (19.05)	.16 (4.06)	5/16 (7.9)	10A	Steel	Solder/Crimp	314-1033-ND	.40	BU-60
	Alligator Clip with Barrel and Screw	1-31/32 (50.00)	5/8 (15.88)	7/16 (11.11)	3/4 (19.05)	.16 (4.06)	5/16 (7.9)	10A	Copper	6/40Screw	314-1034-ND	.79	BU-60CS
	Alligator Clip with Barrel and Screw	1-31/32 (50.00)	5/8 (15.88)	7/16 (11.11)	3/4 (19.05)	.16 (4.06)	5/16 (7.9)	10A	Steel	6/40Screw	314-1035-ND	.48	BU-60S
	Alligator Clip with Barrel	1-31/32 (50.00)	5/8 (15.88)	7/16 (11.11)	3/4 (19.05)	.16 (4.06)	5/16 (7.9)	10A	Stainless Steel	Solder/Crimp	314-1036-ND	1.16	BU-60X
3	Crocodile Clip	2-1/8 (53.97)	15/16 (23.81)	1/2 (12.7)	—	9/64 (3.57)	5/16 (7.9)	5A	Steel	Crimp/6-40 Screw	314-1039-ND	.58	BU-85
	Crocodile Clip	2-1/8 (53.97)	15/16 (23.81)	1/2 (12.7)	—	9/64 (3.57)	5/16 (7.9)	10A	Copper	Crimp/6-40 Screw	314-1040-ND	1.06	BU-85C
4	Heavy Duty Clip	2-27/32 (72.23)	7/16 (11.11)	1-1/8 (28.57)	—	1/4 (6.35)	3/4 (19)	25	Steel	Crimp/8-32 Screw	314-1001-ND	.92	BU-24APN
	Automotive Clip	3 (76.2)	21/32 (16.67)	15/16 (23.81)	—	9/32 (7.15)	3/4 (19)	40	Steel	Crimp/8-32 Screw	314-1002-ND	1.13	BU-25
	Automotive Clip	3 (76.2)	21/32 (16.67)	15/16 (23.81)	—	9/32 (7.15)	3/4 (19)	75	Copper	Crimp/8-32 Screw	314-1003-ND	2.03	BU-25C
	General Purpose Clip	2-7/16 (61.91)	17/32 (13.49)	11/16 (17.46)	—	3/16 (4.76)	5/8 (16)	20	Steel	Crimp/6-32 Screw	314-1006-ND	.84	BU-27
	General Purpose Clip	2-7/16 (61.91)	17/32 (13.49)	11/16 (17.46)	—	3/16 (4.76)	5/8 (16)	40	Copper	Crimp/6-32 Screw	314-1007-ND	1.16	BU-27C
	Pee-Wee Clip	1-17/32 (38.89)	1/4 (6.35)	15/32 (11.91)	—	9/64 (3.57)	5/16 (7.9)	5	Steel	Crimp/6-40 Screw	314-1021-ND	.57	BU-45
	Pee-Wee Clip	1-17/32 (38.89)	1/4 (6.35)	15/32 (11.91)	—	9/64 (3.57)	5/16 (7.9)	10	Copper	Crimp/6-40 Screw	314-1022-ND	.82	BU-45C
	Automotive Analyzer Clip	2 (50.80)	3/8 (9.52)	5/8 (15.88)	—	3/16 (4.76)	1/2 (12.7)	10	Steel	Crimp/6-32 Screw	314-1029-ND	.73	BU-48B
	Automotive Analyzer Clip	2 (50.80)	3/8 (9.52)	5/8 (15.88)	—	3/16 (4.76)	1/2 (12.7)	20	Copper	Crimp/6-32 Screw	314-1030-ND	.90	BU-48C
5	Miniature Plier-Type Clip, Black	2-7/8 (98.42)	—	2 (50.80)	—	9/32 (7.15)	1-1/8 (28.6)	50	Steel	Crimp/Solder	314-1023-ND	1.14	BU-46A-0
	Miniature Plier-Type Clip, Red	2-7/8 (98.42)	—	2 (50.80)	—	9/32 (7.15)	1-1/8 (28.6)	50	Steel	Crimp/Solder	314-1024-ND	1.14	BU-46A-2
	Miniature Plier-Type Clip, Black	2-7/8 (98.42)	—	2 (50.80)	—	9/32 (7.15)	1-1/8 (28.6)	75	Copper	Crimp/Solder	314-1025-ND	1.83	BU-46C-0
	Miniature Plier-Type Clip, Red	2-7/8 (98.42)	—	2 (50.80)	—	9/32 (7.15)	1-1/8 (28.6)	75	Copper	Crimp/Solder	314-1026-ND	1.83	BU-46C-2

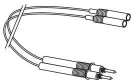
Insulators

Description	Color	Use with Series	Digi-Key Part No.	Price Each	Mueller Part No.
Protective Vinyl Insulator	Black Red	BU-24APN/ 25/25C	314-1004-ND 314-1005-ND	1.06 1.06	BU-26-0 BU-26-2
Flexible Vinyl Insulator	Black Red	BU-27/27C	314-1008-ND 314-1009-ND	.68 .68	BU-29-0 BU-29-2
Tough, Flexible Vinyl Insulator	Black Red	BU-30BL	314-1013-ND 314-1014-ND	.23 .23	BU-31-0 BU-31-2
Skin-tight, Flexible Vinyl Insulator	Black Red	BU-30/30C	314-1015-ND 314-1016-ND	.20 .20	BU-32-0 BU-32-2

Description	Color	Use with Series	Digi-Key Part No.	Price Each	Mueller Part No.
Skin-tight, Flexible Vinyl Insulator	Black Red	BU-34/34C	314-1019-ND 314-1020-ND	.20 .20	BU-36-0 BU-36-2
Durable, Flexible Vinyl Insulator	Black Red	BU-45/45C	314-1027-ND 314-1028-ND	.31 .31	BU-47-0 BU-47-2
Durable, Flexible Vinyl Insulator	Black Red	BU-48B/48C	314-1031-ND 314-1032-ND	.61 .61	BU-49-0 BU-49-2
Tough, Flexible Vinyl Insulator	Black Red	BU-60/60CS/ 60/S/60X	314-1037-ND 314-1038-ND	.23 .23	BU-62-0 BU-62-2
Tough, Flexible Vinyl Insulator	Black Red	BU-85/85C	314-1041-ND 314-1042-ND	.39 .39	BU-87-0 BU-87-2

Test Lead and Prod Kits

All kits feature Mueller's IEC 1010 Compliant test leads and accessories.



Kit 400001 - General Purpose Kit and
Kit 400005 - MeterMate™ XL General Purpose Kit

Kit includes: • Insulated test lead prod-to-banana, 1 red, 1 black (1000V) • Insulated plunger-hook, 1 red, 1 black (1000V) • Insulated banana jack to standard banana plug, 1 red, 1 black (1000V)* • Mueller's most popular threaded alligator clip with insulators, 1 red, 1 black*

Kit 400004 - MeterMate™ XL Automotive Kit

Kit includes: • Flexible silicone test lead banana-to-banana, 1 red, 1 black (1000V) • Shrouded double banana plug, 60" (1.52M), twisted pair cable* • Insulated banana jack to standard banana plug, 1 red, 1 black (1000V)* • Insulated right angle plunger clamp clip with flexible shaft, 1 red, 1 black (1000V) • Insulated plug-on test prod with cage spring banana tip, 1 red, 1 black (1000V)* • Insulated banana coupler, 1 red, 1 black (1000V) • Insulated plug-on shrouded alligator, 1 red, 1 black (1000V) Large durable briefcase

Kit 400002 - Electrical Kit and
Kit 400006 - MeterMate™ XL Electrical Kit

Kit includes: • Flexible silicone test lead 60" (1.52 meter) long, 1 red, 1 black (1000V) • Insulated plug-on shrouded alligator, 1 red, 1 black (1000V) • Insulated right angle plunger jaw clip, 1 red, 1 black (1000V) • Insulated spade lug, 1 red, 1 black* • Insulated plug-on test prod with cage spring banana tip, 1 red, 1 black (1000V)* • Insulated banana jack to standard banana plug, 1 red, 1 black (1000V)*

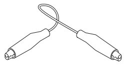
Kit 400003 - Electronic Kit and
Kit 400007 - MeterMate™ XL Electronic Kit

Kit includes: • Oscilloscope probe (600V) Manufactured in compliance with MIL-1-45208A* • Scope accessory Kit: 6" ground lead with Mueller clip and insulator, scope probe plunger clip, BNC male-to-probe tip, female adapter, spare probe tip, adjustment screwdriver* • Flexible silicone test lead, 1 red, 1 black (1000V) • Variable length test prod lead 48" (1.22M) to shrouded banana, 1 red, 1 black (1000V) • Insulated plug-on test prod, 1 red, 1 black (1000V)* • Insulated right angle plunger jaw clip, 1 red, 1 black (1000V) • Insulated right angle plunger hook clip, 1 red, 1 black (1000V) • Female BNC-to-double banana plug adapter* • Insulated banana jack to standard banana plug, 1 red, 1 black (1000V)* • Insulated spade lug, 1 red, 1 black *

Description	Digi-Key Part No.	Price Each	Mueller Part No.
Test Leads Kits			
General Purpose Kit with heavy-duty clear vinyl pouch	314-1043-ND	19.12	400001
Metermate XL General Purpose Kit with large durable briefcase	314-1047-ND	86.18	400005
Metermate XL Automotive Kit with large durable briefcase	314-1046-ND	162.16	400004
Deluxe Electrical Kit with tri-fold pouch	314-1044-ND	73.52	400002
Metermate XL Electrical Kit with large durable briefcase	314-1048-ND	73.31	400006
Electronics Kit with heavy-duty clear vinyl pouch	314-1045-ND	100.00	400003
Metermate XL Electronic Kit with large durable briefcase	314-1049-ND	171.33	400007
Test Prod Pairs and Kits			
Unshrouded Right Angle Banana Plug Kit	314-1050-ND	10.08	110003
Shrouded Right Angle Banana Plug Pair of Leads	314-1055-ND	7.84	110009
Shrouded Right Angle Banana Plug Kit	314-1051-ND	10.08	110004
Unshrouded Banana Plug Pair of Leads	314-1056-ND	7.20	110011
Unshrouded Banana Plug Kit	314-1052-ND	10.08	110005
Shrouded Banana Plug Pair of Leads	314-1054-ND	7.36	110007
Shrouded Banana Plug Kit	314-1053-ND	10.08	110006
Unshrouded Banana Plug Pair of Leads	314-1057-ND	7.84	110012

* IEC 1010 standard and UL does not apply

Jumper Wire Test Leads



Handy test leads with insulated alligator clips attached to each end.
Each package contains black, red, white, green and yellow jumpers.

GC396-ND	Standard Test Leads, 2 Each, 15" (38.10cm) long 27 AWG wires (10 Pkg.)	**$6.68**
GC397-ND	Heavy Duty Test Leads, 1 Each, 22" (55.88cm) long 21 AWG wires (5 Pkg.)	**$6.44**

Alligator Clips

Fig. 1

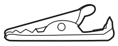


Fig. 2

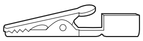


Fig. 3 — Large with Screw Connector

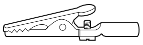


Fig. 4 — Small with Solder Connector

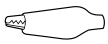


Fig. 5 — X-Large Barrel Type with Solder Conn.

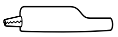


Fig. 6

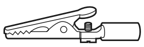
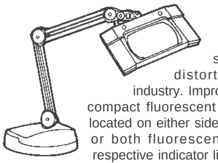


Fig.	Description	Color	Size	Digi-Key Part No.	Price Each 1	10	100
1	without Cover	—	27mm	CP-2400-ND	.36	.30	.23
1	without Cover	—	35mm	CP-2401-ND	.36	.30	.23
1	without Cover	—	44mm	CP-2402-ND	.36	.30	.23
2	without Cover	—	50mm	CP-2403-ND	.40	.33	.25
3	with Wire Term	—	50mm	CP-2404-ND	.44	.36	.28
1	with Screw	—	44mm	CP-2405-ND	.44	.36	.28
4	with Cover	Black	27mm	CP-2406-ND	.44	.36	.28
4	with Cover	Red	27mm	CP-2407-ND	.44	.36	.28
5	with Cover	Black	35mm	CP-2408-ND	.44	.36	.28
5	with Cover	Red	35mm	CP-2409-ND	.44	.36	.28
5	with Cover	Black	44mm	CP-2410-ND	.52	.43	.33
5	with Cover	Red	44mm	CP-2411-ND	.52	.43	.33
5	with Screw, with Cover	Black	44mm	CP-2412-ND	.60	.49	.38
5	with Screw, with Cover	Red	44mm	CP-2413-ND	.60	.49	.38
6	with Handle	Black	50mm	CP-2414-ND	.52	.43	.33
6	with Handle	Red	50mm	CP-2415-ND	.52	.43	.33

LAMPS & ACCESSORIES

Wave + Plus Series Magnifiers



3.5-DIOPTER LENS

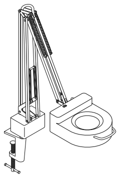
The Luxo Wide Angle Viewing Enlargement system with stadium shaped lens offers the largest distortion-free viewing area in the industry. Improved light output uses two 13-watt compact fluorescent lamps. Blue indicator lights are located on either side of the magnifier head. When one or both fluorescent tubes are in operation, the respective indicator light(s) is illuminated. Magnification 3/4X: Focal length: 13" (33.02cm); viewing area: 6 3/4" (17.15cm). ABS molded housing. Independently switched, energy-efficient, long-life compact fluorescent lamps offer both shadow-free dual light two-dimensional and single light three-dimensional viewing. UL listed (13W PL Compact Bulb)

Arm Inch (cm)	Mount	Digi-Key Part No.	Price Each	Luxo Part No.
45 (114.30) K	Clamp Bracket	L845LG-ND	428.31	17845LG
30 (76.20) K	Weighted Base	L847LG-ND	495.69	17847LG
45 (114.30)K	Clamp Bracket	L841LG-ND *NEW!*	620.81	17841LG
30 (76.20)K	Clamp Bracket	L842LG-ND *NEW!*	620.81	17842LG
30 (76.20)K	Weighted Base	L843LG-ND *NEW!*	688.19	17843LG
45 (114.30)K	Clamp Bracket	L900BK-ND *NEW!*	659.31	17900BK
30 (76.20)K	Clamp Bracket	L902BK-ND *NEW!*	659.31	17902BK
30 (76.20)K	Weighted Base	L904BK-ND *NEW!*	721.88	17904BK

Replacement Bulbs

Description	Digi-Key Part No.	Price Each	Luxo Part No.
22 Watt T-9 Bulb for KFM/LC/FM Series	L540-ND	16.36	31640
15 Watt T-8 Bulb for FL Series......	L541-ND	13.48	31641
13 Watt Fluorescent Bulb...........	L5205-ND	24.06	36205
5 Watt Halogen Lamp...............	L577-ND	14.44	34977
1.5" 10-Diopter Lense...............	L50206-ND *NEW!*	115.50	50206

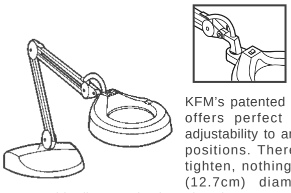
NEW! 60 Watt Incandescent Lamp - Less Bulb



33" reach clamp-on magnifier light, 3-diopter lens. (Bulb not included).

Mount	Digi-Key Part No.	Price Each	Luxo Part No.
Clamp Bracket,Black	L296BK-ND	49.09	L296BK

KFM Series Magnifiers



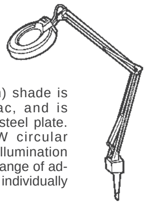
KFM's multi-lens capability offers a wider range of distortion-free magnification than any other magnifier. KFM's patented internal spring arm offers perfect balance and full adjustability to an infinite number of positions. There are no knobs to tighten, nothing to adjust. The 5" (12.7cm) diameter lenses are mounted in die-cast aluminum housing. Comes with a 22W energy-efficient fluorescent bulb which provides cool, shadow-free illumination. (22W T-9 Bulb)

Lens Type	"K" Arm Inch (cm)	Color	Digi-Key Part No.	Price Each	Luxo Part No.
Clamp Bracket					
5d	45 (114.30)	Black	L230B-ND	282.01	17115BK
5d	45 (114.30)	Lt. Gray	L230LG-ND	282.01	17115LG
Weighted Base					
3d	30 (76.20)	Black	L235B-ND	356.13	17253BK
3d	30 (76.20)	Lt. Gray	L235LG-ND	356.13	17253LG

NEW! Additional Lenses

Diameter Inches	Description	Digi-Key Part No.	Price Each	Luxo Part No.
4"	4-Diopter	L50201-ND	52.94	50201
3 1/8"	8-Diopter	L50202-ND	57.75	50202

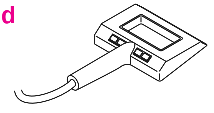
IFM Series



Full size 5" (12.70cm) 3 diopter lens provides distortion free 3/4 power magnification. Lens allows a generous 13" (33.02cm) (focal length) work area between lens and objects. 9" (22.86cm) shade is made of tough, mar-resistant cycolac, and is reinforced at neck and back with heavy steel plate. Comes with an energy-efficient 22W circular fluorescent lamp for cool, shadow-free illumination (22W T-9 Bulb). 5-tube L-arm offers a full range of adjustability. Perfect balance maintained by individually calibrated, tempered-steel springs.

"L" Arm Inch (cm)	Mount	Color	Digi-Key Part No.	Price Each	Luxo Part No.
45 (114.30)	Clamp Bracket	Lt. Gray	L301LG-ND	182.88	16301LG

NEW! Hand Held UV Magnifier

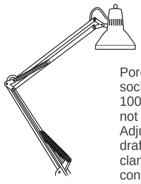


Provides both ultra-violet and standard white fluorescent lighting

Description	Digi-Key Part No.	Price Each	Luxo Part No.
4" x 2" Viewing Area, 5d (2.25x lens)	L16401-ND	293.56	16401

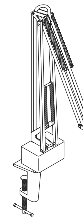
Ledu Task Master Series

UN12D Series



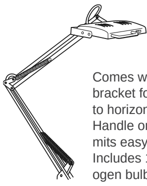
Porcelain socket rated for 100-watts (bulb not included). Adjustable drafting board clamp. 2 conductor cord.

IM12D Series



Clamp-on 22-watt circline fluorescent lamp, 3-conductor cord set. The L712 is a 3 diopter lens and the L7125 is a 5 diopter lens.

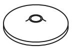
L554 Series Halogen Worklight



Comes with "A"-bracket for clamping to horizontal surfaces. Handle on shade permits easy positioning. Includes 100W halogen bulb.

"L" Arm Inch (cm)	Color	Digi-Key Part No.	Price Each	Luxo Part No.	Luxo Series
Clamp Bracket					
42 (106.68)	White	L112WT-ND	93.45	L112WT	UN12D
42 (106.68)	Black	L112MB-ND	93.45	L112MB	UN12D
42 (106.68)	Black	L123BK-ND	153.30	L554BK	L554
42 (106.68)	White	L712WT-ND *NEW!*	168.44	L712WT	IM12D
42 (106.68)	White	L7125WT-ND *NEW!*	182.88	L7125WT	IM12D

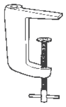
NEW! Weighted Base



Description	Digi-Key Part No.	Price Each	Luxo Part No.
Weighted Base for L712 Series	L60008-ND	51.98	60008

Clamp Bracket

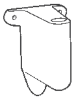
For edgemounting on horizontal surfaces.



L501BK-ND Black
L501LG-ND Lt. Gray
$13.48 each

Wall Bracket

For permanent mounting on vertical surface.

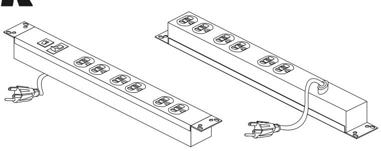


L503BK-ND Black
L503LG-ND Lt. Gray
$13.48 each

NEW! WABER®

Outlet Strips

The greatest convenience item and time-saver ever conceived for racks, enclosures, desks and cabinets. Waber Rack Mounts offer instant power distribution from front, back or a combination of both, the choice is yours.



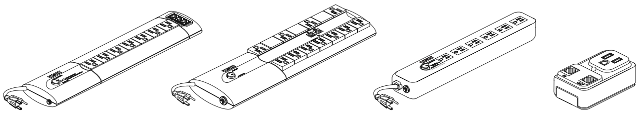
903CB

911CB

Description	Master Switch with Built-In Pilot Light	Circuit Breaker	Digi-Key Part No.	Price Each	Waber Part No.
Rack Mount					
19" Strip 6 Outlet Front 6' Cord	Yes	Yes	271-2500-ND	47.00	900CB
19" Strip 6 Outlet Front 15' Cord	Yes	Yes	271-2501-ND	52.00	900CB-15
19" Strip 6 Outlet Front 6' Cord	Yes	Yes	271-2502-ND	45.00	903CB
19" Strip 6 Outlet Front 15' Cord	Yes	Yes	271-2503-ND	50.00	903CB-15
19" Strip 6 Outlet 2 Front 4 Rear 6' Cord	Yes	Yes	271-2504-ND	49.00	904CB
19" Strip 6 Outlet 2 Front 4 Rear 15' Cord	Yes	Yes	271-2505-ND	54.00	904CB-15
19" Strip 6 Outlet On Back 6' Cord	Yes	Yes	271-2506-ND	47.00	911CB
19" Strip 6 Outlet On Back 15' Cord	Yes	Yes	271-2507-ND	52.00	911CB-15
19" Right Angle 6 Outlets on Back 15' Cord	Yes	Yes	271-2508-ND	61.00	911CBRA-15
Outlet Strip Rack Mount					
20Amp 6 Outlets 15' Cord	Yes	Yes	271-2510-ND	81.00	X911CB-186
Surge Suppressor Rack Mount					
6 Outlets on back 6' Cord	Yes	Yes	271-2509-ND	99.95	DG315-R

Surge and Noise Suppressors

Equipment Guarantee: MSUR6-6/MSUR6-15 $10,000, MSUR6N-6 $25,000, PSUR7N-6/PSUR7N-15 $2,500, PSUR7NT-7 $25,000, PSUR11NT-7/PSUR8NT-8 $100,000, SWT1NT $2,500, SWT6N $25,000/SWT6NT $25,000



PSUR7NT-7

PSUR11NT-7

MSUR6N-6

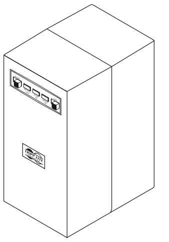
SWT1NT

Description	Digi-Key Part No.	Price Each	Waber Part No.
Surge Suppressor, Medical*, 4 Outlets, 15' Cord	271-2511-ND	92.95	MGS4-15
Surge Suppressor, Medical*, 4 Outlets, 6' Cord	271-2512-ND	87.95	MGS4-6
Surge Suppressor, Medical*, 6 Outlets, 15' Cord	271-2513-ND	104.95	MGS6-15
Surge Suppressor, Medical*, 6 Outlets, 6' Cord	271-2514-ND	99.95	MGS6-6
Surge Suppressor, Metal, 6 Outlets, 6' Cord w/switch	271-2515-ND	32.95	MSUR6-6
Surge Suppressor, Metal, 6 Outlets, 15' Cord w/switch	271-2516-ND	38.95	MSUR6-15
Surge Suppressor, Metal with Alarm, 6 Outlets, 6' Cord w/switch	271-2517-ND	42.95	MSUR6N-6
Surge Suppressor, 7 Outlet with Alarm, Grey w/switch	271-2518-ND	17.95	PSUR7N-6
Surge Suppressor, 7 Outlet and Telephone with Alarm w/switch	271-2520-ND	36.95	PSUR7NT-7
Surge Suppressor, 7 Outlet with Alarm Grey w/switch	271-2521-ND	29.95	PSUR7N-15
Surge Suppressor, 8 Outlet and Fax w/switch	271-2522-ND	79.95	PSUR8NT-8
Surge Suppressor, 11 Outlet and Fax w/switch	271-2523-ND	84.95	PSUR11NT-7
Surge Suppressor, 1 Outlet and Fax with LED	271-2525-ND	12.95	SWT1NT
Surge Suppressor, 6 Outlet with LED	271-2526-ND	19.95	SWT6N
Surge Suppressor, 6 Outlet and Fax with LED	271-2527-ND	24.95	SWT6NT

*Medical Suppressors are manufactured exclusively for use in hospitals, nursing homes, clean rooms and labs. All MEDGARD® products offer superior voltage breakdown, ground integrity, and low leakage current.

"THE POWER PEOPLE"

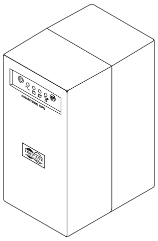
Standby UPS Systems



Tripp Lite's BC Personal provide excellent basic battery backup for home and small office personal computers. BC PRO units are ideal for network workstations and hubs. Battery backup maintains your Internet or network connection, allowing you to work online through short blackouts or safely shut down during longer ones. System provides excellent battery backup for home and small office personal computers and network workstations. 1050 VA of battery backup allows you to work through short blackouts or safely shut down during longer ones, diagnostic LEDs and a built in serial port that works with PowerAlert Software to provide automatic unattended shutdown. Internet Office UPS System provides complete power protection for your entire computer set-up, even power hungry peripherals. Built-in RJ11 jacks prevent surges from damaging your modem/fax equipment on 2 lines simultaneously. A 6 ft. telephone cord is also included. $25,000/$50,000 Ultimate Lifetime Insurance (model dependant) protects both backup and equipment plugged into it. No warranty cards required for coverage! • All UPS's are UL Approved • 2 year warranty • 115VAC (TL203-ND, 230VAC)

Description	Digi-Key Part No.	Price Each	Tripp Lite Part No.
BC Personal Standby Backup			
200VA, 140 W, 2 Outlets	TL120-ND	86.88	BC PERS 200
300VA, 175 W, 2 Outlets	TL196-ND	88.10	BC PERS 300
450VA, 265 W, 3 Outlets	TL197-ND	107.68	BC PERS 450
BC PRO Standby Backup			
600VA, 345 W, 4 Outlets	TL198-ND	156.62	BC PRO 600
850VA, 570 W, 4 Outlets	TL127-ND	324.25	BC PRO 850
1050VA, 705 W, 6 Outlets	TL128-ND	364.63	BC PRO 1050
1400VA, 940 W, 6 Outlets	TL129-ND	461.30	BC PRO 1400
Internet Office Standby Backup			
280VA, 175 W, 6 Outlets	TL199-ND	67.30	INTERNET OFFICE 280
BC, 300VA, 175 W, 2 Outlets	TL200-ND	97.89	BC INTERNET 300
500VA, 280 W, 6 Outlets	TL201-ND	128.48	INTERNET OFFICE 500
700VA, 425 W, 4 Outlets	TL202-ND	174.97	INTERNET OFFICE 700
230V, 500VA, 3 IEC Outlets	TL203-ND	144.04	INTERNET 500I

Smart Pro USB



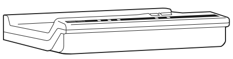
The new SmartPro 500 USB and Smart Pro 700 USB UPS Systems offer all the features you could ask for into one purchase: USB connectivity, automatic voltage regulation, reliable battery backup, premium surge suppression and unattended shutdown software. Built in RJ11 jacks for modem/fax line protection. A unique split-outlet design offers 6 outlets, 3 with battery backup and surge protection and 3 with surge-only protection. This intelligent design allows users to connect not only a CPU, monitor and modem, but also heavy draw peripherals such as printers and scanners. All models include $50,000 Ultimate Lifetime Insurance for connected equipment.

Description	Digi-Key Part No.	Price Each	Tripp Lite Part No.
Smart Pro USB Backup			
500VA, 300 W, 6 Outlets	TL223-ND	149.28	SMART 500 USB
700VA, 425 W, 6 Outlets	TL224-ND	197.00	SMART 700 USB

Command Console

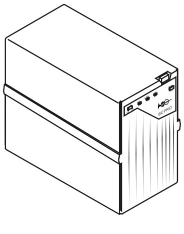
Under Monitor Protection

- Superior ISOBAR® surge and RFI/EMI noise filtration
- 15 amp circuit breaker with reset
- CCC4 features a slimline plastic housing and diagnostic LEDs



TL084-ND	Compact Command Console, 4 outlet, 5 yr. warranty (Mfg. No. CCC4)	**$19.95**

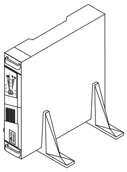
SMART Pro Net Intelligent Standby UPS Systems

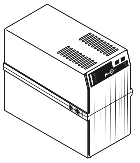


Tripp Lite's Smart Pro Net UPS system provides intelligent, line-interactive battery backup for networks and servers. Smart PRO Net systems allows you to work through short blackouts or safely shut down during longer ones and a built-in serial port that works with PowerAlert Software to provide automatic unattended shutdown. Tripp Lite's PowerAlert Software is the only UPS software capable of managing every type and brand of UPS on your network, from every manufacturer, and it is Year 2000 compliant. $50,000 Ultimate Lifetime Insurance. No warranty cards required for coverage! • 115VAC

Description	Digi-Key Part No.	Price Each	Tripp Lite Part No.
Smart Pro Net Rack Mount			
700VA, 450 W, 8 Outlets	TL161-ND	446.61	SMART700RM
1050VA, 705 W, 8 Outlets	TL162-ND	542.05	SMART1050RM
1400 VA, 940 W, 6 Outlets	TL140-ND	679.10	SMART1400RM
Smart Pro Net Backup			
450VA, 325 W, 4 Outlets	TL157-ND	245.94	SMART450NET
700VA, 450 W, 4 Outlets	TL158-ND	297.33	SMART700NET
1050VA, 705 W, 6 Outlets	TL159-ND	449.06	SMART1050NET
1400VA, 940 W, 6 Outlets	TL160-ND	602.01	SMART1400NET

True On-Line UPS Systems With Zero Transfer Time

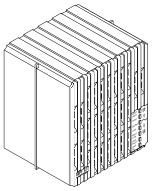




Tripp Lite gives you the benefits of zero transfer time UPS protection at an affordable price. These units provide full brownout-blackout protection and a fully regulated output, as each unit continuously conditions all power to your equipment. Full spike and surge protection as well as noise filtering provided by Tripp Lite's double conversion on-line power.

Description	Digi-Key Part No.	Price Each	Tripp Lite Part No.
On-Line UPS 1000 VA, 800W, 120V, 6 outlet	TL216-ND	630.49	SU1000RT
Unison UPS 1200 VA, 800W, 6 outlet	TL144-ND	1061.34	MPS1400
On-Line UPS 2200 VA, 1600W, 120V, 6 outlet	TL217-ND	1260.31	SU2200RT

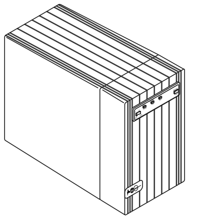
Line Conditioners



Line Conditioners let you work through brownouts for unlimited time periods, without using emergency power such as UPS systems. Line conditioners automatically adjust under and over voltages to provide safe computer grade AC power meeting ANSI C84.1 specifications. Full surge protection and noise filtering to eliminate erratic voltages coming into your equipment. Lifetime surge protection warranty (lightning strikes) and a full 2-year product warranty on all line conditioners.

Description	Digi-Key Part No.	Price Each	Tripp Lite Part No.
600 watts, 2 outlet, under voltage only	TL012-ND	76.69	LS600
600 watts, 4 outlet	TL039-ND	86.58	LS604
1200 watts, 4 outlet	TL013-ND	119.98	LC1200
1800 watts, 6 outlet	TL014-ND	178.11	LC1800
2400 watts, 6 outlet	TL044-ND	241.20	LC2400
Rack Mount, 2400 watts, 14 outlet	TL028-ND	326.54	LCR2400

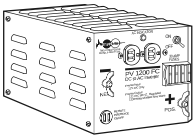
OmniSmart PnP Interactive Standby UPS Systems

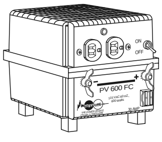


Includes all the features of the Smart Pro series plus adds the capability of detailed self test to all major functions of UPS and offers automatic inverter shutdown 20 seconds after your file server has performed an unattended shutdown, the OmniSmart will also power itself down to save battery power. Network managers can view power conditions about any fileserver to include input voltage, load capacity, battery conditions, operating temperatures and output voltage and frequency data in easy to read pull down menus. • 115VAC

Description	Digi-Key Part No.	Price Each	Tripp Lite Part No.
Omni Smart Standby Backup			
300VA, 175 W, 3 Outlets	TL204-ND	141.94	OMNISMART300PNP
500VA, 300 W, 6 Outlets	TL175-ND	183.54	OMNISMART500PNP
700VA, 425 W, 6 Outlets	TL174-ND	256.96	OMNISMART700PNP
850VA, 570 W, 4 Outlets	TL169-ND	362.19	OMNISMART850PNP
1050VA, 705 W, 6 Outlets	TL170-ND	385.43	OMNISMART1050PNP
1400VA, 940 W, 6 Outlets	TL171-ND	488.22	OMNISMART1400PNP

DC to AC Power Inverters





Solid-state electronic power inverters change ordinary 12VDC to 115VAC. Simply plug in your computer, stereo, or household appliances for convenient portable AC power. Use on boats, campers, cars and anywhere 12VDC is available.

Automotive Inverters are housed in a sturdy portable metal case with 12V cigarette lighter plug built-in. Ideal for laptops, test equipment and TV-VCR units.

General Purpose Inverters are low cost power inverters for equipment that doesn't require frequency controlled outputs or high inrush-startup currents. Ideal for most electronic test equipment.

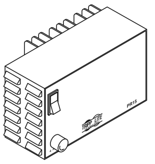
Peak Power models are able to handle up to twice their normal wattage for short periods of time delivering high start-up current, frequency controlled AC, making them ideal for motors, refrigerators, power tools and microwaves.

APS Inverters feature modified sine wave, frequency controlled, fully regulated output. These units automatically sense and switch AC between line power and battery power. A built-in recharge circuit will recharge the battery when line voltage becomes available. Perfect for sump pumps, emergency lighting, and more.

Description: (H x W x D)	Digi-Key Part No.	Price Each	Tripp Lite Part No.
Automotive Inverters			
140W, 1 outlet w/cigarette plug 3" x 6" x 1.75"	TL193-ND	29.26	PV140
300W, 2 outlet w/cigarette plug 4.2" x 6" x 1.8"	TL194-ND	45.22	PV300
500W, 3 outlet (Cables are included)	TL172-ND	83.79	PV500
General Purpose Inverters			
125W, 1 outlet, cigarette lighter plug, 3" x 6" x 5"	TL063-ND	46.55	PV125
200W, 1 outlet, 3" x 6" x 5"	TL030-ND	65.70	PV200
400W, 1 outlet, 3.625" x 7" x 6"	TL031-ND	94.43	PV400
550W, 2 outlet, 6.75" x 7.5" x 14"	TL099-ND	145.30	PV550
Peak Power Inverters (Frequency Controlled)			
500W, 2 outlet, 7" x 7" x 10"	TL146-ND	188.20	PV500FC
1000W, 2 outlet, 7" x 7" x 10"	TL147-ND	223.44	PV1000FC
2000W, 2 outlet, 7.125" x 8.5" x 16.5"	TL148-ND	385.70	PV2000FC
2400W, 24VDC In 2 outlet, 7.125" x 8.5" x 16.5"	TL149-ND	504.07	PV2400FC/24
APS Premium Inverters with Charger			
500W, 2 outlet, 7" x 7" x 10"	TL218-ND	265.52	APS512
900W, 2 outlet, 7" x 8.25" x 16"	TL219-ND	352.40	APS912
1000W, 2 outlet, 7" x 8.25" x 16"	TL220-ND	369.53	APS1024
2000W, 2 outlet, 7" x 8.25" x 16"	TL221-ND	549.40	APS2012
2400W, 2 outlet, 7" x 8.25" x 16"	TL222-ND	703.57	APS2424

"THE POWER PEOPLE"

Precision - Regulated DC Power Supplies



Ideal for commercial/land-mobile 2-way and ham radios, 12 volt point of sale displays, test bench, tape players, amplifiers and more.

Features:

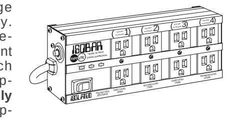
- Current-limiting electronic foldback: for automatic overcurrent protection in case of overload; time controlled on 7 amp and larger models
- Regulated output voltage maintains up to 95% of no load value
- High quality filtering provides for very low ripple/low noise operation
- Large heat sinks and vented cabinet provide cool operation for continuous use and long life of the unit

Digi Key Part No.	General Applications
TL185-ND	Home use CBs, quality car tape players
TL186-ND	Home use single sideband CB's, high power car stereos
TL187-ND	30 Watt transmitters, VHF-UHF, 2-way radios/amps
TL188-ND	40 Watt transmitters, VHF-UHF, 2-way radios/amps
TL189-ND	50 Watt transmitters, VHF-UHF, commercial radios
TL190-ND	75-100 Watt Ham-UHF-VHF, commercial radios
TL191-ND	150-200 Watt Ham-UHF-VHF, commercial radios
TL192-ND	250-300 Watt Ham-UHF-VHF, commercial radios

Description	Digi Key Part No.	Price Each	Tripp Lite Part No.
Power Supply, 13.8VDC, 3A	TL185-ND	29.65	PR3
Power Supply, 13.8VDC, 3A	TL173-ND‡	34.50	PR3UL
Power Supply, 13.8VDC, 4.5A	TL195-ND	34.58	PR4.5
Power Supply, 13.8VDC, 7A	TL186-ND	39.81	PR7
Power Supply, 13.8VDC, 10A......	TL187-ND	58.12	PR10
Power Supply, 13.8VDC, 12A......	TL188-ND	62.55	PR12
Power Supply, 13.8VDC, 15A......	TL189-ND	86.56	PR15
Power Supply, 13.8VDC, 25A......	TL190-ND	121.30	PR25
Power Supply, 13.8VDC, 40A......	TL191-ND	154.91	PR40
Power Supply, 13.8VDC, 50A......	TL192-ND	192.68	PR50

‡ UL Approved Model

ISOBAR® Premium Surge Suppressors

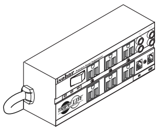


ISOBAR® is the most electronically advanced surge suppressor available today. Includes isolation — preventing connected equipment from interfering with each other. The only surge suppressor with 3 UL listings. **Only ISOBAR® provides:** • Superior RFI/EMI noise suppression • "Cascade Circuitry" to increase protection for more sensitive devices • Surge Suppression up to 13,000 amp spikes • Rack Mount model (IBAR-12) for industrial and sound applications • Up to 24 active filtering components • Multiple filtering components to safeguard against equipment interaction • Meets IEEE 587 A & B Specifications • Less than 5 nanosecond transient response time.

Description	Digi-Key Part No.	Price Each	Tripp Lite Part No.
2 outlet, direct plug-in*	TL002-ND	27.49	ISOBLOK2-0
2 outlet, 6' (1.83M)cord*	TL003-ND	37.79	IBAR2-6
4 outlet, 6' (1.83M) cord, with Diag. LED†...........................	TL076-ND	46.63	ISOBAR4ULTRA
6 outlet, 6' (1.83M) cord, with Diag. LED†...........................	TL077-ND	53.16	ISOBAR6ULTRA
8 outlet, 12' (3.66M) cord, with Diag. LED†...........................	TL078-ND	60.74	ISOBAR8ULTRA
8 outlets, 12' (3.66M) cord with remote power switch*	TL050-ND	67.62	ISOBAR8RM
Rack Mt., 12 out., 12' (3.66M) cord* ..	TL027-ND	97.06	IBAR12

*ULTIMATE® LIFETIME WARRANTY covers both the ISOBAR® and the connected equipment from surge related damage, including direct lightning strikes, up to $10,000 . . . for life! († coverage up to $25,000)

DSS Surge Suppressor



Telephone protection combined with 4 coaxial connectors and 6 outlet AC Surge protection. Designed to protect all highend video and audio equipment, such as large-screen TVs, satellite equipment, DSS systems, VCRs, CD changers and stereo receivers.

ULTIMATE® LIFETIME WARRANTY covers both the ISOBAR® and the connected equipment from surge related damage, including direct lightning strikes, up to $25,000.

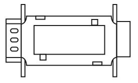
TL205-ND	120V Protector with RJ11 Jacks and Coaxial Connectors	**$62.71**

Line Surge Suppressors

Data networks are increasingly susceptible to problems from dataline transients as transmission rates continue to rise. Tripp Lite's dataline surge suppressors safely divert damaging surges before they reach your critical network equipment. Protects I/O and Serial ports, modem-fax cards, network interface cards and motherboards.

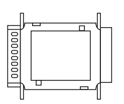
Specifications: • 6000V Clamping at <1 picosecond response time. • Breakover voltage: 7.5V (ethernet), 18V (RS-232), 260V (telephone) • Peak Pulse Current: 750 amps (ethernet), 340 amps (RS-232) • Max. Shunt Capacitance: <30 pF.

Fig. 1



Protects RS-232 DB9 serial ports of data terminal and data communication equipment including PCs, printers, fax/modems, etc. User configurable for either male or female captive ports.

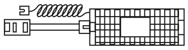
Fig. 2



Protects many RS-232 DB25 serial ports of data terminal and data communication equipment including PCs, printers, fax/modems, etc. User configurable for either male or female captive ports.

Protects any RS-232 serial or parallel DB25 regardless of cable configuration. Self-programming to your application. User configurable for male or female captive ports.

Fig. 3



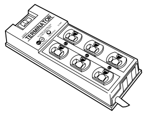
Protects both single and two line telephone equipment including internal and external modems, fax machines, answering machines, etc.

Fig.	Lines Protected	Interface Type	Digi-Key Part No.	Price Each	Tripp Lite Part No.
1	1-9 and Chassis	DB9	TL151-ND	15.74	DB9
2	1-8, 20, and Chassis	DB25	TL152-ND	17.06	DB25
	1-25 and Chassis	DB25	TL153-ND	21.65	DB25-ALL
3	4,5 and 3,6	RJ11/RJ45	TL154-ND	19.34	DTEL2

Economy Surge Suppressors

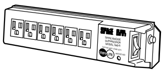
For a more economical approach to power protection, Tripp Lite offers six units for your specialized needs.

Fig. 1 - Super Surge Alert



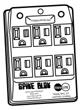
Mid-priced surge suppression with RFI/EMI filtering. Suppresses up to 72,000 amp spikes. UL 1449 approved. Lifetime warranty.

Fig. 2 - Super 8



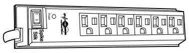
Performance in a low cost spike and line noise suppressor. Suppresses up to 48,000 amps. UL 1449 approved. Lifetime warranty.

Fig. 3 - Spike BLOK



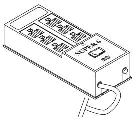
Performance in a low cost spike and line noise suppressor. Suppresses up to 27,000 amps. UL 1449 approved. 2 year warranty.

Fig. 4 - Spike Stik



Effective spike suppressor. Suppresses spikes up to 27,000 amps. Lifetime warranty.

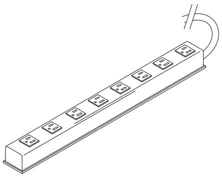
Fig. 5 - Super 6



Protects equipment from damaging AC surges, spikes, and line noise. Suppresses spikes up to 27,000 amps. Lifetime warranty.

Description	Digi-Key Part No.	Price Each	Tripp Lite Part No.
Super Surge Alert, 6 outlets, 6' cord, Diag. LED's (Fig. 1).................	TL051-ND	36.74	TR6
Super 8, 6 outlets, 6' cord (Fig. 2)..........	TL011-ND	28.80	SK6-6
Spike BLOK, 6 outlets, Direct plug-in (Fig. 3)	TL010-ND	18.00	SK6-0
Spike Stik, 6 outlets, 6' cord (Fig. 4)	TL026-ND	15.62	STIK
Super 6, 6 outlets, 3.5' cord (Fig 5)..........	TL083-ND	9.58	STRIKER
Super 7, 7 outlets, 7' cord w/LEDs...........	TL085-ND	19.28	SUPER7

120V Power Strips



Tripp Lite power strips are a convenient solution for applications in which multiple AC outlets are needed without surge or line noise protection. Power strips are ideal for mounting inside rack enclosures or on walls, workbenches and more. Sturdy metal housing stands up to demanding network, lab or factory environments. Comes with a 15' Cord.

Description:	Digi-Key Part No.	Price Each	Tripp Lite Part No.
24" Power Outlet Strip, 8 Outlets	TL206-ND	28.73	PS2408
36" Power Outlet Strip, 12 Outlets	TL207-ND	35.02	PS3612
48" Power Outlet Strip, 16 Outlets	TL208-ND	35.91	PS4816
19" Rack Mt. Outlet Strip, 12 Outlets	TL213-ND	35.91	RS-1215

Modem/Fax Protectors

Protects modems, phone lines and faxes from damaging spikes and harmful line noise.

Fig. 1
Super 8

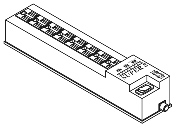


Fig. 2
Super 7 Audio Video

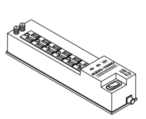


Fig. 3
Super Surge Alert

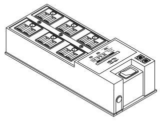


Fig. 4
Isotel

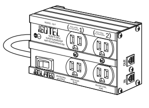


Fig. 5
SMPGS

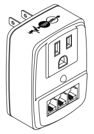
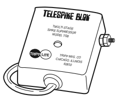


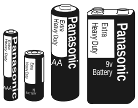
Fig. 6
TSB



Description	Digi-Key Part No.	Price Each	Tripp Lite Part No.
Super surge alert with fax protection, 6 outlet, (Fig. 3)	TL180-ND	35.99	TR6FM
Super 8 w/fax protection, 7 outlet, 8' cord, (Fig. 1)	TL181-ND	36.74	S8+TEL
Super 7 audio video with "F" connector, 6 outlet, (Fig. 2).....	TL182-ND	27.81	S7+COAX
4 outlet ISOBAR® w/2 RJ11 jacks for telephone line protection*, (Fig. 4)........	TL009-ND	52.89	ISOTEL
6 outlet ISOBAR®, 6' cord w/fax protection†..........	TL081-ND	62.71	ISOTEL6ULTRA
8 outlet ISOBAR®, 12' cord with fax protection†	TL082-ND	70.34	ISOTEL8MULTIMEDIA
Direct Plug-in 1 AC outlet, RJ11 fax supp. circuit*‡, (Fig. 5)	TL008-ND	18.24	SMPGS
Premium 3-stage data line protection. 2 year warranty, (Fig. 6)	TL015-ND	37.79	TSB
Economical data line protection, 2 year warranty	TL007-ND	12.80	MP
2 outlet, direct plug-in, with coaxial "F" connectors. For cable TV systems*	TL079-ND	37.08	ISOBARULTRACOAX
2 outlet, direct plug-in, w/1 RJ11 jack for one data line circuit*	TL080-ND	37.08	ISOBARULTRAFAX
Super 7, 6 outlet, 7' cord, with fax protection........	TL105-ND	25.84	S7+TEL

*ULTIMATE® LIFETIME WARRANTY (on select models) covers your product and the connected equipment from surge related damage, including direct lightning strikes, up to $10,000 . . . for life!
(† Coverage up to $25,000) (‡ Coverage up to $5,000)

Panasonic Extra Heavy Duty Carbon Zinc Batteries



FEATURES:
- **Unsurpassed Leakage Resistance for a Longer Service Life**
- **Discharge Characteristics Suited for All Applications**
- **Excellent Storage Life**

Panasonic Extra Heavy Duty battery is composed of: manganese dioxide for the positive-activating substance, zinc for the negative-activating substance, and an aqueous solution of neutral salts such as zinc chloride and ammonium chloride for the electrolyte.

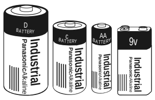
APPLICATIONS: • Transistor radios, tape recorders, portable TVs, interphones, transceivers, electronic calculators, clocks and watches, communications equipment, measuring instruments and various other electronic products • Flashlights, pen lights and various other lighting devices • 8mm cameras and other photographic products • Gas and oil equipment, toys, etc. Also available in tabbed version of D, C, and AA cell batteries; denoted by "T" suffix in Digi-Key part number. *Digi-Key is not approved by any state or federal agency as an authorized supplier of product for medical, life support or life sustaining devices or systems.*

Size	(V)	Dimensions – In. (mm) Dia.	Height	Weight* Oz. (grams)	Capacity (to 0.9V/Cell)	Digi-Key Part No.	Pricing Each	Pkg.	Carton	Panasonic Part No.
AA	1.5	0.571 (14.5)	1.988 (50.5)	0.67 (19)	110 hrs. (100Ω cont.)	P103-ND	.51	20.40/60	132.60/600	UM-3NX
AAA	1.5	0.413 (10.5)	1.752 (44.5)	0.34 (9.7)	39 hrs. (100Ω cont.)	P265-ND	.27	9.00/50	162.00/1500	R03NPA/BK
N	1.5	0.472 (12.0)	1.189 (30.2)	0.23 (6.55)	30 hrs. (100Ω cont.)	P266-ND	.36	12.00/50	288.00/2000	UM-5NX
9V	9	1.91 x 1.04 x 0.69 (48.5 x 26.5 x 17.5)		1.34 (38)	2.5 hrs. (100Ω cont. to 5.4V)	P104-ND	1.77	14.16/12	220.90/288	006PNX
Lantern ‡	6	2-11/16" x 2-11/16" x 4-1/16" (68.26 x 68.26 x 103.19)		20.0 (567)	Heavy duty type battery	P206-ND	4.15	44.82/12	44.82/12	W4FDPA
AA	Tabbed Version					P103T-ND	.87	34.80/60	261.00/600	UM-3NX

* See "How To Order" for note on shipping charges on prepaid orders. ‡ Spring top type.

Panasonic Industrial Alkaline Batteries

MADE IN U.S.A.



FEATURES:
- **Large Current and Large Capacity for an Excellent Performance**
- **Stable Voltage and Current**
- **Unsurpassed Resistance to Leakage**
- **Excellent Storage Life**

The cylindrical alkaline battery is composed of: manganese dioxide for the positive-activating substance, zinc powder for the negative-activating substance, and caustic alkali for the electrolyte.

APPLICATIONS: 99% *MERCURY FREE* • Headphone stereo, radio-cassette recorders, strobes, cameras, electronic calculators, 8 mm cameras, electric shavers, tape recorders, high-power flashlights, toys and other cordless products. Also available in tabbed version of D, C, and AA cell batteries; denoted by "T" suffix in Digi-Key part number. *Digi-Key is not approved by any state or federal agency as an authorized supplier of product for medical, life support or life sustaining devices or systems.*

Size	(V)	Dimensions – In. (mm) Dia.	Height	Weight* Oz. (grams)	Capacity (to 0.9V/Cell)	Rated Drain (mA)	Digi-Key Part No.	Pricing Each	Pkg	Carton	Panasonic Part No.
D	1.5	1.346 (34.2)	2.421 (61.5)	4.76 (135)	1200 hrs. (100Ω cont.)	320	P105-ND	1.74	13.92/12	146.16/144	AM-1PIX
C	1.5	1.031 (26.2)	1.969 (50.0)	2.29 (65)	380 hrs. (100Ω cont.)	300	P106-ND	1.29	20.64/24	160.99/288	AM-2PIX
AA	1.5	0.571 (14.5)	1.988 (50.5)	0.85 (24)	170 hrs. (100Ω cont.)	130	P107-ND	.57	15.20/40	148.20/600	AM-3PIX/2S
AAA	1.5	0.413 (10.5)	1.752 (44.5)	0.42 (12)	65 hrs. (100Ω cont.)	25	P146-ND	.57	19.00/50	123.50/500	AM-4PIX/2S
N	1.5	0.472 (12.0)	1.189 (30.2)	0.32 (9)	48 hrs. (100Ω cont.)	25	P147-ND†	1.08	17.28/24	280.80/600	AM5X
9V	9	1.93 x 1.04 x 0.69 (49.0 x 26.0 x 17.5)		1.66 (47)	6 hrs. (100Ω cont. to 5.4V)		P145-ND	2.22	17.76/12	277.06/288	6AM-6PIX/1S
D	Tabbed Version						P105T-ND	2.10	16.80/12	186.48/144	AM-1PIX
C	Tabbed Version						P106T-ND	1.65	26.40/24	237.60/288	AM-2PIX
AA	Tabbed Version						P107T-ND	.93	24.80/40	279.00/600	AM-3PIX/2S

* See "How To Order" for note on shipping charges on prepaid orders. † Made in Japan.

ACL **Staticide**

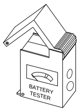
PowerPen

A battery contact cleaner that inhibits and removes oxidation on all types of batteries and terminals of battery powered products. This means you will spend less money on batteries because PowerPen will maximize your battery's performance. In addition, using PowerPen as directed will protect all terminals from corrosion, therefore extending the products' life.

ST1026-ND **$6.17**

CENTURY ELECTRONICS

Battery Tester



Tests D, C, AA, AAA, N and 9-Volt and button cell batteries under load — a true test of terminal voltage!

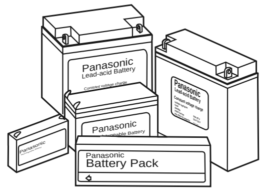
CEC-2-ND..........**$8.95**

Panasonic Sealed Lead-Acid Batteries

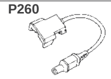
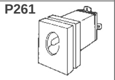
GENERAL FEATURES: *"DO NOT LEAK!!"*

- **High Quality & High Reliability:** The LCR battery has stable and reliable capacity. 100% tested on line for voltage, capacity, and seals. And all vents are 100% visually inspected during the final assembly process.
- **High Power Density:** These batteries save installation space, while providing full and reliable power for the equipment, and many have been designed for rapid recharge, or for high power output.
- **Leak-resistant Structure:** The LCR battery uses an absorbed electrolyte system. The LCR batteries have exceptional leak resistance, **and can be used in any position.**
- **Long Service Life; Flat or Cyclic:** The LCR battery has long life in float or cyclic service.
- **Easy Maintenance:** There is no need to check the specific gravity of the electrolyte or to add water during the service life. Totally sealed, and needs only charging for maintenance.
- **No Corrosive Gas Generation:** There is no corrosive gas generation during normal use.
- **Exceptional Deep Discharge Recovery:** LCR batteries have exceptional deep discharge recovery and charge acceptance, even after deep or prolonged discharge.
- **DOT & IATA Approval:** Transportation; The SLA batteries should be handled as common cargoes for both air and boat shipping.
- **U.L. Component Recognition:** U.L. Component Recognition under UL924, Section 38, for Emergency Lights and Power Supplier (not UPS), requires that the battery safely vent when overcharged, and tested under mineral oil. It further requires that the equipment and battery be submitted together for formal UL approval. **(UL Component Recognition does NOT remove this requirement for complete package testing).** The manufacturer suggests peak charging all sealed lead acid batteries before use and intermittently during storage.

Digi-Key is not approved by any state or federal agency as an authorized supplier of product for medical, life support or life sustaining devices or systems.



CROSS REFERENCE ABBREVIATIONS:
EP = Eagle-Picher; YU = Yuasa; PS = Power Sonic; PA = Panasonic

(V)	Cap. 20h Rate (Ah)	Dimensions – In. (mm) L x W x H	Term. Type (In.)	Weight * lbs. (kg)	Digi-Key Part No.	Pricing 1	10	Carton	Panasonic Part No.	Panasonic Replacement Battery Cross Reference (see above for mfg. abbreviations)
6	1.3	3.82 x 0.94 x 1.97 (97 x 24 x 50)	.187 spade	0.66 (.30)	P128-ND	8.33	74.00	259.00/40	LC-R061R3PU	YU: NP1.2-6; PS: PS-612, PA: LCR-6V1.3P
6	3.4	5.28 x 1.34 x 2.36 (134 x 34 x 60)	.187 spade	1.37 (.62)	P166-ND	15.75	140.00	294.00/24	LC-R063R4P	EP: CF6V2.6; YU: NP3-6; PS: PS-626
6	4.0	2.76 x 1.85 x 4.02 (70 x 47 x 102)	.187 spade	1.98 (.90)	P168-ND	9.34	83.00	174.30/24	LC-RB064P	EP: CF6V4; YU: NP4-6; PS: PS-640
6	4.2	2.76 x 1.89 x 4.02 (70 x 48 x 102)	.187 spade	1.72 (.78)	P164-ND *NEW!*	8.44	75.00	157.50/24	LC-R064R2P	—
6	5.0	2.76 x 1.85 x 4.02 (70 x 47 x 102)	.187 spade	2.14 (.97)	P207-ND	10.13	90.00	189.00/24	LC-R065P	—
6	7.2	5.95 x 1.34 x 3.70 (151 x 34 x 94)	.187 spade	2.78 (1.26)	P074-ND	13.39	—	124.95/12	LC-R067R2P	YU: NP7-6: PA: LCR-6V7.2P
6	12.0	5.95 x 1.97 x 3.70 (151 x 50 x 94)	.187 spade	4.30 (1.95)	P075-ND	16.09	—	150.15/12	LC-R0612P	PA: LCR-6V12P
6	12.0	5.95 x 1.97 x 3.70 (151 x 50 x 94)	.250 spade	4.30 (1.95)	P165-ND *NEW!*	16.09	—	150.15/12	LC-R0612P1	PA: LCR-6V12P1
12	1.3	3.82 x 1.87 x 1.97 (97 x 47.5 x 50)	.187 spade	1.30 (.59)	P264-ND	17.44	155.00	271.25/20	LC-R121R3PU	PS: PS-1212, PA: LCR-12V1.3P
12	2.2	6.97 x 1.34 x 2.36 (177 x 34 x 60)	.187 spade	1.76 (.80)	P171-ND	20.25	180.00	378.00/24	LC-R122R2P	EP: CF12V1.5; YU: NP1.9-12; PS: PS-1219
12	3.4	5.28 x 2.64 x 2.36 (134 x 67 x 60)	.187 spade	2.65 (1.20)	P172-ND	25.65	—	239.40/12	LC-R123R4P	EP: CF12V2.6S1; YU: NP2.6-12; PS: PS-1230
12	7.2	5.95 x 2.54 x 3.70 (151 x 64.5 x 94)	.187 spade	5.45 (2.47)	P078-ND	22.95	—	178.50/10	LC-R127R2P	YU: NP7-12; PA: LCR-12V6.5P
12	7.2	5.95 x 2.54 x 3.70 (151 x 64.5 x 94)	.250 spade	5.45 (2.47)	P218-ND	22.95	—	178.50/10	LC-R127R2P1	PA: LCR-12V6.5P1
12	12	5.95 x 3.86 x 3.70 (151 x 98 x 94)	.250 spade	8.41 (3.8)	P230-ND	33.19	—	265.50/12	LC-RA1212P1	—
12	17	7.13 x 2.99 x 6.58 (181 x 76 x 167)	nut/bolt	14.3 (6.5)	P174-ND	36.23	—	124.20/4	LC-RD1217P	EP: CFM12V18; YU: NP15-12; PS: PS-12150
12	20	7.13 x 2.99 x 6.58 (181 x 76 x 167)	nut/bolt	14.6 (6.6)	P231-ND	41.13	—	141.00/4	LC-X1220P	—
12	28	6.50 x 4.92 x 7.07 (165 x 125 x 179.5)	nut/bolt	24.3 (11)	P049-ND	55.83	478.50	—	LC-XB1228P	PA: LC-X1228P
12	33	7.70 x 5.12 x 7.09 (195.6 x 130 x 180)	nut/bolt	26.5 (12)	P259-ND	57.09	489.30	—	LC-LA1233P	PS: PS-12330, PA: LCR-12V33P
12	42	7.76 x 6.50 x 7.09 (197 x 165 x 180)	nut/bolt	35.3 (16)	P153-ND	80.94	693.75	—	LC-X1242P	—
12	65	13.80 x 6.54 x 6.89 (350 x 166 x 175)	nut/bolt	52.9 (24)	P209-ND	123.38	1057.50	—	LC-X1265P	PA: LCR-12V65P
VCR/Camcorder Batteries										
12	2.3	7.17 x 0.94 x 2.43 (182 x 24 x 62)	pressure	1.40 (.64)	P179-ND	22.50	—	210.00/12	LC-SA122R3EU	PA: LCS-2012AP, LCS-2012AVBNC, PV-BP80, LCS-2312NC, AG-BP212 LCS-2312AVBNC, PV-BP88
12	2.0	5.65 x .93 x 2.55 (143.5 x 24 x 65)	pressure	1.30 (.59)	P263-ND	25.88	—	241.50/12	LC-SD122EU	PA: AG-BP20P; LCS-2012DVBNC, PV-50
Trickle Charge Series (for communications, micro UPS, emergency lights, etc.)										
12	2.0	7.17 x 0.94 x 2.43 (182 x 24 x 62)	pressure	1.40 (.64)	P052-ND	22.28	—	346.50/20	LC-TA122PU	**P260**  **P261** 
12	2.0	6.97 x 0.94 x 2.60 (177 x 24 x 66)	.187 spade	1.40 (.64)	P053-ND	22.28	—	346.50/20	LC-T122PU	
Terminal Clip for P178, P179, P263, P050, and P052					P260-ND	4.73	42.00	1365.00/500	VJA0180	
Mating Connector for Clip (P260)					P261-ND	4.86	43.20	2592.00/1M	LCR-RCP-1	

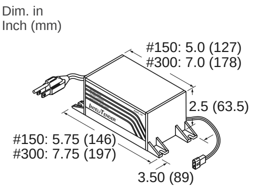
(V)	Cap. @ 10 Minute Rate (watt/cell)	Dimensions — Inch (mm) L x W x H	Term. Type (In.)	Weight Lbs. (kg)	Digi-Key Part No.	Pricing 1	Carton	Panasonic Part No.	Panasonic Replacement Battery Cross Reference
Watt-Rated Series (Designed for UPS Back-up Systems)									
12	45 W	5.95 x 2.54 x 3.70 (151 x 64.5 x 94)	.250 spade	5.62 (2.55)	P225-ND	22.95	178.50/10	UP-RW1245P1	PA; LC-R129CH1 PA; LC-R129P1

* See "How To Order" for note on shipping charges on prepaid orders.

PATCO

Battery Charger/ Maintainer

INTELITENDER MODELS 150 & 300



The InteliTender brings the battery to full optimum charge. Then, under the control of its computer, monitors the battery's voltage, supplying only what is needed to maintain the ideal charge.

Model 300 charges 2 batteries.

Volt	Amp	Model	Digi-Key Part No.	Price Each
Battery Chargers				
6	.75	150	PATC-02-ND*	69.93
6	1.5	150	PATC-01-ND†	69.93
12	.75	150	PATC-04-ND*	69.93
12	1.5	150	PATC-03-ND†	69.93
12 x 2	1.5 x 2	300	PATC-08-ND†	124.88
Cable (Must Order Separately)				
Battery Hook-up, Spring Clamp			PATC-07-ND	7.49
Motorcycle Hook-up, Ring Lugs			PATC-06-ND	5.00
Marine Hook-up, Ring Lugs			PATC-05-ND	5.00

* Recommended for 2.0 to 3.4 Ah batteries.
† Recommended for 4.0 Ah & above batteries.

Panasonic® Nickel-Metal Hydride Batteries and Tabbed Versions

Features: • **Superior Energy Density:** Nickel-metal hydride batteries have approximately double the capacity compared with Panasonic's standard Ni-Cad batteries • **High Cycle Life:** Like Ni-Cad batteries, nickel-metal hydride batteries can be repeatedly charged and discharged up to approx. 500 cycles (under ideal conditions). **Because a specially designed charger will be necessary,** please consult the Panasonic Technical Handbook (P001-ND) regarding the charge system • **Flat trickle charge cannot be used** • **Excellent Discharge Characteristics:** Since the internal resistance of nickel-metal hydride batteries is low, continuous high-rate discharge up to 3C (10C for 4/5SC, SC) is possible in the same way as for Ni-Cad batteries • **Excellent Reliability:** Self-discharge performance is the same or better than that of nickel-cadmium batteries. In addition, charging batteries after extended storage restores original battery capacity. Battery safety has also been improved and verified through testing under a wide range of conditions of use.

Applications: • Communication • Office Automation • Audio Visual Equipment • Other High-Tech Products.

Caution for Safety: Improper usage may cause battery liquid leakage, heat generation or explosion, resulting in equipment failure or injury • Do not disassemble or rework the battery • Do not solder the battery directly • Do not use new batteries together with old batteries, or different type batteries mixed together • Follow the specified charge conditions.

NOTE:
Nickel-metal hydride batteries are not a drop-in replacement for Ni-Cad batteries.

It is the responsibility of each user to ensure that each battery application system is adequately designed safe and compatible with all conditions encountered during use, and in conformance with existing standards and requirements.

P001-ND NIMH Technical Handbook............................**$2.95**

Size	(V)	Capacity C/5 (mAh)	Dimensions Inch (mm) Dia. x Height	Weight* Oz. (gram)	Std. Chg @ 15hrs (mA)	(Control Req.) Quick Charge (mA)	(hrs.)	Digi-Key Part No.	(Regular Flat Top Version) Pricing 1	10	Carton	Digi-Key Part No.	(Solder Tabbed Version) Pricing 1	10	Carton	Panasonic Part No.
AAA	1.2	550	.41 x 1.75 (10.5 x 44.5)	0.42 (12)	55	550	1.2	P011-ND†	2.75	24.75	2277.00/1380	P011T-ND	3.05	27.45	2525.40/1380	HHR-55AAA
L-AAA	1.2	650	.41 x 1.97 (10.5 x 50.0)	0.49 (14)	65	650	1.2	P012-ND†	3.58	32.18	2670.27/1404	P012T-ND	3.88	34.88	2894.35/1404	HHR-65TA
4/5 AA	1.2	1150	.57 x 1.69 (14.5 x 43.0)	0.81 (23)	115	1150	1.2	P013-ND†	2.83	25.43	1356.00/800	P013T-ND	3.13	28.13	1500.00/800	HHR-120AA
AA	1.2	1300	.57 x 1.97 (14.5 x 50.0)	0.92 (26)	130	1300	1.2	P014-ND†	3.23	29.03	1548.00/800	P014T-ND	3.53	31.73	1692.00/800	HHR-130AA
AA	1.2	1500	.57 x 1.97 (14.5 x 50.0)	0.92 (26)	150	1500	1.2	P015-ND†	3.25	29.25	1491.75/765	P015T-ND	3.55	31.95	1629.45/765	HHR-150AA
4/5 A	1.2	1700	.67 x 1.69 (17.0 x 43.0)	1.09 (31)	170	1700	1.2	P016-ND†	4.63	41.63	1998.00/720	P016T-ND	4.93	44.33	2127.60/720	HHR-170A
4/5 A	1.2	2000	.67 x 1.71 (17.0 x 43.5)	1.20 (34)	200	2000	1.2	P010-ND† *NEW!*	4.63	41.63	1498.50/540	P010T-ND *NEW!*	4.93	44.33	1595.70/540	HHR-200A
A	1.2	2100	.67 x 1.97 (17.0 x 50.0)	1.34 (38)	210	2100	1.2	P017-ND†	5.35	48.15	2311.20/720	P017T-ND	5.65	50.85	2440.80/720	HHR-210A
4/3 A	1.2	3700	.67 x 2.64 (17.0 x 67.0)	1.87 (53)	370	2000	2.2	P018-ND†	7.38	66.38	2389.50/540	P018T-ND	7.68	69.08	2486.70/540	HHR-380A
4/5 SC	1.2	2000	.91 x 1.34 (23.0 x 34.0)	1.48 (42)	200	2000	1.2	P020-ND†	6.75	60.75	1944.00/480	P020T-ND	7.05	63.45	2030.40/480	HHR-200SCP
SC	1.2	3000	.91 x 1.69 (23.0 x 43.0)	1.94 (55)	300	3000	1.2	P021-ND†	9.25	83.25	2664.00/480	P021T-ND	9.55	85.95	2750.40/480	HHR-300SCP
D	1.2	6500	1.30 x 2.39 (33.0 x 60.8)	6.00 (170)	650	6500	1.2	P019-ND†	18.13	163.13	1450.00/100	P019T-ND	18.43	165.83	1474.00/100	HHR-650D

† Non-extending positive terminals. * See "How To Order" for note on shipping charges on prepaid orders.

Panasonic® Nickel Cadmium Batteries

The Panasonic nickel-cadmium battery is a rechargeable sealed nickel-cadmium alkaline cell.

FEATURES: • Long life • Excellent discharge characteristics • Long shelf life • High-rate charging • Wide temperature range • Reliable, self-resealing vent • Sealed, strong, leakproof construction

APPLICATIONS: ***For Cyclic Use:*** • Consumer applications • Office equipment • Tools • Photography • Toys & Hobby. ***For Trickle or Float Charge Use:*** • Emergency devices • Memory back-up

SPECIAL PURPOSE BATTERIES: Rapid-charge "R" Type: The "R" type cell has a specially improved negative plate with increased gas absorption characteristics. It can be subjected to controlled charging at the 1C rate and rapid-charge in 1 to 1.5 hours is possible. High-temperature "H" Type: By using a polypropylene separator, the "H" type cell can withstand a temp. of 65°C (149°F) during use. When charging is conducted at a low charging current of C/20 to C/30 in a high-temp. ambient, the "H" type cell has a sharply improved capacity compared to a standard cell, due to special electrolyte. High-capacity "E" Type: The extra capacity cells combine a high-capacity density positive plate with a high-density paste negative plate. These cells have 20~30% more capacity than equivalent standard cells. Super High Capacity & Rapid Charge "S" Type: Super high capacity and rapid charge "S" type batteries are ideal for today's high capacity needs. They feature increased capacity & rapid charging within approx. 1 hr. The high-density positive base material of foam nickel is combined with the pasted negative plate to produce a capacity approximately 40% greater than that of the rapid-charge "R" type battery of the same size. High Rate Discharge & Rapid Charge "R/P" Type: This rapid charge, high rate discharge type has been developed through the integration of all Panasonic battery technology. It employs unique plates featuring unsurpassed gas absorption characteristics & a current-collecting system to provide charging in just 1 to 1.5 hours. The internal resistance is also greatly reduced for improved voltage characteristics during high rate discharge at approximately 10CmA.

Digi-Key is not approved by any state or federal agency as an authorized supplier of product for medical, life support or life sustaining devices or systems.

CROSS REFERENCE ABBREVIATIONS: SF = SAFT USA (France); VA = VARTA Germany; ER = Ever-Ready; SA = SANYO Japan; TO = Toshiba; DY = Dynacharge

Panasonic® 6-Hour Nickel Cadmium Battery Charger

FEATURES: • True full charge in just 6 hours (9V in 15 hours) • Quickly resupplies up to 4 rechargeable nickel-cadmium batteries to 100% power! • UL approved. With anti-reversal polarity protection system • Simultaneous charging of any pair of nickel-cadmium batteries: D, C, AA, AAA, or single 9V. No special adapter needed for AAA! • Not for use with flat top batteries indicated by /FT.

P292-ND (4 batteries or one 9 volt) . . . **$18.73**

Size	(V)	Capacity C/5 (mAh)	Dimensions Inch (mm) Dia. x Height	Weight* Oz. (gram)	Std. Chg @ 15hrs (mA)	Quick Charge (mA)	(hrs.)	Digi-Key Part No.	Pricing 1	10	Pkg.	Carton	Panasonic Part No.	Panasonic Replacement Battery Cross Reference (see above for manufacture abbreviations)
Standard Type														
N	1.2	150	0.45 x 1.16 (11.5 x 29.5)	0.28 (8.0)	15	38	6.0	P110-ND	2.39	21.47	333.90/200	1373.76/1200	P-15N	ER: CH150; SA: N-150N; DY: NN150
AAA	1.2	250	0.41 x 1.75 (10.5 x 44.5)	0.35 (10)	25	75	5.0	P254-ND	2.49	22.39	348.25/200	2149.20/1800	P-25AAA	—
2/3C	1.2	1000	1.02 x 1.22 (25.8 x 31.0)	1.59 (45)	100	333	4.5	P238-ND	6.21	55.91	217.44/50	969.15/300	P-100C	—
C	1.2	2200	1.00 x 1.94 (25.3 x 49.3)	2.65 (75)	220	730	4.5	P163-ND	6.34	57.08	88.80/20	791.54/240	P-220C	SA: KR-2000C; TO: T-180C; DY: NC1800
C	1.2	2400	1.02 x 1.97 (25.8 x 50.0)	2.65 (75)	240	1500	2.4	P108-ND†	7.47	67.21	104.55/20	931.94/240	P-240C/FT	—
D	1.2	4000	1.30 x 2.40 (33.0 x 61.0)	4.90 (139)	400	—	—	P124-ND	10.78	75.48	75.48/10	560.69/100	P-400D	SF: 4.0SC (VR4); VA: RSH4; ER: NCC350, CH4; SA: N-4000D; TO: T-400D; DY: ND4000
9 Volt	8.4	120	1.043 x 1.949 x 0.689 (26.5x49.5x17.5)	1.54 (43.7)	12	—	—	P148-ND	10.63	—	114.75/12	114.75/12	P-9SPA/1B	—
High Temperature "H" Type														
1/3AA	1.2	110	0.57 x 0.69 (14.5 x 17.5)	0.23 (6.5)	11	—	—	P109-ND†	1.96	17.64	164.64/120	2257.92/2400	P-11AAH/FT	ER: NCC24
AA	1.2	500	0.57 x 1.97 (14.5 x 50.0)	0.74 (21)	50	—	—	P161-ND	2.28	20.52	63.84/40	948.48/800	P-50AAH	SA: KR-A4H
SC	1.2	1200	0.91 x 1.69 (23.0 x 43.0)	1.69 (48)	120	—	—	P091-ND†	3.76	33.86	263.38/100	782.60/400	P-120SCH/FT	—
C	1.2	1800	1.02 x 1.97 (25.8 x 50.0)	2.55 (73)	180	—	—	P122-ND†	6.84	61.58	95.80/20	853.94/240	P-180CH/FT	SA: KR-CH
C	1.2	2300	1.02 x 1.97 (25.8 x 50.0)	2.75 (78)	230	—	—	P090-ND†	7.12	64.06	99.65/20	888.26/240	P-230CH/FT	—
D	1.2	4000	1.30 x 2.40 (33.0 x 61.0)	4.90 (139)	400	—	—	P258-ND	10.78	75.48	75.48/10	560.69/100	P-400DH	—
High Capacity "E" Type														
SC	1.2	1500	0.91 x 1.69 (23.0 x 43.0)	1.69 (48)	150	500	4.5	P156-ND†	4.19	37.69	293.13/100	871.00/400	P-150SCE/FT	—
D	1.2	4400	1.30 x 2.40 (33.0 x 61.0)	4.93 (140)	440	—	—	P158-ND	10.91	76.35	76.35/10	567.19/100	P-440DE	ER: NCC400
High Rate Discharge and Rapid Charge "P" Type														
SC	1.2	1200	0.91 x 1.69 (23.0 x 43.0)	1.66 (47)	120	1200	1.5	P240-ND†	3.64	32.74	254.63/100	756.60/400	P-120SCP/FT	—
Rapid Charge "R" Type														
2/3AA	1.2	300	0.57 x 1.11 (14.5 x 28.2)	0.42 (12)	30	300	1.5	P234-ND†	2.19	19.71	306.60/200	2102.40/2000	P-30AAR/FT	—
AA	1.2	600	0.57 x 1.97 (14.5 x 50.0)	0.78 (22)	60	600	1.5	P272-ND	2.48	22.32	69.44/40	1031.68/800	P-60AAR	—
AA	1.2	600	0.57 x 1.90 (14.5 x 48.3)	0.74 (21)	60	600	1.5	P229-ND†	1.87	16.83	52.36/40	777.92/800	P-60AAR/FT	—
AA	1.2	700	0.57 x 1.90 (14.5 x 48.3)	0.78 (22)	70	700	1.5	P253-ND†	1.91	17.15	53.34/40	792.48/800	P-70AARC/FT	—
4/5SC	1.2	1200	0.91 x 1.30 (23.0 x 33.0)	1.38 (38)	120	1000	1.6	P232-ND†	3.64	32.74	254.63/100	1134.90/600	P-120SCJ/FT	—
SC	1.2	1300	0.91 x 1.69 (23.0 x 43.0)	1.66 (47)	130	1300	1.5	P159-ND†	2.56	23.06	215.25/120	639.60/480	P-130SCR/FT	ER:CH1.2;SA:N-1200SC;DY:NSC1200
SC	1.2	1400	0.91 x 1.69 (23.0 x 43.0)	1.69 (48)	140	1400	1.5	P233-ND†	2.81	25.31	196.88/100	585.00/400	P-140SCR/FT	—
SC	1.2	1800	0.91 x 1.69 (23.0 x 43.0)	1.73 (49)	180	1800	1.5	P089-ND†	4.69	42.19	328.13/100	975.00/400	P-180SCR/FT	—
C	1.2	2800	1.02 x 1.97 (26.0 x 50.0)	2.79 (79)	280	2800	1.5	P190-ND†	7.84	70.58	109.80/20	978.74/240	P-280CR/FT	—
D	1.2	5000	1.30 x 2.40 (33.0 x 61.0)	5.10 (145)	500	5000	1.5	P257-ND†	12.93	—	90.53/10	672.49/100	P-500DR/FT	—
Super High Capacity and Rapid Charge "S" Type														
AA	1.2	800	0.57 x 1.90 (14.5 x 48.3)	0.71 (20)	80	800	1.5	P097-ND†	2.21	19.85	61.74/40	917.28/800	P-80AAS/FT	—
AA	1.2	1000	0.57 x 1.97 (14.5 x 50.0)	0.81 (23)	100	1000	1.5	P092-ND†	3.16	28.40	88.34/40	1312.48/800	P-100AASJ/FT	—
5/4AA	1.2	1200	0.57 x 2.56 (14.5 x 65.0)	1.09 (31)	120	1200	1.5	P093-ND†	4.42	39.74	154.53/50	1377.48/600	P-120AAS/FT	—
2/3A	1.2	600	0.67 x 1.12 (17.0 x 28.5)	0.63 (18)	60	600	1.5	P235-ND†	2.78	25.02	97.30/50	1040.83/720	P-60AS/FT	—
4/5A	1.2	1100	0.67 x 1.69 (17.0 x 43.0)	0.88 (25)	110	1100	1.5	P239-ND†	3.66	32.94	461.16/180	1370.30/720	P-110AS/FT	—
4/5A	1.2	1200	0.67 x 1.69 (17.0 x 43.0)	0.92 (26)	120	1200	1.5	P094-ND†	3.54	31.82	445.41/180	1323.50/720	P-120AS/FT	—
4/5A	1.2	1500	0.67 x 1.69 (17.0 x 43.0)	0.95 (27)	140	1400	1.5	P255-ND†	4.16	37.44	524.16/180	1557.50/720	P-150AS/FT	—
A	1.2	1400	0.67 x 1.97 (17.0 x 50.0)	1.16 (33)	140	1400	1.5	P095-ND†	3.67	33.01	462.11/180	1373.11/720	P-140AS/FT	—
A	1.2	1600	0.67 x 1.97 (17.0 x 50.0)	1.16 (33)	160	1600	1.5	P256-ND†	4.22	37.96	531.41/180	1579.03/720	P-160AS/FT	—
5/4SC	1.2	2300	0.91 x 1.97 (23.0 x 50.0)	2.24 (57)	230	2000	1.6	P096-ND†	7.93	71.37	666.12/120	1484.50/360	P-230SCS/FT	—

† Non-extending positive terminals. * See "How To Order" for note on shipping charges on prepaid orders.

Panasonic® Nickel Cadmium Batteries Solder Tabbed Version

Size	(V)	Capacity C/5 (mAh)	Dimensions Inch (mm) Dia. x Height	Weight* Oz. (gram)	Std. Chg @ 15hrs (mA)	Quick Charge (mA)	Quick Charge (hrs.)	Digi-Key Part No.	Pricing 1	Pricing 10	Pricing Pkg.	Pricing Carton
Standard Type (Solder Tabbed)												
N	1.2	150	0.45 x 1.16 (11.5 x 29.5)	0.28 (8.0)	15	38	6.0	P110T-ND	2.69	24.17	429.60/200	1714.10/1200
AAA	1.2	250	0.41 x 1.75 (10.5 x 44.5)	0.35 (10)	25	75	5.0	P254T-ND	2.79	25.09	446.00/200	2669.31/1800
2/3C	1.2	1000	1.02 x 1.22 (25.8 x 31.0)	1.59 (45)	100	333	4.5	P238T-ND	6.51	58.61	260.50/50	1172.25/300
C	1.2	2200	1.00 x 1.94 (25.3 x 49.3)	2.65 (75)	220	730	4.5	P163T-ND	6.64	59.78	106.28/20	956.52/240
C	1.2	2400	1.02 x 1.97 (25.8 x 50.0)	2.65 (75)	240	1500	2.4	P108T-ND	7.77	69.91	124.28/20	1118.52/240
D	1.2	4000	1.30 x 2.40 (33.0 x 61.0)	4.90 (139)	400	—	—	P124T-ND	11.61	92.86	92.86/10	696.45/100
High Temperature “H” Type (Solder Tabbed)												
1/3AA	1.2	110	0.57 x 0.69 (14.5 x 17.5)	0.23 (6.5)	11	—	—	P109T-ND	2.26	20.34	216.96/120	2885.57/2400
AA	1.2	500	0.57 x 1.97 (14.5 x 50.0)	0.74 (21)	50	—	—	P161T-ND	2.58	23.22	82.56/40	1238.40/800
SC	1.2	1200	0.91 x 1.69 (23.0 x 43.0)	1.69 (48)	120	—	—	P091T-ND	4.06	36.56	325.00/100	975.00/400
C	1.2	1800	1.02 x 1.97 (25.8 x 50.0)	2.55 (73)	180	—	—	P122T-ND	7.14	64.28	114.28/20	1028.52/240
C	1.2	2300	1.02 x 1.97 (25.8 x 50.0)	2.75 (78)	230	—	—	P090T-ND	7.42	66.76	118.68/20	1068.12/240
D	1.2	4000	1.30 x 2.40 (33.0 x 61.0)	4.90 (139)	400	—	—	P258T-ND	11.08	88.66	88.66/10	664.95/100
High Capacity “E” Type (Solder Tabbed)												
SC	1.2	1500	0.91 x 1.69 (23.0 x 43.0)	1.69 (48)	150	500	4.5	P156T-ND	4.49	40.39	430.80/120	1292.40/480
D	1.2	4400	1.30 x 2.40 (33.0 x 61.0)	4.93 (140)	440	—	—	P158T-ND	11.21	89.66	89.66/10	672.45/100
High Rate Discharge and Rapid Charge “P” Type (Solder Tabbed)												
SC	1.2	1200	0.91 x 1.69 (23.0 x 43.0)	1.66 (47)	120	1200	1.5	P240T-ND	3.94	35.44	315.00/100	945.00/400
Rapid Charge “R” Type (Solder Tabbed)												
2/3AA	1.2	300	0.57 x 1.11 (14.5 x 28.2)	0.42 (12)	30	300	1.5	P234T-ND	2.49	22.41	398.40/200	2649.36/2000
AA	1.2	600	0.57 x 1.90 (14.5 x 48.3)	0.74 (21)	60	600	1.5	P229T-ND	2.17	19.53	69.44/40	1041.60/800
AA	1.2	700	0.57 x 1.90 (14.5 x 48.3)	0.78 (22)	70	700	1.5	P253T-ND	2.21	19.85	70.56/40	1058.40/800
4/5SC	1.2	1200	0.91 x 1.30 (23.0 x 33.0)	1.38 (38)	120	1000	1.6	P232T-ND	3.94	35.44	315.00/100	1417.50/600
SC	1.2	1300	0.91 x 1.69 (23.0 x 43.0)	1.66 (47)	130	1300	1.5	P159T-ND	2.86	25.76	274.80/120	824.40/480
SC	1.2	1400	0.91 x 1.69 (23.0 x 43.0)	1.69 (48)	140	1400	1.5	P233T-ND	3.11	28.01	249.00/100	896.40/480
SC	1.2	1800	0.91 x 1.69 (23.0 x 43.0)	1.73 (49)	180	1800	1.5	P089T-ND	4.99	44.89	399.00/100	1197.00/400
C	1.2	2800	1.02 x 1.97 (26.0 x 50.0)	2.79 (79)	280	2800	1.5	P190T-ND	8.14	73.28	130.28/20	1172.52/240
D	1.2	5000	1.30 x 2.40 (33.0 x 61.0)	5.10 (145)	500	5000	1.5	P257T-ND	13.23	—	105.86/10	793.95/100
Super High Capacity and Rapid Charge “S” Type (Solder Tabbed)												
AA	1.2	800	0.57 x 1.90 (14.5 x 48.3)	0.71 (20)	80	800	1.5	P097T-ND	2.51	22.55	80.16/40	1202.40/800
AA	1.2	1000	0.57 x 1.97 (14.5 x 50.0)	0.81 (23)	100	1000	1.5	P092T-ND	3.46	31.10	110.56/40	1658.40/800
5/4AA	1.2	1200	0.57 x 2.56 (14.5 x 65.0)	1.09 (31)	120	1200	1.5	P093T-ND	4.72	42.44	188.60/50	1697.40/600
2/3A	1.2	600	0.67 x 1.12 (17.0 x 28.5)	0.63 (18)	60	600	1.5	P235T-ND	3.08	27.72	123.20/50	1330.56/720
4/5A	1.2	1200	0.67 x 1.69 (17.0 x 43.0)	0.92 (26)	120	1200	1.5	P094T-ND	3.84	34.52	552.24/180	1656.72/720
4/5A	1.2	1500	0.67 x 1.69 (17.0 x 43.0)	0.95 (27)	140	1400	1.5	P255T-ND	4.46	40.14	642.24/180	1926.72/720
A	1.2	1400	0.67 x 1.97 (17.0 x 50.0)	1.16 (32)	140	1400	1.5	P095T-ND	3.97	35.71	571.32/180	1713.96/720
A	1.2	1600	0.67 x 1.97 (17.0 x 50.0)	1.16 (33)	160	1600	1.5	P256T-ND	4.52	40.66	650.52/180	1951.56/720
5/4SC	1.2	2300	0.91 x 1.97 (23.0 x 50.0)	2.24 (57)	230	2000	1.6	P096T-ND	8.23	74.07	790.08/120	1777.68/360

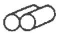
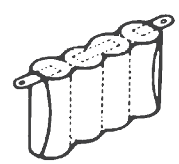
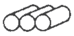
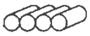
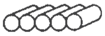
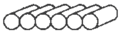
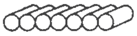
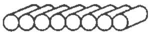
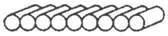
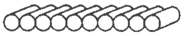
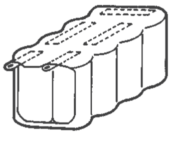
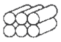
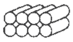
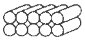
* See “How To Order” for note on shipping charges on prepaid orders.

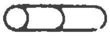
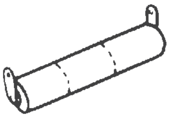
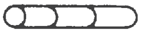
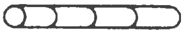
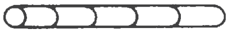
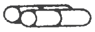
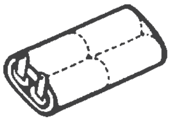
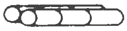
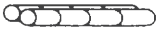
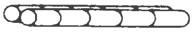
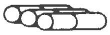
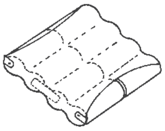
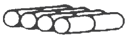
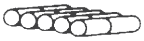
Battery Packs with Panasonic® Batteries

**For Memory Backup, Power Tools,
Radio Controlled and Other Endless Applications**

All battery packs are made using our high quality Panasonic cells. Shown are standard configurations. If you have a special need or a configuration that you do not see, give us a call for further information. Packs are available in nearly all sizes of Nickel-Cadmium, NIMH, Lithium, and Alkaline cylinder batteries.

Digi-Key is not approved by any state or federal agency as an authorized supplier of product for medical, life support or life sustaining devices or systems.

Style	Volts	Cells	Configurations	Diagram
F021	2.4	2		
F031	3.6	3		
F041	4.8	4		
F051	6.0	5		
F061	7.2	6		
F071	8.4	7		
F081	9.6	8		
F091	10.8	9		
F101	12.0	10		
F022	4.8	4		
F023	7.2	6		
F024	9.6	8		
F025	12.0	10		

Style	Volts	Cells	Configurations	Diagram
L021*	2.4	2		 * Styles L021, L031, L041 and L051 are not available in nickel-metal hydride batteries.
L031*	3.6	3		
L041*	4.8	4		
L051*	6.0	5		
L022	4.8	4		
L032	7.2	6		
L042	9.6	8		
L052	12.0	10		
L023	7.2	6		
L024	9.6	8		
L025	12.0	10		

HOW TO ORDER:

P □ □ □ – □ □ □ □ – ND

Call for pricing on any standard or custom battery pack

Select Digi-Key Part No. of any Cylinder Type Battery

Select Style of Battery Pack From Chart

Panasonic

Lithium Batteries

The main features of lithium batteries are as follows:

- **High Voltage:** Nominal voltage is 3V, which is nearly double that of other batteries which use the aqueous electrolyte system, such as manganese dry batteries, and silver-oxide batteries.
- **High energy density:** Overwhelmingly high energy density, as compared with conventional batteries and other lithium batteries. The energy density is 5 to 10 times higher than that of manganese dry batteries.
- **Long Service and Shelf Life:** Since Panasonic lithium batteries are composed of chemically and thermally stable material, self-discharge is extremely small. Deterioration when stored at room temperatures is ca. 0.5% annually – worry about deterioration is unnecessary.
- **Stable Flat Discharge Voltage:** Since conductive carbon is continuously formed during discharge, internal impedance does not increase until the end of discharge, thus stabilizing discharge voltage.
- **Excellent Temperature Characteristics:** Organic solvent ensures a low electrolyte freezing point so that the batteries can be used in a wide temperature range, -40°C to 85°C is standard (-40°C to 125°C for the High Temperature Coin Type; -40°C to 70°C for Camera Type; -30° to 60°C for CR2004/P9A).
- **BR Types versus CR Types:** BR, or (CF) n/Li, batteries provide a more stable voltage particularly during the last half of discharge, while CR, or Mn02/Li, batteries provide a higher voltage during the first half. CR batteries also can provide a higher current capability than BR batteries. In storage, BR batteries perform better at high temperatures. These characteristics must be taken into consideration when selecting a battery for a particular application.
- **UL Approval:** Panasonic Lithium batteries are UL recognized. UL File No. MH12210.
- **DOT Exemption:** Panasonic lithium cells and multiple cell batteries are authorized for transportation, in commerce, by U.S. shipping exemption DOT-E7052.
- **Disposal Information:** Panasonic lithium cells are not an EPA listed hazardous waste, but may be considered a "characteristic" hazardous waste. Lithium metal, the anode component of the cells, is considered by the U.S. EPA to be hazardous when disposed because it is reactive with water. However, a cell which contains a small quantity of lithium metal is not necessarily a hazardous waste. Disposal regulations and policies are different in each State and are subject to frequent changes. Contact your local jurisdiction for specific advice on disposal.

Digi-Key is not approved by any state or federal agency as an authorized supplier of product for medical, life support or life sustaining devices or systems.

Fig.	Type	(V)	Cap. (mAh)	Dim. (mm) Dia. x Height	Wt.* (g)	Drain Pulse (mA)	Drain Std. (mA)	Digi-Key Part No.	Pricing 1	Pricing 10	Pricing Pkg.	Pricing Carton	Panasonic Part No.
								Computer Type					
–	Replacement Pack	6	1200	19.5 x 33.9 x 36.0	31.0	250	2.5	P204-ND	12.63	113.63	1454.40/144	2181.60/288	BR-P2PE
–	Pack w/Leads	6	1200	22.0 x 39.0 x 41.0	45.0	—	—	P203-ND‡	15.48	139.28	619.00/50	928.50/100	BR-E3C3BCA
								Camera Type					
–	Replacement Cyl.	3	750	15.6 x 27.0	11.0	—	20	P155-ND	7.00	63.00	67.20/12	4468.80/1200	CR-2PA/1B
–	Replacement Cyl.	3	1400	17.0 x 34.5	17.0	—	20	P154-ND	7.00	63.00	67.20/12	4468.80/1200	CR-123APA/1B
–	Replacement Pack	3	3000	29.0 x 14.5 x 52.0	39.0	—	200	P212-ND	12.99	—	138.96/12	2501.28/288	CR-V3A/1B
–	Replacement Pack	6	1400	17.0 x 34.0 x 45.0	38.0	—	20	P073-ND	11.00	99.00	105.60/12	1900.80/288	2CR-5MPA/1B
–	Replacement Pack	6	1400	19.5 x 35.0 x 36.0	37.0	—	20	P205-ND	11.00	—	118.80/12	2534.40/288	CR-P2PA/1B
								Standard Type					
–	C	3	5000	26.0 x 50.0	42.0	300	5.0	P167-ND	13.70	123.30	1096.00/100	1644.00/200	BR-CSSP
–	C w/Tabs	3	5000	26.0 x 50.0	42.0	300	5.0	P144-ND†	14.88	133.88	1190.00/100	1785.00/200	BR-CT2SP
–	A	3	1800	17.0 x 45.5	18.0	250	2.5	P267-ND	9.38	84.38	750.00/100	4987.50/1000	BR-A
–	A w/ Tabs	3	1800	17.0 x 45.5	18.0	250	2.5	P267T-ND†	9.68	87.08	774.00/100	5147.10/1000	BR-A-T
–	2/3 A	3	1200	17.0 x 33.5	13.5	250	2.5	P133-ND	4.40	39.60	70.40/20	2112.00/800	BR-2/3A
–	2/3 A w/Tabs	3	1200	17.0 x 33.5	13.5	250	2.5	P201-ND†	5.25	47.25	420.00/100	2793.00/1000	BR-2/3AT-2SP
–	2/3 A w/2 PCB Pins	3	1200	17.0 x 33.5	13.5	250	2.5	P226-ND†	5.25	47.25	420.00/100	2793.00/1000	BR-2/3AE5SP
–	2/3 A w/3 PCB Pins	3	1200	17.0 x 33.5	13.5	250	2.5	P270-ND†	5.25	47.25	420.00/100	2793.00/1000	BR-2/3AE2SP
								Standard Coin Type					
–	Coin	3	25	12.5 x 1.6	0.6	5	0.3	P182-ND	1.38	12.38	440.00/400	2805.00/4000	BR1216
–	Coin	3	48	12.5 x 2.5	0.8	5	0.3	P183-ND	1.43	12.83	456.00/400	2907.00/4000	BR1225
–	Coin	3	48	16.0 x 1.6	1.0	8	0.3	P184-ND	1.40	12.60	224.00/200	1489.60/2000	BR1616
–	Coin	3	75	20.0 x 1.6	1.5	10	0.3	P137-ND	1.25	11.25	200.00/200	1330.00/2000	BR2016
–	Coin	3	100	20.0 x 2.0	2.0	10	0.3	P185-ND	1.38	12.38	220.00/200	1463.00/2000	BR2020
–	Coin	3	110	23.0 x 2.0	2.5	10	0.3	P136-ND	1.50	13.50	240.00/200	1596.00/2000	BR2320
–	Coin	3	165	23.0 x 2.5	3.2	10	0.3	P135-ND	1.50	13.20	240.00/200	1596.00/2000	BR2325
–	Coin	3	190	20.0 x 3.2	2.5	10	0.3	P186-ND	1.38	12.38	220.00/200	1463.00/2000	BR2032
–	Coin	3	255	23.0 x 3.0	3.2	10	0.3	P187-ND	2.03	18.23	324.00/200	2154.60/2000	BR2330
–	Coin	3	30	10.0 x 2.5	0.7	5	0.1	P031-ND	1.13	10.13	360.00/400	2295.00/4000	CR1025
–	Coin	3	25	12.5 x 1.6	0.7	5	0.1	P032-ND	1.13	10.13	360.00/400	2295.00/4000	CR1216
–	Coin	3	35	12.5 x 2.0	1.2	5	0.1	P033-ND	1.08	9.68	344.00/400	2193.00/4000	CR1220
–	Coin	3	40	16.0 x1.2	0.8	—	0.1	P041-ND	2.70	24.30	432.00/200	1296.00/800	CR1612
–	Coin	3	55	16.0 x 1.6	1.2	8	0.1	P034-ND	1.00	9.00	160.00/200	1064.00/2000	CR1616
–	Coin	3	75	16.0 x 2.0	1.3	8	0.1	P035-ND	.98	8.78	312.00/400	1989.00/4000	CR1620
–	Coin	3	125	16.0 x 3.2	1.8	8	0.1	P036-ND	1.13	10.13	360.00/400	2295.00/4000	CR1632
–	Coin	3	55	20.0 x 1.2	1.4	10	0.1	P037-ND	1.25	11.25	400.00/400	2550.00/4000	CR2012
–	Coin	3	90	20.0 x 1.6	1.7	10	0.1	P138-ND	.45	4.05	72.00/200	287.28/1200	CR2016
–	Coin	3	165	20.0 x 2.5	2.5	15	0.2	P188-ND	.50	4.50	80.00/200	1020.00/4000	CR2025
–	Coin	3	220	20.0 x 3.2	3.1	15	0.2	P189-ND	.45	4.05	72.00/200	918.00/4000	CR2032
–	Coin	3	130	23.0 x 2.0	3.0	15	0.2	P038-ND	1.25	11.25	200.00/200	1330.00/2000	CR2320
–	Coin	3	265	23.0 x 3.0	4.0	15	0.2	P111-ND	1.60	14.40	256.00/200	1702.40/2000	CR2330
–	Coin	3	560	23.0 x 5.4	5.9	15	0.2	P117-ND	1.98	17.78	158.00/100	1050.70/1000	CR2354
–	Coin	3	100	24.5 x1.2	2.0	—	0.2	P042-ND	3.25	29.25	520.00/200	1560.00/800	CR2412
–	Coin	3	1000	24.5 x 7.7	10.5	10	0.2	P120-ND	3.00	27.00	240.00/100	1596.00/1000	CR2477
–	Coin	3	500	30.0 x 3.2	7.1	15	0.2	P121-ND	2.58	23.18	412.00/200	2739.80/2000	CR3032
								PCB Terminal – Coin Type					
1	Coin	3	48	See Figure Below	0.8	8	0.3	P191-ND	1.75	15.75	168.00/120	1117.20/1200	BR1225-1HC
2	Coin	3	48		0.8	8	0.3	P192-ND	1.75	15.75	280.00/200	630.00/600	BR1225-1VC
3	Coin	3	165		3.2	10	0.3	P142-ND	1.75	15.75	84.00/60	630.00/600	BR2325-1HB
4	Coin	3	165		3.2	10	0.3	P193-ND	1.75	15.75	84.00/60	630.00/600	BR2325-1HG
5	Coin	3	165		3.2	10	0.3	P202-ND	1.75	15.75	84.00/60	630.00/600	BR2325-1HC
6	Coin	3	165		3.2	10	0.3	P194-ND	1.75	15.75	84.00/60	630.00/600	BR2325-1VC
7	Coin	3	165		3.2	10	0.3	P195-ND	1.75	15.75	84.00/60	630.00/600	BR2325-1VG
8	Coin	3	190		2.5	10	0.3	P196-ND	2.00	18.00	96.00/60	720.00/600	BR2032-1HE
9	Coin	3	190		2.5	10	0.3	P197-ND	1.75	15.75	84.00/60	630.00/600	BR2032-1VB
10	Coin	3	255		3.2	10	0.3	P198-ND	2.30	20.70	184.00/100	1223.60/1000	BR2330-1HE
11	Coin	3	255		3.2	10	0.3	P199-ND	2.10	18.90	168.00/100	1117.20/1000	BR2330-1VC
12	Coin	6	165		6.4	10	0.3	P143-ND	3.63	32.63	116.00/40	870.00/400	BR2325-2HC
13	Coin	3	12		0.5	—	0.03	P130-ND *NEW!*	5.63	50.63	900.00/200	11475.00/4000	CR2004/P9A
14	Coin	3	1000		10.5	10	0.3	P126-ND	4.38	39.38	350.00/100	2327.50/1000	CR2477-1HF
								PCB Terminal - High Temperature Coin Type (-40°C to 125°C)					
15	Coin	3	120	See Figure Below	1.5	—	0.03	P022-ND	2.08	18.68	664.00/400	4233.00/4000	BR1632A/FA
16	Coin	3	120		1.5	—	0.03	P023-ND	2.08	18.68	664.00/400	2649.36/2400	BR1632A/HA
17	Coin	3	120		1.5	—	0.03	P024-ND	2.08	18.68	664.00/400	4233.00/4000	BR1632A/VA
18	Coin	3	255		3.2	—	0.03	P025-ND	2.35	21.15	376.00/200	2500.40/2000	BR2330A/FA
19	Coin	3	255		3.2	—	0.03	P026-ND	2.35	21.15	376.00/200	2500.40/2000	BR2330A/HD
20	Coin	3	255		3.2	—	0.03	P027-ND	2.35	21.15	376.00/200	2500.40/2000	BR2330A/VA
21	Coin	3	1000		8.0	—	0.03	P028-ND	3.83	34.43	306.00/100	2034.90/1000	BR2477A/FB
22	Coin	3	1000		8.0	—	0.03	P029-ND	3.83	34.43	306.00/100	2034.90/1000	BR2477A/HB
23	Coin	3	1000		8.0	—	0.03	P030-ND	3.83	34.43	306.00/100	2034.90/1000	BR2477A/VA
								Pin Type					
–	Pin	3	25	4.2 x 25.9	0.55	4	0.5	P140-ND	3.75	33.75	900.00/300	5737.50/3000	BR425
–	Pin	3	50	4.2 x 35.9	0.85	6	1.0	P139-ND	3.75	33.75	900.00/300	5737.50/3000	BR435

* See "How To Order" for note on shipping charges on prepaid orders. † Tabbed version. ‡ Has internal 6.8K ohm resistor in series.

PCB Terminal Type

Fig. 1

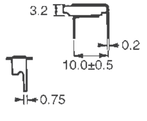


Fig. 2

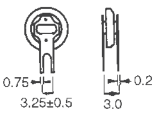


Fig. 3

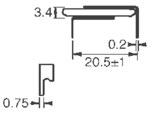


Fig. 4

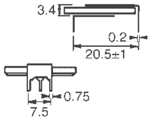


Fig. 5 (w/PVC Cover)

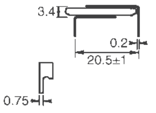


Fig. 6

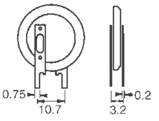


Fig. 7

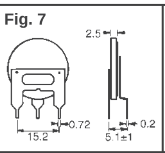


Fig. 8

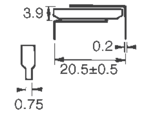


Fig. 9

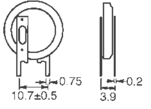


Fig. 10

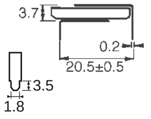


Fig. 11

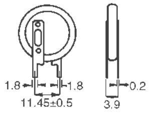


Fig. 12

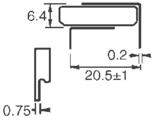


Fig. 13 *NEW!*

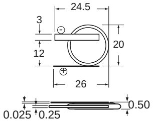


Fig. 14

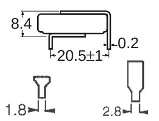


Fig. 15

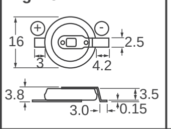


Fig. 16

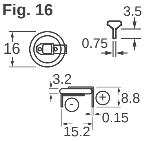


Fig. 17

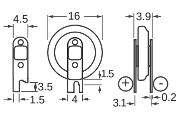


Fig. 18

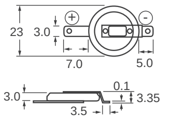


Fig. 19

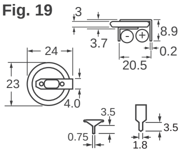


Fig. 20

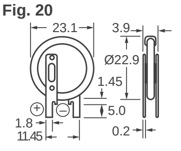


Fig. 21

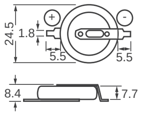


Fig. 22

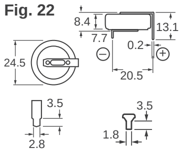
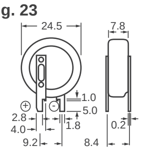


Fig. 23



Panasonic Vanadium Pentoxide Lithium Rechargeable Batteries

Features:

• One high-voltage battery to serve your back up needs. This single, compactly designed, cost-effective 3V battery does the work of three 1.2V Ni-Cd or two capacitors. • Months of continuous use as a backup The VL3032 has a nominal electrical capacity of 100mAh which translates into 10,000 hours with a microprocessor load of 10 µA.

Applications:

• **Memory Backup:** Facsimiles, ECRs, telephones, typewriters, sequencers, VTRs, video cameras, personal computers, memory cards, tuners.

Fig. 1

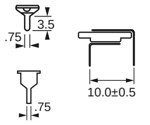


Fig. 2

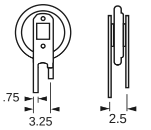


Fig. 3

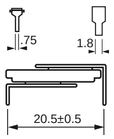


Fig. 4

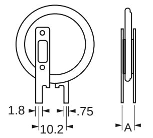


Fig. 5

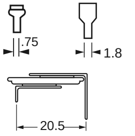


Fig. 6

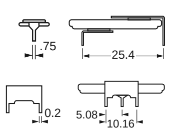


Fig. 7

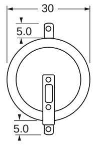


Fig.	Type	(V)	Capacity (mAh)	Dimensions (mm) Dia.	Height	A	Weight (g)	Drain Max. (mA)	Charge Current*	Digi-Key Part No.	Pricing 1	10	Pkg.	Carton	Panasonic Part No.
1	Coin	3	7	12.5	2.0	—	0.8	0.03	<0.5 mA	P079-ND	4.45	40.05	213.60/60	2840.88/1200	VL1220-1HF
2	Coin	3	7	12.5	2.0	—	0.8	0.03	<0.5 mA	P080-ND	4.45	40.05	178.00/50	2840.88/1200	VL1220-1VC
3	Coin	3	20	20.0	2.0	—	2.2	0.07	<1.5 mA	P081-ND	4.75	42.75	456.00/120	1710.00/600	VL2020-1HF
4	Coin	3	20	20.0	2.0	2.7	2.2	0.07	<1.5 mA	P082-ND	4.75	42.75	456.00/120	1710.00/600	VL2020-1VC
5	Coin	3	30	23.0	2.0	—	2.8	0.10	<2.0 mA	P083-ND	5.85	52.65	280.80/60	2106.00/600	VL2320-1HF
4	Coin	3	30	23.0	2.0	2.7	2.8	0.10	<2.0 mA	P084-ND	5.85	52.65	280.80/60	2106.00/600	VL2320-1VC
5	Coin	3	50	23.0	3.0	—	3.7	0.10	<2.0 mA	P085-ND	7.38	66.38	354.00/60	2655.00/600	VL2330-1HF
4	Coin	3	50	23.0	3.0	3.7	3.7	0.10	<2.0 mA	P086-ND	7.38	66.38	354.00/60	2655.00/600	VL2330-1VC
6	Coin	3	100	30.0	3.2	—	6.3	0.20	<4.0 mA	P087-ND	9.28	83.48	445.20/60	3339.00/600	VL3032-1GUF
7	Coin	3	100	30.0	3.2	—	6.3	0.20	<4.0 mA	P088-ND	9.28	83.48	742.00/100	3339.00/600	VL3032-1F2

* Charge Voltage = 3.4 ± 0.15V

Manganese Lithium Rechargeable Batteries (ML Series)

Fig. 1

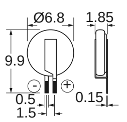
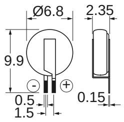


Fig. 2



Features:

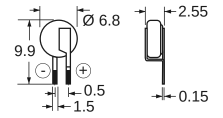
• **Charging at voltage levels even under 3V.** In order to support the current trend in ICs toward lower voltages, these batteries can be charged at a 3 ±0.2 voltage level, and this makes it easier to set the charging circuits for the circuits which employ 3V ICs • **Large capacity for hour-after-hour back-up** • **Excellent withstand voltage characteristics.** These batteries can withstand the application of a continuous 3.2V voltage at a high temperature of 60°C (140°F)

Applications:

Power source for backing up memory data in mobile telephones, personal handyphone systems, memory cards, pagers, data terminals and office automation equipment.

Fig.	Type	(V)	Capacity (mAh)	Dim. (mm) Dia.	Height	Weight (g)	Drain Std. (mA)	Digi-Key Part No.	Pricing 1	10	Pkg.	Carton	Panasonic Part No.
1	Coin	3	2.9	6.8	1.6	0.2	0.01	P043-ND	2.13	19.13	850.00/500	5418.75/5000	ML616S/F9DE
2	Coin	3	4.5	6.8	2.1	0.3	0.01	P044-ND	2.13	19.13	680.00/400	4335.00/4000	ML621S/F9DE

Niobium Titanium Lithium Rechargeable Battery



Features:

Designed for very low voltage ICs. Nominal voltage is 2.0V. These can be charged and discharged at temperatures as high as 60°C (140°F). Charging voltage is 2.5 volts.

Applications:

Power source for backing up memory data in cellular phones, PDAs (personal digital assistants), portable communication devices, and other handheld applications.

Type	Voltage (V)	Capacity (mAh)	Dim. (mm) Dia.	Height	Weight (g)	Drain Std. (mA)	Digi-Key Part No.	Price Each 1	10	400	Panasonic Part No.
Coin	2.0	4.0	6.8	2.55	0.25	0.01	P009-ND	3.75	3.38	3.00	NBL621/F9D

Flashlights and Light Scopes

TASKMASTER™ Flashlights

These Heavy-Duty Lights are durable enough for even the most demanding jobs.

Features: • Performance tested by independent testing laboratory • Durable scratch-resistant high-tech plastic withstands drop tests from 7 feet onto concrete pavement • Powerful Krypton bulb for brighter and whiter light • Heavy-Duty switch tested to operate over 10,000 cycles • Lifetime warranty on flashlight and switch (On manufacturer defects only).

Specifications:

BF-310PA/K-A: (Fig.1)
• **Weight:** 8.53 oz. • **Batteries:** 2 Heavy-Duty "AA" size • **Brightness:** Light output of over 50 candles at 5 feet (1.52 meters)

BF-110PA/K-A: (Fig.2)
• **Weight:** 1.16 ibs. • **Batteries:** 2 Heavy-Duty "D" size • **Brightness:** Light output of over 100 candles at 5 feet (1.52 meters)

FF-3PA/K: (Fig.3)
• **Weight:** 1.8 lbs. (.82 kg) • **Batteries:** 4 Heavy-Duty "D" size • **Brightness:** Over 200 candles at 5 feet (1.52 meters)

TASKMASTER™ Head Light (Fig.4)

Features: • Powerful hands-free operation • Designed for comfort with wide, adjustable elastic headband & padded headrest • Heavy-duty rugged, impact resistant plastic housing and durable switch • Pivoting lamp has high intensity bulb with hands-free operation for any job — indoors or out • Lightweight 5.7 oz. (161.59 grams) • Operates on two "AA" batteries (P107-ND sold separately) • Spare bulb included.

TASKMASTER™ Light Scope (Fig.5)

Features: • Built-in blue filter optimizes focal clarity • Sturdy rack and pinion focusing mechanism built into the barrel • Comes with removable base stand/mount clip for viewing slides, printed pieces, etc.

Specifications: • **Magnification**: 100x • **Power Source:** Two "AA" batteries (P107-ND sold separately) • **Body Material:** ABS plastic (black) • **Dimensions:** 5.5" x 2.0" x 0.9" (139.7mm x 50.8mm x 22.86mm) • **Weight:** Approx. 2.4 oz. (68.04 grams)

Applications: Research labs, environmental field work, circuit board exam, hobbyists, collectors, students, manufacturing, and more.

Fig.	Description	Digi-Key Part No.	Price Each	Panasonic Part No.
1	Flashlight........................	P056-ND	6.99	BF-310PA/KA
2	Flashlight........................	P057-ND	8.49	BF-110PA/KA
3	Lantern..........................	P058-ND	11.99	FF-3PA/K
4	Head Light	P059-ND	12.99	BF-178PA/1B
5	100X Light Scope	P055-ND	59.99	FF-394PA

Fig. 1

Fig. 2

Fig. 3

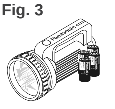


Fig. 4

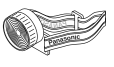
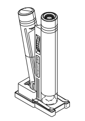


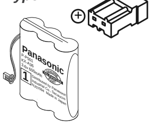
Fig. 5



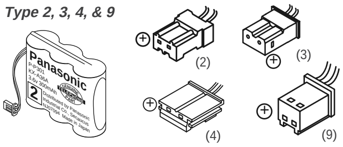
(Shown with base)

Replacement Telephone Packs

Type 1



Type 2, 3, 4, & 9



Type 43 & 92

Pan. Type	(V)	Cap. C/5 (mAh)	Dimensions — H x L x T Inch (mm)	Weight Oz. (g)	Digi-Key Part No.	Price Each	Panasonic Part No.
1	3.6	600	1.88 x 1.65 x 0.55 (47.8 x 41.9 x 14.0)	2.37 (67.2)	P072-ND	6.35	P-P501
2	3.6	300	1.09 x 1.65 x 0.55 (27.7 x 41.9 x 14.0)	1.47 (41.7)	P071-ND	6.86	P-P301
3	3.6	300	1.09 x 1.65 x 0.55 (27.7 x 41.9 x 14.0)	1.47 (41.7)	P070-ND	6.86	P-P302
4	3.6	300	1.09 x 1.65 x 0.55 (27.7 x 41.9 x 14.0)	1.47 (41.7)	P069-ND	6.86	P-P303
9	3.6	300	1.09 x 1.65 x 0.55 (27.7 x 41.9 x 14.0)	1.47 (41.7)	P066-ND	6.86	P-P304
43	3.6	600	2.16 x 1.77 x 0.66 (54.9 x 45.0 x 16.8)	2.69 (72.6)	P065-ND	22.39	P-P543
92	3.6	600	2.08 x 1.68 x 0.58 (52.8 x 42.7 x 14.7)	2.52 (71.4)	P064-ND	16.92	P-P592

Replacement Packs available for the following telephone brands.

AT&T / Lucent
Bell Phone
Bell South
Cobra
Code-A-Phone
Conair

General Electric
Goldstar
GTE
Northwestern Bell
Pacific Bell
Pactel

Panasonic
Phone Mate
Radio Shack
Sanyo
Sears
Sharp

Sony
Southwestern Bell Freedom Phone
Tele-Phone
Toshiba
Uniden

To obtain the correct Panasonic cross reference number, please call our technical staff at 1-800-344-4539 with the model number of your phone.

Battery Holders

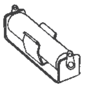
Fig. 1


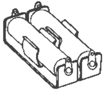
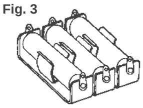
Fig. 2


Fig. 3


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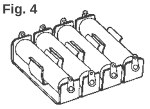

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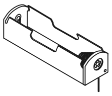

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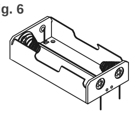

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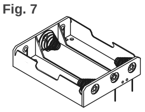
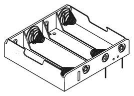


Fig. 8


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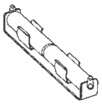

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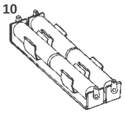

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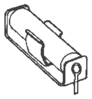

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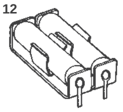

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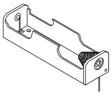

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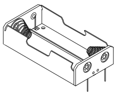

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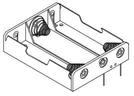


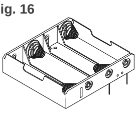
Fig. 16


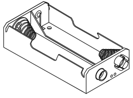
Fig. 17


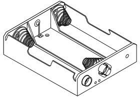
Fig. 18


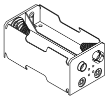
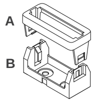
Fig. 19


Fig. 20


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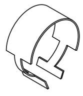

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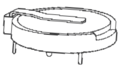
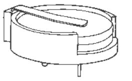


Fig. 23


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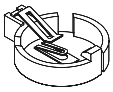

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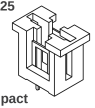

Compact

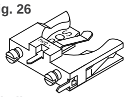
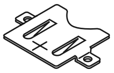
Fig. 26

Slimline

Fig. 27


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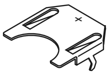
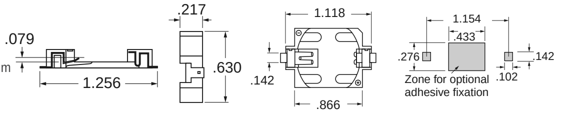


Fig. 29
Uses CR2032 Coin Cell Lithium Batteries


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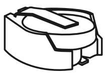

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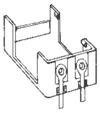

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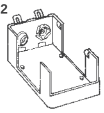

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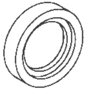

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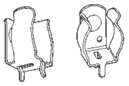

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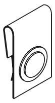

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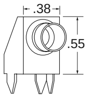

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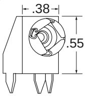

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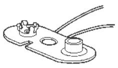

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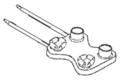

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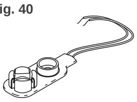

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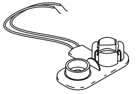

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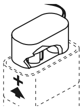

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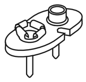
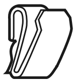


Fig. 44


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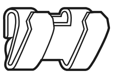


Fig.	Desc.	Digi-Key Part No.	Price Each		
			1	10	100
“N” Cell Holders*					
1	1 Cell	154K-ND	1.39	1.05	.86
2	2 Cell	155K-ND	2.87	2.15	1.76
3	3 Cell	156K-ND	5.97	4.48	3.49
“AAA” Cell Holders*					
1	1 Cell	137K-ND	1.69	1.27	1.04
2	2 Cell	138K-ND	3.00	2.25	1.90
3	3 Cell	169K-ND	4.39	3.29	2.58
4	4 Cell	170K-ND	6.00	4.50	3.54
“AAA” Cell Holders - PC Mount††					
5	1 Cell	2466K-ND	.70	.65	.60
6	2 Cell	2468K-ND	.73	.67	.62
7	3 Cell	2479K-ND	.97	.90	.83
8	4 Cell	2481K-ND	1.07	.99	.91
“AAA” Cell Holders - 6” Wire Leads††					
5	1 Cell	2467K-ND	.70	.65	.60
6	2 Cell	2469K-ND	.73	.67	.62
7	3 Cell	2480K-ND	.97	.90	.83
8	4 Cell	2482K-ND	1.07	.99	.91
“AA” Cell Holders*					
1	1 Cell	139K-ND	1.10	.83	.68
2	2 Cell	140K-ND	2.21	1.66	1.36
3	3 Cell	171K-ND	3.52	2.64	2.06
4	4 Cell	182K-ND	4.99	3.75	3.07
9	2 Cell	189K-ND	1.75	1.32	1.08
10	4 Cell	192K-ND	3.38	2.54	1.97
11	1 Cell	2222K-ND	1.38	1.04	.90
12	2 Cell	2223K-ND	2.35	1.77	1.52
“AA” Cell Holders - PC Mount††					
13	1 Cell	2460K-ND	.70	.65	.60
14	2 Cell	2462K-ND	.73	.67	.62
15	3 Cell	2464K-ND	.97	.90	.83
16	4 Cell	2477K-ND	1.07	.99	.91
“AA” Cell Holders - 6” Wire Leads††					
13	1 Cell	2461K-ND	.70	.65	.60
14	2 Cell	2463K-ND	.73	.67	.62
15	3 Cell	2465K-ND	.97	.90	.83
16	4 Cell	2478K-ND	1.07	.99	.91
“AA” Cell Holders - with Snap-On Connector††					
17	2 Cell	2474K-ND	.73	.67	.62
18	3 Cell	2475K-ND	.97	.90	.83
19	4 Cell	2476K-ND	1.06	.99	.91
Cell Lithium Holders - PC Mount††					
20B	1/2 AA	108K-ND	1.15	1.06	.62
20B	AA	1028K-ND	1.15	1.06	.62
20B	2/3 A	1029K-ND	1.15	1.06	.62
Cell Lithium Retaining Cover††					
20A	1/2 AA	108CK-ND	.37	.35	.34
20A	AA	1028CK-ND	.45	.42	.38
21	2/3 A	1029CK-ND	.42	.40	.37
“C” Cell Holders*†					
1	1 Cell	173K-ND	1.35	1.01	.83
2	2 Cell	174K-ND*	2.35	1.76	1.44
3	3 Cell	187K-ND	4.86	3.65	2.85
9	2 Cell	185K-ND	2.06	1.55	1.27
10	4 Cell	196K-ND	3.82	2.87	2.26
11	1 Cell	2224K-ND	1.41	1.06	.87
12	2 Cell	2225K-ND*	2.52	1.89	1.55
“D” Cell Holders*†					
1	1 Cell	175K-ND	1.56	1.17	.94
2	2 Cell	176K-ND	2.74	2.06	1.68
3	3 Cell	190K-ND	6.03	4.53	3.55
9	2 Cell	186K-ND	2.35	1.76	1.44
10	4 Cell	200K-ND	4.77	3.58	2.50
11	1 Cell	2226K-ND	1.95	1.47	1.18
12	2 Cell	2227K-ND*	3.08	2.32	1.89
24mm Coin Cell Lithium “PC” Holders					
22	1 Cell	105K-ND	1.09	.82	.73
23	2 Cell	1025K-ND	.96	.84	.80
20mm Coin Cell Lithium “PC” Holders					
22	1 Cell	106K-ND	1.09	.82	.73
22	1 Cell	103K-ND	1.18	1.09	.73
23	2 Cell	1026K-ND	.96	.84	.80
23mm Coin Cell Lithium “PC” Holders					
22	1 Cell	107K-ND	1.09	.82	.73
23	2 Cell	1027K-ND	.96	.84	.80
12mm Coin Cell Lithium “PC” Holders					
22	1 Cell	500K-ND	1.67	1.36	1.17
16mm Coin Cell Lithium “PC” Holders					
22	1 Cell	502KE-ND	1.61	1.31	1.13
20mm Coin Cell Holder					
24	1 Cell	1066K-ND	1.18	1.09	.73
Vertical 20mm Coin Cell Holder					
25	1 Cell	1067K-ND	1.05	.93	.88
26	1 Cell	1065K-ND	1.05	.93	.88
Surface Mount Coin Cell Retainer Contacts					
27	12mm	3000K-ND	.33	.25	.22
27	20mm	3002K-ND	.34	.26	.23
27	23mm	3004K-ND	.33	.25	.22
27	24mm	3006K-ND	.35	.27	.24
Thru Hole Mount Coin Cell Retainer Contacts					
28	12mm	3001K-ND	.33	.25	.22
28	20mm	3003K-ND	.34	.26	.23
28	23mm	3005K-ND	.34	.26	.23
28	24mm	3007K-ND	.35	.27	.24
Surface Mount Coin Cell Holder - Bulk					
29	1 Cell, 20mm	1060K-ND	1.18	1.09	.73
Surface Mount Coin Cell Holder - Tape & Reel					
29	1 Cell, 20mm	1060KTR-ND	377.50/500		
Surface Mount Coin Cell Holder - Bulk					
30	1 Cell, 20mm	1061K-ND	1.58	1.46	.97
30	2 Cell, 20mm	1062K-ND	1.58	1.46	.97
30	1 Cell, 23mm	1071K-ND	1.58	1.46	.97
Surface Mount Coin Cell Holder - Tape & Reel					
30	1 Cell, 20mm	1061KTR-ND	214.60/200		
30	2 Cell, 20mm	1062KTR-ND	214.60/200		
30	1 Cell, 23mm	1071KTR-ND	214.60/200		
9 Volt Holders					
31	1 Cell	1294K-ND	1.24	.93	.78
32	1 Cell	1295K-ND	1.19	.90	.74
Insulated Polarizing Washers					
33	Red	59K-ND	—	.07	.06
33	Black	60K-ND	—	.07	.06
“AA” “PC” Battery Clip					
34	1 Cell	92K-ND•	.49/2	.19	.13
“AAA” Snap-In Battery Clips					
34	—	82K-ND•	.36/2	.16	.13
“AAA”, “AAAA”, “N” Snap-IN Battery Clips					
35	—	238K-ND•	.23/2	.10	.10
9 Volt “PC” Battery Clips (on board battery mount)					
36	Male	593K-ND	.27	.20	.19
37	Female	594K-ND	.32	.24	.24
9 Volt Battery Straps					
38	Single	72K-ND	.79	.71	.53
39	Dual	227K-ND	2.04	1.53	1.25
Premium 9 Volt Battery Straps (I-Style)					
40	Single, 4”	2238K-ND	.45	.42	.36
40	Single, 6”	2239K-ND	.46	.43	.37
40	Single, 8”	2240K-ND	.48	.45	.38
Premium 9 Volt Battery Straps (T-Style)					
41	Single, 4”	2241K-ND	.48	.45	.38
41	Single, 6”	2242K-ND	.49	.46	.39
41	Single, 8”	2243K-ND	.50	.47	.40
Economy 9 Volt Battery Straps (I-Style)					
40	Single, 4”	232K-ND	.27	.26	.24
40	Single, 6”	233K-ND	.28	.26	.24
40	Single, 8”	234K-ND	.29	.27	.25
Economy 9 Volt Battery Straps (T-Style)					
41	Single, 4”	235K-ND	.30	.28	.26
41	Single, 6”	236K-ND	.30	.29	.26
41	Single, 8”	237K-ND	.31	.29	.27
Shielded 9 Volt Battery Straps (I-Style)					
42	Single, 4”	84-4K-ND	.32	.30	.28
42	Single, 6”	84-6K-ND	.33	.31	.29
42	Single, 8”	84-8K-ND	.34	.32	.29
Shielded 9 Volt Battery Straps (T-Style)					
42	Single, 4”	81-4K-ND	.32	.30	.28
42	Single, 6”	81-6K-ND	.33	.31	.29
42	Single, 8”	81-8K-ND	.34	.32	.29
Vertical “9V” PC Connector					
43	—	968K-ND	.81	.74	.55
Single “AA” Cell Clip					
44	—	209K-ND•	.38/2	.16	.13
Dual “AA” Cell Clip					
45	—	210K-ND•	.64/2	.26	.23
“AAA” Snap-On Contacts					
44	—	204K-ND•	.38/2	.16	.13
45	—	202K-ND•	.64/2	.26	.23

* Cell Holders are Aluminum. †† Cell Holders are Plastic.
† “C” and “D” cell holders are dual clips only.
● Figs. 34, 35, 44 & 45 sold by the pair.

Memory Protection Devices

Fig. 1

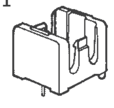
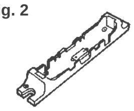


Fig. 2



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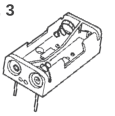

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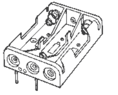
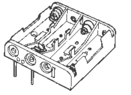


Fig. 5



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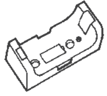

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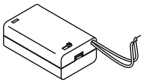
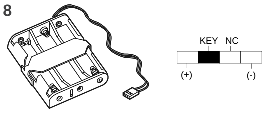


Fig. 8



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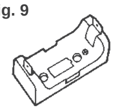

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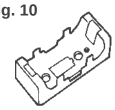

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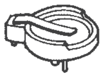

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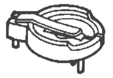
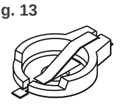


Fig. 13



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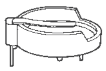
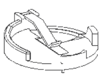


Fig. 15



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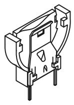
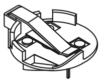


Fig. 17



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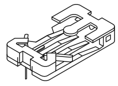

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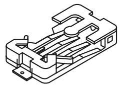


Fig. 20

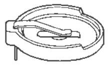
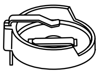


Fig. 21



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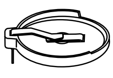

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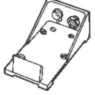

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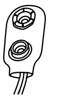

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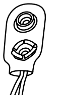

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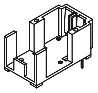

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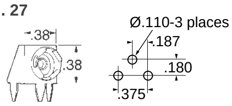
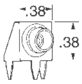


Fig. 28



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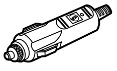

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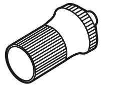

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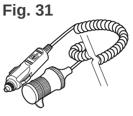

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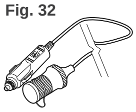

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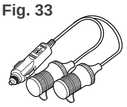

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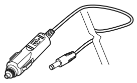
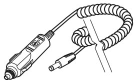


Fig. 35



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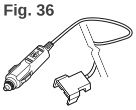

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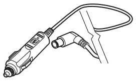

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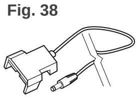


Fig. 39

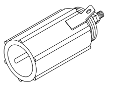
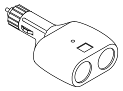


Fig. 40



Battery Holders

Fig.	No. of Cells	Description	Digi-Key Part No.	Price Each 1	10	100
		“1/3N” Cell Holders				
1	1	PC Mount, Solder Legs	BC1/3N-ND	.86	.78	.66
		“N” Cell Holders				
2	2	PC Mount, Solder Legs”	BH2N-ND	1.94	1.75	1.60
		“AAA” Cell Holders				
3	2	PC Mount, Solder Legs	BH2AAA-PC-ND	1.35	1.22	1.01
4	3	PC Mount, Solder Legs	BH3AAA-PC-ND	2.24	2.02	1.68
3	2	6” (152.40mm) Wire Leads, Stripped-Tinned .187”(4.76mm)	BH2AAA-W-ND	1.35	1.22	1.01
4	3	6” (152.40mm) Wire Leads, Stripped-Tinned .187”(4.76mm)	BH3AAA-W-ND	2.24	2.02	1.68
5	4	6” (152.40mm) Wire Leads, Stripped-Tinned .187”(4.76mm)	BH4AAA-W-ND	2.49	2.25	1.88
		“AA” Cell Holders				
6	1	PC Mount, Solder Legs	BHAA-ND	1.84	1.66	1.39
3	2	PC Mount, Solder Legs	BH2AA-PC-ND	1.42	1.28	1.07
4	3	PC Mount, Solder Legs	BH3AA-PC-ND	2.39	2.16	1.80
5	4	PC Mount, Solder Legs	BH4AA-PC-ND	2.59	2.34	1.95
7	2	Battery Case for 2 AA Cells with 6” Wire Leads and Switch	SBH-321AS-ND	.72	.65	.60
7	3	Battery Case for 3 AA Cells with 6” Wire Leads and Switch	SBH-331AS-ND	1.03	.93	.86
7	4	Battery Case for 4 AA Cells with 6” Wire Leads and Switch	SBH-341AS-ND	1.08	.98	.90
3	2	6” (152.40mm) Wire Leads, Stripped-Tinned .187”(4.76mm)	BH2AA-W-ND	1.42	1.28	1.07
4	3	6” (152.40mm) Wire Leads, Stripped-Tinned .187”(4.76mm)	BH3AA-W-ND	2.39	2.16	1.80
5	4	6” (152.40mm) Wire Leads, Stripped-Tinned .187”(4.76mm)	BH4AA-W-ND	2.59	2.34	1.95
		Computer Clock Battery Replacement / “AA” Cell Holder				
8	3	9” Wire Leads w/ conn, velcro pads included	BH3AA-211-ND	3.19	2.88	2.84
		“1/2AA” Cell Holders				
6	1	PC Mount, Solder Legs	BH1/2AA-ND	1.48	1.34	1.12
		“2/3A” Cell Holders				
6	1	PC Mount, Solder Legs	BH2/3A-ND	1.65	1.57	1.50
—	1	Cover for PC Mount Holder	BH2/3AC-ND	.44	.40	.34
9	1	Fast-On Tabs	BH2/3A-T-ND	1.66	1.50	1.43
		“C” Cell Holders				
10	1	PC Mount, Solder Legs	BHC-ND	2.02	1.82	1.76
		Coin Cell Holders — 12mm Cell Diameter				
11	1	PC Mount, Solder Legs, 2-2.5mm Cell Height	BH500-ND	.97	.88	.74
		Coin Cell Holders — 16mm Cell Diameter				
12	1	PC Mount, Solder Legs, 1.6-3.2mm Cell Height	BH600-ND	.92	.83	.70
13	1	SMT, Temp. range -40°C to +245°C	BH600SM-ND	1.13	1.02	.85
		Coin Cell Holders — 20mm Cell Diameter				
14	2	PC Mount, Solder Legs 2.5-3.2mm Cell Height	BH800S-ND	.60	.55	.54
15	1	PC Mount, Solder Legs	BH32T-C-ND	1.14	.87	.73
16	1	Vertical, for CR2032 Battery	BS-5-ND	.95	.86	.72
17	1	Horizontal, for CR2032 Battery	BS-3-ND	.77	.70	.58
18	1	PC Mount, Press-to-Eject Feature	BA2032-ND	.72	.59	.54
19	1	SMT, Press-to-Eject Feature	BA2032SM-ND	.72	.59	.54
		Coin Cell Holders — 23mm Cell Diameter				
14	2	PC Mount, Solder Legs, 2.5mm Cell Height	BH906S-ND	1.01	.92	.77
15	1	PC Mount, Solder Legs, 2-3.2mm Cell Height	BH908T-C-ND	1.14	.87	.73
13	1	SMT, Temp. range -60°C to +282°C	BH2330SM-ND	1.16	1.05	.90
		Coin Cell Holders — 24-25mm Cell Diameter				
20	1	PC Mount, Solder Legs, 2-3mm Cell Height	BH1000-ND	.98	.89	.74
21	1	PC Mount, Solder Legs, 7.7mm Cell Height	BH1000-G-ND	1.22	1.13	.95
		Coin Cell Holders — 30mm Cell Diameter				
22	1	PC Mount, Solder Legs, 3.2mm Cell Height	BH3000-ND	1.22	1.13	.95
		9-Volt Cell Holders				
23	1	PC Mount, Solder Legs	BH9V-PC-ND	1.17	1.06	.90
23	1	6” (152.40mm) Lead Wires	BH9V-W-ND	.88	.80	.79
24	1	6” (152.40mm) Battery Snap Cable	BS6I-ND	.30	.27	.25
24	1	12” (304.8mm) Battery Snap Cable	BS12I-ND	.31	.28	.26
25	1	6” (152.40mm) Heavy Duty Battery Snap Cable	BS6I-HD-ND	.33	.31	.28
25	1	12” (304.8mm) Heavy Duty Battery Snap Cable	BS12I-HD-ND	.35	.32	.30
26	1	PC Mount, Printed Circuit Board Type w/Contacts	BC9VPC-ND	1.41	1.13	1.02
		Printed Circuit Snap-Ons (off board battery mount)				
27	—	9-Volt Female Snap-on	BSPCF-ND	.22	.20	.14
28	—	9-Volt Male Snap-on	BSPCM-ND	.19	.18	.12

Cigarette Lighter Sockets

- 21 mm (Inside Diameter) • Auto Plugs: (Fuse 3AG Style)
- The length of cord shown in each item is measured from the welding point.

Fig.	Description	Digi-Key Part No.	Price Each 1	10	100
	Auto Power Plug				
29	ABS fused auto plug with LED, Black	APP-001-ND	2.25	2.03	2.00
29	ABS fused auto plug with LED, Gray	APP-002-ND	2.25	2.03	2.00
29	ABS fused auto plug w/ no LED, Black	APP-003-ND	2.07	1.86	1.84
	Cigarette Assemblies				
30	Cigarette Inline Socket, Plastic	ZA2010-ND	1.13	1.02	1.00
—	Red Rubber Cap for Sockets	ZA2081-ND	.56	.51	.50
31	12’ (3.66 meters) Coil Cord Assembly with 5A Fused Plug	ZA5070-ND	5.26	4.74	4.67
32	12’ (3.66 meters) 18AWG Cord Assembly, w/10A Fused Plug	ZA5071-ND	6.48	5.84	5.76
33	8” (203.2mm) 18AWG Cord Assembly, w/10A Fused Plug	ZA5072-ND	6.20	5.58	5.51
34	6’ (1.83 meters) 18AWG Cord, 2.1mm x 5.5mm DC Plug with 5A Fused Plug	ZA5073-ND	3.85	3.47	3.42
35	12’ (3.66 meters) Cord, 2.1mm x 5.5mm DC Plug, w/5A Fused Plug	ZA5074-ND	6.11	5.50	5.42
36	1’, (0.30 meters) UL2468 Cord, Lead Acid Clip, with 2A Fused Plug	ZA5076-ND	4.32	3.89	3.84
37	6’ (1.83 meters) Cord, 2.1mm x 5.5mm Rt. Angle DC Plug with 3A Fused Plug	ZA5077-ND	3.85	3.47	3.42
38	8” (203.2mm), UL2468 Cord, Lead Acid Clip, 2.1mm x 5.5mm DC Plug	ZA5350-ND	2.91	2.63	2.59
38	8” (203.2mm), UL2468 Cord, Lead Acid Clip, No Connector	ZA5350-B-ND	2.54	2.29	2.25
39	Panel Mount, Power Socket, Insert Lock	ZA2070-ND	3.36	3.00	2.71
39	Panel Mount, Power Socket, Screw Lock	ZA2060-ND	2.60	2.32	2.10
40	Power Plug Splitter, One Male Plug-Two Receptacle Sockets	ZA5018-ND	6.08	5.50	5.40

Memory Protection Devices "Budget Balancers" Battery Holders

Fig. 1

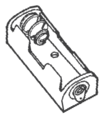


Fig. 2

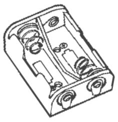


Fig. 3

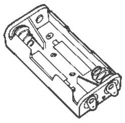


Fig. 4

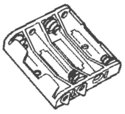


Fig. 5

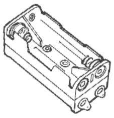


Fig. 6

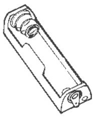


Fig. 7

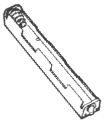


Fig. 8

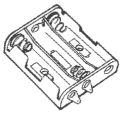


Fig. 9

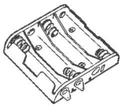
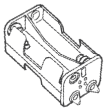


Fig. 10



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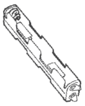


Fig. 12

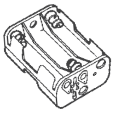


Fig. 13

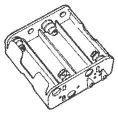


Fig. 14

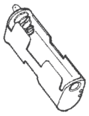


Fig. 15

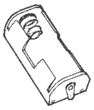


Fig. 16

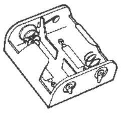


Fig. 17

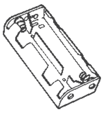


Fig. 18

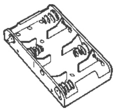


Fig. 19

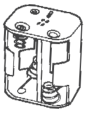


Fig. 20

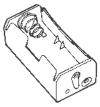


Fig. 21

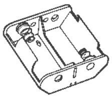


Fig. 22

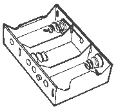


Fig. 23

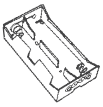


Fig. 24

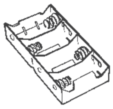


Fig.	No. of Cells	Description	Digi-Key Part No.	Price Each 1	10	100
		"N" Cell Holders				
1	1	Solder Tabs	BHNL-ND	.58	.52	.48
2	2	Solder Tabs	BH2NL-ND	.62	.56	.52
		"AAA" Cell Holders				
3	2	Solder Tabs	BC2AAAL-ND	.62	.56	.52
4	4	Solder Tabs	BC4AAAL-ND	1.46	1.32	1.22
5	4	Solder Tabs	BH24AAAL-ND	.99	.89	.82
3	2	6" Wire Leads, Stripped-Tinned 3/16" (4.78mm)	BC2AAAW-ND	.69	.63	.58
4	4	6" Wire Leads, Stripped-Tinned 3/16" (4.78mm)	BC4AAAW-ND	1.49	1.35	1.24
5	4	6" Wire Leads, Stripped-Tinned 3/16" (4.78mm)	BH24AAAW-ND	1.00	.91	.84
		"AA" Cell Holders				
6	1	Solder Tabs	BCAAL-ND	.54	.49	.46
7	2	Solder Tabs	BC12AAL-ND	.60	.54	.50
14	2	Solder Tabs	BC22AAL-ND	.58	.52	.48
8	3	Solder Tabs	BC3AAL-ND	.93	.84	.78
9	4	Solder Tabs	BC4AAL-ND	.96	.87	.80
10	4	Solder Tabs	BH24AAL-ND	.85	.77	.71
11	4	Solder Tabs	BH14AAL-ND	.71	.65	.60
12	6	Solder Tabs	BH26AAL-ND	1.20	1.08	1.00
13	8	Solder Tabs	BH48AAL-ND	1.46	1.32	1.22
14	2	6" Wire Leads, Stripped-Tinned 3/16" (4.78mm)	BC22AAW-ND	.59	.54	.50
8	3	6" Wire Leads, Stripped-Tinned 3/16" (4.78mm)	BC3AAW-ND	.96	.87	.80
9	4	6" Wire Leads, Stripped-Tinned 3/16" (4.78mm)	BC4AAW-ND	1.00	.91	.84
10	4	6" Wire Leads, Stripped-Tinned 3/16" (4.78mm)	BH24AAW-ND	.93	.84	.78
11	4	6" Wire Leads, Stripped-Tinned 3/16" (4.78mm)	BH14AAW-ND	.77	.70	.64
12	6	6" Wire Leads, Stripped-Tinned 3/16" (4.78mm)	BH26AAW-ND	1.26	1.14	1.06
13	8	6" Wire Leads, Stripped-Tinned 3/16" (4.78mm)	BH48AAW-ND	1.49	1.35	1.24
		"C" Cell Holders				
15	1	Solder Tabs	BHCL-ND	.65	.59	.54
16	2	Solder Tabs	BH2CL-ND	1.24	1.12	1.03
17	4	Solder Tabs	BH24CL-ND	1.37	1.24	1.15
18	4	Solder Tabs	BH4CL-ND	1.63	1.47	1.36
19	4	Solder Tabs	BH22CL-ND	1.75	1.58	1.46
		"D" Cell Holders				
20	1	Solder Tabs	BHDL-ND	.71	.65	.60
21	2	Solder Tabs	BH2DL-ND	1.37	1.24	1.15
22	3	Solder Tabs	BH3DL-ND	1.71	1.54	1.42
23	4	Solder Tabs	BH24DL-ND	1.71	1.54	1.42
24	4	Solder Tabs	BH4DL-ND	2.12	1.91	1.77

Color LCD TFT Modules

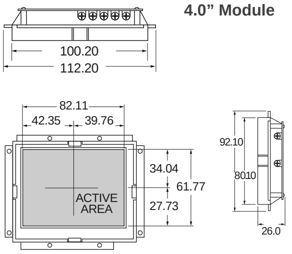
4.0" and 6.4" Modules Take Standard NTSC Composite Video Signals

These high quality, low profile, 4.0" and 6.4" color LCD TFT modules can be used to view any NTSC composite video source such as the output from a VCR or one of our small Panasonic CCD cameras.

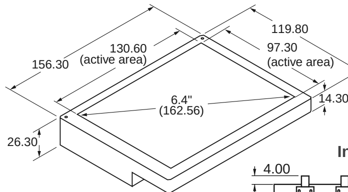
Operating Conditions

- **Operating Voltage (Vop)**: 10-30VDC, 12VDC typ.
- **Operating Temp. (Top):** 0°C to 60°C
- **Storage Temp. (Tst):**
  - **4.0" Module:** -20°C to +80°C
  - **6.4" Module:** -25°C to +80°C
- **Operating Humidity (Ho):** 85%RH
- **Storage Humidity (Hs):** 85% RH
- **Input Signal/NTSC Sync Negative** (Composite Video Signal: 1Vp-p/75Ω):
  - **Vi:** 1Vp-p
  - **fH:** 15.75KHz
  - **fV:** 60Hz
  - **fc:** 3.58MHz
- **Power Consumption (Pc):**
  - **4.0" Module:** 5W
  - **6.4" Module:** 7W

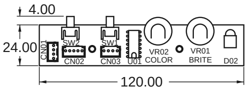
4.0" Module



6.4" Module



Interface Board

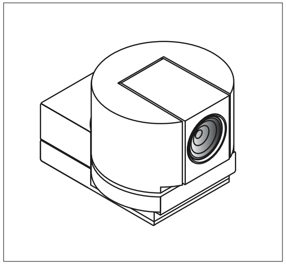


Display Size (inch)	Resolution (No. of lines) Width	Height	Active Area (mm) Width	Height	Dot Pitch (mm) Width	Height	Weight (gm.)	Backlight*	Viewing Angle Right	Left	Up	Down	Digi-Key Part No.	Price Each	Lumex Part No.
4.0	480	234	82.10	61.70	0.106	0.161	166 ±5	CCFT	45°	45°	10°	30°	67-1547-ND	299.00	LCM-480234GF-40CG
6.4	960	234	130.6	97.3	0.136	0.416	340 ±5	CCFT	50°	50°	10°	30°	67-1511-ND	497.53	LCM-960234GR-64FC

* 10,000 hour min. at Tamb=25°C

Panasonic

PTZ Color Camera w/Optical Zoom



	Operating	Non-Operating
Temp.	0 to 40° C (32 to 104° F)	-10 to 60° C (-14 to 140° F)
Humidity	30 to 80% No condensation	30 to 90% No condensation

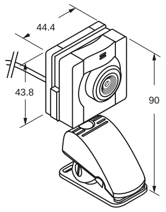
SPECIFICATIONS:

CCD Type • Image Size - 1/4 inch • Effective pixels - 752 x 582 **Lens** • Focal Length - 3.8 - 79.8mm • Zoom Range - 21:1 (Distance to object: infinity) • Max. horizontal field of view - 51° • Focus Control - Auto/Manual/Hold • Lens Distortion - >2% • Iris Control - Auto/Direct/Hold **Picture Setting** • White Balance - Auto/Direct/Hold • Shutter Speed - Adjustable (*1) • Back Light - Adjustable **Video output** • Composite 1.0Vp-p (Based on PAL) • S-Video (Y/C) • (Typ. :1.0Vpp 75 Ω, Based on PAL) **S/N Ration** • >49dB **Horizontal Resolution** • 450 TV lines **Vertical Resolution** • 420 TV lines **Min. illumination** • 5 lux **Dimension** • 141(W) x 114 (H) x 180 (D)mm [5 9/16" (W) x 4 1/2" (H) x 7 3/32" (D)] **Mass [Weight] (Camera unit)** • 1.2kg **Pan/Tilt** • Tilting angle - +15° to -87° • Panning angle - ± 100° • Preset Position - 11 pos. (including document position) (*2) **Control Method** • RS-232C port **DC Operation Voltage** • 12V± 10% DC **Power consumption** • 12W **AC Adaptor Operating Voltage** • AC 100-240V, 50Hz **Safety and EMI Specification** • EN60950, EN55022, EN55024 (*1) Serieal interface control only. (*2) 6 positions in case of remote controller

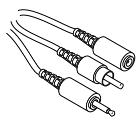
Description	Digi-Key Part No.	Price Each	Matsushita Part No.
Cameral Color PTZ 21x Zoom	P9514-ND	799.00	KX-DP702
IR Remote for KX-DP702 Camera	P9515-ND	39.00	KX-DP602R

Matsushita Communication Industrial Co., Ltd.

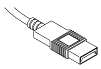
Color CCD Cameras



P9506



P9513



Model GP-KR521P • Enclosed color CCD camera with microphone • Designed for video conferencing or video telephone use • Features the GP-CX161P camera board with audio • Innovative mounting bracket allows mounting in virtually any position • 360° Pan, 110° Tilt (manual) • Includes AC adapter and non-detachable cables • Color: black • RCA Plug for video out, standard 3.5mm microphone plug for audio out

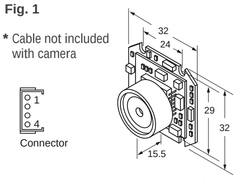
Model GP-KR651US • USB version of above camera. No external AC adapter required. Microphone not included. Non-detachable USB cable. VGA @ 12.5 frames per second. Driver software indcluded. • Color: Beige

Lux	Digi-Key Part No.	Price Each	Matsushita Part No.
10~10,000	P9506-ND	125.00	GP-KR521P
10~10,000	P9513-ND	125.00	GP-KR651US

Panasonic

NTSC Color Board Cameras

Fig. 1



1 - DC In
2 - Power Ground
3 - Video Out
4 - Video Ground

Fig. 2

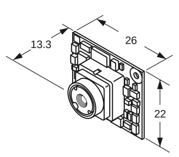


Fig. 3

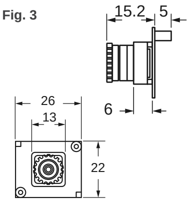


Fig. 4

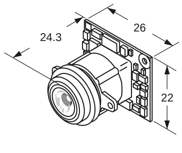


Fig. 5

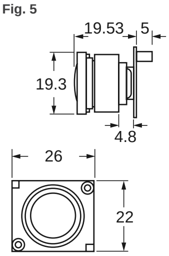
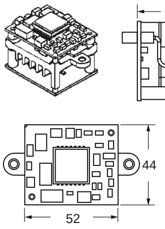


Fig. 6



Model GP-CX151/45P • 45 Degree Pinhole Plastic Lens F2.8 • 40~10,000 lux, 32mm x 32mm
Model GP-CX161-45P • 45 Degree Pinhole Plastic Lens F2.8 • 10~10,000 lux, 22mm x 26mm
Model GP-CX161-51P • 51.2 Degree Glass/Plastic lens F2.0 5-10,000 lux
Model GP-CX161-53P • 53 Degree Dual Element Glass Lens F2.0 • 5~10,000 lux, 22mm x 26mm
Model GP- CX161-15P • 115 Degree Plastic lens F2.8 10-10,000 lux
Model GP-CX161P • CCD Board Camera w/filter - No lens 5 lux min. @ F2.0
Model GP- CX161CSP • CCD Camera Board , CS mount, no lens, 2.5 lux @ F1.4
Model GP-CX171P • CCD Camera, High resolution with filter, no lens, 9 lux @ F2.0/18 lux @ F2.8

Panasonic's self-contained board cameras are designed for indoor applications. All feature small size and low power consumption with a built in one chip DSP for digital signal processing and the latest bare-chip manufacturing technology.

Specifications: • **Image Device:** 1/4" CCD • **Resolution:** 330 lines (480 for GP-CX171P) • **Video Out:** VBS 1Vp-p/75Ω • **Sync:** Internal • **Power Consumption:** 160mA • **Power Supply:** 4.8~6.3VDC (151 series), 4.8~5.5VDC (161 series) 12V (171 series) • **Focus:** Manual • **Operating Temperature:** 0°C to 40°C (151 series), 5°C to 35°C (161 series)

Fig.	Description	Digi-Key Part No.	Price Each	Panasonic Part No.
1	Color Camera Module 45°	P9502-ND	49.00	GP-CX151/45P
2	Color Camera Module 45°	P9504-ND	92.95	GP-CX161-45P
3	Color Camera Module 51.2°	P9509-ND	99.00	GP-CX161-51P
4	Color Camera Module 53°	P9505-ND	105.00	GP-CX161-53P
5	Color Camera Module 115°	P9510-ND	118.33	GP-CX161-15P
—	Color Camera No Lens or Mount	P9508-ND	81.67	GP-CX161P
—	Color Camera Module CS Mount No Lens	P9511-ND	138.33	GP-CX161CSP
6	Color Camera High Res. No Lens or Mount	P9512-ND	216.67	GP-CX171P
—	Cable Assembly for All except P9502	P9507-ND	3.00	Z-E498-01

NOTE: Cable assemblies are not included with cameras. P9502-ND requires Digi-Key #'s WM1722-ND and WM1775-ND to make assembly. All 161/171 Series require cable assembly P9507-ND.

Panasonic

Magnetic Card Readers

Fig. 1

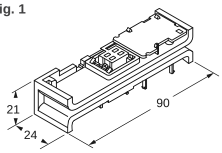
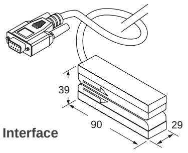


Fig. 2



Built-in
RS-232 Interface

Fig. 3

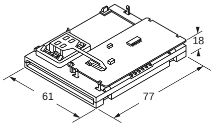
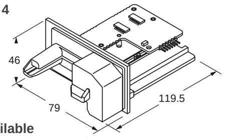
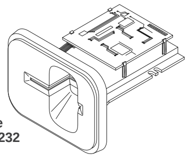


Fig. 4



Available
with RS-232 Interface

Fig. 5



Available
with RS-232
Interface

Manual Swipe Card Readers • Compact and lightweight designs • New high performance head mechanism. **Applications:** • Credit authorization terminals • Credit card telephones • POS terminals • Time and attendance terminals • Banking terminals (ATM/CD). **Specifications:** • **Power Supply Voltage: +**5 VDC • **Operating Temperature/Humidity:** -20°C to 60°C/10 to 90%RH • **Head Life:** PCR 100 - 300K passes, PCR102 - 500K passes

Manual Swipe Card Reader with Built-In RS-232 Interface and Decoder • Fully enclosed self (port) powered card reader featuring two track capability with long life heads. Shipped with attached 9-Pin D-Sub cable, demo-software and documentation. **Specifications:** • **Power Supply Voltage:** +5 VDC • **Operating Temperature/Humidity:** -10°C to 50°C/10 to 90%RH • **Weight:** Approx. 90g

Manual Insertion Card Readers: • High precision, high reliability. **Applications:** • Credit card telephones • Cost control for facsimiles and copiers • Security control systems • Time and attendance terminals. **Specifications:** • **Power Supply Voltage:** +5 VDC • **Operating Temperature/Humidity:** -20°C to 60°C / 10 to 90%RH • **Head Life:** PCR105/109/111 - 300K Passes, PCR106/PCR107 - 500K passes

Manual Insertion Card Reader with Built-in RS-232 Interface and Decoder • For indoor applications • Shipped with 9 Pin D-Sub cable and documentation. **Specifications:** • **Power Supply Voltage:** +6 ~ +12 VDC • **Operating Temperature/Humidity:** -10°C to 50°C/10 to 90%RH

Fig.	Card Standard	Current	Card Feed Speed	Card Reading Direction	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
1	IS02	3mA	8 ~ 150 cm/sec.	Swipe	PCR100-ND	25.10	23.80	19.30	ZU-M1121S1
1	IS01/IS02	6mA	10 ~ 150 cm/sec.	Swipe	PCR102-ND	64.04	56.95	47.22	ZU-M1242S1
2	IS01/IS02	14mA	10 ~ 150 cm/sec.	RS-232 Swipe	PCR108-ND	117.66	94.13	76.48	ZU-M1242L4DK
3	IS02	10mA	10 ~ 120 cm/sec.	Insertion	PCR105-ND	34.50	33.50	32.40	ZU-M2121S11
4	IS02	15mA	10 ~ 120 cm/sec.	Ejection	PCR106-ND	63.75	55.35	47.00	ZU-1852MAL5
4	IS01/IS02	15mA	10 ~ 100 cm/sec.	Ejection	PCR107-ND	104.50	94.05	83.61	ZU-1870MA5T5
4	IS01/IS02	15mA	10 ~ 150 cm/sec.	Ejection	PCR109-ND	60.00	54.00	48.01	ZU-1870MA4T4
4	IS01/IS02	15mA	10 ~ 150 cm/sec.	RS-232 Eject	PCR110-ND	110.00	99.00	88.01	ZU-1870MA101
5	IS01/IS02	15mA	10 ~ 150 cm/sec.	Ejection	PCR111-ND	63.33	57.00	50.67	ZU-1890M
5	IS01/IS02	15mA	10 ~ 150 cm/sec.	RS-232 Eject	PCR112-ND	113.33	102.00	90.68	ZU-1890M101
Cable for Single Track Swipe Reader 200mm (Use with PCR100)					PCR101-ND	7.50	—	—	ZUHM106A200
Cable for Double Track Swipe Reader 200mm (Use with PCR102)					PCR103-ND	7.50	—	—	ZUHM109A200
Cover for Single/Double Manual Swipe Reader (Use with PCR100, PCR102)					PCR104-ND	5.26	—	—	U1101M041

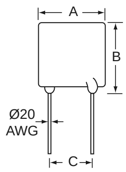
tyco Electronics Raychem PolySwitch Resettable Fuses

PolySwitch circuit protection devices protect electrical and electronic circuits against excessive current, voltage, and temperature. Like fuses and circuit breakers, PolySwitch devices interrupt the flow of dangerously high currents, whether due to excessive voltage or to a fault condition within the circuit. After switching, the PolySwitch device is latched into its high-resistance, protective state by the small, sustained self-heating current. The protector will reset only after it has cooled and the fault condition has been corrected, thus avoiding continuous cycling that could cause circuit damage. The protector requires no manual resetting or replacement.

Definitions: Maximum Voltage: The highest voltage the device can withstand (in its tripped state) without damage. Hold Current: The maximum continuous current that will not cause the device to trip at 20°C. Trip Current: The minimum continuous current that will cause the device to trip at 20°C. Maximum Current: The largest fault current, at rated voltage, the device can interrupt without being damaged. Maximum R: Maximum non-tripped resistance of the device.

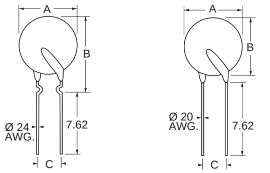
H55440-ND Raychem PolySwitch® Resettable Fuses Data Book $7.95

Fig. 1 — RGE and RHE Series



This product line can be used in a wide variety of automotive, computer and general electronics applications. The RGE devices feature high current carrying capability (up to 13 amps) in a small package with fast trip times.

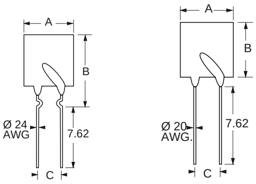
Fig. 2 — RXE Series



RXE010-RXE090 RXE110-RXE375

These products function as the general purpose line of circuit protectors and are well suited for power supplies, alarm systems, speakers, motors and many other applications. The RXE products range in hold currents from .10 to 3.75 amps and complement the RUE devices by providing a higher voltage rating.

Fig. 3 — RUE Series



RUE090-RUE250 RUE300-RUE900

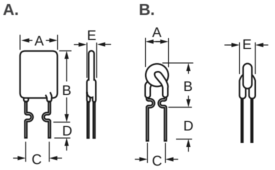
These devices are also designed to be used in a wide variety of general electronics applications. They complement the RXE line by providing a smaller form factor with lower resistance and higher hold current capability (up to 9 amps).

Fig.	Max Volt.	Rated Current (20°C) (amps) Hold	Trip	Max Current	R min. (Ohms)	Recognized By	Dimensions Inches (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	100	Raychem Part No.
RGE Series														
1	16	3.00	5.10	100	0.034	CSA, TUV, UL	0.28 (7.1)	0.40 (10.2)	0.20 (5.2)	RGE300-ND	.71	.65	.59	RGE300
1	16	4.00	6.80	100	0.020	CSA, TUV, UL	0.35 (8.9)	0.50 (12.8)	0.20 (5.1)	RGE400-ND	.73	.67	.61	RGE400
1	16	5.00	8.50	100	0.014	CSA, TUV, UL	0.41 (10.4)	0.53 (13.5)	0.20 (5.2)	RGE500-ND	.73	.67	.61	RGE500
1	16	6.00	10.20	100	0.009	CSA, TUV, UL	0.42 (10.7)	0.67 (17.1)	0.20 (5.1)	RGE600-ND	.77	.71	.65	RGE600
1	16	7.00	11.90	100	0.006	CSA, TUV, UL	0.44 (11.2)	0.74 (18.8)	0.20 (5.2)	RGE700-ND	.83	.76	.69	RGE700
1	16	8.00	13.60	100	0.005	CSA, TUV, UL	0.50 (12.7)	0.82 (20.9)	0.20 (5.1)	RGE800-ND	.87	.80	.73	RGE800
1	16	9.00	15.30	100	0.004	CSA, TUV, UL	0.55 (14.0)	0.82 (20.8)	0.20 (5.2)	RGE900-ND	.98	.90	.82	RGE900
1	16	11.00	18.70	100	0.003	CSA, TUV, UL	0.69 (17.5)	0.99 (25.1)	0.20 (5.2)	RGE1100-ND	1.20	1.10	1.00	RGE1100
1	16	12.00	20.40	100	0.002	CSA, TUV, UL	.69 (17.5)	1.10 (28.0)	.40 (10.2)	RGE1200-ND	1.28	1.18	1.07	RGE1200
1	16	14.00	23.80	100	0.002	CSA, TUV, UL	1.10 (27.9)	1.10 (27.9)	.40 (10.2)	RGE1400-ND	1.40	1.29	1.17	RGE1400
RHE Series														
1	16	4.5	7.8	100	0.054	N/A	0.41 (10.4)	0.67 (16.9)	.20 (5.1)	RHE450-ND	.83	.77	.70	RHE450
1	16	6.0	10.8	100	0.032	N/A	0.44 (11.2)	0.85 (21.6)	.20 (5.1)	RHE600-ND	.89	.82	.75	RHE600
1	16	7.5	13.1	100	0.022	N/A	0.67 (17.1)	0.93 (23.5)	.20 (5.1)	RHE750-ND	1.00	.92	.84	RHE750
1	16	10.0	18.6	100	0.015	N/A	0.69 (17.5)	1.15 (29.2)	.40 (10.2)	RHE1000-ND	1.31	1.21	1.10	RHE1000
1	16	13.0	24.0	100	0.010	N/A	1.10 (27.9)	1.20 (30.5)	.40 (10.2)	RHE1300-ND	1.48	1.36	1.23	RHE1300

Fig.	Max Volt.	Rated Current (20°C) (amps) Hold	Trip	Max Current	RMax Initial (Ohms)	Recognized By	Dimensions Inches (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	100	Raychem Part No.
RXE Series														
2	60	0.10	0.20	40	4.50	UL, TUV, CSA	0.29 (7.4)	0.50 (12.7)	0.2 (5.1)	RXE010-ND	.60	.55	.50	RXE010
2	60	0.17	0.34	40	5.21	UL, TUV, CSA	0.29 (7.4)	0.50 (12.7)	0.2 (5.1)	RXE017-ND	.55	.51	.46	RXE017
2	72	0.20	0.40	40	2.84	UL, TUV, CSA	0.29 (7.4)	0.48 (12.2)	0.2 (5.1)	RXE020-ND	.55	.51	.46	RXE020
2	72	0.25	0.50	40	1.95	UL, TUV, CSA	0.29 (7.4)	0.50 (12.7)	0.2 (5.1)	RXE025-ND	.55	.51	.46	RXE025
2	72	0.30	0.60	40	1.36	UL, TUV, CSA	0.29 (7.4)	0.51 (13.0)	0.2 (5.1)	RXE030-ND	.55	.51	.46	RXE030
2	72	0.40	0.80	40	0.86	UL, TUV, CSA	0.30 (7.6)	0.53 (13.5)	0.2 (5.1)	RXE040-ND	.57	.53	.48	RXE040
2	72	0.50	1.00	40	0.77	UL, TUV, CSA	0.31 (7.9)	0.54 (13.7)	0.2 (5.1)	RXE050-ND	.59	.55	.50	RXE050
2	72	0.65	1.30	40	0.48	UL, TUV, CSA	0.38 (9.7)	0.57 (14.5)	0.2 (5.1)	RXE065-ND	.62	.57	.52	RXE065
2	72	0.75	1.50	40	0.40	UL, TUV, CSA	0.41 (10.4)	0.60 (15.2)	0.2 (5.1)	RXE075-ND	.62	.57	.52	RXE075
2	72	0.90	1.80	40	0.31	UL, TUV, CSA	0.46 (11.7)	0.62 (15.8)	0.2 (5.1)	RXE090-ND	.64	.59	.53	RXE090
2	72	1.10	2.20	40	0.25	UL, TUV, CSA	0.51 (13.0)	0.71 (18.0)	0.2 (5.1)	RXE110-ND	.74	.68	.62	RXE110
2	72	1.35	2.70	40	0.19	UL, TUV, CSA	0.57 (14.5)	0.77 (19.6)	0.2 (5.1)	RXE135-ND	.74	.68	.62	RXE135
2	72	1.60	3.20	40	0.14	UL, TUV, CSA	0.64 (16.3)	0.84 (21.3)	0.2 (5.1)	RXE160-ND	.76	.70	.64	RXE160
2	72	1.85	3.70	40	0.12	UL, TUV, CSA	0.70 (17.8)	0.90 (22.9)	0.2 (5.1)	RXE185-ND	.78	.72	.65	RXE185
2	72	2.50	5.00	40	0.08	UL, TUV, CSA	0.84 (21.3)	1.04 (26.4)	0.4 (10.2)	RXE250-ND	.90	.83	.75	RXE250
2	72	3.00	6.00	40	0.06	UL, TUV, CSA	0.98 (24.9)	1.18 (30.0)	0.4 (10.2)	RXE300-ND	.95	.87	.79	RXE300
2	72	3.75	7.50	40	0.05	UL, TUV, CSA	1.12 (28.5)	1.32 (33.5)	0.4 (10.2)	RXE375-ND	.95	.87	.79	RXE375
RUE Series														
3	30	0.90	1.80	40	0.12	UL, CSA	0.29 (7.4)	0.48 (12.2)	0.20 (5.1)	RUE090-ND	.62	.57	.52	RUE090
3	30	1.10	2.20	40	0.10	UL, CSA	0.29 (7.4)	0.56 (14.2)	0.20 (5.1)	RUE110-ND	.62	.57	.52	RUE110
3	30	1.35	2.70	40	0.08	UL, CSA	0.35 (8.9)	0.53 (13.5)	0.20 (5.1)	RUE135-ND	.62	.57	.52	RUE135
3	30	1.60	3.20	40	0.07	UL, CSA	0.35 (8.9)	0.60 (15.2)	0.20 (5.1)	RUE160-ND	.67	.62	.56	RUE160
3	30	1.85	3.70	40	0.06	UL, CSA	0.40 (10.2)	0.62 (15.7)	0.20 (5.1)	RUE185-ND	.72	.66	.60	RUE185
3	30	2.50	5.00	40	0.04	UL, CSA	0.45 (11.4)	0.72 (18.3)	0.20 (5.1)	RUE250-ND	.77	.71	.64	RUE250
3	30	3.00	6.00	40	0.05	UL, CSA	0.45 (11.4)	0.68 (17.3)	0.20 (5.1)	RUE300-ND	.81	.75	.68	RUE300
3	30	4.00	8.00	40	0.03	UL, CSA	0.55 (14.0)	0.79 (20.1)	0.20 (5.1)	RUE400-ND	.95	.87	.79	RUE400
3	30	5.00	10.00	40	0.03	UL, CSA	0.55 (14.0)	0.98 (24.9)	0.40 (10.2)	RUE500-ND	1.00	.92	.84	RUE500
3	30	6.00	12.00	40	0.02	UL, CSA	0.65 (16.5)	0.98 (24.9)	0.40 (10.2)	RUE600-ND	1.05	.96	.88	RUE600
3	30	7.00	14.00	40	0.02	UL, CSA	0.75 (19.1)	1.05 (26.7)	0.40 (10.2)	RUE700-ND	1.10	1.01	.92	RUE700
3	30	8.00	16.00	40	0.02	UL, CSA	0.85 (21.6)	1.15 (29.2)	0.40 (10.2)	RUE800-ND	1.15	1.06	.96	RUE800
3	30	9.00	18.00	40	0.01	UL, CSA	0.95 (24.1)	1.17 (29.7)	0.40 (10.2)	RUE900-ND	1.22	1.12	1.02	RUE900

(Continued)

Fig. 4 — RUSB Series

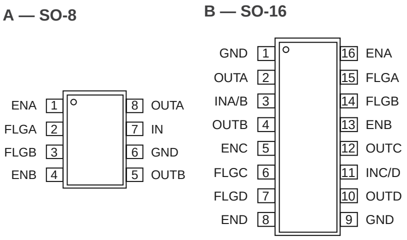


New PolySwitch RUSB devices are designed to meet USB and safety agency requirements.The RUSB family of leaded resettable fuses offers overcurrent protection for USB applications.

Fig. 5 — RYC Series Power Distribution Switches

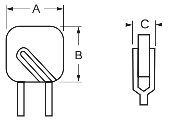
This family is designed for USB self-powered hub applications such as notebook PCs, self/bus-powered stand-alone USB hubs, USB bus-powered hubs in keyboards and USB peripherals such as CCD cameras. They provide efficient and reliable power switching and in-rush current limiting capabilities.

These USB power distribution switches enable power to USB ports upon USB controller commands. The switches signal the controller when faults such as overcurrent, over-temperature, under-voltage lock-out (UVLO) or over-voltage lock-out (OVLO) are detected.



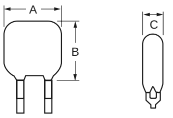
SO-8 Pin No.	SO-16 Pin No.	Pin Function
1 and 4	5, 8, 13, 16	Enable (Input): Logic-compatible enable input. High input > 2.1V typical. Low input <1.9V typical
2 and 3	6, 7, 14, 15	Fault Flat (Output): Active-low open-drain output. Indicates overcurrent, UVLO, OVLO and thermal shutdown
6	1, 9	Ground: Supply return
7	3, 11	Supply Input: Output MOSFET drain. Also supplies ICs internal circuitry. Connect to positive supply
5 and 8	2, 4, 10, 12	Switch Output: Output MOSFET source. Typically connect to switched side of load

Fig. 6 — TR Series



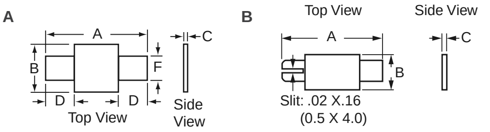
This family uses a new geometry to build high voltage (250V-600V) products for telecommunications applications.

Fig. 7 — Encapsulated TR Series



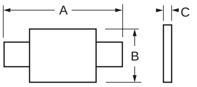
This family uses a new geometry to build high voltage (250V-600V) products for telecommunications applications.

Fig. 8 — LTP Series



Similar to the SRP family of PolySwitch strap products, LTP devices provide reliable, noncycling protection for rechargeable batteries and have a slim, low-profile design that makes them easy to install. LTP devices also offer additional protection at elevated temperatures.

Fig. 9 — SRP Series



These products provide reliable, non-cycling protection for rechargeable batteries. Weldable nickel leads and a narrow, low-profile design make these devices extremely easy to install on the edges of battery packs.

Fig.	I_H (A)	Initial Resistance		Dimensions Inches (mm)					Digi-Key Part No.	Price Each			Raychem Part No.
		R typ. (Ω)	R max. (Ω)	A max.	B max.	C max.	D min.	E max.		1	10	100	
RUSB													
4B	0.75	0.14	0.23	.27 (6.9)	.45 (11.4)	.23 (5.9)	.30 (7.6)	.12 (3.1)	RUSB075-ND	.62	.57	.52	RUSB075
4A	0.90	0.10	0.18	.29 (7.4)	.48 (12.2)	.23 (5.9)	.30 (7.6)	.12 (3.1)	RUSB090-ND	.62	.57	.52	RUSB090
4A	1.10	0.08	0.14	.29 (7.4)	.56 (14.2)	.23 (5.9)	.30 (7.6)	.12 (3.1)	RUSB110-ND	.62	.57	.52	RUSB110
4B	1.20	0.08	0.14	.27 (6.9)	.46 (11.7)	.23 (5.9)	.30 (7.6)	.12 (3.1)	RUSB120-ND	.62	.57	.52	RUSB120
4A	1.35	0.06	0.12	.35 (8.9)	.53 (13.5)	.23 (5.9)	.30 (7.6)	.12 (3.1)	RUSB135-ND	.62	.57	.52	RUSB135
4A	1.60	0.05	0.11	.35 (8.9)	.60 (15.2)	.23 (5.9)	.30 (7.6)	.12 (3.1)	RUSB160-ND	.63	.58	.53	RUSB160
4A	1.85	0.05	0.09	.40 (10.2)	.62 (15.7)	.23 (5.9)	.30 (7.6)	.12 (3.1)	RUSB185-ND	.68	.63	.57	RUSB185
4A	2.50	0.03	0.06	.45 (11.4)	.72 (18.3)	.23 (5.9)	.30 (7.6)	.12 (3.1)	RUSB250-ND	.74	.68	.62	RUSB250

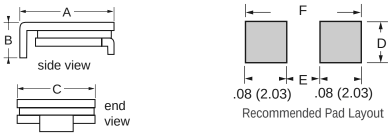
Fig.	Max. Supply Voltage	Fault Flag Voltage	Fault Flag Current	Output Voltage	Output Current	Control Input	Storage Temp.	Max. Lead Temp. during Soldering (5 sec.)	ESD Rating	Supply Voltage	Ambient Operating Temp.	Pkg.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel Pricing† 2,500	Raychem Part No.
RYC Series																		
5a	+8 V	+8 V	50mA	+8 V	Internally Limited	-0.3 to +12.0V	-65°C to +150°C	260°C	2000 V	+3 to +5.5 V	-40°C to +85°C	SO-8	RYC8220-2MCT-ND	1.94	1.67	1.53	932.00/M	RYC8220-2M
5a	+8 V	+8 V	50mA	+8 V				260°C	2000 V			SO-8	RYC8220-4MCT-ND	1.94	1.67	1.53	932.00/M	RYC8220-4M
5b	+8 V	+8 V	50mA	+8 V				260°C	2000 V			SO-16	RYC8240-2WMCT-ND	3.47	2.97	2.73	1661.01/M	RYC8240-2WM
5b	+8 V	+8 V	50mA	+8 V				260°C	2000 V			SO-16	RYC8240-4WMCT-ND	3.47	2.97	2.73	1661.01/M	RYC8240-4WM

† For Tape & Reel Part No., change CT-ND to TR-ND

Fig.	Max Volt.	Rated Current (20°C) (amps) Hold	Trip	Max Current	RMax Initial (Ohms)	Recognized By	Dimensions Inches (mm) A	B	C	D	F	Digi-Key Part No.	Price Each 1	10	100	Raychem Part No.
TR Series																
6	250	0.080	0.160	3	—	CSA, UL	0.19 (4.83)	0.36 (9.14)	0.2 (5.08)	—	—	TR080U-ND	.69	.64	.58	TR250-080U
6	250	0.120	0.300	3	10.0	CSA, UL	0.236 (6.00)	0.393 (10.00)	0.150 (3.80)	—	—	TR120U-ND	.69	.64	.58	TR250-120U
6	250	0.145	0.360	3	6.5	CSA, UL	0.236 (6.00)	0.393 (10.00)	0.150 (3.80)	—	—	TR145U-ND	.69	.64	.58	TR250-145U
6	250	0.180	0.450	10	2.0	CSA, UL	0.410 (10.40)	0.495 (12.60)	0.140 (3.60)	—	—	TR180U-ND	.87	.80	.73	TR250-180U
7	250	0.120	0.300	3	8.0	CSA, UL	0.256 (6.50)	0.433 (11.00)	0.180 (4.60)	—	—	TR120-ND	.77	.71	.65	TR250-120
7	250	0.145	0.360	3	6.0	CSA, UL	0.256 (6.50)	0.433 (11.00)	0.180 (4.60)	—	—	TR145-ND	.77	.71	.65	TR250-145
7	600	0.150	0.375	3	12.0	CSA, UL	0.531 (13.50)	0.495 (12.60)	0.236 (6.00)	—	—	TR150-ND	1.21	1.11	1.01	TR600-150
7	600	0.150	0.450	3	10.0	CSA, UL	0.531 (13.50)	0.495 (12.60)	0.236 (6.00)	—	—	TR150RA-ND	1.31	1.20	1.09	TR600-150-RA-B-0.5
LTP Series																
8A	15	.70	1.45	100	0.200	UL, TUV, CSA	0.87 (22.1)	0.20 (5.2)	0.05 (1.2)	0.30 (7.5)	0.16 (4.1)	LTP070-ND	.74	.68	.62	LTP070
8B	15	.70	1.45	100	0.200	UL, TUV, CSA	0.87 (22.1)	0.20 (5.2)	0.05 (1.2)	0.30 (7.5)	0.16 (4.1)	LTP070S-ND	.74	.68	.62	LTP070S
8A	24	1.00	2.5	100	0.130	UL, TUV, CSA	0.91 (23.1)	0.20 (5.2)	0.04 (1.0)	0.22 (5.5)	0.16 (4.1)	LTP100-ND	.74	.68	.62	LTP100
8B	24	1.00	2.5	100	0.130	UL, TUV, CSA	0.91 (23.1)	0.20 (5.2)	0.04 (1.0)	0.22 (5.5)	0.16 (4.1)	LTP100S-ND	.74	.68	.62	LTP100S
8A	24	1.80	3.8	100	0.068	UL, TUV, CSA	1.02 (26.0)	0.20 (5.2)	0.04 (1.0)	0.22 (5.5)	0.16 (4.1)	LTP180-ND	.74	.68	.62	LTP180
8B	24	1.8	3.8	100	0.068	UL, TUV, CSA	1.02 (26.0)	0.20 (5.2)	0.04 (1.0)	0.22 (5.5)	0.16 (4.1)	LTP180S-ND	.74	.68	.62	LTP180S
8A	24	1.90	4.2	100	0.057	UL, TUV, CSA	0.92 (23.4)	0.43 (11.0)	0.04 (1.0)	0.30 (7.6)	0.21 (5.4)	LTP190-ND	.71	.66	.60	LTP190
8A	24	2.60	5.2	100	0.042	UL, TUV, CSA	1.02 (26.0)	0.47 (11.9)	0.04 (1.0)	0.28 (7.0)	0.24 (6.1)	LTP260-ND	.93	.86	.78	LTP260
8A	24	3.0	6.3	100	0.031	UL, TUV, CSA	1.25 (31.8)	0.53 (13.5)	0.043 (1.1)	0.35 (8.9)	0.26 (6.6)	LTP300-ND	.93	.86	.78	LTP300
8A	24	3.1	6.0	100	0.030	UL, TUV, CSA	1.02 (26.0)	0.62 (15.9)	0.04 (1.0)	0.28 (7.0)	0.24 (6.1)	LTP310-ND	.98	.90	.82	LTP310
8A	24	3.4	6.8	100	0.027	UL, TUV, CSA	1.02 (26.0)	0.62 (15.9)	0.04 (1.0)	0.20 (5.0)	0.24 (6.1)	LTP340-ND	.98	.90	.82	LTP340
SRP																
9	15	1.20	2.31	100	0.16	UL, TUV, CSA	0.87 (22.1)	0.20 (5.2)	0.04 (1.0)	—	—	SRP120-ND	.65	.60	.54	SRP120
9	15	1.75	3.44	100	0.09	UL, TUV, CSA	0.91 (23.1)	0.20 (5.2)	0.04 (1.0)	—	—	SRP175-ND	.65	.60	.54	SRP175
9	30	2.00	4.40	100	0.06	UL, TUV, CSA	0.92 (23.4)	0.43 (11.0)	0.04 (1.1)	—	—	SRP200-ND	.65	.60	.54	SRP200
9	30	3.50	6.30	100	0.03	UL, TUV, CSA	1.25 (31.8)	0.53 (13.5)	0.04 (1.1)	—	—	SRP350-ND	.69	.64	.58	SRP350
9	30	4.20	7.80	100	0.02	UL, TUV, CSA	1.28 (32.4)	0.54 (13.6)	0.04 (1.1)	—	—	SRP420-ND	.69	.64	.58	SRP420

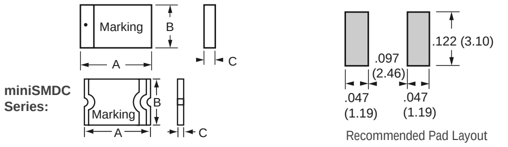
(Continued)

Fig. 10 — SMD



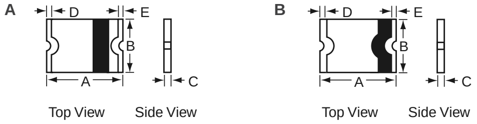
This product line is specifically designed for surface mount applications. The products range in hold currents from 0.3 amps to 2.6 amps and voltages from 6 volts to 60 volts. These devices are ideally suited for high density board applications in computer and computer peripheral products, telecommunications and general electronics applications. They are designed to be reflowed onto a PCB using standard surface mount processes. Packaged per EIA-481 standard.

Fig. 11 — miniSMD



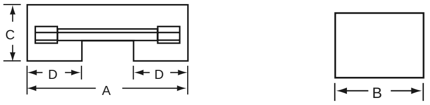
The miniSMD resettable fuses extremely small size makes them excellent choices for keyboard and mouse ports, SCSI devices, battery packs, PC cards and sockets, cellular modems and phones, and portable electronic equipment. SMT packaging for automated assembly compared to SMD the MINISMD offers: 40% reduction in size, 300% faster time to trip, 50% reduction in DC resistance, 66% reduction in profile, 80% reduction in mass and drop in replacement for the NANO 2 fuse in many applications.

Fig. 12— microSMD



This product line is designed for surface-mount applications. Its smaller component size enables installation on crowded printed circuit boards and in small end-user devices such as digital cameras, personal digital assistants (PDAs) and palm-top computers. The new low hold current devices are ideal for protecting industrial sensors and data acquisition systems.

Fig. 13 — nanoSMD *NEW!*



The nanoSMD series reduces the component size to a 1206 footprint, nearly half the size of the microSMD series and one-quarter the size of the popular miniSMD series. The industries fastest time to trip. Smaller size saves board space and cost. Compatible with high volume electronics assembly.

Fig.	Max Volt.	Rated Current (20°C) (amps) Hold	Trip	Max Current	RMax Initial (Ohms)	Recognized By	Dimensions – Inches (mm) A	B	C	D	E	F	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel† Size	Pricing	Raychem Part No.
											SMD								
10	60	0.30	0.60	10	2.40	UL, CSA, TUV	.314 (7.98)	.125 (3.18)	.214 (5.44)	.12 (3.1)	.022 (5.6)	.38 (9.7)	SMD030CT-ND	.86	.74	.68	2,000	412.00/M	SMD030-2
10	60	0.50	1.00	10	0.70	UL, CSA, TUV	.314 (7.98)	.125 (3.18)	.214 (5.44)	.12 (3.1)	.022 (5.6)	.38 (9.7)	SMD050CT-ND	.86	.74	.68	2,000	412.00/M	SMD050-2
10	30	0.75	1.50	40	0.50	UL, CSA, TUV	.314 (7.98)	.125 (3.18)	.214 (5.44)	.12 (3.1)	.022 (5.6)	.38 (9.7)	SMD075CT-ND	.86	.74	.68	2,000	412.00/M	SMD075-2
10	30	1.10	2.20	40	0.24	UL, CSA, TUV	.314 (7.98)	.118 (3.00)	.214 (5.44)	.12 (3.1)	.022 (5.6)	.38 (9.7)	SMD100CT-ND	.82	.70	.65	2,000	391.00/M	SMD100-2
10	15	1.25	2.50	40	0.14	UL, CSA, TUV	.314 (7.98)	.118 (3.00)	.214 (5.44)	.12 (3.1)	.022 (5.6)	.38 (9.7)	SMD125CT-ND	.82	.70	.65	2,000	391.00/M	SMD125-2
10	15	1.50	3.00	40	0.12	UL, CSA, TUV	.374 (9.50)	.118 (3.00)	.264 (6.71)	.18 (4.6)	.022 (5.6)	.42 (10.7)	SMD150CT-ND	.86	.74	.68	1,500	412.00/M	SMD150-2
10	15	2.00	4.00	40	0.080	UL, CSA, TUV	.374 (9.50)	.118 (3.00)	.264 (6.71)	.18 (4.6)	.022 (5.6)	.42 (10.7)	SMD200CT-ND	.86	.74	.68	1,500	412.00/M	SMD200-2
10	15	2.50	5.00	40	0.065	UL, CSA, TUV	.374 (9.50)	.118 (3.00)	.264 (6.71)	.18 (4.6)	.022 (5.6)	.42 (10.7)	SMD250CT-ND	.86	.74	.68	1,500	412.00/M	SMD250-2
10	6	2.60	5.20	40	0.025	UL, CSA, TUV	.314 (7.98)	.118 (3.00)	.214 (5.44)	.12 (3.1)	.022 (5.6)	.38 (9.7)	SMD260CT-ND	.86	.74	.68	2,000	391.00/M	SMD260-2
10	6	3.00	6.00	40	3.6	CSA, TUV	.314 (7.98)	.118 (3.00)	.214 (5.44)	.12 (3.1)	.022 (5.6)	.38 (9.7)	SMD300CT-ND	.82	.70	.65	2,000	391.00/M	SMD300-2
											miniSMD								
11	60	0.14	0.34	10	1.5	UL, CSA, TUV	.186 (4.73)	.134 (3.41)	.035 (.89)	—	—	—	MINISMDC014CT-ND	.63	.55	.50	2,000	304.00/M	MINISMDC014-2
11	6	0.35	0.70	40	0.32*	UL, CSA, TUV	.135 (3.43)	.110 (2.80)	.025 (.62)	—	—	—	MINISMDC035CT-ND	.63	.55	.50	—	—	MINISMDC035-2
11	15	0.50	1.00	40	0.15*	UL, CSA, TUV	.186 (4.73)	.134 (3.41)	.025 (.62)	—	—	—	MINISMDC050CT-ND	.63	.55	.50	2,000	304.00/M	MINISMDC050-2
11	13.2	0.75	1.50	40	0.11*	UL, CSA, TUV	.186 (4.73)	.134 (3.41)	.025 (.62)	—	—	—	MINISMDC075CT-ND	.63	.55	.50	2,000	304.00/M	MINISMDC075-2
11	6	1.1	2.2	40	0.04*	UL, CSA, TUV	.186 (4.73)	.134 (3.41)	.025 (.62)	—	—	—	MINISMDC110CT-ND	.63	.55	.50	2,000	304.00/M	MINISMDC110-2
11	6	1.5	3.0	40	0.04	UL, CSA, TUV	.186 (4.73)	.134 (3.41)	.019 (.48)	—	—	—	MINISMDC150CT-ND	.63	.55	.50	2,000	304.00/M	MINISMDC150-2
11	8	2.0	4.0	40	0.02	UL, CSA, TUV	.186 (4.73)	.134 (3.41)	.064(1.62)	—	—	—	MINISMDC200CT-ND	.79	.68	.63	2,000	380.00/M	MINISMDC200-2
11	15	0.50	1.00	40	1.00	UL, CSA, TUV	.186 (4.73)	.134 (3.41)	.025 (.62)	—	—	—	MINISMD050CT-ND	.63	.55	.50	1,500	366.00/M	MINISMD050-2
11	13.2	0.75	1.50	40	0.45	UL, CSA, TUV	.186 (4.73)	.134 (3.41)	.025 (.62)	—	—	—	MINISMD075CT-ND	.63	.55	.50	1,500	366.00/M	MINISMD075-2
											microSMD								
12a	30	0.05	0.15	10	3.6	CSA, TUV	.135 (3.43)	.111 (2.80)	.034 (.85)	.012 (.30)	.010 (.25)	—	MICROSMD005CT-ND	.63	.55	.50	3,000	441.00/M	MICROSMD005-2
12a	30	0.10	0.1	10	1.6	—	.135 (3.43)	.111 (2.80)	.034 (.85)	.012 (.30)	.010 (.25)	—	MICROSMD010CT-ND	.72	.64	.55	3,000	441.00/M	MICROSMD010-2
12b	6	0.35	0.75	40	0.32	UL, CSA, TUV	.135 (3.43)	.111 (2.80)	.025 (.62)	.012 (.30)	.010 (.25)	—	MICROSMD035CT-ND	.63	.55	.50	4,000	441.00/M	MICROSMD035-2
12b	13.2	0.50	1.0	40	0.35	CSA, TUV	.135 (3.43)	.111 (2.80)	.025 (.62)	.012 (.30)	.010 (.25)	—	MICROSMD050CT-ND	.63	.55	.50	4,000	305.00/M	MICROSMD050-2
12b	6	0.75	1.5	40	0.13	CSA, TUV	.135 (3.43)	.111 (2.80)	.025 (.62)	.012 (.30)	.010 (.25)	—	MICROSMD075CT-ND	.63	.55	.50	4,000	305.00/M	MICROSMD075-2
12b	6	1.10	2.2	40	0.07	CSA, TUV	.135 (3.43)	.111 (2.80)	.019 (.48)	.012 (.30)	.010 (.25)	—	MICROSMD110CT-ND	.63	.55	.50	4,000	305.00/M	MICROSMD110-2
12b	6	1.50	3.0	40	0.04	(pending)	.135 (3.43)	.111 (2.80)	.048 (1.22)	.012 (.30)	.010 (.25)	—	MICROSMD150CT-ND	.70	.60	.55	4,000	335.00/M	MICROSMD150-2
											nanoSMD								
13	6	0.50	1.00	40	0.7	(pending)	.134 (3.40)	.071 (1.80)	.047 (1.20)	.030 (0.75)	—	—	NANOSMDM050CT-ND *NEW!*	.66	.57	.52	3,000	318.00/M	NANOSMDM050-02
13	6	1.00	1.80	40	0.29	(pending)	.134 (3.40)	.071 (1.80)	.047 (1.20)	.030 (0.75)	—	—	NANOSMDM100CT-ND *NEW!*	.66	.57	.52	3,000	318.00/M	NANOSMDM100-02

† For Tape and Reel Part Number change CT-ND to TR-ND. * R min Initial (Ohms)

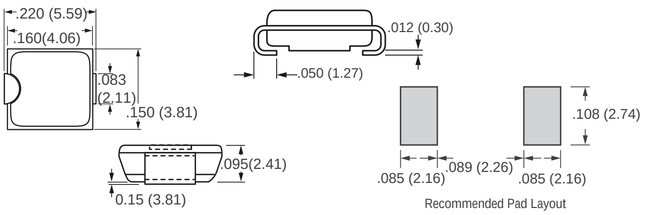
tyco / Electronics Raychem SiBar Thyristor Surge Protectors

SiBar thyristor surge protectors are designed specifically for telecommunications and computer telephony applications, including: • Modems • Fax machines • PBX Systems • Phones • POS Systems • Analog and digital linecards • Other customer premise and network equipment requiring protection.

Features: • Bidirectional transient voltage protection • High off-state impedance • Low on-state voltage • High surge capability • Glass-passivated junctions • Short-circuit failure mode • Surface-mount technology • UL 497B recognized, file #E179610

SiBar thyristor surge protectors are bidirectional silicon devices that foldback in the presence of transient overvoltage faults. When the breakover voltage of a SiBar device is exceeded, the device switches from high to low impedance to protect sensitive downstream equipment from harmful voltage surges. The device remains latched in a low-impedance state until the current decreases below the hold current, at which point the device returns to its high-impedance state.

SiBar devices may be used in conjunction with PolySwitch resettable fuses in telecommunications applications, including network equipment and customer premise equipment. Proper selection of both devices can provide reliable, self-resetting overvoltage and overcurrent protection, allowing designers to meet worldwide telecommunications standards and to lower equipment-service and warranty cost.



V_{DM} max. (V)	V_{BO} max. (V)	I_H min. (mA)	V_T max. (V)	C_1 typ. (pF)	I_{TSM} min. (A)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 2,500	Raychem Part No.
215	325	200	5.0	20	22	TVB280CT-ND	1.07	.92	.85	TVB280TR-ND	514.00/M	TVB280-050
165	265	200	5.0	20	22	TVB330CT-ND	1.07	.92	.85	TVB330TR-ND	514.00/M	TVB330-050
270	370	175	5.0	50	60	TVB270SCCT-ND	1.50	1.29	1.18	TVB270SCTR-ND	719.00/M	TVB270SC
200	320	175	5.0	50	60	TVB200SCCT-ND	1.50	1.29	1.18	TVB200SCTR-ND	719.00/M	TVB200SC
170	265	175	5.0	50	60	TVB170SCCT-ND	1.50	1.29	1.18	TVB170SCTR-ND	719.00/M	TVB170SC
270	370	175	5.0	20	22	TVB270SACT-ND	.99	.85	.78	TVB270SATR-ND	473.00/M	TVB270SA
200	320	175	5.0	20	22	TVB200SACT-ND	.99	.85	.78	TVB200SATR-ND	473.00/M	TVB200SA
170	265	175	5.0	20	22	TVB170SACT-ND	.99	.85	.78	TVB170SATR-ND	473.00/M	TVB170SA

BOURNS Multifuse® Resettable Overcurrent Protectors

Bourns' Multifuse products provide overcurrent protection against circuit faults and safeguard against potential overcurrent damage of critical circuitry and loads in a vast amount of applications. This series is made of highly conductive, carbon black loaded polymer material. When a short circuit occurs, the devices start to heat rapidly until they reach a critical temperature of approximately 120°C. At this point the densely packed crystalline polymer matrix changes to an amorphous structure as it undergoes a phase transformation. Resistance increases by many orders of magnitude. The material will stay in this high-resistance state as long as the power is applied. The device will remain latched, providing continuous protection until the fault is cleared and the power is removed. With the fault removed the resistance quickly returns to its original value and the device is ready to operate again. **Agency Approvals:** The MF-R & MF-RX product families have UL, CSA, and TUV recognition to 30 volts. UL #E17454S, CSA #CA110338, and TUV #E9772255.01

MF-SM SERIES: This series is a SMT PTC Resettable Fuse designed for applications anywhere there is a low voltage power supply and a load to be protected including computers and peripherals, general electronics and automotive applications. They are fully compatible with current industry standards. Packaged per EIA 481-2 standards. **Agency Approvals:** UL #E17454S, CSA #CA110338, and TUV #E9772255.01

Fig. 1

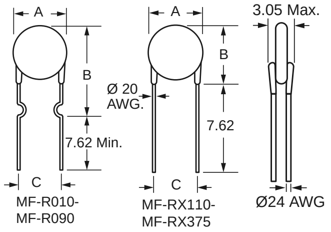


Fig. 2

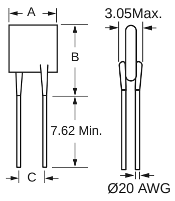


Fig. 3

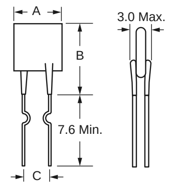


Fig. 4

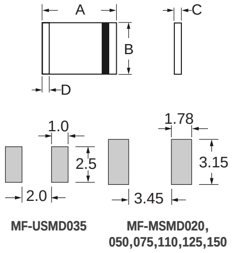


Fig. 5

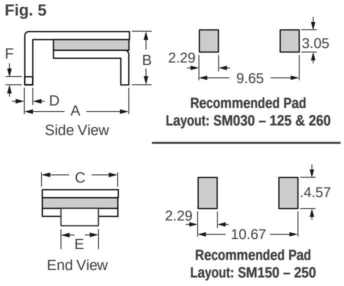


Fig.	Max Volt.	I max. Amps	Rated Current (amps @ 23°C) Hold	Trip	Initial Resist. Ohms @ 23°C Min.	Max.	Post-Trip Resist.	Dimensions (mm) A (max.)	B (max.)	C (nom.)	Digi-Key Part No.	Price Each 1	10	100	500	1,000	Bourns Part No.
1	60	40	0.10	0.20	2.50	4.50	7.50	7.39	12.70	5.08	MF-R010-ND	.48	.44	.40	.32	.26	MF-R010
	60	40	0.17	0.34	2.0	3.2	8.00	7.39	12.70	5.08	MF-R017-ND	.48	.44	.40	.32	.28	MF-R017
	60	40	0.20	0.40	1.50	2.84	4.40	7.39	12.70	5.08	MF-R020-ND	.51	.47	.43	.34	.29	MF-R020
	60	40	0.25	0.50	1.00	1.95	3.00	7.39	12.70	5.08	MF-R025-ND	.51	.47	.43	.34	.29	MF-R025
	60	40	0.30	0.60	0.76	1.36	2.10	7.39	13.39	5.08	MF-R030-ND	.51	.47	.43	.34	.29	MF-R030
	60	40	0.40	0.80	0.52	0.86	1.29	7.39	13.69	5.08	MF-R040-ND	.51	.47	.43	.34	.29	MF-R040
	60	40	0.50	1.00	0.41	0.77	1.17	7.90	13.69	5.08	MF-R050-ND	.54	.50	.45	.35	.31	MF-R050
	60	40	0.65	1.30	0.27	0.48	0.72	9.70	15.19	5.08	MF-R065-ND	.54	.50	.45	.36	.31	MF-R065
	60	40	0.75	1.50	0.18	0.40	0.60	10.39	16.00	5.08	MF-R075-ND	.54	.50	.45	.36	.31	MF-R075
	60	40	0.90	1.80	0.14	0.31	0.47	11.71	16.69	5.08	MF-R090-ND	.54	.50	.45	.37	.32	MF-R090
	60	40	1.10	2.20	0.15	0.25	0.38	13.00	18.01	5.08	MF-RX110-ND	.54	.50	.45	.36	.32	MF-RX110
	60	40	1.35	2.70	0.12	0.19	0.30	14.50	19.61	5.08	MF-RX135-ND	.57	.53	.48	.38	.34	MF-RX135
	60	40	1.60	3.20	0.09	0.14	0.22	16.31	21.29	5.08	MF-RX160-ND	.60	.55	.50	.40	.35	MF-RX160
	60	40	1.85	3.70	0.08	0.12	0.19	17.81	22.89	5.08	MF-RX185-ND	.60	.55	.50	.40	.35	MF-RX185
	60	40	2.50	5.00	0.05	0.08	0.13	21.31	26.42	10.16	MF-RX250-ND	.66	.61	.55	.43	.37	MF-RX250
	60	40	3.00	6.00	0.04	0.06	0.10	24.89	29.97	10.16	MF-RX300-ND	.69	.64	.58	.46	.40	MF-RX300
	60	40	3.75	7.50	0.03	0.05	0.08	28.45	33.53	10.16	MF-RX375-ND	.72	.66	.60	.48	.42	MF-RX375
	30	40	1.10	2.20	0.10	0.18	0.27	8.89	14.00	5.08	MF-R110-ND	.57	.53	.48	.38	.33	MF-R110
	30	40	1.35	2.70	0.065	0.115	0.17	8.89	18.90	5.08	MF-R135-ND	.57	.53	.48	.38	.33	MF-R135
	30	40	1.60	3.20	0.055	0.105	0.15	10.19	16.79	5.08	MF-R160-ND	.60	.55	.50	.41	.36	MF-R160
	30	40	1.85	3.70	0.04	0.07	0.11	11.99	18.39	5.08	MF-R185-ND	.60	.55	.50	.40	.35	MF-R185
2	30	40	0.90	1.80	0.07	0.12	0.22	7.39	12.19	5.08	MF-R090-0-009-ND	.57	.53	.48	.38	.33	MF-R090-0-009
3	30	40	2.50	5.00	0.025	0.048	0.07	11.99	18.29	5.08	MF-R250-0-010-ND	.66	.61	.55	.44	.38	MF-R250-0-010
2	30	40	3.00	6.00	0.02	0.05	0.08	11.99	18.29	5.08	MF-R300-ND	.69	.64	.58	.45	.39	MF-R300
	30	40	4.00	8.00	0.01	0.03	0.05	14.40	24.79	5.08	MF-R400-ND	.72	.66	.60	.48	.42	MF-R400
	30	40	5.00	10.00	0.01	0.03	0.05	17.40	24.89	10.16	MF-R500-ND	.78	.72	.65	.52	.45	MF-R500
	30	40	6.00	12.00	0.005	0.02	0.04	19.30	31.90	10.16	MF-R600-ND	.81	.75	.68	.53	.46	MF-R600
	30	40	7.00	14.00	0.005	0.02	0.03	22.10	29.79	10.16	MF-R700-ND	.84	.77	.70	.56	.48	MF-R700
	30	40	8.00	16.00	0.005	0.02	0.03	24.21	32.89	10.16	MF-R800-ND	.87	.80	.73	.58	.51	MF-R800
	30	40	9.00	18.00	0.005	0.01	0.02	24.21	32.89	10.16	MF-R900-ND	.93	.86	.78	.61	.53	MF-R900

Fig.	Max Volt.	I max. Amps	Rated Current (amps @ 23°C) Hold	Trip	Initial Resist. Ohms @ 23°C Min.	Max.	Post-Trip Resist.	Dimensions (mm) A (max.)	B (max.)	C (max.)	D (max.)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel* Pricing 2,000	3,000	Bourns Part No.
4	60.0	10	0.14	0.34	1.50	6.50	6.50	4.73	3.17	0.89	0.30	MF-MSMD014CT-ND	.63	.54	.50	360.00/M	—	MF-MSMD014-02
	30.0	10	0.20	0.40	0.40	5.00	5.00	4.73	3.41	0.81	0.30	MF-MSMD020CT-ND	.56	.48	.44	320.00/M	—	MF-MSMD020-02
	6.0	40	0.35	0.70	0.32	1.30	1.30	3.43	2.80	0.62	0.35	MF-USMD035CT-ND	.63	.54	.50	—	360.00/M	MF-USMD035-02
	15.0	40	0.50	1.00	0.15	1.00	1.00	4.73	3.41	0.62	0.30	MF-MSMD050CT-ND	.56	.48	.44	320.00/M	—	MF-MSMD050-02
	13.2	40	0.75	1.50	0.11	0.45	0.45	4.73	3.41	0.62	0.30	MF-MSMD075CT-ND	.56	.48	.44	320.00/M	—	MF-MSMD075-02
	6.0	40	1.10	2.20	0.04	0.21	0.21	4.73	3.41	0.62	0.30	MF-MSMD110CT-ND	.56	.48	.44	320.00/M	—	MF-MSMD110-02
	6.0	40	1.25	2.50	0.05	0.18	0.18	4.73	3.41	0.48	0.25	MF-MSMD125CT-ND	.56	.48	.44	320.00/M	—	MF-MSMD125-02
	6.0	40	1.50	3.00	0.03	0.15	0.15	4.73	3.41	0.48	0.25	MF-MSMD150CT-ND	.56	.48	.44	320.00/M	—	MF-MSMD150-02

Fig.	Max Volt.	I max. Amps	Rated Current (amps @ 23°C) Hold	Trip	Initial Resist. Ohms @ 23°C Min.	Max.	Post-Trip Resist.	Dimensions (mm) A (max.)	B (max.)	C (max.)	D (max.)	E (max.)	F (max.)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel* Pricing 1,500	2,000	Bourns Part No.
5	60	10	0.30	0.60	1.20	2.40	4.80	7.98	3.18	5.44	.71	2.41	.43	MF-SM030CT-ND	.74	.63	.58	—	420.00/M	MF-SM030-02
	60	10	0.50	1.00	0.35	0.70	1.40	7.98	3.18	5.44	.71	2.41	.43	MF-SM050CT-ND	.74	.63	.58	—	420.00/M	MF-SM050-02
	30	40	0.75	1.50	0.35	0.70	1.00	7.98	3.18	5.44	.71	2.41	.43	MF-SM075CT-ND	.74	.63	.58	—	420.00/M	MF-SM075-02
	30	40	1.00	2.20	0.12	0.24	0.48	7.98	3.00	5.44	.71	2.41	.43	MF-SM100CT-ND	.74	.63	.58	—	413.00/M	MF-SM100-02
	15	40	1.25	2.50	0.07	0.14	0.25	7.98	3.00	5.44	.71	2.41	.43	MF-SM125CT-ND	.74	.63	.58	—	413.00/M	MF-SM125-02
	15	40	1.50	3.00	0.06	0.12	0.25	9.50	3.00	6.71	.71	3.94	.43	MF-SM150CT-ND	.77	.66	.61	440.00/M	—	MF-SM150-02
	15	40	2.00	4.00	0.05	0.10	0.125	9.50	3.00	6.71	.71	3.94	.43	MF-SM200CT-ND	.77	.66	.61	440.00/M	—	MF-SM200-02
	15	40	2.50	5.00	0.035	0.08	0.085	9.50	3.00	6.71	.71	3.94	.43	MF-SM250CT-ND	.77	.66	.61	440.00/M	—	MF-SM250-02
	6	40	2.60	5.20	0.025	0.075	0.075	7.98	3.00	5.44	.71	2.41	.43	MF-SM260CT-ND	.77	.66	.61	—	440.00/M	MF-SM260-02

* For Tape & Reel part number, change "CT" to "TR".

Littelfuse® PTC Resettable Devices - 2029L / 3425L Series

PTC Resettable devices utilize a unique polymer-based, Positive Temperature Coefficient (PTC) material to protect electrical circuits against overcurrent conditions.

PTC Resettable Operation: In normal operation, the Littelfuse PTC has many conductive paths and a very low resistance. In an overcurrent condition, the temperature of the polymer material rises. This dramatically reduces the conductive paths resulting in an immediate rise in resistance. In this condition the device provides circuit protection by significantly limiting the flow of current. However, once the cause of the initial overcurrent condition is eliminated, the Littelfuse PTC cools down and resets to a low resistance value permitting the normal current flow to resume.

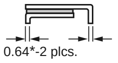
Agency Approvals: • UL: Recognized under Components Program of Underwriters Laboratories • CSA: Recognized under Component Acceptance Program of the Canadian Standards Association • TUV approved (F2155 TUV Pending)

• **Recommended Reflow Conditions:** IR, forced air convection, vapor-phase (Devices are not designed to be wave soldered) • **Device Labeling:** Device marked with amperage rating and date code, and Letter "L"

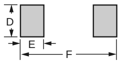
ELECTRICAL DEFINITIONS:

- **Ihold**: Hold Current: maximum current device will sustain for 4 hours without switching at 20°C
- **Itrip**: Trip Current: minimum current that will switch the device into a high resistance state at 20°C
- **Isc**: Maximum short circuit current device can withstand at rated voltage
- **Ril**: Minimum initial resistance of device at 20°C, prior to tripping
- **Riu**: Maximum initial resistance of device at 20°C, prior to tripping

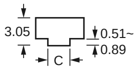
NOTE: *Devices are not intended to be used for continual, repeated tripping.*

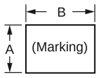


*** (.25 for 2029L050)**



Recommended Pad Layout





Series	Dimensions (mm) A (max.)	B (max.)	C	D	E	F
2029L	5.44	7.98	2.29	3.05	2.29	9.65
3425L	6.71	9.50	3.68	4.57	2.29	10.67

CAUTION: Operation beyond the specified ratings may result in damage and possible arcing and flame.

Ihold (A)	Itrip (A)	Voltage Rating (V)	Isc (A)	Max. Time to Trip Current (A)	Time (Sec)	Resistance (Ω) Ril	Riu	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing	Littelfuse Part No.
1.25	2.5	15	40	8.0	2.0	0.070	0.250	F2104CT-ND	.70	.60	.54	—	—	—	2029L125PR
1.5	3.0	15	40	8.0	5.0	0.060	0.250	F2105CT-ND	.73	.63	.57	F2105TR-ND	1,500	311.00/M	3425L150DR
2.0	4.0	15	40	8.0	12.0	0.050	0.130	F2106CT-ND	.73	.63	.57	F2106TR-ND	1,500	311.00/M	3425L200DR
2.5	5.0	15	40	8.0	25.0	0.035	0.090	F2107CT-ND	.73	.63	.57	F2107TR-ND	1,500	311.00/M	3425L250DR

Littelfuse®

PulseGuard®
SMT ESD Suppressor

PulseGuard ESD suppressors provide protection for electronic devices against the threat of electrostatic discharge (ESD). Employing a voltage variable material to switch between high resistance and low resistance states, shunting ESD transients away from sensitive circuitry.

PulseGuard suppressors comply with ESD specifications (IEC 61000-4-2, MIL-STD-883).

Electrical Specifications:

• **Capacitance:** <1pF[1] • **Leakage Current:** <0.1µA[2] • **Off-state Resistance:** 10MΩ[2] • **Clamping Voltage:** 150V[3], typical • **Operating Voltage:** 24VDC • **Peak Current:** 45A at 15kV • **Bi-directional** • Product rated for 10,000 cycles

Physical Specifications:

• **Body Material:** Glass epoxy • **Terminations:** Copper, nickel, tin-lead • **Voltage Variable Material:** Littlefuse polymeric formula

Operating Temperature: -65°C to 125°C

Fig. 1 0603

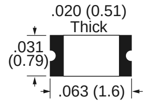


Fig. 2 SOT-23

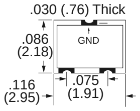
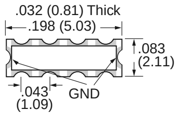


Fig. 3



Amp Fig.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing
1	F1320CT-ND	.70	.65	.49	F1320TR-ND	290.00/1000
2	F1321CT-ND	1.23	1.14	.86	F1321TR-ND	708.75/1500
3	F1323CT-ND	5.60	5.20	3.92	F1323TR-ND	4320.00/2000

Notes:

1. Tested at 1 Megahertz
2. Tested at 24 VDC
3. Tested at 8 kV, Direct Contact, IEC 61000-4-2 ESD Waveform

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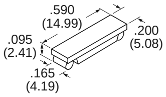
*SMT*elecom™ Fuse



• Surface mount overcurrent protection from lightning and power cross • Ideal for use in telecommunication equipment including modems, fax machines, desk top phones, answering machines and line cards.

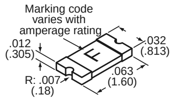
% Amp. Rating	Opening Time (Min./Max.)
100%	4 hours, min.
200%	5 sec. / 30 sec.

Electrical Specifications: • Short Circuit Capabilities: UL1459 / UL 1950 3rd. Edt.: 40 amperes @ 600 VAC; 7 amperes @ 600 VAC; 2.2 amperes @ 600 VAC • **Interrupting Ratings:** 10,000 amperes @ 125V; 100 amperes @ 250V • **Operating Temperature Range:** -55°C to +125°C • **Voltage Rating:** 250V. **Specifications: • Construction Materials:** Body: Melamine substrate; Terminations: Copper/nickel/tin-lead (95/5) • **Soldering Parameters:** Reflow Solder: 250°C, 10 sec. max.; Wave Solder: Not recommended • **Packaging Specifications:** 24mm Tape and Reel per EIA-RS481, (Equivalent to IEC 286, part 3.) • **Performance Characteristics:** Complies with FCC 47 Part 68 Longitudinal Surge and Metallic Surge; Bellcore GR-1089-CORE

Amp Rate	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 2,000
0436 Series						
.750	F1280CT-ND	1.40	1.30	.98	F1280TR-ND	539.00/M
1.00	F1281CT-ND	1.40	1.30	.98	F1281TR-ND	539.00/M
1.25	F1282CT-ND	1.40	1.30	.98	F1282TR-ND	539.00/M
1.50	F1283CT-ND	1.40	1.30	.98	F1283TR-ND	539.00/M
1.60	F1284CT-ND	1.40	1.30	.98	F1284TR-ND	539.00/M

NEW! "0603" (1608) Slim Very Fast Acting Thin-Film Fuse

% Amp Rating	Opening Time at 25°C
100%	4 Hours, Min.
200%	5 Seconds, Max.
300%	0.2 Seconds, Max.

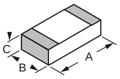


Mounting pad and electrical specification are identical to the popular (431) Series specifications **Specifications: • Construction Materials:** Body: Epoxy substrate; Terminations: Copper/nickel/tin-lead (95/5). Cover Coat: Conformal coating • **Interrupting Rating:** 50 amps @ 32V AC/DC (.25-1A) or 35 amps @ 32V AC/DC (1.25-5A) • **Operating Temperature Range:** -55°C to +125°C • **Voltage Rating:** 32V • **Tape and Reel Specification:** Supplied on 8mm wide reels that are in compliance with EIA-RS481.

Amp Rate	Marking-Code	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 5,000
0434 Series							
.250	D	F1360CT-ND	.89	.83	.63	F1360TR-ND	342.90/M
.375	E	F1361CT-ND	.89	.83	.63	F1361TR-ND	342.90/M
.500	F	F1362CT-ND	.89	.83	.63	F1362TR-ND	342.90/M
.750	G	F1363CT-ND	.89	.83	.63	F1363TR-ND	342.90/M
1.00	H	F1364CT-ND	.89	.83	.63	F1364TR-ND	342.90/M
1.25	J	F1365CT-ND	.89	.83	.63	F1365TR-ND	342.90/M
1.50	K	F1366CT-ND	.89	.83	.63	F1366TR-ND	342.90/M
1.75	L	F1367CT-ND	.89	.83	.63	F1367TR-ND	342.90/M
2.00	N	F1368CT-ND	.89	.83	.63	F1368TR-ND	342.90/M
2.50	O	F1369CT-ND	.89	.83	.63	F1369TR-ND	342.90/M
3.00	P	F1370CT-ND	.89	.83	.63	F1370TR-ND	342.90/M
4.00	S	F1371CT-ND	.89	.83	.63	F1371TR-ND	342.90/M
5.00	T	F1372CT-ND	.89	.83	.63	F1372TR-ND	342.90/M

"1206" (3216) SMF Very Fast Acting and Slo-Blo® Thin-Film Fuse

	Dimensions - In. (mm) A	B	C
Very Fast Acting	.122 (3.10)	.063 (1.60)	.047 (1.19)
Slo-Blo®	.124 (3.15)	.060 (1.52)	.045 (1.14)



Amp. Rating	Opening Time at 25°C Very Fast Acting	Slo-Blo®
100%	4 hours min.	—
200%	5 sec., max.	1 sec. min., 120 sec. max.
300%	0.2 sec., max.	0.1 sec. min., 3 sec. max.
800%	—	0.002 sec. min., .05 sec. max.

Specifications:

• **Construction Materials:** Body: Epoxy Substrate, Terminations: Copper/Nickel/Tin-Lead (95/5). Cover Coat: Conformal Coating • **Operating Temperature Range:** -55°C to +125°C • **Solderability:** Withstands 60 seconds above 200°C up to 260°C max.

Tape and Reel Specifications:

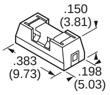
Supplied on 8mm wide reels that are in compliance with EIA-RS481-2 (equivalent to IEC 286 part 3). Packaged 3,000 fuses per reel.

Voltage Ratings: .125-.375A (125V)
.500-2.00A (63V)
2.5-3.0A (32V)
4.0-7.0A (24V)

Amp Rate	Marking-Code	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
429 Series — Very Fast-Acting							
.125	FB	F1270CT-ND	.86	.80	.61	F1270TR-ND	330.75/M
.200	FC	F1271CT-ND	.70	.66	.50	F1271TR-ND	271.35/M
.250	FD	F1230CT-ND	.70	.66	.50	F1230TR-ND	271.00/M
.375	FE	F1231CT-ND	.70	.66	.50	F1231TR-ND	271.00/M
.500	FF	F1232CT-ND	.70	.66	.50	F1232TR-ND	271.00/M
.750	FG	F1233CT-ND	.70	.66	.50	F1233TR-ND	271.00/M
1.00	FH	F1234CT-ND	.70	.66	.50	F1234TR-ND	271.00/M
1.25	FJ	F1235CT-ND	.70	.66	.50	F1235TR-ND	271.00/M
1.50	FK	F1236CT-ND	.70	.66	.50	F1236TR-ND	271.00/M
1.75	FL	F1237CT-ND	.70	.66	.50	F1237TR-ND	271.00/M
2.00	FN	F1238CT-ND	.70	.66	.50	F1238TR-ND	271.00/M
2.50	FO	F1272CT-ND	.70	.66	.50	F1272TR-ND	271.35/M
3.00	FP	F1273CT-ND	.70	.66	.50	F1273TR-ND	271.35/M
4.00	FS	F1274CT-ND	.70	.66	.50	F1274TR-ND	271.35/M
5.00	FT	F1275CT-ND	.86	.80	.61	F1275TR-ND	330.75/M
7.00	FU	F1276CT-ND	.86	.80	.61	F1276TR-ND	330.75/M
0430 Series — Slo-Blo®							
.500	TF	F1260CT-ND	1.02	.95	.72	F1260TR-ND	392.00/M
1.00	TH	F1261CT-ND	1.02	.95	.72	F1261TR-ND	392.00/M
1.50	TK	F1262CT-ND	1.02	.95	.72	F1262TR-ND	392.00/M
2.00	TN	F1263CT-ND	1.02	.95	.72	F1263TR-ND	392.00/M

Littelfuse®

SMF Omni-Blok® Fuse Block with Nano^{2}® Very Fast Acting and Slo-Blo® Fuses



The SMF Omni-Blok® Fuseholder permits quick and easy replacement of Nano^{2}® SMF surface mount fuses. The fuse block and pre-installed fuse combination can be placed on the PC board in one efficient manufacturing operation.

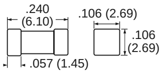
Specifications: • **Electricals:** 7A, 125V • **Molded Parts:** Thermoplastic (94V0) • **Ambient Temp.:** -55°C to +125°C • **Soldering Parameters:** Infrared: 445°F (230°C), 30 sec. • **Packaging:** 16mm wide Tape & Reel per EIA Standard 481. Installed fuses have silver plated end caps, installed to accommodate solder reflow process.

Use 451 Series Fast Acting Fuse with tin/lead alloy plated end caps for replacement purposes of the 154 Series product. Use 452 Series Slo-Blo® Fuse with tin/lead alloy plated end caps for replacement purposes of the 154xxxT Series.

Amp. Rate	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,500
154 Series – Very Fast Acting						
.250	F1219CT-ND	2.39	2.23	1.68	F1219TR-ND	923.00/M
.500	F1220CT-ND	2.39	2.23	1.68	F1220TR-ND	923.00/M
.750	F1221CT-ND	2.03	1.89	1.43	F1221TR-ND	784.00/M
1.00	F1222CT-ND	2.03	1.89	1.43	F1222TR-ND	784.00/M
1.50	F1223CT-ND	2.03	1.89	1.43	F1223TR-ND	784.00/M
2.00	F1224CT-ND	2.03	1.89	1.43	F1224TR-ND	784.00/M
2.50	F1225CT-ND	2.03	1.89	1.43	F1225TR-ND	784.00/M
3.00	F1226CT-ND	2.03	1.89	1.43	F1226TR-ND	784.00/M
4.00	F1227CT-ND	2.03	1.89	1.43	F1227TR-ND	784.00/M
5.00	F1228CT-ND	2.03	1.89	1.43	F1228TR-ND	784.00/M
154xxxT Series – Slo-Blo®						
.375	F1300CT-ND	2.99	2.78	2.10	F1300TR-ND	1153.00/M
.500	F1301CT-ND	2.99	2.78	2.10	F1301TR-ND	1153.00/M
.750	F1302CT-ND	2.63	2.45	1.85	F1302TR-ND	1015.00/M
1.00	F1303CT-ND	2.63	2.45	1.85	F1303TR-ND	1015.00/M
1.50	F1304CT-ND	2.63	2.45	1.85	F1304TR-ND	1015.00/M
2.00	F1305CT-ND	2.63	2.45	1.85	F1305TR-ND	1015.00/M
2.50	F1306CT-ND	2.63	2.45	1.85	F1306TR-ND	1015.00/M
3.00	F1307CT-ND	2.63	2.45	1.85	F1307TR-ND	1015.00/M
3.50	F1308CT-ND	2.63	2.45	1.85	F1308TR-ND	1015.00/M
4.00	F1309CT-ND	2.63	2.45	1.85	F1309TR-ND	1015.00/M
5.00	F1310CT-ND	2.63	2.45	1.85	F1310TR-ND	1015.00/M

Nano^{2}® SMF Very Fast-Acting and Slo-Blo® Fuses

1-5 Amp



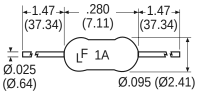
Nano^{2}® Surface Mount Fuses incorporate proven Picofuse performance and dependability in a flat top design which permits efficient pick and place assembly. **Recommended Soldering Parameters:** *Infrared Reflow* for 30 sec. is 500°F (260°C) for Very Fast-Acting; 445°F (230°C) for Slo-Blo®. *Wave Solder* is 500°F (260°C) for 10 sec. for Very Fast-Acting; 500°F (260°C) for 3 sec. max. for Slo-Blo®. **Construction Materials:** Body is ceramic, Caps are tin-lead alloy plated brass. **Operating Temperature Range:** -55°C to 125°C. **Voltage Rating:** 125V, 65V: F1155 and F1151

Fast Acting			Slo-Blo®	
Rating	Amps	Blow Time	Rating	Blow Time (Min. / Max.)
100%	1/16-15	4 hours min.	100%	4 hrs. min.
200%	1/16-10	5 sec., max.	200%	1 sec. / 60 sec.
200%	12-15	20 sec., max.	300%	0.2 / 3 sec.
			800%	0.02 / 0.1 sec.

Amp. Rate	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000
R451 Series - Very Fast Acting						
.250	F1140CT-ND•	.93	.87	.65	F1140TR-ND•	384.00
.375	F1152CT-ND	.93	.87	.65	F1152TR-ND	384.25
.500	F1141CT-ND•	.93	.87	.65	F1141TR-ND•	384.00
.750	F1142CT-ND•	.93	.87	.65	F1142TR-ND•	384.00
1.000	F1143CT-ND•	.93	.87	.65	F1143TR-ND•	384.00
1.500	F1144CT-ND•	.93	.87	.65	F1144TR-ND•	384.00
2.000	F1145CT-ND•	.93	.87	.65	F1145TR-ND•	384.00
2.500	F1146CT-ND•	.93	.87	.65	F1146TR-ND•	384.00
3.000	F1147CT-ND•	.93	.87	.65	F1147TR-ND•	384.00
3.500	F1153CT-ND	.93	.87	.65	F1153TR-ND	384.25
4.000	F1148CT-ND•	.93	.87	.65	F1148TR-ND•	384.00
5.000	F1149CT-ND•	.93	.87	.65	F1149TR-ND•	384.00
7.000	F1154CT-ND	.93	.87	.65	F1154TR-ND	384.25
10.000	F1150CT-ND•	1.47	1.37	1.04	F1150TR-ND•	610.00
12.000	F1155CT-ND	1.47	1.37	1.04	F1155TR-ND	610.45
15.000	F1151CT-ND	1.47	1.37	1.04	F1151TR-ND	610.00
R452 Series – Slo-Blo®						
0.375	F1340CT-ND	1.23	1.14	.86	F1340TR-ND	508.00
0.500	F1341CT-ND	1.23	1.14	.86	F1341TR-ND	508.00
0.750	F1342CT-ND	1.23	1.14	.86	F1342TR-ND	508.00
1.000	F1343CT-ND	1.23	1.14	.86	F1343TR-ND	508.00
1.500	F1344CT-ND	1.23	1.14	.86	F1344TR-ND	508.00
2.000	F1345CT-ND	1.23	1.14	.86	F1345TR-ND	508.00
2.500	F1346CT-ND	1.23	1.14	.86	F1346TR-ND	508.00
3.000	F1347CT-ND	1.23	1.14	.86	F1347TR-ND	508.00
3.500	F1348CT-ND	1.23	1.14	.86	F1348TR-ND	508.00
4.000	F1349CT-ND	1.23	1.14	.86	F1349TR-ND	508.00
5.000	F1350CT-ND	1.23	1.14	.86	F1350TR-ND	508.00

- **SMF-KIT-ND** ***Digi-Key® Nano^{2}® SMF/Pico SMD Fuse Kit***
  5 each of ***Nano^{2}® SMF Fuses*** parts indicated and 5 each of
  Pico SMD Very Fast-Acting and Slo-Blo® Fuses **$99.95**

PICO II™ 125 Volt Very Fast-Acting Pico Fuses



Approvals:
Recognized under the Components Program of Underwriters Laboratories through 10 amperes. Certified by CSA through 7 amperes.

Patents:
U.S. Patent #2,385,281

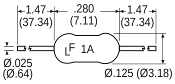
Construction Materials:
Body: UL94V0 epoxy coating, green.

Electrical Characteristics:

Rating	Amperage	Blow Time
100%	1/16 – 15	4 hours, min.
200%	1/16 – 10	5 seconds, max.
200%	12 – 15	10 seconds, max.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 5	100	250
251 Series — Non Color-Coded Type					
.0625	125	F820-ND	1.19	.89	.79
.125	125	F821-ND	.88	.66	.58
.250	125	F822-ND	.88	.66	.58
.375	125	F823-ND	.88	.66	.58
.500	125	F824-ND	.88	.66	.58
.750	125	F825-ND	.73	.55	.49
1.000	125	F826-ND	.73	.55	.49
1.500	125	F827-ND	.73	.55	.49
2.000	125	F828-ND	.73	.55	.49
2.500	125	F829-ND	.73	.55	.49
3.000	125	F830-ND	.73	.55	.49
3.500	125	F831-ND	.73	.55	.49
4.000	125	F832-ND	.73	.55	.49
5.000	125	F833-ND	.73	.55	.49
7.000	125	F834-ND	.73	.55	.49
10.000	125	F835-ND	.73	.55	.49
12.000	32	F836-ND	1.55	1.16	1.03
15.000	32	F837-ND	1.55	1.16	1.03

PICO II™ 125 Volt Slo-Blo® Pico Fuses



Construction Materials:
Body-UL94V0 epoxy coating, gold.
Leads-solder coated copper wire.

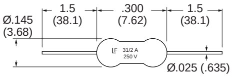
Operating Temperature Range: -55°C to 125°C.

Electrical Characteristics:

Rating	Blow Time	Rating	Blow Time
100%	4 hrs., min.	200%	60 sec., max.
300%	3 sec., max.	800%	0.1 sec., max.

Amp. Rating	Digi-Key Part No.	Cut Tape Price Each 5	100	Digi-Key Part No.	Tape & Reel Pricing 4,000
473 Series - Non-Color Coded Type					
.500	F1200CT-ND	1.56	1.27	F1200TR-ND	698.00/M
.750	F1201CT-ND	1.56	1.27	F1201TR-ND	698.00/M
1.000	F1202CT-ND	1.56	1.27	F1202TR-ND	698.00/M
1.500	F1203CT-ND	1.56	1.27	F1203TR-ND	698.00/M
2.000	F1204CT-ND	1.56	1.27	F1204TR-ND	698.00/M
2.500	F1205CT-ND	1.56	1.27	F1205TR-ND	698.00/M
3.000	F1206CT-ND	1.56	1.27	F1206TR-ND	698.00/M
3.500	F1207CT-ND	1.56	1.27	F1207TR-ND	698.00/M
4.000	F1208CT-ND	1.56	1.27	F1208TR-ND	698.00/M
5.000	F1209CT-ND	1.56	1.27	F1209TR-ND	698.00/M

PICO II™ 250 Volt Very Fast-Acting Pico Fuses



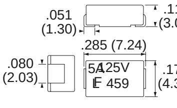
Interrupting Rating:
50 amperes at 250 VAC
Construction Materials:
Encapsulated, epoxy-coated body; solder coated copper leads; green in color

Electrical Characteristics:

% Amp. Rating	Opening Time (Min./Max.)
100%	4 hours, min.
200%	1 sec. max.
300%	0.1 sec. max.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 1	10	100
263 Series					
.062	250	F880-ND	2.28	2.12	1.60
.125	250	F881-ND	1.82	1.69	1.28
.250	250	F882-ND	1.82	1.69	1.28
.375	250	F883-ND	1.82	1.69	1.28
.500	250	F884-ND	1.82	1.69	1.28
.750	250	F885-ND	1.50	1.40	1.06
1.00	250	F886-ND	1.50	1.40	1.06
1.50	250	F887-ND	1.50	1.40	1.06
2.00	250	F888-ND	1.50	1.40	1.06
2.50	250	F889-ND	1.50	1.40	1.06
3.00	250	F890-ND	1.50	1.40	1.06
3.50	250	F891-ND	1.50	1.40	1.06
4.00	250	F892-ND	1.50	1.40	1.06
5.00	250	F893-ND	1.50	1.40	1.06

Pico SMD Very Fast-Acting and Slo-Blo® SMT Fuses



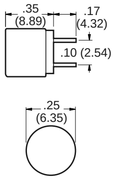
EIA Case Code 7343
Laser etched for ease of identification.
Operating Temperature: -55°C to +125°C. **Soldering Methods:** *Infrared Reflow* is 500°F (260°C) max. temp. for Very Fast-Acting; 446°F (230°C) max. temp. for Slo-Blo®. *Thru the wave soldering* is 500°F (260°C),10 sec. max. **Voltage Rating:** 125

Rating	Fast-Acting Blow Time	Slo-Blo® Blow Time
100%	4 hrs. min.	4 hrs., min.
200%	1 sec. max.	60 sec., max.
300%	—	3 sec., max.
800%	—	0.1 sec. max.

Amp. Rating	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500
R459 Series – Very Fast-Acting						
.125	F1160CT-ND	.88	.82	.62	F1160TR-ND	200.00
.250	F1161CT-ND	.88	.82	.62	F1161TR-ND	200.00
.375	F1162CT-ND•	.88	.82	.62	F1162TR-ND•	200.00
.500	F1163CT-ND•	.88	.82	.62	F1163TR-ND•	200.00
.750	F1164CT-ND•	.88	.82	.62	F1164TR-ND•	200.00
1.000	F1165CT-ND•	.88	.82	.62	F1165TR-ND•	200.00
1.500	F1166CT-ND•	.88	.82	.62	F1166TR-ND•	200.00
2.000	F1167CT-ND•	.88	.82	.62	F1167TR-ND•	200.00
2.500	F1168CT-ND•	.88	.82	.62	F1168TR-ND•	200.00
3.000	F1169CT-ND•	.88	.82	.62	F1169TR-ND•	200.00
3.500	F1170CT-ND•	.88	.82	.62	F1170TR-ND•	200.00
4.000	F1171CT-ND•	.88	.82	.62	F1171TR-ND•	200.00
5.000	F1172CT-ND•	.88	.82	.62	F1172TR-ND•	200.00
R460 Series – Slo-Blo®						
.375	F1180CT-ND•	1.86	1.73	1.30	F1180TR-ND•	424.00
.500	F1181CT-ND•	1.86	1.73	1.30	F1181TR-ND•	424.00
.750	F1182CT-ND	1.86	1.73	1.30	F1182TR-ND	424.00
1.000	F1183CT-ND•	1.86	1.73	1.30	F1183TR-ND•	424.00
1.500	F1184CT-ND•	1.86	1.73	1.30	F1184TR-ND•	424.00
2.000	F1185CT-ND•	1.86	1.73	1.30	F1185TR-ND•	424.00
2.500	F1186CT-ND	1.86	1.73	1.30	F1186TR-ND	424.00
3.000	F1187CT-ND•	1.86	1.73	1.30	F1187TR-ND•	424.00
3.500	F1188CT-ND	1.86	1.73	1.30	F1188TR-ND	424.00
4.000	F1189CT-ND•	1.86	1.73	1.30	F1189TR-ND•	424.00
5.000	F1190CT-ND•	1.86	1.73	1.30	F1190TR-ND•	424.00

- **SMF-KIT-ND** ***Digi-Key® Pico SMD/Nano^{2}® SMF Fuse Kit***
  5 each of ***Pico SMD Fuses*** parts indicated & 5 each of ***Nano^{2}® SMF***
  Very Fast-Acting and SloBlo® Fuses **$99.95**

Microfuse Very Fast-Acting Type



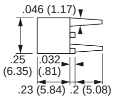
Approvals: Recognized under the Components Program of Underwriters Laboratories and Certified by CSA
Operating Temperature Range: 55°C to 85C

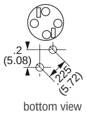
Electrical Characteristics:

Rating	Amperage	Opening Time
100%	1/500 — 5	4 hrs., min.
200%	1/500 — 3/10	5 sec., max.
200%	4/10 — 5	2 sec., max.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 1	100	250
273 Series — Fast-Acting Type					
.005	125	F851-ND	8.23	5.34	4.74
.031	125	F854-ND	8.54	5.54	4.93
.050	125	F855-ND	3.00	1.78	1.58
.100	125	F857-ND	3.00	1.78	1.58
.125	125	F858-ND	3.00	1.78	1.58
.200	125	F859-ND	3.14	1.86	1.66
.250	125	F860-ND	3.00	1.78	1.58
.300	125	F861-ND	3.00	1.78	1.58
.400	125	F862-ND	3.00	1.78	1.58
.500	125	F863-ND	3.00	1.78	1.58
.600	125	F864-ND	3.14	1.86	1.66
.700	125	F865-ND	3.14	1.86	1.66
.750	125	F866-ND	3.00	1.78	1.58
1.000	125	F868-ND	3.00	1.78	1.58
1.500	125	F869-ND	3.00	1.78	1.58
2.000	125	F870-ND	3.00	1.78	1.58
3.000	125	F871-ND	3.00	1.78	1.58
4.000	125	F872-ND	3.00	1.78	1.58
5.000	125	F873-ND	3.00	1.78	1.58

Microfuse Fuseholder





bottom view

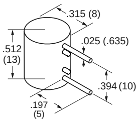
Fuseholder will accept Littelfuse Microfuses and PICO II™ fuses (rated to 5 amperes) with .025" (.64mm) diameter leads.

Electrical: Rated at 5 amperes for any voltage up to 125 volts. **Molded Parts:** White thermoplastic. **Terminals:** Copper alloy. **Ambient Temp.:** -40°C to +100°C. Silver terminal plating

Mounting	Digi-Key Part No.	Price Each 1	100	250
Vertical	F060-ND	1.77	1.29	1.15
Horizontal	F061-ND	1.77	1.29	1.15

Littelfuse®

Safe-T-Plus Fuses



• Designed to allow equipment to meet “Intrinsically Safe” certification for applications in gas plants, petrochemical and processing industries where there is a danger of gas explosion from faulty circuits. • Hermetically sealed. **Voltage Rating:** 125V. **Interrupting Ratings:** 50 amperes at 125 VAC; 300 amperes at 125 VDC

Electrical Characteristics:

% Amp. Rating	Opening Time
100% 200%	4 hours, min. 5 seconds, max.

Agency Approvals:

Meets CENELEC EN50, 014 to 39 and BASEEFA BS 5501, part 7.

Amp. Rating	Volt. Drop	Digi-Key Part No.	Price Each 1	100	250
259 Series					
.062	2.1	F1311-ND	4.56	2.70	2.40
.125	1.3	F1312-ND	4.56	2.70	2.40
.250	0.83	F1313-ND	4.56	2.70	2.40
.375	0.81	F1314-ND	4.56	2.70	2.40
.500	0.78	F1315-ND	4.56	2.70	2.40
.750	0.23	F1316-ND	4.56	2.70	2.40
1.000	0.24	F1317-ND	4.56	2.70	2.40

Schedule of Limitations:

1. The fuse must be so mounted that creepage and clearance distances meet the requirements of Table 2 of EN50020 :1977 or Table 4 of EN500020 :1994 (equivalent to IEC 60079-11 4th Edition 1999).

2. When used in intrinsically safe apparatus it will be necessary to determine a surface temperature classification for the fuse.

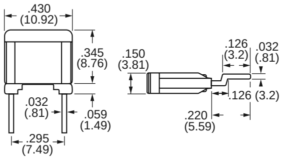
350 Volt SMT Fuses

Fast-Acting EBF Series

1-5 Amp

• Ideal for use in electronic lighting ballast, power supply and power inverter applications • Rated for use in 125, 250, 277 and 350 VAC circuits.

Agency Approvals: UL recognized, CSA certified, MITI approved for 5 amperes **Interrupting Ratings:** 100 amperes at 350 VAC **Operating Temperature:** -40°C to +125°C **Physical Specifications:** Materials: Plastic Body; Silver Plated Zinc Terminations **Packaging Specifications:** 24mm Tape and Reel per EIA-RS481 (equivalent to IEC 286, part 3); 800 fuses per reel



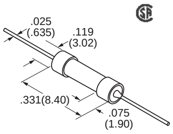
Part No.	Color Coding
F1000	Natural
F1001	Violet
F1002	Pink
F1003	Tan
F1004	Brown
F1005	Red

Electrical Characteristics:

% Amp. Rating	Opening Time
100% 200%	4 hours, min. 0.15 sec. min., 5 sec. max.

Amp. Rating	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Box Pricing 800
446 Series						
2	F1000CT-ND	.89	.83	.62	F1000TR-ND	323.84
3	F1001CT-ND	.89	.83	.62	F1001TR-ND	323.84
4	F1002CT-ND	.89	.83	.62	F1002TR-ND	323.84
5	F1003CT-ND	.89	.83	.62	F1003TR-ND	323.84
7.5	F1004CT-ND	.89	.83	.62	F1004TR-ND	323.84
10	F1005CT-ND	.89	.83	.62	F1005TR-ND	323.84

Barrier Network Fuses



• Meets Barrier Network Standards for hazardous applications
• High interrupting rating.
Voltage Rating: 4000.
Interrupting Ratings: 4000 amperes at 250 VAC/VDC

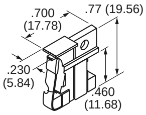
Part No.	Color Coding
F1290	Red
F1291	Green
F1292	Blue
F1293	Violet
F1294	Brown
F1295	Black

Electrical Characteristics:

% Amp. Rating	Opening Time
110% 300% 1000%	4 hours, min. 10 seconds, max. 0.002 seconds, max.

Amp. Rating	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Box Pricing 500
242 Series						
.050	F1290CT-ND	4.20	3.90	2.94	F1290TB-ND	960.00
.080	F1291CT-ND	4.20	3.90	2.94	F1291TB-ND	960.00
.100	F1292CT-ND	4.20	3.90	2.94	F1292TB-ND	960.00
.160	F1293CT-ND	4.20	3.90	2.94	F1293TB-ND	960.00
.200	F1294CT-ND	4.20	3.90	2.94	F1294TB-ND	960.00
.250	F1295CT-ND	4.20	3.90	2.94	F1295TB-ND	960.00

Alarm Indicating Fuses



Electrical Characteristics:

% of Amp. Rating	Opening Time
100% 150%	10 minutes, min. 5 minutes, max.

Alarm Indicating Fuses are ideal for telecom and control panel circuits. Color coded flag conforms to telecom color standards to easily identify amperage ratings. This series has enhancements with an expanded amperage range and higher interrupting ratings, making this a viable replacement for competitive lines such as Bussmann: GMT and San-O: AX-1 series product.

Agency Approval File Numbers: UL E71611, CSA LR29862.

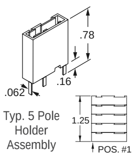
Construction Materials: Body – Polyphenylene Sulfide (UL 94V0). Terminations – Beryllium Copper, Tin Plated. **Voltage Rating:** 125 VAC or 60 VDC. **Interrupting Rating:** 450 Amps at 60 VDC; 300 Amps at 125 VAC/VDC. **Operating Temp. Range:** -55°C to +125°C.

Amp. Rating	Color Code	Digi-Key Part No.	Price Each 1	10	100
0481 Series — Alarm Indicating Type					
.180	Yellow	F712-ND	1.74	1.60	1.20
.250	Violet	F713-ND	1.74	1.60	1.20
.500	Red	F714-ND	1.74	1.60	1.20
.750	Brown	F715-ND	1.74	1.60	1.20
1.000	Gray	F716-ND	1.74	1.60	1.20
1.333	White	F717-ND	1.74	1.60	1.20
1.500	Ylw/Wht	F718-ND	1.74	1.60	1.20
2.000	Orange	F719-ND	1.74	1.60	1.20
3.000	Blue	F720-ND	1.74	1.60	1.20
3.500	Blue/Wht	F721-ND	1.74	1.60	1.20
4.000	Brn/Wht	F722-ND	1.74	1.60	1.20
5.000	Green	F723-ND	1.74	1.60	1.20
7.500	Blk/Wht	F724-ND	1.74	1.60	1.20
10.000	Red/Wht	F725-ND	1.74	1.60	1.20
12.000	Grn/Ylw	F726-ND	1.74	1.60	1.20
15.000	Red/Blue	F727-ND	1.74	1.60	1.20

Gangable Alarm Indicating Fuseholder

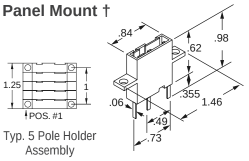
Dim. in inches

PCB Mount



Typ. 5 Pole Holder Assembly

Panel Mount †



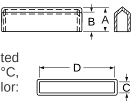
Typ. 5 Pole Holder Assembly

Specifications: • **Electrical:** Rated at 15 amperes for any voltage up to 125 VAC, 125VDC • **Molded Bodies:** Thermoplastic (UL 94VO) • **Terminals:** Alarm Terminal – Brass, tin-plated, wire-wrap type; Fuse Terminal – Beryllium copper, tin-plated

No. of Poles	Digi-Key Part No. PCB Mt.	Digi-Key Part No. Panel Mt.	Price Each 1	10	100
1	F1400-ND	F1420-ND	1.54	1.42	1.07
2	F1401-ND	F1421-ND	3.07	2.84	2.13
3	F1402-ND	F1422-ND	4.61	4.26	3.20
4	F1403-ND	F1423-ND	6.15	5.68	4.26
5	F1404-ND	F1424-ND	7.69	7.10	5.33
6	F1405-ND	F1425-ND	9.22	8.52	6.39
7	F1406-ND	F1426-ND	10.76	9.94	7.45
8	F1407-ND	F1427-ND	12.30	11.36	8.52
9	F1408-ND	F1428-ND	13.84	12.78	9.58
10	F1409-ND	F1429-ND	15.37	14.19	10.65
11	F1410-ND	F1430-ND	16.91	15.61	11.71
12	F1411-ND	F1431-ND	18.45	17.03	12.78
13	F1412-ND	F1432-ND	19.98	18.45	13.84
14	F1413-ND	F1433-ND	21.52	19.87	14.90
15	F1414-ND	F1434-ND	23.06	21.29	15.97
16	F1415-ND	F1435-ND	24.60	22.71	17.03
17	F1416-ND	F1436-ND	26.13	24.13	18.10
18	F1417-ND	F1437-ND	27.67	25.55	19.16
19	F1418-ND	F1438-ND	29.21	26.97	20.23
20	F1419-ND	F1439-ND	30.75	28.38	21.29

† On Panel Mount, first & last position have mounting holes only.

Richco ‘Quick Fit’ Fuse Covers



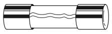
• For use on fuse terminal blocks or PCB-mounted fuse clips • UL recognized E81260, rating 105°C, 600V • Material: Flexible PVC, RMS-55 • Color: Transparent blue

Dim.	Digi-Key Part No. RP613-ND	RP614-ND	RP615-ND	RP616-ND
A	.50 (12.70)	.50 (12.70)	.63 (16.00)	.50 (12.70)
B	.39 (9.91)	.39 (9.91)	.58 (14.73)	.39 (9.91)
C	.24 (6.10)	.28 (7.11)	.32 (8.13)	.32 (8.13)
D	.79 (20.07)	1.18 (29.97)	1.26 (32.00)	1.42 (36.07)

Fuse Type	Digi-Key Part No.	Price Each 25	100	Richco Part No.
Metric	RP613-ND	.58	.50	840620
Metric	RP614-ND	.94	.81	840730
Metric	RP615-ND	.99	.85	840832
Standard	RP616-ND	1.26	1.08	840836

Metric (5x20mm) Fuses

Fast-Acting High-Interrupting 216 Series
Fast-Acting 217 Series
Slo-Blo® 218 Series



Electrical Characteristics:

Amp. (%)	216 Series .05-3.15A	216 Series 4-10A	217 Series .032-.100A	217 Series .125-10A	218 Series .032-.100A	218 Series .125-10A
150	60 min. min.	60 min. min.	60 min. min.	60 min. min.	60 min. min.	60 min. min.
210	30 min. max.	30 min. max.	30 min. max.	30 min. max.	2 min. max.	2 min. max.
275	0.01-2 sec.	0.01-3 sec.	0.01-0.5 sec.	0.05-2 sec.	0.2-10 sec.	0.6-10 sec.
400	0.003-0.3 sec.	0.003-0.3 sec.	0.003-0.1 sec.	0.01-0.3 sec.	0.04-3 sec.	0.15-3 sec.
1000	0.02 sec. max.	0.02 sec. max.	0.02 sec. max.	0.02 sec max.	0.01-0.3 sec.	0.02-0.3 sec.

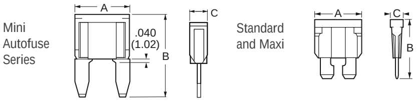
Approvals: 216 Series: SEMKO approved thru 6.3 amps; UL and CSA recognized. **217 Series:** SEMKO approved thru 6.3 amps; BSI approved .4-5 amps; UL and CSA recognized. **218 Series:** SEMKO approved thru 6.3 amps; BSI and VDE approved .05-6.3 amps; UL and CSA recognized.

Interrupting Capacity: 216 Series: 1500 Amperes; **217 Series:** 35 Amperes or 10 x rated current, whichever is greater; **218 Series:** 35 Amperes or 10 x rated current, whichever is greater.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 5	100	250
216 Series – Fast-Acting Interrupting Type; Ceramic Body					
.050	250	F900-ND	1.40	1.05	.94
.080	250	F902-ND	1.40	1.05	.94
.100	250	F903-ND	1.12	.84	.75
.125	250	F904-ND	1.12	.84	.75
.160	250	F905-ND	1.12	.84	.75
.200	250	F906-ND	1.12	.84	.75
.250	250	F907-ND	1.12	.84	.75
.315	250	F908-ND	1.12	.84	.75
.400	250	F909-ND	1.12	.84	.75
.500	250	F910-ND	1.12	.84	.75
.630	250	F911-ND	1.12	.84	.75
.800	250	F912-ND	1.12	.84	.75
1.000	250	F913-ND	1.12	.84	.75
1.250	250	F914-ND	1.12	.84	.75
1.600	250	F915-ND	1.12	.84	.75
2.000	250	F916-ND	1.12	.84	.75
2.500	250	F917-ND	1.12	.84	.75
3.150	250	F918-ND	1.12	.84	.75
4.000	250	F919-ND	1.12	.84	.75
5.000	250	F920-ND	1.12	.84	.75
6.300	250	F921-ND	1.12	.84	.75
8.000	250	F922-ND	1.40	1.05	.94
10.000	250	F923-ND	1.40	1.05	.94
217 Series— Fast-Acting Type					
.032	250	F930-ND	1.32	.99	.88
.040	250	F931-ND	1.32	.99	.88
.050	250	F932-ND	1.32	.99	.88
.063	250	F933-ND	1.32	.99	.88
.080	250	F934-ND	1.32	.99	.88
.100	250	F935-ND	1.32	.99	.88
.125	250	F936-ND	1.32	.99	.88
.160	250	F937-ND	.78	.58	.52
.200	250	F938-ND	.78	.58	.52
.250	250	F939-ND	.78	.58	.52
.315	250	F940-ND	.78	.58	.52
.400	250	F941-ND	.78	.58	.52
.500	250	F942-ND	.24	.18	.16
.630	250	F943-ND	.24	.18	.16
.800	250	F944-ND	.24	.18	.16
1.000	250	F945-ND	.24	.18	.16
1.250	250	F946-ND	.24	.18	.16
1.600	250	F947-ND	.24	.18	.16
2.000	250	F948-ND	.24	.18	.16
2.500	250	F949-ND	.24	.18	.16
3.150	250	F950-ND	.24	.18	.16
4.000	250	F951-ND	.24	.18	.16
5.000	250	F952-ND	.24	.18	.16
6.300	250	F953-ND	.24	.18	.16
8.000	250	F954-ND	.89	.67	.59
10.000	250	F955-ND	.89	.67	.59
218 Series — Slo-Blo® Type					
.032	250	F960-ND	1.74	1.31	1.16
.040	250	F961-ND	1.74	1.31	1.16
.050	250	F962-ND	1.74	1.31	1.16
.063	250	F963-ND	1.74	1.31	1.16
.080	250	F964-ND	1.74	1.31	1.16
.100	250	F965-ND	1.02	.77	.68
.125	250	F966-ND	1.02	.77	.68
.160	250	F967-ND	1.02	.77	.68
.200	250	F968-ND	1.02	.77	.68
.250	250	F969-ND	1.02	.77	.68
.315	250	F970-ND	1.02	.77	.68
.400	250	F971-ND	1.02	.77	.68
.500	250	F972-ND	.70	.52	.47
.630	250	F973-ND	.70	.52	.47
.800	250	F974-ND	.70	.52	.47
1.000	250	F975-ND	.70	.52	.47
1.250	250	F976-ND	.70	.52	.47
1.600	250	F977-ND	.70	.52	.47
2.000	250	F978-ND	.70	.52	.47
2.500	250	F979-ND	.70	.52	.47
3.150	250	F980-ND	.70	.52	.47
4.000	250	F981-ND	.70	.52	.47
5.000	250	F982-ND	.70	.52	.47
6.300	250	F983-ND	.70	.52	.47
8.000	250	F984-ND	1.09	.82	.73
10.000	250	F985-ND	1.09	.82	.73

Littelfuse®

ATO Fuse: Mini, ATO and Maxi



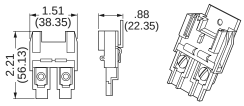
Designed and originated by Littelfuse for the automotive industry, the ATO fuse has become the original equipment circuit protection standard for foreign and domestic automobiles and trucks. This fuse can also be specified for a variety of low voltage electronic applications. **Design Standards:** UL Standard for Automotive Blade Type Fuses. SAE (Society of Automotive Engineers) J1284. **Color-Coding:** Autofuse fuses are color-coded for easy amperage identification. **Voltage Rating:** 32V. **Approvals:** 297 Series: UL listed, 257 series: UL listed 3-40 amps; CSA certified 3-30 amps. 299 Series: UL recognized 20-60 amps.

Fuse Type	Dimensions - Inch (mm) A	B	C
Mini-Fuse	.43 (10.92)	.63 (16.00)	.15 (3.81)
ATO Fuse	.75 (19.05)	.73 (18.54)	.20 (5.08)
Maxi-Fuse	1.15 (29.21)	1.35 (34.29)	.35 (8.89)

Amp. Rtg.	Color Code	Digi-Key Part No.	Price Each 5	100	250
297 Series — Mini Fuses					
2	Grey	F986-ND	.39	.36	.32
3	Violet	F987-ND	.39	.36	.32
4	Pink	F988-ND	.39	.36	.32
5	Tan	F989-ND	.39	.36	.32
7.5	Brown	F990-ND	.39	.36	.32
10	Red	F991-ND	.39	.36	.32
15	Blue	F992-ND	.39	.36	.32
20	Yellow	F993-ND	.39	.36	.32
25	Natural	F994-ND	.39	.36	.32
30	Green	F995-ND	.39	.36	.32
257 Series — Fuses					
3	Violet	F996-ND	.34	.31	.28
4	Pink	F997-ND	.34	.31	.28
5	Tan	F998-ND	.34	.31	.28
7.5	Brown	F999-ND	.34	.31	.28
10	Red	F1015-ND	.51	.31	.28
15	Blue	F1016-ND	.51	.31	.28
20	Yellow	F1017-ND	.51	.31	.28
25	Natural	F1018-ND	.51	.31	.28
30	Green	F1019-ND	.51	.31	.28
40	Amber	F1220-ND	.51	.31	.28
299 Series — Maxi Fuses					
20	Yellow	F1035-ND	1.12	1.03	.92
30	Green	F1036-ND	1.12	1.03	.92
40	Amber	F1037-ND	1.12	1.03	.92
50	Red	F1038-ND	1.12	1.03	.92
60	Blue	F1039-ND	1.12	1.03	.92

MAXIFUSE BLOCK:

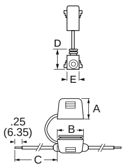
- Rated to 60 amperes at 32 volts
- Interlocking block feature
- Built-in mounting bracket



Description	Digi-Key Part No.	Price Each 1	100	250
Maxi Fuse Block	F1085-ND	16.18	13.24	11.77

IN-LINE FUSEHOLDERS:

- Rated at 32 volts
- Protective cover included

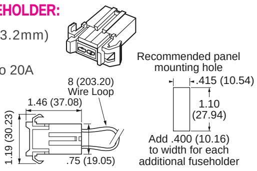


Dim.	Fuse Type - Inch (mm) MINI	ATO	MAXI
A	.52 (13.21)	.97 (24.64)	1.35 (34.29)
B	.97 (24.64)	1.00 (25.40)	3.36 (85.34)
C	4.0 (101.60)	4.0 (101.60)	6.0 (152.40)
D	.60 (15.24)	.67 (17.02)	1.39 (35.31)
E	.41 (10.41)	.43 (10.92)	1.12 (28.45)

Description	AWG Wire	Amp Rtg. (max.)	Digi-Key Part No.	Price Each 1	100	250
In-line Mini Holder	14	20	F1057-ND	2.53	1.71	1.52
In-line Mini Holder	12	30	F1058-ND	2.30	1.56	1.38
In-line Maxi Holder	6	60	F1059-ND	11.32	7.65	6.80
In-line ATO Holder	16	20	F1086-ND	2.53	1.71	1.52
In-line ATO Holder	12	30	F1087-ND	1.99	1.35	1.20

PANEL MOUNT ATO FUSEHOLDER:

- Assembled with 8” (203.2mm) wire loop, no fuse
- #14 wire/terminals rated to 20A
- #10 wire/terminals rated to 30
- Snap mounting to panel
- Fuseholders interlock for multiple mounting.


Recommended panel mounting hole
8 (203.20) Wire Loop
.415 (10.54)
1.46 (37.08)
1.10 (27.94)
1.19 (30.23)
.75 (19.05)
Add .400 (10.16) to width for each additional fuseholder

Description	AWG Wire	Amp Rtg. (max.)	Digi-Key Part No.	Price Each 1	100	250
Panel Mount Holder	14	20	F1088-ND	1.41	.96	.85
Panel Mount Holder	10	30	F1089-ND	2.05	1.39	1.23

ATO Fuseholders

Fig. 1- Horizontal Mount

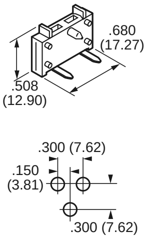
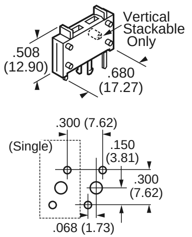


Fig. 2 - Vertical Mount



P.C.B. Footprint (Stacked)

Mini Fuse PC Board Fuseholder Specifications:

- **Terminals:** Copper alloy, tin-plated
- **Body:** Black thermoplastic (UL 94V0) **Electrical:** Recognized under the Components Program of Underwriters Laboratory for 15 amperes and Certified by CSA for 10 amperes. Three fuseholders can be mounted side by side (stacked) and operated at rated current. Contact factory for applications where more than three fuseholders will be stacked.
- **Voltage:** 32 Volts DC
- **Temperature Range:** -40°C to +85°C
- **PC Board Compatibility:** Designed for use with standard .062” (1.57mm) circuit board.

Fig. 3 — Autofuse Fuse Clip

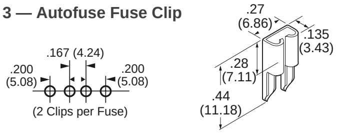
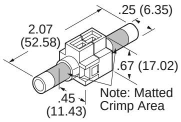


Fig. 4 — Mini Fuse Easy-Crimp Fuseholder



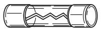
Materials:

- **Body:** Black thermoplastic
- **Terminals:** Tin plated copper alloy
- **Operating Temperature:** -40°C to 105°C

Fig.	Description	Digi-Key Part No.	Price Each 1	10	100
1	Horizontal Mini Holder	F064-ND	1.56	1.47	.88
2	Single or End Cap Mini Holder	F065-ND	1.56	1.47	.88
2	Stackable Mini Holder	F066-ND	1.56	1.47	.88
3	ATO Fuse Clip	F067-ND	.28	.27	.16
4	In-line Mini Holder	F068-ND*	1.40	1.31	.79
4	In-line Mini Holder	F069-ND†	1.40	1.31	.79
—	Removal/Replacement Tool	F070-ND‡	.50	.42	.38

* 20A max. rating terminals accept #16-22AWG
† 30A max. rating, terminals accept #10-14AWG
‡ Mini & ATO Removal/Replacement Tool

2AG Subminiature Fast-Acting Fuses



Pigtail Material: Tinned copper wire

Approvals: Listed by U.L. and Certified by CSA. Patented.

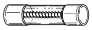
Dimensions:
- **Cartridge:** .177” (4.50mm) diameter; .57” (14.48mm) length
- **Pigtail:** .19” (4.83mm) diameter; .6” (15.24mm) length
- **Leads:** .025” (.64mm) diameter; 1.50” (38.10mm) length typ.

Electrical Characteristics:

Rating	Blow Time
110%	4 hr., min.
135%	1 hr., max.
200%	1 sec., max.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 5	100	250
225 Series — Cartridge Type					
.125	250	F640-ND	.63	.47	.42
.250	250	F641-ND	.63	.47	.42
.375	250	F642-ND	.63	.47	.42
.500	250	F643-ND	.44	.33	.29
.750	250	F644-ND	.44	.33	.29
1.000	250	F645-ND	.44	.33	.29
1.500	250	F646-ND	.44	.33	.29
2.000	250	F647-ND	.44	.33	.29
2.500	250	F648-ND	.44	.33	.29
3.000	250	F649-ND	.44	.33	.29
3.500	250	F650-ND	.44	.33	.29
4.000	125	F651-ND	.44	.33	.29
5.000	125	F652-ND	.44	.33	.29
7.000	125	F653-ND	.44	.33	.29
224 Series — Pigtail Type					
.125	250	F620-ND	.82	.62	.55
.250	250	F621-ND	.82	.62	.55
.375	250	F622-ND	.82	.62	.55
.500	250	F623-ND	.63	.48	.42
.750	250	F624-ND	.63	.48	.42
1.000	250	F625-ND	.63	.48	.42
1.500	250	F626-ND	.63	.48	.42
2.000	250	F627-ND	.63	.48	.42
2.500	250	F628-ND	.63	.48	.42
3.000	250	F629-ND	.63	.48	.42
3.500	250	F630-ND	.63	.48	.42
4.000	125	F631-ND	.63	.48	.42
5.000	125	F632-ND	.63	.48	.42
7.000	125	F633-ND	.63	.48	.42

2AG Subminiature Slo-Blo® Fuses



Pigtail Material: Tinned copper wire

Approvals: Listed by U.L. and Certified by CSA through 3.5 amperes. Recognized under the Components Program of U.L. from 4 through 7 amperes. **Patents:** U.S. Patents #4,409,729 and #4,445,106.

Dimensions: • **Cartridge:** .177” (4.50mm) diameter; .57” (14.48mm) length • **Pigtail:** .19” (4.83mm) diameter; .60” (15.24mm) length • **Leads:** .025” (.64mm) diameter; 1.50” (38.10mm) length type

Electrical Characteristics:

Rating	Blow Time
110%	4 hrs., min.
135%	1 hr., max.
200%	3 sec., min./ 20 sec., max.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 5	100	250
229 Series — Cartridge Type					
.250	250	F660-ND	.52	.39	.35
.375	250	F661-ND	.52	.39	.35
.500	250	F662-ND	.52	.39	.35
.750	250	F663-ND	.52	.39	.35
1.000	250	F664-ND	.52	.39	.35
1.500	250	F665-ND	.52	.39	.35
2.000	250	F666-ND	.52	.39	.35
2.500	250	F667-ND	.52	.39	.35
3.000	250	F668-ND	.52	.39	.35
3.500	250	F669-ND	.52	.39	.35
4.000	125	F670-ND	.52	.39	.35
5.000	125	F671-ND	.52	.39	.35
7.000	125	F672-ND	.52	.39	.35
230 Series — Pigtail Type					
.250	250	F680-ND	.72	.54	.48
.375	250	F681-ND	.72	.54	.48
.500	250	F682-ND	.72	.54	.48
.750	250	F683-ND	.72	.54	.48
1.000	250	F684-ND	.72	.54	.48
1.500	250	F685-ND	.72	.54	.48
2.000	250	F686-ND	.72	.54	.48
2.500	250	F687-ND	.72	.54	.48
3.000	250	F688-ND	.72	.54	.48
3.500	250	F689-ND	.72	.54	.48
4.000	125	F690-ND	.72	.54	.48
5.000	125	F691-ND	.72	.54	.48
7.000	125	F692-ND	.72	.54	.48

3AB Ceramic Body Fast-Acting Fuses

Dimensions: Diameter: 1/4” (6.35mm); Length: 1-1/4” (31.75mm). **Approvals:** Listed by UL and Certified by CSA through 15 amperes. Recognized under the Components Program of U.L. from 20 through 30 amperes.

Electrical Characteristics:

Rating	Amperage	Blow Time
110%	1/8 — 30	4 hrs., min.
135%	1/8 — 30	1 hr., max.
200%	1/8 — 12	15 sec., max.
200%	15 — 30	360 sec., max.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 5	100	250
314 Series — Cartridge Type					
.125	250	F150-ND	1.07	.81	.72
.250	250	F151-ND	.75	.56	.50
.500	250	F153-ND	.75	.56	.50
1.000	250	F155-ND	.70	.52	.47
2.000	250	F156-ND	.70	.52	.47
3.000	250	F157-ND	.70	.52	.47
4.000	250	F158-ND	.70	.52	.47
5.000	250	F159-ND	.66	.50	.44
6.000	250	F160-ND	.66	.50	.44
7.000	250	F161-ND	.66	.50	.44
8.000	250	F162-ND	.66	.50	.44
10.000	250	F163-ND	.66	.50	.44
12.000	250	F164-ND	.66	.50	.44
15.000	250	F165-ND	.66	.50	.44
20.000	250	F166-ND	.98	.74	.66
25.000	125	F167-ND	.98	.74	.66
30.000	125	F168-ND	.98	.74	.66

3AB Ceramic Body Slo-Blo® Fuses

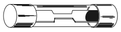
Dimensions: Diameter: 1/4” (6.35mm); Length: 1-1/4” (31.75mm) **Patents:** U.S. Patents #4,409,729 and #4,445,106 **Approvals:** Listed by UL Certified by CSA from 1/4 through 10 amperes.

Elect. Characteristics:

Rating	Blow Time
110%	4 hrs., min.
135%	1 hr., max.
200%	5 sec., min.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 5	100	250
326 Series — Cartridge Type					
.0312	250	F451-ND	2.57	1.93	1.71
.100	250	F453-ND	1.75	1.31	1.17
.125	250	F454-ND	1.75	1.31	1.17
.250	250	F459-ND	1.67	1.25	1.11
.375	250	F461-ND	1.67	1.25	1.11
.500	250	F463-ND	1.67	1.25	1.11
.750	250	F466-ND	1.67	1.25	1.11
1.000	250	F468-ND	1.67	1.25	1.11
1.500	250	F471-ND	1.67	1.25	1.11
2.000	250	F473-ND	1.67	1.25	1.11
2.500	250	F474-ND	1.17	.88	.78
3.000	250	F476-ND	1.17	.88	.78
4.000	250	F478-ND	1.17	.88	.78
5.000	250	F479-ND	1.17	.88	.78
6.250	250	F480-ND	1.17	.88	.78
7.000	250	F481-ND	1.17	.88	.78
8.000	250	F482-ND	1.17	.88	.78
10.000	250	F483-ND	1.17	.88	.78
12.000	250	F484-ND	1.17	.88	.78
15.000	250	F485-ND	1.17	.88	.78
20.000	250	F486-ND	1.17	.88	.78
25.000	125	F487-ND	1.17	.88	.78
30.000	125	F488-ND	1.17	.88	.78

3AG Low Voltage Normal-Blow Fuses



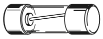
Dimensions: Dia.: 1/4" (6.35mm); Length: 1-1/4" (31.75mm)
Approvals: Listed by UL and Certified by CSA through 30 amperes
Design Standards: UL Standard 275.

Electrical Characteristics:

Rating	Blow Time
110%	4 hrs., min.
135%	1 hr., max.
200%	10 sec., max.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 5	100	250
311 Series — Normal-Blow Type					
12.000	32	F140-ND	.28	.21	.18
15.000	32	F141-ND	.28	.21	.18
25.000	32	F142-ND	.28	.21	.18
30.000	32	F143-ND	.28	.21	.18
35.000	32	F144-ND	.28	.21	.18

3AG Glass Body Fast-Acting Fuses



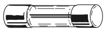
Approvals: Listed by UL and Certified by CSA.
Dimensions: 312 Series: Diameter: 1/4" (6.35mm); Length: 1-1/4" (31.75mm). **318 Series:** Diameter: .275" (6.99mm); Length: 1.275" (32.39mm); Pigtail Diameter: .032" (.81mm); Pigtail Length: 1.50" (38.10mm); Pigtail Material: Solder-coated copper.

Electrical Characteristics:

Rating	Blow Time
110%	4 hrs., min.
135%	1 hr., max.
200%	5 sec., max.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 5	100	250
312 Series — Cartridge Type					
.010	250	F100-ND	4.20	3.15	2.80
.031	250	F101-ND	4.20	3.15	2.80
.062	250	F102-ND	.97	.73	.65
.100	250	F103-ND	.97	.73	.65
.125	250	F104-ND	.97	.73	.65
.150	250	F105-ND	.97	.73	.65
.175	250	F106-ND	.97	.73	.65
.200	250	F108-ND	.97	.73	.65
.250	250	F109-ND	.60	.45	.40
.300	250	F110-ND	.60	.45	.40
.375	250	F111-ND	.60	.45	.40
.500	250	F112-ND	.42	.32	.28
.600	250	F113-ND	.42	.32	.28
.750	250	F114-ND	.42	.32	.28
1.000	250	F115-ND	.26	.20	.18
1.250	250	F116-ND	.26	.20	.18
1.500	250	F117-ND	.26	.20	.18
1.600	250	F118-ND	.26	.20	.18
2.000	250	F119-ND	.26	.20	.18
2.500	250	F120-ND	.26	.20	.18
3.000	250	F121-ND	.26	.20	.18
4.000	250	F122-ND	.41	.31	.28
5.000	250	F123-ND	.41	.31	.28
6.000	250	F124-ND	.41	.31	.28
7.000	250	F125-ND	.41	.31	.28
8.000	250	F126-ND	.56	.42	.37
10.000	250	F127-ND	.56	.42	.37
318 Series — Pigtail Type					
.125	250	F208-ND	1.34	1.00	.89
.250	250	F209-ND	.82	.62	.55
.500	250	F212-ND	.82	.62	.55
1.000	250	F215-ND	.59	.45	.40
1.500	250	F217-ND	.59	.45	.40
2.000	250	F219-ND	.59	.45	.40
3.000	250	F221-ND	.59	.45	.40
4.000	250	F222-ND	.64	.47	.42
5.000	250	F223-ND	.64	.47	.42
6.000	250	F224-ND	.64	.47	.42
8.000	250	F226-ND	.64	.47	.42

3AG Glass Body Slo-Blo® Fuses



Patents: U.S. Patents #4,409,729 and #4,445,106.
Approvals: Listed by Underwriters Laboratories and Certified by CSA through 8 amperes. Recognized under the Components Program of UL from 9 through 30 amperes.
Dimensions: 313 Series: Dia.: 1/4" (6.35mm), Length: 1-1/4" (31.75mm). **315 Series:** Dia.: .275" (6.99mm), Length: 1.275" (32.39mm); Pigtail Dia.: .032" (.81mm), 1/100A–15A; .040" (1.02mm), 20A–30A; Pigtail Length: 1.50" (38.10mm); Pigtail Material: Solder-coated copper.

Electrical Characteristics:

Rating	Blow Time
110%	4 hrs., min.
135%	1 hr., max.
200%	5 sec., min.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 5	100	250
313 Series — Cartridge Type					
.010	250	F300-ND	2.14	1.61	1.43
.031	250	F301-ND	2.14	1.61	1.43
.040	250	F302-ND	2.14	1.61	1.43
.062	250	F303-ND	1.55	1.16	1.03
.100	250	F304-ND	1.55	1.16	1.03
.125	250	F305-ND	1.55	1.16	1.03
.150	250	F306-ND	1.55	1.16	1.03
.175	250	F307-ND	1.55	1.16	1.03
.187	250	F308-ND	1.55	1.16	1.03
.200	250	F309-ND	1.55	1.16	1.03

(Continued)

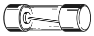
3AG Glass Body Slo-Blo® Fuses, *(Cont.)*

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 5	100	250
.250	250	F310-ND	.94	.70	.63
.300	250	F311-ND	.94	.70	.63
.375	250	F312-ND	.94	.70	.63
.400	250	F313-ND	.94	.70	.63
.500	250	F314-ND	.90	.67	.60
.600	250	F315-ND	.90	.67	.60
.700	250	F316-ND	.90	.67	.60
.750	250	F317-ND	.90	.67	.60
.800	250	F318-ND	.90	.67	.60
1.000	250	F319-ND	.90	.67	.60
1.200	250	F320-ND	.68	.51	.46
1.250	250	F321-ND	.68	.51	.46
1.500	250	F322-ND	.68	.51	.46
1.600	250	F323-ND	.68	.51	.46
2.000	250	F325-ND	.68	.51	.46
2.250	250	F326-ND	.68	.51	.46
2.500	250	F327-ND	.68	.51	.46
2.800	250	F328-ND	.68	.51	.46
3.000	250	F329-ND	.68	.51	.46
3.200	250	F330-ND	.68	.51	.46
4.000	250	F331-ND	.68	.51	.46
5.000	250	F332-ND	.68	.51	.46
6.250	250	F333-ND	.68	.51	.46
7.000	250	F334-ND	.68	.51	.46
8.000	250	F335-ND	.68	.51	.46
10.000	32	F336-ND	1.00	.75	.67
12.000	32	F337-ND	1.00	.75	.67
15.000	32	F338-ND	1.00	.75	.67
20.000	32	F339-ND	1.00	.75	.67
25.000	32	F340-ND	1.00	.75	.67
30.000	32	F341-ND	1.00	.75	.67
315 Series — Pigtail Type					
1.000	250	F419-ND	1.16	.87	.78
1.500	250	F422-ND	1.16	.87	.78
2.000	250	F425-ND	1.16	.87	.78
3.000	250	F429-ND	1.16	.87	.78
4.000	250	F431-ND	1.16	.87	.78
5.000	250	F432-ND	1.16	.87	.78
7.000	250	F434-ND	1.16	.87	.78

8AG Fast-Acting Instrument Fuses

Electrical Characteristics:

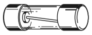
Rating	Blow Time
100%	4 hrs., min.
200%	5 sec., max.



0.25 x 1.00
(6.35 x 25.4)

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 5	100	250
361 Series — Fast-Acting Type					
.062	250	F504-ND	1.64	1.23	1.10
.125	250	F505-ND	1.17	.88	.78
.250	250	F506-ND	.72	.54	.48
.375	250	F507-ND	.72	.54	.48
.500	250	F508-ND	.72	.54	.48
.750	250	F509-ND	.72	.54	.48
1.000	250	F510-ND	.43	.32	.29
2.000	250	F512-ND	.43	.32	.29
3.000	125	F513-ND	.44	.33	.29
4.000	125	F514-ND	.44	.33	.29

8AG Normal-Blow Fuses



0.25 x 1.00
(6.35 x 25.4)

Approvals:

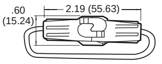
Listed by UL through 5 amperes. Certified by CSA from 0.25 through 5 amperes. Sold in multiples of 5.

Electrical Characteristics:

Rating	Blow Time
110%	4 hrs., min.
135%	1 hr., max.
200%	10 sec., max.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 5	100	250
362 Series — Normal-Blow Type					
.125	250	F600-ND	1.06	.80	.71
.250	250	F601-ND	.66	.49	.44
.500	250	F602-ND	.66	.49	.44
1.000	250	F603-ND	.42	.31	.28
1.500	250	F604-ND	.42	.31	.28
2.000	250	F605-ND	.42	.31	.28
2.500	125	F606-ND	.42	.31	.28
3.000	125	F607-ND	.42	.31	.28
5.000	125	F608-ND	.28	.21	.19
6.000	125	F609-ND	.28	.21	.19
8.000	32	F610-ND	.28	.21	.19
10.000	32	F611-ND	.28	.21	.19
15.000	32	F612-ND	.28	.21	.19
20.000	32	F613-ND	.28	.21	.19

Universal In-Line Fuseholder



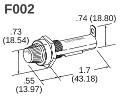
Supplied with 8" (20.32cm) loop of #14 AWG red vinyl insulated wire and two springs.
Electrical: Intended for use at 32 volts or less with fuses rated up to 20 amperes when the proper spring is installed for fuse size. **Molded Parts:** Black thermoplastic (UL 94V2). Body halves have a .14" (3.56mm) diameter hole for insulated wire. **Ambient Temperature:** -40° to +75°C.

F062-ND (Littelfuse #155100) **$1.95/1; $17.33/10; $141.75/100**

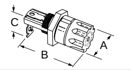
3AG and 5x20mm Panel Fuseholders

UL Recognized and Certified by CSA

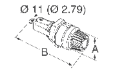
F002



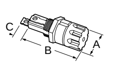
***F003, *F004, †F007, *F012**



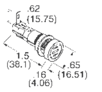
†F005, *F006



***F009, *F013, †F015**



F053



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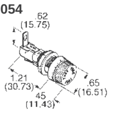
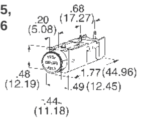
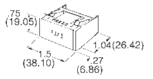


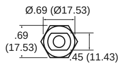
F055, F056



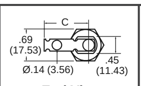
F059



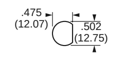
* Fluted Knob † Knurled Knob



End View Straight Terminals



End View Right Angle Terminals



Mounting Hole for Straight & Right Angle

Digi-Key Part No.	Dimensions - Inch (mm) A	B	C
F003-ND	.69 (17.53)	1.70 (43.18)	.63 (16.00)
F004-ND	.69 (17.53)	1.70 (43.18)	.63 (16.00)
F005-ND	.69 (17.53)	2.09 (53.09)	—
F006-ND	.69 (17.53)	2.01 (51.05)	—
F007-ND	.69 (17.53)	1.78 (45.21)	.63 (16.00)
F009-ND	.69 (17.53)	1.70 (43.18)	.30 (7.62)
F012-ND	.69 (17.53)	1.70 (43.18)	.59 (14.99)
F013-ND	.69 (17.53)	1.70 (43.18)	.40 (10.16)
F015-ND	.69 (17.53)	1.78 (45.21)	.40 (10.16)

Description	Digi-Key Part No.	Price Each	Littelfuse Part No.
3AG, Panel Mounting, Finger Grip	F002-ND	3.08	342001
3AG, Drip Prf. Right Angle, Solder	F003-ND	2.78	342004PL
3AG, Rt. Angle Term., Solder	F004-ND	2.63	342004L
3AG, Straight Term., Solder.....................	F005-ND	2.45	342012
3AG, Straight Term., Solder.....................	F006-ND	2.45	342014
3AG, Rt. Angle Term., Solder	F007-ND	2.57	342022
3AG, 3/16" (4.76mm) Q-Conn. Straight Term ...	F009-ND	2.75	342038
3AG, 1/4" (6.35mm) Q-Conn. Rt. Angle Term ...	F012-ND	2.88	342828
3AG, 1/4" (6.35mm) Q-Conn. Straight Term.....	F013-ND	3.02	342838
3AG, 1/4" (6.35mm) Q-Conn. Straight Term.....	F015-ND	3.02	342858
5x20mm Low-Profile Front Mount Holder	F053-ND	3.82	345621
5x20mm High-Profile Front Mount Holder.......	F054-ND	3.82	345623
1/4" x 1-1/4" (6.35mm x 31.75mm) P.C. Board Type Holder	F055-ND	2.65	345101
5x20mm P.C. Board Type Holder	F056-ND	3.43	345121
3AG Flip-Top, Shock Safe Panel Mt. Holder......	F059-ND	3.56	346877

3AG Fuse Clips

Fig. 1

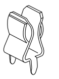


Fig. 2

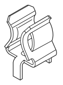


Fig. 3

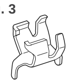


Fig. 4

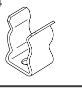


Fig. 5 – 5x20 & 2AG Fuse Clip

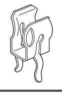


Fig. 6 – 5x20 Fuse Clip

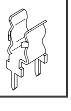
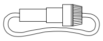


Fig.	Digi-Key Part No.	Price Each 10	100	250	Mfg. Part No.
4	F038-ND†	.16	.12	.11	101002
1	F040-ND	.12	.09	.08	102071
1	F041-ND†	.18	.13	.12	102074
2	F042-ND†	.22	.16	.15	102078
1	F046-ND*	.48	.36	.32	122083
3	F048-ND*	.44	.33	.29	122090
2	F052-ND	.22	.16	.15	102079
5	F058-ND	.18	.13	.12	111501
6	F063-ND	.22	.14	.12	100056

* Beryllium Copper 30 amp rating (all others are spring brass 15 amp rating).
† Fuse clip without fuse stops.

In-Line Fuseholder



Supplied with a 15-inch (38.10cm) loop of 14-gauge vinyl covered wire and three springs in different lengths to adapt the holder to SFE 7-1/2, 9, 14, 20 amp & 3AG fuses.

F049-ND (Littelfuse #150145) **$2.74/1; $25.32/10; $189.90/100**

COOPER Bussmann

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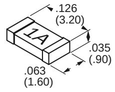
SMT Chip Fuse - 3216FF (1206)



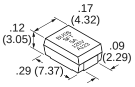
Characteristics: • Fast acting **Time Current:** • Will carry 100% of rated current for a min. of 4 hours, and will open within 5 seconds at 250% of rated current (250mA-3A). • The 4-5A fuses will open within 1 second at 350% of rated current. **Construction Material:** • Body: Ceramic substrate encapsulated with glass • Leads: Over-plated with nickel and tin-lead **Agency Approvals:** UL Recognized (All Ratings), CSA Certified (1.5-3A), and CSA Component Acceptance (250-750mA, 1A, 4-5A)

Current Rating	Rated Volt. AC/DC	Digi-Key Part No.	Cut Tape Price Each 1	10	100	T & R* Pricing 3,000
.250	32/63	283-2440-1-ND	.91	.85	.64	352.35/M
.500	32/63	283-2442-1-ND	.91	.85	.64	352.35/M
.750	32/63	283-2443-1-ND	.91	.85	.64	352.35/M
1	32/63	283-2444-1-ND	.91	.85	.64	352.35/M
1.25	32/63	283-2445-1-ND	.91	.85	.64	352.35/M
1.5	32/63	283-2446-1-ND	.91	.85	.64	352.35/M
2	32/63	283-2447-1-ND	.91	.85	.64	352.35/M
2.5	32/63	283-2448-1-ND	.91	.85	.64	352.35/M
3	32/63	283-2449-1-ND	.91	.85	.64	352.35/M
4	32/32	283-2450-1-ND	.91	.85	.64	352.35/M
4.5	32/32	283-2451-1-ND	.91	.85	.64	352.35/M
5	32/32	283-2452-1-ND	.91	.85	.64	352.35/M

* For Tape & Reel part number change "1-ND" to "2-ND".

* ***BIF document: #3001***

SMD TRON® Surface Mount Fuses - SFT



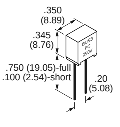
Characteristics: • Fast-Acting • Current-Limiting. **Time Current:** Rated current values 0-10 amps carry 100% of rating for 4 hrs. min.; open at 250% of rating in 5 seconds max. **Construction Material:** Solid Matrix • Body: Thermoplastic, with a rating of 94V-O • Leads: Base-Copper, Barrier-Nickel (50-100 micro inches), Finish: Electroplated tin (400-500 micro inches with a 2-10% lead content). **Agency Approvals:** UL Recognized (250mA-10A), and CSA Component Acceptance (250mA-10A).

Current Rating	Rated Volt. AC/DC	Digi-Key Part No.	Cut Tape Price Each 1	10	100	T & R* Pricing 500
250mA	125/125	283-2426-1-ND	1.47	1.37	1.03	336.00
500mA	125/125	283-2428-1-ND	1.47	1.37	1.03	336.00
1	125/125	283-2430-1-ND	1.47	1.37	1.03	336.00
1.5	125/125	283-2431-1-ND	1.47	1.37	1.03	336.00
2	125/125	283-2432-1-ND	1.47	1.37	1.03	336.00
2.5	125/125	283-2433-1-ND	1.47	1.37	1.03	336.00
3	125/125	283-2434-1-ND	1.47	1.37	1.03	336.00
4	125/125	283-2436-1-ND	1.47	1.37	1.03	336.00
5	125/125	283-2437-1-ND	1.47	1.37	1.03	336.00
7	60/90	283-2438-1-ND	1.47	1.37	1.03	336.00
10A	60/90	283-2439-1-ND	1.47	1.37	1.03	336.00

* For Tape & Reel part number change "1-ND" to "2-ND".

* ***BIF document: #2005***

PC-TRON® Subminiature Fuses



Characteristics: Offers short-circuit performance which until now could only be found in much larger size glass tube fuses. At 250 VAC, the 1/2 to 3 amp PC-Tron can safely interrupt 50 amperes; at 125 VAC the 1/2 to 5 amp versions can interrupt 10,000 amperes. This makes the PC-Tron subminiature fuse ideal for line-side protection of power supplies. **Time Current:** • Carry 100% of rating for 4 hrs. min.; open at 200% of rating in 10 sec. max. **Construction Material:** • Body: High temperature plastic • Leads: Tin-plated copper **Agency Approvals:** UL Recognized and CSA Certified

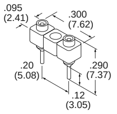
Current Rating	Rated Voltage AC/DC	Digi-Key Part No.	Price Each 1	10	100
PCB Series - Full Lead Length					
1/2A	250/450	283-2111-ND	1.61	1.35	1.21
3/4A	250/450	283-2112-ND	1.61	1.35	1.21
1A	250/450	283-2113-ND	1.61	1.35	1.21

PCB Series, *(Cont.)*

Current Rating	Rated Voltage AC/DC	Digi-Key Part No.	Price Each 1	10	100
1-1/2A	250/450	283-2114-ND	1.61	1.35	1.21
2A	250/450	283-2115-ND	1.61	1.35	1.21
2-1/2A	250/450	283-2116-ND	1.61	1.35	1.21
3A	250/350	283-2117-ND	1.61	1.35	1.21
PCC Series - Short Lead Length					
1/2A	250/450	283-2118-ND	1.61	1.35	1.21
3/4A	250/450	283-2119-ND	1.61	1.35	1.21
1A	250/450	283-2120-ND	1.61	1.35	1.21
1-1/2A	250/450	283-2121-ND	1.61	1.35	1.21
2A	250/450	283-2122-ND	1.61	1.35	1.21
2-1/2A	250/450	283-2123-ND	1.61	1.35	1.21
3A	250/350	283-2124-ND	1.61	1.35	1.21
PCE Series - Short Lead Length					
5A	125/250	283-2126-ND	1.61	1.35	1.21

* ***BIF document: #2034***

PC-Tron® PCB Mount Fuseholder

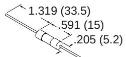


Digi-Key Part No.	Price Each 1	10	100
283-2356-ND	.61	.51	.46

* ***BIF document: #2034***

Fast-Acting and Time-Delay Glass Fuses – C518, C515 Series

.205" x .591" (5mm x 15mm)



Construction Material:
• Endcaps: Silver-plated brass • Leads: Tin-plated copper • Tube: Glass.

Agency Approvals:

C518: UL Listed (125mA-4A), CSA Component Acceptance (125mA-4A)

C520: UL Listed (125mA-5A), CSA Component Acceptance (125mA-5A)

C515 and C519: UL Listed (250mA-3A), CSA Certification (250mA-3A), UL Recognized (3.5A-7A), Telecommunication Capabilities: UL1459 and UL497.

Limits for Pre-arcing Time/UL Listed Fuses.

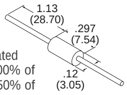
Amp	135%	110%	200%	
Rating	Max.	Min.	Min.	Max.
C518 and C520 Series				
125mA - 7A	1 hr.	4 hr.	—	2 sec.
C515 and C519 Series				
250mA - 7A	60 min.	—	3 sec.	2 min.

Current Rating	Rated Voltage (AC)	Digi-Key Part No.	Price Each 5	100	250
C518 Series (Axial)					
125mA	250	283-2360-ND	.94	.71	.63
250mA	250	283-2361-ND	.94	.71	.63
375mA	250	283-2362-ND	.94	.71	.63
500mA	250	283-2363-ND	.94	.71	.63
750mA	250	283-2364-ND	.94	.71	.63
2A	250	283-2365-ND	.72	.54	.48
2.5A	250	283-2366-ND	.72	.54	.48
3A	250	283-2367-ND	.72	.54	.48
3.5A	250	283-2368-ND	.72	.54	.48
4A	250	283-2369-ND	.72	.54	.48
5A	250	283-2370-ND	.72	.54	.48
C520 Series (No Leads)					
125mA	250	283-2371-ND	.72	.54	.48
250mA	250	283-2372-ND	.72	.54	.48
500mA	250	283-2374-ND	.49	.37	.33
750mA	250	283-2375-ND	.49	.37	.33
2.5A	250	283-2377-ND	.49	.37	.33
3A	250	283-2378-ND	.49	.37	.33
3.5A	250	283-2379-ND	.49	.37	.33
4A	250	283-2380-ND	.49	.37	.33
5A	250	283-2381-ND	.49	.37	.33
C515 Series (Axial)					
250mA	250	283-2239-ND	.75	.56	.50
375mA	250	283-2240-ND	.75	.56	.50
500mA	250	283-2241-ND	.75	.56	.50
750mA	250	283-2242-ND	.75	.56	.50
1A	250	283-2243-ND	.75	.56	.50
3.5A	125	283-2244-ND	.75	.56	.50
4A	125	283-2245-ND	.75	.56	.50
7A	125	283-2246-ND	.75	.56	.50
C519 Series (No Leads)					
250mA	250	283-2247-ND	.54	.41	.36
500mA	250	283-2249-ND	.54	.41	.36
750mA	250	283-2250-ND	.54	.41	.36
1A	250	283-2251-ND	.54	.41	.36
1.5A	250	283-2252-ND	.54	.41	.36
2A	250	283-2253-ND	.54	.41	.36
3A	250	283-2254-ND	.54	.41	.36
4A	125	283-2256-ND	.54	.41	.36
5A	125	283-2257-ND	.54	.41	.36
7A	125	283-2258-ND	.54	.41	.36

* ***BIF document: #2026 (C519 Series),***
#2027 (C520 Series),
#2006 (C515 Series),
#2007 (C519 Series)

MCR Microtron® Fuses

(Printed Circuit Board)



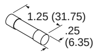
Characteristics: • Fast-Acting • Current-Limiting.
Time Current Characteristics: Rated current values 0-10 amps carry 100% of rating for 4 hours min.; open at 250% of rating in 5 seconds maximum.
Construction Material: • Body: High temperature thermoplastic, flammability rating UL 94V-O • Element: Solid Matrix, gold or silver element encapsulated in ceramic • Leads: Tin-plated copper, .64mm (.025") diameter.
Agency Approvals: UL Recognized (1/16-10A), CSA Component Acceptance (1/16-10A) and Japanese Industrial Standard (1-5A)

Current Rating	Rated Voltage (AC)	Digi-Key Part No.	Price Each 5	100	250
1/16	125/125	283-2068-ND	1.16	.87	.77
1/8	125/125	283-2069-ND	1.03	.78	.69
1/4	125/125	283-2070-ND	1.03	.78	.69
1/2	125/125	283-2072-ND	1.03	.78	.69
3/4	125/125	283-2073-ND	.81	.61	.54
1	125/125	283-2074-ND	.81	.61	.54
1-1/2	125/125	283-2075-ND	.81	.61	.54
2	125/125	283-2076-ND	.81	.61	.54
3	125/125	283-2078-ND	.81	.61	.54
4	125/125	283-2080-ND	.81	.61	.54
5	125/125	283-2081-ND	.81	.61	.54
7	60/90	283-2082-ND	.81	.61	.54
10	60/90	283-2083-ND	.81	.61	.54

* ***BIF document: #2003***

AGC Fast-Acting and MDL Time-Delay Glass Fuses

1/4" x 1-1/4" (6.35mm x 31.75mm)



Time Current Characteristics: Rated current values 0-30 amps carry 110% of rating for 4 hrs. min.; open at 135% of rating in 60 min. max. or 200% of rating in 120 sec. max.

Construction Material: • Tube: Glass • Endcaps: Albaloy plated brass

Agency Approvals:

AGC Fast-Acting: UL Recognized (15-30A), UL Listed (1/4-10A) and CSA Component Acceptance (1/4-30A)

MDL Time-Delay: UL Listed (1/4-8A), UL Recognized (9-30A), and CSA Component Acceptance (1/4-8A)

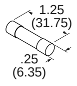
Current Rating	Rated Voltage AC/DC†	Digi-Key Part No.	Price Each 5	100	250
AGC Fast-Acting					
1/4	250/250	283-2009-ND	.62	.46	.41
3/10	250/250	283-2010-ND	.62	.46	.41
3/8	250/250	283-2011-ND	.62	.46	.41
1/2	250/250	283-2012-ND	.43	.32	.29
3/4	250/250	283-2014-ND	.43	.32	.29
1	250/250	283-2015-ND	.27	.20	.18
1-1 /4	250/250	283-2016-ND	.27	.20	.18
1-1/2	250/250	283-2017-ND	.27	.20	.18
2	250/250	283-2020-ND	.27	.20	.18
2-1/2	250/250	283-2021-ND	.27	.20	.18
3	250/250	283-2022-ND	.27	.20	.18
4	250/250	283-2023-ND	.42	.32	.28
5	250/250	283-2024-ND	.42	.32	.28
6	250/250	283-2025-ND	.42	.32	.28
7	250/250	283-2026-ND	.42	.32	.28
8	250/250	283-2027-ND	.42	.32	.28
10	250/250	283-2028-ND	.42	.32	.28
15	32/—	283-2029-ND	.30	.22	.20
20	32/—	283-2030-ND	.30	.22	.20
30	32/—	283-2031-ND	.30	.22	.20
MDL Time-Delay					
1/4	250/250	283-2167-ND	.96	.72	.64
3/10	250/250	283-2168-ND	.96	.72	.64
3/8	250/250	283-2169-ND	.96	.72	.64
1/2	250/250	283-2171-ND	.91	.69	.61
3/4	250/250	283-2174-ND	.91	.69	.61
1	250/250	283-2176-ND	.91	.69	.61
1-1/4	250/250	283-2178-ND	.69	.52	.46
1-1/2	250/250	283-2179-ND	.69	.52	.46
2	250/250	283-2182-ND	.69	.52	.46
2-1/2	250/250	283-2184-ND	.69	.52	.46
3	250/250	283-2186-ND	.69	.52	.46
3-1/2	250/250	283-2188-ND	.69	.52	.46
4	250/32	283-2189-ND	.69	.52	.46
5	250/32	283-2190-ND	.69	.52	.46
6-1/4	250/32	283-2191-ND	.69	.52	.46
7	250/32	283-2192-ND	.69	.52	.46
8	250/250	283-2193-ND	.69	.52	.46
10	32/32	283-2194-ND	1.02	.77	.68
12	32/32	283-2195-ND	1.02	.77	.68
15	32/32	283-2196-ND	1.02	.77	.68
20	32/32	283-2197-ND	1.02	.77	.68
25	32/32	283-2198-ND	1.02	.77	.68
30	32/32	283-2199-ND	1.02	.77	.68

† 1-10A, UL Rec. for 125 VDC and 500 A/C. Other DC ratings are self-certified.

* ***BIF document: #2001*** **(AGC eries),*****#2004*** **(MDL Series)**

ABC Fast-Acting and MDA Time-Delay Ceramic Fuses

1/4" x 1-1/4" (6.35mm x 31.75mm)



Time Current Characteristics: Rated current values 0-30 amps carry 110% of rating for 4 hrs. min.; open at 135% of rating in 60 min. max. or 200% of rating in 120 sec. max. **Construction Material:** Ceramic • Endcaps: Albaloy plated brass

Agency Approvals:

ABC Fast-Acting: UL Listed (1/2-15A), UL Recognized (20A), and CSA Certification (1/2-15A)

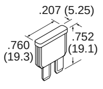
MDL Time-Delay: UL Listed (1/12-20A), CSA Certified (1/2-15A)

Current Rating	Rated Voltage AC/DC†	Digi-Key Part No.	Price Each 5	100	250
ABC Fast-Acting					
1/2	250/250	283-2095-ND	1.67	1.25	1.11
3/4	250/250	283-2096-ND	.76	.57	.51
1	250/250	283-2097-ND	.71	.54	.48
2	250/—	283-2098-ND	.71	.54	.48
3	250/—	283-2099-ND	.71	.54	.48
4	250/250	283-2100-ND	.71	.54	.48
5	250/250	283-2101-ND	.68	.51	.45
6	250/—	283-2102-ND	.68	.51	.45
8	250/—	283-2104-ND	.68	.51	.45
10	250/250	283-2105-ND	.68	.51	.45
12	250/—	283-2106-ND	.68	.51	.45
15	250/250	283-2107-ND	.68	.51	.45
20	250/—	283-2108-ND	1.01	.76	.67
30	125/—	283-2110-ND	1.01	.76	.67
MDA Time Delay					
1/2	250/250	283-2289-ND	1.71	1.28	1.14
1	250/250	283-2293-ND	1.71	1.28	1.14
2	250/—	283-2297-ND	1.71	1.28	1.14
3	250/250	283-2300-ND	1.19	.89	.79
4	250/—	283-2302-ND	1.19	.89	.79
5	250/—	283-2303-ND	1.19	.89	.79
6	250/—	283-2304-ND	1.19	.89	.79
8	250/—	283-2307-ND	1.19	.89	.79
10	250/250	283-2308-ND	1.19	.89	.79
12	250/—	283-2309-ND	1.19	.89	.79
15	250/250	283-2310-ND	1.19	.89	.79
20	250/—	283-2311-ND	1.19	.89	.79
30	250/—	283-2313-ND	1.19	.89	.79

† DC ratings are self-certified.

* ***BIF document: #2000*** **(ABC Fast-Acting Series),**
#2002 **(MDA Time-Delay Series)**

ATC® Blade-Type Automotive Fuses



Rated Voltage: 32 VDC
Characteristics: Fast-Acting
Agency Approvals: UL Recognized (3-30A)

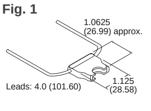
Current Rating	Color Code	Digi-Key Part No.	Price Each 5	100	250
3	Violet	283-2314-ND	.39	.35	.31
4	Pink	283-2315-ND	.39	.35	.31
5	Tan	283-2316-ND	.39	.35	.31
7-1/2	Brown	283-2317-ND	.39	.35	.31
10	Red	283-2318-ND	.39	.35	.31
15	Blue	283-2319-ND	.39	.35	.31
20	Yellow	283-2320-ND	.39	.35	.31
25	Clear	283-2321-ND	.39	.35	.31
30	Green	283-2322-ND	.39	.35	.31

* ***BIF document: #2009***

ATC® Blade Type Holders

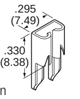
Rated Current: 3-20 Amps.
Rated Voltage: 32V DC, 16AWG wire 4" (101.60mm) length

Fig. 1



Bussman #HHC

Fig. 2



Bussman
#1A5600

Fig. No.	Description	Digi-Key Part No.	Price Each 1	10	100
1	In-Line for ATC	283-2357-ND	2.54	2.25	1.72
2	Fuse Clip ATC Brass with Tin Plate	283-2336-ND	.43	.37	.28

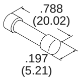
* ***BIF document: #2107*** **(for 283-2357-ND),**
#2131 **(for 283-2336-ND).**

COOPER Bussmann

Metric Ferrule Fuses

5mm x 20mm (.205” x .787”)

GDA (S501†) - Fast Acting, High Breaking Capacity
GDB (S500§) - Fast Acting, Low Breaking Capacity
GDC (S506‡) - Time-Delay, Low Breaking Capacity



Construction Material: • Tube: Ceramic (GDA Series), Glass (GDB and GDC Series) • End Caps: Nickel or silver-plated brass. **Agency Approvals: GDA Series:** VDE (4 & 6.3A), Semko (400mA-6.3A), IMQ (2-6.3A) and UL Recognized (400mA-6.3A). **GDB and GDC Series:** BSI (100mA-6.3A), VDE (100mA-6.3A), Semko (100mA-400mA, 800mA-6.3A), IMQ (100mA-6.3A) and UL Recognized (100mA-6.3A)

Limits for Pre-arcing Time/UL Listed Fuses.

Amp Rating	150% Min.	210% Max.	275% Min–Max.	400% Min–Max.	1000% Max.
*GDA Series**					
100mA - 3.15A	60 min.	30 min.	10ms.- 2 sec.	3 ms.- 300 ms.	20 ms.
4A - 6.3A	60 min.	30 min.	10ms.- 3sec.	3 ms.- 300 ms.	20 ms.
*GDB Series**					
100mA	60 min.	30 min.	10ms.- 500ms.	3ms.- 100ms.	20 ms.
125mA - 6.3A	60 min.	30 min.	50ms.- 2sec.	10ms.- 300ms.	20 ms.
8A - 10A	60 min.	30 min.	—	—	40 ms.
*GDC Series**					
100mA	60 min.	2 min.	200ms.- 10sec.	40ms.- 3sec.	10ms.- 300ms.
125mA - 6.3A	60 min.	2 min.	600ms.- 10sec.	150ms.- 3sec.	20ms.- 300ms.

Current Rating	Rated Voltage (AC)	Digi-Key Part No.	Price Each 5	100	250
GDA (S501†) - Fast-Acting, High Breaking					
100mA	250	283-2384-ND	1.30	.98	.87
160mA	250	283-2386-ND	1.30	.98	.87
400mA	250	283-2388-ND	1.30	.98	.87
630mA	250	283-2390-ND	1.08	.81	.72
800mA	250	283-2391-ND	1.08	.81	.72
1A	250	283-2392-ND	1.08	.81	.72
1.6A	250	283-2394-ND	1.08	.81	.72
2A	250	283-2395-ND	1.08	.81	.72
2.5A	250	283-2396-ND	1.08	.81	.72
3.15A	250	283-2397-ND	1.08	.81	.72
4A	250	283-2398-ND	1.08	.81	.72
5A	250	283-2399-ND	1.08	.81	.72
6.3A	250	283-2400-ND	1.08	.81	.72
GDB (S500§) - Fast-Acting, Low Breaking					
100mA	250	283-2405-ND	1.30	.98	.87
125mA	250	283-2406-ND	1.30	.98	.87
160mA	250	283-2407-ND	.74	.56	.49
250mA	250	283-2409-ND	.74	.56	.49
315mA	250	283-2410-ND	.74	.56	.49
500mA	250	283-2412-ND	.23	.18	.16
630mA	250	283-2413-ND	.23	.18	.16
800mA	250	283-2414-ND	.23	.18	.16
1A	250	283-2415-ND	.23	.18	.16
1.25A	250	283-2416-ND	.23	.18	.16
1.6A	250	283-2417-ND	.23	.18	.16
2A	250	283-2418-ND	.23	.18	.16
2.5A	250	283-2419-ND	.23	.18	.16
3.15A	250	283-2420-ND	.23	.18	.16
4A	250	283-2421-ND	.23	.18	.16
5A	250	283-2422-ND	.23	.18	.16
6.3A	250	283-2423-ND	.23	.18	.16
8A◊	250	283-2424-ND	.84	.63	.56
10A◊	250	283-2425-ND	.84	.63	.56
GDC (S506‡) - Time-Delay, Low Breaking					
100mA	250	283-2263-ND	.94	.71	.63
125mA	250	283-2264-ND	.94	.71	.63
160mA	250	283-2265-ND	.94	.71	.63
250mA	250	283-2267-ND	.94	.71	.63
315mA	250	283-2268-ND	.94	.71	.63
400mA	250	283-2269-ND	.94	.71	.63
500mA	250	283-2270-ND	.68	.51	.45
630mA	250	283-2271-ND	.68	.51	.45
800mA	250	283-2272-ND	.68	.51	.45
1A	250	283-2273-ND	.68	.51	.45
1.25A	250	283-2274-ND	.68	.51	.45
1.6A	250	283-2275-ND	.68	.51	.45
2A	250	283-2276-ND	.68	.51	.45
2.5A	250	283-2277-ND	.68	.51	.45
3.15A	250	283-2278-ND	.68	.51	.45
4A	250	283-2279-ND	.68	.51	.45
5A	250	283-2280-ND	.68	.51	.45
6.3A	250	283-2281-ND	.68	.51	.45

† S501 is a European designation. In North America use GDA respectively when referencing product.

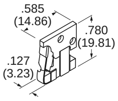
§ S500 is a European designation. In North America use GDB respectively when referencing product.

‡ S506 is a European designation. In North America use GDC respectively when referencing product.

◊ IEC Standard 127 Sheet II does not include ratings above 6.3 amps.

* ***BIF document: #2014*** **(GDA Series),**
#2015 **(GDB Series),**
#2016 **(GDC Series)**

GMT Indicating Fuse



Rated Voltage: 125VAC, 60VDC.

Characteristics: • Fast Acting.

TIme Current Characteristics: Rated current values 1/4-15 amps carry 100% of rating for 10 minutes min.; open at 150% of rating in 5 minutes max.

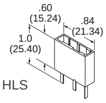
Construction Material: • Body: Thermoplastic, U.L. 94VO flammability rating • Terminals: Tin plated Beryllium Copper

Agency Approvals: UL Recognized

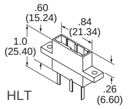
Current Rating	Color Code	Digi-Key Part No.	Price Each 1	10	100
1/4	Violet	283-2051-ND	2.15	1.98	1.49
1/2	Red	283-2053-ND	2.15	1.98	1.49
3/4	Brown	283-2055-ND	2.15	1.98	1.49
1	Gray	283-2056-ND	2.15	1.98	1.49
1-1/3	White	283-2057-ND	2.15	1.98	1.49
1-1/2	White/Ylw.	283-2058-ND	2.15	1.98	1.49
2	Orange	283-2059-ND	2.15	1.98	1.49
3	Blue	283-2060-ND	2.15	1.98	1.49
4	White/Brn.	283-2062-ND	2.15	1.98	1.49
5	Green	283-2063-ND	2.15	1.98	1.49
7-1/2	Blk./White	283-2064-ND	2.04	1.89	1.42
10	Red/White	283-2065-ND	2.15	1.98	1.49
15	Red/Blue	283-2067-ND	2.15	1.98	1.49

* ***BIF document: #5008***

Fuseholders for GMT Type Indicating Fuse



HLS



HLT

PC Mount.

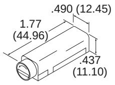
Electrical Rating: 15A (60V DC). **Construction Material:** • Body: Thermosplastic, UL-94V0 flammability rating • Terminals: Tin-plated bifrucated copper. **Agency Approval:** UL Recognized

Description	Digi-Key Part No.	Price Each 1	10	100
No Flange - HLS	283-2358-ND	2.00	1.84	1.50
With Flange - HLT	283-2359-ND	1.81	1.66	1.36

* ***BIF document: #5010***

HBH-I and HBH-M Fuseholders

for 1/4” x 1-1/4” (6.35mm x 31.75mm) & .205” x .591” (5mm x 20mm) fuses



Horizontal PCB Mount

Electrical Ratings: UL-16A @ 250V and CSA - 12A @ 250V

Agency Approvals: UL Recognized, CSA Certified, VDE, and SEMKO

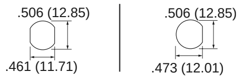
Description	Digi-Key Part No.	Price Each 1	10	Mfg. Part No.
For 1/4 x 1-1/4 (6.35 x 31.75) fuses	283-2351-ND	2.84	2.63	HBH-I
For .205 x .591 (5 x 20) fuses	283-2352-ND	3.67	3.39	HBH-M

* ***BIF document: #2118***

HTB Panel Mount Fuseholders

for 1/4” x 1-1/4” (6.35mm x 31.75mm) & .205” x .591” (5mm x 20mm) fuses

Common Mounting Hole — HTB 2, 3, 4, & 5

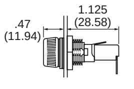


Construction Material: • Terminals: Tin-plated brass • Molded Components: Thermoplastic; UL Component Recognized; 94V0; mounting nut, spacer-black polycarbonate.

Agency Approvals: UL Recognized: 20A (3/16” quick-connect 15A) @ 250V, CSA: 16A @ 250V; Screwdriver slot carrier only, VDE: 10A @ 250V and SEMKO: 10A @ 250V.

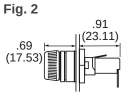
Common Dimensional Data: • Length (Knob Type) — 1.69” (42.9mm) Plus In-Line Terminal (Screwdriver Slotted) 1.75” (44.5mm). Note: Plus In-LIne Terminal

Fig. 1



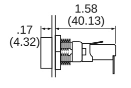
HTB-2: Low Profile Rear Hex Nut

Fig. 2



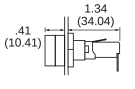
HTB-4: High Profile Rear Hex Nut

Fig. 3



HTB-3: Low Profile Rear Hex Nut

Fig. 4



HTB-5: High Profile Rear Hex Nut

TERMINAL OPTIONS

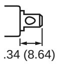
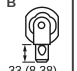
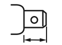
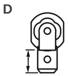
Solder - 3/16” (4.76mm) Quick-Connect		1/4” (6.35mm) Quick-Connect	
A	B	C	D
			
.34 (8.64)	.33 (8.38)	.47 (11.94)	.45 (11.43)
In-Line	Right Angle	In-Line	Right Angle

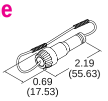
Fig. No.	Term. Opt.	Fuse Accept. In.(mm)	Panel Thick. In.(mm)	Digi-Key Part No.	Price Each 1	10
1	B	1/4x1-1/4 (6.35x31.75)	.30 (7.62)	283-2345-ND	2.52	2.33
1	B	.205x.591 (5x20)	.30 (7.62)	283-2354-ND	2.69	2.49
2	A	1/4x1-1/4 (6.35x31.75)	.125 (3.18)	283-2348-ND	2.80	2.59
2	B			283-2346-ND	2.94	2.72
2	B			283-2347-ND†	2.92	2.70
2	C			283-2349-ND	3.16	2.92
2	D			283-2350-ND	3.16	2.92
3	B	.205x.591 (5x20)	.30 (7.62)	283-2353-ND	2.69	2.49
4	B	1/4x1-1/4 (6.35x31.75)	.125 (3.18)	283-2344-ND	2.52	2.33

† Splash Proof Seal

* ***BIF document: #2119***

HRK Universal In-Line Fuseholder

for 1/4” x 7/8” to 1-1/4” (6.35mm x 22.23mm x 31.75mm) Fuses



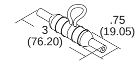
Specifications: • Three springs furnished with fuseholder afford acceptance of 1/4” (6.35mm) fuses of different lengths • Wire leads are staked and soldered to the contacts of the fuseholder • Leads are 8” (20.3mm) long • Wire size - #14

Amps	Volts AC	Digi-Key Part No.	Price Each 1	10	100	Mfg. Part No.
15	32	283-2343-ND	3.16	2.92	2.19	HRK

* ***BIF document: #2111***

HFB Waterproof In-Line Fuseholder

for 1/4” x 1-1/4” (6.35mm x 31.75mm) Fuses



Construction Material: • Body: Thermoplastic rubber • Contacts: Albaloy plated copper

Amps	Volts AC	Digi-Key Part No.	Price Each 1	10	100	Mfg. Part No.
30	32	283-2355-ND	4.57	4.15	3.74	HFB-10

* ***BIF document: #2102***

KEYSTONE ELECTRONICS CORP.

Fuseholder Boards

For 1/4" (6.35mm)

Assembled with .125” (3.18mm) thick black phenolic

Fig.	Digi-Key Part No.	Price Each 1	10	100
1	3536K-ND	.87	.79	.58
2	3537K-ND	1.57	1.43	1.05
3	3538K-ND	2.36	2.14	1.57
4	3539K-ND	3.10	2.81	2.06
5	3522-2K-ND	.61	.44	.35
6	3522-3K-ND	.81	.59	.47
7	4527K-ND	—	.36	.31
—	4527CK-ND	1.50/10	12.70/100	58.00/500

Fig. 1 - (3AG)

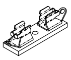


Fig. 2 - (3AG)

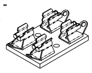


Fig. 3 - (3AG)

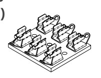
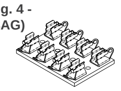


Fig. 4 - (3AG)



Auto Fuse Holders

Fig. 5

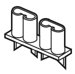


Fig. 6

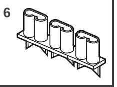
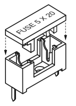


Fig. 7
PC 5mm Fuse Holder

Order cover separately:
4527CK-ND



COOPER Bussmann

Printed Circuit Board Fuseclips

Fig. 1

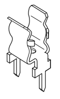


Fig. 2

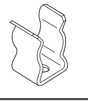


Fig. 3

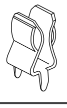


Fig. 4

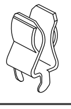


Fig. 5

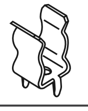


Fig.	Accepts Fuse (Dia.) In. (mm)	End Stop	Lead Type	Clip Material†	Finish	Digi-Key Part No.	Price Each 10	100	250	Cooper/ Bussmann Part No.
1	.20 (5)	yes	Straight	Spring Bronze	Bright Tin	283-2335-ND	.18	.14	.12	1A5018-10
2	1/4 (6.35)	no	None	Spring Bronze	Bright Tin	283-2337-ND	.18	.14	.12	5681-15
3	1/4 (6.35)	yes	Straight	Spring Bronze	Bright Tin	283-2338-ND	.14	.11	.09	1A1907-06
3	1/4 (6.35)	no	Straight	Spring Bronze	Bright Tin	283-2339-ND	.19	.14	.13	1A3398-07
4	1/4 (6.35)	yes	Angled-In	Spring Bronze	Bright Tin	283-2341-ND	.25	.19	.17	1A1119-10
3	1/4 (6.35)	yes	Straight	Beryllium Copper	Silver	283-2342-ND	.57	.43	.38	1A1907-05
5	1/4 (6.35)	no	Angled-In	Spring Bronze	Bright Tin	283-2340-ND	.25	.19	.17	1A1120-09

† Beryllium copper recommended for currents higher than 15 amps (1/4” or 6.35mm clips).

* ***BIF document: #2131 (#2132 for Digi-Key Part No.283-2337-ND)***

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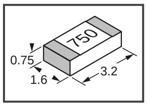
Surface Mount Chip Fuse Fast-Acting 3216 (1206) — UL 248-14



Approvals: cULus Recognized **Soldering Conditions:** 235°C, 2 sec. (wave); 215°C, 3 sec. (reflow) **Material:** Housing: Ceramic substrate, Glass encapsulated. Terminals: Tinned, metallized

Electrical Characteristics:

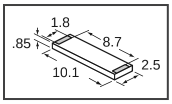
Rated Current	Pre-arcing Rating 100%	250%
750mA - 2.00A	4 hr. min.	5 sec. max.

Amp Rtg.	Volt. Rtg.	Digi-Key Part No.	Cut Tape Price Each 1	10	T & R Pricing* 3,000
		Fast-Acting 443 Series			
.750	63	WK4660CT-ND	.79	.74	360.00/M
1.00	63	WK4661CT-ND	.79	.74	360.00/M
1.50	63	WK4662CT-ND	.79	.74	360.00/M
2.00	63	WK4663CT-ND	.79	.74	360.00/M

* For Tape and Reel part number, change CT-ND to TR-ND.

• FaxBack Document #321

NEW! SMD Telecom Chip Protector - Transient Tolerant (T)



Approvals: UL 1950 3rd Edition FCC 47 Part 68, cULus Recognized **Material:** Housing: Ceramic substrate. Element: Metal film. Terminals: Tinned, metallized **Features:** • Surge proof for telecom line applications • Irreversible physical separation under fault • Highly defined cut-off times • Low internal resistance

Electrical Characteristics:

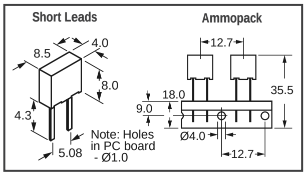
Rated Current	Pre-arcing Rating 100%	300%
500mA - 2.00A	>4 hr. min.	<2 min.

Amp Rtg.	Volt. Rtg.	Digi-Key Part No.	Cut Tape Price Each 1	10	T & R Pricing* 3,000
		456 Series			
.500	125	WK6204CT-ND	1.64	1.53	748.80/M
1.50	125	WK6205CT-ND	1.64	1.53	748.80/M
2.00	125	WK6206CT-ND	1.64	1.53	748.80/M

* For Tape and Reel part number, change CT-ND to TR-ND.

• FaxBack Document #327

TIP Telecom Duty Fuses (Telecom Interface Protector)



Approvals: cULus Recognized, File No. E67006. Complies to FCC 47 Part 68; Bellcore GR-1089. **Features:** • For UL1950 3rd Edition applications • Highly defined cutoff times • Flame resistant encapsulated casing • Low internal resistance • Irreversible physical separation • Stable characteristics under varying temperatures. **Max. Fault Currents:** ≤50A at 125 VAC; ≤35A at 125 VDC. **Material:** Base and Cap: Brown thermoplastic (polyamide PA 6.6), UL 94-V0; Round Pins: Copper alloy, tin-plated

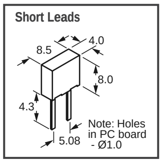
Electrical Characteristics:

Rated Current	Pre-arcing Rating 100%	300%
350mA - 1.50A	2 hr. min.	300ms...5s

Amp Rtg.	Volt. Rtg.	Digi-Key Part No.	Bulk Price Each 1	10	Tape & Ammo-Pk. Pricing 1,250
		TIP 385 Series			
.350	125	WK4560BK-ND	.59	.55	216.00/M
1.00	125	WK4563BK-ND	.52	.48	209.00/M†
1.25	125	WK4564BK-ND	.50	.46	200.00/M†
1.50	125	WK4565BK-ND	.52	.48	189.00/M

* For Tape and Ammo Pack #, change CT-ND to TB-ND.
† Package size is 1,400. **• FaxBack Document #314**

T^2CP Telecom Duty Fuses – UL 248-14, 125V



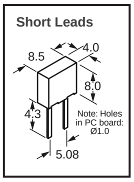
Approvals: UL, cUL listed, (.350A - 1.50A) **Description:** Used in telecom applications for line protection, this fuse has a higher melting integral than a standard time-lag fuse. Can be utilized in conjunction with across line surge protection for added protection of sensitive telecom equipment • **Material:** Base and Cap: Brown thermoplastic UL 94-V0. Round Pins: Copper alloy, tin-plated • **Soldering Heat Resistance:** 260°C, 10s (IEC 60068-2-20) • Plug-in holders available (WK0009-ND)

Series	Rated Current	Pre-arcing Rating 200%	570%	1700%
397	350mA-1.50A	<60 sec.	80ms 2 sec.	<200 ms

Amp Rtg.	Volt. Rtg.	Digi-Key Part No.	Bulk Price Each 1	10	100
		397 Series			
.350	125	WK4538BK-ND	.56	.52	.38
.500	125	WK4541BK-ND	.57	.52	.38
1.00	125	WK4548BK-ND	.50	.46	.34
1.25	125	WK4550BK-ND	.48	.45	.33
1.50	125	WK4552BK-ND	.48	.45	.33

• FaxBack Document #303

TE5 Sub-Miniature Fuses – UL 248-14



Approvals (395 and 396 Series): cUL Listed, UL Listed for .050A-6.30A. MITI approved for 1.00A-5.00A. **Features:** • Fast-acting and time-lag • Material: Brown thermoplastic UL 94-V0. Round Pins: Copper alloy, tin-plated • Soldering Heat Resistance: 260°C, 10s (IEC 60068-2-20) • Plug-in holders available.

Electrical Characteristics:

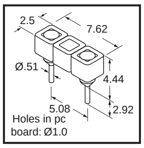
Series	Rated Current	Pre-arcing Rating 100%	200%
395	50mA-6.3A	> 4 hr.	< 5 sec.
396	50mA-6.3A	> 4 hr.	< 60 sec.

Breaking Capacity: 100A at 125VAC

Amp Rtg.	Volt. Rtg.	Digi-Key Part No.	Bulk Price Each 1	10	100
		Fast-Acting 395 Series			
.050	125	WK4322BK-ND	2.12	1.94	1.41
.063	125	WK4325BK-ND	1.71	1.57	1.14
.080	125	WK4326BK-ND	1.67	1.54	1.12
.100	125	WK4327BK-ND	1.64	1.50	1.09
.125	125	WK4328BK-ND	.56	.52	.38
.160	125	WK4330BK-ND	.56	.52	.38
.200	125	WK4334BK-ND	.56	.52	.38
.250	125	WK4335BK-ND	.56	.52	.38
.315	125	WK4337BK-ND	.56	.52	.38
.400	125	WK4340BK-ND	.56	.52	.38
.500	125	WK4341BK-ND	.56	.52	.38
.630	125	WK4343BK-ND	.56	.52	.38
.800	125	WK4346BK-ND	.56	.52	.38
1.00	125	WK4348BK-ND	.56	.52	.38
1.25	125	WK4350BK-ND	.56	.52	.38
1.60	125	WK4353BK-ND	.56	.52	.38
2.00	125	WK4357BK-ND	.56	.52	.38
2.50	125	WK4358BK-ND	.56	.52	.38
3.15	125	WK4324BK-ND	.56	.52	.38
4.00	125	WK4362BK-ND	.56	.52	.38
5.00	125	WK4363BK-ND	.56	.52	.38
6.30	125	WK4366BK-ND	.56	.52	.38
		Time-Lag 396 Series			
.050	125	WK4422BK-ND	1.08	1.00	.73
.063	125	WK4425BK-ND	1.17	1.08	.79
.080	125	WK4426BK-ND	.94	.87	.63
.100	125	WK4427BK-ND	.81	.75	.55
.125	125	WK4428BK-ND	.79	.73	.53
.160	125	WK4430BK-ND	.72	.66	.48
.200	125	WK4434BK-ND	.72	.66	.48
.250	125	WK4435BK-ND	.68	.63	.46
.315	125	WK4437BK-ND	.68	.63	.46
.400	125	WK4440BK-ND	.68	.63	.46
.500	125	WK4441BK-ND	.65	.60	.44
.630	125	WK4443BK-ND	.62	.57	.41
.800	125	WK4446BK-ND	.62	.57	.41
1.00	125	WK4448BK-ND	.62	.57	.41
1.25	125	WK4450BK-ND	.62	.57	.41
1.60	125	WK4453BK-ND	.62	.57	.41
2.00	125	WK4457BK-ND	.62	.57	.41
2.50	125	WK4458BK-ND	.62	.57	.41
3.15	125	WK4424BK-ND	.62	.57	.41
4.00	125	WK4462BK-ND	.62	.57	.41
5.00	125	WK4463BK-ND	.62	.57	.41
6.30	125	WK4466BK-ND	.62	.57	.41

• FaxBack Document #302

TE5 Fuseholder

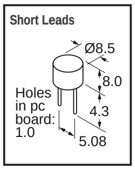


Material:
Black thermoplastic UL 94-V0. Terminals – Brass, tin-plated for soldering
Rated Values: 250V; 6.3A; UL Recognized

WK0009-ND .... **$.41/1**
$3.71/10
$27.00/100

• FaxBack Document #304

TR5 Sub-Miniature Fuses – IEC 60127-3



Approvals: 370 Series: Semko Approved, VDE Approved, cULus Recognized, (0.050A-4.00A). **372 Series:** Semko Approved, cULus Recognized, (0.050A-5.00A), VDE Approved (0.050A-4.00A). **382 Series:** VDE, SEMKO (1.00-4.00A), cULus Recognized, MITI(1.00-5.00A) **Material:** Base and Cap: Brown thermoplastic UL94-V0, insulated. Round Pins: Copper alloy, tin-plated. **Features:** • Fast-acting and Time-lag • Soldering Heat Resistance: 260°C, 10s (IEC 60068-2-20) • Plug-in holders available

Electrical Characteristics:

Pre-arcing Rating 150%	210%	275%	400%	1000%
Series 370 — 50mA-4.0A				
>1 hr.	<30 min.	10ms -3sec.	3-300ms	<20ms
Series 372 — 50mA-5.00A				
>1 hr.	<2 min.	400ms-10sec.	150ms-3sec.	20-150ms
Series 382 — 1.00A-5.00A				
>1 hr.	<2 min.	400ms-10sec.	150ms-3sec.	20-150ms

BREAKING CAPACITY:

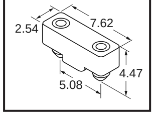
370 and 372 Series: 35A at 250VAC for (.050-3.15A), 40A for (4.00A), 50A for (5.00A)

382 Series: 100A at 250VAC (1.00-5.00A)

Amp Rtg.	Volt. Rtg.	Digi-Key Part No.	Bulk Price Each 1	10	100
		Fast-Acting 370 Series			
.050	250	WK4922BK-ND	1.20	1.11	.81
.063	250	WK4925BK-ND	1.17	1.08	.78
.080	250	WK4926BK-ND	1.17	1.08	.78
.100	250	WK4927BK-ND	1.17	1.08	.78
.125	250	WK4928BK-ND	1.17	1.08	.78
.160	250	WK4930BK-ND	.45	.42	.30
.200	250	WK4934BK-ND	.45	.42	.30
.250	250	WK4935BK-ND	.45	.42	.30
.315	250	WK4937BK-ND	.45	.42	.30
.400	250	WK4940BK-ND	.45	.42	.30
.500	250	WK4941BK-ND	.45	.42	.30
.630	250	WK4943BK-ND	.45	.42	.30
.800	250	WK4946BK-ND	.45	.42	.30
1.00	250	WK4948BK-ND	.45	.42	.30
1.25	250	WK4950BK-ND	.45	.42	.30
1.60	250	WK4953BK-ND	.45	.42	.30
2.00	250	WK4957BK-ND	.45	.42	.30
2.50	250	WK4958BK-ND	.45	.42	.30
3.15	250	WK4924BK-ND	.45	.42	.30
4.00	250	WK4962BK-ND	.45	.42	.30
		NEW! Time-Lag High Breaking 382 Series (IEC 60127-3/IV)			
1.00	250	WK6207BK-ND	.51	.47	.34
2.00	250	WK6208BK-ND	.51	.47	.34
2.50	250	WK6209BK-ND	.51	.47	.34
3.15	250	WK6210BK-ND	.51	.47	.34
4.00	250	WK6211BK-ND	.51	.47	.34
5.00	250	WK6212BK-ND	.51	.47	.34
		Time-Lag 372 Series			
.050	250	WK4222BK-ND	.68	.63	.46
.063	250	WK4225BK-ND	.65	.60	.44
.080	250	WK4226BK-ND	.59	.54	.39
.100	250	WK4227BK-ND	.59	.54	.39
.125	250	WK4228BK-ND	.53	.49	.36
.160	250	WK4230BK-ND	.53	.49	.36
.200	250	WK4234BK-ND	.51	.47	.34
.250	250	WK4235BK-ND	.51	.47	.34
.315	250	WK4237BK-ND	.51	.47	.34
.400	250	WK4240BK-ND	.51	.47	.34
.500	250	WK4241BK-ND	.51	.47	.34
.630	250	WK4243BK-ND	.51	.47	.34
.800	250	WK4246BK-ND	.51	.47	.34
1.00	250	WK4248BK-ND	.51	.47	.34
1.25	250	WK4250BK-ND	.51	.47	.34
1.60	250	WK4253BK-ND	.51	.47	.34
2.00	250	WK4257BK-ND	.51	.47	.34
2.50	250	WK4258BK-ND	.51	.47	.34
3.15	250	WK4224BK-ND	.51	.47	.34
4.00	250	WK4262BK-ND	.54	.50	.37
5.00	250	WK4263BK-ND	.54	.50	.37

• FaxBack Document #300

TR5 / TE5 SMT Fuseholder



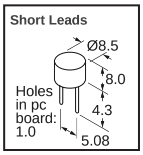
Material:
Black thermoplastic UL 94-V0. Terminals; Brass, tin-plated.
- UL Recognized

Amp Rtg.	Volt. Rtg.	Digi-Key Part No.	Cut Tape Price Each 1	10	T & R Pricing* 1,500
6.3	250	WK0010CT-ND	.47	.43	195.00/M

* For Tape and Reel part #, change CT-ND to TR-ND.

• FaxBack Document #304

TR5 Sub-Miniature Fuses – UL 248-14



Approvals: 373 and 374 Series: UL Listed, CSA Certified Approved (.050A-6.30A) **Material:** Base and cap: Brown thermoplastic UL 94-V0, insulated. Round Pins: Copper alloy, tin-plated **Features:** • Fast-acting and Time-lag • Soldering Heat Resistance: acc. to IEC 68, part 2-20, 260°C, 10sec • Plug-in holders available

Electrical Characteristics:

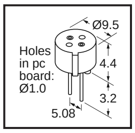
Series	Rated Current	Pre-arcing Rating 100%	200%
373 & 378	50mA-10.A	4 hr. min.	5 sec. max.
374 & 379	50mA-10.00A	4 hr. min.	60 sec.max.

Amp Rtg.	Volt. Rtg.	Digi-Key Part No.	Bulk Price Each 1	10	100
		Fast-Acting 373 Series			
.050	250	WK3022BK-ND	2.24	2.05	1.49
.063	250	WK3025BK-ND	1.70	1.57	1.14
.080	250	WK3026BK-ND	1.67	1.53	1.11
.100	250	WK3027BK-ND	1.64	1.50	1.09
.125	250	WK3028BK-ND	.55	.51	.37
.160	250	WK3030BK-ND	1.42	1.31	.95
.200	250	WK3034BK-ND	1.42	1.31	.95
.250	250	WK3035BK-ND	.55	.51	.37
.315	250	WK3037BK-ND	.55	.51	.37
.400	250	WK3040BK-ND	.55	.51	.37
.500	250	WK3041BK-ND	.55	.51	.37
.630	250	WK3043BK-ND	.55	.51	.37
.800	250	WK3046BK-ND	.55	.51	.37
1.00	250	WK3048BK-ND	.55	.51	.37
1.25	250	WK3050BK-ND	.55	.51	.37
1.60	250	WK3053BK-ND	.55	.51	.37
2.00	250	WK3057BK-ND	.55	.51	.37
2.50	250	WK3058BK-ND	.55	.51	.37
3.15	250	WK3024BK-ND	.55	.51	.37
4.00	250	WK3062BK-ND	.55	.51	.37
5.00	250	WK3063BK-ND	.55	.51	.37
6.30	250	WK3066BK-ND	.55	.51	.37
		Fast-Acting 378 Series			
10.00	250	WK3071BK-ND†	.57	.52	.38
		Time-Lag 374 Series			
.050	250	WK4022BK-ND	1.13	1.04	.76
.063	250	WK4025BK-ND	1.20	1.10	.80
.080	250	WK4026BK-ND	.96	.89	.65
.100	250	WK4027BK-ND	.84	.77	.56
.125	250	WK4028BK-ND	.82	.76	.55
.160	250	WK4030BK-ND	.73	.67	.49
.200	250	WK4034BK-ND	.73	.67	.49
.250	250	WK4035BK-ND	.68	.62	.45
.315	250	WK4037BK-ND	.68	.62	.45
.400	250	WK4040BK-ND	.68	.62	.45
.500	250	WK4041BK-ND	.62	.57	.41
.630	250	WK4043BK-ND	.62	.57	.41
.800	250	WK4046BK-ND	.62	.57	.41
1.00	250	WK4048BK-ND	.62	.57	.41
1.25	250	WK4050BK-ND	.62	.57	.41
1.60	250	WK4053BK-ND	.62	.57	.41
2.00	250	WK4057BK-ND	.62	.57	.41
2.50	250	WK4058BK-ND	.62	.57	.41
3.15	250	WK4024BK-ND	.62	.57	.41
4.00	250	WK4062BK-ND	.62	.57	.41
5.00	250	WK4063BK-ND	.62	.57	.41
6.30	250	WK4066BK-ND	.63	.58	.42
		Time-Lag 379 Series			
10.00	250	WK4071BK-ND†	.67	.62	.45

† Does not carry UL/CSA approvals.

• FaxBack Document #301

TR5 Fuseholder



Material:
Black Thermoplastic, UL 94-V0. Terminals; brass, tin-plated
Rated Values:
250V; 6.3A

WK0001-ND .... **$.56/1;**
$5.09/10;
$37.00/100

• FaxBack Document #304

WICKMANN

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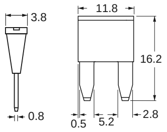
FUN Blade Fuses – 125 Volt



Color-coded thermoplastic body.

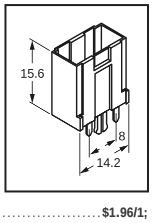
Pending: cULus Recognized.

Rating: 125VDC

Amp Rtg.	Color Code	Digi-Key Part No.	Bulk Price Each 1	10	100
Series 125.6785 — 125VDC					
3 A	Violet	WK5101-ND	2.52	2.31	1.68
4 A	Pink	WK5102-ND	2.52	2.31	1.68
5 A	Lt. Brown	WK5103-ND	2.52	2.31	1.68
7.5 A	Brown	WK5104-ND	2.52	2.31	1.68
10 A	Red	WK5105-ND	2.52	2.31	1.68
15 A	Lt. Blue	WK5106-ND	2.52	2.31	1.68

• FaxBack Document #407

FL1 Blade Fuseholder



Mounting:
Interlocking blocks, PC Board, 2 pins and center pivot

Material:
Body: Black thermoplastic, UL 94-V0

Metal Parts: Copper alloy, corrosion protection

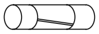
Terminals: plated for soldering

Rated Values: 125V, 20A

WK5201-ND **$1.96/1; $17.99/10; $130.80/100**

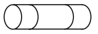
• FaxBack Document #513

IEC 60127-2 Metric (5x20mm) Fuses



193 & 195 Series – Glass

• FaxBack Document #202



181 & 194 Series – Ceramic

• FaxBack Document #203

Approvals:

193 Series: SEMKO Approved, VDE Approved (.050A-6.30A), cULus Recognized (0.050A-6.30A)

194 Series: SEMKO Approved, VDE Approved (0.200A-6.30A), cULus Recognized (0.315A-10A)

181 Series: SEMKO Approved, BSI Approved, VDE Approved, IMQ Approved, cULus Recognized (1.0–10A), SEV Approved, MITI (1-5A), CCEE (1.25-6.3A)

195 Series: SEMKO Approved, VDE Approved, BSI Approved, IMQ Approved (0.032A–6.30A), cULus Recognized (0.032A-12.50A)

Electrical Characteristics:

Series	Rated Current	Pre-arcing Rating 150%	210%	275%	400%	1000%
193	**0.050 .100A**	> 1 hr.	< 30 min.	10-500ms	3-100 ms	<20 ms
	.125 6.3A	> 1 hr.	< 30 min.	50ms-2 sec.	10-300ms	<20 ms
194	**0.200 3.15A**	> 1 hr.	< 30 min.	10ms-2 sec.	3-300 ms	<20 ms
	4.0-6.3A	> 30 min.	< 30 min.	10ms-3 sec.	3-300 ms	<20 ms
	8.0 10.0A	> 30 min.	> 1 hr.	10ms-3 sec.	3-300 ms	<20 ms
181	**1.00-3.15A**	> 1 hr.	< 30 min.	1-80 sec.	95ms-5sec.	10-100ms
	4.00-6.3A	> 1 hr.	< 30 min.	1-80 sec.	150ms-5sec.	20-100ms
	8.00-10.0A	> 1 hr.	< 30 min.	—	60ms-5sec.	10-100ms
195	**0.032 .100A**	> 1 hr.	< 2 min.	200ms-10 sec.	40ms-3 sec.	10-300 ms
	.125-6.3A	> 1 hr.	< 2 min.	600ms-10 sec.	150 ms-3 sec.	20-300 ms
	8.0 16.0A	> 30 min.	< 10 min.	—	—	20-300 ms

BREAKING CAPACITY:
193 Series: 35A at 250VAC for (.050-3.15A), 40A for (4.0A), 50A for (5A), 63A for (6.3A)

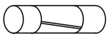
194 Series: 1500A at 250VAC

181 Series: 1500A at 250VAC (≤ 6.30A), 1000A at 250VAC (8-10A)

195 Series: 35A at 250VAC for (.032-3.15A), 40A for (4.0A), 50A for (5.0A), 63A for (6.3-16A)

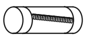
Amp Rtg.	Volt. Rtg.	Digi-Key Part No.	Price Each 1	10	100
Fast-Acting 193 Series					
.050	250	WK1022-ND	1.18	1.09	.79
.063	250	WK1025-ND	1.18	1.09	.79
.080	250	WK1026-ND	.65	.60	.44
.100	250	WK1027-ND	.26	.24	.18
.125	250	WK1028-ND	.26	.24	.18
.160	250	WK1030-ND	.26	.24	.18
.200	250	WK1034-ND	.26	.24	.18
.250	250	WK1035-ND	.26	.24	.18
.315	250	WK1037-ND	.26	.24	.18
.400	250	WK1040-ND	.26	.24	.18
.500	250	WK1041-ND	.26	.24	.18
.630	250	WK1043-ND	.26	.24	.18
.800	250	WK1046-ND	.26	.24	.18
1.00	250	WK1048-ND	.26	.24	.18
1.25	250	WK1050-ND	.26	.24	.18
1.60	250	WK1053-ND	.26	.24	.18
2.00	250	WK1057-ND	.26	.24	.18
2.50	250	WK1058-ND	.26	.24	.18
3.15	250	WK1124-ND	.27	.25	.18
4.00	250	WK1062-ND	.27	.25	.18
5.00	250	WK1063-ND	.27	.25	.18
6.30	250	WK1066-ND	.27	.25	.18
Fast Acting, High Breaking Capacity 194 Series					
.200	250	WK2034-ND	1.04	.95	.69
.250	250	WK2035-ND	1.04	.95	.69
.315	250	WK2037-ND	1.04	.95	.69
.400	250	WK2040-ND	.50	.46	.34
.500	250	WK2041-ND	.50	.46	.34
.630	250	WK2043-ND	.50	.46	.34
.800	250	WK2046-ND	.50	.46	.34
1.00	250	WK2048-ND	.50	.46	.34
1.25	250	WK2050-ND	.50	.46	.34
1.60	250	WK2053-ND	.50	.46	.34
2.00	250	WK2057-ND	.50	.46	.34
2.50	250	WK2058-ND	.50	.46	.34
3.15	250	WK2124-ND	.53	.49	.35
4.00	250	WK2062-ND	.53	.49	.35
5.00	250	WK2063-ND	.53	.49	.35
6.30	250	WK2066-ND	.53	.49	.35
8.00	250	WK2069-ND	.56	.51	.37
10.00	250	WK2071-ND	.56	.51	.37
Time Lag High Breaking Capacity 181 Series (IEC 60127-2/SS5V)					
1.00	250	WK2248-ND	.53	.49	.35
1.25	250	WK2250-ND	.35	.32	.24
1.60	250	WK2253-ND	.35	.32	.24
2.00	250	WK2257-ND	.35	.32	.24
2.50	250	WK2258-ND	.35	.32	.24
3.15	250	WK2224-ND	.35	.32	.24
4.00	250	WK2262-ND	.35	.32	.24
5.00	250	WK2263-ND	.35	.32	.24
6.30	250	WK2266-ND	.35	.32	.24
8.00	250	WK6202-ND *NEW!*	.26	.24	.18
10.00	250	WK6203-ND *NEW!*	.30	.28	.20
Time-Lag 195 Series					
.032	250	WK5019-ND	1.35	1.24	.90
.040	250	WK5021-ND	.92	.85	.62
.050	250	WK5022-ND	.92	.85	.62
.063	250	WK5025-ND	.76	.70	.51
.080	250	WK5026-ND	.78	.72	.52
.100	250	WK5027-ND	.66	.61	.44
.125	250	WK5028-ND	.61	.56	.41
.160	250	WK5030-ND	.61	.56	.41
.200	250	WK5034-ND	.50	.46	.34
.250	250	WK5035-ND	.45	.41	.30
.315	250	WK5037-ND	.43	.40	.29
.400	250	WK5040-ND	.39	.36	.27
.500	250	WK5041-ND	.39	.36	.27
.630	250	WK5043-ND	.39	.36	.27
.800	250	WK5046-ND	.38	.35	.26
1.00	250	WK5048-ND	.38	.35	.26
1.25	250	WK5050-ND	.38	.35	.26
1.60	250	WK5053-ND	.38	.35	.26
2.00	250	WK5057-ND	.29	.27	.20
2.50	250	WK5058-ND	.29	.27	.20
3.15	250	WK5124-ND	.29	.27	.20
4.00	250	WK5062-ND	.31	.29	.21
5.00	250	WK5063-ND	.31	.29	.21
6.30	250	WK5066-ND	.31	.29	.21
8.00	250	WK5069-ND	.31	.29	.21
10.00	250	WK5071-ND	.36	.33	.24
12.50	250	WK5126-ND	.36	.33	.24
16.00	250	WK5074-ND	.43	.40	.29

UL / CSA Fuses Metric (5x20mm) — UL 248-14



191 and 197 Series – Glass

• FaxBack Document #201



198 Series – Glass

• FaxBack Document #201

Equivalent to:

Wickmann	Littelfuse	Bussmann
191 Series	235	GMA
197 Series	233	GMC
198 Series	239	GMD

Approvals:

191 Series: UL, cUL listed, .250A-7.00A
197 Series: UL, cUL listed, 1.00A - 7.00A.
198 Series: UL listed, CSA certified, .250A-3.50A;

Electrical Characteristics:

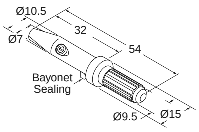
Series	Rated Current	Pre-arcing Rating 135%	200%
191	**.250A - 7.00A**	**< 1 hr.**	**< 5 sec.**
197	**1.00A - 7.00A**	**< 1 hr.**	**< 120 sec.**
198	**.250A - 3.00A 3.50A**	**< 1 hr < 1 hr**	**5-120 sec. 12-120 sec.**

Breaking Capacity
191 Series: 35A at 250VAC (.250A-1.00A); 100A at 250VAC (1.25A-3.50A); 10,000A at 125VAC (.250A-7.00A)
197 Series: 35A at 250VAC (.250A-1.00A); 100A at 250VAC (1.25A - 3.50A); 10,000A at 125VAC (.250A - 7.00A)
198 Series: 35A at 250VAC (.250A -1.00A); 100A at 250VAC (1.25A - 3.50A); 10,000A at 125VAC (.250A - 3.50A)

Amp Rating	Volt. Rtg.	Digi-Key Part No.	Price Each 1	10	100
Fast-Acting 191 Series					
.250	250	WK4701-ND	—	.25	.18
.300	250	WK4702-ND	—	.20	.14
.350	250	WK4703-ND	—	.20	.14
.400	250	WK4704-ND	—	.20	.14
.500	250	WK4705-ND	—	.17	.12
.600	250	WK4706-ND	—	.17	.12
.700	250	WK4707-ND	—	.17	.12
.800	250	WK4708-ND	—	.14	.10
1.00	250	WK4709-ND	—	.14	.10
1.25	250	WK4710-ND	—	.14	.10
1.60	250	WK4711-ND	—	.14	.10
2.00	250	WK4712-ND	—	.14	.10
2.50	250	WK4713-ND	—	.17	.12
3.00	250	WK4714-ND	—	.20	.14
3.50	250	WK4715-ND	—	.14	.10
4.00	125	WK4716-ND	—	.20	.14
5.00	125	WK4717-ND	—	.14	.10
6.00	125	WK4718-ND	—	.20	.14
7.00	125	WK4719-ND	—	.14	.10
Medium Time-Lag 197 Series					
1.00	250	WK4748-ND	.27	.25	.18
1.25	250	WK4750-ND	.27	.25	.18
1.60	250	WK4753-ND	.27	.25	.18
2.00	250	WK4757-ND	.27	.25	.18
2.50	250	WK4758-ND	.27	.25	.18
3.00	250	WK4760-ND	.27	.25	.18
3.50	250	WK4723-ND	.27	.25	.18
4.00	125	WK4762-ND	.27	.25	.18
5.00	125	WK4763-ND	.27	.25	.18
6.00	125	WK4764-ND	.27	.25	.18
7.00	125	WK4767-ND	.27	.25	.18
Time-Lag 198 Series					
.250	250	WK4835-ND	.64	.59	.43
.300	250	WK4836-ND	.60	.55	.40
.400	250	WK4840-ND	.57	.53	.39
.500	250	WK4841-ND	.77	.71	.52
.600	250	WK4842-ND	.68	.63	.46
.700	250	WK4844-ND	.68	.63	.46
.800	250	WK4846-ND	.72	.66	.48
1.00	250	WK4848-ND	.69	.64	.46
1.25	250	WK4850-ND	.69	.64	.46
1.60	250	WK4853-ND	.69	.64	.46
2.00	250	WK4857-ND	.69	.64	.46
2.50	250	WK4858-ND	.69	.64	.46
3.00	250	WK4860-ND	.74	.68	.50
3.50	250	WK4823-ND	1.02	.94	.68

• FaxBack Document #201

5x20mm In-Line Fuseholder



Terminals:
Solderable/ screwable. Accepts 14-20AWG wire.
Ratings: 63V, 6.3A

WK0012-ND **$1.14/1; $10.48/10; $76.20/100**

• FaxBack Document #514

Shock-Safe Fuseholders

Shock-Safe fuseholders for 1/4 x 1-1/4" (3AG) or 5 x 20mm fuses built according to UL 512 and IEC EN 60127-6 and CSA C22.2 No. 39. Rated for use up to 250 Volts. (VDE, SEMKO); Fig. 1, 2, 3, 4, 6 at 6.3 Amps; Fig 5 at 10 Amps. Casing made of black thermoplastic with UL-94V0 ratings. Injection-molded terminals prevent intermittent connections.

PC Mount versions include additional pin(s) for added stability from torsional forces seen during fuse removal.

Panel Mount versions have combination 3/16" quick-connect/solderable tabs.

- Order number includes holder and carrier.

PC Board Mount (Fig. 7): No approvals. Body Material: White thermoplastic, UL 94-V1 rated; Rated Current: 6.3A

Vertical PC Mount

Fig. 1 – (3AG)

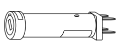


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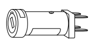
Fig. 2 – (5mm x 20mm)



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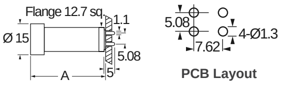

Horizontal PC Mount

Fig. 3 – (3AG)

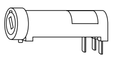

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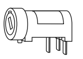
Fig. 4 – (5mm x 20mm)



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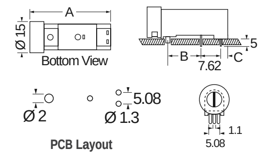

Panel Mount

Fig. 5 – (3AG)

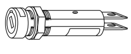

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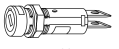
Fig. 6 – (5mm x 20mm)



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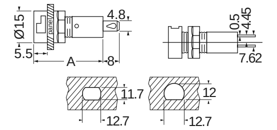
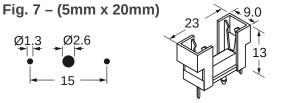


Panel Cutout (Alternatives)

PC Mount

Fig. 7 – (5mm x 20mm)



• FaxBack Document #510

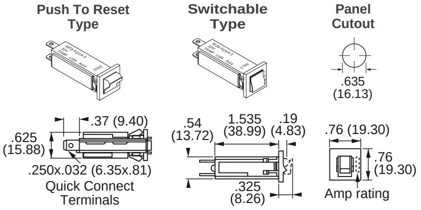
Fig.	Dimension A	B	C	Digi-Key Part No.	Price Each 1	10	100
Vertical PC Mount							
1	46.3	—	—	WK0004-ND	2.40	2.20	1.60
2	32.6	—	—	WK0007-ND	2.04	1.87	1.36
Horizontal PC Mount							
3	45.7	27.94	1.9	WK0003-ND	2.40	2.20	1.60
4	32	12.7	1.8	WK0006-ND	2.04	1.87	1.36
Panel Mount							
5	45.7	—	—	WK0002-ND	2.40	2.20	1.60
6	32	—	—	WK0005-ND	2.04	1.87	1.36
PC Board Mount (5x20mm)							
7	—	—	—	WK0011-ND	.32	.29	.21

tyco Electronics P&B

Thermal Circuit Breakers

W28 Series

Push To Reset Type — Switchable Type — Panel Cutout



Replaces slow blow cartridge type fuses. Labor saving snap-in mounting. Switchable version combines on-off switch and circuit protection in a single unit. Button extends for visual trip indication on the push to reset versions and rocker on switchable model moves to "overload" position upon trip. All breakers are black body with white rate marking. Panel thickness of .032" to .062" (.81mm to 1.57mm) except where noted. Optional push-on lockwasher for panel thickness greater than .105" (2.67mm).

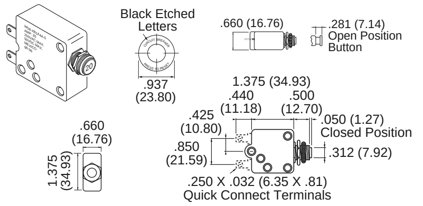
Specifications:
- Maximum operating voltage: 32VDC; 250VAC • Will continuously carry 100% of rated current
- **.25-2 Amp Model** may trip between 101% and 174% of rating within 1 hour, must trip at 175% of rating within 1 hour at 25°C
- **3-20 Amp Model** may trip between 101% and 134% of rating within 1 hour, must trip at 135% of rating within 1 hour at 25°C

Current	Digi-Key Part No.	Price Each 1	25	50	Potter & Brumfield Part No.
Push To Reset Type					
0.25	PB180-ND	5.11	4.48	4.05	W28-XQ1A-0.25
0.50	PB181-ND	5.11	4.48	4.05	W28-XQ1A-0.50
1	PB182-ND	5.11	4.48	4.05	W28-XQ1A-1
2	PB183-ND	5.11	4.48	4.05	W28-XQ1A-2
3	PB184-ND	2.64	2.31	2.09	W28-XQ1A-3
4	PB185-ND	2.64	2.31	2.09	W28-XQ1A-4
5	PB186-ND	2.64	2.31	2.09	W28-XQ1A-5
6	PB187-ND	2.64	2.31	2.09	W28-XQ1A-6
7	PB188-ND	2.64	2.31	2.09	W28-XQ1A-7
8	PB189-ND	2.64	2.31	2.09	W28-XQ1A-8
10	PB190-ND	2.64	2.31	2.09	W28-XQ1A-10
12	PB191-ND	2.64	2.31	2.09	W28-XQ1A-12
15	PB192-ND	2.64	2.31	2.09	W28-XQ1A-15
10	PB239-ND†	2.64	2.31	2.09	W28-XT1A-10
12	PB240-ND†	2.64	2.31	2.09	W28-XT1A-12
20	PB425-ND *NEW!*	2.64	2.31	2.09	W28-XQ1A-20
Switchable Type					
3	PB233-ND	3.60	3.15	2.85	W28-SQ11A-3
5	PB234-ND	3.60	3.15	2.85	W28-SQ11A-5
10	PB236-ND	3.60	3.15	2.85	W28-SQ11A-10
15	PB238-ND	3.60	3.15	2.85	W28-SQ11A-15
Internal Lock Washer — W28 Series					
—	PB241-ND*	.24	.21	.19	55-025B

† Will mount in .075" to .105" (1.91mm to 2.67mm) thick panel, all others have std. panel thickness of .032" to .062" (.81mm to 1.57mm)

* Optional Push-On Lock Washer for panels greater than .105" (2.67mm) thickness.

W58 Series



Button extends for visual trip indication (red trip band). .250" (6.35mm) quick connect terminals or 6/32 screw terminals. Comes complete with knurled nut and hex nut assembled on bushing.

Specifications: • Breaker will continuously carry 100% of rated load. It may trip between 101% and 144% of rated load, but must trip at 145% at 25°C. • Maximum operating voltage: 50VDC, 250VAC.

Current	Digi-Key Part No.	Price Each 1	25	50	Potter & Brumfield Part No.
Push to Reset Breaker — .250 (6.35) QC Terminal					
1	PB193-ND ‡	7.39	6.47	5.86	W58-XB1A4A-1
2	PB194-ND ‡	7.39	6.47	5.86	W58-XB1A4A-2
3	PB195-ND ‡	7.39	6.47	5.86	W5B-XB1A4A-3
4	PB196-ND ‡	7.39	6.47	5.86	W58-XB1A4A-4
5	PB197-ND ‡	5.23	4.58	4.15	W58-XB1A4A-5
6	PB198-ND ‡	5.23	4.58	4.15	W58-XB1A4A-6
7	PB199-ND ‡	5.23	4.58	4.15	W58-XB1A4A-7
8	PB200-ND ‡	5.23	4.58	4.15	W58-XB1A4A-8
10	PB201-ND ‡	5.23	4.58	4.15	W58-XB1A4A-10
12	PB202-ND ‡	5.23	4.58	4.15	W58-XB1A4A-12
15	PB203-ND ‡	5.23	4.58	4.15	W58-XB1A4A-15
20	PB204-ND ‡	5.23	4.58	4.15	W58-XB1A4A-20
25	PB205-ND ‡	5.23	4.58	4.15	W58-XB1A4A-25
30	PB206-ND ‡	5.23	4.58	4.15	W58-XB1A4A-30
Push to Reset Breaker — 6-32 Screw Terminal					
1	PB242-ND †	8.38	7.33	6.64	W58-XC4C12A-1
2	PB243-ND †	8.38	7.33	6.64	W58-XC4C12A-2
3	PB244-ND †	8.38	7.33	6.64	W58-XC4C12A-3
5	PB245-ND †	7.51	6.58	5.95	W58-XC4C12A-5
7	PB246-ND †	7.51	6.58	5.95	W58-XC4C12A-7
10	PB247-ND †	7.51	6.58	5.95	W58-XC4C12A-10
15	PB248-ND †	7.51	6.58	5.95	W58-XC4C12A-15
20	PB249-ND †	7.51	6.58	5.95	W58-XC4C12A-20
25	PB250-ND †	7.51	6.58	5.95	W58-XC4C12A-25
30	PB251-ND †	7.51	6.58	5.95	W58-XC4C12A-30

‡ White button, Red Marking/Red Trip Band
† White button, Black Marking, Red Trip Band

Digi-Key Part No.	Price Each 1	25	50	Potter & Brumfield Part No.
"Push to Reset" disk for panel, use with 6-32 Screw Terminal Types				
PB253-ND	.36	.32	.29	33-012A
"Push to Reset" disk for panel, use with .250 (6.35) QC Terminal Types				
PB254-ND	.41	.36	.33	33-012C
Knurled Nut, Silver Plated, use with .250 (6.35) QC Terminal Types				
PB255-ND	.55	.49	.44	55-010A
Knurled Nut, Black, use with 6-32 Screw Terminal Types				
PB256-ND	.86	.76	.69	55-010E

W23 and W31 Series

Fig. 1 — W23 Series

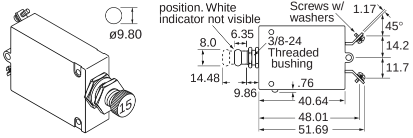
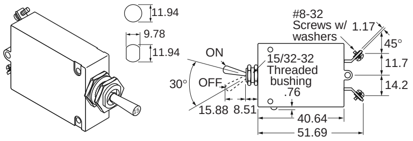


Fig. 2 — W31 Series



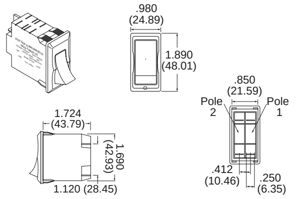
Two series of thermal circuit breakers with your choice of push/pull actuation or toggle actuation. W23 series (push/pull) has a visual trip indicator to quickly determine circuit breaker status. W31 series (toggle) offers an On/Off switch combined with circuit protection. Both series have amperage marking on the end of the actuator and 8-32 screw terminals. Single Pole only.

Features: • **Calibration:** Will continuously carry 100% of rating, may trip between 101% and 134% of rating at 25°C. Must trip at 135% in one hour. • **Maximum Operating Voltages:** 50VDC or 250VAC (to 400Hz). • **Dielectric Strength:** Over 1,500 volts RMS. • **Endurance Cycling:** More than 6,000 cycles at 100% of rating, or 10,000 mechanical cycles. • **Termination:** Two #8-32 screw terminals.

Agency Approvals: W23 and W31 are UL 1077 Recognized as Supplementary Protectors. File E69543, and CSA Certified as Appliance Component Protectors, File LR15734

Current Rating (Amps)	Digi-Key Part No.	Price Each 1	25	50	Potter & Brumfield Part No.
Fig. 1 — Push/Pull Type					
1	PB399-ND	27.91	24.43	22.10	W23-X1A1G-1
2	PB400-ND	27.91	24.43	22.10	W23-X1A1G-2
3	PB401-ND	27.91	24.43	22.10	W23-X1A1G-3
5	PB402-ND	18.19	15.92	14.41	W23-X1A1G-5
10	PB404-ND	18.19	15.92	14.41	W23-X1A1G-10
15	PB405-ND	18.19	15.92	14.41	W23-X1A1G-15
20	PB406-ND	18.19	15.92	14.41	W23-X1A1G-20
25	PB407-ND	18.19	15.92	14.41	W23-X1A1G-25
30	PB408-ND	18.19	15.92	14.41	W23-X1A1G-30
35	PB409-ND	18.19	15.92	14.41	W23-X1A1G-35
40	PB410-ND	18.19	15.92	14.41	W23-X1A1G-40
50	PB411-ND	18.19	15.92	14.41	W23-X1A1G-50
Fig. 2 — Toggle Type					
1	PB412-ND	32.74	28.65	25.92	W31-X2M1G-1
2	PB413-ND	32.74	28.65	25.92	W31-X2M1G-2
3	PB414-ND	32.74	28.65	25.92	W31-X2M1G-3
5	PB415-ND	22.63	19.81	17.92	W31-X2M1G-5
7.5	PB416-ND	23.11	20.23	18.30	W31-X2M1G-7.5
10	PB417-ND	22.63	19.81	17.92	W31-X2M1G-10
15	PB418-ND	22.63	19.81	17.92	W31-X2M1G-15
20	PB419-ND	22.63	19.81	17.92	W31-X2M1G-20
25	PB420-ND	22.63	19.81	17.92	W31-X2M1G-25
30	PB421-ND	22.63	19.81	17.92	W31-X2M1G-30
35	PB422-ND	22.63	19.81	17.92	W31-X2M1G-35
40	PB423-ND	22.63	19.81	17.92	W31-X2M1G-40
50	PB424-ND	22.63	19.81	17.92	W31-X2M1G-50

W33 Series



Combination switch and separate circuit breaker in one package. 5-20 Amp versions available in either one circuit breaker with separate switch or 2 circuit breaker option available. Lighted or non-lighted actuator with convenient snap-in mounting. Available in three colors: black, white or amber. Illuminated versions are 120VAC neon lamps. Two breaker models will trip both sides when only 1 side is overdriven. Reset is accomplished with rocker actuator at front of device.

Specifications:
- Breaker will continuously carry 100% of the rated load. It may trip between 101% and 135% of rated load, but must trip at 135% within 1 hour at 25°C • Maximum Operating Voltage: 50VCD, 250VAC

Current (A)	Actuator Color	Pole 1/ Pole 2 Type	Digi-Key Part No.	Price Each 1	25	50	Potter & Brumfield Part No.
5	Black	Switch/Breaker	PB257-ND	9.26	8.11	7.34	W33-S1N1Q-5
15	Black	Switch/Breaker	PB259-ND	9.26	8.11	7.34	W33-S1N1Q-15
20	Black	Switch/Breaker	PB260-ND	9.26	8.11	7.34	W33-S1N1Q-20
10	Amber	Switch/Breaker Illuminated	PB261-ND	10.56	9.24	8.36	W33-S4B1Q-10
15	Amber	Switch/Breaker Illuminated	PB262-ND	10.56	9.24	8.36	W33-S4B1Q-15
20	White	2 Breakers	PB263-ND	10.25	8.97	8.12	W33-T2N1Q-20
5	Amber	2 Breakers Illuminated	PB264-ND	11.50	10.06	9.11	W33-T4B1Q-5
10	Amber	2 Breakers Illuminated	PB265-ND	11.50	10.06	9.11	W33-T4B1Q-10
15	Amber	2 Breakers Illuminated	PB266-ND	11.50	10.06	9.11	W33-T4B1Q-15

NEW! Magnetic Hydraulic Circuit Breaker

W67, W68, W69, W91, W92, W93 Series

Fig. 1

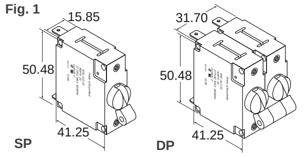
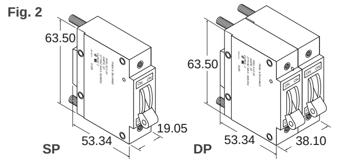


Fig. 2



The W6/W9 series are designed for the international market. Magnetic hydraulic breakers are a proven design where the hydraulic delay provides tripping that is highly tolerant to changes in ambient temperatures. W9 units have ON/OFF molded into the area at the base of the toggle.

- **Calibration:** Breakers will hold 100% of rated current. Breakers may trip between 101% and 124% of rated load. Breakers must trip at 125% of rated load and above.
- **Operating Temp:** -40°C to +85°C.

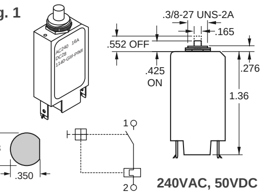
Current (A)	Description	Digi-Key Part No.	Price Each 1	25	50	Potter & Brumfield Part No.
Fig. 1 — White Toggle Actuator						
5	Toggle Type, SP, Instantaneous	PB426-ND	20.18	17.67	15.98	W67-X2Q10-5
10	Toggle Type, SP, Std Delay	PB427-ND	20.18	17.67	15.98	W67-X2Q52-10
15	Toggle Type, SP, Std Delay	PB428-ND	20.18	17.67	15.98	W67-X2Q12-15
10	Toggle Type, DP, Std Delay	PB429-ND	49.68	43.47	39.33	W68-X2Q12-10
15	Toggle Type, DP, Std Delay	PB430-ND	49.68	43.47	39.33	W68-X2Q12-15
20	Toggle Type, DP, Std Delay	PB431-ND	49.68	43.47	39.33	W68-X2Q12-20
10	Toggle Type, 3P, Std Delay	PB432-ND	69.38	60.72	54.93	W69-X2Q12-10
Fig. 2 — Black Toggle Actuator						
10	Toggle Type, SP, Std Delay	PB433-ND	22.94	20.08	18.17	W91-X112-10
20	Toggle Type, SP, Std Delay	PB434-ND	22.94	20.08	18.17	W91-X112-20
1	Toggle Type, DP, Std Delay	PB435-ND	56.38	49.33	44.64	W92-X112-1
15	Toggle Type, DP, Std Delay	PB436-ND	56.38	49.33	44.64	W92-X112-15
20	Toggle Type, DP, Std Delay	PB437-ND	56.38	49.33	44.64	W92-X112-20
30	Toggle Type, DP, Std Delay	PB438-ND	56.38	49.33	44.64	W92-X112-30
50	Toggle Type, DP, Std Delay	PB439-ND	56.38	49.33	44.64	W92-X112-50
50	Toggle Type, 3P, Std Delay	PB440-ND	91.46	80.04	72.41	W93-X112-50

E-T-A®

Thermal Circuit Breakers

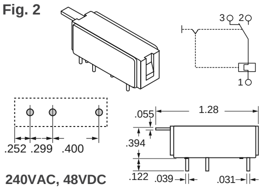
ETA Circuit Breakers for equipment are designed as safety critical items for protection during equipment failure. These circuit breakers may be required to operate just occasionally or very often during the life of the equipment and can confidently be reset by inexperienced personnel. Applications range from motors and transformers to appliances and automotive. Thermal breakers respond in a similar manner as a slow blow fuse. All thermal breakers carry 100% rated current continuously and trip within one hour at 140% rating. Selection should be based on 125% of your maximum current required. Magnetic breakers are fast-acting devices which are highly tolerant to changes in ambient temperatures and sensitive to small overloads. All panel mount breakers come with dress nut and hex nut.

Fig. 1



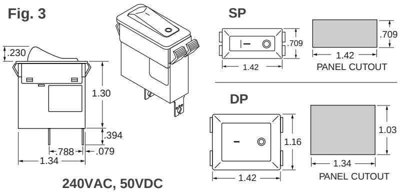
240VAC, 50VDC

Fig. 2



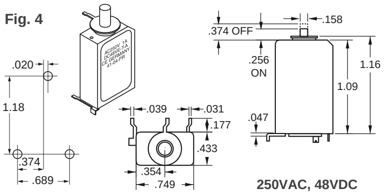
240VAC, 48VDC

Fig. 3



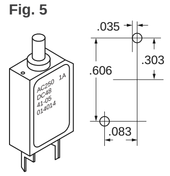
240VAC, 50VDC

Fig. 4



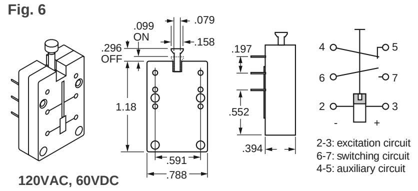
250VAC, 48VDC

Fig. 5



250VAC, 48VDC

Fig. 6



120VAC, 60VDC

Thermal Breaker - Miniature Panel Mount

Fig.	Current (Amps)	Description*	Digi-Key Part No.	Price Each				ETA Part No.
				1	10	25	50	
1	0.1A	SP Med. Delay, Black	302-1000-ND	10.49	9.98	9.66	8.93	106-M2-P10-0.1A
	0.2A	SP Med. Delay, Black	302-1001-ND	10.49	9.98	9.66	8.93	106-M2-P10-0.2A
	0.3A	SP Med. Delay, Black	302-1002-ND	10.49	9.98	9.66	8.93	106-M2-P10-0.3A
	0.4A	SP Med. Delay, Black	302-1003-ND	10.49	9.98	9.66	8.93	106-M2-P10-0.4A
	0.5A	SP Med. Delay, Black	302-1004-ND	10.49	9.98	9.66	8.93	106-M2-P10-0.5A
	0.6A	SP Med. Delay, Black	302-1005-ND	10.49	9.98	9.66	8.93	106-M2-P10-0.6A
	0.8A	SP Med. Delay, Black	302-1006-ND	10.49	9.98	9.66	8.93	106-M2-P10-0.8A
	1A	SP Med. Delay, Black	302-1007-ND	10.49	9.98	9.66	8.93	106-M2-P10-1A
	1.2A	SP Med. Delay, Black	302-1008-ND	10.49	9.98	9.66	8.93	106-M2-P10-1.2A
	1.5A	SP Med. Delay, Black	302-1009-ND	10.49	9.98	9.66	8.93	106-M2-P10-1.5A
	1.8A	SP Med. Delay, Black	302-1010-ND	10.49	9.98	9.66	8.93	106-M2-P10-1.8A
	2A	SP Med. Delay, Black	302-1011-ND	10.49	9.98	9.66	8.93	106-M2-P10-2A
	2.5A	SP Med. Delay, Black	302-1012-ND	10.49	9.98	9.66	8.93	106-M2-P10-2.5A
	3A	SP Med. Delay, Black	302-1013-ND	10.49	9.98	9.66	8.93	106-M2-P10-3A
	4A	SP Med. Delay, Black	302-1015-ND	11.48	10.91	10.56	9.76	41-06-P10-3.5A
	5A	SP Med. Delay, Black	302-1016-ND	11.48	10.91	10.56	9.76	1140-G111-P1M1-5A
	7A	SP Med. Delay, Black	302-1018-ND	11.48	10.91	10.56	9.76	1140-G111-P1M1-7A
	8A	SP Med. Delay, Black	302-1019-ND	11.48	10.91	10.56	9.76	1140-G111-P1M1-8A
	10A	SP Med. Delay, Black	302-1020-ND	11.48	10.91	10.56	9.76	1140-G111-P1M1-10A
	12A	SP Med. Delay, Black	302-1021-ND	11.48	10.91	10.56	9.76	1140-G111-P1M1-12A
	15A	SP Med. Delay, Black	302-1023-ND	11.48	10.91	10.56	9.76	1140-G111-P1M1-15A
	16A	SP Med. Delay, Black	302-1024-ND	11.48	10.91	10.56	9.76	1140-G111-P1M1-16A

Thermal Breaker - Horizontal PC Mount

Fig.	Current (Amps)	Description*	Digi-Key Part No.	Price Each				ETA Part No.
				1	10	25	50	
2	0.63A	SP Fast Switching	302-1025-ND	7.88	7.49	7.25	6.70	1410L210L2F1S020.63A
	0.80A	SP Fast Switching	302-1026-ND	7.88	7.49	7.25	6.70	1410L210L2F1S020.80A
	1A	SP Fast Switching	302-1027-ND	7.88	7.49	7.25	6.70	1410L210L2F1S021A
	1.25A	SP Fast Switching	302-1028-ND	7.88	7.49	7.25	6.70	1410L210L2F1S021.25A
	1.5A	SP Fast Switching	302-1029-ND	7.88	7.49	7.25	6.70	1410L210L2F1S021.5A
	1.8A	SP Fast Switching	302-1030-ND	7.88	7.49	7.25	6.70	1410L210L2F1S021.8A
	2A	SP Fast Switching	302-1032-ND	7.88	7.49	7.25	6.70	1410L210L2F1S022A
	2.5A	SP Fast Switching	302-1033-ND	7.88	7.49	7.25	6.70	1410L210L2F1S022.5A
	3.15A	SP Fast Switching	302-1034-ND	7.88	7.49	7.25	6.70	1410L210L2F1S023.15A
	4A	SP Fast Switching	302-1035-ND	7.88	7.49	7.25	6.70	1410L210L2F1S024A
	4.5A	SP Fast Switching	302-1036-ND	7.88	7.49	7.25	6.70	1410L210L2F1S024.5A
	5A	SP Fast Switching	302-1037-ND	7.88	7.49	7.25	6.70	1410L210L2F1S025A
	6.3A	SP Fast Switching	302-1038-ND	7.88	7.49	7.25	6.70	1410L210L2F1S026.3A
	8A	SP Fast Switching	302-1039-ND	7.88	7.49	7.25	6.70	1410L210L2F1S028A
	10A	SP Fast Switching	302-1031-ND	7.88	7.49	7.25	6.70	1410L210L2F1S0210A

Thermal Breaker with On/Off Switch - Rocker Style

Fig.	Current (Amps)	Description*	Digi-Key Part No.	Price Each				ETA Part No.
				1	10	25	50	
3	0.1A	SP Black w/White Act.	302-1040-ND	16.02	15.23	14.75	13.62	3130F110P7T1W02Q0.1A
	0.2A	SP Black w/White Act.	302-1041-ND	16.02	15.23	14.75	13.62	3130F110P7T1W02Q0.2A
	0.3A	SP Black w/White Act.	302-1042-ND	16.02	15.23	14.75	13.62	3130F110P7T1W02Q0.3A
	0.4A	SP Black w/White Act.	302-1043-ND	16.02	15.23	14.75	13.62	3130F110P7T1W02Q0.4A
	0.5A	SP Black w/White Act.	302-1044-ND	16.02	15.23	14.75	13.62	3130F110P7T1W02Q0.5A
	0.8A	SP Black w/White Act.	302-1045-ND	16.02	15.23	14.75	13.62	3130F110P7T1W02Q0.8A
	1A	SP Black w/White Act.	302-1046-ND	16.02	15.23	14.75	13.62	3130F110P7T1W02Q1A
	1.2A	SP Black w/White Act.	302-1047-ND	16.02	15.23	14.75	13.62	3130F110P7T1W02Q1.2A
	1.5A	SP Black w/White Act.	302-1048-ND	16.02	15.23	14.75	13.62	3130F110P7T1W02Q1.5A
	2A	SP Black w/White Act.	302-1049-ND	16.02	15.23	14.75	13.62	3130F110P7T1W02Q2A
	2.5A	SP Black w/White Act.	302-1050-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q2.5A
	3A	SP Black w/White Act.	302-1051-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q3A
	4A	SP Black w/White Act.	302-1053-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q4A
	5A	SP Black w/White Act.	302-1054-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q5A
	6A	SP Black w/White Act.	302-1055-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q6A
	7A	SP Black w/White Act.	302-1056-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q7A
	8A	SP Black w/White Act.	302-1057-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q8A
	10A	SP Black w/White Act.	302-1058-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q10A
	12A	SP Black w/White Act.	302-1059-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q12A
	14A	SP Black w/White Act.	302-1060-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q14A
	16A	SP Black w/White Act.	302-1061-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q16A
	20A	SP Black w/White Act.	302-1062-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q20A
	0.1A	DP Black w/White Act.	302-1063-ND	32.50	30.89	29.91	27.63	3130F120P7T1W02Q0.1A
	0.2A	DP Black w/White Act.	302-1064-ND	32.50	30.89	29.91	27.63	3130F120P7T1W02Q0.2A
	0.3A	DP Black w/White Act.	302-1065-ND	32.50	30.89	29.91	27.63	3130F120P7T1W02Q0.3A
	0.4A	DP Black w/White Act.	302-1066-ND	32.50	30.89	29.91	27.63	3130F120P7T1W02Q0.4A
	0.5A	DP Black w/White Act.	302-1067-ND	32.50	30.89	29.91	27.63	3130F120P7T1W02Q0.5A
	0.8A	DP Black w/White Act.	302-1068-ND	32.50	30.89	29.91	27.63	3130F120P7T1W02Q0.8A
	1A	DP Black w/White Act.	302-1069-ND	32.50	30.89	29.91	27.63	3130F120P7T1W02Q1A
	1.2A	DP Black w/White Act.	302-1070-ND	32.50	30.89	29.91	27.63	3130F120P7T1W02Q1.2A
	1.5A	DP Black w/White Act.	302-1071-ND	32.50	30.89	29.91	27.63	3130F120P7T1W02Q1.5A
	2A	DP Black w/White Act.	302-1072-ND	32.50	30.89	29.91	27.63	3130F120P7T1W02Q2A
	2.5A	DP Black w/White Act.	302-1073-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q2.5A
	3A	DP Black w/White Act.	302-1074-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q3A
	3.5A	DP Black w/White Act.	302-1075-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q3.5A
	4A	DP Black w/White Act.	302-1076-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q4A
	5A	DP Black w/White Act.	302-1077-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q5A
	6A	DP Black w/White Act.	302-1078-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q6A
	7A	DP Black w/White Act.	302-1079-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q7A
	8A	DP Black w/White Act.	302-1080-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q8A
	10A	DP Black w/White Act.	302-1081-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q10A
	12A	DP Black w/White Act.	302-1082-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q12A
	14A	DP Black w/White Act.	302-1083-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q14A
	16A	DP Black w/White Act.	302-1084-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q16A

Thermal Breaker - Horizontal PC Mount

Fig.	Current (Amps)	Description*	Digi-Key Part No.	Price Each				ETA Part No.
				1	10	25	50	
4	0.1A	SP Med. Delay, Black	302-1088-ND	11.48	10.91	10.56	9.76	104-PR-0.1A
	0.2A	SP Med. Delay, Black	302-1089-ND	11.48	10.91	10.56	9.76	104-PR-0.2A
	0.3A	SP Med. Delay, Black	302-1090-ND	11.48	10.91	10.56	9.76	104-PR-0.3A
	0.4A	SP Med. Delay, Black	302-1091-ND	11.48	10.91	10.56	9.76	104-PR-0.4A
	0.5A	SP Med. Delay, Black	302-1092-ND	11.48	10.91	10.56	9.76	104-PR-0.5A
	0.6A	SP Med. Delay, Black	302-1093-ND	11.48	10.91	10.56	9.76	104-PR-0.6A
	0.8A	SP Med. Delay, Black	302-1094-ND	11.48	10.91	10.56	9.76	104-PR-0.8A
	1A	SP Med. Delay, Black	302-1095-ND	11.48	10.91	10.56	9.76	104-PR-1A
	1.2A	SP Med. Delay, Black	302-1096-ND	11.48	10.91	10.56	9.76	104-PR-1.2A
	1.5A	SP Med. Delay, Black	302-1097-ND	11.48	10.91	10.56	9.76	104-PR-1.5A
	1.8A	SP Med. Delay, Black	302-1098-ND	11.48	10.91	10.56	9.76	104-PR-1.8A
	2A	SP Med. Delay, Black	302-1099-ND	11.48	10.91	10.56	9.76	104-PR-2A
	2.5A	SP Med. Delay, Black	302-1100-ND	11.48	10.91	10.56	9.76	104-PR-2.5A
	3A	SP Med. Delay, Black	302-1101-ND	11.48	10.91	10.56	9.76	104-PR-3A
	5A	SP Med. Delay, Black	302-1105-ND	11.48	10.91	10.56	9.76	104-PR-5A
	6A	SP Med. Delay, Black	302-1106-ND	11.48	10.91	10.56	9.76	104-PR-6A
	7A	SP Med. Delay, Black	302-1107-ND	11.48	10.91	10.56	9.76	104-PR-7A
	8A	SP Med. Delay, Black	302-1108-ND	11.48	10.91	10.56	9.76	104-PR-8A
	10A	SP Med. Delay, Black	302-1109-ND	11.48	10.91	10.56	9.76	104-PR-10A

Thermal Breaker - Vertical PC Mount

Fig.	Current (Amps)	Description*	Digi-Key Part No.	Price Each				ETA Part No.
				1	10	25	50	
5	0.1A	SP Med. Delay, Black	302-1112-ND	11.48	10.91	10.56	9.76	104-PR014014-0.1A
	0.2A	SP Med. Delay, Black	302-1113-ND	11.48	10.91	10.56	9.76	104-PR014014-0.2A
	0.3A	SP Med. Delay, Black	302-1114-ND	11.48	10.91	10.56	9.76	104-PR014014-0.3A
	0.4A	SP Med. Delay, Black	302-1115-ND	11.48	10.91	10.56	9.76	104-PR014014-0.4A
	0.5A	SP Med. Delay, Black	302-1116-ND	11.48	10.91	10.56	9.76	104-PR014014-0.5A
	0.6A	SP Med. Delay, Black	302-1117-ND	11.48	10.91	10.56	9.76	104-PR014014-0.6A
	0.7A	SP Med. Delay, Black	302-1118-ND	11.48	10.91	10.56	9.76	104-PR014014-0.7A
	0.8A	SP Med. Delay, Black	302-1119-ND	11.48	10.91	10.56	9.76	104-PR014014-0.8A
	1A	SP Med. Delay, Black	302-1120-ND	11.48	10.91	10.56	9.76	104-PR014014-1A
	1.2A	SP Med. Delay, Black	302-1121-ND	11.48	10.91	10.56	9.76	104-PR014014-1.2A
	1.5A	SP Med. Delay, Black	302-1122-ND	11.48	10.91	10.56	9.76	104-PR014014-1.5A
	1.8A	SP Med. Delay, Black	302-1123-ND	11.48	10.91	10.56	9.76	104-PR014014-1.8A
	2A	SP Med. Delay, Black	302-1125-ND	11.48	10.91	10.56	9.76	104-PR3-2A
	2.5A	SP Med. Delay, Black	302-1124-ND	11.48	10.91	10.56	9.76	104-PR014014-2.5A
	3A	SP Med. Delay, Black	302-1126-ND	11.48	10.91	10.56	9.76	104-PR014014-3A
	5A	SP Med. Delay, Black	302-1130-ND	11.48	10.91	10.56	9.76	104-PR014014-5A
	6A	SP Med. Delay, Black	302-1131-ND	11.48	10.91	10.56	9.76	104-PR014014-6A
	7A	SP Med. Delay, Black	302-1132-ND	11.48	10.91	10.56	9.76	104-PR014014-7A
	8A	SP Med. Delay, Black	302-1133-ND	11.48	10.91	10.56	9.76	104-PR014014-8A
	10A	SP Med. Delay, Black	302-1134-ND	11.48	10.91	10.56	9.76	104-PR014014-10A

Magnetic Breaker - Horizontal PC Mount

Fig.	Current (Amps)	Description*	Digi-Key Part No.	Price Each				ETA Part No.
				1	10	25	50	
6	0.01A	SP Fast Switching Type	302-1137-ND	24.93	23.68	22.94	18.70	808-H-0.01A
	0.02A	SP Fast Switching Type	302-1138-ND	24.93	23.68	22.94	18.70	808-H-0.02A
	0.03A	SP Fast Switching Type	302-1139-ND	24.93	23.68	22.94	18.70	808-H-0.03A
	0.04A	SP Fast Switching Type	302-1140-ND	24.93	23.68	22.94	18.70	808-H-0.04A
	0.05A	SP Fast Switching Type	302-1141-ND	24.93	23.68	22.94	18.70	808-H-0.05A
	0.08A	SP Fast Switching Type	302-1143-ND	24.93	23.68	22.94	18.70	808-H-0.08A
	0.1A	SP Fast Switching Type	302-1144-ND	21.59	20.51	19.86	16.19	808-H-0.1A
	0.2A	SP Fast Switching Type	302-1145-ND	21.59	20.51	19.86	16.19	808-H-0.2A
	0.3A	SP Fast Switching Type	302-1146-ND	21.59	20.51	19.86	16.19	808-H-0.3A
	0.4A	SP Fast Switching Type	302-1147-ND	21.59	20.51	19.86	16.19	808-H-0.4A
	0.5A	SP Fast Switching Type	302-1148-ND	21.59	20.51	19.86	16.19	808-H-0.5A
	0.6A	SP Fast Switching Type	302-1149-ND	21.59	20.51	19.86	16.19	808-H-0.6A
	0.7A	SP Fast Switching Type	302-1150-ND	21.59	20.51	19.86	16.19	808-H-0.7A
	0.8A	SP Fast Switching Type	302-1151-ND	21.59	20.51	19.86	16.19	808-H-0.8A
	0.9A	SP Fast Switching Type	302-1152-ND	21.59	20.51	19.86	16.19	808-H-0.9A
	1A	SP Fast Switching Type	302-1153-ND	21.59	20.51	19.86	16.19	808-H-1A
	1.2A	SP Fast Switching Type	302-1154-ND	21.59	20.51	19.86	16.19	808-H-1.2A
	1.5A	SP Fast Switching Type	302-1155-ND	21.59	20.51	19.86	16.19	808-H-1.5A
	2A	SP Fast Switching Type	302-1157-ND	21.59	20.51	19.86	16.19	808-H-2A
	2.5A	SP Fast Switching Type	302-1158-ND	21.59	20.51	19.86	16.19	808-H-2.5A
	3A	SP Fast Switching Type	302-1159-ND	21.59	20.51	19.86	16.19	808-H-3A
	3.25A	SP Fast Switching Type	302-1160-ND	21.59	20.51	19.86	16.19	808-H-3.25A
	4A	SP Fast Switching Type	302-1161-ND	21.59	20.51	19.86	16.19	808-H-4A
	4.5A	SP Fast Switching Type	302-1162-ND	21.59	20.51	19.86	16.19	808-H-4.5A
	5A	SP Fast Switching Type	302-1163-ND	21.59	20.51	19.86	16.19	808-H-5A

* **SP** (single pole) and **DP** (double pole).

Panasonic® Thermal Cutoffs (TCO) / Thermal-Links — EYP Type

Features: • **Small and Insulation Type:** TCO is compact and insulated, featuring quick temperature response, and mountable in a small space without insulation or protection • **High Reliability:** TCO opens reliably when the equipment becomes abnormal, and is not resettable • **Solid Structure:** Unique formed lead provides reliable TCO connection and provides easy assembly handling. (Axial lead type only) • **Non-Cadmium Alloy:** TCO uses specially selected non-cadmium alloy • **Thin Type:** Thickness is less than 1mm. Available for spot welding.

Recommended Applications: Transformers, solenoids, ventilation fan, electric fans, small electric motors, dryers, gas home appliances, fluorescent lights, electric shavers, adaptors, heating devices, ICs, batteries, etc. The TCO can be used for overheating protection.

Approved Safety Standards:

▽ (Japan): 33-xxx (see chart)

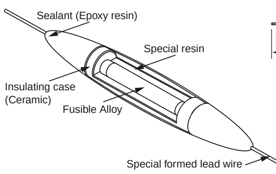
UL (USA): E60271

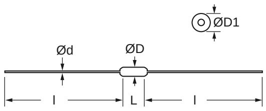
CSA (Canada): LR67163

VDE (Germany): N Series: 4811.6-1171-0001; F Series: 4811.6-4510-1026; E Series: 4811.6-4510-1030

BEAB (U.K.): N Series: C0736; F Series: C0738; E Series: C0739

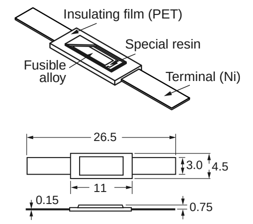
Series N, F and E Axial Lead Type





Dimensions (mm)	L	øD	øD1	l	ød
N Series	9.0	2.5	3.0	38	0.60
F Series	6.0	1.85	2.2	38	0.53
E Series	5.0	1.5	1.8	38	0.53

Series MT — Thin Type



Type No. of Approved Standards	Rated Functioning Temp.*1 (°C)	Function-ing Temp.*2 (°C)	Maximum Operating Temp.*3 (°C)	Holding Temp.*4 (°C)	Maximum Temp. (°C)*5		Electrical Rating			Approved Safety Standards					Digi-Key Part No.	Price Each			Panasonic Part No.
					UL, VDE, BEAB	CSA	AC/ DC	Amp (A)	Volt (V)	▽	UL	CSA	VDE	BEAB		1	10	100	
N Series																			
N082	86	82±2	52 60 45	56 60 50	200	150	AC AC DC	3.0 2.0 4.0	125 250 50	33-627	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10917-ND	.45	.41	.38	EYP-2BN082
N088	92	88±2	56 62 47	60 65 52	200		AC AC DC	3.0 2.0 4.0	125 250 50	33-627	○ ○ ○	— — —	— — —	— — —	P10918-ND	.45	.41	.38	EYP-2BN088
N098	102	98±2	65 75 55	70 76 60	200	150	AC AC DC	3.0 2.0 4.0	125 250 50	33-632	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10919-ND	.45	.41	.38	EYP-2BN098
N109	114	110±3	76 80 65	86 90 74	200	150	AC AC DC	3.0 2.0 5.0	125 250 50	33-634	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10920-ND	.45	.41	.38	EYP-2BN109
N110	115	110^{+3}_{-2}	76 80 65	86 90 74	200		AC AC DC	3.0 2.0 5.0	125 250 50	33-634	○ ○ ○	○ ○ ○	○ ○ ○	— — —	P10921-ND	.45	.41	.38	EYP-2BN110
N124	130	126±2	90 94 80	105 105 94	200	180	AC AC DC	3.0 2.0 5.0	125 250 50	33-619	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10922-ND	.45	.41	.38	EYP-2BN124
N126	133	128±2	92 96 82	108 108 96	200	180	AC AC DC	3.0 2.0 5.0	125 250 50	33-619	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10923-ND	.45	.41	.38	EYP-2BN126
N135	140	136±2	99 103 80	115 115 90	200	180	AC AC DC	3.0 2.0 6.0	125 250 50	33-619	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10924-ND	.45	.41	.38	EYP-2BN135
N143	145	141±2	105 110 80	115 120 90	200	180	AC AC DC	3.0 2.0 6.0	125 250 50	33-621	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10925-ND	.45	.41	.38	EYP-2BN143
N163	168	163^{+4}_{-2}	120 120 90	130 135 100	200		AC AC DC	3.0 2.0 6.0	125 250 50	33-623	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10926-ND	.45	.41	.38	EYP-2BN163
N183	188	183^{+4}_{-2}	120 120 120	140 140 130	200		AC AC DC	3.0 2.0 6.0	125 250 50	33-625	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10927-ND	.45	.41	.38	EYP-2BN183
F Series																			
F102	102	98±2	70 75 55	74 76 60	200	150	AC AC DC	2.0 1.0 3.5	125 250 50	33-632	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10911-ND	.45	.41	.38	EYP-1BF102
F115	115	110^{+3}_{-2}	76 80 70	90 90 80	200	150	AC AC DC	2.0 1.0 4.0	125 250 50	33-634	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10912-ND	.45	.41	.38	EYP-1BF115
F130	130	126±2	90 94 74	105 105 90	200	180	AC AC DC	2.0 1.0 4.5	125 250 50	33-619	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10913-ND	.45	.41	.38	EYP-1BF130
F133	133	128±2	92 96 76	108 108 92	200	180	AC AC DC	2.0 1.0 4.5	125 250 50	33-619	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10914-ND	.45	.41	.38	EYP-1BF133
F139	139	135±3	99 103 80	115 115 95	200	180	AC AC DC	2.0 1.0 5.0	125 250 50	33-619	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10915-ND	.45	.41	.38	EYP-1BF139
F168	168	163^{+4}_{-2}	120 120 95	135 142 110	200		AC AC DC	2.0 1.0 5.0	125 250 50	33-623	○ ○ ○	○ ○ ○	○ ○ ○	— — —	P10916-ND	.45	.41	.38	EYP-1BF168
E Series																			
E102	102	98±2	70 75 65	78 80 70	200	150	AC AC DC	1.5 0.5 3.0	125 250 50	33-632	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10906-ND	.45	.41	.38	EYP-05BE102
E115	115	110±2	76 80 70	93 95 84	200	150	AC AC DC	1.5 0.5 3.0	125 250 50	33-634	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10907-ND	.45	.41	.38	EYP-05BE115
E130	130	126±2	90 94 83	112 112 102	200	180	AC AC DC	1.5 0.5 3.0	125 250 50	33-619	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10908-ND‡	.45	.41	.38	EYP-05BE130
E133	133	128±2	92 96 85	115 115 105	200	180	AC AC DC	1.5 0.5 3.0	125 250 50	33-619	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10909-ND	.45	.41	.38	EYP-05BE133
E139	139	135±3	99 103 92	120 120 110	200	180	AC AC DC	1.5 0.5 3.0	125 250 50	33-619	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10910-ND‡	.45	.41	.38	EYP-05BE139
MT Series †																			
MT092 MT092A MT092B	92	89±2	55	60	150		DC	2.0	50	—	○	—	—	—	P10928-ND P10929-ND P10930-ND	.89 .89 .89	.82 .82 .82	.75 .75 .75	EYP-2MT92 EYP-2MT92A EYP-2MT92B
MT098 MT098A MT098B	98	94±2	60	65	150		DC	2.0	50	—	○	—	—	—	P10931-ND P10932-ND P10933-ND	.89 .89 .89	.82 .82 .82	.75 .75 .75	EYP-2MT98 EYP-2MT98A EYP-2MT98B
MT102 MT102A MT102B	102	98±2	65	70	150		DC	2.0	50	—	○	—	—	—	P10934-ND P10935-ND P10936-ND	.89 .89 .89	.82 .82 .82	.75 .75 .75	EYP-2MT102 EYP-2MT102A EYP-2MT102B

NOTES:

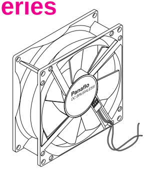
1. **Rated Functioning Temperature** (UL: TF, CSA, VDE, BEAB: Tf). The temperature at which a TCO changes its state of conductivity to open circuit with loading detection current only. Tolerance: ▽: ±7°C; UL, CSA, VDE, BEAB: 0 / -10°C
2. **Functioning Temperature** (Fusing-off temperature): The functioning temperature at which a TCO changes its state of conductivity to open circuit in the ambient air oven which increases temperature by 1°C per minute and with loading the detective current 0.1A or less.
3. **Maximum Operating Temperature:** The maximum temperature at which a TCO can be maintained while conducting rated current for 3000 h.
4. **Holding Temperature** (UL: TH, CSA: Th, VDE, BEAB: Tc). The maximum temperature at which a TCO can be maintained while conducting rated current for 168h which will not cause a change in state of conductivity to open circuit.
5. **Maximum Temperature Limit** (UL: TM, CSA, VDE, BEAB: Tm) The maximum temperature at which a TCO can maintain its mechanical and electrical properties without closing again for 10 minutes after a TCO has changed its state of conductivity.

‡ P10908-ND and P10910-ND are additionally approved for UL, on DC50V 5A.
† Std. DC Resistance is <15mΩ, A = <16mΩ, B = <17mΩ.

L

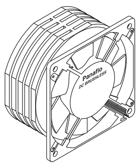
Panasonic DC Fans FBA & FBL Series

FBA Series



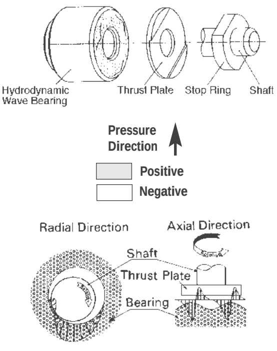
FBA fans force air out in a “funnel” type pattern, and are ideal when cooling a specific area that is surrounded by numerous components with minimum ventilation available.

FBL Series



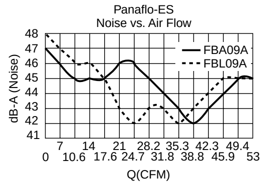
Louvered design increases air flow and decreases turbulent noise at standard rating conditions.

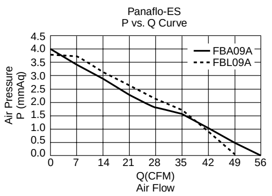
Hydro-Wave Bearing Technology Fans



Bearing Structure and Pressure Distribution

Panaflo's unique hydro-wave bearing (HWB) technology addresses the traditional weakness of sleeve bearings...axial friction. By utilizing our unique HWB system, the thrust plate "floats" on a circulating film of oil greatly reducing the axial friction and the bearings deterioration. The HWB pattern on the bearing virtually eliminates contact with the thrust plate which is depicted above.





Operating Voltage (VDC)		Dim. (mm) Sq.xThk.	Input Power (W)	Max. Air Flow (CFM)	Max. Air Pressure (mmH$_2$O)	Max. Noise (dB-A)	Digi-Key Part No.	Price Each					Panasonic Part No.	Finger Guards	Price Each
Nom.	Range							1	5	10	50	100			
FBA Series Hydro-Wave Bearing (HWB) Fans															
12	7-13.8	60 x 15	1.04	12.0	2.77	23.5	P9724-ND	12.50	10.75	8.33	7.70	7.15	FBA06T12L	CR221-ND	.71
12	7-13.8	60 x 15	1.78	16.6	4.75	32.0	P9725-ND	12.50	10.75	8.33	7.70	7.15	FBA06T12H	CR221-ND	.71
24	14-27.6	60 x 15	1.34	12.0	2.77	23.5	P9726-ND	12.50	10.75	8.33	7.70	7.15	FBA06T24L	CR221-ND	.71
24	14-27.6	60 x 15	1.99	16.6	4.75	32.0	P9727-ND	12.50	10.75	8.33	7.70	7.15	FBA06T24H	CR221-ND	.71
12	7-13.5	60 x 25.5	1.32	12.0	3.1	24.0	P9728-ND	11.88	10.22	7.92	7.31	6.79	FBA06A12L1A	CR221-ND	.71
12	7-13.5	60 x 25.5	1.32	12.0	3.1	24.0	P11034-ND	10.13	8.71	6.75	6.24	5.79	FBA06A12L1BX	CR221-ND	.71
12	7-13.5	60 x 25.5	1.56	16.6	—	28.0	P9767-ND	11.88	10.22	7.92	7.31	6.79	FBA06A12M1A	CR221-ND	.71
12	7-13.5	60 x 25.5	2.04	16.6	5.21	32.0	P9729-ND	11.88	10.22	7.92	7.31	6.79	FBA06A12H1A	CR221-ND	.71
12	7-13.5	60 x 25.5	2.04	16.6	5.21	32.0	P11033-ND	10.13	8.71	6.75	6.24	5.79	FBA06A12H1BX	CR221-ND	.71
12	7-13.8	60 x 25	3.24	19.7	4.7	42.0	P9758-ND	11.88	10.22	7.92	7.31	6.79	FBA06A12U1A	CR221-ND	.71
24	14-27.6	60 x 25.5	1.68	12.0	3.1	24.0	P9730-ND	11.88	10.22	7.92	7.31	6.79	FBA06A24L1A	CR221-ND	.71
24	14-27.6	60 x 25.5	2.16	16.6	—	28.0	P9768-ND	11.88	10.22	7.92	7.31	6.79	FBA06A24M1A	CR221-ND	.71
24	14-27.6	60 x 25.5	2.52	16.6	5.21	32.0	P9731-ND	11.88	10.22	7.92	7.31	6.79	FBA06A24H1A	CR221-ND	.71
12	7-13.8	80 x 15	0.94	21.9	1.55	21.5	P9732-ND	12.50	10.75	8.33	7.70	7.15	FBA08T12L	CR180-ND	.85
12	7-13.8	80 x 15	2.40	33.6	3.2	33.5	P9733-ND	12.50	10.75	8.33	7.70	7.15	FBA08T12H	CR180-ND	.85
24	14-27.6	80 x 15	1.13	21.9	1.55	21.5	P9734-ND	12.50	10.75	8.33	7.70	7.15	FBA08T24L	CR180-ND	.85
24	14-27.6	80 x 15	2.64	33.6	3.2	33.5	P9735-ND	12.50	10.75	8.33	7.70	7.15	FBA08T24H	CR180-ND	.85
12	7-13.5	80 x 25.5	0.84	24.0	1.57	21.0	P9736-ND	11.88	10.22	7.92	7.31	6.79	FBA08A12L1A	CR180-ND	.85
12	7-13.5	80 x 25.5	0.84	24.0	1.57	21.0	P11037-ND	10.13	8.71	6.75	6.24	5.79	FBA08A12L1AZ	CR180-ND	.85
12	7-13.5	80 x 25.5	1.50	32.1	2.51	28.0	P9737-ND	11.88	10.22	7.92	7.31	6.79	FBA08A12M1A	CR180-ND	.85
12	7-13.5	80 x 25.5	1.50	32.1	2.51	28.0	P11038-ND	10.13	8.71	6.75	6.24	5.79	FBA08A12M1BS	CR180-ND	.85
12	7-13.5	80 x 25.5	1.50	32.1	2.51	28.0	P11039-ND	10.13	8.71	6.75	6.24	5.79	FBA08A12M1BX	CR180-ND	.85
12	7-13.5	80 x 25.5	2.10	39.6	3.78	32.0	P9738-ND	11.88	10.22	7.92	7.31	6.79	FBA08A12H1A	CR180-ND	.85
12	7-13.8	80 x 25	4.32	46.9	3.8	44.0	P9759-ND	11.88	10.22	7.92	7.31	6.79	FBA08A12U1A	CR180-ND	.85
24	14-27.6	80 x 25.5	1.32	24.0	1.57	21.0	P9739-ND	11.88	10.22	7.92	7.31	6.79	FBA08A24L1A	CR180-ND	.85
24	14-27.6	80 x 25.5	1.80	32.1	2.51	28.0	P9740-ND	11.88	10.22	7.92	7.31	6.79	FBA08A24M1A	CR180-ND	.85
24	14-27.6	80 x 25.5	2.52	39.6	3.78	32.0	P9741-ND	11.88	10.22	7.92	7.31	6.79	FBA08A24H1A	CR180-ND	.85
12	7-13.5	80 x 25.5	2.10	39.6	3.78	32.0	P11035-ND	10.13	8.71	6.75	6.24	5.79	FBA08A12H1AZ	CR180-ND	.85
12	7-13.5	80 x 25.5	2.10	39.6	3.78	32.0	P11036-ND	10.13	8.71	6.75	6.24	5.79	FBA08A12H1BS	CR180-ND	.85
12	7-13.5	92 x 25.5	1.32	42.7	2.3	27.0	P9742-ND	11.88	10.22	7.92	7.31	6.79	FBA09A12L1A	CR220-ND	.92
12	7-13.5	92 x 25.5	1.32	42.7	2.3	27.0	P11043-ND	10.13	8.71	6.75	6.24	5.79	FBA09A12L1BX	CR220-ND	.92
12	7-13.5	92 x 25.5	1.80	48.0	3.0	30.0	P9743-ND	11.88	10.22	7.92	7.31	6.79	FBA09A12M1A	CR220-ND	.92
12	7-13.5	92 x 25.5	2.70	56.9	3.98	35.0	P9744-ND	11.88	10.22	7.92	7.31	6.79	FBA09A12H1A	CR220-ND	.92
12	7-13.5	92 x 25.5	2.70	56.9	3.98	35.0	P11040-ND	10.13	8.71	6.75	6.24	5.79	FBA09A12H1AZ	CR220-ND	.92
12	7-13.5	92 x 25.5	2.70	56.9	3.98	35.0	P11041-ND	10.75	9.25	7.17	6.62	6.15	FBA09A12H1BO	CR220-ND	.92
12	7-13.5	92 x 25.5	2.70	56.9	3.98	35.0	P11042-ND	10.13	8.71	6.75	6.24	5.79	FBA09A12H1BX	CR220-ND	.92
12	7-13.5	92 x 25.5	5.16	68.8	5.0	43.0	P11044-ND	10.75	9.25	7.17	6.62	6.15	FBA09A12U1BO	CR220-ND	.92
12	7-13.8	92 x 25	6.60	65.6	4.6	47.0	P9760-ND	11.88	10.22	7.92	7.31	6.79	FBA09A12U1A	CR220-ND	.92
24	14-27.6	92 x 25.5	1.92	42.7	2.3	27.0	P9745-ND	11.88	10.22	7.92	7.31	6.79	FBA09A24L1A	CR220-ND	.92
24	14-27.6	92 x 25.5	2.64	48.0	3.0	30.0	P9746-ND	11.88	10.22	7.92	7.31	6.79	FBA09A24M1A	CR220-ND	.92
24	14-27.6	92 x 25.5	3.36	56.9	3.98	35.0	P9747-ND	11.88	10.22	7.92	7.31	6.79	FBA09A24H1A	CR220-ND	.92
24	14-27.6	92 x 25.5	3.36	56.9	3.98	35.0	P11045-ND	10.13	8.71	6.75	6.24	5.79	FBA09A24H1AZ	CR220-ND	.92
24	14-27.6	92 x 25.5	3.36	56.9	3.98	35.0	P11046-ND	10.13	8.71	6.75	6.24	5.79	FBA09A24H1BS	CR220-ND	.92
24	14-27.6	92 x 25.5	3.36	56.9	3.98	35.0	P11047-ND	10.13	8.71	6.75	6.24	5.79	FBA09A24H1BX	CR220-ND	.92
12	7-13.8	120 x 38	2.16	68.9	3.3	30.0	P9748-ND	21.13	18.17	14.08	13.00	12.08	FBA12G12L1A	CR210-ND	1.79
12	7-13.8	120 x 38	4.08	86.5	4.8	35.5	P9749-ND	21.13	18.17	14.08	13.00	12.08	FBA12G12M1A	CR210-ND	1.79
12	7-13.5	120 x 38	5.52	103.8	6.8	41.5	P9750-ND	21.13	18.17	14.08	13.00	12.08	FBA12G12H1A	CR210-ND	1.79
12	7-13.5	120 x 38	5.52	103.8	6.8	41.5	P11048-ND	18.50	15.91	12.33	11.39	10.58	FBA12G12H1AZ	CR210-ND	1.79
12	7-13.5	120 x 38	5.52	103.8	6.8	41.5	P11049-ND	18.50	15.91	12.33	11.39	10.58	FBA12G12H1BS	CR210-ND	1.79
12	7-13.5	120 x 38	5.52	103.8	6.8	41.5	P11050-ND	18.50	15.91	12.33	11.39	10.58	FBA12G12H1BX	CR210-ND	1.79
12	7-13.8	120 x 38	7.8	114.7	6.2	50.0	P9761-ND	24.45	21.03	16.30	15.05	13.98	FBA12G12U1A	CR210-ND	1.79
24	14-27.6	120 x 38	2.64	68.9	3.3	30.0	P9751-ND	21.13	18.17	14.08	13.00	12.08	FBA12G24L1A	CR210-ND	1.79
24	14-27.6	120 x 38	3.84	86.5	4.8	35.5	P9752-ND	21.13	18.17	14.08	13.00	12.08	FBA12G24M1A	CR210-ND	1.79
24	14-27.6	120 x 38	5.52	103.8	6.8	41.5	P9753-ND	21.13	18.17	14.08	13.00	12.08	FBA12G24H1A	CR210-ND	1.79
24	14-27.6	120 x 38	5.52	103.8	6.8	41.5	P11080-ND	18.50	15.91	12.33	11.39	10.58	FBA12G24H1BX	CR210-ND	1.79
FBL Series Hydro-Wave Bearing (HWB) Fans															
12	7-13.8	60 x 25.5	1.68	14.83	2.1	29.0	P10890-ND	12.50	10.75	8.33	7.70	7.15	FBL06A12L1A	CR221-ND	.71
12	7-13.8	60 x 25.5	2.04	13.06	3.0	32.0	P10891-ND	12.50	10.75	8.33	7.70	7.15	FBL06A12M1A	CR221-ND	.71
12	7-13.8	60 x 25.5	2.64	14.83	4.1	36.0	P10892-ND	12.50	10.75	8.33	7.70	7.15	FBL06A12H1A	CR221-ND	.71
12	7-13.5	60 x 25.5	3.24	15.89	4.7	42.0	P10893-ND	12.50	10.75	8.33	7.70	7.15	FBL06A12U1A	CR221-ND	.71
24	14-27.6	60 x 25.5	1.68	14.83	2.1	29.0	P11014-ND	12.50	10.75	8.33	7.70	7.15	FBL06A24L1A	CR221-ND	.71
24	14-27.6	60 x 25.5	2.04	13.06	3.0	32.0	P11015-ND	12.50	10.75	8.33	7.70	7.15	FBL06A24M1A	CR221-ND	.71
24	14-27.6	60 x 25.5	2.64	14.83	4.1	36.0	P11016-ND	12.50	10.75	8.33	7.70	7.15	FBL06A24H1A	CR221-ND	.71
24	14-27.6	60 x 25.5	3.24	15.89	4.7	42.0	P11017-ND	12.50	10.75	8.33	7.70	7.15	FBL06A24U1A	CR221-ND	.71
12	7-13.8	80 x 25.5	1.20	17.30	1.1	26.0	P10894-ND	12.50	10.75	8.33	7.70	7.15	FBL08A12L1A	CR180-ND	.85
12	7-13.8	80 x 25.5	2.04	24.71	2.0	33.0	P10895-ND	12.50	10.75	8.33	7.70	7.15	FBL08A12M1A	CR180-ND	.85
12	7-13.8	80 x 25.5	3.00	30.01	2.9	39.0	P10896-ND	12.50	10.75	8.33	7.70	7.15	FBL08A12H1A	CR180-ND	.85
12	7-13.8	80 x 25.5	4.32	35.30	4.0	42.0	P10897-ND	12.50	10.75	8.33	7.70	7.15	FBL08A12U1A	CR180-ND	.85
12	7-13.5	80 x 25.5	3.24	15.9	4.7	42.0	P11082-ND	13.13	11.29	8.75	8.08	7.50	FBL08A12U1BX	CR180-ND	.85
24	14-27.6	80 x 25.5	1.20	17.30	1.1	26.0	P11018-ND	12.50	10.75	8.33	7.70	7.15	FBL08A24L1A	CR180-ND	.85
24	14-27.6	80 x 25.5	2.04	24.71	2.0	33.0	P11019-ND	12.50	10.75	8.33	7.70	7.15	FBL08A24M1A	CR180-ND	.85
24	14-27.6	80 x 25.5	3.00	30.00	2.9	39.0	P11020-ND	12.50	10.75	8.33	7.70	7.15	FBL08A24H1A	CR180-ND	.85
24	14-27.6	80 x 25.5	4.32	35.30	4.0	42.0	P11021-ND	12.50	10.75	8.33	7.70	7.15	FBL08A24U1A	CR180-ND	.85
12	7-13.8	92 x 25.5	1.80	31.77	1.9	33.0	P10898-ND	12.50	10.75	8.33	7.70	7.15	FBL09A12L1A	CR220-ND	.92
12	7-13.8	92 x 25.5	2.40	35.30	2.3	36.0	P10899-ND	12.50	10.75	8.33	7.70	7.15	FBL09A12M1A	CR220-ND	.92
12	7-13.5	92 x 25.5	3.48	45.89	3.3	40.0	P10900-ND	12.50	10.75	8.33	7.70	7.15	FBL09A12H1A	CR220-ND	.92
12	7-13.5	92 x 25.5	3.48	45.9	3.3	40.0	P11083-ND	13.13	11.29	8.75	8.08	7.50	FBL09A12H1BX	CR220-ND	.92
12	7-13.8	92 x 25.5	6.60	54.72	4.4	47.0	P10901-ND	12.50	10.75	8.33	7.70	7.15	FBL09A12U1A	CR220-ND	.92
24	14-27.6	92 x 25.5	1.80	31.77	1.9	33.0	P11022-ND	12.50	10.75	8.33	7.70	7.15	FBL09A24L1A	CR220-ND	.92
24	14-27.6	92 x 25.5	2.40	35.30	2.3	36.0	P11023-ND	12.50	10.75	8.33	7.70	7.15	FBL09A24M1A	CR220-ND	.92
24	14-27.6	92 x 25.5	3.48	45.89	3.3	40.0	P11024-ND	12.50	10.75	8.33	7.70	7.15	FBL09A24H1A	CR220-ND	.92
24	14-27.6	92 x 25.5	6.60	54.70	4.4	47.0	P11025-ND	12.50	10.75	8.33	7.70	7.15	FBL09A24U1A	CR220-ND	.92
12	7-13.8	120 x 38	2.88	52.95	2.3	35.0	P10902-ND	28.25	24.30	18.83	17.39	16.15	FBL12G12L1A	CR210-ND	1.79
12	7-13.8	120 x 38	5.40	67.07	3.6	41.0	P10903-ND	28.25	24.30	18.83	17.39	16.15	FBL12G12M1A	CR210-ND	1.79
12	7-13.8	120 x 38	7.20	81.19	5.2	46.0	P10904-ND	28.25	24.30	18.83	17.39	16.15	FBL12G12H1A	CR210-ND	1.79
12	7-13.8	120 x 38	7.80	86.49	5.5	48.0	P10905-ND	29.38	25.27	19.58	18.08	16.79	FBL12G12U1A	CR210-ND	1.79
24	14-27.6	120 x 38	2.88	52.95	2.3	35.0	P11026-ND	28.25	24.30	18.83	17.39	16.15	FBL12G24L1A	CR210-ND	1.79
24	14-27.6	120 x 38	5.40	67.07	3.6	41.0	P11027-ND	28.25	24.30	18.83	17.39	16.15	FBL12G24M1A	CR210-ND	1.79
24	14-27.6	120 x 38	7.20	81.19	5.2	46.0	P11028-ND	28.25	24.30	18.83	17.39	16.15	FBL12G24H1A	CR210-ND	1.79
24	14-27.6	120 x 38	7.80	86.49	5.5	48.0	P11029-ND	29.38	25.27	19.58	18.08	16.79	FBL12G24U1A	CR210-ND	1.79

Manufacturer Part Number Ending Code:
AZ - Solid Corner Housing **BS** - Locked Rotor Alarm Sensor **BX** - 2 PPR Speed Sensor (TAC Output) **BO** - Locked Rotor Alarm Sensor & Solid Corner Housing

P11030-ND	Lead Wire Assembly, 3 Conductors	**$.63/1; $13.13/25**
P11031-ND	Lead Wire Assembly, 2 Conductors	**$.63/1; $13.13/25**
A1950-ND	Crimp Contacts, 22-26 AWG	**$.62/10; $3.74/100**
A1948-ND	Connector Housing For Hydro-Wave Fans	**$.26/1; $1.75/10; $8.77/100**

Panasonic

DC Fans

UDQ Series

- **Operating Temperature:** 0°C to 70°C
- **Operating Humidity:** <85 Rh%

Fig. 1 – Flat Unidirectional

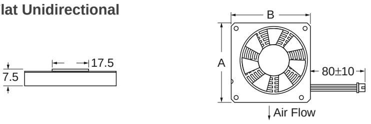


Fig. 2 – Vertical

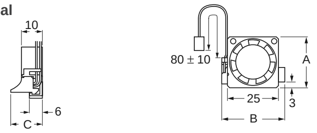


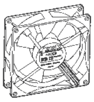
Fig.	Dim. (mm) A B C	Operating Voltage (VDC) Nom.	Range	@ 60° C Current (mA)	Speed (r/min)	Max Air Flow @ 60° C (m3/min.)	(CFM)	Max Air Pressure @ 60° C (Pa)	(in H2O)	Life Expectancy (HRS@ 60°C)	Noise @ 1M dBA	Digi-Key Part Number	Price Each 1	5	10	50	100	Panasonic Part Number
1	34.5 x 34.5 x 7.5	3.1	5.5	145	8,000	0.013	0.46	34	0.14	30,000	40	P9696-ND*	28.13	24.19	18.75	17.31	16.08	UDQFC3E07-P1
	34.5 x 34.5 x 7.5	3.1	5.5	145	8,000	0.013	0.46	34	0.14	30,000	40	P9697-ND†	28.13	24.19	18.75	17.31	16.08	UDQFC3E08-PI
	35 x 35 x 6	5	3.1-5.5	125	8,000	0.012	0.43	32	0.13	30,000	25	P11086-ND§	30.50	26.23	20.33	18.77	17.43	UDQFMKH01-P1
	35 x 35 x 6	5	3.1-5.5	125	8,000	0.012	0.43	32	0.13	30,000	25	P11087-ND§	30.50	26.23	20.33	18.77	17.43	UDQFMKH01F-P1
	35 x 35 x 7	5	3.1-5.5	175	7,000	0.027	0.96	52	0.21	30,000	28	P11088-ND§	26.25	22.58	17.50	16.16	15.00	UDQFNLH21-P1
	44.5 x 44.5 x 7.5	5	4.5-6	150	4,800	0.022	0.78	24.5	0.10	30,000	26	P9770-ND*	28.13	24.19	18.75	17.31	16.08	UDQFC4E07-PI
	45 x 45 x 7	5	3.1-5.5	225	7,500	0.039	1.4	65	0.26	30,000	33	P11089-ND§	28.13	24.19	18.75	17.31	16.08	UDQFUMH01-P1
	45 x 45 x 10	5	3.1-5.5	200	5,500	0.07	2.5	65	0.26	30,000	33	P11090-ND§	26.75	23.01	17.83	16.47	15.29	UDQFSEH01-P1
2	25 x 25 x 10	5	3.1-5.5	130	13,000	0.1	2	60	0.24	30,000	29	P11084-ND‡	33.88	29.14	22.58	20.85	19.36	UDQFBDB01-P1
	25 x 30 x 15	5	4.5-6	65	6,700	0.023	0.81	9.8	0.04	10,000	21	P9771-ND	28.13	24.19	18.75	17.31	16.08	UDQFB2E02-PI
	30 x 30 x 10	5	3.1-5.5	90	8,500	0.1	3.6	35	0.14	30,000	26	P11085-ND‡	33.88	29.14	22.58	20.85	19.36	UDQFHBB01-P1
	30 x 30 x 14	5	4.5-6	85	5,600	0.062	2.19	13	0.06	30,000	21	P9779-ND	28.13	24.19	18.75	17.31	16.08	UDQFB3E5-1-PI

* Thermal Sensor 10K@ 25°C † TAC Output (2PPR) § Hydrodynamic Bearings ‡ Ball Bearings

DC Fans FBK Series

TÜV

- Brushless DC Motor
- Low RF and Audible Sound
- Adjustable Speed
- High Efficiency
- Long Life



GENERAL SPECIFICATIONS:

Operating Temperature: -10°C to +70°C. **Bearing System:** Ball bearing. **Insulation Resistance:** 10MΩmin. DC 250V between frame and 1 lead wire. **Dielectric Strength:** AC 500V 1 minute less than 5mA between frame and + lead wire.

- Plastic housing and blade material are PET, UL 94V-0 rating.
- Noise is measured at rated voltage in free air in Semi-Anechoic Chamber of Background Noise 18 dB max.
- Panasonic will guarantee the life time as 40,000 hours with 100% confidence at 25°C continuous operation.

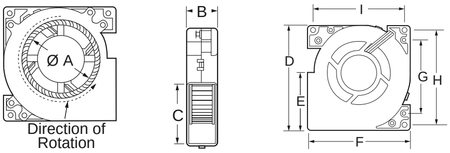
Operating Voltage (VDC) Nom.	Range	Dim. (mm) Sq.xThk.	Input Power (W)	Max Air Flow (CFM)	Max Air Pressure (mmH2O)	Max Noise (dB-A)	Digi-Key Part No.	Price Each 1	5	10	50	100	Panasonic Part No.	Finger Guards	Price Each
5	4.5-6	40 x 20	0.65	3.9	2.5	24.0	P9700-ND	17.50	15.05	11.67	10.77	10.00	FBK04F05L	CR285-ND	.43
5	4.5-6	40 x 20	1.50	6.7	6.6	33.0	P9701-ND	17.50	15.05	11.67	10.77	10.00	FBK04F05H	CR285-ND	.43
12	7-13.8	40 x 20	0.96	3.9	2.5	23.0	P9702-ND	17.50	15.05	11.67	10.77	10.00	FBK04F12L	CR285-ND	.43
12	7-13.8	40 x 20	2.40	6.7	6.6	32.0	P9703-ND	17.50	15.05	11.67	10.77	10.00	FBK04F12H	CR285-ND	.43
12	7-13.8	40 x 20	2.06	9.2	11.5	43.0	P9723-ND	17.50	15.05	11.67	10.77	10.00	FBK04F12U	CR285-ND	.43
24	14-27.6	40 x 20	2.20	6.7	6.6	33.0	P9704-ND	17.50	15.05	11.67	10.77	10.00	FBK04F24H	CR285-ND	.43
24	14-27.6	40 x 20	3.84	9.7	7.5	23.5	P9762-ND	17.50	15.05	11.67	10.77	10.00	FBK04F24U	CR285-ND	.43
12	7-13.5	40 x 20	2.40	6.7	6.6	32.0	P11081-ND*	15.25	13.12	10.17	9.39	8.72	FBK04F12HS	CR285-ND	.43

* Locked rotor alarm sensor

DC Blowers Scirocco Blowers

Blowers With Hydro-Wave Bearing Technology

- **Operating Temp:** -10°C to 60°C.
- **Storage Temp:** -40°C to 75°C.
- **Bearing System:** HWB



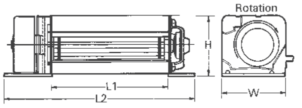
Model Type	Dimensions(mm) A	B	C	D	E	F	G	H	I
FAL-6F	65.8	28.1	55.7	111.4	60.7	107.1	76	99	97
FAL-5F	50	28	37	76	41	76	47	68	68
FAL-3F	33.2	20	26.8	50	26.8	50	29.6	43	43

Operating Voltage (VDC) Nom.	Range	Input Current (mA)	Air Power (W)	Static Flow (m3/min/CFM)	Pressure (mmQa/InchAq)	Acoustic Noise	Digi-Key Part No.	Price Each 1	5	10	50	100	Panasonic Part No.
12	7-13.8	500	6.00	0.65/22.97	18/0.71	45	P9754-ND	32.75	28.17	21.83	20.16	18.72	FAL6F12LH
12	7-13.8	280	3.36	0.53/18.73	11.2/0.44	40	P9755-ND	32.75	28.17	21.83	20.16	18.72	FAL6F12LL
24	14-27.6	295	7.08	0.67/23.7	19.7/0.78	45	P9763-ND	32.75	28.17	21.83	20.16	18.72	FAL6F24LH
24	14-27.6	155	3.72	0.53/18.7	11.5/0.45	40	P9764-ND	32.75	28.17	21.83	20.16	18.72	FAL6F24LL
12	7-13.8	210	2.52	0.3/10.60	10.5/0.41	35	P9756-ND	30.13	25.91	20.08	18.54	17.22	FAL5F12LH
12	7-13.8	145	1.74	0.25/8.83	6.1/0.24	29	P9757-ND	30.13	25.91	20.08	18.54	17.22	FAL5F12LL
24	14-27.6	150	3.5	0.26/9.18	7.2/0.28	40	P9765-ND	30.13	25.91	20.08	18.54	17.22	FAL5F24LH
24	14-27.6	100	2.4	0.20/7.06	4.1/0.16	37.5	P9766-ND	30.13	25.91	20.08	18.54	17.22	FAL5F24LL
5	4.5-6	320	1.6	.09	6.0	34	P9772-ND	24.63	21.18	16.41	15.16	14.08	FAL3F05LL
5	4.5-6	570	2.85	.12	10.0	40	P9773-ND	24.63	21.18	16.41	15.16	14.08	FAL3F05LH
12	7-13.8	170	2.04	.09	6.0	34	P9774-ND	24.63	21.18	16.41	15.16	14.08	FAL3F12LL
12	7-13.8	270	3.24	.12	10.0	40	P9775-ND	24.63	21.18	16.41	15.16	14.08	FAL3F12LH
24	14-27.6	150	3.6	.12	10.0	40	P9776-ND	24.63	21.18	16.41	15.16	14.08	FAL3F24LH
12	7-13.5	500	6.00	0.65/22.97	18/0.71	45	P11032-ND	33.38	28.71	22.25	20.54	19.08	FAL6F12LHXA*

* 2 PPR speed sensor (TAC Output)

Cross Flow Fans

DESIGN: • **Motor:** DC Brushless 2 phase half wave drive • **Bearing:** Sleeve with Molded monobody housing • **Blade:** Molded, 1.30" (33mm) dia., 1.57" (39.9mm) long multiple blades • **Mounting:** L-Shaped Molded Bracket • **Lead Wires:** UL 1007, AWG 26



Model Type	Dimensions (mm) L1	L2	H	W
FCB-34AA□□	77.98	134.11	44.96	50.04
FCB-34AB□□	117.09	173.48	44.96	50.04
FCB-34AC□□	155.96	212.09	44.96	50.04
FCB-34AD□□	195.07	250.95	44.96	50.04
FCB-34AE□□	233.93	290.07	44.96	50.04
FCB-34AF□□	273.05	328.93	44.96	50.04

Operating Voltage (VDC) Nominal	Range	Input Power (W)	Air Flow (CFM)	Air Pressure (mmH2O)	Noise (dB-A)	Digi-Key Part No.	Price Each 1	5	10	50	Panasonic Part No.
12	10.2-13.8	1.95	10.6	1.3	37.0	P9711-ND	26.50	22.79	17.66	16.31	FCB34AA12
24	20.4-27.6	2.60	10.6	1.5	38.2	P9712-ND	26.50	22.79	17.66	16.31	FCB34AA24
12	10.2-13.8	4.08	21.6	3.0	42.0	P9721-ND	27.25	23.44	18.16	16.77	FCB34AB12
24	20.4-27.6	3.94	22.7	2.4	42.0	P9722-ND	27.25	23.44	18.16	16.77	FCB34AB24
12	10.2-13.8	4.50	28.3	2.0	43.0	P9713-ND	28.05	24.13	18.70	17.27	FCB34AC12
24	20.4-27.6	4.70	28.3	1.9	42.0	P9714-ND	28.05	24.13	18.70	17.27	FCB34AC24
12	10.2-13.8	4.50	35.3	2.1	42.0	P9715-ND	28.75	24.73	19.16	17.70	FCB34AD12
24	20.4-27.6	5.00	35.3	2.1	41.2	P9716-ND	28.75	24.73	19.16	17.70	FCB34AD24
12	10.2-13.8	4.50	38.9	2.2	42.0	P9717-ND	29.50	25.37	19.66	18.16	FCB34AE12
24	20.4-27.6	5.50	38.9	2.2	41.3	P9718-ND	29.50	25.37	19.66	18.16	FCB34AE24
12	10.2-13.8	5.00	42.4	2.2	43.0	P9719-ND	30.25	26.02	20.16	18.62	FCB34AF12
24	20.4-27.6	6.00	42.4	2.2	41.8	P9720-ND	30.25	26.02	20.16	18.62	FCB34AF24

COMAIR ROTRON

DC Brushless, TPV and Tachometer

Fig. 1

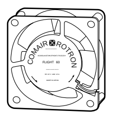


Fig. 2

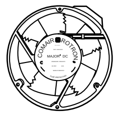


Fig. 3

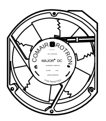
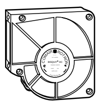


Fig. 4



AC Fans - Motor:

Two-pole shaded pole induction motor. All 50/60Hz, impedance or thermally protected. 100% dielectric tested at 1800 VAC/1 sec./500 microamps max. leakage.

TPV Fans - Motor:

Voltage regulated, programmable, thermally speed controlled brushless DC fans for completely reliable cooling. Current limiting circuits.

DC Fans - Motor:

Brushless electronic commutation provided by dependable solid-state circuitry. 100% dielectric tested at 600 VAC/1 sec./500 microamps max. leakage. Electronic locked rotor protection. Polarity protected.

DC, TPV and Tachometer Output DC Fans

Model	Venturi	Propeller	EMI (See Right)
Flight LT Series	PPS Plastic, black glass-filled, meets UL94V-0	PBT Plastic, black reinforced glass, meets UL94V-0	A
Flight II Series	PBT with glass, black, meets UL94V-0	PBT, black, meets UL94V-0	B
Sprint	Glass-filled nylon, black, meets UL94V-0	Injection molded polypropylene, black, meets UL94V-0	B
Sprite	One-piece die-cast zinc alloy, black	Flame retardant polypropylene, black, meets UL94V-0	C
Muffin	Glass-filled nylon, black, meets UL94V-0	Injection molded polypropylene, black, meets UL94V-0	—
Muffin XL	One-piece die-cast zinc alloy, black	Flame retardant polypropylene, black, meets UL94V-0	C
Whisper XL	One-piece die-cast zinc alloy, black	Flame retardant polypropylene, black, meets UL94V-0	C
Muffin XP	Plastic, Black, UL94V-0	Plastic, Black, UL94V-0	—
Diplomat	One-piece die-cast aluminum, black	Polycarbonate, black, meets UL94V-0	B
Galaxy	One-piece die-cast zinc alloy, black	Polycarbonate, black, meets UL94V-0	C
Patriot Quiet	One-piece die-cast aluminum, black	Polycarbonate, black, meets UL94V-0	B
Major Quiet	One-piece die-cast aluminum, black	Polycarbonate, black, meets UL94V-0	C
Falcon	One-piece die-cast aluminum	Polycarbonate, black, meets UL94V-0	B
Maltese	One-piece die-cast aluminum	Polycarbonate, black, meets UL94V-0	B
Tarzan	Plastic, black, meets UL94V-0	Injection molded of flame retardant polycarbonate, black, meets UL94V-0	B
Caravel	One-piece die-cast aluminum, black	Polycarbonate, black, meets UL94V-0	B
Whiffet Blower	Glass-filled polyester, black, meets UL94V-0	Polyester, black, meets UL94V-0	B
Biscuit Blower	Mineral-filled nylon, black, meets UL94V-0	Polypropylene, black, meets UL94V-0	—
Viking Blower	Glass-filled polyester, black, meets UL94V-0	Polypropylene, black, meets UL94V-0	—
Spinnaker	One-piece die-cast zinc alloy, black	Flame retardant polycarbonate, black, meets UL94V-0	B
Muffin TPV	Flame retardant, black, phenolic	Flame retardant polypropylene, black	—
Sprint TPV	One-piece die-cast zinc alloy, black	Flame retardant polypropylene, black, meets UL94V-0	B
Patriot TPV	One-piece die-cast aluminum, black	Polycarbonate, black, meets UL94V-0	—

EMI

- **A** Meets EMI standards per FCC part 15, subpart J of Docket 20780, Class A or B radiated and conducted emissions.
- **B** Meets EMI standards per FCC part 15, subpart J of Docket 20780, Class A or B radiated and conducted emissions. Meets EMI standards per VDE specification 0871/6.78 for category A and B requirements.
- **C** Per MIL STD 461, Meets EMI standards per FCC part 15, subpart J of Docket 20780, Class A or B radiated and conducted emissions. Meets EMI standards per VDE specification 0871/6.78 for category A and B requirements.

APPROVALS

1. UL yellow card recognized, file No. E31293.
2. CSA certified, file No. L52898.
3. CSA certified, file No. LR52898.
4. CSA certified, file No. UL E31293.
5. CSA certified, file No. LR701980.
6. CSA certified, file No. LR70190.
7. TUV certified, file No. EN60950.
8. TUV approved to IEC 950, VDE 0730; License R97229.
9. TUV approved to IEC 950, VDE 0730; License R97152 and R97188.
10. Complies with FCC Part 15 Class B of EN55022 - 1994 Class B Conducted Emissions.
11. Complies with FCC Part 15 Class B of EN55022 - 1995 Class B Radiated Emissions.
12. Environmental Protection Type 2

Fig.	Model	Connection Type	Bearing	Voltage		Power (Watts)	Running Current	RPM	CFM	Dimensions (mm)	Life(F) Expectancy	Approvals (See Above)	Digi-Key Part No.	Price Each		Comair Model No.	Finger Guards	Price Each
				Nom.	Range									1	25			
Brushless DC Fans																		
1	Flight LT 25,40,52	Lead Wires	Ball	12	6/14	0.8	70mA	10000	1.40	25x10	50,000 hrs. @ 25°C	1, 5	CR011-ND	24.07	20.75	CR0212LB-G70	—	—
		Lead Wires	Ball	12	6/14	1.2	100mA	6000	6.80	40x10	50,000 hrs. @ 25°C	1, 5	CR015-ND	18.79	16.20	CR0412HB-G70	CR230-ND	.64
		Lead Wires	Ball	12	6/14	1.4	130mA	8500	10.80	40x20	50,000 hrs. @ 25°C	1, 5	CR016-ND	16.68	14.38	CR0412HB-C50	CR230-ND	.64
		Lead Wires	Ball	24	24/56	1.8	75mA	8500	10.8	40x20	50,000 hrs. @ 25°C	1, 5	CR360-ND	10.87	9.37	CR0424HB-C50	CR230-ND	.64
		Lead Wires	Ball	12	6/14	1.0	80mA	3800	9.80	52x10	50,000 hrs. @ 25°C	1, 5	CR018-ND	18.07	15.58	CR0512HB-G90	—	—
		Lead Wires	Ball	12	6/14	1.2	100mA	4600	12.00	52x15	50,000 hrs. @ 25°C	1, 5	CR022-ND	18.68	16.10	CR0512HB-D71	—	—
1	Flight II 60	Lead Wires	Ball	12	6/14	1.7	142mA	5000	18	60x25	60,000 hrs. @ 25°C	1, 2, 7	CR001-ND	31.61	25.07	FS12B3	CR221-ND	.71
		Lead Wires	Ball	24	12/28	1.9	80mA	5000	18	60x25	60,000 hrs. @ 25°C	1, 2, 7	CR002-ND	31.61	25.07	FS24B3	CR221-ND	.71
		Lead Wires	Ball	12	6/14	1.0	84mA	3500	12	60x25	60,000 hrs. @ 40°C	1, 2, 7	CR003-ND	31.61	25.07	FS12H3	CR221-ND	.71
		Lead Wires	Ball	24	12/28	1.1	46mA	3500	12	60x25	60,000 hrs. @ 25°C	1, 2, 7	CR004-ND	31.61	25.07	FS24H3	CR221-ND	.71
		Lead Wires	Ball	5	4.5/5.5	2.0	400mA	5000	18	60x25	60,000 hrs. @ 25°C	1, 2, 7	CR346-ND	14.09	12.14	FS05B3	CR221-ND	.71
		Lead Wires	Ball	5	4.5/5.5	1.0	190mA	3500	12	60x25	60,000 hrs. @ 25°C	1, 2, 7	CR347-ND	14.09	12.14	FS05H3	CR221-ND	.71
		Lead Wires	Ball	48	24/56	4.0	80mA	5930	23	60x25	60,000 hrs. @ 25°C	1, 2, 7	CR348-ND	14.09	12.14	FS48K3	CR221-ND	.71
		Lead Wires	Ball	12	6/14	3.1	260mA	6200	23	60x25	60,000 hrs. @ 25°C	1, 2, 7	CR358-ND	14.09	12.14	FS12K3	CR221-ND	.71
1	Flight LT 60	Lead Wires	Ball	12	6/14	1.6	130mA	4500	16.60	60x15	50,000 hrs. @ 25°C	1, 6	CR023-ND	16.15	13.93	CR0612HB-D71GL	CR221-ND	.71
		Lead Wires	Ball	12	6/14	2.8	230mA	4500	23.20	60x25	50,000 hrs. @ 25°C	1, 6	CR024-ND	14.27	12.30	CR0612HB-A70GL	CR221-ND	.71
		Lead Wires	Ball	24	12/28	3.6	150mA	4500	23.20	60x25	50,000 hrs. @ 25°C	1, 6	CR026-ND	14.27	12.30	CR0624HB-A70GL	CR221-ND	.71
1	Flight II 80	Lead Wires	Ball	12	6/14	2.0	165mA	3600	37	80x25	60,000 hrs. @ 25°C	1, 2, 7	CR005-ND	32.19	25.53	FE12B3	CR180-ND	.85
		Lead Wires	Ball	24	12/28	2.0	87mA	3600	37	80x25	60,000 hrs. @ 25°C	1, 2, 7	CR006-ND	32.19	25.53	FE24B3	CR180-ND	.85
		Lead Wires	Ball	12	6/14	1.0	89mA	2700	27	80x25	60,000 hrs. @ 25°C	1, 2, 7	CR007-ND	32.19	25.53	FE12H3	CR180-ND	.85
		Lead Wires	Ball	24	12/28	1.2	48mA	2700	27	80x25	60,000 hrs. @ 25°C	1, 2, 7	CR008-ND	32.19	25.53	FE24H3	CR180-ND	.85
1	Flight LT 80	Lead Wires	Ball	12	6/14	3.0	250mA	3010	38.60	80x25	50,000 hrs. @ 25°C	1, 6	CR030-ND	13.08	11.28	CR0812HB-A70GL	CR180-ND	.85
		Lead Wires	Ball	12	6/14	1.8	150mA	2440	31.40	80x25	50,000 hrs. @ 25°C	1, 6	CR031-ND	13.08	11.28	CR0812MB-A70GL	CR180-ND	.85
		Lead Wires	Ball	24	12/28	3.8	160mA	3010	38.60	80x25	50,000 hrs. @ 25°C	1, 6	CR032-ND	13.08	11.28	CR0824HB-A70GL	CR180-ND	.85
1	Sprint	Lead Wires	Sleeve	12	6/14	3.4	280mA	3400	33	80x32	55,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR009-ND	16.20	13.95	ST12A3	CR180-ND	.85
		Lead Wires	Sleeve	24	12/28	3.3	140mA	3400	33	80x32	55,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR012-ND	16.20	13.95	ST24A3	CR180-ND	.85
		Lead Wires	Sleeve	12	6/14	1.4	120mA	2500	24	80x32	55,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR010-ND	16.20	13.95	ST12G3	CR180-ND	.85
		Lead Wires	Ball	12	6/14	3.4	280mA	3400	33	80x32	78,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR014-ND	18.45	15.89	ST12B3	CR180-ND	.85
		Lead Wires	Ball	24	12/28	3.3	140mA	3400	33	80x32	78,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR017-ND	18.45	15.89	ST24B3	CR180-ND	.85
		Lead Wires	Ball	5	4.5/5.5	2.3	460mA	3400	33	80x32	78,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR353-ND	25.20	21.70	ST05B3	CR180-ND	.85
		Lead Wires	Ball	12	6/14	6.2	520mA	4700	45	80x32	78,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR354-ND	19.93	17.16	ST12Z3	CR180-ND	.85
1	Sprite	Lead Wires	Ball	12	6/14	3.0	250mA	3500	35	80x42	80,000 hrs. @ 40°C	1, 3, 7	CR019-ND	24.76	21.58	SD12B1	CR180-ND	.85
		Terminal	Ball	12	6/14	3.0	250mA	3500	35	80x42	80,000 hrs. @ 40°C	1, 3, 7	CR027-ND	26.43	23.03	SD12B2	CR180-ND	.85
		Terminal	Ball	24	12/28	3.0	130mA	3500	35	80x42	80,000 hrs. @ 40°C	1, 3, 7	CR028-ND	25.73	22.42	SD24B2	CR180-ND	.85
		Lead Wires	Ball	24	12/28	3.0	130mA	3500	35	80x42	83,000 hrs. @ 40°C	1, 3, 7	CR020-ND	24.75	21.57	SD24B1	CR180-ND	.85
		Lead Wires	Ball	48	24/56	3.0	60mA	3500	35	80x42	83,000 hrs. @ 40°C	1, 3, 7	CR021-ND	24.76	21.58	SD48B1	CR180-ND	.85
		Terminal	Ball	48	24/56	3.0	60mA	3500	35	80x42	83,000 hrs. @ 40°C	1, 3, 7	CR236-ND	29.40	24.26	SD48B2	CR180-ND	.85
1	Flight II 90	Lead Wires	Ball	12	6/14	2.4	202mA	2800	45	92x25	60,000 hrs. @ 25°C	1, 2, 7, 10, 11	CR034-ND	34.23	27.14	FN12B3	CR220-ND	.92
		Lead Wires	Ball	12	6/14	1.5	124mA	2350	37	92x25	60,000 hrs. @ 25°C	1, 2, 7, 10, 11	CR036-ND	34.23	27.14	FN12C3	CR220-ND	.92
		Lead Wires	Ball	24	12/28	2.4	100mA	2800	45	92x25	60,000 hrs. @ 25°C	1, 2, 7, 10, 11	CR237-ND	23.60	19.52	FN24B3	CR220-ND	.92
		Lead Wires	Ball	24	12/28	1.5	62mA	2350	37	92x25	60,000 hrs. @ 25°C	1, 2, 7, 10, 11	CR238-ND	17.52	14.46	FN24C3	CR220-ND	.92
		Lead Wires	Ball	12	4.5/5.5	5.1	423mA	3850	60	92x25	60,000 hrs. @ 25°C	1, 2, 7, 10, 11	CR349-ND	15.77	13.58	FN12K3	CR220-ND	.92
		Lead Wires	Ball	24	12/28	5.5	230mA	3800	60	92x25	60,000 hrs. @ 25°C	1, 2, 7, 10, 11	CR359-ND	15.77	13.58	FN24K3	CR220-ND	.92
		Lead Wires	Ball	48	24/56	2.9	65mA	2800	45	92x25	60,000 hrs. @ 25°C	1, 2, 7, 10, 11	CR350-ND	15.77	13.58	FN48B3	CR220-ND	.92
1	Flight LT 90	Lead Wires	Ball	12	6/14	4.3	360mA	3000	48.40	92x25	50,000 hrs. @ 25°C	1, 5	CR035-ND	15.98	13.78	CR0912HB-A70GL	CR220-ND	.92
		Lead Wires	Ball	24	12/28	4.8	200mA	3000	48.40	92x25	50,000 hrs. @ 25°C	1, 5	CR037-ND	15.98	13.78	CR0924HB-A70GL	CR220-ND	.92

Fig.	Model	Connection Type	Bearing	Voltage Nom.	Voltage Range	Power (Watts)	Running Current	RPM	CFM	Dimensions (mm)	Life(F) Expectancy	Approvals (See Above)	Digi-Key Part No.	Price Each 1	Price Each 25	Comair Model No.	Finger Guards	Price Each
1	Flight II 120	Lead Wires	Ball	12	6/14	4.3	360mA	2950	86	120x25	60,000 hrs. @ 25°C	1, 2, 7	CR038-ND	35.10	27.83	FT12B3	CR210-ND	1.79
		Lead Wires	Ball	24	12/28	4.3	180mA	2950	86	120x25	60,000 hrs. @ 25°C	1, 2, 7	CR039-ND	35.10	27.83	FT24B3	CR210-ND	1.79
		Lead Wires	Ball	12	6/14	1.6	130mA	2000	61	120x25	60,000 hrs. @ 25°C	1, 2, 7	CR040-ND	35.09	27.83	FT12M3	CR210-ND	1.79
		Lead Wires	Ball	24	12/28	1.9	80mA	2000	61	120x25	60,000 hrs. @ 25°C	1, 2, 7	CR041-ND	35.10	27.83	FT24M3	CR210-ND	1.79
1	Muffin	Lead Wires	Sleeve	12	6/14	7.9	660mA	3700	102	120x32	50,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR042-ND	17.82	15.35	MC12A3	CR210-ND	1.79
		Lead Wires	Sleeve	24	12/28	6.7	280mA	3700	102	120x32	50,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR046-ND	17.82	15.35	MC24A3	CR210-ND	1.79
		Lead Wires	Sleeve	12	6/14	3.8	320mA	2850	80	120x32	50,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR044-ND	17.82	15.35	MC12G3	CR210-ND	1.79
		Lead Wires	Sleeve	12	6/14	2.2	180mA	2150	58	120x32	50,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR043-ND	17.82	15.35	MC12E3	CR210-ND	1.79
		Lead Wires	Sleeve	24	12/28	2.1	85mA	2150	58	120x32	50,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR047-ND	17.84	15.37	MC24E3	CR210-ND	1.79
		Lead Wires	Ball	12	6/14	7.9	660mA	3700	102	120x32	75,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR051-ND	20.25	17.44	MC12B3	CR210-ND	1.79
		Lead Wires	Ball	24	12/28	6.7	280mA	3700	102	120x32	75,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR055-ND	20.25	17.44	MC24B3	CR210-ND	1.79
		Lead Wires	Ball	48	22/56	9.6	200mA	3700	102	120x32	78,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR240-ND	22.50	18.57	MC48B3	CR210-ND	1.79
		Lead Wires	Ball	24	12/28	4.0	170mA	2850	80	120x32	78,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR241-ND	22.50	18.57	MC24H3	CR210-ND	1.79
		Lead Wires	Ball	24	12/28	10.6	440mA	4200	118	120x32	78,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR351-ND	20.77	17.89	MC24K3	CR210-ND	1.79
		Lead Wires	Ball	48	24/56	10.6	220mA	4100	118	120x32	78,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR352-ND	20.77	17.89	MC48K3	CR210-ND	1.79
1	Muffin XL	Lead Wires	Ball	24	12/28	6.0	250mA	3100	110	119x39	83,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR070-ND†	41.43	37.61	MD24B1	CR210-ND	1.79
		Terminal	Ball	12	6/14	6.0	500mA	3100	110	119x39	83,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR072-ND†	41.43	37.61	MD12B2	CR210-ND	1.79
		Terminal	Ball	24	12/28	6.0	250mA	3100	110	119x39	83,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR073-ND†	41.43	37.61	MD24B2	CR210-ND	1.79
		Terminal	Ball	48	24/56	6.0	125mA	3100	110	119x39	83,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR074-ND†	41.43	37.61	MD48B2	CR210-ND	1.79
		Lead Wires	Ball	12	6/14	6.0	500mA	3100	110	119x39	83,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR069-ND†	41.42	37.61	MD12B1	CR210-ND	1.79
		Lead Wires	Ball	48	24/56	6.0	125mA	3100	110	119x39	83,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR071-ND†	43.60	35.97	MD48B1	CR210-ND	1.79
		Lead Wires	Ball	12	6/14	6.0	350mA	3100	110	119x39	83,000 hrs. @ 40°C	1, 3, 7,10, 11, 12	CR355-ND	42.64	36.72	MD12B1-E	CR210-ND	1.79
		Lead Wires	Ball	24	12/28	6.0	250mA	3100	110	119x39	83,000 hrs. @ 40°C	1, 3, 7,10, 11, 12	CR356-ND	42.64	36.72	MD24B1-E	CR210-ND	1.79
		Lead Wires	Ball	48	24/56	6.0	125mA	3100	110	119x39	83,000 hrs. @ 40°C	1, 3, 7,10, 11, 12	CR357-ND	42.64	36.72	MD48B1-E	CR210-ND	1.79
1	Whisper XL	Lead Wires	Ball	12	6/14	2.4	200mA	2230	75	119x39	83,000 hrs. @ 40°C	1, 3, 7	CR262-ND†	43.30	35.73	WD12C3	CR210-ND	1.79
		Lead Wires	Ball	24	12/28	2.4	100mA	2230	75	119x39	83,000 hrs. @ 40°C	1, 3, 7	CR263-ND†	43.30	35.73	WD24C3	CR210-ND	1.79
		Lead WIres	Ball	12	6/14	1.2	100mA	1635	55	119x39	83,000 hrs. @ 40°C	1, 3, 7	CR264-ND†	43.30	35.73	WD12M3	CR210-ND	1.79
		Lead Wires	Ball	24	12/28	1.2	52mA	1635	55	119x39	83,000 hrs. @ 40°C	1, 3, 7	CR265-ND†	43.28	35.71	WD24M3	CR210-ND	1.79
1	Muffin XP	Lead WIres	Sleeve	12	6/14	7.0	580mA	3000	110	120x38	78,000 hrs. @ 40°C	10, 11	CR341-ND	22.25	19.16	MS12B3	—	—
		Lead WIres	Sleeve	24	12/28	7.0	290mA	3000	110	120x38	78,000 hrs. @ 40°C	10, 11	CR342-ND	22.23	19.15	MS24B3	—	—
		Lead WIres	Sleeve	48	24/56	7.4	150mA	3000	110	120x38	78,000 hrs. @ 40°C	10, 11	CR343-ND	22.23	19.15	MS48B3	—	—
2	Diplomat	Lead Wires	Ball	12	6/14	30.0	250mA	3400	170	133x91	35,000 hrs. @ 50°C	1, 2, 7	CR288-ND	83.43	71.85	DDF12B1	—	—
		Lead Wires	Ball	24	12/28	26.0	110mA	3400	170	133x91	35,000 hrs. @ 50°C	1, 2, 7	CR289-ND	83.43	71.85	DDF24B1	—	—
		Lead Wires	Ball	48	24/56	24.0	51mA	3400	170	133x91	35,000 hrs. @ 50°C	1, 2, 7	CR290-ND	83.43	71.85	DDF48B1	—	—
1	Galaxy	Terminal	Ball	12	6/14	15.0	1250mA	3250	150	127x38	82,500 hrs. @ 50°C	1, 3, 7	CR266-ND†	51.00	42.08	GL12B4	CR200-ND	2.03
		Terminal	Ball	24	12/28	15.0	625mA	3250	150	127x38	82,500 hrs. @ 50°C	1, 3, 7	CR267-ND†	51.00	42.08	GL24B4	CR200-ND	2.03
		Terminal	Ball	48	24/56	15.0	310mA	3250	150	127x38	82,000 hrs. @ 50°C	1, 3, 7	CR268-ND†	51.00	42.08	GL48B4	CR200-ND	2.03
2	Patriot Quiet	Terminal	Ball	24	12/28	20.3	850mA	3500	235	172x51	62,000 hrs. @ 50°C	1, 3, 7	CR242-ND†	66.60	54.95	PQ24B4	CR206-ND	2.72
		Terminal	Ball	48	24/56	20.1	420mA	3500	235	172x51	62,000 hrs. @ 50°C	1, 3, 7	CR243-ND†	66.60	54.95	PQ48B4	CR206-ND	2.72
		Terminal	Ball	12	6/14	14.6	1215mA	3000	200	172x51	62,000 hrs. @ 50°C	1, 3, 7	CR244-ND†	66.60	54.95	PQ12C4	CR206-ND	2.72
3	Major Quiet	Terminal	Ball	24	12/28	20.3	850mA	3500	235	172x150x51	62,000 hrs. @ 50°C	1, 3, 7	CR291-ND†	64.89	55.88	JQ24B4	CR196-ND	3.06
		Terminal	Ball	48	24/56	20.1	420mA	3500	235	172x150x51	62,000 hrs. @ 50°C	1, 3, 7	CR292-ND†	64.89	55.88	JQ48B4	CR196-ND	3.06
		Terminal	Ball	12	6/14	14.6	1215mA	3000	200	172x150x51	62,000 hrs. @ 50°C	1, 3, 7	CR293-ND†	64.89	55.88	JQ12C4	CR196-ND	3.06
2	Falcon	Lead Wires	Ball	12	6/14	39.6	3A	3400	300	172x55	62,000 hrs. @ 50°C	1, 2, 7	CR294-ND†	88.67	76.36	FD12B3	CR196-ND	3.06
		Lead Wires	Ball	24	12/28	41.0	1.48A	3400	300	172x55	62,000 hrs. @ 50°C	1, 2, 7	CR295-ND†	88.67	76.36	FD24B3	CR196-ND	3.06
		Lead Wires	Ball	48	24/56	34.5	.72A	3400	300	172x55	62,000 hrs. @ 50°C	1, 2, 7	CR296-ND†	88.65	76.34	FD48B3	CR196-ND	3.06
3	Maltese	Lead Wires	Ball	12	6/14	39.6	3A	3400	300	172x150x55	62,000 hrs. @ 50°C	1, 2, 7	CR297-ND†	88.65	76.34	MT12B3	CR196-ND	3.06
		Lead Wires	Ball	24	12/28	41.0	1.48A	3400	300	172x150x55	62,000 hrs. @ 50°C	1, 2, 7	CR298-ND†	88.65	76.34	MT24B3	CR196-ND	3.06
		Lead Wires	Ball	48	24/56	34.5	.72A	3400	300	172x150x55	62,000 hrs. @ 50°C	1, 2, 7	CR299-ND†	88.65	76.34	MT48B3	CR196-ND	3.06
1	Tarzan	Lead Wires	Ball	24	12/28	36.0	1.5A	3250	340	176x112	35,000 hrs. @ 50°C	1, 2, 7	CR300-ND	90.90	78.28	TD24B1	CR179-ND	6.56
		Lead Wires	Ball	48	24/56	33.6	.7A	3250	340	176x112	35,000 hrs. @ 50°C	1, 2, 7	CR301-ND	90.85	78.23	TD48B1	CR179-ND	6.56
2	Caravel	Lead Wires	Ball	24	12/28	29.0	1.2A	1650	550	254x89	60,000 hrs. @ 50°C	1, 2, 7	CR302-ND†	82.80	71.30	CD24B3	CR182-ND	1.89
		Lead Wires	Ball	48	24/56	30.2	.63A	1650	550	254x89	60,000 hrs. @ 50°C	1, 2, 7	CR303-ND†	82.80	71.30	CD48B3	CR182-ND	1.89
4	Whiffet Blower	Lead Wires	Ball	12	6/14	5.1	420mA	4050	15	80x32	80,000 hrs. @ 25°C	1, 4, 7	CR304-ND	32.40	27.90	WT12B3	—	—
		Lead Wires	Ball	24	12/28	5.1	200mA	4050	15	80x32	80,000 hrs. @ 25°C	1, 4, 7	CR305-ND	32.40	27.90	WT24B3	—	—
4	Biscuit Blower	Lead Wires	Sleeve	12	9/14	11.0	900mA	3050	25	121x31	50,000 hrs. @ 40°C	1, 3, 7	CR085-ND	31.18	26.96	BD12A3	CR210-ND	1.79
		Lead Wires	Sleeve	24	18/28	11.0	480mA	3050	25	121x31	50,000 hrs. @ 40°C	1, 3, 7	CR086-ND	31.18	26.96	BD24A3	CR210-ND	1.79
		Lead Wires	Ball	12	6/14	11.0	900mA	3050	25	121x31	78,000 hrs. @ 40°C	1, 3, 7	CR247-ND	38.00	31.35	BD12B3	CR210-ND	1.79
		Lead Wires	Ball	24	12/28	11.0	480mA	3050	25	121x31	78,000 hrs. @ 40°C	1, 3, 7	CR248-ND	38.00	31.35	BD24B3	CR210-ND	1.79
4	Viking Blower	Lead Wires	Ball	12	6/14	20.0	1670mA	4000	33	127x41	83,000 hrs. @ 40°C	—	CR306-ND	31.91	27.49	VK12B3	—	—
		Lead Wires	Ball	24	12/28	20.0	830mA	4000	33	127x41	83,000 hrs. @ 40°C	—	CR307-ND	31.95	27.52	VK24B3	—	—
		Lead Wires	Ball	48	24/56	20.0	420mA	4000	33	127x41	83,000 hrs. @ 40°C	—	CR308-ND	31.95	27.52	VK48B3	—	—
4	Spinnaker	Lead Wires	Ball	24	12/28	30.0	1300mA	2500	60	162x41	62,000 hrs. @ 50°C	1, 3, 7	CR249-ND	70.20	57.92	SPD24B1	—	—
ThermaPro-V (TPV) DC Fans																		
1	Muffin TPV	Lead Wires	Sleeve	12	6/14	2.8	230mA	1700	47	120x32	83,000 hrs. @ 40°C	1, 2, 8	CR269-ND•	33.80	27.89	MC12T3H	CR210-ND	1.79
		Lead Wires	Sleeve	24	12/28	3.1	130mA	1800	50	120x32	83,000 hrs. @ 40°C	1, 2, 8	CR270-ND•	33.80	27.89	MC24T3H	CR210-ND	1.79
		Lead Wires	Sleeve	48	24/56	4.3	90mA	200	56	120x32	83,000 hrs. @ 40°C	1, 2, 8	CR271-ND•	33.80	27.89	MC48T3H	CR210-ND	1.79
1	Sprint TPV	Lead Wires	Sleeve	12	6/14	2.9	240mA	2100	20	80x32	55,000 hrs. @ 40°C	1, 2, 8	CR272-ND•	30.40	25.08	ST12T3H	CR180-ND	.85
		Lead WIres	Sleeve	24	12/28	2.3	95mA	2100	20	80x32	55,000 hrs. @ 40°C	1, 2, 8	CR273-ND•	30.40	25.08	ST24T3H	CR180-ND	.85
		Lead Wires	Sleeve	48	24/56	2.9	60mA	2100	20	80x32	55,000 hrs. @ 40°C	1, 2, 8	CR274-ND•	30.40	25.08	ST48T3H	CR180-ND	.85
2	Patriot TPV	Terminal	Ball	12	6/14	11.0	900mA	1700	113	127x51	62,000 hrs. @ 50°C	1, 2, 9	CR275-ND•	75.62	62.39	PD12T2H	CR206-ND	2.72
		Terminal	Ball	24	12/28	9.0	390mA	1700	113	127x51	62,000 hrs. @ 50°C	1, 2, 9	CR276-ND•	74.34	61.34	PD24T2H	CR206-ND	2.72
		Terminal	Ball	48	24/56	10.0	210mA	1700	113	127x51	62,000 hrs. @ 50°C	1, 2, 9	CR277-ND•	74.34	61.34	PD48T2H	CR206-ND	2.72
Tachometer Output DC Fans																		
1	Muffin	Lead Wires	Ball	12	6/14	7.9	660mA	3700	102	120x32	78,000 hrs. @ 40°C	10, 11	CR339-ND	23.24	20.02	MC12B7	CR210-ND	1.79
		Lead Wires	Ball	24	12/28	5.5	230mA	3700	102	120x32	78,000 hrs. @ 40°C	10, 11	CR340-ND	23.22	20.00	MC24B7	CR210-ND	1.79
1	Muffin XL	Lead Wires	Ball	12	6/14	6.0	500mA	3100	110	119x39	83,000 hrs. @ 40°C	10, 11	CR344-ND†	36.18	31.16	MD12B5	CR210-ND	1.79
		Lead Wires	Ball	24	12/28	6.0	250mA	3100	110	119x39	83,000 hrs. @ 40°C	10, 11	CR345-ND†	36.18	31.16	MD24B5	CR210-ND	1.79

† Feathered Edge for lower noise. • Current limited.

AC Fans

Model	Venturi	Propeller	EMI (See Right)
Sprite	One-piece die-cast zinc alloy, black	Flame retardant polypropylene, black, meets UL94V-0	A
Whisper	Flame retardant, black, phenolic	Flame retardant polypropylene, black	—
Whisper XL	One-piece die-cast zinc alloy, black	Flame retardant polypropylene, black, meets UL94V-0	—
Muffin	Flame retardant, black, phenolic	Flame retardant polypropylene, black	—
Muffin XL	One-piece die-cast zinc alloy, black	Flame retardant polypropylene, black, meets UL94V-0	—
Diplomat	One-piece die-cast aluminum, black	Injection molded of flame retardant polycarbonate, black, meets UL94V-0	—
Falcon	One-piece die-cast aluminum, black	Injection molded of flame retardant polycarbonate, black, meets UL94V-0	—
Maltese	One-piece die-cast aluminum, black	Injection molded of flame retardant polycarbonate, black, meets UL94V-0	—
Major	One-piece die-cast aluminum, black	Polycarbonate, black, meets UL94V-0	—
Patriot	One-piece die-cast aluminum, black	Polycarbonate, black, meets UL94V-0	—
Tarzan	Flame retardant, black, phenolic	Flame retardant polycarbonate, black	—
Caravel	One-piece die-cast aluminum, black	Polycarbonate, black, meets UL94V-0	—
Biscuit Blower	Black, meets UL94V-0	Polypropylene, black, meets UL94V-2	—

EMI

A Meets EMI standards per FCC part 15, subpart J of Docket 20780, Class A or B radiated and conducted emissions. Meets EMI standards per VDE specification 0871/6.78 for category A and B requirements.

APPROVALS

1. UL yellow card recognized, file No. E31293.
2. CSA certified, file No. LR52898.
3. TUV certified, file No. EN60950.
4. TUV approval pending.
5. VDE Marks license No. 1126.
6. VDE Marks license No. 1354.
7. TUV approved, file No. R97229.

		Connection		Voltage		Power	Running			Dimensions	Life(F)	Approvals	Digi-Key	Price Each		Comair	Finger	Price
Fig.	Model	Type	Bearing	Nom.	Range	(Watts)	Current	RPM	CFM	(mm)	Expectancy	(See Above)	Part No.	1	25	Model No.	Guards	Each
AC Fans																		
1	Sprite	Lead Wires	Sleeve	115	—	7/6	.08/.07A	2200/2600	23/27	80x42	55,000 hrs. @ 40°C	1, 2, 5	CR093-ND	26.20	21.62	SU2E1	CR180-ND	.85
		Terminal	Sleeve	115	—	13/11	.19/.15A	2750/3250	28/34	80x42	55,000 hrs. @ 40°C	1, 2, 5	CR097-ND	25.90	21.37	SU2A5	CR180-ND	.85
		Lead Wires	Sleeve	115	—	13/11	.19/.15A	2750/3250	28/34	80x42	55,000 hrs. @ 40°C	1, 2, 5	CR091-ND	24.80	20.46	SU2A1	CR180-ND	.85
		Lead Wires	Ball	115	—	13/11	.19/.15A	2750/3250	28/34	80x42	73,000 hrs. @ 40°C	1, 2, 5	CR103-ND	29.00	23.93	SU2B1	CR180-ND	.85
		Terminal	Ball	115	—	13/11	.19/.15A	2750/3250	28/34	80x42	73,000 hrs. @ 40°C	1, 2, 5	CR105-ND	29.00	23.93	SU2B5	CR180-ND	.85
		Lead Wires	Sleeve	115	—	7/6	.07/.06A	1700/1950	15/18	80x42	55,000 hrs. @ 40°C	1, 2, 5	CR108-ND⋆	26.80	22.11	SU2C7	CR180-ND	.85
		Lead Wires	Sleeve	—	220/230	14/13	.09/.08A	2750/3250	28/34	80x42	55,000 hrs. @ 40°C	1, 2, 5	CR250-ND⋆	25.40	20.96	SU3A1	CR180-ND	.85
		Lead Wires	Sleeve	115	—	7/6	.07/.06A	1750/1900	17/20	80x42	55,000 hrs. @ 40°C	1, 2, 5	CR251-ND⋆	25.40	20.96	SU2C1	CR180-ND	.85
		Terminal	Sleeve	—	220/230	14/13	.09/.08A	2750/3250	28/34	80x42	55,000 hrs. @ 40°C	1, 2, 5	CR252-ND⋆	26.40	21.78	SU3A5	CR180-ND	.85
		Terminal	Sleeve	115	—	7/6	.07/.06A	1750/1900	17/20	80x42	55,000 hrs. @ 40°C	1, 2, 5	CR253-ND⋆	26.70	22.03	SU2C5	CR180-ND	.85
		Lead Wires	Ball	—	220/230	14/13	.09/.08A	2750/3250	28/34	80x42	55,000 hrs. @ 40°C	1, 2, 5	CR255-ND⋆	37.92	31.29	SU3B1	CR180-ND	.85
1	Whisper	Terminal	Sleeve	115	—	7/7	.07/.06A	1640/1660	55/57	120x38	55,000 hrs. @ 40°C	1, 2	CR113-ND	27.00	22.28	WR2A1	CR210-ND	1.79
		Terminal	Sleeve	115	—	11/10	.12/.11A	2100/2400	70/80	120x38	55,000 hrs. @ 40°C	1, 2	CR114-ND	27.00	22.28	WR2H1	CR210-ND	1.79
		Terminal	Sleeve	—	220/230	12/12	.07/.07A	1590/2000	53/62	120x38	55,000 hrs. @ 40°C	1, 2	CR116-ND	27.50	22.69	WR3A1	CR210-ND	1.79
1	Whisper XL	Terminal	Sleeve	115	—	6/6	.07/.06A	1450/1500	48/50	119x39	55,000 hrs. @ 40°C	1, 2, 5	CR117-ND†	27.40	22.61	WX2A1	CR210-ND	1.79
		Terminal	Sleeve	115	—	10/9	.11/.10A	1900/2000	65/70	119x39	55,000 hrs. @ 40°C	1, 2, 5	CR119-ND†	27.40	22.61	WX2M1	CR210-ND	1.79
		Terminal	Sleeve	115	—	15/13	.19/.15A	2200/2500	70/83	119x39	55,000 hrs. @ 40°C	1, 2, 5	CR118-ND†	27.40	22.61	WX2H1	CR210-ND	1.79
		Terminal	Sleeve	—	220/230	14/13	.10/.09A	2200/2500	70/83	119x39	55,000 hrs. @ 40°C	1, 2, 5	CR256-ND†	27.40	22.61	WX3H1	CR210-ND	1.79
1	Muffin	Terminal	Sleeve	115	—	15/14	.19/.16A	2650/3100	88/105	120x38	55,000 hrs. @ 40°C	1, 2	CR122-ND	24.30	20.05	MU2A1	CR210-ND	1.79
		Terminal	Ball	115	—	15/14	.19/.16A	2650/3100	88/105	120x38	85,000 hrs. @ 40°C	1, 2	CR124-ND	35.90	29.62	MU2B1	CR210-ND	1.79
		Terminal	Sleeve	—	220/230	15/14	.10/.09A	2650/3100	88/105	120x38	55,000 hrs. @ 40°C	1, 2	CR123-ND	24.30	20.05	MU3A1	CR210-ND	1.79
		Terminal	Ball	—	220/230	15/14	.10/.09A	2650/3100	88/105	120x38	85,000 hrs. @ 40°C	1, 2	CR125-ND	35.90	29.62	MU3B1	CR210-ND	1.79
1	Muffin XL	Terminal	Sleeve	115	—	17/15	.20/.18A	2700/3100	92/108	119x39	55,000 hrs. @ 40°C	1, 2, 5	CR128-ND†⋆	25.60	21.12	MX2A1	CR210-ND	1.79
		Terminal	Ball	115	—	17/15	.20/.18A	2700/3100	92/108	119x39	83,000 hrs. @ 40°C	1, 2, 5	CR132-ND†⋆	37.80	31.19	MX2B1	CR210-ND	1.79
		Terminal	Sleeve	115	—	17/15	.20/.18A	2700/3100	98/115	119x39	55,000 hrs. @ 40°C	1, 2, 5	CR126-ND†	25.60	21.12	MX2A3	CR210-ND	1.79
		Terminal	Ball	115	—	17/15	.20/.18A	2700/3100	98/115	119x39	83,000 hrs. @ 40°C	1, 2, 5	CR130-ND†	37.80	31.19	MX2B3	CR210-ND	1.79
		Terminal	Sleeve	—	220/230	17/16	.10/.09A	2700/3100	98/115	119x39	55,000 hrs. @ 40°C	1, 2, 5	CR257-ND†	25.70	21.21	MX3A3	CR210-ND	1.79
		Terminal	Ball	—	220/230	17/16	.10/.09A	2700/3100	98/115	119x39	55,000 hrs. @ 40°C	1, 2, 5	CR258-ND†	37.80	31.19	MX3B3	CR210-ND	1.79
2	Diplomat	Terminal	Ball	115	—	30/31	.27/.28A	2850/3350	150/170	133x91	50,000 hrs. @ 40°C	1, 2, 3	CR313-ND	64.89	55.88	DAF2B2	—	—
		Terminal	Ball	—	220/230	26/30	.13/.20A	2850/3350	150/170	133x91	50,000 hrs. @ 40°C	1, 2, 3	CR314-ND	64.89	55.88	DAF77B2	—	—
2	Falcon	Terminal	Ball	115	—	41.4	.36A	3400	300	172x55	40,000 hrs. @ 50°C	1, 2, 3	CR309-ND†	72.90	62.78	FA2B3	CR196-ND	3.06
		Terminal	Ball	—	220/230	41.4	.18A	3400	300	172x55	40,000 hrs. @ 50°C	1, 2, 3	CR310-ND†	72.88	62.76	FA77B3	CR196-ND	3.06
3	Maltese	Terminal	Ball	115	—	41.4	.36A	3400	300	172x150x55	40,000 hrs. @ 50°C	1, 2, 7	CR311-ND†	72.90	62.78	MA2B3	CR196-ND	3.06
		Terminal	Ball	—	220/230	41.4	.18A	3400	300	172x150x55	40,000 hrs. @ 50°C	1, 2, 7	CR312-ND†	72.90	62.78	MA77B3	CR196-ND	3.06
3	Major	Terminal	Ball	115	—	30/31	.27/.26A	2850/3350	200/235	172x150x51	5 yrs. @ 25°C	1, 2, 6	CR134-ND†	57.86	46.44	MR2B3	—	—
		Terminal	Ball	—	220/230	26/30	.13/.14A	2850/3350	200/235	172x150x51	5 yrs. @ 25°C	1, 2, 6	CR135-ND†	58.15	46.67	MR77B3	—	—
2	Patriot	Terminal	Ball	115	—	30/31	.27/.26A	2850/3350	200/235	172x51	5 yrs. @ 25°C	1, 2, 6	CR136-ND†	57.86	46.44	PT2B3	CR206-ND	2.72
		Terminal	Ball	—	220/230	26/30	.13/.14A	2850/3350	200/235	172x51	53,000 hrs. @ 40°C	1, 2, 6	CR137-ND†	61.20	50.49	PT77B3	CR206-ND	2.72
1	Tarzan	Terminal	Ball	115	—	90/85	1.4/1.2A	2820/3350	280/340	176x112	25,000 hrs. @ 40°C	1, 2, 4	CR140-ND	78.05	65.79	TNE2A	—	—
		Terminal	Ball	—	220/230	82/85	.65/.60A	2820/3350	280/340	176x112	25,000 hrs. @ 40°C	1, 2, 4	CR141-ND	78.05	65.79	TNE3A	—	—
		Leadwire	Ball	115	—	90/85	1.4/1.2A	2820/3350	280/340	176x112	25,000 hrs. @ 40°C	1, 2, 4	CR259-ND	88.20	72.77	TNE2C	—	—
		Leadwire	Ball	—	220/230	82/85	.65/.60A	2820/3350	280/340	176x112	25,000 hrs. @ 40°C	1, 2, 4	CR260-ND	88.20	72.77	TNE3C	—	—
2	Caravel	Lead Wires	Ball	115	—	65	.48/.50A	1400/1650	455/550	254x89	54,000 hrs. @ 40°C	1, 2, 3	CR144-ND†	57.75	47.03	CLE2L2	CR182-ND	1.89
		Terminal	Ball	115	—	65	.48/.50A	1400/1650	455/550	254x89	54,000 hrs. @ 40°C	1, 2, 3	CR145-ND†	59.50	48.45	CLE2T2	CR182-ND	1.89
		Terminal	Ball	—	220/230	55	.24/.25A	1400/1650	455/550	254x89	54,000 hrs. @ 40°C	1, 2, 3	CR147-ND†	59.50	48.45	CLE3T2	CR182-ND	1.89
4	Biscuit Blower	Terminal	Sleeve	115	—	17/16	.19/.17A	2500/2700	20/22	120x40	55,000 hrs. @ 40°C	1, 2	CR148-ND	34.00	27.63	BT2A1	—	—
		Terminal	Sleeve	—	220/230	15/14	.09/.08A	2500/2700	20/22	120x40	55,000 hrs. @ 40°C	1, 2	CR149-ND	34.00	27.63	BT3A1	—	—

† Feathered Edge for lower noise ⋆ Reverse Flow

COMAIR ROTRON

Fan Accessories

Fig. 1

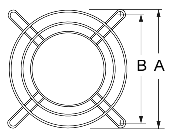


Fig. 2

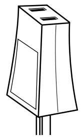


Fig.	Dim. (mm) A	B	Thick	Fits Fan Size (mm)	Center Dim. (mm)	No. of Rings	Material	Digi-Key Part No.	Price Each 1	25	50
Finger Guards											
1	—	222.00	17.78	176 Sq.	99 open	3	Metal	CR179-ND	6.56	5.65	5.19

Fig.	Description	Fits Fan Size (mm)	Digi-Key Part No.	Price Each 1	25	50
Filters and Filter Accessories						
—	Filter Mounting Clips	Whisper and Muffin	CR163-ND	.92	.80	.74
—	Filter Assembly	119 and 120 Square	CR209-ND	16.59	12.64	11.46
Grilles						
—	Grille (Spiral)	119 and 120 Square	CR177-ND	4.43	3.82	3.51
Clips						
—	#6-32 Flush Mounting Clip	Major, Major DC, Whisper,	CR187-ND	.17	.15	.14
—	#6-32 Mounting Clip	All XL Models	CR192-ND	.15	.12	.11
Plug Cord Set – SPT-1 (18/2)						
2	Straight On Plug and Cord – 72” (182.88cm)	Fits all AC Fans with Terminal Connection Type	CR203-ND	2.05	—	—

Qualtek ELECTRONICS CORP.

Fan Accessories

Fig. 1

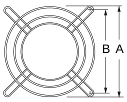


Fig. 2

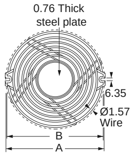


Fig. 3

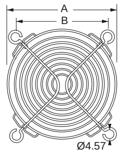


Fig. 4

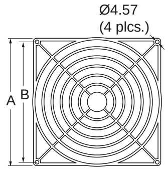


Fig. 5

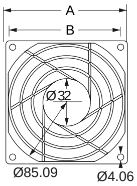


Fig. 6

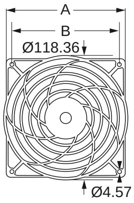


Fig. 7

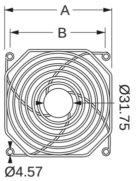


Fig. 8

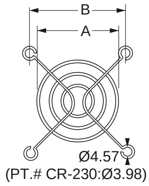


Fig. 9

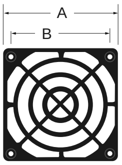


Fig. 10

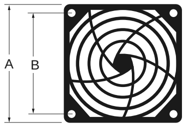


Fig. 11

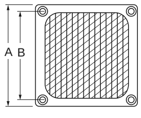


Fig. 12

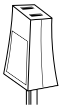


Fig. 13

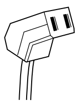


Fig. 14

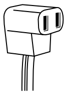


Fig. 15

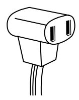


Fig.	Dim. (mm) A	B	Thick	Fits Fan Size (mm)	Center Dim. (mm)	No. of Rings	Material	Digi-Key Part No.	Price Each 1	25	50
Finger Guards											
1	109.47	104.78	4.83	120 Sq.	57 open	3	Metal	CR178-ND	1.00	.84	.76
	76.96	71.37	3.89	80 Sq.	50 open	3	Metal	CR180-ND	.85	.71	.65
	209.55	173.99	8.38	254 Dia.	102 open	5	Metal	CR182-ND	1.89	1.71	1.53
2	158.75	161.92	6.10	150 Dia.	74 solid	6	Metal	CR206-ND	2.72	2.29	2.07
	158.75	161.92	6.10	171.5 Dia.	74 solid	5 3/4	Metal	CR196-ND	3.06	2.58	2.33
3	124.46	113.28	5.92	127 Dia.	14 open	9	Metal	CR200-ND	2.03	1.71	1.55
4	115.06	104.65	6.60	120 Sq.	25.4 solid	6	Plastic	CR280-ND	.89	.75	.68
5	115.06	104.65	2.54	120 Sq.	32 solid	3	Plastic	CR315-ND	1.40	1.18	1.07
6	115.06	104.65	6.60	120 Sq.	45 solid	5	Plastic	CR281-ND	1.28	1.08	.98
7	117.35	104.78	5.21	120 Sq.	33 solid	7	Metal	CR210-ND	1.79	1.51	1.36
8	89.41	82.42	4.95	92 Sq.	14 open	6	Metal	CR220-ND	.92	.78	.70
	53.10	50.04	4.95	60 Sq.	14 open	4	Metal	CR221-ND	.71	.60	.54
	222.25	173.99	6.35	254 Dia.	76.2 solid	9	Metal	CR223-ND	3.67	3.32	2.97
	115.6	104.8	5.66	120 Dia.	17.5 open	8	Metal	CR224-ND	1.11	.93	.84
	76.20	71.37	4.95	80 Dia.	17.4 open	5	Metal	CR229-ND	.81	.69	.62
	29.21	32.00	4.80	40 Dia.	15.875 open	2	Metal	CR230-ND	.64	.54	.49
9	39.88	32.00	4.83	40 Sq.	12 open	3	Plastic	CR285-ND	.43	.37	.33
	59.94	50.04	6.35	60 Sq.	5 solid	3	Plastic	CR225-ND	.47	.40	.36
10	80.01	71.37	6.35	80 Sq.	15 solid	3	Plastic	CR226-ND	.72	.61	.55
	79.76	71.37	3.05	80 Sq.	32 solid	3	Plastic	CR282-ND	.58	.49	.44
	91.95	82.55	6.35	92 Sq.	31.5 solid	4	Plastic	CR227-ND	.80	.67	.61
	118.11	104.65	7.11	120 Sq.	25 solid	6	Plastic	CR228-ND	.98	.83	.75

Fig.	Description	Fits Fan Size (mm)	Digi-Key Part No.	Price Each 1	25	50
Filters and Filter Accessories						
9	Finger Guard Assembly (30 PPI)	40 Square	CR286-ND	1.00	.84	.76
9	Finger Guard Assembly (45 PPI)	40 Square	CR287-ND	1.00	.84	.76
—	Replacement Filter Element (30 PPI) - Pkg. of 5	40 Square	CR324-ND	2.15	1.81	1.64
—	Replacement Filter Element (45 PPI) - Pkg. of 5	40 Square	CR325-ND	2.15	1.81	1.64
9	Finger Guard Assembly (30 PPI)	60 Square	CR283-ND	1.24	1.05	.95
9	Finger Guard Assembly (45 PPI)	60 Square	CR284-ND	1.24	1.05	.95
—	Replacement Filter Element (30 PPI) - Pkg. of 5	60 Square	CR326-ND	2.23	1.87	1.70
—	Replacement Filter Element (45 PPI) - Pkg. of 5	60 Square	CR327-ND	2.23	1.87	1.70
10	Filter Guard Assembly (30 PPI)	80 Square	CR212-ND	1.43	1.21	1.09
10	Filter Guard Assembly (45 PPI)	80 Square	CR214-ND	1.43	1.21	1.09
—	Replacement Filter Element (30 PPI) - Pkg. of 5	80 Square	CR213-ND	1.61	1.36	1.23
—	Replacement Filter Element (45 PPI) - Pkg. of 5	80 Square	CR215-ND	1.61	1.36	1.23
10	Filter Guard Assembly (30 PPI)	92 Square	CR328-ND	3.19	2.89	2.59
10	Filter Guard Assembly (45 PPI)	92 Square	CR329-ND	3.19	2.89	2.59
—	Replacement Filter Element (30 PPI) - Pkg. of 5	92 Square	CR330-ND	2.58	2.17	1.96
—	Replacement Filter Element (45 PPI) - Pkg. of 5	92 Square	CR331-ND	2.58	2.17	1.96
10	Filter Guard Assembly (30 PPI)	119 & 120 Square	CR216-ND	2.19	1.84	1.67
10	Filter Guard Assembly (45 PPI)		CR218-ND	2.19	1.84	1.67
—	Replacement Filter Element (30 PPI) - Pkg. of 5		CR217-ND	2.08	1.75	1.58
—	Replacement Filter Element (45 PPI) - Pkg. of 5		CR219-ND	2.08	1.75	1.58
11	Filter/Screen, Stainless Steel (Washable) Dim.: A: 64.26, B: 51.82	60 Square	CR373-ND	5.38	4.87	4.36
	Filter/Screen, Aluminum (Washable) Dim.: A: 83.82, B: 71.37	80 Square	CR233-ND	3.35	3.03	2.71
	Filter/Screen, Stainless Steel (Washable) Dim.: A: 83.82, B: 71.37	80 Square	CR374-ND	5.52	5.00	4.48
	Filter/Screen, Aluminum (Washable) Dim.: A: 91.95, B: 82.42	92 Square	CR234-ND	3.74	3.39	3.03
	Filter/Screen, Stainless Steel (Washable) Dim.: A: 91.95, B: 82.42	92 Square	CR375-ND	5.69	5.15	4.61
	Filter/Screen, Aluminum (Washable) Dim.: A: 118.87, B: 104.77	120 Square	CR235-ND	4.15	3.76	3.36
	Filter/Screen, Stainless Steel (Washable) Dim.: A: 118.87, B: 104.77	120 Square	CR376-ND	8.53	7.72	6.91
Plug Cord Sets – SPT-1 (18/2)						
12	Straight On Plug and Cord – 12” (30.48cm)	Fits all Diplomat, Falcon, Maltese, Major, Patriot, Tarzan, Caravel,and Biscuit model fans with Terminal Connections	CR316-ND	1.58	1.33	1.20
	Straight On Plug and Cord – 24” (60.96cm)		CR197-ND	.92	.78	.70
	Straight On Plug and Cord – 36” (91.44cm)		CR198-ND	1.04	.88	.80
	Straight On Plug and Cord – 50” (127.00cm)		CR199-ND	1.19	1.00	.91
	Straight On Plug and Cord – 72” (182.88cm)		CR336-ND	1.61	1.36	1.23
	Straight On Plug and Cord – 24” (60.96cm), Dual Ended		CR361-ND	1.63	1.37	1.24
	Straight On Plug and Cord – 36” (91.44cm), Dual Ended		CR362-ND	1.80	1.52	1.37
	Straight On Plug and Cord – 72” (182.88cm), Dual Ended		CR363-ND	2.38	2.00	1.81
13	45° Angle Plug and Cord – 12” (30.48cm)	Fits all AC Fans with Terminal Connection Type	CR317-ND	1.58	1.33	1.20
	45° Angle Plug and Cord – 24” (60.96cm)		CR318-ND	1.65	1.39	1.26
	45° Angle Plug and Cord – 36” (91.44cm)		CR319-ND	1.80	1.52	1.37
	45° Angle Plug and Cord – 24” (60.96cm), Dual Ended		CR364-ND	1.63	1.37	1.24
	45° Angle Plug and Cord – 36” (91.44cm), Dual Ended		CR365-ND	1.80	1.52	1.37
	45° Angle Plug and Cord – 72” (182.88cm), Dual Ended		CR366-ND	2.38	2.00	1.81
14	90° Angle Plug and Cord – 12” (30.48cm)	Fits all AC Fans with Terminal Connection Type	CR320-ND	1.58	1.33	1.20
	90° Angle Plug and Cord – 24” (60.96cm)		CR321-ND	1.65	1.39	1.26
	90° Angle Plug and Cord – 36” (91.44cm)		CR322-ND	1.80	1.52	1.37
	90° Angle Plug and Cord – 24” (60.96cm), Dual Ended		CR367-ND	1.63	1.37	1.24
	90° Angle Plug and Cord – 36” (91.44cm), Dual Ended		CR368-ND	1.80	1.52	1.37
	90° Angle Plug and Cord – 72” (182.88cm), Dual Ended		CR369-ND	2.38	2.00	1.81
15	90° Angle T-Style Plug and Cord – 12” (30.48cm)	Fits all AC Fans with Terminal Connection Type	CR323-ND	1.58	1.33	1.20
	90° Angle T-Style Plug and Cord – 24” (60.96cm)		CR170-ND	.92	.78	.70
	90° Angle T-Style Plug and Cord – 36” (91.44cm)		CR175-ND	1.04	.88	.80
	90° Angle T-Style Plug and Cord – 72” (182.88cm)		CR337-ND	1.61	1.36	1.23
	90° Angle T-Style Plug and Cord – 96” (243.84cm)		CR338-ND	1.91	1.61	1.46
	90° Angle T-Style Plug and Cord – 24” (60.96cm), Dual Ended		CR370-ND	1.63	1.37	1.24
	90° Angle T-Style Plug and Cord – 36” (91.44cm), Dual Ended		CR371-ND	1.80	1.52	1.37
	90° Angle T-Style Plug and Cord – 72” (182.88cm), Dual Ended		CR372-ND	2.38	2.00	1.81

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Fans

UL yellow card E38324, CSA file 27697, VDE file 3041

Fig. 1

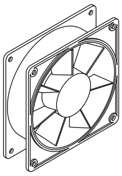


Fig. 2

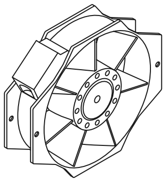


Fig. 3

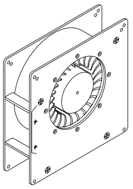


Fig.4

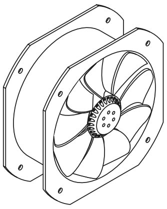


Fig. 5

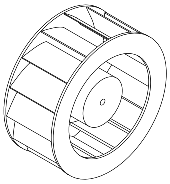


Fig.	Size (mm)	Voltage (DC)	Voltage Range (DC)	Bearing	Watts	CFM @ O"	dBA	Leads	Digi-Key Part No.	Price Each 1	25	50	100	EBM Ind. Part No.
								Brushless DC Fans						
1	40 x 10	12	10.2-13.8	Sleeve	0.8	6	28	28 AWG 12.2" Leads	381-1081-ND	19.15	14.76	12.25	11.50	412FH
	40 x 10	24	20.4-27.6	Sleeve	0.7	5	26	28 AWG 12.2" Leads	381-1082-ND	18.20	14.04	11.65	10.95	414F
	40 x 20	12	10.2-13.8	Sleeve	0.9	6	26	28 AWG 12.2" Leads	381-1069-ND	19.15	14.76	12.25	11.50	412
	40 x 20	24	20.4-27.6	Sleeve	0.9	6	26	28 AWG 12.2" Leads	381-1070-ND	19.15	14.76	12.25	11.50	414
1	60 x 25	12	6-15	Ball	2.4	24	40	22 AWG 12.2" Leads	381-1071-ND	26.00	22.50	20.60	17.55	612
	60 x 25	24	12-27	Ball	3.4	27	44	22 AWG 12.2" Leads	381-1097-ND	27.25	23.58	21.65	18.40	614H
	60 x 25	24	12-30	Ball	2.7	24	40	22 AWG 12.2" Leads	381-1072-ND	26.00	22.50	20.60	17.55	614
	60 x 25	12	6-15	Ball	1.3	18	33	22 AWG 12.2" Leads	381-1000-ND	26.00	22.50	20.60	17.55	612M
	60 x 25	24	6-15	Ball	0.8	12	26	22 AWG 12.2" Leads	381-1039-ND	26.00	22.50	20.60	17.55	614L
	60 x 25	24	6-15	Ball	1.4	18	33	22 AWG 12.2" Leads	381-1040-ND	26.00	22.50	20.60	17.55	614M
1	80 x 25	12	7-15	Ball	0.8	21	21	24 AWG 12.2" Leads	381-1101-ND	19.00	16.47	15.05	12.80	8412L
	80 x 25	12	7-15	Ball	2.4	33	35	24 AWG 12.2" Leads	381-1010-ND	19.00	16.47	15.05	12.80	8412
	80 x 25	24	12-28	Ball	2.4	33	35	24 AWG 12.2" Leads	381-1011-ND	19.00	16.47	15.05	12.80	8414
	80 x 25	12	7-15	Ball	1.4	27	29	24 AWG 12.2" Leads	381-1049-ND	19.00	16.47	15.05	12.80	8412M
	80 x 25	24	12-28	Ball	1.4	27	29	24 AWG 12.2" Leads	381-1050-ND	19.00	16.47	15.05	12.80	8414M
1	80 x 32	48	6-15	Ball	2.2	32	36	24 AWG 12.2" Leads	381-1077-ND	36.35	31.41	28.85	24.56	8318
	80 x 32	12	6-15	Ball	2.2	32	36	22 AWG 12.2" Leads	381-1008-ND	25.65	22.23	20.35	17.35	8312
	80 x 32	12	6-15	Ball	1.8	28	34	22 AWG 12.2" Leads	381-1048-ND	25.65	22.23	20.35	17.35	8312M
	80 x 32	24	12-28	Ball	2.5	32	36	22 AWG 12.2" Leads	381-1009-ND	25.65	22.23	20.35	17.35	8314
1	80 x 38	12	8-16	Sleeve	3	35	38	22 AWG 12.2" Leads	381-1099-ND	48.55	41.94	38.55	32.81	8112G
	80 x 38	12	8-16	Ball	3	35	39	22 AWG 12.2" Leads	381-1100-ND	52.60	45.45	41.81	35.50	8112K
	80 x 38	24	18-30	Ball	3	35	39	22 AWG 12.2" Leads	381-1047-ND	52.60	45.45	41.81	35.50	8124K
	80 x 38	48	38-56	Ball	3	35	39	22 AWG 12.2" Leads	381-1007-ND	67.90	58.68	53.90	45.85	8148
1	92 x 25	12	7-15	Ball	1.3	36	27	24 AWG 12.2" Leads	381-1080-ND	26.05	17.19	15.80	13.45	3412L
	92 x 25	12	7-15	Ball	1.8	42	32	24 AWG 12.2" Leads	381-1012-ND	26.05	17.19	15.80	13.45	3412M
	92 x 25	24	12-28	Ball	2.6	49	36	24 AWG 12.2" Leads	381-1001-ND	19.90	17.19	15.80	13.45	3414
	92 x 25	24	12-28	Ball	1.8	42	32	24 AWG 12.2" Leads	381-1013-ND	19.90	17.19	15.80	13.45	3414M
1	92 x 32	12	6-15	Ball	2.4	47	37	22 AWG 12.2" Leads	381-1073-ND	26.05	22.50	20.70	17.60	3312
	92 x 32	24	12-28	Ball	2.4	47	37	22 AWG 12.2" Leads	381-1074-ND	26.05	22.50	20.70	17.60	3314
1	119 x 25	12	7-13	Ball	3	82	38	24 AWG 12.2" Leads	381-1024-ND	30.50	26.37	24.25	20.60	4412FM
	119 x 25	24	12-28	Ball	3	82	38	24 AWG 12.2" Leads	381-1025-ND	30.50	26.37	24.25	20.60	4414FM
1	119 x 32	12	6-15	Ball	5	100	45	Leads, Hall Effect	381-1088-ND	30.90	26.73	24.55	20.90	4312S
	119 x 32	12	6-15	Ball	5	100	45	22 AWG 12.2" Leads	381-1002-ND	29.10	25.20	23.15	19.65	4312
	119 x 32	12	6-15	Ball	1.2	56	30	22 AWG 12.2" Leads	381-1020-ND	29.10	25.20	23.15	19.65	4312L
	119 x 32	12	6-15	Ball	2.6	82	39	22 AWG 12.2" Leads	381-1021-ND	29.10	25.20	23.15	19.65	4312M
1	119 x 32	24	12-28	Ball	5	100	45	22 AWG 12.2" Leads	381-1003-ND	29.10	25.20	23.15	19.65	4314
	119 x 32	24	12-28	Ball	1.2	56	30	22 AWG 12.2" Leads	381-1022-ND	29.10	25.20	23.15	19.65	4314L
	119 x 32	24	12-28	Ball	2.6	82	39	22 AWG 12.2" Leads	381-1023-ND	29.10	25.20	23.15	19.65	4314M
	119 x 32	48	36-53	Ball	5	100	45	22 AWG 12.2" Leads	381-1004-ND	31.85	27.54	25.30	21.50	4318
1	119 x 38	12	7-14.5	Ball	5.3	108	49	22 AWG 12.2" Leads	381-1084-ND	35.30	30.51	28.05	23.80	4212H
	119 x 38	24	12-28	Ball	5.3	108	49	.110 x .02" Terminals	381-1086-ND	37.75	32.67	30.00	25.50	4294H
	119 x 38	24	12-28	Ball	5.3	108	49	22 AWG 12.2" Leads	381-1085-ND	35.30	30.51	28.05	23.80	4214H
	119 x 38	48	36-56	Ball	5.3	108	49	.110 x .02" Terminals	381-1087-ND	42.15	36.45	33.45	28.45	4298H
	119 x 38	12	7-14.5	Ball	1.2	51	29	22 AWG 12.2" Leads	381-1016-ND	32.90	28.44	26.15	22.20	4212L
1	119 x 38	12	7-14.5	Ball	2.2	75	38	22 AWG 12.2" Leads	381-1017-ND	32.90	28.44	26.15	22.20	4212M
	119 x 38	24	12-28	Ball	1.2	75	29	22 AWG 12.2" Leads	381-1018-ND	32.90	28.44	26.15	22.20	4214L
	119 x 38	12	7-15	Ball	4.5	106	49	.110" x .02" Terminals	381-1014-ND	46.50	40.14	36.90	31.40	4182NX
	119 x 38	24	12-29	Ball	4.5	106	49	.110" x .02" Terminals	381-1015-ND	46.50	40.14	36.90	31.40	4184NX
	119 x 38	24	12-30	Sleeve	3.5	94	44	.110" x .02" Terminals	381-1083-ND	41.45	35.82	32.90	28.01	4184NGX
1	127 x 38	12	8-16	Ball	4.5	118	44	.110" x .02" Terminals	381-1115-ND	60.15	46.35	38.40	36.05	W2G115-AD15-13
	127 x 38	12	8-16	Ball	5.9	130	48	.110" x .02" Terminals	381-1117-ND	60.15	46.35	38.40	36.05	W2G115-AE53-13
	127 x 38	24	18-30	Ball	5.7	130	48	22 AWG 10.5" Leads	381-1116-ND	60.15	46.35	38.40	36.05	W2G115-AE31-01
	127 x 38	24	16-28	Ball	12	160	52	.118" x .02" Terminals	381-1068-ND	67.20	51.84	42.90	40.31	W2G115-AG71-13
2	60 x 25	12	6-15	Ball	0.7	12	26	22 AWG 12.2" Leads	381-1038-ND	26.00	22.50	20.60	17.55	612L
2	172 x 51	24	12-32	Ball	12	206	50	.118" x .02" Terminals	381-1098-ND	88.35	76.32	70.15	59.65	6224NM
	172 x 51	12	8-15	Ball	12	206	50	.118" x .02" Terminals	381-1041-ND	113.50	98.10	90.10	76.60	6212NM
	172 x 51	24	12-28	Ball	18	241	55	.118" x .02" Terminals	381-1042-ND	88.35	76.32	70.15	59.65	6224N
	172 x 51	24	12-28	Ball	26	283	61	.118" x .02" Terminals	381-1043-ND	93.05	71.82	59.40	55.85	6224NH
2	172 x 51	48	28-60	Ball	17	241	55	.118" x .02" Terminals	381-1045-ND	88.35	76.32	70.15	59.65	6248N
	172 x 51	24	12-28	Ball	18	241	57	.118" x .02" Terminals	381-1005-ND	88.35	76.32	70.15	59.65	6424
	172 x 51	24	12-28	Ball	26	283	61	.118" x .02" Terminals	381-1046-ND	92.73	80.10	73.63	62.61	6424H
	172 x 51	48	28-60	Ball	17	241	57	.118" x .02" Terminals	381-1006-ND	88.35	76.32	70.15	59.65	6448
								DC Flatpaks						
3	120 x 40	12	7-15	Ball	6	32	55	22 AWG 13.4" Leads	381-1059-ND	57.05	49.23	45.30	38.50	RL90-18/12N
	120 x 40	24	12-28	Ball	5	32	55	22 AWG 13.4" Leads	381-1060-ND	57.05	49.23	45.30	38.50	RL90-18/14N

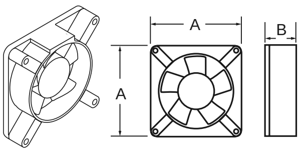
(Continued)

Fig.	Voltage Size (mm)	Voltage (DC)	Range (DC)	CFM @ O”	dBA	Watts	Impeller Material	Digi-Key Part No.	Price Each 1	25	50	100	EBM Ind. Part No.
Brushless DC Backward Curved Impellers													
5	175 x 69	48	36-56	300	68	38	Plastic	381-1108-ND	168.20	154.08	143.20	134.61	R1G175-AB41-52
	133 x 91	12	14-Aug	174	60	19	Plastic	381-1111-ND	207.70	189.92	176.71	166.11	R2G133-AB15-10

Fig.	Size (mm)	Voltage (AC)	Input Watts	CFM @ O”	dBA	Impeller Dimensions Inches (mm)	Capacitor	Impeller Material	Digi-Key Part No.	Price Each 1	25	50	100	EBM Ind. Part No.
AC Backward Curved Motorized Impellers														
5	220 x 71	115	100	530	70	8.66” (220) x 2.8” (71)	10	Plastic	381-1110-ND	76.45	72.72	67.30	63.45	R2E220-AA44-23
	220 x 71	230	100	530	70	8.66” (220) x 2.8” (71)	2	Plastic	381-1109-ND	80.80	73.84	68.76	64.60	R2E220-AA40-23

Fig.	Size (mm)	Bearing	Voltage (AC)	Input Watts	CFM @ O"	dBA	Leads	Digi-Key Part No.	Price Each 1	25	50	100	EBM Ind. Part No.
AC Tubeaxial Fans													
1	80 x 38	Sleeve	115	8	21	21	18 AWG 17.3" Leads	381-1057-ND	27.55	23.76	21.85	18.56	8830N
	80 x 38	Sleeve	115	11	28	28	18 AWG 17.3" Leads	381-1106-ND	27.55	23.76	21.85	18.55	8800N
	80 x 38	Sleeve	115	11	36	34	18 AWG 12.2" Leads	381-1103-ND	24.35	21.06	19.35	16.45	8500N
	80 x 38	Sleeve	115	11	36	34	18 AWG 12.2" Leads	381-1102-ND	32.00	27.63	25.40	21.61	8500DP
	80 x 38	Sleeve	230	11	36	34	18 AWG 12.2" Leads	381-1105-ND	26.45	22.86	21.00	17.85	8550N
1	80 x 38	Ball	115	11	36	35	22 AWG 12.2" Leads	381-1104-ND	38.65	33.39	30.70	26.10	8506N
	80 x 38	Sleeve	115	8	20	29	.110"x.02"Terminals	381-1056-ND	30.50	26.37	24.25	20.60	8830A
	80 x 38	Sleeve	115	11	34	41	.110"x.02"Terminals	381-1051-ND	24.41	23.58	21.70	18.45	8500A
	80 x 38	Sleeve	230	11	34	41	.110"x.02"Terminals	381-1054-ND	29.45	25.47	23.35	19.85	8550A
	80 x 38	Sleeve	115	11	36	34	22 AWG 12.2" Leads	381-1052-ND	24.35	21.06	19.35	16.45	8500VW
	80 x 38	Ball	115	11	36	34	22 AWG 12.2" Leads	381-1053-ND	38.65	33.39	30.70	26.10	8506VW
	80 x 38	Ball	230	11	36	34	22 AWG 12.2" Leads	381-1055-ND	40.75	35.28	32.35	27.55	8556VW
1	92 x 25	Ball	115	9	41	40	.110"x.02"Terminals	381-1076-ND	36.80	31.86	29.25	24.85	3906
1	92 x 38	Ball	115	11	53	42	18 AWG 12.2" Leads	381-1075-ND	51.90	40.05	33.10	31.15	3606
1	119 x 25	Ball	115	8	59	35	.110"x.02"Terminals	381-1107-ND	38.00	32.85	30.15	25.60	9906L
	119 x 25	Ball	115	12	79	42	.110"x.02"Terminals	381-1078-ND	35.45	30.60	28.15	23.90	9906
	119 x 25	Ball	230	12	79	42	.110"x.02"Terminals	381-1079-ND	37.40	32.31	29.70	25.26	9956
1	119 x 38	Sleeve	115	18	106	50	.118"x.02"Terminals	381-1089-ND	23.55	20.34	18.70	15.90	4600N
	119 x 38	Sleeve	115	18	106	50	.118"x.02"Terminals	381-1090-ND	23.55	20.34	18.70	15.90	4600X
	119 x 38	Sleeve	230	18	106	50	.118"x.02"Terminals	381-1093-ND	27.00	23.40	21.45	18.26	4650N
	119 x 38	Sleeve	230	18	106	50	.118"x.02"Terminals	381-1094-ND	27.00	23.40	21.45	18.26	4650X
	119 x 38	Ball	115	18	106	51	.118"x.02"Terminals	381-1091-ND	37.45	32.40	29.75	25.31	4606N
1	119 x 38	Ball	230	18	106	51	.118"x.02"Terminals	381-1095-ND	40.90	35.37	32.45	27.65	4656X
	119 x 38	Ball	115	18	106	45	.110"x.02"Terminals	381-1030-ND	37.45	32.40	29.75	25.31	4606VX
	119 x 38	Ball	230	18	106	45	.110"x.02"Terminals	381-1034-ND	45.92	35.37	32.45	27.65	4656VX
	119 x 38	Sleeve	115	10	56	28	.110"x.02"Terminals	381-1036-ND	28.95	25.11	23.00	19.55	4800Z
	119 x 38	Sleeve	230	10	56	28	.110"x.02"Terminals	381-1037-ND	32.40	28.08	25.70	21.91	4850Z
1	119 x 38	Sleeve	115	12	71	33	.110"x.02"Terminals	381-1026-ND	28.45	24.57	22.60	19.25	4530Z
	119 x 38	Sleeve	230	12	71	33	.110"x.02"Terminals	381-1027-ND	31.90	27.54	25.30	21.56	4580Z
	119 x 38	Sleeve	115	18	106	45	.110"x.02"Terminals	381-1029-ND	23.55	20.34	18.70	15.90	4600Z
	119 x 38	Sleeve	230	18	106	45	.110"x.02"Terminals	381-1033-ND	27.00	23.40	21.45	18.26	4650Z
	119 x 38	Ball	115	18	106	45	.110"x.02"Terminals	381-1031-ND	37.45	32.40	29.75	25.31	4606Z
1	119 x 38	Ball	115	18	106	45	22 AWG 12.2" Leads	381-1092-ND	37.45	32.40	29.75	25.31	4606ZW
	119 x 38	Ball	230	18	106	45	.110"x.02"Terminals	381-1035-ND	40.90	35.37	32.45	27.65	4656Z
1	120 x 38	Sleeve	115	18	106	50	.110"x.02"Terminals	381-1028-ND	23.55	20.34	18.70	15.90	4600A
	120 x 38	Sleeve	230	18	106	50	.110"x.02"Terminals	381-1032-ND	27.00	23.40	21.45	18.26	4650A
1	127 x 38	Ball	115	17	121	47	.118"x.02"Terminals	381-1119-ND	56.35	43.56	35.95	33.85	W2K121-AA15-13
	127 x 38	Sleeve	115	17	121	47	.118"x.02"Terminals	381-1120-ND	39.30	30.33	25.10	23.60	W2K121-AA15-39
	127 x 38	Ball	115	17	121	47	22 AWG 12.2" Leads	381-1118-ND	56.35	43.56	35.95	33.85	W2K121-AA15-01
1	135 x 38	Ball	230	26	159	50	.110"x.02"Terminals	381-1096-ND	65.95	56.97	52.35	44.50	5656S
2	150 x 55	Ball	115	38	225	52	20 AWG 13.3" Leads	381-1121-ND	65.30	50.40	41.71	39.15	W2S130-AA25-01
	150 x 55	Ball	115	38	225	52	.110"x.02"Terminals	381-1122-ND	65.30	50.40	41.71	39.15	W2S130-AA25-44
	150 x 55	Ball	115	46	263	60	20 AWG 13.3" Leads	381-1124-ND	65.30	50.40	41.71	39.15	W2S130-BM15-01
	150 x 55	Ball	230	46	263	60	20 AWG 13.3" Leads	381-1123-ND	65.30	50.40	41.71	39.15	W2S130-BM03-01
2	172 x 51	Ball	230	26	260	58	PSC 0.11" Terminals	381-1064-ND	93.65	72.27	59.80	56.20	W2E143-AA09-01
	172 x 51	Ball	115	26	260	58	PSC 0.11" Terminals	381-1065-ND	93.65	72.27	59.80	56.20	W2E143-AA15-01
	172 x 51	Ball	230	29	295	58	PSC 0.11" Terminals	381-1066-ND	93.65	72.27	59.80	56.20	W2E143-AB09-01
	172 x 51	Ball	115	29	295	58	PSC 0.11" Terminals	381-1067-ND	93.65	72.27	59.80	56.20	W2E143-AB15-01
4	172 x 150 x 38	Ball	230	24	230	57	0.11" 'Terminals	381-1062-ND	89.55	69.12	57.20	53.75	W2E142-BB01-01
	172 x 150 x 38	Ball	115	24	230	57	0.11" 'Terminals	381-1063-ND	89.55	69.12	57.20	53.75	W2E142-BB05-01
4	225 x 80	Ball	115	80	607	61	Terminal Block	381-1114-ND	135.80	104.76	86.70	81.50	W2E200-HH86-01
	225 x 80	Ball	230	80	607	61	Terminal Block	381-1113-ND	135.80	104.76	86.70	81.50	W2E200-HH38-01
AC Flatpaks													
3	180 x 40	Ball	115	19	55	60	22 AWG 12.2" Leads	381-1112-ND	55.45	47.88	44.01	37.41	RG125-19/06
	120 x 40	Sleeve	115	20	25	60	18 AWG 12.2" Leads	381-1058-ND	53.80	46.53	42.70	36.35	RL90-18/00
	120 x 40	Sleeve	230	20	25	60	18 AWG 12.2" Leads	381-1061-ND	56.15	48.51	44.55	37.95	RL90-18/50

SUNON Thin Cooling Fans and Blowers



General

Motor: Patented brushless DC motor design

Fan Housing: Injection molded non-flammable black thermoplastic UL 94V-O rating

Blower Housing: See Below

Impeller: Injection molded non-flammable black thermoplastic UL 94V-O rating

Bearing: Precision, life-lubricated ball bearing system; Precision, oil-impregnated sintered sleeve bearing system.

Insulation: Class E integral ground system rated @ 100°C

Insulation Resistance: More than 500M ohm between internal stator and lead wire (+) measured by DC 500V

Dielectric Strength: 500VAC for one minute

Safety Protection: Electronic locked rotor protected

Operating Temperature: -10°C to +70°C for sleeve bearing version; -20°C to +80°C for ball bearing version (fans); 0°C to +70°C (blowers)

Storage Temperature: -40°C to +70°C (fans); -20°C to +70°C (blowers)

Operating Voltage: Rated voltage ±15%

Life Expectancy: 30,000 hours

Blower Features

- Exceptional cooling performance, radiating blower with one directional exhaust
- Low noise via highly efficient fan blade design
- Low power consumption and high motor efficiency through radial gap type motor design

Dim. (mm) Sq.xThk.	Voltage (VDC)	Operating Voltage (VDC)	Bearing Type	Motor No. of Poles	Current (A)	Input (W)	Speed (RPM)	Air Flow (CFM)	Static Pressure (@ 1" or 25.4mm – H20)	Noise Pressure (dBA)	Digi-Key Part No.	Price Each				Sunon Part No.
												1	10	25	50	
Plastic Ultra-Thin Brushless DC Fans																
17 x 8	5	4-6	Ball	8	0.09	0.45	12000	0.70	0.12	25	259-1080-ND	20.64	19.19	17.97	16.90	KDE0517PDB2-8V
20 x 8	5	4-6	Ball	8	0.11	0.55	15000	1.30	0.18	27.5	259-1081-ND	20.64	19.19	17.97	16.90	KDE0501PDB1-8V
					0.09	0.45	12000	1.00	0.15	26.5	259-1082-ND	20.64	19.19	17.97	16.90	KDE0501PDB2-8V
25 x 6	5	4-6	Ball	8	0.10	0.60	13000	1.60	0.15	29	259-1001-ND	17.96	16.70	15.64	14.71	KDE0502PEB1-8V
					0.06	0.30	10000	1.20	0.095	21	259-1002-ND	17.96	16.70	15.64	14.71	KDE0502PEB2-8V
					0.03	0.15	7000	0.75	0.035	11	259-1003-ND	17.96	16.70	15.64	14.71	KDE0502PEB3-8V
30 x 6	5	4-6	Ball	8	0.11	0.55	9500	3.00	0.15	25	259-1004-ND	17.22	16.04	15.00	14.12	KDE0503PEB1-8V
					0.08	0.40	7500	2.40	0.08	20	259-1005-ND	17.22	16.04	15.00	14.12	KDE0503PEB2-8V
					0.05	0.25	5500	1.90	0.065	13	259-1006-ND	17.22	16.04	15.00	14.12	KDE0503PEB3-8V
40 x 6	5	4-6	Ball	8	0.12	0.60	6000	5.50	0.08	26	259-1007-ND	16.30	15.17	14.19	13.33	KDE0504PEB1-8V
					0.08	0.45	5000	4.35	0.05	22	259-1008-ND	16.30	15.17	14.19	13.33	KDE0504PEB2-8V
					0.05	0.25	4000	3.50	0.04	16	259-1009-ND	16.30	15.17	14.19	13.33	KDE0504PEB3-8V
Plastic Thin Brushless DC Fans																
20 x 10	5	4-6	Ball	8	0.10	0.5	14000	0.65	0.15	25.5	259-1010-ND	17.78	16.55	15.48	14.55	KDE0501PFB2-8V
25 x 10	5	4-6	Ball	8	0.12	0.9	10000	2.4	0.16	24	259-1012-ND	16.30	15.17	14.19	13.33	KDE0502PFB1-8V
					0.12	0.6	10000	2.0	0.16	24	259-1062-ND	16.30	15.17	14.19	13.33	KDE0502PFB2-8V
					0.06	0.3	7000	1.3	0.09	23	259-1013-ND	16.30	15.17	14.19	13.33	KDE0502PFB3-8V
	12	10.2-13.8		8	0.10	1.7	10000	2.4	0.16	24	259-1014-ND	16.30	15.17	14.19	13.33	KDE1202PFB1-8V
					0.10	.72	10000	2.0	0.16	24	259-1063-ND	16.30	15.17	14.19	13.33	KDE1202PFB2-8V
					0.08	0.9	7000	1.3	0.09	23	259-1015-ND	16.30	15.17	14.19	13.33	KDE1202PFB3-8V
30 x 10	5	4-6	Ball	8	0.18	0.9	9500	3.5	0.14	22.5	259-1016-ND	16.30	15.17	14.19	13.33	KDE0503PFB1-8V
					0.12	0.6	8000	3.0	0.11	20.5	259-1064-ND	16.30	15.17	14.19	13.33	KDE0503PFB2-8V
					0.06	0.3	5500	2.3	0.07	18.5	259-1017-ND	17.04	15.86	14.84	13.94	KDE0503PFB3-8V
	12	10.2-13.8		8	0.13	.96	9500	3.5	0.14	22.5	259-1018-ND	16.30	15.17	14.19	13.33	KDE1203PFB1-8V
					0.12	.84	8000	3.0	0.11	20.5	259-1065-ND	16.30	15.17	14.19	13.33	KDE1203PFB2-8V
					0.08	0.9	5500	2.3	0.07	18	259-1019-ND	17.04	15.86	14.84	13.94	KDE1203PFB3-8V
35 x 10	5	4-6	Ball	8	0.19	1.0	7000	5.2	0.09	22.5	259-1020-ND	17.04	15.86	14.84	13.94	KDE0535PFB1-8V
					0.13	0.7	6000	4.5	0.08	21	259-1066-ND	17.04	15.86	14.84	13.94	KDE0535PFB2-8V
					0.07	0.3	4500	3.2	0.05	18	259-1021-ND	17.04	15.86	14.84	13.94	KDE0535PFB3-8V
	12	10.2-13.8		8	0.13	1.7	7000	5.2	0.09	22.5	259-1022-ND	17.04	15.86	14.84	13.94	KDE1235PFB1-8V
					0.12	.84	6000	4.5	0.08	21	259-1067-ND	17.04	15.86	14.84	13.94	KDE1235PFB2-8V
					0.08	0.9	4500	3.2	0.05	18.5	259-1023-ND	17.04	15.86	14.84	13.94	KDE1235PFB3-8V
40 x 10	5	4-6	Sleeve	8	0.15	0.7	7000	6.6	0.17	25	259-1024-ND	12.50	11.90	11.36	10.42	KDE0504PFS1-8V
					0.11	0.6	6000	5.6	0.13	24	259-1070-ND	12.50	11.90	11.36	10.42	KDE0504PFS2-8V
					0.08	0.4	4500	4.5	0.09	22.8	259-1025-ND	12.50	11.90	11.36	10.42	KDE0504PFS3-8V
			Ball	8	0.15	0.7	7300	6.9	0.19	25.5	259-1026-ND	13.73	12.96	12.32	11.48	KDE0504PFB1-8V
					0.11	0.6	6500	6.2	0.14	24.5	259-1068-ND	13.73	12.96	12.32	11.48	KDE0504PFB2-8V
					0.08	0.4	5300	4.8	0.10	23.5	259-1027-ND	13.73	12.96	12.32	11.48	KDE0504PFB3-8V
	12	10.2-13.8	Sleeve	8	0.06	0.7	7000	6.6	0.17	25	259-1028-ND	12.50	11.90	11.36	10.42	KDE1204PFS1-8V
					0.05	0.6	6000	5.6	0.13	24	259-1071-ND	12.50	11.90	11.36	10.42	KDE1204PFS2-8V
					0.04	0.5	4500	4.5	0.09	22.8	259-1029-ND	12.50	11.90	11.36	10.42	KDE1204PFS3-8V
			Ball	8	0.06	0.7	7300	6.9	0.19	25.5	259-1030-ND	13.73	12.96	12.32	11.48	KDE1204PFB1-8V
					0.05	0.6	6500	6.2	0.14	24.5	259-1069-ND	13.73	12.96	12.32	11.48	KDE1204PFB2-8V
					0.04	0.5	5300	4.8	0.10	23.5	259-1031-ND	13.73	12.96	12.32	11.48	KDE1204PFB3-8V
45 x 10	5	4-6	Sleeve	8	0.12	0.6	5200	7	0.11	27	259-1074-ND	13.75	13.10	12.26	11.52	KDE0545PFS2-8V
			Ball	8	0.16	0.8	6300	9	0.155	29	259-1034-ND	14.51	13.70	13.03	12.13	KDE0545PFB1-8V
					0.12	0.6	5500	7.5	0.12	28	259-1072-ND	14.51	13.70	13.03	12.13	KDE0545PFB2-8V
	12	10.2-13.8	Sleeve	8	0.06	0.7	5200	7.0	0.11	22	259-1075-ND	13.75	13.10	12.26	11.52	KDE1245PFS2-8V
			Ball	8	0.07	0.8	6300	9	0.155	29	259-1038-ND	14.51	13.70	13.03	12.13	KDE1245PFB1-8V
					0.06	0.7	5500	7.5	0.12	28	259-1073-ND	14.51	13.70	13.03	12.13	KDE1245PFB2-8V
					0.04	0.5	4500	6.2	0.095	26	259-1039-ND	14.51	13.70	13.03	12.13	KDE1245PFB3-8V
50 x 10	5	4-6	Sleeve	8	0.17	0.9	5100	9.6	0.105	30.5	259-1040-ND	13.75	13.10	12.26	11.52	KDE0505PFS1-8V
					0.13	0.6	4300	8	0.09	29	259-1078-ND	13.75	13.10	12.26	11.52	KDE0505PFS2-8V
					0.09	0.4	3500	7.0	0.065	21	259-1041-ND	12.50	11.90	11.36	10.42	KDE0505PFS3-8V
			Ball	8	0.17	0.9	5400	10.2	0.11	31.5	259-1042-ND	14.51	13.70	13.03	12.13	KDE0505PFB1-8V
					0.13	0.6	4700	9.2	0.10	30	259-1076-ND	14.51	13.70	13.03	12.13	KDE0505PFB2-8V
					0.09	0.4	3800	7.2	0.07	22	259-1043-ND	13.73	12.96	12.32	11.48	KDE0505PFB3-8V
	12	10.2-13.8	Sleeve	8	0.06	0.7	4300	8	0.09	29	259-1079-ND	13.75	13.10	12.26	11.52	KDE1205PFS2-8V
			Ball	8	0.07	0.9	5400	10.2	0.11	31.5	259-1046-ND	14.51	13.70	13.03	12.13	KDE1205PFB1-8V
					0.06	0.7	4700	9.2	0.10	30	259-1077-ND	14.51	13.70	13.03	12.13	KDE1205PFB2-8V
					0.04	0.5	3800	7.2	0.07	22	259-1047-ND	13.73	12.96	12.32	11.48	KDE1205PFB3-8V
52 x 15	5	4-6	Ball	4	0.38	1.9	5300	12.7	0.16	27.8	259-1050-ND	13.73	12.96	12.32	11.48	KDE0505PHB2V
	12	10.2-13.8	Sleeve	4	0.14	1.7	5000	12.4	0.14	27	259-1052-ND	12.50	11.90	11.36	10.42	KDE1205PHS2V
			Ball	4	0.14	1.7	5300	12.7	0.16	27.8	259-1054-ND	13.73	12.96	12.32	11.48	KDE1205PHB2V
					0.08	0.9	4300	8.5	0.14	25.4	259-1055-ND	13.73	12.96	12.32	11.48	KDE1205PHB3V
Thin Miniature Brushless DC Blowers																
25 x 10	5	4-6	Ball	8	0.125	0.65	10000	0.7	0.23	24	259-1083-ND*	17.39	16.30	15.34	14.49	B0502PFB2-8V
					0.2	0.9	7000	0.85	0.37	25	259-1057-ND†	18.93	17.88	16.99	15.83	B0502AFB1-8V
					0.125	0.65	10000	0.7	0.23	24	259-1084-ND*	18.93	17.88	16.99	15.83	B0502AFB2-8V
30 x 10	5	4-6	Ball	8	0.125	0.65	8000	1.1	0.27	20.5	259-1085-ND*	17.39	16.30	15.34	14.49	B0503PFB2-8V
					0.22	0.9	7000	1.35	0.38	22.5	259-1059-ND†	18.93	17.88	16.99	15.83	B0503AFB1-8V
					0.125	0.65	8000	1.1	0.27	20.5	259-1086-ND*	18.93	17.88	16.99	15.83	B0503AFB2-8V
Ultra-Thin Miniature Brushless DC Blowers																
35 x 4.8	5	4-6	Ball	8	0.16	0.8	9500	1.2	0.33	30	259-1087-ND†	21.13	19.65	18.40	17.30	GB0535ACB1-8 OC
					0.07	0.35	7500	0.95	0.22	24	259-1088-ND†	21.13	19.65	18.40	17.30	GB0535ACB2-8 OC
35 x 6					0.09	1.0	7000	0.7	0.135	23	259-1060-ND*	17.39	16.30	15.34	14.49	B0535PEB2-8V
					0.12	0.6	8500	1.4	0.32	31	259-1089-ND†	16.08	14.96	14.01	13.17	GB0535AEB1-8 OC
					0.08	0.4	7000	1.15	0.22	25	259-1090-ND†	16.08	14.96	14.01	13.17	GB0535AEB2-8 OC
35 x 7					0.09	1.0	7000	0.7	0.135	23	259-1061-ND†	18.93	17.88	16.99	15.83	B0535ADB2-8V
					0.12	0.6	8000	1.6	0.31	33	259-1091-ND†	16.08	14.96	14.01	13.17	GB0535ADB1-8 OC
					0.08	0.4	6500	1.3	0.22	25	259-1092-ND†	16.08	14.96	14.01	13.17	GB0535ADB2-8 OC

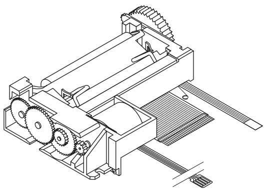
* Plastic Housing (Fan Blades - PBT 94V-O) † Aluminum Housing (Fan Blades - PBT 94V-O)

Panasonic Thermal Printers

THERMAL PRINTERS:
Use a non-impact method for printing. This is accomplished by using chemically treated thermal paper. Chemicals suspended in the paper react to heat generated by the print head to form dots that make up the characters or image. Panasonic offers a thermal serial printer and a thermal line printer. The serial printer uses a moving head that prints one character at a time, it is most suited for character printing, although the high speed model does support graphics. Its main benefit is low cost. Line printers have a fixed print head, printing one line at a time. It is suited for both high speed character and graphic printing. Its main benefits are higher definition graphic printing along with fewer moving parts.

INTERFACE BOARDS:
Acts as an interface between user's system and the thermal printer. Monitors temperature and paper status. Controls motor(s) and thermal head energy for optimal printing. Generates built in test pattern. Accepts both simplified Centronics or RS-232C (TTL only) interface.

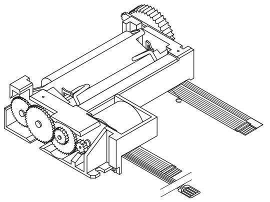
Fig. 1 – Line Printer



EPL1600 Series
- Compact size, light weight
- High resolution (8 dots/mm), high printing speed
- Operatable by batteries (4.2 to 8.5 volts)
- Low current consumption
- Semi-auto paper loading function

Note: Available in 58, 80, and 112mm paper widths

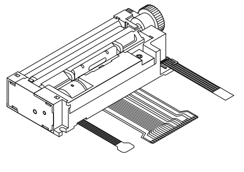
Fig. 2 – Line Printer



EPL1700 Series
- Compact size, light weight
- High resolution (8 dots/mm), high printing speed
- Semi-auto paper loading function
- Thick (label paper) paper printing possible

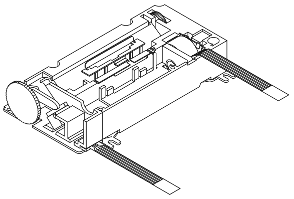
Note: Available in 60, 80, and 112mm paper widths

Fig. 3 – Miniature Line Printer



EPL1802S2 Series
- High speed printing
- Very small size
- Very light weight (40g)
- Low power consumption

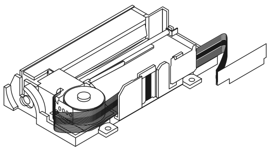
Fig. 4 – Compact Line Printer



EPL1900 Series
- Compact size
- Low weight (55g)
- High reliability
- Easy maintenance

Note: Available with paper cutter (PT1034-ND)

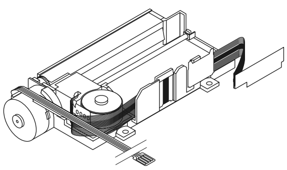
Fig. 5 – Serial Printer



EPT2000L Series
- High speed printing
- Uni-directional character printing (L to R)
- 8 vertical dots per line
- Low noise, less than 55dB
- Compact size, lightweight
- SIngle 5 volt power source (battery operation)
- Low cost

Note: Available in 58, 80, and 112mm paper widths

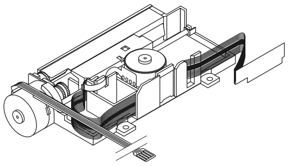
Fig. 6 – Serial Printer



EPT2000H Series
- High speed printing
- Suitable for graphic printing
- Bi-directional character printing
- 8 vertical dots per line
- Uni-directional graphic printing (L to R)
- Low noise, less than 55dB
- Compact size, lightweight
- Single 5 volt power source (battery operation)
- Low cost

Note: Available in 58, 80, and 112mm paper widths

Fig. 7 – High Speed Serial Printer



EPT2214S2H Series
- Character printing only
- 8 vertical dots per line
- High speed printing 140 cps
- High reliability 2 million lines
- Compact size lightweight
- Single 5 volt power source (battery operation)

Fig.	Print Method	Paper Width	Head Volt	Logic Volt	Print Speed (max)	Char. / line	Head life	Size (mm)	Digi-Key Part No.	Price Each 1	10	100	250	Panasonic Part No.
1	Line	58mm	5v	5v	450 dots-line/s max	24/48	5x10^{7} pulse/50 km	79x51x20	PT1000-ND	107.72	99.33	92.24	86.43	EPL1601S2
1	Line	80mm	5v	5v	400 dots-line/s max	36/72	5x10^{7} pulse/50 km	101x52x20	PT1001-ND	127.76	117.81	109.40	102.51	EPL1602S3
1	Line	112mm	5v	5v	360 dots-line/s max	52/104	5x10^{7} pulse/50 km	147x54x20	PT1002-ND	147.80	136.29	126.56	118.59	EPL1603S4
2	Line	60mm	24v	5v	432 dots-line/s max	27/54	5x10^{7} pulse/50 km	81x52x20	PT1003-ND	80.16	73.92	68.64	64.32	EPL1701S2
2	Line	80mm	24v	5v	576 dots-line/s max	36/72	5x10^{7} pulse/50 km	101x52x20	PT1004-ND	99.37	91.63	85.09	79.73	EPL1702S3
2	Line	112mm	24v	5v	864 dots-line/s max	54/108	5x10^{7} pulse/50 km	147x54x20	PT1005-ND	119.41	110.11	102.25	95.81	EPL1703S4
3	Line	58mm	5v	5v	450 dots-line/s max	24/48	1x10^{8} pulse/50km	72x32x15	PT1032-ND	120.24	110.88	102.96	96.48	EPL1802S2
4	Line	58mm	5v	5v	300 dots-line/s max	24/36	5x10^{7} pulse/30km	82x41x15.8	PT1033-ND	78.49	72.38	67.21	62.98	EPL1902S2C
4	Line	58mm	5v	5v	300 dots-line/s max	24/36	5x10^{7} pulse/30km	82x41x25	PT1034-ND	75.15	69.30	64.35	60.30	EPL1904S2C
5	Serial	58mm	5v	5v	70cps	24	5x10^{5} pulse/50 MCTF	87x43x24	PT1006-ND	61.79	56.98	52.91	49.58	EPT2014S2L
5	Serial	80mm	5v	5v	70cps	32	5x10^{5} pulse/50 MCTF	111x43x24	PT1007-ND	65.13	60.06	55.77	52.26	EPT2019S3L
5	Serial	112mm	5v	5v	70cps	53	5x10^{5} pulse/50 MCTF	143x43x24	PT1008-ND	50.38	46.47	43.15	40.43	EPT2025S4L
6	Serial	58mm	5v	5v	70cps	24	5x10^{5} pulse/50 MCTF	100x43x24	PT1009-ND	71.81	66.22	61.49	57.62	EPT2014S2H
6	Serial	80mm	5v	5v	70cps	32	5x10^{5} pulse/50 MCTF	124x43x24	PT1010-ND	56.23	51.86	48.15	45.12	EPT2019S3H
6	Serial	112mm	5v	5v	70cps	53	5x10^{5} pulse/50 MCTF	156x43x24	PT1011-ND	58.17	53.64	49.81	46.68	EPT2025S4H
7	Serial	58mm	5v	5v	140cps	24	2x10^{6} pulse/50 MCTF	100x43x24	PT1012-ND	55.76	51.43	47.75	44.75	EPT2214S2H

Interface Boards

EPLR1601/EPLR1701 Series
- Supports EPLR1600/EPLR1700 series
- 364 built in character fonts
- ASCII JIS C6220 character codes
- Automatic loading
- Marker detection
- Bar code printing (UPC, JAN, EAN, CODE39, ITF, NW7)
- Operates on 5 volts EPLR1601, 24 volts for EPLR1701

EPTR2002/EPTR2102 Series
- Supports EPT2000 series (not EPT2214S2H)
- 353 built in character fonts
- ASCII JIS C6220 character codes
- Operates on 5 volts

Description	Digi-Key Part No.	Price Each 1	10	100	250	Panasonic Part No.
Interface board for EPL1600 Series	PT1013-ND	161.57	149.00	138.36	129.65	EPLR1601
Interface board for EPL1700 Series	PT1014-ND	161.57	149.00	138.36	129.65	EPLR1701
Interface board for EPL1900 Series	PT1035-ND	208.75	192.50	178.75	167.50	EPLZR1901E
Interface board for EPT2000L Series	PT1015-ND	120.24	110.88	102.96	96.48	EPTR2002
Interface board for EPT2000H Series	PT1016-ND	144.27	133.05	123.54	115.77	EPTR2102
Power cable for EPLR1601/1701 interface boards	PT1017-ND	8.02	7.40	6.87	6.44	EPLSRDSP303
Centronics cable for EPLR1601/1701 interface boards	PT1018-ND	7.52	6.93	6.44	6.03	EPLSRDSP304
RS232 cable for EPLR1601/1701 interface boards	PT1019-ND	5.85	5.39	5.01	4.69	EPLSRDSP305
Power cable for EPTR2000L/H interface boards	PT1020-ND	2.35	2.18	2.02	1.89	EPTSRDSP279
Centronics cable for EPTR2000L/H interface boards	PT1021-ND	5.90	5.44	5.05	4.74	EPLSRDSP276
RS232 cable for EPT2000L/H interface boards	PT1022-ND	3.52	3.25	3.02	2.83	EPLSRDSP277
EPLR1601 CPU replacement chip for user designed interfaces	PT1023-ND	24.80	22.87	21.24	19.90	EPLSAR1601
EPLR1701 CPU replacement chip for user designed interfaces	PT1024-ND	24.80	22.87	21.24	19.90	EPLSAR1701
EPLR1601/1701 gate-array for user designed interfaces	PT1025-ND	10.44	9.63	8.94	8.38	EPLASR1101
EPTR2002 CPU replacement chip for user designed interfaces	PT1026-ND	29.23	26.95	25.03	23.45	EPTSAR2001
EPTR2102 CPU replacement chip for user designed interfaces	PT1027-ND	29.23	26.95	25.03	23.45	EPTSAR2101

NAKAGAWA MFG. (USA), INC. Thermal Paper

Quality thermal paper available in 58, 60, 80 and 112mm paper widths.

SPECIFICATIONS:

Paper core: 12mm
Paper length: 30M
Outer diameter: 55mm
End mark: red, 50cm from end of roll.

Paper weight: 65um
Print life: greater than 5 years when stored in a dark location, 25°C or less, 65% R.H. max.

Description	Digi-Key Part No.	Price Each 1	10	100	250	Nakagawa Part No.
58mm thermal printer paper	PT1028-ND	2.08	1.66	1.46	1.39	EPT-58
60mm thermal printer paper	PT1029-ND	2.43	1.94	1.70	1.62	EPL-60
80mm thermal printer paper	PT1030-ND	2.73	2.18	1.91	1.83	EPT-80
112mm thermal printer paper	PT1031-ND	2.93	2.34	2.05	1.96	EPL-112

Digi-Key® Potentiometer Kits

Conveniently packaged in a plastic box with bin guide
for easy storage and quick access.

Description	Digi-Key Part No.	Price Each
Panasonic 6mm Carbon Trimmer, Laydown and Standup Version		
10 each of 14 popular values (140 pieces)	DXA-KIT-ND	29.95
Panasonic 6mm Cermet Dust-Proof		
Both Sides Adjust - 10 each of 13 popular values (130 total pieces)	31G-KIT-ND	52.95
Vertical Both Sides Adjust - 10 each of 13 popular values (130 total pieces)	36G-KIT-ND	52.95
Panasonic SMT Trimmer		
P1S Series - 10 each of 12 values (120 total pieces)	P1S-KIT-ND	43.95
P1D Series - 10 each of 13 values (130 total pieces)	P1D-KIT-ND	43.95
P1E Series - 10 each of 13 values (130 total pieces)	P1E-KIT-ND	43.95
P7J Series - 10 each of 15 values (150 total pieces)	P7J-KIT-ND	59.95
Bourns 3/4" (19.05mm) Rectangular 15-Turn		
10 each of 15 popular values (150 total pieces)	3006P-KIT-ND	159.00
Bourns 3/8" (9.52mm) Square 25-Turn		
3296P Series - 5 each of values denoted (75 total pieces)	3296P-KIT-ND	139.00
3296W Series - 5 each of values denoted (75 total pieces)	3296W-KIT-ND	139.00
3296X Series - 5 each of values denoted (75 total pieces)	3296X-KIT-ND	139.00
3296Y Series - 5 each of values denoted (75 total pieces)	3296Y-KIT-ND	139.00
3296Z Series - 5 each of values denoted (75 total pieces)	3296Z-KIT-ND	139.00
Bourns 3/8" (9.52mm) Square Single-Turn		
3386C Series - 5 each of values denoted (75 total pieces)	3386C-KIT-ND	64.95
3386F Series - 5 each of values denoted (75 total pieces)	3386F-KIT-ND	64.95
3386P Series - 5 each of values denoted (75 total pieces)	3386P-KIT-ND	64.95
3386R Series - 5 each of values denoted (75 total pieces)	3386R-KIT-ND	64.95
3386X Series - 5 each of values denoted (75 total pieces)	3386X-KIT-ND	64.95
Bourns 1/2" (12.70mm) Square 25-Turn		
5 each of 18 popular values (90 total pieces)	3252-KIT-ND	569.00
Bourns 1/4" (6.35mm) Square Cermet 12-Turn		
3266W Series - 5 each of values denoted (85 total pieces)	3266W-KIT-ND	189.00
3266X Series - 5 each of values denoted (85 total pieces)	3266X-KIT-ND	189.00
Bourns 1/4" (6.35mm) Square Cermet Single-Turn		
3362H Series - 10 each of 14 popular values (140 total pieces)	3362H-KIT-ND	89.95
3362M Series - 10 each of 14 popular values (140 total pieces)	3362M-KIT-ND	89.95
3362R Series - 10 each of 14 popular values (140 total pieces)	3362R-KIT-ND	89.95
3362U Series - 10 each of 14 popular values (140 total pieces)	3362U-KIT-ND	89.95
3362X Series - 10 each of 14 popular values (140 total pieces)	3362X-KIT-ND	89.95
Bourns 9mm Round Cermet Single-Turn		
10 each of values denoted (180 total pieces)	3309-KIT-ND	89.95
Bourns 1/4" (6.35mm) Round Cermet Single-Turn		
3329H Series - 5 each of 14 popular values (70 total pieces)	3329H-KIT-ND	119.95
3329P Series - 5 each of 14 popular values (70 total pieces)	3329P-KIT-ND	119.95
3329S Series - 5 each of 14 popular values (70 total pieces)	3329S-KIT-ND	119.95
3329W Series - 5 each of 14 popular values (70 total pieces)	3329W-KIT-ND	119.95
3329X Series - 5 each of 14 popular values (70 total pieces)	3329X-KIT-ND	119.95
Bourns 5/16" (7.95mm) Round Cermet 4-Turn		
3339P Series - 5 each of 14 popular values (70 total pieces)	3339P-KIT-ND	259.00
3339W Series - 5 each of 14 popular values (70 total pieces)	3339W-KIT-ND	259.00
Bourns 3/8" (9.52mm) Round Cermet Single-Turn		
3352E Series - 5 each of 15 popular values (75 total pieces)	3352E-KIT-ND	46.95
3352H Series - 5 each of 15 popular values (75 total pieces)	3352H-KIT-ND	46.95
3352P Series - 5 each of 15 popular values (75 total pieces)	3352P-KIT-ND	46.95
3352T Series - 5 each of 15 popular values (75 total pieces)	3352T-KIT-ND	46.95
3352W Series - 5 each of 15 popular values (75 total pieces)	3352W-KIT-ND	46.95
Bourns 1/2" (12.70mm) Round Wirewound Single-Turn		
5 each of 9 popular values (45 total pieces)	3345P-KIT-ND	169.95
Bourns SMD 4mm Square. Cermet Single-Turn Open Frame		
5 each of 11 popular values (55 total pieces)	3364W-KIT-ND	39.95
CTS 1/4 Watt Carbon Linear Taper		
270 Series, With Switch - 5 each of 8 values (40 total pieces)	270-A-KIT-ND	109.95
270 Series, Without Switch - 5 each of 8 values (40 total pieces)	270-B-KIT-ND	89.95
CTS 1/4 Watt Carbon Logarithmic Taper		
270 Series, With Switch - 5 each of 8 values (40 total pieces)	270-C-KIT-ND	109.95
270 Series, Without Switch - 5 each of 8 values (40 total pieces)	270-D-KIT-ND	89.95
CTS 1/8 Watt Carbon		
296 Series, Top Adjust - 5 each of 11 values (55 total pieces)	296U-KIT-ND	59.95
296 Series, Side Adjust - 5 each of 11 values (55 total pieces)	296X-KIT-ND	59.95
CTS 5 Watt Wirewound		
026 Series - 5 each of 7 values (35 total pieces)	26-KIT-ND	99.95
CTS 1/4 Watt Trimmer		
201 Series, Top Adjust - 5 each of 13 values (65 total pieces)	201U-KIT-ND	29.95
201 Series, Side Adjust - 5 each of 13 values (65 total pieces)	201X-KIT-ND	29.95
CTS .15 Watt Trimmer		
262 Series, Top Adjust - 5 each of 11 values (55 total pieces)	U262-KIT-ND	27.95
262 Series, Side Adjust - 5 each of 11 values (55 total pieces)	X262-KIT-ND	27.95

Digi-Key® Thermistor Kits

Conveniently packaged in a plastic box with bin guide
for easy storage and quick access.

Description	Digi-Key Part No.	Price Each
Keystone Thermistors		
PTC - 2 each of 10 popular thermistors (20 total pieces)	KCPTC1-KIT-ND	37.95
NTC - 2 each of 15 popular thermistors (30 total pieces)	KCNTC-KIT-ND	39.95

Digi-Key® Resistor Kits

Conveniently packaged
into bags per value.

Description	Digi-Key Part No.	Price Each
Yageo 5% Carbon Film, 1/8 Watt		
5 ea. of values 1.0, 1.2, 1.5, 1.8, 2.2, etc. thru 1.0 megohm (365 total pieces)	RS112-ND	16.96
5 ea. of values 1.1, 1.3, 1.6, 2.0, 2.4, etc. thru 910 kilohm (360 total pieces)	RS212-ND	16.99
200 ea. of all 161 standard values 1.0 - 4.7 megohms (32,200 total pieces)	RSE200-ND	409.00
Yageo 5% Carbon Film, 1/4 Watt		
5 ea. of values 1.0, 1.2, 1.5, 1.8, 2.2, etc. thru 1.0 megohm (365 total pieces)	RS125-ND	14.95
5 ea. of values 1.1, 1.3, 1.6, 2.0, 2.4, etc. thru 910 kilohm (360 total pieces)	RS225-ND	14.95
200 ea. of all 161 standard values 1.0 - 4.7 megohms (32,200 total pieces)	RSQ200-ND	239.00
Yageo 5% Carbon Film, 1/2 Watt		
5 ea. of values 1.0, 1.2, 1.5, 1.8, 2.2, etc. thru 1.0 megohm (365 total pieces)	RS150-ND	16.95
5 ea. of values 1.1, 1.3, 1.6, 2.0, 2.4, etc. thru 910 kilohm (360 total pieces)	RS250-ND	16.95
200 ea. of all 161 standard values 1.0 - 4.7 megohms (32,200 total pieces)	RSH200-ND	335.00
Panasonic 0402 1% Chip Resistor Assortments, 1/16 Watt		
50 each of values 10 ohm to 97.6 ohm (4,800 pieces)	RSM1L-ND	349.00
50 each of values 100 ohm to 976 ohm (4,800 pieces)	RSM2L-ND	349.00
50 each of values 1.00K to 9.76K (4,800 pieces)	RSM3L-ND	349.00
50 each of values 10.0K to 97.6K (4,800 pieces)	RSM4L-ND	349.00
50 each of values 100K to 1.00M (4,850 pieces)	RSM5L-ND	349.00
Panasonic 0402 5% Chip Resistor Assortments, 1/16 Watt		
50 each of every other value from 10, 12, 15, etc 1.0M (3,050 pieces)	CR7A-KIT-ND	99.95
200 each of every other value from 10, 12, 15, etc 1.0M (12,200 pieces)	CR7-KIT-ND	399.00
50 each of every other value from 11, 13, 16, etc. 910K (3,000 pieces)	CR8A-KIT-ND	99.95
200 each of every other value from 11, 13, 16, etc. 910K (12,000 pieces)	CR8-KIT-ND	399.00
Panasonic 0603 1% Chip Resistor Assortments, 1/16 Watt		
50 each of values 10 ohm to 97.6 ohm (4,800 pieces)	RSM1H-ND	199.00
50 each of values 100 ohm to 976 ohm (4,800 pieces)	RSM2H-ND	199.00
50 each of values 1.00K to 9.76K (4,800 pieces)	RSM3H-ND	199.00
50 each of values 10.0K to 97.6K (4,800 pieces)	RSM4H-ND	199.00
50 each of values 100K to 1.00M (4,850 pieces)	RSM5H-ND	199.00
Panasonic 0603 5% Chip Resistor Assortments, 1/16 Watt		
50 each of every other value from 10, 12, 15, etc 1.0M (3,050 pieces)	CR5A-KIT-ND	94.95
200 each of every other value from 10, 12, 15, etc 1.0M (12,200 pieces)	CR5-KIT-ND	379.00
50 each of every other value from 11, 13, 16, etc. 910K (3,000 pieces)	CR6A-KIT-ND	94.95
200 each of every other value from 11, 13, 16, etc. 910K (12,000 pieces)	CR6-KIT-ND	379.00
Panasonic 0805 1% Chip Resistor Assortments, 1/10 Watt		
50 each of values 10 ohm to 97.6 ohm (4,800 pieces)	RSM1CA-ND	129.95
200 each of values 10 ohm to 97.6 ohm (19,200 pieces)	RSM1C-ND	495.00
50 each of values 100 ohm to 976 ohm (4,800 pieces)	RSM2CA-ND	129.95
200 each of values 100 ohm to 976 ohm (19,200 pieces)	RSM2C-ND	495.00
50 each of values 1.00K to 9.76K (4,800 pieces)	RSM3CA-ND	129.95
200 each of values 1.00K to 9.76K (19,200 pieces)	RSM3C-ND	495.00
50 each of values 10.0K to 97.6K (4,800 pieces)	RSM4CA-ND	129.95
200 each of values 10.0K to 97.6K (19,200 pieces)	RSM4C-ND	495.00
50 each of values 100K to 1.00M (4,850 pieces)	RSM5CA-ND	129.95
200 each of values 100K to 1.00M (19,400 pieces)	RSM5C-ND	495.00
Panasonic 0805 5% Chip Resistor Assortments, 1/10 Watt		
50 each of every other value from 10, 12, 15, etc. 1.0M (3,050 pieces)	CR3A-KIT-ND	89.95
200 each of every other value from 10, 12, 15, etc. 1.0M (12,200 pieces)	CR3-KIT-ND	349.00
50 each of every other value from 11, 13, 16, etc. 910K (3,000 pieces)	CR4A-KIT-ND	89.95
200 each of every other value from 11, 13, 16, etc. 910K (12,000 pieces)	CR4-KIT-ND	349.00
Panasonic 1206 1% Chip Resistor Assortments, 1/8 Watt		
50 each of values 10.0 ohm to 97.6 ohm (4,800 pieces)	RSM1FA-ND	129.95
200 each of values 10.0 ohm to 97.6 ohm (19,200 pieces)	RSM1F-ND	495.00
50 each of values 100 ohm to 976 ohm (4,800 pieces)	RSM2FA-ND	129.95
200 each of values 100 ohm to 976 ohm (19,200 pieces)	RSM2F-ND	495.00
50 each of values 1.00K to 9.76K (4,800 pieces)	RSM3FA-ND	129.95
200 each of values 1.00K to 9.76K (19,200 pieces)	RSM3F-ND	495.00
50 each of values 10.0K to 97.6K (4,800 pieces)	RSM4FA-ND	129.95
200 each of values 10.0K to 97.6K (19,200 pieces)	RSM4F-ND	495.00
50 each of values 100K to 1.00M (4,850 pieces)	RSM5FA-ND	129.95
200 each of values 100K to 1.00M (19,400 pieces)	RSM5F-ND	495.00

(Continued)

Description	Digi-Key Part No.	Price Each
Panasonic 1206 5% Chip Resistor Assortments, 1/8 Watt		
50 each of every other value from 10, 12, 15, etc. 1.0M (3,050 pieces)	CR1A-KIT-ND	89.95
200 each of every other value from 10, 12, 15, etc. 1.0M (12,200 pieces)	CR1-KIT-ND	329.00
50 each of every other value from 11, 13, 16, etc. 910K (3,000 pieces)	CR2A-KIT-ND	89.95
200 each of every other value from 11, 13, 16, etc. 910K (12,000 pieces)	CR2-KIT-ND	329.00
NEW! **BC Component 1% Metal Film, .40 Watt, 5043ED Series**		
5 each of values 10.0 ohm to 97.6 ohm (495 total pieces)	BCY1-KIT-ND	34.95
5 each of values 100 ohm to 976 ohm (490 total pieces)	BCY2-KIT-ND	34.95
5 each of values 1.00K ohm to 9.76K ohm (485 total pieces)	BCY3-KIT-ND	34.95
5 each of values 10.0K ohm to 97.6K ohm (490 total pieces)	BCY4-KIT-ND	34.95
5 each of values 100K ohm to 2.00M ohm (655 total pieces)	BCY5-KIT-ND	46.95
NEW! **BC Component 1% Metal Film, .40 Watt, 5063JD "Spacemiser" Series**		
5 each of values 10.0 ohm to 97.6 ohm (480 total pieces)	BCX1-KIT-ND	69.95
5 each of values 100 ohm to 976 ohm (485 total pieces)	BCX2-KIT-ND	69.94
5 each of values 1.00K ohm to 9.76K ohm (485 total pieces)	BCX3-KIT-ND	69.94
5 each of values 10.0K ohm to 97.6K ohm (485 total pieces)	BCX4-KIT-ND	69.94
5 each of values 100K ohm to 2.00M ohm (655 total pieces)	BCX5-KIT-ND	94.96
NEW! **BC Component 1% Metal Film, .60 Watt, B0207C-F Series**		
5 each of values 10.0 ohm to 97.6 ohm (480 total pieces)	BCZ1-KIT-ND	57.95
5 each of values 100 ohm to 976 ohm (480 total pieces)	BCZ2-KIT-ND	57.95
5 each of values 1.00K ohm to 9.76K ohm (480 total pieces)	BCZ3-KIT-ND	57.95
5 each of values 10.0K ohm to 97.6K ohm (475 total pieces)	BCZ4-KIT-ND	57.94
5 each of values 100K ohm to 2.20M ohm (520 total pieces)	BCZ5-KIT-ND	59.95
NEW! **BC Component 5% Metal Film, 1 Watt, 5073NW Series**		
5 each of values 1.0 ohm to 91 ohm (240 total pieces)	BCAW1-KIT-ND	29.95
5 each of values 100 ohm to 9.1K ohm (240 total pieces)	BCBW1-KIT-ND	29.95
5 each of values 10K ohm to 1.0M ohm (245 total pieces)	BCCW1-KIT-ND	29.96
NEW! **BC Component 5% Metal Film, 2 Watt, 5083NW Series**		
5 each of values 1.0 ohm to 91 ohm (240 total pieces)	BCAW2-KIT-ND	39.95
5 each of values 100 ohm to 9.1K ohm (240 total pieces)	BCBW2-KIT-ND	39.95
5 each of values 10K ohm to 1.0M ohm (245 total pieces)	BCCW2-KIT-ND	39.95
NEW! **BC Component 5% Metal Film, 3 Watt, 5093NW Series**		
5 each of values 10 ohm to 430 ohm (200 total pieces)	BCAW3-KIT-ND	59.95
5 each of values 470 ohm to 20K ohm (200 total pieces)	BCBW3-KIT-ND	59.95
5 each of values 22K ohm to 1.0M ohm (205 total pieces)	BCCW3-KIT-ND	59.96
Yageo 1% Metal Film, 1/4 Watt		
5 each of values 10 ohm to 97.6 ohm (480 total pieces)	RS1X-ND	29.95
5 each of values 100 ohm to 976 ohm (480 total pieces)	RS2X-ND	29.95
5 each of values 1.00K to 9.76K (480 total pieces)	RS3X-ND	29.95
5 each of values 10.0K to 97.6K (480 total pieces)	RS4X-ND	29.95
5 each of values 100K to 1.00M (480 total pieces)	RS5X-ND	29.95
Yageo 5% Metal Oxide, 1 Watt		
5 each of values 0.47 ohm to 56 ohm (255 total pieces)	RS101-ND	26.95
5 each of values 62 ohm to 7.5K (255 total pieces)	RS201-ND	26.95
5 each of values 8.2K to 1.0M (255 total pieces)	RS301-ND	26.95
Yageo 5% Metal Oxide, 2 Watt		
5 each of values 0.47 ohm to 56 ohm (255 total pieces)	RS102-ND	29.95
5 each of values 62 ohm to 7.5K (255 total pieces)	RS202-ND	29.95
5 each of values 8.2K to 1.0M (255 total pieces)	RS302-ND	29.95
Yageo 5% Wirewound Rectangular, 5 Watt		
5 each of values 0.30 ohm - 0.91 ohm (60 pieces)	RS105-ND	23.95
4 each of values 1.0 ohm - 9.1 ohm (96 pieces)	RS205-ND	32.95
4 each of values 10 ohm - 91 ohm (96 pieces)	RS305-ND	32.95
3 each of values 100 ohm - 2.0K (96 pieces)	RS405-ND	32.95
Yageo 5% Wirewound Rectangular, 10 Watt		
2 each of all 10 watt resistors values listed (168 total pieces)	R110-ND	72.95

NEW! Digi-Key® Resistor Network Kits

Conveniently packaged in a plastic box with bin guide
for easy storage and quick access.

Description	Digi-Key Part No.	Price Each
CTS 766 Series		
Bussed Circuits		
5 each of 62 values in the series (310 total pieces)		
*Kit does not include value 330K ohm	766-141-KIT-ND	249.00
5 each of 63 values in the series (315 total pieces)	766-161-KIT-ND	249.00
Isolated Circuits		
5 each of 63 values in the series (315 total pieces)	766-143-KIT-ND	249.00
5 each of 61 values in the series (305 total pieces)		
*Kit does not include values 820, and 1.2K ohm	766-163-KIT-ND	249.00
Dual Terminator Circuits		
5 each of 8 values in the series (40 total pieces)	766-DUAL-KIT-ND	46.95
CTS 767 Series		
Bussed Circuits		
5 each of 62 values in the series (310 total pieces)		
*Kit does not include value 3.9K ohm	767-141-KIT-ND	159.95
5 each of 63 values in the series (315 total pieces)	767-161-KIT-ND	159.95
Isolated Circuits		
5 each of 62 values in the series (310 total pieces)		
*Kit does not include value 27 ohm	767-143-KIT-ND	159.95
5 each of 63 values in the series (315 total pieces)	767-163-KIT-ND	159.95
Dual Terminator Circuits		
5 each of 8 values in the series (40 total pieces)	767-DUAL-KIT-ND	34.95
CTS 768 Series		
Bussed Circuits		
5 each of 62 values in the series (310 total pieces)		
*Kit does not include value 3.9K ohm	768-141-KIT-ND	159.95
5 each of 63 values in the series (315 total pieces)	768-161-KIT-ND	159.95
Isolated Circuits		
5 each of 62 values in the series (310 total pieces)		
*Kit does not include value 27 ohm	768-143-KIT-ND	159.95
5 each of 63 values in the series (315 total pieces)	768-163-KIT-ND	159.95
Dual Terminator Circuits		
5 each of 8 values in the series (40 total pieces)	768-DUAL-KIT-ND	34.95

Digi-Key® Capacitor Kits

Conveniently packaged in a plastic box with bin guide
for easy storage and quick access.

Description	Digi-Key Part No.	Price Each
Panasonic Miniature Aluminum Electrolytic		
KG Series - 10 each of 18 popular values denoted (180 total pieces)	P900-KIT-ND	34.95
Panasonic Miniature Radial Lead Electrolytic		
M-Series - 10 each of 17 popular values denoted (170 total pieces)	M-KIT-ND	69.95
NHG-Series - 10 each of 18 popular values denoted (180 total pieces)	NHG-KIT-ND	69.95
Panasonic Miniature Radial Lead Electrolytic		
KA-Series - 10 each of 16 popular values denoted (160 total pieces)	P835-KIT-ND	29.95
Panasonic Tantalum		
EF-Series - Assortment of 15 popular values denoted (180 total pieces)	F-KIT-ND	39.95
Panasonic Stacked Metal Film		
V-Series, 50 Volt - 10 each of 18 popular values denoted (180 total pieces)	P4542-KIT-ND	49.95
V-Series, 100 Volt - 10 each of 18 popular values denoted (180 total pieces)	P4700-KIT-ND	49.95
Panasonic Metal Film (Interference Suppressors)		
X-Y Series - 10 each of 10 popular values denoted (100 total pieces)	P4650-KIT-ND	59.95
Panasonic Metalized Polyester		
E-Series - 10 each of 14 popular values denoted (except #E2104 has 30 total pieces) (170 total pieces)	E-KIT-ND	59.95
Panasonic Polyester		
B-Series - Various quantities of 12 popular values denoted (300 total pieces)	P4550-KIT-ND	29.95
Panasonic Polyester Foil		
M-Series, **200 Volt** - 10 each of 15 popular values denoted (150 total pieces)	M200-KIT-ND	29.95
M-Series, **400 Volt** - 10 each of 15 popular values denoted (150 total pieces)	M400-KIT-ND	29.95
Panasonic Polypropylene		
P-Series - 10 each of 15 popular values denoted (150 total pieces)	P3100-KIT-ND	69.95
Panasonic Bi-Polar Capacitor		
10 each of 14 popular values denoted (140 total pieces)	P1141-KIT-ND	89.95
Panasonic SMT Tantalum Electrolytic		
TE-Series - 10 each of 18 popular values denoted (180 total pieces)	PCS1-KIT-ND	89.95
TE-Series - 10 each of 18 popular values denoted (180 total pieces)	PCS2-KIT-ND	89.95
Panasonic Chip Tantalum - TEH Series		
25, 35VDC - 10 each of 16 popular values denoted (170 total pieces)	PCT2-KIT-ND	99.95
Panasonic SMT Film		
ECH-U Series - 10 each of 18 popular values denoted (180 total pieces)	PCF1-KIT-ND	59.95
ECW-U Series - 10 each of 18 popular values denoted (180 total pieces)	PCF2-KIT-ND	59.95
Panasonic 0402 Chip Ceramic		
NPO Series - 10 each of 30 popular values denoted (300 total pieces)	PCC11-KIT-ND	64.95
X7R and **Y5V Series** - 10 each of 23 popular values denoted (230 total pieces)	PCC12-KIT-ND	49.95
Panasonic 0603 Chip Ceramic		
NPO Series -10 each of 30 popular values denoted (300 total pieces)	PCC9-KIT-ND	29.95
X7R Series - 10 each of 25 popular values denoted (250 total pieces)	PCC10-KIT-ND	29.95
Panasonic 0805 Chip Ceramic		
NPO Series - 10 each of 30 popular values denoted (300 total pieces)	PCC7-KIT-ND	29.95
X7R Series - 10 each of 26 popular values denoted (260 total pieces)	PCC8-KIT-ND	29.95

(Continued)

Description	Digi-Key Part No.	Price Each
Panasonic 1206 Chip Ceramic		
NPO Series - 10 each of 30 popular values denoted (300 total pieces)	PCC5-KIT-ND	34.95
X7R Series - 10 each of 30 popular values denoted (300 total pieces)	PCC6-KIT-ND	49.95
Panasonic Ceramic Disc		
20 each of 18 popular values denoted (360 total pieces)	PDC1-KIT-ND	25.95
Philips Components Ceramic Disc		
N750 Series - 20 each of 18 popular values denoted (360 total pieces)	PHD1-KIT-ND	21.95

Digi-Key® Inductor Kits

Conveniently packaged in a plastic box with bin guide
for easy storage and quick access.

Description	Digi-Key Part No.	Price Each
API Delevan Surface Mount Inductors		
Series 1008 - 5 ea. of 54 values (270 pcs.), 0.0018-47.0µH (Mfg. # 1008KIT)	1008KIT-ND	95.95
Series S1008 - 5 ea. of 36 values (180 pcs.), 0.1-47.0µH (Mfg. # S1008KIT)	S1008KIT-ND	95.95
Series 1210 - 5 ea. of 58 values (290 pcs.), 0.0018-100.0µH (Mfg. # 1210KIT)	1210KIT-ND	95.95
Series S1210 - 5 ea. of 37 values (185 pcs.), 0.10-100.0µH (Mfg. # S1210KIT)	S1210KIT-ND	95.95
Series 1812 - 5 ea. of 61 values (305 pcs.), 0.010-1000.0µH (Mfg. # 1812KIT)	1812KIT-ND	95.95
Series S1812 - 5 ea. of 49 values (245 pcs.), 0.10-1000.0µH (Mfg. # S1812KIT)	S1812KIT-ND	95.95
API Delevan Air Core Inductors		
Series 4426 - 5 ea. of 10 values (50 pcs.), 2.5nH-43nH (Mfg. # 4426KIT)	4426KIT-ND	25.50
MagneTek E-Core Inductors		
CME375 Series - 1 each of 9 popular inductors (9 total pieces)	237-1219-ND	55.56
MagneTek Common Mode Encapsulated		
Toroidal Inductors - 1 each of 8 popular inductors (8 total pieces)	237-1238-ND	33.33
MagneTek Toroidal Inductors		
1 each of 30 popular inductors (30 total pieces)	237-1209-ND	83.33
MagneTek High Current Rod Core Inductors		
1 each of 6 popular inductors (6 total pieces)	237-1164-ND	11.11
MagneTek Rod Core Inductors		
1 each of 11 popular inductors (11 total pieces)	237-1177-ND	27.78
Panasonic SMT Inductors		
RE Type (2% Tolerance) - 10 each of 23 inductors (230 total pieces)	PCD4-KIT-ND	79.95
RE Type (5% Tolerance) - 10 each of 23 inductors (230 total pieces)	PCD1-KIT-ND	69.95
ND Type - 10 ea. of 25 inductors (***PCD1185CT-ND not included***) (250 total pieces)	PCD2-KIT-ND	99.95
RF Type - 10 each of 20 inductors (200 total pieces)	PCD3-KIT-ND	69.95
Toko Standard Coil Kit		
5mm - 2 each of 43 popular coils denoted (86 total pieces)	TK4-KIT-ND	63.00
7mm - (Assortment of various 7mm coils) (122 total pieces)	TK1-KIT-ND	56.70
Toko Chip Inductors - LL Series		
1005 - 10 ea. of 25 values (250 pcs.), 1.0nH-100nH (SPK-LL1005FH-5%)	TK10-KIT-ND	40.50
Toko Chip Inductors - PTL Series		
2012 - 10 each of 24 values (240 pcs.), 1.0nH-82nH (Toko # SPK-PTL2012-98)	TK14-KIT-ND	49.00
Toko Surface Mount Fixed Inductors		
D52FU Series, 3 ea. of 22 values (66 pcs.), 100µH-6800µH (Toko # SPK-D52FU-1998)	TK15-KIT-ND	49.00
33CS/36CS Series, 10 ea. of 9 values (90 pcs.), 6.8nH-49.8nH (Toko # SPK-3336CS-1993)	TK11-KIT-ND	49.00
D62CB Series, 3 each of 18 values (54 pieces), 1.0µH-82.0µH (Toko # SPK-D62CB-1999)	TK18-KIT-ND	58.80
D32FU Series, 3 each of 14 values (42 pieces), 0.33mH-3.3mH (Toko # SPK-D32FU-1999)	TK19-KIT-ND	52.27
D124C Series, 3 each of 13 values (39 pieces), 3.3µH-100.0µH (Toko # SPK-D124C-1999)	TK17-KIT-ND	66.97

Digi-Key® Miscellaneous Kits

Conveniently packaged in a plastic box with bin guide
for easy storage and quick access.

Description	Digi-Key Part No.	Price Each
ECS, Inc. Crystals		
3 each of 27 popular crystals denoted (81 total pieces)	XC-KIT-ND	169.00
Epson Surface Mount Crystals		
MA-505 Series - 3 each of 17 popular crystals (51 total pieces)	SE1-KIT-ND	89.00
MA-506 Series - 3 each of 17 popular crystals (51 total pieces)	SE2-KIT-ND	89.00
SG-615P Series - 2 each of 16 popular crystals (32 total pieces)	SE3-KIT-ND	109.00
LittelFuse Pico SMD and Nano^2 SMF Fuses		
5 each of 30 fuses denoted (150 total pieces)	SMF-KIT-ND	99.95
Panasonic LEDs		
10 each of 18 popular LEDs (180 total pieces)	LED-KIT-ND	36.95

Description	Digi-Key Part No.	Price Each
Capital Advanced Technologies Inc. - Master Assortment Kit for Discretes, 2 each of all 23 models in the 6000 series of surfboards for discrete components (46 total pieces)	MK-6000CA-ND	99.00
Capital Advanced Technologies Inc. - Master Assortment Kit for ICs, 5 each of models 9081, 9082, 9161, 9162 and 2 each of models 9163, 9164, 9165, 9210, 9301 and 9302 (32 total pieces)	MK-9000CA-ND	99.00
Capital Advanced Technologies Inc. - Master Assortment Kit for UNI-SIP, 2 each of all 26 types in the UNI-SIP Series, packaged in reclosable bags grouped by series number (52 total pieces)	MK260CA-ND	79.00
Johnson Plugs and Jacks		
10 each of 15 popular plugs and jacks denoted (150 total pieces)	J100-KIT-ND	76.95
Hardware - 100 each of machine screws, hex nuts and lock washers in each of the following kits:		
Slotted - (1600 total pieces)	1600-KIT-ND	17.95
Slotted - (1600 total pieces)	1601-KIT-ND	27.95
Phillips - (1600 total pieces)	1602-KIT-ND	17.95
Phillips - (1600 total pieces)	1603-KIT-ND	27.78
Nylon - (1500 total pieces)	1604-KIT-ND	53.94
Phillips, Stainless Steel - (1400 total pieces)	1607-KIT-ND	39.95
Phillips, Stainless Steel - (1500 total pieces)	1608-KIT-ND	79.95
Keystone Electronics .250” Round Clear Spacers		
Brass Nickel Plated Assortment with Cabinet - (1500 total pieces)	SPR-13KIT-ND	236.98
Aluminum Iridite Plated Assortment with Cabinet - (1500 total pieces)	SPR-34KIT-ND	223.06
Keystone Electronics .250” Hex Female Threaded Standoffs		
Brass Assortment with Cabinet - (1500 total pieces)	STH-14KIT-ND	383.39
Aluminum Assortment with Cabinet - (1500 total pieces)	STH-22KIT-ND	277.31
Keystone Electronics .250” Round Threaded Standoffs		
Brass Assortment with Cabinet - (1500 total pieces)	STR-15KIT-ND	348.51
Aluminum Assortment with Cabinet - (1500 total pieces)	STR-35KIT-ND	271.86
Keystone Electronics .250” Hex Male/Female Standoffs		
Brass Assortment with Cabinet - (750 total pieces)	STH-19KIT-ND	348.51
Hardware (Metric) - 100 each of machine screws, hex nuts, lock washers and flat washers in each of the following kits:		
Metric Phillips, Zinc Plated - (1500 total pieces)	1605-KIT-ND	59.95
Metric Phillips, Zinc Plated - (1500 total pieces)	1606-KIT-ND	99.95
3M Insulated Terminals		
650 assorted terminals (14 sizes), 200 cable ties, wire marker dispenser, crimp tool, metal box	923000-I-ND	108.08
MagneTek Current Sense Transformers		
CST206 Series - 1 each of 6 popular transformers (6 total pieces)	237-1102-ND	33.30
CST306 Series - 1 each of 6 popular transformers (6 total pieces)	237-1110-ND	22.22
MagneTek Gate Drive Transformers		
1 each of 6 popular transformers (6 total pieces)	237-1117-ND	88.89
3M Heatshrink Precut Lengths		
CP-221 Series - 50 each of 5 sizes/100 of 1 size (350 total pieces)	CP-KIT-ND	9.95
FP-301 Series - 50 each of 5 sizes/100 of 1 size (350 total pieces)	FP-KIT-ND	10.94
VFP-876 Series - 50 each of 5 sizes/100 of 1 size (350 total pieces)	VFP-KIT-ND	11.95
3M Colored Heatshrinkable Tubing		
FP-301 Ser. - 1-5 ft. tubing of each color in 8 denoted series (55 total pieces)	FPC-KIT-ND	34.95
Daburn Shrinkable Tubing, Polyolefin: Black		
5 feet of 6 popular sizes (30 total feet of tubing)	STA-KIT-ND	10.95
CW Industries Switches		
Various quantities of 14 switches denoted (130 total pieces)	SW-KIT-ND	89.95
Hamlin Magnetic Switches		
Various quantities of 18 switches denoted (22 total pieces)	HE1-KIT-ND	69.95
1 each of 18 switches denoted (18 total pieces)	HE2-KIT-ND	49.95
Zetex SOT-23 SMD Zener Diode Kit		
10 each of 18 popular diodes denoted (180 total pieces)	BZX1-KIT-ND	49.95
Diode SOT-23 SMD Zener Diode Kit		
10 each of 18 popular diodes denoted (180 total pieces)	BZX2-KIT-ND	23.79
Alpha Hook-Up Wire		
3050 Series - 5-100 foot spools (Black, White, Red, Green and Blue) with dispenser and wire cutter (Alpha # HUKIT40 NC032)	HU-KIT-40-ND	100.05
3051 Series - 5-100 foot spools (Black, White, Red, Green and Blue) with dipenser and wire cutter (Alpha # HUKIT20 NC032)	HU-KIT-20-ND	100.05

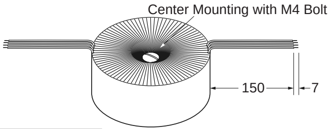
"Mini" Toroidal Transformer

Wire Leaded 115/230VAC, 50/60 Hz Dual Primary

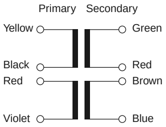
UL File #E145880

Lower strayfield, higher efficiency, reduced "standby" current and reduced weight. Primary-secondary test voltage 4.0kV. Ambient operating temperature: +60°C maximum. Insulation system recognized for Class A (105°C) and meets all requirements of Class E (125°C).

Center Mounting with M4 Bolt



Power VA	Dimensions OD x ID x H mm	Weight Total gr	Reg. ΔV/Sec %	Δt °C	Eff. %	No Load mA	230V Fuse* mA
25.0	58.0 x 13.8 x 34.5	388	19	28	84	5.0	160
35.0	72.0 x 17.0 x 33.5	453	17.7	31	85	7.0	200
50.0	78.0 x 22.5 x 35.0	670	15.5	30	86	8.0	315



* Recommend Slo-Blo. Double the fuse current for 120 volt operation.

Power VA	Parallel VAC @ A	Series VCT @ A	Digi-Key Part No.	Price Each 1	10	25	50
25.0	7 @ 3.570	14 @ 1.785	TE62060-ND	13.32	11.84	10.36	9.48
	9 @ 2.754	18 @ 1.377	TE62061-ND	13.32	11.84	10.36	9.48
	12 @ 2.082	24 @ 1.041	TE62062-ND	13.32	11.84	10.36	9.48
	15 @ 1.664	30 @ .832	TE62063-ND	13.32	11.84	10.36	9.48
	18 @ 1.388	36 @ .694	TE62064-ND	13.32	11.84	10.36	9.48
	22 @ 1.136	44 @ .568	TE62065-ND	13.32	11.84	10.36	9.48
35.0	7 @ 5.000	14 @ 2.500	TE62070-ND	14.85	13.20	11.55	10.56
	9 @ 3.888	18 @ 1.944	TE62071-ND	14.85	13.20	11.55	10.56
	12 @ 2.916	24 @ 1.458	TE62072-ND	14.85	13.20	11.55	10.56
	15 @ 2.332	30 @ 1.166	TE62073-ND	14.85	13.20	11.55	10.56
	18 @ 1.944	36 @ .972	TE62074-ND	14.85	13.20	11.55	10.56
	22 @ 1.590	44 @ .795	TE62075-ND	14.85	13.20	11.55	10.56
50.0	7 @ 7.142	14 @ 3.571	TE62080-ND	17.66	15.70	13.74	12.56
	9 @ 5.554	18 @ 2.777	TE62081-ND	17.66	15.70	13.74	12.56
	12 @ 4.166	24 @ 2.083	TE62082-ND	17.66	15.70	13.74	12.56
	15 @ 3.332	30 @ 1.666	TE62083-ND	17.66	15.70	13.74	12.56
	18 @ 2.776	36 @ 1.388	TE62084-ND	17.66	15.70	13.74	12.56
	22 @ 2.272	44 @ 1.136	TE62085-ND	17.66	15.70	13.74	12.56

Note: *To obtain output voltage, load current must be met.*

Current Transformer

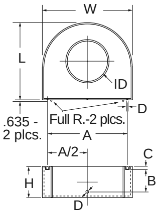
Standard Accuracy Low-Cost 50/60 Hz

Applications:

- Sensing current overload • Ground fault detection • Metering

Notes:

- RCF: Ratio Correction Factor. Multiple current readings by this factor to compensate for transformer losses. • Data is deemed reliable at the time of publication, but may be subject to change without notice

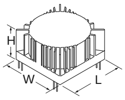


Size Code	Dimensions – mm W	L	H	A	B	C	D (Dia.)	ID
A	23.83	23.83	11.13	15.24	7.62	1.75	0.81	9.53
B	30.18	30.18	14.30	20.32	10.16	2.08	1.02	11.43
C	34.93	34.93	14.30	25.40	10.16	2.08	1.02	14.61
D	38.10	38.10	15.88	30.48	10.16	2.84	1.02	14.61
E	44.45	44.45	14.30	35.56	10.16	2.08	1.02	19.05
F	55.58	55.58	20.65	45.72	12.70	3.96	1.02	23.88

Size Code	Rated Ip Amps	Turns Ratio	Nominal DCR	RCF @ 10% (1)	Volts/Amp @ rated Ip, for various loads (Ohms) 100	500	2K	5K	Digi-Key Part No.	Price Each 1	10	25
A	5.0	1000:1	39	1.040	0.10	0.45	1.35	1.8	TE1005-ND	7.80	6.50	5.20
A	10.0	1000:1	39	1.035	0.10	0.45	1.00	1.3	TE1010-ND	7.80	6.50	5.20
A	15.0	1000:1	39	1.030	0.10	0.43	0.80	1.0	TE1015-ND	7.80	6.50	5.20
A	20.0	1000:1	39	1.030	0.10	0.42	0.70	0.8	TE1020-ND	7.80	6.50	5.20
B	25.0	1000:1	46	1.020	0.10	0.40	1.00	1.2	TE1025-ND	9.21	7.68	6.14
B	30.0	1000:1	46	1.020	0.10	0.40	0.85	1.1	TE1030-ND	9.21	7.68	6.14
C	40.0	1000:1	46	1.020	0.10	0.45	0.75	1.0	TE1040-ND	10.74	8.95	7.16
C	50.0	1000:1	46	1.020	0.10	0.44	0.70	0.8	TE1050-ND	10.74	8.95	7.16
D	60.0	1000:1	23	1.020	0.10	0.36	0.60	0.7	TE1060-ND	11.76	9.80	7.84
D	75.0	1000:1	23	1.015	0.10	0.35	0.50	0.6	TE1075-ND	11.76	9.80	7.84
E	100	1000:1	20	1.015	0.10	0.35	0.50	0.6	TE1100-ND	11.76	9.80	7.84
F	150	1000:1	10	1.010	0.10	0.32	0.55	0.6	TE1150-ND	15.99	13.33	10.66
F	200	1000:1	10	1.010	0.10	0.30	0.45	0.6	TE1200-ND	15.99	13.33	10.66

Toroidal Transformer

PC Mount, Low Profile 115/230V, 50/60 Hz Dual Primary

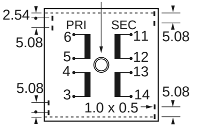


Low Magnetic strayfield emissions, higher efficiency, reduced "standby" current, reduced weight, fully encapsulated durable body formation.

Primary-secondary test voltage 4.0 kV (IEC742, VDE055 and EN60742). Primaries and secondaries for parallel or series connection. Ambient operating temperature +60°C maximum.

Recognized for Class A (105°C) and meets all requirements of Class E (125°C).

1.6-25VA - Blind insert M4 X 6 threads
35-50VA - M5 through hole



Bottom View

Power VA	Dimensions (Pin Length 5mm) L x W x H mm	Pin Pattern XY mm	Weight Total gr	Reg. ΔV/Sec %	Δt °C	Eff. %	Excitation Current mA	230V Fuse* mA	Max. Secondary Range VA	ΔV/ Sec %	Δt °C	Eff. %	220V Fuse* mA
1.6	39.6 x 39.6 x 18.5	35.56	82	29	10	77	1.0	32	2.0	60	30	60	32
3.2	44.7 x 44.7 x 19.5	40.64	110	43	20	70	1.5	32	3.7	80	40	50	50
5.0	49.7 x 49.7 x 19.5	45.72	144	40	29	68	2.0	50	5.5	80	40	50	63
7.0	49.7 x 49.7 x 23.1	45.72	174	34	25	74	3.0	63	7.5	70	40	60	80
10.0	55.0 x 55.0 x 26.0	50.80	252	20	24	82	3.0	80	12.0	60	45	60	100
15.0	60.0 x 60.0 x 26.3	55.88	304	23	27	80	4.0	100	16.0	60	40	65	125
25.0	60.0 x 60.0 x 37.5	55.88	435	19	28	83	5.0	160	—	—	—	—	—
35.0	72.0 x 72.0 x 37.5	66.04	525	17.7	31	81	7.0	200	—	—	—	—	—
50.0	82.4 x 82.4 x 37.5	76.02	685	15.5	30	86	8.0	315	—	—	—	—	—

* Recommend Slo-Blo. Double the fuse current for 120 volt operation.

Power VA	Parallel VAC @ A	Series VCT @ A	Digi-Key Part No.	Price Each 1	10	25	50
1.6	7 @ .228	14 @ .114	TE70000-ND	9.34	8.30	7.27	6.64
	9 @ .178	18 @ .089	TE70001-ND	9.34	8.30	7.27	6.64
	12 @ .134	24 @ .067	TE70002-ND	9.34	8.30	7.27	6.64
	15 @ .106	30 @ .053	TE70003-ND	9.34	8.30	7.27	6.64
	18 @ .088	36 @ .044	TE70004-ND	9.34	8.30	7.27	6.64
	22 @ .072	44 @ .036	TE70005-ND	9.34	8.30	7.27	6.64
3.2	7 @ .458	14 @ .229	TE70010-ND	10.76	9.56	8.37	7.65
	9 @ .356	18 @ .178	TE70011-ND	10.76	9.56	8.37	7.65
	12 @ .266	24 @ .133	TE70012-ND	10.76	9.56	8.37	7.65
	15 @ .214	30 @ .107	TE70013-ND	10.76	9.56	8.37	7.65
	18 @ .178	36 @ .089	TE70014-ND	10.76	9.56	8.37	7.65
	22 @ .146	44 @ .073	TE70015-ND	10.76	9.56	8.37	7.65

Power VA	Parallel VAC @ A	Series VCT @ A	Digi-Key Part No.	Price Each 1	10	25	50
5	7 @ .714	14 @ .357	TE70020-ND	11.41	10.14	8.88	8.12
	9 @ .556	18 @ .278	TE70021-ND	11.41	10.14	8.88	8.12
	12 @ .416	24 @ .208	TE70022-ND	11.41	10.14	8.88	8.12
	15 @ .334	30 @ .167	TE70023-ND	11.41	10.14	8.88	8.12
	18 @ .278	36 @ .139	TE70024-ND	11.41	10.14	8.88	8.12
	22 @ .228	44 @ .114	TE70025-ND	11.41	10.14	8.88	8.12
7	7 @ 1.0	14 @ .500	TE70030-ND	12.87	11.44	10.01	9.16
	9 @ .778	18 @ .389	TE70031-ND	12.87	11.44	10.01	9.16
	12 @ .584	24 @ .292	TE70032-ND	12.87	11.44	10.01	9.16
	15 @ .466	30 @ .233	TE70033-ND	12.87	11.44	10.01	9.16
	18 @ .388	36 @ .194	TE70034-ND	12.87	11.44	10.01	9.16
	22 @ .318	44 @ .159	TE70035-ND	12.87	11.44	10.01	9.16
10	7 @ 1.428	14 @ .714	TE70040-ND	14.45	12.84	11.24	10.28
	9 @ 1.112	18 @ .556	TE70041-ND	14.45	12.84	11.24	10.28
	12 @ .834	24 @ .417	TE70042-ND	14.45	12.84	11.24	10.28
	15 @ .666	30 @ .333	TE70043-ND	14.45	12.84	11.24	10.28
	18 @ .556	36 @ .278	TE70044-ND	14.45	12.84	11.24	10.28
	22 @ .454	44 @ .227	TE70045-ND	14.45	12.84	11.24	10.28
15	7 @ 2.142	14 @ 1.071	TE70050-ND	16.22	14.42	12.62	11.54
	9 @ 1.666	18 @ .833	TE70051-ND	16.22	14.42	12.62	11.54
	12 @ 1.250	24 @ .625	TE70052-ND	16.22	14.42	12.62	11.54
	15 @ 1.000	30 @ .500	TE70053-ND	16.22	14.42	12.62	11.54
	18 @ .834	36 @ .417	TE70054-ND	16.22	14.42	12.62	11.54
	22 @ .682	44 @ .341	TE70055-ND	16.22	14.42	12.62	11.54
25	7 @ 3.570	14 @ 1.785	TE70060-ND	18.23	16.20	14.18	12.96
	9 @ 2.754	18 @ 1.377	TE70061-ND	18.23	16.20	14.18	12.96
	12 @ 2.082	24 @ 1.041	TE70062-ND	18.23	16.20	14.18	12.96
	15 @ 1.664	30 @ .832	TE70063-ND	18.23	16.20	14.18	12.96
	18 @ 1.388	36 @ .694	TE70064-ND	18.23	16.20	14.18	12.96
	22 @ 1.136	44 @ .568	TE70065-ND	18.23	16.20	14.18	12.96
35	7 @ 5.000	14 @ 2.500	TE70070-ND	22.34	19.86	17.38	15.89
	9 @ 3.888	18 @ 1.944	TE70071-ND	22.34	19.86	17.38	15.89
	12 @ 2.916	24 @ 1.458	TE70072-ND	22.34	19.86	17.38	15.89
	15 @ 2.332	30 @ 1.166	TE70073-ND	22.34	19.86	17.38	15.89
	18 @ 1.944	36 @ .972	TE70074-ND	22.34	19.86	17.38	15.89
	22 @ 1.590	44 @ .795	TE70075-ND	22.34	19.86	17.38	15.89
50	7 @ 7.142	14 @ 3.571	TE70080-ND	27.65	24.58	21.51	19.67
	9 @ 5.554	18 @ 2.777	TE70081-ND	27.65	24.58	21.51	19.67
	12 @ 4.166	24 @ 2.083	TE70082-ND	27.65	24.58	21.51	19.67
	15 @ 3.332	30 @ 1.666	TE70083-ND	27.65	24.58	21.51	19.67
	18 @ 2.776	36 @ 1.388	TE70084-ND	27.65	24.58	21.51	19.67
	22 @ 2.272	44 @ 1.136	TE70085-ND	27.65	24.58	21.51	19.67

Note: *To obtain output voltage, load current must be met.*

N

Transformers and Inductors

Certified ISO 9001 Certified

Fig. 1

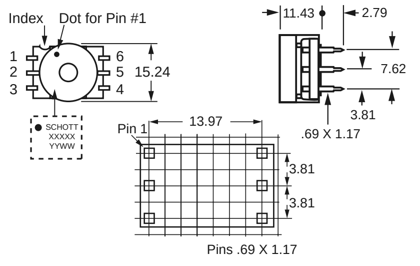


Fig. 2

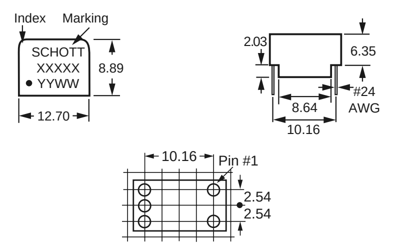


Fig. 3

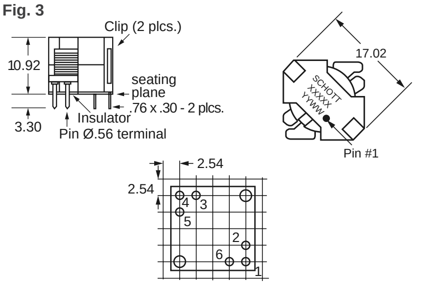


Fig. 4

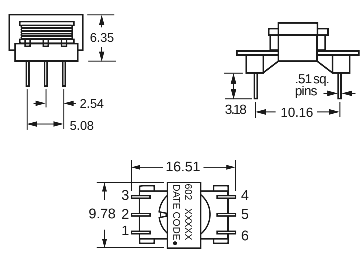


Fig. 5

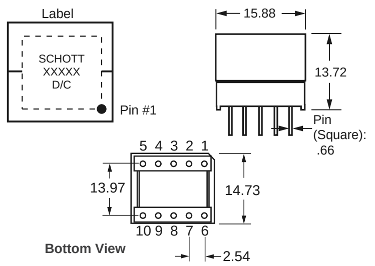


Fig. 6

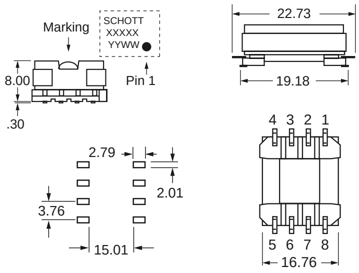
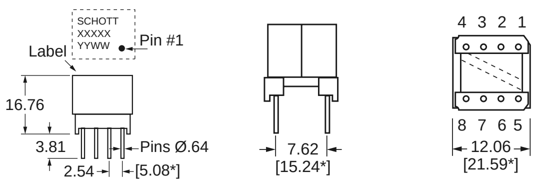


Fig. 7



*** Dimensions shown in [ ] are for part numbers 257-1062-ND and 257-1065-ND**

Fig. 8

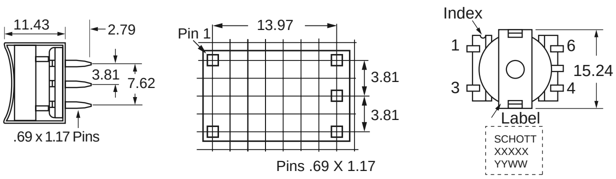
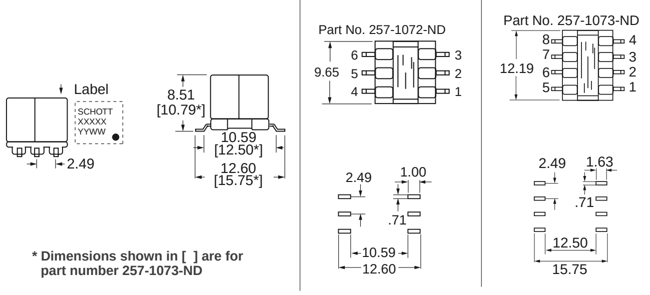


Fig.	Description (applications and notes)	Inductance	Schematic Information						Digi-Key Part No.	Price Each					Schott Part No.
			Primary			Secondary									
			Start	CTap	Finish	Start	CTap	Finish		1	10	50	100	500	
1	Transformer for Maxim 250/251; 5V to 5V @ 50ma	2.5mH	1	—	3	4	—	6	257-1006-ND	9.29	7.14	5.19	4.16	2.89	67114760
2	Transformer for T1 Transmit: Dallas 2151	500µH	1	—	5	2	4	6	257-1007-ND	10.55	8.12	5.19	4.15	2.89	67112020
	Transformer for T1; Crystal 6154, 6158, 61535	700µH	1	—	2	3	—	4	257-1008-ND	12.57	8.44	6.15	4.59	3.78	67115100
	Transformer for Maxim 250/251; For RS232 Isolation	2mH	1	2	3	4	5	6	257-1009-ND	9.71	6.55	4.80	3.61	2.99	67117970
	Transformer for T1 Receive; Dallas 2151	700µH	1	3	5	2	—	6	257-1010-ND	9.97	6.70	4.88	3.65	3.00	67124650
	Line Interface Transformer T1 Transmit	700µH	1	—	5	2	4	6	257-1011-ND	8.93	6.87	4.40	3.52	2.25	67124670
	Isolation for Digital Audio; Crystal CS8401/2/11/12	225µH	1	—	2	3	—	4	257-1015-ND	9.61	6.45	4.70	3.51	2.89	67125450
3	Transformer for EXAR T1 Receive	8.44mH	6	1	2	3	4	5	257-1016-ND	11.44	7.68	4.39	3.84	3.48	67109510
	T1 Transmit Transformer for Level One 310	3mH	6	1	2	3	4	5	257-1017-ND	10.08	7.75	4.96	3.96	2.76	67125350
4	Transmit & Receive Transformer; Level One 300/301/305	700µH	1	—	2	6	—	5	257-1018-ND	8.61	5.78	3.47	2.89	2.46	67127370
	Isolation for Digital Audio: Crystal CS8401/1/11/12	225µH	1	—	3	4	—	6	257-1020-ND	8.61	5.78	3.47	2.89	2.46	67128990
	Transformer for Maxim 250/251; RS232 Isolation	2mH	3	2	1	6	5	4	257-1021-ND	20.59	13.82	8.29	7.36	6.54	67129080
	Transformer for T1 Transmit; Crystal 61574/35A	1.5mH	6	—	4	1	2	3	257-1023-ND	8.67	6.67	4.27	3.42	2.38	67129310
	Isolation for Digital Audio, Shielded, Crystal CS8401/2/11/12	225µH	1	—	3	4	—	6	257-1025-ND	8.61	5.78	3.47	2.89	2.46	67129600
	Receive Transformer for Rockwell 8069	1.2mH	1	2	3	6	—	4	257-1027-ND	8.61	5.78	3.47	2.89	2.46	67130840
	Transmit Transformer for Rockwell 8069	1.2mH	1	2	3	6	5	4	257-1028-ND	11.24	8.64	5.53	4.43	—	67130850
	Interface Transformer for Dallas 2187	60µH	1	2	3	4	5	6	257-1029-ND	7.72	5.94	3.80	3.04	2.21	67131050
	Digital Audio, shielded, 70-110 ohm, Crystal 8401, 8402, 8411 and 8412	225µH	1	—	3	4	—	6	257-1031-ND	8.61	5.78	3.47	2.89	2.46	67137640
5	Inductor for LM259x as L29, 1.5 Amps	100µH	1-5	—	6-10	—	—	—	257-1044-ND	14.95	11.08	6.31	4.86	3.12	67144130
	Inductor, 3.6A	33µH	1-5	—	6-10	—	—	—	257-1045-ND	14.95	11.08	6.31	4.86	3.12	67144220
6	Inductor DCR 0.09 ohms SMD, 1.77 Amps	100µH	1-4	—	5-8	—	—	—	257-1053-ND	11.00	8.46	5.42	4.33	3.01	24518
	Inductor DCR 0.26 ohms SMD, 1.18 Amps	220µH	1-4	—	5-8	—	—	—	257-1054-ND	12.04	9.27	5.93	4.74	3.30	24520
7	Inductor DCR 0.15 ohms, 0.63A	150µH	1-4	—	5-8	—	—	—	257-1057-ND	10.44	8.03	5.14	4.11	2.86	67144050
	Inductor DCR 0.045 ohms, 1.15A	47µH	1-4	—	5-8	—	—	—	257-1060-ND	11.02	8.47	5.42	4.34	3.02	67144080
	Inductor DCR 0.04 ohms, 3.7A	47µH	1-4	—	5-8	—	—	—	257-1062-ND	15.01	11.12	6.34	4.88	3.12	67144210

(Continued)

Fig. 9



* Dimensions shown in [ ] are for part number 257-1073-ND

Fig. 10

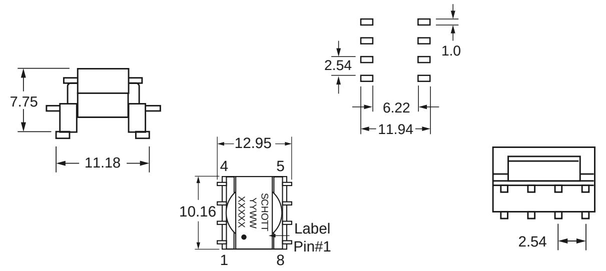


Fig. 11

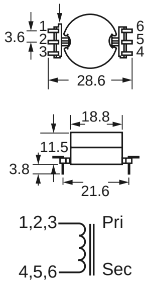


Fig. 12

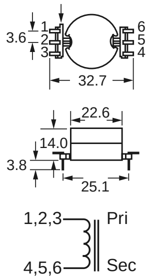


Fig. 13

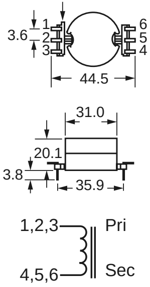


Fig. 14

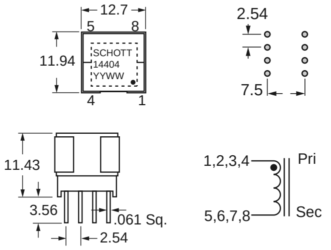


Fig. 15

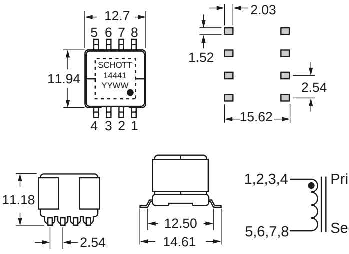


Fig. 16

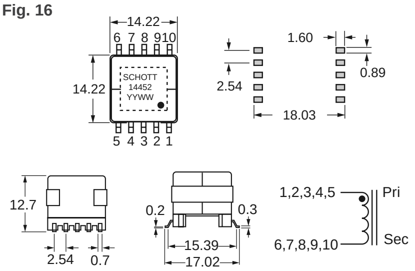
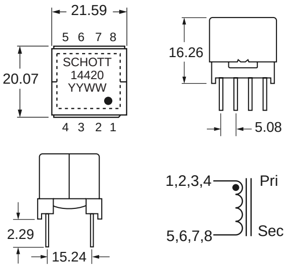


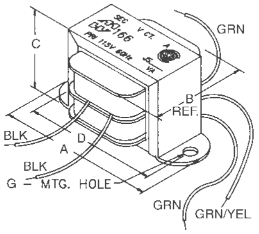
Fig. 17



			Schematic Information												
			Primary			Secondary			Digi-Key	Price Each					Schott
Fig.	Description (applications and notes)	Inductance	Start	CTap	Finish	Start	CTap	Finish	Part No.	1	10	50	100	500	Part No.
8	Transformer DDS Level I LXT 400	200mH	3	—	1	6	5	4	257-1066-ND	10.84	8.33	5.33	4.26	2.97	67127340
9	Inductor DCR 0.300 ohms SMD, 0.45A	150µH	1	—	6	—	—	—	257-1072-ND	14.42	10.69	6.09	4.69	3.00	67144340
	Inductor DCR 0.150 ohms SMD, 0.63A	150µH	1-4	—	5-8	—	—	—	257-1073-ND	14.96	11.09	6.32	4.86	3.11	34591
10	Digital Audio, SMD;Transformer	225µH	1	—	4	5	—	8	257-1126-ND	15.37	10.39	6.19	5.35	4.92	37211
11	3A Inductor, Buck for LM257x	47µH	1	—	3	4	—	6	257-1094-ND	11.78	9.06	5.80	4.64	3.37	67126980
	1.3A Inductor, Buck for LM257x	220µH	1	—	3	4	—	6	257-1036-ND	11.77	9.06	5.80	4.64	3.37	67127020
	1A Inductor, Buck for LM257x	330µH	1	—	3	4	—	6	257-1096-ND	11.78	9.06	5.80	4.64	3.37	67127030
	0.95A Inductor, Buck for LM257x	470µH	1	—	3	4	—	6	257-1097-ND	11.78	9.06	5.80	4.64	3.37	67127040
	0.62A Inductor, Buck for LM257x	680µH	1	—	3	4	—	6	257-1098-ND	11.78	9.06	5.80	4.64	3.37	67127050
	0.42A Inductor, Buck for LM257x	2200µH	1	—	3	4	—	6	257-1099-ND	11.78	9.06	5.80	4.64	3.37	67127130
12	3A Inductor, Buck for LM257x	68µH	1	—	3	4	—	6	257-1100-ND	11.89	9.15	5.86	4.68	3.41	67126990
	3A Inductor, Buck for LM257x	100µH	1	—	3	4	—	6	257-1101-ND	11.89	9.15	5.86	4.68	3.41	67127000
	2A Inductor, Buck for LM257x	150µH	1	—	3	4	—	6	257-1102-ND	11.89	9.15	5.86	4.68	3.41	67127010
	3A Inductor, Buck for LM257x	150µH	1	—	3	4	—	6	257-1038-ND	11.89	9.15	5.86	4.68	3.41	67127060
	1.3A Inductor, Buck for LM257x	680µH	1	—	3	4	—	6	257-1104-ND	11.89	9.15	5.86	4.68	3.41	67127100
	0.9A Inductor, Buck for LM257x	1000µH	1	—	3	4	—	6	257-1105-ND	11.89	9.15	5.86	4.68	3.41	67127110
	0.62A Inductor, Buck for LM257x	1500µH	1	—	3	4	—	6	257-1106-ND	11.89	9.15	5.86	4.68	3.41	67127120
	3A Inductor, Buck for LM257x	220µH	1	—	3	4	—	6	257-1039-ND	12.16	9.35	5.99	4.79	3.48	67127070
13	3A Inductor, Buck for LM257x	330µH	1	—	3	4	—	6	257-1108-ND	12.16	9.35	5.99	4.79	3.48	67127080
	1.9A Inductor, Buck for LM257x	470µH	1	—	3	4	—	6	257-1109-ND	12.16	9.35	5.99	4.79	3.48	67127090
14	.51A Inductor for LM259x	220µH	1	—	4	5	—	8	257-1118-ND	9.01	6.93	4.44	3.55	2.58	67144040
	.42A Inductor for LM259x	330µH	1	—	4	5	—	8	257-1119-ND	9.01	6.93	4.44	3.55	2.58	67144030
15	.42A Inductor, SMT for LM259x	330µH	1	—	4	5	—	8	257-1120-ND	9.12	7.02	4.50	3.60	2.61	67144410
16	1.85A Inductor, SMT for LM259x	68µH	1	—	5	6	—	10	257-1121-ND	9.27	7.13	4.57	3.66	2.66	67144520
	1.00A Inductor, SMT for LM259x	220µH	1	—	5	6	—	10	257-1122-ND	9.27	7.13	4.57	3.66	2.66	67144490
	3.60A Inductor, SMT for LM259x	33µH	1	—	5	6	—	10	257-1123-ND	9.27	7.13	4.57	3.66	2.66	67148290
	3.70A Inductor, SMT for LM259x	22µH	1	—	5	6	—	10	257-1124-ND	9.27	7.13	4.57	3.66	2.66	67148300
17	3.25A Inductor for LM259x	68µH	1	—	4	5	—	8	257-1125-ND	9.12	7.02	4.50	3.60	2.61	67144200

Filament and Low Voltage Rectifier Use Transformers

Fig. 1



OPEN STYLE

- Primary 115 VAC, 60 Hz
- Open style, channel bracket, two hole chassis mount
- Minimum 6" (15.24cm) leads
- Dual bobbin design - no electrostatic shield required
- Class A insulation (105°C)
- Hi-Pot test of 2,000V RMS
- CSA certified (#LR3902) & UL listed (#E50394)

Schematic Drawing for "Open" and "High Current-Open Frame" styles.

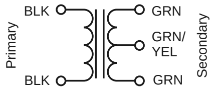
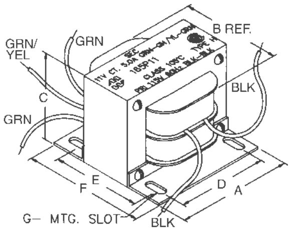


Fig. 2

HIGH CURRENT - OPEN FRAME



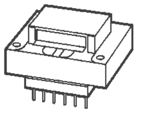
- Primary 115 VAC, 60 Hz
- Open style, 4 hole frame chassis mount
- Minimum 6" (15.24cm) leads
- Dual bobbin design - no electrostatic shield required
- Class A insulation (105°C)
- Hi-Pot test of 2,000V RMS
- CSA certified (#LR3902) & UL listed (#E50394)

Fig.	Volts† AC	Amps	Dimensions - Inch (mm) A	B	C	D	E	F	G	Digi-Key Part No.	Price Each 1	5	10	25	Hammond Part No.
1	2.5	1.0	2.06 (52.32)	1.38 (35.05)	1.19 (30.23)	1.75 (44.45)	—	—	0.187 (4.75)	HM500-ND	17.14	15.69	14.50	13.57	166J2
1	2.5	2.5	2.81 (71.37)	1.50 (38.10)	1.69 (42.93)	2.38 (60.45)	—	—	0.187 (4.75)	HM501-ND	16.17	14.82	13.68	12.82	166L2
1	2.5	6.0	3.25 (82.55)	1.63 (41.40)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM502-ND	18.04	16.52	15.27	14.29	166Q2
2	5.0	30.0	3.75 (95.25)	2.63 (66.80)	3.13 (79.50)	3.13 (79.50)	2.50 (63.50)	3.25 (82.55)	.22 x .56 (5.59 x 14.22)	HM503-ND	48.27	44.22	40.85	38.24	165X5
2	3.0	50.0	3.75 (95.25)	3.13 (79.50)	3.13 (79.50)	3.13 (79.50)	2.75 (69.85)	3.50 (88.90)	.22 x .56 (5.59 x 14.22)	HM504-ND	48.82	44.70	41.31	38.66	165Z3
1	6.3	0.6	2.38 (60.45)	1.38 (35.05)	1.38 (35.05)	2.00 (50.80)	—	—	0.187 (4.75)	HM505-ND	14.97	13.71	12.67	11.86	166G6
1	6.3	1.0	2.81 (71.37)	1.50 (38.10)	1.69 (42.93)	2.38 (60.45)	—	—	0.187 (4.75)	HM506-ND	16.16	14.80	13.67	12.80	166J6
1	6.3	2.0	2.81 (71.37)	1.63 (41.40)	1.69 (42.93)	2.38 (60.45)	—	—	0.187 (4.75)	HM507-ND	16.25	14.90	13.75	12.88	166L6
1	6.3	4.0	3.25 (82.55)	1.75 (44.45)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM508-ND	17.22	15.78	14.57	13.65	166N6
1	8.5	1.0	2.81 (71.37)	1.50 (38.10)	1.69 (42.93)	2.38 (60.45)	—	—	0.187 (4.75)	HM509-ND	16.32	14.95	13.81	12.93	166J8
1	8.5	2.0	3.25 (82.55)	1.63 (41.40)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM510-ND	16.72	15.32	14.15	13.25	166L8
1	9.0	0.5	2.38 (60.45)	1.38 (35.05)	1.38 (35.05)	2.00 (50.80)	—	—	0.187 (4.75)	HM511-ND	14.97	13.71	12.67	11.86	166G9
1	10.0	0.5	2.38 (60.45)	1.50 (38.10)	1.38 (35.05)	2.00 (50.80)	—	—	0.187 (4.75)	HM512-ND	15.67	14.36	13.26	12.42	166G10
1	10.0	1.0	2.81 (71.37)	1.63 (41.40)	1.69 (42.93)	2.38 (60.45)	—	—	0.187 (4.75)	HM513-ND	16.28	14.92	13.78	12.90	166J10
1	10.0	2.0	3.25 (82.55)	1.75 (44.45)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM514-ND	16.88	15.47	14.28	13.38	166L10
1	10.0	3.0	3.25 (82.55)	2.00 (50.80)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM515-ND	17.43	15.97	14.75	13.81	166M10
1	12.0	1.2	3.25 (82.55)	1.63 (41.40)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM516-ND	16.55	15.16	14.01	13.11	166K12
1	12.6	0.3	2.38 (60.45)	1.38 (35.05)	1.38 (35.05)	2.00 (50.80)	—	—	0.187 (4.75)	HM517-ND	15.03	13.77	12.72	11.91	166F12
1	12.6	0.5	2.81 (71.37)	1.50 (38.10)	1.69 (42.93)	2.38 (60.45)	—	—	0.187 (4.75)	HM518-ND	15.94	14.60	13.49	12.63	166G12
1	12.6	1.0	2.81 (71.37)	1.63 (41.40)	1.69 (42.93)	2.38 (60.45)	—	—	0.187 (4.75)	HM519-ND	16.51	15.12	13.97	13.08	166J12
1	12.6	2.5	3.25 (82.55)	2.00 (50.80)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM520-ND	18.31	16.78	15.50	14.52	166L12
1	12.6	4.0	3.69 (93.73)	2.13 (54.10)	2.31 (58.67)	3.13 (79.50)	—	—	0.187 (4.75)	HM521-ND	21.19	19.41	17.93	16.79	166N12
1	12.6	6.0	4.03 (102.36)	2.25 (57.15)	2.63 (66.60)	3.56 (90.42)	—	—	0.187 (4.75)	HM522-ND	26.50	24.28	22.42	21.00	166Q12
1	12.6	8.0	4.50 (114.30)	2.50 (63.50)	2.88 (73.15)	4.00 (101.60)	—	—	0.203 (5.16)	HM523-ND	29.39	26.92	24.87	23.28	166R12
2	12.6	10.0	3.00 (76.20)	3.25 (82.55)	2.56 (65.02)	2.50 (63.50)	3.25 (82.55)	4.00 (101.60)	.22 x .56 (5.59 x 14.22)	HM524-ND	45.12	41.33	38.18	35.75	165S12
2	12.6	20.0	3.75 (95.25)	3.63 (92.20)	3.13 (79.50)	3.13 (79.50)	3.25 (82.55)	4.00 (101.60)	.22 x .56 (5.59 x 14.22)	HM525-ND	57.15	52.34	48.36	45.27	165V12
1	14.0	0.15	2.06 (52.32)	1.38 (35.05)	1.19 (30.23)	1.75 (44.45)	—	—	0.187 (4.75)	HM526-ND	17.35	15.90	14.68	13.75	166E14
1	14.0	0.5	2.81 (71.37)	1.50 (38.10)	1.69 (42.93)	2.38 (60.45)	—	—	0.187 (4.75)	HM527-ND	15.98	14.64	13.52	12.66	166G14
1	14.0	1.0	2.81 (71.37)	1.63 (41.40)	1.69 (42.93)	2.38 (60.45)	—	—	0.187 (4.75)	HM528-ND	16.51	15.12	13.97	13.08	166J14
1	14.0	2.0	3.25 (82.55)	2.00 (50.80)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM529-ND	17.29	15.84	14.63	13.70	166L14
1	16.0	0.25	2.38 (60.45)	1.38 (35.05)	1.38 (35.05)	2.00 (50.80)	—	—	0.187 (4.75)	HM530-ND	15.38	14.08	13.02	12.18	166F16
1	16.0	0.5	2.81 (71.37)	1.50 (38.10)	1.69 (42.93)	2.38 (60.45)	—	—	0.187 (4.75)	HM531-ND	16.02	14.67	13.56	12.69	166G16
1	16.0	1.0	3.25 (82.55)	1.63 (41.40)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM532-ND	16.68	15.29	14.11	13.22	166J16
1	16.0	2.2	3.25 (82.55)	2.00 (50.80)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM533-ND	17.77	16.28	15.03	14.08	166L16
1	16.0	3.0	3.69 (93.73)	2.13 (54.10)	2.31 (58.67)	3.13 (79.50)	—	—	0.187 (4.75)	HM534-ND	21.13	19.39	17.91	16.77	166M16
1	18.0	1.5	3.25 (82.50)	1.75 (44.45)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM535-ND	17.33	15.88	14.67	13.73	166K18
1	18.0	3.0	3.69 (93.73)	2.13 (54.10)	2.31 (58.67)	3.13 (79.50)	—	—	0.187 (4.75)	HM536-ND	24.34	22.30	20.60	19.28	166M18
1	18.0	5.0	4.03 (102.36)	2.50 (63.50)	2.63 (66.80)	3.56 (90.42)	—	—	0.187 (4.75)	HM537-ND	28.28	25.90	23.93	22.40	166P18
2	18.0	10.0	3.75 (95.25)	3.13 (79.50)	3.13 (79.50)	3.13 (79.50)	2.75 (69.85)	3.50 (88.90)	.22 x .56 (5.59 x 14.22)	HM538-ND	49.17	45.03	41.61	38.95	165S18
2	18.0	15.0	4.50 (114.30)	3.88 (98.55)	3.75 (95.25)	3.75 (95.25)	2.75 (69.85)	3.50 (88.90)	.28 x .56 (7.11 x 14.22)	HM539-ND	56.77	51.99	48.03	44.96	165U18
1	20.0	0.1	2.06 (52.32)	1.38 (35.05)	1.19 (30.23)	1.75 (44.45)	—	—	0.187 (4.75)	HM540-ND	17.39	15.93	14.71	13.78	166D20
1	20.0	0.15	2.06 (52.32)	1.38 (35.05)	1.19 (30.23)	1.75 (44.45)	—	—	0.187 (4.75)	HM541-ND	17.50	16.03	14.80	13.86	166E20
1	20.0	0.5	2.81 (71.37)	1.63 (41.40)	1.69 (42.93)	2.38 (60.45)	—	—	0.187 (4.75)	HM542-ND	15.98	14.64	13.52	12.66	166G20
1	20.0	2.0	3.69 (93.73)	1.88 (47.75)	2.31 (56.67)	3.13 (79.50)	—	—	0.187 (4.75)	HM543-ND	23.03	21.09	19.49	18.24	166L20
2	22.0	12.0	4.50 (114.30)	3.88 (98.55)	3.75 (95.25)	3.75 (95.25)	2.75 (69.85)	3.50 (88.90)	.28 x .56 (7.11 x 14.22)	HM544-ND	58.12	53.23	49.18	46.04	165T22
2	22.0	20.0	4.50 (114.30)	4.38 (111.25)	3.75 (95.25)	3.75 (95.25)	3.75 (95.25)	4.50 (114.30)	.28 x .56 (7.11 x 14.22)	HM545-ND	72.40	66.31	61.26	57.35	165V22
1	24.0	.085	2.06 (52.32)	1.38 (35.05)	1.19 (30.23)	1.75 (44.45)	—	—	0.187 (4.75)	HM546-ND	17.25	15.80	14.60	13.67	166C24
1	24.0	2.0	3.69 (93.73)	2.13 (54.10)	2.31 (58.67)	3.13 (79.50)	—	—	0.187 (4.75)	HM547-ND	20.58	18.86	17.41	16.31	166L24
1	24.0	4.0	4.50 (114.30)	2.50 (63.50)	2.88 (73.15)	4.00 (101.60)	—	—	0.203 (5.16)	HM548-ND	28.66	26.26	24.25	22.71	166N24
1	25.0	0.1	2.06 (52.32)	1.38 (35.05)	1.19 (30.23)	1.75 (44.45)	—	—	0.187 (4.75)	HM549-ND	17.45	15.99	14.77	13.83	166D25
1	25.0	0.15	2.38 (60.45)	1.38 (35.05)	1.38 (35.05)	2.00 (50.80)	—	—	0.187 (4.75)	HM550-ND	15.07	13.81	12.75	11.94	166E25
1	25.0	0.3	2.81 (71.37)	1.50 (38.10)	1.69 (42.93)	2.38 (60.45)	—	—	0.187 (4.75)	HM551-ND	15.97	14.62	13.51	12.64	166F25
1	25.0	0.5	2.81 (71.37)	1.63 (41.40)	1.69 (42.93)	2.38 (60.45)	—	—	0.187 (4.75)	HM552-ND	16.25	14.90	13.75	12.88	166G25
1	25.0	1.0	3.25 (82.55	1.75 (44.45)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM553-ND	17.25	15.80	14.60	13.67	166J25
1	25.0	1.5	3.69 (93.73)	1.88 (47.75)	2.31 (58.67)	3.13 (79.50)	—	—	0.187 (4.75)	HM554-ND	20.15	18.47	17.05	15.97	166K25
1	25.0	2.0	3.69 (93.73)	2.13 (54.10)	2.31 (58.67)	3.13 (79.50)	—	—	0.187 (4.75)	HM555-ND	20.77	19.02	17.57	16.45	166L25
1	25.0	3.0	4.03 (102.36)	2.25 (57.15)	2.63 (66.80)	3.56 (90.42)	—	—	0.187 (4.75)	HM556-ND	25.76	23.59	21.80	20.40	166M25
2	25.0	5.0	3.00 (76.20)	3.25 (82.55)	2.56 (65.02)	2.50 (63.50)	3.25 (82.55)	4.00 (101.60)	.22 x .56 (5.59 x 14.22)	HM557-ND	48.64	44.55	41.16	38.53	165P25
2	25.0	10.0	3.75 (95.25)	3.63 (92.20)	3.13 (79.50)	3.13 (79.50)	3.25 (82.55)	4.00 (101.60)	.22 x .56 (5.59 x 14.22)	HM558-ND	54.82	50.19	46.38	43.41	165S25
1	28.0	0.5	2.81 (71.37)	1.63 (41.40)	1.69 (42.93)	2.38 (60.45)	—	—	0.187 (4.75)	HM559-ND	16.47	15.08	13.94	13.04	166G28
1	28.0	1.0	3.25 (82.55)	2.00 (50.80)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM560-ND	17.26	15.82	14.61	13.68	166J28
2	30.0	5.0	3.00 (76.20)	3.25 (82.55)	2.56 (65.02)	2.50 (63.50)	3.25 (82.55)	4.00 (101.60)	.22 x .56 (5.59 x 14.22)	HM561-ND	44.22	40.50	37.42	35.03	165P30
2	30.0	10.0	4.50 (114.30)	3.88 (98.55)	3.75 (95.25)	3.75 (95.25)	2.75 (69.85)	3.50 (88.90)	.28 x .56 (7.11 x 14.22)	HM562-ND	59.88	54.84	50.67	47.43	165S30
1	33.0	1.0	3.25 (82.55)	2.00 (50.80)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM563-ND	17.75	16.27	15.02	14.07	166J33
1	35.0	1.5	3.69 (93.73)	2.13 (54.10)	2.31 (58.67)	3.13 (79.50)	—	—	0.187 (4.75)	HM564-ND	21.00	19.24	17.77	16.64	166K35
1	36.0	0.15	2.38 (60.45)	1.50 (38.10)	1.38 (35.05)	2.00 (50.80)	—	—	0.187 (4.75)	HM565-ND	16.02	14.67	13.56	12.69	166E36
1	36.0	0.5	3.25 (82.55)	1.63 (41.40)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM566-ND	16.55	15.16	14.01	13.11	166G36
1	36.0	1.0	3.69 (93.73)	1.88 (47.75)	2.31 (58.67)	3.13 (79.50)	—	—	0.187 (4.75)	HM567-ND	20.18	18.49	17.08	15.99	166J36
1	44.0	1.0	3.69 (93.73)	2.00 (50.80)	2.31 (58.67)	3.13 (79.50)	—	—	0.187 (4.75)	HM568-ND	21.03	19.26	17.79	16.66	166J44
1	80.0	0.5	3.69 (93.73)	1.88 (47.75)	2.31 (58.67)	3.13 (79.50)	—	—	0.187 (4.75)	HM569-ND	20.58	18.86	17.41	16.31	166G80

† Center tap voltage is half the voltage shown. All voltage ratings are based on full load current rating shown.

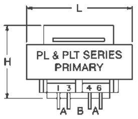
Worldtrans® Power Transformers

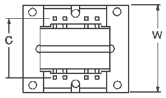
For PC Board Solid-State Power, Control, & Instrumentation Applications



- Meets U.S. and International Safety Standards — UL, VDE, IEC, CSA.
- 4,000V RMS hipot test —

  Dual non-concentric bobbins and insulating shroud provide high isolation and reduced capacitance.
- 115/230V 50/60Hz primary.
- 130°C insulation system — Insulating materials meet UL 94V-0 flammability requirements.

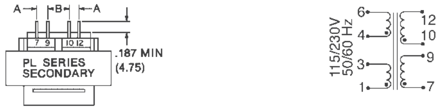




File #LR69222; File #LR69223

File 810/89, 811/89; VCD 0551,0806

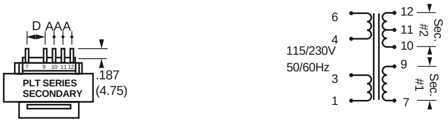
Fig. 1



TUV File 810/89, 811/89; IEC 380 EN60950

File #E79781; UL506
E138028; UI1411

Fig. 2



TUV File 810/89, 811/89; IEC 380 EN60950

File #E79781; UL506
E138028; UI1411

VA Size	Dimensions – Inch (mm) L	W	H	A†	B	C	D	Mtg. Screw	Pin Square In. (mm)	Wt. Lbs. (kg)
2.5	1.625 (41.28)	1.313 (33.35)	1.125 (28.58)	.200 (5.08)	.250 (6.35)	1.000 (25.40)	—	2x #4	.025 (.64)	.25 (.11)
5.0	1.625 (41.28)	1.313 (33.35)	1.375 (34.93)	.200 (5.08)	.400 (10.16)	1.000 (25.40)	—	2x #4	.025 (.64)	.37 (.17)
10.0	1.875 (47.63)	1.563 (39.70)	1.375 (34.93)	.200 (5.08)	.400 (10.16)	1.140 (28.96)	—	2x #4	.036 (.91)	.53 (.24)
20.0	2.250 (57.15)	1.875 (47.63)	1.625 (41.28)	.400 (10.16)	.400 (10.16)	1.460 (37.08)	.40 (10.16)	2x #4	.036 (.91)	.90 (.41)
30.0	2.625 (66.68)	2.188 (55.58)	1.563 (39.70)	.550 (13.97)	.275 (6.98)	1.680 (42.67)	.55 (13.97)	4x #6	.045 (1.14)	1.15 (.52)
56.0	3.000 (76.20)	2.500 (63.50)	1.813 (46.05)	.600 (15.24)	.300 (7.62)	1.900 (48.26)	.60 (15.24)	4x #6	.045 (1.14)	1.70 (.77)

† For PLT series secondary only, dimension A is 1/2 of value shown.

PL Series — Dual Output Low Profile

Fig.	VA (Size)	Secondary RMS Rating Parallel VAC @ A	Secondary RMS Rating Series VCT @ A	Digi-Key Part No.	Price Each* 1	10	25	Tamura Part No.
1	2.5	5 @ 0.5	10 @ 0.25	MT3101-ND	7.97	7.08	6.02	PL2.5-10
	5.0	5 @ 1.0	10 @ 0.5	MT3102-ND	8.60	7.64	6.50	PL5.0-10
	10.0	5 @ 2.0	10 @ 1.0	MT3103-ND	9.47	8.42	7.16	PL10-10
	20.0	5 @ 4.0	10 @ 2.0	MT3104-ND	11.41	10.14	8.62	PL20-10
	30.0	5 @ 6.0	10 @ 3.0	MT3105-ND	13.52	12.02	10.22	PL30-10
	56.0	5 @ 11.2	10 @ 5.6	MT3106-ND	18.14	16.12	13.71	PL56-10
1	2.5	6.3 @ 0.4	12.6 @ 0.2	MT3107-ND	7.97	7.08	6.02	PL2.5-12
	5.0	6.3 @ 0.8	12.6 @ 0.4	MT3108-ND	8.60	7.64	6.50	PL5.0-12
	10.0	6.3 @ 1.6	12.6 @ 0.8	MT3109-ND	9.47	8.42	7.16	PL10-12
	20.0	6.3 @ 3.2	12.6 @ 1.6	MT3110-ND	11.41	10.14	8.62	PL20-12
	30.0	6.3 @ 4.8	12.6 @ 2.4	MT3111-ND	13.52	12.02	10.22	PL30-12
	56.0	6.3 @ 8.8	12.6 @ 4.4	MT3112-ND	18.14	16.12	13.71	PL56-12
1	2.5	8 @ 0.3	16 @ 0.15	MT3113-ND	7.97	7.08	6.02	PL2.5-16
	5.0	8 @ 0.62	16 @ 0.31	MT3114-ND	8.60	7.64	6.50	PL5.0-16
	10.0	8 @ 1.25	16 @ 0.62	MT3115-ND	9.47	8.42	7.16	PL10-16
	20.0	8 @ 2.5	16 @ 1.25	MT3116-ND	11.41	10.14	8.62	PL20-16
	30.0	8 @ 3.8	16 @ 1.9	MT3117-ND	13.52	12.02	10.22	PL30-16
	56.0	8 @ 7.0	16 @ 3.5	MT3118-ND	18.14	16.12	13.71	PL56-16
1	2.5	10 @ 0.24	20 @ 0.12	MT3119-ND	7.97	7.08	6.02	PL2.5-20
	5.0	10 @ 0.5	20 @ 0.25	MT3120-ND	8.60	7.64	6.50	PL5.0-20
	10.0	10 @ 1.0	20 @ 0.5	MT3121-ND	9.47	8.42	7.16	PL10-20
	20.0	10 @ 2.0	20 @ 1.0	MT3122-ND	11.41	10.14	8.62	PL20-20
	30.0	10 @ 3.0	20 @ 1.5	MT3123-ND	13.52	12.02	10.22	PL30-20
	56.0	10 @ 5.6	20 @ 2.8	MT3124-ND	18.14	16.12	13.71	PL56-20
1	2.5	12 @ 0.2	24 @ 0.1	MT3125-ND	7.97	7.08	6.02	PL2.5-24
	5.0	12 @ 0.42	24 @ 0.21	MT3126-ND	8.60	7.64	6.50	PL5.0-24
	10.0	12 @ 0.84	24 @ 0.42	MT3127-ND	9.47	8.42	7.16	PL10-24
	20.0	12 @ 1.66	24 @ 0.83	MT3128-ND	11.41	10.14	8.62	PL20-24
	30.0	12 @ 2.5	24 @ 1.25	MT3129-ND	13.52	12.02	10.22	PL30-24
	56.0	12 @ 4.66	24 @ 2.33	MT3130-ND	18.14	16.12	13.71	PL56-24
1	2.5	14 @ 0.18	28 @ 0.09	MT3131-ND	7.97	7.08	6.02	PL2.5-28
	5.0	14 @ 0.36	28 @ 0.18	MT3132-ND	8.60	7.64	6.50	PL5.0-28
	10.0	14 @ 0.72	28 @ 0.36	MT3133-ND	9.47	8.42	7.16	PL10-28
	20.0	14 @ 1.44	28 @ 0.72	MT3134-ND	11.41	10.14	8.62	PL20-28
	30.0	14 @ 2.12	28 @ 1.06	MT3135-ND	13.52	12.02	10.22	PL30-28
	56.0	14 @ 4.0	28 @ 2.0	MT3136-ND	18.14	16.12	13.71	PL56-28
1	2.5	18 @ 0.14	36 @ 0.07	MT3137-ND	7.97	7.08	6.02	PL2.5-36
	5.0	18 @ 0.28	36 @ 0.14	MT3138-ND	8.60	7.64	6.50	PL5.0-36
	10.0	18 @ 0.56	36 @ 0.28	MT3139-ND	9.47	8.42	7.16	PL10-36
	20.0	18 @ 1.12	36 @ 0.56	MT3140-ND	11.41	10.14	8.62	PL20-36
	30.0	18 @ 1.64	36 @ 0.82	MT3141-ND	13.52	12.02	10.22	PL30-36
	56.0	18 @ 3.12	36 @ 1.56	MT3142-ND	18.14	16.12	13.71	PL56-36

PLT Series — Triple Output

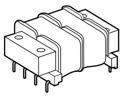
Fig.	VA (Size)	Sec. #1 VAC @ A	Sec. #2 VCT @ A	Digi-Key Part No.	Price Each* 1	10	25	Tamura Part No.
2	20.0	9.3 @1.5	27.5 @ .22	MT3143-ND†	13.61	12.10	10.29	PLT20-32
	30.0	9.3 @ 2.2	27.5 @ .34	MT3144-ND†	15.77	14.02	11.92	PLT30-32
	56.0	9.3 @4.0	27.5 @ .68	MT3145-ND†	20.52	18.24	15.51	PLT56-32

Note: *To obtain output voltage, load current must be met, ratings based on 120V nominal input.*

† Intended for use as a regulated power supply transformer, 5VDC and ±12VDC.

* Call for price on quantities of 50 or more.

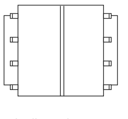
FLAT STACK® Low Profile Power Transformers

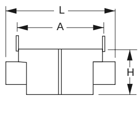


For low height PC Board Solid-State Power, Control, and Instrumentation

Split Bobbin:

- Primaries and secondaries wound side by side
- High isolation for low leakage applications 1500V hi-pot
- Low capacity coupling minimizes line noise and false triggering.
- Hum-bucking semi-toroidal construction
- Precision spaced terminals
- Dual primaries: 115/230V, 50/60Hz
- No load to Full Regulation: 30%; 12VA, 20%





Pin dimensions: 0.091” x 0.2” (2.31mm x .51mm)

UL 506 File #E145619, E79781
130°C Insulation System

CSA22,2 No. 66
File # LR81383-7

130B*
File No. E92957

* 130B for 3FL series only, up to 12VA size

Fig. 1

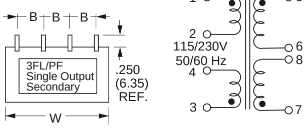
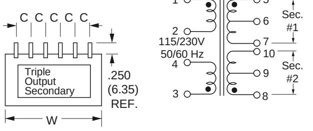


Fig. 2



VA (Size)	Dimensions – Inch (mm) L	W	H	A	B	C	Weight Oz. (Gram)
2.5	1.87 (47.50)	1.56 (39.62)	0.65 (16.51)	1.6 (40.64)	.375 (9.52)	.187 (4.75)	5 (141.75)
6	1.875 (47.63)	1.56 (39.70)	0.85 (21.59)	1.6 (40.64)	.375 (9.52)	.187 (4.75)	7 (198.44)
12	2.5 (63.50)	2.0 (50.80)	1.065 (27.05)	2.0 (50.80)	.500 (12.70)	.250 (6.35)	11 (311.84)
24	2.87 (72.90)	2.25 (57.15)	1.25 (31.75)	1.9 (48.26)	.530 (13.46)	.300 (7.62)	15 (425.24)

Fig.	VA (Size)	Secondary RMS Rating Parallel VAC @ A	Secondary RMS Rating Series VCT @ A	Digi-Key Part No.	Price Each* 1	10	25	Tamura Part No.
1	2.5	5.0 @ 0.5	10 @ 0.25	MT1101-ND	8.78	7.80	6.63	3FL10-250
	6.0	5.0 @ 1.2	10 @ 0.6	MT1102-ND	9.63	8.56	7.28	3FL10-600
	12.0	5.0 @ 2.4	10 @ 1.2	MT1103-ND	12.38	11.00	9.35	3FL10-1200
	24.0	5.0 @ 4.8	10 @ 2.4	MT1104-ND	13.73	12.20	10.37	PF24-10
1	2.5	6.3 @ 0.4	12.6 @ 0.2	MT1105-ND	8.78	7.80	6.63	3FL12-200
	6.0	6.3 @ 0.9	12.6 @ 0.45	MT1106-ND	9.63	8.56	7.28	3FL12-475
	12.0	6.3 @ 1.9	12.6 @ 0.95	MT1107-ND	12.38	11.00	9.35	3FL12-950
	24.0	6.3 @ 3.8	12.6 @ 1.9	MT1108-ND	13.73	12.20	10.37	PF24-12
1	2.5	8 @ 0.3	16 @ 0.15	MT1109-ND	8.78	7.80	6.63	3FL16-150
	6.0	8 @ 0.7	16 @ 0.35	MT1110-ND	9.63	8.56	7.28	3FL16-350
	12.0	8 @ 1.5	16 @ 0.75	MT1111-ND	12.38	11.00	9.35	3FL16-700
	24.0	8 @ 3.0	16 @ 1.5	MT1112-ND	13.73	12.20	10.37	PF24-16
1	2.5	10 @ 0.25	20 @ 0.125	MT1113-ND	8.78	7.80	6.63	3FL20-125
	6.0	10 @ 0.6	20 @ 0.3	MT1114-ND	9.63	8.56	7.28	3FL20-300
	12.0	10 @ 1.2	20 @ 0.6	MT1115-ND	12.38	11.00	9.35	3FL20-600
	24.0	10 @ 2.4	20 @ 1.2	MT1116-ND	13.73	12.20	10.37	PF24-20
1	2.5	12 @ 0.2	24 @ 0.1	MT1117-ND	8.78	7.80	6.63	3FL24-100
	6.0	12 @ 0.5	24 @ 0.25	MT1118-ND	9.63	8.56	7.28	3FL24-250
	12.0	12 @ 1.0	24 @ 0.5	MT1119-ND	12.38	11.00	9.35	3FL24-500
	24.0	12 @ 2.0	24 @ 1.0	MT1120-ND	13.73	12.20	10.37	PF24-24
1	2.5	15 @ 0.17	30 @ 0.085	MT1121-ND	8.78	7.80	6.63	3FL30-85
	6.0	15 @ 0.4	30 @ 0.2	MT1122-ND	9.63	8.56	7.28	3FL30-200
	12.0	15 @ 0.8	30 @ 0.4	MT1123-ND	12.38	11.00	9.35	3FL30-400
	24.0	15 @ 1.6	30 @ 0.8	MT1124-ND	13.73	12.20	10.37	PF24-30
1	2.5	17 @ 0.15	34 @ .075	MT1125-ND	8.78	7.80	6.63	3FL34-75
	6.0	17 @ 0.34	34 @ 0.17	MT1126-ND	9.63	8.56	7.28	3FL34-170
	12.0	17 @ 0.7	34 @ 0.35	MT1127-ND	12.38	11.00	9.35	3FL34-340
	24.0	17 @ 1.4	34 @ 0.7	MT1128-ND	13.73	12.20	10.37	PF24-34

PFT Series — Triple Output

Fig.	VA (Size)	Sec. #1 VCT @ A	Sec. #2 VCT @ A	Digi-Key Part No.	Price Each* 1	10	25	Tamura Part No.
2	6.0	17.5 @ .155	31.5@ .065	MT1129-ND†	7.67	6.82	5.80	PFT6-32
	6.0	17.5 @ .155	37.5 @ .060	MT1130-ND†	7.67	6.82	5.80	PFT6-38
	12.0	16 @ .36	28 @ .187	MT1132-ND†	8.87	7.88	6.70	PFT12-28
	12.0	16 @ .36	35 @ .150	MT1131-ND†	8.87	7.88	6.70	PFT12-35
	24.0	16 @ .72	28 @ .375	MT1134-ND†	10.46	9.30	7.91	PFT24-28
	24.0	16 @ .72	35 @ .300	MT1133-ND†	10.46	9.30	7.91	PFT24-35

Note: *To obtain output voltage, load current must be met, ratings based on 120V nominal input.*

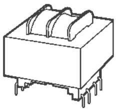
† Intended for use as a regulated power supply transformer, 5VDC, and ± 12VDC or ± 15VDC.

* Call for price on quantities of 50 or more.

tamura
MICROTRAN.

SPLITFORM® Power Transformers

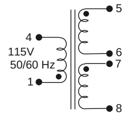
For PC Board Solid-State Power, Control, and Instrumentation Applications



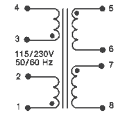
- 115V Single or 115/230V 50/60Hz dual primary
- Split Bobbin Construction:
  - Center flange insulation barrier
  - High isolation for low leakage applications
  - Low capacitive coupling minimizes line noise and false triggering
- 2,500V RMS hi-pot
- Precision spaced terminals
- 130°C insulation system
- Terminal numbers are molded on bobbin

File #'s LR73078,
LR69808

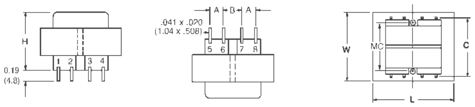
UL 1585 Class 2 &3 - File #'s E96720, 95844
UL 506 - File #'s E79781, E91239
130B - File #92957



115V
Single Primary



115V/250V
Dual Primary



(Pins 2 and 3 omitted on 115V Single Primary)

3F(X) Series	VA Size	Dimensions – Inch (mm) L	W	H	MC	A	B	C	Weight Lbs. (kg)
2	1.1	1.44 (36.58)	1.23 (31.24)	1.00 (25.40)	—	.250 (6.35)	.250 (6.35)	1.200 (30.48)	0.17 (.077)
3	2.4	1.44 (36.58)	1.23 (31.24)	1.26 (32.00)	—	.250 (6.35)	.250 (6.35)	1.200 (30.48)	0.25 (.113)
4	6	1.69 (42.93)	1.39 (35.31)	1.36 (34.54)	1.063 (27.00)	.250 (6.35)	.350 (8.89)	1.280 (32.51)	0.44 (.200)
5	12	1.97 (50.04)	1.63 (41.40)	1.50 (38.10)	1.250 (31.75)	.300 (7.62)	.400 (10.16)	1.410 (35.81)	0.70 (.318)

VA (Size)	Secondary RMS Rating Parallel VAC @ A	Series VCT @ A	Digi-Key Part No.	Price Each 1	10	25	Tamura Part No.
115V Single Primary							
1.1	5.0 @ 0.220	10.0 @ 0.110	MT2201-ND	7.08	6.10	5.13	3FS-210
2.4	5.0 @ 0.500	10.0 @ 0.250	MT2202-ND	7.37	6.35	5.34	3FS-310
6	5.0 @ 1.200	10.0 @ 0.600	MT2203-ND	8.21	7.08	5.95	3FS-410
12	5.0 @ 2.400	10.0 @ 1.200	MT2204-ND	9.34	8.05	6.77	3FS-510
1.1	6.3 @ 0.180	12.6 @ 0.090	MT2205-ND	7.08	6.10	5.13	3FS-212
2.4	6.3 @ 0.400	12.6 @ 0.200	MT2206-ND	7.37	6.35	5.34	3FS-312
6	6.3 @ 1.000	12.6 @ 0.500	MT2207-ND	8.21	7.08	5.95	3FS-412
12	6.3 @ 2.000	12.6 @ 1.000	MT2208-ND	9.34	8.05	6.77	3FS-512
1.1	8.0 @ 0.140	16.0 @ 0.070	MT2209-ND	7.08	6.10	5.13	3FS-216
2.4	8.0 @ 0.300	16.0 @ 0.150	MT2210-ND	7.37	6.35	5.34	3FS-316
6	8.0 @ 0.800	16.0 @ 0.400	MT2211-ND	8.21	7.08	5.95	3FS-416
12	8.0 @ 1.600	16.0 @ 0.800	MT2212-ND	9.34	8.05	6.77	3FS-516
1.1	10.0 @ 0.110	20.0 @ 0.055	MT2213-ND	7.08	6.10	5.13	3FS-220
2.4	10.0 @ 0.240	20.0 @ 0.120	MT2214-ND	7.37	6.35	5.34	3FS-320
6	10.0 @ 0.600	20.0 @ 0.300	MT2215-ND	8.21	7.08	5.95	3FS-420
12	10.0 @ 1.200	20.0 @ 0.600	MT2216-ND	9.34	8.05	6.77	3FS-520
1.1	12.0 @ 0.900	24.0 @ 0.045	MT2217-ND	7.08	6.10	5.13	3FS-224
2.4	12.0 @ 0.200	24.0 @ 0.100	MT2218-ND	7.37	6.35	5.34	3FS-324
6	12.0 @ 0.500	24.0 @ 0.250	MT2219-ND	8.21	7.08	5.95	3FS-424
12	12.0 @ 1.000	24.0 @ 0.500	MT2220-ND	9.34	8.05	6.77	3FS-524
1.1	14.0 @ 0.080	28.0 @ 0.040	MT2221-ND	7.08	6.10	5.13	3FS-228
2.4	14.0 @ 0.170	28.0 @ 0.085	MT2222-ND	7.37	6.35	5.34	3FS-328
6	14.0 @ 0.400	28.0 @ 0.200	MT2223-ND	8.21	7.08	5.95	3FS-428
12	14.0 @ 0.840	28.0 @ 0.420	MT2224-ND	9.34	8.05	6.77	3FS-528
1.1	18.0 @ 0.060	36.0 @ 0.030	MT2225-ND	7.08	6.10	5.13	3FS-236
2.4	18.0 @ 0.130	36.0 @ 0.065	MT2226-ND	7.37	6.35	5.34	3FS-336
6	18.0 @ 0.340	36.0 @ 0.170	MT2227-ND	8.21	7.08	5.95	3FS-436
12	18.0 @ 0.700	36.0 @ 0.350	MT2228-ND	9.34	8.05	6.77	3FS-536
1.1	24.0 @ 0.046	48.0 @ 0.023	MT2229-ND	7.08	6.10	5.13	3FS-248
2.4	24.0 @ 0.100	48.0 @ 0.050	MT2230-ND	7.37	6.35	5.34	3FS-348
6	24.0 @ 0.250	48.0 @ 0.125	MT2231-ND	8.21	7.08	5.95	3FS-448
12	24.0 @ 0.500	48.0 @ 0.250	MT2232-ND	9.34	8.05	6.77	3FS-548
1.1	28.0 @ 0.040	56.0 @ 0.020	MT2233-ND	7.08	6.10	5.13	3FS-256
2.4	28.0 @ 0.090	56.0 @ 0.045	MT2234-ND	7.37	6.35	5.34	3FS-356
6	28.0 @ 0.220	56.0 @ 0.110	MT2235-ND	8.21	7.08	5.95	3FS-456
12	28.0 @ 0.440	56.0 @ 0.220	MT2236-ND	9.34	8.05	6.77	3FS-556

VA (Size)	Secondary RMS Rating Parallel VAC @ A	Series VCT @ A	Digi-Key Part No.	Price Each 1	10	25	Tamura Part No.
115V/230V Dual Primary							
1.1	5.0 @ 0.220	10.0 @ 0.110	MT2096-ND	8.21	7.08	5.95	3FD-210
2.4	5.0 @ 0.500	10.0 @ 0.250	MT2097-ND	8.50	7.33	6.16	3FD-310
6	5.0 @ 1.200	10.0 @ 0.600	MT2098-ND	9.34	8.05	6.77	3FD-410
12	5.0 @ 2.400	10.0 @ 1.200	MT2099-ND	10.76	9.28	7.80	3FD-510
1.1	6.3 @ 0.180	12.6 @ 0.090	MT2101-ND	7.65	6.80	5.78	3FD-212
2.4	6.3 @ 0.400	12.6 @ 0.200	MT2102-ND	7.74	6.88	5.85	3FD-312
6.0	6.3 @ 1.000	12.6 @ 0.500	MT2103-ND	8.37	7.44	6.33	3FD-412
12	6.3 @ 2.000	12.6 @ 1.000	MT2104-ND	9.63	8.56	7.28	3FD-512
1.1	8.0 @ 0.140	16.0 @ 0.070	MT2105-ND	7.65	6.80	5.78	3FD-216
2.4	8.0 @ 0.300	16.0 @ 0.150	MT2106-ND	7.74	6.88	5.85	3FD-316
6.0	8.0 @ 0.800	16.0 @ 0.400	MT2107-ND	8.37	7.44	6.33	3FD-416
12	8.0 @ 1.600	16.0 @ 0.800	MT2108-ND	9.63	8.56	7.28	3FD-516
1.1	10.0 @ 0.110	20.0 @ 0.055	MT2109-ND	7.65	6.80	5.78	3FD-220
2.4	10.0 @ 0.240	20.0 @ 0.120	MT2110-ND	7.74	6.88	5.85	3FD-320
6.0	10.0 @ 0.600	20.0 @ 0.300	MT2111-ND	8.37	7.44	6.33	3FD-420
12	10.0 @ 1.200	20.0 @ 0.600	MT2112-ND	9.63	8.56	7.28	3FD-520
1.1	12.0 @ 0.090	24.0 @ 0.045	MT2113-ND	7.65	6.80	5.78	3FD-224
2.4	12.0 @ 0.200	24.0 @ 0.100	MT2114-ND	7.74	6.88	5.85	3FD-324
6.0	12.0 @ 0.500	24.0 @ 0.250	MT2115-ND	8.37	7.44	6.33	3FD-424
12	12.0 @ 1.000	24.0 @ 0.500	MT2116-ND	9.63	8.56	7.28	3FD-524
1.1	14.0 @ 0.080	28.0 @ 0.040	MT2117-ND	7.65	6.80	5.78	3FD-228
2.4	14.0 @ 0.170	28.0 @ 0.085	MT2118-ND	7.74	6.88	5.85	3FD-328
6.0	14.0 @ 0.400	28.0 @ 0.200	MT2119-ND	8.37	7.44	6.33	3FD-428
12	14.0 @ 0.840	28.0 @ 0.420	MT2120-ND	9.63	8.56	7.28	3FD-528
1.1	18.0 @ 0.060	36.0 @ 0.030	MT2121-ND	7.65	6.80	5.78	3FD-236
2.4	18.0 @ 0.130	36.0 @ 0.065	MT2122-ND	7.74	6.88	5.85	3FD-336
6.0	18.0 @ 0.340	36.0 @ 0.170	MT2123-ND	8.37	7.44	6.33	3FD-436
12	18.0 @ 0.700	36.0 @ 0.350	MT2124-ND	9.63	8.56	7.28	3FD-536
1.1	24.0 @ 0.046	48.0 @ 0.023	MT2125-ND	8.21	7.08	5.95	3FD-248
2.4	24.0 @ 0.100	48.0 @ 0.050	MT2126-ND	8.50	7.33	6.16	3FD-348
6	24.0 @ 0.250	48.0 @ 0.125	MT2127-ND	9.34	8.05	6.77	3FD-448
12	24.0 @ 0.500	48.0 @ 0.250	MT2128-ND	10.76	9.28	7.80	3FD-548
1.1	28.0 @ 0.040	56.0 @ 0.020	MT2129-ND	8.21	7.08	5.95	3FD-256
2.4	28.0 @ 0.090	56.0 @ 0.045	MT2130-ND	8.50	7.33	6.16	3FD-356
6	28.0 @ 0.220	56.0 @ 0.110	MT2131-ND	9.34	8.05	6.77	3FD-456
12	28.0 @ 0.440	56.0 @ 0.220	MT2132-ND	10.76	9.28	7.80	3FD-556

Note: To obtain output voltage, load current must be met, ratings are based on 120V nominal input.

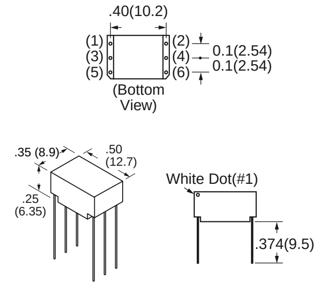
Encapsulated Pulse Transformers

Isolation and Data Interface

Specifications: • **Average Power Rating (40°C Rise):** 500mW • **Dissipation Rating:** 150mW • **Peak Pulse Voltage:** 100V • **Dielectric Strength:** DC500V 1 minute • **Insulation Resistance:** DC500V 10000MΩ min.

Primary Inductance mH (min.)*	Primary ET Product V μS (min.)	Rise Time ns (max.)	Pin Out Primary	Secondary	Tertiary	Turns Ratio (±5%) Pri : Sec : Ter	Digi-Key Part No.	Price Each 1	10	25	Tamura Part No.
5.00	25.0	10.5	1, 2	3, 4	5, 6	1 : 1 : 1	MT4201-ND	3.60	3.20	2.72	G500
2.00	16.0	8.2	1, 2	3, 4	5, 6	1 : 1 : 1	MT4202-ND	3.24	2.88	2.45	G501
0.50	8.5	5.3	1, 2	3, 4	5, 6	1 : 1 : 1	MT4203-ND	2.88	2.56	2.18	G502
0.20	5.0	4.2	1, 2	3, 4	5, 6	1 : 1 : 1	MT4204-ND	2.70	2.40	2.04	G503
0.05	5.2	5.6	1, 2	3, 4	5, 6	1 : 1 : 1	MT4205-ND	2.70	2.40	2.04	G504
5.00	25.0	16.0	1, 2	3, 4	5, 6	2 : 1 : 1	MT4210-ND	4.14	3.68	3.13	G505
2.00	16.0	11.0	1, 2	3, 4	5, 6	2 : 1 : 1	MT4211-ND	3.60	3.20	2.72	G506
0.50	8.5	5.6	1, 2	3, 4	5, 6	2 : 1 : 1	MT4212-ND	3.06	2.72	2.32	G507
2.00	16.0	8.2	1, 3ct, 5	2, 4ct, 6	—	1ct : 1ct	MT4207-ND	3.24	2.88	2.45	G508
0.50	8.5	5.3	1, 3ct, 5	2, 4ct, 6	—	1ct : 1ct	MT4208-ND	2.88	2.56	2.18	G509
2.00	16.0	11.0	1, 3ct, 5	2, 4ct, 6	—	2ct : 1ct	MT4213-ND	3.24	2.88	2.45	G512
1.20	10.0	5.3	1, 2	3, 4	5, 6	1 : 1 : 1	MT4206-ND	3.24	2.88	2.45	G513
0.20	5.0	3.2	1, 3ct, 5	2, 4ct, 6	—	2ct : 1ct	MT4214-ND	2.70	2.40	2.04	G515
0.50	8.5	5.6	1, 2	3, 4	—	1 : 1.3	MT4209-ND	2.70	2.40	2.04	G516

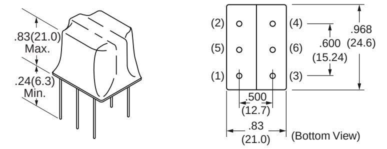
* Primary Inductance is typical primary open circuit inductance.



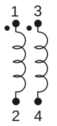
Encapsulated SCR and Triac Trigger Transformers

Designed for isolation in half and full wave SCR or TRIAC control circuits. Pass 2600V rms dielectric breakdown testing.

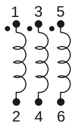
Schematic No.	Turns Ratio (±5%)	Primary mH (min.)	E.T. V μSec (min.)	Digi-Key Part No.	Price Each 1	10	25	Tamura Part No.
1	1 : 1	1.0	90	MT4301-ND	13.70	12.18	10.36	STT-101
1	1 : 1	5.0	200	MT4302-ND	13.70	12.18	10.36	STT-102
1	1 : 1	10.0	280	MT4303-ND	13.70	12.18	10.36	STT-103
2	1 : 1 : 1	1.0	90	MT4304-ND	15.28	13.58	11.55	STT-104
2	1 : 1 : 1	5.0	200	MT4305-ND	15.28	13.58	11.55	STT-105
2	1 : 1 : 1	10.0	280	MT4306-ND	15.28	13.58	11.55	STT-106
1	2 : 1	1.0	90	MT4307-ND	13.70	12.18	10.36	STT-107
1	2 : 1	5.0	200	MT4308-ND	13.70	12.18	10.36	STT-108
1	2 : 1	10.0	280	MT4309-ND	13.70	12.18	10.36	STT-109
2	2 : 1 : 1	1.0	90	MT4310-ND	15.28	13.58	11.55	STT-110
2	2 : 1 : 1	5.0	200	MT4311-ND	15.28	13.58	11.55	STT-111
2	2 : 1 : 1	10.0	280	MT4312-ND	15.28	13.58	11.55	STT-112



Schematic 1



Schematic 2



Telephone Coupling Transformers

For Interconnecting Data/Voice Telephone Lines per FCC part 68.
Frequency Response: 300-3500Hz±0.5dB. **Hi-pot:** 1500V RMS. **Impedance Matching:** ±10%.
UL 1459, File #138028.
Drawings show maximum number of pins. Actual parts may have fewer pins.

Fig. 1

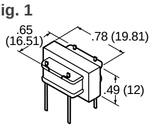


Fig. 2

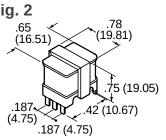


Fig. 3

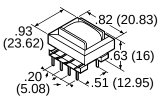


Fig. 4

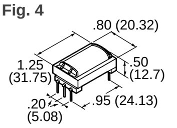


Fig. 5

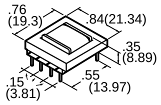


Fig. 6

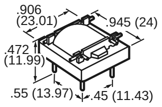


Fig. 7 - Surface Mt.

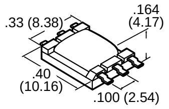


Fig. 8 - Surface Mt.

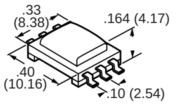


Fig. 9

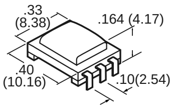


Fig. 10 - Surface Mt.

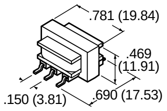
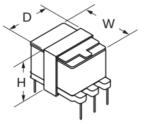


Fig. 11



	Dimensions Inch (mm): W	D	H
MT4139-ND (TTC-167)	.69 (17.5)	.61 (15.5)	.55 (14.0)
MT4140-ND (TTC-170)	.51 (13.0)	53 (13.4)	.42 (10.7)

Fig. 12

UL1950 Third Addition

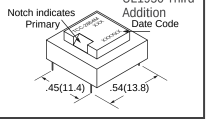
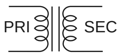


Fig.	Impedance Primary	Impedance Secondary	IDC (mA)	Insertion Loss (dB) ◊	Schematic	Pinout Primary	Pinout Secondary	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 25	Tamura Part No.
1	600	600	0	1.0	A	1 - 3	4 - 6	MT4112-ND	4.73	4.20	3.57	T1104
1	600	600	0	1.2	A	1 - 3	4 - 6	MT4133-ND	3.51	3.12	2.66	TTC-02
2‡	600	600	0	1.0	A	1 - 3	4 - 6	MT4113-ND	9.83	8.74	7.43	TTC-110
2	600CT	600CT	0	1.0	B	1 - 2CT - 3	4 - 5CT - 6	MT4114-ND	11.34	10.08	8.57	TTC-109
2	600	600/600	0	1.0	D	1 - 6	2 - 5 / 3 - 4	MT4115-ND*	13.34	11.86	10.09	TTC-10
2‡	600	600	90	2.0	A	1 - 3	4 - 6	MT4134-ND	2.95	2.62	2.23	TTC-105
2	600	600CT	90	2.0	C	1 - 3	4 - 5CT - 6	MT4135-ND	3.04	2.70	2.30	TTC-105-1
2	600CT	600CT	0	1.2	B	1 - 2CT - 3	4 - 5CT - 6	MT4136-ND	2.95	2.62	2.23	TTC-108
2‡	4K	600	0	0.9	A	1 - 3	4 - 6	MT4137-ND	3.87	3.44	2.93	TTC-13
3	600	600	90	2.0	A	2 - 3	5 - 8	MT4116-ND	8.33	7.40	6.29	TTC-109N
3	600	600CT	90	2.0	C	2 - 3	5 - 6CT - 8	MT4117-ND	8.33	7.40	6.29	TTC-109N1
4‡	600	600	90	1.8	A	1 - 3	4 - 6	MT4118-ND	9.61	8.54	7.26	TTC-142
4	600	600 split	90	1.8	D	1 - 6	2 - 5 Split / 3 - 4	MT4119-ND	9.92	8.82	7.50	TTC-142-2
4‡	600	600	90	1.6	A	1 - 3	4 - 6	MT4138-ND	5.09	4.52	3.85	TTC-143
4	600	600/600	50	1.0§	D	1 - 6	2 - 5 / 3 - 4	MT4141-ND	5.36	4.76	4.05	TTC-174
5	600	600	50	1.8	A	1 - 4	5 - 8	MT4120-ND	10.13	9.00	7.65	TTC-218
6	600	470	100	2.5	A	1 - 2	3 - 4	MT4123-ND	6.05	5.38	4.58	TTC-264
7	600	346	0	2.75	A	1 - 3	4 - 6	MT4121-ND†	13.48	11.98	10.19	TTC-103SL
8	600	346	0	2.75	A	1 - 3	4 - 6	MT4122-ND	13.48	11.98	10.19	TTC-203SL
9	600	346	0	2.7	A	1 - 3	4 - 6	MT4124-ND	13.48	11.98	10.19	TTC-303SL
10	600	600	0	1.0	A	1 - 3	4 - 6	MT4130-ND	11.54	10.26	8.73	TS1104
10	600	600/600	0	.7	D	1 - 6	3 - 4 / 2 - 5	MT4132-ND	14.00	12.44	10.58	TS1220
11	10K	10K	0	1.4	A	1 - 3	4 - 6	MT4139-ND	3.69	3.28	2.79	TTC-167
11	600	600	0	1.7	A	1 - 3	4 - 6	MT4140-ND	3.33	2.96	2.52	TTC-170
12	600	470	100	2.5	A	1 - 2	3 - 4	MT4142-ND	4.52	4.02	3.42	TTC-264M

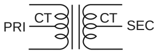
◊ Typical insertion loss (IL) in dB @ rated unbalanced maDC, 0dBm and 1kHz.
§ Add 3dB fo IL for single hybrid use with balancing network on 2--wire side.
‡ Has a 4-pin configuration

† TSL103SL must be mounted through a circuit board cutout .4" (10.16mm) x .33" (8.38mm)
* Two required for conventional hybrid operation, the insertion loss does not include 3dB in hybrid balance network.

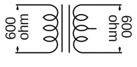
Schematic A



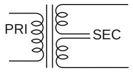
Schematic B



Schematic C



Schematic D

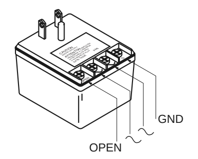


AC-AC Wall Plug-In Transformers

Screw Terminal Type - 120VAC, 60Hz

Features:

- UL Class II Xfmrs-UL 1310 Listed
- Thermal overload protection
- Material: Black ABS resin/UL 94-V0.
- Screw terminal, 4 each, #6-32



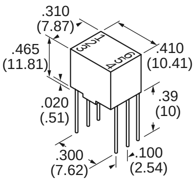
Rated Output Volts AC	Rated Output mA AC	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 25	Tamura Part No.
10.0	1200	MT7101-ND	11.77	10.46	8.90	820A0060-03
10.0	2000	MT7109-ND	13.75	12.22	10.39	830A0060-03
12.0	1000	MT7102-ND	11.77	10.46	8.90	820A0061-03
12.0	1600	MT7110-ND	13.75	12.22	10.39	820A0061-03
14.0	850	MT7103-ND	11.77	10.46	8.90	820A0062-03
14.0	1430	MT7111-ND	13.75	12.22	10.39	830A0062-03
16.0	750	MT7104-ND	11.77	10.46	8.90	820A0063-03
16.0	1250	MT7112-ND	13.05	11.60	9.86	830A0063-03
18.0	650	MT7105-ND	11.77	10.46	8.90	820A0064-03
18.0	1110	MT7113-ND	13.05	11.60	9.86	830A0064-03
20.0	600	MT7106-ND	11.77	10.46	8.90	820A0065-03
20.0	1000	MT7114-ND	13.05	11.60	9.86	830A0065-03
22.0	550	MT7107-ND	11.77	10.46	8.90	820A0066-03
22.0	900	MT7115-ND	13.05	11.60	9.86	830A0066-03
24.0	500	MT7108-ND	11.77	10.46	8.90	820A0067-03
24.0	830	MT7116-ND	13.05	11.60	9.86	830A0067-03

Note: Output voltage shown is at full load current.

Encapsulated Transformers — MIL-T-27 Type

Telecom, Input, Interface, Isolation and Output Impedance Matching

Features:
- FCC Part 68 Models available ‡
- Dielectric Strength: 1kVrms
- Operating Temperature: ≤105°C
- Frequency Response: ±2dB, .3≈100kHz.



Physical pin locations vary, see chart.

Matching Impedance Primary : Secondary	PRI § maDC	PRI • (MW)	Pin Location Primary	Pin Location Secondary	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 25	Tamura Part No.
200kCT : 1kCT	0.00	10	1 - 2CT - 3	4 - 5CT - 6	MT4143-ND	18.00	16.00	13.60	MET-01
25kCT : 1kCT	0.50	30	1 - 2CT - 3	4 - 5CT - 6	MT4144-ND	17.55	15.60	13.26	MET-05
10kCT : 10kCT	1.00	40	1 - 2CT - 3	4 - 5CT - 6	MT4145-ND	17.55	15.60	13.26	MET-09
10kCT : 2kCT	1.00	40	1 - 2CT - 3	4 - 5CT - 6	MT4146-ND	17.55	15.60	13.26	MET-11
10kCT : 500CT	1.00	40	1 - 2CT - 3	4 - 5CT - 6	MT4147-ND	17.55	15.60	13.26	MET-17
1.6kCT : 3.2	2.50	50	1 - 2CT - 3	4 - 6	MT4148-ND	14.33	12.74	10.83	MET-23
1k : 50	3.00	50	1 - 3	4 - 6	MT4149-ND	14.33	12.74	10.83	MET-28
900CT : 600	3.00	50	1 - 2CT - 3	4 - 6	MT4150-ND‡	15.66	13.92	11.84	MET-29
600CT : 600CT	3.00	50	1 - 2CT - 3	4 - 5CT - 6	MT4111-ND‡	25.83	22.96	19.52	MET-31
600 : 600CT†	3.00	50	1 - 2	3 - 4 / 5 - 6	MT4151-ND	15.21	13.52	11.50	MET-32
600CT : 8	4.50	50	1 - 2CT - 3	4 - 6	MT4153-ND	13.91	12.36	10.51	MET-35
500 : 500CT†	3.00	50	1 - 2	3 - 4 / 5 - 6	MT4154-ND	15.66	13.92	11.84	MET-38
500 : 50	3.00	50	1 - 3	4 - 6	MT4155-ND	13.91	12.36	10.51	MET-39
150 : 12	10.00	50	1 - 3	4 - 6	MT4156-ND	13.91	12.36	10.51	MET-42
600 : 600	3.00	50	1 - 3	4 - 6	MT4110-ND‡	24.50	21.78	18.52	MET-46
600 : 600CT	3.00	50	1 - 2	3 - 4 / 5 - 6	MT4152-NDΔ	15.21	13.52	11.50	MET-59
MU Metal Shield, MET Series, Slip-On Can					MT4157-ND	2.50	2.22	1.89	METC-99

† CT-Winding can be connected as a center tapped winding or as two isolated windings.
§ PRI maDC-Primary maximum rated unbalanced current in milli-amps, DC.
Δ Has special pinout

• PWR (mW)-Maximum power level in milli-watts @ 300Hz
‡ Meets FCC part 68 (hi-pot 1.5kV or 1.0kV).

MagneTek TRIAD™ Audio Transformers

Data/Voice Coupling Transformers

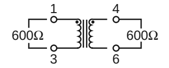
SPECIFICATIONS: Designed to meet FCC Part 68.

Longitudinal Balance: (FCC68.310): 60dB min. 200-1000 HZ, 45 dB mn. 1000-4000 HZ.

Dielectric Strength: (FCC 68.304): 1500V.

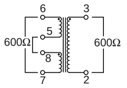
Freq. Range: Data/Voice = 300 - 3500 HZ, Data = 800 - 3500 HZ

Schematic A

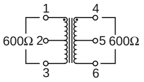


TY-305P	PRI 2, 3; SEC 6, 7
TY-307P, TY-310P TY-311P, TY-400P TY-301P, TY-303P TY-402P	PRI 1, 3; SEC 4, 6

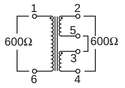
Schematic B



Schematic C



Schematic D



Schematic E

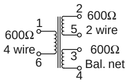


Fig. 1

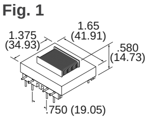


Fig. 2

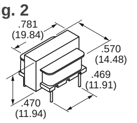


Fig. 3

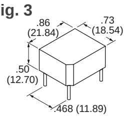


Fig. 4

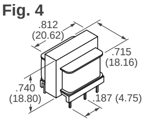


Fig. 5

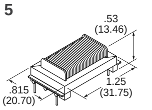


Fig. 6

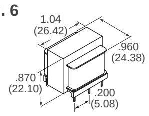


Fig. 7

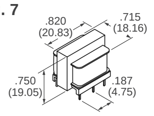


Fig.	Schematic	Impedance Pri.	Impedance Sec.	IDC Max (mA)	Insertion Loss (dB)	Digi-Key Part No.	Price Each 1	Price Each 50	Price Each 100	MagneTek Part No.
Data/Voice Coupling Transformers										
1	A	600	600	100	1.5	237-1128-ND	10.94	7.14	6.06	TY-305P
1	B	600 Split	600	75	1.5	237-1129-ND	10.94	7.14	6.06	TY-306P
2	A	600	600	0	1.0	237-1130-ND	6.41	4.18	3.55	TY-307P
3	A	600	600	0	1.0	237-1131-ND	7.54	4.92	4.17	TY-310P
4‡	A	600	600	0	1.0	237-1132-ND	5.56	3.63	3.08	TY-311P
4	C	600CT*	600CT*	0	1.0	237-1127-ND	5.56	3.63	3.08	TY-304P
4	A	600	900	0	1.0	237-1124-ND	5.56	3.63	3.08	TY-301P
4	A	4000	600	0	1.0	237-1126-ND	5.56	3.63	3.08	TY-303P
7‡	A	600	600	90	1.75	237-1133-ND	8.34	5.44	4.62	TY-400P
7	C	600CT*	600CT*	90	1.75	237-1134-ND	8.34	5.44	4.62	TY-401P
5‡	A	600	600	90	1.75	237-1135-ND	6.89	4.50	3.82	TY-402P
5	D	600	600 Split	90	1.75	237-1136-ND	6.89	4.50	3.82	TY-403P
Data/Voice Dual Transformer Hybrids										
4	E	600 (4W)	600/600	0	.80	237-1123-ND†	5.56	3.63	3.08	TY-300P
6	E	600 (4W)	600/600	0	.65	237-1125-ND†	8.33	5.44	4.62	TY-302P

*CT = Center Tap ‡ Four-pin configuration

†Two required for conventional hybrid operation, the insertion loss does not include 3dB in hybrid balance network.

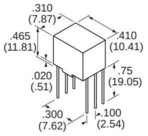
MIL-T-27E Audio Transformers

DESCRIPTION: The line of Red Spec audio transformers is designed and constructed to meet the rigid requirements of MIL-T-27E.

SPECIFICATIONS: Freq. Response Ranges: 300 Hz to 150 kHz

TECHNICAL NOTES: • HI-Pot Test: 1,000 VRMS • Working Voltage: 150 VDC

Pin-Out #	Pinout Primary	Pinout Secondary
1	1,2	3,4
2	1, 2CT, 3	4, 5
3	1, 2CT, 3	4, 5CT, 6
4	1, 2	3, 4,§, 5, 6



Power Level in mW	Matching Impedance Pri.	Matching Impedance Sec.	DC Unbal. in Pri. Max(mA)	Pin-Out #	Digi-Key Part No.	Price Each 1	Price Each 50	Price Each 100	MagneTek Part No.
10	200,000 CT*	1,000 CT*	0.0	3	237-1137-ND	21.29	13.90	11.79	SP-4
50	10,000 CT*	2,000 CT*	1.0	3	237-1141-ND	21.21	13.85	11.75	SP-21
	1,000	50	3.0	1	237-1144-ND	17.25	11.26	9.55	SP-33
	150 CT*	12	10.0	2	237-1145-ND	15.51	10.13	8.59	SP-42
	7,500 CT*	12	1.0	2	237-1146-ND	18.39	12.00	10.18	SP-48
	900 CT*	600	4.0	2	237-1149-ND	19.12	12.47	10.58	SP-51
	10,000 CT*	10,000 CT*	1.0	3	237-1151-ND	16.93	11.05	9.38	SP-66
	600 CT*	600 CT*	3.0	3	237-1152-ND	18.64	12.17	10.32	SP-67
	600	600 CT/150§	3.0	4	237-1154-ND	18.56	12.11	10.28	SP-69
	600	600	3.0	1	237-1155-ND	17.48	11.42	9.69	SP-70
—	—	Shield Only	—	—	237-1157-ND	2.76	1.80	1.53	SP-310

*CT = Center Tap § Split Secondary

Audio PC Mount Transformers

DESCRIPTION:

Audio transformers are used in line matching, telephone coupling, pulse trigger and driver applications.

SPECIFICATIONS:

Freq. Response Ranges: 200 - 15,000Hz

Fig. 1

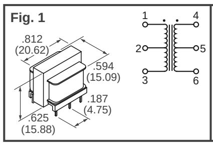


Fig. 2

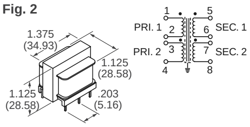


Fig.	Matching Impedance Pri.	Matching Impedance Sec.	DC Unbal. in Pri. Max (mA)	Digi-Key Part No.	Price Each 1	Price Each 50	Price Each 100	MagneTek Part No.
1	10,000 CT*	10,000 CT*	4 Ma	237-1118-ND	3.89	2.54	2.16	TY-141P
1	10,000 CT*	2,000 CT*	4 Ma	237-1119-ND	3.89	2.54	2.16	TY-142P
1	15,000 CT*	15,000 CT*	4 Ma	237-1120-ND	3.89	2.54	2.16	TY-144P
1	600 CT*	600 CT*	15 Ma	237-1121-ND	3.89	2.54	2.16	TY-145P
2	600 CT/150§	600 CT/150§	—	237-1122-ND	7.22	4.72	4.00	TY-146P

*CT = Center Tap § Split Winding

MagneTek TRIAD™ Switchmode Transformers

High Frequency Current Sense

DESCRIPTION: TRIAD current sense transformers are used to detect the current passing through a conductor. They are constructed of UL rated 130°C materials. **Freq. Range:** 20 kHz- 200 kHz

Fig. 1

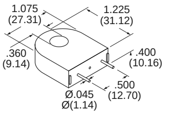


Fig. 2

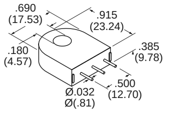


Fig.	Min. Ind. mH	ET VµSEC Ref 20 kHz	Pri. Amps	Digi-Key Part No.	Price Each 1	Price Each 50	Price Each 100	MagneTek Part No.
1	14.0	2000	110.0 RMS	237-1096-ND	6.11	3.99	3.39	CST206-1A
	56.0	4000	80.0 RMS	237-1098-ND	6.11	3.99	3.39	CST206-2A
	130.0	6000	70.0 RMS	237-1100-ND	6.11	3.99	3.39	CST206-3A
	3.5	500	35.0 RMS	237-1104-ND	4.11	2.69	2.28	CST306-1A
	14.0	1000	25.0 RMS	237-1106-ND	4.11	2.69	2.28	CST306-2A
	55.0	2000	25.0 RMS	237-1108-ND	4.11	2.69	2.28	CST306-3A
2	14.0	2000	110.0 RMS	237-1097-ND	6.67	4.35	3.69	CST206-1T*
	56.0	4000	80.0 RMS	237-1099-ND	6.67	4.35	3.69	CST206-2T*
	130.0	6000	70.0 RMS	237-1101-ND	6.67	4.35	3.69	CST206-3T*
	3.5	500	35.0 RMS	237-1105-ND	4.67	3.05	2.59	CST306-1T*
	14.0	1000	25.0 RMS	237-1107-ND	4.67	3.05	2.59	CST306-2T*
	55.0	2000	25.0 RMS	237-1109-ND	4.67	3.05	2.59	CST306-3T*

*T Suffix = Center Tapped 3-pin version

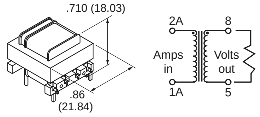
237-1102-ND (CST206-KIT) - 6 piece kit (one of each in series CST206). **$33.30**

237-1110-ND (CST306-KIT) - 6 piece kit (one of each in series CST306). **$22.22**

Low Frequency Current Sense

DESCRIPTION: Designed to monitor current in low freq. applications. Frequencies from 50 Hz to 400 Hz, current from .1 to 30 amperes.

TECHNICAL NOTES: • Turns ratio: Primary to sense 1:500. • Suggested burden resistor: 60 ohms. Hi-Pot: 2,500 volts.

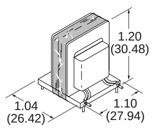


Primary DCR Max. µOhms	Sense DCR Max. Ohms	Typ. Output	Digi-Key Part No.	Price Each 1	Price Each 50	Price Each 100	MagneTek Part No.
250	21	110 mV/Amp	237-1103-ND	2.89	1.89	1.60	CSE187-L

High Frequency Gate Drive

DESCRIPTION: TRIAD gate drive transformers are used to isolate the control circuitry from the line-connected switches such as with power supplies. The windings are interleaved for the lowest possible practical leakage inductance. Maximum leakage Inductance: 2.5 µH. Features operating frequencies up to 200 kHz.

TECHNICAL NOTES: • Hi-Pot tested: 3,750 VRMS. • Pin-out: Drive = Pins 1, 2. Gate = Pins 3, 6 and Dual Gate = Pins 3, 4; 5, 6.



Max. DCR Gate	Max. ET Product	Turns Ratio	Min. Inductance	Digi-Key Part No.	Price Each 1	Price Each 50	Price Each 100	MagneTek Part No.
.350 Ohms	540 VµSec	1:1	.680 mH	237-1111-ND	15.56	10.15	8.61	GDE25-1
.650 Ohms	540 VµSec	1:1:1	.680 mH	237-1112-ND*	15.56	10.15	8.61	GDE25-2
.350 Ohms	840 VµSec	1.5:1	1.50 mH	237-1113-ND	15.56	10.15	8.61	GDE25-3
.650 Ohms	840 VµSec	1.5:1:1	1.50 mH	237-1114-ND*	15.56	10.15	8.61	GDE25-4
.875 Ohms	540 VµSec	1:1.5	.680 mH	237-1115-ND	15.56	10.15	8.61	GDE25-5
1.75 Ohms	540 VµSec	1:1.5:1.5	.680 mH	237-1116-ND*	15.56	10.15	8.61	GDE25-6

* Dual Secondary Gate

237-1117-ND (GDE25-KIT) - 6-piece kit (one of each)..**$88.89**

MagneTek TRIAD™ Switchmode / High Frequency Inductors

Common Mode Inductors

DESCRIPTION: • TRIAD common mode EMI suppression inductors are used to eliminate noise common to all lines. • Meeting VDE, IEC, UL and CSA requirements. • Constructed with UL rated 130°C materials. • Hi-Pot Tested: 2,500 VRMS.

Fig. 1

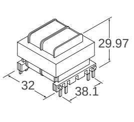


Fig. 2

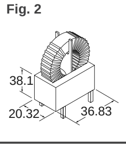


Fig. 3

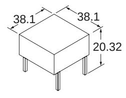


Fig.	Induct. mH min.	Amps. R.M.S	Max DC Resist. (Ohms)	Min. Leakage	Pin-Out Winding I	Pin-Out Winding II	Digi-Key Part No.	Price Each 1	Price Each 50	Price Each 100	MagneTek Part No.
E-Core Inductors											
1	4.40	5.500	.049	45.0µH	1 & 6	7 & 12	237-1210-ND	6.78	4.43	3.76	CME375-1
	6.90	4.400	.077	70.0µH			237-1211-ND	6.78	4.43	3.76	CME375-2
	10.9	3.500	.122	125.0µH			237-1212-ND	6.78	4.43	3.76	CME375-3
	17.8	2.700	.196	180.0µH			237-1213-ND	6.78	4.43	3.76	CME375-4
	28.6	2.200	.316	300.0µH			237-1214-ND	6.78	4.43	3.76	CME375-5
	43.6	1.750	.489	440.0µH			237-1215-ND	6.78	4.43	3.76	CME375-6
	70.3	1.380	.785	720.0µH			237-1216-ND	6.78	4.43	3.76	CME375-7
	111.6	1.100	1.240	1.1mH			237-1217-ND	6.78	4.43	3.76	CME375-8
	176.1	0.870	1.980	1.8mH			237-1218-ND	6.78	4.43	3.76	CME375-9
Encapsulated Toroidal Inductors											
2	2.00	7.50	.020	25.0µH	1 & 2	3 & 4	237-1230-ND	4.78	3.12	2.65	CMT908-V1
	4.00	5.20	.040	45.0µH			237-1231-ND	4.78	3.12	2.65	CMT908-V2
	8.00	3.20	.120	90.0µH			237-1232-ND	4.78	3.12	2.65	CMT908-V3
	16.00	2.60	.160	180.0µH			237-1233-ND	4.78	3.12	2.65	CMT908-V4
3	2.00	7.50	.020	25.0µH	1 & 2	3 & 4	237-1234-ND	4.78	3.12	2.65	CMT908-H1
	4.00	5.20	.040	45.0µH			237-1235-ND	4.78	3.12	2.65	CMT908-H2
	8.00	3.20	.120	90.0µH			237-1236-ND	4.78	3.12	2.65	CMT908-H3
	16.00	2.60	.160	180.0µH			237-1237-ND	4.78	3.12	2.65	CMT908-H4

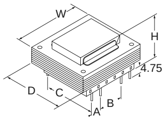
237-1219-ND (CME375-KIT) 9 piece kit - one of each E-Core Inductor Series CME375.....................................**$55.56**

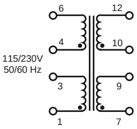
237-1238-ND (CMT908-KIT) 8 piece kit - one of each Encapsulated Toroidal Ind. Series CMT908 ....**$33.33**

MagneTek TRIAD™

PC Mount - World Series™ Power Transformers

- World Series dual bobbin construction transformers meet U.S. & international standards including CSA, IEC, VDE & UL requirements.
- Hi-Pot Test: 4,000 VRMS
- Primary: 115/230V, 50/60 Hz





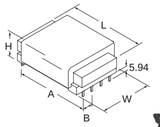
VA Size	Dimensions – Inch (mm) H	W	D	A	B	C	Pin Dim.	Wt. Kg
2.5	1.125 (28.58)	1.625 (41.28)	1.3125 (33.34)	.200 (5.08)	.250 (6.35)	1.000 (25.40)	.025 (.64)	.25 (.11)
5.0	1.375 (34.93)	1.625 (41.28)	1.3125 (33.34)	.200 (5.08)	.400 (10.16)	1.000 (25.40)	.025 (.64)	.37 (.17)
10.0	1.375 (34.93)	1.875 (47.63)	1.5625 (39.69)	.200 (5.08)	.400 (10.16)	1.140 (28.96)	.031 (.79)	.53 (.24)
20.0	1.625 (41.28)	2.25 (57.15)	1.875 (47.63)	.400 (10.16)	.400 (10.16)	1.460 (37.08)	.031 (.79)	.90 (.41)
30.0	1.5625 (39.69)	2.625 (66.68)	2.1875 (55.56)	.550 (13.97)	.275 (6.98)	1.680 (42.67)	.045 (1.14)	1.15 (.52)
56.0	1.8125 (46.04)	3.000 (76.20)	2.500 (63.50)	.600 (15.24)	.300 (7.62)	1.900 (48.26)	.045 (1.14)	1.70 (.77)

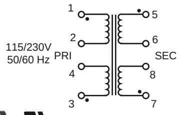
VA (Size)	Parallel VAC @ A	Series VCT* @ A	Digi-Key Part No.	Price Each 1	50	100	MagneTek Part No.
2.5	5 @ 0.5	10 @ 0.25	237-1060-ND	9.62	6.51	5.70	VPP10-250
5.0	5 @ 1.0	10 @ 0.5	237-1081-ND	10.36	7.04	6.16	VPP10-500
10.0	5 @ 2.0	10 @ 1.0	237-1053-ND	11.60	7.76	6.78	VPP10-1000
20.0	5 @ 4.0	10 @ 2.0	237-1067-ND	14.11	9.35	8.18	VPP10-2000
30.0	5 @ 6.0	10 @ 3.0	237-1074-ND	16.22	11.08	9.69	VPP10-3000
56.0	5 @ 11.2	10 @ 5.6	237-1088-ND	19.84	12.30	10.44	VPP10-5600
2.5	6.3 @ 0.4	12.6 @ 0.2	237-1061-ND	9.62	6.51	5.70	VPP12-200
5.0	6.3 @ 0.8	12.6 @ 0.4	237-1082-ND	10.36	7.04	6.16	VPP12-400
10.0	6.3 @ 1.6	12.6 @ 0.8	237-1054-ND	11.60	7.76	6.78	VPP12-800
20.0	6.3 @ 3.2	12.6 @ 1.6	237-1068-ND	14.11	9.35	8.18	VPP12-1600
30.0	6.3 @ 4.8	12.6 @ 2.4	237-1075-ND	16.22	11.08	9.69	VPP12-2400
56.0	6.3 @ 8.8	12.6 @ 4.4	237-1089-ND	19.84	12.30	10.44	VPP12-4400
2.5	8 @ 0.3	16 @ 0.15	237-1062-ND	9.62	6.51	5.70	VPP16-150
5.0	8 @ 0.62	16 @ 0.31	237-1083-ND	10.36	7.04	6.16	VPP16-310
10.0	8 @ 1.25	16 @ 0.62	237-1055-ND	11.60	7.76	6.78	VPP16-620
20.0	8 @ 2.5	16 @ 1.25	237-1069-ND	14.11	9.35	8.18	VPP16-1250
30.0	8 @ 3.8	16 @ 1.9	237-1076-ND	16.22	11.08	9.69	VPP16-1900
56.0	8 @ 7.0	16 @ 3.5	237-1090-ND	19.84	12.30	10.44	VPP16-3500
2.5	10 @ 0.24	20 @ 0.12	237-1063-ND	9.62	6.51	5.70	VPP20-120
5.0	10 @ 0.5	20 @ 0.25	237-1084-ND	10.36	7.04	6.16	VPP20-250
10.0	10 @ 1.0	20 @ 0.5	237-1056-ND	11.60	7.76	6.78	VPP20-500
20.0	10 @ 2.0	20 @ 1.0	237-1070-ND	14.11	9.35	8.18	VPP20-1000
30.0	10 @ 3.0	20 @ 1.5	237-1077-ND	16.22	11.08	9.69	VPP20-1500
56.0	10 @ 5.6	20 @ 2.8	237-1091-ND	19.84	12.30	10.44	VPP20-2800
2.5	12 @ 0.2	24 @ 0.1	237-1064-ND	9.62	6.51	5.70	VPP24-100
5.0	12 @ 0.42	24 @ 0.21	237-1085-ND	10.36	7.04	6.16	VPP24-210
10.0	12 @ 0.84	24 @ 0.42	237-1057-ND	11.60	7.76	6.78	VPP24-420
20.0	12 @ 1.66	24 @ 0.83	237-1071-ND	14.11	9.35	8.18	VPP24-830
30.0	12 @ 2.50	24 @ 1.25	237-1078-ND	16.22	11.08	9.69	VPP24-1250
56.0	12 @ 4.66	24 @ 2.33	237-1092-ND	19.84	12.30	10.44	VPP24-2330
2.5	14 @ 0.18	28 @ 0.09	237-1065-ND	9.62	6.51	5.70	VPP28-090
5.0	14 @ 0.36	28 @ 0.18	237-1086-ND	10.36	7.04	6.16	VPP28-180
10.0	14 @ 0.72	28 @ 0.36	237-1058-ND	11.60	7.76	6.78	VPP28-360
20.0	14 @ 1.44	28 @ 0.72	237-1072-ND	14.11	9.35	8.18	VPP28-720
30.0	14 @ 2.12	28 @ 1.06	237-1079-ND	16.22	11.08	9.69	VPP28-1060
56.0	14 @ 4.0	28 @ 2.0	237-1094-ND	19.84	12.30	10.44	VPP28-2000
2.5	18 @ 0.14	36 @ 0.07	237-1066-ND	9.62	6.51	5.70	VPP36-070
5.0	18 @ 0.28	36 @ 0.14	237-1087-ND	10.36	7.04	6.16	VPP36-140
10.0	18 @ 0.56	36 @ 0.28	237-1059-ND	11.60	7.76	6.78	VPP36-280
20.0	18 @ 1.12	36 @ 0.56	237-1073-ND	14.11	9.35	8.18	VPP36-560
30.0	18 @ 1.64	36 @ 0.82	237-1080-ND	16.22	11.08	9.69	VPP36-820
56.0	18 @ 3.12	36 @ 1.56	237-1095-ND	19.84	12.30	10.44	VPP36-1560

*CT = Center Tap

PC Mount - Pack Power Transformers

- Designed to meet the needs of low clearance PC board and solid state power designs.
- Hi-Pot Test: 2,000 VRMS
- Primary: 115/230V, 50/60 Hz
- Class B UL Recognized, UL File E53148





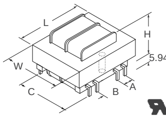
VA Size	Dimensions – Inch (mm) H	W	L	A	B	Wt. Oz. (Gram)
2.5	0.650 (16.51)	1.562 (39.67)	1.875 (47.63)	1.600 (40.64)	0.375 (9.52)	5 (141.75)
6.0	0.875 (22.23)	1.562 (39.67)	1.875 (47.63)	1.600 (40.64)	0.375 (9.52)	7 (198.44)
12.0	1.062 (26.97)	2.000 (50.80)	2.500 (63.50)	2.000 (50.80)	0.500 (12.70)	11 (311.84)

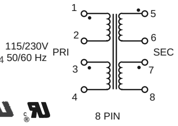
VA (Size)	Parallel VAC @ A	Series VCT* @ A	Digi-Key Part No.	Price Each 1	50	100	MagneTek Part No.
2.5	5 @ 0.5	10 @ 0.25	237-1008-ND	10.76	7.13	6.23	FP10-250
	6.3@ 0.4	12.6 @ 0.2	237-1009-ND	10.76	7.13	6.23	FP12-200
	8 @ 0.3	16 @ 0.15	237-1010-ND	10.76	7.13	6.23	FP16-150
	10 @ 0.25	20 @ 0.125	237-1011-ND	10.76	7.13	6.23	FP20-125
	12 @ 0.2	24 @ 0.1	237-1012-ND	10.76	7.13	6.23	FP24-100
	15 @ 0.16	30@ 0.08	237-1013-ND	10.76	7.13	6.23	FP30-85
	17 @ 0.15	34 @ 0.075	237-1014-ND	10.76	7.13	6.23	FP34-75
	28 @ 0.09	56 @ 0.045	237-1015-ND	10.76	7.13	6.23	FP56-45
6.0	5 @ 1.2	10 @ 0.6	237-1016-ND	12.00	8.18	7.21	FP10-600
	6.3@ 0.95	12.6 @ 0.475	237-1017-ND	12.00	8.18	7.21	FP12-475
	8 @ 0.75	16 @ 0.375	237-1018-ND	12.00	8.18	7.21	FP16-375
	10 @ 0.6	20 @ 0.3	237-1019-ND	12.00	8.18	7.21	FP20-300
	12 @ 0.5	24 @ 0.25	237-1020-ND	12.00	8.18	7.21	FP24-250
	15 @ 0.4	30@ 0.2	237-1021-ND	12.00	8.18	7.21	FP30-200
	17 @ 0.34	34 @ 0.17	237-1022-ND	12.00	8.18	7.21	FP34-170
	28 @ 0.2	56 @ 0.1	237-1023-ND	12.00	8.18	7.21	FP56-100
12.0	5 @ 2.4	10 @ 1.2	237-1000-ND	14.00	8.75	7.51	FP10-1200
	6.3@ 1.9	12.6 @ 0.95	237-1001-ND	14.00	8.75	7.51	FP12-950
	8 @ 1.5	16 @ 0.75	237-1002-ND	14.00	8.75	7.51	FP16-750
	10 @ 1.2	20 @ 0.6	237-1003-ND	14.00	8.75	7.51	FP20-600
	12 @ 1.0	24 @ 0.5	237-1004-ND	14.00	8.75	7.51	FP24-500
	15 @ 0.8	30@ 0.4	237-1005-ND	14.00	8.75	7.51	FP30-400
	17 @ 0.68	34 @ 0.34	237-1006-ND	14.00	8.75	7.51	FP34-340
	28 @ 0.4	56 @ 0.2	237-1007-ND	14.00	8.75	7.51	FP56-200

*CT = Center Tap

PC Mount -Split Pack™ Power Transformers

- Split Pack split bobbin transformer for PC board applications.
- Hi-Pot Test: 2,500 VRMS
- Primary: 115/230V, 50/60 Hz
- Class B UL Recognized, UL File E53148





VA Size	Dimensions – Inch (mm) H	W	L	A	B	C	Wt. Lbs. (Kg)
1.1	.9375 (23.81)	1.125 (28.58)	1.375 (34.93)	.250 (6.35)	.250 (6.35)	1.20 (30.48)	.17 (.08)
2.5	1.1875 (30.16)	1.125 (28.58)	1.375 (34.93)	.250 (6.35)	.250 (6.35)	1.20 (30.48)	.25 (.11)
6.0	1.3125 (33.34)	1.3125 (33.34)	1.625 (41.28)	.250 (6.35)	.350 (8.80)	1.280 (32.51)	.44 (.20)
12.0	1.4375 (36.51)	1.5625 (39.69)	1.875 (47.63)	.30 (7.62)	.40 (10.16)	1.410 (35.81)	.70 (.32)

VA (Size)	Parallel VAC @ A	Series VCT* @ A	Digi-Key Part No.	Price Each 1	50	100	MagneTek Part No.
1.1	6.3 @ 0.18	12.6 @ 0.09	237-1024-ND	8.71	5.51	4.73	FS12-090
	8 @ 0.14	16 @ 0.07	237-1025-ND	8.71	5.51	4.73	FS16-070
	10 @ 0.11	20 @ 0.055	237-1026-ND	8.71	5.51	4.73	FS20-055
	12 @ 0.09	24 @ 0.045	237-1028-ND	8.71	5.51	4.73	FS24-045
	14 @ 0.08	28 @ 0.04	237-1029-ND	8.71	5.51	4.73	FS28-040
	18 @ 0.06	36 @ 0.03	237-1030-ND	8.71	5.51	4.73	FS36-030
2.5	5 @ 0.5	10 @ 0.25	237-1031-ND	9.00	5.63	4.83	FS10-250
	6.3@ 0.4	12.6 @ 0.2	237-1032-ND	9.00	5.63	4.83	FS12-200
	8 @ 0.3	16 @ 0.15	237-1033-ND	9.00	5.63	4.83	FS16-150
	10 @ 0.24	20 @ 0.12	237-1034-ND	9.00	5.63	4.83	FS20-120
	12 @ 0.2	24 @ 0.1	237-1035-ND	9.00	5.63	4.83	FS24-100
	14 @ 0.17	28@ 0.085	237-1036-ND	9.00	5.63	4.83	FS28-85
	18 @ 0.13	36 @ 0.065	237-1037-ND	9.00	5.63	4.83	FS36-65
6.0	5 @ 1.2	10 @ 0.6	237-1038-ND	9.60	6.08	5.22	FS10-600
	6.3@ 1.0	12.6 @ 0.5	237-1039-ND	9.60	6.08	5.22	FS12-500
	8 @ 0.8	16 @ 0.4	237-1040-ND	9.60	6.08	5.22	FS16-400
	10 @ 0.6	20 @ 0.3	237-1041-ND	9.60	6.08	5.22	FS20-300
	12 @ 0.5	24 @ 0.25	237-1042-ND	9.60	6.08	5.22	FS24-250
	14 @ 0.4	28 @ 0.2	237-1043-ND	9.60	6.08	5.22	FS28-200
	18 @ 0.34	36 @ 0.17	237-1044-ND	9.60	6.08	5.22	FS36-170
12.0	5 @ 2.4	10 @ 1.2	237-1045-ND	11.00	6.93	5.95	FS10-1200
	6.3 @ 2.0	12.6 @ 1.0	237-1046-ND	11.00	6.93	5.95	FS12-1000
	8.0 @ 1.6	16 @ 0.8	237-1047-ND	11.00	6.93	5.95	FS16-800
	10 @ 1.2	20 @ 0.6	237-1048-ND	11.00	6.93	5.95	FS20-600
	12 @ 1.0	24 @ 0.5	237-1050-ND	11.00	6.93	5.95	FS24-500
	14 @ 0.84	28 @ 0.42	237-1051-ND	11.00	6.93	5.95	FS28-420
	18 @ 0.7	36 @ 0.35	237-1052-ND	11.00	6.93	5.95	FS36-350

*CT = Center Tap

Switchmode / High Frequency Inductors

Rod Core Inductors

DESCRIPTION:
TRIAD high current rod core inductors from MagneTek provide cost effective energy storage. By conditioning the output signal, the inductor smoothes out the current waveform to provide a more stable current. These low cost inductors are designed to be compatible with automated P.C.B. installation.

Fig. 1

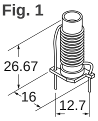


Fig. 2

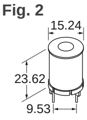
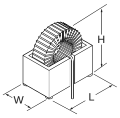


Fig.	± 15% Induct. µH	DC Rated Current	Max. DC Resist. (mOhms)	Lead Diameter Inch (mm)	Digi-Key Part No.	Price Each 1	50	100	MagneTek Part No.
High Current Rod Core Inductors									
1	2.54	11.60A	5.50	.050 (1.27)	237-1158-ND	2.44	1.60	1.36	FIRCH-1
	3.05	9.70A	7.30	.045 (1.14)	237-1159-ND	2.44	1.60	1.36	FIRCH-2
	3.60	8.10A	9.95	.040 (1.02)	237-1160-ND	2.44	1.60	1.36	FIRCH-3
	5.00	6.80A	14.10	.036 (.91)	237-1161-ND	2.44	1.60	1.36	FIRCH-4
	5.90	5.70A	18.50	.032 (.81)	237-1162-ND	2.44	1.60	1.36	FIRCH-5
	7.22	4.80A	26.10	.028 (.71)	237-1163-ND	2.44	1.60	1.36	FIRCH-6

Fig.	10% Induct.	DC Rated Current	± 15% DC Resist. (Ohms)	Lead Diameter Inch (mm)	Digi-Key Part No.	Price Each 1	50	100	MagneTek Part No.
Rod Core Inductors									
2	5.6mH	.250A	6.100	.032 (.81)	237-1165-ND	2.71	1.77	1.51	RC-1
	3.9mH	.320A	3.900		237-1166-ND	2.71	1.77	1.51	RC-2
	2.5mH	.400A	2.450		237-1167-ND	2.71	1.77	1.51	RC-3
	1.5mH	.500A	1.530		237-1168-ND	2.71	1.77	1.51	RC-4
	915.0µH	.625A	1.000		237-1169-ND	2.71	1.77	1.51	RC-5
	560.0µH	.800A	.600		237-1170-ND	2.71	1.77	1.51	RC-6
	450.0µH	1.000A	.420		237-1171-ND	2.71	1.77	1.51	RC-7
	250.0µH	1.250A	.210		237-1172-ND	2.71	1.77	1.51	RC-8
	200.0µH	1.600A	.180		237-1173-ND	2.71	1.77	1.51	RC-9
	100.0µH	2.000A	.098		237-1175-ND	2.71	1.77	1.51	RC-10
	75.0µH	2.500A	.070		237-1176-ND	2.71	1.77	1.51	RC-11

237-1164-ND (FIRCH-KIT) 6 piece kit - one of each High Current Rod Core Inductors **$11.11**
237-1177-ND (RC-KIT) 11 piece kit - one of each Rod Core Inductor **$27.78**

Toroidal Inductors



DESCRIPTION: TRIAD toroidal inductors condition the output signal by leveling out the current waveform providing a more stable current supply. **TECHNICAL NOTES:** • Nominal inductance values are typically 10% higher than minimum rating. • Biased inductance measured at rated DC amps.

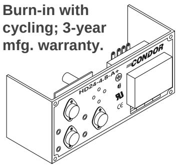
Min. Induct. (µH) No Bias	At Bias	Rated DC Amps	Max. DCR (mOhm)	Dims. - Inch (mm) L x W x H	Digi-Key Part No.	Price Each 1	50	100	MagneTek Part No.
18.85	12.72	2.8	44.8	.625 x .350 x .700 (15.88 x 8.89 x 17.78)	237-1178-ND	1.96	1.28	1.09	FIT44-1
14.75	9.82	3.4	30.7		237-1179-ND	1.96	1.28	1.09	FIT44-2
12.30	7.75	4.0	23.4		237-1180-ND	1.96	1.28	1.09	FIT44-3
8.06	5.22	4.8	15.9		237-1181-ND	1.96	1.28	1.09	FIT44-4
47.40	29.00	2.8	78.9	.700 x .475 x .750 (17.78 x 12.06 x 19.05)	237-1182-ND	2.31	1.51	1.28	FIT50-1
35.48	23.77	3.4	57.8		237-1183-ND	2.31	1.51	1.28	FIT50-2
27.16	16.13	4.0	40.1		237-1184-ND	2.31	1.51	1.28	FIT50-3
21.65	12.27	4.8	29.2		237-1185-ND	2.31	1.51	1.28	FIT50-4
16.76	9.50	5.7	20.0		237-1186-ND	2.31	1.51	1.28	FIT50-5
12.50	6.75	6.8	14.0		237-1187-ND	2.31	1.51	1.28	FIT50-6
8.86	4.80	8.1	11.0		237-1188-ND	2.31	1.51	1.28	FIT50-7
89.50	57.99	2.8	108.0	.875 x .475 x .950 (22.23 x 12.06 x 24.13)	237-1189-ND	2.80	1.83	1.55	FIT68-1
71.10	41.59	3.4	86.1		237-1190-ND	2.80	1.83	1.55	FIT68-2
54.81	33.05	4.0	59.9		237-1191-ND	2.80	1.83	1.55	FIT68-3
43.30	26.63	4.8	42.4		237-1192-ND	2.80	1.83	1.55	FIT68-4
33.15	18.79	5.7	28.8		237-1193-ND	2.80	1.83	1.55	FIT68-5
24.31	13.56	6.8	20.2		237-1194-ND	2.80	1.83	1.55	FIT68-6
18.64	10.23	8.1	14.8		237-1195-ND	2.80	1.83	1.55	FIT68-7
128.00	74.04	4.0	95.2	.975 x .625 x 1.100 (24.77 x 15.88 x 27.94)	237-1196-ND	3.47	2.27	1.92	FIT80-1
107.50	58.05	4.8	67.9		237-1197-ND	3.47	2.27	1.92	FIT80-2
80.75	42.00	5.7	44.8		237-1198-ND	3.47	2.27	1.92	FIT80-3
65.04	31.60	6.8	32.8		237-1199-ND	3.47	2.27	1.92	FIT80-4
47.70	22.79	8.1	22.5		237-1200-ND	3.47	2.27	1.92	FIT80-5
38.07	18.11	9.7	17.0		237-1201-ND	3.47	2.27	1.92	FIT80-6
253.00	153.00	4.0	139.0	1.300 x .725 x 1.400 (33.02 x 18.42 x 35.56)	237-1202-ND	4.31	2.82	2.39	FIT106-1
197.00	113.00	4.8	106.0		237-1203-ND	4.31	2.82	2.39	FIT106-2
154.00	84.00	5.7	74.0		237-1205-ND	4.31	2.82	2.39	FIT106-3
116.00	61.90	6.8	48.5		237-1206-ND	4.31	2.82	2.39	FIT106-4
93.00	48.00	8.1	39.1		237-1207-ND	4.31	2.82	2.39	FIT106-5
70.05	35.30	9.7	24.0		237-1208-ND	4.31	2.82	2.39	FIT106-6

237-1209-ND (FIT-KIT) 30 piece kit - one of each Toroidal Inductor **$83.33**

CONDOR Linear Power Supplies

9288B-ND Power Engineering Manual.................. **$2.95**

Burn-in with cycling; 3-year mfg. warranty.



FEATURES:

• Worldwide AC input ranges and safety standards • Industry standard packages • UL/CSA TUV/IEC approved - 68 models to UL1950; CSA C22.2 No. 234 L3; TUV certified to IEC950 • Capacitors have highest CV & ripple current ratings • MTBF 200,000+ hours per Mil Handbk 217D (most units) • All electrolytic caps rated at 105°C • Transformer insulation meets Class F (155°C) • Exceed FCC and CISPR22 Class B conducted emissions • CE marked to LVD

GENERAL SPECIFICATIONS:

• **AC Input:** 100/120/240 VAC: +10%, -13%; 215VAC: +12%, -11%; 47 to 63Hz. Tolerance for 230VAC operation is +15%, -10%. Derate output current 10% for 50Hz operation • **DC Output:** Adjustment range ±5% minimum except HA series • **Line Regulation:** ±0.05% for a 10% change • **Load Regulation:** ±0.05% for a 50% load change • **Output Ripple**: 3mV +0.05% of ouput voltage, peak to peak maximum. All "3-terminal regulator" outputs: 3mV +0.2% peak to peak maximum • **Transient Response:** <50 microseconds for 50% load change • **Short Circuit Protection:** Automatic current limit/foldback • **Overvoltage Protection:** Built-in on all 5V models, set at 6.2V ±0.4V. Other models use optional over voltage protection • **Remote Sensing:** Provided on all models; open sense lead protection built-in (except HA series) • **Stability**: ±0.05% for 24 hours after warmup • **Temperature Rating**: 0°C to 50°C full rated, derated linearly to 40% at 70°C • **Temperature Coefficient:** ±0.01%/°C maximum • **Logic Inhibit and Current-Share:** F Models

International+ Series Single Output

Output	Dimensions Inch (mm)	Weight lbs. (kilograms)	Digi-Key Part No.	Price Each 1	10	25	50	100	Condor Part No.
5V@1.5A	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 (1)	271-2007-ND	34.72	31.71	31.10	29.57	28.05	HA5-1.5-OV-A+
5V@3A	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 (1)	271-2019-ND	37.03	35.91	35.24	33.43	30.60	HB5-3-OV-A+
5V@6A	5.62 x 4.87 x 2.95 (142.75 x 123.70 x 74.93)	4.25 (1.93)	271-2029-ND	59.97	58.20	55.97	53.04	50.07	HC5-6-OV-A+
5V@9A	7.00 x 4.87 x 3.20 (177.80 x 123.70 x 81.28)	6 (2.72)	271-2052-ND	81.81	79.38	76.71	72.68	68.64	HN5-9-OV-A+
5V@12A	9. 00 x 4.87 x 3.28 (228.60 x 123.70 x 83.31)	7.5 (3.40)	271-2039-ND	92.73	89.97	88.14	82.51	77.92	HD5-12-OV-A+
5V@18A	14.00 x 4.87 x 3.53 (355.60 x 123.70 x 89.66)	10 (4.54)	271-2047-ND*	135.65	131.76	129.15	121.67	109.96	HE5-18-OV-A+
12V@1.7A	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 (1)	271-2014-ND	35.98	34.90	34.19	32.38	30.60	HB12-1.7-A+
12V@3.4A	5.62 x 4.87 x 2.95 (142.75 x 123.70 x 74.93)	4.25 (1.93)	271-2025-ND	54.51	52.88	50.78	48.11	45.44	HC12-3.4-A+
12V@5.1A	7.00 x 4.87 x 3.20 (177.80 x 123.70 x 81.28)	6 (2.72)	271-2048-ND	76.35	74.09	71.53	67.77	64.01	HN12-5.1-A+
12V@6.8A	9.00 x 4.87 x 3.28 (228.60 x 123.70 x 83.31)	7.5 (3.40)	271-2034-ND	87.27	84.68	81.90	78.65	73.29	HD12-6.8-A+
12V@10.2A	14.00 x 4.87 x 3.53 (355.60 x 123.70 x 89.66)	10 (4.54)	271-2043-ND*	119.48	115.93	113.57	107.65	100.67	HE12-10.2-A+
15V@0.9A	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 (1)	271-2005-ND	32.83	31.71	31.10	29.57	28.05	HA15-0.9-A+
15V@3A	5.62 x 4.87 x 2.95 (142.75 x 123.70 x 74.93)	4.25 (1.93)	271-2026-ND	54.51	52.88	50.78	48.11	45.44	HC15-3-A+
15V@4.5A	7.00 x 4.87 x 3.20 (177.80 x 123.70 x 81.28)	6 (2.72)	271-2049-ND	76.35	74.09	71.53	67.77	64.01	HN15-4.5-A+
15V@6A	9.00 x 4.87 x 3.28 (228.60 x 123.70 x 83.31)	7.5 (3.40)	271-2035-ND	87.27	84.68	81.90	78.65	73.29	HD15-6-A+
15V@9A	14.00 x 4.87 x 3.53 (355.60 x 123.70 x 89.66)	10 (4.54)	271-2044-ND*	119.48	115.93	113.57	107.65	100.67	HE15-9-A+
15V@15A	16.75 x 4.88 x 5.00 (425.45 x 123.95 x 127.00)	19 (8.62)	271-2054-ND*	184.96	179.89	168.10	160.69	148.03	F15-15-A+
24V@0.5A	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 (1)	271-2006-ND	34.72	31.71	31.10	29.57	28.05	HA24-0.5-A+
24V@1.2A	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 (1)	271-2016-ND	39.13	38.01	35.24	33.43	30.60	HB24-1.2-A+
24V@2.4A	5.62 x 4.87 x 2.95 (142.75 x 123.70 x 74.93)	4.25 (1.93)	271-2027-ND	54.51	52.88	50.78	48.11	45.44	HC24-2.4-A+
24V@3.6A	7.00 x 4.87 x 3.20 (177.80 x 123.70 x 81.28)	6 (2.72)	271-2050-ND	76.35	74.09	71.53	67.77	64.01	HN24-3.6-A+
24V@4.8A	9.00 x 4.87 x 3.28 (228.60 x 123.70 x 83.31)	7.5 (3.40)	271-2036-ND	87.27	84.68	81.90	78.65	73.29	HD24-4.8-A+
24V@7.2A	14.00 x 4.87 x 3.53 (355.60 x 123.70 x 89.66)	10 (4.54)	271-2045-ND*	119.48	115.93	113.57	107.65	100.67	HE24-7.2-A+
24V@12A	16.75 x 4.88 x 5.00 (425.45 x 123.95 x 127.00)	19 (8.62)	271-2055-ND*	184.96	179.89	168.10	160.69	148.03	F24-12-A+
28V@1A	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 (1)	271-2017-ND	37.03	35.91	35.24	33.43	30.60	HB28-1-A+
28V@2A	5.62 x 4.87 x 2.95 (142.75 x 123.70 x 74.93)	4.25 (1.93)	271-2028-ND	54.81	52.61	50.78	48.11	45.44	HC28-2-A+
28V@3A	7.00 x 4.87 x 3.20 (177.80 x 123.70 x 81.28)	6 (2.72)	271-2051-ND	76.35	74.09	71.53	67.77	64.01	HN28-3-A+
28V@4A	9.00 x 4.87 x 3.28 (228.60 x 123.70 x 83.31)	7.5 (3.40)	271-2037-ND	87.27	84.68	81.90	78.65	73.29	HD28-4-A+
48V@0.5A	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 (1)	271-2018-ND	42.37	40.32	38.36	36.46	32.46	HB48-0.5-A+
48V@3A	9.00 x 4.87 x 3.28 (228.60 x 123.70 x 83.31)	7.5 (3.40)	271-2038-ND*	91.68	88.92	87.09	82.51	77.92	HD48-3-A+
48V@4A	14.00 x 4.87 x 3.53 (355.60 x 123.70 x 89.66)	10 (4.54)	271-2046-ND*	130.40	126.51	123.94	117.46	109.96	HE48-4-A+
48V@6A	16.75 x 4.88 x 5.00 (425.45 x 123.95 x 127.00)	19 (8.62)	271-2056-ND*	200.07	194.09	190.44	178.50	169.17	F48-6-A+

International+ Series Dual Output

Output 1	Output 2	Dimensions Inch (mm)	Weight lbs. (kilograms)	Digi-Key Part No.	Price Each 1	10	25	50	Condor Part No.
5V@1.5A	5V@1.5A	6.50 x 4.00 x 2.10 (165.10 x 101.60 x 53.34)	2.5 (1.13)	271-2010-ND	54.81	51.85	50.78	48.11	HAA5-1.5-OV-A+
5V@3A	5V@3A	7.00 x 4.87 x 2.95 (177.80 x 123.70 x 74.93)	4.4 (2)	271-2022-ND	75.09	72.99	70.54	68.10	HBB5-3-OV-A+
5V@2A	+9V to +15V@0.5A	6.50 x 4.00 x 2.10 (165.10 x 101.60 x 53.34)	2.5 (1.13)	271-2011-ND	54.51	52.90	50.78	48.11	HAA512-A+
5V@3A	+9V to +15V@1.2A	7.00 x 4.87 x 2.95 (177.80 x 123.70 x 74.93)	4.4 (2)	271-2023-ND	65.47	63.50	62.19	58.93	HBB512-A+
5V@6A	+9V to +15V@2.5A	9.38 x 4.87 x 3.28 (238.25 x 123.70 x 83.31)	7 (3.18)	271-2033-ND*	103.65	100.57	97.47	92.35	HCC512-A+
5V@3A	+18V to +24V@0.8A	7.00 x 4.87 x 2.95 (177.80 x 123.70 x 74.93)	4.4 (2)	271-2024-ND	66.47	64.52	61.15	57.94	HBB524-A+
+12V@0.4A	-12V@0.4A	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 (1)	271-2012-ND	40.53	39.59	37.81	35.83	HAD12-0.4-A+
+15V@0.4A	-15V@0.4A	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 (1)	271-2013-ND	40.53	39.59	37.81	35.83	HAD15-0.4-A+
+12V to +15V@1A/0.8A	-12V to -15V@1A/0.8A	6.50 x 4.00 x 2.10 (165.10 x 101.60 x 53.34)	2.5 (1.13)	271-2008-ND	46.90	45.50	44.56	42.21	HAA15-0.8-A+
+12V to +15V@1.7A/1.5A	-12V to -15V@1.7A/1.5A	7.00 x 4.87 x 2.95 (177.80 x 123.70 x 74.93)	4.4 (2)	271-2021-ND	60.01	58.21	57.00	54.01	HBB15-1.5-A+
+12V to +15V@3.4A/3A	-12V to -15V@3.4A/3A	9.38 x 4.87 x 3.28 (238.25 x 123.70 x 83.31)	7 (3.18)	271-2032-ND	96.00	93.14	91.27	85.46	HCC15-3-A+
+12V to +15V@5A	-12V to -15V@5	14.00 x 4.87 x 3.53 (355.60 x 123.70 x 89.66)	10 (4.54)	271-2042-ND*	141.32	137.11	134.41	127.30	HDD15-5-A+
+18V to +24V@0.4A/0.6A	-18V to -24V@0.4A/0.6A	6.50 x 4.00 x 2.10 (165.10 x 101.60 x 53.34)	2.5 (1.13)	271-2009-ND	45.81	44.44	43.52	41.23	HAA24-0.6-A+

International+ Series Triple Output

Output 1	Output 2	Output 3	Dimensions Inch (mm)	Weight lbs. (kilograms)	Digi-Key Part No.	Price Each 1	10	25	50	Condor Part No.
5V@2A	+12V to +15V@0.4/0.4A	-12V to -15V@0.4/0.4A	6.50 x 4.00 x 2.10 (165.10 x 101.60 x 53.34)	2.5 (1.13)	271-2053-ND†	59.97	58.20	55.97	53.04	HTAA-16W-A+
5V@3A	+12V to +15V@1/0.8A	-12V to -15V@1/0.8A	10.25 x 4.00 x 2.95 (260.35 x 101.60 x 74.93)	5 (2.27)	271-2020-ND†	82.90	80.44	77.75	73.68	HBAA40W-A+
5V@6A	+12V to +15V@1/0.8A	-12V to -15V@1/0.8A	9.00 x 4.87 x 3.28 (228.60 x 123.70 x 83.31)	7.5 (3.40)	271-2030-ND†	98.19	95.27	93.32	87.43	HCAA60W-A+
5V@6A	+12V to +15V@1.7/1.5A	-12V to -15V@1.7/1.5A	11.00 x 4.87 x 3.28 (279.40 x 123.70 x 83.31)	8 (3.63)	271-2031-ND†	113.31	110.06	102.65	97.26	HCBB75W-A+
5V@9A	+12V to +15V@1.7/1.5A	-12V to -15V@1.7/1.5A	11.00 x 4.88 x 2.75 (279.40 x 123.95 x 69.85)	12 (5.44)	271-2001-ND†	130.95	127.05	124.45	116.91	CP131-A+
5V@12A	+12V to +15V@1.7/1.5A	-12V to -15V@1.7/1.5A	14.25 x 4.87 x 3.38 (361.95 x 123.70 x 85.85)	11 (4.99)	271-2040-ND†*	147.33	142.94	138.96	131.65	HDBB105W-A+
5V@12A	+12V to +15V@3.4/3A	-12V to -15V@3.4/3A	15.00 x 4.88 x 4.55 (381.00 x 123.95 x 115.57)	12 (5.44)	271-2041-ND†*	169.17	164.22	159.71	151.31	HDCC150W-A+
+5V@6A	+24V@3.5/6A	-5V or -12V@1.2A	11.00 x 4.88 x 2.75 (279.40 x 123.95 x 69.85)	12 (5.44)	271-2003-ND	140.27	136.06	133.26	126.24	CP379-A+
+5V@6A	+24V@5/10A	-12V@0.5A	11.00 x 4.88 x 2.75 (279.40 x 123.95 x 69.85)	12 (5.44)	271-2004-ND	140.27	136.06	133.26	126.24	CP498-A+

* Requires fan cooling. † No. 3 output usable at -5V, rate at 1/2 of 15V current rating.

Linear Medical Power Supplies

World Class Medical Linears

FEATURES: • 19 Models (single, dual and triple output) • Approved to UL 544, IEC 601 and CSA 234 L3 • 3 power levels (5 to 92 watts) • Medical leakage current does not exceed 10µA • 8-Hour burn-in with cycling • Full 3-year warranty

World Wide AC Input Ranges: • AC Input: 110/120/220/240 VAC, 47-63 Hz • OVP on all 5V outputs • Meets EMI per FCC/VDE B

Industry Standard Packaging: • Hermetically sealed power transistors and ICs • MTFB 200,000+ hours per mil handbook 217D

Single Output

Output	Dimensions Inch (mm)	Digi-Key Part No.	Price Each 1	10	25	50	Condor Part No.
5V@1.0A	4.25 x 3.25 x 1.80 (107.95 x 82.55 x 45.72)	271-1018-ND	42.59	41.31	40.46	38.33	ML5-1-OV-A
5V@3.0A	4.88 x 4.00 x 2.25 (123.95 x 101.60 x 57.15)	271-1006-ND	51.32	49.78	48.76	46.19	MB5-3-OV-A
5V@6.0A	5.63 x 4.86 x 2.95 (143.00 x 123.44 x 74.93)	271-1012-ND	65.52	63.56	62.24	58.97	MC5-6-OV-A
12V@1.7A	4.88 x 4.00 x 2.25 (123.95 x 101.60 x 57.15)	271-1002-ND	51.32	49.78	48.76	46.19	MB12-1.7-A
12V@3.4A	5.63 x 4.86 x 2.95 (143.00 x 123.44 x 74.93)	271-1009-ND	65.52	63.56	62.24	58.97	MC12-3.4-A
15V@0.4A	4.25 x 3.25 x 1.80 (107.95 x 82.55 x 45.72)	271-1017-ND	42.59	41.31	40.46	38.33	ML15-O.4-A
15V@1.5A	4.86 x 4.00 x 2.25 (123.44 x 101.60 x 57.15)	271-1003-ND	51.32	49.78	48.76	46.19	MB15-1.5-A
24V@1.2A	4.86 x 4.00 x 2.25 (123.44 x 101.60 x 57.15)	271-1004-ND	51.32	49.78	48.76	46.19	MB24-1.2-A
24V@2.4A	5.63 x 4.86 x 2.95 (143.00 x 123.44 x 74.93)	271-1011-ND	65.52	63.56	62.24	58.97	MC24-2.4-A
24V@4.8A	9.00 x 4.86 x 3.30 (228.60 x 123.44 x 83.82)	271-1015-ND	101.56	98.51	96.48	91.40	MD24-4.8-A
28V@1.0A	4.86 x 4.00 x 2.25 (123.44 x 101.60 x 57.15)	271-1005-ND	51.32	49.78	48.76	46.19	MB28-1-A

Multiple Output

Output 1	Output 2	Output 3	Dimensions Inch (mm)	Digi-Key Part No.	Price Each 1	10	25	50	Condor Part No.
Dual Output									
+12/15V@1.0/0.8A	–12/15V@1.0/0.8A	—	6.50 x 4.00 x 2.25 (165.10 x 101.60 x 57.15)	271-1000-ND	57.88	56.14	54.98	52.09	MAA15-0.8-A
+12/15V@1.7/1.5A	–12/15V@1.7/1.5A	—	7.00 x 4.88 x 2.95 (177.80 x 123.95 x 74.93)	271-1008-ND	74.26	72.03	70.54	66.83	MBB15-1.5-A
+12/15V@3.4/3.0A	–12/15V@3.4/3.0A	—	9.38 x 4.88 x 3.30 (238.25 x 123.95 x 83.82)	271-1014-ND	111.38	108.05	105.82	100.25	MCC15-3-A
Triple Output									
+5V@3.0A	+12/15V@1.0/0.8A	–12/15V@1.0/0.8A	10.25 x 4.00 x 2.95 (260.35 x 101.60 x 74.93)	271-1007-ND	96.10	93.21	91.29	86.49	MBAA40W-A

CONDOR Medical Global Switchers

9288B-ND Power Engineering Manual **$2.95**

Global Performance switching power supplies with the agency approvals you need.

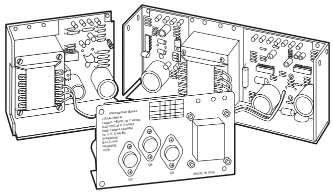
FEATURES:
- Wide range input (85-264V) • Approval to IEC601-1, UL2601 and CSA 601.1 • Conducted Emissions to FCC and VDC Class B • 2-Year Warranty • Models from 28-225W

Input Protection: Internal AC fuse provided on all units. This fuse only blows if a catastrophic failure occurs in the unit — it does not blow on overload or short circuit. AC input protected against line transients by metal oxide varistors on all medical units.

Output Noise and Ripple: 0.5% RMS, 1% Pk-Pk maximum on all outputs (20MHz bandwidth on GSM7 & GSM28 series.

Temperature Coefficient: 0.03%/°C typical for all outputs.

GENERAL SPECIFICATIONS:
- **AC Input:** 85-264 VAC, 47-63 Hz single phase
- **Safety Specifications:** All medical models are approved to UL544/UL2601, IEC601-1, CSA234L3, VDE0750 and CE9LVD
- **Overload Protection:** Fully protected against short circuit and output overload. Short circuit protection is cycling type on Outputs #1 and#2; foldback type on Outputs #3 and #4. Recovery after fault is automatic.
- **Temperature Rating:** 0°C to 50°C full rated load.
- **Minimum Load:** Single output units require no minimum load except for GSM28 (GSM28 = ±5%). Multiple output units: GPM40 = 0.4A, GPM55 = 0.7A, GPM80 = 1A, GPM130 = 3A, GSL50 = 0.8A.
- **EMI Compliance:** All models include EMI filtering to meet or exceed conducted emissions of CISPR 11 Class B, VDE0871 Class B (FCC Class B, CISPR 11 Class B and EN5522 Class B for GSM7 & GSM28 Series).
- **Voltage Adjustment:** Outputs adjustable ±5% minimum via built-in potentiometer (Factory set for GSM7 & GSM28 Series).
- **Remote Sense:** Provided as a standard feature on the +5V output of the GPM130 and on all single output units except for GSM7 and GSM28 series.



- **Reverse Voltage Protection:** All outputs protected against inadvertent application of reverse voltage up to 1 times the rated current of the reversed output.

Single Output Medical

Total Power Watts	Output 1	Min. Load	Dimensions Inch (mm) L x W x H	Mating Connectors					Digi-Key Part No.	Price Each				Condor Part No.
				Housing Input	Housing Output	Contacts	Signal Housing	Signal Contacts		1	10	25	50	
							GSM Series							
7	5.0V @ 1.4A	—	2.00 x 2.28 x .50 (50.80 x 57.91 x 12.70)	—	—	—	—	—	271-1100-ND	30.68	29.15	27.62	26.08	GSM7-5
	12V @ .58A	—							271-1101-ND	30.68	29.15	27.62	26.08	GSM7-12
	15V @ .47A	—							271-1102-ND	30.68	29.15	27.62	26.08	GSM7-15
	24V @ .29A	—							271-1103-ND	30.68	29.15	27.62	26.08	GSM7-24
	28V @ .25A	—							271-1104-ND	30.68	29.15	27.62	26.08	GSM7-28
Connector Kit for GSM7 Series									271-1135-ND	8.74	—	—	—	18-30234-1003
28	5.1V @ 5.5A	±5%	2.59 x 4.00 x .92 (65.79 x 101.60 x 23.37)	WM2125	WM2124	WM17403	—	—	271-1121-ND	54.60	51.87	49.14	46.41	GSM28-5
	12V @ 2.3A	±5%							271-1122-ND	54.60	51.87	49.14	46.41	GSM28-12
	24V @ 1.2A	±5%							271-1123-ND	54.60	51.87	49.14	46.41	GSM28-24
Chassis and Cover for GSM28 Series, 4.31” x 3.10” x 1.53” (109.47mm x 78.74mm x 38.86mm)									271-1128-ND	13.10	—	—	—	08-30466-0028
							GPM Series							
40	12V @ 3.3A	—	3.00 x 5.00 x 1.28 (76.20 x 127.00 x 32.51)	WM2123	WM2104	WM17403	—	—	271-1019-ND	78.62	74.69	70.76	66.82	GPM40-12
	15V @ 2.7A	—							271-1020-ND	78.62	74.69	70.76	66.82	GPM40-15
	24V @ 1.7A (2.1pk)	—							271-1021-ND	78.62	74.69	70.76	66.82	GPM40-24
	24V @ 1.4A (2.1pk)	—							271-1022-ND	78.62	74.69	70.76	66.82	GPM40-28
	+5V @ 8.0A	—							271-1023-ND	78.62	74.69	70.76	66.82	GPM40-5
55	12V @ 4.7A	—	6.30 x 3.94 x 1.68 (160.02 x 100.08 x 42.67)	WM17401	WM17402	WM17403	—	—	271-1024-ND	104.83	99.58	94.34	89.10	GPM55-12
	15V @ 3.7A	—							271-1025-ND	104.83	99.58	94.34	89.10	GPM55-15
	24V @ 2.3A	—							271-1026-ND	104.83	99.58	94.34	89.10	GPM55-24
80/110*	12V @ 6.7A	—	7.00 x 4.25 x 1.86 (177.80 x 107.95 x 47.24)	WM2103	WM2105	WM17403	—	—	271-1027-ND	144.14	136.93	129.73	122.52	GPM80-12
	24V @ 3.4A	—							271-1029-ND	144.14	136.93	129.73	122.52	GPM80-24
							GLM Series							
50	3.3V @ 8A	—	4.25 x 2.50 x 1.25 (107.95 x 63.50 x 31.75)	A19951	A19954	A19990	—	—	271-2196-ND	64.61	63.09	60.80	57.36	GLM50-3.3
	5.1V @ 8A	—							271-2198-ND	64.61	63.09	60.80	57.36	GLM50-5
	12V @ 4.2A	—							271-2192-ND	64.61	63.09	60.80	57.36	GLM50-12
	15V @ 3.3A	—							271-2193-ND	64.61	63.09	60.80	57.36	GLM50-15
	24V @ 2.1A	—							271-2194-ND	64.61	63.09	60.80	57.36	GLM50-24
	28V @ 1.8A	—							271-2195-ND	64.61	63.09	60.80	57.36	GLM50-28
65	3.3V @ 11A	—	5.00 x 3.00 x 1.00 (127.00 x 76.20 x 25.40)	A19951	A19954	A19990	—	—	271-2163-ND	77.70	73.82	69.93	65.52	GLM65-3.3
	5.1V @ 11A	—							271-2165-ND	77.70	73.82	69.93	66.05	GLM65-5
	12V @ 5.5A	—							271-2159-ND	77.70	73.82	69.93	65.52	GLM65-12
	15V @ 4.3A	—							271-2160-ND	77.70	73.82	69.93	66.05	GLM65-15
	24V @ 2.7A	—							271-2161-ND	77.70	73.82	69.93	65.52	GLM65-24
	28V @ 2.3A	—							271-2162-ND	77.70	73.82	69.93	65.52	GLM65-28
	48V @ 1.35A	—							271-2164-ND	77.70	73.82	69.93	66.05	GLM65-48
75	5.1V @ 14.7A	—	5.75 x 3.40 x 1.563 (146.05 x 86.36 x 39.70)	A19953	A19957	A19990	—	—	271-2185-ND	83.10	78.95	74.79	71.10	GLM75-5
	12V @ 6.3A	—							271-2181-ND	83.10	78.95	74.79	71.10	GLM75-12
	15V @ 5A	—							271-2182-ND	83.10	78.95	74.79	71.10	GLM75-15
	24V @ 3.1A	—							271-2183-ND	83.10	78.95	74.79	71.10	GLM75-24
	28V @ 2.7A	—							271-2184-ND	83.10	78.95	74.79	71.10	GLM75-28
							GPFM Series							
115	5.1V @ 12A	—	5.25 x 3.30 x 1.50 (133.35 x 83.82 x 38.10)	A19953	A19956	A19990	A19492	A19520	271-2158-ND	115.61	109.82	104.06	87.60	GPFM115-5
	12V @ 6.7A	—							271-2153-ND	115.61	109.82	104.06	87.60	GPFM115-12
	15V @ 5.3A	—							271-2154-ND	115.61	109.82	104.06	87.60	GPFM115-15
	24V @ 3.3A	—							271-2155-ND	115.61	109.82	104.06	87.60	GPFM115-24
	28V @ 2.9A	—							271-2156-ND	115.61	109.82	104.06	87.60	GPFM115-28
	48V @ 1.7A	—							271-2157-ND	115.61	109.82	104.06	87.60	GPFM115-48
250	5.1V @ 45A	—	8.00 x 5.00 x 1.75 (203.20 x 127.00 x 44.45)	A19953	A19956	A19990	—	—	271-2152-ND	285.66	271.38	257.11	242.82	GPFM250-5
	12V @ 21A	—							271-2147-ND	285.66	271.38	257.11	242.82	GPFM250-12
	15V @ 17A	—							271-2148-ND	285.66	271.38	257.11	242.82	GPFM250-15
	24V @ 11A	—							271-2149-ND	285.66	271.38	257.11	242.82	GPFM250-24
	28V @ 9.5A	—							271-2150-ND	285.66	271.38	257.11	242.82	GPFM250-28
	48V @ 5.2/6.1A†	—							271-2151-ND	285.66	271.38	257.11	242.82	GPFM250-48
Cover with Fan for GPFM250 Series, 8.00” x 5.00” x 1.81” (203.20mm x 127.00m x 45.97mm)									271-1138-ND	18.46	—	—	—	09-250CF
							GLD Series							
150	12V @ 10.8A	—	7.00 x 4.50 x 1.70 (177.80 x 114.30 x 43.18)	WM18436	WM3703	WM2500	A19494	A19490	271-2172-ND	221.49	210.41	199.35	188.28	GLD150-12
	15V @ 8.7A	—							271-2173-ND	221.49	210.41	199.35	188.28	GLD150-15
	24V @ 5.7A	—							271-2174-ND	221.49	210.41	199.35	188.28	GLD150-24

***** 26cfm moving air required. † Convection/Air Flow

Triple Output Medical

Total Power Watts	Output 1	Output 2	Output 3	Dimensions Inch (mm) L x W x H	Mating Connectors			Digi-Key Part No.	Price Each				Condor Part No.
					Housing Input	Housing Output	Contacts		1	10	25	50	
						GPM Series							
40	+5V @ 4.0A	+12V @ 2.0A (3pk)	-12V @ 0.4A	3.00 x 5.00 x 1.28 (76.20 x 127.00 x 32.51)	WM2123	WM2104	WM17403	271-1039-ND	78.62	74.69	70.76	66.82	GPM40A
	+5V @ 4.0A	+15V @ 2.0A (3pk)	-15V @ 0.4A					271-1040-ND	78.62	74.69	70.76	66.82	GPM40B
						GLM50 Series							
50	+5.05V @ 4A	+12V @ 2.5A	-12V @ 0.2A	4.25 x 2.50 x 1.25 (107.95 x 63.50 x 31.75)	A19951	A19954	A19990	271-2199-ND	64.61	63.09	60.80	57.36	GLM50A
	+5.1V @ 4A	+15V @ 2.5A	-15V @ 0.2A					271-2200-ND	64.61	63.09	60.80	57.36	GLM50B
	+5.1V @ 4A	+24V @ 1.5A	-12V @ 0.2A					271-2201-ND	64.61	63.09	60.80	57.36	GLM50D
	+3.3V @ 4A	+12V @ 2.5A	-12V @ 0.2A					271-2202-ND	64.61	63.09	60.80	57.36	GLM50G

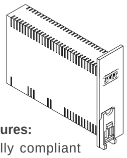
(Continued)

CONDOR Medical Global Switchers *(Cont.)*

Quad Output Medical

Total Power Watts	Output 1	Output 2	Output 3	Output 4	Dimensions Inch (mm) L x W x H	Mating Connectors			Digi-Key Part No.	Price Each				Condor Part No.
						Housing Input	Housing Output	Contacts		1	10	25	50	
GPM Series														
55	+5V @ 6.0A	+12V @ 3.0A (5pk)	+12V @ 1.0A	-12V @ 1.0A	6.30 x 3.94 x 1.68 (160.02 x 100.08 x 42.67)	WM17401	WM17402	WM17403	271-1041-ND	104.83	99.58	94.34	89.10	GPM55A
55	+5V @ 6.0A	+12V @ 3.0A (5pk)	-12V @ 1.0A	-5V @ 1.0A					271-1042-ND	104.83	99.58	94.34	89.10	GPM55B
55	+5V @ 6.0A	+15V @ 3.0A (5pk)	-15V @ 1.0A	-5V @ 1.0A					271-1043-ND	104.83	99.58	94.34	89.10	GPM55C
55	+5V @ 6.0A	+24V @ 1.5A (2pk)	+12V @ 1.0A	-12V @ 1.0A					271-1044-ND	104.83	99.58	94.34	89.10	GPM55D
55	+5V @ 6.0A	+24V @ 1.5A (2pk)	+15V @ 1.0A	-15V @ 1.0A					271-1045-ND	104.83	99.58	94.34	89.10	GPM55E
80/110*	+5V @ 12.0A	+12V @ 3.0A (5pk)	-12V @ 1.0A	+12V @ 1.0A	7.00 x 4.25 x 1.86 (177.80 x 107.95 x 47.24)	WM2103	WM1910	WM17403	271-1046-ND	144.14	136.93	129.73	122.52	GPM80A
80/110*	+5V @ 12.0A	+12V @ 3.0A (5pk)	-15V @ 1.0A	+15V @ 1.0A					271-1048-ND	144.14	136.93	129.73	122.52	GPM80C
80/110*	+5V @ 12.0A	+24V @ 2.0A (4pk)	-15V @ 1.0A	+15V @ 1.0A					271-1050-ND	144.14	136.93	129.73	122.52	GPM80E
80/110*	+5V @ 12.0A	+24V @ 3.5A (4.5pk)	-12V @ 1.0A	+12V @ 2.0A					271-1051-ND	144.14	136.93	129.73	122.52	GPM80P
130*	+5V @ 16.0A	+12V @ 5.0A (8pk)	-12V @ 1.2A	+12V @ 1.2A	8.50 x 4.50 x 2.00 (215.90 x 114.30 x 50.80)	WM2125	WM17400	WM17403	271-1035-ND	209.66	199.17	188.71	178.21	GPM130A
130*	+5V @ 16.0A	+24V @ 3.5A (5pk)	-12V @ 1.2A	+12V @ 1.2A					271-1037-ND	209.66	199.17	188.71	178.21	GPM130D
130*	+5V @ 16.0A	+24V @ 3.5A (5pk)	-15V @ 1.2A	+15V @ 1.2A					271-1038-ND	209.66	199.17	188.71	178.21	GPM130E
GLM Series														
75	+5.1V @ 1A (8pk)	+12V @ 0.5A (2.5pk)	+12V @ 1.0A	-12V @ 2.5A	7.00 x 4.25 x 1.30 (177.80 x 107.95 x 33.02)	A19953	A28761	A19990	271-2186-ND	85.06	80.81	76.56	72.30	GLM75A
75	+5.1V @ 1A (8pk)	+12V @ 0.5A (2.5pk)	-5V @ 1.0A	+12V @ 2.5A					271-2187-ND	85.06	80.81	76.56	72.30	GLM75B
75	+5.1V @ 1A (8pk)	+15V @ 0.5A (2.5pk)	-15V @ 1.0A	+15V @ 2.5A					271-2188-ND	85.06	80.81	76.56	72.30	GLM75C
75	+5.1V @ 1A (8pk)	+24V @ 0.5A (2.5pk)	-12V @ 1.0A	+12V @ 2.5A					271-2189-ND	85.06	80.81	76.56	72.30	GLM75D
75	+5.1V @ 1A (8pk)	+24V @ 0.5A (2.5pk)	-15V @ 1.0A	+15V @ 2.5A					271-2190-ND	85.06	80.81	76.56	72.30	GLM75E
75	+5.1V @ 1A (8pk)	+24V @ 4A	-12V @ 1.0A	+12V @ 2.5A					271-2191-ND	85.06	80.81	76.56	72.30	GLM75P

CONDOR TODD POWER SUPPLIES Compact PCI Power Supplies



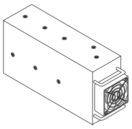
Features:
- Fully compliant with PICMG® CompactPCI® specifications
- Forced current sharing and internal OR-ing diodes for N+1 redundancy
- High current 5V and 3.3V outputs
- 150W in 3U x 8HP (350W in 6U x 8HP) CompactPCI® package requiring only 15cfm of external air

Watt-age	Input	Output #1	Output #2	Output #3	Output #4	Min. Load on V1†	Max. Output from V1 & V2	Dimensions - Inches (mm) L x W x H	Digi-Key Part No.	Price Each	Condor/Todd Part No.
150	AC 90-264VAC 47-63Hz	+5V@25A	+3.3V@20A	+12V@5.5A	-12V@0.5A	2.5A	25A	3.93 x 1.59 x 6.34 (99.8 x 40.39 x 161.0)	271-2100-ND	346.00	CPCI-154-1203
200		+5V@25A	+3.3V@30A	+12V@5.5A	-12V@0.5A	3.0A	35A	3.93 x 1.59 x 6.34 (99.8 x 40.39 x 161.0)	271-2116-ND	346.00	CPCI-204-1203
200		+5V@25A	+3.3V@25A	+12V@5.5A	-12V@0.5A	2.5A	35A	3.93 x 1.59 x 6.62 (99.82 x 40.39 x 168.15)	271-2117-ND	363.00	CPCI-204-1203M
200		+5V@25A	+3.3V@30A	+12V@5.5A	-12V@0.5A	3.0A	35A	3.93 x 1.59 x 6.34 (99.8 x 40.39 x 161.0)	271-2118-ND‡	367.00	CPCI-204L-1203
350		+5V@50A	+3.3V@40A	+12V@12A	-12V@2A	5.0A	65A	6.50 x 1.59 x 9.19 (165.20 x 40.39 x 233.43)	271-2101-ND	559.00	CPCI-354-1203
350		+5V@50A	+3.3V@40A	+12V@12A	-12V@4A	5.0A	65A	6.50 x 1.59 x 9.19 (165.20 x 40.39 x 233.43)	271-2119-ND	559.00	CPCI-354T-1203
150	DC 36-72VDC	+5V@25A	+3.3V@20A	+12V@5.5A	-12V@0.5A	2.5A	2.5A	3.93 x 1.59 x 6.34 (99.8 x 40.39 x 161.0)	271-2102-ND	346.00	DPCI-154-1203
200		+5V@25A	+3.3V@30A	+12V@5.5A	-12V@0.5A	3.0A	35A	3.93 x 1.59 x 6.34 (99.8 x 40.39 x 161.0)	271-2120-ND	346.00	DPCI-204-1203
200		+5V@25A	+3.3V@25A	+12V@5.5A	-12V@0.5A	2.5A	35A	3.93 x 1.59 x 6.62 (99.82 x 40.39 x 168.15)	271-2121-ND	363.00	DPCI-204-1203M
350		+5V@50A	+3.3V@40A	+12V@12A	-12V@2A	5.0A	65A	6.50 x 1.59 x 9.19 (165.20 x 40.39 x 233.43)	271-2103-ND	559.00	DPCI-354-1203
350		+5V@50A	+3.3V@40A	+12V@12A	-12V@4A	5.0A	65A	6.50 x 1.59 x 9.19 (165.20 x 40.39 x 233.43)	271-2122-ND	559.00	DPCI-354T-1203

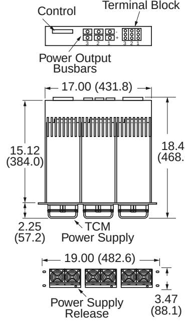
† For full output current capability on V2, V3, V4. ‡ "L" Option: Leakage current less than 0.5mA per unit. Will require additional filtering for compliance to EMI specifications.

Rack Mount Models

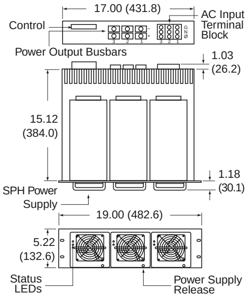
Features:
- Diode isolated outputs for hot swap
- "Zero wire" slope program current sharing for redundancy
- True remote inhibit
- Monotonic turn-on and turn-off



Rack System for TCM1000 Series



NEW! **Rack System for SPH1200 Series**



Watt-age	Input	Internally Fused For	Output #1	Output #2	Output #3	Output #4	Dimensions - Inches (mm) L x W x H	Digi-Key Part No.	Price Each	Condor/Todd Part No.
RMX Series										
350	90-264 VAC 47-63Hz	7A	+5V@50A	+12V@8/12A pk	-12V@4A	—	4.80 x 2.56 x 10.75 (121.9 x 65.0 x 273.1)	271-2104-ND *	521.00	RMX-353-0512
						5.2V @5A		271-2105-ND *	521.00	RMX-354-1205
						12V @5A		271-2106-ND *	521.00	RMX-354-1212
						24V @3A		271-2107-ND *	521.00	RMX-354-1224
TMX Series										
350	40-60 VDC	15A	+5V@50A	+12V@8/12A pk	-12V@4A	—	4.80 x 2.56 x 10.75 (121.9 x 65.0 x 273.1)	271-2108-ND *	521.00	TMX-353-0512
						5.2V @5A		271-2109-ND *	521.00	TMX-354-1205
						12V @5A		271-2110-ND *	521.00	TMX-354-1212
						24V @3A		271-2111-ND *	521.00	TMX-354-1224
TCM Series										
1000	180-264 VAC 47-63Hz	10A	24V@41.6A	—	—	—	4.87 x 2.49 x 13.27 (123.7 x 63.2 x 337.1)	271-2112-ND	752.00	TCM-1000-24
			48V@20.8A	—	—	—		271-2113-ND	752.00	TCM-1000-48
Rack System for TCM1000 Series Power Supply — Contains both input and output housings and contacts								271-1136-ND	442.50	TRS-2-3
SPH Series										
1200	105-264 VAC 47-63Hz	20A	24V@50A	—	—	—	5.00 x 4.03 x 13.44 (127.0 x 102.3 x 341.4)	271-2114-ND	799.00	SPH-1200-24
			48V@25A	—	—	—		271-2115-ND	799.00	SPH-1200-48
Rack System for SPH1200 Series Power Supply								271-1139-ND *NEW!*	442.50	TRS-3-3
NMX Series										
350	90-264 VAC 47-63Hz	7A	+5V @ 50A	+12V@8/12A pk	-12V @ 4A	5.2V @ 5A	8.05 x 4.82 x 1.85 (204.5 x 122.4 x 47.0)	271-2123-ND	495.00	NMX-354-1205
							8.05 x 4.82 x 3.08 (204.5 x 122.4 x 78.2)	271-2124-ND	527.00	NMX-354-1205F
							9.40 x 4.82 x 2.50 (238.8 x 122.4 x 63.5)	271-2125-ND	527.00	NMX-354-1205V
			+5V @ 50A	+12V@8/12A pk	-12V @ 4A	12V @ 5A	8.05 x 4.82 x 1.85 (204.5 x 122.4 x 47.0)	271-2126-ND	495.00	NMX-354-1212
							8.05 x 4.82 x 1.85 (204.5 x 122.4 x 47.0)	271-2127-ND	495.00	NMX-354-1212E
							8.05 x 4.82 x 3.08 (204.5 x 122.4 x 78.2)	271-2128-ND	527.00	NMX-354-1212F
							9.40 x 4.82 x 2.50 (238.8 x 122.4 x 63.5)	271-2129-ND	527.00	NMX-354-1212V
			+5V @ 50A	+12V@8/12A pk	-12V @ 4A	24V @ 3A	8.05 x 4.82 x 1.85 (204.5 x 122.4 x 47.0)	271-2130-ND	495.00	NMX-354-1224
							9.40 x 4.82 x 2.50 (238.8 x 122.4 x 63.5)	271-2131-ND	527.00	NMX-354-1224EV
							9.40 x 4.82 x 2.50 (238.8 x 122.4 x 63.5)	271-2132-ND	527.00	NMX-354-1224V
500	90-264 VAC 47-63Hz	10A	+5V @ 75A	+12V@8/12A pk	-12V @ 4A	5.2V @ 5A	9.65 x 5.00 x 2.05 (245.1 x 127.0 x 52.1)	271-2133-ND	645.00	NMX-504-1205
							9.65 x 5.00 x 3.28 (245.1 x 127.0 x 83.3)	271-2134-ND	677.00	NMX-504-1205F
							11.00 x 5.00 x 2.50 (279.4 x 127.0 x 63.5)	271-2135-ND	677.00	NMX-504-1205V
			+5V @ 75A	+12V@8/12A pk	-12V @ 4A	12V @ 5A	9.65 x 5.00 x 2.05 (245.1 x 127.0 x 52.1)	271-2136-ND	645.00	NMX-504-1212
							11.00 x 5.00 x 2.50 (279.4 x 127.0 x 63.5)	271-2137-ND	677.00	NMX-504-1212V
			+5V @ 75A	+12V@8/12A pk	-12V @ 4A	24V @ 3A	9.65 x 5.00 x 2.05 (245.1 x 127.0 x 52.1)	271-2138-ND	645.00	NMX-504-1224
							9.65 x 5.00 x 3.28 (245.1 x 127.0 x 83.3)	271-2139-ND	677.00	NMX-504-1224F
							11.00 x 5.00 x 2.50 (279.4 x 127.0 x 63.5)	271-2140-ND	677.00	NMX-504-1224V
750	90-264 VAC 47-63Hz	15A	+5V @ 120A	+12V@12/20A pk	-12V @ 10A	5.2V @ 5A	12.92 x 5.00 x 2.50 (328.2 x 127.0 x 63.5)	271-2141-ND	839.00	NMX-754-1205
							12.92 x 5.00 x 2.50 (328.2 x 127.0 x 63.5)	271-2142-ND	839.00	NMX-754-1205B
			+5V @ 120A	+12V@12/20A pk	-12V @ 10A	12V @ 5A	12.92 x 5.00 x 2.50 (328.2 x 127.0 x 63.5)	271-2143-ND	839.00	NMX-754-1212
							12.92 x 5.00 x 2.50 (328.2 x 127.0 x 63.5)	271-2144-ND	839.00	NMX-754-1212B
			+5V @ 120A	+12V@12/20A pk	-12V @ 10A	24V @ 3A	12.92 x 5.00 x 2.50 (328.2 x 127.0 x 63.5)	271-2145-ND	839.00	NMX-754-1224
							12.92 x 5.00 x 2.50 (328.2 x 127.0 x 63.5)	271-2146-ND	839.00	NMX-754-1224B

* Maximum power from outputs #2, #3 and #4 to be less than 170W.

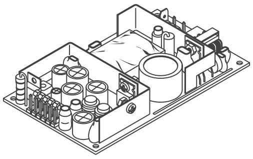
CONDOR DC Power Supplies

The standard version power supply for data processing, control, etc., applications.

General Features
- Cost Effective Power Source
- 2-Year Warranty - 100% burn-in, test and inspection.

Safety Specifications:
- Conform with the applicable requirements of EN60950 following the provisions of the Low Voltage Directive 73/23/EEC. Approved to UL1950, CSA22.2 No. 234 Level 3, IEC950, EN60950, VDE 0805 and CSA950

General Specifications:
- **AC Input:** 90-264 VAC, 47-63 Hz single phase (GPC41, GPFC110 and GPFC160 Series: 85-264 VAC, 47-63 Hz single phase)
- **Overload Protection:** Fully protected against short circuit and output overload
- **Temperature Rating:** 0°C to 50°C full rated output power
- **EMI Compliance:** All models include EMI filtering to meet or exceed conducted emissions of CISPR 11 Class B, VDE0871 Class B and EN55022 Class B (GPFC110 in compliance to CISPR22, FCC Class B)
- **Remote Sense:** GPFC110 and GPFC160 Series only
- **Reverse Voltage Protection:** All outputs protected against inadvertent application of reverse voltage up to 1 times the rated current of the reverse output



Watt-age	Volt-age	Min. Load	Current (A)	Current (B)	I Peak	Dimensions L x W x H Inch (mm)	Mating Connectors					Digi-Key Part No.	Price Each				Condor Part No.
							Housing Input	Housing Output	Contacts	Signal Housing	Signal Contact		1	10	25	50	
GSC 20 Series — Commercial Switcher																	
20	+12	0	1.7A	—	—	2.00" x 3.50" x 0.68" (50.80 x 88.90 x 17.27)	WM17405	WM17405	WM17406	—	—	271-1030-ND	50.40	47.88	45.36	42.84	GSC20-12
20	+15	0	1.4A	—	—		WM17405	WM17405	WM17406	—	—	271-1031-ND	50.40	47.88	45.36	42.84	GSC20-15
20	+24	0	0.85A	—	—		WM17405	WM17405	WM17406	—	—	271-1032-ND	50.40	47.88	45.36	42.84	GSC20-24
20	+28	0	0.7A	—	—		WM17405	WM17405	WM17406	—	—	271-1033-ND	50.40	47.88	45.36	42.84	GSC20-28
20	+5	0	3.8A	—	—		WM17405	WM17405	WM17406	—	—	271-1034-ND	50.40	47.88	45.36	42.84	GSC20-5
Chassis and Cover for GSC20 Series, 3.80" x 2.36" x 1.06" (96.52mm x 59.94mm x 26.92mm)												271-1131-ND	13.10	—	—	—	08-30466-020W
Triple Output - GSC25 Series																	
25	+5.1V +12V -12	0.25A 0 0	2.5A 1.5A 0.2A	—	—	4.25" x 2.5" x .86" (107.95 x 63.50 x 21.84)	WM2123	WM2104	WM17403	—	—	271-1105-ND	53.55	50.87	48.20	45.52	GSC25A
25	+5.1V +24V -12	0.25A 0 0	2.5A 1.0A 0.2A	—	—	4.25" x 2.5" x .86" (107.95 x 63.50 x 21.84)	WM2123	WM2104	WM17403	—	—	271-1106-ND	53.55	50.87	48.20	45.52	GSC25D
Chassis and Cover for GSC25 Series, 5.00" x 2.90" x 1.50" (127.00mm x 73.66mm x 38.10mm)												271-1127-ND	13.10	—	—	—	08-30466-0025
SIngle Output - GPC41 Series																	
30	5.1V	0.15	6.0A	—	—	4.00" x 2.00" x 1.5" (101.60 x 50.80 x 38.10)	A19950	A19952	A19990	—	—	271-1124-ND	52.50	49.88	47.25	44.63	GPC41-5
40	12V	0.03	3.3A	—	—		A19950	A19952	A19990	—	—	271-1125-ND	52.50	49.88	47.25	44.63	GPC41-12
40	24V	0.01	1.7A	—	—		A19950	A19952	A19990	—	—	271-1126-ND	52.50	49.88	47.25	44.63	GPC41-24
Cover for GPC41 Series, 3.32" x 1.98" x 1.66" (84.33mm x 50.29mm x 42.16mm)												271-1129-ND	13.10	—	—	—	08-30466-1041
Single Output - GLC50 Series																	
50	3.3V	0	8A	—	—	4.25" x 2.5" x 1.10" (107.95 x 63.50 x 27.94)	WM2123	WM2126	WM17403	—	—	271-1109-ND	56.18	54.86	52.87	49.89	GLC50-3.3
50	5.1V	0	8A	—	—		WM2123	WM2126	WM17403	—	—	271-1110-ND	56.18	54.86	52.87	49.89	GLC50-5
50	12V	0	4.2A	—	—		WM2123	WM2126	WM17403	—	—	271-1111-ND	56.18	54.86	52.87	49.89	GLC50-12
50	24V	0	2.1A	—	—		WM2123	WM2126	WM17403	—	—	271-1112-ND	56.18	54.86	52.87	49.89	GLC50-24
Triple Output - GLC50 Series																	
50	+5.1V +12V -12V	0.5A 0.1A 0	4A 2.5A 0.2A	—	—	4.25" x 2.5" x 1.10" (107.95 x 63.50 x 27.94)	WM2123	WM2126	WM17403	—	—	271-1107-ND	56.18	54.86	52.87	49.89	GLC50A
50	+5.1V +24V -12V	0.5A 0.1A 0	4A 1.5A 0.2A	—	—	4.25" x 2.5" x 1.10" (107.95 x 63.50 x 27.94)	WM2123	WM2126	WM17403	—	—	271-1108-ND	56.18	54.86	52.87	49.89	GLC50D
Chassis and Cover for GLC50 Series, 5.00" x 2.90" x 1.50" (127.00mmx 73.66mm x 38.1mm)												271-1130-ND	13.10	—	—	—	08-30466-0050
NEW! GLC65 Series NEW!																	
65	+5.1V	0	11A	—	—	5.00 x 3.00 x 1.00 (127.00 x 76.20 x 25.40)	A19951	A19954	A19990	—	—	271-2171-ND	73.76	70.08	66.39	62.70	GLC65-5
65	+12V	0	5.5A	—	—		A19951	A19954	A19990	—	—	271-2166-ND	73.76	70.08	66.39	62.70	GLC65-12
65	+15V	0	4.3A	—	—		A19951	A19954	A19990	—	—	271-2167-ND	73.76	70.08	66.39	62.70	GLC65-15
65	+24V	0	2.7A	—	—		A19951	A19954	A19990	—	—	271-2168-ND	73.76	70.08	66.39	62.70	GLC65-24
65	+28V	0	2.3A	—	—		A19951	A19954	A19990	—	—	271-2169-ND	73.76	70.08	66.39	62.70	GLC65-28
65	+48V	0	1.35A	—	—		A19951	A19954	A19990	—	—	271-2170-ND	73.76	70.08	66.39	62.70	GLC65-48
Single Output - GLC75 Series (See Amperage Rating Notes Below)																	
75	5.1V	0	14.7A	18A	18A	5.75" x 3.40" x 1.56" (146.05 x 86.36 x 39.70)	WM2125	WM2129	WM17403	—	—	271-1113-ND	72.26	68.65	65.05	61.81	GLC75-5
75	12V	0	6.3A	9.1A	9.1A		WM2125	WM2129	WM17403	—	—	271-1114-ND	72.26	68.65	65.05	61.81	GLC75-12
75	24V	0	3.1A	4.6A	4.6A		WM2125	WM2129	WM17403	—	—	271-1115-ND	72.26	68.65	65.05	61.81	GLC75-24
Chassis and Cover for GLC75 Single Output Series, 5.90" x 3.75" x 1.98" (149.86mm x 95.25 x 50.29mm)												271-1132-ND	13.31	—	—	—	08-30466-2075
Quad Output - GLC75 Series (See Amperage Rating Notes Below)																	
75	+5.1V +12V -12V 12V*	1A 0.5A — —	8A 2.5A 1A 2.5A	10A 3A 1A 3A	12A 4A 1.2A 4A	7.00" x 4.25" x 1.30" (177.80 x 107.95 x 33.02)	WM2125	WM17404	WM17403	—	—	271-1116-ND	73.96	70.27	66.57	62.86	GLC75A
75	+5.1V +24V -12V 12V*	1A 0.5A — —	8A 2.5A 1A 2.5A	10A 3A 1A 3A	12A 4A 1.2A 4A	7.00" x 4.25" x 1.30" (177.80 x 107.95 x 33.02)	WM2125	WM17404	WM17403	—	—	271-1117-ND	73.96	70.27	66.57	62.86	GLC75D
NEW! Single Output - GLC110 Series (See Amperage Rating Notes Below)																	
110	+12V	0	6.3A	9.1A	9.5A	7.00" x 4.25" x 1.30" (177.80 x 107.95 x 33.02)	A19953	A28761	A19990	—	—	271-2203-ND	73.63	69.94	66.27	62.58	GLC110-12
110	+15V	0	5A	7.3A	7.7A		A19953	A28761	A19990	—	—	271-2204-ND	73.63	69.94	66.27	62.58	GLC110-15
110	+24V	0	3.2A	4.6A	5A		A19953	A28761	A19990	—	—	271-2207-ND	73.63	69.94	66.27	62.58	GLC110-24
NEW! Double Output - GLC110 Series (See Amperage Rating Notes Below)																	
110	+12V -12V	0 0	6.3A 2.5A	9.1A 3A	9.5A 4A	7.00" x 4.25" x 1.30" (177.80 x 107.95 x 33.02)	A19953	A28761	A19990	—	—	271-2205-ND	79.17	75.21	71.25	67.29	GLC110-212
110	+15V -15V	1A 0	6.3A 2.5A	7.3A 3A	7.7A 4A	7.00" x 4.25" x 1.30" (177.80 x 107.95 x 33.02)	A19953	A28761	A19990	—	—	271-2206-ND	79.17	75.21	71.25	67.29	GLC110-215
110	+24V +5V	1A 0	3.2A 1.5A	4.6A 2A	5A 2.5A	7.00" x 4.25" x 1.30" (177.80 x 107.95 x 33.02)	A19953	A28761	A19990	—	—	271-2208-ND	79.17	75.21	71.25	67.29	GLC110-524
Chassis and Cover for GLC75 and GLC110 Multiple Output Series, 7.30 " 4.50" x 2.10"" (185.42mm x 114.30mm x 53.34mm)												271-1137-ND	13.31	—	—	—	08-30466-2175
NEW! Single Output - GPFC110 Series NEW!																	
110	+5.1V	—	12A	—	20A	6.3" x 3.75" x 1.62" (160.02 x 95.25 x 41.15)	A19953	A19957	A19990	—	—	271-2180-ND	100.53	95.50	90.48	76.18	GPFC110-5
110	+12V	—	6.7A	—	10A		A19953	A19957	A19990	—	—	271-2175-ND	100.53	95.50	90.48	76.18	GPFC110-12
110	+15V	—	5.3A	—	8A		A19953	A19957	A19990	—	—	271-2176-ND	100.53	95.50	90.48	76.18	GPFC110-15
110	+24V	—	3.4A	—	5A		A19953	A19957	A19990	—	—	271-2177-ND	100.53	95.50	90.48	76.18	GPFC110-24
110	+28V	—	2.9A	—	4.3A		A19953	A19957	A19990	—	—	271-2178-ND	100.53	95.50	90.48	76.18	GPFC110-28
110	+48V	—	1.7A	—	2.5A		A19953	A19957	A19990	—	—	271-2179-ND	100.53	95.50	90.48	76.18	GPFC110-48
Cover for GPFC110 Series, 6.30" x 3.75" x 1.75" (160.02mm x 95.25mm x 44.45mm)												271-1133-ND	13.31	—	—	—	08-30466-2110
Single Output - GPFC160 Series																	
160	5.1V	—	26A	—	—	7.00" x 4.50" x 1.69" (177.80 x 114.30 x 42.93)	WM2125	WM17400	WM17403	WM2013	WM2200	271-1118-ND	181.95	172.85	163.77	154.67	GPFC160-5
160	12V	—	11.7A	—	—		WM2125	WM17400	WM17403	WM2013	WM2200	271-1119-ND	181.95	172.85	163.77	154.67	GPFC160-12
160	24V	—	5.8A	—	—		WM2125	WM17400	WM17403	WM2013	WM2200	271-1120-ND	181.95	172.85	163.77	154.67	GPFC160-24
Cover with Fan for GPFC160 Series, 7.00" x 4.5" x 1.75" (177.80mm x 114.30mm x 44.45mm)												271-1134-ND	18.46	—	—	—	09-160CF

***** Floating fourth output can be referenced as either positive or negative.

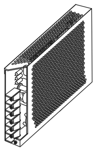
Amperage Rating Notes for GLC75 and GLC110 Series: • **Current A**: Rating with unrestricted convection cooling. Total power not to exceed 75W. • **Current B:** Rating with 26cfm forced air cooling. Total power not to exceed 110W. • **I Peak:** During peak load conditions output regulation may exceed specified limits.

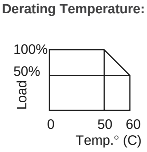
Enclosed Switching Power Supplies

SXU SERIES - Models: 15W, 30W, 50W, 100W & 150W

Features: • AC (AC85-132V) • Safety Approvals: UL, CSA • EMI: FCC Class "B", CISPR-B, VCCI-2 • Built-in Overvoltage/Overcurrent Protection • Operating Temperature: 0°C to 50°C • Metal Chassis with Cover • Compact, Low-Profile Packages • Three Year Factory Warranty.

General Specifications: • **Input Frequency:** 50/60Hz (47~63 Hz) • **Output Adjust Range:** ±10% • **Over Voltage Protection:** Zener Limiter (Output Shutdown: for 50, 100 and 150 Models). • **Over Current Protection:** Over 105% (Automatic Recovery). • **Temperature Coefficient:** 0.02% / °C • **Rise Time:** 100 mS max. (at 25°C nominal input/output) & 300 mS max. for 100 &150 Models • **Hold-Up Time:** 20mS (typical) • **Storage Temperature:** Temperature: -20°C to 85°C. • Humidity: 20-85% RH (Non Condensing) • **Dielectric Withstanding Voltage:** Models 15W, 30W & 50W: Primary - Secondary: AC 2000V / 1 min., Primary Case: AC 2000V / 1 min., Secondary Case: AC 500V / 1 min. Models 100W & 150W: Primary - Secondary: AC 2000V / 1 min., Primary Case: AC 1500V / 1 min., Secondary Case: AC 500V / 1 min. • **Leakage Current:** 0.5 mA max. • **Isolation Resistance**: Input-Output-Case 100 M-ohms min. • **Shock Test Procedures:** .020" (0.5mm) width, 10-55 Hz / 1 min. cycle, 3 directions each 30 min. 20G (3 directions each 3 times).



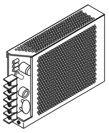


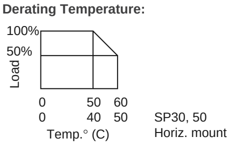
Input Voltage	Input Current A(typ)	Inrush Current A(typ)	Output Voltage (VDC)	Output Current (A)	Effi-ciency	Line Reg. (mV)	Load Reg. (mV)	RIpple Noise (mVp-p)	Dimensions Inch (mm) HxWxD	Digi-Key Part No.	Price Each 1	10	25	50	Volgen Part No.
SX15U															
85 - 132	0.3	10	5	3.0	73%	20	40	100	1.34 x 2.72 x 3.31 (34 x 69 x 84)	62-1001-ND	54.83	50.13	41.99	40.65	SX15U-05S
85 - 132	0.3	10	12	1.3	76%	40	60	150	1.34 x 2.72 x 3.31 (34 x 69 x 84)	62-1002-ND	54.83	50.13	41.99	40.65	SX15U-12S
85 - 132	0.3	10	15	1.0	76%	40	60	150	1.34 x 2.72 x 3.31 (34 x 69 x 84)	62-1003-ND	54.83	50.13	41.99	40.65	SX15U-15S
85 -132	0.3	10	24	0.7	78%	60	150	200	1.34 x 2.72 x 3.31 (34 x 69 x 84)	62-1004-ND	54.83	50.13	41.99	40.65	SX15U-24S
SX30U															
85 - 132	0.7	20	5	6.0	72%	20	40	150	1.34 x 2.72 x 4.09 (34 x 69 x 104)	62-1005-ND	63.21	57.80	48.45	46.90	SX30U-05S
85 - 132	0.7	20	12	2.6	76%	30	60	150	1.34 x 2.72 x 4.09 (34 x 69 x 104)	62-1006-ND	63.21	57.80	48.45	46.90	SX30U-12S
85 - 132	0.7	20	15	2.1	77%	30	60	150	1.34 x 2.72 x 4.09 (34 x 69 x 104)	62-1007-ND	63.21	57.80	48.45	46.90	SX30U-15S
85 - 132	0.7	20	24	1.4	79%	30	60	150	1.34 x 2.72 x 4.09 (34 x 69 x 104)	62-1008-ND	63.21	57.80	48.45	46.90	SX30U-24S
SX50U															
85 - 132	1.1	28	5	9.5	72%	25	60	100	1.46 x 3.35 x 4.69 (37 x 85 x 119)	62-1009-ND	87.29	79.81	67.06	64.90	SX50U-05S
85 - 132	1.1	28	12	4.2	78%	40	120	150	1.46 x 3.35 x 4.69 (37 x 85 x 119)	62-1010-ND	87.29	79.81	67.06	64.90	SX50U-12S
85 - 132	1.1	28	15	3.4	78%	40	120	150	1.46 x 3.35 x 4.69 (37 x 85 x 119)	62-1011-ND	87.29	79.81	67.06	64.90	SX50U-15S
85 - 132	1.1	28	24	2.2	80%	60	160	200	1.46 x 3.35 x 4.69 (37 x 85 x 119)	62-1012-ND	87.29	79.81	67.06	64.90	SX50U-24S
SX100U															
85 - 132	2.3	14	5	20.0	82%	10	20	100	1.54 x 3.66 x 6.30 (39 x 93 x 160)	62-1013-ND	129.48	118.39	99.63	96.41	SX100U-05S
85 -132	2.3	14	12	8.6	85%	10	20	170	1.54 x 3.66 x 6.30 (39 x 93 x 160)	62-1014-ND	129.48	118.39	99.63	96.41	SX100U-12S
85 -132	2.3	14	15	7.0	86%	10	20	170	1.54 x 3.66 x 6.30 (39 x 93 x 160)	62-1015-ND	129.48	118.39	99.63	96.41	SX100U-15S
85 -132	2.3	14	24	4.4	87%	20	30	200	1.54 x 3.66 x 6.30 (39 x 93 x 160)	62-1016-ND	129.48	118.39	99.63	96.41	SX100U-24S
SX150U															
85 - 132	3.5	15	5	30.0	82%	10	30	100	1.89 x 3.66 x 6.89 (48 x 93 x 175)	62-1017-ND	169.14	154.64	130.26	126.05	SX150U-05S
85 -132	3.5	15	12	12.5	85%	15	45	170	1.89 x 3.66 x 6.89 (48 x 93 x 175)	62-1018-ND	169.14	154.64	130.26	126.05	SX150U-12S
85 -132	3.5	15	15	10.0	86%	15	45	170	1.89 x 3.66 x 6.89 (48 x 93 x 175)	62-1019-ND	169.14	154.64	130.26	126.05	SX150U-15S
85 -132	3.5	15	24	6.5	87%	20	60	200	1.89 x 3.66 x 6.89 (48 x 93 x 175)	62-1020-ND	169.14	154.64	130.26	126.05	SX150U-24S

SPU SERIES Universal Input - Models: 15W, 30W & 50W

Features: • Universal Input (AC85-264V) • International Safety Approvals including: IEC801-2, -3, -4 & EMI: FCC Class "B", EN55022-B, VCCI-II, CE • Built-in Overvoltage/Overcurrent Protection • Operating Temperature: 0°C to 60°C • Lightweight Construction • Metal Chassis with Cover • 3 Year Factory Warranty.

General Specifications: • **Input Frequency:** 50/60Hz (47-63 Hz) • **Output Adjust Range:** ±10% • **Output Ripple (100/230VAC, Full load):** 150mV / 75mVp-p max. DC-100MHz • **Over Voltage Protection:** Zener Limiter • **Over Current Protection:** Over 105% (Auto. Recovery) • **Temperature Coefficient:** 0.02%/ °C maximum • **Rise Time:** 100 mS maximum • **Storage Temperature and Humidity:** Temperature: -20°C to 85°C. Humidity: 20-85% RH (Non Condensing) • **Dielectric Withstanding Voltage:** Primary - Secondary: AC 3000V / 1 min., Primary Case: AC 1500V / 1 minute, Secondary Case: AC 500V / 1 min. • **Leakage Current** (100 / 230 VAC): 0.5 / 0.75 mA max. • **Isolation Resistance**: Input-Output-Case 100 M-ohms min. • **Shock Test Procedures:** Vibration: .020" (0.5mm) width, 10-55 Hz / 1 minute cycle, 3 directions each 30 minutes. Shock: 20G (3 directions each 3 times).

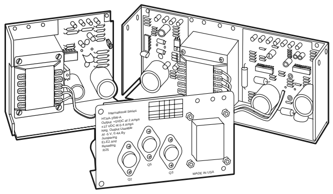




Input Voltage	Input Current A(typ)	Hold-Up Time mS(typ)	Inrush Current A(typ)	Output Volt. (VDC)	Output Current (A) @100V	Output Current (A) @230V	Effi-ciency	Line Reg. (mV)	Load Reg. (mV)	Dimensions Inch (mm) HxWxD	Digi-Key Part No.	Price Each 1	10	25	50	Volgen Part No.
SP15U																
85-264	0.28-0.17	20-100	12-24	3.3	3.0	3.6	70%	20	40	1.30 x 2.95 x 4.21 (33 x 75 x 107)	62-1021-ND	74.20	67.84	56.94	55.12	SP15U-03S
85-264	0.36-0.24	15-70	12-24	5	3.0	3.6	73%	20	50	1.30 x 2.95 x 4.21 (33 x 75 x 107)	62-1022-ND	74.20	67.84	56.94	55.12	SP15U-05S
85-264	0.36-0.24	15-70	12-24	12	1.3	1.5	77%	30	50	1.30 x 2.95 x 4.21 (33 x 75 x 107)	62-1023-ND	74.20	67.84	56.94	55.12	SP15U-12S
85-264	0.36-0.24	15-70	12-24	15	1.0	1.2	77%	30	50	1.30 x 2.95 x 4.21 (33 x 75 x 107)	62-1024-ND	74.20	67.84	56.94	55.12	SP15U-15S
85-264	0.36-0.24	15-70	12-24	24	0.7	0.8	78%	30	50	1.30 x 2.95 x 4.21 (33 x 75 x 107)	62-1025-ND	74.20	67.84	56.94	55.12	SP15U-24S
85-264	0.36-0.24	15-70	12-24	48	0.35	0.4	79%	50	50	1.30 x 2.95 x 4.21 (33 x 75 x 107)	62-1026-ND	74.20	67.84	56.94	55.12	SP15U-48S
SP30U																
85-264	0.5-0.33	30-180	12-28	3.3	6.0	7.0	70%	20	40	1.30 x 3.11 x 4.88 (33 x 79 x 124)	62-1027-ND	93.94	85.89	72.18	69.87	SP30U-03S
85-264	0.7-0.46	20-120	12-28	5	6.0	7.0	72%	20	40	1.30 x 3.11 x 4.88 (33 x 79 x 124)	62-1028-ND	93.94	85.89	72.18	69.87	SP30U-05S
85-264	0.7-0.46	20-120	12-28	12	2.6	3.0	77%	20	40	1.30 x 3.11 x 4.88 (33 x 79 x 124)	62-1029-ND	93.94	85.89	72.18	69.87	SP30U-12S
85-264	0.7-0.46	20-120	12-28	15	2.1	2.5	77%	20	40	1.30 x 3.11 x 4.88 (33 x 79 x 124)	62-1030-ND	93.94	85.89	72.18	69.87	SP30U-15S
85-264	0.7-0.46	20-120	12-28	24	1.4	1.5	77%	30	80	1.30 x 3.11 x 4.88 (33 x 79 x 124)	62-1031-ND	93.94	85.89	72.18	69.87	SP30U-24S
85-264	0.7-0.46	20-120	12-28	48	0.7	0.80	79%	50	120	1.30 x 3.11 x 4.88 (33 x 79 x 124)	62-1032-ND	93.94	85.89	72.18	69.87	SP30U-48S
SP50U																
85-264	0.8-0.52	35-210	18-45	3.3	10.0	12.0	70%	20	60	1.30 x 3.50 x 6.46 (33 x 89 x 164)	62-1033-ND	117.84	106.80	99.17	95.97	SP50U-03S
85-264	1.2-0.75	20-120	18-45	5	10.0	12.0	72%	20	60	1.30 x 3.50 x 6.46 (33 x 89 x 164)	62-1034-ND	117.84	106.80	99.17	95.97	SP50U-05S
85-264	1.2-0.75	20-120	18-45	12	4.6	5.5	77%	20	60	1.30 x 3.50 x 6.46 (33 x 89 x 164)	62-1035-ND	117.84	106.80	99.17	95.97	SP50U-12S
85-264	1.2-0.75	20-120	18-45	15	3.7	4.4	77%	20	60	1.30 x 3.50 x 6.46 (33 x 89 x 164)	62-1036-ND	117.84	106.80	99.17	95.97	SP50U-15S
85-264	1.2-0.75	20-120	18-45	24	2.3	2.7	77%	30	120	1.30 x 3.50 x 6.46 (33 x 89 x 164)	62-1037-ND	117.84	106.80	99.17	95.97	SP50U-24S
85-264	1.2-0.75	20-120	18-45	48	1.2	1.4	79%	50	180	1.30 x 3.50 x 6.46 (33 x 89 x 164)	62-1038-ND	117.84	106.80	99.17	95.97	SP50U-48S
SPN75																
85-264	0.55-1.0	40-50	16-39	5	15.0	—	78%	10	40	1.52 x 3.47 x 7.00 (39 x 88 x 178)	62-1040-ND	74.97	70.89	67.32	63.75	SPN75-05S
85-264	0.55-1.0	40-50	16-39	12	6.5	—	82%	10	20	1.52 x 3.47 x 7.00 (39 x 88 x 178)	62-1041-ND	74.97	70.89	67.32	63.75	SPN75-12S
85-264	0.55-1.0	40-50	16-39	24	3.2	—	83%	20	40	1.52 x 3.47 x 7.00 (39 x 88 x 178)	62-1042-ND	74.97	70.89	67.32	63.75	SPN75-24S
85-264	0.55-1.0	40-50	16-39	48	1.6	—	83%	20	40	1.52 x 3.47 x 7.00 (39 x 88 x 178)	62-1043-ND	74.97	70.89	67.32	63.75	SPN75-48S
SPN100																
85-264	0.66-1.3	50	15-25	5	20.0	—	79%	10	20	1.54 x 3.66 x 8.15 (39 x 93 x 207)	62-1044-ND	102.17	96.61	91.74	86.88	SPN100-05S
85-264	0.66-1.3	50	15-25	12	8.6	—	83%	10	20	1.54 x 3.66 x 8.15 (39 x 93 x 207)	62-1045-ND	102.17	96.61	91.74	86.88	SPN100-12S
85-264	0.66-1.3	50	15-25	15	7.0	—	83%	10	20	1.54 x 3.66 x 8.15 (39 x 93 x 207)	62-1046-ND	102.17	96.61	91.74	86.88	SPN100-15S
85-264	0.66-1.3	50	15-25	24	4.4	—	83%	20	40	1.54 x 3.66 x 8.15 (39 x 93 x 207)	62-1047-ND	102.17	96.61	91.74	86.88	SPN100-24S
85-264	0.66-1.3	50	15-25	48	2.2	—	84%	20	40	1.54 x 3.66 x 8.15 (39 x 93 x 207)	62-1048-ND	102.17	96.61	91.74	86.88	SPN100-48S
SPN150																
85-264	1.00-1.3	50	13-31	5	30.0	—	78%	10	20	1.77 x 4.21 x 8.5 (45 x 107 x 216)	62-1049-ND	122.16	115.51	109.70	103.88	SPN150-05S
85-264	1.00-1.3	50	13-31	12	13.0	—	82%	10	20	1.77 x 4.21 x 8.5 (45 x 107 x 216)	62-1050-ND	122.16	115.51	109.70	103.88	SPN150-12S
85-264	1.00-1.3	50	13-31	24	6.5	—	83%	20	40	1.77 x 4.21 x 8.5 (45 x 107 x 216)	62-1051-ND	122.16	115.51	109.70	103.88	SPN150-24S
85-264	1.00-1.3	50	13-31	48	3.3	—	83%	20	40	1.77 x 4.21 x 8.5 (45 x 107 x 216)	62-1052-ND	122.16	115.51	109.70	103.88	SPN150-48S

POWER-ONE® Linear Power Supplies

9222B-ND Power One Reference Guide **$3.95**



Features:

• Worldwide AC input Capabilities • Meets domestic and foreign safety standards: UL, CSA, IEC, VDE, BPO, ECMA, CE • Low output ripple • 2 hour burn-in • Made in U.S.A.

Overvoltage Protection Options:

Optional overvoltage protection modules are offered, each is user adjustable from 6.4V to 34V. Note: Outputs with factory built-in OVP are indicated in the Voltage/Current Rating Chart for each model.

General Specifications:

• AC Input: 100/120/220/240 VAC +10%, -13%. 47-63 Hz. Tolerance for 230 VAC operation is +15%, -10%. Factory wired for 120V operation • DC Output: Adjustment range ±5% minimum. Voltage non-adjustable on "3 terminal regulator" outputs • Line Regulation: ±.05% for a 10% line change. Exceptions: ±.01% for F, G case models, ±0.5% for all other outputs using "3 terminal regulators" • Load Regulation: ±.05% for a 50% load change. Exceptions: ±.02% for F, G case models, ±0.5% for all other outputs using "3 terminal regulators" • Output Ripple: 5V through 15V models: 5.0 mV PK-PK maximum. (3.0 mV PK-PK maximum for F, G case models). 24V through 250V models: 3.0 mV PK-PK plus .02% of output voltage, maximum. All "3 terminal regulator" outputs: 0.2% PK-PK maximum • Overvoltage Protection: Provided on 5V outputs where indicated. Set at 6.2V ±0.4%. Other outputs use optional overvoltage protectors OVP12 and OVP24. • Operating Temperature: 0°C to 50°C full rated, derated linearly to 40% at 70°C. • Efficiency: 5V outputs — 45%, 12V and 15V outputs — 55%, 24V through 250V outputs — 60% • Master/Slave Operation: Provided on F, G models only. For parallel operation of up to 6 units.

Safety Specifications:

All models exceed the following safety standards — Leakage Current Line to Ground (max.): 0.05 mA • Dielectric Withstand Voltage (min.): Input to Ground — 3750VRMS, Input to Outputs — 3750VRMS, Outputs to Ground — 500VDC • 2 year warranty

Overvoltage Protection

Voltage Adjustment Range: 6.4 - 33VDC		
	Maximum Current Rating	
Model	Intermittent	Continuous
OVP-12	12.0A	8.0A
OVP-24	30.0A	20.0A

Dimensions – In. (mm) Height x Width x Thickness	Digi-Key Part No.	Price Each 1	10	25	Power-One Part No.
1.50 x 1.55 x 0.56 (38.10 x 39.37 x 14.22)	179-2057-ND	9.73	9.44	9.24	OVP-12
2.00 x 2.75 x 0.77 (50.80 x 69.85 x 19.56)	179-2058-ND	16.20	15.71	15.39	OVP-24

International Series Single Output

Voltage/ Current	Case Size	Digi-Key Part No.	Price Each 1	10	25	50	Power-One Part No.
5V @ 1.5A*	B	179-2061-ND	34.66	33.63	32.92	31.19	HA5-1.5/OVP-A
5V @ 3A†*	B	179-2035-ND	36.56	35.46	34.73	32.89	HB5-3/OVP-A
5V @ 6A†*	C	179-2040-ND	57.42	55.70	54.86	51.68	HC5-6/OVP-A
5V @ 9A†*	N	179-2056-ND	78.32	75.97	74.40	70.50	HN5-9/OVP-A
5V @ 12A†*	D	179-2046-ND	88.77	86.11	84.34	79.89	HD5-12/OVP-A
5V @ 18A†*	E	179-2051-ND	131.00	127.07	124.45	117.89	HE5-18/OVP-A
5V @ 25A†*	F	179-2026-ND	184.51	178.97	175.29	166.06	F5-25/OVP-A
12V @ 0.9A**	B	179-2027-ND	32.13	31.16	30.51	28.90	HA15-0.9-A
12V @ 1.7A†	B	179-2029-ND	34.43	33.40	32.71	30.98	HB12-1.7-A
12V @ 3.4A†	C	179-2036-ND	52.20	50.63	49.59	46.97	HC12-3.4-A
12V @ 5.1A†	N	179-2052-ND	73.10	70.90	69.45	65.78	HN12-5.1-A
12V @ 6.8A†	D	179-2041-ND	83.55	81.04	79.37	75.20	HD12-6.8-A
12V @ 10.2A†	E	179-2047-ND	114.90	111.45	109.15	103.40	HE12-10.2-A
12V @ 16A†**	F	179-2024-ND	184.51	178.97	175.29	166.06	F15-15-A
15V @ 1.5A†	B	179-2030-ND	35.64	34.58	33.86	32.07	HB15-1.5-A
15V @ 3A†	C	179-2037-ND	52.20	50.63	49.59	46.97	HC15-3-A
15V @ 4.5A†	N	179-2053-ND	73.10	70.90	69.45	65.78	HN15-4.5-A
15V @ 6A†	D	179-2042-ND	83.55	81.04	79.37	75.20	HD15-6-A
15V @ 9A†	E	179-2048-ND	114.90	111.45	109.15	103.40	HE15-9-A
24V @ 0.5A**	B	179-2028-ND	34.66	33.62	32.92	31.19	HA24-0.5-A
24V @ 1.2A†	B	179-2032-ND	36.35	35.26	34.53	32.70	HB24-1.2-A
24V @ 2.4A†	C	179-2038-ND	52.20	50.63	49.59	46.97	HC24-2.4-A
24V @ 3.6A†	N	179-2054-ND	73.10	70.90	69.45	65.78	HN24-3.6-A
24V @ 4.8A†	D	179-2043-ND	83.55	81.04	79.37	75.20	HD24-4.8-A
24V @ 7.2A†	E	179-2049-ND	114.90	111.45	109.15	103.40	HE24-7.2-A
24V @ 12A†**	F	179-2025-ND	184.51	178.97	175.29	166.06	F24-12-A
28V @ 1A†	B	179-2033-ND	36.35	35.26	34.53	32.70	HB28-1-A
28V @ 2A†	C	179-2039-ND	52.20	50.63	49.59	46.97	HC28-2-A
28V @ 3A†	N	179-2055-ND	73.10	70.90	69.45	65.78	HN28-3-A
28V @ 4A†	D	179-2044-ND	83.55	81.04	79.37	75.20	HD28-4-A
48V @ 0.5A	B	179-2034-ND	41.83	40.58	39.73	37.65	HB48-0.5-A
48V @ 3A†	D	179-2045-ND	88.77	86.11	84.34	79.89	HD48-3-A
48V @ 4A†	E	179-2050-ND	125.35	121.59	119.08	112.81	HE48-4-A
175-210V @ 0.12A	B	179-2031-ND	49.97	48.55	46.61	45.29	HB200-0.12-A

* Overvoltage protection provided. Set at 6.2V ±0.4V. ** Adjustable outputs: F15-15-A: 12-15V, F24-12-A: 24-28V, HA24-0.5-A: 24-28V † Remote sense provided

OVP SELECTION GUIDE		
Model	Case Size	OVP Modules Required
Single Output	B, C, N, D	(1) OVP-12
	E, F	(1) OVP-24
Dual Output	AA, B, BB, CC	(1) OVP-12 protects both outputs
	E	(1) OVP-24 protects both outputs
Triple Output	AA, BAA, D, CBB 131, DBB, DCC	(1) OVP-12 protects both 12V through 15V outputs
Peak Current Models	PW9935-ND	(1) OVP-12 protects any output not provided with built-in OVP

Case Size

Case	Overall Size – In. (mm)	Weight
CBB	11.00 x 4.87 x 3.28 (279.40 x 123.70 x 83.31)	8 Lbs
D	9.00 x 4.87 x 3.28 (228.60 x 123.70 x 83.31)	7.5 Lbs
DBB	14.25 x 4.87 x 3.38 (361.95 x 123.70 x 85.85)	11 Lbs
DCC	15.00 x 4.88 x 4.55 (381.00 x 123.95 x 115.57)	12 Lbs
E	14.00 x 4.87 x 3.53 (355.60 x 123.70 x 89.66)	10 Lbs
F	16.75 x 4.88 x 5.00 (425.45 x 123.95 x 127.00)	19 Lbs
AA	6.50 x 4.00 x 2.10 (165.10 x 101.60 x 53.34)	2.5 Lbs
B	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 Lbs

Case	Overall Size – In. (mm)	Weight
BB	7.00 x 4.87 x 2.95 (177.80 x 123.70 x 74.93)	4.4 Lbs
BAA	10.25 x 4.00 x 2.95 (260.35 x 101.60 x 74.93)	5 Lbs
C	5.62 x 4.87 x 2.95 (142.75 x 123.70 x 74.93)	4.25 Lbs
CC	9.38 x 4.87 x 3.28 (238.25 x 123.70 x 83.31)	7 Lbs
N	7.00 x 4.87 x 3.20 (177.80 x 123.70 x 81.28)	6 Lbs
CP131	11.00 x 4.87 x 3.20 (279.40 x 123.70 x 81.28)	9 Lbs
NRG275	9.00 x 5.00 x 2.50 (228.60 x 127.00 x 63.50)	3 Lbs

International Series Dual Output

Output #1	Output #2	Case Size	Digi-Key Part No.	Price Each 1	10	25	50	Power-One Part No.
+12V @ 0.4A§	-12V @ 0.4A§	B	179-2065-ND	38.61	37.46	36.68	34.76	HAD12-0.4-A
+15 @ 0.4A§	-15V @ 0.4A§	B	179-2066-ND	38.61	37.46	36.68	34.76	HAD15-0.4-A
+12V @ 1A or +15V @ 0.8A†	-12V @ 1A or -15V @ 0.8A or -5V @ 0.4A†	AA	179-2062-ND	44.88	43.53	42.64	40.39	HAA15-0.8-A
+12V @ 1.7A or +15V @ 1.5A†	-12V @1.7A or -15V @ 1.5A or -5V @ 0.7A†	BB	179-2068-ND	57.42	55.70	54.86	51.68	HBB15-1.5-A
+12V @ 3.4A or +15V @ 3A†	-12V @ 3.4A or -15V @ 3A†	CC	179-2073-ND	91.91	89.15	87.63	82.72	HCC15-3-A
+12V or 15V @ 5A†	(-)12V or 15V @ 5A†	E	179-2078-ND	135.80	131.72	129.01	122.22	HDD15-5-A
+18-20V @ 0.4A or +24V @ 0.6A	(-)18-20V @ 0.4A or -24V @ 0.6A	AA	179-2063-ND	48.46	47.00	46.04	43.61	HAA24-0.6-A
+18-20V @ 0.9A or +24V @ 1.2A	(-)18-20V @ 0.9A or -24V @ 1.2A	BB	179-2069-ND	57.42	55.70	54.86	51.68	HBB24-1.2-A
+18-20V @ 1.8A or +24V @ 2.4A†	(-)18-20V @ 1.8A or -24V @ 2.4A†	CC	179-2074-ND	91.91	89.15	87.63	82.72	HCC24-2.4-A
5V @ 2A*x	9-15V @ 0.5A	AA	179-2064-ND	52.20	50.63	49.59	46.97	HAA512-A
5V @ 3A*x†	12-15V @ 1.25A†	BB	179-2070-ND	62.65	60.77	59.51	56.39	HBB512-A
5V @ 6A*x†	12-15V @ 2.5A†	CC	179-2075-ND	99.22	96.24	94.26	89.31	HCC512-A
+5V @ 2A*	+12V @ 4A	N	179-2060-ND	91.91	89.14	87.31	84.16	CP323-A

* Overvoltage protection provided. Set at 6.2V ±0.4%. † Remote sense provided. x Isolated outputs, can be referenced as + or -. § Non-adjustable 3 terminal regulator.

International Series Triple Output

Output #1	Output #2	Output #3	Case Size	Digi-Key Part No.	Price Each 1	10	25	50	Power-One Part No.
5V @ 2A*x	+12 to 15V @ 0.4A	(-)12 to 15V @ 0.4A or -5V @ 0.4A	AA	179-2079-ND	57.42	55.70	54.55	51.68	HTAA-16W-A
5V @ 3A*†x	+12V @ 1A or +15V @ 0.8A†	(-)12 @ 1A or -15V @ 0.8A or -5V @ 0.4A†	BAA	179-2067-ND	79.37	76.99	75.41	71.43	HBAA-40W-A
+5V @ 6A*†	+12 to 15V @1.0A	(-)12 to 15V @ 1A or -5V @ 0.4A	D	179-2071-ND	94.00	91.18	89.30	84.55	HCAA-60W-A
5V @ 6A*†x	+12V @ 1.7A or +15V @ 1.5A†	-12V @ 1.7A or -15V @ 1.5A or -5V @ 0.7A†	CBB	179-2072-ND	109.67	106.38	104.17	98.70	HCBB-75W-A
5V @ 8A*†x	+12V @ 1.7A or +15V @ 1.5A†	-12V @ 1.7A or -15V @ 1.5A or -5V @ 0.7A†	131	179-2059-ND	125.35	121.59	119.08	112.81	CP131-A
5V @ 12A*†x	+12V @ 1.7A or +15V @ 1.5A†	-12V @ 1.7A or -15V @ 1.5A or -5V @ 0.7A†	DBB	179-2076-ND	141.02	136.79	133.97	126.93	HDBB-105W-A
5V @ 12A*†x	+12V @ 3.4A or +15V @ 3A†	-12V @ 3.4A or -15V @ 3A†	DCC	179-2077-ND	161.92	157.06	153.82	145.74	HDCC-150W-A

* Overvoltage protection provided. Set at 6.2V ±0.4%. † Remote sense provided. x Isolated outputs, can be referenced as + or -

power-one®

DC-DC Converters

Single, Dual and Triple Output

General Specifications

9274B-ND Power One DC-DC Reference Guide..........**$1.95**

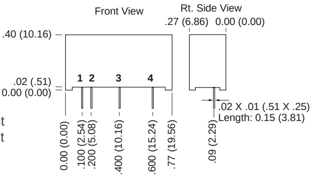
Fig.	Output Noise*	Load Reg (%)	Line Reg. (%)	Cross Reg. (%)	% Max Efficiency	Isolation Voltage	Temp. Range (case)
Single Output							
1	70 mV	+8, -5	±1.2	N/A	75	700V	-25°C to +85°C
2	50 mV	±0.4	±0.8	N/A	83	700V	-40°C to +85°C
3	75 mV	±0.7	±0.2	N/A	77	700V	-40°C to +85°C
4	60 mV	±0.4	±1.0	N/A	83	700V/1544V†	-40°C to +85°C
5	50 mV	±0.7	±0.2	N/A	82	700V	-40°C to +85°C
6	75 mV	±0.75	±0.2	N/A	83	700V	-40°C to +85°C
5	75 mV	±0.6	±1.0	N/A	83	700V/1544V†	-40°C to +85°C
Dual Output							
8	70 mV	±5.0	±1.0	±6.0	70	700V	-25°C to +85°C
4	100 mV	±1.0	±0.75	±3.0	79	700V	-40°C to +85°C
5	120 mV	±0.7	±0.2	±2.5	78	700V	-40°C to +85°C
6	70 mV	±0.4	±0.2	±3.0	82	1544V	-40°C to +100°C
5	50 mV	±0.7	±0.8	±2.5	85	700V/1544V†	-40°C to +85°C
Triple Output							
8	50 mV	±2.0	±1.5	±5.0	84	700V/1544V†	-40°C to +90°C

* Measured 1" from converter across a 1µF tantalum capacitor and bandwidth limited to 20MHz.
† 1544V isolation for DC/DC converters with 48V inputs.

Fig. 1

DSP1N5S Series: • Up to 1 watt unregulated output power • Single in-line package • Four terminal operation • Efficiencies to 75% • 350KHz fixed frequency operation • 700V isolation • -25°C to +85°C operation

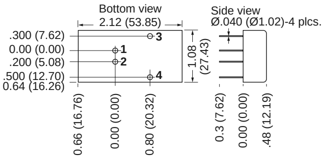
Output filtering is required for operation 10µf min.



1: +Input
2: –Input
3: -Out
4: +Out

Fig. 2

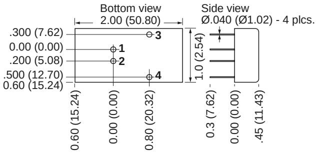
DFA6UxxS Series: • Up to 6 watts of output power • Over-current protection • Efficiencies to 83% • Low input to output capacitance • 700V Isolation, input to output • Ultra-wide input range (3:1)



1: +Input **2:** –Input **3:** +Out **4:** –Out

Fig. 3

DFC6U5S Series: • Ultra-wide 3.5-16 volt input range • Input filtered • 6 watts of output power • Efficiencies to 77% • 700V Isolation • Low input to output capacitance and Ultra-wide input range (4:1)

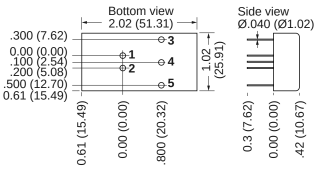


1: +Input **2:** –Input **3:** +Out **4:** –Out

Fig. 4

DFC10E Series:
- High power density, up to 11 watts per cubic inch (0.67 watts per cm^3)
- Efficiencies to 83% (lower for 3.3V)
- Low input to output capacitance
- 700V Isolation (1544V for 48V converters)
- Continuous overcurrent protection
- Five-sided shielded copper case
- Extended input range (2:1)

DFC10U Series:
- High power density, up to 11 watts per cubic inch
- Efficiencies to 79%
- Fully isolated, fully filtered design
- Greater than 700V Isolation
- Overcurrent protection
- Five-sided shielded copper case
- Ultra-wide input range (4:1)



DFC10E Series:
1: +Input **2:** –Input **3:** +Out **4:** No Pin **5:** –Out

DFC10U Series
1: +Input **2:** –Input **3:** +Out **4:** Common **5:** –Out

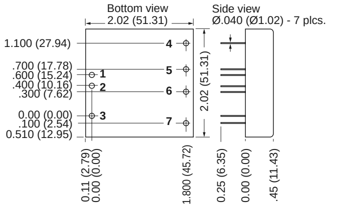
Fig. 5

DFA20ExxS Series: • Remote On/Off and Trim • Overcurrent protection and thermal shutdown • Efficiencies to 83% • 700V Isolation up to 1544V on 48V converters • Power density up to 11 watts per cubic inch • Five-sided shielded case • Extended range input (2:1)

DFA20ExxD Series: • Remote On/Off and Trim • Water washable case • Overcurrent protection and thermal shutdown • Efficiencies to 85% • Low input to output capacitance • 700V to 1544V isolation • 5-sided shielded case • Extended range input (2:1)

DGP12U5S Series: • Up to 12 watts output power • Five-sided shielded isolated copper case • Ultra-wide 3.5 to 16 volt input range • Efficiencies to 82% • Fully isolated and filtered • 700V isolation • Remote On/Off and Trim

DGP12U5D Series: • Remote On/Off and Trim • Five-sided shielded copper case • Typical efficiencies up to 78% • Fully isolated and filtered • 700V isolation • Ultra-wide range input (4:1)



DFA20ExxS and DGP12U5S Series
1: +Input **3:** On/Off **5:** +Output **7:** Trim
2: –Input **4:** No Pin **6:** –Output

DFA20ExxD and DGP12U5D Series
1: +Input **3:** On/Off **5:** Common **7:** Trim
2: –Input **4:** +Output **6:** –Output

Fig. 6

DFC15U48S Series: • High power density, up to 11 watts per cubic inch (0.67 watts per cm^3) • Efficiencies to 83% (lower for 3.3V) • Low input to output capacitance • 700V Isolation (1544V for 48V converters) • Continuous overcurrent protection • 3.3 Volt output available • Five-sided shielded copper case • Extended input range (2:1)

DFC15U48D Series: • Remote On/Off and Trim • Overcurrent and overtemperature protected • Water washable case • Efficiencies to 82% • 1544V Isolation • Ultra-wide range input (>3:1)

DFC15U48S Series
1: +Input **5:** +Output
2: –Input **6:** –Output
3: On/Off **7:** Trim
4: No Pin

DFC15U48D Series
1: +Input **5:** Common
2: –Input **6:** –Output
3: On/Off **7:** Trim
4: +Output

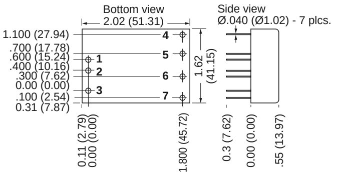
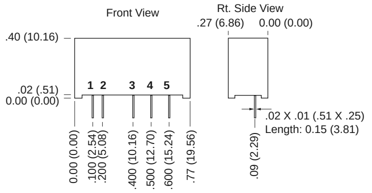


Fig. 7

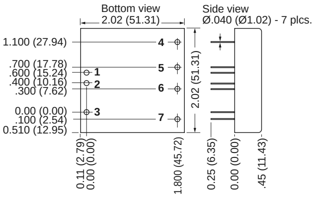
DSP1N5D Series: • Up to 1 watt unregulated output power • Single in-line package • Four terminal operation • Efficiencies to 70% • Output voltages: 5V, 7V, 12V, 14V, 15V, 17V • 500V isolation • -25°C to +85°C operation



1: +Input **2:** –Input **3:** -Out **4:** Common **5:** +Out

Fig. 8

DGP20ExxT Series: • Triple Outputs • Five-sided shielded case • Remote On/Off • Efficiencies to 84% • -40°C to +85°C operation • 700V isolation • Extended range input (2:1)



1: +Input **3:** On/Off **5:** +5V Output **7:** -12/15V Out
2: –Input **4:** +12/15V Out **6:** Common

Fig.	V Out	I Out	V In Range	Digi-Key Part No.	Price Each 1	10	25	50	Power-One Part No.
Single Output									
1	5	0.15 A	4.5-5.5	179-1068-ND	15.00	14.50	14.00	13.00	DSP1N5S5
	7	0.14 A	4.5-5.5	179-1069-ND	15.00	14.50	14.00	13.00	DSP1N5S7
	12	0.08 A	4.5-5.5	179-1070-ND	15.00	14.50	14.00	13.00	DSP1N5S12
	14	0.07 A	4.5-5.5	179-1071-ND	15.00	14.50	14.00	13.00	DSP1N5S14
	15	0.065 A	4.5-5.5	179-1072-ND	15.00	14.50	14.00	13.00	DSP1N5S15
	17	0.06 A	4.5-5.5	179-1073-ND	15.00	14.50	14.00	13.00	DSP1N5S17
2	5	1 A	9.0 -27.0	179-1005-ND	61.00	58.50	56.00	54.00	DFA6U12S5
	12	0.5 A	9.0 -27.0	179-1006-ND	61.00	58.50	56.00	54.00	DFA6U12S12
	15	0.4 A	9.0 -27.0	179-1007-ND	61.00	58.50	56.00	54.00	DFA6U12S15
	5	1 A	20.0-60.0	179-1008-ND	61.00	58.50	56.00	54.00	DFA6U48S5
	12	0.5 A	20.0-60.0	179-1009-ND	61.00	58.50	56.00	54.00	DFA6U48S12
3	5	1.2 A	3.5-16.0	179-1001-ND	61.00	58.50	56.00	54.00	DFC6U5S5
	5.2	1.2 A	3.5-16.0	179-1002-ND	61.00	58.50	56.00	54.00	DFC6U5S5.2
	12	0.5 A	3.5-16.0	179-1003-ND	61.00	58.50	56.00	54.00	DFC6U5S12
	15	0.4 A	3.5-16.0	179-1004-ND	61.00	58.50	56.00	54.00	DFC6U5S15
4	5	2 A	9.0-18.0	179-1011-ND	68.00	66.50	65.00	63.51	DFC10E12S5
	12	0.9 A	9.0-18.0	179-1014-ND	68.00	66.50	65.00	63.51	DFC10E12S12
	15	0.7 A	9.0-18.0	179-1015-ND	68.00	66.50	65.00	63.51	DFC10E12S15
	5	2 A	18.0-36.0	179-1012-ND	68.00	66.50	65.00	63.51	DFC10E24S5
	12	0.9 A	18.0-36.0	179-1016-ND	68.00	66.50	65.00	63.51	DFC10E24S12
	15	0.7 A	18.0-36.0	179-1017-ND	68.00	66.50	65.00	63.51	DFC10E24S15
	5	2 A	36.0-72.0	179-1013-ND	68.00	66.50	65.00	63.51	DFC10E48S5
5	5	4 A	9.0-18.0	179-1033-ND	100.50	96.50	91.50	86.50	DFA20E12S5
	12	1.7 A	9.0-18.0	179-1034-ND	100.50	96.50	91.50	86.50	DFA20E12S12
	15	1.4 A	9.0-18.0	179-1035-ND	100.50	96.50	91.50	86.50	DFA20E12S15
	5	4 A	18.0-36.0	179-1037-ND	100.50	96.50	91.50	86.50	DFA20E24S5
	15	1.4 A	18.0-36.0	179-1039-ND	100.50	96.50	91.50	86.50	DFA20E24S15
5	5	2 A	3.5-16.0	179-1053-ND	81.50	78.00	75.00	72.00	DGP12U5S5
	12	1 A	3.5-16.0	179-1054-ND	81.50	78.00	75.00	72.00	DGP12U5S12
6	5	3 A	20.0-60.0	179-1027-ND	93.00	89.00	85.50	82.00	DFC15U48S5
Double Output									
4	±5	±0.85 A	9.0-36.0	179-1021-ND	68.00	66.50	65.00	63.51	DFC10U24D5
	±12	±0.4 A	9.0-36.0	179-1022-ND	68.00	66.50	65.00	63.51	DFC10U24D12
	±15	±0.32 A	9.0-36.0	179-1023-ND	68.00	66.50	65.00	63.51	DFC10U24D15
	±5	±0.8 A	18.0-72.0	179-1024-ND	68.00	66.50	65.00	63.51	DFC10U48D5
	±12	±0.415 A	18.0-72.0	179-1025-ND	68.00	66.50	65.00	63.51	DFC10U48D12
	±15	±0.33 A	18.0-72.0	179-1026-ND	68.00	66.50	65.00	63.51	DFC10U48D15
5	±5	±1.7 A	9.0-18.0	179-1044-ND	100.50	96.50	91.50	86.50	DFA20E12D5
	±12	±0.85 A	9.0-18.0	179-1045-ND	100.50	96.50	91.50	86.50	DFA20E12D12
	±15	±0.7 A	9.0-18.0	179-1046-ND	100.50	96.50	91.50	86.50	DFA20E12D15
	±5	±1.7 A	18.0-36.0	179-1047-ND	100.50	96.50	91.50	86.50	DFA20E24D5
	±12	±0.85 A	18.0-36.0	179-1048-ND	100.50	96.50	91.50	86.50	DFA20E24D12
	±15	±0.7 A	18.0-36.0	179-1049-ND	100.50	96.50	91.50	86.50	DFA20E24D15
5	±5	±1.0 A	3.5-16.0	179-1056-ND	81.50	78.00	75.00	72.00	DGP12U5D5
	±12	±0.5 A	3.5-16.0	179-1057-ND	81.50	78.00	75.00	72.00	DGP12U5D12
	±15	±0.4 A	3.5-16.0	179-1058-ND	81.50	78.00	75.00	72.00	DGP12U5D15
6	±15	±0.5 A	20.0-72.0	179-1031-ND	93.00	89.00	85.50	82.00	DFC15U48D15
7	±5	±0.075 A	4.5-5.5	179-1074-ND	15.00	14.50	14.00	13.00	DSP1N5D5
	±7	±0.07 A	4.5-5.5	179-1075-ND	15.00	14.50	14.00	13.00	DSP1N5D7
	±12	±0.04 A	4.5-5.5	179-1076-ND	15.00	14.50	14.00	13.00	DSP1N5D12
	±14	±0.035 A	4.5-5.5	179-1077-ND	15.00	14.50	14.00	13.00	DSP1N5D14
	±15	±0.033 A	4.5-5.5	179-1078-ND	15.00	14.50	14.00	13.00	DSP1N5D15
	±17	±0.030 A	4.5-5.5	179-1079-ND	15.00	14.50	14.00	13.00	DSP1N5D17
Triple Output									
8	5 ±12	2.5 A ±0.310 A	9.0-18.0	179-1059-ND*	102.00	98.00	94.00	89.00	DGP20E12T5/12
	5 ±15	2.5 A ±0.250 A	9.0-18.0	179-1060-ND†	102.00	98.00	94.00	89.00	DGP20E12T5/15
	5 ±12	2.5 A ±0.310 A	18-36.0	179-1061-ND‡	102.00	98.00	94.00	89.00	DGP20E24T5/12
	5 ±15	2.5 A ±0.250 A	18-36.0	179-1062-ND*	102.00	98.00	94.00	89.00	DGP20E24T5/15

***600 mA, †75 mA, ‡60 mA = Minimum Current Load**

POWER-ONE® Switching Power Supplies

GENERAL FEATURES: Power-One's proprietary Universal Terminal Block Connectors and Mounting System assure product integration. Safety agency approved: UL recognized, CSA certified, and TUV Essen certified. • Power Fail Warning Signal. 100% test, inspection and burn-in. • Overload Protection • Overvoltage Protection • Overtemperature Protection **AC Input:** Automatic selecting: 90-264 VAC, 47-63 Hz single phase. **Temperature Rating:** 0°C to +50°C • Two Year Warranty

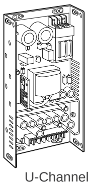
MPU150 - 150 Watts with PFC

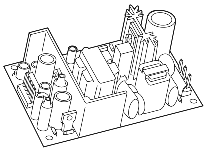
The MPU150 is the first product in this power range incorporating PFC in a low profile package that meets 1U height constraints. All models feature remote sense on V1 and V2 to provide independent compensation of power cable losses.

Power-Ones' unique dual-converter architecture combines high reliability, achieved through reduced component stresses, with exceptional regulation. Other standard features include CE Marking, current sharing on V1 and V2, thermal shutdown, and remote inhibit. Additionally,only 300 Linear Feet per Minute (LFM) airflow is required. **FEATURES:** • Active power factor correction meets EN61000-3-2 • Low profile height fits 1U height constraints • Dual main outputs provide 3.3V and 5V for mixed logic applications • CE Marked to the LVD • Autoranging AC input, 85-264VAC • Isolated V3 and V4 can be used as plus or minus outputs

MPB80 - 80 Watts with PFC

FEATURES: • 65 Watts convection cooled, 80 Watts with 300 LFM forced air • Power factor correction meets EN61000-3-2 • High 3.3V and 5V current capabilities available • CE Marked to the LVD • Autoranging AC input, 85-264VAC • Overvoltage protection on the main output • Isolated V3 can be used as a plus or minus output.


U-Channel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MAP SERIES *Single Output*

Nominal Output Voltage	Power (Watts)		Current		Initial Setting Tolerance	Line Reg.	Load Reg.	Output Adj. Range	Configuration	Digi-Key Part No.	Price Each			Power-One Part No.
	Continuous	Peak	Maximum	Peak							1	10	25	
5V	40	—	8A/11A	—	—	.2%	1%	4.75V-5.5V	6.00" x 3.27" x 1.60" (152.40mm x 83.06mm x 40.64mm) *	179-2020-ND	102.26	88.53	79.81	MAP40-1005
5V	40	—	8A/11A	—	4.9 to 5.1V	.2%	1%	4.7V-5.8V	5.00" x 3.00" x 1.25" (127.00mm x 76.20mm x 31.75mm) ‡	179-2001-ND	61.80	56.65	51.50	MAP42-1005
12V-15V	40	—	3.4A/2.2 A	4.6A/3.0A	11.9 to 12.1V	.2%	1%	11V-18V	5.00" x 3.00" x 1.25" (127.00mm x 76.20mm x 31.75mm) ‡	179-2002-ND	61.80	56.65	51.50	MAP42-1012
24V-28V	40	—	1.4A/1.7A	2.3A/1.9A	23.8 to 24.2V	.2%	1%	23V-29V	5.00" x 3.00" x 1.25" (127.00mm x 76.20mm x 31.75mm) ‡	179-2003-ND	61.80	56.65	51.50	MAP42-1024
12V-15V†	60	70	5.0A/4.0A	5.8A/4.7A	12.0 to 12.2V	.2%	1%	11.4V-15.75V	6.00" x 3.27" x 1.60" (152.40mm x 83.06mm x 40.64mm) *	179-2081-ND	102.26	88.53	79.81	MAP55-1012
24V-28V†	60	70	2.5A/2.2A	2.9A/2.5A	23.8 to 24.2V	.2%	1%	23.5V-28.5V	6.00" x 3.27" x 1.60" (152.40mm x 83.06mm x 40.64mm) *	179-2082-ND	102.26	88.53	79.81	MAP55-1024
5.1V	110††	110	16A	22A	5.09 to 5.11V	.2%	1%	4.95V-5.50V	7.00" x 4.25" x 1.80" (177.80mm x 107.95mm x 45.72mm) ‡	179-2006-ND	154.50	144.20	133.90	MAP110-1005
12V-15V†	150	165	12A/10A	13.8A/11A	12 to 12.2V	.2%	1%	11.4V-15.75V	8.50" x 4.50" x 2.00" (215.90mm x 114.30mm x 50.80mm) *	179-2080-ND	223.22	198.64	179.03	MAP130-1012
12V-15V†	140††	—	9.2A 7.3A	12.5A 10A	11.97 to 12.03V	.1%	.5%	11.0V-16.0V	7.00" x 4.25" x 1.80" (177.80mm x 107.95mm x 45.72mm)‡	179-2009-ND	185.40	175.10	164.81	MAP140-1012
24V-28V†	140††	—	4.6A 4A	6.3A 5.4A	23.95 to 24.5V	.1%	.5%	22.8V-29.2V	7.00" x 4.25" x 1.80" (177.80mm x 107.95mm x 45.72mm) ‡	179-2010-ND	185.40	175.10	164.81	MAP140-1024
48V	140††	—	2.3A	3.1A	47.9 to 48.1V	.1%	.5%	45.6V-54V	7.00" x 4.25" x 1.80" (177.80mm x 107.95mm x 45.72mm) ‡	179-2011-ND	185.40	175.10	164.81	MAP140-1048

* U-Channel Configuration † Models with adjustable outputs have current ratings expressed as current at lowest nominal voltage followed by current at highest nominal voltage.
†† 200LFM force-air cooling ‡ Board Only Configuration.

Triple Output

Nom. Output Voltage	Power (Watts)		Current	Initial Setting Tolerance	Line Reg.	Load Reg.	Configuration	Digi-Key Part No.	Price Each				Power-One Part No.
	Continuous	Peak							1	10	25	50	
+5V +24V -12V	40	50	3A 1A .3A	4.9 to 5.1V 23.0 to 25V -11.5 to -12.5V	.2% 1% 1%	2% 3.5% 2%	*Board Only* 5.00" x 3.00" x 1.25" (127.00mm x 76.20mm x 31.75mm)	179-2004-ND	74.10	67.05	60.69	54.95	MAP40-3101
+5V +12V -5V	40	50	3A 2A .5A	4.9 to 5.1V 11.5 to 12.5V -4.75 to 5.25V	.2% 1% 1%	2% 3.5% 2%	*Board Only* 5.00" x 3.00" x 1.25" (127.00mm x 76.20mm x 31.75mm)	179-2005-ND	74.10	67.05	60.69	54.95	MAP40-3105
+5V +12V -12V	40	50	3A 2A .3A	4.9 to 5.1V 11.5 to 12.5V -11.5 to -12.6V†	.2% 1% 1%	2% 3.5% 2%	*Board Only* 5.00" x 3.00" x 1.25" (127.00mm x 76.20mm x 31.75mm)	179-2095-ND*	61.75	55.88	50.57	45.78	MAP40-3000
+5V +12V -12V	80	140	20A 4A 1A	5.09 to 5.11V 11.97 to 12.03AV -11.4 to -12.6V	.2% .1% .1%	1% 2% 2%	*Board Only* 7.00" x 4.25" x 1.80" (177.80mm x 107.95mm x 45.72mm)	179-2012-ND	200.85	190.55	177.16	162.74	MAP140-3000P

* Requires Connectors WM 2123-ND, WM2126-ND, & WM2300-ND which are sold separately. † MAP40-3000 V3 regulation requires a minimum load of 0.5A on V1 or 0.3A on V2.

Quad Output

Nom. Output Voltage	Power(Watts)		Current	Initial Setting Tolerance	Line Reg.	Load Reg.	Configuration	Digi-Key Part No.	Price Each				Power-One Part No.
	Continuous	Peak							1	10	25	50	
+5V +12V -5V -12V	55	65	6A 3A .5A* .5A*	5.0 to 5.2V 11.6 to 12.4V -4.8 to -5.2V -11.6 to -12.4V	.2% .2% .5% .5%	2% 2% 2% 2%	*U-Channel* 6.00" x 3.27" x 1.60" (152.40mm x 83.06mm x 40.64mm)	179-2096-ND	113.01	97.89	88.26	85.84	MAP55-4000
+5V +24V +12V -12V	55	65	6A 1.5A .5A* .5A*	5.0 to 5.2V 23.0 to 24.9V 11.6 to 12.4V -11.6 to -12.4V	.2% .2% .5% .5%	2% 2% 2% 2%	*U-Channel* 6.00" x 3.27" x 1.60" (152.40mm x 83.06mm x 40.64mm)	179-2097-ND	113.01	97.89	88.26	85.84	MAP55-4001
+5V +12V +12V -12V	55	65	6A 3A .5A* .5A*	5.0 to 5.2V 11.6 to 12.4V 11.6 to 12.4V -11.6 to -12.4V	.2% .2% .5% .5%	2% 2% 2% 2%	*U-Channel* 6.00" x 3.27" x 1.60" (152.40mm x 83.06mm x 40.64mm)	179-2098-ND	113.01	97.89	88.26	85.84	MAP55-4002
+5V +15 -5V -15V	55	65	6A 2.5A .5A* .5A*	5.0 to 5.2V 14.6 to 15.4V -4.8 to -5.2V -14.4 to -15.6V	.2% .2% .5% .5%	2% 2% 2% 2%	*U-Channel* 6.00" x 3.27" x 1.60" (152.40mm x 83.06mm x 40.64mm)	179-2099-ND	117.60	103.98	91.81	89.06	MAP55-4003
+5V +12V -12V -5V	80	90	14A 4A 1A 1A	5.1 to 5.2V 11.9 to 12.1V -11.5 to -12.5V -4.8 to -5.4V	.2% .2% .5% .5%	1% 1% 2% 2%	*U-Channel* 7.20" x 4.20" x 1.80" (182.88mm x 106.68mm x 45.72mm)	179-2100-ND	177.87	167.71	152.46	147.39	MAP80-4000
+5V +24V +12V -12V	80	90	14A 2A 1A 1A	5.1 to 5.2V 24.0 to 24.1V 11.5 to 12.5V -11.5 to -12.5V	.2% .2% .5% .5%	1% 1% 2% 2%	*U-Channel* 7.20" x 4.20" x 1.80" (182.88mm x 106.68mm x 45.72mm)	179-2101-ND	177.87	167.71	152.46	147.38	MAP80-4001
+5V +12V +12V -12V	80	90	14A 4A 1A 1A	5.1 to 5.2V 12.0 to 12.1V 11.6 to 12.4V -11.6 to -12.4V	.2% .2% .5% .5%	1% 1% 2% 2%	*U-Channel* 7.20" x 4.20" x 1.80" (182.88mm x 106.68mm x 45.72mm)	179-2102-ND	177.87	167.71	152.46	147.38	MAP80-4002
+5V +15V -5V -15V	80	90	14A 3.5A 1A 1A	5.1 to 5.2V 14.6 to 15.1V -4.8 to -5.4V -14.4 to -15.5V	.2% .2% .5% .5%	1% 1% 2% 2%	*U-Channel* 7.20" x 4.20" x 1.80" (182.88mm x 106.68mm x 45.72mm)	179-2103-ND	181.68	177.87	162.62	152.46	MAP80-4003
+5V +12V -12V +24V	80	110	12A 5A 1A 1A	5.09 to 5.11V 11.97 to 12.03V -11.4 to -12.6V 23.2 to 24.8V	.2% .1% .1% .1%	.5% 1% 1% 1%	*Board Only* 7.00" x 4.25" x 1.80" (177.80mm x 107.95mm x 45.72mm)	179-2007-ND	154.50	144.20	133.90	124.63	MAP110-4011
+3.3V +5V -12V +12V	80	110	12A 5A 1A 1A	3.29 to 3.31V 4.98 to 5.02V -11.4 to -12.6V 11.4 to 12.6V	.3% .2% .1% .1%	.7% 1% 1% 1%	*Board Only* 7.00" x 4.25" x 1.80" (177.80mm x 107.95mm x 45.72mm)	179-2008-ND	159.65	149.35	139.05	128.75	MAP110-4300
+5V +12V -12V -5V	130	165	20A 5A 1A 1A	5.1 to 5.2V 11.75 to 12V -11.6 to -12.4V -48 to -5.2V	.2% .5% .5% .5%	1% 2% 2% 2%	*U-Channel* 8.50" x 4.50" x 2.00" (215.90mm x 114.30mm x 50.80mm)	179-2093-ND	223.21	198.64	179.03	174.13	MAP130-4000
+5V +24V -12V +12V	130	165	20A 3.5A 1A 1A	5.1 to 5.2V 23.9 to 24.1V -11.6 to -12.4V 11.6 to 12.4V	.2% .5% .5% .5%	1% 2% 2% 2%	*U-Channel* 8.50" x 4.50" x 2.00" (215.90mm x 114.30mm x 50.80mm)	179-2019-ND	223.21	198.64	179.03	174.13	MAP130-4001
+5V +12V +12V -12V	130	165	20A 5A 1A 1A	5.1 to 5.2V 11.9 to 12.1V 11.6 to 12.4V -11.6 to -12.4V	.2% .5% .5% .5%	1% 2% 2% 2%	*U-Channel* 8.50" x 4.50" x 2.00" (215.90mm x 114.30mm x 50.80mm)	179-2094-ND	223.21	198.64	179.03	174.13	MAP130-4002
Cover for MAP55 and MAP40-1005 Series								179-2021-ND	10.00	—	—	—	412-59584
Cover for MAP80 Series								179-2022-ND	11.00	—	—	—	412-59585
Cover for MAP130 Series								179-2023-ND	10.00	—	—	—	412-59586

* Max load on V3 or V4 can be 1 amp if either V3 or V4 is unloaded.

(Continued)

POWER-ONE® Switching Power Supplies *(Cont.)*

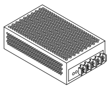
MPB 80 Series

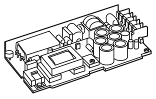
Configuration: 179-2013-ND: Board Only 5.00” x 3.00” x 1.30” (127.00mm x 76.20mm x 33.02mm)
179-2014-ND and 179-2015-ND: Board Only 5.00” x 3.00” x 1.40” (127.00mm x 76.20mm x 35.56mm)

Nom. Output Volt.	Cur.	Adjustable Range	Line Reg.	Load Reg.	Digi-Key Part No.	Price Each 1	10	25	50	Power-One Part No.
*80 - Power (Watts)**										
+5V +12V	11A .5A	4.9 to 5.1V 11.5 to 12.5V	.8% .5%	-4% to +2% ±5%	179-2013-ND	98.70	88.20	81.90	73.51	MPB80-2000
+5V +12V 12V	7A 2.5A 0.3A	4.9 to 5.1V 11.5 to 12.5 -11.5 to -12.5	.5% 1.5% .5%	-4% to +6% -7% to +13% ±4%	179-2014-ND	98.70	88.20	81.90	73.51	MPB80-3000
+3.3V +5V 12V	7A 3A 0.4A	3.27 to 3.33V 4.95 to 5.05V 10.2 to 14.0V	.7% .5% 1.5%	±2% ±2% -15% to +17%	179-2015-ND	105.00	96.60	89.25	79.80	MPB80-3300

* 80 Watt with 300LFM force-air cooling.

TOKO Power Supplies SW Series





FEATURES: • Very low profile and small size • Wide Variation: 7 type 94 part number • Worldwide Input Voltage: all type 85VAC ~ 264VAC (continuous) • High Dialectic Strength: 2000VAC between input and output • Safety Standards: Designed to meet UL1950(D3). **GENERAL SPECIFICATIONS:** • **Frequency Range:** 47-63 Hz • **Inrush Current:** 5V~15V = 30/60A; 30V~100V = 45/90A • **Ripple Voltage (max.):** 5V-12V: 120mVpp; 15V: 150mVpp; 24V: 200mVpp; 48V: 400mVpp: • **Overall Output Req.:** 3% • **Overload Protection:** +105% of rated current, automatic recovery • **Dielectric Strength:** 2.0KVAC for 1 minute applied between input/output • **Insulation Resistance:** 100mΩ between output/frame and input/output, measured with a 500 VDC tester • **Operating Temp.:** 0°C to +60°C • **Operating Humidity:** 30% to 85% RH • **Weight:** SW30: 250g; SW50: 400g; SW100: 600g

Input Volt. (Vac)	Output Volt.(s)	Output Current	Dim. (mm) H x D x W	Digi-Key Part No.	Price Each 1	50	Toko Part No.
Output Power — 30 Watts — Open Frame							
85-264	24V	1.33A	97x114x25.4	TS9996-ND	67.65	65.06	SW30-24F
Output Power — 50 Watts — Open Frame							
85-264	24V	2.1A	97x158x25.4	TS9937-ND	89.22	85.79	SW50-24F
Output Power — 100 Watts — Open Frame							
85-264	24V	4.2A	97 x 194 x 35	TS9928-ND	152.58	—	SW100-24F
85-264	48V	2.1A	97 x 194 x 35	TS9927-ND	148.97	143.25	SW100-48F
Output Power — 100 Watts — Enclosed Frame							
85-264	5V	20.0A	97 x 194 x 35	TS9864-ND	158.18	—	SW100-05C

Power Supplies SWE Series

FEATURES: • Meets CE marking • Ultra thin and compact • High isolation • Universal input (85~264 VAC) **Safety Standard:** UL, CSA, EN60 950. **Noise Immunity:** EN61000-4-2~5. **Noise Standard:** FCC, VCCI, EN55011, EN55022 **DESCRIPTION:** Toko’s CE approved single output series. Compact size and high reliability make this series an excellent choice when a very low profile is required. Six standard single output ratings with 65 versions are available, all with universal input (85 ~ 264 VAC). If you need the low profile of the SWE Series, but need more flexibility in output, the SWE Series can fit into your distributive power architectures by adding Toko’s DC-DC converters to your design. This will keep your costs low, while allowing you to choose the output you need.

Input Volt. (Vac)	Output Volt.(s)	Output Current	Dim. (mm) H x D x W	Digi-Key Part No.	Price Each 1	50	Toko Part No.
Output Power — 5 Watts — Open Frame							
85-264	12V	0.42A	18 x 65 x 50	TS9702-ND	42.78	37.08	SWE05-12PC
Output Power — 10 Watts — Open Frame							
85-264	12V	0.83A	18 x 70 x 65	TS9704-ND	49.38	42.80	SWE10-12PC
85-264	24V	0.42A	18 x 70 x 65	TS9705-ND	49.38	42.80	SWE10-24PC
*Output Power — 15 Watts — Enclosed Frame**							
85-264	12V	1.0A	25.4 x 80 x 97	TS9707-ND	73.31	63.54	SWE15-12C
*Output Power — 30 Watts — Enclosed Frame**							
85-264	24V	1.0A	27.4 x 114 x 97	TS9714-ND	97.48	84.49	SWE30-24C
Output Power — 30 Watts — Open Frame							
85-264	12V	2.50A	27.4 x 114 x 97	TS9715-ND	91.84	79.60	SWE30-12F
85-264	24V	1.33A	27.4 x 114 x 97	TS9716-ND	91.84	79.60	SWE30-24F
*Output Power — 50 Watts — Enclosed Frame**							
85-264	5V	10.0A	25.4 x 158 x 97	TS9717-ND	127.50	110.50	SWE50-05C
85-264	12V	4.20A	25.4 x 158 x 97	TS9718-ND	127.50	110.50	SWE50-12C
85-264	24V	2.10A	25.4 x 158 x 97	TS9719-ND	127.50	110.50	SWE50-24C
Output Power — 50 Watts — Open Frame							
85-264	24V	2.10A	25.4 x 158 x 97	TS9721-ND	121.11	104.97	SWE50-24F
*Output Power — 75 Watts — Enclosed Frame**							
85-264	12V	6.30A	37.0 x 179 x 97	TS9722-ND	182.40	158.09	SWE75-12C
85-264	24V	3.10A	37.0 x 179 x 97	TS9723-ND	182.40	158.09	SWE75-24C
Output Power — 75 Watts — Open Frame							
85-264	24V	3.10A	37.0 x 179 x 97	TS9724-ND	176.45	152.92	SWE75-24F

TS9914-ND	Cable Kit AC Input SW05/10 Series	**$4.60**
TS9905-ND	Cable Kit DC Output SW05 Series	**$4.60**
TS9901-ND	Cable Kit DC Output SW10 Series	**$7.23**

* These units have a 20% current derating unless fan cooled.

MPU 150 Series

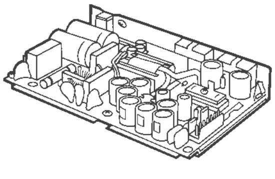
Configuration: 179-2016-ND, 179-2017-ND and 179-2018-ND: U-Channel 7.40” x 4.20” 1.50” (187.96mm x 106.68mm x 38.10mm)

Nom. Output Volt.	Cur.	Adjustable Range	Line Reg.	Load Reg.	Digi-Key Part No.	Price Each 1	10	25	50	Power-One Part No.
*150 - Power (Watts)**										
+3.3V +5V +12V	35A 20A 2A	3.15 to 3.8V 5.0 to 5.5V 10.8 to 13.2V	.6% .4% .4%	1.5% 3% 3%	179-2016-ND	241.50	220.50	210.01	194.26	MPU150-3300
+5.1V +12V 5V 12V	30A 8A 3A 2A	5.0 to 5.5V 10.8 to 13.2V 5.0 to 5.5V 10.8 to 13.2V	.4% .4% .4% .4%	1% 1% 1% 1%	179-2017-ND	262.50	241.50	225.75	204.75	MPU150-4000
+5.1V +3.3V 12V 12V	30A 15A 3A† 3A†	5.0 to 5.5V 3.15 to 3.6V 10.8 to 13.2V 10.8 to 13.2V	.4% .6% .4% .4%	1% 1.5% 7% 7%	179-2018-ND	262.50	241.50	225.75	204.75	MPU150-4530

* 150 Watt with 300LFM force-air cooling. † Total not to exceed 5A.

Switching Power Supplies MW Series

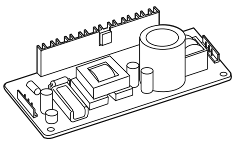
GENERAL SPECIFICATIONS:



• **Frequency Range:** 47-63Hz • **Inrush Current:** 30A • **Ripple Voltage (max.):** 100mVpp • **Overall Output Reg.:** 2% max. • **Overload Protection:** Effective at 105% of rated current, automatic recovery • **Efficiency:** 65% • **Dielectric Strength:** 3.750 VAC for 1 minute applied between input/output and input/frame, leakage less than 10mA • **Insulation Resistance:** +100mΩ between output frame, measured with a 500 VDC tester • **Operating Temp.:** -10°C ~ 60°C • **Operating Humidity:** 30 ~ 85% RH • **Weight:** MW15: 150g (.33 lb.) • **Safety Standards:** UL478 CSA C22.2, No. 143, 154; MW100: Designed to meet VDE, IEC 950, CSA C22.2, No.143, 154, applicable to UL478, 1419 • **Noise Standards:** Meets FCC Class B.

Input Volt. (Vac)	Output Volt.(s)	Output Current	Dim. (mm) H x D x W	Digi-Key Part No.	Price Each 1	50	Toko Part No.
Output Power — 15 Watts							
85-264	+5, +15, –15V	2, 0.3, 0.2A	25 x 110 x 60	TS9970-ND	63.95	61.49	MW15-11

Switching Power Supplies LS Series



Offers high density and low profile. Worldwide input ratings are covered by the LS Series at 85 - 132 VAC input. These are especially suited for distributed power architectures where flexibility of output is required. With the addition of Toko DC-DC Converter.

FEATURES:

• Low cost • High density • High isolation • Simple structure that is easy to install • Overcurrent protection with safety reset • Overvoltage protection • Ability to operate in series • Input voltage: LS Series input of 120 VAC • Available power: 30W, 50W, and 100W • Available voltage: 5V, 12V, and 24V.

Safety Standard: • Designed to meet UL 1950 (D3) • Designed to meet CSA 22.2 no. 950 (D3).

Noise Standard: • FCC Class A • VCCI Class 1

Input Volt. (Vac)	Output Volt.	Output Current	Dim. (mm) H x D x W	Digi-Key Part No.	Price Each 1	50	Toko Part No.
Output Power — 100 Watts - Open Frame							
85-132	5V	20.0A	37 x 220 x 65	TS9920-ND	85.49	82.21	LS100-05

Switching Power Supplies MWE Series

• Multiple Output • Universal Input (85~264VAC) • Conforming to the CE Marking

FEATURES:

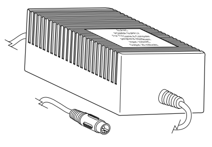
• Triple output • Ultra thin and compact • High isolation • Universal input (85~264VAC) • Safety Standard: Approved UL1950, CAS 950, EN60 950 (LGA) • Noise Standard: Designed to Meet FCC-B, VCCI-2, EN55011, EN55022 Class: B • Immunity: EN61000-4-2~5 • Flex power topology

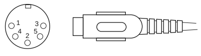
Input Volt. (VAC)	Output Volt.(s) (V)	Output Current (A)	Dim. (mm) H x D x W	Digi-Key Part No.	Price Each 1	50	Toko Part No.
Output Power — 30 Watts							
85-264	+5, +15, -15	5, 1.2A, 0.5	27 x 150 x 60	TS9753-ND	121.14	104.99	MWE30-11
Output Power — 50 Watts							
85-132/ 170-264	+5, +12, -12	8, 1.5, 1.0	27 x 155 x 95	TS9754-ND	168.90	146.39	MWE50-01
	+5, +15, -15	8, 1.5, 1.0	27 x 155 x 95	TS9755-ND	168.90	146.39	MWE50-11

ELPAC POWER SYSTEMS

External Power Supplies

Wide Range Input Series- Switching Regulated Tabletops





TUV FCC IEC

Outside ring on all units is an EMI earth ground (Not to be used as a safety ground).

Features: • IEC input connector • One year warranty.

General Specifications: • Storage Temperature: -55°C to +85°C • Operating Temperature: 0°C to +40°C

Output Specifications: • Line Regulation: ±0.2% max. • Load Regulation: ±5% from 60% load nominal except output #2 • Cross Regulation: ±2%. Cross regulation specifies the max. voltage change on auxiliary outputs when the +5V output load current is varied from 75% of full rated to either 50% or 100% of full rated • Set Point: ±2% at 60% load on main input • Ripple & Noise: ±1% max. • Overload Protection: All outputs protected against overloads and short circuit. Automatic recovery upon removal of overload conditions • Overvoltage Protection: Provided on main output only and set at 115-135% • Output Overshoot: No overshoot on turn-on or turn-off • Transient Response: For all outputs, recovery to within 1% of nominal output occurs within 2 milliseconds for a 50% to 100% load step. Maximum excursion is 6% from initial voltage setpoint • Hold-Up Time: 25msec min. at full rated load and nominal AC input voltage • Min. Load: Third quarter down to zero load.

Approved by all major regulatory agencies

OUTPUT PIN CONFIGURATION-5 PIN DIN

Single Output Model

MODEL	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5
WRI3012	COM	COM	12V	COM	12V
WRI4212	COM	COM	12V	COM	12V
WRI4214	COM	COM	24V	COM	24V
WRI5215	COM	COM	30V	COM	30V

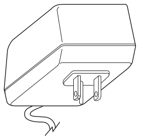
Dual Output Model

MODEL	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5
WRI3021	COM	COM	5V	COM	12V
WRI3025	COM	N/C	5V	COM	5V
WRI4221	COM	COM	5V	COM	12V

Triple Output Model

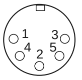
MODEL	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5
WRI2731	COM	COM	5V	-12V	12V
WRI3031	COM	COM	5V	-12V	12V
WRI4231	COM	COM	5V	-12V	12V
WRI4232	COM	COM	5V	-12V	12V

Regulated Wallmounts



DIN PINOUT MATRIX

MODEL	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5
WM053	COM	N/C	5V	-5V	12V
WM063	COM	N/C	5V	-12V	12V
WM075	COM	N/C	5V	COM	5V
WM093	COM	N/C	5V	-5V	12V
WM112	COM	N/C	5V	COM	12V
WM113	COM	N/C	5V	-12V	12V
WM144	COM	N/C	12V	COM	12V



Features: • UL 1310 & UL 1950 listed, CSA Approved • One year warranty

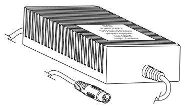
Specifications: • Output Ripple: 20 millivolts (p-p) • Operating Temperature: 0-40°C • Combined Regulation: ±5% • Fusing: Internal & non-replaceable

Options: • Shielded output cable - S Option: Shielded cable with EMI ground tied to outer ring of DIN connector (Not to be used as safety ground)

Connector Type: Din, except for WM025 which is Switchcraft Plug 760.

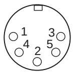
UL and CSA Approved

Regulated Tabletops



DIN PINOUT MATRIX

MODEL	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5
WM100★	-5V	N/C	5V	COM	COM
WM113TT	COM	N/C	5V	-12V	12V
WM220-1	COM	N/C	5V	-12V	12V



Features: • UL 1310 listed, CSA Approved • One year warranty

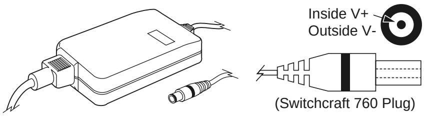
Specifications: • Output Ripple: 20 millivolts (p-p) • Operating Temp.: 0°C to 40°C • Combined Regulation: ±5% • Fusing: Internal & non-replaceable

Options: • ***Shielded output cable - S Option***: Shielded cable with EMI ground tied to outer ring of DIN connector (Not to be used as safety ground) • Connector Type: Din.

UL and CSA Approved
★ CSA Approved Only

Switching MIADA Series

(Notebook Style)



(Switchcraft 760 Plug)

Input Specifications: • A/C Input: 95-250VAC, 47/63Hz via IEC input connector • Input Protection: Input line fuse provided • Inrush Current: Internally limited by thermistor. Cold start, peak current at 250VAC, 25 amps max.

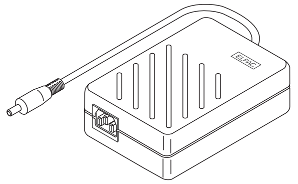
Output Specifications: • Line Regulation: ±.2% over 90-132 or 180-250 • Load Regulation: ±5% for ±40% load variation (60% nominal) • Min. load: 0 watts • Ripple & Noise: ±1% PK-PK max. • Overload Protection: Automatic Recovery • Overvoltage Protection: 115-140%

General Specifications: • Storage Temp.: -55°C to +85°C • Operating Temp.: 0°C to 40°C • EMI: FCC B/VDE B • Input Connector: IEC 320 Series.

UL, CSA & TUV Approved

TUV

MW40 Series - Medical Adapters



Features: • 3-pin IEC 320 inlet • Output connector: barrel type (5.5mm x 2.5mm x 9.5mm) • Wide range AC input • Level B EMI filter • Fully regulated output

Input Specifications: • 100-240VAC • Frequency: 50/60 Hz

Output Specifications: • Line Regulation: 0.2% max. • Load Regulation: 5% max. • Short circuit protected • Ripple & Noise (VP-P): ±0.5%

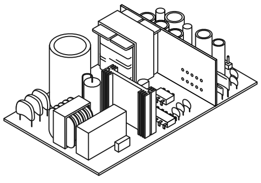
Safety Approvals: • UL2601 • CSA 601 • IEC 601-1

AC	DC Outputs			Max.	Dimensions - In. (mm)	Digi-Key	Price Each			Elpac
Input	Single	Double	Triple	Watts	L x W x H	Part No.	1	5	10	Part No.
Wide Range Input Series-Regulated Tabletops										
90-250VAC, 47-440Hz	12V, 2.5A	—	—	30†	6.3 x 3.82 x 2.66 (160.02 x 97.03 x 67.56)	EPS107-ND	110.00	99.00	91.30	WRI3012-D5
90-250VAC, 47-440Hz	12V, 3.5A	—	—	42†	6.3 x 3.82 x 2.66 (160.02 x 97.03 x 67.56)	EPS112-ND	110.00	99.00	91.30	WRI4212-D5
90-250VAC, 47-440Hz	24V, 1.75A	—	—	42†	6.3 x 3.82 x 2.66 (160.02 x 97.03 x 67.56)	EPS113-ND	114.00	102.60	94.62	WRI4214-D5
90-250VAC, 47-440Hz	30V, 1.75A	—	—	52†	6.3 x 3.82 x 2.66 (160.02 x 97.03 x 67.56)	EPS117-ND	136.00	122.40	112.88	WRI5215-D5
90-250VAC, 47-440Hz	5V, 2.0A	12V, 1.5/2.5A*	—	30	6.3 x 3.82 x 2.66 (160.02 x 97.03 x 67.56)	EPS109-ND	118.00	106.20	97.94	WRI3021-D5
90-250VAC, 47-440Hz	5V, 3.0A	12V, 2.5/4.0A*	—	42	6.3 x 3.82 x 2.66 (160.02 x 97.03 x 67.56)	EPS114-ND	118.00	106.20	97.94	WRI4221-D5
90-250VAC, 47-440Hz	5V, 3.0A	12V, 0.5A	-12V, 0.5A	27††	6.3 x 3.82 x 2.66 (160.02 x 97.03 x 67.56)	EPS106-ND	128.00	115.20	106.24	WRI2731-D5
90-250VAC, 47-440Hz	5V, 2.0A	12V, 1.5/2.5A*	-12V, 0.5A	30	6.3 x 3.82 x 2.66 (160.02 x 97.03 x 67.56)	EPS111-ND	124.00	111.60	102.92	WRI3031-D5
90-250VAC, 47-440Hz	5V, 3.0A	12V, 2.5/4.0A*	-12V, 0.5A	42	6.3 x 3.82 x 2.66 (160.02 x 97.03 x 67.56)	EPS115-ND	124.00	111.60	102.92	WRI4231-D5
90-250VAC, 47-440Hz	5V, 4.8A	12V, 1.5/2.5A*	-12V, 0.5A	42	6.3 x 3.82 x 2.66 (160.02 x 97.03 x 67.56)	EPS116-ND	124.00	111.60	102.92	WRI4232-D5
Regulated Wallmounts										
115VAC, 60Hz	5V, 500mA	—	—	2.5	2.20 x 2.75 x 3.50 (55.88 x 69.85 x 88.90)	EPS129-ND•	30.00	27.00	24.90	WM025-760
115VAC, 60Hz	5V, 380mA	-5V, 180mA	12V, 180mA	5.3	2.20 x 2.75 x 3.50 (55.88 x 69.85 x 88.90)	EPS118-ND	43.00	38.70	35.69	WM053-D5
115VAC, 60Hz	5V, 600mA	+12V, 180mA	-12V, 160mA	6.8	1.80 x 2.60 x 4.50 (45.72 x 66.04 x 114.30)	EPS142-ND	41.00	36.90	34.03	WM063-1950-D5
115VAC, 60Hz	5V, 1.5A	—	—	7.5	2.28 x 3.10 x 4.36 (57.91 x 78.74 x 110.74)	EPS143-ND	40.00	36.00	33.20	WM075-1950-D5
115VAC, 60Hz	5V, 860mA	-5V, 300mA	12V, 300mA	9.3	2.28 x 3.10 x 4.36 (57.91 x 78.74 x 110.74)	EPS123-ND	60.75	54.00	48.60	WM093-D5
115VAC, 60Hz	5V, 860mA	-5V, 300mA	12V, 300mA	9.3	2.28 x 3.10 x 4.36 (57.91 x 78.74 x 110.74)	EPS124-ND	56.00	50.40	46.48	WM093-S
115VAC, 60Hz	5V, 800mA	12V, 700mA	—	11.2	2.28 x 3.10 x 4.36 (57.91 x 78.74 x 110.74)	EPS125-ND	53.00	47.70	43.99	WM112-D5
115VAC, 60Hz	5V, 860mA	-12V, 300mA	12V, 300mA	11.3	2.28 x 3.10 x 4.36 (57.91 x 78.74 x 110.74)	EPS126-ND	41.00	36.90	34.03	WM113-D5
115VAC, 60Hz	5V, 860mA	-12V, 300mA	12V, 300mA	11.3	2.28 x 3.10 x 4.36 (57.91 x 78.74 x 110.74)	EPS127-ND	45.00	40.50	37.35	WM113-S
115VAC, 60Hz	12V, 1.2A	—	—	14.4	2.28 x 3.10 x 4.36 (57.91 x 78.74 x 110.74)	EPS145-ND	44.00	39.60	36.52	WM144-1950-S
Regulated Tabletops										
115VAC, 60Hz	5V, 1.0A	-5V, 1.0A	—	10	2.66 x 3.82 x 6.30 (67.56 x 97.03 x 160.02)	EPS130-ND	52.00	46.80	43.16	WM100-S
115VAC, 60Hz	5V, 860mA	+12V, 300mA	12V, 300mA	11.3	2.28 x 3.10 x 4.36 (57.91 x 78.74 x 110.74)	EPS131-ND	52.00	46.80	43.16	WM113TT
115VAC, 60Hz	5V, 2.0A	-12V, 500mA	12V, 500mA	22	2.28 x 3.10 x 5.025(57.91 x 78.74 x 127.64)	EPS134-ND	86.00	77.40	71.38	WM220-1
Miada Series										
95-250VAC, 47/63Hz	5V, 3.0A	—	—	15	3.0 x 5.0 x 1.31 (76.20 x 127.00 x 33.27)	EPS146-ND	90.00	81.00	74.70	MI2005-760
95-250VAC, 47/63Hz	12V, 2.17A	—	—	26	3.0 x 5.0 x 1.31 (76.20 x 127.00 x 33.27)	EPS101-ND	90.00	81.00	74.70	MI2612-760
95-250VAC, 47/63Hz	15V, 1.9A	—	—	28	3.0 x 5.0 x 1.31 (76.20 x 127.00 x 33.27)	EPS102-ND	90.00	81.00	74.70	MI2815-760
95-250VAC, 47/63Hz	18V, 1.56A	—	—	28	3.0 x 5.0 x 1.31 (76.20 x 127.00 x 33.27)	EPS103-ND	90.00	81.00	74.70	MI2818-760
95-250VAC, 47/63Hz	24V, 1.17A	—	—	28	3.0 x 5.0 x 1.31 (76.20 x 127.00 x 33.27)	EPS104-ND	90.00	81.00	74.70	MI2824-760
Medical Adapters (requires power cord Q132 or Q133)										
100-240VAC, 50/60Hz	12V, 3.3A	—	—	40	5.0 x 3.0 x 1.3 (127.00 x 76.20 x 33.02)	EPS180-ND	110.00	99.00	91.30	MW4012-760-NC
100-240VAC, 50/60Hz	15V, 2.6A	—	—	40	5.0 x 3.0 x 1.3 (127.00 x 76.20 x 33.02)	EPS181-ND	110.00	99.00	91.30	MW4015-760-NC
100-240VAC, 50/60Hz	18V, 2.2A	—	—	40	5.0 x 3.0 x 1.3 (127.00 x 76.20 x 33.02)	EPS182-ND	110.00	99.00	91.30	MW4018-760-NC
100-240VAC, 50/60Hz	24V, 1.67A	—	—	40	5.0 x 3.0 x 1.3 (127.00 x 76.20 x 33.02)	EPS183-ND	110.00	99.00	91.30	MW4024-760-NC

† Min. load on models=8 Watts †† Min. load on models=2 Watts * Max. Peak • Has a Switchcraft Plug 760

ELPAC POWER SYSTEMS

Open Frame Power Supplies OS40 Series



FEATURES:
- Wide range AC input • Level B EMI filter • Fully regulated output • High efficiency

SPECIFICATIONS:

Input: • Voltage: 90-254 VAC • Current: 1.5A maximum • Frequency: 47-63 Hz

Environmental: • Operating Temperature: 0°C to 50°C • Storage Temperature: -20°C to +80°C.

EMI: • Meets FCC class B, CISPR 22 class B

Mechanical: • Size: 5.01" x 2.99" x 1.27" (127.25mm x 75.95mm x 32.26mm)

Safety: • UL1950 • CSA 22.2 No. 950 • EN60950 • IEC950

MATES WITH:
- **Connectors** – WM2101-ND and WM2104-ND • **Contacts** – WM2300-ND

DC Outputs			Maximum Power	Digi-Key Part No.	Price Each			Elpac Part No.
Single	Double	Triple			1	5	10	
				Single Output				
5V @ 8A	—	—	40W	EPS185-ND	36.44	32.80	30.25	OS40-105
12V @ 3.5A	—	—	40W	EPS186-ND	36.44	32.80	30.25	OS40-112
15V @ 2.7A	—	—	40W	EPS187-ND	36.44	32.80	30.25	OS40-115
24V @ 1.7A	—	—	40W	EPS188-ND	36.44	32.80	30.25	OS40-124
				Dual Output				
5V @ 5A	12V @ 1A	—	40W	EPS189-ND	37.58	33.83	31.20	OS40-201
5V @ 5A	24V @ 0.5A	—	40W	EPS190-ND	37.58	33.83	31.20	OS40-202
5V @ 8A	12V @ 0.6A	—	47W	EPS191-ND	37.58	33.83	31.20	OS40-203
				Triple Output				
5V @ 3A	12V @ 2A	-5V @ 0.3A	40W	EPS192-ND	38.72	34.85	32.14	OS40-301
5V @ 3A	12V @ 2A	-12V @ 0.3A	40W	EPS193-ND	38.72	34.85	32.14	OS40-302
5V @ 5A	12V @ 1A	-12V @ 0.3A	40W	EPS194-ND	38.72	34.85	32.14	OS40-303

AC Adapters

Fig. 1

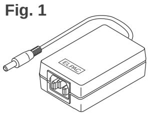


Fig. 2

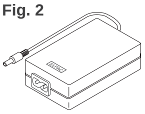
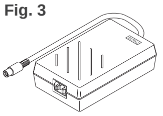


Fig. 3



DIN PINOUT MATRIX					
MODEL	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5
W4221	COM	COM	+5V	COM	+12V
W4231	COM	COM	+5V	-12V	+12V
W4232	COM	COM	+5V	-12V	+12V

Fig. 4

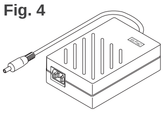


Fig. 5

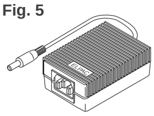
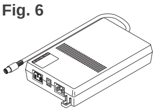


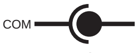
Fig. 6



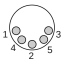
International

Features:
- 95-250 VAC (W08 & W14 Series: 100-240VAC; W24 Series: 90-265VAC); 47-63Hz Input • IEC 320 Input connector for worldwide use • Input protected VIA internal line fuse • Ripple & Noise: ±1% PK-PK max. • Overload Protection: All outputs protected-auto recovery • Operating Temperature Range: 0°C to 40°C • Output Cable - 6 foot - 760 standard (ID=2.5mm /OD=5.5mm/Barrel length 10mm/inside positive) or 5-pin DIN as shown • Two-year warranty

Agency Approvals:
- UL1012 Listed • CSA Certified to 22.2 No. 223 • TUV Licensed, IEC 950 • CE Certified • FCC/VDE Class B Emissions **(W08 Series:** UL listed to UL1950, cUL listed to CSA950, CE-Marked, TUV licensed to EN 60950. **W14 Series:** IEC950, UL1950/EN60950, CE-Marked)



760 Plug



5-pin DIN

Fig.	DC Outputs			Max. Power	Dimensions - Inch (mm) L x W x H	Digi-Key Part No.	Price Each			Elpac Part No.
	Single	Double	Triple				1	5	10	
					Desk Mount - International Power Supply					
1	5V @ 1.6A	—	—	8W	3.35 x 1.97 x 1.30 (85.09 x 50.04 x 33.02)	EPS200-ND	34.24	30.82	28.42	W0805-760
	12V @ 0.67A	—	—	8W	3.35 x 1.97 x 1.30 (85.09 x 50.04 x 33.02)	EPS201-ND	34.24	30.82	28.42	W0812-760
1	5V @ 2.5A	—	—	13W	3.30 x 2.00 x 1.30 (83.82 x 50.80 x 33.02)	EPS165-ND	42.80	38.52	35.53	W1505-760
	12V @ 1.25A	—	—	15W	3.30 x 2.00 x 1.30 (83.82 x 50.80 x 33.02)	EPS166-ND	42.80	38.52	35.53	W1512-760
	24V @ 0.63	—	—	15W	3.30 x 2.00 x 1.30 (83.82 x 50.80 x 33.02)	EPS167-ND	42.80	38.52	35.53	W1524-760
1	5V @ 4A	—	—	20W	4.33 x 2.26 x 1.26 (109.98 x 57.40 x 32.00)	EPS206-ND	64.62	58.16	53.64	W2405-760
	12V @ 2A	—	—	24W	4.33 x 2.26 x 1.26 (109.98 x 57.40 x 32.00)	EPS207-ND	64.62	58.16	53.64	W2412-760
2	12V @ 4.0A	—	—	48W	4.10 x 2.20 x 1.20 (104.14 x 55.88 x 30.48)	EPS168-ND	82.80	74.52	68.73	W4012-760
	24V @ 2.1A	—	—	50W	4.10 x 2.20 x 1.20 (104.14 x 55.88 x 30.48)	EPS169-ND*	82.80	74.52	68.73	W4024-760
3	5V @ 3.0A	12V @ 2.5A	—	42W	5.80 x 3.30 x 1.50 (147.32 x 83.82 x 38.10)	EPS170-ND	138.00	124.20	114.54	W4221-D5
	5V @ 3.0A	12V @ 1.5A	-12V @ 0.5A	42W	5.80 x 3.30 x 1.50 (147.32 x 83.82 x 38.10)	EPS171-ND	138.00	124.20	114.54	W4231-D5
	5V @ 4.8A	12V @ 1.5A	-12V @ 0.5A	42W	5.80 x 3.30 x 1.50 (147.32 x 83.82 x 38.10)	EPS172-ND	138.00	124.20	114.54	W4232-D5
4	5V @ 3.5A	—	—	18W	4.30 x 2.30 x 1.30 (109.22 x 58.42 x 33.02)	EPS173-ND	74.00	66.60	61.42	W42005-760
	12V @ 1.7A	—	—	20W	4.30 x 2.30 x 1.30 (109.22 x 58.42 x 33.02)	EPS174-ND	74.00	66.60	61.42	W42012-760
5	12V @ 6.0A	—	—	72W	6.50 x 3.86 x 2.60 (165.10 x 98.04 x 66.04)	EPS175-ND	120.00	108.00	99.60	W7212-D5
	24V @ 3.0A	—	—	72W	6.50 x 3.86 x 2.60 (165.10 x 98.04 x 66.04)	EPS176-ND	120.00	108.00	99.60	W7224-D5
					Panel Mount - International Power Supply					
6	12V @ 8.3A	—	—	100W	11.10 x 6.90 x 1.80 (281.94 x 175.26 x 45.72)	EPS177-ND†	203.66	183.30	169.04	W100-11
	24V @ 4.2A	—	—	100W	11.10 x 6.90 x 1.80 (281.94 x 175.26 x 45.72)	EPS178-ND†	203.66	183.30	169.04	W100-13

* Minimum load of 2 watts required to fully regulated . † Minimum load of 20 watts required to fully regulate.

Domestic

WP06 Series:
- **Input Voltage:** 100-240 VAC (wide range) • **Current:** 0.2 Amp • **Frequency:** 47-63Hz • **Short Circuit Protection:** Pulsing mode, auto recovery • **Operating Temperature Range:** 0°C to +40°C • **EMI:** Meets FCC class B, CISPR 22 class B • **Agency Approvals:** CE-Marked

WP11 and WP12 Series:
- **A/C Input:** 108-132VAC 60Hz • **Input Protection:** Internal input line fuse • **Overload Protection:** Output protected against overload and short circuit • **Min. Load:** 0 Watts • **Operating Temperature Range:** 0°C to +40°C • **Output Cable:** 6 foot with 760 type barrel plug ID = 2.5mm, OD = 5 5mm, Barrel Length 10.00mm - Inside Positive • **Two-Year Warranty**. • **Agency Approvals:** NRTL (UL) and CSA • **EMI:** FCC Class B

Fig.	DC Outputs Single	Max. Power	Dimensions - Inch (mm) L x W x H	Digi-Key Part No.	Price Each			Elpac Part No.
					1	5	10	
			Wall Mount - Domestic Power Supply					
1	5V @ 1.2A	6W	2.25 x 1.88 x 1.03 (57.15 x 58.42 x 26.16)	EPS197-ND	29.96	26.97	24.87	WP0605-760
1	12V @ 0.5A	6W	2.25 x 1.88 x 1.03 (57.15 x 58.42 x 26.16)	EPS198-ND	31.04	27.94	25.77	WP0612-760
1	5V @ 1.5A	8W	2.20 x 1.80 x 1.10 (55.88 x 45.72 x 27.94)	EPS160-ND	31.04	27.94	25.77	WP1105-760
1	12V @ 0.8A	10W	2.20 x 1.80 x 1.10 (55.88 x 45.72 x 27.94)	EPS161-ND	32.10	28.89	26.65	WP1112-760
2	5V @ 2.4A	12W	3.00 x 2.00 x 1.00 (76.20 x 50.80 x 25.40)	EPS162-ND	32.50	29.25	26.98	WP1205-760
2	12V @ 1A	12W	3.00 x 2.00 x 1.00 (76.20 x 50.80 x 25.40)	EPS163-ND	32.50	29.25	26.98	WP1212-760
2	24V @ 0.5A	12W	3.60 x 2.30 x 1.30 (91.44 x 58.42 x 33.02)	EPS164-ND	82.80	74.52	68.73	WP1224-760

Fig. 1 — WP06 and WP11 Series

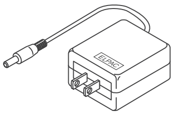
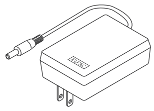


Fig. 2 — WP12 Series



LAMBDA UltraFlex® Series Power Supply

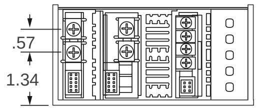
Modular Power Supplies with Any Combination of Outputs — Custom-Made and Shipped in 24 Hours!*

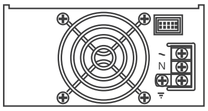
The UltraFlex® Series provides high performance and high power density, with either a power factor corrected AC input or a 48VDC input. With leading edge and proprietary circuit design (280 KHz fixed frequency converters, synchronized circuits, planar magnetics), advanced thermal management and surface mount technology, these power supplies offer state-of-the-art power densities, exceptional flexibility, reliability, and outstanding performance. The UltraFlex Series gives you the flexibility you need to cope with today's fast-paced new product development cycles and relentless time-to-market schedules.

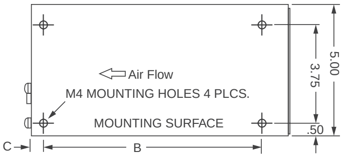
SPECIFICATIONS:

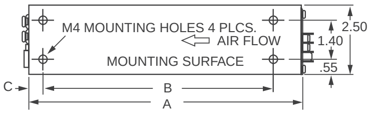
- **AC Input:** 85-265VAC, 47-63 Hz (Case A&B)
- **DC Input:** 36-75 VDC on Case C
- **Inrush Current:** Less than 40A peak
- **Efficiency:** 75% typical at nominal line voltage
- **EMI:** Conducted EMI conforms to EN55022, Level B, and FCC Docket 20780 Part 15, Subpart J, Class B for AC input versions. Conducted EMI to EN55022A for DC input models.
- **Power Factor and Harmonic Correction:** All models are compliant with EN60555-2 and EN61000-3-2, with up to 250 VAC input. Power factor is 0.998 typical at full load.
- **Input Transient and ESD Protection:** IEEE-C62.41, Category A3; IEEE-587 Category B; EN61000-4-2/4/5 Level 3.
- **Regulated Voltage:** Line Regulation — <0.1% for line variations from 85-265VAC; <0.2% for dual output modules. Load Regulation — <0.4% for load variations from no load to full load and full load to no load; <0.8% for dual output modules. Cross Regulation — <0.1% between single output modules; <3% between dual outputs with 25% load change on high current output. Ripple and Noise — <0.33% or 15mV RMS; <1.0% or 50mV pk-pk (<50mV pk-pk on 5V and 12V outputs) on single output modules; <1.0% or 50mV pk-pk on dual output modules. Temperature Coefficient — 0.02%/°C.
- **Output Adjustment Range:** ±10% of nominal output voltage on all models.
- **Thermal Protection:** The power supply will shut down in the event of an overtemperature condition (the fan will continue to operate). To restore operation, the supply must cool down and the AC input must be recycled.
- **Overcurrent Protection:** Overcurrent protection on single output modules limits the current from 110% to 120% of current rating on outputs greater than 400W. (110% to 150% of current rating on outputs less than 400W.) Upon removal of the overload condition, normal operation resumes automatically.
- **Overvoltage Protection:** Factory-set overvoltage protection from 120% to 130% of nominal output on single output modules. Dual output modules have factory-set overvoltage protection of 120% to 140% of nominal. Internal circuitry will shut down the individual output module. Reset the OVP by cycling the input power.
- **Preload:** External preload is not required on single output modules. Dual output modules require 1A minimum load on the highest current output (Output #1).
- **Dynamic Response:** ±25% load change (from 75% base at a rate of 1A/µsec) will result in input deviation of less than 2% or 100mV peak (125mV for less than 5V outputs). Output recovery to within 1% of nominal to be less than 300µsec.
- **Holdup Time:** The output voltage will remain within regulation limits for 20msec at full load with nominal 115/230VAC line input.
- **Remote Sensing:** Remote Sense compensates for total cable drop of up to 0.5VDC. Available on all outputs.
- **Isolation Ratings:** Conforms to safety agency requirements.
- **Cooling:** Provided via an internal DC operated ball-bearing fan.
- **Operating Temperature Range:** Full operation from 0°C to +50°C with 100% rated power on most models. Derate linearly from +50°C to 50% power at +65°C. Derate H, V, W and Y models in 600W case starting at +40°C to 50% power at 55°C.
- **Storage Temperature:** -40°C to +85°C
- **Military Specifications:** Shock — MIL-STD-810E, Method 516.4, Procedure I; Vibration — MIL-STD-810E, Method 514.4, Category I, TP1.
- **Mounting:** Two mounting surfaces on all models.
- **Safety Agency Approvals:** The UltraFlex Series meets UL 1950, CSA 22.2 No. 234, TUV, EN60950/IEC950, and SELV. All models carry the CE mark to indicate conformance to the Low Voltage Directive on complete custom-assembled units.
- **Guarantee:** Lambda's 3-year guarantee includes labor and parts. Guarantee applies to operation within published specifications at the end of 3 years.

** NOTE: 24-hour shipping dependent upon modules selected, time of day ordered, and destination of shipment. Call Digi-Key Specialty Sales for assistance, 1-888-671-1741.*









Model	Weight - Lbs.		Dim. - Inch		
	Net	Ship	a	b	c
UA	5.5	7.5	10.0	8.4	.50
UB	6.0	8.0	11.0	9.6	.50
UC	6.5	8.5	12.0	9.6	.50

Notes:

1. Weight dependent on module configuration.
2. **Electrical terminations (rear panel):** • AC Input Barrier Type: Three 6-32 screws on .325" (8.26mm) center to center as indicated. (DC Input Barrier Type is the same except screws on .375"/9.53mm centers) maximum torque 10 in-lbs. accepts up to 1/4" (6.35mm) wide terminals. • Logic/Control: Connector (J3) 10-position AMP #87579-2, mates with AMP #87977-3 and AMP Pin #87309-8.
3. **Output Terminations** *(per module, not including dual output):* • DC Output Terminals: Two M5 x 7mm pan head mech. screws with spring washers provided. Max. Torque: 20 in-lbs. Screw Penetration: 7mm max. • Logic/Control: Connector (J1) 10 position AMP #87579-2, mates with AMP #87977-3 and AMP Pin #87309-8.
4. **Output Terminations** *(Dual Output Only):* • DC Output Terminations: Four 6-32 screws on .325 (8.26mm) centers, maximum torque 10 in-lbs. accepts up to 1/4" (6.35mm) wide terminals. • Logic/Control: Connector (J2) 6 position AMP #3-87579-5, mates with AMP #87977-1 and AMP Pin #87309-8.

How to Configure Your Standard UltraFlex Power Supply

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UltraFlex Series

Step 1 — Case Configuration

Select your power supply case based on the total output power you need (either 400W or 600W) and the corresponding package size.

Note: Items are not sold separately.

Case Code	Output Power	Input Voltage	Without Signal Approximate Price Each	With Signal Approximate Price Each
A	400W	85-265 VAC	322.00	338.00
B	600W	85-265 VAC	459.00	475.00
C	600W	36-75 VDC	—	567.00

Step 2 — Interface Signals Option Code

Select your input and output interface signal code.

Signal Code	Input Signal	Output Signal	Description of Included Signals & Functions
J	No	No	***No Option Signals:*** The Standard DC Output Module has remote sense, overcurrent and overvoltage protection.
K	Yes	No	***Input Signals*** *(Global):* Input power fail, 5V standby, global inhibit, fan stop/thermal alarm, fan inhibit, sync input.
T	No	Yes	***Output Module Signals:*** Module inhibit, margin, remote adjust, output good, current monitor and current share: active current share and module inverter OK.
Z	Yes	Yes	***Input Signals*** *(Global):* Input power fail, 5V Standby, global inhibit, global output good, fan stop/thermal alarm, fan inhibit. ***Module Signals:*** Module inhibit, margin, remote adjust, output good, current monitor and current share: active current share and module inverter OK.

Step 3 — Input Voltage and EMI Code

Select AC or DC input voltage

1	=	PFC, 85-265 VAC, 50/60 Hz, Class B EMI
4	=	DC INPUT, 36-75 VDC, EN55022A

Step 4 — Output Module Codes

List the output voltages and currents you need, and select your output modules. The modules are available with 2V to 48V outputs. Choose as many modules as you need — up to five module slot widths. Single output modules may be paralleled for higher current requirements.

Note: Components are not sold separately.

Module Code	Output Voltage	Max. Current Amps @ 50°C	Max. Power Watts @ 50°C	VOUT Adj. Range	Slot Width	Without Signal Option Price Each	With Signal Option Price Each
Single Output Modules							
A	2V	30.0	66	1.8-2.2	1	124.00	133.00
B	2V	60.0	132	1.8-2.2	2	186.00	215.00
C	2V	100.0	200	1.8-2.2	3	—	308.00
D	3.3V	30.0	108	3.0-3.6	1	124.00	133.00
E	3.3V	60.0	216	3.0-3.6	2	186.00	195.00
F	3.3V	100.0	330	3.0-3.6	3	—	308.00
G	5V	30.0	150	4.5-6.0	1	124.00	133.00
H	5V†	60.0	300	4.5-6.0	2	186.00	195.00
I	5V	100.0	500	4.5-6.0	3	—	308.00
J	12V	17.0	204	10.8-13.2	1	124.00	133.00
K	12V	30.0	360	10.8-13.2	2	186.00	195.00
L	12V	50.0	600	10.8-13.2	3	—	308.00
M	15V	14.0	210	13.5-16.5	1	124.00	133.00
N	15V	24.0	360	13.5-16.5	2	186.00	195.00
P	24V	8.5	204	21.6-26.4	1	124.00	133.00
Q	24V	15.0	360	21.6-26.4	2	186.00	195.00
R	24V	25.0	600	21.6-26.4	3	—	308.00
8	28V	12.0	336	25.2-30.8	2	—	195.00
3	36V	11.0	396	32.4-39.6	2	—	195.00
S	48V	4.0	192	43.2-52.8	1	124.00	133.00
T	48V	8.0	384	43.2-52.8	2	186.00	196.00
U	48V	12.5	600	43.2-52.8	3	—	308.00
Dual Output Modules•							
V	12V & 5V†	10.0 & 4.0	150	±10%	1	169.00	169.00
W	5V & 12V†	10.0 & 4.0	150	±10%	1	169.00	169.00
Y	12V & 12V†	10.0 & 4.0	150	±10%	1	169.00	169.00
Z	15V & 15V	8.0 & 3.0‡	150	±10%	1	169.00	169.00

† When using the 600W AC Case B, derate as follows:

H Mod.: 5V @ 55A	**W Mod.:** 5V @ 8A, 12V @ 4A
V Mod.: 12V @ 8A, 5V @ 3A	**Y Mod.:** 12V @ 8A, 12 @ 3A

‡ Peak Rating 10A and 4A for up to 1 minute.

• On dual output modules, output 1 has the highest current rating.

Example:

Part No. UAK1-HJJP

This part number is for:

U	=	UltraFlex Power Supply	**H** = 5V/60V	(2 slots)
A	=	400 Watts, Standard Case	**J** = 12V/17A	(1 slot)
K	=	Input Signals (Global)	**J** = 12V/17A	(1 slot)
1	=	85-265VAC, PFC, Class B EMI Input	**P** = 24V/8.5A	(1 slot)
HJJP	=	with 4 Output Modules	Total	5 Slots

For assistance in configuring the part number and determining the cost of your custom-made power supply unit, call a Digi-Key Specialty Sales Representative —

1-888-671-1741

Note: *Due to UL approval requirements, modules may not be ordered separately.*

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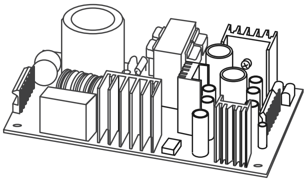
9293B-ND **Lambda 2000-2001 Power Supply Solutions Book**............$1.95

SWT SERIES Low Cost Triple Output Power Supplies



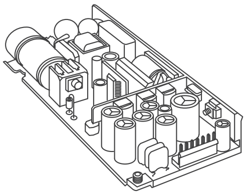
Lambda's SWT series of triple output PCB style power supplies have a continuous wide range or auto ranging AC input and EMI to curve B. Full power is available up to 50°C ambient without the need for forced air cooling.

Available in four industry standard package sizes from 30-100 watts using high performance components, Lambda's SWT series will prove to be the economical choice for high reliability and quality, ensuring maximum up-time.

Specifications:
• **AC Input:** *SWT30, SWT40* and *SWT 100:* 85-265VAC, 47-63Hz. (110-340VDC); *SWT65:* 85-132, 170-265VAC, 47-63Hz (Autostrap) • **Minimum Load:** *SWT30:* +5V 0.2A, +12/15 0.4A; *SWT 40:* +5V 0.2A, +12/15V 0.3A; *SWT65:* +5V 0.3A; *SWT100:* +5V 0.5A • **Operating Temperature Range:** -10°C to +60°C; 100% output at 50°C, derate linearly to 70% at 60°C • **Safety Agency Approval:** UL1950, CSA950, EN60950, Dentori, CE Mark • **Warranty:** 2 years.

Power (W)	Output 1	Output 2	Output 3	Dimensions – In. (mm) W x H x L	Wgt. (Kilograms)	Digi-Key Part No.	Price Each 1	10	25	Lambda Part No.
30	+5V@2A	+12V@1.5A	-5V@.3A	3.00 x 1.20 x 5.00 (76.20 x 30.48 x 127.00)	.07	285-1069-ND	45.78	43.26	41.05	SWT30-525
	+5V@2A	+12V@1.5A	-12V@.3A	3.00 x 1.20 x 5.00 (76.20 x 30.48 x 127.00)	.07	285-1068-ND	45.78	43.26	41.05	SWT30-522
	+5V@2A	+15V@1A	-15V@.3A	3.00 x 1.20 x 5.00 (76.20 x 30.48 x 127.00)	.07	285-1070-ND	45.78	43.26	41.05	SWT30-5FF
40	+5V@3A	+12V@2A	-5V@.3A	3.00 x 1.40 x 5.00 (76.20 x 35.56 x 127.00)	.09	285-1072-ND	49.13	46.42	44.05	SWT40-525
	+5V@3A	+15V@1.5A	-15V@.3A	3.00 x 1.40 x 5.00 (76.20 x 35.56 x 127.00)	.09	285-1073-ND	49.13	46.42	44.05	SWT40-5FF
	+5V@3A	+12V@2A	-12V@.3A	3.00 x 1.40 x 5.00 (76.20 x 35.56 x 127.00)	.09	285-1071-ND	49.13	46.42	44.05	SWT40-522
65	+5V@6A	+12V@2.5A	-5V@.5A	3.50 x 1.77 x 6.00 (88.90 x 44.96 x 152.40)	.13	285-1075-ND	58.06	54.86	52.06	SWT65-525
	+5V@6A	+15V@1.8A	-15V@.5A	3.50 x 1.77 x 6.00 (88.90 x 44.96 x 152.40)	.13	285-1076-ND	58.06	54.86	52.06	SWT65-5FF
	+5V@6A	+12V@2.5A	-12V@.5A	3.50 x 1.77 x 6.00 (88.90 x 44.96 x 152.40)	.13	285-1074-ND	58.06	54.86	52.06	SWT65-522
100	+5V@8A	+12V@4A	-5V@.8A	4.25 x 1.77 x 7.75 (107.95 x 44.96 x 196.85)	.32	285-1066-ND	122.57	115.81	109.89	SWT100-525
	+5V@8A	+12V@4A	-12V@.8A	4.25 x 1.77 x 7.75 (107.95 x 44.96 x 196.85)	.32	285-1065-ND	122.57	115.81	109.89	SWT100-522
	+5V@8A	+15V@3.2A	-15V@.8A	4.25 x 1.77 x 7.75 (107.95 x 44.96 x 196.85)	.32	285-1067-ND	122.57	115.81	109.89	SWT100-5FF
Connector Kit for SWT30						285-1095-ND	8.00	—	—	KTSWT30
Connector Kit for SWT40						285-1096-ND	8.00	—	—	KTSWT40
Connector Kit for SWT65						285-1097-ND	8.00	—	—	KTSWT65
Connector Kit for SWT100						285-1098-ND	8.00	—	—	KTSWT100

LW SERIES Compact Dual and Triple Output Power Supplies

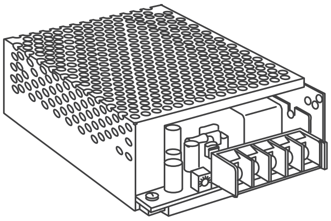


Lambda's LW multiple output power supplies feature international safety approvals, universal AC input, and integral EMI filtering. The LW's low profile package, available from 15-50 watts, makes it ideal for space limited applications. Designed to meet the demands of industrial applications, the LW's high reliability and performance specifications will be an effective solution for your power supply needs.

Specifications: • **AC Input:** 85-265VAC, 47-440Hz • **DC Input:** 110-330VDC • **Fusing:** AC input line fuse protects the input wiring to the power supply. Overload of power supply does not cause fuse failure. • **Minimum Load:** (On Channel 1:) *LWT15H:* 0.5A; *LWT30H:* 0.7A; *LWT50H:* 1.0A; *LWD-50:* 20% on output #1 • **Overvoltage Protection:** Standard on main outputs, inverter shut down method, manual reset • **Overload Protection:** Automatic electronic current limiting circuit limits short circuit output current to safe, preset value, thereby protecting the load as well as the power supply when direct shorts occur. Sustained short circuit operation for more than 30 seconds may cause damage to the power supply. • **Operating Temperature Range:** 0°C to +60°C with derating above 40°C • **Input and Output Connections:** Connectors (Mating connectors provided with units) • **Safety Agency Approval:** UL1950, CSA22.2 No. 234, IEC950, EN60950, CE Mark (Low voltage directive) • **Warranty:** 1 year

Power (W)	Output 1	Output 2	Output 3	Dimensions – In. (mm) W x H x L	Wgt. (Kilograms)	Digi-Key Part No.	Price Each 1	10	25	Lambda Part No.
Dual Outputs										
15	+5V@1.5A	+12V@.6A	—	2.36 x 1.03 x 4.32 (59.94 x 26.16 x 109.73)	.19	285-1001-ND	110.20	104.12	98.80	LWD-15-0512
	+5V@1.5A	+24V@.3A	—	2.36 x 1.03 x 4.32 (59.94 x 26.16 x 109.73)	.19	285-1002-ND	110.20	104.12	98.80	LWD-15-0524
	+12V@.6A	+12V@.6A	—	2.36 x 1.03 x 4.32 (59.94 x 26.16 x 109.73)	.19	285-1003-ND	110.20	104.12	98.80	LWD-15-1212
	+12V@.6A	+24V@.3A	—	2.36 x 1.03 x 4.32 (59.94 x 26.16 x 109.73)	.19	285-1004-ND	110.20	104.12	98.80	LWD-15-1224
	+15V@.5A	+15V@.5A	—	2.36 x 1.03 x 4.32 (59.94 x 26.16 x 109.73)	.19	285-1005-ND	110.20	104.12	98.80	LWD-15-1515
30	+5V@3A	+12V@1.2A	—	2.36 x 1.03 x 5.75 (59.94 x 26.16 x 146.05)	.26	285-1006-ND	159.50	150.70	143.00	LWD-30-0512
	+5V@3A	+24V@.6A	—	2.36 x 1.03 x 5.75 (59.94 x 26.16 x 146.05)	.26	285-1007-ND	159.50	150.70	143.00	LWD-30-0524
	+12V@1.2A	+12V@1.2A	—	2.36 x 1.03 x 5.75 (59.94 x 26.16 x 146.05)	.26	285-1008-ND	159.50	150.70	143.00	LWD-30-1212
	+12V@1.2A	+24V@.6A	—	2.36 x 1.03 x 5.75 (59.94 x 26.16 x 146.05)	.26	285-1009-ND	159.50	150.70	143.00	LWD-30-1224
	+15V@1A	+15V@1A	—	2.36 x 1.03 x 5.75 (59.94 x 26.16 x 146.05)	.26	285-1010-ND	159.50	150.70	143.00	LWD-30-1515
50	+5V@5A	+12V@2A	—	3.81 x 1.03 x 6.29 (96.77 x 26.16 x 159.77)	.37	285-1011-ND	200.10	189.06	179.40	LWD-50-0512
	+5V@5A	+24V@1A	—	3.81 x 1.03 x 6.29 (96.77 x 26.16 x 159.77)	.37	285-1012-ND	200.10	189.06	179.40	LWD-50-0524
	+12V@2A	+12V@2A	—	3.81 x 1.03 x 6.29 (96.77 x 26.16 x 159.77)	.37	285-1013-ND	200.10	189.06	179.40	LWD-50-1212
	+12V@2A	+24V@1A	—	3.81 x 1.03 x 6.29 (96.77 x 26.16 x 159.77)	.37	285-1014-ND	200.10	189.06	179.40	LWD-50-1224
	+15V@1.6A	+15V@1.6A	—	3.81 x 1.03 x 6.29 (96.77 x 26.16 x 159.77)	.37	285-1015-ND	200.10	189.06	179.40	LWD-50-1515
Triple Outputs										
15	+5V@3A	+12V@.6A	-12V@.4A	2.36 x 1.02 x 5.03 (59.94 x 25.91 x 127.76)	.19	285-1016-ND	143.55	135.63	128.70	LWT-15H-522
	+5V@3A	+12V@.6A	-5V@.4A	2.36 x 1.02 x 5.03 (59.94 x 25.91 x 127.76)	.19	285-1017-ND	143.55	135.63	128.70	LWT-15H-525
	+5V@3A	+15V@.6A	-15V@.4A	2.36 x 1.02 x 5.03 (59.94 x 25.91 x 127.76)	.19	285-1018-ND	143.55	135.63	128.70	LWT-15H-5FF
30	+5V@5A	+12V@1.2A	-12V@.6A	2.75 x 1.02 x 6.29 (69.85 x 25.91 x 159.77)	.26	285-1019-ND	184.15	173.99	165.10	LWT-30H-522
	+5V@5A	+12V@1.2A	-5V@.6A	2.75 x 1.02 x 6.29 (69.85 x 25.91 x 159.77)	.26	285-1020-ND	184.15	173.99	165.10	LWT-30H-525
	+5V@5A	+15V@1.2A	-15V@.6A	2.75 x 1.02 x 6.29 (69.85 x 25.91 x 159.77)	.26	285-1021-ND	184.15	173.99	165.10	LWT-30H-5FF
50	+5V@8A	+12V@1.5A	-12V@1A	3.82 x 1.02 x 6.29 (97.03 x 25.91 x 159.77)	.37	285-1022-ND	227.65	215.09	204.10	LWT-50H-522
	+5V@8A	+12V@1.5A	-5V@1A	3.82 x 1.02 x 6.29 (97.03 x 25.91 x 159.77)	.37	285-1023-ND	227.65	215.09	204.10	LWT-50H-525
	+5V@8A	+15V@1.5A	-15V@1A	3.82 x 1.02 x 6.29 (97.03 x 25.91 x 159.77)	.37	285-1024-ND	227.65	215.09	204.10	LWT-50H-5FF

RWS-A SERIES Low Power Industrial Supply

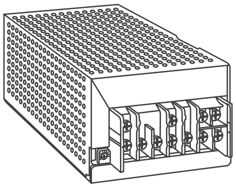


Lambda's RWS-A Series meets the demands of today's global industrial market with universal AC input, international agency approvals including the CE Mark and FCC Class B EMI compliance. The RWS-A Series is available in 15 and 30 watt packages with output voltages ranging from 5 to 48 volts with a ±10% adjustment range. Din rail mountable.

Specifications:
• **AC Input:** 85-265VAC, 47-440Hz • **DC Input:** 110-330VDC • **EMI:** Conducted: FCC Class B • **Output Voltage Adj. Range:** ±10% • **Overcurrent Protection:** Electronic current limiting circuits limits the output current to 105% of the maximum rated current with automatic recovery • **Overvoltage Protection:** Non-crowbar, inverter shutdown type OV protection • **Operating Temperature Range:** 0°C to +60°C with derating above +50°C • **Output Status Indicator:** A green LED when DC output is "ON" • **Input and Output Connections:** Barrier strip with clear plastic cover • **Safety Agency Approval:** UL1950, CSA22.2 No. 234, EN60950, and CE Mark (Low voltage directive) • **Warranty:** 3 years.

Output V	Power (W)	Max. Current Amps at 40°	50°	60°	Dimensions – In. (mm) W x H x L	Wgt. (Kilograms)	Digi-Key Part No.	Price Each 1	10	25	Lambda Part No.
5	15	3.0	3.0	1.80	3.81 x 1.55 x 3.87 (96.77 x 39.37 x 98.30)	.22	285-1038-ND	46.40	43.84	41.60	RWS-15A-5/A
	30	6.0	6.0	3.60	3.81 x 1.55 x 4.78 (96.77 x 39.37 x 121.41)	.25	285-1042-ND	56.55	53.43	50.70	RWS-30A-5/A
12	15	1.3	1.3	0.78	3.81 x 1.55 x 3.87 (96.77 x 39.37 x 98.30)	.22	285-1035-ND	46.40	43.84	41.60	RWS-15A-12/A
	30	2.5	2.5	1.50	3.81 x 1.55 x 4.78 (96.77 x 39.37 x 121.41)	.25	285-1039-ND	56.55	53.43	50.70	RWS-30A-12/A
15	15	1.0	1.0	0.60	3.81 x 1.55 x 3.87 (96.77 x 39.37 x 98.30)	.22	285-1036-ND	46.40	43.84	41.60	RWS-15A-15/A
	30	2.0	2.0	1.20	3.81 x 1.55 x 4.78 (96.77 x 39.37 x 121.41)	.25	285-1040-ND	56.55	53.43	50.70	RWS-30A-15/A
24	15	0.7	0.7	0.42	3.81 x 1.55 x 3.87 (96.77 x 39.37 x 98.30)	.22	285-1037-ND	46.40	43.84	41.60	RWS-15A-24/A
	30	1.3	1.3	0.78	3.81 x 1.55 x 4.78 (96.77 x 39.37 x 121.41)	.25	285-1041-ND	56.55	53.43	50.70	RWS-30A-24/A
Din Bracket for RWS Series							285-1202-ND	12.50	11.25	11.00	L-DIN30

JWS SERIES High Quality Industrial Power Supplies



Lambda's new JWS series meets the demands of today's worldwide industrial market with universal input, international agency approvals, and CE Marking. Reducing the risk of system failures, the JWS has been engineered to meet input transients and brown-outs in compliance to EN61000-4 (2, -3, -4, -5, -6) as well as meeting EMI Curve B (for both radiated and conducted). Din rail mountable.

The JWS Series is power factored corrected.

Backed by Lambda's five-year warranty, the JWS series will prove to be the industrial choice for insured reliability and high quality, guaranteeing end-users maximum up-time. **Specifications:** • **AC Input:** 85-265VAC, 47-63Hz • **DC Input:** 120-330VDC • **Power Factor Correction:** 0.99 (typical), EN61000-3-2 • **EMI:** Conducted and Radiated per: EN55022-B Curve B & FCC Class B • **Overcurrent Protection:** Electronic current limiting circuit limits the output current to 105% of the maximum rated current with automatic recovery • **Overvoltage Protection:** Non-crowbar, inverter shutdown type OV protection • **Cooling:** Convection (Internal fan for 300 and 600 watt units) • **Operating Temperature Range:** -10°C to +50°C with derating above +40°C (300W/600W: -10°C to +60°C with derating above +50°C) • **Output Status Indicator:** A green LED when DC output is "ON" • **Safety Agency Approval:** UL1950, CSA950, EN60950, VDE0160 and CE Mark (Low voltage directive) • **Warranty:** 5-year

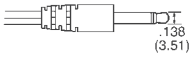
Output V	Power (W)	Max. Current Amps at 40°	45°	50°	Dimensions – In. (mm) W x H x L	Wgt. (Kilograms)	Digi-Key Part No.	Price Each 1	10	25	Lambda Part No.
3.3	33	10.0	10.0	8.0	3.346 x 1.45 x 6.25 (84.99 x 36.83 x 158.75)	.35	285-1047-ND	121.80	115.08	109.20	JWS50-3/A
	50	15.0	12.0	9.0	3.62 x 1.65 x 6.88 (91.95 x 41.91 x 174.75)	.45	285-1052-ND	163.85	154.81	146.90	JWS75-3/A
	198	60.0	60.0	60.0	3.62 x 4.72 x 7.48 (91.95 x 119.89 x 189.99)	2.27	285-1100-ND	359.60	339.76	322.40	JWS300-3
5	50	10.0	10.0	6.0	3.346 x 1.45 x 6.25 (84.99 x 36.83 x 158.75)	.35	285-1048-ND	121.80	115.08	109.20	JWS50-5/A
	75	15.0	12.0	9.0	3.62 x 1.65 x 6.88 (91.95 x 41.91 x 174.75)	.45	285-1053-ND	163.85	154.81	146.90	JWS75-5/A
	100	20.0	16.0	12.0	3.62 x 1.96 x 7.40 (91.95 x 49.78 x 187.96)	.65	285-1057-ND	192.85	182.21	172.90	JWS100-5/A
	150	30.0	24.0	18.0	3.62 x 2.55 x 7.79 (91.95 x 64.77 x 197.87)	.85	285-1061-ND	250.85	237.01	224.90	JWS150-5/A
	300	60.0	60.0	60.0	3.62 x 4.72 x 7.48 (91.95 x 119.89 x 189.99)	2.27	285-1101-ND	359.60	339.76	322.40	JWS300-5
	600	120.0	120.0	120.0	3.62 x 7.48 x 7.87 (91.95 x 189.99 x 199.90)	4.08	285-1105-ND	593.05	560.33	531.70	JWS600-5
12	50	4.3	4.3	3.4	3.346 x 1.45 x 6.25 (84.99 x 36.83 x 158.75)	.35	285-1049-ND	121.80	115.08	109.20	JWS50-12/A
	75	6.3	5.0	3.8	3.62 x 1.65 x 6.88 (91.95 x 41.91 x 174.75)	.45	285-1054-ND	163.85	154.81	146.90	JWS75-12/A
	100	8.5	6.8	5.1	3.62 x 1.96 x 7.40 (91.95 x 49.78 x 187.96)	.65	285-1058-ND	192.85	182.21	172.90	JWS100-12/A
	150	13.0	10.4	7.8	3.62 x 2.55 x 7.79 (91.95 x 64.77 x 197.87)	.85	285-1062-ND	250.85	237.01	224.90	JWS150-12/A
	300	27.0	27.0	27.0	3.62 x 4.72 x 7.48 (91.95 x 119.89 x 189.99)	2.27	285-1102-ND	359.60	339.76	322.40	JWS300-12
	600	53.0	53.0	53.0	3.62 x 7.48 x 7.87 (91.95 x 189.99 x 199.90)	4.08	285-1106-ND	593.05	560.33	531.70	JWS600-12
24	50	2.2	2.2	1.7	3.346 x 1.45 x 6.25 (84.99 x 36.83 x 158.75)	.35	285-1050-ND	121.80	115.08	109.20	JWS50-24/A
	75	3.2	2.5	1.9	3.62 x 1.65 x 6.88 (91.95 x 41.91 x 174.75)	.45	285-1055-ND	163.85	154.81	146.90	JWS75-24/A
	100	4.5	3.6	2.7	3.62 x 1.96 x 7.40 (91.95 x 49.78 x 187.96)	.65	285-1059-ND	192.85	182.21	172.90	JWS100-24/A
	150	6.5	5.2	3.9	3.62 x 2.55 x 7.79 (91.95 x 64.77 x 197.87)	.85	285-1063-ND	250.85	237.01	224.90	JWS150-24/A
	300	14.0	14.0	14.0	3.62 x 4.72 x 7.48 (91.95 x 119.89 x 189.99)	2.27	285-1103-ND	359.60	339.76	322.40	JWS300-24
	600	27.0	27.0	27.0	3.62 x 7.48 x 7.87 (91.95 x 189.99 x 199.90)	4.08	285-1107-ND	593.05	560.33	531.70	JWS600-24
48	50	1.1	1.1	0.88	3.346 x 1.45 x 6.25 (84.99 x 36.83 x 158.75)	.35	285-1051-ND	121.80	115.08	109.20	JWS50-48/A
	75	1.6	1.3	0.96	3.62 x 1.65 x 6.88 (91.95 x 41.91 x 174.75)	.45	285-1056-ND	163.85	154.81	146.90	JWS75-48/A
	100	2.1	1.7	1.26	3.62 x 1.96 x 7.40 (91.95 x 49.78 x 187.96)	.65	285-1060-ND	192.85	182.21	172.90	JWS100-48/A
	150	3.3	2.6	1.98	3.62 x 2.55 x 7.79 (91.95 x 64.77 x 197.87)	.85	285-1064-ND	250.85	237.01	224.90	JWS150-48/A
	300	6.5	6.5	6.5	3.62 x 4.72 x 7.48 (91.95 x 119.89 x 189.99)	2.27	285-1104-ND	359.60	339.76	322.40	JWS300-48
	600	13.0	13.0	13.0	3.62 x 7.48 x 7.87 (91.95 x 189.99 x 199.90)	4.08	285-1108-ND	593.05	560.33	531.70	JWS600-48
Din Bracket for JWS 50/75 Series							285-1200-ND	12.50	11.25	11.00	L-DIN50/75
Din Bracket for JWS 100/150 Series							285-1201-ND	14.50	13.00	12.50	L-DIN100/150

CUI STACK Wall Transformers

- Cord Lengths are 6 feet (1.83 meters); T805 has a 4 foot (1.22 meter) cord.
- All transformers are UL listed and most are also CSA approved.

P-1 (3.5mm Male)

Tip is Positive,
Sleeve is Negative

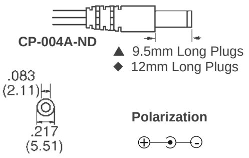


CP-3501-ND

P-5 (2.1mm Female)

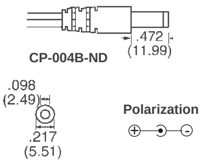
CP-004A-ND

▲ 9.5mm Long Plugs
◆ 12mm Long Plugs

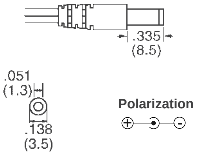


P-6 (2.5mm Female)

CP-004B-ND



P-7 (1.3mm Female)



P-13 (1.7mm Female)

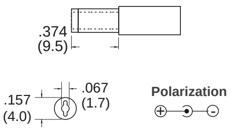


Fig. 1 — US/Canada Transformer

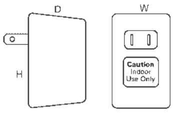


Fig. 2 — European Transformer
TUV Approved

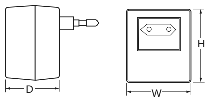
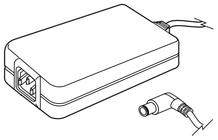


Fig. 3 — Switching Desk-Top Power Supply

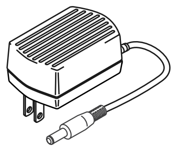


SPECIFICATIONS: • **AC Input Voltage Range:** 90 VAC to 264 VAC Universal • **AC Input Frequency:** 47 Hz to 63 Hz • **Maximum In-rush Current:** 26 A max @ 115 VAC, 50 A max @ 230 VAC at 25°C ambient cold start • **Minimum Load Current:** 0A • **Output Ripple and Noise:** 5V = 50 mVP-P, 12V = 120mVP-P, 24V = 240mVP-P • **Operating Temperature:** 0°C to 40°C

Safety Requirements: **(1)** UL 1950, **(2)** CSA 22.2, No. 950, **(3)** CSA 22.2, No. 234 LEVEL 3, **(4)** IEC 950 **(5)** TUV/CS, EN60950.

EMI Requirement: FCC class “B” rules. VDE 243/1991 class “B” rules

Fig. 4 — Switching Wall-Mount Power Supply



SPECIFICATIONS: • **AC Input Voltage Range:** 100 VAC to 120 VAC (T930-ND & T931-ND: 100VAC to 240VAC Universal) • **AC Input Frequency:** 50 Hz to 60 Hz • **Switching Frequency:** 65KHz Typical • **Protection Type:** Short circuit protection • **Hold up time:** 16ms after loss of nominal AC input under full load condition • **Operating Temperature:** 0°C to 40°C

Safety Requirements: **(1)** UL 1950 **(2)** CSA 22.2 **(3)** TUV, EN60950 (T930-ND & T931-ND) **(4)** Comply with CE Directives (T930-ND & T931-ND).

Output: No Minimum Load

Fig. 5 — EI-28 Core Size Adapter

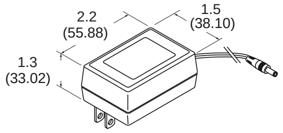
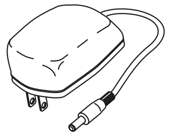


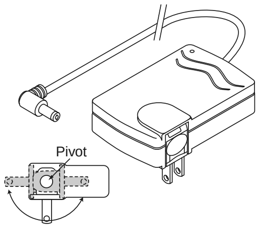
Fig. 6 — POWER PUP Thin, Low-Profile Case Wall Transformer



SPECIFICATIONS: • **AC Input Voltage:** 120VAC/60Hz • **Operating Temperature:** -10°C to 40°C • **Hi-Pot Test - 1mA for 1 Minute:** 1,500VAC Primary to Secondary and Primary to Core, 1,000VAC Secondary to Core • **Protection Type:** Thermal

Safety Requirements: UL/cUL Approvals

Fig. 7 — 10 Watt Flip Out Series

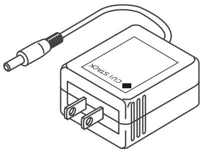


SPECIFICATIONS: • **AC Input Voltage Range:** 90 VAC to 264VAC • **AC Input Frequency:** 47 Hz to 63 Hz • **Minimum Load Current:** 0A • **Total Regulations:** ±5%

FEATURES: • **Short Circuit:** Output equipped with short circuit protection - auto restart • **Over Voltage Protection:** 15.6V Maximum by Zener Diode Clamping • **Overload Protection:** Limited to 1.5 A typical (1.8A Maximum) at 240 VAC Input Voltage

Safety Requirements: • UL • cUL

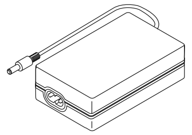
Fig. 8 — 10 Watt Power Strip Type



SPECIFICATIONS: • **Input Voltage:** AC90V-264V • **Frequency:** 50 Hz to 60Hz • **Minimum Load Current:** 0A • **Load Regulation:** ±5% • **Short Circuit and Overcurrent Protection:** Shutoff and Auto Restart

Safety Requirements: • UL • cUL

Fig. 9 — 12, 15, 20 Watt Small Desk-Top



SPECIFICATIONS: • **Input Voltage Range:** AC90V-264V • **Frequency:** 50 Hz to 60 Hz • **Load Regulation:** ±5% • **Minimum Load Current:** 0A • **Short Circuit and Overcurrent Protection:** Shutoff and Auto Restart

Safety Requirements: UL, cUL, TUV, CE

Fig.	Ratings			Dimensions Inches (mm)	Cord	Digi-Key	Price Each				CUI/Stack
	Volt.	mA	Reg.	H x W x D	Plug	Part No.	1	10	50	100	Part No.
US/Canada Transformer 110VAC/60Hz Input											
1	5VDC	300	5%	2.38 x 2.00 x 1.65 (60.45 x 50.80 x 41.91)	P-6	T309-P6P-ND	9.00	7.20	6.30	5.98	DPR050030-P6P
	5VDC	1000	5%	3.35 x 2.68 x 2.20 (85.09 x 68.07 x 55.88)	P-1	T310-P1P-ND•	20.93	16.74	14.65	13.90	DTR050100-P1P
	5VDC	1500	5%	4.72 x 3.07 x 2.48 (119.89 x 77.98 x 62.99)	P-5◆	T311-P5P-ND•	51.98	41.58	36.39	34.52	DTR050150-P5P
	5.5VDC	500	No	2.38 x 2.00 x 1.46 (60.45 x 50.80 x 37.08)	P-1	T301-P1P-ND	6.60	5.28	4.62	4.39	DPD055050-P1P
	6VDC	200	No	2.15 x 1.67 x 1.46 (54.61 x 42.42 x 37.08)	P-1	T305-P1P-ND	5.65	4.52	3.96	3.76	DPD060020-P1P-SZ
	6VDC	500	No	2.32 x 1.97 x 1.63 (58.93 x 50.04 x 41.40)	P-1	T307-P1P-ND	6.25	5.00	4.38	4.15	DPD060050-P1P-SZ
1	9VDC	100	No	2.15 x 1.67 x 1.46 (54.61 x 42.42 x 37.08)	P-1	T406-P1P-ND	5.40	4.32	3.78	3.59	DPD090010-P1P-SZ
	9VDC	200	No	2.19 x 1.69 x 1.48 (55.63 x 42.93 x 37.59)	P-1	T401-P1P-ND	4.65	3.72	3.26	3.09	DPD090020-P1P
	9VDC	200	No	2.19 x 1.69 x 1.48 (55.63 x 42.93 x 37.59)	P-5◆	T402-P5P-ND	4.65	3.72	3.26	3.09	DPD090020-P5P
	9VDC	300	No	2.15 x 1.67 x 1.46 (54.61 x 42.42 x 37.08)	P-1	T407-P1P-ND	5.68	4.54	3.98	3.77	DPD090030-P1P-SZ
	9VDC	500	No	2.38 x 2.00 x 1.46 (60.45 x 50.80 x 37.08)	P-1	T403-P1P-ND	5.78	4.62	4.05	3.84	DPD090050-P1P
	9VDC	500	No	2.38 x 2.00 x 1.46 (60.45 x 50.80 x 37.08)	P-5◆	T405-P5P-ND	5.78	4.62	4.05	3.84	DPD090050-P5P
	9VDC	800	5%	2.38 x 2.38 x 1.91 (60.45 x 60.45 x 48.51)	P-5◆	T410-P5P-ND	14.53	11.62	10.17	9.65	DPR090080-P5P
	9VDC	1000	No	2.38 x 2.38 x 1.91 (60.45 x 60.45 x 48.51)	P-1	T404-P1P-ND	8.30	6.64	5.81	5.52	DPD090100-P1P
1	12VDC	50	No	2.15 x 1.67 x 1.46 (54.61 x 42.42 x 37.08)	P-1	T508-P1P-ND	5.40	4.32	3.78	3.59	DPD120005-P1P-SZ
	12VDC	200	No	2.15 x 1.67 x 1.46 (54.61 x 42.42 x 37.08)	P-1	T509-P1P-ND	5.50	4.40	3.85	3.66	DPD120020-P1P-SZ
	12VDC	300	No	2.38 x 2.00 x 1.46 (60.45 x 50.80 x 37.08)	P-1	T501-P1P-ND	5.75	4.60	4.03	3.82	DPD120030-P1P
	12VDC	300	No	2.38 x 2.00 x 1.46 (60.45 x 50.80 x 37.08)	P-5◆	T505-P5P-ND	5.75	4.60	4.03	3.68	DPD120030-P5P
	12VDC	500	No	2.38 x 2.00 x 1.46 (60.45 x 50.80 x 37.08)	P-1	T502-P1P-ND	6.08	4.86	4.26	4.04	DPD120050-P1P
	12VDC	500	No	2.38 x 2.00 x 1.46 (60.45 x 50.80 x 37.08)	P-5◆	T506-P5P-ND	6.08	4.86	4.26	4.04	DPD120050-P5P
	12VDC	800	No	2.38 x 2.38 x 1.91 (60.45 x 60.45 x 48.51)	P-1	T503-P1P-ND	6.95	5.56	4.87	4.62	DPD120080-P1P
	12VDC	800	No	2.38 x 2.38 x 1.91 (60.45 x 60.45 x 48.51)	P-5◆	T507-P5P-ND	6.95	5.56	4.87	4.62	DPD120080-P5P
1	24VDC	400	No	2.38 x 2.38 x 1.91 (60.45 x 60.45 x 48.51)	P-1	T521-P1P-ND	8.75	7.00	6.13	5.81	DPD240040-P1P
	24VDC	400	No	2.38 x 2.38 x 1.91 (60.45 x 60.45 x 48.51)	P-6	T520-P6P-ND	8.75	7.00	6.13	5.81	DPD240040-P6P
1	9VAC	100	No	2.15 x 1.67 x 1.46 (54.61 x 42.42 x 37.08)	S/T	T701-ND†	5.28	4.22	3.70	3.51	DPA090010-S/T-SZ
	9VAC	600	No	2.32 x 1.99 x 1.61 (58.93 x 50.55 x 40.89)	S/T	T702-ND†	6.70	5.36	4.69	4.45	DPA090060-S/T-SZ
1	12VAC	300	No	2.15 x 1.67 x 1.46 (54.61 x 42.42 x 37.08)	S/T	T601-ND†	5.50	4.40	3.85	3.66	DPA120030-S/T-SZ
	12VAC	400	No	2.15 x 1.67 x 1.46 (54.61 x 42.42 x 37.08)	S/T	T611-ND†	6.98	5.58	4.89	4.64	DPA120040-S/T-SZ
	12VAC	500	No	2.32 x 1.99 x 1.61 (58.93 x 50.55 x 40.89)	S/T	T612-ND†	7.20	5.76	5.04	4.79	DPA120050-S/T-SZ
	12VAC	600	No	2.38 x 2.00 x 1.46 (60.45 x 50.80 x 37.08)	S/T	T602-ND†	5.45	4.36	3.82	3.62	DPA120060-S/T
	12VAC	1000	No	2.76 x 1.97 x 1.54 (70.10 x 50.04 x 39.12)	S/T	T603-ND†	6.08	4.86	4.26	4.04	DPA120100-S/T

(Continued)

Fig.	Ratings			Dimensions Inches (mm)	Cord	Digi-Key	Price Each				CUI/Stack
	Volt.	**mA**	**Reg.**	**H x W x D**	**Plug**	**Part No.**	**1**	**10**	**50**	**100**	**Part No.**
1	12VAC	1500	No	3.20 x 2.21 x 1.89 (81.28 x 56.13 x 48.01)	S/T	T613-ND†	13.38	10.70	9.37	8.89	DPA120150-S/T
	12VAC	2000	No	3.30 x 2.48 x 2.16 (83.82 x 62.99 x 54.86)	S/T	T604-ND†	14.28	11.42	10.00	9.48	DPA120200-S/T
	12VAC	3300	No	3.50 x 2.68 x 2.16 (88.90 x 68.07 x 54.86)	S/T	T605-ND§†	23.60	18.88	16.52	15.68	DPA120333C-S/T
	12VAC	200	No	2.15 x 1.67 x 1.46 (54.61 x 42.42 x 37.08)	P-1	T606-ND	5.40	4.32	3.78	3.59	DPA120020-P1-SZ
	12VAC	600	No	2.38 x 2.00 x 1.46 (60.45 x 50.80 x 37.08)	P-1	T607-P1P-ND	5.45	4.36	3.82	3.62	DPA120060-P1P
	12VAC	1000	No	2.75 x 1.97 x 1.54 (69.85 x 50.04 x 39.12)	P-1	T608-P1P-ND	6.08	4.86	4.26	4.04	DPA120100-P1P
	12VAC	2000	No	3.30 x 2.48 x 2.16 (83.82 x 62.99 x 54.86)	P-1	T609-P1P-ND	14.28	11.42	10.00	9.48	DPA120200-P1P
1	24VAC	1670	No	3.50 x 2.68 x 2.16 (88.90 x 68.07 x 54.86)	S/T	T620-ND§†	23.60	18.88	16.52	15.68	DPA240167C-S/T
European Transformer 220VAC/50Hz Input											
2	9VDC	500	No	2.32 x 1.99 x 1.61 (58.93 x 50.55 x 40.89)	P-5◆	T408-P5P-ND	7.65	6.12	5.36	5.08	DPD090050E-P5P
	12VDC	800	No	3.19 x 2.20 x 1.89 (81.03 x 55.88 x 48.01)	P-5◆	T511-P5P-ND	12.00	9.60	8.40	7.97	DPD120080E-P5P
Switching Desk-Top Power Supply											
3	5VDC	2400	5%	1.38 x 1.97 x 3.94 (35.05 x 50.04 x 100.08)	P-5◆	T805-P5P-ND‡	22.75	18.20	15.93	15.17	DTS050240U/AC1-P5P
	12VDC	1500	5%	1.38 x 1.97 x 3.94 (35.05 x 50.04 x 100.08)	P-5◆	T806-P5P-ND‡	22.75	18.20	15.93	15.17	DTS120150U/AC1-P5P
	24VDC	1250	5%	1.42 x 2.36 x 4.41 (36.07 x 59.94 x 112.01)	P-5(Rt)▲	T803-ND‡	59.86	52.38	44.90	39.81	DTS240125U/AC1-P5
Switching Wall-Mount Power Supply											
4	5VDC	2400	5%	1.38 x 2.09 x 3.19 (35.05 x 53.09 x 81.03)	P-5◆	T920-P5P-ND	16.50	13.20	11.55	11.00	DPS050240-P5P
	6VDC	2000	5%	1.38 x 2.09 x 3.19 (35.05 x 53.09 x 81.03)	P-5◆	T921-P5P-ND	16.50	13.20	11.55	11.00	DPS060200-P5P
	9VDC	1500	5%	1.38 x 2.09 x 3.19 (35.05 x 53.09 x 81.03)	P-5◆	T922-P5P-ND	16.50	13.20	11.55	11.00	DPS090150-P5P
	12VDC	1250	5%	1.38 x 2.09 x 3.19 (35.05 x 53.09 x 81.03)	P-5◆	T923-P5P-ND	16.50	13.20	11.55	11.00	DPS120125-P5P
	15VDC	1000	5%	1.38 x 2.09 x 3.19 (35.05 x 53.09 x 81.03)	P-5◆	T924-P5P-ND	16.50	13.20	11.55	11.00	DPS150100-P5P
	5VDC	2800	5%	1.65 x 2.09 x 3.19 (41.91 x 53.09 x 81.03)	P-5◆	T930-P5P-ND††	18.00	14.40	12.60	12.00	DPS050280U-P5P
	12VDC	1500	5%	1.65 x 2.09 x 3.19 (41.91 x 53.09 x 81.03)	P-5◆	T931-P5P-ND††	18.00	14.40	12.60	12.00	DPS120150U-P5P
	24VDC	750	5%	1.38 x 2.09 x 3.19 (35.05 x 53.09 x 81.03)	P-5◆	T932-P5P-ND††	18.00	14.40	12.60	12.00	DPS240075U-P5P
EI-28 Core Size Adapters											
5	3VDC	400	No	2.2 x 1.5 x 1.33 (55.88 x 38.10 x 33.78)	P-7	T201-P7P-ND	5.31	4.43	3.10	2.94	DPD030040-P7P-DK
	4.5VDC	300	No	2.2 x 1.5 x 1.33 (55.88 x 38.10 x 33.78)	P-7	T202-P7P-ND	5.40	4.50	3.15	2.99	DPD045030-P7P-DK
	6VDC	250	No	2.2 x 1.5 x 1.33 (55.88 x 38.10 x 33.78)	P-7	T203-P7P-ND	5.55	4.63	3.24	3.08	DPD060025-P7P-DK
	9VDC	150	No	2.2 x 1.5 x 1.33 (55.88 x 38.10 x 33.78)	P-7	T205-P7P-ND	5.40	4.50	3.15	2.99	DPD090015-P7P-DK
	12VDC	100	No	2.2 x 1.5 x 1.33 (55.88 x 38.10 x 33.78)	P-7	T206-P7P-ND	5.31	4.43	3.10	2.94	DPD120010-P7P-DK
POWER PUP											
6	5VDC	550	No	2.63 x 1.65 x 1.17 (66.7 x 41.8 x 29.6)	P-13	T312-P13P-ND	6.60	5.28	4.62	4.39	DPD050055-P13P-TC
	9VDC	200	No	2.63 x 1.65 x 1.17 (66.7 x 41.8 x 29.6)	P-5◆	T412-P5P-ND	4.65	3.72	3.26	3.09	DPD090020-P5P-TC
	9VDC	500	No	3.07 x 1.91 x 1.33 (78 x 48.5 x 33.9)	P-5◆	T413-P5P-ND	5.66	4.53	3.97	3.76	DPD090050-P5P-TC
	9VDC	1000	No	3.7 x 2.32 x 1.81 (94 x 59 x 46)	P-5◆	T414-P5P-ND	8.30	6.64	5.81	5.52	DPD090100-P5P-TC
	12VDC	300	No	3.07 x 1.91 x 1.33 (78 x 48.5 x 33.9)	P-13	T510-P13P-ND	5.64	4.51	3.95	3.75	DPD120030-P13P-TC
	12VDC	500	No	3.07 x 1.91 x 1.33 (78 x 48.5 x 33.9)	P-5◆	T512-P5P-ND	6.08	4.86	4.26	4.04	DPD120050-P5P-TC
	12VDC	800	No	3.72 x 2.32 x 1.81 (94.5 x 59 x 46)	P-5◆	T513-P5P-ND	6.81	5.45	4.77	4.53	DPD120080-P5P-TC
	12VAC	1000	No	3.72 x 2.32 x 1.81 (94.4 x 59 x 46)	P-5◆	T614-P5P-ND	6.22	4.98	4.36	4.14	DPA120100-P5P-TC
10 Watt Flip Out Series											
7	5VDC	2000	5%	3.35 x 2.13 x .78 (85 x 54 x 19.8)	P-5▲	T321-P5P-ND	35.50	28.40	24.86	23.68	DPS050200U-P5P-DF
	9VDC	1100	5%	3.35 x 2.13 x .78 (85 x 54 x 19.8)	P-5▲	T322-P5P-ND	35.50	28.40	24.86	23.68	DPS090110U-P5P-DF
	12VDC	830	5%	3.35 x 2.13 x .78 (85 x 54 x 19.8)	P-5▲	T323-P5P-ND	35.50	28.40	24.86	23.68	DPS120083U-P5P-DF
	15VDC	670	5%	3.35 x 2.13 x .78 (85 x 54 x 19.8)	P-5▲	T324-P5P-ND	35.50	28.40	24.86	23.68	DPS150067U-P5P-DF
	24VDC	420	5%	3.35 x 2.13 x .78 (85 x 54 x 19.8)	P-5▲	T325-P5P-ND	35.50	28.40	24.86	23.68	DPS240042U-P5P-DF
10 Watt Power Strip Type											
8	5VDC	2000	5%	2.36 x 1.73 x .98 (60 x 44 x 25)	P-5▲	T450-P5P-ND	21.68	17.34	15.18	14.46	DPS050200UPS-P5P
	6VDC	2000	5%	2.36 x 1.73 x .98 (60 x 44 x 25)	P-5▲	T451-P5P-ND	21.68	17.34	15.18	14.46	DPS060200UPS-P5P
	9VDC	1100	5%	2.36 x 1.73 x .98 (60 x 44 x 25)	P-5▲	T452-P5P-ND	21.68	17.34	15.18	14.46	DPS090110UPS-P5P
	12VDC	850	5%	2.36 x 1.73 x .98 (60 x 44 x 25)	P-5▲	T453-P5P-ND	21.68	17.34	15.18	14.46	DPS120085UPS-P5P
	18VDC	550	5%	2.36 x 1.73 x .98 (60 x 44 x 25)	P-5▲	T454-P5P-ND	21.68	17.34	15.18	14.46	DPS180055UPS-P5P
	24VDC	500	5%	2.36 x 1.73 x .98 (60 x 44 x 25)	P-5▲	T455-P5P-ND	21.68	17.34	15.18	14.46	DPS240050UPS-P5P
12 Watt Small Desk-Top											
9	5VDC	2500	5%	2.91 x 1.81 x .98 (74 x 46 x 25)	P-5▲	T850-P5P-ND‡	27.48	21.98	19.24	18.33	DTS050250SUDC-P5P
	6VDC	2000	5%	2.91 x 1.81 x .98 (74 x 46 x 25)	P-5▲	T851-P5P-ND‡	27.48	21.98	19.24	18.33	DTS060200SUDC-P5P
	9VDC	1330	5%	2.91 x 1.81 x .98 (74 x 46 x 25)	P-5▲	T852-P5P-ND‡	27.48	21.98	19.24	18.33	DTS090133SUDC-P5P
	12VDC	1000	5%	2.91 x 1.81 x .98 (74 x 46 x 25)	P-5▲	T853-P5P-ND‡	27.48	21.98	19.24	18.33	DTS120100SUDC-P5P
	18VDC	670	5%	2.91 x 1.81 x .98 (74 x 46 x 25)	P-5▲	T854-P5P-ND‡	27.48	21.98	19.24	18.33	DTS180067SUDC-P5P
	24VDC	500	5%	2.91 x 1.81 x .98 (74 x 46 x 25)	P-5▲	T855-P5P-ND‡	27.48	21.98	19.24	18.33	DTS240050SUDC-P5P
15 Watt Two-Prong Inlet Type											
9	5VDC	3000	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T550-P5P-ND‡	29.50	23.60	20.66	19.68	DTS050300UDC-P5P
	6VDC	2500	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T551-P5P-ND‡	29.50	23.60	20.66	19.68	DTS060250UDC-P5P
	9VDC	1660	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T552-P5P-ND‡	29.50	23.60	20.66	19.68	DTS090166UDC-P5P
	12VDC	1250	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T553-P5P-ND‡	29.50	23.60	20.66	19.68	DTS120125UDC-P5P
	24VDC	620	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T554-P5P-ND‡	29.50	23.60	20.66	19.68	DTS240062UDC-P5P
20 Watt Two-Prong Inlet Type											
9	5VDC	4000	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T560-P5P-ND‡	32.48	25.98	22.74	21.66	DTS050400UDC-P5P
	6VDC	3300	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T561-P5P-ND‡	32.48	25.98	22.74	21.66	DTS060330UDC-P5P
	9VDC	2200	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T562-P5P-ND‡	32.48	25.98	22.74	21.66	DTS090220UDC-P5P
	12VDC	1660	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T563-P5P-ND‡	32.48	25.98	22.74	21.66	DTS120166UDC-P5P
	15VDC	1330	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T564-P5P-ND‡	32.48	25.98	22.74	21.66	DTS150133UDC-P5P
	24VDC	830	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T565-P5P-ND‡	32.48	25.98	22.74	21.66	DTS240083UDC-P5P
30 Watt Low Cost / Desk-Top Series											
3	5VDC	4000	5%	4.33 x 2.36 x 1.34 (110 x 60 x 34)	P-5▲	T807-P5P-ND‡	59.63	47.70	41.76	39.76	DTS050400U2/AC1-P5P
	9VDC	2200	5%	4.33 x 2.36 x 1.34 (110 x 60 x 34)	P-5▲	T808-P5P-ND‡	59.63	47.70	41.76	39.76	DTS090220U2/AC1-P5P
	12VDC	2500	5%	4.33 x 2.36 x 1.34 (110 x 60 x 34)	P-5▲	T809-P5P-ND‡	59.63	47.70	41.76	39.76	DTS120250U2/AC1-P5P
	15VDC	2000	5%	4.33 x 2.36 x 1.34 (110 x 60 x 34)	P-5▲	T810-P5P-ND‡	59.63	47.70	41.76	39.76	DTS150200U2/AC1-P5P
	18VDC	1660	5%	4.33 x 2.36 x 1.34 (110 x 60 x 34)	P-5▲	T811-P5P-ND‡	59.63	47.70	41.76	39.76	DTS180166U2/AC1-P5P
	48VDC	625	5%	4.33 x 2.36 x 1.34 (110 x 60 x 34)	P-5▲	T813-P5P-ND‡	59.63	47.70	41.76	39.76	DTS480063U2/AC1-P5P
50 or 60 Watt Desk-Top Series											
9	12VDC	4160	4%	4.02 x 2.5 x 1.26 (102 x 63.5 x 32)	P-5▲	T820-P5P-ND‡	67.88	54.30	47.53	45.26	DTS120416UD/AC5-P5P
	18VDC	3300	4%	4.02 x 2.5 x 1.26 (102 x 63.5 x 32)	P-5▲	T821-P5P-ND‡	67.88	54.30	47.53	45.26	DTS180333UD/AC5-P5P
	19VDC	3160	4%	4.02 x 2.5 x 1.26 (102 x 63.5 x 32)	P-5▲	T822-P5P-ND‡	67.88	54.30	47.53	45.26	DTS190316UD/AC5-P5P
	24VDC	2500	4%	4.02 x 2.5 x 1.26 (102 x 63.5 x 32)	P-5▲	T823-P5P-ND‡	67.88	54.30	47.53	45.26	DTS240250UD/AC5-P5P

• Table Top Style. † "S/T" = Stripped/Tinned. ‡ AC Cord Included. § Center Tapped. †† AC Input Voltage Range: 90VAC to 265VAC Universal. ▲ 9.5mm Long Plugs. ◆ 12mm Long Plugs.

★ ***For additional plug options available, please call 1-800-344-4539 and request technical assistance to build your part number. A minimum order and lead time will apply.***

NEC Optoelectronic Products

Photo Transistor Output Optoisolators

Fig.	Isolation Voltage	Current Transfer Ratio - Typ.	VCEO (Max.)	Typ. t_{on}/t_{off} (µsec.)	Length L (mm)	Width W (mm)	Pitch P (mm)	Pkg.	Digi-Key Part No.	Price Each			Digi-Key Part No.	Tape & Reel	
										1	10	100		Size	Pricing
1	5000	80-600%	80	3/5	5.1	6.5	2.54	Dip	PS2501-1-ND	.48	.40	.34	—	—	—
2	5000	80-600%	80	3/5	10.2	6.5	2.54	Dip	PS2501-2-ND	.99	.83	.70	—	—	—
3	5000	80-600%	80	3/5	20.3	6.5	2.54	Dip	PS2501-4-ND	1.80	1.50	1.27	—	—	—
1	5000	80-600%	80	3/5	5.1	6.5	2.54	SMT	PS2501L-1-ND	.51	.43	.36	—	—	—
2	5000	80-600%	80	3/5	10.2	6.5	2.54	SMT	PS2501L-2-ND	1.02	.85	.72	—	—	—
3	5000	80-600%	80	3/5	20.3	6.5	2.54	SMT	PS2501L-4-ND	1.83	1.53	1.29	—	—	—
4	5000	200-2000+%	40	100/100	5.1	6.5	2.54	Dip	PS2502-1-ND	.72	.60	.51	—	—	—
5	5000	200-2000+%	40	100/100	10.2	6.5	2.54	Dip	PS2502-2-ND	1.59	1.33	1.12	—	—	—
6	5000	200-2000+%	40	100/100	20.3	6.5	2.54	Dip	PS2502-4-ND	2.50	2.25	1.92	—	—	—
7	5000	80-600%	80	3/5	5.1	6.5	2.54	Dip	PS2505-1-ND	.60	.50	.43	—	—	—
8	5000	80-600%	80	3/5	10.2	6.5	2.54	Dip	PS2505-2-ND	1.20	1.00	.85	—	—	—
9	5000	80-600%	80	3/5	20.3	6.5	2.54	Dip	PS2505-4-ND	2.30	2.07	1.77	—	—	—
7	5000	80-600%	80	3/5	5.1	6.5	2.54	SMT	PS2505L-1-ND	.63	.53	.45	—	—	—
8	5000	80-600%	80	3/5	10.2	6.5	2.54	SMT	PS2505L-2-ND	1.23	1.03	.87	—	—	—
9	5000	80-600%	80	3/5	20.3	6.5	2.54	SMT	PS2505L-4-ND	2.33	2.10	1.79	—	—	—
10	5000	200-2000+%	40	100/100	5.1	6.5	2.54	Dip	PS2506-1-ND	.87	.73	.62	—	—	—
11	5000	200-2000+%	40	100/100	10.2	6.5	2.54	Dip	PS2506-2-ND	2.01	1.68	1.42	—	—	—
12	5000	200-2000+%	40	100/100	20.3	6.5	2.54	Dip	PS2506-4-ND	3.33	3.00	2.55	—	—	—
13	5000	1500-6500%	300	100/100	5.1	6.5	2.54	Dip	PS2532-1-ND	.93	.78	.66	—	—	—
14	5000	1500-6500%	300	100/100	10.2	6.5	2.54	Dip	PS2532-2-ND	1.92	1.60	1.36	—	—	—
15	5000	1500-6500%	300	100/100	20.3	6.5	2.54	Dip	PS2532-4-ND	3.08	2.77	2.36	—	—	—
13	5000	1500-6500%	300	100/100	5.1	6.5	2.54	SMT	PS2532L-1-ND	.93	.78	.66	—	—	—
14	5000	1500-6500%	300	100/100	10.2	6.5	2.54	SMT	PS2532L-2-ND	1.95	1.63	1.38	—	—	—
15	5000	1500-6500%	300	100/100	20.3	6.5	2.54	SMT	PS2532L-4-ND	3.10	2.79	2.38	—	—	—
13	5000	1500-6500%	350	100/100	5.1	6.5	2.54	Dip	PS2533-1-ND	1.59	1.33	1.12	—	—	—
14	5000	1500-6500%	350	100/100	10.2	6.5	2.54	Dip	PS2533-2-ND	3.33	3.00	2.55	—	—	—
1	5000	80-400%	80	3/5	5.1	6.5	2.54	Dip	PS2561-1-V-ND‡	.60	.50	.43	—	—	—
2	5000	80-400%	80	3/5	10.2	6.5	2.54	Dip	PS2561-2-V-ND‡	1.23	1.03	.87	—	—	—
3	5000	80-400%	80	3/5	20.3	6.5	2.54	Dip	PS2561-4-V-ND‡	3.08	2.77	2.36	—	—	—
1	5000	80-400%	80	3/5	5.1	6.5	2.54	SMT	PS2561L-1-V-ND‡	.63	.53	.45	—	—	—
2	5000	80-400%	80	3/5	10.2	6.5	2.54	SMT	PS2561L-2-V-ND‡	1.26	1.05	.89	—	—	—
1	5000	80-400%	80	3/5	5.1	6.5	2.54	Dip	PS2561L1-1-V-ND*‡	.63	.53	.45	—	—	—
1	5000	80-400%	80	3/5	5.1	6.5	2.54	SMT	PS2561L2-1-V-ND*‡	.63	.53	.45	—	—	—
7	5000	80-400%	80	3/5	5.1	6.5	2.54	Dip	PS2565-1-V-ND‡	.69	.58	.49	—	—	—
8	5000	80-400%	80	3/5	10.2	6.5	2.54	Dip	PS2565-2-V-ND‡	1.53	1.28	1.08	—	—	—
7	5000	80-400%	80	3/5	5.1	6.5	2.54	SMT	PS2565L-1-V-ND‡	.72	.60	.51	—	—	—
8	5000	80-400%	80	3/5	10.2	6.5	2.54	SMT	PS2565L-2-V-ND‡	1.59	1.33	1.12	—	—	—
1	3750	50-300%	40	3/5	4.5	4.4	2.54	SMT	PS2701-1-ND	.57	.48	.41	PS2701-1TR-ND	3,500	300.00/M
2	3750	50-300%	40	3/5	9.3	4.4	2.54	SMT	PS2701-2-ND	1.44	1.20	1.02	—	—	—
3	3750	50-300%	40	3/5	19.5	4.4	2.54	SMT	PS2701-4-ND	2.28	2.05	1.75	—	—	—
4	3750	200-2000+%	40	200/200	4.5	4.4	2.54	SMT	PS2702-1-ND	.84	.70	.60	PS2702-1TR-ND	900	434.70
5	3750	200-2000+%	40	200/200	9.3	4.4	2.54	SMT	PS2702-2-ND	1.53	1.28	1.08	—	—	—
6	3750	200-2000+%	40	200/200	19.5	4.4	2.54	SMT	PS2702-4-ND	2.55	2.30	1.96	—	—	—
1	3750	50-400%	120	10/10	4.5	4.4	2.54	SMT	PS2703-1-ND	.63	.53	.45	PS2703-1TR-ND	3,500	367.00/M
2	3750	50-400%	120	10/10	9.3	4.4	2.54	SMT	PS2703-2-ND	1.44	1.20	1.02	—	—	—
3	3750	50-400%	120	10/10	19.5	4.4	2.54	SMT	PS2703-4-ND	2.43	2.19	1.86	—	—	—
7	3750	50-300%	40	3/5	4.5	4.4	2.54	SMT	PS2705-1-ND	.63	.53	.45	PS2705-1TR-ND	3,500	367.00/M
8	3750	50-300%	40	3/5	9.3	4.4	2.54	SMT	PS2705-2-ND	1.53	1.28	1.08	—	—	—
9	3750	50-300%	40	3/5	19.5	4.4	2.54	SMT	PS2705-4-ND	2.55	2.30	1.96	—	—	—
1	2500	80-600%	80	3/5	2.7	4.4	1.27	SMT	PS2801-1CT-ND†	.84	.70	.60	PS2801-1TR-ND	3,500	467.00/M
3	2500	80-600%	80	3/5	10.3	4.4	1.27	SMT	PS2801-4-ND	2.68	2.41	2.06	PS2801-4TR-ND	2,500	1665.00/M
7	2500	80-600%	80	3/5	2.7	4.4	1.27	SMT	PS2805-1CT-ND†	1.05	.88	.74	PS2805-1TR-ND	3,500	583.00/M
9	2500	80-600%	80	3/5	10.3	4.4	1.27	SMT	PS2805-4-ND	3.45	3.11	2.65	—	—	—

† Cut Tape pricing   * 10.16mm (0.4”) wide row spacing; standard spacing is 7.62mm (0.3”)   ‡ VDE Approved

High Speed Analog Output Optoisolators

Fig.	Isolation Voltage	CTRR	Vcc (Max.)	Typ. Prop Delay (µsec.)	Length L (mm)	Width W (mm)	Pitch P (mm)	Pkg.	Digi-Key Part No.	Price Each		
										1	10	100
16	5000	>15%	35	0.3/0.5	10.16	6.5	2.54	Dip	PS8601-ND	2.01	1.68	1.42
16	5000	>15%	35	0.3/0.5	10.16	6.5	2.54	SMT	PS8601L-ND	2.04	1.70	1.44
17	5000	>15%	35	0.3/0.5	10.16	6.5	2.54	Dip	PS8602-ND	2.01	1.68	1.42
17	5000	>15%	35	0.3/0.5	10.16	6.5	2.54	SMT	PS8602L-ND	2.04	1.70	1.44
18	2500	15%-35%	35	0.5/0.6	4.5	4.4	1.27	SMT	PS8701-ND	2.28	2.05	1.75

High Speed Digital

Fig.	Isolation Voltage	Prop Delay	Length L (mm)	Width W (mm)	Pitch P (mm)	Pkg.	Digi-Key Part No.	Price Each		
								1	10	100
19	5000	50ns	10.16	6.5	2.54	Dip	PS9601-ND	2.28	2.05	1.75
19	5000	50ns	10.16	6.5	2.54	SMT	PS9601L-ND	2.30	2.07	1.77
20	3750	40ns	10.16	6.5	2.54	Dip	PS9611-ND	2.34	1.95	1.65
21	2500	50ns	4.5	4.4	1.27	SMT	PS9701-ND	2.28	2.05	1.75
21	2500	40ns	4.5	4.4	1.27	SMT	PS9711-ND	2.35	2.12	1.81

Coupler For IGBT Driver

Fig.	Isolation Voltage	Prop Delay	Length L (mm)	Width W (mm)	Pitch P (mm)	Pkg.	Digi-Key Part No.	Price Each		
								1	10	100
22	5000	3µs	10.2	6.5	2.54	Dip	PS9634-ND	2.19	1.83	1.55
22	5000	3µs	10.2	6.5	2.54	SMT	PS9634L-ND	2.22	1.85	1.57

High Linearity Diode Output Optoisolator (Surface Mount)

Fig.	Isolation Voltage	Transfer Gain (K2/K1)	Transfer Gain Linearity ∆ (K2/K1) (for Vcc=15V, If=2-10mA)	Length L (mm)	Width W (mm)	Pitch P (mm)	Digi-Key Part No.	Price Each		
								1	10	100
23	1500	.733-1.072	<1%	10.3	4.4	1.27	PS8741-ND	4.48	4.03	3.44

Fig. 1

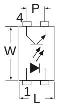
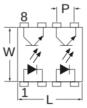


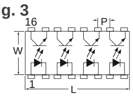
Photo Transistor Output Dip or SMT

Fig. 2



Dual Photo Transistor Output Dip or SMT

Fig. 3



Quad Photo Transistor Output Dip or SMT

Fig. 4

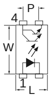
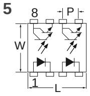


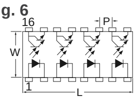
Photo Darlington Output Dip or SMT

Fig. 5



Dual Photo Darlington Output Dip or SMT

Fig. 6



Quad Photo Darlington Output Dip or SMT

Fig. 7

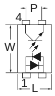
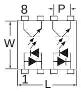


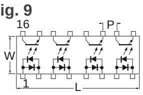
Photo Transistor Output Dip or SMT

Fig. 8



Dual Photo Transistor Output Dip or SMT

Fig. 9



Quad Photo Transistor Output Dip or SMT

Fig. 10

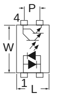
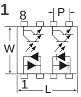


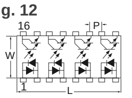
Photo Darlington Output Dip

Fig. 11



Dual Photo Darlington Output Dip

Fig. 12



Quad Photo Darlington Output Dip

Fig. 13

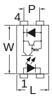
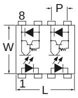


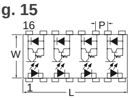
Photo Darlington Output Dip or SMT

Fig. 14



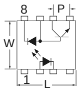
Dual Photo Darlington Output Dip or SMT

Fig. 15



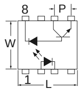
Quad Photo Darlington Output Dip or SMT

Fig. 16



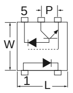
Dip or Lead-Bent

Fig. 17



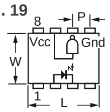
Dip or Lead-Bent

Fig. 18



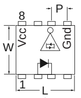
SMT

Fig. 19



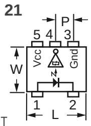
DIP and Lead-Bent

Fig. 20



Dip

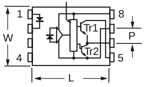
Fig. 21



SMT

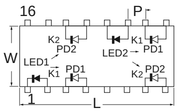
Fig. 22

Signal processing circuit



DIP and Lead-Bent

Fig. 23



TOSHIBA

Optoisolators

Fig. 1

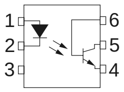
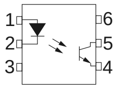


Fig. 2



No Base Connection

Fig. 3

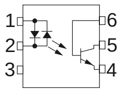


Fig. 4

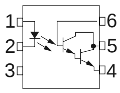
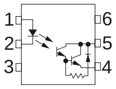


Fig. 5



No Base Connection

Fig. 6

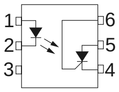
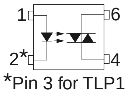
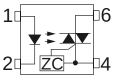


Fig. 7



*Pin 3 for TLP160
(TLP160G-ND and TLP160J-ND SMT)

Fig. 8



(TLP161G-ND and TLP161J-ND SMT)

Fig. 9

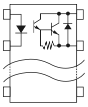


Fig. 10 - SMT

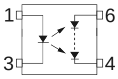


Fig. 11

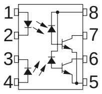


Fig. 12

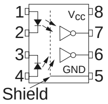


Fig. 13

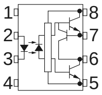


Fig. 14

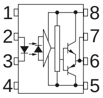


Fig. 15 - SMT

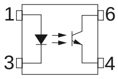


Fig. 16 - SMT

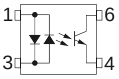


Fig. 17 - SMT

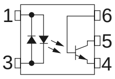


Fig. 18 - SMT

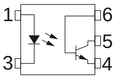


Fig. 19 - SMT

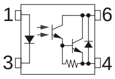


Fig. 20 - SMT

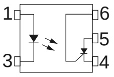


Fig. 21

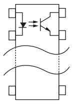


Fig. 22

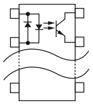


Fig. 23

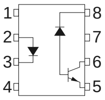


Fig. 24

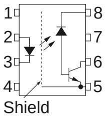


Fig. 25

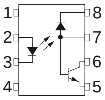


Fig. 26

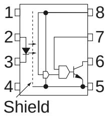


Fig. 27

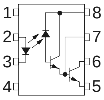


Fig. 28

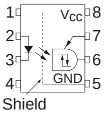
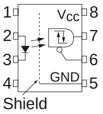


Fig. 29



Transistor Output Optoisolators

Fig.	Current Transfer Ratio				Collector Breakdown V(BR)	Isolation Voltage (Vrms)	Digi-Key Part No.	Pricing		
	Min. (%)	Max. (%)	@IF (ma)	VCE (V)				1	10	100
1	20	—	10	10	30	2500	4N25ASHORT-ND	.78	5.82	43.65
1	20	—	10	10	30	2500	4N25SHORT-ND	.70	5.25	39.38
1	100	—	10	10	30	2500	4N35SHORT-ND	.69	5.16	38.70
1	100	—	10	10	30	2500	4N36SHORT-ND	.64	4.83	36.23
1	10	—	10	10	80	2500	4N38SHORT-ND	.64	4.83	36.23
19	1000	—	1	1	300	2500	TLP127-ND	1.11	9.28	74.20
1	100	1200	1	0.5	55	5000	TLP331-ND	1.40	11.70	93.60
2	100	1200	1	0.5	55	5000	TLP332-ND	1.40	11.70	93.60
22	50	600	±5	—	55	5000	TLP620-ND	.95	7.11	53.33
22	50	600	±5	—	55	5000	TLP620-2-ND	1.42	11.83	94.60
22	100	600	±5	—	55	5000	TLP620-2GB-ND	1.46	12.20	97.60
22	50	600	±5	—	55	5000	TLP620-4-ND	2.32	18.52	138.90
22	100	600	±5	—	55	5000	TLP620-4GB-ND	2.04	16.34	122.55
22	100	600	±5	—	55	5000	TLP620GB-ND	.95	7.11	53.33
22	100	300	±5	—	55	5000	TLP620GR-ND	1.04	7.80	58.50
21	50	600	5	—	55	5000	TLP621-2-ND	1.38	11.53	92.20
21	100	600	5	—	55	5000	TLP621-2GB-ND	1.38	11.53	92.20
21	50	600	5	—	55	5000	TLP621-4-ND	2.37	18.92	141.90
21	100	600	5	—	55	5000	TLP621-4GB-ND	2.37	18.92	141.90
21	200	600	5	—	55	5000	TLP621BLT-ND	.86	6.45	48.38
21	100	600	5	—	55	5000	TLP621GBT-ND	.69	5.16	38.70
21	100	300	5	—	55	5000	TLP621GRT-ND	.82	6.12	45.90
21	50	600	5	—	55	5000	TLP621-ND	.69	5.16	38.70
21	100	1200	1	—	55	5000	TLP624-ND	.81	6.73	53.80
21	100	1200	1	—	55	5000	TLP624-2-ND	1.35	10.76	80.70
21	100	1200	1	—	55	5000	TLP624-4-ND	2.42	19.35	150.50
22	100	1200	±1	—	55	5000	TLP626-ND	1.16	9.68	77.40
22	100	1200	±1	—	55	5000	TLP626-2-ND	2.55	20.40	153.00
22	100	1200	±1	—	55	5000	TLP626-4-ND	3.87	30.96	240.80
3	50	600	±5	5	55	5000	TLP630TAIE-ND	1.20	10.03	80.20
1	50	600	5	5	55	5000	TLP631-ND	.82	6.80	54.40
1	100	600	5	5	55	5000	TLP631GB-ND	.82	6.80	54.40
2	50	600	5	5	55	5000	TLP632-ND	1.07	8.88	71.00

Darlington Transistor Output

Fig.	Current Transfer Ratio				Saturation Voltage			Collector Break-down V(BR)	Iso-lation Volt.	Digi-Key Part No.	Pricing		
	Min. (%)	Max. (%)	@IF (ma)	VCE (V)	Max. (V)	@IC (ma)	@IF (ma)				1	10	100
4	100	—	10	10	1	2	8	30	2500	4N29ASHORT-ND	.79	5.94	44.55
4	100	—	10	10	1	2	8	30	2500	4N29SHORT-ND	.82	6.18	46.35
4	500	—	10	10	1	2	8	30	2500	4N32SHORT-ND	.82	6.18	46.35
4	500	—	10	10	1	2	8	30	2500	4N33SHORT-ND	.82	6.18	46.35
16	100	1200	±1	0.5	0.4	0.5	1	80	3750	TLP126-ND	1.16	9.68	77.40
17	100	600	±5	5	0.4	2.4	8	80	3750	TLP130GB-ND	1.13	9.38	75.00
18	50	600	5	5	0.4	2.4	8	80	3750	TLP131-ND	.90	7.53	60.20
18	100	600	5	5	0.4	2.4	8	80	3750	TLP131GB-ND	1.00	8.33	66.60
18	100	1200	1	0.5	0.4	0.5	1	80	3750	TLP137-ND	.87	7.23	57.80
15	50	600	5	5	0.4	2.4	8	80	3750	TLP181-ND	.92	6.93	51.98
15	100	600	5	5	0.4	2.4	8	80	3750	TLP181GB-ND	.92	6.93	51.98
4	1000	—	1	1	1.2	100	10	300	5000	TLP371-ND	.87	7.25	58.00
5	1000	—	1	1	1.2	100	10	300	5000	TLP372-ND	1.47	12.28	98.20
9	1000	—	1	1	1.2	100	10	300	5000	TLP627-ND	.94	7.80	62.40
9	1000	—	1	1	1.2	100	10	300	5000	TLP627-2-ND	1.56	12.48	93.60
9	1000	—	1	1	1.2	100	10	300	5000	TLP627-4-ND	2.46	19.66	152.88

Thyristor Output Optoisolators

Fig.	LED Trigger Current Max. (ma)	dv/dt Typical (V/uS)	Blocking Voltage	Isolation Voltage	Digi-Key Part No.	Pricing		
						1	10	100
20	10	10	400	2500	TLP141G-ND	1.45	12.10	96.80
7	10	500	400	2500	TLP160G-ND	1.13	9.40	75.20
7	10	500	600	2500	TLP160J-ND	1.29	10.75	86.00
8	10	500	400	2500	TLP161G-ND	1.36	11.30	90.40
8	10	500	600	2500	TLP161J-ND	1.58	13.18	105.40
7	10	500	400	5000	TLP3022S-ND	.97	8.08	64.60
7	5	500	400	5000	TLP3023S-ND	.97	8.08	64.60
7	10	—	600	5000	TLP3052-ND	1.29	10.75	86.00
6	10	10	400	4000	TLP741GTAIE-ND	1.03	8.58	68.60
6	10	10	600	4000	TLP741JTAIE-ND	1.13	9.45	75.60
6	10	10	400	4000	TLP741GD4-TAIE-ND*	1.13	9.45	75.60
8	10	500	400	5000	TLP3042S-ND†	.97	8.08	64.60
8	5	500	400	5000	TLP3043S-ND†	1.03	8.60	68.80
8	10	500	600	5000	TLP3062S-ND†	1.16	9.68	77.40
8	5	500	600	5000	TLP3063S-ND†	1.29	10.75	86.00

* VDE Approved † Zero Crossing

High Speed Output Optoisolators

Fig.	Output Current			Data Rate Typical (bit/s)	Max. Supply Voltage (V)	Isolation Voltage (Vrms)	Digi-Key Part No.	Pricing		
	Min. (ma)	@IF (ma)	@VO (V)					1	10	100
25	1.12	16	0.4	1M	15	2500	6N135T-ND	1.57	13.05	104.40
25	3.04	16	0.4	1M	15	2500	6N136T-ND	1.29	10.75	86.00
26	13	5	0.6	10M	5	2500	6N137T-ND	1.29	10.75	86.00
27	4.8	1.6	0.4	100K	7	2500	6N138T-ND	1.29	10.75	86.00
27	2	0.5	0.4	100K	18	2500	6N139T-ND	1.29	10.75	86.00
29	6.4 -2.6	0 1.6	0.5 2.4	5M	20	2500	TLP2200-ND	2.54	20.32	158.06
11	1.12	16	0.4	1M	15	2500	TLP2530-ND	3.99	31.93	248.36
11	3.04	16	0.4	1M	15	2500	TLP2531-ND	3.99	31.93	248.36
26	13	5	0.6	10M	5	2500	TLP2601-ND	2.93	23.42	182.14
12	13	5	0.6	10M	5	2500	TLP2630-ND	4.79	38.32	298.06
12	13	5	0.6	10M	5	2500	TLP2631-ND	4.79	38.32	298.06
23	1.6	16	0.4	1M	15	2500	TLP550-ND	1.58	12.60	94.50
28	6.4 -2.6	1.6 0	0.4 2.4	5M	20	2500	TLP558-ND	4.39	35.12	273.14
24	3.2	16	0.4	1M	15	2500	TLP559-ND	2.38	19.04	142.80

Photovoltaic Coupler

Fig.	Short Current		Open Voltage Typical (V)	Switching Time (@UF=20 mA, CL=1000pF)		Isolation Voltage (VRMS)	Digi-Key Part No.	Pricing		
	Min. (uA)	@IF (ma)		T on (ms)	T off (ms)			1	10	100
10	12	10	8	0.2	2	2500	TLP190B-ND	3.00	23.98	186.48

Power Transistor Outputs

Fig.	Output Current		Propagation Delay Typical (us)	Max. Supply Voltage (V)	Isolation Voltage (VRMS)	Digi-Key Part No.	Pricing		
	IO (A)	@IF (ma)					1	10	100
14	±0.5	5	0.2	35	2500	TLP250-ND	3.63	29.03	225.82
13	0.25	5	1	16	2500	TLP557-ND	2.05	16.36	122.70

FAIRCHILD
SEMICONDUCTOR

Optoisolators

Fig. 1

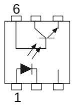


Photo-Transistor Output

Fig. 2

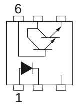
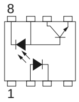


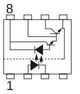
Photo-Darlington Output

Fig. 3



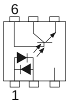
High-Speed Transistor Output

Fig. 4



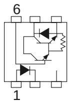
High Gain Split Darlington Output

Fig. 5



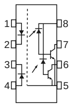
AC Input
Photo-Transistor Output

Fig. 6



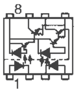
High Voltage
Photo-Darlington Output

Fig. 7



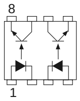
Dual Channel High Speed
Transistor Output

Fig. 8



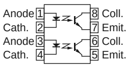
Dual Split Darlington Output

Fig. 9



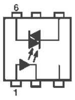
Dual Photo Transistor Output

Fig. 10



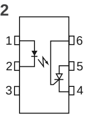
SMT Dual Photo Transistor
Output
MCT9001QT-ND not SMT

Fig. 11



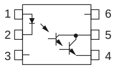
Non-zero Crossing Triac Output

Fig. 12



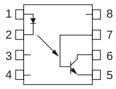
SCR Output

Fig. 13



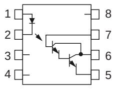
Darlington Output

Fig. 14



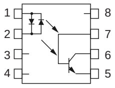
SMT. Transistor Output

Fig. 15



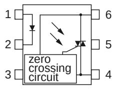
SMT. Darlington Output

Fig. 16



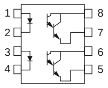
SMT. AC Input Transistor
Output

Fig. 17



Zero-Cross Triac Output

Fig. 18 SMT



Dual Channel Darlington Output

Photo Transistor Output Optoisolators

Fig.	Isolation Voltage	Current Transfer Ratio - Typ.	V_{CEO} (Max.)	Typ. t_{on}/t_{off} (µsec.)	Digi-Key Part No.	Price Each 1	10	100
1	2500	20%	30	2.5/2.6	4N25FS-ND	.50	.40	.30
1	2500	20%	30	3.0/3.0	4N26FS-ND	.50	.40	.30
1	2500	10%	30	3.0/3.0	4N27-ND	.50	.40	.30
1	2500	10%	30	2.5/2.6	4N28-ND	.50	.40	.30
2	2500	100%	30	5.0/40	4N29-ND	.50	.40	.30
2	2500	100%	30	5.0/40	4N30-ND	.50	.40	.30
2	2500	50%	30	5.0/40	4N31-ND	.50	.40	.30
2	2500	500%	30	5.0/100	4N32-ND	.50	.40	.30
2	2500	500%	30	5.0/100	4N33-ND	.50	.40	.30
1	3550	100%	30	5.0/5.0	4N35FS-ND	.50	.40	.30
1	2500	100%	30	5.0/5.0	4N36-ND	.50	.40	.30
1	1500	100%	30	5.0/5.0	4N37FS-ND	.50	.40	.30
1	5300	20%	80	—	4N38-ND	.88	.66	.50
3	2500	7%	15V	1.5/1.5	6N135QT-ND	.90	.75	.60
3	2500	19%	15V	.8/.8	6N136QT-ND	.93	.78	.62
4	2500	300%	7V	10/35	6N138QT-ND	.93	.78	.62
4	2500	400%	18V	1/7	6N139QT-ND	.99	.83	.66
1	5300	40-80%	70	2.0/11	CNY171300-ND †	..55	.44	.33
1	5300	63-125%	70	10/10	CNY172FS-ND	.55	.44	.33
1	5300	63-125%	70	3.0/14	CNY172300-ND †	.55	.44	.33
1	5300	100-200%	70	10/10	CNY173FS-ND	.55	.44	.33
1	5300	100-200%	70	3.0/14	CNY173300-ND †	.55	.44	.33
1	5300	160-320%	70	10/10	CNY174FS-ND	.55	.44	.33
1	5300	160-320%	70	3.0/14	CNY174300-ND †	.55	.44	.33
1	5300	50%	70	—	H11A1FS-ND	.55	.44	.33
1	5300	50%	30	2.0/2.0	H11A1300-ND †	.55	.44	.33
1	5300	20%	70	—	H11A2FS-ND	.55	.44	.33
1	2500	30%	30	2.0/2.0	H11A5FS-ND	.55	.44	.33
5	5300	20%	30	—	H11AA1300-ND †	.84	.63	.48
5	2500	20%	30	2.0/2.0	H11AA1-ND	.84	.63	.48
5	2500	10%	30	2.0/2.0	H11AA2-ND	.84	.63	.48
5	2500	50%	30	2.0/2.0	H11AA3-ND	.84	.63	.48
5	2500	100%	30	2.0/2.0	H11AA4-ND	.75	.63	.50
1	4000	300%	30	5.0/5.0	H11AG1-ND	.80	.67	.53
2	5300	500%	25	—	H11B1-ND	.50	.38	.29
2	5300	500%	25	—	H11B1300-ND †	.50	.38	.29
2	5300	200%	25	—	H11B2-ND	.48	.36	.27
1	4000	100%	70	3.0/2.5	CNW11AV1-ND	.96	.80	.64
1	4000	50%	70	3.0/2.5	CNW11AV2-ND	1.02	.86	.69
1	5300	20%	300	—	H11D1FS-ND	.81	.68	.54
1	5300	20%	300	5.0/5.0	H11D1300-ND †	.81	.68	.54
1	5300	20%	300	—	H11D2-ND	.81	.68	.54
1	5300	20%	300	5.0/5.0	H11D2300-ND †	.81	.68	.54
1	5300	20%	200	—	H11D3-ND	.99	.75	.56
6	4000	1000%	100	5/100	H11G1-ND	.96	.72	.54
6	4000	1000%	80	5/100	H11G2-ND	.92	.69	.52
6	5300	200%	25	—	H11G3-ND	.88	.66	.50
6	4000	250%	55	50/500	H11G45QT-ND	1.40	1.12	.84
6	4000	500%	55	50/500	H11G46QT-ND	1.53	1.22	.92
3	2500	12%	15V	.8/.8	HCPL2503QT-ND	1.17	.98	.78
7	2500	16%	—	1.5/1.5	HCPL2530-ND	1.83	1.46	1.10
7	2500	16%	—	.8/.8	HCPL2531-ND	1.98	1.58	1.19
8	2500	300%	7V	20/35	HCPL2730QT-ND	1.85	1.48	1.11
8	2500	400%	18V	2/10	HCPL2731QT-ND	2.00	1.60	1.20
1	2500	150%	30	5/5	MCT210-ND	.84	.63	.48
1	5300	20%	30	6/5	MCT2200300-ND †	.52	.39	.30
1	2500	20%	30	5/5	MCT26QT-ND	.33	.31	.28
1	2500	50%	30	10/10	MCT270QT-ND	.43	.40	.37
1	2500	45-90%	30	7/7	MCT271-ND	.52	.39	.30
1	2500	20%	30	5/5	MCT2E-ND	.52	.39	.30
1	2500	20%	30	5/5	MCT2-ND	.55	.44	.33
1	2500	300%	30	6/19	MCT5201-ND	.87	.73	.58
1	2500	70%	30	10/12	MCT5210-ND	.90	.75	.60
1	2500	110%	30	20/20	MCT5211-ND	.93	.78	.62
9	2500	50%	30	2.4/15	MCT61-ND	.96	.72	.54
9	2500	100%	30	2.4/15	MCT62-ND	.75	.63	.50
9	2500	12%	30	2.4/15	MCT6-ND	.96	.72	.54
10	2500	50%	55	2.4/2.4	MCT9001-ND	.81	.68	.54
1	5300	12.5%	70	10/10	TIL111-ND	.50	.40	.30

Fig.	Isolation Voltage	Current Transfer Ratio - Typ.	V_{CEO} (Max.)	Typ. t_{on}/t_{off} (µsec.)	Digi-Key Part No.	Price Each 1	10	100
13	5300	450%	30	3.5/95	MOC119-ND	.84	.63	.48
14	3000	60%	70	3.0/2.8	MOC205M-ND	.88	.66	.50
14	3000	94%	70	3.0/2.8	MOC206M-ND	.88	.66	.50
14	3000	150%	70	3.0/2.8	MOC207M-ND	.88	.66	.50
14	3000	80%	70	3.0/2.8	MOC208M-ND	.84	.63	.48
14	3000	65%	30	7.5/5.7	MOC211M-ND	.84	.63	.48
14	3000	90%	30	7.5/5.7	MOC212M-ND	.84	.63	.48
14	3000	140%	30	7.5/5.7	MOC213M-ND	.84	.63	.48
14	3000	50%	30	7.5/5.7	MOC215M-ND	.96	.72	.54
14	3000	80%	30	7.5/5.7	MOC216M-ND	.96	.72	.54
14	3000	130%	30	7.5/5.7	MOC217M-ND	.78	.65	.52
15	3000	1000%	30	3.5/95	MOC223M-ND	.92	.69	.52
16	3000	150%	30	—	MOC256M-ND	1.02	.85	.68
13	5300	500%	50	3.5/95	MOC8020-MQT-ND	1.05	.99	.91
13	5300	500%	50	3.5/95	MOC8020-ND	1.09	.91	.73
13	5300	1000%	50	3.5/95	MOC8021-ND	1.09	.91	.73
13	5300	300%	80	3.5/95	MOC8030-ND	.84	.70	.56
13	5300	500%	80	3.5/95	MOC8050-ND	.84	.70	.56
10	3000	150%	70	3.0/2.8	MOCD207M-ND	1.05	.88	.70
10	3000	80%	70	3.0/2.8	MOCD208M-ND	1.05	.88	.70
10	3000	65%	30	7.5/5.7	MOCD211M-ND	1.05	.88	.70
10	3000	100%	70	3.0/2.8	MOCD213M-ND	1.02	.85	.68
10	3000	130%	30	7.5/5.7	MOCD217M-ND	1.08	.90	.72
18	3000	1000%	30	3.5/95	MOCD223M-ND	1.05	.88	.70

† Z denotes VDE approval.

SCR and Triac Output Optoisolators

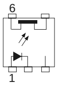
Fig.	Isolation Voltage	Max I_F Trigger (mA)	Min. Blocking Voltage	Max. I_R (uA)	Digi-Key Part No.	Price Each 1	10	100
11	5300	15	250V	100	MOC3010M-ND	.80	.60	.45
11	5300	10	250V	100	MOC3011M-ND	.84	.63	.48
11	5300	30	400V	100	MOC3020MFS-ND	.80	.60	.45
11	5300	15	400V	100	MOC3021MFS-ND	.84	.63	.48
11	5300	10	400V	100	MOC3022MFS-ND	.84	.63	.48
11	5300	10	400V	100	MOC3022VM-ND †	.84	.63	.48
11	5300	5	400V	100	MOC3023MFS-ND	.92	.69	.52
12	5300	14	200V	1000	4N39-ND	1.20	1.00	.80
12	5300	14	200V	1000	4N40QT-ND	1.35	1.13	.90
12	5300	20	200V	—	H11C1-ND	1.20	1.00	.80
12	5300	20	200V	—	H11C2-ND	1.14	.95	.76
12	5300	30	200V	—	H11C3-ND	1.08	.90	.72
12	5300	20	400V	—	H11C4-ND	1.26	1.05	.84
12	5300	20	400V	—	H11C5-ND	1.20	1.00	.80
12	5300	30	400V	—	H11C6-ND	1.14	.95	.76
17	7500	15	250V	0.05	MOC3031M-ND	.86	.72	.58
17	7500	10	250V	0.05	MOC3032M-ND	.89	.75	.60
17	7500	5	250V	0.05	MOC3033M-ND	.92	.77	.62
17	7500	15	400V	0.05	MOC3041M-ND	.92	.77	.62
17	7500	10	400V	0.05	MOC3042M-ND	.96	.80	.64
17	7500	5	400V	0.05	MOC3043M-ND	.99	.83	.66
11	7500	15	600V	0.05	MOC3051M-ND	.89	.75	.60
11	7500	10	600V	0.05	MOC3052M-ND	.92	.77	.62
17	7500	15	600V	0.05	MOC3061M-ND	.99	.83	.66
17	7500	10	600V	0.05	MOC3062M-ND	1.02	.86	.69
17	7500	5	600V	0.05	MOC3063M-ND	1.12	.94	.75
17	7500	15	800V	0.05	MOC3081M-ND	1.32	1.06	.80
17	7500	10	800V	0.05	MOC3082M-ND	1.35	1.08	.81
17	7500	5	800V	0.05	MOC3083M-ND	1.62	1.30	.98
17	7500	10	600V	0.05	MOC3162M-ND	1.63	1.30	.98
17	7500	5	600V	0.05	MOC3163M-ND	1.65	1.32	.99

† VDE approval

FAIRCHILD
SEMICONDUCTOR

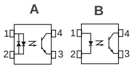
Optoisolators

Fig. 1



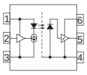
Bilateral Analog FET Output

Fig. 2



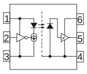
4-Pin Transistor Output

Fig. 3



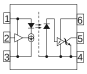
High Speed TTL Buffered Output

Fig. 4



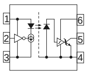
High Speed TTL Inverted Output

Fig. 5



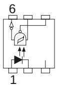
High Speed CMOS Buffered Output

Fig. 6



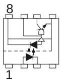
High Speed CMOS Inverted Output

Fig. 7



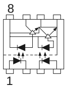
Schmitt Trigger Inverted OC Output

Fig. 8



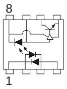
Very High Speed TTL, 5V CMOS Output

Fig. 9



Dual Very High Speed TTL, 5V CMOS Output

Fig. 10



AC Line Monitor TTL Output

FET Outputs

Fig.	Isolation Voltage	Rds ON (ohm)	Vbr (Min.)	Typ. t_{on}/t_{off} (µS)	Digi-Key Part No.	Price Each		
						1	10	100
1	5300	200	30	25/25	H11F1-ND	2.17	1.74	1.31
1	5300	330	30	25/25	H11F2-ND	2.20	1.76	1.32
1	5300	470	15	25/25	H11F3-ND	1.65	1.32	.99

4-Pin Couplers

Fig.	Isolation Voltage	Current Transfer Ratio	VCEO (Max.)	Typ. t_{on}/t_{off} (µsec.)	Digi-Key Part No.	Price Each		
						1	10	100
2A	5300	20-300%	35	2.4/2.4	H11AA814-ND	.56	..42	..32
2A	5300	50-150%	35	2.4/2.4	H11AA814A-ND	.72	.54	.41
2B	5300	50-600%	35	2.4/2.4	H11A817-ND	.40	.32	.24
2B	5300	80-160%	35	2.4/2.4	H11A817A-ND	.45	.36	.27
2B	5300	130-260%	35	2.4/2.4	H11A817B-ND	.45	.36	.27
2B	5300	200-400%	35	2.4/2.4	H11A817C-ND	.45	.36	.27
2B	5300	300-600%	35	2.4/2.4	H11A817D-ND	.55	.44	.33

Logic Output Optoisolators

Fig.	Function	Input: LSTTL Output	15M Baud Rt. Output Configuration	Digi-Key Part No.	Price Each		
					1	10	100
3	Buff.	TTL	Totem Pole	74OL6000-ND	2.81	2.25	1.75
4	Inv.	TTL	Totem Pole	74OL6001-ND	2.78	2.23	1.74
5	Buff.	CMOS	Open Collect.	74OL6010-ND	2.78	2.23	1.74
6	Inv.	CMOS	Open Collect.	74OL6011-ND	2.78	2.23	1.74

Fig.	Isol. Voltage	I_{fon} Current (Max.)	I_{CCL} (Max.)	Oper. Voltage (Max.)	Digi-Key Part No.	Price Each		
						1	10	100
7	5300	1.6mA	5	16V	H11L1-ND	1.02	.86	.69
7	5300	1.6mA	5	16V	H11L1-MQT-ND	1.02	.86	.69
7	5300	1.6mA	5	16V	H11L1V-MQT-ND †	1.02	.86	.69
7	5300	10mA	5	16V	H11L2-ND	.90	.75	.60
7	5300	10mA	5	16V	H11L2-MQT-ND	.90	.75	.60
7	5300	5mA	5	16V	H11L3-ND	.99	.83	.66
7	5300	5mA	5	16V	H11L3-MQT-ND	1.05	.88	.70
7	5300	3.2mA	10	16V	H11N1-ND	3.84	3.07	2.39
7	5300	3.2mA	10	16V	H11N1-MQT-ND	5.06	4.05	3.15
7	5300	10mA	10	16V	H11N3-ND	2.60	2.08	1.62
7	5300	10mA	10	16V	H11N3-MQT-ND	2.81	2.25	1.75

Fig.	Isol. Volt.	Max. Prop. Delay (nS)	Typ. CMR V/µsec.	I_F (mA)	Digi-Key Part No.	Price Each		
						1	10	100
8	2500	75	10,000	5	HCPL2601QT-ND	1.38	1.10	.83
9	2500	75	10,000	5	HCPL2630QT-ND	2.03	1.62	1.26
9	2500	75	10,000	5	HCPL2631QT-ND	2.25	1.80	1.40
8	2500	75	10,000	5	6N137QT-ND	1.14	.95	.76

Fig.	Isolation Voltage	BV_{CEO} (Min.)	Typ. t_{on}/t_{off} (µsec.)	Digi-Key Part No.	Price Each		
					1	10	100
10	2500	5V	1/1	MID400-ND	2.48	1.98	1.54

† VDE approval

LUMEX
We Tame Photons To Work For You

Optolinks

Fig. 1

Photo Transistor Output Dip or SMT

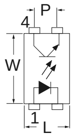


Fig. 2

Dual Photo Transistor Output Dip or SMT

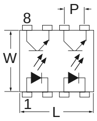


Fig. 3

Quad Photo Transistor Output Dip or SMT

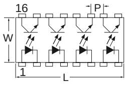


Fig. 4

Photo Transistor Output Dip or SMT

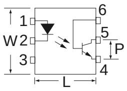


Fig. 5

Photo Transistor Output Dip or SMT

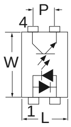
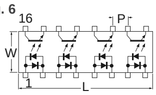


Fig. 6



Quad Photo Transistor Output Dip or SMT

Fig. 7

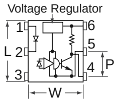


Photo IC Output Dip or SMT

Optoisolators with Photo-Transistor Output

SPECIFICATIONS: • **Isolation Voltage:** 5000 • **VCEO (Maximum):** 60V • **Typ. tr/tf:** 5 µs/4 µs

Fig.	Current Transfer Ratio Min-Max.	Length L (mm)	Width W (mm)	Pitch P (mm)	Pkg.	Digi-Key Part No.	Price Each		Tape and Reel Pricing‡ 1,000	Lumex Part No.
							1	10		
1	60-600%	4.60	6.50	2.54	Dip	67-1560-5-ND	.51	.43	—	OCP-PCT114/E
	60-600%	4.60	6.50	2.54	SMT	67-1613-1-ND	.51	.43	255.00	OCP-PCT114/E-TR
2	60-600%	9.68	6.50	2.54	Dip	67-1561-5-ND	1.05	.88	—	OCP-PCT218/E
	60-600%	9.68	6.50	2.54	SMT	67-1614-1-ND	1.05	.88	525.00	OCP-PCT218/E-TR
3	60-600%	19.84	6.50	2.54	Dip	67-1562-5-ND	1.83	1.53	—	OCP-PCT4116/E
	60-600%	19.84	6.50	2.54	SMT	67-1618-5-ND	1.83	1.53	—	OCP-PCT4116/E-TR
4	60-600%	7.30	6.50	2.54	Dip	67-1563-5-ND	.39	.33	—	OCP-PCTB116/E
	60-600%	7.30	6.50	2.54	SMT	67-1615-1-ND	.39	.33	195.00	OCP-PCTB116/E-TR
5	60-600%	4.60	6.50	2.54	Dip	67-1564-5-ND	.63	.53	—	OCP-PCT124/A
	60-600%	4.60	6.50	2.54	SMT	67-1616-1-ND	.63	.53	315.00	OCP-PCT124/A-TR
6	60-600%	19.84	6.50	2.54	Dip	67-1565-5-ND	2.89	2.41	—	OCP-PCT4216/A
	60-600%	19.84	6.50	2.54	SMT	67-1619-5-ND	2.89	2.41	—	OCP-PCT4216/A-TR

Optoisolators with Photo-IC Output

Fig.	Isolation Voltage	Prop Delay t_{PHL}/t_{PLH} (µS)	Length L (mm)	Width W (mm)	Pitch P (mm)	Pkg.	Digi-Key Part No.	Price Each		Tape and Reel Pricing‡ 1,000	Lumex Part No.
								1	10		
7	5000	5/3	7.3	6.5	2.54	Dip	67-1566-5-ND	1.64	1.37	—	OCP-PCP116
	5000	5/3	7.3	6.5	2.54	SMT	67-1617-1-ND	1.64	1.37	817.50	OCP-PCP116-TR

‡ For Tape and Reel part number, change -1-ND to -2-ND

FAIRCHILD
SEMICONDUCTOR

Infrared Photosensors and Emitters

Fig. 1

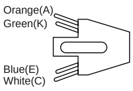


Fig. 2

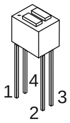


Fig. 2A

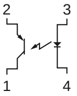


Fig. 3 – TO-18 2 Lead

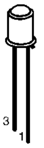


Fig. 3A

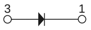


Fig. 4 – TO-18 Flat Window 2 Lead

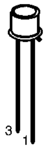


Fig. 5 – Side Look

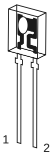


Fig. 5A

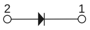


Fig. 6

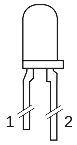


Fig. 7

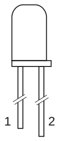


Fig. 8

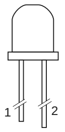
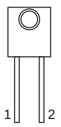


Fig. 9



Reflective Photosensors

Fig.	Circuit	Output Type	Min/Max Output Ic @ If	Optimum Sensing Distance	Termi-nation	Digi-Key Part No.	Price Each			
							1	10	100	500
1	—	Transistor	.6/3 @ 40mA	3.81mm	Leads	QRB1114-ND	1.25	1.00	.75	.68
1	—	Transistor	.6/3 @ 40mA	3.81mm	Wires	QRB1134-ND	2.29	1.83	1.38	1.24
2	2A	Transistor	1/5 @ 20mA	1.27mm	Leads	QRD1114-ND	1.23	1.03	.82	.58

Semiconductor Infrared Emitters (IRED LEDs)

Fig.	Circuit	Forward Voltage (V)	Max. Forward Current (mA)	Min. Power Output (mW/sr)	Beam Angle +/-	Peak Wave-Length (nm)	Digi-Key Part No.	Price Each			
								1	10	100	500
4	3A	1.7	100	6.0	40	940	1N6265-ND	1.65	1.32	.99	.90
3	3A	1.7	100	25.0	10	940	1N6266-ND	2.23	1.78	1.34	1.21
3	3A	1.7	100	5.4	10	940	CQX14-ND	1.58	1.26	.95	.86
4	3A	1.7	100	5.4	40	940	CQX15-ND	1.58	1.26	.95	.86
3	3A	1.7	100	12.0	10	880	F5D1-ND	1.90	1.52	1.14	1.03
3	3A	1.7	100	9.0	10	880	F5D2-ND	1.80	1.44	1.08	.98
3	3A	1.7	100	10.5	10	880	F5D3-ND	1.85	1.48	1.11	1.00
4	3A	1.7	100	12.0	40	880	F5E1-ND	1.90	1.52	1.14	1.03
4	3A	1.7	100	9.0	40	880	F5E2-ND	1.80	1.44	1.08	.98
4	3A	1.7	100	10.5	40	880	F5E3-ND	1.85	1.48	1.11	1.00
5	5A	1.7	60	0.28	35	940	F5F1-ND	.45	.36	.27	.15
5	5A	1.85	50	0.6	35	880	F5G1-ND	.52	.39	.30	.19
3	3A	1.7	100	1.5	10	940	LED56-ND	1.50	1.20	.90	.81
4	3A	1.7	100	3.5	40	940	LED55BF-ND	1.56	1.25	.94	.85
3	3A	1.7	100	3.5	10	940	LED55B-ND	1.56	1.25	.94	.85
6	5A	1.7	50	14	8	940	QEC113-ND	.55	.44	.33	.19
7	5A	1.5	100	80	9	880	QED123-ND	.54	.41	.31	.19
7	5A	1.5	100	10	20	940	QED233-ND	.45	.36	.27	.15
8	5A	1.7	100	18	30	880	QED423-ND	.92	.69	.52	.33
8	5A	1.7	100	20	15	880	QED522-ND	.48	.36	.27	.17
8	5A	1.7	100	40	15	880	QED523-ND	.54	.41	.31	.19
9	5A	1.5	50	3	25	940	QEE113-ND	.45	.36	.27	.15
9	5A	1.7	50	8	25	880	QEE123-ND	.48	.36	.27	.17

FAIRCHILD
SEMICONDUCTOR

Semiconductor Interrupter Modules

Fig.	Circuit	Output Type	Gap Current I_C @ I_f (mA)	Slot Width (mm)	Lead Spacing (mm)	Digi-Key Part No.	Price Each 1	10	100	500
5	A	Darlington	3/15 @ 5mA	3.99	10.16	QCK4-ND	1.73	1.38	1.04	.94
3	B	Transistor	1/4 @ 20mA	3.18	5.59	QVA11134-ND	1.13	.94	.75	.53
3	B	Transistor	1/4 @ 20mA	3.18	7.62	QVA11234-ND	1.13	.94	.75	.53
3	B	Transistor	1/4 @ 20mA	3.18	8.13	QVA11334-ND	1.13	.94	.75	.53
2	B	Transistor	1/4 @ 20mA	3.18	5.59	QVB11134-ND	1.13	.94	.75	.53
2	B	Transistor	1/4 @ 20mA	3.18	7.62	QVB11234-ND	1.13	.94	.75	.53
2	B	Transistor	1/4 @ 20mA	3.18	8.13	QVB11334-ND	1.13	.94	.75	.53
4	C	Transistor	.5/- @ 20mA	3.81	7.62	QVE11233-ND	1.01	.84	.67	.47
1	B	Transistor	1.9/3.0 @ 30mA	3.02	7.24	H21A1-ND	.90	.75	.60	.42
3	B	Transistor	1.9/3.0 @ 30mA	3.02	7.24	H22A1-ND	.90	.75	.60	.42
1	A	Darlington	7.5/- @ 10mA	3.02	7.24	H21B1-ND	1.17	.98	.78	.55
3	A	Darlington	7.5/- @ 10mA	3.15	7.24	H22B1-ND	1.17	.98	.78	.55

Semiconductor Matched Emitter Detector Pairs

Fig.	Circuit	Output Type	Ic Min (mA)	Forward Voltage	Separation (mm)	Digi-Key Part No.	Price Each 1	10	100	500
6	F	Transistor	1.5	1.7	3.94	H23A1-ND	.75	.63	.50	.35
6	G	Darlington	7.5	1.7	3.94	H23B1-ND	.90	.75	.60	.42

Semiconductor Infrared Photo Detectors

Fig.	Circuit	BV_{CEO} (V)	Min. Ic @ 5Vce (mA)	Rise/Fall (μ sec)	Reception Angle +/-	Peak Wavelength Sensitivity	Digi-Key Part No.	Price Each 1	10	100	500
7	I	45	6	8/7	—	880	BPW36-ND	1.63	1.30	.98	.88
7	I	45	3	8/7	—	880	BPW37-ND	1.58	1.26	.95	.86
8	I	50	1	5/5	60	880	L14C1-ND	1.53	1.22	.92	.83
8	I	50	0.5	5/5	60	880	L14C2-ND	1.48	1.18	.89	.80
7	I	45	6	8/7	—	880	L14G1-ND	1.53	1.22	.92	.83
7	I	45	3	8/7	—	880	L14G2-ND	1.48	1.18	.89	.80
7	I	45	12	8/7	—	880	L14G3-ND	1.59	1.27	.96	.86
8	I	30	3	10/12	30	880	L14N1-ND	1.64	1.31	.99	.89
8	I	30	6	14/16	30	880	L14N2-ND	1.70	1.36	1.02	.92
7	I	30	4	10/12	12	880	L14P1-ND	1.70	1.36	1.02	.92
7	I	30	8	14/16	12	880	L14P2-ND	1.75	1.40	1.05	.95
6	D	30	1	8/50	—	880	L14Q1-ND	.50	.40	.30	.17
7	H	25	3	300/250	8	880	BPW38-ND	1.98	1.58	1.19	1.07
7	H	25	3	300/250	8	880	L14F1-ND	1.95	1.56	1.17	1.06
7	H	25	1	300/250	8	880	L14F2-ND	1.78	1.42	1.07	.96
6	E	30	5	45/250	—	880	L14R1-ND	.54	.41	.31	.19
9	D	30	1	5/5	8	880	QSC112-ND	.50	.40	.30	.17
9	D	30	2	5/5	8	880	QSC113-ND	.55	.44	.33	.19
9	D	30	4	5/5	8	880	QSC114-ND	.48	.36	.27	.17
10	D	30	1.6	7/7	12	880	QSD122-ND	.48	.36	.27	.17
10	D	30	3.2	7/7	12	880	QSD123-ND	.56	.42	.32	.20
10	D	30	7.5	7/7	12	880	QSD124-ND	.60	.45	.34	.21
11	D	30	1.2	8/8	12	880	QSD722-ND	.48	.36	.27	.17
11	D	30	3	8/8	12	880	QSD723-ND	.56	.42	.32	.20
12	D	30	0.64	8/8	8	880	QSE113-ND	.45	.36	.27	.15
12	D	30	1.28	8/8	8	880	QSE114-ND	.50	.40	.30	.17

Logic Detectors

Fig.	Circuit	Output Type	VCC	Isink (mA)	Isource (mA)	Rise/Fall (ns)	Reception Angle +/-	Peak Wavelength Sensitivity	Digi-Key Part No.	Price Each 1	10	100	500
13	J	T.P. BUFF	4.5 - 16	50	10	70	25	935	QSE156-ND	.75	.63	.50	.35
13	L	T.P. INV.	4.5 - 16	50	10	70	25	935	QSE157-ND	.75	.63	.50	.35
13	K	O.C. BUFF	4.5 - 16	50	—	100	25	935	QSE158-ND	.75	.63	.50	.35
13	M	O.C. INV.	4.5 - 16	50	—	100	25	935	QSE159-ND	.75	.63	.50	.35

Fig. 1

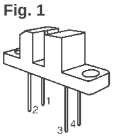


Fig. 2

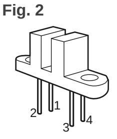
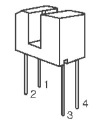


Fig. 3



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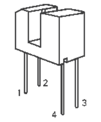

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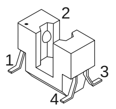

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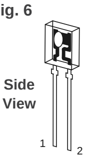

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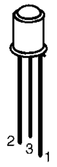

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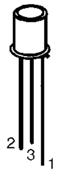
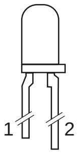


Fig. 9



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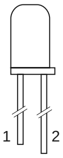

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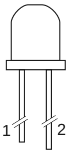


Fig. 12

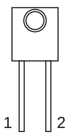
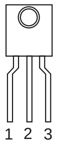
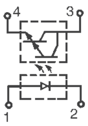


Fig. 13

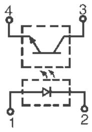


Circuits

A



B



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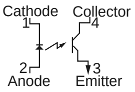

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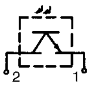

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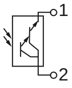

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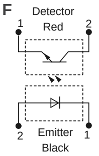

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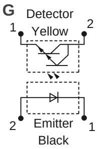

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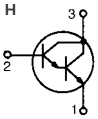
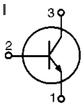


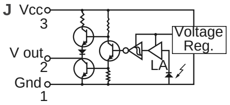
TO-18 3 Lead

I



TO-18, Flat Window, 3 Lead

J



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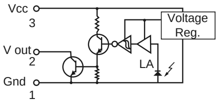

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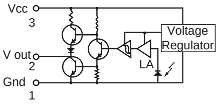

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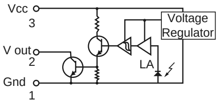


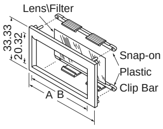
PRD Plastics **Bezels**

Bezel material is polystyrene plastic. Recommended panel thickness for mounting snap-fit bezel is 8.13mm to 3.18mm.

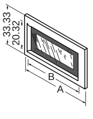
Digi-Key Part No.	Dimensions (mm) A	B	Panel Cut-Out For Snap Fit Bezel Height	Width
PRD180☐-ND	58.74	45.72	26.99	52.39
PRD250☐-ND	76.20	63.50	26.99	69.85
PRD360☐-ND†	104.78	91.44	26.99	98.43

† PRD360B-ND has 4 snap-on plastic clip bars

Snap-Fit Bezel (Lenses must be ordered separately)



Lo-Profile Polycarbonate/ABS with Non-Removable Lens (requires adhesive strips)



Description	Digi-Key Part No.	Price Each 1	10	100	Mfg. Part No.
Snap Fit Bezels (Lenses Must Be Ordered Separately)					
45.72mm Wide Bezel Black Plastic	PRD180B-ND	1.62	1.35	1.08	6101010
63.50mm Wide Bezel Black Plastic	PRD250B-ND	1.98	1.65	1.32	6102010
91.44mm Wide Bezel Black Plastic	PRD360B-ND	2.30	1.92	1.54	6103010
For Use With LCDs					
Clear Lens for 45.72mm Bezel	PRD180C-ND	1.44	1.20	.96	6201010
Clear Lens for 63.50mm Bezel	PRD250C-ND	1.62	1.35	1.08	6202010
Clear Lens for 91.44mm Bezel	PRD360C-ND	1.80	1.50	1.20	6203010
For Use With LEDs					
Smoke Lens for 45.72mm Bezel	PRD180S-ND	1.44	1.20	.96	6201020
Smoke Lens for 63.50mm Bezel	PRD250S-ND	1.62	1.35	1.08	6202020
Smoke Lens for 91.44mm Bezel	PRD360S-ND	1.80	1.50	1.20	6203020
Red Lens for 45.72mm Bezel	PRD180R-ND	1.44	1.20	.96	6201030
Red Lens for 63.50mm Bezel	PRD250R-ND	1.62	1.35	1.08	6202030
Red Lens for 91.44mm Bezel	PRD360R-ND	1.80	1.50	1.20	6203030
Green Lens for 45.72mm Bezel	PRD180G-ND	1.44	1.20	.96	6201040
Green Lens for 63.50mm Bezel	PRD250G-ND	1.62	1.35	1.08	6202040
Green Lens for 91.44mm Bezel	PRD360G-ND	1.80	1.50	1.20	6203040

Description	Digi-Key Part No.	Price Each 1	10	100	Mfg. Part No.
Masked Lenses					
25.40mm x 22.23mm Window for 45.72mm	PRD180W-ND	1.44	1.20	.96	6201050
60.96mm x 16.00mm Window for 63.50mm	PRD250W-ND	1.62	1.35	1.08	6202050
65.41mm x 13.79mm Window for 63.50mm	PRD250W1-ND	1.62	1.35	1.08	6202060
83.01mm x 18.59mm Window for 91.44mm	PRD360W-ND	1.80	1.50	1.20	6203050
93.35mm x 15.80mm Window for 91.44mm	PRD360W1-ND	1.80	1.50	1.20	6203060
Lo-Profile Polycarbonate/ABS					
*Lo-Profile For LCDs **					
45.72mm Bezel with Clear Lens	PRD180LP-ND	3.06	2.55	2.04	6301010
45.72mm Bezel and Clear Lens with 25.40mm x 22.23mm Window	PRD180LPW-ND	3.06	2.55	2.04	6301020
63.50mm Bezel with Clear Lens	PRD250LP-ND	3.60	3.00	2.40	6302010
63.50mm Bezel with Clear Lens with 60.96mm x 16.00mm Window	PRD250LPW-ND	3.60	3.00	2.40	6302020
63.50mm Bezel with Clear Lens with 65.41mm x 13.79mm Window	PRD250LPW1-ND	3.60	3.00	2.40	6302030
91.44mm Bezel with Clear Lens	PRD360LP-ND	4.10	3.42	2.74	6303010
91.44mm Bezel with Clear Lens with 83.01mm x 18.59mm Window	PRD360LPW-ND	4.10	3.42	2.74	6303020
91.44mm Bezel with Clear Lens with 93.35mm x 15.80mm Window	PRD360LPW1-ND	4.10	3.42	2.74	6303030
*Lo-Profile For LEDs **					
45.72mm Bezel with Smoke Lens	PRD180LPS-ND	3.06	2.55	2.04	6301040
45.72mm Bezel with Red Lens	PRD180LPR-ND	3.06	2.55	2.04	6301050
45.72mm Bezel with Green Lens	PRD180LPG-ND	3.06	2.55	2.04	6301060
63.50mm Bezel with Smoke Lens	PRD250LPS-ND	3.60	3.00	2.40	6302040
63.50mm Bezel with Red Lens	PRD250LPR-ND	3.60	3.00	2.40	6302050
63.50mm Bezel with Green Lens	PRD250LPG-ND	3.60	3.00	2.40	6302060
91.44mm Bezel with Smoke Lens	PRD360LPS-ND	4.10	3.42	2.74	6303040
91.44mm Bezel with Red Lens	PRD360LPR-ND	4.10	3.42	2.74	6303050
91.44mm Bezel with Green Lens	PRD360LPG-ND	4.10	3.42	2.74	6303060
Accessories					
Adhesive Strips 2/Pad	PRDAS-ND	.30	.29	.27	6000010

* Requires Adhesive Strips (recommend 2 pads for the 91.44mm Bezel)

Infrared Photo Detectors and Emitters

Fig. 1 – Ceramic, Epoxy Globe

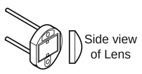


Fig. 2 – Ceramic, Epoxy Filled

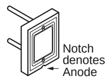


Fig. 3 – Solderable Photo Cell

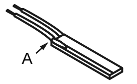


Fig. 4 – Solderable Photo Cell

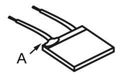


Fig. 5 – 16 Element Array

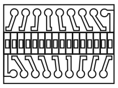


Fig. 6 – 32 Element Array

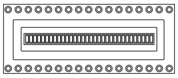


Fig. 7 – TO-46 Flat Window

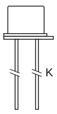


Fig. 8 – TO-46 Lens Window

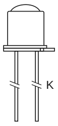


Fig. 9 – TO-46 Epoxy Globe

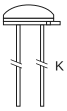


Fig. 10 – TO-46 Plastic Lens

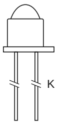


Photo Detectors

Fig.	Short Circuit Current I_S	Dark Current I_D	Peak Sensitivity Wavelength	Breakdown Voltage V_{BR}	Active Area (mm sq.)	Digi-Key Part No.	Price Each 1	25	100	250
Blue Enhanced Photovoltaic Detectors										
1	155µA	1.0nA	950nm	10V	17	PDB-V107-ND	2.00	1.80	1.60	1.45
1	70µA	5nA	950nm	15V	7.75	PDB-V113-ND	1.65	1.48	1.30	1.20
2	85µA	2nA	950nm	10V	100	PDB-V110-ND	42.00	34.00	29.00	27.00
Blue Enhanced Photoconductive Detectors										
1	215µA	5nA	950nm	100V	17	PDB-C107-ND	2.25	1.90	1.70	1.55
1	70µA	15nA	950nm	100V	7.75	PDB-C113-ND	1.48	1.45	1.30	1.20
1	325µA	25nA	940nm	35V	29	PDB-C140-ND	4.00	3.60	3.25	2.95
2	90µA	5nA	950nm	100V	100	PDB-C110-ND	45.00	36.00	32.00	30.00
Blue Enhanced Solderable Photo Cells										
3	185µA	10nA	950nm	100V	16.6	PDB-C607-2-ND	4.40	4.18	4.07	3.95
3	650µA	30nA	950nm	100V	54	PDB-C612-2-ND	8.85	8.50	7.95	7.70
3	4200µA	250nA	950nm	100V	243	PDB-C615-2-ND	23.00	20.90	18.65	18.50
4	400µA	20nA	950nm	100V	44.68	PDB-C609-2-ND	7.75	7.50	7.25	7.00
4	850µA	0.5nA	950nm	100V	90	PDB-C613-2-ND	11.00	10.45	10.15	9.90
Blue Enhanced Multi-Element Detector Arrays										
7*	60µA	0.5nA	350-1100nm	75V	6.4	PDB-C203-ND	29.00	26.00	22.00	18.75
5	40µA	1.0nA	400-1100nm	35V	1.8	PDB-C216-ND	45.00	38.00	28.00	24.00
6	10µA	20nA	350-1100nm	30V	1.4	PDB-C232-ND	125.00	106.00	90.00	75.00
Detector-Amplifier Hybrid (TO-5 Package)										
8*	45µA	10nA	350-1100nm	10V	5.1	PDB-715-100-ND	36.00	30.00	25.00	24.20

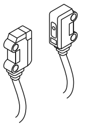
High Power Infrared Emitters

Fig.	Continuous Forward Current	Reverse Breakdown Voltage	Peak Sensitivity Wavelength	Output Power	Beam Angle	Digi-Key Part No.	Price Each 1	25	100	250
7*	100mA	30V	880nm	24mW	40°	PDI-E801-ND	2.80	2.35	2.00	1.75
8*	100mA	30V	880nm	24mW	30°	PDI-E802-ND	2.80	2.35	2.00	1.75
8*	100mA	30V	880nm	24mW	20°	PDI-E803-ND	2.80	2.35	2.00	1.75
9*	100mA	30V	880nm	24mW	60°	PDI-E804-ND	2.50	2.15	1.85	1.60
10*	100mA	30V	880nm	24mW	5°	PDI-E805-ND	3.00	2.55	2.15	1.85

* Tab denotes cathode

9297B-ND Omron Industrial
Opto Sensor, Data Book . . . **$2.00**

Amplified Mini Optical Sensors with Pin Point Beam



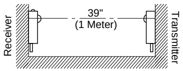
Miniature optical sensor with "Pin-point" beam for sensing minute objects (1-2mm dia.). Use both indoors or outdoors for detecting where small body size is desired. Perfect for security, conveyor detection as well as emergency stop detection and limit control and more. Sensor not affected by ambient light. Comes standard with 2 meter molded cords attached.

Terminal Type: 2m Cable

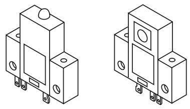
Sensing Method	Mounting Type/Features	Dist. In.	(max.) (M/mm)	Digi-Key Part No.	Price Each 1	25	100	Omron Part No.
Through-Beam	Side/Light-On	393.7	1M	OR591-ND	102.48	92.24	87.11	E3T-ST11
Through-Beam	Side/Dark-On	393.7	1M	OR592-ND	102.48	92.24	87.11	E3T-ST12
Reflect., Retro	Side/Light-On	7.87	200mm	OR593-ND	95.76	86.19	81.40	E3T-SR11
Reflect, Retro	Side/Dark-On	7.87	200mm	OR594-ND	95.76	86.19	81.40	E3T-SR12
Reflect, Diff.	Flat/Light-On	1.18	30mm	OR595-ND	90.16	81.15	76.64	E3T-FD11N
Reflect, Diff.	Flat/Dark-On	1.18	30mm	OR596-ND	90.16	81.15	76.64	E3T-FD12N

Amplified Optical Sensors *1 Meter (39 Inches) Sensing Distance!*

- One meter sensing distance
- Supply voltage of 5 to 24 VDC for easy interface with TTL circuits, relays and programmable controllers
- IP60 sealability rating. Comes with two — 2m cables with connectors



Sensor Side View



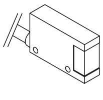
Description	Digi-Key Part No.	Price Each	Omron Part No.
Through-Beam Receiver/Transmitter Pair - Dark on	OR544-ND	84.75	EE-SPW311
Through-Beam Receiver/Transmitter Pair - Light on	OR545-ND	84.75	EE-SPW411

Long Distance Amplified Optical Sensors

9297B-ND Omron Industrial Opto
Sensor, Data Book **$2.00**

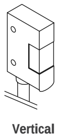
These General Purpose Optical Sensors are small DC Sensors (10-30VDC Input) available in both a transmitter-receiver pair or a reflected beam type with sensing distances of 23 feet (7 meters). Ideal for conveyor systems and doorway sensing with direct interface to PLC's. Meets NEMA 4X, 6 and IP67 standards. Through-beam sensors include separate transmitter and receiver. Reflective sensors include transceiver and E39-R1 reflector. Horizontal mount sensors include mounting bracket. All sensors include mounting hardware.

Fig. 1



Horizontal

Fig. 2



Vertical

Fig.	Sensing Method	Mounting/Type Features	Dist.(max.) Ft.	(M)	Terminal Type	Digi-Key Part No.	Price Each 1	25	100	Omron Part No.
1	Through-Beam	Horizontal	22.97	7	2m Cable	OR584-ND	147.84	133.06	125.67	E3S-AT11
1	Reflective	Horizontal	6.56	2	2m Cable	OR585-ND	126.56	113.91	107.58	E3S-AR11
2	Through-Beam	Vertical	22.97	7	2m Cable	OR586-ND	147.84	133.06	125.67	E3S-AT61
2	Reflective	Vertical	6.56	2	2m Cable	OR587-ND	126.56	113.91	107.58	E3S-AR61
—	Mounting Bracket for Vertical Sensors (2 required for Through-Beam Type)					OR588-ND	4.80	4.32	4.08	E39-L59
—	Light Reflector for Confirming Optical Alignment during Setup (Clips onto Receiver)					OR589-ND	14.46	13.02	12.30	E39-R5
—	Light Interference Filter Eliminates Ambient Light Problems (Snaps onto Receiver)					OR590-ND	25.48	22.94	21.66	E39-E6

Amplified Optical Sensors

EE-SPX74/84 series of optical sensors feature a snap in connector which provides excellent shock and vibration resistance and prevents accidental disconnection of the sensor.

Fig. 1

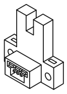


Fig. 2

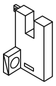


Fig. 3

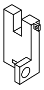


Fig. 4

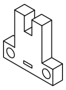


Fig.	Sensing Method	Sensing Distance	Output Type	Output	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
1	Slot	3.6mm	NPN	Dark-On	OR615-ND	74.08	66.67	59.26	EE-SPX740
1	Slot	3.6mm	NPN	Light-On	OR616-ND	74.08	66.67	59.26	EE-SPX840
2	Slot	3.6mm	NPN	Dark-On	OR617-ND	74.08	66.67	59.26	EE-SPX742
2	Slot	3.6mm	NPN	Light-On	OR618-ND	74.08	66.67	59.26	EE-SPX842
3	Slot	3.6mm	NPN	Dark-On	OR619-ND	74.08	66.67	59.26	EE-SPX743
3	Slot	3.6mm	NPN	Light-On	OR620-ND	74.08	66.67	59.26	EE-SPX843
4	Slot	3.6mm	NPN	Dark-On	OR621-ND	74.08	66.67	59.26	EE-SPX741
4	Slot	3.6mm	NPN	Light-On	OR622-ND	74.08	66.67	59.26	EE-SPX841
Snap-In connector with cable for EE-SPX74/84 Series					OR623-ND	5.13	4.62	4.10	EE-1013

Non-Amplified Optical Sensors

Fig. 1

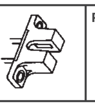


Fig. 2

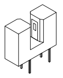


Fig. 3

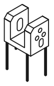


Fig. 4

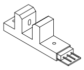
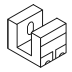


Fig.	Sensing Method	Sensing Distance	Terminal Type	Type On/Off	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
1	Slot	5mm	PC Board	4/4	OR627-ND	1.75	1.58	1.40	EE-SX1081
2	Slot	2mm	PC Board	4/4	OR624-ND	1.75	1.58	1.40	EE-SX1018
2	Slot	5mm	PC Board	4/4	OR625-ND	1.75	1.58	1.40	EE-SX1041
2	Slot	3.4mm	PC Board	4/4	OR626-ND	1.75	1.58	1.40	EE-SX1071
2	Slot	3mm	PC Board	4/4	OR631-ND	1.75	1.58	1.40	EE-SX198
2	Slot	3mm	PC Board	4/4	OR632-ND	1.75	1.58	1.40	EE-SX199
3	Slot	2mm	PC Board	10/10	OR633-ND	1.28	1.15	1.02	EE-SX1103
3	Slot	2mm	PC Board	10/10	OR634-ND	1.28	1.15	1.02	EE-SX1105
3	Slot	3mm	PC Board	10/10	OR635-ND	1.28	1.15	1.02	EE-SX1106
4	Slot	5mm	Amp Connect	3Khz	OR629-ND	3.78	3.40	3.02	EE-SX4009-P1
4	Slot	5mm	Molex Connect	3Khz	OR630-ND	4.68	4.21	3.74	EE-SX4009-P10

Fig. 5



SMT compact size makes these sensors ideal for use in applications with restricted space.

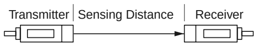
Dual channel model (EE-SX1131) is ideal for encoder applications.

Fig.	Sensing Method	Sensing Dist.	Term. Type	Type On/Off	Digi-Key Part No.	Cut Tape Price Each 1	25	50	Digi-Key Part No.	Tape & Reel Size	Pricing	Omron Part No.
5	Slot (Dual)	2mm	SMT	10/10	OR628CT-ND	1.28	1.15	1.02	OR628TR-ND	2,000	637.50/M	EE-SX1131
5	Slot	1mm	SMT	10/10	OR636CT-ND	1.28	1.15	1.02	OR636TR-ND	2,500	637.50/M	EE-SX1107
5	Slot	2mm	SMT	10/10	OR637CT-ND	1.28	1.15	1.02	OR637TR-ND	2,000	637.50/M	EE-SX1108
5	Slot	3mm	SMT	10/10	OR638CT-ND	1.28	1.15	1.02	OR638TR-ND	1,000	637.50	EE-SX1109

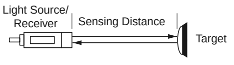
9136B-ND Omron Photo Microsensors Data Book **$2.95**

Non-Amplified Optical Sensors

Omron's optical sensors are designed to meet the needs of positioning, detection of components and objects, cam-timer switching-control and robotic control. Available in two types: nonamplified optical sensors are low cost, fast response optical sensors used mainly in design-in processes. Amplified optical sensors are ideal for plug and play applications where external light does not affect performance and wide input voltages can be applied.



Through-Beam Slot Type



Reflective Type

Fig. 1

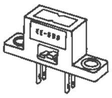


Fig. 2

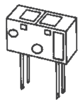


Fig. 3

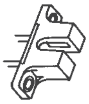


Fig. 4

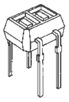


Fig. 5

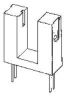


Fig. 6

Low Profile

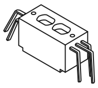


Fig. 7

Dual Channel

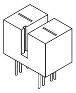


Fig. 8

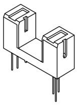


Fig. 9

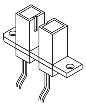


Fig. 10

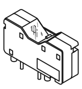


Fig. 11

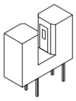


Fig. 12

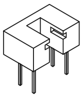


Fig. 13

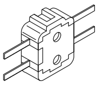


Fig. 14

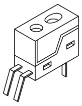


Fig. 15

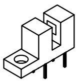


Fig.	Sensing Method	Sensing Distance	Terminal Type	Typ. t_{on}/t_{off} (μsec.)	Digi-Key Part No.	Price Each			Omron Part No.
						1	25	100	
1	Reflective	5mm	Solder	30/30	OR500-ND	4.78	4.30	3.44	EE-SB5
1	Reflective	5mm	PC Board	30/30	OR501-ND	4.78	4.30	3.44	EE-SB5-B
2	Reflective	5mm	Solder	30/30	OR502-ND	4.70	4.23	3.39	EE-SF5
2	Reflective	5mm	PC Board	30/30	OR503-ND	4.70	4.23	3.39	EE-SF5-B
3	Slot	3.6mm	Solder	4/4	OR504-ND	3.58	3.22	2.58	EE-SG3
3	Slot	3.6mm	PC Board	4/4	OR505-ND	3.58	3.22	2.58	EE-SG3-B
4	Reflective	1mm	PC Board	35/25	OR520-ND	1.90	1.71	1.37	EE-SY124
4	Reflective	1mm	SMT	35/25	OR557-ND	1.90	1.71	1.37	EE-SY125
5	Slot	5mm	PC Board	4/4	OR518-ND	1.68	1.51	1.21	EE-SX1042
5	Slot	4.6mm	PC Board	500 Hz	OR556-ND	1.95	1.76	1.41	EE-SX1061
5	Slot	3mm	PC Board	70/70	OR601-ND	1.95	1.76	1.41	EE-SX298
6	Reflective	5mm	PC Board	50 Hz	OR525-ND	3.45	3.11	2.49	EE-SY310
6	Reflective	5mm	PC Board	50 Hz	OR526-ND	3.45	3.11	2.49	EE-SY410
6	Reflective	4.4mm	PC Board	3/20	OR603-ND	3.68	3.31	2.65	EE-SY313
6	Reflective	4.4mm	PC Board	3/20	OR604-ND	3.68	3.31	2.65	EE-SY413
7	Slot	3.4mm	PC Board	4/4	OR523-ND	4.08	3.67	2.94	EE-SX1031
8	Slot	8mm	PC Board	3 KHz	OR524-ND	1.93	1.74	1.39	EE-SX4070
8	Slot	8mm	PC Board	3 KHz	OR571-ND	1.68	1.51	1.21	EE-SX1070
9	Vert Slot	3.4mm	61cm Wires	4/4	OR562-ND	7.08	6.37	5.10	EE-SX1088-W1
9	Horz Slot	3.4mm	61cm Wires	4/4	OR563-ND	6.68	6.01	4.81	EE-SX1096-W1
10	Reflect/Vert	4.5mm	PC Board	30/30	OR564-ND	8.68	7.81	6.25	EE-SY190
10	Reflect/Horz	4.5mm	PC Board	30/30	OR565-ND	8.68	7.81	6.25	EE-SY191
11	Slot	3.4mm	PC Board	4/4	OR569-ND	3.18	2.86	2.29	EE-SJ3-D
11	Slot	2.8mm	PC Board	4/4	OR598-ND	2.03	1.83	1.46	EE-SX1025
11	Slot	5.2mm	PC Board	4/4	OR599-ND	2.13	1.92	1.53	EE-SX1035
12	Slot	3mm	PC Board	4/4	OR570-ND	2.90	2.61	2.09	EE-SX1046
12	Slot	2mm	PC Board	3/20	OR600-ND	2.93	2.64	2.11	EE-SX493
13	Reflective	4 mm	PC Board	180/60	OR578-ND	3.53	3.18	2.54	EE-SY201
14	Red LED Reflect	4 mm	PC Board	30/30	OR581-ND	10.53	9.48	7.58	EE-SY169
14	IR Reflective	4 mm	PC Board	30/30	OR582-ND	9.40	8.46	6.77	EE-SY169A
15	Slot	3mm	PC Board	70/70	OR602-ND	3.05	2.75	2.20	EE-SK3W-B

Amplified Optical Sensors

Fig. 1

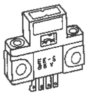


Fig. 2

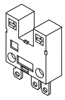


Fig. 3

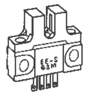
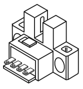
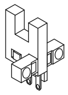


Fig. 4



L-Shape

Fig. 5



T-Shape

Fig. 6

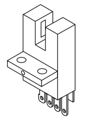


Fig. 7

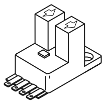


Fig. 8

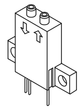
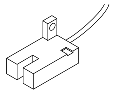


Fig. 9



Right Mount Shown

Fig. 10

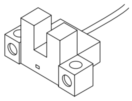


Fig. 11

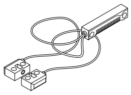


Fig. 12

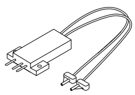


Fig. 13

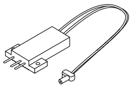


Fig. 14

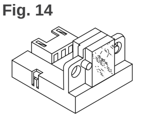
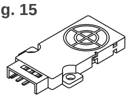


Fig. 15



Inductive Type

Fig. 16

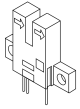


Fig. 17

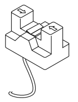


Fig. 18

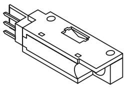


Fig. 19

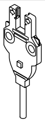


Fig. 20

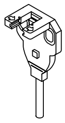


Fig. 21

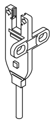


Fig.	Sensor Type/Features	Sensing Distance	Config-uration	Digi-Key Part No.	Price Each		Omron Part No.
					1	25	
1	Reflective (General Purpose)	5mm	Light-On	OR506-ND	13.45	12.11	EE-SB5V
1	Reflective (General Purpose)	5mm	Dark-On	OR507-ND	13.45	12.11	EE-SB5VC
1	Reflective (General Purpose)	19mm	Light-On	OR519-ND	18.80	16.92	EE-SB5V-E
1	Reflective (Side Detecting)	5mm	Light-On	OR535-ND*	36.53	32.88	EE-SPY311
1	Reflective (Side Detecting)	5mm	Light-On	OR536-ND*	36.53	32.88	EE-SPY411
1	Reflective (Top Detecting)	5mm	Dark-On	OR572-ND*	36.53	32.88	EE-SPY312
1	Reflective (Top Detecting)	5mm	Light-On	OR573-ND*	36.53	32.88	EE-SPY412
1	Reflective (Side Detecting)	5mm	Light/Dark-On	OR531-ND†	21.90	19.71	EE-SY671
1	Reflective (Top Detecting)	5mm	Light/Dark-On	OR532-ND†	21.90	19.71	EE-SY672
2	Wide Slot (13mm Slot)	13mm	Dark-On	OR533-ND*	39.13	35.22	EE-SPX303
2	Wide Slot (13mm Slot)	13mm	Light-On	OR534-ND*	39.13	35.22	EE-SPX403
3	Slot (Dust Proof Slit)	5mm	Light/Dark-On	OR528-ND	18.13	16.32	EE-SX670
3	Slot (Dust Proof Slit)	5mm	Light/Dark-On	OR611-ND	18.10	16.29	EE-SX670A
4	Slot (L-Shaped, Dust Proof Slit)	5mm	Light/Dark-On	OR529-ND	18.48	16.63	EE-SX671
4	Slot (L-Shaped, Dust Proof Slit)	5mm	Light/Dark-On	OR612-ND	18.50	16.65	EE-SX671A
5	Slot (T-Shaped, Dust Proof Slit)	5mm	Light/Dark-On	OR530-ND	18.70	16.83	EE-SX672
5	Slot (T-Shaped, Dust Proof Slit)	5mm	Light/Dark-On	OR613-ND	18.70	16.83	EE-SX672A
6	Slot (Close Mounting Style)	5mm	Light/Dark-On	OR549-ND	19.38	17.44	EE-SX673
6	Slot (Close Mounting Style)	5mm	Light/Dark-On	OR614-ND	19.38	17.44	EE-SX673A
7	Slot (Close Mount)	5mm	Light/Dark-On	OR597-ND	19.93	17.94	EE-SX674
8	Reflective (Long Distance)	200mm	Dark-On	OR538-ND*	49.18	44.26	EE-SPZ301A
8	Reflective (Long Distance)	200mm	Light-On	OR539-ND*	49.18	44.26	EE-SPZ401A
9	Slot (Left Mount w/1M Cable)	3.6mm	Dark-On	OR541-ND*	55.70	50.13	EE-SPX302-W2A
9	Slot (Right Mount w/1M Cable)	3.6mm	Dark-On	OR542-ND*	60.20	54.18	EE-SPX304-W2A
10	Slot (Top Mount w/1M Cable)	3.6mm	Dark-On	OR543-ND*	62.48	56.23	EE-SPX305-W2A
11	Slot (Wide Sensing Distance)	30mm	Dark-On	OR546-ND*	163.50	147.15	EE-SPW321
11	Slot (Wide Sensing Distance)	30mm	Light-On	OR547-ND*	163.50	147.15	EE-SPW421
12	Fiber (19" Optical Fiber)	30mm	Dark-On	OR552-ND*	67.23	60.51	EE-SPZ301W-01
12	Fiber (19" Optical Fiber)	30mm	Light-On	OR553-ND*	67.23	60.51	EE-SPZ401W-01
13	Reflective (11"Optical Fiber)	1-3mm	Dark-On	OR554-ND*	70.30	63.27	EE-SPZ301Y-01
13	Reflective (11" Optical Fiber)	1-3mm	Light-On	OR555-ND*	70.30	63.27	EE-SPZ401Y-01
14	Reflective (External A-D Needed)	7.5mm	10 Bit A/D	OR548-ND	54.90	49.41	Z4D-A01
15	Inductive (Detects Ferrous Metal)	5mm	N/O Output	OR560-ND	23.70	21.33	E2R-A01
16	Slot (General Purpose)	3.6mm	Dark-On	OR574-ND*	37.63	33.87	EE-SPX301
16	Slot (General Purpose)	3.6mm	Light-On	OR575-ND*	37.63	33.87	EE-SPX401
17	Slotted Liquid Level Detector	6-13mm	Dark/Light-On	OR579-ND*	107.48	96.73	EE-SPX613
18	Reflective (General Purpose)	11mm	Dark-On	OR580-ND*	11.70	10.53	EE-SPY415
19	Slot Type w/2M Cable	5mm	Dark-On	OR605-ND*	24.23	21.81	EE-SX770
19	Slot Type w/2M Cable	5mm	Light-On	OR606-ND*	24.23	21.81	EE-SX870
20	L-Shaped w/2M Cable	5mm	Dark-On	OR607-ND*	25.65	23.09	EE-SX771
20	L-Shaped w/2M Cable	5mm	Light-On	OR608-ND*	25.65	23.09	EE-SX871
21	T-Shaped w/2M Cable	5mm	Dark-On	OR609-ND*	26.73	24.06	EE-SX772
21	T-Shaped w/2M Cable	5mm	Light-On	OR610-ND*	26.73	24.06	EE-SX872
—	IR Reflector for Fig. 8 above, 60 x 40mm			OR540-ND	12.00	10.80	E39-R1
—	3 Pin Conn. w/ 1 Meter Cable for Fig. 15 above			OR561-ND	6.35	5.72	E22-01
—	Converter from NPN to PNP Output for Amp Sensors			OR550-ND	23.95	21.56	EE-2001
—	Converter from NPN to PNP Output for AMP Sensors			OR551-ND	23.95	21.56	EE-2002
—	4 Pin Connector for Fig. 1-6 above			OR527-ND	2.43	2.19	EE-1001
—	4 Pin Conn. w/ 2 Meter Cable for Fig. 1-6 above			OR559-ND	11.58	10.42	EE-1006
—	Panel Mount Holder Clip for OR559-ND			OR576-ND	3.45	3.11	EE-1006A
—	3 Pin Connector for 8, 12, 13 and 16 above			OR537-ND	2.43	2.19	EE-1002
—	3 Pin Conn. w/ 2 Meter Cable for 4, 12 and 13 above			OR558-ND	4.35	3.92	EE-1003
—	Panel Mount Holder Clip for OR558-ND			OR583-ND	1.35	1.22	EE-1003A

* Sensors not influenced by external light. † Built-in sensitivity adjuster.

NEW! OPTEK® TECHNOLOGY, INC.

Sensors

Fig. 1

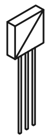


Fig. 2

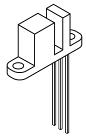


Fig. 3

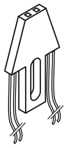


Fig. 4

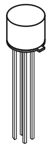


Fig. 5

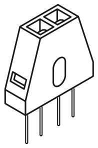


Fig. 6

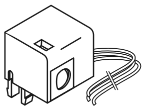
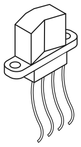


Fig. 7



Hallogic® Hall Effect Sensors

Fig.	Operate Point* Min. / Typ. / Max. (Gauss - B)	Release Point Min. / Typ. / Max. (Gauss - B)	Hysteresis Typ. / Max. (Gauss - B)	Supply Cur. Typ. / Max. (mA)	Digi-Key Part No.	Price Each 1	100	250	Optek Part No.
1	0 / 90 / 180	-100 / 65 / 100	25 - 100	6 / 9	365-1001-ND	2.94	2.36	1.88	OH090U
	70 / — / 200	50 / — / 180	20	4 / 7	365-1003-ND	3.23	2.59	2.07	OHS3140U

***** South pole facing symbolized surface.

Fig.	Output Current (mA)	Output DC Voltage	Output Rise Typ. / Max.	Ouput Fall Time Typ. / Max.	Supply Curr. Typ. / Max. (mA)	Digi-Key Part No.	Price Each 1	100	250	Optek Part No.
2	25	25	0.21 / 1.00 µs	0.25 / 1.00 µs	4 - 7	365-1002-ND	9.64	7.71	6.17	OHB900

Reflective Object Sensors

Fig.	Continuous Forward Curr. (mA)	Reverse DC Voltage	V (BR)ECO Voltage (Min.)	Min. Lead Wire Length Inch (mm)	Digi-Key Part No.	Price Each 1	100	250	Optek Part No.
3	100	2.0	5.0	4.0” (101.6)	365-1010-ND	9.89	7.01	6.65	OPB700
	100	2.0	5.0	18.0” (457.2)	365-1011-ND	13.10	9.29	8.81	OPB701AL
4	50	3.0	5.0	—	365-1012-ND	7.67	5.44	5.16	OPB710
5	40	2.0	5.0	—	365-1014-ND*	2.88	2.04	1.94	OPB742
	40	2.0	5.0	—	365-1015-ND*	3.61	2.56	2.43	OPB745

***** Collector Emitter Voltage 30V - OPB742 and 15V - OPB745

Photologic® Reflective Object Sensors

Fig.	Supply Voltage	Output Voltage	Operating DC Supply Voltage	Min. Lead Wire Length Inch (mm)	Digi-Key Part No.	Price Each 1	100	250	Optek Part No.
6	10	35	4.75 - 5.25	18.0” (457.2)	365-1013-ND	8.58	6.08	5.77	OPB716
7	10	35	4.75 - 5.25	12.0” (304.8)	365-1016-ND	8.95	6.34	6.02	OPB770T

Optoisolators

OPI1264 Series: Optically coupled isolators, each consisting of an infrared emitting diode coupled to an NPN silicon phototransistor and sealed in a precast opaque housing.

OPI155: Contains a high speed monolithic photo-IC comprised of a photodiode and DC amplifier driving an open collector output Schottky transistor.

Fig. 1

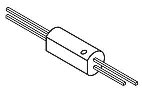


Fig. 2

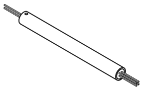
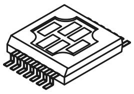


Fig.	Isolation Voltage	Forward DC Voltage (mA)	Reverse DC Voltage	DC Current Transfer Ratio (mA)	Digi-Key Part No.	Price Each 1	100	250	Optek Part No.
1	±10k	40	2.0	2.5	365-1031-ND	2.75	1.95	1.85	OPI1264A
	±10k	40	2.0	5.0	365-1032-ND	2.81	1.99	1.89	OPI1264B
	±10k	40	2.0	10.0	365-1033-ND	2.86	2.03	1.92	OPI1264C
2	±50k	50	3.0	25	365-1034-ND	67.49	47.86	45.40	OPI155

Photodiode Array

The OSM960 has six individual chips mounted on isolated cathode contacts to allow external connection in any desired configuration.

Descripton	Dark Current	Digi-Key Part No.	Price Each 1	100	250	Optek Part No.
6-Element, SMD, High Temperature Array	10nA	365-1035-ND	8.44	7.21	6.65	OSM960



Diodes and Receivers

Fig. 1

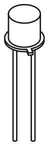


Fig. 2

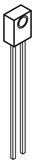


Fig. 3

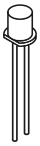


Fig. 4

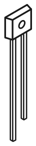


Fig. 5 (Panel Mount)

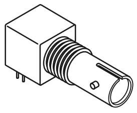


Fig. 6

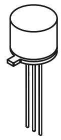
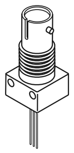


Fig. 7



Infrared Light-Emitting Diodes

• Reverse Voltage: 2.0V • Rise/Fall Time: 10ns

Fig.	Style Package	Continuous Forward DC Current (mA)	Peak Emission (nm)	Apertured Irrad. Min. / Max. (mW / cm²)	Digi-Key Part No.	Price Each 1	100	250	Optek Part No.
1	TO-46	100	850	.5 / —	365-1004-ND	3.48	2.90	2.61	OP230WPS
2	Side View	50	850	.10 / .90	365-1005-ND	1.98	1.65	1.49	OP245PS
3	T-1	50	850	.055 / .55	365-1006-ND	1.68	1.40	1.26	OP265WPS
4	End-Looking	50	850	.10 / .90	365-1007-ND	1.80	1.50	1.35	OP268FPS

Fiber Optic (850nm) Light-Emitting Diodes

Fig.	Optical Power Output Min. / Typ.	Output Rise Time - Typ. (ns)	Continuous Forward DC Current (mA)	Digi-Key Part No.	Price Each 1	100	250	Optek Part No.
5	-17.3 µW / -13.8µW	4.0	100	365-1024-ND	12.85	10.51	9.64	OPF1414T
6	25.0dBm / 29.0dBm	6.0	100	365-1026-ND	8.89	7.27	6.67	OPF370A
7	15.0dBm / 19dBm	6.0	100	365-1027-ND	17.42	14.26	13.07	OPF372B

Fiber Optic Pin Photodiodes and Receivers

Fig.	Output Current (mA)	Responsivity Min. / Typ.	Output Rise Time - Typ. (ns)	Digi-Key Part No.	Price Each 1	100	250	Optek Part No.
5	25	5.3mV / 7µW	3.3	365-1025-ND	13.86	11.34	10.40	OPF2416T
6	—	0.45AW / 0.55AW	6.0	365-1028-ND	7.44	6.08	5.58	OPF470
	—	0.45AW / 0.55AW	1.0	365-1029-ND	7.30	5.98	5.48	OPF480
7	—	0.45AW / 0.55AW	1.0	365-1030-ND	15.49	12.67	11.62	OPF482

Switches

Fig. 1

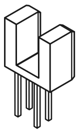


Fig. 2

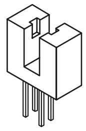


Fig. 3

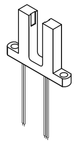


Fig. 4

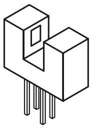


Fig. 5

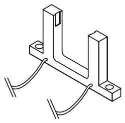


Fig. 6

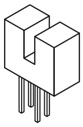


Fig. 7

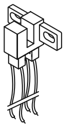
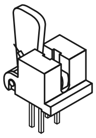


Fig. 8



Slotted Optical Switches

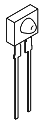
Fig.	Output Type	Slot Width Inch (mm)	Lead Spacing Inch (mm)	Digi-Key Part No.	Price Each 1	100	250	Optek Part No.
1	Transistor	.200 (5.08)	.325 (8.26)	365-1008-ND	1.57	1.11	1.05	OPB620
2	Transistor	.160 (4.06)	.310 (7.87)	365-1017-ND	1.97	1.40	1.33	OPB804
3	Transistor	.20 (5.08)	—	365-1018-ND	5.97	4.23	4.02	OPB817
	Photologic®	.20 (5.08)	—	365-1022-ND	6.57	4.66	4.43	OPB917
4	Transistor	.210 (5.33)	.410 (10.41)	365-1019-ND	2.37	1.68	1.59	OPB818
5	Transistor	1.26 (32)	—	365-1020-ND	7.12	5.05	4.80	OPB819
6	Transistor	2.10 (5.33)	.310 (7.87)	365-1021-ND	2.12	1.50	1.42	OPB848
7	Photologic®	.130 (3.30)	—	365-1023-ND	6.49	4.60	4.37	OPB930W55

Slotted Optical Flag Switches

Fig.	Output Type	Slot Width Inch (mm)	Lead Spacing Inch (mm)	Digi-Key Part No.	Price Each 1	100	250	Optek Part No.
8	Transistor	.090 (2.16)	.280 (7.11)	365-1009-ND	2.86	2.03	1.92	OPB680

Panasonic

Infrared Photosensors

Fig. 1


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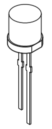

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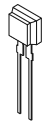

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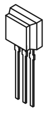

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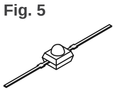

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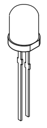

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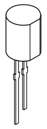

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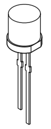

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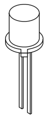

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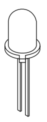

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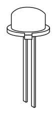

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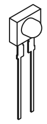

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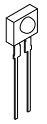

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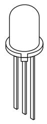

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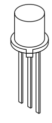

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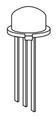


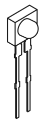
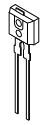
Fig. 17


Fig. 18


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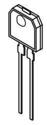
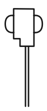


Fig. 20 *NEW!*


***NL59L= Long Leads**

Infrared Light Emitting Diode

Style/ Pkg.	Fig.	Pulse Forward Current	Optical Power Output	Peak Emission Wavelength	Beam Angle	Digi-Key Part No.	Pricing			Panasonic Part No.
							1	10	100	
Side View	1	1 A	4.6mW	950nm	17°	LN54PA-ND	1.00	8.37	66.96	LN54
Top View	2	1.5 A	7mW	950nm	45°	LN64PA-ND	.91	7.56	60.48	LN64
T-1 3/4	6	1.5 A	3-8mW	950nm	25°	LN66-ND	.95	7.13	53.46	LN66R
Side View	3	2 A	12mW	900nm	115°	LN175PA-ND	1.81	14.47	108.54	LN175
T-1 3/4	6	1.5 A	10mW/sr	950nm	20°	LN166-ND	.89	7.42	59.33	LN166
TO-18 Flat	9	2 A	3-6mW	950nm	32°	LN51F-ND	3.63	29.02	225.70	LN51F
TO-18	10	2 A	3-6mW	950nm	8°	LN51L-ND	3.63	29.02	225.70	LN51L
TO-18 Small	11	2 A	3.5-6mW	950nm	100°	LN52-ND	3.05	24.38	189.59	LN52
Side View	12	1 A	1.8-3.5mW	950nm	35°	LN55-ND	.97	8.06	64.49	LN55
Axial	5	1 A	3-4.5mW	950nm	18°	LN57-ND	1.35	11.29	90.28	LN57
Side View	13	1 A	1.8-3.5mW	950nm	35°	LN58-ND	.97	8.06	64.49	LN58
Side View x2	20	1 A	1.8mW	950nm	23°	LN59-ND *NEW!*	.82	6.57	51.11	LN59
Side View x2	20	1 A	1.8mW	950nm	23°	LN59L-ND* *NEW!*	.76	6.05	47.02	LN59L
Side View x2	20	1 A	1.2mW/sr	940nm	23°	LN159-ND *NEW!*	.99	7.89	61.39	LN159
T-1 3/4	6	1.5 A	9mW/sr	950nm	25°	LN66A-ND	.45	3.61	27.08	LN66A
T-1	6	1 A	2.5-5mW	950nm	20°	LN68-ND	.45	3.61	27.08	LN68
T-1 3/4	6	1 A	10-18mW	860nm	20°	LN77L-ND	1.60	15.09	130.59	LN77L
Side View	13	1 A	6-10mW	880nm	40°	LN78-ND	5.37	42.95	334.04	LN78
T-1	6	1 A	6mW/sr	940nm	15°	LNA2801L-ND	.67	5.03	37.73	LNA2801L

* Long Leads

Pin Photo Diode

Style/ Pkg.	Fig.	V_R	Peak Sensitivity Wavelength	tr/tf	Digi-Key Part No.	Pricing			Panasonic Part No.
						1	10	100	
Side View	7	30V	960nm	50ns	PN323BPA-ND	.91	7.56	60.48	PN323B
Top View	8	50V	900nm	2ns	PN334PA-ND	1.46	12.15	97.20	PN334
TO-18 Small	11	30V	850nm	2ns	PN330CL-ND	2.99	23.90	185.91	PN330CL
Side View	3	30V	850nm	2ns	PN335-ND	1.26	10.12	75.88	PN335

NPN Photo Transistor

Style/ Pkg.	Fig.	V_{CEO}	I_C	Peak Sensitivity Wavelength	tr/tf	Digi-Key Part No.	Pricing			Panasonic Part No.
							1	10	100	
Side View	4	20V	10mA	900nm	8µs	PN116PA-ND	1.51	12.10	90.72	PN116
Axial	5	20V	20mA	800nm	2.5/3.5µs	PN127-SPA-ND	1.20	9.99	79.92	PN127S
Side View	1	20V	20mA	800nm	4µs	PN154PA-ND	1.39	11.61	92.88	PN154
T-1	6	30V	20mA	800nm	4µs	PN168PA-ND	.65	4.86	36.45	PN168
TO-18	10	30V	50mA	800nm	3µs	PN101-ND	3.56	28.46	221.32	PN101
TO-18 Flat	9	30V	50mA	800nm	3µs	PN101F-ND	3.56	28.46	221.32	PN101F
TO-18	14	40V*	50mA	800nm	3µs	PN102-ND	3.56	28.46	221.32	PN102
TO-18 Flat	15	30V*	50mA	800nm	3µs	PN102F-ND	3.56	28.46	221.32	PN102F
TO-18	14	30V*	30mA	900nm	5/6µs	PN108-ND	3.56	28.46	221.32	PN108
TO-18 Flat	15	30V*	30mA	900nm	8/9µs	PN108F-ND	3.56	28.46	221.32	PN108F
TO-18 Small	16	30V*	20mA	900nm	5/6µs	PN108CL-ND	2.99	23.90	185.91	PN108CL
TO-18 Flat	15	30V*	30mA	900nm	8/9µs	PN109F-ND	3.56	28.46	221.32	PN109F
TO-18 Small	16	30V*	20mA	900nm	5/6µs	PN109CL-ND	2.99	23.90	185.91	PN109CL
TO-18	14	30V*	30mA	900nm	5/6µs	PN109L-ND	3.56	28.46	221.32	PN109L
Axial	5	20V	20mA	800nm	3-10µs	PN147-ND	1.58	12.65	94.85	PN147
Side View	12	20V	20mA	800nm	4-10µs	PN150-ND	1.06	8.85	70.82	PN150
Side View	17	20V	20mA	800nm	4µs	PN150L-ND	1.06	8.85	70.82	PN150L
Side View	3	20V	10mA	800nm	4µs	PN155-ND	1.25	10.43	83.47	PN155
Side View	13	20V	20mA	800nm	4-10µs	PN158-ND	1.06	8.85	70.82	PN158
Side View	18	20V	20mA	850nm	4µs	PN163NC-ND	1.06	8.85	70.82	PN163-(NC)
Side View	19	20V	20mA	850nm	4µs	PN166-ND	1.06	8.85	70.82	PN166
Side View	12	20V	30mA	800nm	100µs	PN205-ND**	1.14	9.49	75.88	PN205
Side View	17	20V	30mA	850nm	150µs	PN205LNC-ND**	1.14	9.49	75.88	PN205L-(NC)
Axial	5	20V	30mA	800nm	200µs	PN207-ND**	1.58	12.65	94.85	PN207
Side View	13	20V	30mA	800nm	100µs	PN208-ND**	1.14	9.49	75.88	PN208
Side View	18	20V	30mA	850nm	150µs	PN263LNC-ND**	1.14	9.49	75.88	PN263L-(NC)
T-1	6	20V	30mA	850nm	150µs	PN268NC-ND**	.91	6.83	51.22	PN268-(NC)

* VCBO (This device has signal mixing capability using the base pin.) ** Darlington

NEW! Optoisolators

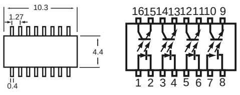
Fig. 1


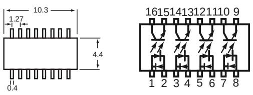
Fig. 2


Fig.	Current Transfer Ratio				V_{CEO}	Isolation Voltage (Vrms)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing 2,500
	Min. (%)	Max. (%)	@ IF (ma)	VCE (V)				1	10	100		
DC Input Type, SMD, 16-Pin												
1	100	600	50	0.2	80	2500	CNC1H001CT-ND	1.89	1.51	1.14	CNC1H001TR-ND	966.30/M
AC Input Type, SMD, 16-Pin												
2	100	600	±50	0.2	80	2500	CNC7H001CT-ND	2.10	1.68	1.26	CNC7H001TR-ND	1074.13/M

NEW! Photo Interrupter

Photo Interrupters are a transmissive photosensor series in which a high efficiency GaAs infrared light emitting diode is used as the light emitting element, and a high sensitivity phototransistor is used as the light detecting element. The two elements are arranged so as to face each other, and objects passing between them are detected.

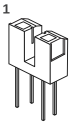
Fig. 1


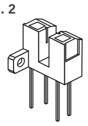
Fig. 2


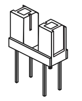
Fig. 3


Fig.	Sensing Method	Sensing Distance	Terminal Type	Typ. t_{on}/t_{off} (µsec.)	Digi-Key Part No.	Price Each			Panasonic Part No.
						1	10	100	
1	Slot	3 mm	PC Board	5/5	ON1021-ND	1.39	1.16	.93	ON1021
2	Slot	3 mm	Tabs	5/5	ON1023-ND	1.33	1.07	.80	ON1023
3	Slot	5 mm	PC Board	5/5	ON1024-ND	1.26	1.05	.85	ON1024

Bipolar Integrated Circuit with Photodetection Function

FEATURES:

PNA4601M Series *(For infrared remote control systems.)*
• Extension distance is 8 m or more • External parts not required • Adoption of visible light cutoff resin

PNA4611M Series *(For infrared remote control systems.)*
• High sensitivity (extension distance is 11 m or more) • External parts not required • Resin to cutoff visible light is used

PNA4603H Series *(For brightness control systems.)*
• Wavelength characteristics close to human visual sensitivity • External parts not required • Good output voltage linearity with respect to incident illuminance

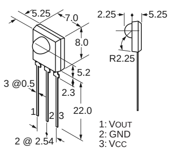
Fig. 1


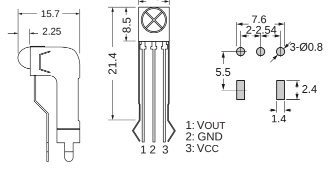
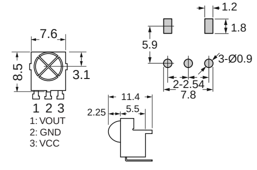
Fig. 2


Fig. 3


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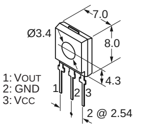


PNA4603H Series Main Characteristics

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Operating Supply Voltage	V_{CC}	—	4.5	5.0	5.5	V
Current Consumption	I_{CC}	V_{CC} = 5.25V	0.5	1.0	1.5	mA
Output Voltage	V_{OFF}	L = 0 lx, V_{CC} = 5.0V	0.1	0.5	0.8	V
	V_{01}	L = 10 lx, V_{CC} = 5.0V*	2.0	2.7	3.4	V
	V_{02}	L = 800 lx, V_{CC} = 5.0V*	3.9	4.1	4.9	V
	η	V_{01}-V_{OFF}, V_{CC} = 5.0V	1.65	1.9	4.9	V
Output Impedance	Z	—	—	10	—	kΩ
Peak Sensitivity Wavelength	λ_p	—	—	540	—	nm

* Halogen lamp light source.

Fig.	Operating Supply Voltage Typ. (V)	Current Consumption Typ. (mA)	Max. Recep. Distance (m)		Carrier Frequency Typ. (kHz)	Digi-Key Part No.	Pricing			Panasonic Part No.
			min.	Typ.			1	10	100	
1	5.0	2.4	8	10	38.0	PNA4602M-ND	1.53	12.76	102.10	PNA4602M
2	5.0	2.4	11	16	36.7	PNA4611M00YB-ND	1.72	14.33	114.64	PNA4611M00YB
	5.0	2.4	11	16	38.0	PNA4612M00YB-ND	1.72	14.33	114.64	PNA4612M00YB
	5.0	2.4	11	16	40.0	PNA4613M00YB-ND	1.72	14.33	114.64	PNA4613M00YB
	5.0	2.4	11	16	56.9	PNA4614M00YB-ND	1.72	14.33	114.64	PNA4614M00YB
3	5.0	2.4	11	16	36.7	PNA4611M00XD-ND	1.72	14.33	114.64	PNA4611M00XD
	5.0	2.4	11	16	38.0	PNA4612M00XD-ND	1.72	14.33	114.64	PNA4612M00XD
	5.0	2.4	11	16	40.0	PNA4613M00XD-ND	1.72	14.33	114.64	PNA4613M00XD
	5.0	2.4	11	16	56.9	PNA4614M00XD-ND	1.72	14.33	114.64	PNA4614M00XD
4	See PNA4603A Main Characteristics Chart					PNA4603H-ND	4.22	35.15	281.23	PNA4603H

DOT MATRIX Type LCD Modules

Optrex Numbering System

DMC – 50000 N Y H U – S E B 1

1 2 3 4 5 6 7 8 9 10

1.	Type of Display:	Character Dot Matrix
2.	Development Number:	Successive Number (3 digits to 5 digits)
3.	LCD TYPE:	Nil = TN N = STN
4.	Background Color:	Nil = Neutral Y = Yellow B = Blue K = Dark Blue
5.	Operating Temp.:	Nil = Normal H = Extended
6.	Viewing Direction:	Nil = 6:00 U = 12:00 L = 9:00 R = 3:00
7.	Display Mode:	Nil = Reflective, Transmissive with Backlight S = Transflective T = Transmissive without Backlight
8.	Backlight:	Nil = Without Backlight E = EL L = LED
9.	Backlight Color:	Nil = Without Backlight W = White B = Blue Y = Yellow
10.	Supplemented Specification:	Successive Number (No. 1 to 99)

40x4 Pin Connections

Pin No.	Symbol	Pin No.	Symbol	Pin No.	Symbol
1	DB7	7	DB1	13	Vss
2	DB6	8	DB0	14	Vcc
3	DB5	9	E1	15	E2
4	DB4	10	R/W	16	NC
5	DB3	11	RS	17	K
6	DB2	12	VEE	18	A

Standard Pin Connections

Pin No.	Symbol	Pin No.	Symbol
1	Vss	8	DB1
2	Vcc	9	DB2
3	VEE	10	DB3
4	RS	11	DB4
5	R/W	12	DB5
6	E	13	DB6
7	DB0	14	DB7

FEATURES: • Interface with 8-bit or 4-bit MPU is available • 192 kinds of characters, numerals, symbols and special characters can be displayed by built-in character generator (ROM) • Other preferred characters can be displayed by character generator (RAM) • Various functions of instruction are available by programming: clear display, cursor at home, on/off cursor, blink character, shift display, shift cursor, read/write display data, etc. • Compact and lightweight design • Low power consumption.

Inverter Needed	Display Format	Matching Bezel ‡	Character Format	Outline Dimension W x H x D (mm)	Viewing Area W x H (mm)	Character Size W x H (mm)	Dot Size W x H (mm)	Operating Temp. (°C)	Storage Temp. (°C)	Supply Voltage (V)	Digi-Key Part No.	Price Each 1	100	Optrex Part No.
Standard LCD Dot Matrix Modules (Data Book Sold Separately)														
—	16x1	PRD250LPW1-ND	5x8 dots	80 x 36 x 10	64.5 x 13	3.2 x 5.95	.6 x .7	0 to +50	-20 to +70	5	73-1012-ND	13.76	10.00	DMC-16117A
—	16x1	N/A	5x7 CURS	122 x 33 x 11	99 x 13	4.84 x 9.66	.92 x 1.1	0 to +50	-20 to +70	5	73-1013-ND	20.20	14.68	DMC-16128
—	16x1	N/A	5x7 CURS	122 x 33 x 11	99 x 13	4.84 x 9.66	.92 x 1.1	0 to +50	-20 to +70	5	73-1015-ND	22.36	16.24	DMC-16129
—	16x2	PRD250LPW-ND	5x8 dots	80 x 40 x 10.9	59.5 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1033-ND•	18.86	13.70	DMC-16204
—	16x2	PRD250LPW-ND	5x8 dots	84 x 44 x 11	61 x 16	2.95 x 5.55	.55 x .55	0 to +50	-20 to +70	5	73-1025-ND	19.18	13.93	DMC-16207
—	16x2	PRD250LPW-ND	5x8 dots	84 x 44 x 11	61 x 16	2.95 x 5.55	.55 x .55	-20 to +70	-30 to +80	+5, -7	73-1036-ND	19.40	14.09	DMC-16207H
—	16x2	PRD250LPW-ND	5x8 dots	84 x 44 x 11	61 x 16	2.95 x 5.55	.55 x .55	0 to +50	-20 to +70	5	73-1054-ND	19.18	13.93	DMC-16207U
—	16x2	N/A	5x7 CURS	122 x 44 x 11	99 x 24	4.84 x 9.66	.92 x 1.1	0 to +50	-20 to +70	5	73-1026-ND	22.90	16.64	DMC-16230
—	16x2	N/A	5x7 CURS	122 x 44 x 11	99 x 24	4.84 x 9.66	.92 x 1.1	-20 to +70	-30 to +80	+5, -7	73-1041-ND	28.22	20.51	DMC-16230H
—	16x2	N/A	5x7 CURS	122 x 44 x 11	99 x 24	4.84 x 9.66	.92 x 1.1	0 to +50	-20 to +70	5	73-1030-ND	22.90	16.64	DMC-16230U
—	16x2	PRD250LPW-ND	5x8 dots	80 x 36 x 11	64.5 x 13.8	2.95 x 4.35	.55 x .5	0 to +50	-20 to +70	5	73-1037-ND	16.62	12.07	DMC-16249B
—	16x2	PRD250LPW-ND	5x8 dots	80 x 36 x 11	64.5 x 13.8	2.95 x 4.35	.55 x .5	0 to +50	-20 to +70	5	73-1039-ND	16.62	12.07	DMC-16249UB
—	16x4	N/A	5x8 dots	87 x 60 x 11	61.8 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1080-ND	35.02	25.44	DMC-16433
—	16x4	N/A	5x8 dots	87 x 60 x 11	61.8 x 25.2	2.95 x 4.75	.55 x .55	-20 to +70	-30 to +80	+5, -7	73-1108-ND	35.38	25.70	DMC-16433H
—	20x2	PRD360LPW-ND	5x8 dots	116 x 37 x 11	83 x 18.6	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1056-ND	29.56	21.48	DMC-20261
—	20x2	PRD360LPW-ND	5x8 dots	116 x 44 x 11	83 x 18.6	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1055-ND	22.90	16.64	DMC-20215A
—	20x2	PRD360LPW-ND	5x8 dots	116 x 37 x 11	83 x 18.6	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1058-ND	24.24	17.61	DMC-50218
—	24x2	PRD360LPW1-ND	5x8 dots	118 x 36 x 11	93.5 x 15.8	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1064-ND	26.94	19.57	DMC-24227
—	40x2	N/A	5x8 dots	182 x 33.5 x 11	152 x 16.5	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1069-ND	43.10	31.31	DMC-40218
—	40x4	N/A	5x8 dots	190 x 54 x 11	147 x 29.5	2.78 x 4.89	.5 x .55	0 to +50	-20 to +70	5	73-1099-ND	83.52	60.69	DMC-40457
Supertwist LCD Modules (Data Book Sold Separately)														
—	8x2	N/A	5x8 dots	40 x 35.4 x 8.2	30.4 x 13.9	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1106-ND	13.50	9.81	DMC-50448N
—	16x2	PRD250LPW-ND	5x7 dots	64.2 x 27.6 x 2.2	56.2 x 12.7	2.6 x 5.2	.48 x .7	0 to +50	-20 to +70	+3,-7	73-1177-ND†	15.10	10.97	DMC-50747NF
—	16x2	PRD250LPW-ND	5x8 dots	84 x 44 x 11	61 x 16	2.95 x 5.55	.55 x 65	0 to +50	-20 to +70	5	73-1044-ND	22.90	16.64	DMC-16207N
—	16x2	N/A	5x7 CURS	122 x 44 x 11	99 x 24	4.84 x 9.66	.92x 1.10	0 to +50	-20 to +70	5	73-1028-ND	25.86	18.79	DMC-16230N
—	16x2	PRD250LPW-ND	5x8 dots	80 x 36 x 11	64.5 x 13.8	2.95 x 4.35	.55x .50	0 to +50	-20 to +70	5	73-1038-ND	19.76	14.36	DMC-16249N
—	16x4	N/A	5x8 dots	87 x 60 x 11	61.8 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1083-ND	37.72	27.40	DMC-16433N
—	20x4	N/A	5x8 dots	98 x 60 x 11	76 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1091-ND	48.72	35.41	DMC-20434N
High Contrast Supertwist LCD Modules (Data Book Sold Separately)														
—	16x2	PRD250LPW-ND	5x8 dots	84 x 44 x 11	61 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1045-ND	22.90	16.64	DMC-16207N-B
—	20x2	PRD360LPW-ND	5x8 dots	116 x 37 x 11	83 x 18.6	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1061-ND	24.76	17.99	DMC-50218N-B
—	20x4	N/A	5x8 dots	98.5 x 60 x 11	76 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1092-ND	44.70	32.47	DMC-20434N-B
—	24x2	PRD360LPW1-ND	5x8 dots	118 x 36 x 11	93.5 x 15.8	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1066-ND	28.60	20.78	DMC-24227N-B
Supertwist LCD Modules With Yellow LED Backlighting (Data Book Sold Separately)														
—	16x1	N/A	5x7 CURS	122 x 33 x 15.7	99 x 13	4.84 x 9.66	.92 x 1.10	0 to +50	-20 to +70	5	73-1011-ND	30.98	22.51	DMC-16128NY-LY
—	16x1	PRD250LPW1-ND	5x8 dots	80 x 36 x 15	64.5 x 13	3.2 x 5.85	.6 x .7	0 to +50	-20 to +70	5	73-1018-ND	26.94	19.57	DMC-16105NY-LY
—	16x2	PRD250LPW-ND	5x8 dots	84 x 45 x 15.1	61 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1048-ND	27.20	19.76	DMC-16202NY-LY
—	16x2	PRD250LPW-ND	5x8 dots	80 x 40 x 16.1	59.5 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1034-ND•	22.90	16.64	DMC-16204NY-LY
—	16x2	PRD250LPW-ND	5x8 dots	88 x 34 x 16.1	59.5 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1035-ND	26.94	19.57	DMC-16205NY-LY
—	16x2	N/A	5x7 CURS	122 x 44 x 14.6	99 x 24	4.84 x 9.66	.92 x 1.1	0 to +50	-20 to +70	5	73-1051-ND	34.06	24.74	DMC-16230NY-LY
—	16x2	N/A	5x7 CURS	122 x 44 x 14.6	99 x 24	4.84 x 9.66	.92 x 1.1	0 to +50	-20 to +70	5	73-1053-ND	35.02	25.44	DMC-16230NYU-LY
—	20x4	N/A	5x8 dots	98.5 x 61 x 15.6	76 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1094-ND	41.86	30.41	DMC-20481NY-LY-ABE
—	20x4	N/A	5x8 dots	98.5 x 61 x 15.6	76 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1097-ND	46.00	33.42	DMC-20481NYU-LY
—	40x2	N/A	5x8 dots	182 x 34.5 x 15.1	152.5 x 16.5	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1076-ND	71.40	51.87	DMC-40267NY-LY
—	40x2	N/A	5x8 dots	182 x 34.5 x 15.1	152.5 x 16.5	3.2 x 5.55	.6 x .65	-20 to +70	-30 to +80	+5, -7	73-1078-ND	71.40	51.87	DMC-40267NYJ-LY
High Contrast Supertwist LCD Modules with Yellow LED Backlighting (Data Book Sold Separately)														
—	16x2	PRD250LPW-ND	5x8 dots	84 x 45 x 15.1	61 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1047-ND	22.32	16.22	DMC-16202N-LY-AME
—	16x2	PRD250LPW-ND	5x8 dots	84 x 45 x 15.1	61 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1043-ND	22.32	16.22	DMC-16202NY-LY-AGE
—	16x2	PRD250LPW-ND	5x8 dots	84 x 45 x 15.1	61 x 16	2.95 x 5.55	.55 x .65	-20 to +70	-30 to +80	+5, -7	73-1032-ND	26.94	19.57	DMC-16202NYJ-LY-D
—	16x2	N/A	5x7 CURS	122 x 44 x 14.6	99 x 24	4.84 x 9.66	.92 x 1.10	0 to +50	-20 to +70	5	73-1052-ND	37.28	27.09	DMC-16230NY-LY-B
—	16x2	N/A	5x7 CURS	122 x 44 x 14.6	99 x 24	4.84 x 9.66	.92 x 1.10	-20 to +70	-30 to +80	+5, -7	73-1050-ND	37.72	27.41	DMC-16230NYJ-LYD
—	20x2	PRD360LPW-ND	5x8 dots	116 x 37 x 15.7	83 x 18.6	3.20 x 5.55	.60 x .65	0 to +50	-20 to +70	5	73-1057-ND	27.90	20.27	DMC-20261NY-LY-AKE
—	20x2	PRD360LPW-ND	5x8 dots	116 x 37 x 15.7	83 x 18.6	3.20 x 5.55	.60 x .65	-20 to +70	-30 to +80	+5, -7	73-1063-ND	27.90	20.27	DMC-20261NYJ-LY-BCE
—	20x4	N/A	5x8 dots	98.5 x 61 x 15.6	76 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1095-ND	41.86	30.41	DMC-20481NY-LY-AGE
—	24x2	PRD360LPW1-ND	5x8 dots	121.5 x 33.5 x 16.1	93.5 x 15.8	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1024-ND	48.70	35.38	DMC-50149NYU-LY-B
—	40x2	N/A	5x8 dots	182 x 34.5 x 15.1	147.5 x 11.5	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1179-ND	53.02	38.52	DMC-40202NY-LY-AFE
—	40x4	N/A	5x8 dots	190 x 54 x 13.6	147 x 29.5	2.78 x 4.89	.5 x .55	0 to +50	-20 to +70	5	73-1101-ND	113.00	82.10	DMC-40457NY-LY-B
Standard LCD Modules With Blue-Green EL Backlighting (must order inverter) (Data Book Sold Separately)														
289-1031-ND	20x4	N/A	5x8 dots	98 x 60 x 11	76 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1087-ND	49.84	36.22	DMC-20434E
289-1031-ND	20x4	N/A	5x8 dots	98 x 60 x 11	76 x 25.2	2.95 x 4.75	.55 x .55	-20 to +70	-30 to +80	+5, -7	73-1090-ND	52.54	38.17	DMC-20434HE
High Contrast Supertwist LCD Modules With Blue-Green EL Backlighting (must order inverter) (Data Book Sold Separately)														
289-1028-ND	16x2	PRD250LPW-ND	5x8 dots	84 x 44 x 11	61 x 16	2.95 x 5.55	.55 x .55	0 to +50	-20 to +70	5	73-1040-ND	29.64	21.53	DMC-16207N-EB
289-1031-ND	16x2	N/A	5x7 CURS	122 x 44 x 11	99 x 24	4.84 x 9.66	.92 x 1.1	0 to +50	-20 to +70	5	73-1046-ND	35.02	25.44	DMC-16230N-EB
289-1028-ND	20x4	N/A	5x8 dots	98 x 60 x 11	76 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1088-ND	59.30	43.08	DMC-20434N-EB
289-1028-ND	24x2	PRD360LPW1-ND	5x8 dots	118 x 36 x 11	93.5 x 15.8	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1067-ND	33.68	24.47	DMC-24227N-EB
289-1030-ND	40x2	N/A	5x8 dots	182 x 33.5 x 11	152 x 16.5	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1071-ND	57.92	42.09	DMC-40218N-EB
289-1031-ND	40x4	N/A	5x8 dots	190 x 54 x 11	147 x 29.5	2.78 x 4.89	.5 x .55	0 to +50	-20 to +70	5	73-1100-ND	108.00	78.46	DMC-40457N-EB
Supertwist LCD Modules With White EL Backlighting (must order inverter) (Data Book Sold Separately)														
289-1031-ND	20x4	N/A	5x8 dots	98 x 60 x 11	76 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1093-ND	59.30	43.08	DMC-20434N-SEW
High Contrast Supertwist LCD Modules With White EL Backlighting (must order inverter) (Data Book Sold Separately)														
289-1029-ND	16x4	N/A	5x8 dots	87 x 60 x 11	61.8 x 25.5	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1109-ND	44.46	32.31	DMC-16433N-SEW-B
Inverters For EL Backlighting (Converts 5 VDC to 100 VAC 400Hz) (Data Book Sold Separately)														
Inverter for use with EL Backlit Character Modules											289-1031-ND	11.90	—	NDL-204

† Chip on glass display, uses “SED1233DGB” control IC • Pin to Pin spacing = 2.0mm ‡ Bezels can be found under PRD Plastics in the manufacturer’s index

JKL COMPONENTS CORPORATION

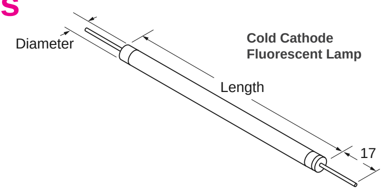
Cold Cathode Fluorescent Lamps and Inverters

Tri-Phosphor RGB White Lamps

Dia. (mm)	Length (mm)	Start Volt (V)	Lamp Volt (V)	Lamp Curr. (mA)	Intensity (Cd./m2)	Digi-Key Part No.	Price Each 1	10	50	JKL Part No.
2.2	140	730	340	5	38,000	289-1053-ND	10.29	9.31	7.84	BF22140-24B
2.6	180	1000	400	5	38,000	289-1054-ND	10.29	9.31	7.84	BF26180-24B
2.6	188	1300	525	5	30,000	289-1039-ND	10.29	9.31	7.84	BF26188-20B
2.6	240	1250	505	5	30,000	289-1055-ND	12.76	11.55	9.72	BF26240-24B
2.6	250	1300	525	5	30,000	289-1056-ND	12.76	11.55	9.72	BF26250-24B
2.6	285	1500	725	5	30,000	289-1057-ND	12.76	11.55	9.72	BF26285-20B
3.2	25	400	165	5	19,000	289-1002-ND	10.29	9.31	7.84	BF325-22B
3.2	50	500	195	5	28,000	289-1003-ND	10.29	9.31	7.84	BF350-20B
3.2	75	525	210	5	28,000	289-1058-ND	10.29	9.31	7.84	BF375-20B
3.2	86	540	220	5	28,000	289-1004-ND	10.29	9.31	7.84	BF386-20B
3.2	100	665	270	5	28,000	289-1005-ND	10.29	9.31	7.84	BF3100-20B
3.2	160	850	345	5	28,000	289-1006-ND	10.29	9.31	7.84	BF3160-20B
3.2	216	1100	440	5	28,000	289-1040-ND	10.29	9.31	7.84	BF3216-20B
3.2	228	1150	460	5	28,000	289-1007-ND	10.29	9.31	7.84	BF3228-21B
3.2	250	1200	520	5	28,000	289-1008-ND	10.29	9.31	7.84	BF3250-20B
3.2	300	1350	665	5	28,000	289-1041-ND	12.76	11.55	9.72	BF3300-20B
3.2	360	1500	785	5	28,000	289-1042-ND	12.76	11.55	9.72	BF3360-20B
4.1	183	900	365	5	16,000	289-1043-ND	10.29	9.31	7.84	BF4183-20B
5.6	118	600	305	5	7,000	289-1009-ND	10.29	9.31	7.84	BF5118-20B
5.6	165	800	400	5	7.000	289-1044-ND	10.29	9.31	7.84	BF5165-20B
5.6	200	850	445	5	7,000	289-1010-ND	10.29	9.31	7.84	BF5200-20B
6.5	50	390	170	5	6,500	289-1011-ND	10.29	9.31	7.84	BF650-20B
6.5	100	550	230	5	6,500	289-1012-ND	10.29	9.31	7.84	BF6100-20B
6.5	144	600	245	5	6,500	289-1045-ND	10.29	9.31	7.84	BF6144-20B
6.5	150	600	250	5	6,500	289-1013-ND	10.29	9.31	7.84	BF6150-20B
6.5	165	600	255	5	6,500	289-1046-ND	10.29	9.31	7.84	BF6165-20B
6.5	178	650	270	5	6,500	289-1014-ND	10.29	9.31	7.84	BF6178-20B
6.5	200	680	290	5	6,500	289-1015-ND	10.29	9.31	7.84	BF6200-20B
6.5	225	750	340	5	6,500	289-1016-ND	10.29	9.31	7.84	BF6225-20B
6.5	262	850	350	5	6,500	289-1017-ND	10.29	9.31	7.84	BF6262-20A

Narrow Spectrum UltraViolet (UV) Lamps

Dia. (mm)	Length (mm)	Start Volts (V)	Operating Volts (V)	Watts @ 5mA	Output uW/cm2@1"	Digi-Key Part No.	Price Each 1	10	50	JKL Part No.
3.0	25	350	140	0.70	0.30	289-1018-ND	10.29	9.31	7.84	BF325-UV1
3.0	50	500	195	0.98	0.30	289-1019-ND	10.29	9.31	7.84	BF350-UV1
3.0	100	675	270	1.35	0.25	289-1020-ND	10.29	9.31	7.84	BF3100-UV1
3.0	120	865	280	1.35	0.25	289-1021-ND	10.29	9.31	7.84	BF3120-UV1
3.0	240	950	500	2.50	0.25	289-1022-ND	10.29	9.31	7.84	BF3240-UV1
9.0	59	375	150	0.75	0.15	289-1023-ND	10.29	9.31	7.84	BF959-UV1/3



Inverters for CCFL and UV Lamps

Input Volts	Output Volts (V)	Output I (mA)	Inverter Characteristics	Digi-Key Part No.	Price Each 1	10	50	JKL Part No.
5.0	700	5.0	Fixed Single Output	289-1024-ND	15.12	13.86	11.97	BXA-501/KIT
5.0	650	4.5	Fixed Single Output	289-1047-ND	15.12	13.86	11.97	BXA-502
12.0	850	5.5	Fixed Dual Output	289-1025-ND	15.12	13.86	11.97	BXA-12529
12.0	850	5.5	Fixed Dual Output	289-1048-ND†	16.17	14.63	12.32	BXA-12529/PSI
12.0	700	5.5	Fixed Single Output	289-1049-ND	15.12	13.86	11.97	BXA-12553
12.0	800	4.0	Fixed Single Output	289-1050-ND	15.12	13.86	11.97	BXA-12576
12.0	800	4.0	Fixed Single Output	289-1051-ND	15.12	13.86	11.97	BXA-12577
12.0	1500	5.0	Fixed Dual Output	289-1026-ND	15.12	13.86	11.97	BXA-12579/INV
24.0	1000	5.5	Fixed Dual Output	289-1027-ND	15.12	13.86	11.97	BXA-24529
12.0	1000	6.0	Dimming Single Output	289-1034-ND	27.72	24.95	22.18	BXA-12562-6M
12.0	1000	5.0	Dimming Single Output	289-1035-ND	24.72	22.25	19.78	BXA-12564-6M
12.0	1000	6.0	Dimming Single Output	289-1036-ND	25.76	23.19	20.61	BXA-12565-6M
Accessories								
Input connector assembly for BXA-12579/INV				289-1037-ND	2.00	—	—	BXA-12580/CONN
Output connector assembly for BXA-12579/INV				289-1038-ND	2.50	—	—	BXA-12581/CONN
Output connector assembly for BXA-12553				289-1052-ND	2.00	—	—	BXA-12552/CONN

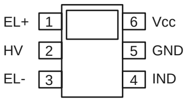
† Potted inverter

Inverters for Electroluminescent (EL) Backlighting

Input Voltage Range (dc)	EL Element Area (cm^2)	Digi-Key Part No.	Price Each 1	10	50	JKL Part No.
3.0 - 5.5	10 - 19	289-1028-ND	12.20	10.98	9.76	NDL-201
3.0 - 5.5	19 - 38	289-1029-ND	12.20	10.98	9.76	NDL-202
3.0 - 5.5	25 - 43	289-1030-ND	12.20	10.98	9.76	NDL-203
3.0 - 5.5	41 - 70	289-1031-ND	11.90	10.71	9.52	NDL-204
3.0 - 5.5	50 - 83	289-1032-ND	11.90	10.71	9.52	NDL-205
3.0 - 5.5	100 - 170	289-1033-ND	11.20	10.08	8.96	NDL-217

TOKO

EL Lamp Drivers



The TK659 Electroluminescent (EL) Lamp Driver has been optimized for battery controlled systems where power consumption and size are primary concerns. The miniature device size (SOT23L-6), together with the miniature Toko EL coils (D32FU, D31FU, D52FU), further helps system designers reduce the space required to drive the small EL panels.

Low 3.5 to 6 volt input voltage is ideal for battery operation. The TK659 provides a constant output power to the lamp, independent of variations in the battery voltage. This architecture allows the output voltage to remain relatively constant as battery voltages decay, without the need for directly sensing the high voltage output of the EL driver. The capacitance of the EL Panel is typically proportional to the size of the lamp (a 1 square inch EL Panel typically exhibits approximately 5nF of capacitance load).

The TK6591 series of devices has been optimized to drive EL panels which are approximately 1-2 square inches in size. The TK6592 series of devices has been optimized to drive EL panels which are approximately 2-4 square inches in size. The TK6593 series of devices has been optimized to drive EL panels which are approximately 3-6 square inches in size (1 square inch = 645 mm^2).

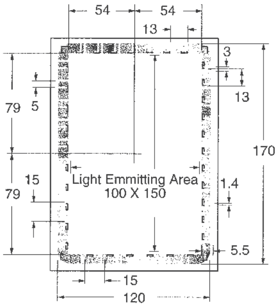
Description	Lamp Frequency Code	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,300	Toko Part No.
Small, Optimized for 3.5nF to 12.5nF Panel Capacitance	200Hz	TKS3640CT-ND	5.67	4.86	4.05	TKS3640TR-ND	3159.00	TK65911MTL
	250Hz	TKS3641CT-ND	5.67	4.86	4.05	TKS3641TR-ND	3159.00	TK65913MTL
	350Hz	TKS3642CT-ND	5.67	4.86	4.05	TKS3642TR-ND	3159.00	TK65917MTL
	400Hz	TKS3643CT-ND	5.67	4.86	4.05	TKS3643TR-ND	3159.00	TK65919MTL
Medium, Optimized for 9nF to 27nF Panel Capacitance	250Hz	TKS3644CT-ND	5.67	4.86	4.05	TKS3644TR-ND	3159.00	TK65923MTL
	350Hz	TKS3645CT-ND	5.67	4.86	4.05	TKS3645TR-ND	3159.00	TK65927MTL
	400Hz	TKS3646CT-ND	5.67	4.86	4.05	TKS3646TR-ND	3159.00	TK65929MTL
Large, Optimized for 15nF to 45nF Panel Capacitance	250Hz	TKS3647CT-ND	5.67	4.86	4.05	TKS3647TR-ND	3159.00	TK65933MTL
	350Hz	TKS3648CT-ND	5.67	4.86	4.05	TKS3648TR-ND	3159.00	TK65937MTL
	400Hz	TKS3649CT-ND	5.67	4.86	4.05	TKS3649TR-ND	3159.00	TK65939MTL

Panasonic

EL Elements for Backlighting Applications

Panasonic's new high brightness EL backlighting sheets are thin and flexible. They may be trimmed to size or cut in almost any shape, making them ideal for many of today's backlighting applications. Multiple terminals around the entire outside edge provide numerous power input options. Terminals can not be soldered to, but may be with conductive epoxy, pressure contacts, or stitched terminals. Requires inverter which is sold separately.

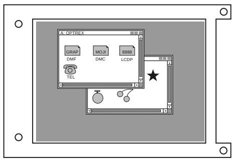
SPECIFICATIONS:
Sheet Size: 120mm x 170mm
Lighted Area: 100mm x 150mm
Rated Input: 100Vrms @ 400Hz
Maximum Input: 120Vrms, 1KHz (100Vrms)
Current Consumption: .3mA/cm^2 max
Normal Operating Temperature: 15°C to 35°C
Maximum Operating Temperature: -30°C to 50°C
Storage Temperature: -30°C to 60°C
Humidity: 25 to 75%
Maximum Bend: 180 degrees, radius of 10mm or more

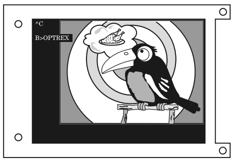


Color On	Color Off	Brightness cd/m^2 (Min)	Digi-Key Part No.	Price Each 1	10	50	Panasonic Part No.
Blue	Milky White	35	P11051-ND	31.63	28.47	26.57	ESPS1111030A
Green	Milky White	45	P11052-ND	31.63	28.47	26.57	ESPS1311030A
White	Pink	30	P11053-ND	31.63	28.47	26.57	ESPS1411030A
Yellow/Orange	Orange	35	P11054-ND	31.63	28.47	26.57	ESPS1511030A
Yellow/Green	Yellow	45	P11055-ND	31.63	28.47	26.57	ESPS1611030A
Red	Red	10	P11056-ND	31.63	28.47	26.57	ESPS1711030A
Blue	White	45	P11057-ND	36.90	33.21	31.00	ESPTL111029A
Green	White	60	P11058-ND	36.90	33.21	31.00	ESPTL311029A
White	Pink	40	P11059-ND	36.90	33.21	31.00	ESPTL411029A
Yellow/Orange	Orange	50	P11060-ND	36.90	33.21	31.00	ESPTL511029A
Yellow/Green	Yellow	65	P11061-ND	36.90	33.21	31.00	ESPTL611029A
Red	Red	15	P11062-ND	36.90	33.21	31.00	ESPTL711029A

OPTREX Supertwist® LCD Graphic Modules

Color Display: 73-1178-ND





Optrex Numbering System

DMF – 50000 N Y U – S E B 1
1 2 3 4 5 6 7 8 9

1.	Type of Display:	Full Dot Matrix
2.	Development Number:	Successive Number (3 digits to 5 digits)
3.	LCD TYPE:	Nil = TN N = STN
4.	Background Color:	Nil = Neutral B = Blue C = Color F = FSTN K = Dark Blue W = DSTN Y = Yellow
5.	Viewing Direction:	Nil = 6:00 U = 12:00 L = 9:00 R = 3:00
6.	Display Mode:	Nil = Reflective, Transmissive with Backlight S = Transflective T = Transmissive without Backlight
7.	Backlight:	Nil = Without Backlight E = EL F = CFL L = LED
8.	Backlight Color:	Nil = Without Backlight B = Blue W = White Y = Yellow
9.	Supplemented Specification:	Successive Number (No. 1 to 99)

FEATURES: • Low voltage drive and low power consumption • Compact, light, and thin • Graphic, Figure, and Character display • STN fluid allows high contrast and wide viewing angle • Large area display like CRT. **APPLICATIONS:** • Personal Computer • Musical Instrument • Word Processor • Electronic Typewriter • Copying Machine • Instrument Device • Telecommunication Equipment • POS Terminal • Fish Finder • Oscillograph • Medical Instrument • Other Peripherals

Controller Needed	Inverter Needed	Dot Pixels W x H	Outline Dim. (mm) W x H x D	Viewing Area (mm) W x H	Dot Size (mm) W x H	Dot Pitch (mm) W x H	Display Type	Digi-Key Part No.*	Price Each 1	Price Each 100	Optrex Part No.
N/A	289-1030-ND	128 x 64	78 x 80 x 10.3	62 x 44	.40 x .56	.44 x .60	EL Backlighting	73-1123-ND	67.34	48.92	DMF-50051N-SEW
Built-in	—	160 x 128	129 x 102 x 12.8	101 x 82	.54 x .54	.58 x .58	LED Backlighting	73-1181-ND	144.26	104.80	DMF-5001NY-LY-AIE
Built-in	73-1113-ND	160 x 128	152 x 112 x 23	101 x 82	.54 x .54	.58 x .58	CFL Backlighting	73-1117-ND	168.38	122.34	DMF-5003NB-FW
Built-in	73-1113-ND	160 x 128	152 x 112 x 23	101 x 82	.54 x .54	.58 x .58	CFL Backlighting	73-1120-ND	171.06	124.28	DMF-5003NF-FW
Built-in	—	240 x 64	180 x 65 x 12	132 x 39	.49 x .49	.53 x .53	Reflective	73-1156-ND	113.14	82.20	DMF-5005N
Built-in	73-1176-ND	240 x 64	180 x 65 x 12	132 x 39	.49 x .49	.53 x .53	EL Backlighting	73-1118-ND	123.92	90.03	DMF-5005N-EB
Built-in	73-1176-ND	240 x 64	180 x 65 x 12	132 x 39	.49 x .49	.53 x .53	EL Backlighting	73-1119-ND	123.92	90.03	DMF-5005N-EW
Built-in	73-1176-ND	240 x 64	180 x 65 x 12	132 x 39	.49 x .49	.53 x .53	EL Backlighting	73-1122-ND	126.62	91.99	DMF-5005NF-SEW
Built-in	—	240 x 64	180 x 65 x 17.6	132 x 39	.49 x .49	.53 x .53	LED Backlighting	73-1157-ND	111.60	81.08	DMF-5005NY-LY-AKE
Built-in	—	240 x 64	180 x 65 x 17.6	132 x 39	.49 x .49	.53 x .53	LED Backlighting	73-1126-ND	129.88	94.37	DMF-5005NYJ-LY
Built-in	73-1007-ND	240 x 64	200 x 66 x 23	132 x 39	.49 x .49	.53 x .53	CFL Backlighting	73-1131-ND	133.92	97.29	DMF-5010NB-FW
Built-in	73-1007-ND	240 x 64	200 x 66 x 23	132 x 39	.49 x .49	.53 x .53	CFL Backlighting	73-1132-ND	156.26	113.52	DMF-5010NBU-FW
Built-in	73-1007-ND	240 x 64	200 x 66 x 23	132 x 39	.49 x .49	.53 x .53	CFL Backlighting	73-1133-ND	158.94	115.47	DMF-5010NF-FW
Built-in	289-1024-ND	240 x 128	170 x 105 x 14	126 x 70	.47 x .47	.50 x .50	CFL Backlighting	73-1197-ND	188.58	137.01	DMF-50773NF-FW
E-1330BA	73-1176-ND	256 x 128	147 x 116 x 12	127 x 70	.43 x .43	.47 x .47	EL Backlighting	73-1145-ND	150.86	109.61	DMF-682ANY-EB
E-1330BA	73-1176-ND	256 x 128	147 x 116 x 12	127 x 70	.43 x .43	.47 x .47	EL Backlighting	73-1144-ND	150.86	109.61	DMF-682ANF-EW
E-1330BA	73-1007-ND	256 x 128	167 x 116 x 24	120.28 x 60.12	.43 x .43	.47 x .47	CFL Backlighting	73-1127-ND	177.80	129.17	DMF-6104NB-FW
E-1330BA	73-1007-ND	256 x 128	167 x 116 x 24	120.28 x 60.12	.43 x .43	.47 x .47	CFL Backlighting	73-1128-ND	180.50	131.14	DMF-6104NF-FW
Built-in	289-1025-ND	240 x 64	180 x 70 x 14	132 x 39	.50 x .50	.53 x .53	CFL Backlighting	73-1188-ND	148.16	107.65	DMF-50316NF-FW-1
E-1330BA	289-1025-ND	320 x 240	139 x 120 x 13.2	95.97 x 71.97	.27 x .27	.30 x .30	CFL Backlighting	73-1184-ND	151.50	110.06	DMF-50081ZNB-FW
N/A	289-1036-ND	320 x 240	147.1 x 127.1 x 12.3	119.0 x 90.0	.09 x .33	.12 x .36	CFL Backlighting	73-1178-ND	425.00	308.76	DMF-50944NCU-FW-1
E-1330BA	289-1025-ND	320 x 240	174 x 112 x 14	122 x 92	.33 x .33	.36 x .36	CFL Backlighting	73-1186-ND	145.48	105.69	DMF-50174ZNB-FW
E-1330BA	289-1025-ND	320 x 240	174 x 112 x 14	122 x 92	.33 x .33	.36 x .36	CFL Backlighting	73-1187-ND	164.34	119.40	DMF-50174ZNF-FW
E-1330BA	289-1024-ND	320 x 240	167.1 x 109 x 11	120 x 90	.33 x .33	.36 x .36	CFL Backlighting	73-1193-ND	126.26	91.74	DMF-50840NB-FW
E-1330BA	289-1024-ND	320 x 240	167.1 x 109 x 11	120 x 90	.33 x .33	.36 x .36	CFL Backlighting	73-1194-ND	133.76	97.18	DMF-50840NF-FW-ABEAU
E-1330BA	289-1026-ND	640 x 200	270 x 142 x 13.5	231 x 105	.32 x .46	.35 x .49	CFL Backlighting	73-1182-ND	390.62	283.80	DMF-50036ZNBU-FW
E-1330BA	289-1026-ND	640 x 200	270 x 142 x 13.5	231 x 105	.32 x .46	.35 x .49	CFL Backlighting	73-1183-ND	404.10	293.58	DMF-50036ZNFU-FW
Inverters for CFL Backlighting (Converts 12 VDC to 900VAC 30 KHz)											
Inverter for use with CFL Backlit Graphic Modules								73-1007-ND	22.51	—	CXAL10L
Inverter for use with CFL Backlit Graphic Modules								73-1115-ND	26.07	—	S-12564
Inverter for use with CFL Backlit Graphic Modules								289-1036-ND	25.76	—	BXA-12565-6M
Inverter for use with CFL Backlit Graphic Modules								289-1027-ND	15.12	—	BXA-24529
Inverters for EL Backlighting (Converts 5 VDC to 100VAC 400 Hz)											
Inverter for use with EL Backlit Graphic Modules								289-1030-ND	12.20	—	NDL-203
Inverter for use with EL Backlit Graphic Modules								289-1031-ND	11.90	—	NDL-204

* Data Sheet sold separately.

Noritake Vacuum Fluorescent Display Modules

VFD OVER LCD ADVANTAGES: • Higher Brightness • Wider Viewing Angle • Wider Temperature Range **FEATURES:** • LCD compatible interface • Same mounting locations as LCD • +5V single power supply • Power save mode (display off) • 4 level brightness control (by code) • 8-bit or 4-bit interface • Wide operating temperature range • 8 user definable fonts • Power consumption similar to LCD with LED backlight • 5mm or 9mm character height • Color: Blue-Green

Pin Connections

Pin No.	Symbol	Pin No.	Symbol
1	Vss	8	DB1
2	Vcc	9	DB2
3	NC	10	DB3
4	RS	11	DB4
5	RW (WR)	12	DB5
6	E (RD)	13	DB6
7	DB0	14	DB7

Display Format	Character Format	Outline Dim. W x H x D (mm)	Viewing Area W x H (mm)	Char. Size W x H (mm)	Dot Size W x H (mm)	Operating Temp. (°C)	Storage Temp. (°C)	Supply Volt. (V)	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 50	Noritake Part No.
16x2	5x7 CURS	80 x 36 x 19.6	51.36 x 11.4	2.46 x 5.46	.38 x .56	-20 to +70	-40 to +85	5	286-1002-ND	54.20	50.14	40.65	CU16025ECPB-U5J
16x2	5x7 CURS	80 x 36 x 19.6	51.36 x 11.4	2.46 x 5.46	.38 x .56	-40 to +85	-50 to +85	5	286-1003-ND	57.80	53.47	43.35	CU16025ECPB-W1J
20x2	5x7 CURS	116 x 37 x 16	70.8 x 11.5	2.4 x 5.4	.4 x .5	-20 to +70	-40 to +85	5	286-1004-ND	58.80	54.39	44.10	CU20025ECPB-U1J
20x2	5x7 CURS	116 x 37 x 16	70.8 x 11.5	2.4 x 5.4	.4 x .5	-40 to +85	-50 to +85	5	286-1005-ND	61.40	56.80	46.05	CU20025ECPB-W1J
20x2	5x7 CURS	146 x 43 x 19	102.6 x 18.8	3.8 x 9.2	.6 x .98	-20 to +70	-40 to +85	5	286-1006-ND	95.80	88.62	71.85	CU20029ECPB-U1J
24x2	5x7 CURS	125 x 36 x 13	85.2 x 11.5	2.4 x 5.4	.4 x .5	-20 to +70	-40 to +85	5	286-1007-ND	65.60	60.68	49.20	CU24025ECPB-U1J
20x4	5x7 Dots	98 x 60 x 17	70.8 x 20.9	2.4 x 4.7	.4 x .5	-20 to +70	-40 to +85	5	286-1008-ND	91.40	84.55	68.55	CU20045SCPB-U2J
40x2	5x7 CURS	182 x 33.5 x 20.5	138.8 x 11.5	2.3 x 5.4	.38 x .5	-20 to +70	-40 to +85	5	286-1009-ND	92.20	85.29	69.15	CU40025SCPB-U1J

Graphics Vacuum Fluorescent Display Modules

GRAPHICS DEVELOPMENT SOFTWARE:

Help for the Development Engineer - Development Software on CD

(Save 80% of the effort to develop new graphics software for Noritake displays)

Includes: • Software Library of Source C Code (see API Library) • DOS demo • Graphics Windowsâ00000 face=Arial size=-1>DOS demo • Graphics Windowsâ, ¢ Demo Application • Font editor • Other useful software

Noritake Display API Library (1.1 Introduction): The Noritake Display API library is a portable C language library of routines which will provide an application programming interface (API) to a user application. This API will allow the user application to call functions to perform useful graphics operations, such as “draw a line”, or “put text”, and will convert these functions to the appropriate bit-level operations for a Noritake VFD display. The library will, in turn, call a lower level interface to actually manipulate the hardware. This I/O access layer will convert the API layer bit-level data to actual hardware I/O accesses.

The primary purpose of this library is to provide Noritake customers with a portable library to allow them to use Noritake VFD displays in their products with a minimum of effort. In order for a customer to port the library to their platform, they must provide, in addition to their application, the I/O Access Layer and the Digtal I/O Hardware. The I/O Access Layer will be just a few simple functions that will allow the hardware to write or read to the command or data port on the VFD display. In the demonstration software, these functions will communicate with a digital I/O board attached to a PC. In a microcontroller-based system, the Digital I/O hardware may consist of simply an address decode, or it could be a couple of latches or buffers and associated address decode logic.

The Display API Library can be broken into four main parts: graphics primitives, text primitives, glyph-based text primitives and display control.

GRAPHICS SOFTWARE DEVELOPMENT KIT:

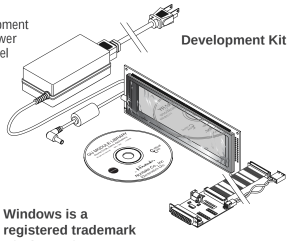
Demonstrate Your Application from Your PC - Easily create text, boxes, lines and freehand drawings:

• Load the Noritake Software onto your Window 95™ or 98 PC • Connect the graphics display to the interface card • Connect the power supply to the interface board • Connect the interface card to your parallel port

Using the Noritake software on your PC: • Download BMP files and illustrate them on the graphics display • Enter text • Create boxes, lines and freehand drawings easily.

Noritake Development Kit Includes: • Noritake Graphics Development Software • Noritake GU256x64-372 Graphics Display • Power Supply • Interface board from display to PC parallel port (parallel port cable not included - recommend AE1012-ND)

Development Kit



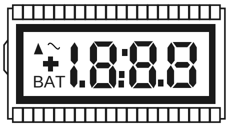
Windows is a registered trademark of Microsoft Corp.

Number Of Dots	Display Char.	Dot Pitch (mm)	Display Area W x H (mm)	PCB Size W x H (mm)	Power (v/mA) (all dots on)	Operating Temp. (°C)	Storage Temp. (°C)	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 50	Noritake Part No.
Graphic Vacuum Fluorescent Display Modules												
256x64	8x42	0.65x0.65	166.3x41.50	222x78	5.0/2000	-20 to +70	-40 to +85	286-1010-ND	300.40	277.87	225.30	GU256X64-372
128x32	4x21	0.65x0.65	83.05x20.65	130x38.5	5.0/450	-40 to +85	-40 to +85	286-1011-ND	128.20	118.59	96.15	GU128X32-800
128x64	8x21	0.65x0.65	83.05x41.45	140x68	5.0/750	-40 to +85	-40 to +85	286-1012-ND	159.60	147.63	119.70	GU128X64-800
256x32	4x42	0.65x0.65	166.25x20.65	220x50	5.0/650	-40 to +85	-40 to +85	286-1013-ND	163.80	151.52	122.85	GU256X32-800
Graphics Development Kit Without Display								286-1015-ND	200.00	185.00	150.00	GUD-ND
Graphics Software On CD-ROM								286-1016-ND	25.00	23.13	18.75	GUCD-1.0

Varitronix Limited LCDs

Reflective and Transflective

(Transflective Denoted by
“FC” in Varitronix Part No.)



- Long Life/High Reliability
- Excellent Optical Quality
- High Contrast Ratio
- Wide Viewing Angle
- Large Useful Viewing Area
- Fast Response
- Low Power Consumption
- Data Sheet Included

Electrical and Optical Characteristics

	Static	HV†	Units
Oper. Temp. Range	-10°–+60°	-10°–+60°	°C
Oper. Voltage, RMS	3.0	3.9 - 4.7	V-RMS
Drive Frequency	30-300	60-300	Hz
Current Consumption	15	15	nA/mm²
Turn-On Time	120	80	ms
Turn-Off Time	100	80	ms

Format	Digit Size (mm)	No. Of Digits	Type (mm)	Conn. No. Of Pins	Dual Row Spacing (mm)	Driver IC’s (Not Included) (Applies to both P/N)	LED Black-light	Matching Bezel ‡	Digi-Key Part No.	Price Each 1	5	10	Varitronix Part No.
.8.8	12.70	2	2.54 Dip	18	33.02	4543B(2)	—	PRD180LPW-ND	153-1003-ND	4.30	3.98	3.57	VI-201-DP-RC-S
							—	PRD180LPW-ND	153-1002-ND*	4.50	4.17	3.74	VI-201-DP-FC-S
▲∼ + BAT 1.8:8.8	12.70	3 1/2	2.54 Dip	40	33.02	4543B(4)	—	PRD180LP-ND	153-1005-ND	5.70	5.28	4.74	VI-322-DP-RC-S
							1	PRD180LP-ND	153-1004-ND*	6.80	6.29	5.65	VI-322-DP-FC-S
▲ 8.8:8.8	12.70	4	2.54 Dip	40	33.02	4543B(4)	—	PRD180LP-ND	153-1007-ND	5.70	5.28	4.74	VI-422-DP-RC-S
							1	PRD180LP-ND	153-1006-ND*	6.80	6.29	5.65	VI-422-DP-FC-S
← ± 1.8:8:8.8	10.16	4 1/2	2.54 Dip	40	33.02	4543B(5)	—	PRD180LP-ND	153-1009-ND	5.70	5.28	4.74	VI-502-DP-RC-S
							1	PRD180LP-ND	153-1008-ND*	6.80	6.29	5.65	VI-502-DP-FC-S
8.8:8.8:8.8	12.70	6	2.54 Dip	50	33.02	4543B(6)	—	PRD250LP-ND	153-1011-ND	9.30	8.61	7.72	VI-602-DP-RC-S
							2	PRD250LP-ND	153-1010-ND*	11.30	10.46	9.38	VI-602-DP-FC-S
8.8:8.8:8.8:8.8	12.70	8	2.54 Dip	68	33.02	4543B(8)	—	PRD360LP-ND	153-1013-ND	13.20	12.21	10.96	VI-804-DP-RC-S
							3	PRD360LP-ND	153-1012-ND*	15.10	13.97	12.54	VI-804-DP-FC-S
▲∼ + BAT 1.8:8.8	17.78	3 1/2	2.54 Dip	40	40.64	4543B(4)	—	N/A	153-1015-ND	10.50	9.72	8.72	VI-319-DP-RC-S
							2	N/A	153-1014-ND*	14.30	13.23	11.87	VI-319-DP-FC-S
8.8:8.8	17.78	4	2.54 Dip	40	40.64	4543B(4)	—	N/A	153-1017-ND	11.80	10.92	9.80	VI-415-DP-RC-S
							2	N/A	153-1016-ND*	14.30	13.23	11.87	VI-415-DP-FC-S
8:8:8.8.8	10.16	5	2.54 Dip	40	33.02	4543B(5)	—	PRD180LP-ND	153-1019-ND	5.70	5.28	4.74	VI-508-DP-RC-S
							2	PRD180LP-ND	153-1018-ND*	6.80	6.29	5.65	VI-508-DP-FC-S
8.8:8.8:8.8	17.78	6	2.54 Dip	50	40.64	4543B(6)	—	N/A	153-1021-ND	15.70	14.53	13.04	VI-607-DP-RC-S
							3	N/A	153-1020-ND*	19.80	18.32	16.44	VI-607-DP-FC-S
LO BAT ± 1.8:8.8	12.70	3 1/2	2.54 Dip	40	33.02	4543B(4)	—	PRD180LP-ND	153-1023-ND	5.70	5.28	4.74	VI-302-DP-RC-S
							1	PRD180LP-ND	153-1022-ND*	6.80	6.29	5.65	VI-302-DP-FC-S
LO BAT ± 1.8:8:8.8	10.16	4 1/2	2.54 Dip	40	33.02	4543B(5)	—	PRD180LP-ND	153-1025-ND	5.70	5.28	4.74	VI-509-DP-RC-S
							1	PRD180LP-ND	153-1024-ND*	6.80	6.29	5.65	VI-509-DP-FC-S
8.8.8.8	12.70	4	2.54 Dip	20	33.02	—	—	PRD180LP-ND	153-1046-ND†	6.40	5.92	5.32	VIM-404-DP-RC-S-H
							2	PRD180LP-ND	153-1047-ND†*	6.80	6.29	5.65	VIM-404-DP-FC-S-HV
LOW BATTERY CONTINUITY -1.8.8.8.8	10.16	4 1/2	2.54 Dip	15	33.02	ICL7129A	—	PRD180LP-ND	153-1054-ND†	5.90	5.46	4.90	VIM-503-DP-RC-S-HV
							2	PRD180LP-ND	153-1055-ND†*	6.80	6.29	5.65	VIM-503-DP-FC-S-HV
8.8:8.8:8.8:8.8	12.70	8	2.54 Dip	42	33.02	—	—	PRD360LP-ND	153-1056-ND†	11.70	10.83	9.72	VIM-808-DP-RC-S-HV
							3	PRD360LP-ND	153-1057-ND†*	17.00	15.73	14.11	VIM-808-DP-FC-S-HV

‡ Bezels can be found under PRD Plastics in the manufacture index. † Multiplexed Display * Transflective

Backlight For Transflective LCDs

LED Backlight	Overall Size (mm) L x W x H	Active Size (mm) LE x WE	Forward Current mA at 4.1V Typ.	Max.	Digi-Key Part No.	Price Each 1	5	10	Varitronix Part No.
1	565 x 19.5 x 3.5	49 x 12	70	140	153-1026-ND	7.30	6.76	6.06	LED4-16264
2	75 x 26.6 x 3.8	60 x 22	135	270	153-1027-ND	11.20	10.36	9.30	LED4-20464B
3	94 x 24 x 4	84 x 19	180	360	153-1028-ND	9.50	8.79	7.89	LED4-20265

Varitronix Limited LCD Modules

Display Format	Matching Bezel ‡	Character Format	Outline Dim. (mm) W x H x D	Display Area Dim. (mm) W x H	Character Size (mm) W x H	Operating Temp. (°C)	Storage Temp. (°C)	Supply Voltage (V)	Digi-Key Part No.	Price Each 1	5	10	Varitronix Part No.
Standard LCD Module (Data Book Sold Separately)													
16 x 1	PRD250LPW1-ND	5 x 8 dots	80 x 36 x 11	64.5 x 13.8	3.15 x 6.30	-5° to +50°	-20° to +60°	5	153-1031-ND	17.40	16.10	14.45	MDL-16166-LV
16 x 2	PRD250LPW-ND	5 x 8 dots	84 x 44 x 10	61.0 x 15.8	2.95 x 5.55	-5° to +50°	-20° to +60°	5	153-1036-ND	20.50	18.97	17.02	MDL-16265-LV
24 x 2	PRD360LPW1-ND	5 x 8 dots	118 x 36 x 10	93.5 x 15.8	3.2 x 5.15	-5° to +50°	-20° to +60°	5	153-1041-ND	33.10	30.62	27.48	MDL-24265-LV
Supertwist LCD Module (Data Book Sold Separately)													
8 x 1	PRD250LPW-ND	5 x 8 dots	84 x 44 x 11	61.0 x 15.8	6.45 x 10.75	-5° to +50°	-20° to +60°	5	153-1029-ND	24.60	22.76	20.42	MDLS-81809-LV-G
16 x 1	PRD250LPW1-ND	5 x 8 dots	80 x 36 x 11	64.5 x 13.8	3.15 x 6.30	-5° to +50°	-20° to +60°	5	153-1032-ND	17.90	16.56	14.86	MDLS-16166-LV-G
16 x 2	PRD250LPW-ND	5 x 8 dots	84 x 44 x 10	61.0 x 15.8	2.95 x 5.55	-5° to +50°	-20° to +60°	5	153-1037-ND	21.40	19.80	17.77	MDLS-16265-LV-G
16 x 4	N/A	5 x 8 dots	87 x 60 x 10	61.8 x 25.2	2.95 x 4.75	-5° to +50°	-20° to +60°	5	153-1048-ND	49.00	45.33	40.67	MDLS-16465-LV-G
20 x 1	N/A	5 x 8 dots	182 x 33.5 x 11	154 x 15.3	6.7 x 11.50	-5° to +50°	-20° to +60°	5	153-1034-ND	52.90	48.94	43.91	MDLS-20189-LV-G
20 x 2	PRD360LPW-ND	5 x 8 dots	116 x 37 x 11	83.0 x 18.6	3.2 x 5.55	-5° to +50°	-20° to +60°	5	153-1039-ND	32.60	30.16	27.06	MDLS-20265-LV-G
20 x 4	N/A	5 x 8 dots	98 x 60 x 12	76.0 x 25.2	2.95 x 4.75	-5° to +50°	-20° to +60°	5	153-1051-ND	47.40	43.85	39.35	MDLS-20464-LV-G
24 x 2	PRD360LPW1-ND	5 x 8 dots	118 x 36 x 10	93.5 x 15.8	3.2 x 5.15	-5° to +50°	-20° to +60°	5	153-1042-ND	35.00	32.38	29.05	MDLS-24265-LV-G
40 x 2	N/A	5 x 8 dots	182 x 33.5 x 11	154.0 x 15.8	3.15 x 5.50	-5° to +50°	-20° to +60°	5	153-1044-ND	53.00	49.03	43.99	MDLS-40266K-LV-G
40 x 2	N/A	5 x 8 dots	182 x 33.5 x 11	154.0 x 15.8	3.15 x 5.50	-5° to +50°	-20° to +60°	5	153-1067-ND	56.80	52.54	47.15	MDLS-40266-LV-G
40 x 4	N/A	5 x 8 dots	196 x 56 x 11	154.4 x 27.6	3.15 x 6.30	-5° to +50°	-20° to +60°	+5/-5	153-1052-ND	96.00	88.80	79.68	MDLS-40466-G-HV
Supertwist LCD Module w/LED Backlighting (Data Book Sold Separately)													
8 x 1	PRD250LPW-ND	5 x 8 dots	84 x 44 x 15.2	61.0 x 15.8	6.45 x 10.75	-5° to +50°	-20° to +60°	5	153-1030-ND*	34.10	31.55	28.31	MDLS-81809-LV-G-LED-04
16 x 1	PRD250LPW1-ND	5 x 8 dots	80 x 36 x 14.2	64.5 x 13.8	3.15 x 6.30	-5° to +50°	-20° to +60°	5	153-1033-ND*	24.50	22.67	20.34	MDLS-16166-LV-G-LED-04
16 x 2	PRD250LPW-ND	5 x 8 dots	84 x 44 x 13	61.0 x 15.8	2.95 x 5.55	-5° to +50°	-20° to +60°	5	153-1038-ND	28.80	26.64	23.91	MDLS16265LVGLED4G14
16 x 2	PRD250LPW-ND	5 x 8 dots	84 x 44 x 13	61.0 x 15.8	2.95 x 5.55	-5° to +50°	-20° to +60°	5	153-1072-ND†	28.80	26.64	23.91	MDLS16265LVGLED4G16
16 x 4	N/A	5 x 8 dots	87 x 60 x 13	61.8 x 25.2	2.95 x 4.75	-5° to +50°	-20° to +60°	5	153-1049-ND*	57.90	53.56	48.06	MDLS-16465-LV-G-LED-04
20 x 1	N/A	5 x 8 dots	182 x 33.5 x 13.3	154 x 15.3	6.7 x 11.50	-5° to +50°	-20° to +60°	5	153-1071-ND*	69.00	63.83	57.27	MDLS-20189-LV-G-LED-04
20 x 2	PRD360LPW-ND	5 x 8 dots	116 x 37 x 14.4	83.0 x 18.6	3.2 x 5.55	-5° to +50°	-20° to +60°	5	153-1040-ND*	41.60	38.48	34.53	MDLS-20265-LV-G-LED-04
20 x 4	N/A	5 x 8 dots	98 x 60 x 14.8	76.0 x 25.2	2.95 x 4.75	-5° to +50°	-20° to +60°	5	153-1050-ND*	57.90	53.56	48.06	MDLS-20464-LV-G-LED4G
24 x 2	PRD360LPW1-ND	5 x 8 dots	118 x 36 x 13.4	93.5 x 15.8	3.2 x 5.15	-5° to +50°	-20° to +60°	5	153-1043-ND*	47.30	43.76	39.26	MDLS-24265-LV-G-LED-04
40 x 2	N/A	5 x 8 dots	182 x 33.5 x 15.04	154.0 x 15.8	3.15 x 5.50	-5° to +50°	-20° to +60°	5	153-1045-ND	70.70	65.40	58.69	MDLS-40266-LV-G-LED4G
40 x 4	N/A	5 x 8 dots	196 x 56 x 16	154.4 x 27.6	3.15 x 6.30	-5° to +50°	-20° to +60°	+5/-5	153-1053-ND	117.80	108.97	97.78	MDLS-40466-GHVLED4G

* The LED chips are distributed over the whole lit area, bonded in a pattern which gives the most uniform illumination. Power connection is made by two solder holes, marked "A" for +5V and "K" for Ground.
‡ Bezels can be found under PRD Plastics in the manufacture index.
† 16 Pin Version

SenSym ICT Solid State Pressure Sensors

For use in medical equipment, pneumatic controls, computer peripherals and pressure instrumentation, process and flow control.

Fig. 1 — Sensor AMP

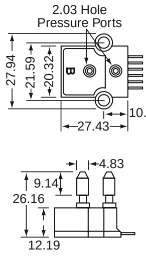


Fig. 2 — SDX A4, D4

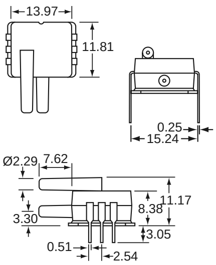


Fig. 3 — SDX A2/G2/D2

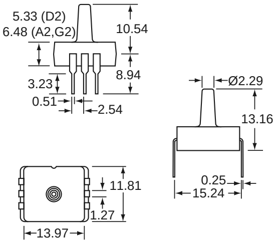
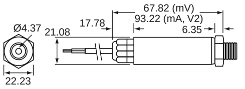


Fig. 4 — Pigtail



Note: 4-Conductor Cable. 24 AWG conductors shielded with drain wire 24" (61cm) long.

Fig. 5 — Button Sensor

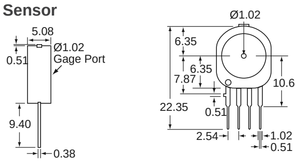
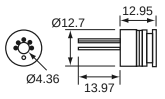


Fig.	Pressure	Pressure Type	Output	Pkg.	Supply (VDC)	Response Time*	Operating Temp.	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 100	SenSym ICT Part No.
Signal Conditioned Pressure Sensors												
1	0-1 PSID	Differential/Gage	0.25 to 4.5V	SIP	+4.5 to +16	100µSec	-25°C to +105°C	287-1002-ND	47.70	34.20	27.50	ASCX01DN
	0-5 PSID	Differential/Gage	0.25 to 4.5V	SIP	+4.5 to +16	100µSec	-25°C to +105°C	287-1003-ND	47.70	34.20	27.50	ASCX05DN
	0-15 PSIA	Absolute	0.25 to 4.5V	SIP	+4.5 to +16	100µSec	-25°C to +105°C	287-1008-ND	47.70	34.20	27.50	ASCX15AN
	0-15 PSID	Differential/Gage	0.25 to 4.5V	SIP	+4.5 to +16	100µSec	-25°C to +105°C	287-1009-ND	47.70	34.20	27.50	ASCX15DN
	0-30 PSIA	Absolute	0.25 to 4.5V	SIP	+4.5 to +16	100µSec	-25°C to +105°C	287-1010-ND	47.70	34.20	27.50	ASCX30AN
	0-30 PSID	Differential/Gage	0.25 to 4.5V	SIP	+4.5 to +16	100µSec	-25°C to +105°C	287-1011-ND	47.70	34.20	27.50	ASCX30DN
	0-100 PSIA	Absolute	0.25 to 4.5V	SIP	+4.5 to +16	100µSec	-25°C to +105°C	287-1004-ND	47.70	34.20	27.50	ASCX100AN
	0-100 PSID	Differential/Gage	0.25 to 4.5V	SIP	+4.5 to +16	100µSec	-25°C to +105°C	287-1005-ND	47.70	34.20	27.50	ASCX100DN
	0-150 PSIA	Absolute	0.25 to 4.5V	SIP	+4.5 to +16	100µSec	-25°C to +105°C	287-1006-ND	47.70	34.20	27.50	ASCX150AN
	0-150 PSID	Differential/Gage	0.25 to 4.5V	SIP	+4.5 to +16	100µSec	-25°C to +105°C	287-1007-ND	47.70	34.20	27.50	ASCX150DN
Precision Compensated Pressure Sensors												
1	0-1 PSID	Differential/Gage	0-18mV	SIP	+20	100µSec	-40°C to +85°C	287-1017-ND	54.90	36.30	34.66	SCX01DN
	0-5 PSID	Differential/Gage	0-60mV	SIP	+20	100µSec	-40°C to +85°C	287-1018-ND	44.70	31.70	28.36	SCX05DN
	0-15 PSIA	Absolute	0-90mV	SIP	+20	100µSec	-40°C to +85°C	287-1023-ND	44.70	31.70	28.36	SCX15AN
	0-15 PSID	Differential/Gage	0-90mV	SIP	+20	100µSec	-40°C to +85°C	287-1024-ND	44.70	31.70	28.36	SCX15DN
	0-30 PSIA	Absolute	0-90mV	SIP	+20	100µSec	-40°C to +85°C	287-1025-ND	44.70	31.70	28.36	SCX30AN
	0-30 PSID	Differential/Gage	0-90mV	SIP	+20	100µSec	-40°C to +85°C	287-1026-ND	44.70	31.70	28.36	SCX30DN
	0-100 PSIA	Absolute	0-100mV	SIP	+20	100µSec	-40°C to +85°C	287-1019-ND	54.90	36.30	34.66	SCX100AN
	0-100 PSID	Differential/Gage	0-100mV	SIP	+20	100µSec	-40°C to +85°C	287-1020-ND	54.90	36.30	34.66	SCX100DN
	0-150 PSIA	Absolute	0-90mV	SIP	+20	100µSec	-40°C to +85°C	287-1021-ND	54.90	36.30	34.66	SCX150AN
	0-150 PSID	Differential/Gage	0-90mV	SIP	+20	100µSec	-40°C to +85°C	287-1022-ND	54.90	36.30	34.66	SCX150DN
	0-4" H2O	WC	0.5 to 4.5V	SIP	+18	500µSec	0°C to 70°C	287-1027-ND	78.80	57.80	41.70	SCXL004DN
2	0-1 PSID	Differential/Gage	0-18mV	DIP	+20	100µSec	-40°C to +85°C	287-1028-ND	25.00	19.43	17.02	SDX01D4
	0-5 PSID	Differentia/Gage	0-60mV	DIP	+20	100µSec	-40°C to +85°C	287-1030-ND	25.00	19.43	17.02	SDX05D4
	0-15 PSIA	Absolute	0-90mV	DIP	+20	100µSec	-40°C to +85°C	287-1037-ND	25.00	19.43	17.02	SDX15A4
	0-15 PSID	Differential/Gage	0-90mV	DIP	+20	100µSec	-40°C to +85°C	287-1038-ND	25.00	19.43	17.02	SDX15D4
	0-30 PSIA	Absolute	0-90mV	DIP	+20	100µSec	-40°C to +85°C	287-1041-ND	25.00	19.43	17.02	SDX30A4
	0-30 PSID	Differential/Gage	0-90mV	DIP	+20	100µSec	-40°C to +85°C	287-1042-ND	25.00	19.43	17.02	SDX30D4
	0-100 PSIA	Absolute	0-100mV	DIP	+20	100µSec	-40°C to +85°C	287-1033-ND	25.00	19.43	17.02	SDX100A4
	0-100 PSID	Differential/Gage	0-100mV	DIP	+20	100µSec	-40°C to +85°C	287-1034-ND	25.00	19.43	17.02	SDX100D4
	0-5" H2O	WC	0-25mV	DIP	+20	100µSec	-40°C to +85°C	287-1044-ND	42.60	32.18	30.24	SDXL005D4
	0-10" H2O	WC	0-25mV	DIP	+20	100µSec	-40°C to +85°C	287-1045-ND	42.60	32.18	30.24	SDXL010D4
3	0-1 PSIG	Gage	0-18mV	DIP	+20	100µSec	-40°C to +85°C	287-1029-ND	25.00	19.43	17.02	SDX01G2
	0-5 PSIG	Gage	0-60mV	DIP	+20	100µSec	-40°C to +85°C	287-1031-ND	25.00	19.43	17.02	SDX05G2
	0-15 PSIA	Absolute	0-90mV	DIP	+20	100µSec	-40°C to +85°C	287-1036-ND	25.00	19.43	17.02	SDX15A2
	0-15 PSIG	Gage	0-90mV	DIP	+20	100µSec	-40°C to +85°C	287-1039-ND	25.00	19.42	17.02	SDX15G2
	0-30 PSIA	Absolute	0-90mV	DIP	+20	100µSec	-40°C to +85°C	287-1040-ND	25.00	19.43	17.02	SDX30A2
	0-30 PSIG	Gage	0-90mV	DIP	+20	100µSec	-40°C to +85°C	287-1043-ND	25.00	19.43	17.02	SDX30G2
	0-100 PSIA	Absolute	0-100mV	DIP	+20	100µSec	-40°C to +85°C	287-1032-ND	25.00	19.43	17.02	SDX100A2
	0-100 PSIG	Gage	0-100mV	DIP	+20	100µSec	-40°C to +85°C	287-1035-ND	25.00	19.43	17.02	SDX100G2
Calibrated and Temperature Compensated Steel Sensors												
4	0-5 PSIG	Gage	1-6VDC	Steel 1/4" (6.35mm) 18NPT (Male) 2" (61cm) Pigtail Electrical Connection	+10 to +30	100µSec	-40°C to +125°C	287-1046-ND	144.86	109.85	—	STIV20005G2A
	0-5 PSIG	Gage	4-20mA		+10 to +30	100µSec	-40°C to +125°C	287-1052-ND	144.86	109.85	—	STIMA0005G2A
	0-5 PSIG	Gage	0-100mV		+2.5 to +16	100µSec	-40°C to +125°C	287-1058-ND	123.26	93.47	—	STIMV0005G2A
	0-15 PSIG	Gage	4-20mA		+10 to +30	100µSec	-40°C to +125°C	287-1053-ND	144.86	109.85	—	STIMA0015G2A
	0-15 PSIG	Gage	0-100mV		+2.5 to +16	100µSec	-40°C to +125°C	287-1059-ND	123.26	93.47	—	STIMV0015G2A
	0-30 PSIG	Gage	1-6VDC		+10 to +30	100µSec	-40°C to +125°C	287-1048-ND	144.86	109.85	—	STIV20030G2A
	0-30 PSIG	Gage	0-100mV		+2.5 to +16	100µSec	-40°C to +125°C	287-1060-ND	123.26	93.47	—	STIMV0030G2A
	0-100 PSIG	Gage	0-100mV		+2.5 to +16	100µSec	-40°C to +125°C	287-1061-ND	123.26	93.47	—	STIMV0100G2A
	0-300 PSIG	Gage	1-6VDC		+10 to +30	100µSec	-40°C to +125°C	287-1050-ND	144.86	109.85	—	STIV20300G2A
	0-300 PSIG	Gage	4-20mA		+10 to +30	100µSec	-40°C to +125°C	287-1056-ND	144.86	109.85	—	STIMA0300G2A
	0-300 PSIG	Gage	0-100mV		+2.5 to +16	100µSec	-40°C to +125°C	287-1062-ND	123.26	93.47	—	STIMV0300G2A
	0-500 PSIG	Gage	1-6VDC		+10 to +30	100µSec	-40°C to +125°C	287-1051-ND	144.86	109.85	—	STIV20500G2A
	0-500 PSIG	Gage	4-20mA		+10 to +30	100µSec	-40°C to +125°C	287-1057-ND	144.86	109.85	—	STIMA0500G2A
	0-500 PSIG	Gage	0-100mV		+2.5 to +16	100µSec	-40°C to +125°C	287-1063-ND	123.26	93.47	—	STIMV0500G2A
High-Impedance Bridge Sensors												
2	0-1 PSID	Differential	0-20mV	DIP	+12	100µSec	-40°C to +85°C	287-1065-ND	23.30	16.70	14.20	SX01DD4
	0-5 PSID	Differential	0-75mV	DIP	+12	100µSec	-40°C to +85°C	287-1068-ND	18.90	13.20	12.30	SX05DD4
	0-15 PSIA	Absolute	0-110mV	DIP	+12	100µSec	-40°C to +85°C	287-1080-ND	18.90	13.20	12.30	SX15AD4
	0-15 PSID	Differential	0-110mV	DIP	+12	100µSec	-40°C to +85°C	287-1082-ND	18.90	13.20	12.30	SX15DD4
	0-30 PSIA	Absolute	0-110mV	DIP	+12	100µSec	-40°C to +85°C	287-1086-ND	18.90	13.20	12.30	SX30AD4
	0-30 PSID	Differential	0-110mV	DIP	+12	100µSec	-40°C to +85°C	287-1088-ND	18.90	13.20	12.30	SX30DD4
	0-100 PSIA	Absolute	0-150mV	DIP	+12	100µSec	-40°C to +85°C	287-1072-ND	23.30	16.70	14.20	SX100AD4
	0-100 PSID	Differential	0-150mV	DIP	+12	100µSec	-40°C to +85°C	287-1074-ND	23.30	16.70	14.20	SX100DD4
3	0-1 PSIG	Gage	0-20mV	DIP	+12	100µSec	-40°C to +85°C	287-1066-ND	25.50	21.00	15.20	SX01GD2
	0-5 PSIG	Gage	0-75mV	DIP	+12	100µSec	-40°C to +85°C	287-1069-ND	22.10	16.20	12.30	SX05GD2
	0-15 PSIA	Absolute	0-110mV	DIP	+12	100µSec	-40°C to +85°C	287-1079-ND	18.90	13.20	12.30	SX15AD2
	0-15 PSIG	Gage	0-110mV	DIP	+12	100µSec	-40°C to +85°C	287-1083-ND	18.90	13.20	12.30	SX15GD2
	0-30 PSIA	Absolute	0-110mV	DIP	+12	100µSec	-40°C to +85°C	287-1085-ND	18.90	13.20	12.30	SX30AD2
	0-30 PSIG	Gage	0-110mV	DIP	+12	100µSec	-40°C to +85°C	287-1089-ND	18.90	13.20	12.30	SX30GD2
	0-100 PSIA	Absolute	0-150mV	DIP	+12	100µSec	-40°C to +85°C	287-1071-ND	23.30	16.70	14.20	SX100AD2
	0-100 PSIG	Gage	0-150mV	DIP	+12	100µSec	-40°C to +85°C	287-1075-ND	23.30	16.70	14.20	SX100GD2
5	0-1 PSID	Differential	0-20mV	Button	+12	100µSec	-40°C to +85°C	287-1064-ND	23.30	16.70	14.20	SX01D
	0-5 PSID	Differential	0-75mV	Button	+12	100µSec	-40°C to +85°C	287-1067-ND	18.90	13.20	12.30	SX05D
	0-15 PSID	Differential	0-110mV	Button	+12	100µSec	-40°C to +85°C	287-1081-ND	18.90	13.20	12.30	SX15D
	0-15 PSIA	Absolute	0-110mV	Button	+12	100µSec	-40°C to +85°C	287-1078-ND	18.90	13.20	12.30	SX15A
	0-30 PSID	Differential	0-110mV	Button	+12	100µSec	-40°C to +85°C	287-1087-ND	18.90	13.20	12.30	SX30D
	0-30 PSIA	Absolute	0-110mV	Button	+12	100µSec	-40°C to +85°C	287-1084-ND	18.90	13.20	12.30	SX30A
	0-100 PSIA	Absolute	0-150mV	Button	+12	100µSec	-40°C to +85°C	287-1070-ND	23.30	16.70	14.20	SX100A
	0-100 PSID	Differential	0-150mV	Button	+12	100µSec	-40°C to +85°C	287-1073-ND	23.30	16.70	14.20	SX100D
	0-150 PSIA	Absolute	0-110mV	Button	+12	100µSec	-40°C to +85°C	287-1076-ND	23.30	16.70	14.20	SX150A
	0-150 PSID	Differential	0-110mV	Button	+12	100µSec	-40°C to +85°C	287-1077-ND	23.30	16.70	14.20	SX150D
Handbook								287-1001-ND	5.00	—	—	DA-B-7/96-15K

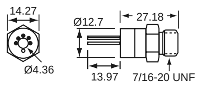
SenSym ICT

Stainless Steel Isolated Pressure Sensors & Compensated Sensors

13mm Cell Package

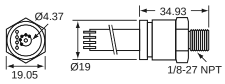


13mm Ported Male Package



Note: Ø 0.22" ±0.001" (0.56mm ±0.03mm) Pins on Ø 0.230" (5.84mm) pin circle.

19mm 1/8" (3.18mm)27 NPT Male Port Package



Note: 2" (50.8mm) NOMEX ribbon cable with 0.100" (2.54mm) pin spacing (24 AWG wire size).

Pressure	Pressure Type	Output	Package	Max. Supply (VDC)	Response Time*	Operating Temp.	Digi-Key Part No.	Price Each 1	10	25	SenSym ICT Part No.
Sensors — 13mm Steel											
0-1000 PSIA	Absolute	0-200mV	Male Port	+12	100µSec	-40°C to +125°C	287-1302-ND	55.00	42.50	35.00	13U1000AM
0-5000 PSIA	Absolute	0-200mV	Cell	+12	100µSec	-40°C to +125°C	287-1305-ND	60.00	47.00	39.00	13U5000AC
Calibrated Compensated Sensors — 19mm Steel											
0-15 PSIG	Gage	0-100mV		+15	100µSec	-40°C to +125°C	287-1902-ND	72.00	63.00	54.60	19C015G4
0-30 PSIG	Gage	0-100mV		+15	100µSec	-40°C to +125°C	287-1904-ND	72.00	63.00	54.60	19C030G4
0-50 PSIA	Absolute	0-100mV		+15	100µSec	-40°C to +125°C	287-1905-ND	72.00	63.00	54.60	19C050A4
0-50 PSIG	Gage	0-100mV	1/8"	+15	100µSec	-40°C to +125°C	287-1906-ND	72.00	63.00	54.60	19C050G4
0-100 PSIA	Absolute	0-100mV	(3.18mm)	+15	100µSec	-40°C to +125°C	287-1907-ND	72.00	63.00	54.60	19C100A4
0-100 PSIG	Gage	0-100mV	27NPT	+15	100µSec	-40°C to +125°C	287-1908-ND	72.00	63.00	54.60	19C100G4
0-200 PSIG	Gage	0-100mV	Male Port	+15	100µSec	-40°C to +125°C	287-1910-ND	72.00	63.00	54.60	19C200G4
0-500 PSIG	Gage	0-100mV		+15	100µSec	-40°C to +125°C	287-1914-ND	72.00	63.00	54.60	19C500G4

* Response time for a 0 psi to full scale span pressure step change, 10% to 90% rise time.

Accelerometers – PC Board Mountable

Description:

These piezoresistive silicon accelerometers consist of a micro machined silicon mass suspended by multiple beams from a silicon frame. Piezoresistors located in the beams change their resistance as the motion of the suspended mass changes the strain in the beams. Silicon caps on the top and bottom of the devices are added to provide over-range stops. This design provides for a very low profile, high shock resistance, durability and built-in damping over a wide usable bandwith.

Features:

• ±0.5% Non-linearity, (typ.), ±2% max. (Best fit straight line; for full scale range of 10g or less) • DC Response • Built-in damping • Built-in overrange stops • Low power

Model 3031 - Surface Mount

A piezoresistive silicon accelerometer intended for high volume applications where small size, light weight, and low cost are required.

Specifications:

• ±1.0% Temp. Performance (with comp resistors, typical) • Supply: 5.0 VDC (typ.) • Operating Temperature: -40°C to +125°C

Model 3022 - Adhesive Mount

A piezoresistive silicon accelerometer packaged on a ceramic substrate with an epoxy sealed ceramic cover and is designed for adhesive mounting.

Specifications:

• ±1.0% Temperature Performance (with comp resistors, typical) • Supply (typ.): 5.0 VDC • Operating Temperature: -40°C to +125°C

Model 3052 - Adhesive Mount

A piezoresistive silicon accelerometer with integral temperature compensation packaged on a ceramic substrate with an epoxy sealed ceramic cover and is designed for adhesive mounting.

Specifications:

• ±1.0% Temp. Performance (typ.) • Supply (typ.): 5.0 VDC • Operating Temperature: -40°C to +125°C

Model 3140 - Bolt Mount

A high performance accelerometer intended for instrumentation applications provides a fully signal conditioned output with performance similar to traditional instrumentation accelerometers but at a much lower cost.

The accelerometer consists of a silicon micro machined accelerometer with signal conditioning electronics in a lightweight Valox™ housing that can be easily attached to a mounting surface. The sensing element is a micro machined silicon mass suspended by multiple beams from a silicon frame.

Specifications:

• ±2.0% Temperature Performance • Supply (typ.) 12 VDC @ 5mA • Operating Temperature: -20°C to +85°C

Fig. 1 — Model 3031

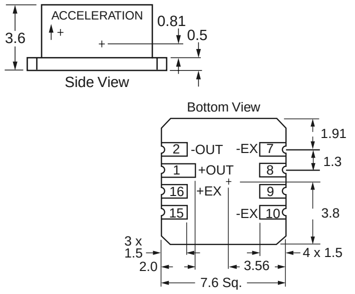
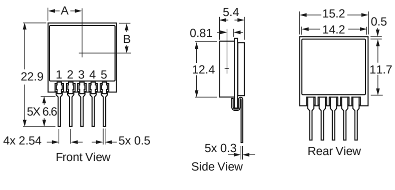
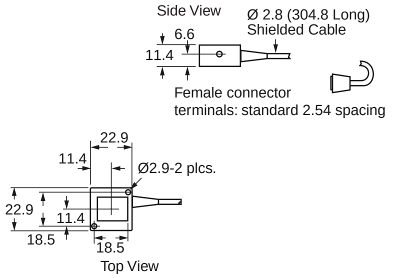


Fig. 2 — Models 3022 and 3052



Dim. (mm)	A	B
2g to 10g	7.62	6.35
20g to 500g	6.73	6.10

Fig. 3 — Model 3140



Side View
Ø 2.8 (304.8 Long) Shielded Cable
6.6
11.4
Female connector terminals: standard 2.54 spacing
22.9
11.4
Ø2.9-2 plcs.
22.9
11.4
18.5
18.5
Top View

Dimensions in mm

Fig	Acceleration Range	Sensitivity (Min/Max)	Acceleration Output Max	Digi-Key Part No.	Price Each 1	10	100	MSI Part No.
1	±0-50 G	0.6/1.5 mV/g	±25.0mV	MSP6869-ND	77.00	74.00	42.00	3031-050
2	±2 G	8.0.20.0 mV/g	±25.0mV	MSP6871-ND	150.00	108.00	80.00	3022-002-P
	±5 G	6.0/15.0 mV/g	±25.0mV	MSP6872-ND	150.00	108.00	80.00	3022-005-P
	±10 G	3.0/6.0 mV/g	±25.0mV	MSP6873-ND	150.00	108.00	80.00	3022-010-P
	±50 G	0.6/1.5 mV/g	±25.0mV	MSP6875-ND	123.00	95.00	65.01	3022-050-P
	±100 G	0.3/0.6 mV/g	±25.0mV	MSP6876-ND	123.00	95.00	65.01	3022-100-P
2	±2 G	6.0/9.0 mV/g*	±2mV	MSP6877-ND	195.00	136.00	102.00	3052-002-P
	±5 G	2.4/3.6 mV/g*	±2mV	MSP6878-ND	195.00	136.00	102.00	3052-005-P
	±10 G	1.2/1.8 mV/g*	±2mV	MSP6879-ND	195.00	136.00	102.00	3052-010-P
	±50 G	0.24.0.36 mV/g*	±2mV	MSP6881-ND	144.00	124.00	90.00	3052-050-P
	±100 G	0.12/0.18 mV/g*	±2mV	MSP6882-ND	144.00	124.00	90.00	3052-100-P
3	±2 G	1 V/g	2.54V	MSP6883-ND	495.00	345.00	280.01	3140-002
	±5 G	400mV/g	2.54V	MSP6884-ND	495.00	345.00	280.01	3140-005
	±10 G	200mV/g	2.54V	MSP6885-ND	495.00	345.00	280.01	3140-010
	±50 G	40mV/g	2.54V	MSP6887-ND	495.00	345.00	280.01	3140-050
	±100 G	20mV/g	2.54V	MSP6888-ND	495.00	345.00	280.01	3140-100

* Positive voltage change for positive acceleration: negative voltage change for negative acceleration.

PC Board Mountable Pressure Sensors

Temperature Compensated, Dip/TO-8 Package

These pressure sensors are intended for cost sensitive applications where excellent performance and long-term stability are required. Integral temperature compensation is provided using laser-trimmed resistors. An additional laser-trimmed resistor is included to normalize pressure sensitivity variations by programming the gain of an external differential amplifier. This provides sensitivity interchangeability of ±1%.

Features:
• ±0.1% non-linearity • ±1.0% Interchangeable Span (provided by gain set resistor) • Solid State Reliability • Low Power

Specifications:
• **Output:** 0-100mV typ. (full scale) • **Supply Current:** 1.5mA typ. • **Response Time:** 1.0mSec typ. (For a zero-to-full scale pressure step change) • **Operating Temp.:** -40°C to +125°C

Model 1210 / 1220– Low Pressure
• 0-50°C Temp. Compensation • 1.0% Temp. Performance

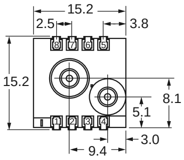
Model 1230 / 1240 – UltraStable™
• -20°C to +85°C Temp. Compensation • ±0.5% Temp. Performance

Models 1210 / 1220 – Medium Pressure
• 0-50°C Temperature Compensation • 0.5-1% Temperature Performance

Models 13, 23, 33, 43 – Medium Pressure
• 0-50°C Temperature Compensation • ±0.5% Temperature Performance

Model 17, 27, 37 – UltraStable™
• -20°C to +85°C Temp. Compensation Range
• ±0.5% Temperature Performance

Dual-In-Line Pkg.



TO-8 Pkg.

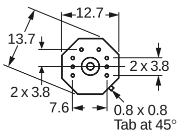
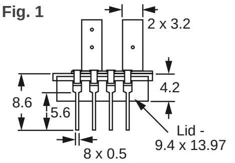


Fig. 1



Tube Length: 470 (±5mil.)

Fig. 2

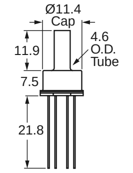


Fig. 3

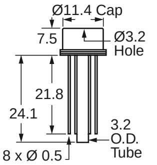


Fig. 4

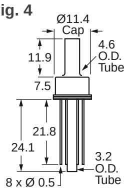


Fig. 5

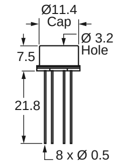


Fig.	Pressure	Pressure Type	Package	Digi-Key Part No.	Price Each 1	10	100	MSI Part No.
				Model 1210 / 1220 - Low and Medium Pressure				
1	02-PSID	Differential	8-Pin Dip	MSP6814-ND	39.00	28.00	18.00	1210A-002D-3L
	0-5 PSID	Differential	8-Pin Dip	MSP6816-ND	39.00	28.00	18.00	1220A-005D-3L
				Model 1230 / 1240 - Ultrastable™				
1	0-15 PSID	Differential	8-Pin Dip	MSP6819-ND	33.00	28.00	18.00	1240-015D-3L
	0-30 PSID	Differential	8-Pin Dip	MSP6822-ND	33.00	28.00	18.00	1230-030D-3L
	0-100 PSID	Differential	8-Pin Dip	MSP6828-ND	33.00	28.00	18.00	1230-100D-3L
	0-100 PSID	Differential	8-Pin Dip	MSP6829-ND	33.00	28.00	18.00	1240-100D-3L
				Model 13 - Low and Medium Pressure				
2	0-1 PSIG	Gage	TO-8	MSP6830-ND	72.00	53.00	38.00	13A-001G
	0-5 PSIG	Gage	TO-8	MSP6833-ND	72.00	53.00	38.00	13A-005G
				Model 17 - Ultrastable™				
2	0-15 PSIG	Gage	TO-8	MSP6834-ND	60.00	53.00	38.00	17-015G
	0-30 PSIG	Gage	TO-8	MSP6835-ND	60.00	53.00	38.00	17-030G
	0-50 PSIG	Gage	TO-8	MSP6836-ND	60.00	53.00	38.00	17-050G
	0-100 PSIG	Gage	TO-8	MSP6837-ND	60.00	53.00	38.00	17-100G
				Model 23 - Low and Medium Pressure				
3	0-1 PSIG	Gage	TO-8	MSP6831-ND	90.00	61.00	50.00	23A-001G
	0-5 PSIG	Gage	TO-8	MSP6838-ND	90.00	61.00	50.00	23A-005G
				Model 27 - Ultrastable™				
3	0-15 PSIG	Gage	TO-8	MSP6839-ND	69.00	61.00	50.00	27-015G
	0-30 PSIG	Gage	TO-8	MSP6840-ND	69.00	61.00	50.00	27-030G
	0-50 PSIG	Gage	TO-8	MSP6841-ND	69.00	61.00	50.00	27-050G
	0-100 PSIG	Gage	TO-8	MSP6842-ND	69.00	61.00	50.00	27-100G
				Model 33 - Low and Medium Pressure				
4	0-1 PSID	Differential	TO-8	MSP6832-ND	90.00	61.00	50.00	33A-001D
	0-5 PSID	Differential	TO-8	MSP6843-ND	90.00	61.00	50.00	33A-005D
				Model 37 - Ultrastable™				
4	0-15 PSID	Differential	TO-8	MSP6844-ND	69.00	61.00	50.00	37-015D
	0-30 PSID	Differential	TO-8	MSP6845-ND	69.00	61.00	50.00	37-030D
	0-50 PSID	Differential	TO-8	MSP6846-ND	69.00	61.00	50.00	37-050D
	0-100 PSID	Differential	TO-8	MSP6847-ND	69.00	61.00	50.00	37-100D
				Model 43 - Low and Medium Pressure				
5	0-15 PSIA	Absolute	TO-8	MSP6848-ND	60.00	53.00	38.00	43-015A
	0-30 PSIA	Absolute	TO-8	MSP6849-ND	60.00	53.00	38.00	43-030A
	0-50 PSIA	Absolute	TO-8	MSP6850-ND	60.00	53.00	38.00	43-050A
	0-100 PSIA	Absolute	TO-8	MSP6851-ND	60.00	53.00	38.00	43-100A

UltraStable™ Stainless Steel Pressure Sensors

Ribbon Cable with Connector

Features: • Gage Pressure type • -20°C to +85°C Compensated temperature range • ±1.0% Interchangeable Span (provided by gain set resistor) • High performance • Small profile • Solid State reliability • Low power • +0.1% Pressure non-linearity

Specifications: • **Output:** 0-100mV • **Supply Current:** 1.5mA typ. (guarantees output/input ratiometricity) • **Operating Temperature:** -40°C to +125°C

Model 85 – 316L: This micro-machined piezoresistive silicon pressure sensor is designed for applications where compatibitility with corrosive media must be maintained. The sensor chip is mounted on a TO style header, which is resistance welded to a 316 stainless steel package, sealing a small volume of silicone oil between the diaphragm and the sensor chip. The ISO pressure housing utilizes the oil column to couple the piezoresistive sensor to the isolation diaphragm. A thick film ceramic compensation board with laser trimmed resistors, and an additional gain set resistor to normalize pressure sensitivity are an integral part of the sensor package.

Model 86 – 316L: This is a small profile, media compatible, piezoresistive silicon pressure sensor packaged in a 316L stainless steel housing and is designed for O-ring mounting. The sensing package utilizes silicone oil to transfer pressure from the 316L stainless steel diaphragm to the sensing element. It is designed for high performance, low pressure applications. A ceramic substrate is attached to the package that contains laser-trimmed resistors for temperature compensation and offset correction. An additional laser-trimmed resistor is included which can be used to adjust an interchangeability to within ±1%.

Fig.	Pressure	Output Load Resistance	Digi-Key Part No.	Price Each 1	10	100	MSI Part No.
			Model 85 — 1/4 - 18 NPT				
1	0-15 PSIA	5mW Min.	MSP6853-ND	126.00	96.00	70.01	85-015G-4C
	0-30 PSIA		MSP6854-ND	126.00	96.00	70.01	85-030G-4C
	0-50 PSIA		MSP6855-ND	126.00	96.00	70.01	85-050G-4C
	0-100 PSIA		MSP6856-ND	126.00	96.00	70.01	85-100G-4C
	0-300 PSIA		MSP6857-ND	126.00	96.00	70.01	85-300G-4C
	0-500 PSIA		MSP6858-ND	126.00	96.00	70.01	85-500G-4C
			Model 86 — O-Ring Flush Mount				
2	015 PSIA	1mW Min.	MSP6859-ND	105.00	74.00	54.01	86-005G-4C
	0-15 PSIA		MSP6860-ND	105.00	74.00	54.01	86-015G-4C
	0-30 PSIA		MSP6861-ND	105.00	74.00	54.01	86-030G-4C
	0-50 PSIA		MSP6862-ND	105.00	74.00	54.01	86-050G-4C
	0-100 PSIA		MSP6863-ND	105.00	74.00	54.01	86-100G-4C
	0-300 PSIA		MSP6864-ND	105.00	74.00	54.01	86-300G-4C
	0-500 PSIA		MSP6865-ND	105.00	74.00	54.01	86-500G-4C

Fig. 1

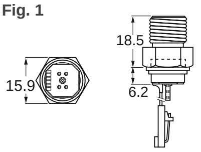
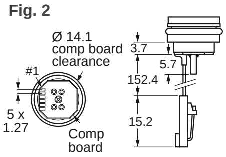


Fig. 2



PC Board Mountable Pressure Sensors

Model 1451

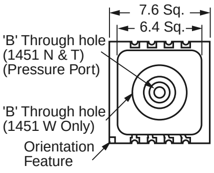
This pressure sensor is intended for high volume applications where small size, light weight, low cost, and compatibility with automated assembly equipment are required.

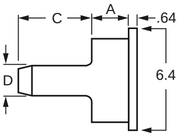
Features:

• Surface Mount Pkg. • ±0.25% Pressure Non-linearity • 3 Pressure Port Options • Solid State Reliability • Low Power

Specifications:

• **Output:** 0-60mV • **Supply Voltage:** 3VDC • **Response Time:** 1.0mSec typ. • **Operating Temp.:** -40°C to +125°C



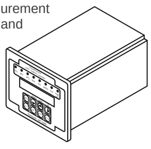


Package	Dimensions (mm) A	B	C	D
Narrow Hole	2.79	0.78	—	—
Wide Hole	2.79	4.06	—	—
Tube	2.79	0.78	5.59	2.29

Pressure	Pressure Type	Package	Digi-Key Part No.	Price Each 1	10	100	MSI Part No.
0-5 PSIG	Gage	Tube	MSP6800-ND	20.00	19.00	11.00	1451-005G-T
0-5 PSIA	Absolute	Wide	MSP6801-ND	20.00	19.00	11.00	1451-005A-W
0-15 PSIA	Absolute	Narrow	MSP6802-ND	20.00	19.00	11.00	1451-015A-N
0-15 PSIG	Gage	Tube	MSP6803-ND	20.00	19.00	11.00	1451-015G-T
0-15 PSIA	Absolute	Wide	MSP6804-ND	20.00	19.00	11.00	1451-015A-W
0-30 PSIA	Absolute	Narrow	MSP6805-ND	20.00	19.00	11.00	1451-030A-N
0-30 PSIG	Gage	Tube	MSP6806-ND	20.00	19.00	11.00	1451-030G-T
0-30 PSIA	Absolute	Wide	MSP6807-ND	20.00	19.00	11.00	1451-030A-W
0-50 PSIA	Absolute	Narrow	MSP6808-ND	20.00	19.00	11.00	1451-050A-N
0-50 PSIG	Gage	Tube	MSP6809-ND	20.00	19.00	11.00	1451-050G-T
0-50 PSIA	Absolute	Wide	MSP6810-ND	20.00	19.00	11.00	1451-050A-W
0-100 PSIA	Absolute	Narrow	MSP6811-ND	20.00	19.00	11.00	1451-100A-N
0-100 PSIG	Gage	Tube	MSP6812-ND	20.00	19.00	11.00	1451-100G-T
0-100 PSIA	Absolute	Wide	MSP6813-ND	20.00	19.00	11.00	1451-100A-W

NEW! SCHAEVITZ SENSORS

Sensors MP1000 Readout/Controller



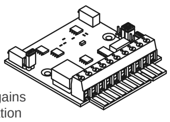
The Schaevitz microprocessor-based LVDT indicator and set-point controller is designed for industrial and process control applications utilizing any LVDT/RVDT based measurement device. A 16-bit analog to digital converter provides high speed performance and resolution. An RS-232 output will communicate data to any standard PLC or computer serial port. 1/4 DIN case.

Application: RS-232 data collection for SPC

Features: • Simultaneous dual channel display • Opto-isolated set-point outputs • Digitally scaled analog output • Digitally controlled analog zero suppression • CE approval pending (mid 1998) • Programmable digital filtering

Description	Operating Temp.	Power Requirements	Digi-Key Part No.	Price Each			Schaevitz MSI Part No.
				1	5	10	
Single Channel LVDT	0° to 55° C	100 - 250 VAC, 50-60Hz	356-1000-ND	899.00	845.00	802.00	02291328-000

DC Powered Voltage Module

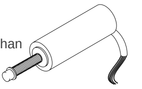


The LVM-110 Module is a DC-powered LVDT signal conditioner board consisting of a carrier oscillator, AC amplifier, demodulator, filter, and DC amplifier.

Features: • DC powered • Zero and span controls • Six jumper selectable gains • Plug-in, card edge, or stand-off installation • 2.5 kHz, 5 kHz or 10 kHz excitation

Description	Voltage Range	Frequency Range	Digi-Key Part No.	Price Each			Schaevitz MSI Part No.
				1	5	10	
LVDT Signal Conditioner Board	3.5 ± 10%Vrms	2.5kHz, 5kHz, 10kHz	356-1001-ND	177.00	165.00	155.00	04171776-000

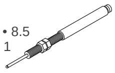
PCA-116 Series Economy Gage Heads



PCA-116 gage heads incroporate a standardized LVDT with repeatability better than 0.0001" (0.0025 mm) and linearity within 0.5% of full range output. The probe shaft is externally sprung and is carried on low friction nylon sleeve bearings.

PCA-116 Series Model No	Linear Range Inches (mm)	Digi-Key Part No.	Price Each			Schaevitz MSI Part No.
			1	5	10	
PCA-116-100	±0.10" (2.5)	356-1002-ND	105.00	95.00	88.80	02350531-000
PCA-116-200	±0.20" (5.1)	356-1003-ND	124.00	111.00	104.40	02350532-000
PCA-116-300	±0.30" (7.6)	356-1004-ND	146.00	131.00	122.40	02350533-000

GCD-SE Series Gage Heads - Precision Spring-Loaded

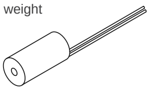


Features:
• CE compliance • Heavy-duty, all welded construction • Unipolar ranges: 0.1" to 2.0" • 8.5 to 28 VDC operation • Low power consumption • May be battery operated • 0 to 5 and 1 to 6 VDC outputs • New heavy duty front end • Hermetically sealed design

GCD-SE Series Model No	Linear Range Inches (mm)	Digi-Key Part No.	Price Each			Schaevitz MSI Part No.
			1	5	10	
GCD-SE-100	0.10 (2.54)	356-1005-ND	480.00	429.01	403.20	02351006-000
GCD-SE-250	0.25 (6.35)	356-1006-ND	544.00	486.00	457.20	02351007-000
GCD-SE-500	0.50 (12.7)	356-1007-ND	617.00	552.00	518.40	02351008-000
GCD-SE-1000	1.0 (25.4)	356-1008-ND	704.00	630.00	591.60	02351009-000
GCD-SE-2000	2.0 (50.8)	356-1009-ND	800.00	716.00	672.00	02351010-000

LVDT MHR Series

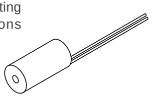
The MHR series of miniature LVDT's is ideal for applications where excessive core weight could influence the motion of sensitive mechanisms.



Features: • For applications where installation space or weight is limited • Lightweight core • Calibration certificate supplied with all models • Compatible with all Schaevitz™ signal conditioners • High temperature (220°C) and high pressure (vented case) available - consult factory

MHR Series Model No	Nominal Linear Range Inches (mm)	Digi-Key Part No.	Price Each			Schaevitz MSI Part No.
			1	5	10	
025 MHR	±0.025 (±0.64)	356-1010-ND	106.00	96.00	89.00	02560407-000
050 MHR	±0.50 (±1.27)	356-1011-ND	115.00	104.00	97.20	02560408-000
100 MHR	±0.100 (±2.54)	356-1012-ND	135.00	122.00	114.00	02560409-000
250 MHR	±0.250 (±6.35)	356-1013-ND	174.00	157.00	146.40	02560410-000
500 MHR	±0.500 (±12.70)	356-1014-ND	231.00	208.00	194.40	02560411-000
1000 MHR	±1.000 (±25.40)	356-1015-ND	272.00	245.00	228.00	02560412-000

E Series LVDT

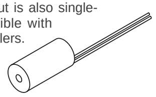


The low cost AC operated E series is particularly suitable for moderate operating temperatures. Its rugged construction will resist the shocks and vibrations encountered in most industrial applications.

Features: • Customerary LVDT performance at minimal cost • Magnetically shielded case • Compatible with all Schaevitz™ signal conditioners

E Series Model No	Nominal Linear Range Inches (mm)	Digi-Key Part No.	Price Each			Schaevitz MSI Part No.
			1	5	10	
E100	±0.100 (±2.54)	356-1016-ND	42.00	38.00	35.00	02560541-000
E200	±0.200 (±5.08)	356-1017-ND	50.00	46.00	42.00	02560542-000
E300	±0.300 (±7.62)	356-1018-ND	67.00	62.00	57.00	02560543-000
E500	±0.500 (±12.70)	356-1019-ND	105.00	97.00	88.80	02560544-000
E1000	±1.00 (±25.4)	356-1020-ND	147.00	135.00	124.00	02560545-000
E2000	±2.00 (±50.8)	356-1021-ND	207.00	190.00	174.00	02560546-000

DC-SE Series LVDT

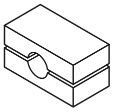


The new Schaevitz™ General Purpose DC operated DC-SE series has been designed to meet today's requirements for operation from a single-ended power supply. The output is also single-ended over the full range displacement of the LVDT making the unit compatible with unipolar inputs on the analog-to-digital converters and programmable logic controllers.

Features: • CE certified • Operates from single-ended, unregulated 8.5 - 28 VDC supply • 0 - 5 VDC or 1 - 6 VDC output voltage, depending on customer hook up • Low power consumption • 200 Hz frequency response • 1 meter shielded cable

DC-SE Series Model No	Nominal Linear Range Inches (mm)	Digi-Key Part No.	Price Each			Schaevitz MSI Part No.
			1	5	10	
250DC-SE	0-0.250 (0-6.25)	356-1022-ND	300.00	267.00	252.00	02560991-000
500DC-SE	0-0.500 (0-12.5)	356-1023-ND	348.00	313.00	292.80	02560992-000
1000DC-SE	0-1.000 (0-25)	356-1024-ND	402.00	362.01	337.20	02560993-000
2000DC-SE	0-2.000 (0-50)	356-1025-ND	449.00	403.00	376.80	02560994-000
4000DC-SE	0-4.00 (0-100)	356-1026-ND	512.00	461.00	429.60	02560995-000

Accessories Mounting Blocks

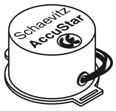


Model Number	Digi-Key Part No.	Price Each			Schaevitz MSI Part No.
		1	5	10	
MB-OD-0.375	356-1027-ND	24.00	22.00	20.40	04560954-000
MB-OD-0.750	356-1028-ND	24.00	22.00	20.40	04560950-000

Core Extension Rods

Description	Digi-Key Part No.	Price Each		Schaevitz MSI Part No.
		1	10	
1-72unf X 6" Non-Magnetic Stainless Steel	356-1029-ND	12.00	10.00	05282945-006
4-40oz X 6" Non-Magnetic Stainless Steel	356-1030-ND	12.00	10.00	05282946-006
4-40oz X 12" Non-Magnetic Stainless Steel	356-1031-ND	24.00	20.00	05282946-012

AccuStar® Electronic Clinometers

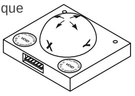


The AccuStar® Electronic Clinometer is and extremely accurate angle measurement device. This compact and rugged sensor is ideal where space is critical and environmental conditions are serious design concerns.

Features: • CE certified • Just 2" in diameter • Rugged plastic housing • Extremely accurate • Weighs only 2 oz.

Description	Linear Range	Operating Temp Range	Digi-Key Part No.	Price Each			Schaevitz MSI Part No.
				1	10	25	
Single Axis Ratiometric Vertical Flange	±45°C	-30° to 65°C	356-1032-ND	139.00	128.00	117.01	02110002-000
Single Axis Ratiometric Horizontal Flange	±45°C	-30° to 65°C	356-1033-ND	139.00	128.00	117.01	02110102-000

AccuStar II® Clinometers

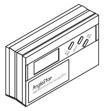


AccuStar™ II combines the function of two clinometers in one package. The unique dome shaped design features a capacitance based sensor which produces output signals directly proportional to the relative tilt in two axes.

Features:
• Two clinometers in one package • Adaptable design DC powered • Ratiometric and PW digital output in one model • Trimmable DC output

Description	Linear Range	Operating Temp Range	Digi-Key Part No.	Price Each			Schaevitz MSI Part No.
				1	10	25	
Dual Axis Clinometer	±20°C	-20° to 75°C	356-1034-ND	100.00	95.00	90.00	02119011-000

AngleStar® Digital Protractor

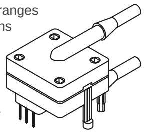


The AngleStar™ Digital Protractor Model DP-45 provides instant digital display of level, angle and tilt.

Features: • Reads in degrees • Alternate reference (floating zero) • Display hold • High impact plastic carrying case

Description	Linear Range	Operating Temp Range	Digi-Key Part No.	Price Each			Schaevitz MSI Part No.
				1	5	20	
Digital Protractor Model DP-45	±45°C	0° to 65°C	356-1035-ND	309.00	291.00	263.00	02475-01

Ares Series Pressure Transducers



The Ares Series is a small, low cost pressure transducer, which is able to measure pressures as low as 0 to 5, 0 to 10, 0 to 15 inches of water, and 0 to 1 psig. The ranges combined with the small physical size make the device ideally suited for applications such as HVAC, medical equipment and flow monitoring. The ASIC is a mixed signal CMOS sensor interface that uses differential switched capacitor architecture, and was specifically designed to compensate for the errors associated with piezoresistive silicon sensors.

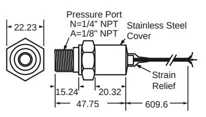
Features: • Very low pressure ranges • Small size • PCB mountable • Solder reflow capability • Barbed pressure ports

Description	Standard Pressure Range	Accuracy % FSO	Digi-Key Part No.	Price Each			Schaevitz MSI Part No.
				1	10	25	
PCB Mount 0.5-4.5V	0 - 5" H_2O	0.25	356-1036-ND	40.00	32.25	27.30	GA100-005WD
PCB Mount 0.5-4.5V	0 - 10" H2O	0.50	356-1037-ND	40.00	32.25	27.30	GA100-010WD
PCB Mount 0.5-4.5V	0 - 15" H_2O	0.50	356-1038-ND	40.00	32.25	27.30	GA100-015WD
PCB Mount 0.5-4.5V	0 - 1 PSI	0.75	356-1039-ND	40.00	32.25	27.30	GA100-001PD
PCB Mount 0.250-4.5V	0 - 5" H_2O	0.25	356-1040-ND	40.00	32.25	27.30	GA200-005WD
PCB Mount 0.250-4.5V	0 - 10" H_2O	0.50	356-1041-ND	40.00	32.25	27.30	GA200-010WD
PCB Mount 0.250-4.5V	0 - 15" H_2O	0.50	356-1042-ND	40.00	32.25	27.30	GA200-015WD
PCB Mount 0.250-4.5V	0 - 1 PSI	0.75	356-1043-ND	40.00	32.25	27.30	GA200-001PD

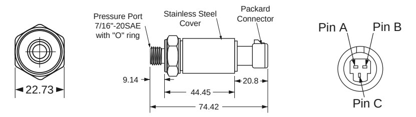
MEASUREMENT
SPECIALTIES

Rugged Stainless Steel Pressure Transducers Featuring Microfused Technology

The MSP pressure transducer is designed for high-volume, low-cost commercial, industrial and off road applications which require accurate measurement of gases or liquids. Operating ranges up to 10,000 psi is available with your choice of output signal in volts, millivolts, or milliamps. The MSP uses a micro machined silicon strain gauge inorganically bonded to a machined stainless steel diaphragm; no welds, no 0-rings, no silicone oil. All wetted surfaces are stainless steel and all signal conditioning electronics are housed in a stainless steel cover which provides protection from hostile environments. The housing is sealed and requires no maintenance. Each transducer is thoroughly tested and calibrated before shipment. **Applications:** Pumps and Compressors • Hydraulic / Pneumatic Systems • Energy and Water Management • Pressure Instrumentation • Process Control, Off Road Refrigeration, HVAC.



2 Foot Cable



Packard Connector

	MSP-300	MSP-310	MSP-320	MSP-400	MSP-600
Pressure Range (PSIG)	0-100 to 10,000	0-100 to 10,000	0-25 to 75	0-100 to 10,000	0-25 to 10,000
Temperature Output	None	10mV/K	None	None	None
Accuracy (combined linearity, hysteresis & repeatability)	±1% of FS	±1% of FS	±1% of FS	±0.5% of FS	±0.25% BSL
Pressure Overload	2X	2X	2X	2X	2X
Burst Pressure	5x or 20,000 PSI whichever is less		10x or 500 PSI whichever is less	5x or 20,000 PSI whichever is less	
Outputs VDC or mA	0-100mV, 1-5V 4-20mA	0-100mV —	1-5V 4-20mA	0.5-4.5V, 1-5V, 4-20mA	0.5-4.5V 1-5V, 4-20mA
Zero Offset (millivolt output) (amplified output)	±3% of FS ±2% of FS	±3% of FS —	— ±2% of FS	— ±2% of FS	— —
Span Tolerance	±2% of FS	±2% of FS	±2% of FS	±2% of FS	—
Long-Term Stability, Typical (1 year)	±.25%	±.25%	±.5%	±.25%	±0.25%
Operating Temperature (°F) (°C)	(-4 to 185) (-20 to 85)	(-4 to 185) (-20 to 85)	(-4 to 185) (-20 to 85)	(-40 to 185) (-40 to 85)	(-40 to 257) (-40 to 125)
Compensated Range (°F) (°C)	30 to 130 0 to 55	30 to 130 0 to 55	30 to 130 0 to 55	30 to 158 0 to 70	(-4 to 185) (-20 to 85)
Thermo Zero Shift	<±2% of FS	<±2% of FS	<±2% of FS	<±1.5% of FS	—
Thermo Span Shift	<±2% of FS	<±2% of FS	<±2% of FS	<±1.5% of FS	—
Total Error Band	N/A	N/A	N/A	N/A	1.5% of FS
EMI/RFI Protection, CE Mark	No	No	No	Yes	Yes
UL Listed	Yes	No	Yes	Yes	Yes

MSP Series	Op. Pressure Range PSIG	Supply	Digi-Key Part No.	Price Each		MSI Part No.
				1	10	
0-100mV Output — 4 Wire Unamplified 1/4” NPT, 2 ft. Cable						
300	100	5 VDC	MSP3101P1-ND	70.00	59.50	2000130
	250		MSP3251P1-ND	70.00	59.50	2000199
	500		MSP3501P1-ND	70.00	59.50	2000255
	1000		MSP3102P1-ND	70.00	59.50	2000045
	2500		MSP3252P1-ND	70.00	59.50	2000222
	5000		MSP3502P1-ND	70.00	59.50	2000096
	10000		MSP3103P1-ND	70.00	59.50	2000157
0.5-4.5 V Output — Ratiometric output voltage to input voltage 3 Wire supply current 10mA max. 1/4” NPT, 2 ft. Cable						
300	100	5 VDC	MSP3101P2-ND	90.00	72.00	2000131
	250		MSP3251P2-ND	90.00	72.00	2000202
	500		MSP3501P2-ND	90.00	72.00	2000260
	1000		MSP3102P2-ND	90.00	72.00	2000046
	2500		MSP3252P2-ND	90.00	72.00	2000223
	5000		MSP3502P2-ND	90.00	72.00	2000099
	10000		MSP3103P2-ND	90.00	72.00	2000158
1-5 V Output — Fixed - 3 Wire supply current 10mA max. 1/4” NPT, 2 ft. Cable						
300	100	10-32 VDC	MSP3101P3-ND	95.00	76.00	2000133
	250		MSP3251P3-ND	95.00	76.00	2000204
	500		MSP3501P3-ND	95.00	76.00	2000262
	1000		MSP3102P3-ND	95.00	76.00	2000048
	2500		MSP3252P3-ND	95.00	76.00	2000226
	5000		MSP3502P3-ND	95.00	76.00	2000100
	10000		MSP3103P3-ND	95.00	76.00	2000159
1-5V Output 1/8” NPT, 2 ft. Cable						
300	100	10-32 VDC	MSP3101P4A1-ND	95.00	76.00	2000132
	250		MSP3251P4A1-ND	95.00	76.00	2000203
	500		MSP3501P4A1-ND	95.00	76.00	2000261
	1000		MSP3102P4A1-ND	95.00	76.00	2000047
4-20mA Output — 2 Wire regulated supply 1/4” NPT, 2 ft. Cable						
300	100	10-32 VDC	MSP3101P4-ND	100.00	80.00	2000137
	250		MSP3251P4-ND	100.00	80.00	2000207
	500		MSP3501P4-ND	100.00	80.00	2000264
	1000		MSP3102P4-ND	100.00	80.00	2000050
	2500		MSP3252P4-ND	100.00	80.00	2000227
	5000		MSP3502P4-ND	100.00	80.00	2000101
	10000		MSP3103P4-ND	100.00	80.00	2000160
4-20mA Output 1/8” NPT, 2 ft. Cable						
300	100	10-32 VDC	MSP3101P5A1-ND	100.00	80.00	2000136
	250		MSP3251P5A1-ND	100.00	80.00	2000206
	500		MSP3501P5A1-ND	100.00	80.00	2000263
	1000		MSP3102P5A1-ND	100.00	80.00	2000049
0-100mV with Temperature Output — 5 Wire 1/4” NPT, 2 ft. Cable						
310	100	5 VDC	MSP1101P1-ND	100.00	81.50	2000290
	250		MSP1251P1-ND	100.00	81.50	2000295
	500		MSP1501P1-ND	100.00	81.50	2000299
	1000		MSP1102P1-ND	100.00	81.50	2000286
	2500		MSP1252P1-ND	100.00	81.50	2000296
	5000		MSP1502P1-ND	100.00	81.50	2000658
	10000		MSP1103P1-ND	100.00	81.50	2000291
1-5 V Output — Fixed — 3 Wire supply current 10mA max. 1/4” NPT, 2 ft. Cable						
320	25	10-30 VDC	MSP2025P3-ND	110.00	88.00	2000314
	50		MSP2050P3-ND	110.00	88.00	2000329
	75		MSP2075P3-ND	110.00	88.00	2000335
4-20mA Output — 2 Wire regulated supply 1/4” NPT, 2 ft. Cable						
320	25	10-30 VDC	MSP2025P4-ND	115.00	98.00	2000316
	50		MSP2050P4-ND	115.00	98.00	2000330
	75		MSP2075P4-ND	115.00	98.00	2000336
0.5-4.5 V Output — Ratiometric output voltage to input voltage 3 Wire supply current 10mA max. 1/4” NPT, 2 ft. Cable						
400	100	5 VDC	MSP4101P2-ND	100.50	86.00	2000473
	250		MSP4251P2-ND	100.50	86.00	2000519
	500		MSP4501P2-ND	100.50	86.00	2000550
	1000		MSP4102P2-ND	100.50	86.00	2000415
	2500		MSP4252P2-ND	100.50	86.00	2000527
	5000		MSP4502P2-ND	100.50	86.00	2000454
	10000		MSP4103P2-ND	100.50	86.00	2000497
1-5 V Output — Fixed – 3 Wire supply current 10mA max. 1/4” NPT, 2 ft. Cable						
400	100	10-32 VDC	MSP4101P3-ND	106.00	99.50	2000484
	250		MSP4251P3-ND	106.00	99.50	2000521
	500		MSP4501P3-ND	106.00	99.50	2000553
	1000		MSP4102P3-ND	106.00	99.50	2000416
	2500		MSP4252P3-ND	106.00	99.50	2000528
	5000		MSP4502P3-ND	106.00	99.50	2000455
	10000		MSP4103P3-ND	106.00	99.50	2000498
4-20mA Output — 2 Wire regulated supply 1/4” NPT, 2 ft. Cable						
400	100	10-32 VDC	MSP4101P4-ND	152.00	121.25	2000486
	250		MSP4251P4-ND	152.00	121.25	2000522
	500		MSP4501P4-ND	152.00	121.25	2000554
	1000		MSP4102P4-ND	152.00	121.25	2000417
	2500		MSP4252P4-ND	152.00	121.25	2000531
	5000		MSP4502P4-ND	152.00	121.25	2000457
	10000		MSP4103P4-ND	152.00	121.25	2000499
0.5-4.5VDC Output — 1/4” NPT, 2 ft. Cable						
600	25	5 VDC	MSP6025P3-1-ND	110.50	96.00	2000871
	50		MSP6050P3-1-ND	110.50	96.00	2000877
	75		MSP6075P3-1-ND	110.50	96.00	2000883
	100		MSP6101P3-1-ND	110.50	96.00	2000889
	250		MSP6251P3-1-ND	110.50	96.00	2000895
	500		MSP6501P3-1-ND	110.50	96.00	2000901
	1000		MSP6102P3-1-ND	110.50	96.00	2000907
	2500		MSP6252P3-1-ND	110.50	96.00	2000913
	5000		MSP6502P3-1-ND	110.50	96.00	2000919
	7500		MSP6752P3-1-ND	110.50	96.00	2000925
	10000		MSP6103P3-1-ND	110.50	96.00	2000931
0.5-4.5VDC Output — 7/16” SAE, Packard Connector						
600	25	5 VDC	MSP6025P3-4-ND	110.50	96.00	2000964
	50		MSP6050P3-4-ND	110.50	96.00	2000965
	75		MSP6075P3-4-ND	110.50	96.00	2000966
	100		MSP6101P3-4-ND	110.50	96.00	2000967
	250		MSP6251P3-4-ND	110.50	96.00	2000968
	500		MSP6501P3-4-ND	110.50	96.00	2000969
	1000		MSP6102P3-4-ND	110.50	96.00	2000970
	2500		MSP6252P3-4-ND	110.50	96.00	2000971
	5000		MSP6502P3-4-ND	110.50	96.00	2000972
	7500		MSP6752P3-4-ND	110.50	96.00	2001116
	10000		MSP6103P3-4-ND	110.50	96.00	2000973
1-5VDC Output — 1/4” NPT, 2 ft. Cable						
600	25	10-30 VDC	MSP6025P4-1-ND	116.00	109.50	2000872
	50		MSP6050P4-1-ND	116.00	109.50	2000878
	75		MSP6075P4-1-ND	116.00	109.50	2000884
	100		MSP6101P4-1-ND	116.00	109.50	2000890
	250		MSP6251P4-1-ND	116.00	109.50	2000896
	500		MSP6501P4-1-ND	116.00	109.50	2000902
	1000		MSP6102P4-1-ND	116.00	109.50	2000908
	2500		MSP6252P4-1-ND	116.00	109.50	2000914
	5000		MSP6502P4-1-ND	116.00	109.50	2000920
	7500		MSP6752P4-1-ND	116.00	109.50	2000926
	10000		MSP6103P4-1-ND	116.00	109.50	2000932
1-5VDC Output — 7/16” SAE, Packard Connector						
600	25	10-30 VDC	MSP6025P4-4-ND	116.00	109.50	2000974
	50		MSP6050P4-4-ND	116.00	109.50	2000975
	75		MSP6075P4-4-ND	116.00	109.50	2000976
	100		MSP6101P4-4-ND	116.00	109.50	2000977
	250		MSP6251P4-4-ND	116.00	109.50	2000978
	500		MSP6501P4-4-ND	116.00	109.50	2000979
	1000		MSP6102P4-4-ND	116.00	109.50	2000980
	2500		MSP6252P4-4-ND	116.00	109.50	2000981
	5000		MSP6502P4-4-ND	116.00	109.50	2000982
	7500		MSP6752P4-4-ND	116.00	109.50	2001117
	10000		MSP6103P4-4-ND	116.00	109.50	2000983
4-20mA Output— 1/4” NPT, 2 ft. Cable						
600	25	10-30 VDC	MSP6025P5-1-ND	162.00	131.25	2000873
	50		MSP6050P5-1-ND	162.00	131.25	2000879
	75		MSP6075P5-1-ND	162.00	131.25	2000885
	100		MSP6101P5-1-ND	162.00	131.25	2000891
	250		MSP6251P5-1-ND	162.00	131.25	2000897
	500		MSP6501P5-1-ND	162.00	131.25	2000903
	1000		MSP6102P5-1-ND	162.00	131.25	2000909
	2500		MSP6252P5-1-ND	162.00	131.25	2000915
	5000		MSP6502P5-1-ND	162.00	131.25	2000921
	7500		MSP6752P5-1-ND	162.00	131.25	2000927
	10000		MSP6103P5-1-ND	162.00	131.25	2000933
4-20mA Output — 7/16” SAE, Packard Connector						
600	25	10-30 VDC	MSP6025P5-4-ND	162.00	131.25	2000984
	50		MSP6050P5-4-ND	162.00	131.25	2000985
	75		MSP6075P5-4-ND	162.00	131.25	2000986
	100		MSP6101P5-4-ND	162.00	131.25	2000987
	250		MSP6251P5-4-ND	162.00	131.25	2000988
	500		MSP6501P5-4-ND	162.00	131.25	2000989
	1000		MSP6102P5-4-ND	162.00	131.25	2000990
	2500		MSP6252P5-4-ND	162.00	131.25	2000991
	5000		MSP6502P5-4-ND	162.00	131.25	2000992
	7500		MSP6752P5-4-ND	162.00	131.25	2001118
	10000		MSP6103P5-4-ND	162.00	131.25	2000993

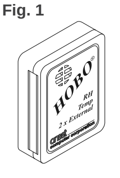
Data Loggers

HOBO® H8 Family

Single and multi-channel loggers for recording temperature in indoor and outdoor environments.

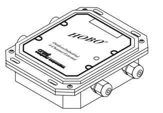
Features: • User-selectable sampling intervals: 0.5 seconds to 9 hours, recording times up to 1 year • Programmable start time/date • Memory modes stop when full, wrap-around when full • Nonvolatile EEPROM memory retains data even if battery fails • Blinking LED light confirms operation • User-replaceable battery lasts 1 year • Battery level indication at launch

Fig. 1



(341-1011-ND shown)

Fig. 2



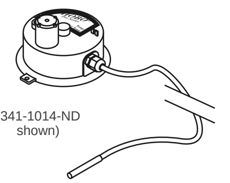
Specifications: • **Relative Humidity:** 25% to 95% (±5%) • **External Input:** Accepts sensors and input cables for temperature, AC current, 4-20mA and 0-2.5V DC • **Light Intensity:** 2 to 600 lumens/ft^2 (±2) • **Temperature Range:** -4°F to +158°F (-20°C to +70°C, ±0.7°C); accuracy at 70°F: ±1.27°F (±0.7°C) • **Resolution:** 0.7°F (0.4°C) at +70°F • **Time Accuracy:** ±1 minute per week at +68°F (+20°C)

Fig.	No. of Channels	Environment	Measurement Capacity	Digi-Key Part No.	Price Each	Onset Part No.
1	1	Indoor	7,943	341-1006-ND	59.00	H08-001-02
1	2	Indoor	7,943	341-1007-ND	65.00	H08-002-02
1	2	Indoor	7,943	341-1008-ND	85.00	H08-003-02
1	4	Indoor	32,520	341-1010-ND	85.00	H08-006-04
1	4	Indoor	7,943	341-1009-ND	95.00	H08-004-02
1	4	Indoor	7,943	341-1011-ND	95.00	H08-007-02
2	4	Indoor/Outdoor	32,520	341-1012-ND	169.00	H08-008-04

Note: A BoxCar® Pro or BoxCar 3.6+ starter kit is required to operate the H8 Family loggers.

HOBO® H8 Pro Series

Features: • Indoor/Outdoor Environment • User-selectable sampling intervals: 0.5 seconds to 9 hours, recording times up to 3 years • Programmable start time/date • Memory mode: stop when full • Non-volatile EEPROM memory retains data even if battery fails • Blinking LED light confirms operation (visible through communication jack) • User-replaceable battery lasts 3 years; battery life is substantially less if the HOBO Pro is constantly used below 0°F (-18°C) • Battery check at launch



(341-1014-ND shown)

Specifications: • **Relative Humidity:** 0% to 100% condensing • **Temperature Range:** -22°F to +122°F (-30°C to +50°C) • **Temperature Accuracy (at 70°F):** ±0.33°F (±0.2°C) in high resolution mode; ±0.7°F (±0.38°C) in standard resolution mode • **Resolution (at 70°F):** 0.4°F (0.02°C) in high resolution mode; ±0.68°F (0.38°C) in standard resolution mode • **Time Accuracy:** ±1 minute per week at +68°F (+20°C)

Description	No. of Channels	Measurement Capacity	Digi-Key Part No.	Price Each	Onset Part No.
HOBO Pro Temp	1	65,291	341-1013-ND	129.00	H08-030-08
HOBO Pro RH/Temp	2	65,291	341-1015-ND	159.00	H08-032-08
HOBO Pro Temp/External Temp	2	65,291	341-1014-ND	169.00	H08-031-08

Note: A BoxCar® Pro or BoxCar 3.6+ starter kit is required to operate the HOBO Pro Series loggers.

HOBO® H6 Family

The HOBO H6 Family of loggers record when devices change between on and off or open and closed, storing the time, date, and state for each change.

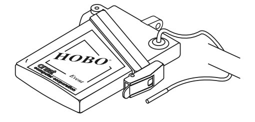
Features: • Motor on/off • Light on/off • State open/closed • External contact closure • Programmable start time/date • Memory modes: stop when full, wrap-around when full • Nonvolatile EEPROM memory retains data even if battery fails • Blinking LED light shows current state • User-replaceable battery lasts 1 year • Battery check at launch

Specifications: • **Time Resolution:** 0.5 seconds • **Measurement Capacity:** 2,000 state changes • **Operating Temperature Range:** -4°F to +158°F (-20°C to +70°C) • **Relative Humidity:** 0 to 95%, non-condensing, non-fogging • **Time Accuracy:** ±1 minute per week at +68°F (+20°C)

Description	Measurement Range	Digi-Key Part No.	Price Each	Onset Part No.
HOBO State (includes cable & magnet)	—	341-1001-ND	69.00	H06-001-02
HOBO Light On/Off Logger	10 to 300 lumens/ft^2	341-1002-ND	69.00	H06-002-02
HOBO Motor On/Off Logger (AC field sensor)	~2 Gauss at 60 Hz	341-1004-ND	69.00	H06-004-02
HOBO Motor On/Off Logger (vibration sensor)	adjustable ~0.05 G to 0.5 G at 60 Hz	341-1003-ND	69.00	H06-003-02

Note: A BoxCar® Pro or BoxCar 3.6+ starter kit is required to operate the H6 Family loggers.

HOBO® Event



The reusable HOBO Event records when momentary contact-closure events happen, storing the time and date of each event. Only one time per event is stored to minimize memory usage for applications where the event duration is not needed.

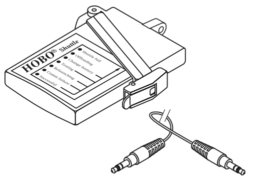
Features: • 1-Channel • Indoor/Outdoor environment • Programmable start time/date • Memory modes: stop when full or wrap-around when full • Nonvolatile EEPROM memory retains data even if battery fails • Blinking LED light inside case confirms operation • User-replaceable battery lasts 1 year • Battery check at launch

Specifications: • **Event Resolution:** 0.5 seconds • **Capacity:** 8,000 events • **Time Accuracy:** ±1 minute per week at +68°F (+20°C) • **Operating Temp. (logger):** -4°F to +158°F (-20°C to +70°C)

Note: A BoxCar® Pro or BoxCar 3.6+ starter kit is required to operate the HOBO Event logger.

341-1005-ND HOBO Event Logger (H07-002-04) **$85.00**

HOBO® Shuttle Data Transporter



The pocket-sized HOBO Shuttle provides a convenient way to readout and relaunch HOBO data loggers and bring the data back to your host PC.

Features: • Verifies operation of HOBO H6 Family and HOBO Event data loggers • One-foot connector cable fits inside case • Data offload time from logger: 90 sec. typical from 8K logger, about 5 min. from 32K logger and about 1 min. from 64K HOBO Pro Logger • Data readout time to PC: 2 minutes typical for full shuttle • Operating humidity range when case is open: 0 to 95% relative humidity, non-condensing • Clear styrene case (weatherproof when closed) • Size: 3.5" x 4.3" x 0.8" (108mm x 89mm x 19 mm); with attached adjustable cord

Specifications: • **Time Accuracy:** ±1 minute per week at +68°F (+20°C). The shuttle's clock is synchronized to the computer clock when the Shuttle is read out or launched • **Operating Temp. Range:** -4°F to +158°F (-20°C to +70°C)

341-1016-ND HOBO Shuttle (H09-002-08)..**$159.00**

External Sensors/Input Cables

Wide Range Temperature Sensors:

• **Temperature Range:** -40°F to +212°F (-40°C to +100°C), in air • **Accuracy:** ±0.9°F at +70°F (±0.5°C at +20°C) • **Resolution:** 0.7°F at +70°F (0.41°C at +20°C) • **Dimensions:** 0.2" (5.08mm) diameter sensor (fits in 1/4" holes)

High Accuracy Temperature Sensors:

• **Temperature Range:** -32°F to +110°F (-0°C to +44°C), in air • **Accuracy:** ±0.7°F at +70°F (±0.4°C at +20°C) • **Resolution:** 0.3°F at +70°F (0.2°C at +20°C) • **Dimensions:** 0.3" (7.62mm) diameter sensor (fits in 3/8" holes)

Stainless Steel Temperature Sensors:

• **Temperature Range:** -40°F to +212°F (-40°C to +100°C), in air or water • **Accuracy:** ±0.9°F at +70°F (±0.5°C at +20°C) • **Resolution:** 0.7°F at +70°F (0.41°C at +20°C) • **Dimensions:** 4" food-grade stainless-steel probe with pointed tip; 0.12" (3.05) diameter

4-20mA Cable:

• 18" cable with 3.5" tinned braided wire leads • **Loop Current Range:** 0 to 20.1mA • **Accuracy:** ±0.1mA ±1% of reading • **Resolution:** 0.4% of full scale

Voltage Input Cable:

• 6' cable with 0.5" tinned braided wire leads • For voltage input specifications, refer to the HOBO H8 specifications for the model you will be using.

Fig. 1

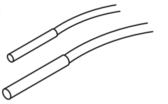


Fig. 2

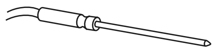


Fig. 3

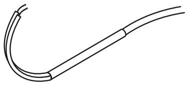


Fig. 4

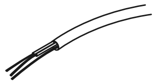


Fig.	Product	Digi-Key Part No.	Price Each	Onset Part No.
1	1' (.30 M) Wide Range Temperature Sensors *	341-1019-ND	23.00	TMC1-HA
	6' (1.83 M) Wide Range Temperature Sensors *	341-1020-ND	25.00	TMC6-HA
	20' (6.1 M) Wide Range Temperature Sensors *	341-1021-ND	30.00	TMC20--HA
	50' (15.24 M) Wide Range Temperature Sensors *	341-1022-ND	35.00	TMC50-HA
1	6' (1.83 M) High Accuracy Temperature Sensor *	341-1023-ND	40.00	TMC6-HB
2	6' (1.83 M) Stainless Steel Temperature Probe	341-1024-ND	70.00	TMC6-HC
3	4-20mA Cable	341-1031-ND	13.00	CABLE-4-20mA
4	Voltage Input Cable	341-1030-ND	6.00	CABLE-2.5-STEREO

* Not recommended for prolonged use in water. Do not use for more than 3 months total in water less than +90°F (+30°C), or more than 1 month total in water over +90°F (+30°C).

(Continued)

Data Loggers *(Cont.)*

Windows Software Starter Kits

BoxCar 3.6 provides basic launch, data readout, plotting and data export capabilities. BoxCar Pro 4.0 is a powerful enhanced version of BoxCar 3.6 that adds new features for graphing, data analysis, data export and management of multiple loggers. BoxCar Pro 4.0 and BoxCar 3.6 support all currently available HOBO and StowAway loggers. Each starter kit includes software, computer interface cable and software manual.

BoxCar® 3.6 for Windows

Export Data Files to Spreadsheets: • Microsoft Excel, Lotus 1-2-3 or any ASCII-compatible program

System Requirements for BoxCar 3.6: 386 or better processor with at least 4M of RAM running Windows 3.1x or Windows 95/98/NT, with at least one available serial port.

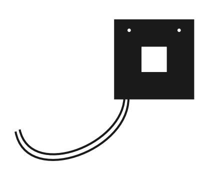
BoxCar® Pro 4.0 for Windows

Export Data to other Programs: • Control bar tool for Microsoft Excel export (.TXT format) • Lotus 1-2-3 and custom export • International data format options • Batch export utility

System Requirements for BoxCar Pro 4.0: Minimum system requirement is 486/66Mhz with at least 16M of RAM running Windows 95/98/NT4 or later with 16-bit color. A Pentium 90 or higher with 24M of RAM is recommended. The system must have at least one available serial COM port and a CD-ROM drive.

Description	Digi-Key Part No.	Price Each	Onset Part No.
BoxCar 3.6 Starter Kit	341-1018-ND	14.00	BC3.6-ON
BoxCar Pro 4.0 Starter Kit	341-1017-ND	95.00	BCP4.0-ON

Split-core AC Current Sensors



Specifications:

- **Length:** 6' (1.83 M) Cable
- **Input Current:** AC current, sine wave, single phase 50Hz or 60Hz, load power factor 0.5 to 1.0 lead or lag
- **Voltage Rating:** 600 Vac tested with full wave 10 KV impulse for 60 seconds
- **Ratio and Linear Accuracy:** ±2.0 % of full scale (includes logger accuracy)
- **Response Time:** approximately 250 milliseconds from 10% to 90% of amplitude

Range (AC Amps)	Window Inch (mm)	Outer Length Inch (mm)	Outer Width Inch (mm)	Digi-Key Part No.	Price Each	Onset Part No
0-20 A ac	0.5 (12.70)	2.8 (71.12)	2.8 (71.12)	341-1025-ND	86.10	CT-A
0-50 A ac	0.75 (19.05)	2.8 (71.12)	2.8 (71.12)	341-1026-ND	86.10	CT-B
0-100 A ac	1.0 (25.40)	2.8 (71.12)	3.3 (83.82)	341-1027-ND	82.00	CT-C
0-200 A ac	1.5 (38.10)	4.0 (101.60)	3.8 (96.52)	341-1028-ND	82.00	CT-D
0-600 A ac	2.0 (50.80)	4.5 (114.30)	4.5 (114.30)	341-1029-ND	82.00	CT-E

NEW! Thermocouple Sensors

HOBO Wide-range Temperature (Thermocouples)

Each logger includes cold-junction compensation, and two software-selectable measurement ranges for optimal resolution and accuracy. The loggers also have an internal temperature sensor which can be used to record ambient temperatures. Thermocouples are popular for their wide temperature range and specialized probes.

Thermocouples: Features and Specifications: • Capacity: 32,520 measurements total • Mounting kit included (hook/loop. Magnet and tape) • Programmable start time/date • Memory modes: stop when full, wrap-around when full • Nonvolatile EEPROM memory retains data even if battery fails • User-replaceable battery lasts 1 year • User-selectable sampling intervals: 0.5 seconds to 9 hours, recording times up to 1 year • Operating range: 0°C to +50°C (+32°F to +122°F), 0 to 95% relative humidity, non-condensing, non-fogging • Time accuracy: ±1 minute per week at +20°C (+68°F)

Subminiature Connectors: Features and Specifications: • Accept stranded or solid wire up to 20 AWG • Internal silicone grommet for strain relief

Fig. 1

Type J: Iron-Constantan
+32°F to +482°F
+32°F to +1382°F

Type K: Chromel-Alumel
+32°F to +932°F
+32°F to +2282°F

Type T: Copper-Constantan
-328°F to +122°F
-94°F to +356°F

Fig. 2

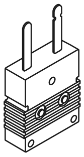


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	Onset Part No.
	Thermocouple Logger					
1	HOBO, Type J	341-1032-ND	94.98	88.99	81.99	H12-001
	HOBO, Type K	341-1033-ND	95.00	89.00	82.01	H12-002
	HOBO, Type T	341-1034-ND	95.00	89.00	82.01	H12-003
	Subminiature Connector					
2	Type J, Black	341-1035-ND	4.00	3.94	—	SMC-J
	Type K, Yellow	341-1036-ND	4.00	3.94	—	SMC-K
	Type T, Blue	341-1037-ND	4.00	3.94	—	SMC-T

Note: A BoxCar® Pro 4.0 starter kit is required to operate the HOBO Pro Series loggers.

Thermocouple Wire

Specifications: 100' (30.48mm) coils of insulated 24-AWG thermocouple wire

Type J: **Wire:** • Range: +32°F to +482°F (0°C to +250°C) • Initial Accuracy: ±4°F (±2.2°C)
Teflon Insulation: Rated up to +400°F (+200°C) continuous, and +482°F (+250°C) for 24 hours.

Type K: **Wire:** • Range: +32°F to +545°F (0°C to +250°C). Initial Accuracy: ±4°F (±2.2°C)
• Range: +545°F to +900°F (+285°C to +482°C). Initial Accuracy: ±0.75%*
Glass Braid Insulation: Rated up to +900°F (+482°C) continuous, and +1000°F (+537°C) for single exposure.

Type T: **Wire:** • Range: -330°F to -85°F (-200°C to -65°C). Initial Accuracy: ±1.5%*
• Range: -85°F to +270°F (-65°C to +130°C). Initial Accuracy: ±1.8°F* (±1°C)
• Range: +270°F to +356°F (+130°C to +180°C). Initial Accuracy: ±0.75%*
Teflon Insulation: Rated up to +400°F (+200°C) continuous, and +482°F (+250°C) for 24 hours.

* Percentage is of degrees above or below ice point (+32°F or 0°C)

Description	Digi-Key Part No.	Price Each 1	10	Onset Part No.
Type J, Teflon Insulation, 100'	341-1038-ND	55.00	54.12	TCW100-J
Type K, Glass Braid Insulation, 100'	341-1039-ND	55.00	54.12	TCW100-K
Type T, Teflon Insulation, 100'	341-1040-ND	55.00	54.12	TCW100-T

Water Temperature

Optic StowAway:

Features and Specifications: • Waterproof to 100 feet • 10-year factory-replaceable battery • Capacity: 7,943 or 32,520 measurements • Two measurement ranges†: +24°F to +99°F (-4°C to +37°C), -32°F to +167°F (-35°C to +75°C) • User-selectable sampling interval: 0.5 seconds to 9 hours, recording times up to several years • Uses optic communications through Optic Base Station for launch and readout • Programmable start time/date • Time accuracy: ±1 minute per week at +68°F (+20°C)

StowAway TidbiT:

Features and Specifications: • Waterproof to 1000 feet • 5-year, non-replaceable battery • Capacity: 32,520 measurements • Completely sealed in epoxy; very durable • Small size: 1.2" wide x 1.6" tall x 0.65" thick (30 x 41 x 17mm) and 0.8 oz. • Two measurement ranges†: +24°F to 99°F (-4°C to +37°C) and -4°F to +122°F (-20°C to +50°C) • User-selectable sampling interval: 0.5 seconds to 9 hours, recording times up to several years • Uses optic communications through Optic Base Station for launch and readout • Time accuracy: ±1 minute per week at +68°F (+20°C)

† Specified range is narrower than nominal range due to precision calibration process.

Fig. 1

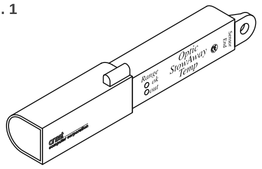


Fig. 2

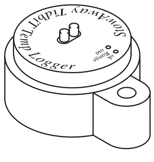
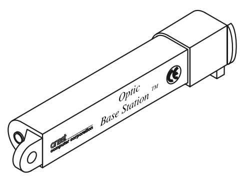


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	Onset Part No.
	Optic StowAway					
1	8K Capacity, Temp. (-4°C to +37°C)	341-1041-ND	129.00	119.00	110.01	WTA08-05+37
	8K Capacity, Temp. (-39°C to +75°C)	341-1042-ND	129.00	119.00	110.01	WTA08-39+75
	32K Capacity, Temp. (-5°C to +37°C)	341-1043-ND	189.00	174.00	161.00	WTA32-05+37
	32K Capacity, Temp. (-39°C to +75°C)	341-1044-ND	189.00	174.00	161.00	WTA32-39+75
	StowAway TidbiT					
2	32K, (-5°C to +37°C)	341-1045-ND	99.00	91.00	84.00	TBI32-05+37
	32K, (-20°C to +50°C)	341-1046-ND	99.00	91.00	84.00	TBI32-20+50

Optic Shuttle Data Transporter



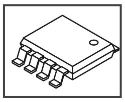
The Optic Base Station is used to communicate between the host computer and Optic data logger, Optic Shuttle, Optic StowAway or StowAway Tidbit. The Optic Base Station connects to the computer interface cable included with the windows software starter kits (sold separtely).

Features and Specifications: • Used for readout of the Optic StowAway and the StowAway TidbiT loggers • Includes Optic Coupler and TidbiT Coupler for connecting the base station loggers • 128K capacity enough for 16 full 8K loggers or 4 full 32K loggers • Waterproof to 30 ft (15 psi) • 10-year, factory-replaceable battery • Optic Coupler and TidbiT Coupler included

Description	Digi-Key Part No.	Price Each 1	10	100	Onset Part No.
Optic Base Station	341-1047-ND	70.00	64.00	60.00	DSA
Optic Shuttle	341-1048-ND	199.00	183.01	169.00	DTA128B

1- and 2-Axis Magnetoresistive Microcircuits –

HMC1001/1002, HMC1021/1022, NEW! HMC1052



Configured as a 4-element wheatstone bridge, these highly sensitive sensors convert magnetic fields to a differential output voltage, capable of sensing magnetic fields as low as 30 µgauss.

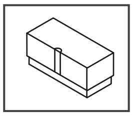
Features: • Field range up to ±6 gauss, (earth's field = 0.5 µgauss) • Small package designed for 1- and 2-axis to work together to provide 3-axis (x, y, z) sensing • Solid state devices reduce board assembly costs, improve reliability and ruggedness compared to mechanical fluxgates • Patented on-chip set/reset straps to reduce effects of temperature drift, non-linearity errors and loss of signal output due to the presence of high magnetic fields • Patented on-chip offset straps for elimination of the effects of hard iron distortion. **Applications:** • Compassing • Navigation Systems • Attitude Reference • Traffic Detection • Medical Devices • Non-Contact Switch

SPECIFICATIONS: *(See notes below)*	**Digi-Key Part No.** 342-1001-5-ND 342-1002-5-ND	342-1003-5-ND 342-1004-5-ND 342-1005-5-ND	342-1029-5-ND	**Conditions**
Operating Temp.	-40°C to +85°C (*)	-40°C to +85°C	-40°C to + 125°C	Ambient
Field Range	±2 gauss (†Δ*)	±6 gauss	-6 to +6 gauss	Full scale (FS) - total applied field
Linearity Error Typ	1% FS (†Δ*)	1.6% FS	0.4%FS	Best fit straight line (at 25°C) ±2 Gauss (±6 Gauss for 342-1003/1004/1005-5-ND) Best fit straight line ±3 gauss for 342-1029-5-ND
Hysteresis Error Typ	0.05% FS (†Δ*)	0.08% FS	0.10%	3 sweeps across ±2 Gauss @ 25°C (±3 Gauss for 342-1003/1004/1005-5-ND) 3 sweeps across ±6 gauss at -40°C to +125°C for 342-1029-5-ND
Sensitivity Typ	3.2 mV/V/gauss († Δ)	1.0mV/V/gauss	1.0mV/Vgauss	At IOFFSET = ±50mA, Vbridge=8V (Vbridge=5V for 342-1003/1004/1005-5-ND) Set/Rest Current=0.5A for 342-1029-5-ND
Resolution Typ	27 µgauss	85 µgauss	85 µgauss	Bandwidth = 10Hz, Vbridge=5V
Bandwidth	5MHz	5MHz	5MHz	Magnetic signal (lower limit=DC)
Units: 1 gauss (G) = 1 Oersted (in air), 1G=79.58A/m, 1G=10E-4 Tesla, 1G=10E5 gamma.				

Notes:
† VBridge = 4.3V, IS/R = 3.2A, T = 25°C . VOUT = VSET - VRESET
Δ If VBridge = 8.0V, IS/R = 2.0A, T = 25°C, lower S/R current leads to greater output variation.
* Not tested, guaranteed by characterization.

Description	Digi-Key Part No.	Price Each 1	5	25	Honeywell Part No.
8-Pin SIP, Single Axis	342-1001-5-ND	33.00	24.75	22.00	HMC1001
20-Pin SOIC, Double Axis	342-1002-5-ND	45.00	33.75	30.00	HMC1002
8-Pin SOIC, Single Axis	342-1003-5-ND	24.00	18.00	16.00	HMC1021S
8-Pin SIP, Single Axis	342-1004-5-ND	24.00	18.00	16.00	HMC1021Z
16-Pin SOIC, Double Axis	342-1005-5-ND	27.00	20.25	18.00	HMC1022
10-Pin MSOP, Double Axis	342-1029-5-ND *NEW!*	18.00	—	—	HMC1052

3-Axis Magnetoresistive Sensor – HMC1023



Configured as three magnetoresistive sensors in x, y and z orientation, these highly sensitive sensors convert all three magnetic field axes to a differential output voltage.

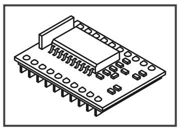
Features: • Field range of ±6 gauss, (earth's field = 0.5 gauss) while maintaining high sensitivity with a minimal detectable field down to 85 µgauss • Small package designed to work as a single stand-alone three-axis (x, y, z) magnetoresistive sensing system • Custom Ball Grid Array (BGA), 1mm pitch, 16-pin miniature package provides a small footprint and accurate sensor placement for orthogonal three-axis sensing applications • Solid state device reduces board assembly costs, improves reliability and ruggedness compared to mechanical fluxgates • Patented on-chip set/reset and offset straps have been improved and now require 50% less power to drive the set-reset and offset functions • Operates with a 3V to 25V power supply, lowering power consumption and reducing support circuitry.

Applications: • Compassing • Navigation Systems • Attitude Reference • Virtual Reality • Traffic Detection • Proximity Detection • Medical Devices

Specifications: • **Operating Temp.:** -40°C to +125°C, Ambient • **Field Range:** ±6 gauss; Full scale (FS) - total applied field • **Typ. Linearity Error:** 1.6% FS; Best fit straight line (at 25°C) ±6 Gauss • **Typ. Hysteresis Error:** 0.08% FS; 3 sweeps across ±3 Gauss @ 25°C • **Typ. Sensitivity:** 1.0mV/V/gauss; At Vbridge +5V • **Typ. Resolution:** 85 µgauss; Bandwidth=10Hz, Vbridge=5V • **Bandwidth:** 5MHz; Magnetic signal (lower limit=DC). (Units: 1 gauss (G) = 1 Oersted (in air), 1G=79.58A/m, 1G=10E-4 Tesla, 1G=10E5 gamma.)

Description	Digi-Key Part No.	Price Each	Honeywell Part No.
3-Axis Magnetoresistive Sensor	342-1006-ND	75.00	HMC1023
HMC Mounted on 16-Pin DIP Socket Demo Kit	342-1007-ND	100.00	HMC1023 Demo Kit

3-Axis Magnetic Sensor Hybrid – HMC2003



A complete 3-axis magnetometer with analog output in a 20-Pin hybrid DIP package.

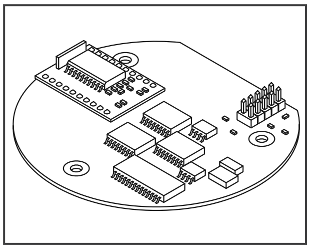
Features: • DIP-20 footprint (1" x .75") allows easy insertion into system-level boards, reducing development costs • Solid state components improve reliability and ruggedness compared to mechanical fluxgates • Accurately measures fields from 40 micro-gauss to ±2 gauss at 1V/gauss • Low noise instrumentation amplifiers with 1kHz low pass filters, reject unwanted noise • No flux concentrators used in this design that can lead to hysteresis and non-repeatability • An externally accessible +2.5V reference improves measurement accuracy and stability • On-board excitation current source reduces temperatures errors and regulates the power supply input • Magnetic field offsets or closed loop circuits can be applied using the built-in straps • Output signal accuracy may be enhanced by using the integral set/reset straps • All components selected and packaged in nonmagnetic material to reduce magnetic distortion and offsets.

Applications: • Compassing • Navigation Systems • Attitude Reference • Traffic Detection • Proximity Detection • Medical Devices

Specifications (Power Supply: +15VDC; Set/Reset switching is active): • **Operating Temp.:** -40°C to +85°C, Ambient @ 25°C • **Supply Voltage**: 6 to 15 VDC; Transient protection circuitry should be added across V+ and Gnd if an unregulated power supply is used • **Supply Current:** 20mA • **Output Voltage:** 0.5V to 4.5V • **Field Range:** ±2 gauss • **Typ. Linearity Error:** 1%FS; ±2 gauss Applied Field Sweep • **Typ. Hysteresis Error:** 0.05% FS; 3 sweeps across ±2 gauss • **Sensitivity Typ**.: 1.0mV/V/gauss; At Vbridge +5V • **Typ. Resolution:** 40 µgauss • **Bandwidth:** 1KHz (Units: 1 gauss (G) = 1 Oersted (in air), 1G=79.58A/m, 1G=10E-4 Tesla, 1G=10E5 gamma.)

Description	Digi-Key Part No.	Price Each	Honeywell Part No.
3-Axis Magnet Sensor Hybrid	342-1011-ND	199.00	HMC2003

3-Axis Strapdown Magnetometer – HMR2300r



The three-axis strapdown magnetometer detects the strength and direction of the earth's magnetic field and communicates the x, y, and z component directly via serial bus. It provides an excellent replacement for conventional fluxvalve sensors commonly used in aviation systems. It offers higher reliability since it has no moving parts to damage or wear out during severe flight conditions. Low cost, high sensitivity, fast response, small size, and reliability are advantages over mechanical or other magnetometer alternatives.

Features: • Strapdown magnetometer replaces bulky fluxvalves • Microprocessor-based Smart Sensor • Range of ±2 Gauss: <70 µGauss Resolution • Readings can achieve heading resolution of 0.02° • Rate Selectable: 10 to 154 samples/sec. • Small Size: 2.83", fits in ML-1 Style enclosure • Repeatable & Reliable: MTBF >50,000 hours.

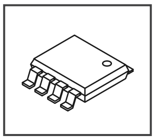
Applications: • Navigation Systems (Avionics and Marine) • Fluxvalve Replacement • Can be slaved to AHRS System • GPS Backup Systems • Remote Vehicle Monitoring • Unpiloted Air Vehicles (UAVs) • Navigation/Attitude for Satellites.

Specifications: • **Supply Voltage:** 6.5 to 15V; Pin 9 referenced to Pin 5 • **Typ. Supply Current:** 45mA; Vsupply=15V, (with 120W termination) • **Operating Temp:** -40°C to +85°C; Ambient • **Field Range:** ±2 gauss; Full scale (FS) - total applied field • **Typ. Linearity Error:** 0.1 / 1%FS; Best fit straight line at 25°C ±1 Gauss • **Typ. Hysteresis Error:** 0.01%FS; 3 sweeps across ±2 Gauss @ 25°C • **Min. Resolution:** 67µgauss; Applied field to change output. (Units: 1 gauss (G) = 1 Oersted (in air), 1G=79.58A/m, 1G=10E-4 Tesla, 1G=10E5 gamma)

Serial Output	Description	Digi-Key Part No.	Price Each	Honeywell Part No.
RS-422	Round	342-1021-ND	850.00	HMR2300r-422
RS-485	Round	342-1020-ND	850.00	HMR2300r-485

Linear / Angular / Rotary Displacement Sensors –

HMC1501 / HMC1512



High resolution, low power MR sensor capable of measuring the angle direction of a magnetic field from a magnet with <0.07° resolution. Output is typical Wheatstone Bridge

Features: • No "rare earth" magnets; functions with Alnico or ceramic type magnets • Linear range of 8mm with two sensors mounted on two ends; range may be increased through multiple sensor arrays operating together • Absolute sensing ability to know exact position and require no indexing for proper positional output • No moving parts to wear out • 8-pin SMT package • Case dimensions (exclusive of pins) of 5mm x 4mm x 1.2mm total mounting envelope, with pins of less than 6mm square • Full scale output range of 120mV with 5V of power supply.

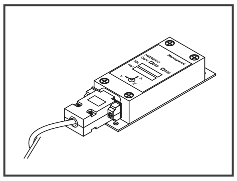
Applications: • Linear Displacement • Angular Displacement • Motor Control • Valve Position • Proximity Detection • Current Spike Detection.

Specifications (at 25°C except stated otherwise)**:** • **Typ. Bridge Supply:** 5V, Vbridge referenced to GND • **Sensitivity** Vbridge =5V, field 80 Oe**:** 2.1mV/° @ zerocrossing; 1.8mV/° @ zero crossing, averaged in the range of 45° • **Typ. Peak-to-Peak Voltage:** 120mV, Vbridge=5V, field=80 Oe • **Bandwidth:** 0 to 5MHz, Magnetic signal • **Typ. Hysteresis Error:** 30µV°, 1.7x10^{-2} mV°, Magnetic field ≥saturation field, Vbridge = 5V

Typ. Bridge Resistance @ 1mA	Angle Range ≥ Saturation Field	Typ. Resolution 10Hz Bandwidth Vbridge=5V <0.07°	Digi-Key Part No.	Price Each	Honeywell Part No.
5KΩ	±45°	<0.07°	342-1008-5-ND	24.00	HMC1501
2.1KΩ	±90°	<0.05°	342-1010-5-ND	27.00	HMC1512

Smart Digital Magnetometer –

HMR2300



Microcontroller-Based Smart Sensor with range of ±2 Gauss; <70µGauss Resolution. Has high accuracy over ±1 Gauss; <0.5%FS; and Output Rate Selectable of 10 to 154 Samples/Sec. This sensor has a three-axis digital output, BCD ASCII or Binary, RS-232 or RS-485 Serial Output (9600 or 19200), and a 9-pin D-Sub connector.

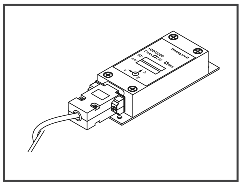
Applications: • Compassing – Avionics and Marine • Remote Vehicle Monitoring (Roll/Pitch/Yaw) • Process Control • Laboratory Instrumentation • Anomaly Detection • Traffic and Vehicle Detection • Security Systems.

Specifications: • **Supply Voltage:** 6.5 to 15V; Pin 9 referenced to Pin 5 • **Typ. Supply Current:** 27mA; Vsupply=15V, with S/R=ON • **Operating Temp:** -40°C to 85°C; Ambient • **Field Range:** ±2 gauss; Full scale (FS) - total applied field • **Typ. Linearity Error:** 1%FS; Best fit straight line at 25°C ±2 Gauss • **Typ. Hystereis Error:** 0.01%FS; 3 sweeps across ±2 Gauss @ 25°C • **Min. Resolution:** 67µgauss; Applied field to change output. (Units: 1 gauss (G) = 1 Oersted (in air), 1G=79.58A/m, 1G=10E-4 Tesla, 1G=10E5 gamma)

Serial Output	Description	Digi-Key Part No.	Price Each	Honeywell Part No.
RS-232	Without Enclosure	342-1014-ND	675.00	HMR2300-D00-232
RS-232	Flush Mount Enclosure, Aluminum, 3.25" x 1.50" x 1.13" (82.55 x 38.1 x 28.70mm)	342-1015-ND	699.00	HMR2300-D20-232
RS-232	Extended Enclosure, Aluminum, 4.00" x 1.50" x 1.13" (101.60 x 38.1 x 28.70mm)	342-1016-ND	699.00	HMR2300-D21-232
RS-485	Without Enclosure	342-1017-ND	675.00	HMR2300-D00-485
RS-485	Flush Mount Enclosure, Aluminum, 3.25" x 1.50" x 1.13" (82.55 x 38.1 x 28.70mm)	342-1018-ND	699.00	HMR2300-D20-485
RS-485	Extended Enclosure, Aluminum, 4.00" x 1.50" x 1.13" (101.60 x 38.1 x 28.70mm)	342-1019-ND	699.00	HMR2300-D21-485
RS-232	HMR2300 Development Kit with RS-232 Output, Cables, Manual	342-1012-ND	750.00	HMR2300-Demo-232
RS-485	HMR2300 Development Kit with RS-485 Output, Cables, Manual	342-1013-ND	750.00	HMR2300-Demo-485

Honeywell Sensors

Digital Compass Module – HMR3000



Electronic compass module that provides heading, pitch and roll output for navigation and guidance systems. This solid state magnetoresistive sensors make this strapdown compass both rugged and reliable. This compass provides fast response time up to 20Hz and high heading accuracy of 0.5° with 0.1° resolution.

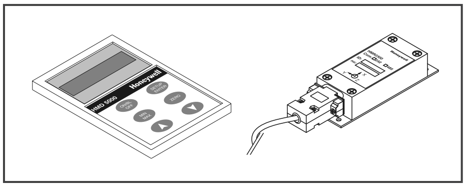
Features: • Built with solid state magnetic sensors and no moving parts improves response time, allowing faster updates compared to gimballed fluxgates • Available as a circuit board 1.2” x 2.95”, weighing less than one ounce, or in an aluminum enclosure • Operates with less than 35mA, allowing for long operation with a battery • Accuracy better than 0.5° with 0.1° resolution for critical positioning applications • Tilt range of ±40° for both the roll and pitch allows operation for most applications • Calibration routines to compensate for distortion due to nearby ferrous objects and stray fields, such as vehicles • User settings of baud rate, update rate, output format, units, filter settings, deviation angles, alarms, and warnings are stored internally in non-volatile memory.

Specifications: • **Typ. Supply Voltage:** 5.0Vdc regulated, 6-15Vdc unregulated • **Typ. Power:** 35mA @ 6Vdc Normal Operation, 13mA STOP Mode, 2.0mA SLEEP Mode • **Serial:** RS-232 / RS-485 (Half Duplex) • **Baud Rate:** 1200 to 38400 bps • **Standard:** NMEA 0183 • **Update Modes:** Continuous: 1/min to 20Hz per sentence; Strobed: selectable averaging • **Operating Temperature:** Meets or exceeds -20°C to 70°C • **Storage Temperature:** Meets or exceeds -35°C to +100°C • **Shock:** Meets or exceeds 30” drop (MIL-STD-810E:TM 516.4) • **Vibration:** Meets or exceeds 20-2000Hz Random 2 hrs/axis (MIL-STD-810E:TM 514.4).

Applications: • Oceanographic (Marine compassing; Positioning of buoys, underwater structures) • Drilling (down hole and directional) • Attitude Reference • Heading (Navigation of unmanned vehicles; Avionic compassing) • Integration with GPS (Dead Reckoning) • Satellite Antenna Positioning • Laser Range Finders (surveying applications)

Serial Output	Description	Digi-Key Part No.	Price Each	Honeywell Part No.
RS-232	Without Enclosure	342-1024-ND	675.00	HMR3000-D00-232
RS-232	Enclosure, Extended Base	342-1025-ND	675.00	HMR3000-D21-232
RS-485	Without Enclosure	342-1026-ND	675.00	HMR3000-D00-485
RS-485	Enclosure, Extended Base	342-1027-ND	699.00	HMR3000-D21-485
HMR 3000 Development Kit, with RS-232 Output, Cables, Manual		342-1022-ND	750.00	HMR3000-Demo-232
HMR 3000 Development Kit, with RS-485 Output, Cables, Manual		342-1023-ND	750.00	HMR3000-Demo-485

Hand Held Display Module – HMD5000



This Hand Held Display Module for digital magnetic sensor products displays heading, pitch, and roll information when connected to the HMR3000 Digital Compass Module. If used with the HMR2300 Smart Digital Magnetometer, magnetic field readings in the X, Y and Z directions, as well as the magnitude of all three axes combined are shown.

This small hand held unit has actual case dimensions of 3.60” x 5.70” x 2.09” and weighs 0.54 pounds. The interface cable is 3 feet long and has a female 9-pin “D” connector. The accuracy and resolution of the HMD500 is dependent on the instrument with which it is used (the HMR3000 or the HMR2300).

Features: • Portable, runs on batteries, easy to use in field applications.

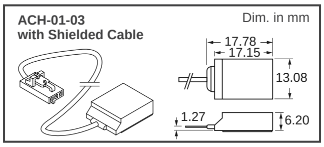
Input Power Requirements: • **Supply Voltage:** 6-15 Vdc Unregulated • **Power:** 72mA @ 9 Vdc (300mA at Power Up).

Applications: • Compassing • Navigation Systems • Attitude Reference • Magnetic Anomoly Detection • Proximity Detection • Laboratory Instrumentation • Traffic and Vehicle Detection

Description	Digi-Key Part No.	Price Each	Honeywell Part No.
HMD5000 Hand Held Display Module	342-1028-ND	569.00	HMD5000

MEASUREMENT SPECIALTIES

Accelerometer

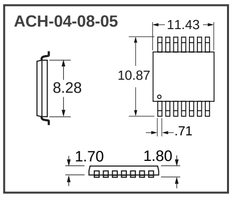


The ACH-01 Accelerometer is a robust, general purpose, linear single axis accelerometer featuring buffered electronic output. **Specifications:** • **Sensitivity:** 10mV/g • **Lower Frequency Limit (-3dB):** 2Hz • **Upper Frequency Limit (+3dB):** 20kHz • **Dynamic Range:** ±150g • **Linearity:** 0.1% • **Resonant Frequency:** 35kHz • **Operating Temp.:** -40°C to +85°C • **Max. Shock Level:** 1000g

Description	Digi-Key Part No.	Price Each 1	10	100	MSI Part No.
ACH-01-03 Sensor Accelerometer with 40” Single Coax Cable and Female Connector	MSP1001-ND	19.95	18.00	17.00	1-1001220-0
ACH-01-04 Sensor Accelerometer with Wires	MSP1002-ND	19.95	18.00	17.00	1-1001497-0

3-Axis Accelerometer/Shock Sensor

Dim. in mm



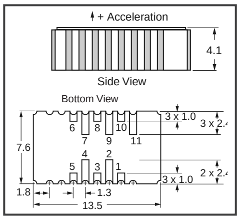
The ACH-04-08-05 accelerometer/shock sensor contains three piezoelectric sensing elements oriented to measure acceleration in three orthogonal, linear axes. “Internal JFET’s provide for a low impedance, buffered output with a wide variety of possible application specific signal conditioning circuitry. It can be used in a wide range of applications including motional measurement and control systems, speaker feedback systems, vibration switches, shipment monitor and material handling systems, security systems, computer input/output devices and data loggers.”

Specifications: • **Sensitivity:** 1.8mV/g Typ. • **Frequency Limit (±3dB):** .35Hz to 5kHz • **Dynamic Range:** ±250g • **Linearity:** 0.1% • **Resonant Frequency:** 9.2kHz • **Operating Temperature:** -40°C to +85°C • **Max. Shock Level:** 1000g

Description	Digi-Key Part No.	Price Each 1	10	100	MSI Part No.
ACH-04-08-05 — Surface Mount 3-Axis Sensor Accelerometer	MSP1004-ND	25.00	23.00	21.25	0-1003800-5
ACH-04-08-05 PCB — Surface Mount 3-Axis Sensor Accelerometer with PCB	MSP1005-ND	50.00	45.00	35.00	0-1005685-1

2-Chip Accelerometer

Dim. in mm



The Model 3255 is a two-chip accelerometer designed for low cost surface mount applications. The package can be mounted in one of two orientations, allowing the measurement axis to be either parallel or perpendicular to the mounting surface without the use of costly brackets. It consists of a micro machined silicon mass suspended by multiple beams from a silicon frame. Piezoresistors located in the beams change their resistance as the motion of the suspended mass changes the strain in the beams. Silicon caps on the top and bottom of the device are added to provide over-range stops. This design provides for a very low profile, high shock resistance, built-in damping over a wide usable bandwidth. Each sensor is individually serialized.

Features: • Surface Mount Pkg. • ±0.5% Non-linearity Typ. • Self Test Function • DC Response • Built-in Damping • Built-in Over-range Stops

Acceleration Range	Sensitivity Typ.†	Digi-Key Part No.	Price Each 1	10	100	MSI Part No.
±50G	40.0 mV/g	MSP6890-ND	105.00	99.00	65.00	3255-050
±100G	20.0 mV/g	MSP6891-ND	105.00	99.00	65.00	3255-100

† The output voltage increases from the Zero Acceleration Output for positive acceleration and decreases for negative acceleration. Best Fit Straight Line.

Amplifier Box

For use with ACH-01-03 and ACH-01-04

Characteristics:

• **Gain:** 10X • **Power Supply:** 9V Battery • **Supply Current:** 4.0mA • **Input Interface:** FET for ACH-01 • **Output Impedance:** 100Ω • **Output Connector:** BNC

Description	Digi-Key Part No.	Price Each 1	10	100	MSI Part No.
IB-ACH-01 — Amplifier Box	MSP1003-ND	100.00	85.50	70.00	0-1003058-0

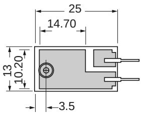
LDT Vibration Sensor

Dim. in mm

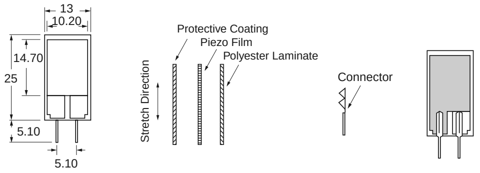
Typically, a 0.005” (125µm) polyester layer is laminated to a 28µm piezo film element. When used in a “bending” mode, laminated film elements develop much higher voltage output when flexed than non-laminated elements. The piezo film is off the neutral axis in the laminate, and is strained more when flexed.

LDTM

Also available with a mass (M) which provides higher output (mv/g) for higher sensitivity applications.

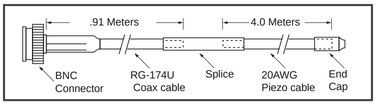


LDT0-028K High Sensitivity



Description	Cap (nF)	Digi-Key Part No.	Price Each 1	10	100	MSI Part No.
LDT0-028K, with Solder Tabs	.500	MSP1006-ND	.75	.73	.70	1002794-0
LDTM-028K, with Mass and Solder Tabs	.420	MSP1007-ND	1.00	.85	.75	0-1005447-1

Piezo Polymer Coax Cable Assembly



4 meters of piezo cable plus splice and BNC connector

Description	Digi-Key Part No.	Price Each 1	10	100	MSI Part No.
Piezo Polymer Coaxial Cable Assembly	MSP1009-ND	80.00	68.40	56.00	0-1005707-1

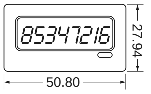
Basic Design Kit

This kit demonstrates the use of MSI piezo film sensors as microphones, speakers, switches and acoustic pickups. All components and film samples in the kit can be used for experimentation. Kit includes seven sensor elements, one piezo cable, one PCB for ACH-04-08, application/instruction specs, and technical manual.

Description	Digi-Key Part No.	Price Each	MSI Part No.
Basic Design Kit	MSP1010-ND	135.00	0-1004308-0

RED LION CONTROLS

CUB7 Series Miniature Electronic 8-Digit Counter



CUB7 / CUB7W (with Voltage Input)

• Replaceable internal lithium battery provides up to 7 years of uninterrupted operation • Front panel reset or remote reset • Wire connection made via screw clamp type terminals • Fits DIN standard cut-out 1.77" (45 mm) x 0.874" (22.2 mm) • Low speed count to 30Hz from switch closure or O.C. transistor. High speed count to 10 KHz (CUB7)

DESCRIPTION:

The *CUB7* and *CUB7W* are an 8-digit miniature counter with large 0.35 inch (8.89 mm) high digits. They have an LCD read-out available in Positive Image Reflective, Negative Image Transmissive with yellow/green or red LED backlighting. The backlight versions require an external 9 to 28 VDC power supply. The *CUB7* series is housed in a lightweight, high impact plastic case with a clear viewing window. The sealed front panel with the silicone rubber reset button meets NEMA 4X/IP65 specifications for wash-down and/or dusty environments, when properly installed. The *CUB7W* accepts most machine control voltage signals. The input accepts AC (50/60 Hz) or DC control voltages from 10 to 300 V at count speeds up to 30 counts per second (cps).

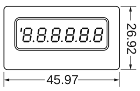
CUB7T

• 10 programmable timer ranges • 8-digit LCD reflective display with "Timer Active" annunciator • .35" (8.89mm) high digits • Available in either contact or voltage versions • Replaceable internal lithium battery provides up to 6 years of uninterrupted operation • Both front panel program and reset buttons are individually enabled • Wire connections via screw clamp type terminals • Front panel and remote reset input • NEMA 4X/IP65 sealed front bezel

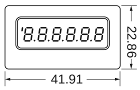
Description	Digi-Key Part No.	Price Each	Red Lion Part No.
CUB7 8-Digit Reflective Display	RLC700-ND	48.00	CUB70000
CUB7 8-Digit Yellow/Green Backlight	RLC701-ND	68.00	CUB70010
CUB7 8-Digit Red Backlight	RLC702-ND	68.00	CUB70020
CUB7W 8-Digit Reflective w/Voltage Input	RLCW70-ND	52.00	CUB7W000
CUB7W 8-Digit Yellow Backlight w/Voltage Input	RLCW71-ND	72.00	CUB7W010
CUB7W 8-Digit Red Backlight w/Voltage Input	RLCW72-ND	72.00	CUB7W020
CUB7T 8-Digit Reflective w/Contact Input	RLC7T0-ND	44.00	CUB7T000
CUB7T 8-Digit Reflective with Voltage Input	RLC7T1-ND	44.00	CUB7T100

MDMU Miniature Electronic 6-Digit Counter/Timer/Tach

Panel Mount



Circuit Board Mount



• LCD, Positive Image Reflective or Negative Image Transmissive with yellow/green or red LED backlighting • Counter, timer and tach all in a single unit • Rate multiplier/prescaler from 0.0001 to 1.9999 in count and tach modes • 10 ranges in internal timer mode • Selectable decimal points • 5 VDC powered • Panel mount or PC board mount

DESCRIPTION

The MDMU is a complete 6-digit counter/timer/tach in a small panel or printed circuit board mounted package. It is designed to operate from a 5 VDC power supply. It has a 6-digit LCD with 0.35" (8.89mm) high digits and 5 selectable decimal points. In the timer modes, a flashing annunciator is supplied to indicate that the signal input of the MDMU is active. The displays are available in Positive Image Reflective (black digits, reflective background) or Negative Image Transmissive (illuminated digits, dark background) with red or yellow/green backlighting.

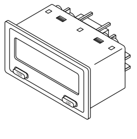
The **Counter** mode can be selected by setting the Mode Select Inputs to the appropriate levels (Hardware selection). A rate multiplier of 0.0001 to 1.9999 and a decimal point of 0 through 0.00000 can be selected using the *Program* mode. Decimal points may also be set using the DP Inputs (Hardware selection). Both the Count (CNT) and LSC Inputs can be used. (Using the *Program* mode options causes the counter to increment on the opposite edge of the Input signal.)

The **Timer** mode and range can be selected by either setting the Mode Select Inputs to the appropriate levels (Hardware selection) or by selecting the range in the *Program* mode. The timing range increments available are 1 msec, 10 msec, 100 msec, 1 sec, 0.1 min., 1 min., 0.01 hr, 0.1 hr, 1 hr, and hr:min:sec. The *Timer Active* annunciator will flash at a 2 Hz rate when the input to the timer is activated. Both the CNT and the LSC inputs can be used. The Inhibit (INH) Input can be used to enable or disable Leading Zero Blanking (LZB).

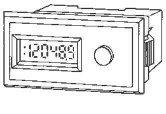
The **Tach** mode can be selected by setting the Mode Select Inputs to the appropriate levels (Hardware selection). In the **Tach** mode, the MDMU operates as a fixed 1 second time base tachometer. In the *Program* mode, the time base can be set 1 through 7 seconds (in whole second increments). The rate multiplier can also be programmed from 0.0001 through 1.9999. Decimal points can be set from 0 through 0.00000. Decimal points may also be set using the DP Inputs. Both the CNT and the LSC Inputs can be used.

Description	Digi-Key Part No.	Price Each	Red Lion Part No.
MDMU 6-Digit Panel Mount, Reflective Display	RLCU00-ND	35.00	MDMU0000
MDMU 6-Digit Panel Mount, Yellow Backlight	RLCU01-ND	45.00	MDMU0010
MDMU 6-Digit Panel Mount, Red Backlight	RLCU02-ND	45.00	MDMU0020
MDMU 6-Digit PCB Mount, Reflective Display	RLCU10-ND	32.00	MDMU0100
MDMU 6-Digit PCB Mount, Yellow Backlight	RLCU11-ND	42.00	MDMU0110
MDMU 6-Digit PCB Mount, Red Backlight	RLCU12-ND	42.00	MDMU0120
MDMV Cable Assembly	RLC70-ND	12.00	HWK70000

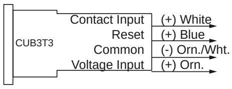
Counters and Timers



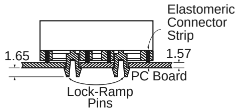
CUB 5 — LCD, Positive reflective or negative transmissive with yellow-green or red LED backlighting • 0.46" (11.7mm) high digits • Programmable decimal point • Front panel and remote reset • Count speeds up to 20KHz (high speed input) • Operates from 9 to 28 VDC power source • Programmable prescaler for totaling • Bi-directional counting, up/down control • Quadrature sensing (up to 4 times resolution) • Anti-coincidence counting (Add/Add and Add/Sub) • Separate count and rate input mode • Wire connections made via screw clamp type terminals • Dual counter mode • Count input voltage up to +28VDC • NEMA 4X/IP65 sealed front bezel.



CUB III — Operates from switch contact or NPN open collector inputs • Self powered, 2-wire connection, eliminates power wiring. **Description:** Nylon case snap-fits into a standard rectangular opening without screws or other hardware. Hook-up is simply a matter of connecting two wires. No external power, internal batteries provide year of uninterruptible service. **Specifications:** • 6-digit, LCDm 0.2" (5.08mm) high • **Power:** 2 replaceable Alkaline "N" cells. Nominal battery life 4 years. Front panel reset button • **Count Input:** Switch contact of solid-state transistor switch. Counter increments on negative going edge of input. • **Count Speed:** 100 counts/sec. Batteries not supplied with counter, order separately.

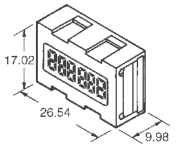


CUB 3T3 — The CUB3T3 is designed to be used as hour, tenth hour, hundredth hour or tenth minute timers. The timing function can be activated by either a contact closure or the application of 10 to 300 (AC 50/60 Hz or DC) and is equipped with a remote reset. Time is displayed on a 6-digit LCD that will wrap around from a full display of "999999" to "000000" when an overflow occurs. **Specifications:** • **Display:** 6-digit, LCD, 0.2" (5.08mm) high. • **Power:** 3 volts supplied by a non-replaceable lithium battery. Nominal battery life is 7 years. • **Remote Reset:** 15 msec min. pulse width (active low) from 3.0 V bi-polar output, an open collector transistor, or a switch contact to common. • **Signal Input:** Contact Connections: Switch Contact or Solid-State Transistor Switch. A maintained closed switch will actuate the timer. • **10 to 300 V Connections:** 10 V min. to 300 V max. Constant voltage applied to the inputs will actuate the timer.



SUPER SUB CUB — True quadrature — with resolutions up to 4 times the encoded input • Bi-directional counting with up/down control • Anti-coincidence addition and subtraction • Polarity indication • 8-digit counting capability (6-digit display) • Decimal point and leading zero blanking selection • Solderless, elastomeric interconnects (snap mounts directly on P.C. board) • Ultra low power, 25µA at 5V (typical). **Description:** The Super Sub Cub provides all the capabilities and features of the Sub Cub 2 plus four "built-in" modes of operation: Bi-direction counting with up/down control, quadrature counting, coincidence summing and anti-coincidence add/subtract counting. *For dimensions, see Sub Cub 2.*

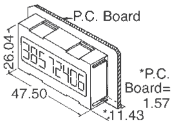
SUB CUB I — Complete 6-Digit Component Counters



• LSI counter chip with LCD display • Snap mounts directly on P.C. board • 0.2" (5.08mm) high display • Solderless, elastomeric interconnects • Ultra-low power, 5V at 15µA typical • Latchable display with leading zero blanking • Count rates to 500 KHZ • Ideal in applications for: Register, status and usage counting, frequency, EPUT, and RPM indication timer, pulse-width and period readout. **Description:** The modules contain a custom monolithic counter/driver chip that performs all the counting functions together with a 6-digit LCD readout. To be used as frequency or rate meters, timers, phase-angle or pulse width indicators and for other complex readout requirements in addition to simple high speed counting.

SUB CUB II — Complete 6-Digit Component Counters

• LSI counter chip with LCD display • Snap mounts directly on P.C. board • 0.35" (8.89mm) high display • Solderless, elastomeric interconnects • Ultra-low power, 5V at 15µA typical • Latchable display with leading zero blanking • Count rates to 500 KHZ • Ideal in applications for: Register, status and usage counting, frequency, INPUT, and RPM indication timer, pulse-width and period readout. **Description:** The modules contain a custom monolithic counter/driver chip that performs all the counting functions together with a 6-digit LCD readout. To be used as frequency or rate meters, timers, phase-angle or pulse width indicators and for other complex readout requirements in addition to simple high speed counting.



SUB CUB 2-8A • LSI counter chip and 0.30" (7.62mm) high LCD display • Solderless, elastomeric interconnects (snap mounts directly onto PC board) • Latchable display with selectable leading zero blanking • Count rates to 750KHz • Low power, 30µA at 5V (typical) **Description:** 8-digit LCD component up-counter • Test feature allows all decades to count in parallel to provide rapid testing. *For dimensions, see Sub Cub 2.*

SUB CUB D • True quadrature with resolutions up to 4 times the encoded input • Bi-directional counting with up/down control • Polarity indication • 3 position decimal point with selectable leading zero blanking • Solderless, elastomeric interconnects (snap mounts directly onto P.C. board) • Ultra low power, 15UA at 5.0V (typical). **Description:** The Sub Cub D provides all of the capabilities of the Sub Cub 2 with two additional modes of operation: Bi-directional counting with up/down control and quadrature counting. *For dimensions, see Sub Cub 2.*

SUB CUB T • LSI timer/counter chip with crystal controlled oscillator and .35" (8.89mm) high LCD display • Snap mounts directly onto P.C. board • Solderless, elastomeric interconnect • Ultra low power, 15UA at 5.0 VDC typical • Times in hours, 0.1 hours, 0.01 hours, and 0.1 minutes • Counts in X1, :10, :100, and :1000 • Debounce selectable in counter modes • Counts rates up to 500 KHz • Annunciator to indicate timer running • Accepts AC voltage on signal input directly through input resistor. **Description:** Completely self-contained timer/counter/display module. Ideal for internal "on board" applications where a readout of elapsed time or count is needed. *For dimensions, see Sub Cub 2.*

SUB CUB R • LSI counter chip with time base chip and .35" (8.89mm) high LCD display • Snap mounts directly onto P.C. board • Solderless, elastomeric interconnects • Ultra low power, 25UA at 3V • Selectable time base from 3.9 msec to 15.9 sec • Frequency doubling capability • Selectable decimal point positions • Master reset to synchronize time base with external functions. **Description:** Completely self-contained tachometer/display module. Contains a custom monolithic counter/driver chip, a custom time base chip, and a 6-digit liquid crystal display. Ideal for internal "on board" applications where readout of rate or frequency is needed. *For dimensions, see Sub Cub 2.*

Description	Digi-Key Part No.	Price Each	Red Lion Part No.
CUB 5			
CUB 5 Dual Counter & Rate Indicator Positive Image Reflective	RLC500-ND	92.05	CUB50000
CUB 5 Dual Counter & Rate Indicator with Yellow-Green Backlighting	RLC510-ND	103.00	CUB50010
CUB 5 Dual Counter & Rate Indicator with Red Backlighting	RLC520-ND	103.00	CUB50020
Micro Line/Sensor Power Supply	RLCMLPS-ND	27.00	MLPS0000
CUB III and CUB 3T3			
CUB III (Requires 2 N-Cell Batteries)	RLC03-ND	28.00	CUB III
CUB III w/Lithium Battery (Battery life 10 yrs. depending on usage)	RLC04-ND	33.00	CUB3L000/A
N-Cell Battery	P147-ND	1.08	AM5X
CUB 3T300 Timer, Remote Reset, 1 hour	RLC3TR-30-ND	48.00	CUB3T300
CUB 3T310 Timer, Remote Reset, 0.1 hour	RLC3TR-31-ND	48.00	CUB3T310
CUB 3T320 Timer, Remote Reset, 0.01 hour	RLC3TR-32-ND	48.00	CUB3T320
CUB 3T330 Timer, Remote Reset, 0.1 minute.	RLC3TR-33-ND	48.00	CUB3T330
SUPER SUB CUB			
Super Sub-Cub Display/Counter Module	RLC200A-ND	38.00	SSCUB200
Super Sub-Cub Prototype P.C. Board	RLC08-ND	14.00	DM-0SC-B03/A
SUB CUB I and II			
Evaluation Kit (batteries included, RLC02-ND & display counter needed)	RLC01-ND	52.00	DM-OSC-B01/A
Mounting PCB for Display Counter to Evaluation Kit	RLC02-ND	10.00	DM-OSC-B02/A

Description	Digi-Key Part No.	Price Each	Red Lion Part No.
Display Counter .2" (5.08mm) High Digits	RLC1000-ND	22.00	SCUB-1000
Display Counter .35" (8.89mm) High Digits	RLC2000-ND	28.00	SCUB-2000
SUB CUB 2-8A			
8 Digit LCD component up-counter	RLC2-8A-ND	40.00	SCUB28A0
SUB CUB D			
8 Digit Bi-directional Module w/6 Digit LCD Display	RLC05-ND	30.00	SCUBD-200/A
Sub Cub D Prototype P.C. Board	RLC09-ND	14.00	DM-0SC-B04/A
SUB CUB T			
Timer/Counter 5 Digit	RLC07-ND	29.00	SCUBT-200/A
SUB CUB R			
6 Digit Rate Indicator Module	RLC06-ND	37.00	SCUBR-200/A
Bezels			
Bezel Kit w/P.C. Board & Cable (For RLC05-ND, RLC06-ND, RLC07-ND)	RLC10-ND	24.00	HWK-60-000/A
Panel Bezel Kit w/P.C. Board & Cable (For RLC2-8-ND)	RLC28-ND	22.00	HWK-28-000/A
Panel Bezel Kit w/o P.C. Board & Cable (For RLC05-ND, RLC07-ND, RLC2-8-ND, RLC200A-ND, RLC2000-ND)	RLC30-ND	10.00	HWK-30-000/A
Panel Bezel Kit w/P.C. Board & Cable (For RLC2000-ND)	RLC40-ND	20.00	HWK-40-000/A
Super Sub-Cub Panel Bezel Kit w/P.C. Board & Cable (For RLC200A-ND)	RLC50A-ND*	24.00	HWK-50-000/A

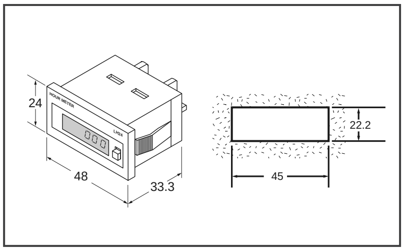
* Does not include SUPER SUB-CUB Display/Counter Module. Order SUPER SUB-CUB Module separately.

Aromat Corporation
NAiS *Your Partner for the 21st Century*

Timers, Counters and Hour Meters

9278B-ND	Aromat Timers, Counters Data Book	**$2.95**

LCD Hour Meters



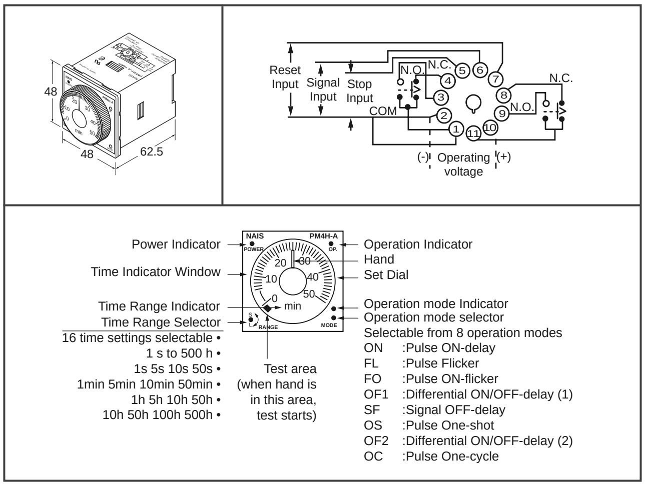
Aromat hour meters display total time when the signal input terminal is connected either together (No-Voltage, using a switch or relay) or the rated input voltage is applied directly to the input terminal (AC/DC Volt type).

All hour meters feature a built-in 10 year battery for long life and screw terminals for easy connections.

Features: • Large 7-digit LCD display value reading • Wide range of measurement: 0 to 3999 days, 23.9 hours; 0 to 99999.99 hours; 0 to 9999 hours, 59.9 min.

Input Type	Time Range	Reset	Digi-Key Part No.	Price Each 1	25	50	Aromat Part No.
100-120VAC	0-3999 days, 23.9 hrs.	Manual PB	255-1180-ND	62.70	59.40	56.10	LH24-F-DH-AL
200-240VAC	0-3999 days, 23.9 hrs	Manual PB	255-1183-ND	62.70	59.40	56.10	LH24-F-DH-AH
200-240VAC	0-99999.99 hrs	Manual PB	255-1184-ND	62.70	59.40	56.10	LH24-F-H-AH
200-240VAC	0-9999 hrs, 59.9 min.	Manual PB	255-1185-ND	62.70	59.40	56.10	LH24-F-HM-AH

PM4H-A Analog Timer



Aromat's PM4H-A series of analog timers operates in one of eight different modes. Available in 11 pin octal base or built-in screw terminals for easy connection. All are IP65 sealed for water and dust and are capable of switching 5A @ 250 VAC with a DPDT timed out relay. Screw terminal types include gasket and mounting bracket.

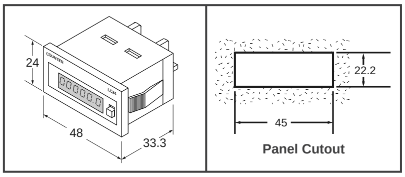
Features: • Front panel of IP65 type is protected against water-splash and dust • 100-240V AC free-voltage input • Built-in screw terminals • 8 different operation modes • Multiple time ranges—1 s to 500 h

Operating Voltage	Terminal	Digi-Key Part No.	Price Each 1	25	50	Aromat Part No.
100-240VAC	11 pin octal	255-1198-ND	48.45	45.90	43.35	PM4HA-H-AC240VW
100-240VAC	Screw	255-1199-ND	52.73	49.95	47.18	PM4HA-H-AC240VSW
24VAC/DC	11 pin octal	255-1200-ND	41.80	39.60	37.40	PM4HA-H-24VW
24VAC/DC	Screw	255-1201-ND	46.08	43.65	41.23	PM4HA-H-24VSW
12VDC	11 pin octal	255-1202-ND	39.90	37.80	35.70	PM4HA-H-DC12VW
12VDC	Screw	255-1203-ND	44.18	41.85	39.53	PM4HA-H-DC12VSW

Relay Accessories

Description	Digi-Key Part No.	Price Each 1	25	50	Aromat Part No.
Track Mounted Socket for 11 pin octal only	255-1205-ND	9.50	9.00	8.50	ATC18004
Track Mounted Socket for 8 pin octal only	255-1222-ND	9.00	8.10	7.65	ATC18003
Snap-in Bezel, Gray for PM4HA Series	255-1206-ND	2.00	1.89	1.79	AT7811
Snap-in Bezel, Black for PM4HA Series	255-1207-ND	2.00	1.89	1.79	AT7812
Snap-in Bezel, Silver for PM4HA Series	255-1208-ND	2.00	1.89	1.79	AT7813
Clear Protective Cover for Timers & Counters	255-1223-ND	4.20	3.78	3.57	N-TC-48
Clear Protective Cover for PM4HA Series	255-1209-ND	3.99	3.78	3.57	N-TC
40" Din Rail Mounting Track for Track Sockets	255-1210-ND	6.08	5.76	5.44	AT8-DLA1
End Stop Plate for Din Rail Mounting Track	255-1211-ND	2.00	1.89	1.79	ATA4806

LCD Up Totalize Counters



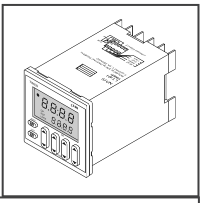
Aromat LCD Up Counters will display a totalized count when the input terminals have the proper input applied. AC input types have a maximum count of 30 cps and DC input types have a maximum count of 70 cps.

All counters are powered by a 10 year internal battery and feature screw terminals for easy connection.

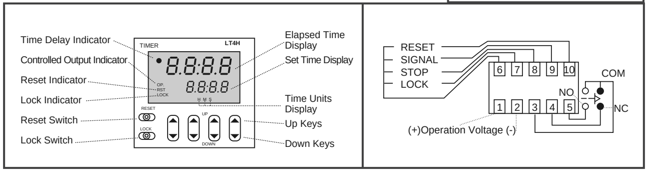
Features: • Large 7-digit LCD display • Unnecessary "0"s are eliminated from the upper digits of elapsed value for easy reading. • Wide counting range

Input Type	Max. Count	Reset	Digi-Key Part No.	Price Each 1	25	50	Aromat Part No.
200-240VAC	30cps	Manual PB	255-1192-ND	57.95	54.90	51.85	LC24-F-AH

LT4H Digital Timer

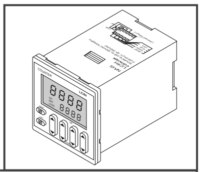


Aromat's LT4H Digital Timer is intended for process control for applications requiring duration time control such as delay-on/off, repeat cycle and start/stop time accumulation. The LT4H has features such as a bright 2 color back-lit display and EE-Prom memory, keeping your program settings without the need of an internal battery. The waterproof front panel keeps out dirt and water under poor operating conditions. Timing from .001 sec. to 999.9 hours, with 8 modes of operation and built-in timed SPDT relay (5A 250VAC).



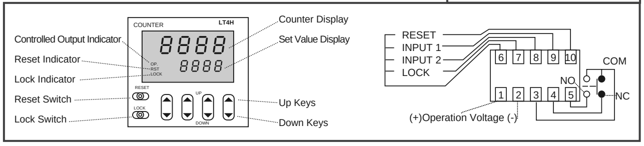
Operating Voltage	Terminal	Digi-Key Part No.	Price Each 1	25	50	Aromat Part No.
100-240VAC	11 pin octal	255-1214-ND	104.00	93.60	88.40	LT4H-AC240V
100-240VAC	Screw Term.	255-1215-ND	104.00	93.60	88.40	LT4H-AC240VS
12-24VDC	11 pin octal	255-1216-ND	104.00	93.60	88.40	LT4H-DC24V
12-24VDC	Screw Term.	255-1217-ND	104.00	93.60	88.40	LT4H-DC24VS

LC4H Digital Counters



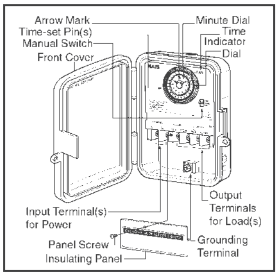
Aromat's LC4H Digital Counters are presettable counters that will count up or count down until your preset count is reached, then trigger the internal relay to switch in one of seven output modes.

Features such as 2 color back-lit display and waterproof front panel display allow this counter to be used in extreme environments.



Operating Voltage	Terminal	Digi-Key Part No.	Price Each 1	25	50	Aromat Part No.
100-240VAC	11 pin octal	255-1218-ND	106.00	95.40	90.10	LC4H-R4-AC240V
100-240VAC	Screw Term.	255-1219-ND	110.50	99.45	93.93	LC4H-R4-AC240VS
12-24VDC	11 pin octal	255-1220-ND	101.00	90.90	85.85	LC4H-R4-DC24V
12-24VDC	Screw Term.	255-1221-ND	105.50	94.95	89.68	LC4H-R4-DC24VS

Low Cost Universal Timer



User presettable in 15 minute intervals for permanent setting points of On-Off cycles. Easy to read direct view clock face and durable plastic enclosure (NEMA 3R rated) commonly used for indoor and outdoor applications. Perfect for applications such as: interior/exterior lighting, heating/ventilation systems, sign/display lighting, pool heaters, fans and conveyors, filters, pumps and refrigeration.

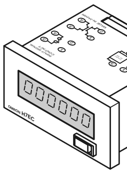
Specifications: Available in 120VAC or 208 to 277VAC versions. SPST and DPST output with 30A@277VAC - Resistive; 15A@125VAC/5A@250VAC - Tungsten. Minimum load 100mA@12VDC. Nema 3R rated case for indoors/outdoors, safety lock compatible for security after programming.

Operating Voltage	Switching Circuit	Digi-Key Part No.	Price Each 1	25	50	Aromat Part No.
120VAC	SPST	255-1242-ND	51.00	45.90	43.35	TB1001R
120VAC	DPST	255-1243-ND	57.20	51.48	48.62	TB1003R
208-277VAC	DPST	255-1244-ND	59.60	53.64	50.66	TB1004R

OMRON

9248B-ND Omron Counters Full Line Catalog...........$2.00

Totalize Counter



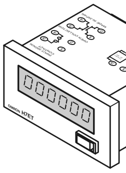
Omron's self-powered totalizing counters feature either no-voltage inputs, DC voltage only or combined AC/DC voltage inputs. Offered in both 1KHz input for high speed, no chatter input signals or 30/20Hz inputs for relay and switch (high chatter) inputs. Available with electrical reset or manual-electrical reset • Operating mode: up count • Display: LCD Digital, 0.2 in. high.

Specifications:

• Supply voltage: Not required (powered by built-in battery) • Input: AC/DC voltage — 24 to 240VAC ±10%, 50/60 Hz, or 6 to 240VDC ±10% at "High" (logic) level, 0 to 1.5VAC ±10%, 50/60 Hz, or 0 to 2VDC at "Low" (logic) level • DC voltage — 4.5 to 30VDC at "High" (logic) level, 0 to 2VDC at "Low" (logic) level • No-voltage — Maximum short-circuit impedance: 10kΩ max. • Reset time: 20 ms reset signal. • Approvals: UL File No. E41515, CSA File No. LR22310. • Instruction Sheet Included.

No. of Digits	Type of Input	Counting Speed	Terminal Type	Reset Type	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
7	No-voltage	1 kcps	WW	Electrical	Z860-ND	45.10	41.76	38.98	H7EC
7	No-voltage	1 kcps	Screw	Electrical	Z861-ND	46.04	42.63	39.79	H7EC-B
7	DC volt.	30 cps	Screw	Electrical	Z865-ND	46.04	42.63	39.79	H7EC-NV-B
7	AC/DC volt.	20 cps	Screw	Electrical	Z867-ND	50.74	46.98	43.85	H7EC-FBV

Timer Counter



Omron's self-powered time totalizers displays cumulative time by counting the output signals received from a sensor. When the proper input has been applied, the timing circuit is enabled allowing the timer to start, disabling the inputs will stop the timing sequence. Available with electrical reset or manual-electrical reset.

Specifications:

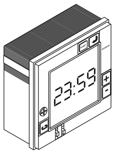
• Supply voltage: Not required (powered by built-in battery) • Input: AC/DC voltage — 24 to 240VAC, or 6 to 240VDC at "High" (logic) level, 0 to 1.5VAC, or 0 to 2VDC at "Low" (logic) level. DC voltage — 4.5 to 30VDC at "High" (logic) level, 0 to 2VDC at "Low" (logic) level. No-voltage — Max. short-circuit impedance: 10kΩ max. Short-circuit residual voltage: 0.5 Vmax. Minimum open impedance: 500kΩ min. • Reset time: 20 ms reset signal. • Terminal: Screw type

Approvals:

UL File No. E41515, CSA File No. LR22310. • Instruction Sheet Included.

Type of Input	Time Range	Reset Type	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
No-voltage	0 to 999999.9h	Electrical	Z870-ND	53.56	49.59	46.29	H7ET-B
DC voltage only	0 to 999999.9h	Electrical	Z872-ND	53.56	49.59	46.29	H7ET-BV
AC/DC voltage	0 to 99h.59m.59.9s	Electrical	Z874-ND	69.06	63.95	59.69	H7ET-FBV1
AC/DC voltage	0 to 999999.9h	Electrical	Z875-ND	66.24	61.34	57.25	H7ET-FBV

Programmable Weekly Timer

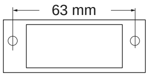


Large LCD display with 7 day x 24 hour programming. Perfect for controlling On-Off cycles for lighting, industrial and security. Two independent 15A control circuits and 16 step front program options allows fast and easy program changes. Wire connections are made by screw terminals from either the front or the back. Timer may be wall mounted, recessed into panel or Din rail mounted. All mounting hardware and instructions are included. Optional protective hard plastic cover prevents accidental resetting and protects from dirt and water.

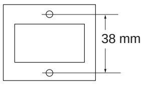
Description	Digi-Key Part No.	Price Each 1	25	Omron Part No.
Programmable Timer 100-240VAC w/Manual Override	Z1000-ND	208.28	186.36	H5L-A
Clear Protective Cover (Hard Plastic) for H5L-A	Z1001-ND	8.70	7.79	Y92A-96A

Counter Accessories

Horizontal



Vertical

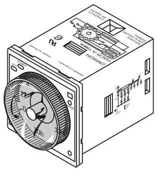


Description	Digi-Key Part No.	Price Each 1	25	Omron Part No.
Horizontal Panel Mounting Adapter for H7 Series	Z998-ND	2.45	2.27	Y92F-75
Vertical Panel Mounting Adapter for H7 Series	Z999-ND	2.45	2.27	Y92F-76

Solid State Timers

9249B-ND Omron Solid State Timers Catalog.....$1.00

Series H3CR



Features:

• Field-selectable time ranges from 0.05 second to 300 hours • Wide range AC supply voltage models (100 to 240 VAC) fits most applications and reduces spare parts inventories • Three external signal inputs for remote control of the timer. • Timing functions: ON-delay, Repeat cycle (B, B2), Signal ON/OFF delay. Signal OFF-delay, Interval.

Specifications:

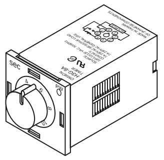
• Supply voltage: 100 to 240 VAC, 50/60Hz • Operating voltage: 85%–110% of rated supply voltage • Timing functions: ON-delay, Repeat cycle signal OFF start, Repeat cycle signal ON start, Signal ON/OFF delay, Signal OFF-delay, Interval • Control output: Type - DPDT relay, Max. load - 5A, 250VAC, Min. load - 10mA, 5VDC • Repeat Accuracy: ±0.3% full scale max., except in 1.2 s range ±0.3%, ±10ms.

Approvals:

UL File No. E41515, CSA File No. LR22310

Description	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
Analog Timer 120/240VAC Time Select DPDT	Z876-ND	53.56	49.59	46.29	H3CRAAC100240DC10012
Analog Timer 24VDC/AC Time Selectable DPDT	Z997-ND	53.56	49.59	46.29	H3CRAAC24-48/DC12-48
Track Mount Relay Socket for H3CR Series	Z884-ND	11.58	10.42	9.26	P2CF-11
Protective Panel Cover, Black For H3CR	Z929-ND	3.48	3.23	3.01	Y92P-48GB

Series H3G



Features:

• DPDT contact Form •Fits standard 8-pin sockets • Ideal replacement for time relays •LED power-ON indictor • On-delay only.

Specifications:

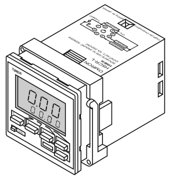
• Supply Voltage: 100/110/120 VAC • Operating Voltage: 85 to 110% of rated voltage • Timing Functions: ON-delay • Control Output, DPDT: Max. load - 5A, 125/250VAC (resistive lead), Min. load - 100mA, 5VDC • Repeat accuracy: ±2% maximum • Indicators: Power ON (LED) • Operating Temperature: 14°F to 131°F (-10°C to 55°C) • Variation due to voltage change: ±2% maximum • Variation due to temperature change: ±5% maximum • Mechanical Service Life: 10 million operations minimum • Electrical Service Life: 100,000 operations minimum at maximum ratings.

Approvals:

UL File No. E41515, CSA File No. LR22310.

Description	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
Analog Timer 120VAC 1-10 Second DPDT	Z877-ND	35.70	33.06	30.86	H3G8CAC100/110/12010S
Analog Timer 120VAC 6-60 Second DPDT	Z930-ND	35.70	33.06	30.86	H3G8CAC10011012060S
Analog Timer 120VAC 1-10 Minute DPDT	Z931-ND	35.70	33.06	30.86	H3G8CAC10011012010M
Analog Timer 120VAC 6-60 Minute DPDT	Z932-ND	35.70	33.06	30.86	H3G8CAC10011012060M
Back Mount Relay Socket for H3G/H5CR Series	Z883-ND	9.95	8.96	7.96	P3G-08
Panel Mount Adapter for H3G Series	Z886-ND	5.53	4.98	4.42	Y92F-31

Series H5CR



Features:

• Nine field-selectable output modes accommodate a wide variety of applications • All parameters set by scroll-through menus accessed from the front panel • Field-selectable time ranges from 0.001 second to 9999 hours • High-visibility alphanumeric LCD display has 8 mm high characters and built-in backlight • Precision control possible to 0.001 second • 10-year battery back-up • Selectable elapsed time (UP) and time remaining (DOWN) display • Timing functions: 9 selectable, including ON-delay, repeat cycle, OFF-delay, interval, and one-shot • Contact type: SPDT relay.

Specifications:

• Supply voltage: 100 to 240VAC, 50/60Hz • Operating voltage: 85%–110% of rated voltage • Relay control output: Max. load - 5A, 250VAC; Min. load - 10mA, 5VDC • Repeat accuracy: Power start - ±0.01%, Signal start - ±0.005% • Indicators: H5CR-L: 4-digit LCD alphanumeric display, 8mm; H5CR-B: 4-digit LCD alphanumeric display with backlighting, 8mm • Memory function: Retains preset values for 10 years at 25°C • Operating Temp.: 14° to 131°F (-10°C to 55°C) • Mechanical service life: 10 million operations min. • Electrical service life: 100,000 operations min. at 5A, 240VAC, resistive load (p.f. = 1).

Approvals:

UL File No. E41515, CSA File No. LR22310, SEV File No. 1021.

Description	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
Digital Timer 120/240VAC Time Select SPDT	Z880-ND	122.15	113.10	105.56	H5CR-L-AC100-240
Digital Timer w/Backlight 120/240VAC Time Select	Z881-ND	135.30	125.28	116.93	H5CR-B-AC100-240
Panel Mount Adapter for H3CR/H5CR Series	Z885-ND	9.73	8.76	7.78	Y92F-30
Back Mount Relay Socket for H3G/H5CR Series	Z883-ND	9.95	8.96	7.96	P3G-08

Big - Little Digital Panel Meters

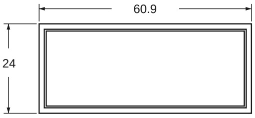


Fig. 1

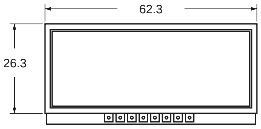


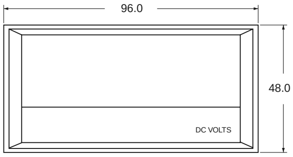
Fig. 2

BL Series Specifications: Display

• Digits: 3 1/2 digits, 7 segments backlit LCD (1999) • Digit Height: 0.5" (12.7 mm) • Polarity: Automatic (-) displayed • Decimal Point: Three positions, external selection • Overload: Three lower digits blank for readings greater than 1999 • Low battery: "Low Bat" indicator for <7.2V (9V power only) **Performance** • Accuracy: ±(0.1% rdg + 2 count) with + 5 and ±5V power ± (0.1% rdg + 1 count) with 9V power 2.5 per second • Conversion Rate: 2.5 per second • Common Mode Voltage Range: ± 1V maximum • Common Mode Rejection: > 86 db • Zero Adjust: Automatic • Tempco: 100 PPM/°C typical **Standard Analog Inputs** • Full Scale Range: Choice ±200mV, ±2V, or ±20V (Special ranges and engineering units available) • Configuration: True differential input and references • Ratiometric Operation: Available on models BL-100, -130, -300, -330, -400, -430, -500, -530, -600, and -630 • Protection: 250V DC or 150V RMS continuous 300V intermittent maximum • Bias Current: 1 pA typical, 10 pA maximum • All backlighting power is + 5VDC

Display	Mounting	DPM Power	Input	Digi-Key Part No.	Price Each 1	5	10	Modutec Part No.
Fig. 1 — 13 Pin Terminals Backlit Power 5VDC								
Neg. Red Backlit	Bezel	+5VDC	0 - 2VDC	180-1002-ND	68.12	66.42	64.72	BL-530302-01-U
Neg. Red Backlit	Bezel	+5VDC	0 - 200mVDC	180-1003-ND	68.12	66.42	64.72	BL-530301-01-U
Neg. Red Backlit	Window	+5VDC	0 - 2VDC	180-1004-ND	65.32	63.69	62.06	BL-500302-01-U
Neg. Red Backlit	Window	+5VDC	0 - 200mVDC	180-1005-ND	65.32	63.69	62.06	BL-500301-01-U
Neg. Red Backlit	Window	9VDC	0 - 2VDC	180-1006-ND	65.32	63.69	62.06	BL-500102-01-U
Neg. Red Backlit	Window	9VDC	0 - 200mVDC	180-1007-ND	65.32	63.69	62.06	BL-500101-01-U
Neg. Green Backlit	Window	+5VDC	0 - 2VDC	180-1008-ND	63.44	61.86	60.27	BL-400302-01-U
Neg. Green Backlit	Window	+5VDC	0 - 200mVDC	180-1009-ND	63.44	61.86	60.27	BL-400301-01-U
Neg. Green Backlit	Window	9VDC	0 - 2VDC	180-1010-ND	63.44	61.86	60.27	BL-400102-01-U
Neg. Green Backlit	Window	9VDC	0 - 200mVDC	180-1011-ND	63.44	61.86	60.27	BL-400101-01-U
Pos. Green Backlit	Bezel	+5VDC	0 - 2VDC	180-1012-ND	62.80	61.23	59.66	BL-330302-01-U
Pos. Green Backlit	Bezel	+5VDC	0 - 200mVDC	180-1013-ND	62.80	61.23	59.66	BL-330301-01-U
Pos. Green Backlit	Window	+5VDC	0 - 2VDC	180-1014-ND	60.64	59.13	57.61	BL-300302-01-U
Pos. Green Backlit	Window	+5VDC	0 - 200mVDC	180-1015-ND	60.64	59.13	57.61	BL-300301-01-U
Pos. Green Backlit	Window	9VDC	0 - 2VDC	180-1016-ND	60.64	59.13	57.61	BL-300102-01-U
Pos. Green Backlit	Window	9VDC	0 - 200mVDC	180-1017-ND	60.64	59.13	57.61	BL-300101-01-U
Std Reflective LCD	Bezel	+5VDC	0 - 20VDC	180-1021-ND	51.40	50.12	48.83	BL-130303-U
Std Reflective LCD	Bezel	+5VDC	0 - 2VDC	180-1022-ND	45.76	44.62	43.48	BL-130302-U
Std Reflective LCD	Bezel	+5VDC	0 - 200mVDC	180-1023-ND	51.40	50.12	48.83	BL-130301-U
Std Reflective LCD	Window	+5VDC	0 - 20VDC	180-1024-ND	48.60	47.39	46.17	BL-100303-U
Std Reflective LCD	Window	+5VDC	0 - 2VDC	180-1025-ND	48.60	47.39	46.17	BL-100302-U
Std Reflective LCD	Window	+5VDC	0 - 200mVDC	180-1026-ND	48.60	47.39	46.17	BL-100301-U
Std Reflective LCD	Window	9VDC	0 - 2VDC	180-1027-ND	48.60	47.39	46.17	BL-100102-U
Std Reflective LCD	Window	9VDC	0 - 200mVDC	180-1028-ND	48.60	47.39	46.17	BL-100101-U
Fig. 2 — Flat Pack								
Std Reflective LCD	Window	+5VDC	20VDC	180-1018-ND	42.88	41.81	40.74	BL-176303-U
Std Reflective LCD	Window	+5VDC	2VDC	180-1019-ND	42.88	41.81	40.74	BL-176302-U
Std Reflective LCD	Window	+5VDC	200mVDC	180-1020-ND	42.88	41.81	40.74	BL-176301-U
Bezel Kit	—	—	—	180-1001-ND	5.00	4.88	4.75	176-BK-U

Industrial Digital Panel Instruments 2000 Series



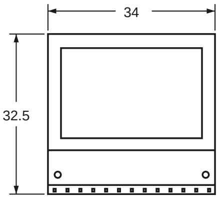
Specifications: Performance:

• Conversion Rate: 2.5 per second • Common Mode Rejection: ≥100db 50 Hz-60Hz • Tempco: ±200 PPM/°C typical except thermocouple inputs which are .1°/ degree zero tempco for selectable process ranges is only ± .2 count/°C • Normal Mode Rejection: ≥40 db 50Hz-60Hz • Zero Adjust: Automatic • Warmup: 10 minutes **Environment:** • Operating Range: -4°F to 140°F (-20°C to + 60°C) •Storage Range: -22°F to 150°F (-30°C to + 70°C) **Power Options:** •115V + 10%, -15% 50Hz to 400Hz at 2VA • 230V +10%, -15% 50Hz to 400Hz at 2VA **Backlighting Options:** • Positive Green (Green Background, Black Characters) • Negative Red (Black Background, Red Characters) **FCC Compliance:** • Complies with the class B limits of FCC rules and regulations, part 15, sub part J for conducted and radiated emissions. • Except isolated DC powered which is ≥ 80 db 50 Hz-60Hz

Display	DPM Power	Input†	Backlit Power††	Digi-Key Part No.	Price Each 1	5	10	Modutec Part No.
TRMS (Power) - Universal Selectable True RMS - Power Ranges								
Neg. Red Backlit	115 or 230 VAC	250VAC	115 or 230VAC	180-1036-ND	170.00	165.75	161.50	2353-1026-10-U
Neg. Red Backlit		200.0VAC	115 or 230VAC	180-1037-ND	170.00	165.75	161.50	2353-1024-10-U
UPM - Universal Selectable Process, IDC Voltage or DC Currrent								
Neg. Red Backlit	115VAC	4/20mADC scaled 0/100.0 percent	115VAC	180-1038-ND	146.88	143.21	139.54	2153-3419-04-U
Neg. Red Backlit		10VDC scaled 0/10.00VDC		180-1039-ND	146.88	143.21	139.54	2153-3406-04-U
1/8 DIN								
Neg. Red Backlit	115VAC	Type J Thermocouple	115VAC	180-1040-ND	96.00	93.60	91.20	2053-3480-04-U
Neg. Red Backlit		100 Ohms Pt 1° Resolution		180-1041-ND	96.00	93.60	91.20	2053-3470-04-U
Neg. Red Backlit		0-50AAC/ Avg		180-1042-ND	96.00	93.60	91.20	2053-3439-04-U
Neg. Red Backlit		80-260VAC Avg		180-1043-ND	96.00	93.60	91.20	2053-3429-04-U
Pos. Green Backlit		0-200VDC		180-1044-ND	96.00	93.60	91.20	2033-3404-04-U
Pos. Green Backlit		0-20VDC		180-1045-ND	96.00	93.60	91.20	2033-3403-04-U
Pos. Green Backlit		0-2VDC scaled 0 to 1.999		180-1046-ND	96.00	93.60	91.20	2033-3402-04-U
Pos Green Backlit		0-200mVDC scaled 0 - 199.9		180-1047-ND	96.00	93.60	91.20	2033-3401-04-U
Non Backlit	Loop Power	4 to 20mADC scaled 0 - 100.0	No Backlight	180-1048-ND	122.40	119.34	116.28	2013-3019-00-U

† Rated for use with 5A or 50A exernal current transformer supplied with DPM. †† Backlight power must be same as selected DPM power.

Miniature Backlit 1000 Series



Specifications: Display:
• Digits: 3 1/2 digits (1999) • Digit Height: 0.3" (7.6mm) • Decimal Point: 3 positions, external selection • Type: 7 Segment Backlit LCD • Polarity: Automatic (-) displayed • Overload: Three lower digits blank for readings greater than 1999
Input: • Full Scale Range: ± 2V or ± 200m VDC • Input Resistance: ± 100 Meg Ohms • Overvoltage Protection: 100V DC or peak AC conditions
Performance: • Accuracy: = (0.25% + 1 count) Maximum • Common Mode Rejection: ≥ 86db 50Hz-60Hz • Zero Adjust: Automatic • Conversion Rate: 2.5 Per Second • Tempco: 100 PPM/°C

Environment: • Operating Range: -0°C to +60°C • Storage Range: -20°C to +70°C
Extended Temperature (option): • Operating Range: -30°C to + 80°C • Storage Range: -40°C to + 85°C
Power Options: • + 5 VDC and -5VDC ± 10% @ 150 ua DC or 9VDC (7.2 to 12 VDC isolated @ 150 µADC)

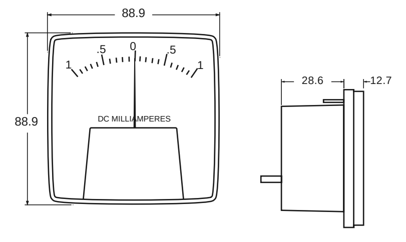
"**Note 1:** For the battery powered DPM, the input must either be fully isolated from the power source, or, if referenced to the source, the IN LO terminal must be no closer than 2.3V for the 200mV range (3.5V for the 2V range) to either battery terminal."

Display	Mounting	Terminals	DPM Power	Input	Digi-Key Part No.	Price Each 1	5	10	Modutec Part No.
Pos. Red Backlight	Window	Uncased with 13 pins	+5 & -5VDC	0-200mVDC	180-1049-ND	44.08	42.98	41.88	1060-0201-U
Pos. Red Backlight	Window		9VDC	0-200mVDC	180-1050-ND	44.08	42.98	41.88	1060-0101-U
Pos. Red Backlight	Window		Loop Powered	4 to 20mADC	180-1051-ND	121.44	118.41	115.37	1060-0019-U
Pos. Green Backlight	Window		9VDC	0-200mVDC	180-1052-ND	44.08	42.98	41.88	1030-0101-U
Pos. Green Backlight	Window		Loop Powered	4 to 20mADC	180-1053-ND	115.60	112.71	109.82	1030-0019-U

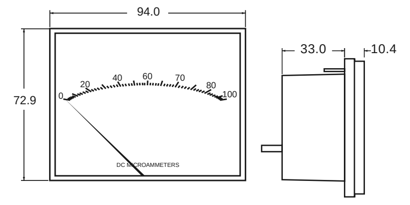
Jewell Instruments **MODUTEC**

Analog Panel Meters

PB Series



S Series



DC Ammeters - Taut band, 50mV, moving coil: Zero left, shunt rated. **DC Voltmeters -** Taut band, moving coil: Zero left. **AC Ammeters -** Iron vane: Sefl-contained, 60Hz nominal input (50-400Hz range). **AC Ammeters -** Iron vane: transfomer rated, 0-5A. **AC Voltmeters -** Iron vane Self-contained, 60Hz nominal input (50Hz with slightly reduced accuracy.

Description	Series	Range	Resistance (ohms)	Digi-Key Part No.	Price Each 1	5	10	Modutec Part No.
DC Ammeters Shunt Rated	S	0-25ADC	10	180-1054-ND	52.66	51.35	50.03	R3SS-DAA-025-U
		0-50ADC	10	180-1055-ND	52.66	51.35	50.03	R3SS-DAA-050-U
		0-100ADC	10	180-1056-ND	52.66	51.35	50.03	R3SS-DAA-100-U
	PB	0-25ADC	10	180-1071-ND	52.66	51.35	50.03	R3PBS-DAA-025-U
		0-50ADC	10	180-1072-ND	52.66	51.35	50.03	R3PBS-DAA-050-U
		0-100ADC	10	180-1073-ND	52.66	51.35	50.03	R3PBS-DAA-100-U
DC Voltmeters	S	0-10VDC	1000 per V	180-1057-ND	54.46	53.10	51.74	R3S-DVV-010-U
		0-50VDC	1000 per V	180-1058-ND	54.46	53.10	51.74	R3S-DVV-050-U
		0-100VDC	1000 per V	180-1059-ND	54.46	53.10	51.74	R3S-DVV-100-U
	PB	0-10VDC	1000 per V	180-1074-ND	54.46	53.10	51.74	R3PB-DVV-010-U
		0-50VDC	1000 per V	180-1075-ND	54.46	53.10	51.74	R3PB-DVV-050-U
		0-100VDC	1000 per V	180-1076-ND	54.46	53.10	51.74	R3PB-DVV-100-U
AC Ammeters	S	0-15AAC	0.003	180-1060-ND	56.26	54.86	53.45	R3S-AAC-015-U
		0-25AAC	0.002	180-1061-ND	56.26	54.86	53.45	R3S-AAC-025-U
		0-50AAC	0.001	180-1062-ND	56.26	54.86	53.45	R3S-AAC-050-U
	PB	0-15AAC	0.003	180-1077-ND	56.26	54.86	53.45	R3PB-AAC-015-U
		0-25AAC	0.002	180-1078-ND	56.26	54.86	53.45	R3PB-AAC-025-U
		0-50AAC	0.001	180-1079-ND	56.26	54.86	53.45	R3PB-AAC-050-U
AC Ammeters Trans. Rated	S	0-100AAC	0.022	180-1063-ND	56.26	54.86	53.45	R3S-AACX-100-U
	PB	0-100AAC	0.022	180-1080-ND	56.26	54.86	53.45	R3PB-AACX-100-U
AC Voltmeters	S	0-50VAC	3K	180-1064-ND	59.86	58.37	56.87	R3S-AVC-050-U
		0-150VAC	30K	180-1065-ND	59.86	58.37	56.87	R3S-AVC-150-U
		0-300VAC	30.25K	180-1066-ND	59.86	58.37	56.87	R3S-AVC-300-U
		0-600VAC	114.7K	180-1067-ND	59.86	58.37	56.87	R3S-AVC-600-U
	PB	0-50VAC	3K	180-1081-ND	59.86	58.37	56.87	R3PB-AVC-050-U
		0-150VAC	30K	180-1082-ND	59.86	58.37	56.87	R3PB-AVC-150-U
		0-300VAC	30.25K	180-1083-ND	59.86	58.37	56.87	R3PB-AVC-300-U
		0-600VAC	114.7K	180-1084-ND	59.86	58.37	56.87	R3PB-AVC-600-U

Series	Freq. Range	Input V	Accuracy	Digi-Key Part No.	Price Each 1	5	10	Modutec Part No.
Frequency Meters Pointer Type Electronic								
S	45-65Hz	120VAC	±.6Hz	180-1068-ND	151.66	147.87	144.08	R3S-FRQ-55/120-20-U
	45-55Hz		±.3Hz	180-1069-ND	151.66	147.87	144.08	R3S-FRQ-50/120-10-U
	55-65Hz		±.3Hz	180-1070-ND	151.66	147.87	144.08	R3S-FRQ-60/120-10-U
PB	45-65Hz	120VAC	±.6Hz	180-1085-ND	151.66	147.87	144.08	R3PB-FRQ-55/120-20-U
	45-55Hz		±.3Hz	180-1086-ND	151.66	147.87	144.08	R3PB-FRQ-50/120-10-U
	55-65Hz		±.3Hz	180-1087-ND	151.66	147.87	144.08	R3PB-FRQ-60/120-10-U

CURTIS

Timers/Counters

Fig. 1

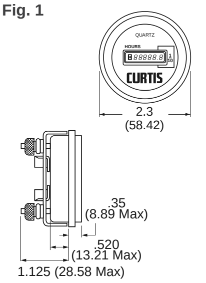


Fig. 2

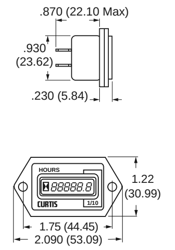


Fig. 3

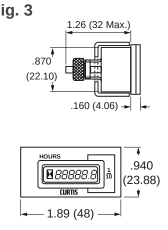


Fig. 4

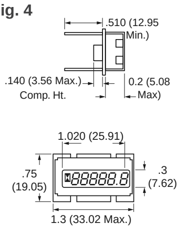


Fig. 5

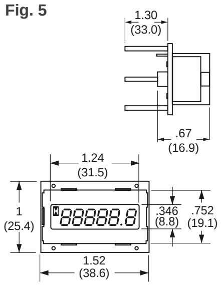
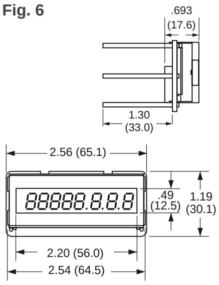


Fig. 6



700 Series Solid State (Hour Meters and Counters) — Curtis Modules are ideally suited for OEM's panel makers and contract manufacturers to measure equipment usage for preventive maintenance scheduling, warranty validation and renting/leasing. These unique modules can be used as timers/counters in vending machines, medical equipment, fuel pumps, office equipment, flow instruments, consumer products and many other applications.

FEATURES: • Attractive and easy to read 6-digit Liquid Crystal Displays with 5 mm digit height • Compact size ideal for electronic subassemblies • Wide voltage range • AC/DC operation on most products • Input Frequency of 500 Hz on DC counters; 1 Hz on AC/DC counters • Exceptional reliability due to non-volatile (EEPROM) memory which can retain data for 25+ years • Resettable option

SPECIFICATIONS: Resolution: 99,999.9 Hours; 999,999 Counts. **Accuracy:** ±0.1% hours; ±1 count. **Mechanical Shock:** SAE J1378 55g. **Vibration:** SAE J1378 20g. **Humidity:** 95% RH. **Operating Temperature:** -40°C to +85°C. **Storage Temperature:** -50°C to +90°C.

17075 Series: 6-digit Hour Meter module with 5mm (.197") high digits, non-backlit.
SPECIFICATIONS: Resolution: 0.1 hours. **Mechanical Shock:** SAE J1378 55g. **Operating Temperature:** -40°C to +85°C. **Storage Temperature:** -50°C to +90°C.

17082 Series: 6-digit Pulse Counter module with 5mm (.197") high digits, non-backlit.
SPECIFICATIONS: Resolution: 1 Count. **Mechanical Shock:** SAE J1378 55g. **Operating Temperature:** -40°C to +85°C. **Storage Temperature:** -50°C to +90°C.

17314 Series: 6-digit Hour Meter module with 7mm (.276") high digits, backlit.
SPECIFICATIONS: Resolution: 0.1 hours. **Mechanical Shock:** SAE J1378 55g. **Operating Temperature:** -40°C to +85°C. **Storage Temperature:** -50°C to +90°C.

17316 Series: 6-digit Pulse Counter module with 7mm (.276") high digits, backlit.
SPECIFICATIONS: Resolution: 1 Count. **Mechanical Shock:** SAE J1378 55g. **Count Frequency:** 2 Hz (AC) / 500 Hz (DC). **Operating Temperature:** -40°C to +85°C. **Storage Temperature:** -50°C to +90°C.

220 Series: 8-digit Add/Add or Add/Substract Counter module with 10mm (.394") high digits, backlit or non-backlit.
SPECIFICATIONS: Prescale: 1:1. **Resolution:** 1 / 0.0 / 0.00 / 0.000 Counts. **Mechanical Shock:** SAE J1378 55g. **Count Frequency:** 10 Hz (AC) / 30 Hz (AC) / 500 Hz (DC). **Operating Temperature:** -30°C to +65°C. **Storage Temperature:** -30°C to +65°C.

221 Series: 8-digit Hour Meter with 10mm (.394") high digits, backlit or non-backlit.
SPECIFICATIONS: Resolution: 0.00 Hours / 1 Minute / 1 Second. **Mechanical Shock:** SAE J1378 55g. **Operating Temperature:** -30°C to +65°C. **Storage Temperature:** -30°C to +65°C.

Fig.	Operating Mode	Operating Voltage DC	AC	Reset	Digi-Key Part No.	Price Each 1	10	Curtis Part No.
1	Hour Meter	12-48	20-60	Elect	267-1001-ND	34.00	30.60	701QR1248D2060A
1	Hour Meter	48-150	100-230	Elect	267-1002-ND	34.00	30.60	701QR48150D100230A
2	Hour Meter	12-48	20-60	Elect	267-1003-ND	34.00	30.60	701FR1248D2060A
2	Hour Meter	48-150	100-230	Elect	267-1004-ND	34.00	30.60	701FR48150D100230A
3	Hour Meter	12-48	20-60	Elect	267-1005-ND	34.00	30.60	701DR1248D2060A
3	Hour Meter	48-150	100-230	Elect	267-1006-ND	34.00	30.60	701DR48150D100230A
3	Counter	12-48	20-60	Elect	267-1007-ND	34.00	30.60	703DR1248D2060A
3	Counter	48-150	100-230	Elect	267-1008-ND	34.00	30.60	703DR48150D100230A
4	Hour Meter	5-12	—	Elect	267-1009-ND	25.50	22.95	701PR-102
4	Hour Meter	12-48	—	Elect	267-1010-ND	25.50	22.95	701PR-112
4	Counter	5-12	—	Elect	267-1011-ND	25.50	22.95	703PR-102
4	Counter	12-48	—	Elect	267-1012-ND	25.50	22.95	703PR-112
5	Reset Backlit Hour Meter	4.5-15	—	Elect	267-1018-ND	31.26	28.13	17314104
5	Reset Backlit Hour Meter	9-60	—	Elect	267-1019-ND	31.26	28.13	17314114
5	Reset Backlit Counter	4.5-15	—	Elect	267-1020-ND	31.26	28.13	17316104
5	Reset Backlit Counter	9-60	—	Elect	267-1021-ND	31.26	28.13	17316114
6	Add / Substract Counter	12-60	—	Elect	267-1022-ND	50.00	45.00	220PR-1-250/001
6	Backlit Add / Substract Counter	24-60	—	Elect	267-1023-ND	55.00	49.50	220PR-4-250/001
6	Hour Meter	12-60	—	Elect	267-1024-ND	50.00	45.00	221PR-1-1
6	Backlit Hour Meter	24-60	—	Elect	267-1025-ND	55.00	49.50	221PR-4-1

CTon Industries

Digital Panel Meter

Fig. 1 — 1/8 Din BIG DIGIT Series

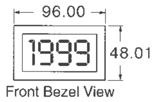


Fig. 2 — Surface Mount 3.5 Digit LCD

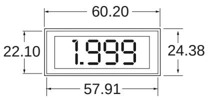


Fig. 3 — Snap-in LCD

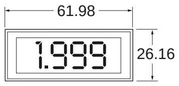


Fig. 4 — Snap-in 3.5 Digit LCD

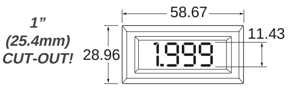


Fig. 5 — Mini 3.5 Digit LCD

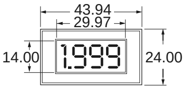


Fig. 6 — 4.5 Digit LCD Window/Surface Mount

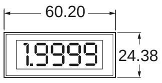
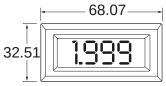


Fig. 7 — 3.5 Digit LED



General LCD Specifications:

• **Type:** 7-segment, liquid crystal display (LCD) • **Polarity:** Displays (-) automatically • **Over/Under Range:** Overrange displays “1” and underrange displays “-1” • **Configuration:** True differential input and reference • **Protection:** 250 VDC or 150V RMS continuous 300 VDC intermittent max. • **Gnd Differential (Source to Input) :** ±1V max. • **Com Mode Reject:** >86 decibels • **Zeroing:** Automatic • **Operating Temperature:** Standard 0 to 50°C • **5-Year Unconditional Warranty**

1/8 DIN Big Digit Series ***Specifications:*** • 3-1/2 digit 7-segment LED or LCD • +5 VDC powered • Overrange indication and automatic zero • **Height:** 20.32mm LED, 24.89mm LCD • **Input:** Single ended or true differential • **Polarity:** “--” displayed for negative reading • **Current Draw:** 80mA LED, 2.2mA LCD • **Operating Temperature:** -10° to 50°C LED, 0 to 50°C LCD • **Connection:** Screw terminals

3.5 Digit LCD ***Specifications:*** • **Annunciators:** 9 VDC powered meters have “LO BAT” when power <7.2 VDC • **Decimal Point:** User selectable 3-position • **Full Scale Ranges:** ±200 mVDC, ±2 VDC, ±20 VDC • **Power:** 9 VDC isolated @ 180 µA, 5 VDC @ 3 mA • **Conversion Rate:** 2.5 per second • **Storage Temperature:** -20° to 70°C • **Type:** Surface Mount • **Pins:** 13 or 10 pins, .64mm square on 2.54mm centers • **Backlit Power Options:** +5 VDC, ±5%, Red 165 mA typical (200 mA max.); Green 115 mA typical (160 mA max.) • **Backlit Connections:** Standard 2 solder pads • **Styles:** Surface/window or snap-in bezel

Miniature LCD ***Specifications:*** • **Annunciators:** 11 different user selectable annunciators: BAT, °C, °F, ~, m, µ, MΩ, KΩ, V, A, HOLD • **Decimal Point:** User selectable 3-position • **Full Scale Range:** Standard ±200 mVDC, ±2 VDC • **Power:** 9 VDC isolated (7.2-15V) at 150 µA, 5 VDC @ 5 mA • **Conversion Rate:** 2.5 per second • **Storage Temperature:** -20° to 70°C • **Type:** Snap-in Bezel Mount • **Pins:** Standard 26 pins, .46mm square, DIP style

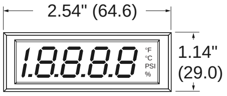
4.5 Digit LCD ***Specifications:*** • **Annunciators:** 9 VDC powered meters have “BT” when power <7.2 VDC • **Decimal Point:** User selectable 4-position • **Hold:** Standard feature • **Full Scale Range:** ±200 mVDC and ±2 VDC • **Power:** 9 VDC isolated @ 1mA, 5 VDC @ 3.5 mA • **Conversion Rate:** 2 per second • **Storage Temperature:** -10° to 60°C • **Types:** Surface/window mount • **Pins:** 13 pins, .64mm square on 2.54mm centers

3.5 Digit LED ***Specifications:*** • **Type:** 7-segment light emitting diode (LED) • **Digits:** 0.56” (12.7mm) height • **Color:** Green or Red • **Polarity:** Displays (-) automatically • **Decimal Point:** User selectable 3-position • **Over/Under Range:** Overrange displays “1” and underrange displays “-1” • **Hold:** Standard feature • **Full Scale Ranges:** ±200 mVDC, ±2 VDC, ±20 VDC • **Configuration:** Bipolar, fully differential • **Power:** +5 VDC, ±5% at 200 mA • **Conversion Rate:** 3 per second • **Zeroing:** Automatic • **Operating Temperature:** 0 to 50°C • **Storage Temperature:** -20° to 70°C • **Relative Humidity:** 0 to 95% non-condensing • **Type:** Bezel Mount • **Pins:** Standard10 pins, .64mm square on 2.54mm centers • **5-Year Unconditional Warranty**

Process Meter ***Specifications:*** • Meter and loop powered/controlled PCB in one unit • 3.5 or 4.5 digit • LCD and red or green LED • Fully scalable • 300Ω Impedance, nominal

Epic Series

3 1/2 and 4 1/2 Digit, Voltage and Process Meters



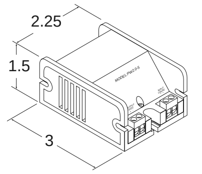
FEATURES: • RF/EMI resistant • Snap-in panel mounting • Engineering units (user selectable) • 1” cut out required • Multiple colors available • **5 year Unconditional Warranty**

COMMON SPECIFICATIONS: • **Power:** 5Vdc @ 3.5mA • **Digits:** .45” (11.43mm) seven segment LCD • **Annunciators:** User selectable °F, °C, PSI, % • **Decimal Point:** User selectable • **Colors:** Amber numerals, Green numerals, Red numerals, Green background • **Backlight Power:** 5Vdc • **Input Ranges:** ±200mV, ±2V, ±20V • **Conversion Rate:** 3 per second • **Operating Temperature:** 0°C to 50°C • **Storage Temperature:** -10° to 60°C • **Over/under Range Indication:** 1.... / -1.... • **Pins:** 13 ins, 0.025” (.64mm) square on 0.100” (2.54mm) centers • **Configuration:** Bipolar, true differential • **Panel Clearance Required:** 1.25” (31.75mm) • **Case Style:** Snap-in bezel mounting

PROCESS COMMON SPECIFICATIONS: • Meter and loop powered PCB in one package • Backlight (if selected) powered by separate terminals • **Power:** Powered by the 4-20mA process loop • **Optional Backlight Power:** 5Vdc, 24Vdc • **Range:** Fully scalable • **Digits:** .45” (11.43mm) seven segment LCD • **Colors:** Standard LCD, Amber numerals, Green numerals, Red numerals, Black numerals with Green background • **Annunciators:** User selectable °F, °C, PSI, % • **Operating Temperature:** 0° to 50°C • **Storage Temperature:** -10° to 60°C • **Over/under Range Indication:** 1.... / -1.... • **Wiring:** 2 pin screw terminals (4 pin with optional backlights) • **Panel Clearance Required:** 1.75” (44.45mm) • **Case Style:** Snap-in bezel mounting

NOTE: The products shown include 200mVdc, 2Vdc, and 20Vdc input, standard non-backlighted LCDs, and 200mVdc and 2Vdc input, negative backlighted (numerals lighted) LCDs. Also available, as non-catalog items, are 20Vdc input negative backlighted (numerals lighted) and 200mVdc, 2Vdc, and 20Vdc input, positive backlighted (black numerals with lighted background) LCDs.

Power Supply for C-Ton Displays



Cable Assembly for C-Ton Displays

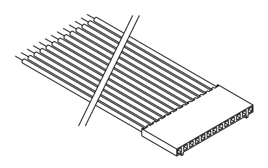
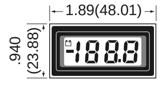


Fig.	Supply	Input	Color	Digi-Key Part No.	Price Each			C-Ton Part No.	Use Cable Assy.
					1	10	50		
Digital Panel Meters									
1/8 DIN Big 3.5 Digit LCD									
1	+5	200mV	—	CDPM801-ND	70.80	67.26	61.95	DK801	—
	+5	2V	—	CDPM802-ND	70.80	67.26	61.95	DK802	—
	+5	20V	—	CDPM803-ND	70.80	67.26	61.95	DK803	—
	Loop	4-20mA	—	CDPM807-ND	70.80	67.26	61.95	DK807	—
1/8 DIN Big 3.5 Digit LED									
1	+5	200mV	Red	CDPM851-ND	70.80	67.26	61.95	DK851	—
	+5	2V	Red	CDPM852-ND	70.80	67.26	61.95	DK852	—
	+5	20V	Red	CDPM853-ND	70.80	67.26	61.95	DK853	—
	+5	4-20mA	Red	CDPM857-ND	70.80	67.26	61.95	DK857	—
1	+5	200mV	Green	CDPM951-ND	70.80	67.26	61.95	DK951	—
	+5	2V	Green	CDPM952-ND	70.80	67.26	61.95	DK952	—
	+5	20V	Green	CDPM953-ND	70.80	67.26	61.95	DK953	—
	+5	4-20mA	Green	CDPM957-ND	70.80	67.26	61.95	DK957	—
Surface Mount 3.5 Digit LCD									
2	+9	200mV	—	CDPM101-ND	39.90	37.91	34.92	DK101	J4C13
	+9	2V	—	CDPM102-ND	39.90	37.91	34.92	DK102	J4C13
	+9	20V	—	CDPM103-ND	39.90	37.91	34.92	DK103	J4C13
2	+5	200mV	—	CDPM301-ND	39.90	37.91	34.92	DK301	J1C13
	+5	2V	—	CDPM302-ND	39.90	37.91	34.92	DK302	J1C13
	+5	20V	—	CDPM303-ND	39.90	37.91	34.92	DK303	J1C13
2	+5	200mV	+ Green	CDPM331-ND	49.90	47.41	43.67	DK331	J1C13
	+5	2V	+ Green	CDPM332-ND	49.90	47.41	43.67	DK332	J1C13
2	+5	200mV	- Green	CDPM431-ND	49.90	47.41	43.67	DK431	J1C13
	+5	2V	- Green	CDPM432-ND	49.90	47.41	43.67	DK432	J1C13
2	+5	200mV	- Red	CDPM531-ND	49.90	47.41	43.67	DK531	J1C13
	+5	2V	- Red	CDPM532-ND	49.90	47.41	43.67	DK532	J1C13
Snap-in 3.5 Digit LCD									
3	+5	200mV	—	CDPM500-ND	39.90	37.91	34.92	DK500	J1C13
	+5	2V	—	CDPM501-ND	39.90	37.91	34.92	DK501	J1C13
	+5	20V	—	CDPM502-ND	39.90	37.91	34.92	DK502	J1C13
Snap-in 3.5 Digit LCD — 25.40mm Cutout									
4	+5	200mV	—	CDPM110-ND	39.90	37.91	34.92	DK110	J1C10
	+5	2V	—	CDPM111-ND	39.90	37.91	34.92	DK111	J1C10
	+5	20V	—	CDPM112-ND	39.90	37.91	34.92	DK112	J1C10
Miniature 3.5 Digit LCD									
5	+5	200mV	—	CDPM201-ND	39.90	37.91	34.92	DK201	—
	+5	2V	—	CDPM202-ND	39.90	37.91	34.92	DK202	—
	+9	200mV	—	CDPM203-ND	39.90	37.91	34.92	DK203	—
	+9	2V	—	CDPM204-ND	39.90	37.91	34.92	DK204	—
Window/Surface Mount 4.5 Digit LCD									
6	+5	200mV	—	CDPM702-ND	49.90	47.41	43.67	DK702	J4C13
	+5	2V	—	CDPM703-ND	49.90	47.41	43.67	DK703	J4C13
	+9	200mV	—	CDPM704-ND	49.90	47.41	43.67	DK704	J4C13
	+9	2V	—	CDPM705-ND	49.90	47.41	43.67	DK705	J4C13
Snap-in 4.5 Digit LCD									
3	+5	200mV	—	CDPM710-ND *NEW!*	49.90	47.41	43.67	DK710	J4C13
3	+5	2V	—	CDPM711-ND *NEW!*	49.90	47.41	43.67	DK711	J4C13
3	+5	20V	—	CDPM712-ND *NEW!*	49.90	47.41	43.67	DK712	J4C13
3.5 Digit LED									
7	+5	200mV	Green	CDPM601-ND	39.90	37.91	34.92	DK601	J1C10
	+5	2V	Green	CDPM602-ND	39.90	37.91	34.92	DK602	J1C10
	+5	20V	Green	CDPM603-ND	39.90	37.91	34.92	DK603	J1C10
7	+5	200mV	Red	CDPM604-ND	39.90	37.91	34.92	DK604	J1C10
	+5	2V	Red	CDPM605-ND	39.90	37.91	34.92	DK605	J1C10
	+5	20V	Red	CDPM606-ND	39.90	37.91	34.92	DK606	J1C10
Process Meter									
3	Loop	4-20mA	—	CDPM590-ND	65.00	61.75	56.88	DK590	—
4	Loop	4-20mA	—	CDPM190-ND	65.00	61.75	56.88	DK190	—
7	+5	4-20mA	Red	CDPM694-ND	65.00	61.75	56.88	DK694	—
7	+5	4-20mA	Green	CDPM691-ND	65.00	61.75	56.88	DK691	—
6	Loop	4-20mA	—	CDPM792-ND	120.00	114.00	105.00	DK792	—
Epic Series Voltage and Process Meters									
3.5 Digit LCD									
—	+5	200mV	—	CDPM541-ND	39.90	37.91	34.92	DK541	J4C13
—	+5	2V	—	CDPM542-ND	39.90	37.91	34.92	DK542	J4C13
—	+5	20V	—	CDPM543-ND	39.90	37.91	34.92	DK543	J4C13
—	+5	200mV	Amber	CDPM551-ND	49.90	47.41	43.67	DK551	J4C13
—	+5	2V	Amber	CDPM552-ND	49.90	47.41	43.67	DK552	J4C13
—	+5	20V	Amber	CDPM553-ND *NEW!*	49.90	47.41	43.67	DK553	J4C13
—	+5	200mV	Green	CDPM561-ND	49.90	47.41	43.67	DK561	J4C13
—	+5	2V	Green	CDPM562-ND	49.90	47.41	43.67	DK562	J4C13
—	+5	20V	Green	CDPM563-ND *NEW!*	49.90	47.41	43.67	DK563	J4C13
—	+5	200mV	Red	CDPM571-ND	49.90	47.41	43.67	DK571	J4C13
—	+5	2V	Red	CDPM572-ND	49.90	47.41	43.67	DK572	J4C13
—	+5	20V	Red	CDPM573-ND *NEW!*	49.90	47.41	43.67	DK573	J4C13
3.5 Digit Process									
—	Loop	4-20mA	—	CDPM191-ND	72.00	68.40	63.00	DK191	—
4.5 Digit LCD									
—	+5	200mV	—	CDPM741-ND	49.90	47.41	43.67	DK741	J4C13
—	+5	2V	—	CDPM742-ND	49.90	47.41	43.67	DK742	J4C13
—	+5	20V	—	CDPM743-ND	49.90	47.41	43.67	DK743	J4C13
—	+5	200mV	Amber	CDPM751-ND	59.90	56.91	52.42	DK751	J4C13
—	+5	2V	Amber	CDPM752-ND	59.90	56.91	52.42	DK752	J4C13
—	+5	20V	Amber	CDPM753-ND *NEW!*	59.90	56.91	52.42	DK753	J4C13
—	+5	200mV	Green	CDPM761-ND	59.90	56.91	52.42	DK761	J4C13
—	+5	2V	Green	CDPM762-ND	59.90	56.91	52.42	DK762	J4C13
—	+5	20V	Green	CDPM763-ND *NEW!*	59.90	56.91	52.42	DK763	J4C13
—	+5	200mV	Red	CDPM771-ND	59.90	56.91	52.42	DK771	J4C13
—	+5	2V	Red	CDPM772-ND	59.90	56.91	52.42	DK772	J4C13
—	+5	20V	Red	CDPM773-ND *NEW!*	59.90	56.91	52.42	DK773	J4C13
4.5 Digit Process									
—	Loop	4-20mA	—	CDPM790-ND	90.00	85.50	78.75	DK790	—

Description	Digi-Key Part No.	Price Each			C-Ton Part No.
		1	10	50	
NEW! Power Supplies NEW!					
5VDC Out, 300mA	CDPM1000-ND	19.90	18.91	17.42	PW205
24VDC Out, 100mA	CDPM1002-ND	19.90	18.91	17.42	PW224
NEW! Cable Assemblies NEW!					
10 Pin Connector with Wires 26AWG	CDPM1003-ND	3.00	2.85	2.63	J1C10
13 Pin Connector with Wires 26AWG	CDPM1004-ND	3.00	2.85	2.63	J1C13
13 Pin Connector with Wires 26AWG	CDPM1005-ND	3.00	2.85	2.63	J4C13

MARTEL ELECTRONICS Digital Panel Meters

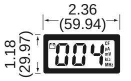
When choosing a Martel Panel Meter for your application, be aware of the difference between standard versions and "single-ended" versions designated by the suffix "S". Use standard versions with floating (isolated) input signals and use single-ended (S-type) versions when the signal to be measured shares the same ground as the meter's power supply. If in question, contact Digi-Key top obtain full data sheets before ordering.



Panel Cutout:
.87" x 1.77"
22.10mm x 44.96mm

DPM125 LCD Series

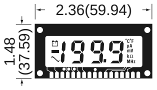
The DPM125 features auto-zero, auto-polarity, 200mV fsr, 12.5mm digit height, low battery indication, and selectable decimal points. The meter will plug directly into a 12-pin SIL socket or can be panel mounted using snap-in bezel provided.



Panel Cutout:
1.06" x 2.24"
26.92mm x 56.90mm

DPM500 LCD Series

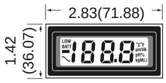
The DPM500 features auto-zero, auto-polarity, 200mV-2V-20V fsr, 12.5mm digit height, low battery indication, selectable decimal points, and 10 user-selected annunciators. The meter will plug into a 40-pin DIL socket or can be panel mounted using snap-in bezel provided. Also available with LED backlight.



Panel Cutout:
1.26" x 2.44"
32.00mm x 61.98mm
External Bezel

DPM600 LCD Series

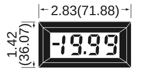
The DPM600 features auto-zero, auto-polarity, 200mV-2V-20V fsr, 12.5mm digit height, adjustable low battery indication, selectable decimal points, and 12 user-selected annunciators. The meter has 36 pins for PCB mounting or can be panel mounted with optional bezel (p/n MB10).



Panel Cutout:
1.3" x 2.68"
33.02mm x 68.07mm

DPM2000 LCD Series

The DPM2000 features auto-zero, auto-polarity, 200mV-2V-20V fsr, 15mm digit height, adjustable low battery indication, selectable decimal points, and 12 user-selected annunciators. The meter will plug into a 40-pin DIL socket or can be panel mounted using snap-in bezel provided.



Panel Cutout:
1.3" x 2.68"
33.02mm x 68.07mm

DPM40 LED Series

The DPM40 features auto-zero, auto-polarity, 200mV-2V-20V fsr, 11mm LED digit height, and selectable decimal points. The meter is supplied with a bezel and filter to give a high contrast display.

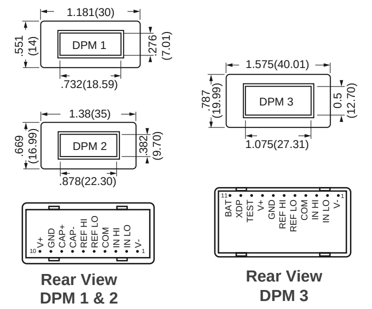
Specification		Min.	Typ.	Max.	Unit
Accuracy			0.05	0.1	% (+1 Count)
Linearity				+1	count
Sample Rate			3		per sec
Temperature Stability			100		ppm/°C
Temperature Range		0		50	°C
Supply Voltage	DPM125/500	7.5	9	14	V
	DPM500S	3.5	5	6.5	V
	DPM600	5	9	14	V
	DPM2000	5	9	15	V
	DPM40	4.5	5	5.5	V
Supply Current	LCD normal		150		µA
	LCD S-type		450		µA
	LED		100	200	mA
Input Leakage Current		1		10	pA
Low Battery Threshold	DPM125/500		7.5		V
	DPM500S		3.7		V
	DPM600		7		V
	DPM2000		6.4		V
Backlight	DPM500		5		V @ 30mA

Supply	Input	Digi-Key Part No.	Price Each 1	5	10	Martel Part No.
7.5-15	200mV	227-1007-ND	65.70	62.42	59.13	DPM125
7.5-15	200mV	227-1008-ND	82.24	78.13	74.02	DPM125L
7.5-15	20V	227-1011-ND	68.62	65.19	61.76	DPM500-20
3.6-6.5	2V	227-1016-ND	79.84	75.85	71.86	DPM500S-2
3.6-6.5	20V	227-1017-ND	79.84	75.85	71.86	DPM500S-20
5-15	200mV	227-1021-ND	68.62	65.19	61.76	DPM600
5-15	20V	227-1023-ND	68.62	65.19	61.76	DPM600-20
5-15	200mV	227-1027-ND	71.92	68.33	64.73	DPM2000
5-15	2V	227-1028-ND	71.92	68.33	64.73	DPM2000-2
5-15	20V	227-1029-ND	71.92	68.33	64.73	DPM2000-20
5	200mV	227-1030-ND	87.90	83.51	79.11	DPM40
5	2V	227-1031-ND	87.90	83.51	79.11	DPM40-2
5	20V	227-1032-ND	87.90	83.51	79.11	DPM40-20
Bezel for DPM 600		227-1033-ND	3.08	2.93	2.78	MB10

MARTEL ELECTRONICS

Universal Volt/Ammeter

When choosing a Martel Panel Meter for your application, be aware of the difference between standard versions and "single-ended" versions designated by the suffix "S". Use standard versions with floating (isolated) input signals and use single-ended (S-type) versions when the signal to be measured shares the same ground as the meter's power supply. If in question, contact Digi-Key top obtain full data sheets before ordering.



Martel uses advanced components and the latest miniaturization techniques to produce the world's smallest DPM module. Miniature size means the module can be integrated into the smallest of enclosures for local indication. Its low cost means it will suit high and low volume applications. The snap-in integral bezel makes mounting easy.

The "Normal" DPM features true differential input, auto-zero, auto-polarity, programmable decimal points, and a 200mV Full Scale Reading (F.S.R). The FSR is adjustable with the use of external resistors.

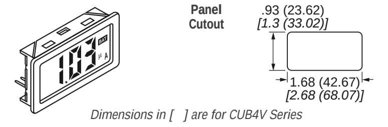
Very low power consumption allows long battery life making it very useful in handheld equipment. For single rail use, the "S-type" DPM features a built in negative rail generator enabling the meter to measure a signal referenced to its own power supply 0V.

Specification		Min.	Typ.	Max.	Unit
Accuracy (overall error)			0.1		% (±1 count)
Linearity				±1	count
Sample Rate			3		per/sec
Temperature Range		0		50	°C
Temperature Stability	Normal		200		ppm/°C
	S-type		100		
Supply Voltage	Normal (V+ to V-)	7	9	14	V
	S-type (V+ to GND)	3	5	7	
Supply Current	Normal		150		µA
	S-type		250		
Input Leakage Current (Vin = 0V)			1	10	pA

Panel Cutout Inch (mm)	Digi-Key Part No.	Price Each 1	5	10	Martel Part No.
1.11" x .44" (28.19 x 11.18)	227-1001-ND 227-1002-ND	46.08 58.36	43.78 55.45	41.48 52.53	DPM1 DPM1S
1.29" x .59" (32.77 x 14.99)	227-1003-ND 227-1004-ND	46.08 58.36	43.78 55.45	41.48 52.53	DPM2 DPM2S
1.49" x .70" (37.85 x 17.78)	227-1005-ND 227-1006-ND	46.08 58.36	43.78 55.45	41.48 52.53	DPM3 DPM3S

RED LION CONTROLS

Miniature Display Module D.C. Voltmeter



MDMV Series:

SPECIFICATIONS: • **Display:** 3-1/2-digit, .4" (10.2mm) high digits. A minus (-) sign is displayed when voltage is negative • **Decimal Points:** Selectable decimal points are activated at the rear terminal pins to allow the display to be read in tenths, hundredths or thousandths • **Annunciators:** 5 selectable annunciators, BAT, V, A, µ and m are activated at the appropriate rear terminal • **Power Requirements:** 4.8VDC to 6VDC @ 5mA Max. • **Input Range:** 0 to ±199.9mV VDC • **Overrange Indication:** Overrange is indicated by a "1" displayed in the most significant digit and the blanking of the three least significant digits • **Reading Rate:** 2 1/2 readings per second • **Common Mode Rejection Ratio:** 70dB • **Input Impedance:** 1000MΩ • **Operating Range:** 0°C to 60°C

CUB4V Series:

SPECIFICATIONS: • LCD, positive reflective or negative transmissive with yellow/green or red backlighting • Four selectable D.C. ranges (0-199.9 mV, 1.999 V, 19.99 V, 199.9 V) • 0.6" (15.24mm) high LCD digits • Built-in scaling provided • Auto-zeroing circuit • Selectable decimal points • Wire connections made via screw clamp type terminals • Fits DIN standard cut-out 2.68" (68mm) x 1.30" (33mm) • NEMA 4X/IP65 sealed front panel bezel • 9 to 28 VDC powered

Description	Digi-Key Part No.	Price Each 1	5	Red Lion Part No.
MDMV Series				
Panel Mount, Reflective Display	RLC000-ND	35.90	35.01	MDMV0000
Panel Mount, Yellow/Green Backlight Display	RLC010-ND	51.40	50.12	MDMV0010
Panel Mount, Red Backlight Display	RLC020-ND	51.40	50.12	MDMV0020
PC Board Mount, Reflective Display	RLC100-ND	35.90	35.01	MDMV0100
PC Board Mount, Yellow/Green Backlight Display	RLC110-ND	51.40	50.12	MDMV0110
PC Board Mount, Red Backlight Display	RLC120-ND	51.40	50.12	MDMV0120
MDMV Cable Assembly	RLC70-ND	12.00	11.70	HWK70000
CUB4V Series				
DC Voltmeter	RLC4V0-ND	89.00	—	CUB4V000
DC Voltmeter, Yellow/Green Backlight Display	RLC4V1-ND	99.00	—	CUB4V010
DC Voltmeter, Red Backlight Display	RLC4V2-ND	99.00	—	CUB4V020
Micro Line/Sensor Power Supply	RLCMLPS-ND	27.00	—	MLPS0000

MARTEL ELECTRONICS Miniature Digital Panel Meters

SPECIFICATIONS:

DISPLAY:
• **Digits:** 3-1/2 Digits (=1999 counts) • **Polarity:** Automatic "-" displayed • **Decimal Points:** 3-position user selectable • **Overload:** Three lower order digits for inputs >1999 and <1999 • **Hold:** Display hold function is standard.

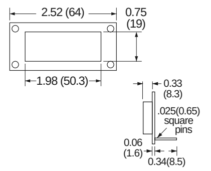
INPUTS:
• **Ranges:** ±200.0mV, ±2.000V, ±20.00V • **Configuration:** 035 Series: Bipolar differential; 065xS Series: Bipolar, single-ended; (INLO internally referenced to supply GND) • **Protection:** ±350V DC (±100VDC on 200mV range) • **Impedance:** >1 Megohm (>10 Megohm on 200mV range)

PERFORMANCE:
• **Accuracy:** ±(0.1% +1 count) typical; ±(0.2% +2 counts) maximum • **Temperature Coefficient:** ±100 ppm per °C typical. • **Operating Range:** 0°C to 50°C • **Storage Range:** -10°C to 60°C.

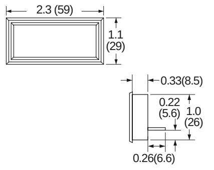
POWER SUPPLY:
• **Voltage:** +5V DC (±5%)

MOUNTING:
• **035 Series:** Window mount or bezel mount with optional bezel • **065 Series:** Snap-in bezel mount • **Connection:** 10 pins, 0.025" (.635mm) square on 0.1" (2.54mm) centers

035 Series



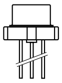
065 Series



Description	Digi-Key Part No.	Price Each 1	5	10	Martel Part No.
035 Series DPM, Red LED	227-1034-ND	38.00	36.75	35.70	DPM35R
035 Series DPM, Green LED	227-1035-ND	38.00	36.75	35.70	DPM35G
065 Series DPM, Reflective LCD	227-1036-ND	38.00	36.75	35.70	DPM65
065 Series DPM, S-Rail LCD	227-1037-ND	38.00	36.75	35.70	DPM65S
Bezel for DPM35 Series	227-1038-ND	3.17	3.07	2.98	BEZ35

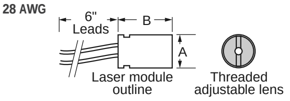
NVG Inc.

Adjustable Focus Laser Diode Modules



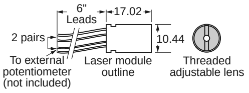
DANGER
VISIBLE LASER LIGHT
AVOID DIRECT EYE EXPOSURE

Fig. 1 — Adjustable Focus Laser Module



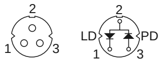
	10.4mm	6.4mm
Po:	5mW	
Class:	IIIa	
Supply Voltage, Up to 12V:	2.7-5 Continuous	
Dimension A:	10.44mm	6.4mm
Dimension B:	17.02mm	17.25mm

Fig. 2 — Adjustable Output Laser Module



Po = 1 to 4.8mW
Recommended Pot = approx. 150K to 500K

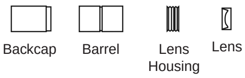
Fig. 3 — Visible Laser Diode



1. Laser cathode
2. Common case(laser anode)
3. PD anode (standard pinout)

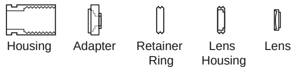
Po: 5mW
Class IIIa
Wide Spectrum Range,
Standard Pinout

Fig. 4 — 6.4mm Laser Diode Housing Kit



Includes: Backcap, barrel, lens housing and lens

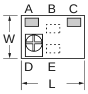
Fig. 5 — 10.4mm Laser Diode Housing Kit



Includes: Housing/Heatsink, 5.6mm to 9mm Adapter, Retaining Ring, Adjustable Focus Lens

Fig. 6 — APC Laser Power Supply

Adjustable Output Power via On-Board Potentiometer



▨ ⬚ Soldering pads
A: Laser diode cathode
B: Laser/pd common (+)
C: Photodiode anode
D: Potentiometer
E: Negative lead (-)

	Dimensions W	Dimensions L
10.4mm	5.4	7.8
6.4mm	9.0	5.0

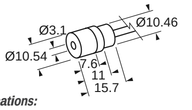
Fig.	Description	Wave-length (nm)	Iop (mA)	Size (mm)	Digi-Key Part No.	Price Each	NVG Part No.
1	Visible Laser Module*	660	10-30	17.02 x 10.44	38-1002-ND	32.66	M6605I
1	Visible Laser Module*	650	25-40	17.02 x 10.44	38-1003-ND	37.00	M6505I
1	Visible Laser Module*	640	55-70	17.02 x 10.44	38-1004-ND	72.00	M6405I
1	Visible Laser Module*	635	45-70	17.02 x 10.44	38-1017-ND	76.00	M6355I
1	Infrared Laser Module*	780	45-70	17.02 x 10.44	38-1018-ND	56.00	M7805I
1	Infrared Laser Module*	808	60-70	17.02 x 10.44	38-1005-ND	64.00	M8085I
1	Infrared Laser Module*	850	45-65	17.02 x 10.44	38-1019-ND	68.00	M8505I
1	Visible Laser Micro Module*	660	12-30	17.25 x 6.4	38-1020-ND	52.00	MM6605I
1	Visible Laser Micro Module*	650	25-40	17.25 x 6.4	38-1021-ND	57.00	MM6505I
1	Visible Laser Micro Module*	640	55-70	17.25 x 6.4	38-1022-ND	92.00	MM6405I
1	Visible Laser Micro Module*	635	45-70	17.25 x 6.4	38-1023-ND	96.00	MM6355I
1	Infrared Laser Micro Module*	780	45-70	17.25 x 6.4	38-1024-ND	76.00	MM7805I
1	Infrared Laser Micro Module*	808	60-70	17.25 x 6.4	38-1025-ND	80.00	MM8085I
1	Infrared Laser Micro Module*	850	45-65	17.25 x 6.4	38-1026-ND	88.00	MM8505I
2	Adj. Output Visible Laser Module*	660	12-30	17.02 x 10.44	38-1010-ND	52.00	EPM6605I
2	Adj. Output Visible Laser Module*	650	25-40	17.02 x 10.44	38-1011-ND	56.00	EPM6505I
2	Adj. Output Visible Laser Module*	640	55-70	17.02 x 10.44	38-1012-ND	112.00	EPM6405I
2	Adj. Output Visible Laser Module*	635	45-70	17.02 x 10.44	38-1013-ND	116.00	EPM6355I
2	Adj. Output Infrared Laser Module*	780	45-70	17.02 x 10.44	38-1014-ND	96.00	EPM7805I
2	Adj. Output Infrared Laser Module*	808	60-70	17.02 x 10.44	38-1015-ND	100.00	EPM8085I
2	Adj. Output Infrared Laser Module*	850	45-65	17.02 x 10.44	38-1016-ND	108.00	EPM8505I
3	Visible Laser Diode	660	12-20	5.6	38-1006-ND	9.00	D6605I
3	Visible Laser Diode	650	25-40	5.6	38-1007-ND	13.00	D6505I
3	Visible Laser Diode	640	55-70	5.6	38-1008-ND	30.00	D6405I
3	Visible Laser Diode	635	45-70	5.6	38-1027-ND	30.00	D6355I
3	Infrared Laser Diode	780	45-70	5.6	38-1028-ND	24.00	D7805I
3	Infrared Laser Diode	808	60-70	5.6	38-1029-ND	28.00	D8085I
3	Infrared Laser Diode	850	45-65	5.6	38-1030-ND	32.00	D8505I
4	Housing Kit, 6.4mm................................			17.25 x 6.4	38-1032-ND	20.00	HK-6.4
5	Housing Kit, 10.4mm			17.02 x 10.44	38-1000-ND	18.00	HK-10.4
6	Laser Driver Circuit (APC) for 10.4mm Housing ...			5.4 x 7.8	38-1009-ND†	14.00	NS102-200K
6	Laser Driver Circuit (APC) for 6.4mm Housing			5.0 x 9.0	38-1031-ND†	14.00	NS102A-200K
—	5.6mm to 9mm Adapter, Non-threaded				38-1033-ND	4.00	AD 5.6-9MM
—	5.6mm to 9mm Adapter, Threaded................................				38-1001-ND	5.00	THAD 5.6-9mm

* Module denotes complete assembly. † For use with 660, 650, 640 and 635nm diodes only.

Quarton Inc. Visible Laser Diode Modules

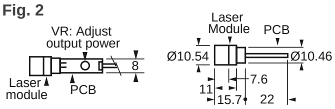
FEATURES: • Built-in driver circuit. Small size • Class IIIa laser product • Operating temperature: -10° to +50°C • Storage temperature range: -40° to +85°C

Fig. 1



Specifications:
• Cw optical power: 3±1mW • Operating current: 50±15 mA • Typical Operating Voltage: 3.0V

Fig. 2



Specifications: • Cw optical power: ≤5mW. • Operating current: 50 ±15mA • Typical Operating Voltage: 3.0V

Fig.	Emission Wavelength Typ. (nm)	Output Power Typ. (mW)	Operating Voltage Typ. (V)	Operating Current Typ. (mA)	Digi-Key Part No.	Price Each 1	10	100
1	655	3.0	3.0	60	VLM-650-01LPA-ND	30.80	27.72	25.88
	635	3.0	3.0	60	VLM-635-01LPA-ND	70.40	63.36	59.14
2	655	3.0	3.0	60	VLM-650-02LPA-ND	35.20	31.68	29.57
	635	3.0	3.0	60	VLM-635-02LPA-ND	76.67	69.00	64.40

COHERENT AUBURN GROUP Visible Laser Diode Modules

DANGER
VISIBLE LASER LIGHT
AVOID DIRECT EYE EXPOSURE

Features: • Fully collimated lens • 2-year limited warranty • ESD protection (over 2200 volts) • Reverse polarity protection • Visual ON/OFF indicator • Regulated output power • Diode life of 100,000 hours. ***Specifications:*** • Operating Temperature: -10°C to +40°C • Storage Temperature: -40°C to +80°C • Laser Operation: Continuous Wave

Fig. 1

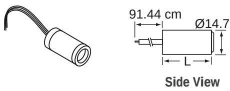


Fig. 2 – Variable Focus

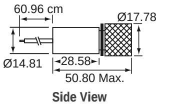


Fig. 3 – Modulation & Variable Power

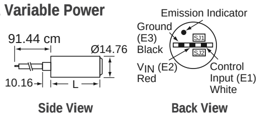


Fig. 4 – Industrial Housing

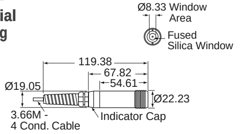


Fig. 5 – Adjustable Mount

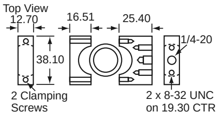


Fig. 6

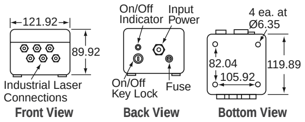


Fig.	Length (mm)	Emission Wavelength (nm)	Vop (Vdc)	Iop (mA)	Output Power (mW)	Laser Class	Beam Size/Angle (mm)	Digi-Key Part No.	Price Each	Coherent Part No.
Fixed Focus Visible Laser Module										
4	119.38	635	5-10	80-100	4.2	IIIa	5.0 x 1.2	188-1005-ND	272.40	0221-535-00
Fixed Focus Visible Module — Round Beam										
1	31.62	635	5-10	60-90	4.9	IIIa	1.4 Dia.	188-1013-ND	548.40	0221-700-01
Variable Focus Visible Laser Module										
2	50.80 Max	670	5-10	50-70	.95	II	3.0 Dia.	188-1009-ND	230.40	0220-862-00
2	50.80 Max	635	5-10	80-100	2.5	IIIa	5.0 x 1.2	188-1010-ND	205.20	0220-843-00
2	50.80 Max	635	5-10	80-100	.95	II	3.0 Dia.	188-1011-ND	250.80	0221-691-00
Modulation & Variable Power Visible Module										
3	46.86	670	6-10	—	4.2	IIIa	4.0 x 1.0	188-1015-ND	304.80	0221-202-00
3	60.35	670	6-10	—	.95	II	3.0 Dia.	188-1016-ND	336.00	0221-460-00
3	46.86	635	6-10	—	4.2	IIIa	5.0 x 1.2	188-1017-ND	325.20	0221-763-00
Fixed Focus Visible Line Generator										
4	119.38	635	5-10	80-100	1.4	II	85°	188-1006-ND	297.60	0220-975-00
4	119.38	635	5-10	80-100	1.4	II	60°	188-1007-ND	297.60	0220-976-00
Accessories										
5	Adjustable mount for Fig. 4 lasers......................................							188-1019-ND	38.40	0221-449-00
5	Adjustable mount for Fig. 1, 2, 3 lasers							188-1020-ND	38.40	0221-437-00
6	Industrial laser power supply for up to six lasers							188-1022-ND	252.00	0221-183-00

LUMEX Visible and Infrared Diodes

67-1542-ND
Lumex Master Catalog
CD-ROM **$1.95**

Fig. 1

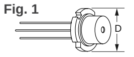


Fig. 2

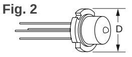
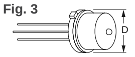


Fig. 3



Wave-length λ Typ. (nm)	Output Power (mW) max.	Current (mA) Ith	Current (mA) Iop	Oper. Voltage (V)	Operating Temp. (°C)	Diameter D (mm)	Digi-Key Part No.	Price Each	Lumex Part No.
Visible Laser Diodes — Fig. 1									
650	5	20	35	2.2	-10° to +40°	5.60	67-1500-ND	5.37	OED-LDP65001E
650	5	18	25	2.1	-10° to +70°	5.60	67-1501-ND	15.00	OED-LD65001E
660	60	80	180	2.1	-10° to +28°	9.00	67-1502-ND	136.90	OED-LDH66003F
Infrared Laser Diodes — Fig. 2									
1550	5 (CW)	8	—	1.2	-40° to +85°	5.60	67-1504-ND	124.84	OED-LDC15001E

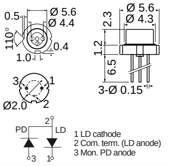
Detection Range λ (nm)	Rise/Fall Time (ns)	Forward Current (mA)	Reverse Voltage (V)	Operating Temp. (°C)	Diameter D (mm)	Digi-Key Part No.	Price Each	Lumex Part No.
Pin Photo Diode — Fig. 3								
1100/1600	0.3	2	25	-40° to +85°	5.35	67-1505-ND	35.26	OED-PPD11075G-B

Panasonic Visible Red Laser Diodes

FEATURES: • Oscillating wavelength 670nm: Luminous efficiency 2000 times a conventional laser • Low threshold oscillation: 25mA • Stable single transverse oscillation • Low astigmatism characteristics: ≤10µm. ***SPECIFICATIONS:*** **Max. Optical Power Output:** 5mW. **Oscillating Wavelength:** 670nm. **Threshold Current:** 25mA. **Operating Current:** 35mA. **LD Operating Voltage:** 2.5V. **Radiation Horizontal Angle:** 8°. **Radiation Perpendicular Angle:** 30°

Digi-Key Part No.	Price Each 1	10	100	250	Panasonic Part No.
P460-ND	33.75	30.38	28.35	26.33	LN9R05MS

5.6mm type



LED 7-Segment Displays

67-1542-ND
Lumex Master Catalog
CD-ROM **$1.95**

Fig. 1

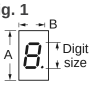


Fig. 2

Only .56" (14.20mm) and .80" (20.32mm) have active decimal points

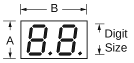


Fig. 3

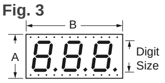


Fig. 4

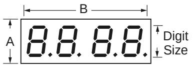


Fig. 5 — Right Angle

Multiplexed

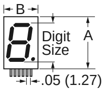
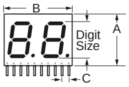


Fig. 6 — Right Angle

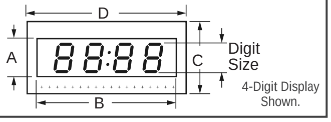
Multiplexed.
Only .56" (14.20mm) has decimal points



Size	No. of Pins	Dim. C In. (mm)
.56"	10	.10 (2.49)
.30"	9	.05 (1.27)

Fig. 7

Only .306" (7.77mm) Display has attached pins.
All others require 0.1" (2.54mm) pitch header pins.



4-Digit Display Shown.

Fig.	Emitted Color	Digit Size In. (mm)	Dimensions Inch (mm) A x B	VF (V)	If (mA)	Io (ucd)	Digi-Key Part No. Common Anode	Digi-Key Part No. Common Cathode	Price Each 1	10	100	Lumex Part No. Common Anode	Lumex Part No. Common Cathode
1	Red/Orng	.30 (7.62)	.75 x .40 (19.05 x 10.16)	2.0	10	5600	67-1403-ND	67-1406-ND	1.57	1.43	1.23	LDS-A304RI	LDS-C304RI
	Green	.30 (7.62)	.75 x .40 (19.05 x 10.16)	2.2	10	3500	67-1404-ND	67-1407-ND	1.57	1.43	1.23	LDS-A302RI	LDS-C302RI
	Yellow	.30 (7.62)	.75 x .40 (19.05 x 10.16)	2.1	10	3500	67-1405-ND	67-1408-ND	1.57	1.43	1.23	LDS-A303RI	LDS-C303RI
	Super-Red	.30 (7.62)	.75 x .40 (19.05 x 10.16)	1.8	10	9800	67-1413-ND	67-1414-ND	2.31	2.10	1.81	LDS-A306RI	LDS-C306RI
1	Red/Orng	.36 (9.14)	.55 x .30 (13.97 x 7.49)	2.0	10	2250	67-1415-ND	67-1417-ND	1.84	1.68	1.45	LDS-A324RI	LDS-C324RI
	Green	.36 (9.14)	.55 x .30 (13.97 x 7.49)	2.2	10	2250	67-1416-ND	67-1418-ND	1.84	1.68	1.45	LDS-A322RI	LDS-C322RI
1	Red/Orng	.43 (10.92)	.74 x .50 (18.90 x 12.60)	2.0	10	3900	67-1431-ND	67-1434-ND	1.57	1.43	1.23	LDS-A414RI	LDS-C414RI
	Green	.43 (10.92)	.74 x .50 (18.90 x 12.60)	2.2	10	2500	67-1432-ND	67-1435-ND	1.57	1.43	1.23	LDS-A412RI	LDS-C412RI
	Yellow	.43 (10.92)	.74 x .50 (18.90 x 12.60)	2.1	10	2500	67-1433-ND	67-1436-ND	1.57	1.43	1.23	LDS-A413RI	LDS-C413RI
	Super-Red	.43 (10.92)	.74 x .50 (18.90 x 12.60)	1.8	10	12300	67-1445-ND	67-1446-ND	2.31	2.10	1.81	LDS-A416RI	LDS-C416RI
1	Red/Orng	.50 (12.70)	.75 x .50 (19.00 x 12.70)	2.0	10	3900	67-1451-ND	67-1453-ND	1.84	1.68	1.45	LDS-A504RI	LDS-C504RI
	Green	.50 (12.70)	.75 x .50 (19.00 x 12.70)	2.2	10	3900	67-1452-ND	67-1454-ND	1.84	1.68	1.45	LDS-A502RI	LDS-C502RI
1	Red/Orng	.56 (14.22)	.75 x .48 (19.05 x 12.19)	2.0	10	3900	67-1463-ND	67-1466-ND	1.57	1.43	1.23	LDS-A514RI	LDS-C514RI
	Green	.56 (14.22)	.75 x .48 (19.05 x 12.19)	2.2	10	3900	67-1464-ND	67-1467-ND	1.57	1.43	1.23	LDS-A512RI	LDS-C512RI
	Yellow	.56 (14.22)	.75 x .48 (19.05 x 12.19)	2.1	10	3900	67-1465-ND	67-1468-ND	1.57	1.43	1.23	LDS-A513RI	LDS-C513RI
	Super-Red	.56 (14.22)	.75 x .48 (19.05 x 12.19)	1.8	10	13300	67-1475-ND	67-1476-ND	2.31	2.10	1.81	LDS-A516RI	LDS-C516RI
1	Red/Orng	.80 (20.32)	1.09 x .788 (27.71 x 20.02)	2.0	10	5600	67-1477-ND	67-1480-ND	2.28	2.08	1.79	LDS-A814RI	LDS-C814RI
	Green	.80 (20.32)	1.09 x .788 (27.71 x 20.02)	2.2	10	2500	67-1478-ND	67-1481-ND	2.28	2.08	1.79	LDS-A812RI	LDS-C812RI
	Yellow	.80 (20.32)	1.09 x .788 (27.71 x 20.02)	2.1	10	2500	67-1479-ND	67-1482-ND	2.28	2.08	1.79	LDS-A813RI	LDS-C813RI
	Super-Red	.80 (20.32)	1.09 x .788 (27.71 x 20.02)	1.8	10	15000	67-1483-ND	67-1484-ND	3.14	2.85	2.46	LDS-A816RI	LDS-C816RI
1	Red/Orng	1.0 (25.40)	1.34 x .95 (34.04 x 24.00)	4.0	10	9800	67-1485-ND	67-1487-ND	3.08	2.80	2.41	LDS-AA14RI	LDS-CA14RI
	Green	1.0 (25.40)	1.34 x .95 (34.04 x 24.00)	4.4	10	6300	67-1486-ND	67-1488-ND	3.08	2.80	2.41	LDS-AA12RI	LDS-CA12RI
1	Red/Orng	2.25 (57.15)	2.76 x 1.89 (70.10 x 48.01)	8.0	10	9000	67-1489-ND	67-1491-ND	9.46	8.60	7.40	LDS-AD14RI	LDS-CD14RI
	Green	2.25 (57.15)	2.76 x 1.89 (70.10 x 48.01)	8.4	10	6300	67-1490-ND	67-1492-ND	9.46	8.60	7.40	LDS-AD12RI	LDS-CD12RI
	Super-Red	2.25 (57.15)	2.76 x 1.89 (70.10 x 48.01)	6.8	10	22500	67-1493-ND	67-1494-ND	10.84	9.85	8.48	LDS-AD16RI	LDS-CD16RI
2	Red/Orng	.30 (7.62)	.60 x .61 (15.24 x 15.49)	2.0	10	3900	67-1409-ND†	67-1411-ND†	2.50	2.28	1.96	LDD-E304NI	LDD-F304NI
	Green	.30 (7.62)	.60 x .61 (15.24 x 15.49)	2.2	10	3900	67-1410-ND†	67-1412-ND†	2.50	2.28	1.96	LDD-E302NI	LDD-F302NI
2	Red/Orng	.40 (10.16)	.63 x .80 (16.00 x 20.22)	2.0	10	3900	67-1437-ND	67-1438-ND	2.39	2.18	1.88	LDD-A404NI	LDD-C404NI
	Green	.40 (10.16)	.63 x .80 (16.00 x 20.22)	2.2	10	3900	67-1419-ND	67-1421-ND	2.39	2.18	1.88	LDD-A402NI	LDD-C402NI
	Yellow	.40 (10.16)	.63 x .80 (16.00 x 20.22)	2.1	10	3900	67-1420-ND	67-1422-ND	2.39	2.18	1.88	LDD-A403NI	LDD-C403NI
	Super-Red	.40 (10.16)	.63 x .80 (16.00 x 20.22)	1.8	10	6300	67-1447-ND	67-1448-ND	3.69	3.35	2.89	LDD-A406NI	LDD-C406NI
2	Red/Orng	.56 (14.22)	.75 x .98 (19.05 x 24.89)	2.0	10	3900	67-1455-ND	67-1458-ND	2.39	2.18	1.88	LDD-A514RI	LDD-C514RI
	Green	.56 (14.22)	.75 x .98 (19.05 x 24.89)	2.2	10	3900	67-1456-ND	67-1459-ND	2.39	2.18	1.88	LDD-A512RI	LDD-C512RI
	Yellow	.56 (14.22)	.75 x .98 (19.05 x 24.89)	2.1	10	3900	67-1457-ND	67-1460-ND	2.39	2.18	1.88	LDD-A513RI	LDD-C513RI
	Super-Red	.56 (14.22)	.75 x .98 (19.05 x 24.89)	1.8	10	13300	67-1461-ND	67-1462-ND	3.69	3.35	2.89	LDD-A516RI	LDD-C516RI
2	Red/Orng	.80 (20.32)	1.01 x 1.41 (25.65 x 35.81)	2.0	10	5600	67-1469-ND	67-1472-ND	3.99	3.63	3.12	LDD-A814RI	LDD-C814RI
	Green	.80 (20.32)	1.01 x 1.41 (25.65 x 35.81)	2.2	10	2500	67-1470-ND	67-1473-ND	3.99	3.63	3.12	LDD-A812RI	LDD-C812RI
	Yellow	.80 (20.32)	1.01 x 1.41 (25.65 x 35.81)	2.1	10	2500	67-1471-ND	67-1474-ND	3.99	3.63	3.12	LDD-A813RI	LDD-C813RI
3	Red/Orng	.56 (14.22)	.75 x 1.48 (19.05 x 37.59)	2.1	10	5600	67-1423-ND	67-1425-ND	5.09	4.63	3.98	LDT-A514RI	LDT-C514RI
	Green	.56 (14.22)	.75 x 1.48 (19.05 x 37.59)	2.2	10	3500	67-1424-ND	67-1426-ND	5.09	4.63	3.98	LDT-A512RI	LDT-C512RI
4	Red/Orng	.28 (7.11)	.40 x 1.264 (10.11 x 32.11)	2.0	10	5000	67-1427-ND†•	—	7.40	6.73	5.79	LDQ-M284RI	—
	Green	.28 (7.11)	.40 x 1.264 (10.11 x 32.11)	2.2	10	2200	67-1428-ND†•	—	7.40	6.73	5.79	LDQ-M282RI	—
	Yellow	.28 (7.11)	.40 x 1.264 (10.11 x 32.11)	2.1	10	3000	67-1429-ND†•	—	7.40	6.73	5.79	LDQ-M283RI	—
	Super-Red	.28 (7.11)	.40 x 1.264 (10.11 x 32.11)	1.8	10	9000	67-1430-ND†•	—	14.16	12.88	11.08	LDQ-M286RI	—
4	Red/Orng	.56 (14.22)	.75 x 1.98 (19.00 x 50.29)	2.1	10	3900	67-1439-ND†	67-1442-ND†	7.40	6.73	5.79	LDQ-M514RI	LDQ-N514RI
	Green	.56 (14.22)	.75 x 1.98 (19.00 x 50.29)	2.2	10	3900	67-1440-ND†	67-1443-ND†	7.40	6.73	5.79	LDQ-M512RI	LDQ-N512RI
	Yellow	.56 (14.22)	.75 x 1.98 (19.00 x 50.29)	2.1	10	3900	67-1441-ND†	67-1444-ND†	7.40	6.73	5.79	LDQ-M513RI	LDQ-N513RI
	Super-Red	.56 (14.22)	.75 x 1.98 (19.00 x 50.29)	1.8	10	12000	67-1449-ND†	67-1450-ND†	7.40	6.73	5.79	LDQ-M516RI	LDQ-N516RI
5	Red	.56 (14.22)	.75 x .49 (19.05 x 12.50)	2.1	10	3400	67-1512-ND†	67-1513-ND†	1.98	1.80	1.55	LDS-M514RI-RA	LDS-N514RI-RA
	Green	.56 (14.22)	.75 x .49 (19.05 x 12.50)	2.1	10	2250	67-1514-ND†	67-1515-ND†	1.98	1.80	1.55	LDS-M512RI-RA	LDS-N512RI-RA
6	Red	.30 (7.62)	.59 x .61 (15.00 x 15.50)	2.0	10	3900	67-1516-ND†‡	67-1517-ND†‡	3.38	3.08	2.65	LDD-E304NI-RA	LDD-F304NI-RA
	Green	.30 (7.62)	.59 x .61 (15.00 x 15.50)	2.0	10	3900	67-1518-ND†‡	67-1519-ND†‡	3.38	3.08	2.65	LDD-E302NI-RA	LDD-F302NI-RA
	Red	.56 (14.20)	.75 x .98 (19.00 x 25.00)	2.0	10	3900	67-1520-ND†	67-1521-ND†	3.33	3.03	2.61	LDD-M514RI-RA	LDD-N514RI-RA
	Green	.56 (14.20)	.75 x .98 (19.00 x 25.00)	2.2	10	3900	67-1522-ND†	67-1523-ND†	3.33	3.03	2.61	LDD-M512RI-RA	LDD-N512RI-RA

† Multiplexed Display • Inactive colon on display ‡ Non standard segment connections

HEWLETT-PACKARD CROSS REFERENCE

HP Part No.	Digi-Key Part No.
5082-7611	67-1403-ND
5082-7613	67-1406-ND
5082-7621	67-1405-ND
5082-7623	67-1408-ND
HDSP-A101	67-1428-ND
HDSP-A151	67-1429-ND
HDSP-A901	67-1416-ND
HDSP-A903	67-1418-ND
HDSP-E101	67-1445-ND
HDSP-E103	67-1446-ND
HDSP-N101	67-1483-ND
HDSP-N103	67-1484-ND
HDSP-3601	67-1404-ND
HDSP-3603	67-1407-ND
HDSP-3731	67-1431-ND
HDSP-3733	67-1434-ND
HDSP-3901	67-1477-ND
HDSP-3903	67-1480-ND
HDSP-4131	67-1433-ND
HDSP-4133	67-1436-ND
HDSP-4201	67-1479-ND
HDSP-4203	67-1482-ND
HDSP-4601	67-1432-ND
HDSP-4603	67-1435-ND
HDSP-5501	67-1463-ND
HDSP-5503	67-1466-ND
HDSP-5521	67-1455-ND
HDSP-5523	67-1458-ND
HDSP-5601	67-1452-ND
HDSP-5603	67-1454-ND
HDSP-5621	67-1456-ND
HDSP-5623	67-1459-ND
HDSP-5701	67-1451-ND
HDSP-5703	67-1453-ND
HDSP-5721	67-1457-ND
HDSP-5723	67-1460-ND
HDSP-7501	67-1415-ND
HDSP-7503	67-1417-ND
HDSP-8601	67-1478-ND
HDSP-8603	67-1481-ND

LED 7-Segment Clock Displays

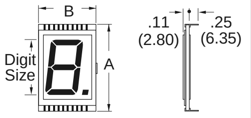
Fig.	Emitted Color	Digit Size In. (mm)	Display	Dimensions – Inch (mm) Display Area (A x B)	Board Area (C x D)	No. of Pins	Common Anode/Cathode	VF (V)	If (mA)	Io (μcd)	Digi-Key Part No.	Price Each 1	25	100	Lumex Part No.
7	Red	.31 (7.77)	3-1/2 Digit	.39 x 1.45 (10.00 x 36.80)	.75 x 1.65 (19.00 x 42.00)	24	Anode	2.0	10	3500	67-1531-ND†	4.02	3.35	2.68	LDC-M3104R
	Green	.31 (7.77)	3-1/2 Digit	.39 x 1.45 (10.00 x 36.80)	.75 x 1.65 (19.00 x 42.00)	24	Anode	2.2	10	2250	67-1530-ND†	4.02	3.35	2.68	LDC-M3102G
7	Red	.50 (12.70)	3-1/2 Digit	.65 x 2.04 (16.60 x 51.75)	1.06 x 2.36 (27.00 x 60.00)	17	Anode	2.0	10	3900	67-1533-ND†	4.38	3.65	2.92	LDC-M5004R
	Green	.50 (12.70)	3-1/2 Digit	.65 x 2.04 (16.60 x 51.75)	1.06 x 2.36 (27.00 x 60.00)	17	Anode	2.2	10	3900	67-1532-ND†	4.38	3.65	2.92	LDC-M5002G
7	Red	.91 (23.00)	4 Digit	1.06 x 3.58 (27.00 x 90.90)	1.36 x 4.13 (34.50 x 105.00)	22	Anode	2.1	10	2200	67-1535-ND†	5.37	4.48	3.58	LDC-M9004R
	Green	.91 (23.00)	4 Digit	1.06 x 3.58 (27.00 x 90.90)	1.36 x 4.13 (34.50 x 105.00)	22	Anode	2.2	10	2200	67-1534-ND†	5.37	4.48	3.58	LDC-M9002G
7	Red	1.37 (34.87)	4 Digit	1.73 x 5.49 (43.90 x 139.50)	2.09 x 6.18 (53.00 x 157.00)	35	Cathode	4.0	10	4400	67-1539-ND	10.68	8.90	7.12	LDC-NA144R
	Green	1.37 (34.87)	4 Digit	1.73 x 5.49 (43.90 x 139.50)	2.09 x 6.18 (53.00 x 157.00)	35	Cathode	4.4	10	4400	67-1538-ND	10.68	8.90	7.12	LDC-NA142G
7	Red	1.50 (38.20)	4 Digit	1.76 x 4.53 (44.75 x 115.00)	2.22 x 4.53 (56.30 x 115.00)	13	Anode	4.2	10	4400	67-1537-ND†∆	9.30	7.75	6.20	LDC-MA154R
	Green	1.50 (38.20)	4 Digit	1.76 x 4.53 (44.75 x 115.00)	2.22 x 4.53 (56.30 x 115.00)	13	Anode	4.4	10	4400	67-1536-ND†∆	9.30	7.75	6.20	LDC-MA152G
7	Red	1.84 (46.60)	3-1/2 Digit	1.97 x 6.30 (50.00 x 160.00)	2.20 x 7.40 (56.00 x 188.00)	30	Cathode	4.0	10	4400	67-1541-ND†	11.28	9.40	7.52	LDC-NA184R
	Green	1.84 (46.60)	3-1/2 Digit	1.97 x 6.30 (50.00 x 160.00)	2.20 x 7.40 (56.00 x 188.00)	30	Cathode	4.4	10	4400	67-1540-ND†	11.28	9.40	7.52	LDC-NA182G

† Multiplexed Display ∆ Do not have colons

Large Liquid Crystal 7-Segment Displays

SPECIFICATIONS: • **Fluid Type:** TN • **Background Color:** Gray • **Viewing Direction:** 6:00 • **Display Mode:** Reflective • **Operating Voltage:** 3.0 to 5.0 VAC • **Operating Temperature:** 0°C to +50°C • **Storage Temperature:** -20°C to +70°C • Can be driven with the CD4543BE

Digit Size In. (mm)	Dim. - Inch (mm) A x B	Driving Method	Digi-Key Part No.	Price Each 1	25	100	Lumex Part No.
1.36 (34.54)	1.97 x 1.30 (50.00 x 33.00)	Static, 1/2 Bias	67-1506-ND	4.65	3.88	3.10	LCD-S101D14TR
2.21 (56.13)	3.00 x 2.20 (76.20 x 55.88)	Static	67-1507-ND	10.56	8.80	7.04	LCD-S101D22TR
2.99 (76.00)	4.03 x 3.00 (102.40 x 76.20)	Static	67-1508-ND	17.66	14.13	12.37	LCD-S101D30TR
4.00 (101.60)	4.83 x 3.20 (122.56 x 81.28)	Static, 1/2 Bias	67-1509-ND	22.86	18.29	16.01	LCD-S101D40TR



Note: 4" display does not have decimal point. Pin count varies with display height.

LEDs

67-1542-ND
Lumex Master Catalog
CD-ROM $1.95

Fig. 1

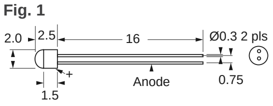
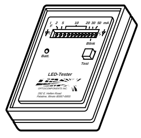


Fig. 2



Features:
- Allows quick testing of LEDS at 2, 5, 10, 20, 30, or 50 mA drive current levels with the push of a button.
- Requires: 9 Volt Battery (not included).

Fig. 3

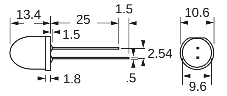


Fig. 4

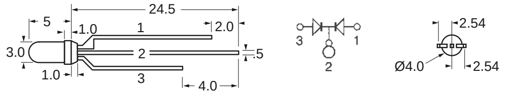


Fig.	LED Dia. (mm)	Emitted Color	Oper Current MA	Oper Type Volt(v)	Digi-Key Part No.	Price Each 1	25	100	Lumex Part No.
				Ceramic Stem LEDs					
1	2	Orange/Red	20	2.0	67-1197-ND	1.02	.85	.68	SSL-LX203CIT
	2	Green	20	2.1	67-1198-ND	1.02	.85	.68	SSL-LX203CGT
	2	Yellow	20	2.1	67-1199-ND	1.02	.85	.68	SSL-LX203CYT
	2	Red	20	1.6	67-1200-ND	1.26	1.05	.84	SSL-LX203CSRT
2	LED Tester Box......................................				67-1398-ND	38.00	—	—	LED Tester Box

Fig.	Emitted Color	Epoxy Lens Color	Typical mCD Intensity @ 20mA If	Emission Total Angle	Peak Wave-length	Vf @ 20mA If Typ.	Max.	Steady If Max.	Digi-Key Part No.	Price Each 1	10	25	Lumex Part No.
					10MM Mega-Brite Lites								
3	Or/Red	Clear	3000	18°	620nm	1.8	2.4	25mA	67-1399-ND	2.37	1.98	1.78	SSL-LX100133XOC
	Green	Clear	500	18°	568nm	2.1	2.7	25mA	67-1400-ND	.72	.60	.54	SSL-LX100133XGC
	Yellow	Clear	2000	18°	590nm	1.8	2.4	25mA	67-1401-ND	2.61	2.18	1.96	SSL-LX100133XYC/B

Fig.	Color Pin 1	Color Pin 3	Vf	Io mcd	View Angle	If mA	Digi-Key Part No.	Price Each 1	25	100	250	Lumex Part No.
					Bi-Color LEDs							
4	Green	Yellow	2.0	30/30	60°	20	67-1329-ND	.75	.63	.51	.44	SSL-LX3059GYW
	Red	Green	2.0	35/35	60°	20	67-1327-ND	.75	.63	.51	.44	SSL-LX3059IGW
	Red	Yellow	2.0	40/30	60°	20	67-1328-ND	.75	.63	.51	.44	SSL-LX3059IYW

Low Battery Indicators

Emitted Color: Red. **Wavelength (NM):** 660.
Intensity: 3mcd. **Standby Current:** 5µA

Fig. 1

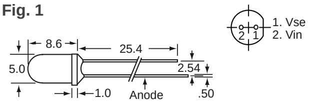


Fig. 2

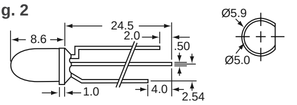


Fig. 3

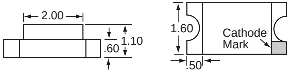


Fig. 4

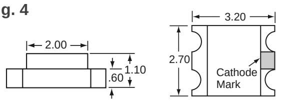


Fig.	Detection Voltage (V)	Viewing Angle	Digi-Key Part No.	Cut Tape Price Each 1	10	25	100	Lumex Part No.
1	2.5	60	67-1195-ND	1.11	—	.93	.74	SSL-LX5093LBI-SRD
2	3.75 - 7.5	60	67-1196-ND	1.44	—	1.20	.96	SSL-LX5099LBI-SRD
3	2.5	140	67-1193-1-ND	1.80	1.58	—	1.35	SML-LX1206LBI-SRD
4	3.75 - 7.5	140	67-1194-1-ND	2.28	2.00	—	1.71	SML-LX1210LBI-SRD

Infrared LEDs

Fig. 1

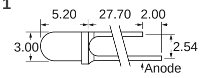


Fig. 2

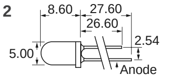
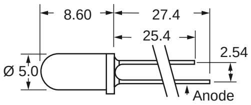


Fig.	LED Dia. (mm)	Peak Wave-Length	Lens Color	Oper. Curr. (mA)	Typ. Forward Voltage	Digi-Key Part No.	Price Each 1	10	100	Lumex Part No.
1	3	940 nm	Clear	60	1.2	67-1000-ND	.25	.23	.20	OED-EL-8L
2	5	940 nm	Clear	100	1.5	67-1001-ND	.27	.25	.22	OED-EL-1L2

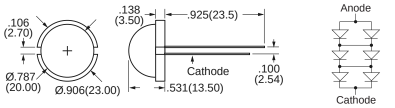
T-1 3/4 Flashing LED Lamps



Features:
- Operating Voltage: 3.0 to 14.0
- Blinking Frequency: 1.5 to 2.5Hz
- Operating Temperature Range: -55°C to 100°C

Color	Color Source	Io @ VF=9V (mcd)	Viewing Angle	Digi-Key Part No.	Price Each 1	25	100	Lumex Part No.
Red/Diff.	Brt. Red	10.0	40°	67-1499-ND	.93	.78	.62	SSL-LX5093BSRD
Dark Red/Diff.	Red	4.0	40°	67-1497-ND	.84	.71	.57	SSL-LX5093BHD
Red/Diff.	Red	8.0	40°	67-1498-ND	.84	.71	.57	SSL-LX5093BID
Green/Diff.	Green	8.0	40°	67-1496-ND	.84	.71	.57	SSL-LX5093BGD
Yellow/Diff.	Yellow	8.0	40°	67-1495-ND	.84	.71	.57	SSL-LX5093BYD

20mm 6-Element LED Dome



Color	Wave-length λ (nm)	Vf Typ. (V)	If Max. (mA)	Io @ If = 20mA (mcd)	Digi-Key Part No.	Price Each 1	25	100	Lumex Part No.
Green	565	6.0	25	25	67-1526-ND	1.74	1.45	1.16	SSL-LX20R6GD
Red	635	5.7	30	35	67-1527-ND	1.74	1.45	1.16	SSL-LX20R6ID
Red	660	5.1	30	60	67-1528-ND	2.22	1.85	1.48	SSL-LX20R6SRD
Yellow	585	5.85	30	23	67-1529-ND	1.74	1.45	1.16	SSL-LX20R6YD

PC Mount LED Arrays / Light Bars

Fig. 1

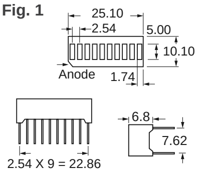


Fig. 2

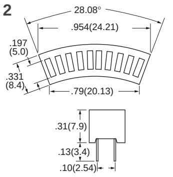


Fig. 3

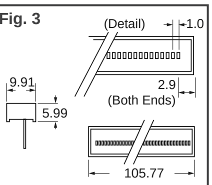


Fig. 4

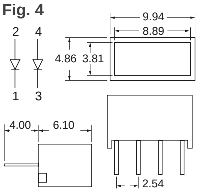


Fig. 5

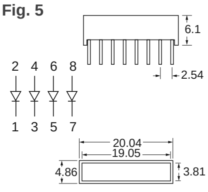


Fig. 6

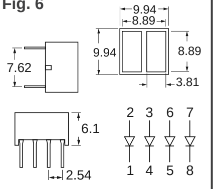


Fig. 7

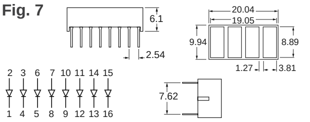


Fig. 8

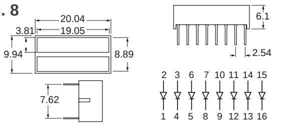


Fig. 9

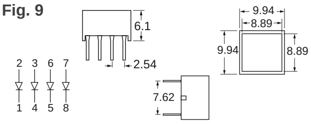


Fig. 10

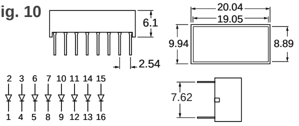


Fig.	Emitted Color	Vf	Io mcd	If mA	Digi-Key Part No.	Price Each 1	25	100	Lumex Part No.
1	Green	2.1	10	25	67-1008-ND	2.85	2.38	1.90	SSA-LXB10GW-GF/LP
1	Red	2.1	4	30	67-1009-ND	2.13	1.78	1.42	SSA-LXB10HW-GF/LP
1	Red	2.1	10	30	67-1010-ND	2.85	2.38	1.90	SSA-LXB10IW-GF/LP
2	Green	2.1	10	30	67-1524-ND	3.90	3.25	2.60	SSA-LXB10GW-10652
2	Red	1.7	40	30	67-1525-ND	6.72	5.60	4.48	SSA-LXB10SRW-10652
3	Red	2.3	60	100(Ip)	67-1011-ND	58.06	51.23	47.81	SSA-LXB8825
3	Green	2.3	70	100(Ip)	67-1012-ND	58.06	51.23	47.81	SSA-LXB8835
4	Red	2.1	25	30	67-1013-ND	.91	.76	.61	SSB-LX2300IW
5	Red	2.1	50	30	67-1014-ND	1.36	1.14	.91	SSB-LX2350IW
4	Yellow	2.1	18	30	67-1015-ND	.91	.76	.61	SSB-LX2400YW
5	Yellow	2.1	38	30	67-1016-ND	1.36	1.14	.91	SSB-LX2450YW
4	Green	2.1	25	25	67-1017-ND	.91	.76	.61	SSB-LX2500SGW
6	Red	2.1	25	30	67-1018-ND	1.49	1.25	1.00	SSB-LX2600IW
7	Red	2.1	25	30	67-1019-ND	2.36	1.97	1.57	SSB-LX2620IW
8	Red	2.0	50	30	67-1020-ND	2.36	1.97	1.57	SSB-LX2635IW
9	Red	2.1	45	30	67-1021-ND	1.49	1.25	1.00	SSB-LX2655IW
10	Red	2.1	80	30	67-1022-ND	2.36	1.97	1.57	SSB-LX2685IW
6	Yellow	2.1	18	30	67-1023-ND	1.49	1.25	1.00	SSB-LX2700YW
7	Yellow	2.1	18	30	67-1024-ND	2.36	1.97	1.57	SSB-LX2720YW
8	Yellow	2.1	40	30	67-1025-ND	2.36	1.97	1.57	SSB-LX2735YW
9	Yellow	2.1	35	30	67-1026-ND	1.49	1.25	1.00	SSB-LX2755YW
10	Yellow	2.1	70	30	67-1027-ND	2.36	1.97	1.57	SSB-LX2785YW
9	Red/Yel	2.1	25	30	67-1028-ND	2.49	2.08	1.66	SSB-LX2950IYW
9	Red/Grn	2.1	25	30/25	67-1029-ND	2.49	2.08	1.66	SSB-LX2965IGW
4	Red	1.7	40	30	67-1030-ND	1.04	.87	.70	SSB-LXA100SRW
5	Red	1.7	80	30	67-1031-ND	1.53	1.28	1.03	SSB-LXB100SRW
9	Red	1.7	80	30	67-1032-ND	2.35	1.96	1.57	SSB-LXC100SRW
6	Red	1.7	40	30	67-1033-ND	2.35	1.96	1.57	SSB-LXD100SRW
7	Red	1.7	40	30	67-1034-ND	2.72	2.27	1.81	SSB-LXE100SRW
8	Red	1.7	80	30	67-1035-ND	2.72	2.27	1.81	SSB-LXF100SRW
10	Red	1.7	150	30	67-1036-ND	2.72	2.27	1.81	SSB-LXH100SRW

Surface Mount LEDs

67-1542-ND
Lumex Master Catalog
CD-ROM............................**$1.95**

Fig. 1 — SOT-23

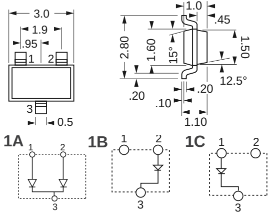
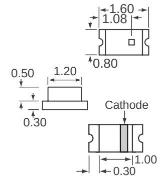
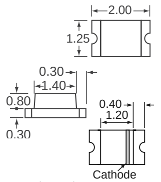


Fig.2 — 0603



* Anode mark on 67-1551-1-ND

Fig. 3 — 0805



* Anode mark on 67-1555-1-ND

Fig. 4 — 1206

* Anode mark on 67-1359-1-ND 67-1004-1-ND

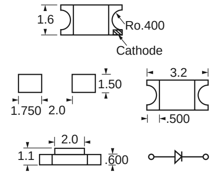


Fig. 5 — 1210

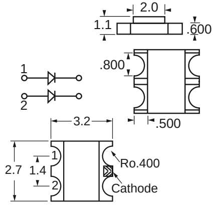


Fig. 6

* Anode mark on 67-1366-ND

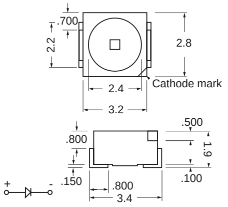


Fig. 7

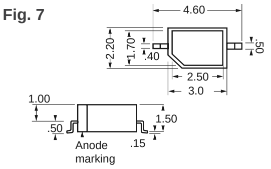


Fig. 8

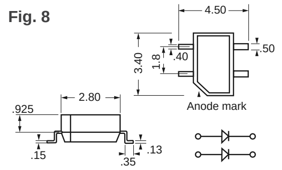
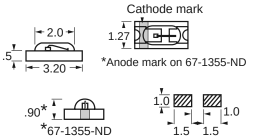


Fig. 9



*Anode mark on 67-1355-ND

*67-1355-ND

Fig. 10

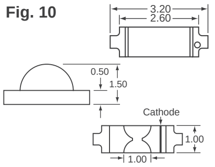


Fig. 11

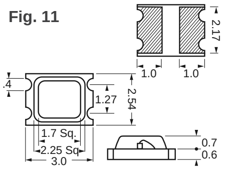
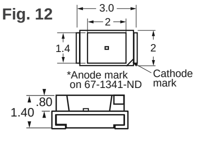


Fig. 12



*Anode mark on 67-1341-ND

Fig. 13

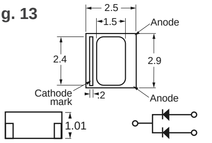


Fig. 14

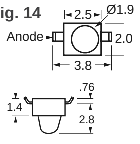


Fig. 15

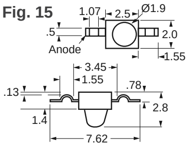


Fig. 16

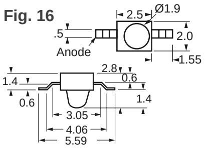


Fig. 17

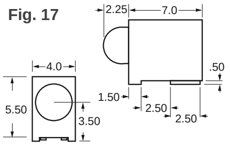


Fig. No.	Emitted Color	Vf	Io (mcd)	View Angle	If (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing	Lumex Part No.
1A	Red/Red	2.1	8	140°	40	67-1334-1-ND	.96	.84	.72	67-1334-2-ND	3,000	398.00/M	SSL-LX15IIC-RP-TR
1A	Green/Green	2.1	8	140°	40	67-1336-1-ND	.96	.84	.72	67-1336-2-ND	3,000	398.00/M	SSL-LX15GGC-RP-TR
1A	Yellow/Yellow	2.1	8	140°	40	67-1337-1-ND	.96	.84	.72	67-1337-2-ND	3,000	398.00/M	SSL-LX15YYC-RP-TR
1A	Red/Green	2.1	4/4	140°	20/20	67-1335-1-ND	.88	.77	.66	67-1335-2-ND	3,000	365.00/M	SSL-LX15IGC-RP-TR
1B	Red	2.1	4	140°	20	67-1381-1-ND	.64	.56	.48	67-1381-2-ND	3,000	265.60/M	SSL-LX15IC-TR
1B	Green	2.1	3	140°	20	67-1382-1-ND	.64	.56	.48	67-1382-2-ND	3,000	265.60/M	SSL-LX15GC-TR
1B	Yellow	2.1	3	140°	20	67-1383-1-ND	.64	.56	.48	67-1383-2-ND	3,000	265.60/M	SSL-LX15YC-TR
1C	Red	2.1	4	140°	20	67-1378-1-ND	.64	.56	.48	67-1378-2-ND	3,000	265.60/M	SSL-LX15IC-RP-TR
1C	Green	2.1	3	140°	20	67-1379-1-ND	.64	.56	.48	67-1379-2-ND	3,000	265.60/M	SSL-LX15GC-RP-TR
1C	Yellow	2.1	3	140°	20	67-1380-1-ND	.64	.56	.48	67-1380-2-ND	3,000	265.60/M	SSL-LX15YC-RP-TR
2	Red	2.0	14	160°	20	67-1548-1-ND	.20	.17	.14	67-1548-2-ND	4,000	111.22/M	SML-LX0603IW-TR
2	Green	2.2	18	160°	20	67-1549-1-ND	.17	.14	.12	67-1549-2-ND	4,000	92.96/M	SML-LX0603GW-TR
2	Yellow	2.1	12	160°	20	67-1550-1-ND	.19	.16	.13	67-1550-2-ND	4,000	106.24/M	SML-LX0603YW-TR
2	Super Red	1.8	30	160°	20	67-1551-1-ND*	.20	.17	.14	67-1551-2-ND*	4,000	112.88/M	SML-LX0603SRW-TR
3	Red	2.0	11	140°	20	67-1552-1-ND	.18	.15	.12	67-1552-2-ND	4,000	97.94/M	SML-LXT0805IW-TR
3	Green	2.0	11	140°	20	67-1553-1-ND	.15	.13	.10	67-1553-2-ND	4,000	81.34/M	SML-LXT0805GW-TR
3	Yellow	2.1	10	140°	20	67-1554-1-ND	.19	.16	.13	67-1554-2-ND	4,000	106.24/M	SML-LXT0805YW-TR
3	Super Red	1.8	21	140°	20	67-1555-1-ND*	.18	.15	.12	67-1555-2-ND*	4,000	99.60/M	SML-LXT0805SRW-TR
4	Red	2.0	6	140°	20	67-1356-1-ND	.36	.32	.27	67-1356-2-ND	3,000	149.40/M	SML-LX1206IC-TR
4	Green	2.1	10	140°	20	67-1357-1-ND	.36	.32	.27	67-1357-2-ND	3,000	149.40/M	SML-LX1206GC-TR
4	Yellow	2.0	6	140°	20	67-1358-1-ND	.36	.32	.27	67-1358-2-ND	3,000	149.40/M	SML-LX1206YC-TR
4	Super Red	1.7	15	140°	20	67-1359-1-ND*	.60	.53	.45	67-1359-2-ND*	3,000	249.00/M	SML-LX1206SRC-TR
4	Green	2.2	10	160°	25	67-1002-1-ND	.27	.24	.21	67-1002-2-ND	3,000	112.88/M	SML-LX1206GW-TR
4	Red	2.0	6	160°	25	67-1003-1-ND	.28	.25	.22	67-1003-2-ND	3,000	117.86/M	SML-LX1206IW-TR
4	Super Red	1.8	15	160°	30	67-1004-1-ND*	.29	.26	.22	67-1004-2-ND*	3,000	119.52/M	SML-LX1206SRW-TR
5	Red/Green	2.0	6/10	140°	20	67-1361-1-ND	.76	.67	.57	67-1361-2-ND	3,000	315.40/M	SML-LX1210IGC-TR
5	Green/Green	2.0	10	140°	20	67-1362-1-ND	.76	.67	.57	67-1362-2-ND	3,000	315.40/M	SML-LX1210GGC-TR
5	Yellow/Green	2.0	6/10	140°	20	67-1363-1-ND	.76	.67	.57	67-1363-2-ND	3,000	315.40/M	SML-LX1210YGC-TR
5	Super Red/Super Red	1.7	15	140°	20	67-1360-1-ND	1.16	1.02	.87	67-1360-2-ND	3,000	481.40/M	SML-LX1210SRSRC-TR
6	Red	2.0	12	120°	20	67-1364-1-ND	.64	.56	.48	67-1364-2-ND	2,000	265.60/M	SML-LX2832IC-TR
6	Green	2.1	25	120°	20	67-1365-1-ND	.64	.56	.48	67-1365-2-ND	2,000	265.60/M	SML-LX2832GC-TR
6	Yellow	2.0	12	120°	20	67-1367-1-ND	.64	.56	.48	67-1367-2-ND	2,000	265.60/M	SML-LX2832YC-TR
6	Super Red	1.7	40	120°	20	67-1366-1-ND*	.80	.70	.60	67-1366-2-ND*	2,000	332.00/M	SML-LX2832SRC-TR
7	Red	2.1	12	130°	20	67-1368-1-ND	.60	.53	.45	67-1368-2-ND	2,000	249.00/M	SSL-LXA1725IC-TR
7	Green	2.0	25	130°	20	67-1369-1-ND	.60	.53	.45	67-1369-2-ND	2,000	249.00/M	SSL-LXA1725GC-TR
7	Yellow	2.1	12	130°	20	67-1370-1-ND	.60	.53	.45	67-1370-2-ND	2,000	249.00/M	SSL-LXA1725YC-TR
7	Super Red	1.7	40	130°	20	67-1371-1-ND	.80	.70	.60	67-1371-2-ND	2,000	332.00/M	SSL-LXA1725SRC-TR
8	Red/Green	2.0	12/20	125°	20	67-1372-1-ND	1.08	.95	.81	67-1372-2-ND	1,000	448.20	SSL-LXA3025IGC-TR
8	Yellow/Green	2.1	20	90°	20	67-1373-1-ND	1.08	.95	.81	67-1373-2-ND	1,000	448.20	SSL-LXA3025YGC-TR
9	Red	2.1	7.2	180°	20	67-1352-1-ND	.84	.74	.63	67-1352-2-ND	3,000	336.00/M	CCL-LX45IT
9	Green	2.0	7	180°	20	67-1353-1-ND	.84	.74	.63	67-1353-2-ND	3,000	336.00/M	CCL-LX45GT
9	Yellow	2.3	7	180°	20	67-1354-1-ND	.84	.74	.63	67-1354-2-ND	3,000	336.00/M	CCL-LX45YT
9	Super Red	1.8	8	180°	20	67-1355-1-ND*	1.28	1.12	.96	67-1355-2-ND*	3,000	512.00/M	CCL-LX45SRT
10	Red	2.0	12	130°	20	67-1556-1-ND	.26	.22	.17	67-1556-2-ND	3,000	141.10/M	SML-LXR85IC-TR
10	Green	2.2	12	130°	20	67-1557-1-ND	.23	.19	.16	67-1557-2-ND	3,000	126.16/M	SML-LXR85GC-TR
10	Yellow	2.1	10	130°	20	67-1558-1-ND	.24	.20	.16	67-1558-2-ND	3,000	131.14/M	SML-LXR85YC-TR
10	Super Red	1.8	30	130°	20	67-1559-1-ND	.26	.22	.17	67-1559-2-ND	3,000	141.10/M	SML-LXR85SRC-TR
11	Red	2.1	4	180°	20	67-1342-1-ND	.70	.62	.53	67-1342-2-ND	3,000	290.50/M	CCL-CRS10R
11	Green	2.1	10	180°	20	67-1343-1-ND	.70	.62	.53	67-1343-2-ND	3,000	290.50/M	CCL-CRS10G
11	Yellow	2.1	5	180°	20	67-1344-1-ND	.70	.62	.53	67-1344-2-ND	3,000	290.50/M	CCL-CRS10Y
11	Super Red	1.7	14	180°	20	67-1345-1-ND	1.04	.91	.78	67-1345-2-ND	3,000	431.60/M	CCL-CRS10SR
12	Red	2.0	20	90°	20	67-1338-1-ND	.59	.52	.45	67-1338-2-ND	2,000	245.68/M	SML-LX23IC-TR
12	Green	2.1	20	90°	20	67-1339-1-ND	.59	.52	.45	67-1339-2-ND	2,000	245.68/M	SML-LX23GC-TR
12	Yellow	2.1	20	90°	20	67-1340-1-ND	.59	.52	.45	67-1340-2-ND	2,000	245.68/M	SML-LX23YC-TR
12	Super Red	1.7	100	90°	20	67-1341-1-ND*	.77	.68	.58	67-1341-2-ND*	2,000	318.72/M	SML-LX23SRC-TR
13	Green/Green	2.0	20	90°	20	67-1350-1-ND	.96	.84	.72	67-1350-2-ND	2,000	398.40/M	CCL-LX253GGC
13	Yellow/Green	2.1	20	90°	20	67-1351-1-ND	.96	.84	.72	67-1351-2-ND	2,000	398.40/M	CCL-LX253YGC
13	Super Red/Super Red	1.7	40	90°	20	67-1349-1-ND	1.48	1.30	1.11	67-1349-2-ND	2,000	614.20/M	CCL-LX253SRSRC
14	Red	2.0	60	25°	20	67-1384-1-ND	.47	.42	.36	67-1384-2-ND	1,000	195.88	SSL-LXA228IC-TR11
14	Green	2.1	30	25°	20	67-1385-1-ND	.47	.42	.36	67-1385-2-ND	1,000	195.88	SSL-LXA228GC-TR11
14	Yellow	2.0	30	25°	20	67-1386-1-ND	.47	.42	.36	67-1386-2-ND	1,000	195.88	SSL-LXA228YC-TR11
14	Super Red	1.7	170	25°	20	67-1393-1-ND	.78	.69	.59	67-1393-2-ND	1,000	323.70	SSL-LXA228SRC-TR11
14	Green	2.1	4	50°	30	67-1141-1-ND	.48	.42	.36	67-1141-2-ND	1,000	197.54	SSL-LXA228GD-TR11
14	Yellow	2.0	12	50°	20	67-1145-1-ND	.48	.42	.36	67-1145-2-ND	1,000	197.54	SSL-LXA228YD-TR11
15	Red	2.0	60	25°	20	67-1387-1-ND	.47	.42	.36	67-1387-2-ND	1,000	195.88	SSL-LXA228IC-TR21
15	Green	2.1	30	25°	20	67-1388-1-ND	.47	.42	.36	67-1388-2-ND	1,000	195.88	SSL-LXA228GC-TR21
15	Yellow	2.0	30	25°	20	67-1389-1-ND	.47	.42	.36	67-1389-2-ND	1,000	195.88	SSL-LXA228YC-TR21
15	Super Red	1.7	170	25°	20	67-1394-1-ND	.78	.69	.59	67-1394-2-ND	1,000	323.70	SSL-LXA228SRC-TR21

(Continued)

Surface Mount LEDs *(Cont.)*

Fig. No.	Emitted Color	Vf	Io (mcd)	View Angle	If (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Reel Size	Tape & Reel Pricing	Lumex Part No.
15	Green	2.1	4	50°	30	67-1142-1-ND	.50	.44	.38	67-1142-2-ND	1,000	207.50	SSL-LXA228GD-TR21
15	Red	2.0	12	50°	30	67-1143-1-ND	.50	.44	.38	67-1143-2-ND	1,000	207.50	SSL-LXA228ID-TR21
15	Red	2.0	12	50°	30	67-1144-1-ND	.52	.46	.39	67-1144-2-ND	1,000	215.80	SSL-LXA228LID-TR21
15	Yellow	2.0	12	50°	20	67-1146-1-ND	.48	.42	.36	67-1146-2-ND	1,000	197.54	SSL-LXA228YD-TR21
16	Red	2.0	60	25°	20	67-1390-1-ND	.47	.42	.36	67-1390-2-ND	1,000	195.88	SSL-LXA228IC-TR31
16	Green	2.1	30	25°	20	67-1391-1-ND	.47	.42	.36	67-1391-2-ND	1,000	195.88	SSL-LXA228GC-TR31
16	Yellow	2.0	30	25°	20	67-1392-1-ND	.47	.42	.36	67-1392-2-ND	1,000	195.88	SSL-LXA228YC-TR31
16	Super Red	1.7	170	25°	20	67-1395-1-ND	.78	.69	.59	67-1395-2-ND	1,000	323.70	SSL-LXA228SRC-TR31
17	Red	2.0	40	60°	20	67-1374-1-ND	.76	.67	.57	67-1374-2-ND	1,000	315.40	SSF-LXH305ID-TR
17	Green	2.1	30	60°	20	67-1375-1-ND	.76	.67	.57	67-1375-2-ND	1,000	315.40	SSF-LXH305GD-TR
17	Yellow	2.1	30	60°	20	67-1376-1-ND	.76	.67	.57	67-1376-2-ND	1,000	315.40	SSF-LXH305YD-TR
17	Super Red	1.7	80	60°	20	67-1377-1-ND	1.00	.88	.75	67-1377-2-ND	1,000	415.00	SSF-LXH305SRD-TR

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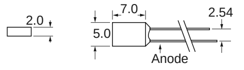
Fig. 1


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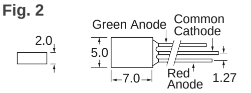

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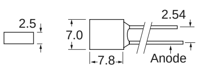

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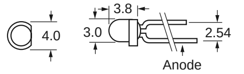

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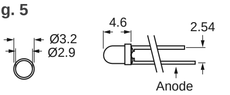

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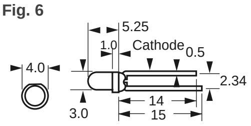

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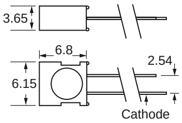

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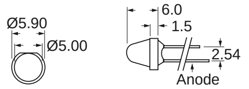

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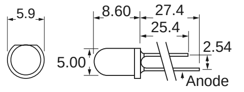

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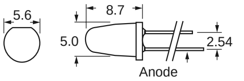

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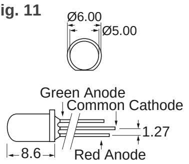

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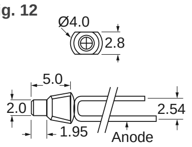

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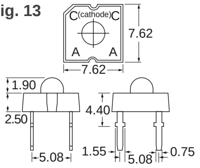

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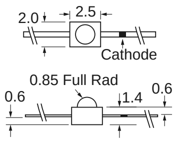

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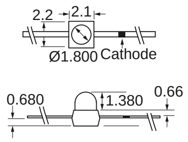

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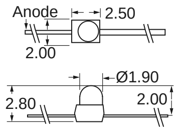

Fig.	LED Dia. (mm)	Emitted Color	Lens Color	Oper Curr. (mA)	Typ. Forward Voltage	Digi-Key Part No.	Price Each 1	10	25	100	200	Lumex Part No.
1	2x5	Amber	Diff.	30	2.1	67-1045-ND	.26	—	.22	.18	—	SSL-LX2573AD
	2x5	Green	Diff.	25	2.1	67-1046-ND	—	.13	—	—	.11	SSL-LX2573GD
	2x5	Red	Diff.	30	2.0	67-1047-ND	—	.14	—	—	.11	SSL-LX2573ID
	2x5	Green	Diff.	25	2.1	67-1048-ND	—	.18	—	—	.15	SSL-LX2573PGD
	2x5	Red	Diff.	30	1.7	67-1049-ND	—	.22	—	—	.18	SSL-LX2573SRD
	2x5	Yellow	Diff.	30	2.1	67-1050-ND	—	.15	—	—	.12	SSL-LX2573YD
2	2x5	Red/Grn	Diff.	30/25	2.1	67-1051-ND	.49	—	.41	.33	—	SSL-LX2577IGW
3	2.5x7	Green	Diff.	25	2.0	67-1052-ND	—	.15	—	—	.12	SSL-LX25783GD
	2.5x7	Red	Diff.	30	2.0	67-1053-ND	—	.15	—	—	.12	SSL-LX25783ID
	2.5x7	Red	Diff.	30	1.7	67-1054-ND	.26	—	.22	.18	—	SSL-LX25783SRD
	2.5x7	Yellow	Diff.	30	2.1	67-1055-ND	—	.15	—	—	.12	SSL-LX25783YD
4	3	Green	Diff.	25	2.1	67-1056-ND	—	.18	—	—	.15	SSL-LX3034GD
	3	Yellow	Diff.	30	2.1	67-1057-ND	—	.20	—	—	.17	SSL-LX3034YD
5	3	Amber	Diff.	30	2.1	67-1058-ND	—	.15	—	—	.13	SSL-LX3044AD
	3	Green	Clear	25	2.1	67-1059-ND	—	.15	—	—	.12	SSL-LX3044GC
	3	Green	Diff.	25	2.1	67-1060-ND	—	.14	—	—	.11	SSL-LX3044GD
	3	Green	Diff.	20	12	67-1061-ND	.32	—	.27	.21	—	SSL-LX3044GD-12V
	3	Green	Diff.	20	5	67-1062-ND	.40	—	.33	.27	—	SSL-LX3044GD-5V
	3	Green	Trans.	25	2.1	67-1063-ND	—	.15	—	—	.12	SSL-LX3044GT
	3	Red	Diff.	25	2.0	67-1064-ND	—	.12	—	—	.10	SSL-LX3044HD
	3	Red	Clear	30	2.1	67-1065-ND	—	.15	—	—	.13	SSL-LX3044IC
	3	Red	Diff.	30	2.0	67-1066-ND	—	.17	—	—	.14	SSL-LX3044ID
	3	Red	Diff.	20	12	67-1067-ND	.32	—	.27	.21	—	SSL-LX3044ID-12V
	3	Red	Diff.	20	5	67-1068-ND	.40	—	.33	.27	—	SSL-LX3044ID-5V
	3	Red	Trans.	30	2.0	67-1069-ND	—	.15	—	—	.13	SSL-LX3044IT
	3	Green	Diff.	25	2.1	67-1070-ND	—	.13	—	—	.11	SSL-LX3044LGD
	3	Red	Diff.	30	2.0	67-1071-ND	—	.14	—	—	.12	SSL-LX3044LID
	3	Yellow	Diff.	30	2.0	67-1072-ND	—	.14	—	—	.12	SSL-LX3044LYD
	3	Green	Diff.	25	2.1	67-1073-ND	—	.17	—	—	.14	SSL-LX3044PGD
	3	Orange	Clear	50	1.8	67-1074-ND	.99	—	.83	.66	—	SSL-LX3044SOC
	3	Red	Clear	30	1.7	67-1075-ND	.33	—	.28	.23	—	SSL-LX3044SRC/B
	3	Yellow	Clear	30	2.0	67-1076-ND	.86	—	.72	.58	—	SSL-LX3044SYC
	3	Yellow	Clear	30	2.1	67-1077-ND	—	.16	—	—	.13	SSL-LX3044YC
	3	Yellow	Diff.	30	2.1	67-1078-ND	—	.15	—	—	.12	SSL-LX3044YD
	3	Yellow	Diff.	20	12	67-1079-ND	.32	—	.27	.21	—	SSL-LX3044YD-12V
	3	Yellow	Diff.	20	5	67-1080-ND	.40	—	.33	.27	—	SSL-LX3044YD-5V
	3	Yellow	Trans.	30	2.1	67-1081-ND	—	.21	—	—	.18	SSL-LX3044YT
6	3	Red	Diff.	20	2.1	67-1402-ND	—	.18	—	—	.15	SSL-LX3052ID
	3	Green	Diff.	20	2.1	67-1396-ND	—	.18	—	—	.15	SSL-LX3052GD
	3	Yellow	Diff.	20	2.1	67-1397-ND	—	.18	—	—	.15	SSL-LX3052YD
7	4x7	Green	Diff.	25	2.1	67-1082-ND	.31	—	.26	.21	—	SSL-LX4673GD-LA20
	4x7	Red	Diff.	20	2.0	67-1083-ND	.31	—	.26	.21	—	SSL-LX4673ID-LA20
	4x7	Yellow	Diff.	30	2.1	67-1084-ND	.31	—	.26	.21	—	SSL-LX4673YD-LA20
8	5	Green	Clear	30	2.0	67-1085-ND	—	.24	—	—	.20	SSL-LX5063GC
	5	Green	Diff.	25	2.0	67-1086-ND	—	.15	—	—	.12	SSL-LX5063GD
	5	Green	Trans.	25	2.0	67-1087-ND	—	.16	—	—	.13	SSL-LX5063GT
	5	Red	Diff.	25	2.0	67-1088-ND	—	.14	—	—	.12	SSL-LX5063HD
	5	Red	Clear	30	2.0	67-1089-ND	—	.18	—	—	.15	SSL-LX5063IC
	5	Red	Diff.	30	2.0	67-1090-ND	—	.16	—	—	.13	SSL-LX5063ID
	5	Red	Trans.	30	2.0	67-1091-ND	—	.18	—	—	.15	SSL-LX5063IT

Fig.	LED Dia. (mm)	Emitted Color	Lens Color	Oper Curr. (mA)	Typ. Forward Voltage	Digi-Key Part No.	Price Each 1	10	25	100	200	Lumex Part No.
8	5	Green	Trans.	25	2.0	67-1092-ND	—	.24	—	—	.20	SSL-LX5063LGT
	5	Yellow	Clear	30	2.1	67-1093-ND	—	.22	—	—	.18	SSL-LX5063YC
	5	Yellow	Diff.	30	2.1	67-1094-ND	—	.18	—	—	.15	SSL-LX5063YD
	5	Yellow	Trans.	30	2.1	67-1095-ND	—	.18	—	—	.15	SSL-LX5063YT
9	5	Red	Diff.	25	2.0	67-1096-ND	—	.12	—	—	.10	SSL-LX5091HD
	5	Amber	Diff.	30	2.1	67-1097-ND	—	.15	—	—	.13	SSL-LX5093AD
	5	Green	Diff.	25	2.0	67-1098-ND	—	.13	—	—	.11	SSL-LX5093GD
	5	Green	Diff.	12	12	67-1099-ND	.40	—	.33	.27	—	SSL-LX5093GD-12V
	5	Green	Diff.	12	5	67-1100-ND	.32	—	.27	.21	—	SSL-LX5093GD-5V
	5	Green	Trans.	25	2.2	67-1101-ND	—	.15	—	—	.12	SSL-LX5093GT
	5	Red	Diff.	25	2.1	67-1102-ND	—	.12	—	—	.10	SSL-LX5093HD
	5	Red	Diff.	10	5	67-1103-ND	.32	—	.27	.21	—	SSL-LX5093HD-5V
	5	Red	Trans.	25	2.0	67-1104-ND	—	.16	—	—	.13	SSL-LX5093HT
	5	Red	Diff.	30	2.0	67-1105-ND	—	.13	—	—	.11	SSL-LX5093ID
	5	Red	Diff.	12	5	67-1106-ND	.32	—	.27	.21	—	SSL-LX5093ID-5V
	5	Red	Trans.	30	2.0	67-1107-ND	—	.15	—	—	.13	SSL-LX5093IT
	5	Green	Diff.	25	2.0	67-1108-ND	—	.13	—	—	.11	SSL-LX5093LGD
	5	Green	Trans.	30	2.1	67-1109-ND	—	.15	—	—	.13	SSL-LX5093LGT
	5	Red	Diff.	30	2.0	67-1110-ND	—	.14	—	—	.12	SSL-LX5093LID
	5	Yellow	Diff.	30	2.1	67-1111-ND	—	.14	—	—	.12	SSL-LX5093LYD
	5	Green	Diff.	25	2.1	67-1112-ND	—	.15	—	—	.12	SSL-LX5093PGD
	5	Orange	Clear	50	1.8	67-1113-ND	.99	—	.83	.66	—	SSL-LX5093SOC
	5	Red	Diff.	30	1.7	67-1114-ND	—	.19	—	—	.16	SSL-LX5093SRD
	5	Yellow	Clear	30	2.0	67-1115-ND	.71	—	.60	.48	—	SSL-LX5093SYC
	5	Yellow	Diff.	30	2.1	67-1116-ND	—	.14	—	—	.12	SSL-LX5093YD
	5	Yellow	Trans.	30	2.1	67-1117-ND	—	.15	—	—	.13	SSL-LX5093YT
10	5	Amber	Clear	25	2.1	67-1118-ND	.29	—	.25	.20	—	SSL-LX5093XAC
	5	Green	Clear	25	2.1	67-1119-ND	—	.20	—	—	.17	SSL-LX5093XGC
	5	Red	Clear	25	2.1	67-1120-ND	—	.18	—	—	.15	SSL-LX5093XIC
	5	Green	Clear	25	2.1	67-1121-ND	.30	—	.25	.20	—	SSL-LX5093XPGC
	5	Red	Clear	30	1.7	67-1122-ND	.57	—	.48	.39	—	SSL-LX5093XRC/4
	5	Yellow	Clear	30	2.0	67-1123-ND	1.00	—	.83	.67	—	SSL-LX5093XYC
11	5	Red/Grn	Diff.	30/25	2.1	67-1124-ND	.44	—	.37	.30	—	SSL-LX5097IGW
12	2	Red	Diff.	30	2.1	67-1125-ND	—	.18	—	—	.15	SSL-LX20465ID
	2	Yellow	Diff.	30	2.1	67-1126-ND	—	.18	—	—	.15	SSL-LX20465YD
	2	Green	Diff.	25	2.1	67-1127-ND	—	.17	—	—	.14	SSL-LX20465GD
13	3	Yellow	Clear	70	2.25	67-1128-ND	.81	—	.68	.55	—	SSL-LX30448SYC
14	1.7	Red	Diff.	30	2.1	67-1129-ND	.36	—	.30	.24	—	SSL-LXA223HD
15	1.8	Green	Diff.	30	5	67-1130-ND	.62	—	.52	.42	—	SSL-LXA227GD-5V
	1.8	Red	Diff.	30	5	67-1131-ND	.62	—	.52	.42	—	SSL-LXA227ID-5V
	1.8	Yellow	Diff.	20	5	67-1132-ND	.62	—	.52	.42	—	SSL-LXA227YD-5V
16	1.9	Green	Diff.	25	2.1	67-1133-ND	.27	—	.23	.18	—	SSL-LXA228GD
	1.9	Red	Clear	30	2.0	67-1134-ND	.29	—	.25	.20	—	SSL-LXA228IC
	1.9	Red	Diff.	30	2.0	67-1135-ND	.27	—	.23	.18	—	SSL-LXA228ID
	1.9	Green	Clear	30	2.1	67-1136-ND	.35	—	.30	.24	—	SSL-LXA228SGC
	1.9	Red	Clear	30	1.7*	67-1137-ND	.41	—	.35	.28	—	SSL-LXA228SRC
	1.9	Red	Diff.	30	1.7*	67-1138-ND	.46	—	.39	.31	—	SSL-LXA228SRD
	1.9	Yellow	Clear	20	2.0	67-1139-ND	1.27	—	1.06	.85	—	SSL-LXA228SYC
	1.9	Yellow	Clear	20	2.0	67-1140-ND	.31	—	.26	.21	—	SSL-LXA228YC

* Note Anode Mark

PC Mount LEDs

67-1542-ND
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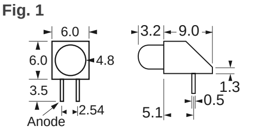
Fig. 1



• Lens height for part numbers 67-1308/09/10/11/12/13-ND, = 4.75mm not 3.2mm

Fig. 2

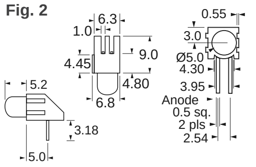


Fig. 3

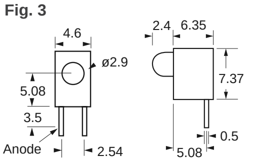


Fig. 4

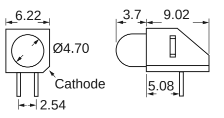


Fig. 5

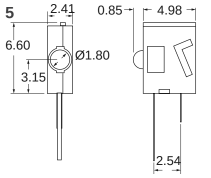
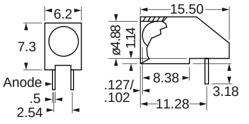


Fig. 6



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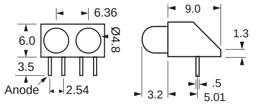

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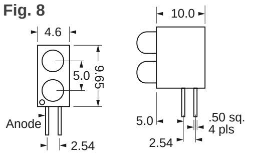

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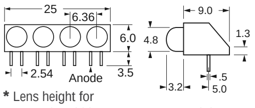
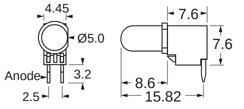


* Lens height for part # 67-1322-ND = 4.75mm not 3.2mm

Fig. 10



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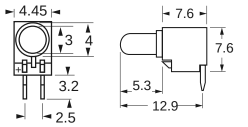

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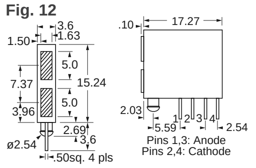

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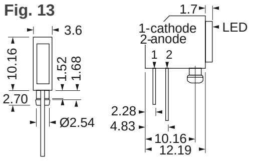

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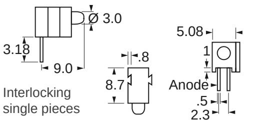

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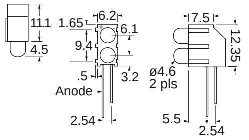

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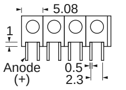


Fig. 17

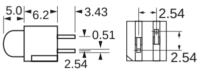
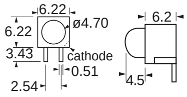


Fig. 18



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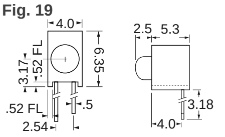


Fig. 20

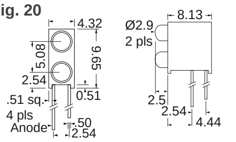


Fig. 21

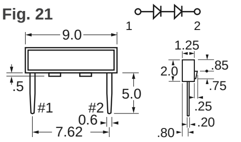


Fig.	LED Dia. (mm)	Emitted Color	Oper Curr. MA	Oper Type Volt (v)	Digi-Key Part No.	Price Each 1	25	100	Lumex Part No.
1	5	Red	10-25	2.1	67-1308-ND•	.48	.40	.32	SSF-LXH100HD-01
	5	Red	10-25	2.1	67-1309-ND•	.84	.70	.56	SSF-LXH100ID-01
	5	Green	10-25	2.1	67-1310-ND•	.84	.70	.56	SSF-LXH100GD-01
	5	Yellow	10-25	2.1	67-1311-ND•	.84	.70	.56	SSF-LXH100YD-01
	5	Red	1-5	1.8	67-1312-ND•	.84	.70	.56	SSF-LXH100LID-01
	5	Green	1-5	1.8	67-1313-ND•	.84	.70	.56	SSF-LXH100LGD-01
	5	Green	10-25	2.1	67-1218-ND	.45	.38	.30	SSF-LXH100GD
	5	Red	10-25	2.1	67-1217-ND	.45	.38	.30	SSF-LXH100ID
	5	Green	1-5	1.8	67-1220-ND	.57	.48	.38	SSF-LXH100LGD
	5	Red	1-5	1.8	67-1219-ND	.57	.48	.38	SSF-LXH100LID
	5	Green	10	5.0	67-1223-ND	.72	.60	.48	SSF-LXH100GD-5V
	5	Red	10	5.0	67-1222-ND	.72	.60	.48	SSF-LXH100ID-5V
	5	Red/Green	10-25	2.1	67-1221-ND	.72	.60	.48	SSF-LXH100HGW
	5	Yellow	10-25	2.1	67-1224-ND	.45	.38	.30	SSF-LXH100YD
	5	Bright Red	10-25	1.7	67-1225-ND	.72	.60	.48	SSF-LXH100SRD
2	5	Green	10-25	2.1	67-1228-ND	.45	.38	.30	SSF-LXH100MGD
	5	Red	10-25	2.1	67-1227-ND	.45	.38	.30	SSF-LXH100MID
	5	Yellow	10-25	2.1	67-1229-ND	.45	.38	.30	SSF-LXH100MYD
	5	Red/Green	10-25	2.1	67-1226-ND	.72	.60	.48	SSF-LXH100MHGW
	5	Bright Red	10-25	1.7	67-1230-ND	.72	.60	.48	SSF-LXH100MSRD
	5	Green	1-5	1.8	67-1232-ND	.57	.48	.38	SSF-LXH100MLGD
	5	Red	1-5	1.8	67-1231-ND	.57	.48	.38	SSF-LXH100MLID
	5	Green	10	5.0	67-1234-ND	.72	.60	.48	SSF-LXH100MGD-5V
	5	Red	10	5.0	67-1233-ND	.72	.60	.48	SSF-LXH100MID-5V
3	3	Green	10-25	2.1	67-1236-ND	.39	.33	.26	SSF-LXH103GD
	3	Red	10-25	2.1	67-1235-ND	.39	.33	.26	SSF-LXH103ID
	3	Yellow	10-25	2.1	67-1237-ND	.39	.33	.26	SSF-LXH103YD
	3	Bright Red	10-25	1.7	67-1238-ND	.54	.45	.36	SSF-LXH103SRD
	3	Green	1-5	1.8	67-1240-ND	.54	.45	.36	SSF-LXH103LGD
	3	Red	1-5	1.8	67-1239-ND	.54	.45	.36	SSF-LXH103LID
	3	Green	10	5.0	67-1242-ND	.66	.55	.44	SSF-LXH103GD-5V
	3	Red	10	5.0	67-1241-ND	.66	.55	.44	SSF-LXH103ID-5V
4	4.7	Green	25	2.0	67-1037-ND	.32	.27	.22	SSF-LXH104GD
	4.7	Red	12	5.0	67-1038-ND	.95	.79	.64	SSF-LXH104HD-5V
	4.7	Red	30	2.0	67-1039-ND	.32	.27	.22	SSF-LXH104ID
	4.7	Yellow	30	2.1	67-1040-ND	.32	.27	.22	SSF-LXH104YD
5	1.8	Green	30	2.1	67-1041-ND	.72	.61	.49	SSF-LXH555GD
	1.8	Red	30	2.0	67-1042-ND	.72	.61	.49	SSF-LXH555ID
	1.8	Yellow	30	2.1	67-1043-ND	.72	.61	.49	SSF-LXH555YD
6	5	Green	10-25	2.1	67-1245-ND	.54	.45	.36	SSF-LXH1071GD
	5	Red	10-25	2.1	67-1244-ND	.54	.45	.36	SSF-LXH1071ID
	5	Yellow	10-25	2.1	67-1246-ND	.54	.45	.36	SSF-LXH1071YD
	5	Bright Red	10-25	1.7	67-1247-ND	.72	.60	.48	SSF-LXH1071SRD
	5	Red/Green	10-25	2.1	67-1243-ND	.81	.68	.54	SSF-LXH1071HGW
	5	Green	1-5	1.8	67-1249-ND	.66	.55	.44	SSF-LXH1071LGD
	5	Red	1-5	1.8	67-1248-ND	.66	.55	.44	SSF-LXH1071LID
7	5	Red	10-25	2.1	67-1250-ND	.90	.75	.60	SSF-LXH2100ID
	5	Green	10-25	2.1	67-1251-ND	.90	.75	.60	SSF-LXH2100GD
	5	Yellow	10-25	2.1	67-1252-ND	.90	.75	.60	SSF-LXH2100YD
	5	Bright Red	10-25	1.7	67-1253-ND	1.08	.90	.72	SSF-LXH2100SRD
8	3	Green	10-25	2.1	67-1255-ND	.99	.83	.66	SSF-LXH2103GGD/4
	3	Red	10-25	2.1	67-1254-ND	.99	.83	.66	SSF-LXH2103IID/4
	3	Yellow	10-25	2.1	67-1256-ND	.99	.83	.66	SSF-LXH2103YYD/4
	3	Bright Red	10-25	1.7	67-1257-ND	1.56	1.30	1.04	SSF-LXH2103SRSRD/4
	3	Green	1-5	1.8	67-1259-ND	1.20	1.00	.80	SSF-LXH2103LGGD/4
	3	Red	1-5	1.8	67-1258-ND	1.20	1.00	.80	SSF-LXH2103LIID/4
	3	Green	10	5.0	67-1261-ND	1.35	1.13	.90	SSF-LXH2103GGD-5V/4
	3	Red	10	5.0	67-1260-ND	1.35	1.13	.90	SSF-LXH2103IID-5V/4

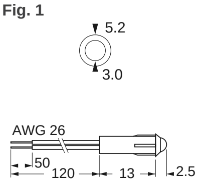
Fig.	LED Dia. (mm)	Emitted Color	Oper Curr. MA	Oper Type Volt (v)	Digi-Key Part No.	Price Each 1	25	100	Lumex Part No.
9	5	Green	10-25	2.1	67-1322-ND*	2.22	1.85	1.48	SSF-LXH400GD-01
	5	Green	10-25	2.1	67-1286-ND	1.26	1.05	.84	SSF-LXH400GD
	5	Red	10-25	2.1	67-1285-ND	1.26	1.05	.84	SSF-LXH400ID
	5	Yellow	10-25	2.1	67-1287-ND	1.26	1.05	.84	SSF-LXH400YD
	5	Bright Red	10-25	1.7	67-1288-ND	2.34	1.95	1.56	SSF-LXH400SRD
	5	Green	10	5.0	67-1291-ND	2.34	1.95	1.56	SSF-LXH400GD-5V
	5	Red	10	5.0	67-1290-ND	2.34	1.95	1.56	SSF-LXH400ID-5V
	5	Red/Green	10-25	2.1	67-1289-ND	2.34	1.95	1.56	SSF-LXH400HGW
10	5	Green	10-25	2.1	67-1294-ND	.96	.80	.64	SSF-LXH4RA5GD
	5	Red	10-25	2.1	67-1293-ND	.96	.80	.64	SSF-LXH4RA5ID
	5	Yellow	10-25	2.1	67-1295-ND	.96	.80	.64	SSF-LXH4RA5YD
	5	Bright Red	10-25	1.7	67-1296-ND	1.38	1.15	.92	SSF-LXH4RA5SRD
	5	Red/Green	10-25	2.1	67-1292-ND	1.38	1.15	.92	SSF-LXH4RA5HGW
	5	Green	1-5	1.8	67-1298-ND	.96	.80	.64	SSF-LXH4RA5LGD
	5	Red	1-5	1.8	67-1297-ND	.96	.80	.64	SSF-LXH4RA5LID
	5	Green	10	5.0	67-1300-ND	1.38	1.15	.92	SSF-LXH4RA5GD-5V
	5	Red	10	5.0	67-1299-ND	1.38	1.15	.92	SSF-LXH4RA5ID-5V
	5	Red/Blinking	10-20	3-15	67-1301-ND†	2.64	2.20	1.76	SSF-LXH4RA5BID
11	3	Green	10-25	2.1	67-1304-ND	.96	.80	.64	SSF-LXH4RAGD
	3	Red	10-25	2.1	67-1303-ND	.96	.80	.64	SSF-LXH4RAID
	3	Yellow	10-25	2.1	67-1305-ND	.96	.80	.64	SSF-LXH4RAYD
	3	Bright Red	10-25	1.7	67-1306-ND	1.38	1.15	.92	SSF-LXH4RASRD
	3	Red/Green	10-25	2.1	67-1302-ND	1.38	1.15	.92	SSF-LXH4RAHGW
	3	Red/Blinking	10-20	3-15	67-1307-ND†	2.64	2.20	1.76	SSF-LXH4RABID
12	2 x 5	Green	10-25	2.1	67-1263-ND	1.14	.95	.76	SSF-LXH22573GGD
	2 x 5	Red	10-25	2.1	67-1262-ND	1.14	.95	.76	SSF-LXH22573IID
	2 x 5	Yellow	10-25	2.1	67-1264-ND	1.14	.95	.76	SSF-LXH22573YYD
	2 x 5	Bright Red	10-25	1.7	67-1265-ND	1.56	1.30	1.04	SSF-LXH22573SRSRD
	3	Green	1-5	1.8	67-1267-ND	1.44	1.20	.96	SSF-LXH22573LGGD
	3	Red	1-5	1.8	67-1266-ND	1.44	1.20	.96	SSF-LXH22573LIID
13	2.5 x 7	Green	10-25	2.1	67-1270-ND	.63	.53	.42	SSF-LXH25780GD
	2.5 x 7	Red	10-25	2.1	67-1269-ND	.63	.53	.42	SSF-LXH25780ID
	2.5 x 7	Yellow	10-25	2.1	67-1271-ND	.63	.53	.42	SSF-LXH25780YD
	2.5 x 7	Bright Red	10-25	1.7	67-1272-ND	.93	.78	.62	SSF-LXH25780SRD
	2.5 x 7	Red/Green	10-25	2.1	67-1268-ND	.93	.78	.62	SSF-LXH25780HGW
14	3	Green	10-25	2.1	67-1274-ND	.54	.45	.36	SSF-LXH2300GD-LM
	3	Red	10-25	2.1	67-1273-ND	.54	.45	.36	SSF-LXH2300ID-LM
	3	Yellow	10-25	2.1	67-1275-ND	.54	.45	.36	SSF-LXH2300YD-LM
	3	Bright Red	10-25	1.7	67-1276-ND	.78	.65	.52	SSF-LXH2300SRD-LM
	3	Green	1-5	1.8	67-1278-ND	.72	.60	.48	SSF-LXH2300LGD-LM
	3	Red	1-5	1.8	67-1277-ND	.72	.60	.48	SSF-LXH2300LID-LM
	3	Green	10	5.0	67-1280-ND	.78	.65	.52	SSF-LXH2300GD-5V-LM
	3	Red	10	5.0	67-1279-ND	.78	.65	.52	SSF-LXH2300ID-5V-LM
15	5	Green	10-25	2.1	67-1283-ND	.96	.80	.64	SSF-LXHM250GGD
	5	Red	10-25	2.1	67-1282-ND	.96	.80	.64	SSF-LXHM250IID
	5	Yellow	10-25	2.1	67-1284-ND	.96	.80	.64	SSF-LXH250MYYD
	5	Red/Green	10-25	2.1	67-1281-ND	1.62	1.35	1.08	SSF-LXH250MIGIGW
16	5	Red	30	2.0	67-1315-ND	2.04	1.70	1.36	SSF-LXH2300/4ID
17	5	Green	30	2.0	67-1316-ND	.84	.70	.56	SSF-LXH101GD-SL-01
18	5	Red	10-25	2.1	67-1317-ND	.84	.70	.56	SSF-LXH101ID-01
	5	Green	10-25	2.1	67-1318-ND	.84	.70	.56	SSF-LXH101GD-01
19	3	Red	20	2.0	67-1320-ND	.84	.70	.56	SSF-LXH303ID
20	3	Red	30	2.0	67-1319-ND	1.20	1.00	.80	SSF-LXH240IID
	3	Green	30	2.1	67-1321-ND	1.20	1.00	.80	SSF-LXH240GGD
21	—	Red	10	4.5	67-1323-ND	.87	.73	.58	SSB-LX02IC
	—	Green	10	4.5	67-1324-ND	.87	.73	.58	SSB-LX02GC
	—	Yellow	10	4.5	67-1325-ND	.87	.73	.58	SSB-LX02YC
	—	Super Red	10	3.5	67-1326-ND	1.08	.90	.72	SSB-LX02SRC

† Blinking Version

O

Panel Mount LEDs

67-1542-ND
Lumex Master Catalog
CD-ROM **$1.95**

Fig. 1


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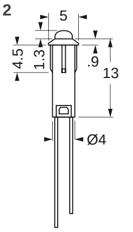

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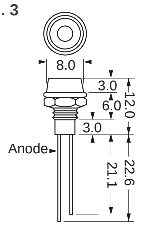

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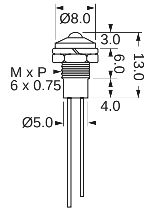

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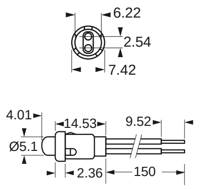

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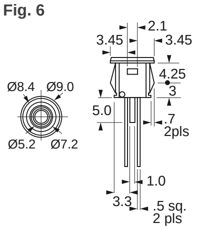

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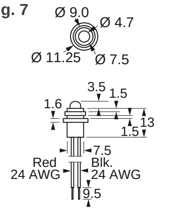

(rear panel mount)

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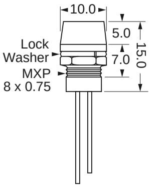

(reflector bezel)

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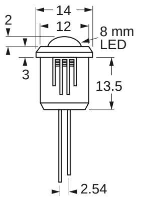

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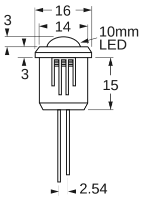

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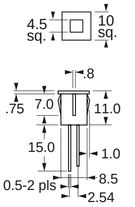

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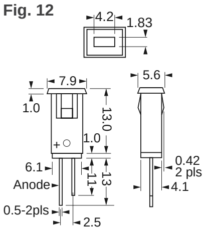

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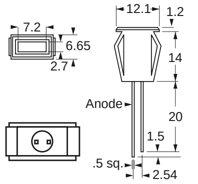

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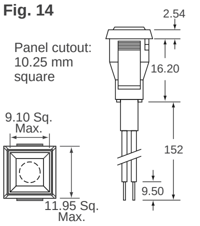

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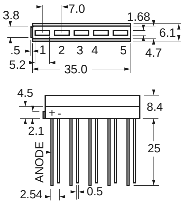

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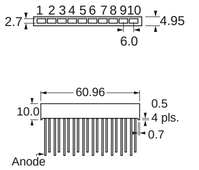

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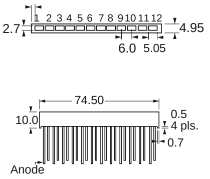

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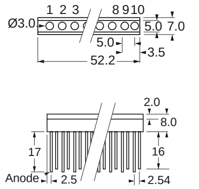

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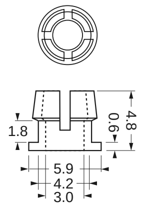

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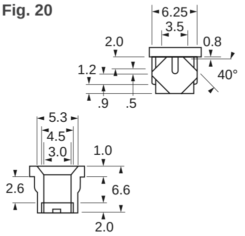

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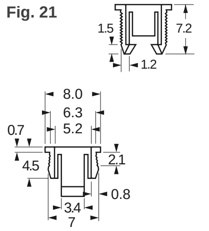

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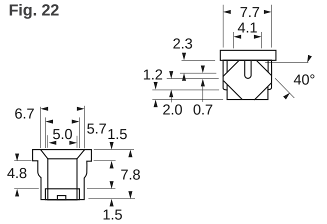

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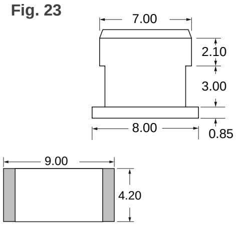


Fig.	LED Dia. (mm)	Emitted Color	Oper Curr. mA	Oper Type Volt(v)	Digi-Key Part No.	Price Each 1	10	50	Lumex Part No.
1	3	Red	10-25	2.1	67-1190-ND	1.20	.96	.84	SSI-LXH312ID-150
1	3	Green	10-25	2.1	67-1191-ND	1.20	.96	.84	SSI-LXH312GD-150
2	3	Red	30	2.0	67-1192-ND	.63	.50	.44	SSI-LXH312ID
3	3	Red	10-25	2.1	67-1147-ND	1.00	.80	.70	SSI-LXR1612ID
3	3	Green	10-25	2.1	67-1148-ND	1.00	.80	.70	SSI-LXR1612GD
3	3	Yellow	10-25	2.1	67-1149-ND	1.00	.80	.70	SSI-LXR1612YD
3	3	Bright Red	10-25	1.7	67-1150-ND	1.25	1.00	.88	SSI-LXR1612SRD
4	3	Red	10-25	2.1	67-1151-ND	1.00	.80	.70	SSI-LXR3612ID
4	3	Green	10-25	2.1	67-1152-ND	1.00	.80	.70	SSI-LXR3612GD
4	3	Yellow	10-25	2.1	67-1153-ND	1.00	.80	.70	SSI-LXR3612YD
4	3	Bright Red	10-25	1.7	67-1154-ND	1.25	1.00	.88	SSI-LXR3612SRD
5	5	Red	10-25	2.1	67-1188-ND	1.15	.92	.81	SSI-LXH600ID-150
5	5	Green	10-25	2.1	67-1189-ND	1.15	.92	.81	SSI-LXH600GD-150
5	5	Red/Green	10-25	2.1	67-1187-ND	1.88	1.50	1.32	SSI-LXH600HGW-150
6	5	Red	10-25	2.1	67-1155-ND	1.13	.90	.79	SSI-LXH387ID
6	5	Green	10-25	2.1	67-1156-ND	1.13	.90	.79	SSI-LXH387GD
6	5	Yellow	10-25	2.1	67-1157-ND	1.13	.90	.79	SSI-LXH387YD
6	5	Bright Red	10-25	1.7	67-1158-ND	1.30	1.04	.91	SSI-LXH387SRD
7	5	Red	10-25	2.1	67-1159-ND	1.00	.80	.70	SSI-LXH9ID/-150
7	5	Green	10-25	2.1	67-1160-ND	1.00	.80	.70	SSI-LXH9GD-150
7	5	Yellow	10-25	2.1	67-1161-ND	1.00	.80	.70	SSI-LXH9YD-150
7	5	Bright Red	10-25	1.7	67-1162-ND	1.15	.92	.81	SSI-LXH9SRD-150
8	5	Red	10-25	2.1	67-1163-ND	1.05	.84	.74	SSI-LXR4815ID
8	5	Green	10-25	2.1	67-1164-ND	1.05	.84	.74	SSI-LXR4815GD
8	5	Yellow	10-25	2.1	67-1165-ND	1.05	.84	.74	SSI-LXR4815YD
8	5	Bright Red	10-25	1.7	67-1166-ND	1.18	.94	.83	SSI-LXR4815SRD
9	8	Red	10-25	2.1	67-1167-ND	.70	.56	.49	SSI-LXH8080ID
9	8	Green	10-25	2.1	67-1168-ND	.70	.56	.49	SSI-LXH8080GD
9	8	Yellow	10-25	2.1	67-1169-ND	.70	.56	.49	SSI-LXH8080YD
9	8	Bright Red	10-25	1.7	67-1170-ND	.85	.68	.60	SSI-LXH8080SRD
10	10	Red	10-25	2.1	67-1171-ND	.85	.68	.60	SSI-LXH1090ID
10	10	Green	10-25	2.1	67-1172-ND	.85	.68	.60	SSI-LXH1090GD
10	10	Yellow	10-25	2.1	67-1173-ND	.85	.68	.60	SSI-LXH1090YD
10	10	Bright Red	10-25	1.7	67-1174-ND	.98	.78	.69	SSI-LXH1090SRD
11	5	Red	10-25	2.1	67-1175-ND	.65	.52	.46	SSI-LXH55ID
11	5	Green	10-25	2.1	67-1176-ND	.65	.52	.46	SSI-LXH55GD
11	5	Yellow	10-25	2.1	67-1177-ND	.65	.52	.46	SSI-LXH55YD
11	5	Bright Red	10-25	1.7	67-1178-ND	.80	.64	.56	SSI-LXH55SRD

Fig.	LED Dia. (mm)	Emitted Color	Oper Curr. mA	Oper Type Volt(v)	Digi-Key Part No.	Price Each 1	10	50	Lumex Part No.
12	2 x 5	Red	10-25	2.1	67-1179-ND	.95	.76	.67	SSI-LXMP059ID
12	2 x 5	Green	10-25	2.1	67-1180-ND	.95	.76	.67	SSI-LXMP059GD
12	2 x 5	Yellow	10-25	2.1	67-1181-ND	.95	.76	.67	SSI-LXMP059YD
12	2 x 5	Bright Red	10-25	1.7	67-1182-ND	1.15	.92	.81	SSI-LXMP059SRD
13	2.5 x 7	Red	10-25	2.1	67-1183-ND	.85	.68	.60	SSI-LXH072ID
13	2.5 x 7	Green	10-25	2.1	67-1184-ND	.85	.68	.60	SSI-LXH072GD
13	2.5 x 7	Yellow	10-25	2.1	67-1185-ND	.85	.68	.60	SSI-LXH072YD
13	2.5 x 7	Bright Red	10-25	1.7	67-1186-ND	1.00	.80	.70	SSI-LXH072SRD
14	9 x 9	Green	5-25	2.2	67-1543-ND	1.50	1.20	1.05	SSI-LXMP5011GC-150
14	9 x 9	Red	5-25	2.0	67-1544-ND	1.50	1.20	1.05	SSI-LXMP5011IC-150
14	9 x 9	Super Red	5-25	1.7	67-1545-ND	1.65	1.32	1.16	SSI-LXMP5011SRC-150
14	9 x 9	Yellow	5-25	2.1	67-1546-ND	1.50	1.20	1.05	SSI-LXMP5011YC-150
15	2 x 5	Red	5-25	2.2	67-1201-ND	1.53	1.22	1.07	SSA-LXB525ID
15	2 x 5	Green	5-25	2.2	67-1202-ND	1.53	1.22	1.07	SSA-LXB525GD
15	2 x 5	Yellow	5-25	2.2	67-1203-ND	1.60	1.28	1.12	SSA-LXB525YD
15	2 x 5	Bright Red	5-25	1.7	67-1204-ND	2.48	1.98	1.74	SSA-LXB525SRD
16	2.5 x 5	Red	5-25	2.2	67-1205-ND	3.10	2.48	2.17	SSA-LXH1025ID
16	2.5 x 5	Green	5-25	2.2	67-1206-ND	3.10	2.48	2.17	SSA-LXH1025GD
16	2.5 x 5	Yellow	5-25	2.2	67-1207-ND	3.48	2.78	2.44	SSA-LXH1025YD
16	2.5 x 5	Bright Red	5-25	1.7	67-1208-ND	4.45	3.56	3.12	SSA-LXH1025SRD
17	2.5 x 5	Red	5-25	2.2	67-1209-ND	4.55	3.64	3.19	SSA-LXH1225ID
17	2.5 x 5	Green	5-25	2.2	67-1210-ND	4.55	3.64	3.19	SSA-LXH1225GD
17	2.5 x 5	Yellow	5-25	2.2	67-1211-ND	4.78	3.82	3.35	SSA-LXH1225YD
17	2.5 x 5	Bright Red	5-25	1.7	67-1212-ND	6.63	5.30	4.64	SSA-LXH1225SRD
18	3	Red	5-25	2.2	67-1213-ND	3.73	2.98	2.61	SSA-LXB102ID
18	3	Green	5-25	2.2	67-1214-ND	3.73	2.98	2.61	SSA-LXB102GD
18	3	Yellow	5-25	2.2	67-1215-ND	3.48	2.78	2.44	SSA-LXB102YD
18	3	Bright Red	5-25	1.7	67-1216-ND	5.48	4.38	3.84	SSA-LXB102SRD

Panel Mount LED Holders

Fig.	Description	Panel Hole	Digi-Key Part No.	Pricing 5	25	100	Lumex Part No.
19	T1 Black Nylon	.160” (4.06)	67-1330-ND	.60	2.25	7.50	SSH-LX3050
20	T1 Black Nylon	.225” (5.71)	67-1331-ND	.60	2.25	7.50	SSH-LXH301
21	T1-3/4 Black Nylon	.250” (6.35)	67-1332-ND	.40	1.50	5.00	SSH-LX5091
22	T1-3/4 Black Nylon	.330” (8.38)	67-1333-ND	.60	2.25	7.50	SSH-LXH501
23	Mounting Clip and Ring for T1-3/4	.250” (6.35)	67-1044-ND	.36	1.35	4.50	SSH-LX5090

Poly LEDS

Completely Encapsulated LED Clusters with Water Clear Lenses

Fig.	Emitted Color	Typical Intensity @20mA Per LED (mcd)	Typical Forward Voltage Vf	Max. Oper. Current mA per LED	Typical Peak Wave length nm	Digi-Key Part No.	Price Each 1	10	100	Lumex Part No.
1	Super Yellow	1200	6.3	30	590	67-1571-ND	1.53	1.28	1.02	SSP-LXC0433S3
	Super Green	300	6.6	25	565	67-1578-ND	.72	.60	.48	SSP-LXC0432S3
	Super Red	2000	5.4	30	660	67-1585-ND	.76	.63	.51	SSP-LXC04363
	Ultra Red	2000	5.4	30	626	67-1592-ND	1.53	1.28	1.02	SSP-LXC0436U3
	Super Red/ Super Green	2000/300	1.8/2.2	30/25	660/565	67-1599-ND	.74	.62	.49	SSP-LXC04362S3A
2	Super Yellow	1200	4.2	30	590	67-1572-ND	2.03	1.70	1.36	SSP-LXC0473S4
	Super Green	300	4.4	25	565	67-1579-ND	.91	.76	.61	SSP-LXC0472S4
	Super Red	2000	3.6	30	660	67-1586-ND	.97	.81	.65	SSP-LXC04764
	Ultra Red	2000	3.6	30	626	67-1593-ND	2.03	1.70	1.36	SSP-LXC0476U4
	Super Red/ Super Green	2000/300	3.6/4.4	30/25	660/565	67-1600-ND	.95	.79	.63	SSP-LXC04762S4A
3	Super Yellow	1200	6.3/4.2	30	590	67-1573-ND	3.39	2.83	2.26	SSP-LXC0673S7A
	Super Green	300	6.6/4.4	25	565	67-1580-ND	1.53	1.28	1.02	SSP-LXC0672S7A
	Super Red	2000	5.4/3.6	30	660	67-1587-ND	1.61	1.35	1.08	SSP-LXC06767A
	Ultra Red	2000	5.4/3.6	30	626	67-1594-ND	3.39	2.83	2.26	SSP-LXC0676U7A
	Super Red/ Super Green	2000/300	5.4/4.4	30/25	660/565	67-1601-ND	1.55	1.30	1.04	SSP-LXC06762S7A
4	Super Yellow	1200	10.5/8.4	30	590	67-1574-ND	5.30	4.24	3.71	SSP-LXC0943S13A
	Super Green	300	11/8.8	25	565	67-1581-ND	2.88	2.41	1.93	SSP-LXC0942S13A
	Super Red	2000	9.0/7.2	30	660	67-1588-ND	3.06	2.55	2.04	SSP-LXC094613A
	Ultra Red	2000	9.0/7.2	30	626	67-1595-ND	5.30	4.24	3.71	SSP-LXC0946U13A
	Super Red/ Super Green	2000/300	9.0/8.8	30/25	660/565	67-1602-ND	2.93	2.45	1.96	SSP-LXC09462S13A
5	Super Yellow	1200	16.8	30	590	67-1575-ND	9.58	7.66	6.71	SSP-LXC1283S24
	Super Green	300	17.6	25	565	67-1582-ND	5.10	4.25	3.40	SSP-LXC1282S24
	Super Red	2000	14.4	30	660	67-1589-ND	5.43	4.53	3.62	SSP-LXC128624
	Ultra Red	2000	14.4	30	626	67-1596-ND	9.58	7.66	6.71	SSP-LXC1286U24
6	Super Yellow	1200	6.3	30	590	67-1576-ND	4.26	3.55	2.84	SSP-LXS0673S9
	Super Green	300	6.6	25	565	67-1583-ND	1.92	1.60	1.28	SSP-LXS0672S9
	Super Red	2000	5.4	30	660	67-1590-ND	1.99	1.66	1.33	SSP-LXS06769
	Ultra Red	2000	5.4	30	626	67-1597-ND	4.26	3.55	2.84	SSP-LXS0676U9
	Super Red/ Super Green	2000/300	5.4/6.6	30/25	660/565	67-1603-ND	1.90	1.59	1.27	SSP-LXS06762S9A
7	Super Yellow	1200	2.1	30	590	67-1577-ND	7.83	6.26	5.48	SSP-LXS1823S16A
	Super Green	300	2.2	25	565	67-1584-ND	5.13	4.28	3.42	SSP-LXS1822S16A
	Super Red	2000	1.8	30	660	67-1591-ND	5.35	4.46	3.57	SSP-LXS182616A
	Ultra Red	2000	1.8	30	626	67-1598-ND	7.83	6.26	5.48	SSP-LXS1826U16A
8	Super Yellow	700	2.1	30	590	67-1567-ND	9.40	7.52	6.58	SSP-LXS2443S16A
	Super Green	300	2.2	25	565	67-1568-ND	5.88	4.70	4.12	SSP-LXS2442S16A
	Super Red	1800	1.8	30	660	67-1569-ND	6.05	4.84	4.24	SSP-LXS244616A
	Ultra Red	1800	1.8	30	626	67-1570-ND	7.40	5.93	5.19	SSP-LXS2446U16A

Fig. 1

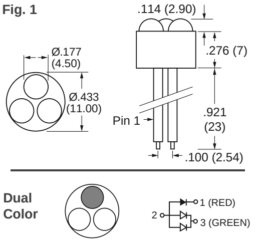


Fig. 2

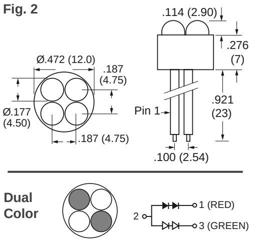


Fig. 3

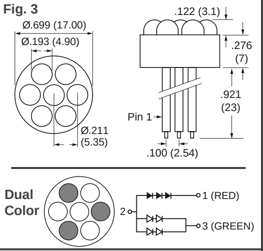


Fig. 4

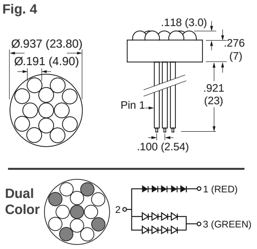


Fig. 5

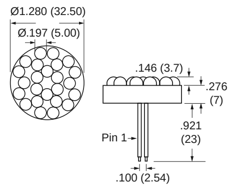


Fig 6

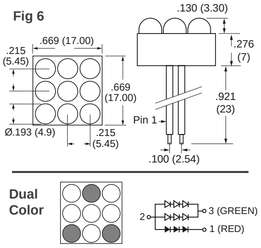


Fig. 7

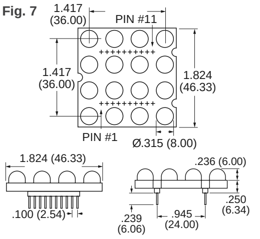
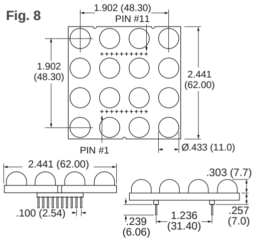


Fig. 8



Bright White LEDs

Fig. 1

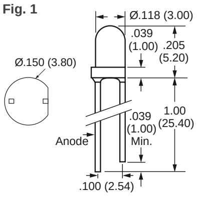


Fig. 2

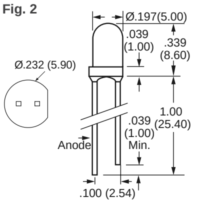


Fig. 3

Tapered Lens

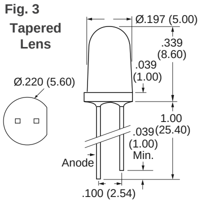


Fig. 4

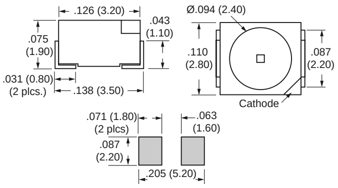


Fig. 5

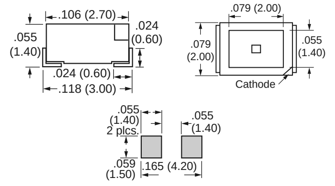


Fig.	Pkg Type	Typical Intensity @ 20mA (mcd)	Typical Forward Voltage	Max. Oper. Current mA	Digi-Key Part Number	Price Each 1	10	100	Digi-Key Part Number	Tape and Reel Size	Pricing	Lumex Part Number
1	3mm	1100	3.6	30	67-1606-ND	3.00	2.78	2.49	—	—	—	SSL-LX3054UWC/A
2	5mm	740	3.6	30	67-1605-ND	3.00	2.78	2.49	—	—	—	SSL-LX5093UWC/A
3	5mm	2300	3.6	30	67-1604-ND	3.00	2.78	2.49	—	—	—	SSL-LX5093XUWC
4	SMD	150	3.6	30	67-1608-1-ND	3.00	2.78	2.49	67-1608-2-ND	1,500	2490.00/M	SML-LX2832UWC-TR
5	SMD	40	3.6	30	67-1607-1-ND	2.86	2.65	2.38	67-1607-2-ND	2,000	2373.80/M	SML-LX23UWC-TR

High Brightness Red LEDs

Emitted Color	Typical Intensity @ 20mA (mcd)	Typical Forward Voltage	Max. Oper. Current mA	Typical Peak Wave Length nm	Digi-Key Part Number	Price Each 1	10	100	Lumex Part Number
Super Red	1000	1.7	20	660	67-1609-ND	.24	.21	.17	SSL-LX5093SRC/C
Super Red	1600	1.7	20	660	67-1610-ND	.28	.24	.19	SSL-LX5093SRC/DV
Super Red	2000	1.7	20	660	67-1611-ND	.55	.46	.37	SSL-LX5093SRC/DW
Super Red	3500	1.7	20	660	67-1612-ND	.54	.45	.36	SSL-LX5093SRC/E

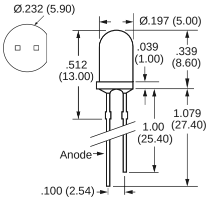


Fig.	Color	Wave Length pk(nm)	Typ. Io (mcd)	Typ. Vf (V)	Typ. If (mA)	Digi-Key Part No.	Price Each			Digi-Key Part No.	Tape & Reel		Dialight Part No.
							1	25	100		Size	Pricing	
1	AlGaAs Red	660	17.0	1.7	20.0	350-1344-1-ND	.45	.38	.30	350-1344-2-ND	2,500	199.50/M	597-3111-407
	Green	560	7.5	2.1	20.0	350-1345-1-ND	.45	.38	.30	350-1345-2-ND	2,500	199.50/M	597-3311-407
	Yellow	580	6.0	2.2	20.0	350-1346-1-ND	.45	.38	.30	350-1346-2-ND	2,500	199.50/M	597-3401-407
2	Red	630	4.0	2.0	20.0	350-1347-1-ND	.54	.45	.36	350-1347-2-ND	3,000	239.40/M	597-3001-107
	Green	565	12.0	2.0	20.0	350-1348-1-ND	.54	.45	.36	350-1348-2-ND	3,000	239.40/M	597-3301-107
	Yellow	585	8.0	2.1	20.0	350-1349-1-ND	.60	.50	.40	350-1349-2-ND	3,000	266.00/M	597-3401-107
3	Red/Green	630/565	4.0/12.0	2.0/2.0	20.0	350-1350-1-ND	.78	.65	.52	350-1350-2-ND	3,000	345.80/M	597-7701-107
	Yellow/Green	585/565	8.0/12.0	2.1/2.0	20.0	350-1351-1-ND	.87	.73	.58	350-1351-2-ND	3,000	385.70/M	597-7721-107
	Red/Yellow	630/585	4.0/8.0	2.0/2.1	20.0	350-1352-1-ND	.78	.65	.52	350-1352-2-ND	3,000	345.80/M	597-7731-107
4	Green	565	8.0	2.1	20.0	350-1353-1-ND	.54	.45	.36	350-1353-2-ND	1,500	239.40/M	597-3301-207
	AlGaAs Red	660	20.0	1.75	10.0	350-1354-1-ND	.66	.55	.44	350-1354-2-ND	2,000	292.60/M	597-3121-207
	Yellow	586	6.0	2.1	20.0	350-1355-1-ND	.54	.45	.36	350-1355-2-ND	1,500	239.40/M	597-3401-207
	Red	635	8.0	2.0	20.0	350-1356-1-ND	.54	.45	.36	350-1356-2-ND	1,500	239.40/M	597-3001-207
5	Red/Green	635/565	6.0/9.4	2.0/2.0	10.0	350-1357-1-ND	.81	.68	.54	350-1357-2-ND	1,500	359.10/M	597-7701-207
	Yellow/Green	585/565	4.0/9.4	2.0/2.0	10.0	350-1358-1-ND	.81	.68	.54	350-1358-2-ND	1,500	359.10/M	597-7721-207
	Red/Yellow	635/586	7.3/6.8	2.0/2.0	10.0	350-1359-1-ND	.81	.68	.54	350-1359-2-ND	2,000	359.10/M	597-7731-207
6	AlGaAs Red	640	25.0	1.7	20.0	350-1341-1-ND	1.35	1.13	.90	350-1341-2-ND	600	378.00	595-2101-007
	Green	567	11.0	2.1	20.0	350-1342-1-ND	1.35	1.13	.90	350-1342-2-ND	600	378.00	595-2301-007
	Yellow	588	9.0	2.2	20.0	350-1343-1-ND	1.35	1.13	.90	350-1343-2-ND	600	378.00	595-2401-007
7	Red	628	5.0	2.0	10.0	350-1334-1-ND	1.29	1.08	.86	350-1334-2-ND	1,600	602.00/M	591-2001-013
	AlGaAs Red	645	14.0	1.75	10.0	350-1335-1-ND	1.35	1.13	.90	350-1335-2-ND	1,600	630.00/M	591-2101-013
	Green	570	4.0	2.0	10.0	350-1336-1-ND	1.29	1.08	.86	350-1336-2-ND	1,600	602.00/M	591-2301-013
	Yellow	590	5.0	2.0	10.0	350-1337-1-ND	1.29	1.08	.86	350-1337-2-ND	1,600	602.00/M	591-2401-013
8	Green	570	8.0	2.0	10.0	350-1360-1-ND	1.29	1.08	.86	350-1360-2-ND	1,600	571.90/M	591-2301-113
	AlGaAs Red	645	24.0	1.75	10.0	350-1361-1-ND	1.35	1.13	.90	350-1361-2-ND	1,600	598.50/M	591-2101-113
	Yellow	590	8.0	2.0	10.0	350-1362-1-ND	1.29	1.08	.86	350-1362-2-ND	1,600	571.90/M	591-2401-113
9	Red/Green	628/570	6.5/8.0	2.0/2.0	20.0	350-1338-1-ND	2.40	2.00	1.60	350-1338-2-ND	1,600	1120.00/M	591-3001-013
	Yellow/Green	586/570	6.5/8.0	2.0/2.0	20.0	350-1339-1-ND	2.40	2.00	1.60	350-1339-2-ND	1,600	1120.00/M	591-3101-013
	Red/Yellow	628/586	6.5/6.5	2.0/2.0	20.0	350-1340-1-ND	2.40	2.00	1.60	350-1340-2-ND	1,600	1120.00/M	591-3201-013

Fig.	Color	Wave Length pk(nm)	Typ. Io (mcd)	Typ. Vf (V)	Typ. If (mA)	Digi-Key Part No.	Price Each				Dialight Part No.
							1	10	25	100	
10	Red	635	10.0	2.0	20.0	350-1363-ND	.60	—	.50	.40	521-9216
	Orange	600	7	2.2	20.0	350-1364-ND	.39	—	.33	.26	521-9498
	Green	565	12.6	2.1	20.0	350-1365-ND	.60	—	.50	.40	521-9210
	Yellow	583	10.0	2.2	20.0	350-1366-ND	.60	—	.50	.40	521-9211
11	Red/Green	635/565	5.0/8.0	2.1/2.3	10.0	350-1367-ND	1.50	—	1.25	1.00	521-9450
12	Red	650	1.2	1.6	20.0	350-1137-ND	1.02	—	.85	.68	555-2001
	Green	565	1.0	2.4	20.0	350-1147-ND	1.05	—	.88	.70	555-2301
	Yellow	583	2.0	2.2	20.0	350-1149-ND	1.05	—	.88	.70	555-2401
	Red	650	1.9	5.0	6.0	350-1139-ND	1.14	—	.95	.76	555-2003
	Red	650	5.2	5.0	17.0	350-1140-ND	1.14	—	.95	.76	555-2004
	Red	650	0.9	5.0	3.0	350-1143-ND	1.14	—	.95	.76	555-2007
	Red	650	0.6	5.0	1.0	350-1145-ND	1.20	—	1.00	.80	555-2009
	Green	565	2.5	5.0	4.7	350-1148-ND	1.20	—	1.00	.80	555-2303
	Yellow	583	2.1	5.0	4.7	350-1150-ND	1.20	—	1.00	.80	555-2403
	Red	650	6.2	3.6	20.0	350-1138-ND	1.14	—	.95	.76	555-2002
	Red	650	4.2	10.0	14.0	350-1141-ND	1.14	—	.95	.76	555-2005
	Red	650	3.1	14.0	10.0	350-1142-ND	1.14	—	.95	.76	555-2006
	Red	650	0.9	24.0	3.0	350-1144-ND	1.14	—	.95	.76	555-2008
	Red	650	0.9	15.0	3.0	350-1146-ND	1.20	—	1.00	.80	555-2010
13	Red	650	1.2	1.6	20.0	350-1151-ND	1.50	—	1.25	1.00	555-3001
	Green	565	1.0	2.4	20.0	350-1160-ND	1.80	—	1.50	1.20	555-3301
	Yellow	583	2.0	2.2	20.0	350-1162-ND	1.80	—	1.50	1.20	555-3401
	Red	650	1.9	5.0	6.0	350-1153-ND	1.65	—	1.38	1.10	555-3003
	Red	650	5.2	5.0	17.0	350-1154-ND	1.65	—	1.38	1.10	555-3004
	Red	650	0.9	5.0	3.0	350-1156-ND	1.65	—	1.38	1.10	555-3007
	Red	650	0.6	5.0	1.0	350-1158-ND	1.74	—	1.45	1.16	555-3009
	Green	565	2.5	5.0	4.7	350-1161-ND	1.95	—	1.63	1.30	555-3303
	Yellow	583	2.1	5.0	4.7	350-1163-ND	1.95	—	1.63	1.30	555-3403
	Red	650	6.2	3.6	20.0	350-1152-ND	1.65	—	1.38	1.10	555-3002
	Red	650	4.2	10.0	14.0	350-1155-ND	1.65	—	1.38	1.10	555-3005
	Red	650	0.9	24.0	3.0	350-1157-ND	1.65	—	1.38	1.10	555-3008
	Red	650	0.9	15.0	3.0	350-1159-ND	1.74	—	1.45	1.16	555-3010
14	Red	650	1.2	1.6	20.0	350-1373-ND	4.14	—	3.45	2.76	555-4001
	Green	565	1.0	2.4	20.0	350-1374-ND	4.80	—	4.00	3.20	555-4301
	Yellow	583	2.0	2.2	20.0	350-1375-ND	4.80	—	4.00	3.20	555-4401
	Red	650	1.9	5.0	6.0	350-1368-ND	4.68	—	3.90	3.12	555-4003
	Red	650	0.9	5.0	3.0	350-1369-ND	4.68	—	3.90	3.12	555-4007
	Green	565	2.5	5.0	4.7	350-1370-ND	4.80	—	4.00	3.20	555-4303
	Yellow	583	2.1	5.0	4.7	350-1371-ND	4.80	—	4.00	3.20	555-4403
15	Red	650	1.9	5.0	6.0	350-1376-ND	6.93	—	5.78	4.62	555-5003
	Red	650	1.2	1.6	20.0	350-1377-ND	6.09	—	5.08	4.06	555-5001
	Green	565	1.0	2.4	20.0	350-1378-ND	7.20	—	6.00	4.80	555-5301
	Yellow	583	2.0	2.2	20.0	350-1379-ND	7.20	—	6.00	4.80	555-5401
16	Green	565	8.7	2.1	20.0	350-1380-ND	2.55	—	2.13	1.70	570-0100-222
	Red	635	12.6	2.0	20.0	350-1381-ND	2.55	—	2.13	1.70	570-0100-111
	Yellow	585	12.6	2.1	20.0	350-1382-ND	2.55	—	2.13	1.70	570-0100-333
	Red/Ylw./Grn.	635/585/565	12.6/12.6/8.7	2.0/2.1/2.1	20.0	350-1383-ND	2.55	—	2.13	1.70	570-0100-132
17	Green	563	16.0	2.1	10.0	350-1384-ND	.69	—	.58	.46	551-0207
	Yellow	585	6.3	2.1	10.0	350-1385-ND	.69	—	.58	.46	551-0307
	Red	650	10.0	2.0	10.0	350-1386-ND	.69	—	.58	.46	551-0407
	Green	565	8.0	5.0	12.0	350-1387-ND	1.05	—	.88	.70	551-0607
	Red	635	4.0	5.0	10.0	350-1388-ND	1.05	—	.88	.70	551-0507
	Yellow	583	8.0	5.0	10.0	350-1389-ND	1.05	—	.88	.70	551-0707
	Red	635	1.8	1.8	2.0	350-1390-ND	.90	—	.75	.60	551-1107
	Green	565	1.6	1.8	2.0	350-1391-ND	.90	—	.75	.60	551-1307
	Yellow	583	1.6	1.9	2.0	350-1392-ND	.90	—	.75	.60	551-1207
	Red/Green	635/565	5.0	2.0	10.0	350-1393-ND	1.65	—	1.38	1.10	551-3007
	Yellow/Green	585/565	4.3/6.3	2.1/2.1	10.0	350-1394-ND	1.65	—	1.38	1.10	551-3107
18	Green	563	16.0	2.1	10.0	350-1084-ND	.81	—	.68	.54	551-0209
	Yellow	585	6.3	2.1	10.0	350-1086-ND	.81	—	.68	.54	551-0309
	Red	650	10.0	2.0	10.0	350-1088-ND	.81	—	.68	.54	551-0409
	Orange	600	6.5	2.2	10.0	350-1102-ND	.90	—	.75	.60	551-2509
	Red	635	4.0	5.0	10.0	350-1090-ND	1.17	—	.98	.78	551-0509
	Green	565	8.0	5.0	12.0	350-1092-ND	1.17	—	.98	.78	551-0609
	Yellow	583	8.0	5.0	10.0	350-1094-ND	1.17	—	.98	.78	551-0709
	Red	635	1.8	1.8	2.0	350-1096-ND	.90	—	.75	.60	551-1109
	Yellow	583	1.6	1.9	2.0	350-1098-ND	.90	—	.75	.60	551-1209
	Green	565	1.6	1.8	2.0	350-1100-ND	.90	—	.75	.60	551-1309
	Red/Green	635/565	5.0	2.0	10.0	350-1104-ND	1.53	—	1.28	1.02	551-3009
	Yellow/Green	585/565	4.3/6.3	2.1	20.0	350-1106-ND	1.77	—	1.48	1.18	551-3109
19	Green	563	16.0	2.1	10.0	350-1083-ND	3.12	—	2.60	2.08	551-0207-004
	Yellow	585	6.3	2.1	10.0	350-1085-ND	3.12	—	2.60	2.08	551-0307-004
	Red	650	10.0	2.0	10.0	350-1087-ND	3.12	—	2.60	2.08	551-0407-004
	Orange	600	6.5	2.2	10.0	350-1101-ND	3.12	—	2.60	2.08	551-2507-004
	Red	635	4.0	5.0	10.0	350-1089-ND	4.47	—	3.73	2.98	551-0507-004
	Green	565	8.0	5.0	12.0	350-1091-ND	4.47	—	3.73	2.98	551-0607-004
	Yellow	583	8.0	5.0	10.0	350-1093-ND	4.47	—	3.73	2.98	551-0707-004

Fig. 1

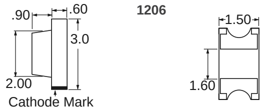


Fig. 2

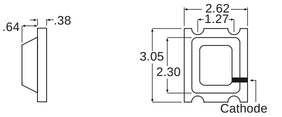


Fig. 3

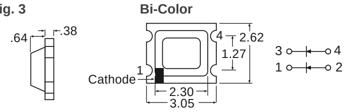


Fig. 4

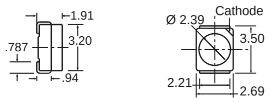


Fig. 5

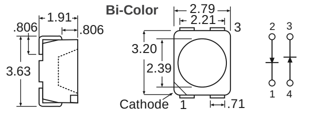


Fig. 6

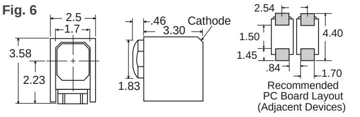


Fig. 7

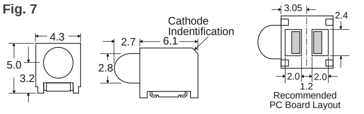


Fig. 8

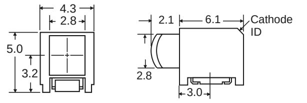


Fig. 9

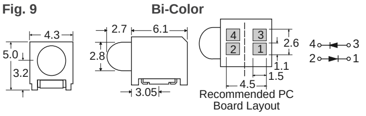


Fig. 10

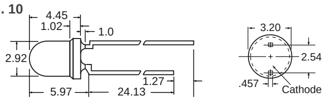


Fig. 11

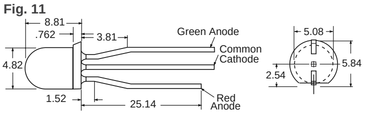


Fig. 12

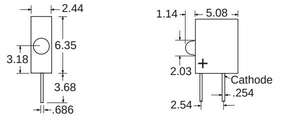


Fig. 13

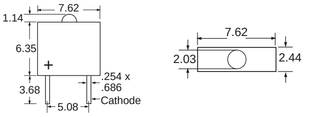
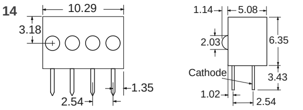


Fig. 14



(Continued)

LEDS *(Cont.)*

Fig.	Color	Wave Length pk(nm)	Typ. Io (mcd)	Typ. Vf (V)	Typ. If (mA)	Digi-Key Part No.	Price Each 1	10	25	100	Dialight Part No.
19	Red	635	1.8	1.8	2.0	350-1095-ND	4.05	—	3.38	2.70	551-1107-004
	Yellow	583	1.6	1.9	2.0	350-1097-ND	4.05	—	3.38	2.70	551-1207-004
	Green	565	1.6	1.8	2.0	350-1099-ND	4.05	—	3.38	2.70	551-1307-004
	Red/Green	635/565	5.0	2.0	10.0	350-1103-ND	7.41	—	6.18	4.94	551-3007-004
	Yellow/Green	585/565	4.3/6.3	2.1	20.0	350-1105-ND	7.41	—	6.18	4.94	551-3107-004
20	Red	650	10.0	2.0	10.0	350-1395-ND	1.53	—	1.28	1.02	553-0111
	Green	563	16.0	2.1	10.0	350-1399-ND	1.53	—	1.28	1.02	553-0122
	Yellow	585	6.3	2.1	10.0	350-1400-ND	1.53	—	1.28	1.02	553-0133
	Grn.(top) / Red(bot)	563/650	16.0/10.0	2.1/2.0	10.0	350-1396-ND	1.53	—	1.28	1.02	553-0121
	Grn.(top) / Ylw.(bot)	563/585	16.0/6.3	2.1/2.1	10.0	350-1397-ND	1.53	—	1.28	1.02	553-0123
	Ylw.(top) / Grn.(bot)	585/563	6.3/16.0	2.1/2.1	10.0	350-1398-ND	1.53	—	1.28	1.02	553-0132
	Red	635	1.8	1.8	2.0	350-1401-ND	1.68	—	1.40	1.12	553-0211
	Green	565	1.6	1.8	2.0	350-1402-ND	1.68	—	1.40	1.12	553-0222
	Yellow	583	1.6	1.9	2.0	350-1404-ND	1.68	—	1.40	1.12	553-0233
	Grn.(top) / Ylw.(bot)	565/583	1.6/1.6	1.8/1.9	2.0	350-1403-ND	1.68	—	1.40	1.12	553-0223
	Green	565	8.0	5.0	12.0	350-1405-ND	1.80	—	1.50	1.20	553-0322
	Red	635	4.0	5.0	10.0	350-1406-ND	1.80	—	1.50	1.20	553-0311
	Yellow	583	8.0	5.0	10.0	350-1407-ND	1.80	—	1.50	1.20	553-0333
	2x Red/Green	635/565	5.0	2.0	10.0	350-1408-ND	2.25	—	1.88	1.50	553-0711
	2x Ylw./Green	585/565	4.3/6.3	2.1/2.1	10.0	350-1409-ND	2.25	—	1.88	1.50	553-0744
21	Red	650	10.0	2.0	10.0	350-1122-ND	1.53	—	1.28	1.02	553-0111-300
	Green	563	16.0	2.1	10.0	350-1123-ND	1.53	—	1.28	1.02	553-0122-300
	Yellow	585	6.3	2.1	10.0	350-1124-ND	1.53	—	1.28	1.02	553-0133-300
	Orange	600	6.5	2.2	10.0	350-1125-ND	1.53	—	1.28	1.02	553-0177-300
	Red	635	1.8	1.8	2.0	350-1126-ND	1.68	—	1.40	1.12	553-0211-300
	Green	565	1.6	1.8	2.0	350-1127-ND	1.68	—	1.40	1.12	553-0222-300
	Yellow	583	1.6	1.9	2.0	350-1128-ND	1.68	—	1.40	1.12	553-0233-300
	Red	635	4.0	5.0	10.0	350-1129-ND	1.80	—	1.50	1.20	553-0311-300
	Green	565	8.0	5.0	12.0	350-1130-ND	1.80	—	1.50	1.20	553-0322-300
	Yellow	583	8.0	5.0	10.0	350-1131-ND	1.80	—	1.50	1.20	553-0333-300
	2x Red/Green	635/565	5.0	2.0	10.0	350-1132-ND	2.25	—	1.88	1.50	553-0711-300
	2x Yellow/Green	585/565	4.3/6.3	2.1	10.0	350-1133-ND	2.25	—	1.88	1.50	553-0744-300
	Red Clear	635	12.0	2.2	10.0	350-1134-ND	1.68	—	1.40	1.12	553-2211-300
	Green Clear	565	12.0	2.3	10.0	350-1135-ND	1.68	—	1.40	1.12	553-2222-300
	Yellow Clear	583	12.0	2.2	10.0	350-1136-ND	1.68	—	1.40	1.12	553-2233-300
22	Red	635	10.0	2.2	10.0	350-1330-ND	1.65	—	1.38	1.10	569-0111-100
	Green	565	8.5	2.3	10.0	350-1331-ND	1.65	—	1.38	1.10	569-0112-200
	Yellow	583	10.0	2.2	10.0	350-1332-ND	1.65	—	1.38	1.10	569-0113-300
	Orange	600	6.5	2.2	10.0	350-1333-ND	1.65	—	1.38	1.10	569-0117-700
23	Red	635	10.0	2.2	10.0	350-1326-ND	2.55	—	2.13	1.70	569-0101-111
	Green	565	8.5	2.3	10.0	350-1327-ND	2.55	—	2.13	1.70	569-0102-222
	Yellow	583	10.0	2.2	10.0	350-1328-ND	2.55	—	2.13	1.70	569-0103-333
	Orange	600	6.5	2.2	10.0	350-1329-ND	2.55	—	2.13	1.70	569-0107-777
24	Red	635	10.0	2.2	10.0	350-1274-ND	2.55	—	2.13	1.70	564-0100-111
	Red/Ylw./Grn.	635/583/565	10.0/10.0/8.5	2.2/2.2/2.3	10.0	350-1275-ND	2.55	—	2.13	1.70	564-0100-132
	Green	565	8.5	2.3	10.0	350-1276-ND	2.55	—	2.13	1.70	564-0100-222
	Orange	600	6.5	2.2	10.0	350-1277-ND	2.55	—	2.13	1.70	564-0100-777
	Red	635	1.8	1.8	2.0	350-1278-ND	2.82	—	2.35	1.88	564-0200-111
	Red/Ylw./Grn.	635/583/565	1.8/1.6/1.6	1.8/1.9/1.8	2.0	350-1279-ND	2.82	—	2.35	1.88	564-0200-132
	Green	565	1.6	1.8	2.0	350-1280-ND	2.82	—	2.35	1.88	564-0200-222
	Red	635	4.0	5.0	10.0	350-1281-ND	2.88	—	2.40	1.92	564-0300-111
	Red/Ylw./Grn.	635/583/565	4.0/8.0/8.0	5.0	10.0/10.0/12.0	350-1282-ND	2.88	—	2.40	1.92	564-0300-132
	Green	565	8.0	5.0	12.0	350-1283-ND	2.88	—	2.40	1.92	564-0300-222
	3x Red/Green	635/565	5.0	2.0	10.0	350-1284-ND	3.75	—	3.13	2.50	564-0700-111
	3x Yellow/Green	585/565	4.3/6.3	2.1	20.0	350-1285-ND	3.75	—	3.13	2.50	564-0700-444
25	Red/Green	630/560	4.0	2.0/2.1	20.0	350-1410-ND	1.80	—	1.50	1.20	551-3508
26	Green	565	12.3	2.1	20.0	350-1003-ND	.69	—	.58	.46	550-0207
	Yellow	585	12.3	2.1	20.0	350-1007-ND	.69	—	.58	.46	550-0307
	Red	635	12.3	2.0	20.0	350-1011-ND	.69	—	.58	.46	550-0407
	Red	655	2.0	5.0	13.0	350-1015-ND	.96	—	.80	.64	550-0507
	Green	565	8.0	5.0	12.0	350-1019-ND	.96	—	.80	.64	550-0707
	Yellow	583	8.0	5.0	10.0	350-1023-ND	.96	—	.80	.64	550-0807
	Red	635	2.0	1.8	2.0	350-1027-ND	.90	—	.75	.60	550-1107
	Yellow	583	1.8	1.9	2.0	350-1031-ND	.90	—	.75	.60	550-1207
	Green	565	1.8	1.8	2.0	350-1035-ND	.90	—	.75	.60	550-1307
	Green	563	10.0	2.1	10.0	350-1039-ND	.75	—	.63	.50	550-2207
	Yellow	585	6.3	2.1	10.0	350-1043-ND	.75	—	.63	.50	550-2307
	Red	650	7.0	2.2	10.0	350-1047-ND	.75	—	.63	.50	550-2407
	Orange	600	7.0	1.9	10.0	350-1051-ND	.75	—	.63	.50	550-2507
	Red/Green	660/565	90/40	1.8/2.1	20.0	350-1055-ND	1.68	—	1.40	1.12	550-3007
	Red	650	34.0	2.1	20.0	350-1061-ND	.90	—	.75	.60	550-5107
	Green	563	34.0	2.2	20.0	350-1065-ND	.90	—	.75	.60	550-5207
	Yellow	585	34.0	2.2	20.0	350-1069-ND	.90	—	.75	.60	550-5307
	Red Clear	635	125.0	2.2	20.0	350-1073-ND	.96	—	.80	.64	550-5507
	Green Clear	565	120.0	2.3	20.0	350-1077-ND	.96	—	.80	.64	550-5607
	Yellow Clear	583	140.0	2.2	20.0	350-1081-ND	.96	—	.80	.64	550-5707
27	Green	565	12.3	2.1	20.0	350-1002-ND	.69	—	.58	.46	550-0205
	Yellow	585	12.3	2.1	20.0	350-1006-ND	.69	—	.58	.46	550-0305
	Red	635	12.3	2.0	20.0	350-1010-ND	.69	—	.58	.46	550-0405
	Red	655	2.0	5.0	13.0	350-1014-ND	.96	—	.80	.64	550-0505
	Green	565	8.0	5.0	12.0	350-1018-ND	.96	—	.80	.64	550-0705
	Yellow	583	8.0	5.0	10.0	350-1022-ND	.96	—	.80	.64	550-0805
	Red	635	2.0	1.8	2.0	350-1026-ND	.90	—	.75	.60	550-1105
	Yellow	583	1.8	1.9	2.0	350-1030-ND	.90	—	.75	.60	550-1205
	Green	565	1.8	1.8	2.0	350-1034-ND	.90	—	.75	.60	550-1305
	Green	563	10.0	2.1	10.0	350-1038-ND	.75	—	.63	.50	550-2205
	Yellow	585	6.3	2.1	10.0	350-1042-ND	.75	—	.63	.50	550-2305
	Red	650	7.0	2.2	10.0	350-1046-ND	.75	—	.63	.50	550-2405
	Orange	600	7.0	1.9	10.0	350-1050-ND	.75	—	.63	.50	550-2505
	Red/Green	660/565	90/40	1.8/2.1	20.0	350-1054-ND	1.68	—	1.40	1.12	550-3005
	Red	650	34.0	2.1	20.0	350-1060-ND	.90	—	.75	.60	550-5105
	Green	563	34.0	2.2	20.0	350-1064-ND	.90	—	.75	.60	550-5205
	Yellow	585	34.0	2.2	20.0	350-1068-ND	.90	—	.75	.60	550-5305
	Red Clear	635	125.0	2.2	20.0	350-1072-ND	.96	—	.80	.64	550-5505
	Green Clear	565	120.0	2.3	20.0	350-1076-ND	.96	—	.80	.64	550-5605
	Yellow Clear	583	140.0	2.2	20.0	350-1080-ND	.96	—	.80	.64	550-5705
28	Red/Green	635/565	5.0/8.0	2.1/2.3	10.0	350-1057-ND	2.01	—	1.68	1.34	550-3509
	Yellow/Green	583/565	5.0/8.0	2.1/2.1	10.0	350-1058-ND	2.01	—	1.68	1.34	550-3609
29	Red/Green	635/565	5.0/8.0	2.1/2.3	10.0	350-1411-ND	2.01	—	1.68	1.34	550-3505
	Yellow/Green	583/565	5.0/8.0	2.1/2.1	10.0	350-1412-ND	2.01	—	1.68	1.34	550-3605
30	Green	565	12.3	2.1	20.0	350-1004-ND	3.18	—	2.65	2.12	550-0207-004
	Yellow	585	12.3	2.1	20.0	350-1008-ND	3.18	—	2.65	2.12	550-0307-004
	Red	635	12.3	2.0	20.0	350-1012-ND	3.18	—	2.65	2.12	550-0407-004
	Red	655	2.0	5.0	13.0	350-1016-ND	4.02	—	3.35	2.68	550-0507-004
	Green	565	8.0	5.0	12.0	350-1020-ND	4.02	—	3.35	2.68	550-0707-004
	Yellow	583	8.0	5.0	10.0	350-1024-ND	4.02	—	3.35	2.68	550-0807-004
	Red	635	2.0	1.8	2.0	350-1028-ND	3.75	—	3.13	2.50	550-1107-004
	Yellow	583	1.8	1.9	2.0	350-1032-ND	3.75	—	3.13	2.50	550-1207-004
	Green	565	1.8	1.8	2.0	350-1036-ND	3.75	—	3.13	2.50	550-1307-004
	Green	563	10.0	2.1	10.0	350-1040-ND	3.30	—	2.75	2.20	550-2207-004
	Yellow	585	6.3	2.1	10.0	350-1044-ND	3.30	—	2.75	2.20	550-2307-004

Fig. 15

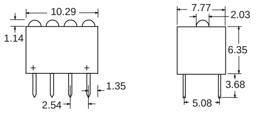


Fig. 16

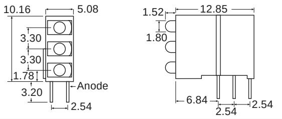


Fig. 17

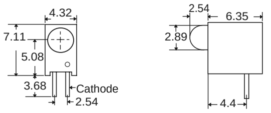


Fig. 18

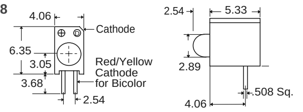


Fig. 19

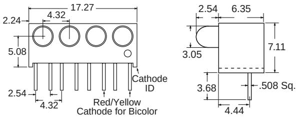


Fig. 20

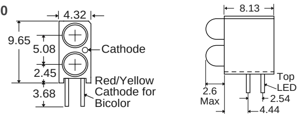


Fig. 21

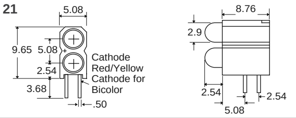


Fig. 22

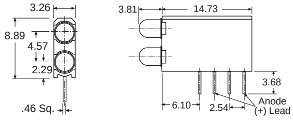


Fig. 23

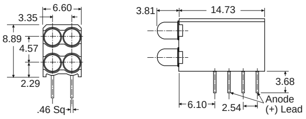


Fig. 24

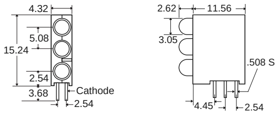


Fig. 25

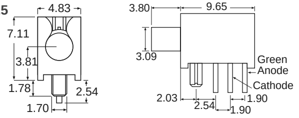
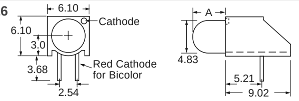
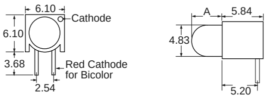


Fig. 26



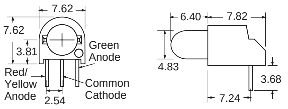
Dim. A: 3.43 for 550-0207 to 0407, 5.0 for all others

Fig. 27



Dim. A: 3.43 for 550-0205 to 0405, 5.0 for all others

Fig. 28



(Continued)

LEDS *(Cont.)*

Fig.	Color	Wave Length pk(nm)	Typ. Io (mcd)	Typ. Vf (V)	Typ. If (mA)	Digi-Key Part No.	Price Each 1	10	25	100	Dialight Part No.
30	Red	650	7.0	2.2	10.0	350-1048-ND	3.30	—	2.75	2.20	550-2407-004
	Orange	600	7.0	1.9	10.0	350-1052-ND	3.30	—	2.75	2.20	550-2507-004
	Red/Green	660/565	90/40	1.8/2.1	20.0	350-1056-ND	7.38	—	6.15	4.92	550-3007-004
	Red	650	34.0	2.1	20.0	350-1062-ND	3.75	—	3.13	2.50	550-5107-004
	Green	563	34.0	2.2	20.0	350-1066-ND	3.75	—	3.13	2.50	550-5207-004
	Yellow	585	34.0	2.2	20.0	350-1070-ND	3.75	—	3.13	2.50	550-5307-004
	Red Clear	635	125.0	2.2	20.0	350-1074-ND	4.02	—	3.35	2.68	550-5507-004
	Green Clear	565	120.0	2.3	20.0	350-1078-ND	4.02	—	3.35	2.68	550-5607-004
	Yellow Clear	583	140.0	2.2	20.0	350-1082-ND	4.02	—	3.35	2.68	550-5707-004
31	Red	650	7.0	2.2	10.0	350-1107-ND	1.53	—	1.28	1.02	552-0211
	Green	563	10.0	2.1	10.0	350-1108-ND	1.53	—	1.28	1.02	552-0222
	Yellow	585	6.3	2.1	10.0	350-1109-ND	1.53	—	1.28	1.02	552-0233
	Orange	600	7.0	1.9	10.0	350-1110-ND	1.53	—	1.28	1.02	552-0277
	Red	655	2.0	5.0	13.0	350-1111-ND	1.80	—	1.50	1.20	552-0311
	Green	565	8.0	5.0	12.0	350-1112-ND	1.80	—	1.50	1.20	552-0322
	Yellow	583	8.0	5.0	10.0	350-1113-ND	1.80	—	1.50	1.20	552-0333
	Red/Green	660/565	90/40	1.8/2.1	20.0	350-1114-ND	2.25	—	1.88	1.50	552-0711
	Yellow/Green	585/565	8.7/8.7	2.1/2.1	20.0	350-1115-ND	2.25	—	1.88	1.50	552-0744
	Red	650	34.0	2.1	20.0	350-1116-ND	1.68	—	1.40	1.12	552-0811
	Green	563	34.0	2.2	20.0	350-1117-ND	1.68	—	1.40	1.12	552-0822
	Yellow	585	34.0	2.2	20.0	350-1118-ND	1.68	—	1.40	1.12	552-0833
	Red	635	2.0	1.8	2.0	350-1119-ND	1.68	—	1.40	1.12	552-0911
	Green	565	1.8	1.8	2.0	350-1120-ND	1.68	—	1.40	1.12	552-0922
	Yellow	583	1.8	1.9	2.0	350-1121-ND	1.68	—	1.40	1.12	552-0933
32	2x Red/Green	635/565	5.0/8.0	2.1/2.3	10.0	350-1413-ND	3.75	—	3.13	2.50	552-3511
	2x Yellow/Green	583/565	5.0/8.0	2.1/2.1	10.0	350-1414-ND	3.75	—	3.13	2.50	552-3544
33	Green	565	12.3	2.1	20.0	350-1001-ND	.84	—	.70	.56	550-0204
	Yellow	585	12.3	2.1	20.0	350-1005-ND	.84	—	.70	.56	550-0304
	Red	635	12.3	2.0	20.0	350-1009-ND	.84	—	.70	.56	550-0404
	Red	655	2.0	5.0	13.0	350-1013-ND	1.17	—	.98	.78	550-0504
	Green	565	8.0	5.0	12.0	350-1017-ND	1.17	—	.98	.78	550-0704
	Yellow	583	8.0	5.0	10.0	350-1021-ND	1.17	—	.98	.78	550-0804
	Red	635	2.0	1.8	2.0	350-1025-ND	1.08	—	.90	.72	550-1104
	Yellow	583	1.8	1.9	2.0	350-1029-ND	1.08	—	.90	.72	550-1204
	Green	565	1.8	1.8	2.0	350-1033-ND	1.08	—	.90	.72	550-1304
	Green	563	10.0	2.1	10.0	350-1037-ND	.99	—	.83	.66	550-2204
	Yellow	585	6.3	2.1	10.0	350-1041-ND	.99	—	.83	.66	550-2304
	Red	650	7.0	2.2	10.0	350-1045-ND	.99	—	.83	.66	550-2404
	Orange	600	7.0	1.9	10.0	350-1049-ND	.75	—	.63	.50	550-2504
	Red/Green	660/565	90/40	1.8/2.1	20.0	350-1053-ND	1.92	—	1.60	1.28	550-3004
	Red	650	34.0	2.1	20.0	350-1059-ND	1.08	—	.90	.72	550-5104
	Green	563	34.0	2.2	20.0	350-1063-ND	1.08	—	.90	.72	550-5204
	Yellow	585	34.0	2.2	20.0	350-1067-ND	1.08	—	.90	.72	550-5304
	Red Clear	635	125.0	2.2	20.0	350-1071-ND	1.14	—	.95	.76	550-5504
	Green Clear	565	120.0	2.3	20.0	350-1075-ND	1.14	—	.95	.76	550-5604
	Yellow Clear	583	140.0	2.2	20.0	350-1079-ND	1.14	—	.95	.76	550-5704
34	Red	635	8.0	5.0	10.0	350-1171-ND	.84	—	.70	.56	561-0104-100
	Red	635	2.0	1.8	2.0	350-1183-ND	.78	—	.65	.52	561-1101-100
	Green	565	1.8	1.8	2.0	350-1195-ND	.78	—	.65	.52	561-1301-100
	Yellow	583	1.8	1.9	2.0	350-1189-ND	.78	—	.65	.52	561-1201-100
	Orange	600	7.0	1.9	10.0	350-1177-ND	1.14	—	.95	.76	561-0901-100
	Red	635	7.0	2.2	10.0	350-1201-ND	.72	—	.60	.48	561-2101-100
	Green	565	32.0	2.0	20.0	350-1207-ND	.78	—	.65	.52	561-2201-100
	Yellow	590	10.0	2.4	20.0	350-1213-ND	.72	—	.60	.48	561-2301-100
	Red Tinted	635	60.0	2.2	10.0	350-1219-ND	.72	—	.60	.48	561-2401-100
	Green Tinted	565	70.0	2.3	10.0	350-1225-ND	.72	—	.60	.48	561-2501-100
	Yellow Tinted	583	50.0	2.2	10.0	350-1231-ND	.72	—	.60	.48	561-2601-100
	Red	650	34.0	2.1	20.0	350-1243-ND	.78	—	.65	.52	561-5101-100
	Green	563	34.0	2.2	20.0	350-1249-ND	.78	—	.65	.52	561-5201-100
	Yellow	585	34.0	2.2	20.0	350-1255-ND	.78	—	.65	.52	561-5301-100
	Red Clear	635	125.0	2.2	20.0	350-1261-ND	.84	—	.70	.56	561-5501-100
	Green Clear	565	120.0	2.3	20.0	350-1267-ND	.84	—	.70	.56	561-5601-100
	Yellow Clear	583	140.0	2.2	20.0	350-1273-ND	.84	—	.70	.56	561-5701-100
35	Green	565	4.0	2.2	20.0	350-1286-ND	1.23	—	1.03	.82	566-0206
	Yellow	583	3.5	2.1	20.0	350-1288-ND	1.23	—	1.03	.82	566-0306
	Red	635	6.0	2.0	20.0	350-1164-ND	1.23	—	1.03	.82	566-0406
36	Green	565	4.0	2.2	20.0	350-1287-ND	1.17	—	.98	.78	566-0207
	Yellow	583	3.5	2.1	20.0	350-1289-ND	1.17	—	.98	.78	566-0307
	Red	635	7.4	2.0	20.0	350-1165-ND	1.17	—	.98	.78	566-0407
37	Red/Green	635/565	3.5/4.0	1.9/2.1	20.0	350-1290-ND	2.34	—	1.95	1.56	566-3507
38	Red	635	5.0	1.9	20.0	350-1232-ND	.84	—	.70	.56	561-4101-055
	Green	565	2.5	2.3	20.0	350-1234-ND	1.83	—	1.53	1.22	561-4201-055
	Yellow	583	5.0	2.1	20.0	350-1236-ND	1.62	—	1.35	1.08	561-4301-055
	Red	635	5.0	1.9	20.0	350-1233-ND	1.71	—	1.43	1.14	561-4101-081
	Green	565	2.5	2.3	20.0	350-1235-ND	1.71	—	1.43	1.14	561-4201-081
	Yellow	583	5.0	2.1	20.0	350-1237-ND	1.71	—	1.43	1.14	561-4301-081
39	Red	635	10.0	2.2	10.0	350-1291-ND	2.63	2.10	—	1.84	568-0101-111
	Green	565	8.5	2.3	10.0	350-1292-ND	2.63	2.10	—	1.84	568-0102-222
	Grn./Ylw./Grn./Ylw.	565/583	8.5/10.0	2.1/2.2	10.0	350-1293-ND	2.63	2.10	—	1.84	568-0102-323
	Ylw./Grn./Ylw./Grn.	583/565	10.0/8.5	2.1/2.2	10.0	350-1294-ND	2.63	2.10	—	1.84	568-0103-232
	Orange	600	6.5	2.2	10.0	350-1295-ND	2.63	2.10	—	1.84	568-0107-777
	Red	635	1.8	1.8	2.0	350-1299-ND	2.93	2.34	—	2.05	568-0201-111
	Green	565	1.6	1.8	2.0	350-1300-ND	2.93	2.34	—	2.05	568-0202-222
	Grn./Ylw./Grn./Ylw.	565/583	1.6	1.8/1.9	2.0	350-1301-ND	2.93	2.34	—	2.05	568-0202-323
	Ylw./Grn./Ylw./Grn.	583/565	1.6	1.9/1.8	2.0	350-1302-ND	2.93	2.34	—	2.05	568-0203-232
	Red	635	4.0	5.0	10.0	350-1306-ND	3.13	2.50	—	2.19	568-0301-111
	Green	565	8.0	5.0	12.0	350-1307-ND	3.13	2.50	—	2.19	568-0302-222
	Grn./Ylw./Grn./Ylw.	565/583	8.0	5.0	12.0/10.0	350-1308-ND	3.13	2.50	—	2.19	568-0302-323
	Ylw./Grn./Ylw./Grn.	583/565	8.0	5.0	10.0/12.0	350-1309-ND	3.13	2.50	—	2.19	568-0303-232
	Bi-Color Red/Green	635/565	5.0	2.0	10.0	350-1313-ND	3.90	3.12	—	2.73	568-0701-111
	Bi-Color Ylw./Grn.	585/565	4.3/6.3	2.1	10.0	350-1314-ND	3.90	3.12	—	2.73	568-0704-444
40	Red	635	8.7	2.0	20.0	350-1317-ND	5.25	4.20	—	3.68	568-2231-1112
	Green	565	32.0	2.1	20.0	350-1319-ND	5.25	4.20	—	3.68	568-2232-2222
	Yellow	585	10.0	2.1	20.0	350-1321-ND	5.25	4.20	—	3.68	568-2233-3332
41	Red	635	8.7	2.0	20.0	350-1318-ND	10.50	8.40	—	7.35	568-2231-1114
	Green	565	32.0	2.1	20.0	350-1320-ND	10.50	8.40	—	7.35	568-2232-2224
	Yellow	585	10.0	2.1	20.0	350-1322-ND	10.50	8.40	—	7.35	568-2233-3334
42	Red	635	7.4	2.0	20.0	350-1296-ND	7.88	6.30	—	5.52	568-0141-1113
	Green	565	4.7	2.1	20.0	350-1297-ND	7.88	6.30	—	5.52	568-0142-2223
	Yellow	585	7.4	2.1	20.0	350-1298-ND	7.88	6.30	—	5.52	568-0143-3333
	Red	635	1.0	1.7	2.0	350-1303-ND	8.78	7.02	—	6.15	568-0241-1113
	Green	565	1.0	1.9	2.0	350-1304-ND	8.78	7.02	—	6.15	568-0242-2223
	Yellow	585	1.0	1.8	2.0	350-1305-ND	8.78	7.02	—	6.15	568-0243-3333
	Red	635	8.7	5.0	10.0	350-1310-ND	9.38	7.50	—	6.57	568-0341-1113
	Green	565	5.6	5.0	10.0	350-1311-ND	9.38	7.50	—	6.57	568-0342-2223
	Yellow	585	3.7	5.0	10.0	350-1312-ND	9.38	7.50	—	6.57	568-0343-3333
	Bi-Color Red/Green	635/565	5.0	2.0	10.0	350-1315-ND	11.70	9.36	—	8.19	568-0741-1113
	Bi-Color Ylw./Grn.	585/565	4.3/6.3	2.1	10.0	350-1316-ND	11.70	9.36	—	8.19	568-0744-4443
	Red	635	8.7	2.0	20.0	350-1323-ND	7.88	6.30	—	5.52	568-2241-1113
	Green	565	32.0	2.1	20.0	350-1324-ND	7.88	6.30	—	5.52	568-2242-2223
	Yellow	585	10.0	2.1	20.0	350-1325-ND	7.88	6.30	—	5.52	568-2243-3333

Fig. 29

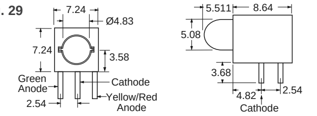
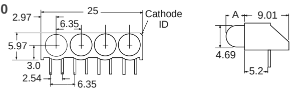


Fig. 30



Dim. A: 3.4 for 550-0207 to 0407, 4.95 for all others

Fig. 31

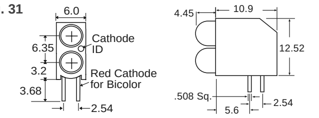


Fig. 32

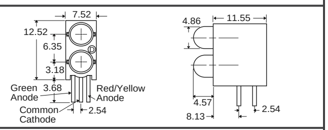
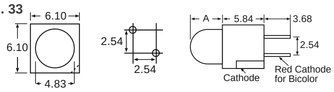


Fig. 33



Dim. A: 3.43 for 550-0204 to 0404, 5.0 for all others

Fig. 34

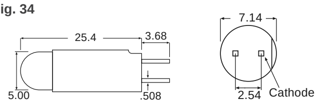


Fig. 35

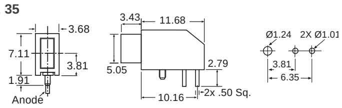


Fig. 36

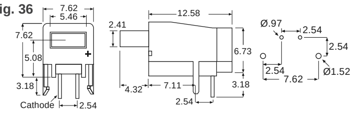


Fig. 37

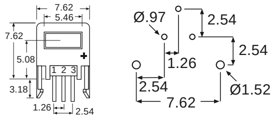
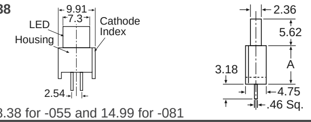


Fig. 38



•A= 8.38 for -055 and 14.99 for -081

Fig. 39

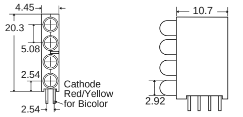


Fig. 40

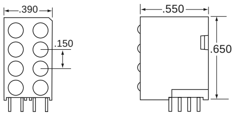


Fig. 41

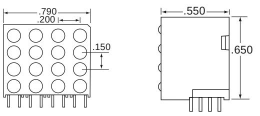
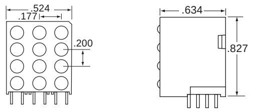
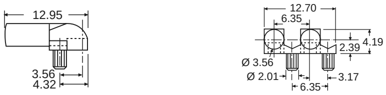


Fig. 42



Dialight Optical Light Pipe

No. of Ports	Dimension (mm)	Digi-Key Part No.	Price Each 1	25	100	Dialight Part No.
2	3	350-1000-ND	1.20	1.00	.80	515-1071



FAIRCHILD SEMICONDUCTOR LEDs

Fig. 1

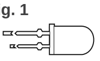


Fig. 2

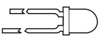


Fig. 3

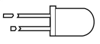


Fig. 4

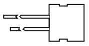
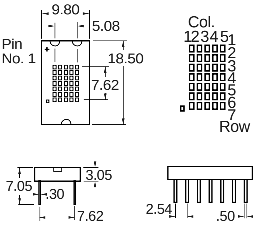


Fig.	Pkg.	Oper. Voltage	Lens Source Color	Luminous Type (Diffused)	Viewing Angle	Intensity mcd	Digi-Key Part No.	Price Each 1	10	100
Integrated T-1 3/4 Resistor Lamps										
1	T-1 3/4	5V	Red	Red	60°	2.0	MR3050-ND	.58	.46	.35
1	T-1 3/4	12V	Red	Red	60°	2.0	MR3051-ND	.48	.36	.27
1	T-1 3/4	5V	Hi. Eff. Green	Green	60°	4.0	MR3450-ND	.48	.36	.27
1	T-1 3/4	12V	Hi. Eff. Green	Green	60°	4.0	MR3451-ND	.48	.36	.27
1	T-1 3/4	5V	Yellow	Yellow	60°	4.0	MR3350-ND	.48	.36	.27
1	T-1 3/4	12V	Yellow	Yellow	60°	4.0	MR3351-ND	.48	.36	.27

Fig.	Pkg.	Oper. Voltage	Lens Source Color	Luminous Type (Diffused)	Viewing Angle	Intensity mcd	Digi-Key Part No.	Price Each 1	10	100
LEDs — Regular and High Efficiency										
2	T-1	—	Yellow	Yellow	50°	2.0	HLMP1719-ND	.42	.33	.23
2	T-1	—	Hi. Eff. Green	Green	50°	2.0	HLMP1790-ND	.42	.33	.23
2	T-1	—	Hi. Eff. Red	Red	50°	2.0	HLMP1700-ND	.42	.33	.23
3	T-1 3/4	—	Yellow	Yellow	50°	2.0	HLMP4719-ND	.42	.33	.23
3	T-1 3/4	—	Hi. Eff. Green	Green	35°	3.0	MV2454-ND	.40	.32	.22
3	T-1 3/4	—	Hi. Eff. Red	Red	50°	2.0	HLMP4700-ND	.42	.33	.23
3	T-1 3/4	—	Hi. Eff. Red	Red	65°	3.5	HLMP3300-ND	.40	.32	.22
3	T-1 3/4	—	Hi. Eff. Red	Red	65°	7.0	HLMP3301-ND	.42	.33	.23
1	T-1 3/4	—	Red/Red	Red	75°	6.0	MV5094A-ND (Bi-Color)	.58	.46	.35
1	T-1 3/4	—	Red/Green	White	100°	6.0	MV5491A-ND (Bi-Color)	.50	.38	.29
4	Rec.	—	Red/Green	White	100°	6.0	MV49124A-ND (Bi-Color)	.56	.42	.32
Panel Mounting Clip and Ring..							MP52-ND	—	.18	—

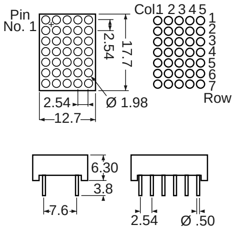
LITEON Optoelectronics LED, Dot Matrix Displays

Fig. 1



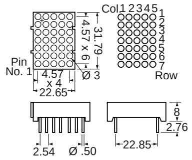
FEATURES: High brightness • Single plane, wide viewing angle • Low power requirements • Compatible with USASCII and EBCDIC codes • Categorized for luminous intensity • Solid state reliability • 36 Light Emitting Diodes • 5x7 Array with X-Y select and decimal point • Easy mounting on PC board or sockets

Fig. 2 — 1.98mm Dot Size

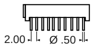


FEATURES: • Low power requirements • 5x7 array with X-Y select • Compatible with USASCII and EBCDIC codes • Categorized for luminous intensity • Stackable vertically and horizontally • Easy mounting on PC board or sockets

Fig. 3 — 3.0mm Dot Size

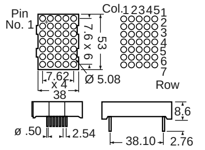


† For Digi-Key Part Number 160-1004-ND (Green/Orange LED), Use this dimension.

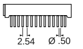


FEATURES: • Low power requirement • High contrast and brightness • Single plane, wide viewing angle • X-Y select • Compatible with USASCII and EBCDIC codes • Categorized for luminous intensity • Multicolor displays are applicable to three bright colors: Green, orange and yellow (green and orange mixed)

Fig. 4 — 5.0mm Dot Size



‡ For Digi-Key Part Number 160-1009-ND (Green/Orange LED), Use this dimension.



FEATURES: • Low power requirement • High contrast & brightness • Single plane, wide viewing angle • X-Y select • Compatible with USASCII and EBCDIC codes • Categorized for luminous intensity • Multicolor displays are applicable to three bright colors: Green, orange and yellow (green and orange mixed)

Fig. 5 — 5.08mm Dot Size

FEATURES: • Low power requirement • High contrast & brightness • Single plane, wide viewing angle • X-Y select • Compatible with USASCII and EBCDIC codes • Categorized for luminous intensity • Multicolor displays are applicable to three bright colors: Green, orange and yellow (green and orange mixed)

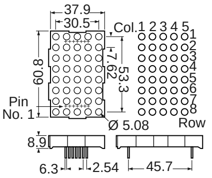


Fig. 6 — 9.0mm Dot Size

FEATURES: • Low power requirement • High contrast and brightness • Single plane, wide viewing angle • X-Y select • Compatible with USASCII and EBCDIC codes • Categorized for luminous intensity • Multicolor displays are applicable to three bright colors: Green, orange and yellow (green and orange mixed)

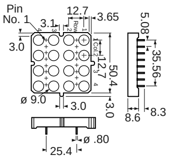
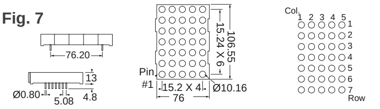


Fig. 7

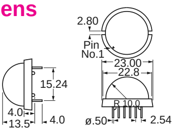


FEATURES: • Low power requirement • High contrast • High brightness • Single plane, wide viewing angle • X-Y select • Compatible with USASCII and EBCDIC codes • Stackable vertically and horizontally • Easy mounting on PC board • Categorized for luminous intensity • Multicolor displays are applicable to three bright colors: Green, orange and yellow (green and orange mixed).

Fig.	Description	Wavelength Ip (nm)	If Peak per dot (mA)*	If Cont. per dot (mA)	Digi-Key Part No.	Pricing 1	25	50
1	0.3" (7.62mm) 5x7 Anode Col., Cathode Row, Lt. Hand Decimal, Red	655	100	20	160-1000-ND	2.88	64.69	115.00
	0.3" (7.62mm) 5x7 Anode Col., Cathode Row, Lt. Hand Decimal, Green	565	60	20	160-1001-ND	3.53	79.31	141.00
2	0.7" (17.78mm) 5x7 Cathode Col., Anode Row, Green	565	80	20	160-1002-ND	4.00	90.00	160.00
3	1.2" (30.48mm) 5x7 Cathode Col., Anode Row, Green/Orange	green 565, orange 630	100	25	160-1004-ND †	9.10	204.75	364.00
4	2" (50.80mm) 5x7 Cathode Col., Anode Row, Green	565	100	25	160-1007-ND	5.13	115.31	205.00
	2" (50.80mm) 5x7 Cathode Col., Anode Row, Green/Orange	green 565, orange 630	100	25	160-1009-ND ‡	9.50	213.75	380.00
	2" (50.80mm) 5x7 Cathode Col., Anode Row, Yellow	585	80	20	160-1114-ND	6.20	139.50	248.00
5	2.3" (58.42mm) 5x8 Cathode Col., Anode Row, Hi. Eff. Red	635	100	25	160-1014-ND	5.88	132.19	235.00
	2.3" (58.42mm) 5x8 Cathode Col., Anode Row, Green	565	100	25	160-1016-ND	5.88	132.19	235.00
	2.3" (58.42mm) 5x8 Cathode Col., Anode Row, Yellow	585	80	20	160-1115-ND	6.63	149.06	265.00
6	2" (50.80mm) 4x4 Anode Row, Cathode Col., Green/Orange	green 565, orange 630	75	18	160-1015-ND	13.45	302.63	538.00
7	4" (101.60mm) 5x7 Cathode Col., Anode Row, Hi. Eff. Red	635	80	20	160-1116-ND	19.40	436.50	776.00
	4" (101.60mm) 5x7 Cathode Col., Anode Row, Yellow	585	60	16	160-1118-ND	21.73	488.81	869.00

*1/10 Duty Cycle, 0.1 ms Pulse Width. Absolute Max. Ratings at TA = 25°C. † See Physical Dimension Under Fig. 3. ‡ See Physical Dimension Under Fig. 4

.8" Big Lamps with Universal Sphere Lens



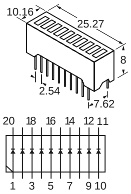
FEATURES:
• High luminous intensity • Categorized for luminous intensity • Excellent on-off contrast • Operating Temp. Range: -25°C to +85°C.

Color	If Peak per chip (mA)	If Cont. per chip (mA)	Digi-Key Part No.	Pricing 1	10	100
Green	100	25	160-1025-ND	2.10	17.50	140.00
Hi. Eff. Red	100	25	160-1026-ND	2.10	17.50	140.00
Yellow	80	20	160-1027-ND	2.10	17.50	140.00

Absolute Max. Ratings at T_A = 25°C, VF = 2.1, VR = 5V

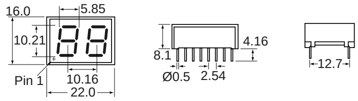
Bar Graph Array

Color	Continuous Forward Current	Forward Voltage (Vf)	Digi-Key Part No.	Pricing 1	10	100
Hi. Eff. Red	25	2.1	160-1066-ND	2.10	17.50	140.00
Green	25	2.1	160-1067-ND	2.10	17.50	140.00
Yellow	20	2.1	160-1068-ND	2.22	18.50	148.00



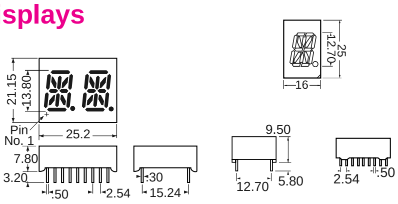
LITEON Optoelectronics

LED 7-Segment Display for CB Radios



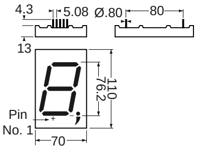
Alphanumeric Displays

FEATURES:
- Low power requirements
- Excellent character appearance
- High contrast & brightness
- Wide viewing angle
- Categorized for luminous intensity

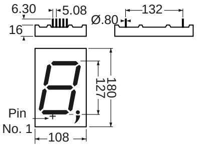


Ultra-Large 7-Segment Display

FEATURES:
- Continuous uniform segments
- Excellent character appearance
- High contrast & brightness
- Wide viewing angle
- Categorized for luminous intensity



3" (76.20mm) Size



5" (127.00mm) Size

Description	Color	Vf (V)	If (mA)	Digi-Key Part No.	Pricing 1	10	100
LED 7-Segment Display for CB Radios							
.4" (101.60mm) 7-Segment LED Common Anode	Red	1.7	20	160-1148-ND	2.15	19.50	167.70
.4" (101.60mm) 7-Segment LED Common Anode	Orange/Red	2.0	20	160-1150-ND	2.15	19.50	167.70

Description	If Peak per segment (mA)*	If Cont. per segment (mA)	Rev. Volt. per segment (V)	Vf Typ. per segment	Oper. Temp. Range	Digi-Key Part No.	Pricing 1	25	50
2-Digit LED Alphanumeric Displays									
0.54" (13.72mm) Multiplex Common Cathode, Right Hand Decimal, Orange	100	25	5	2.1	-25°C-+85°C	160-1010-ND	3.88	87.19	155.00
0.54" (13.72mm) Multiplex Common Anode, Right Hand Decimal, Orange	100	25	5	2.1	-25°C-+85°C	160-1011-ND	3.88	87.19	155.00
0.54" (13.72mm) Multiplex Common Cathode, Right Hand Decimal, Green	100	25	5	2.1	-25°C-+85°C	160-1012-ND	3.88	87.19	155.00
0.54" (13.72mm) Multiplex Common Anode, Right Hand Decimal, Green	100	25	5	2.1	-25°C-+85°C	160-1013-ND	3.88	87.19	155.00
1-Digit LED Alphanumeric Display									
0.5" (12.70mm) Common Anode, Right Hand Decimal, Green	100	25	5	2.1	-25°C-+85°C	160-1106-ND	2.38	53.44	95.00
0.5" (12.70mm) Common Anode, Right Hand Decimal, Yellow	80	20	5	2.1	-25°C-+85°C	160-1107-ND	2.38	53.44	95.00
0.5" (12.70mm) Common Anode, Right Hand Decimal, High Efficiency Red	100	25	5	2.1	-25°C-+85°C	160-1108-ND	2.38	53.44	95.00
Ultra-Large 7-Segment LED Numeric Display									
3" (76.20mm) Common Cathode, High Efficiency Red	160	40	30	12.6	-25°C-+85°C	160-1017-ND	16.80	304.50	558.60
3" (76.20mm) Common Anode, High Efficiency Red	160	40	30	12.6	-25°C-+85°C	160-1018-ND	16.80	304.50	558.60
3" (76.20mm) Common Cathode, Green	160	40	30	12.6	-25°C-+85°C	160-1019-ND	16.94	307.04	563.26
3" (76.20mm) Common Anode, Green	160	40	30	12.6	-25°C-+85°C	160-1020-ND	16.80	304.50	558.60
5" (127.00mm) Common Cathode, High Efficiency Red	180	60	50	21	-25°C-+85°C	160-1021-ND	38.70	701.44	1286.78
5" (127.00mm) Common Anode, High Efficiency Red	180	60	50	21	-25°C-+85°C	160-1022-ND	38.70	701.44	1286.78
5" (127.00mm) Common Cathode, Green	180	60	50	21	-25°C-+85°C	160-1023-ND	38.70	701.44	1286.78
5" (127.00mm) Common Anode, Green	180	60	50	21	-25°C-+85°C	160-1024-ND	38.70	701.44	1286.78

Absolute Max. Ratings at $T_A = 25°C$

* 1/10 duty cycle, 0.1 ms pulse width.

Infrared Emitting Diodes, Photodetectors and Photodiodes

Features of Infrared Emitting Diodes: • Selected to specific on-line intensity and radiant intensity ranges • Low cost plastic end looking package • Made with gallium aluminum arsenide window layer on gallium arsenide infrared emitting diodes

Features of Photodetectors and Photodiodes: • Lensed for high sensitivity • Low cost plastic package

Fig. 1

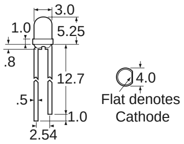


Fig. 2

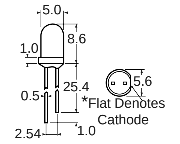


Fig. 3

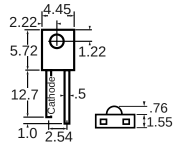
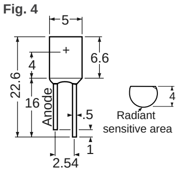


Fig. 4



Infrared Emitting Diodes

Fig.	Vf	Vr	I (ma)	Ipk amps	Viewing angle	Digi-Key Part No.	Pricing 1	10	100
1	1.2	5	50	3	20°	160-1028-ND	.30	2.50	20.00
2	1.2	5	50	3	20°	160-1029-ND	.30	2.50	20.00
2	1.2	5	50	3	40°	160-1061-ND	.30	2.50	20.00
2	1.3	7.2	150	3	35°	160-1062-ND	.30	2.50	20.00
3	1.2	5	50	3	40°	160-1063-ND	.30	2.50	20.00

Matching Photodetectors

Fig.	Vce	Vec	On-State I (ma)	Rise/Fall (us)	Digi-Key Part No.	Pricing 1	10	100
1	30	5	2	5	160-1030-ND	.41	3.38	27.00
2	30	5	2	5	160-1031-ND	.44	3.68	29.40
3	30	5	1	5	160-1065-ND	.30	2.50	20.00

Photodiodes

Fig.	Description	Digi-Key Part No.	Pricing 1	10	100
4	Black Plastic Diode	160-1032-ND	.69	5.75	46.00

Absolute Max. Ratings at $T_A = 25°C$, $\lambda = 940nm$

Infrared Remote Control Receiver Modules

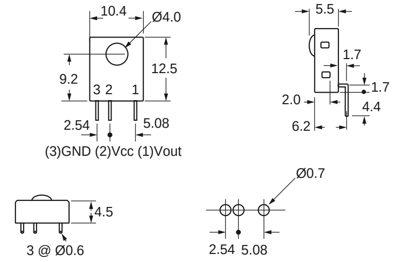
Miniaturized receivers for infrared remote control systems. Single unit type module which incorporates a PIN diode and receiving preamplifier IC. The demodulated output signal can directly be decoded by a microprocessor.

Features:

• Compact package • High immunity from ambient light • Good performance against electric field disturbance • 5 volt power supply – low power consumption • TTL and CMOS compatibility

Detecting Window	Carrier Freq. (KHz)	Digi-Key Part No.	Pricing 1	10	100
Side	56.8	160-1155-ND	2.50	22.50	200.00

Side Look



T-1 and T-1 3/4 Integrated Resistor Lamps

Fig.	Description	Lens	Source Color	VR	Io (mcd)	Viewing Angle	If (mA)	Digi-Key Part No.	Pricing 1	10	100
1	T-1 5V	Red Diff.	Red	7.5	0.8	40°	10	160-1045-ND	.23	1.88	15.00
	T-1 5V	Green Diff.	Green	7.5	5.6	40°	10	160-1049-ND	.23	1.88	15.00
	T-1 5V	Yellow Diff.	Yellow	7.5	5.6	40°	10	160-1053-ND	.25	2.08	16.60
1	T-1 12V	Red Diff.	Red	15	0.9	40°	12	160-1046-ND	.23	1.88	15.00
	T-1 12V	Green Diff.	Green	15	5.8	40°	12	160-1050-ND	.23	1.88	15.00
	T-1 12V	Yellow Diff.	Yellow	15	5.7	40°	12	160-1054-ND	.25	2.08	16.60
2	T-1 3/4 5V	Green Diff.	Green	7.5	8.7	36°	10	160-1051-ND	.26	2.18	17.40
	T-1 3/4 5V	Yellow Diff.	Yellow	7.5	8.7	36°	10	160-1055-ND	.27	2.25	18.00
	T-1 3/4 12V	Green Diff.	Green	15	8.9	36°	12	160-1052-ND	.26	2.18	17.40
1	T-1 5V	Orange Diff.	Orange	7.5	5.6	40°	10	160-1109-ND	.26	2.18	17.40
	T-1 12V	Orange Diff.	Orange	15	5.7	40°	12	160-1110-ND	.26	2.18	17.40
2	T-1 3/4 5V	Red Diff.	Hi. Eff. Red	7.5	8.7	36°	10	160-1111-ND	.26	2.18	17.40
	T-1 3/4 12V	Red Diff.	Hi. Eff. Red	15	8.9	36°	12	160-1112-ND	.26	2.18	17.40

Fig. 1

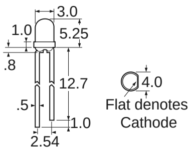
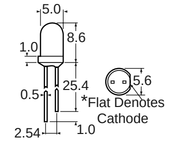


Fig. 2



Absolute Max. Rat. at $T_A = 25°C$

Fig. 1

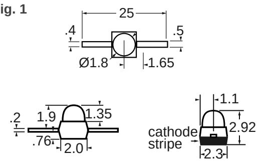


Fig. 2

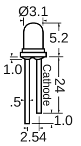


Fig. 3

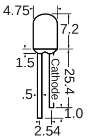


Fig. 4

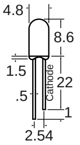


Fig. 5

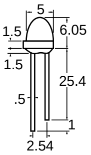


Fig. 6

Features:
- Ultra-brightness
- Sturdy leads
- IC compatible/ Low current capability
- Reliable and rugged
- Low cost

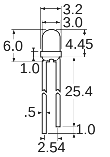
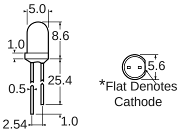
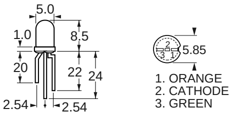


Fig. 7



Features: • Long life-solid state reliability
• Low power consumption • IC compatible

Fig. 8



Features: • Long life-solid state reliability
• Low power consumption • IC compatible

Fig. 9

Features:
- 8mm dia. big lamp
- Wide viewing angle
- Low power consumption
- IC compatible/low current requirements
- Reliable and rugged

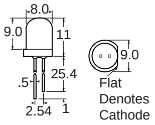


Fig. 10

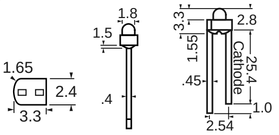


Fig. 11

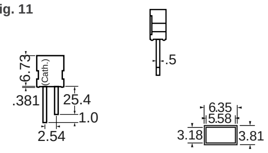


Fig. 12

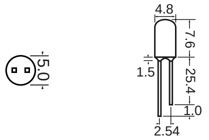


Fig. 13

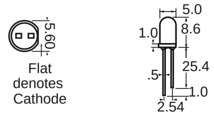


Fig. 14

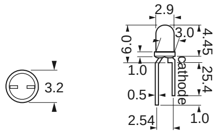


Fig.	Description	Lens	Source Color	VF	Io (mcd)	Viewing Angle	If (mA)	Digi-Key Part No.	Pricing			Liteon Part No.
									1	10	100	
1	Sub-Mini	Water Clear	Red Orange	2.0	12.5	34	30	160-1069-ND	.26	2.13	17.00	LTL-93BEK1
	Sub-Mini	Water Clear	Green	2.1	15.0	34	30	160-1070-ND	.26	2.13	17.00	LTL-93BGK1
	Sub-Mini	Water Clear	Yellow	2.1	8.5	34	20	160-1071-ND	.26	2.13	17.00	LTL-93BYK1
	Sub-Mini	Red Diff.	Red Orange	2.0	3.7	90	30	160-1072-ND	.29	2.38	19.00	LTL-93BHRA1
	Sub-Mini	Green Diff.	Green	2.1	2.5	90	30	160-1073-ND	.29	2.38	19.00	LTL-93BGA1
	Sub-Mini	Yellow Diff.	Yellow	2.1	5.6	90	20	160-1074-ND	.29	2.38	19.00	LTL-93BYA1
2	T-1 Double Flange	Red Diff.	Hi. Eff. Red	2.0	19.0	60	30	160-1078-ND	—	.98	7.80	LTL-16KE
	T-1 Double Flange	Yellow Diff.	Yellow	2.1	12.6	60	20	160-1079-ND	—	.98	7.80	LTL-16KY
	T-1 Double Flange	Green Diff.	Green	2.1	12.6	60	30	160-1080-ND	—	.98	7.80	LTL-16KG
	T-1 Double Flange	Red	Hi. Eff. Red	2.0	29.0	45	30	160-1081-ND	—	.98	7.80	LTL-16KEE
	T-1 Double Flange	Yellow	Yellow	2.1	19.0	45	20	160-1082-ND	—	.98	7.80	LTL-16KYE
	T-1 Double Flange	Green	Green	2.1	40.0	45	30	160-1083-ND	—	.98	7.80	LTL-16KGE
3	T-1 3/4 No Flange	Red Diff.	Hi. Eff. Red	2.0	5.6	60	30	160-1087-ND	—	.98	7.80	LTL-10223W
	T-1 3/4 No Flange	Yellow Diff.	Yellow	2.1	12.6	60	20	160-1088-ND	—	.98	7.80	LTL-10253W
	T-1 3/4 No Flange	Green Diff.	Green	2.1	5.6	60	30	160-1089-ND	—	.98	7.80	LTL-10233W
4	T-1 3/4 No Flange	Red Diff.	Hi. Eff. Red	2.0	19	45	30	160-1090-ND	—	1.43	11.40	LTL-307ENF-D
	T-1 3/4 No Flange	Green Diff.	Green	2.1	8.7	60	30	160-1091-ND	—	1.43	11.40	LTL-307GNF-D
5	Lo Profile T-1 3/4	Red Diff.	Hi. Eff. Red	2.0	4.0	64	30	160-1093-ND	—	1.15	9.20	LTL-5223
	Lo Profile T-1 3/4	Yellow Diff.	Yellow	2.2	4.0	64	20	160-1094-ND	—	1.15	9.20	LTL-5253
	Lo Profile T-1 3/4	Green Diff.	Green	2.2	4.0	64	30	160-1095-ND	—	1.15	9.20	LTL-5233
	Lo Profile T-1 3/4	Red	Hi. Eff. Red	2.0	8.0	44	30	160-1096-ND	—	1.15	9.20	LTL-5224
	Lo Profile T-1 3/4	Yellow	Yellow	2.1	12.6	44	20	160-1097-ND	—	1.15	9.20	LTL-5254
	Lo Profile T-1 3/4	Green	Green	2.2	14.0	44	30	160-1098-ND	—	1.15	9.20	LTL-5234
6	T-1 Ultrabright	Water Clear	Red	2.4	80	45	40	160-1034-ND	.21	1.78	14.20	LTL-4266N
	T-1 Ultrabright	Red Diff.	Red	2.4	48	60	40	160-1035-ND	.21	1.78	14.20	LTL-4261N
	T-1 B-Color	White Diff.	H.E. Red/Grn.	2.0/2.1	4.8/4.8	200	30	160-1058-ND	.36	3.00	24.00	LTL-14CHJ
7	T-1 3/4 Bi-Color	White Diff.	Red/Green	2.0/2.8	1.2/8.7	50	40/30	160-1036-ND	.39	3.25	26.00	LTL-298VJ
	T-1 3/4 Bi-Color	White Diff.	Green/Red	2.1/2.0	8.7/5.5	50	30	160-1037-ND	.39	3.25	26.00	LTL-298WJ
	T-1 3/4 Ultrabright Bi-Color	White Diff.	Red/Green	1.8/2.1	35/16	80	40/30	160-1038-ND	.47	3.88	31.00	LTL-293SJW
	T-1 3/4 Super Bright	Water Clear	Red	1.8	1500	16	40	160-1104-ND*	.45	3.75	30.00	LTL-4268UR
8	T-1 3/4 Ultrabright Bi-Color	White Diff.	Green/Red	2.0/2.1	40/20	30	30	160-1057-ND	.39	3.25	26.00	LTL-30EHJ
9	8mm	Red Diff.	Hi. Eff. Red	2.8	12.6	46	30	160-1039-ND	.27	2.28	18.20	LTL-327HR
	8mm	Green Diff.	Green	2.8	12.6	46	30	160-1040-ND	.27	2.28	18.20	LTL-327G
	8mm	Yellow Diff.	Yellow	2.8	12.6	46	20	160-1041-ND	.27	2.28	18.20	LTL-327Y
10	1.8mm Dot Point	Red	Hi. Eff. Red	2.0	3.0	38	30	160-1084-ND	.19	1.58	12.60	LTL-709E
	1.8mm Dot Point	Yellow	Yellow	2.1	1.5	38	30	160-1085-ND	.20	1.63	13.00	LTL-709Y
	1.8mm Dot Point	Green	Green	2.1	3.5	38	20	160-1086-ND	.20	1.63	13.00	LTL-709L
11	Rectangular	Red	Hi. Eff. Red	2.0	3.8	100	30	160-1099-ND	.35	2.90	23.20	LTL-33221AA
	Rectangular	Green	Green	2.1	5.6	100	30	160-1100-ND	.35	2.90	23.20	LTL-33231AA
	Rectangular	Yellow	Yellow	2.1	5.6	100	20	160-1101-ND	.35	2.90	23.20	LTL-33251AA
12	T-1 3/4 Super Bright	Water Clear	Red	1.8	840	25	40	160-1102-ND	.59	4.88	39.00	LTL-387URK
13	T-1 3/4	Red Diff.	Red	1.7	0.8	36	20	160-1124-ND	.23	1.75	12.25	LTL-4203
	T-1 3/4	Red Trans.	Red	1.7	5.5	16	20	160-1125-ND	.23	1.75	12.25	LTL-4204
	T-1 3/4	Clear	Red	1.7	5.5	16	20	160-1126-ND	.23	1.75	12.25	LTL-4208
	T-1 3/4	Red Diff.	Hi Eff. Red	2.0	8.7	36	20	160-1127-ND	.23	1.75	12.25	LTL-4223

***** For part number 160-1104-ND, flat denotes anode

Continued

LITEON Optoelectronics T-1, T-1 3/4 and 8mm LEDs *(Cont.)*

Fig.	Description	Lens	Source Color	VF	Io (mcd)	Viewing Angle	If (mA)	Digi-Key Part No.	Pricing 1	10	100	Liteon Part No.
13	T-1 3/4	Red Trans.	Hi Eff. Red	2.0	40	16	20	160-1128-ND	.23	1.75	12.25	LTL-4224
	T-1 3/4	Green Diff.	Green	2.1	8.7	36	20	160-1130-ND	.23	1.75	12.25	LTL-4233
	T-1 3/4	Green Trans.	Green	2.1	40	16	20	160-1131-ND	.23	1.75	12.25	LTL-4234
	T-1 3/4	Clear	Green	2.1	60	16	20	160-1132-ND	.23	1.75	12.25	LTL-4238
	T-1 3/4	Yellow Diff.	Yellow	2.1	8.7	36	20	160-1133-ND	.23	1.75	12.25	LTL-4253
	T-1 3/4	Yellow Trans.	Yellow	2.1	40	16	20	160-1134-ND	.23	1.75	12.25	LTL-4254
14	T-1	Red Diff.	Red	1.7	0.8	60	20	160-1136-ND	.23	1.75	12.25	LTL-4201N
	T-1	Clear	Red	1.7	3.7	45	20	160-1138-ND	.23	1.75	12.25	LTL-4206N
	T-1	Red Diff.	Hi Eff. Red	2.0	5.6	60	20	160-1139-ND	.23	1.75	12.25	LTL-4221N
	T-1	Red Trans.	Hi Eff. Red	2.0	12.6	45	20	160-1140-ND	.23	1.75	12.25	LTL-4222N
	T-1	Clear	Orange	2.0	12.6	45	20	160-1141-ND	.23	1.75	12.25	LTL-4296N
	T-1	Green Diff.	Green	2.1	5.6	60	20	160-1142-ND	.23	1.75	12.25	LTL-4231N
	T-1	Green Trans.	Green	2.1	12.6	45	20	160-1143-ND	.23	1.75	12.25	LTL-4232N
	T-1	Clear	Green	2.1	12.6	45	20	160-1144-ND	.23	1.75	12.25	LTL-4236N
	T-1	Yellow Diff.	Yellow	2.1	5.6	60	20	160-1145-ND	.23	1.75	12.25	LTL-4251N
	T-1	Yellow Trans.	Yellow	2.1	12.6	45	20	160-1146-ND	.23	1.75	12.25	LTL-4252N
	T-1	Clear	Yellow	2.1	12.6	45	20	160-1147-ND	.23	1.75	12.25	LTL-4256N

LITEON Optoelectronics

Surface Mount LEDs

160-1190-ND **Surface Mount LED Demo Kit**. Contains a sampling of 9 popular styles of SMD LEDs that you can light with the push of a button..................$4.95

Fig. 1 — 1206

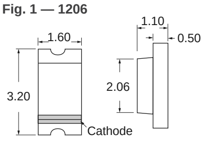


Fig. 2 — 1210

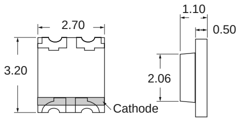
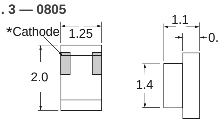
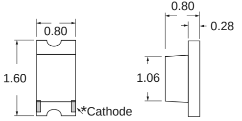


Fig. 3 — 0805



* Anode on parts 160-1174 and 160-1176

Fig. 4 — 0603



* Anode on part 160-1181

Fig. 5 — 1206 (Rear Mount)

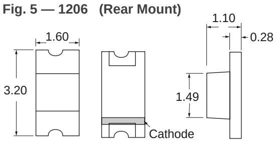
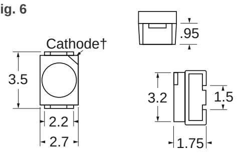


Fig. 6



† Anode on part 160-1123

Fig. 7 — 0805 Right Angle

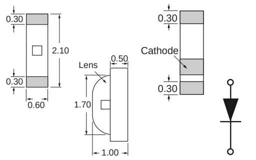


Fig.8 — 1206 Right Angle

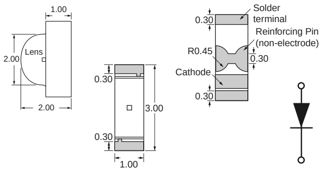


Fig.9 — Domed

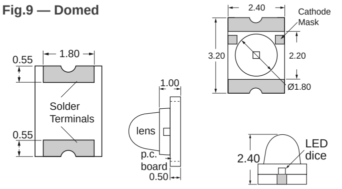


Fig.	Lens	Source Color	Wavelength λpk(nm)	VF (V)	If (mA)	Io (mcd)	Viewing Angle	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing	Liteon Part No.
1	Clear	Amber	610	2.1	20	6	130	160-1166-1-ND	.17	1.38	11.00	160-1166-2-ND	3,000	82.50/M	LTST-C150AKT
	Clear	Red	660	1.8	20	20	130	160-1167-1-ND	.28	2.35	18.80	160-1167-2-ND	3,000	141.00/M	LTST-C150CKT
	Clear	Red/Orange	635	2.0	20	6	130	160-1168-1-ND	.17	1.38	11.00	160-1168-2-ND	3,000	82.50/M	LTST-C150EKT
	Clear	Green	565	2.1	20	6	130	160-1169-1-ND	.17	1.38	11.00	160-1169-2-ND	3,000	82.50/M	LTST-C150GKT
	Clear	Yellow	585	2.1	20	6	130	160-1170-1-ND	.17	1.38	11.00	160-1170-2-ND	3,000	82.50/M	LTST-C150YKT
2	Clear	Green/Yellow	565/585	2.1/2.1	20/20	6/6	130/130	160-1171-1-ND	.32	2.63	21.00	160-1171-2-ND	3,000	157.50/M	LTST-C155GYKT
	Clear	Green/Red	565/635	2.1/2.0	20/20	6/6	130/130	160-1172-1-ND	.32	2.63	21.00	160-1172-2-ND	3,000	157.50/M	LTST-C155GEKT
3	Clear	Green	565	2.1	20	14.2	130	160-1173-1-ND	.22	1.80	14.40	160-1173-2-ND	3,000	108.00/M	LTST-C170FKT
	Clear	Red	660	1.8	20	90	130	160-1174-1-ND	.54	4.50	36.00	160-1174-2-ND	3,000	270.00/M	LTST-C170UKT
	Clear	Yellow	585	2.1	20	6	130	160-1175-1-ND	.17	1.38	11.00	160-1175-2-ND	3,000	82.50/M	LTST-C170YKT
	Clear	Red	660	1.8	20	20	130	160-1176-1-ND	.30	2.50	20.00	160-1176-2-ND	3,000	150.00/M	LTST-C170CKT
	Clear	Amber	610	2.1	20	6	130	160-1177-1-ND	.17	1.38	11.00	160-1177-2-ND	3,000	82.50/M	LTST-C170AKT
	Clear	Red/Orange	635	2.0	20	6	130	160-1178-1-ND	.17	1.38	11.00	160-1178-2-ND	3,000	82.50/M	LTST-C170EKT
	Clear	Green	565	2.1	20	6	130	160-1179-1-ND	.17	1.38	11.00	160-1179-2-ND	3,000	82.50/M	LTST-C170GKT
4	Clear	Amber	610	2.1	20	6	130	160-1180-1-ND	.17	1.38	11.00	160-1180-2-ND	3,000	82.50/M	LTST-C190AKT
	Clear	Red	660	1.8	20	20	130	160-1181-1-ND	.28	2.35	18.80	160-1181-2-ND	3,000	141.00/M	LTST-C190CKT
	Clear	Red/Orange	635	2.0	20	6	130	160-1182-1-ND	.17	1.38	11.00	160-1182-2-ND	3,000	82.50/M	LTST-C190EKT
	Clear	Green	565	2.1	20	6	130	160-1183-1-ND	.17	1.38	11.00	160-1183-2-ND	3,000	82.50/M	LTST-C190GKT
	Clear	Yellow	585	2.1	20	6	130	160-1184-1-ND	.17	1.38	11.00	160-1184-2-ND	3,000	82.50/M	LTST-C190YKT
5	Clear	Amber	610	2.1	20	6	130	160-1185-1-ND	.17	1.38	11.00	160-1185-2-ND	3,000	82.50/M	LTST-C230AKT
	Clear	Red	660	1.8	20	20	130	160-1186-1-ND	.28	2.35	18.80	160-1186-2-ND	3,000	141.00/M	LTST-C230CKT
	Clear	Red/Orange	635	2.0	20	6	130	160-1187-1-ND	.17	1.38	11.00	160-1187-2-ND	3,000	82.50/M	LTST-C230EKT
	Clear	Green	565	2.1	20	6	130	160-1188-1-ND	.17	1.38	11.00	160-1188-2-ND	3,000	82.50/M	LTST-C230GKT
	Clear	Yellow	585	2.1	20	6	130	160-1189-1-ND	.17	1.38	11.00	160-1189-2-ND	3,000	82.50/M	LTST-C230YKT
6	Water Clear	Red/Orange	630	2.0	20	10	120	160-1119-1-ND	.27	2.28	18.20	160-1119-2-ND	1,500	137.00/M	LTL-94PEKTA
	Water Clear	Green	565	2.1	20	10	120	160-1120-1-ND	.27	2.28	18.20	160-1120-2-ND	1,500	137.00/M	LTL-94PGKTA
	Water Clear	Amber	610	2.1	20	10	120	160-1121-1-ND	.27	2.28	18.20	160-1121-2-ND	1,500	137.00/M	LTL-94PAKTA
	Water Clear	Yellow	585	2.1	20	7	120	160-1122-1-ND	.27	2.28	18.20	160-1122-2-ND	1,500	137.00/M	LTL-94PYKTA
7	Clear	Green	565	2.1	20	10	130	160-1218-1-ND	.22	1.65	13.75	160-1218-2-ND	4,000	82.50/M	LTST-S220GKT
	Clear	Yellow	585	2.1	20	4	130	160-1219-1-ND	.22	1.65	13.75	160-1219-2-ND	4,000	82.50/M	LTST-S220YKT
	Clear	Red/Orange	630	2.0	20	4	130	160-1220-1-ND	.22	1.65	13.75	160-1220-2-ND	4,000	82.50/M	LTST-S220EKT
8	Clear	Green	565	2.1	20	10	130	160-1206-1-ND	.22	1.65	13.75	160-1206-2-ND	3,000	82.50/M	LTST-S320GKT
	Clear	Yellow	585	2.1	20	4	130	160-1207-1-ND	.22	1.65	13.75	160-1207-2-ND	3,000	82.50/M	LTST-S320YKT
	Clear	Red/Orange	635	2.0	20	4	130	160-1208-1-ND	.22	1.65	13.75	160-1208-2-ND	3,000	82.50/M	LTST-S320EKT
9	Clear	Green	565	2.1	20	40	25	160-1212-1-ND	.22	1.65	13.75	160-1212-2-ND	1,500	82.50/M	LTST-C930GKT
	Clear	Yellow	585	2.1	20	16	25	160-1213-1-ND	.22	1.65	13.75	160-1213-2-ND	1,500	82.50/M	LTST-C930YKT
	Clear	Red/Orange	635	2.0	20	25	25	160-1214-1-ND	.22	1.65	13.75	160-1214-2-ND	1,500	82.50/M	LTST-C930EKT

***** Sold in bulk packaging

CHICAGO MINIATURE LAMP, INC.
WHERE INNOVATION COMES TO LIGHT

PC Board Mounted LEDs

Fig.	Color	Rated Current (mA)	Forward Voltage Typ. (V)	Digi-Key Part No.	Pricing 1	25	100	250	Chicago Miniature Part No.
				T1					
1	Red	10	2.0	L20261-ND	1.10	22.33	64.60	142.50	5310F1
	Green	20	2.2	L20265-ND	1.10	22.33	64.60	142.50	5310F5
	Yellow	20	2.1	L20267-ND	1.10	22.33	64.60	142.50	5310F7
	Green	20	2.2	L20275-ND	1.10	22.33	64.60	142.50	5312F5
	Yellow	20	2.1	L20277-ND	1.10	22.33	64.60	142.50	5312F7
	Red	10	2.0	L20281-ND	1.10	22.33	64.60	142.50	5315F1
	Green	20	2.2	L20285-ND	1.10	22.33	64.60	142.50	5315F5
2	Red	10	2.0	L20151-ND	2.23	45.24	130.90	288.75	5360F1
	Green	20	2.2	L20155-ND	2.23	45.24	130.90	288.75	5360F5
	Yellow	20	2.1	L20157-ND	2.23	45.24	130.90	288.75	5360F7
3	Red	10	2.0	L20321-ND	.57	11.46	33.15	73.13	5600F1
	Green	20	2.2	L20325-ND	.57	11.46	33.15	73.13	5600F5
	Yellow	20	2.1	L20327-ND	.57	11.46	33.15	73.13	5600F7
	Red	10	5.0	L20331-ND	.84	17.04	49.30	108.75	5602F1-5V
	Amber	10	5.0	L20333-ND	.84	17.04	49.30	108.75	5602F3-5V
	Green	12	5.0	L20335-ND	.84	17.04	49.30	108.75	5602F5-5V
4	Red	20	1.8	L20191-ND	1.02	20.56	59.50	131.25	5608F1
	Green	20	2.3	L20195-ND	1.02	20.56	59.50	131.25	5608F5
	Yellow	20	2.2	L20197-ND	1.02	20.56	59.50	131.25	5608F7
5	Red	10	2.0	L20361-ND	.56	11.40	32.98	72.75	5650F1
	Green	20	2.2	L20365-ND	.56	11.40	32.98	72.75	5650F5
	Yellow	20	2.1	L20367-ND	.56	11.40	32.98	72.75	5650F7
	Red	2.0	1.8	L20371-ND	.71	14.34	41.48	91.50	5650F1LC
	Red	13	5.0	L20381-ND	.84	17.04	49.30	108.75	5652F1-5V
6	Red	10	2.0	L20401-ND	.91	18.45	53.38	117.75	5680F1;1
	Green	20	2.2	L20405-ND	.91	18.45	53.38	117.75	5680F5;5
	Yellow	20	2.1	L20407-ND	.91	18.45	53.38	117.75	5680F7;7
7	Red	10	2.2	L20411-ND	.90	18.21	52.70	116.25	6321F1
	Green	10	2.3	L20415-ND	.90	18.21	52.70	116.25	6321F5
	Yellow	10	2.2	L20417-ND	.90	18.21	52.70	116.25	6321F7
8	Red	10	2.0	L20421-ND	1.10	22.33	64.60	142.50	5322F1
	Green	20	2.2	L20425-ND	1.10	22.33	64.60	142.50	5322F5
	Yellow	20	2.1	L20427-ND	1.10	22.33	64.60	142.50	5322F7
	Red	10	2.0	L20431-ND	1.10	22.33	64.60	142.50	5320F1
	Yellow	20	2.1	L20437-ND	1.10	22.33	64.60	142.50	5320F7
	Red	10	2.0	L20441-ND	1.10	22.33	64.60	142.50	5321F1
	Green	20	2.2	L20445-ND	1.10	22.33	64.60	142.50	5321F5
9	Red	10	2.2	L2045111-ND	2.58	52.29	151.30	333.75	5693F1;1;1-A
	Green	10	2.3	L2045555-ND	2.58	52.29	151.30	333.75	5693F5;5;5-A
	Yellow	10	2.2	L2045777-ND	2.58	52.29	151.30	333.75	5693F7;7;7-A
10	Red	10	2.2	L20461111-ND	3.60	72.85	210.80	465.00	5694F1;1;1;1-A
	Green	10	2.3	L20465555-ND	4.81	97.53	282.20	622.50	5694F5;5;5;5-A
	Yellow	10	2.2	L20467777-ND	3.60	72.85	210.80	465.00	5694F7;7;7;-A
				T 1$^3/_4$					
11	Red	20	1.7	L20001-ND	.61	12.34	35.70	78.75	5300E1
	Red	20	2.0	L20011-ND	.42	8.58	24.82	54.75	5300H1
	Green	20	2.2	L20015-ND	.42	8.58	24.82	54.75	5300H5
	Yellow	20	2.1	L20017-ND	.42	8.58	24.82	54.75	5300H7
	Red	10	5.0	L20021-ND	.84	17.04	49.30	108.75	5302H1-5V
	Amber	10	5.0	L20023-ND	.84	17.04	49.30	108.75	5302H3-5V
	Green	20	5.0	L20025-ND	.84	17.04	49.30	108.75	5302H5-5V
	Red	2	1.8	L20031-ND	.57	11.52	33.32	73.50	5300H1LC
	Green	2	1.8	L20035-ND	.57	11.52	33.32	73.50	5300H5LC
	Yellow	2	1.9	L20037-ND	.57	11.52	33.32	73.50	5300H7LC
	Red	35	3.0	L20041-ND	.75	15.28	44.20	97.50	5308H1
	Green	20	2.5	L20045-ND	.75	15.28	44.20	97.50	5308H5
	Yellow	20	2.1	L20047-ND	.75	15.28	44.20	97.50	5308H7
11	Red/Green	10	2.2	L20048-ND	1.08	21.80	63.07	139.13	5300H1/5
12	Red	20	2.0	L20171-ND	.78	15.86	45.90	101.25	5306H1
	Amber	20	2.0	L20173-ND	.78	15.86	45.90	101.25	5306H3
	Green	20	2.2	L20175-ND	.78	15.86	45.90	101.25	5306H5
	Yellow	20	2.1	L20177-ND	.78	15.86	45.90	101.25	5306H7
13	Red	20	2.0	L20051-ND	.78	15.86	45.90	101.25	5307H1
	Green	20	2.2	L20055-ND	.78	15.86	45.90	101.25	5307H5
14	Red	20	2.0	L20061-ND	.78	15.86	45.90	101.25	5330H1
	Green	20	2.2	L20065-ND	.78	15.86	45.90	101.25	5330H5
	Yellow	20	2.2	L20067-ND	.78	15.86	45.90	101.25	5330H7
14	Red	20	2.0	L20731-ND	.78	15.86	45.90	101.25	5331H1
	Green	20	2.1	L20735-ND	.78	15.86	45.90	101.25	5331H5
	Yellow	20	2.1	L20737-ND	.78	15.86	45.90	101.25	5331H7
15	Red	20	2.0	L20251-ND	1.19	24.09	69.70	153.75	5341H1
	Green	20	2.1	L20255-ND	1.19	24.09	69.70	153.75	5341H5
	Yellow	20	2.1	L20257-ND	1.19	24.09	69.70	153.75	5341H7
16	Red	20	1.7	L20301-ND	.61	12.34	35.70	78.75	5380E1
	Red	20	2.0	L20311-ND	.61	12.34	35.70	78.75	5380H1
	Green	20	2.2	L20315-ND	.61	12.34	35.70	78.75	5380H5
	Yellow	20	2.1	L20317-ND	.61	12.34	35.70	78.75	5380H7
17	Red	20	2.0	L20161-ND	.67	13.51	39.10	86.25	5381H1
	Green	20	2.2	L20165-ND	.67	13.51	39.10	86.25	5381H5
	Yellow	20	2.1	L20167-ND	.67	13.51	39.10	86.25	5381H7
18	Red	20	1.7	L20341-ND	2.52	51.11	147.90	326.25	5640E1
	Red	20	2.0	L20351-ND	2.52	51.11	147.90	326.25	5640H1
	Green	20	2.2	L20355-ND	2.52	51.11	147.90	326.25	5640H5
	Yellow	20	2.1	L20357-ND	2.52	51.11	147.90	326.25	5640H7
19	Red	20	2.0	L20391-ND	1.39	28.20	81.60	180.00	5670H1;1
	Green	20	2.2	L20395-ND	1.39	28.20	81.60	180.00	5670H5;5
	Yellow	20	2.1	L20397-ND	1.39	28.20	81.60	180.00	5670H7;7
				T 13/4					
20	Red	20	2.0	L20491-ND	.78	15.86	45.90	101.25	5332H1
	Green	20	2.1	L20495-ND	.78	15.86	45.90	101.25	5332H5
	Yellow	20	2.1	L20497-ND	.78	15.86	45.90	101.25	5332H7
21	Red/Green	15	2.1	L20488-ND	1.94	39.36	113.90	251.25	5305H1/5
	Amber/Green	15	2.1	L205935-ND	1.94	39.36	113.90	251.25	5305H3/5
				2mm					
22	Red	10	2.2	L20081-ND	.93	18.80	54.40	120.00	5350T1
	Green	10	2.3	L20085-ND	.93	18.80	54.40	120.00	5350T5
	Yellow	10	2.2	L20087-ND	.93	18.80	54.40	120.00	5350T7
	Red	9.6	5.0	L20091-ND	1.04	21.15	61.20	135.00	5352T1-5V
	Amber	10	5.0	L20093-ND	1.04	21.15	61.20	135.00	5352T3-5V
	Green	10	5.0	L20095-ND	1.04	21.15	61.20	135.00	5352T5-5V
	Red	2	1.8	L20101-ND	1.10	22.33	64.60	142.50	5350T1LC
	Green	2	1.8	L20105-ND	1.10	22.33	64.60	142.50	5350T5LC
	Yellow	2	1.9	L20107-ND	1.10	22.33	64.60	142.50	5350T7LC
	Red	3.5	5.0	L20111-ND	1.10	22.33	64.60	142.50	5352T1-5VLC
	Amber	3.5	5.0	L20113-ND	1.10	22.33	64.60	142.50	5352T3-5VLC
	Green	3.5	5.0	L20115-ND	1.10	22.33	64.60	142.50	5352T5-5VLC

NOTE: Figures 1-10 are T1's; Figures 11-21 are T1 $^3/_4$'s

Fig. 1

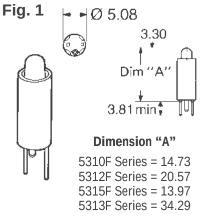


Fig. 2

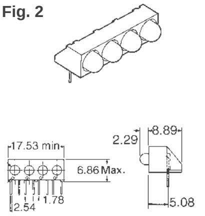


Fig. 3

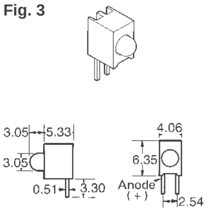
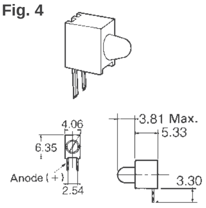


Fig. 4



Clear Lens

Fig. 5

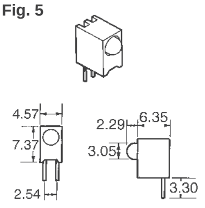


Fig. 6

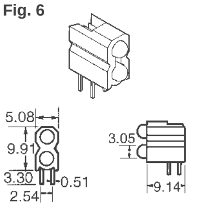
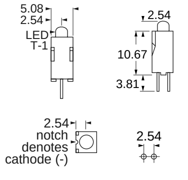


Fig. 7



"Stackable"

Fig. 8

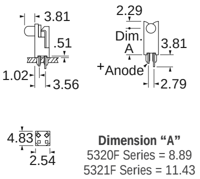


Fig. 9

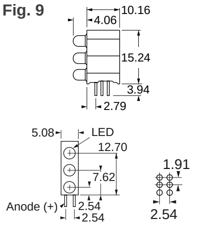


Fig. 10

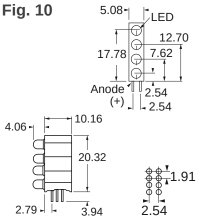
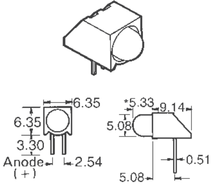


Fig. 11



* 3.3 for Part No. L20001-ND

Fig. 12

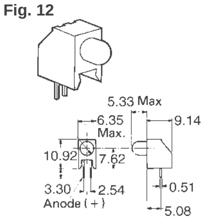


Fig. 13

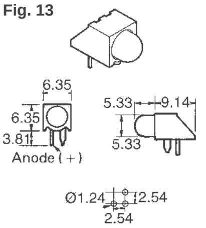


Fig. 14

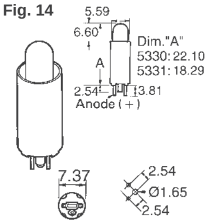


Fig. 15

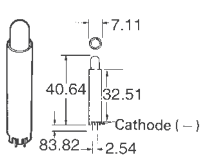


Fig. 16

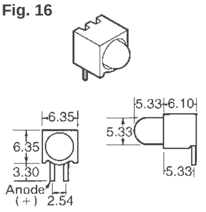


Fig. 17

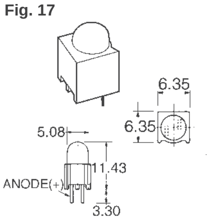


Fig. 18

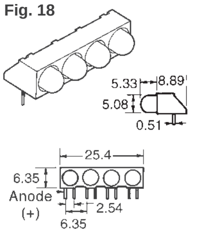


Fig. 19

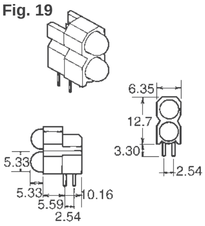


Fig. 20

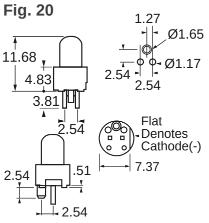
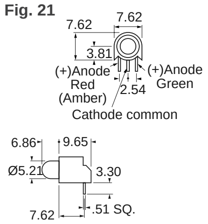


Fig. 21



CHICAGO MINIATURE LAMP, INC.
WHERE INNOVATION COMES TO LIGHT

PC Board Mounted LEDs

Fig.	Color	Rated Current (mA)	Forward Voltage Typ. (V)	Digi-Key Part No.	Pricing 1	25	100	250	Chicago Miniature Part No.
2mm									
23	Red	10	2.2	L20121-ND	1.57	31.73	91.80	202.50	5370T1
	Green	10	2.3	L20125-ND	1.57	31.73	91.80	202.50	5370T5
	Yellow	10	2.2	L20127-ND	1.57	31.73	91.80	202.50	5370T7
	Red	9.5	5.0	L20131-ND	1.71	34.66	100.30	221.25	5372T1-5V
	Amber	10	5.0	L20133-ND	1.71	34.66	100.30	221.25	5372T3-5V
	Green	10	5.0	L20135-ND	1.71	34.66	100.30	221.25	5372T5-5V
	Red	2	1.8	L20141-ND	1.74	35.25	102.00	225.00	5370T1LC
	Green	2	1.8	L20145-ND	1.74	35.25	102.00	225.00	5370T5LC
	Yellow	2	1.9	L20147-ND	1.74	35.25	102.00	225.00	5370T7LC
	Red	3.5	5.0	L20291-ND	1.74	35.25	102.00	225.00	5372T1-5VLC
	Amber	3.5	5.0	L20293-ND	1.74	35.25	102.00	225.00	5372T3-5VLC
	Green	3.5	5.0	L20295-ND	1.74	35.25	102.00	225.00	5372T5-5VLC
Rectangular									
24	Red	20	2.1	L20541-ND	1.31	26.44	76.50	168.75	5636D1
	Green	20	2.1	L20545-ND	1.31	26.44	76.50	168.75	5636D5
	Yellow	20	2.2	L20547-ND	1.31	26.44	76.50	168.75	5636D7
25	Red	10	2.1	L20571-ND	6.26	126.90	367.20	810.00	5638D1

Fig.	Color	Rated Current (mA)	Forward Voltage Typ. (V)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 750	Chicago Miniature Part No.
PC Board Mount on Tape and Reel										
26	Red	10	2.0	L60011CT-ND	1.09	9.30	77.50	L60011TR-ND	348.75	5655F1
	Green	20	2.2	L60015CT-ND	1.09	9.30	77.50	L60015TR-ND	348.75	5655F5

NOTE: Figures 22-23 are 2mm Diameter LED's; Figure 26 is Tape & Reel.

Fig. 22

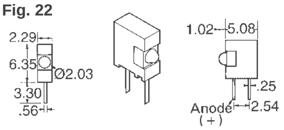


Fig. 23

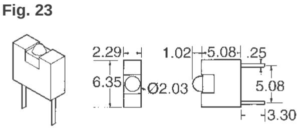


Fig. 24

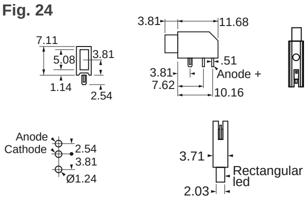


Fig. 25

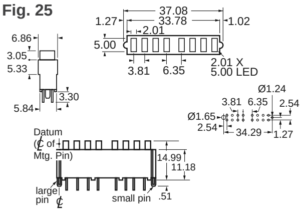
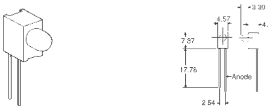


Fig. 26



Panel Mount LED Assemblies

Fig.	Color	Rated Current (mA)	Forward Voltage Typ. (V)	Digi-Key Part No.	Pricing 1	25	100	250	Chicago Miniature Part No.
1	Red	20	2.0	L10001-ND	1.34	27.14	78.54	173.25	5100H1
1	Green	20	2.2	L10005-ND	1.34	27.14	78.54	173.25	5100H5
1	Yellow	20	2.1	L10007-ND	1.34	27.14	78.54	173.25	5100H7
1	Red	2	1.8	L10011-ND	1.70	34.37	99.45	219.38	5100H1LC
1	Yellow	2	1.9	L10017-ND	1.70	34.37	99.45	219.38	5100H7LC
1	Red	10	5.0	L10021-ND	1.86	37.60	108.80	240.00	5102H1-5V
1	Amber	10	5.0	L10023-ND	1.86	37.60	108.80	240.00	5102H3-5V
1	Green	12	5.0	L10025-ND	1.86	37.60	108.80	240.00	5102H5-5V
1	Red/Green	20	2.2	L10008-ND	2.17	43.89	126.99	280.13	5100H1/5
2	Red	20	2.0	L10031-ND	1.22	24.68	71.40	157.50	5101H1
2	Green	20	2.2	L10035-ND	1.22	24.68	71.40	157.50	5101H5
2	Yellow	20	2.1	L10037-ND	1.22	24.68	71.40	157.50	5101H7
3	Red	10	2.0	L10041-ND	1.52	30.79	89.08	196.50	5110F1
3	Green	20	2.2	L10045-ND	1.52	30.79	89.08	196.50	5110F5
3	Yellow	20	2.1	L10047-ND	1.52	30.79	89.08	196.50	5110F7
3	Red	2	1.8	L10051-ND	2.00	40.54	117.30	258.75	5110F1LC
3	Yellow	2	1.9	L10057-ND	2.00	40.54	117.30	258.75	5110F7LC
4	Red	10	2.0	L10061-ND	.84	17.04	49.30	108.75	5111F1
4	Green	20	2.2	L10065-ND	.84	17.04	49.30	108.75	5111F5
4	Yellow	20	2.1	L10067-ND	.84	17.04	49.30	108.75	5111F7
5	Red	10	2.0	L10091-ND	2.06	41.71	120.70	266.25	5210F1
5	Green	20	2.2	L10095-ND	2.06	41.71	120.70	266.25	5210F5
5	Yellow	20	2.1	L10097-ND	2.06	41.71	120.70	266.25	5210F7
6	Red	20	2.0	L10071-ND	2.58	52.29	151.30	333.75	5400A1
6	Green	20	2.1	L10075-ND	2.58	52.29	151.30	333.75	5400A5
6	Yellow	20	2.1	L10077-ND	2.58	52.29	151.30	333.75	5400A7
7	Red	10	2.0	L50381-ND	2.76	55.81	161.50	356.25	3990A1
7	Amber	10	2.0	L50383-ND	2.61	52.88	153.00	337.50	3990A3
7	Green	20	2.2	L50385-ND	2.76	55.81	161.50	356.25	3990A5
7	Yellow	20	2.1	L50387-ND	2.76	55.81	161.50	356.25	3990A7

Fig.	Dia. (mm)	Volts	Termination	Digi-Key Part No.	Pricing 1	25	100	Mfg. Part No.
8	12.70	6	Wire	L5014☐-ND	3.65	74.03	214.20	1091M☐-6V
8	12.70	12	Wire	L5015☐-ND	3.65	74.03	214.20	1091M☐-12V
8	12.70	24	Wire	L5016☐-ND	3.65	74.03	214.20	1091M☐-24V
8	12.70	12	4.75mm Terminal	L5017☐-ND	3.89	78.73	227.80	1091QM☐-12V
8	12.70	24	4.75mm Terminal	L5018☐-ND	3.89	78.73	227.80	1091QM☐-24V
9	7.87	6	Wire	L5025☐-ND	3.68	74.61	215.90	2191L☐-6V
9	7.87	12	Wire	L5026☐-ND	3.68	74.61	215.90	2191L☐-12V
9	7.87	24	Wire	L5027☐-ND	3.68	74.61	215.90	2191L☐-24V
9	7.87	12	4.75mm Terminal	L5028☐-ND	3.89	78.73	227.80	2191QL☐-12V
9	7.87	24	4.75mm Terminal	L5029☐-ND	3.89	78.73	227.80	2191QL☐-24V
10	7.87	6	Wire	L5030☐-ND	3.68	74.61	215.90	2191U☐-6V
10	7.87	12	Wire	L5031☐-ND	3.68	74.61	215.90	2191U☐-12V
10	7.87	24	Wire	L5032☐-ND	3.68	74.61	215.90	2191U☐-24V
10	7.87	12	4.75mm Terminal	L5033☐-ND	3.89	78.73	227.80	2191QU☐-12V
10	7.87	24	4.75mm Terminal	L5034☐-ND	3.89	78.73	227.80	2191QU☐-24V

For ☐ in Digi-Key Part No. choose one of the following: **1**=Red; **5**=Green; **7**=Yellow

Fig. 1

Mounting: Will snap-fit in 6.32/6.45mm dia. hole in panels .79/1.57mm thick. **Wire Leads:** 24 AWG, 152.40mm long. **Housing:** Black nylon. **Anode:** (+): Red lead. **Anode for L1008-ND:** (+): Yellow lead for red light, blue lead for green light.

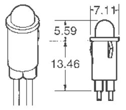


Fig. 2

Mounting: Will snap-fit in 6.32/6.45mm dia. hole in panels .79/1.57mm thick. **Terminals:** .51mm Sq. **Housing:** Black nylon.

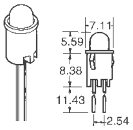


Fig. 3

Mounting: Will snap-fit in 3.94/4.01mm dia. hole in panels .79/1.57mm thick. **Wire Leads:** 24 AWG, 152.40mm long, stripped 4.57/8.13mm. **Anode** (+): Red lead. **Housing:** Black nylon.

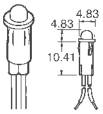


Fig. 4

Mounting: Will snap-fit in 3.94/4.01mm dia. hole in panels .79/1.57mm thick. **Terminals:** .51mm Sq. **Housing:** Black nylon.

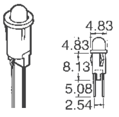


Fig. 5

Mounting: Will snap-fit into 4.75/4.88mm diameter hole in panel .51/2.46mm thick. **Wire Leads:** 26 AWG, 111.76/121.92mm long stripped. **Anode** (+): Red lead. **Lens:** Polycarbonate. **Housing:** Polycarbonate.

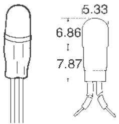


Fig. 6

Mounting: Will snap-fit into 7.92/8.05mm dia. hole in panel .51/2.49mm thick. **Wire Leads:** 24 AWG, 111.76/121.92mm long, stripped: 10.92/14.48mm. **Anode** (+): Red lead. **Lens:** Polycarbonate. **Housing:** Natural nylon.

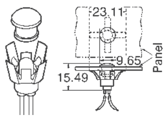


Fig. 7

Mounting: Will snap-fit into 5.51/5.61mm dia. hole in panels .79/1.57mm thick. **Wire Leads:** 26 AWG, 111.76/121.92mm long stripped. **Anode** (+): Red lead. **Lens:** Polycarbonate. **Housing:** White nylon.

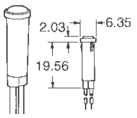


Fig. 8

Wire Leads: 22 AWG, 111.76 /121.92mm long, stripped: 10.92/14.48mm. **Anode** (+) Red Lead or Quick Connect 4.75mm Term Anode (+) marked above terminal

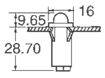


Fig. 9

Wire Leads: 22 AWG, 111.76 /121.92mm long, stripped: 10.92/14.48mm. **Anode** (+) Red Lead or Quick Connect 4.75mm Term Anode (+) marked above terminal

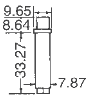
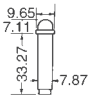
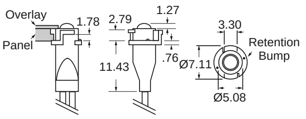


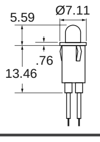
Fig. 10

Wire Leads: 22 AWG, 111.76 /121.92mm long, stripped: 10.92/14.48mm. **Anode** (+) Red Lead or Quick Connect 4.75mm Term Anode (+) marked above terminal



Flashers





Series 5100H Flasher

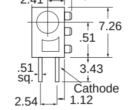
Features: • Built-in flashing circuit • Flashing rate: 1.5 - 2.5 Hz • No external resistor required **Mounting:** Will snap fit in 6.32/6.45mm dia. hole in panels .79/1.57mm. **Wire Leads:** No. 24 AWG, 152.40mm insulated, bonded strands, stripped 12.70mm. **Anode (+):** Red Lead **Housing:** Black Nylon

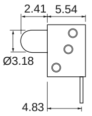
Color	I_V mcd	Current mA	V_F (V)	Digi-Key Part No.	Pricing 1	25	100	Mfg. Part No.
Red	12.5	20	3.5	L20691-ND	2.70	54.64	158.10	5100H1FL
Green	8.0	20	3.5	L20695-ND	2.70	54.64	158.10	5100H5FL
Yellow	12.5	20	3.5	L20697-ND	2.70	54.64	158.10	5100H7FL

T1 Modular LEDs

FEATURES:

• Mount up to 12 LEDs in one operation • Unitized vibration resistant package • Black housing for high contrast background • Wide viewing angle • Vertical or horizontal positioning • Interlocking construction • Hi brite diffused LEDs • Speeds mounting for increased productivity and reduced cost





Mount from 1 to 12 circuit board indicators, as a single unit. Unique snap-together feature.

LED/Lens	Forward Voltage Typ.	If=(mA)	Min. V_R	Max. I_F (mA)	Typ. I_O (mcd)	View Angle	Digi-Key Part No.	Pricing 1	10	C.M. Part No.
Red/Clear	2.2	20	5.0	30	60.0	40°	CMC01R-ND	.46	3.70	CMC01R
Yellow/Clear	2.2	20	5.0	20	60.0	40°	CMC01Y-ND	.46	3.70	CMC01Y
Green/Clear	2.2	20	5.0	30	60.0	40°	CMC01G-ND	.46	3.70	CMC01G
Red/Diff.	2.0	20	5.0	30	20.0	90°	CMW01R-ND	.54	4.32	CMW01R
Yellow/Diff.	2.1	20	5.0	30	12.5	90°	CMW01Y-ND	.54	4.32	CMW01Y
Green/Diff.	2.2	20	5.0	30	12.5	90°	CMW01G-ND	.54	4.32	CMW01G

Surface Mount LEDs

Fig.	Wave-length	Color	Lens Color	TYP mcd	Forward Voltage TYP	@ mA	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Tape & Reel Pricing*	Chicago Miniature Part No.
CMD11-21 Series												
1	640	Red	Clear	6	2.0	20	L62001CT-ND	.37	3.15	26.25	315.00/2000	CMD11-21VRC/TR8
	570	Green	Clear	7.5	2.1	20	L62005CT-ND	.37	3.15	26.25	315.00/2000	CMD11-21VGC/TR8
	585	Yellow	Clear	6	2.0	20	L62007CT-ND	.37	3.15	26.25	315.00/2000	CMD11-21VYC/TR8
	660	Super Red	Clear	17	1.7	20	L62011CT-ND	.37	3.15	26.25	315.00/2000	CMD11-21SRC/TR8
CMD12-21 Series												
2	640	Red	Clear	5	2.0	20	L62101CT-ND	.39	3.30	27.50	330.00/2000	CMD12-21VRC/TR8
	570	Green	Clear	8.8	2.1	20	L62105CT-ND	.39	3.30	27.50	330.00/2000	CMD12-21VGC/TR8
	585	Yellow	Clear	3	2.0	20	L62107CT-ND	.39	3.30	27.50	330.00/2000	CMD12-21VYC/TR8
	660	Super Red	Clear	12.4	1.7	20	L62111CT-ND	.50	4.26	35.50	426.00/2000	CMD12-21SRC/TR8
	570	Ultra Green	Clear	14.9	2.1	20	L62115CT-ND	.50	4.26	35.50	426.00/2000	CMD12-21UGC/TR8
CMD15-21 Series												
3	640	Red	Clear	6	2.0	20	L62201CT-ND	.35	3.00	25.00	300.00/2000	CMD15-21VRC/TR8
	570	Green	Clear	10	2.1	20	L62205CT-ND	.33	2.82	23.50	282.00/2000	CMD15-21VGC/TR8
	430	Ultra Blue	Clear	45	4.9	20	L62206CT-ND	3.43	29.40	245.00	2940.00/2000	CMD15-21UBC/TR8
	581	Yellow	Clear	6	2.0	20	L62207CT-ND	.37	3.18	26.50	318.00/2000	CMD15-21VYC/TR8
	660	Super Red	Clear	15	1.7	20	L62211CT-ND	.44	3.81	31.75	381.00/2000	CMD15-21SRC/TR8
	565	Ultra Green	Clear	12	2.1	20	L62215CT-ND	.41	3.48	29.00	348.00/2000	CMD15-21UGC/TR8
	640	Red	Diff	4	2.0	20	L62301CT-ND	.29	2.52	21.00	252.00/2000	CMD15-21VRD/TR8
	570	Green	Diff	5.6	2.1	20	L62305CT-ND	.29	2.52	21.00	252.00/2000	CMD15-21VGD/TR8
	585	Yellow	Diff	4	2.0	20	L62307CT-ND	.29	2.52	21.00	252.00/2000	CMD15-21VYD/TR8
CMD15-22 Series												
4	640/570	Red/Grn.	Clear	6.0/10.0	2.0/2.1	20	L622015CT-ND	.68	5.82	48.50	582.00/2000	CMD15-22VRVGC/TR8
	660/565	Red/Grn.	Clear	15.0/12.0	1.7/2.1	20	L6221115CT-ND	.81	6.93	57.75	693.00/2000	CMD15-22RUGC/TR8
CMD17-21 Series												
5	640	Red	Clear	13	2.0	20	L62401CT-ND	.29	2.52	21.00	378.00/3000	CMD17-21VRC/TR8
	570	Green	Clear	35	2.1	20	L62405CT-ND	.29	2.52	21.00	378.00/3000	CMD17-21VGC/TR8
	585	Yellow	Clear	12	2.0	20	L62407CT-ND	.29	2.52	21.00	378.00/3000	CMD17-21VYC/TR8
	660	Super Red	Clear	45	1.7	20	L62411CT-ND	.50	4.29	35.75	643.50/3000	CMD17-21SRC/TR8
	570	Ultra Green	Clear	50	2.1	20	L62415CT-ND	.33	2.82	23.50	423.00/3000	CMD17-21UGC/TR8
	640	Red	Diff	3	2.0	20	L62501CT-ND	.33	2.82	23.50	423.00/3000	CMD17-21VRD/TR8
	570	Green	Diff	5	2.1	20	L62505CT-ND	.32	2.76	23.00	414.00/3000	CMD17-21VGD/TR8
	585	Yellow	Diff	4	2.0	20	L62507CT-ND	.37	3.18	26.50	477.00/3000	CMD17-21VYD/TR8
CMD28-21 Series												
6	640	Red	Clear	3	2.0	20	L62601CT-ND	.39	3.30	27.50	330.00/2000	CMD28-21VRC/TR8
	570	Green	Clear	5.5	2.1	20	L62605CT-ND	.39	3.30	27.50	330.00/2000	CMD28-21VGC/TR8
	660	Super Red	Clear	17	1.7	20	L62611CT-ND	.45	3.87	32.25	387.00/2000	CMD28-21SRC/TR8
	640	Red	Clear	0.16	2.0	1	L62701CT-ND	.39	3.30	27.50	330.00/2000	CMD28-21VRC/TR8/T1
	570	Green	Clear	0.16	2.1	1	L62705CT-ND	.39	3.30	27.50	330.00/2000	CMD28-21VGC/TR8/T1
	660	Super Red	Clear	1.6	1.7	1	L62711CT-ND	.53	4.50	37.50	450.00/2000	CMD28-21SRC/TR8/T1
CMD67-21 Series												
7	640	Red	Clear	10	2.0	20	L62801CT-ND	.55	4.71	39.25	471.00/2000	CMD67-21VRC/TR8
	570	Green	Clear	25	2.1	20	L62805CT-ND	.43	3.66	30.50	366.00/2000	CMD67-21VGC/TR8
	585	Yellow	Clear	10	2.0	20	L62807CT-ND	.48	4.14	34.50	414.00/2000	CMD67-21VYC/TR8
	660	Super Red	Clear	40	1.7	20	L62811CT-ND	.62	5.31	44.25	531.00/2000	CMD67-21SRC/TR8
	660	Ultra Red	Clear	62	1.7	20	L628111CT-ND†	.89	7.62	63.50	762.00/2000	CMD67-21URC/TR8
CMD67-22 Series												
8	640/570	Red/Grn.	Clear	10.0/25.0	2.0/2.1	20	L628015CT-ND	1.14	9.78	81.50	978.00/2000	CMD67-22VRVGC/TR8
	660/565	Red/Grn.	Clear	40.0/25.0	1.7/2.1	20	L6281115CT-ND	1.14	9.78	81.50	978.00/2000	CMD67-22SRUGC/TR8
CMD91-21/TR7 Series												
9	640	Red	Clear	80	2.0	20	L62901CT-ND	.42	3.63	30.25	181.50/1000	CMD91-21VRC/TR7
	565	Green	Clear	50	2.1	20	L62905CT-ND	.42	3.63	30.25	181.50/1000	CMD91-21VGC/TR7
	585	Yellow	Clear	30	2.0	20	L62907CT-ND	.42	3.63	30.25	181.50/1000	CMD91-21VYC/TR7
	660	Super Red	Clear	170	1.7	20	L62911CT-ND	.49	4.17	34.75	208.50/1000	CMD91-21SRC/TR7
CMD91-21/TR9 Series												
10	640	Red	Clear	80	2.0	20	L63001CT-ND	.42	3.63	30.25	181.50/1000	CMD91-21VRC/TR9
	565	Green	Clear	50	2.1	20	L63005CT-ND	.42	3.63	30.25	181.50/1000	CMD91-21VGC/TR9
	585	Yellow	Clear	30	2.0	20	L63007CT-ND	.48	4.11	34.25	205.50/1000	CMD91-21VYC/TR9
	660	Super Red	Clear	170	1.7	20	L63011CT-ND	.49	4.17	34.75	208.50/1000	CMD91-21SRC/TR9
CMD91-21/TR10 Series												
11	640	Red	Clear	80	2.0	20	L63101CT-ND	.42	3.63	30.25	181.50/1000	CMD91-21VRC/TR10
	565	Green	Clear	50	2.1	20	L63105CT-ND	.42	3.63	30.25	181.50/1000	CMD91-21VGC/TR10
	585	Yellow	Clear	30	2.0	20	L63107CT-ND	.42	3.63	30.25	181.50/1000	CMD91-21VYC/TR10
	660	Super Red	Clear	170	1.7	20	L63111CT-ND	.49	4.17	34.75	208.50/1000	CMD91-21SRC/TR10
CMD93-21/F8 Series												
12	640	Red	Clear	12	2.0	20	L63201CT-ND	.55	4.68	39.00	468.00/2000	CMD93-21VRC/TR8
	570	Green	Clear	25	2.1	20	L63205CT-ND	.49	4.17	34.75	417.00/2000	CMD93-21VGC/TR8

*For Tape & Reel Part No., change CT to TR.

Fig. 1

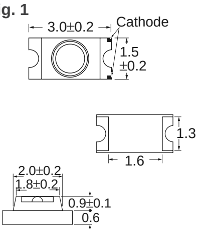


Fig. 2

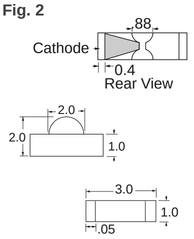


Fig. 3 — 1206

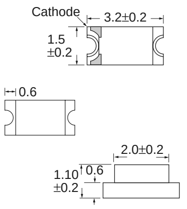


Fig. 4

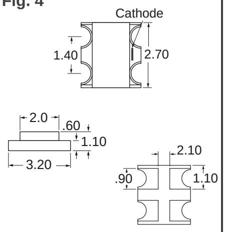


Fig. 5 — 0805

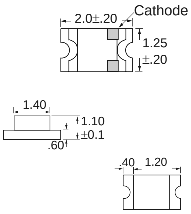


Fig. 6

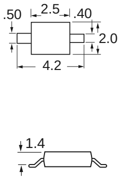
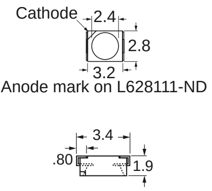


Fig. 7



†Anode mark on L628111-ND

Fig. 8

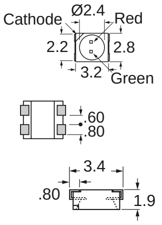


Fig. 9

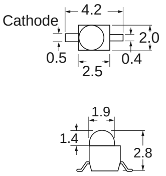


Fig. 10

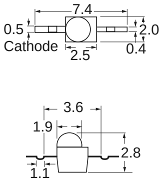


Fig. 11

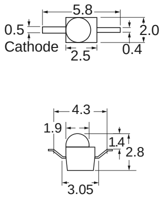


Fig. 12

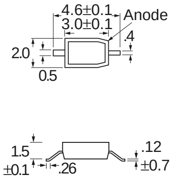


Fig.	Wave-length	Color	Lens Color	TYP mcd	Forward Voltage TYP	@ mA	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Tape & Reel Pricing*	Chicago Miniature Part No.
CMD93-22/F8 Series												
13	660/570	Red/Grn.	Clear	40.0/20.0	1.7/2.1	20	L632115CT-ND	1.03	8.82	73.50	441.00/1000	CMD93-22SRVGC/TR8
CMD95-21/TR7 Series												
14	640	Red	Clear	25	2.0	20	L63301CT-ND	.42	3.63	30.25	181.50/1000	CMD95-21VRC/TR7
	570	Green	Clear	19.5	2.1	20	L63305CT-ND	.44	3.81	31.75	190.50/1000	CMD95-21VGC/TR7
	585	Yellow	Clear	25	2.0	20	L63307CT-ND	.44	3.81	31.75	190.50/1000	CMD95-21VYC/TR7
	660	Super Red	Clear	100	1.7	20	L63311CT-ND	.49	4.17	34.75	208.50/1000	CMD95-21SRC/TR7
CMD95-21/TR9 Series												
15	640	Red	Clear	25	2.0	20	L63401CT-ND	.42	3.63	30.25	181.50/1000	CMD95-21VRC/TR9
	570	Green	Clear	19.5	2.1	20	L63405CT-ND	.44	3.81	31.75	190.50/1000	CMD95-21VGC/TR9
CMD95-21/TR10 Series												
16	640	Red	Clear	25	2.0	20	L63501CT-ND	.47	3.99	33.25	199.50/1000	CMD95-21VRC/TR10
	570	Green	Clear	19.5	2.1	20	L63505CT-ND	.44	3.81	31.75	190.50/1000	CMD95-21VGC/TR10
	585	Yellow	Clear	25	2.0	20	L63507CT-ND	.49	4.17	34.75	208.50/1000	CMD95-21VYC/TR10
	660	Super Red	Clear	100	1.7	20	L63511CT-ND	.49	4.17	34.75	208.50/1000	CMD95-21SRC/TR10

* For Tape & Reel Part No., change CT to TR.

Fig. 13

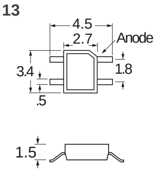


Fig. 14

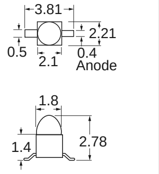


Fig. 15

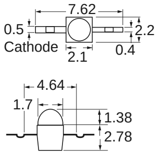
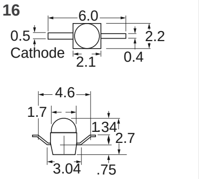
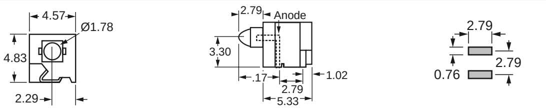


Fig. 16



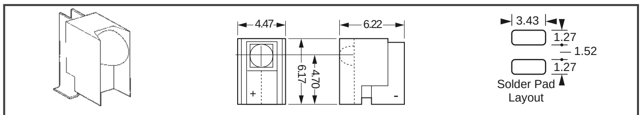
CHICAGO MINIATURE LAMP, INC.
WHERE INNOVATION COMES TO LIGHT

Sub-Miniature Surface Mount LED Assemblies



Color	Typ. mcd	Forward Voltage Typ. (V)	mA	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel 750	Chicago Miniature Model No.
Red	5.0	2.2	10	L60041CT-ND	1.37	11.70	97.50	L60041TR-ND	438.75	6255T1
Green	4.0	2.3	10	L60045CT-ND	1.37	11.70	97.50	L60045TR-ND	438.75	6255T5
Yellow	3.8	2.2	10	L60047CT-ND	1.37	11.70	97.50	L60047TR-ND	438.75	6255T7
Red	5.0	5.0	9.6	L60061CT-ND	1.51	12.90	107.50	L60061TR-ND	483.75	6255T1-5V
Amber	5.0	5.0	10	L60063CT-ND	1.51	12.90	107.50	L60063TR-ND	483.75	6255T3-5V
Green	5.0	5.0	10	L60065CT-ND	1.51	12.90	107.50	L60065TR-ND	483.75	6255T5-5V
Red	0.5	1.8	2.0	L60051CT-ND	1.58	13.50	112.50	L60051TR-ND	506.25	6255T1LC
Green	1.2	1.8	2.0	L60055CT-ND	1.58	13.50	112.50	L60055TR-ND	506.25	6255T5LC
Yellow	0.5	1.9	2.0	L60057CT-ND	1.58	13.50	112.50	L60057TR-ND	506.25	6255G7LC
Red	2.0	5.0	3.5	L60071CT-ND	1.58	13.50	112.50	L60071TR-ND	506.25	6255T1-5VLC
Amber	4.0	5.0	3.5	L60073CT-ND	2.10	18.00	150.00	L60073TR-ND	675.00	6255T3-5VLC
Green	2.0	5.0	3.5	L60075CT-ND	1.58	13.50	112.50	L60075TR-ND	506.25	6255T5-5VLC

Right Angle Surface Mount LEDs



Color	Wave-length	Rated Current (mA)	Forward Voltage Typ. (V)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Tape & Reel Pricing* 1,000	Chicago Miniature Part No.
Red	—	10	2.2	L60001CT-ND	1.44	12.30	102.50	615.00	6200T1
Amber	—	10	2.0	L60003CT-ND	1.44	12.30	102.50	615.00	6200T3
Green	—	10	2.3	L60005CT-ND	1.44	12.30	102.50	615.00	6200T5
Yellow	—	10	2.2	L60007CT-ND	1.44	12.30	102.50	615.00	6200T7
Red	635	2	1.8	L60101CT-ND	1.65	14.10	117.50	705.00	6200T1LC
Green	565	2	1.8	L60105CT-ND	1.65	14.10	117.50	705.00	6200T5LC
Yellow	583	2	1.9	L60107CT-ND	1.65	14.10	117.50	705.00	6200T7LC
Red	635	9.6	5.0	L60201CT-ND	1.75	15.00	125.00	750.00	6202T1-5V
Amber	583	10	5.0	L60203CT-ND	1.75	15.00	125.00	750.00	6202T3-5V
Green	565	10	5.0	L60205CT-ND	1.75	15.00	125.00	750.00	6202T5-5V
Red	635	3.5	5.0	L60301CT-ND	1.75	15.00	125.00	750.00	6202T1-5VLC

Optical Light Pipes for SMD-Style LED

Fig. 1

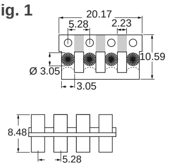


Fig. 2

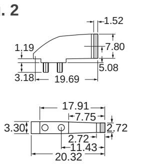


Fig. 3

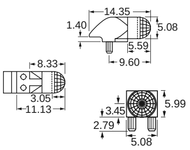
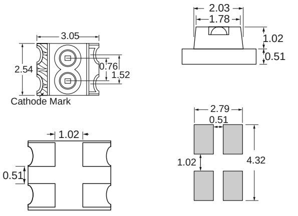


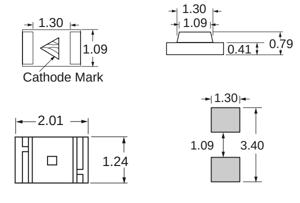
Fig.	Color	Digi-Key Part No.	Pricing 1	25	100	250	500	C.M.L. Part No.
1	Clear	L71200-ND	2.32	47.06	136.17	300.38	576.72	7640D2
2	Clear	L71300-ND	.55	11.16	32.30	71.25	136.80	7610D2
3	Clear	L71400-ND	1.33	27.03	78.20	172.50	331.20	7511G2

Surface Mount LEDs

7011X Series



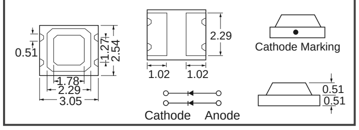
7012X Series



Source (Dice)	Typ. mcd	Forward Voltage Typ. (V)	mA	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing	Chicago Miniature Model No.
Red/Grn	17.0	1.7	20	L61015CT-ND	1.02	8.70	72.50	L61015TR-ND	1087.50/2500	7011X1/5
Grn/Yel	7.5	2.1	20	L61057CT-ND	1.02	8.70	72.50	L61057TR-ND	1087.50/2500	7011X5/7
Red	9.0	1.7	25	L61101CT-ND	.49	4.20	35.00	L61101TR-ND	840.00/4000	7012X1
Green	6.8	2.1	25	L61105CT-ND	.49	4.20	35.00	L61105TR-ND	840.00/4000	7012X5
Yellow	6.8	2.1	25	L61107CT-ND	.49	4.20	35.00	L61107TR-ND	840.00/4000	7012X7

Dual Chip-Surface Mount LED for Use with Light Pipes

FEATURES:
• Compatible with automated placement equipment • Compatible with infrared and vapor phase reflow soldering process • Low power consumption • View angle 100° • Lens color Clear.



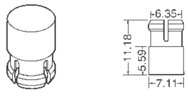
Source Color	Typ. mcd	Forward Voltage Typ. (V)	mA	Digi-Key Part No.	Cut Tape Pricing 1	10
Yellow	14.0	2.1	20	CMD11304YCT-ND	1.25	11.08

* For Tape & Reel Part No., change CT to TR.

LED Lenses

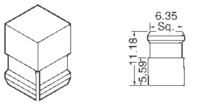
These LED lenses provide quick, economical panel mounting as well as ESD protection. Molded in Fresnel rings provide a wide viewing angle.

Fig. 1



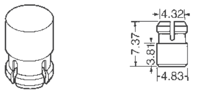
6.35mm Dia. for T-1¾ LEDs

Fig. 2



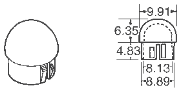
6.35mm Dia. for T-1¾ LEDs

Fig. 3



4.37mm Dia. for T-1 LEDs

Fig. 4



9.13mm Dia. for T-13/4 LEDs

Fig.	Digi-Key Part No.	Pricing 1	25	100	250	Mfg. Part No.
1	L3000☐-ND	.35	7.05	20.40	45.00	431 ☐
2	L3001☐-ND	.44	8.81	25.50	56.25	432 ☐
3	L3002☐-ND	.35	7.05	20.40	45.00	433 ☐
4	L3003☐-ND	.44	8.81	25.50	56.25	434 ☐

For ☐ in Digi-Key Part No., choose one of the following: **1**=Red; **2**=Clear; **3**=Amber; **5**=Green; **6**=Blue; **7**=Yellow

CHICAGO MINIATURE LAMP, INC.
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PC Board Mount T-1 LEDs

Fig. 1

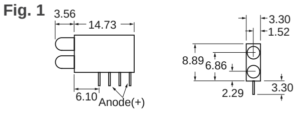


Fig. 2

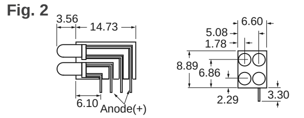
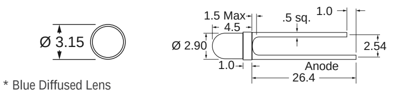


Fig.	Color	Typ. mcd	Forward Voltage mA	Forward Voltage Typ. (V)	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 100	Chicago Miniature Model No.
1	Red	10.0	10	2.2	L206011-ND	1.94	1.58	1.14	5682F1;1
	Green	8.5	10	2.3	L206055-ND	1.94	1.58	1.14	5682F5;5
	Yellow	10.0	10	2.2	L206077-ND	1.94	1.58	1.14	5682F7;7
2	Red	10.0	10	2.2	L206111-ND	3.60	2.92	2.11	5684F1;1;1;1
	Green	8.5	10	2.3	L206555-ND	3.60	2.92	2.11	5684F5;5;5;5
	Yellow	10.0	10	2.2	L206777-ND	3.60	2.92	2.11	5684F7;7;7;7

High Brightness LEDs

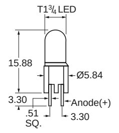


* Blue Diffused Lens

Dia. (mm)	Color	Wave-length (nm)	Vf Typ (V)	If Typ (mA)	Iv Typ (mcd)	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Chicago Miniature Part No.
3	Blue	430	5	20	100	L14006-ND*	1.43	1.30	1.04	CMD264-UBD

Circuit Board Indicator

Super Bright

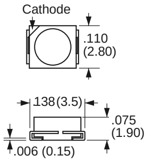


Color	Typ. mcd	Forward Volt mA	Forward Volt Typ. (V)	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 100	Chicago Mini. Model No.
Super Bright								
Red	30.0	20	2.0	L20651-ND	.90	.73	.53	5340H1
Green	30.0	20	2.2	L20655-ND	.90	.73	.53	5340H5
Yellow	25.0	20	2.2	L20657-ND	.90	.73	.53	5340H7
Red	2.0	2	1.8	L20661-ND	.99	.80	.58	5340H1LC
Green	2.5	2	1.8	L20665-ND	.99	.80	.58	5340H5LC
Yellow	2.0	2	1.9	L20667-ND	.99	.80	.58	5340H7LC

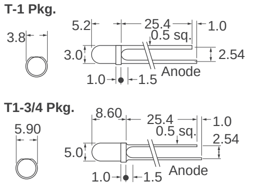
Bright•White™ LEDs

- Peak Forward Current:
  Surface Mount: 100mA
  Through-Hole: 80mA
- Continuous Forward Current:
  Surface Mount: 30mA
  Through-Hole: 25mA
- Emitted Color: White
- Lens Color: Water Clear

SMD Pkg.



T-1 Pkg.

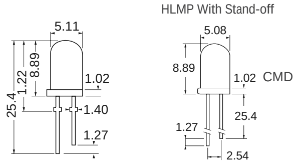


Pkg. Type	Vt Typ.	mcd Typ.	If (mA) Typ.	View Angle	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	T & R* Pricing 2,000	Chicago Miniature Part No.
SMD	3.6	150	20	120°	CMD67-21UWCCT-ND†	3.00	2.78	2.49	1875.00/M	CMD67-21UWC/TR8
T-1	3.70	1000	20	20°	CMD204UWC-ND	3.00	2.78	2.49	—	CMD204UWC
T1-3/4	3.75	2300	20	20°	CMD333UWC-ND	3.00	2.78	2.49	—	CMD333UWC

* For Tape & Reel part number, change CT-ND to TR-ND   † Cut Tape Price

LEDs

T-1 ³/₄ UltraBright



FEATURES: • Min. 80 mcd. • Pale tint avoids mix problems. • With or without stand-off.

Lens Color	Source Color	PD (mW)	Min. Iv mcd	Max. VF (V)	Typ. Ip (nm)	View Angle	Digi-Key Part No.	Pricing 1	Pricing 10	Pricing 100	Chicago Miniature Part No.
Clear †	Hi. Eff. Red	135	80	2.2	635	24°	HLMP3750A-ND	.20	1.62	14.65	HLMP-3750A
Clear	Hi. Eff. Red	135	80	2.2	635	24°	CMD3750-ND	.17	1.34	12.18	CMD3750
Clear †	Hi. Eff. Green	135	80	2.2	565	24°	HLMP3950A-ND	.23	1.86	16.82	HLMP-3950A
Clear	Hi. Eff. Green	135	80	2.2	565	24°	CMD3450-ND	.18	1.46	13.20	CMD3450
Clear †	Yellow	85	80	2.2	585	24°	HLMP3850A-ND	.23	1.86	16.82	HLMP-3850A
Clear	Yellow	85	80	2.2	585	24°	CMD3350-ND	.17	1.34	12.18	CMD3350

† With Stand-off

Panasonic

Designer LEDs

Fig. 1

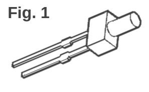


Fig. 2

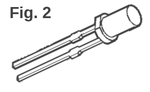


Fig. 3

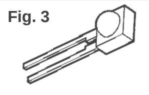


Fig. 4

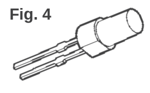


Fig. 5

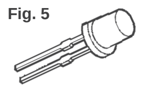


Fig. 6

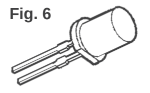


Fig. 7

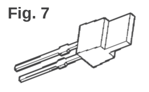


Fig. 8

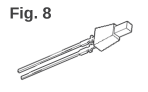


Fig. 9

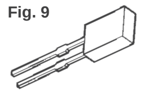


Fig. 10

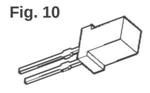
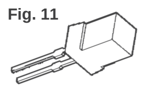


Fig. 11



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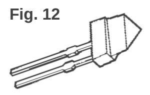


Fig. 13

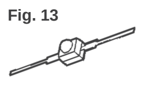


Fig. 14

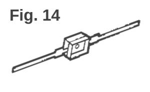


Fig.	Lens Size	Color	Electro-Optical Characteristics (Ta=25°C) PD (mW)	IF (mA)	VR (V)	IO (mcd)	Ip (nm)	Dimensions (mm) Lens Height	Lead Length	Lead Spacing	Digi-Key Part No.	Price Each 10	200	1,000	Panasonic Part No.
1	Ø2.0	Red Diffused	70	20	4	1.0	700	8.0	14, 15.5	2.54	P424-ND	.22	.18	.13	LN222RP
	Ø2.0	Green Diffused	90	20	4	1.0	565	8.0	14, 15.5	2.54	P425-ND	.23	.18	.14	LN322GP
	Ø2.0	Amber Diffused	90	20	4	2.5	590	8.0	14, 15.5	2.54	P426-ND	.28	.23	.17	LN422YP
2	Ø2.8	†Red Clear	70	25	4	0.6	700	5.5	15.5, 17.0	2.54	P376-ND	.22	.18	.13	LN263CPP
	Ø2.8	Green Clear	90	30	4	0.8	565	5.5	15.5, 17.0	2.54	P377-ND	.23	.18	.14	LN363GCPP
	Ø2.8	Amber Clear	90	30	4	0.8	590	5.5	15.5, 17.0	2.54	P378-ND	.28	.23	.17	LN463YCPP
	Ø2.8	Orange Clear	90	30	3	1.0	630	5.5	15.5, 17.0	2.54	P379-ND	.28	.23	.17	LN863RCPP
3	Ø3.5	Red Diffused	70	25	4	0.7	700	2.3	12.5, 12.5	2.54	P441-ND	.31	.25	.19	LN25RP
	Ø3.5	Green Diffused	90	30	4	1.2	565	2.3	12.5, 12.5	2.54	P442-ND	.40	.32	.24	LN35GP
	Ø3.5	Amber Diffused	90	30	4	0.8	590	2.3	12.5, 12.5	2.54	P443-ND	.40	.32	.24	LN45YP
	Ø3.5	Orange Diffused	90	30	3	1.5	630	2.3	12.5, 12.5	2.54	P444-ND	.40	.32	.24	LN85RP
4	Ø3.7	Red Diffused	70	25	4	1.0	700	8.65	13.0, 14.5	2.54	P428-ND	.22	.18	.13	LN253RP
	Ø3.7	Green Diffused	90	30	4	3.0	565	8.65	13.0, 14.5	2.54	P429-ND	.23	.18	.14	LN353GP
	Ø3.7	Amber Diffused	90	30	4	3.0	590	8.65	13.0, 14.5	2.54	P430-ND	.28	.23	.17	LN453YP
5	Ø4.4	†Red Clear	70	25	4	2.0	700	5.0	14.5, 16.0	2.54	P431-ND	.22	.18	.13	LN240CP
	Ø4.4	†Green Clear	90	30	4	10.0	565	5.0	14.5, 16.0	2.54	P432-ND	.23	.18	.14	LN340CP
	Ø4.4	Orange/Pink Tint	90	30	3	6.0	630	5.0	14.5, 16.0	2.54	P434-ND	.28	.23	.17	LN840RCP
6	Ø5.0	†Red Clear	70	25	4	0.6	700	6.7	13.3, 14.8	2.54	P380-ND	.22	.18	.13	LN264CP
	Ø5.0	Green Clear	90	30	4	2.0	565	6.7	13.3, 14.8	2.54	P381-ND	.23	.18	.14	LN364GCP
	Ø5.0	Amber Clear	90	30	4	1.0	590	6.7	13.3, 14.8	2.54	P382-ND	.28	.23	.17	LN464YCP
	Ø5.0	Orange Clear	90	30	3	1.0	630	6.7	13.3, 14.8	2.54	P383-ND	.29	.24	.18	LN864RCP
7	□ 1.0x5.0	Red Diffused	70	25	4	0.6	700	8.5	13.0, 14.5	2.54	P315-ND*	.22	.18	.13	LN224RP
	□ 1.0x5.0	Green Diffused	90	30	4	2.5	565	8.5	13.0, 14.5	2.54	P316-ND*	.23	.18	.14	LN324GP
	□ 1.0x5.0	Amber Diffused	90	30	4	2.0	590	8.5	13.0, 14.5	2.54	P317-ND	.28	.23	.17	LN424YP
8	□ 1.8x1.8	Red Diffused	80	25	4	0.5	700	10.0	25.5, 27.0	2.54	P385-ND	.22	.18	.13	LN265RPH
	□ 1.8x1.8	Green Diffused	90	30	4	1.0	565	10.0	25.5, 27.0	2.54	P386-ND	.23	.18	.14	LN365GPH
	□ 1.8x1.8	Amber Diffused	90	30	4	2.5	590	10.0	25.5, 27.0	2.54	P387-ND	.28	.23	.17	LN465YP
9	□ 2.0x5.0	Red Diffused	70	20	4	0.4	700	7.5	14.5, 16.0	2.54	P437-ND	.22	.18	.13	LN242RP
	□ 2.0x5.0	Green Diffused	70	20	4	1.0	565	7.5	14.5, 16.0	2.54	P438-ND	.23	.18	.14	LN342GP
	□ 2.0x5.0	Amber Diffused	90	20	4	2.0	590	7.5	14.5, 16.0	2.54	P439-ND	.28	.23	.17	LN442YP
	□ 2.0x5.0	Orange Diffused	90	30	3	2.5	630	7.5	14.5, 16.0	2.54	P440-ND	.32	.26	.19	LN842RP
10	□ 4.0x4.0	Red Diffused	70	20	4	0.6	700	8.5	13.3, 14.8	2.54	P445-ND	.22	.18	.13	LN252RP
	□ 4.0x4.0	Green Diffused	90	30	4	1.0	565	8.5	13.3, 14.8	2.54	P446-ND	.23	.18	.14	LN352GP
	□ 4.0x4.0	Amber Diffused	90	40	4	1.0	590	8.5	13.3, 14.8	2.54	P447-ND	.28	.23	.17	LN452YP
11	□ 5.0x5.0	Red Diffused	70	30	4	2.0	700	9.0	13.6, 15.1	2.54	P448-ND	.22	.18	.13	LN250RP
	□ 5.0x5.0	Green Diffused	90	30	4	2.0	545	9.0	13.6, 15.1	2.54	P449-ND	.23	.18	.14	LN350GP
	□ 5.0x5.0	Amber Diffused	90	30	4	1.5	590	9.0	13.6, 15.1	2.54	P450-ND	.28	.23	.17	LN450YP
12	∆ 4.0x4.5	Red Diffused	70	25	4	0.4	700	5.5	15.0, 16.5	2.54	P318-ND*	.22	.18	.13	LN212RP
	∆ 4.0x4.5	Green Diffused	90	30	4	1.0	565	5.5	15.0, 16.5	2.54	P319-ND*	.23	.18	.14	LN312GP
13	Ø1.8	Red Diffused	70	25	4	0.7	700	2.8	8.6, 8.6	—	P421-ND	.37	.30	.22	LN247RP
	Ø1.8	Green Diffused	90	30	4	4.5	565	2.8	8.6, 8.6	—	P422-ND	.42	.34	.25	LN347GP
	Ø1.8	Amber Diffused	90	30	4	4.0	590	2.8	8.6, 8.6	—	P423-ND	.48	.39	.29	LN447YP
14	□ 1.7x2.5	†Red Clear	60	20	4	1.5	700	—	8.5 Typ.	—	P417-ND	.28	.23	.17	LN01201C
	□ 1.7x2.5	†Green Clear	60	20	4	10.0	565	—	8.5 Typ.	—	P418-ND	.31	.25	.19	LN01301C
	□ 1.7x2.5	†Amber Clear	60	20	4	5.0	590	—	8.5 Typ.	—	P419-ND	.34	.27	.20	LN01401C
	□ 1.7x2.5	†Orange Clear	60	20	4	8.0	630	—	8.5 Typ.	—	P420-ND	.34	.27	.20	LN01801C

† Water Clear Lens when off

LED-KIT-ND** ***Digi-Key® LED Kit 10 each of 18 popular LEDs (180 total pieces), remaining 14 part numbers shown on back cover **$36.95**

Panasonic® LEDs — Level Meters High Brightness GA AlAs Red Light-Emitting Diodes

Fig. 1

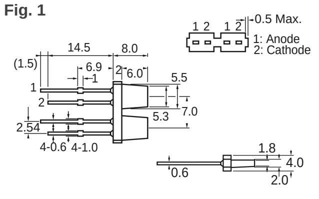


Fig. 2 – 1.75 x 7.0 rectangular

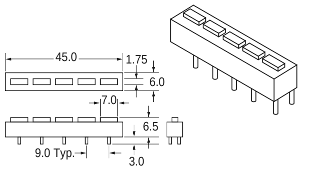


Fig. 3 – 2.8mm round

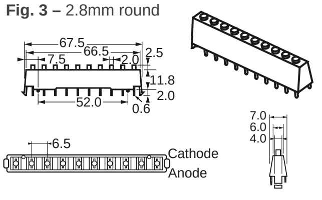


Fig. 4 – 10 Segment End to End Stackable

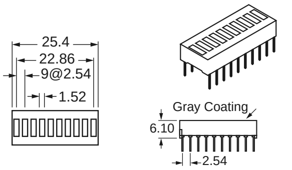
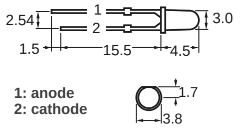


Fig. 5 – T-1 3mm dia.



1: anode
2: cathode

Fig. 6 – T-1¾ 5mm dia.

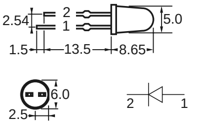


Fig. 7 – T-1¾ 5mm dia.

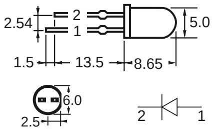


Fig. 8 – T-1¾ 5mm dia.

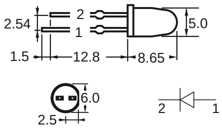
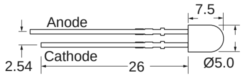


Fig. 9 – T-1¾ 5mm dia.



			IO (mcd	Electro-Optical Characteristics (Ta=25°C)						Dimensions (mm)			Price Each			
Fig.	Package	Color (Diffused)	@5mA) Typ.	PD (mW)	VR (V)	IF (mA)	IO (mcd)	λp (nm)	Lens Size	Lens Height	Lead Length	Digi-Key Part No.	1	10	200	Panasonic Part No.
1	2 Elements	Red	—	70	4	25	0.6	700	□1.8x5.3	6.0	14.5, 16.0	P516-ND	.50	.45	.39	LN02202P
1	2 Elements	Green	—	90	4	30	1.5	565	□1.8x5.3	6.0	14.5, 16.0	P517-ND	.66	.60	.52	LN02302P
1	3 Elements	Red	—	70	4	25	0.6	700	□1.8x5.3	6.0	14.5, 16.0	P519-ND	.74	.68	.59	LN03202P
1	3 Elements	Green	—	90	4	30	1.5	565	□1.8x5.3	6.0	14.5, 16.0	P520-ND	.98	.90	.77	LN03302P
1	3 Elements	Amber	—	90	4	30	1.5	590	□1.8x5.3	6.0	14.5, 16.0	P521-ND	.98	.90	.77	LN03402P
1	4 Elements	Red	—	70	4	25	0.6	700	□1.8x5.3	6.0	14.5, 16.0	P522-ND	.91	.83	.71	LN04202P
1	4 Elements	Green	—	90	4	30	1.5	565	□1.8x5.3	6.0	14.5, 16.0	P523-ND	1.31	1.20	1.03	LN04302P
1	5 Elements	Red	—	70	4	25	0.6	700	□1.8x5.3	6.0	14.5, 16.0	P525-ND	1.25	1.14	.98	LN05202P
1	5 Elements	Green	—	90	4	30	1.5	565	□1.8x5.3	6.0	14.5, 16.0	P526-ND	1.64	1.49	1.28	LN05302P
1	5 Elements	Amber	—	90	4	30	1.5	590	□1.8x5.3	6.0	14.5, 16.0	P527-ND	1.64	1.49	1.28	LN05402P
1	6 Elements	Red	—	70	4	25	0.6	700	□1.8x5.3	6.0	14.5, 16.0	P528-ND	1.50	1.37	1.18	LN06202P
1	6 Elements	Green	—	90	4	30	1.5	565	□1.8x5.3	6.0	14.5, 16.0	P529-ND	1.95	1.78	1.53	LN06302P
1	6 Elements	Amber	—	90	4	30	1.5	590	□1.8x5.3	6.0	14.5, 16.0	P530-ND	1.95	1.78	1.53	LN06402P
1	7 Elements	Red	—	70	4	25	0.6	700	□1.8x5.3	6.0	14.5, 16.0	P531-ND	1.75	1.60	1.37	LN07202P
1	7 Elements	Green	—	90	4	30	1.5	565	□1.8x5.3	6.0	14.5, 16.0	P532-ND	2.28	2.08	1.79	LN07302P
1	7 Elements	Amber	—	90	4	30	1.5	590	□1.8x5.3	6.0	14.5, 16.0	P533-ND	2.45	2.23	1.92	LN07402P
2	—	Red	—	70	4	25	0.4	700	□1.75x7.0	7.65	24.1, 25.6, 27.1	P397-ND	1.45	1.32	1.14	LN05201P
3	—	Red	—	70	4	25	1.0	700	Ø2.0	2.5	2.0	P321-ND	3.55	3.23	2.78	LN10204P
3	—	Green	—	90	4	30	1.0	565	Ø2.0	2.5	2.0	P401-ND	3.85	3.50	3.01	LN10304P
4	10 Elements	Green	—	60	5	20	1900	565	□1.52x5.08	—	4.6	P10722-ND	6.28	5.71	4.91	LNV310105A
4	10 Elements	Red	—	60	3	20	1000	630	□1.52x5.08	—	4.6	P10723-ND	6.28	5.71	4.91	LNV810105A
HIGH BRIGHTNESS LEDs																
5	—	Red	6	70	3	30	50	665	Ø3.0	5.0	15.0, 16.5	P403-ND	.39	.35	.31	LN28RAL(US)
5	—	Red (White)	14	70	3	30	50	665	Ø3.0	5.0	15.0, 16.5	P404-ND	.39	.35	.31	LN28WAL(US)
5	—	† Red	20	70	3	30	85	665	Ø3.0	5.0	15.0, 16.5	P405-ND	.39	.35	.31	LN28CAL(US)
6	—	† Red	110	70	3	30	300	665	Ø5.0	8.65	12.0, 13.5	P406-ND	.39	.35	.31	LN21CAL(US)-2
7	—	† Red	190	70	3	30	1000	665	Ø5.0	8.65	12.0, 13.5	P407-ND	.69	.63	.54	LN21CAL(URS)
7	—	† Red	470	70	3	30	2000	665	Ø5.0	8.65	12.0, 13.5	P408-ND	.96	.88	.76	LN261CAL(UR)
8	—	Red	20	70	3	30	200	660	Ø5.0	8.65	12.0, 13.5	P458-ND	.69	.63	.54	LN21RUQ
8	—	† Red	20	70	3	30	85	665	Ø5.0	8.65	12.0, 13.5	P410-ND	.39	.35	.31	LN21CAL(U)
9	—	Green	—	90	4	30	120	565	Ø5.0	7.5	26, 27.5	P461-ND	.30	.28	.24	LNG305CFT

† Nondiffused lens. Water clear lens when off.

Optoelectronics LEDs — Two Color

Fig. 1

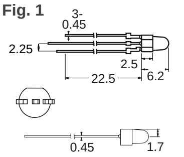


Fig. 2

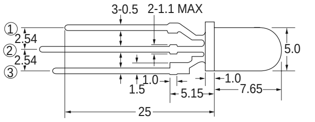


Fig. 3

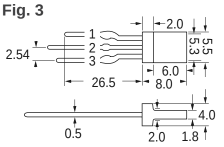


Fig. 4

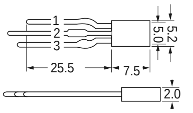
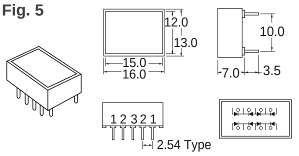


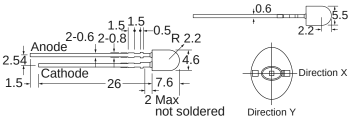
Fig. 5



		Electro-Optical Characteristics (Ta=25°C)					Dimensions (mm)			Pricing				
FIg.	Radiation Color/ Lens Color	PD (mW)	IF (mA)	VR (V)	IO (mcd)	λp (nm)	Lens Size	Lead Length	Digi-Key Part No.	1	10	200	1,000	Panasonic Part No.
1	*1. Green/3. Orange/White Diffused	90/90	30/30	4/3	8.0/8.0	565/630	Ø3.0	22.5, 24.5, 26.5	P509-ND	.66	6.00	103.20	444.15	LN086WP38
2	*1. Green/3. Red/White Diffused	70	25	4	3.0	700	Ø5.0	24.1, 25.6, 27.1	P391-ND	.59	5.40	92.88	399.74	LN11WP23
	*1. Green/3. Red/Clear	70	25	4	3.0	700	Ø5.0	24.1, 25.6, 27.1	P392-ND	.59	5.40	92.88	399.74	LN11CP23
	*1. Amber/3. Red/White Diffused	70	25	4	3.0	700	Ø5.0	24.1, 25.6, 27.1	P393-ND	.66	6.00	103.20	444.15	LN11WP24
	*1. Amber/3. Green/White Diffused	90	30	4	15.0	565	Ø5.0	24.1, 25.6, 27.1	P395-ND	.66	6.00	103.20	444.15	LN11WP34
	*1. Orange/3. Green/White Diffused	90	30	4	15.0	565	Ø5.0	24.1, 25.6, 27.1	P399-ND	.66	6.00	103.20	444.15	LN11WP38
3	*1. Green/3. Red/White Diffused	70/90	25/30	4/4	.6/4.5	700/565	□1.8x5.3	26.5, 28.0, 29.5	P435-ND	.59	5.40	92.88	399.74	LN117WP23
4	*1. Orange/3. Green/White Diffused	90/90	30/30	4/3	3/2.5	565/630	□2.0x5.0	25.5, 27.0, 28.5	P436-ND	.66	6.00	103.20	444.15	LN142WP38
5	*1. Orange/3. Green/White Diffused	60	20	3	8.0	565	□12.0x15.0	3.5 typ.	P396-ND	3.22	29.24	502.95	2164.57	LN0801WP38

* Common Cathode

Wide Angle LEDs



	Io								IR		Viewing Angle (deg)					Pricing			
	mcd	mcd	(mA)	VF (V)		λp	Δλ	(mA)	(µA)	(V)									
Color	Typ	Min	IF	Max	Typ	Typ	Typ	IF	Max	VR	x	y	IFDC Max	IFP* Max	Digi-Key Part No.	1	10	200	Panasonic Part No.
Red	300	120	20	2.6	1.8	660	20	20	100	3	15	35	30	150	P462-ND	.59	5.40	92.88	LNG295LFCP2U
Green	120	75	20	2.8	2.2	565	30	20	10	4	17	35	30	150	P463-ND	.30	2.75	47.30	LNG395MFTP5U
Blue	370	145	20	4.0	3.5	470	30	20	10	5	15	35	30	100	P468-ND	2.67	24.95	463.32	LNG995PFBW

* The condition of IFP is duty 10%, pulse width 1ms.

Panasonic

Surface Mount LEDs

The chip LEDs have thin and compact features available for surface mount technology. It makes super brightness, wide viewing angle and it is suitable for compact and multi-function equipment.

Features: • Compact and thin package • Super bright and high reliability • Surface mount technology available • Wide product range

Cleaning: • The surface of the LED may change when organic solvents such as trichloroethylene and acetone comes in contact with the surface of the LED. • Avoid using organic solvents.

Fig. 1 — Leadless-Side View

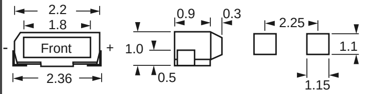


Fig. 2 — Leadless-SS Type

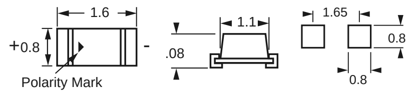
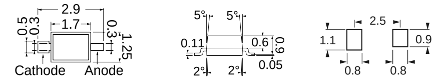


Fig. 3 — Gull Wing-S Type



(†P493-ND Polarity Reversed)

Fig. 4 — Gull Wing-GW Type

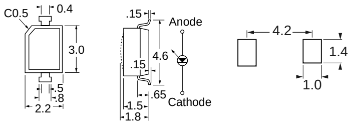


Fig. 5 — J-Lead-S Type

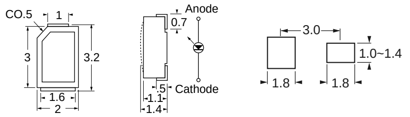


Fig. 6 — Gull Wing-S Type (Bi-Color)

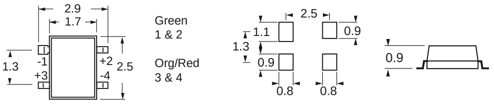


Fig. 7 — Gull Wing-GW Type (Bi-Color)

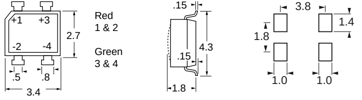


Fig. 8 — Thru-Board Type

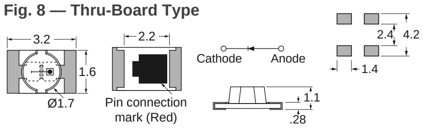


Fig. 9 — J-Lead-S Type

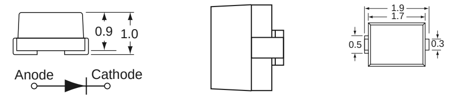


Fig. 10 — TSS Tri Color Type

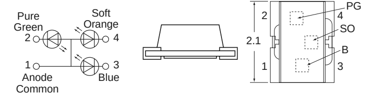


Fig. 11 — TSS Bi Color Type

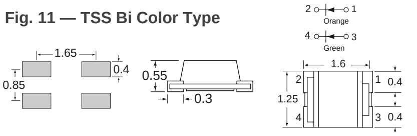


Fig. 12 — Leadless-TSS Type

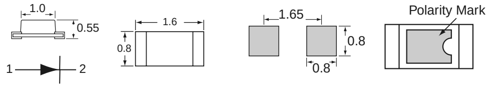
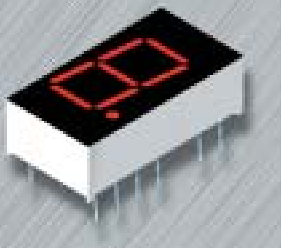


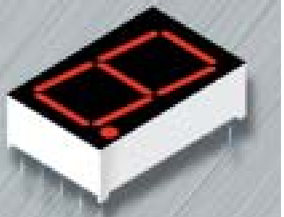
Fig.	Lighting Color	Lens	Absolute Maximum Ratings				Io			VF(V)		λP	Digi-Key	Cut Tape Price Each			Digi-Key	Tape & Reel		Panasonic
			(mW) PD	(mA) IF	(V) VR	(°C) Topr	(mcd) Typ.	(mcd) Min.	(mA) IF	Typ.	Max.	Typ.	Part No.	1	10	100	Part No.	Size	Pricing	Part No.
1	High Bright Green	Clear	60	20	4	-25~+85	8.0	3.00	10	2.03	2.6	565	P520CT-ND	.39	.36	.33	P520TR-ND	3,000	228.00/M	LNJ310M6URA
	Amber	Yellow Clear	60	20	4	-25~+80	2.5	0.8	10	2.00	2.6	590	P11140CT-ND	.40	.37	.34	P11140TR-ND	3,000	233.61/M	LNJ410Q6YRA
	Orange	Red Clear	60	20	3	-25~+80	2.5	.8	10	1.93	2.6	630	P519CT-ND	.39	.36	.33	P519TR-ND	3,000	228.00/M	LNJ810L6DRA
	High Bright Red	Clear	60	20	3	-30~+80	8.0	2.6	10	1.72	2.5	660	P11139CT-ND	.40	.37	.34	P11139TR-ND	3,000	234.00/M	LNJ210C6ARA
	Red	Clear	60	20	4	-25~+80	0.7	0.25	10	2.03	2.6	700	P11138CT-ND	.40	.37	.34	P11138TR-ND	3,000	234.00/M	LNJ210C6RRA
2	Green	Green Diffused	30	10	4	-25~+85	2.1	0.70	5	1.90	2.4	565	P521CT-ND*	.33	.31	.28	P521TR-ND	4,000	193.00/M	LNJ308G8LRA
	Green	Green Diffused	50	20	4	-25~+85	5.0	1.80	10	2.03	2.6	565	P525CT-ND	.33	.31	.28	P525TR-ND	4,000	193.00/M	LNJ308G8TRA
	Amber	Yellow Diffused	30	10	4	-25~+85	0.9	0.40	5	1.90	2.4	590	P522CT-ND*	.33	.31	.28	P522TR-ND	4,000	193.00/M	LNJ408K8ZRA
	Amber	Yellow Diffused	50	20	4	-25~+85	1.5	0.6	10	2.00	2.6	590	P11129CT-ND	.33	.31	.28	P11129TR-ND	4,000	195.00/M	LNJ408K8YRA
	Amber	Yellow Diffused	50	20	4	-25~+85	10.5	4.0	10	2.00	2.3	595	P11130CT-ND	.53	.49	.45	P11130TR-ND	4,000	311.00/M	LNJ408K84RA
	Soft Orange	Yellow Diffused	50	20	3	-25~+85	1.0	0.4	10	1.93	2.6	610	P11132CT-ND	.33	.31	.28	P11132TR-ND	4,000	194.67/M	LNJ808K8SRA
	Orange	Red Diffused	50	20	4	-25~+85	6.5	2.5	10	1.90	2.3	620	P11131CT-ND	.53	.49	.45	P11131TR-ND	4,000	311.00/M	LNJ808R88RA
	Orange	Orange Diffused	30	10	3	-25~+85	1.1	0.40	5	1.80	2.4	630	P523CT-ND*	.33	.31	.28	P523TR-ND	4,000	193.00/M	LNJ808R8ERA
	Ultra Bright Red	Red Diffused	50	20	3	-25~+85	6.7	2.2	10	1.72	2.5	660	P524CT-ND	.33	.31	.28	P524TR-ND	4,000	193.00/M	LNJ208R8ARA
3	Green	Green Diffused	30	10	4	-30~+85	2.0	.7	5	1.9	2.4	565	P516CT-ND*	.33	.31	.28	P516TR-ND	6,000	193.00/M	LN1371SG-(TR)
	Green	Green Diffused	60	20	4	-25~+85	2.6	0.90	10	2.03	2.6	565	P491CT-ND	—	.31	.28	P491TR-ND	6,000	176.00/M	LN1371G-(TR)
	High Bright Green	Green Diffused	60	20	4	-25~+85	5.0	3.00	10	2.03	2.6	565	P494CT-ND	—	.33	.30	P494TR-ND	6,000	189.00/M	LN1371G(H)-6U(TR)
	Amber	Yellow Diffused	60	20	4	-25~+85	1.0	0.4	10	2.00	2.6	590	P11125CT-ND	.36	.33	.30	P11125TR-ND	6,000	190.00/M	LN1471Y-(TR)
	Amber	Yellow Diffused	30	10	4	-30~+85	1.0	.4	5	1.9	2.4	590	P517CT-ND*	.33	.31	.28	P517TR-ND	6,000	193.00/M	LN1471SY-(TR)
	Soft Orange	Yellow Diffused	60	20	3	-25~+85	0.8	0.30	10	1.93	2.6	610	P492CT-ND	—	.31	.29	P492TR-ND	6,000	180.00/M	LN1871Y5-(TR)
	Orange	Yellow Diffused	30	10	3	-30~+85	1.0	.4	5	1.8	2.4	630	P518CT-ND*	.33	.31	.28	P518TR-ND	6,000	193.00/M	LN1871SR-(TR)
	Ultra Bright Red	Red Diffused	60	20	3	-25~+85	5.0	1.70	10	1.72	2.5	660	P493CT-ND†	—	.41	.37	P493TR-ND	6,000	236.00/M	LN1271RAL-(TR)
	Red	Red Diffused	60	20	4	-25~+85	0.4	0.15	10	2.03	2.6	700	P490CT-ND	—	.31	.28	P490TR-ND	6,000	176.00/M	LN1271R-(TR)
4	Green	Clear	60	20	4	-25~+80	7.5	2.80	20	2.20	2.8	565	P504CT-ND	.33	.31	.28	P504TR-ND	2,000	193.00/M	LN1361C-(TR)
	Green	Clear	60	20	4	-25~+80	15.0	8	20	2.2	2.8	565	P514CT-ND	.38	.35	.32	P514TR-ND	2,000	221.00/M	LN1361C(UY)-(TR)
	Amber	Clear	60	20	4	-25~+80	4.5	1.60	20	2.20	2.8	590	P512CT-ND	.34	.31	.29	P512TR-ND	2,000	197.00/M	LN1461C-(TR)
	Amber	Clear	50	20	4	-25~+85	18.0	6.5	10	2.00	2.3	595	P11128CT-ND	.58	.53	.49	P11128TR-ND	2,000	337.00/M	LNJ461C34RA
	Orange	Clear	60	20	3	-25~+80	5.0	1.90	20	2.10	2.8	630	P505CT-ND	.33	.31	.28	P505TR-ND	2,000	193.00/M	LN1861C-(TR)
	Ultra Bright Red	Clear	50	20	3	-25~+80	12.0	5.00	20	1.80	2.6	660	P513CT-ND	.44	.41	.37	P513TR-ND	2,000	258.00/M	LN1261CAL-(TR)
	Red	Clear	60	20	4	-25~+80	1.4	0.50	15	2.20	2.8	700	P503CT-ND	.33	.31	.28	P503TR-ND	2,000	193.00/M	LN1261C-(TR)
5	Blue	Clear	40	10	5	-25~+85	9.0	3.0	5	3.20	3.7	470	P11127CT-ND	3.83	3.51	3.19	P11127TR-ND	3,000	2232.23/M	LNJ951C4BRA
	Green	Clear	45	15	4	-25~+80	5.0	1.90	10	2.10	2.8	565	P501CT-ND	.33	.31	.28	P501TR-ND	3,000	193.00/M	LN1351C-(TR)
	Amber	Clear	45	15	4	-25~+80	2.2	0.80	10	2.10	2.8	590	P511CT-ND	.33	.31	.28	P511TR-ND	3,000	193.00/M	LN1451C-(TR)
	Orange	Clear	45	15	3	-25~+80	3.5	1.30	10	.05	2.8	630	P502CT-ND	.33	.31	.28	P502TR-ND	3,000	193.00/M	LN1851C-(TR)
	Red	Clear	45	15	3	-25~+85	9.0	3.3	10	1.75	2.6	660	P11126CT-ND	.44	.41	.38	P11126TR-ND	3,000	260.00/M	LN1251CAL-(TR)
	Red	Clear	45	15	4	-25~+80	1.2	0.45	10	2.10	2.8	700	P500CT-ND	.33	.31	.28	P500TR-ND	3,000	193.00/M	LN1251C-(TR)
6	High Bright Green	White Diffused	60	20	4	-25~+85	5.0	3.00	10	2.03	2.6	565	P526CT-ND	.75	.69	.63	P526TR-ND	3,000	438.00/M	LNJ107W5PRW
	Ultra Bright Red	White Diffused	60	20	3	-25~+85	5.0	1.70	10	1.72	2.5	660								
6	Green	White Diffused	60	20	4	-25~+85	2.6	0.90	10	2.03	2.6	565	P515CT-ND	.75	.69	.63	P515TR-ND	3,000	438.00/M	LNJ107W5ARA1
	Orange	White Diffused	60	20	3	-25~+85	1.0	0.40	10	1.93	2.6	630								
7	Green	Clear	45	15	4	-25~+80	4.0	1.50	10	2.05	2.8	565	P507CT-ND	.75	.69	.63	P507TR-ND	1,000	438.00	LN2162C13-(TR)
	Red	Clear	45	15	3	-25~+80	1.8	0.65	10	2.00	2.8	650								
7	Pure Green	Clear	45	15	3	-25~+65	2.5	12.0	10	2.05	2.8	555	P11147CT-ND	.80	.74	.67	P11147TR-ND	1,000	467.00	LN2162C68-(TR)
	Orange	Clear	45	15	3	-25~+65	2.1	0.8	10	1.95	2.8	630								
8	High Bright Green	Green Diffused	60	20	4	-30~+85	5.5	1.8	10	2.03	2.6	565	P540CT-ND	.33	.31	.28	P540TR-ND	3,000	193.00/M	LNJ311G8TRU
	High Bright Red	Red Diffused	60	20	3	-30~+85	7.0	2.3	10	1.72	2.5	660	P11141CT-ND	.33	.31	.28	P11141TR-ND	3,000	195.00/M	LNJ211R8ARA
	High Bright Red	Red Diffused	60	20	3	-30~+85	7.0	2.3	10	1.72	2.5	660	P541CT-ND	.33	.31	.28	P541TR-ND	3,000	193.00/M	LNJ211R8ARU
9	Green	Green Diffused	60	20	4	-25~+85	2.6	0.9	10	2.03	2.6	565	P11137CT-ND	.33	.31	.28	P11137TR-ND	6,000	178.00/M	LNJ306G5URA
	High Bright Red	Red Diffused	60	20	3	-25~+85	5.0	1.7	10	1.72	2.5	660	P11136CT-ND	.33	.31	.28	P11136TR-ND	6,000	178.00/M	LNJ206R5ARA
10	Blue	White Diffused	40	15	5	-30~+85	10.0	5.0	5	3.00	3.7	470	P11146CT-ND	11.12	10.20	9.27	P11146TR-ND	2,000	6489.00/M	LNJ717W80RA
	Pure Green	White Diffused	40	15	5	-30~+85	34.0	28.0	5	3.00	3.7	525								
	Soft Orange	White Diffused	55	20	4	-30~+85	23.0	10.0	10	1.95	2.5	615								
11	Green	White Diffused	60	20	4	-30~+85	5.0	1.8	10	2.03	2.6	565	P11142CT-ND	.80	.74	.67	P11142TR-ND	5,000	427.00/M	LNJ115W8ARA
	Soft Orange	White Diffused	60	20	3	-30~+85	1.0	0.4	10	1.93	2.6	630								
11	Green	White Diffused	60	20	4	-30~+85	5.0	1.8	10	2.03	2.6	565	P11143CT-ND	.80	.74	.67	P11143TR-ND	5,000	427.00/M	LNJ115W8PRA
	Red	White Diffused	50	20	3	-30~+85	6.7	2.2	10	1.72	2.5	655								
11	Green	White Diffused	60	20	4	-30~+85	5.0	1.8	10	2.03	2.6	565	P11144CT-ND	1.11	1.02	.93	P11144TR-ND	5,000	593.00/M	LNJ115W88RA
	Amber	White Diffused	55	20	4	-30~+85	21.0	7.0	10	2.10	2.6	595								
11	Pure Green	White Diffused	40	10	5	-30~+85	34.0	10.3	5	3.00	3.7	525	P11145CT-ND	5.78	5.31	4.83	P11145TR-ND	5,000	3085.00/M	LNJ115W8VRA
	Soft Orange	White Diffused	55	20	4	-30~+85	23.0	7.0	10	1.95	2.5	615								
12	Green	Green Diffused	50	20	4	-30~+85	5.0	1.8	10	2.03	2.6	565	P11134CT-ND	.33	.31	.28	P11134TR-ND	5,000	178.00/M	LNJ312G8TRA
	Amber	Yellow Diffused	50	20	4	-30~+85	1.5	0.6	10	2.00	2.6	590	P11135CT-ND	.33	.31	.28	P11135TR-ND	5,000	177.99/M	LNJ412K8YRA
	Red	Red Diffused	50	20	3	-30~+85	6.7	2.2	10	1.72	2.5	655	P11133CT-ND	.33	.31	.28	P11133TR-ND	5,000	178.00/M	LNJ212R8ARA

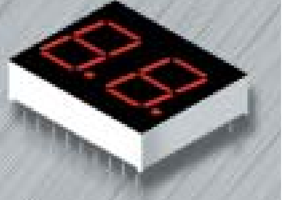
* Low current LED, same brightness as previous design with half the power, ideal for battery powered equipment.

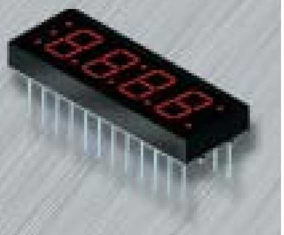
Panasonic®

LED Numeric Displays

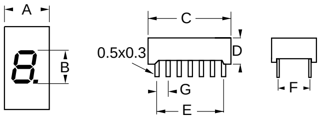






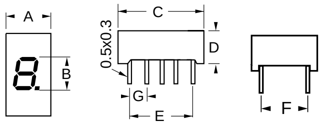


P322-P329, P343-P350

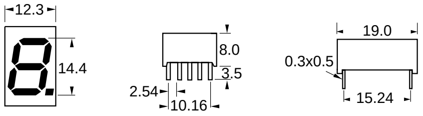


Size	A	B	C	D	E	F	G
0.3A	7.0	8.0	11.0	5.0	8.0	5.3	2.0
0.3B	10.0	7.6	19.0	5.5	15.24	7.6	2.54
.43	11.0	11.0	19.0	5.5	15.24	7.6	2.54

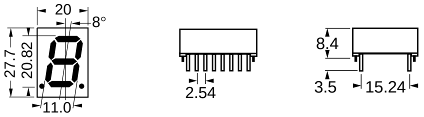
P510-P515



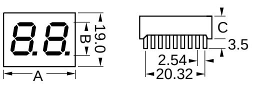
P330-P333, P351-P354

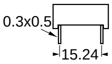


P411-P416



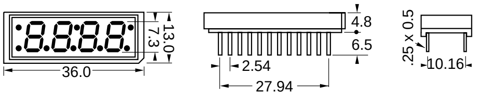
P334-P339, P355-P360





Size	Dim. A	Dim. B	Dim. C
.43	24.0	11.0	6.5
.57	25.1	14.4	8.0

P453-P456



Color	Size	Absolute Max. Ratings (Ta = 25°C) V_R (V)	I_F (mA)	I_{FP}† (mA)	P_D (mW)	Characteristics (Ta = 25°C) at I_F (mA)	IO Typ. (seg.) (µcd)	Typ. (D.P.) (µcd)	at I_F (mA)	V_F Typ. (V)	Digi-Key Part No. Common Anode	Common Cathode	Pricing 1	10	200	1000	Panasonic Part No. Common Anode	Common Cathode
Red	0.3A	5	15	80	40	5	200	70	10	2.1	P510-ND	P511-ND	2.09	18.97	326.24	1404.07	LN513RAM	LN513RKM
Green	0.3A	5	15	80	40	10	1,000	300	10	2.1	P512-ND	P513-ND	2.39	21.68	372.97	1605.20	LN513GAM	LN513GKM
Amber	0.3A	5	15	80	40	10	300	100	10	2.0	P514-ND	P515-ND	2.70	24.50	421.40	1813.62	LN513YAM	LN513YKM
Red	0.3B	5	20	100	60	5	400	150	20	2.2	P322-ND	P343-ND	1.56	14.18	243.81	1049.31	LN513RA	LN513RK
Green	0.3B	5	20	100	60	10	1,200	400	20	2.2	P323-ND	P344-ND	1.95	17.75	305.30	1313.95	LN513GA	LN513GK
Amber	0.3B	5	20	100	60	10	600	200	20	2.2	P324-ND	P345-ND	1.90	17.25	296.70	1276.93	LN513YA	LN513YK
Orange	0.3B	3	20	100	60	10	1,000	400	20	2.1	P325-ND	P346-ND	1.95	17.72	304.76	1311.63	LN513OA	LN513OK
Red	.43	5	20	100	60	5	450	150	20	2.2	P326-ND	P347-ND	1.57	14.25	245.10	1054.86	LN514RA	LN514RK
Green	.43	5	20	100	60	10	1,500	500	20	2.2	P327-ND	P348-ND	1.75	15.90	273.42	1176.72	LN514GA	LN514GK
Amber	.43	5	20	100	60	10	600	200	20	2.2	P328-ND	P349-ND	2.11	19.17	329.72	1419.06	LN514YA	LN514YK
Orange	.43	3	20	100	60	10	1,200	500	20	2.1	P329-ND	P350-ND	2.11	19.17	329.72	1419.06	LN514OA	LN514OK
Red	.57	5	20	100	60	5	600	250	20	2.2	P330-ND	P351-ND	1.62	14.72	253.10	1089.28	LN516RA	LN516RK
Green	.57	5	20	100	60	10	1,500	500	20	2.2	P331-ND	P352-ND	1.87	17.00	292.40	1258.43	LN516GA	LN516GK
Amber	.57	5	20	100	60	10	800	300	20	2.2	P332-ND	P353-ND	2.27	20.66	355.27	1528.99	LN516YA	LN516YK
Orange	.57	3	20	100	60	10	1,200	500	20	2.1	P333-ND	P354-ND	2.27	20.66	355.27	1528.99	LN516OA	LN516OK
Red	.82	5	20	100	60	5	450	150	20	2.2	P411-ND	P415-ND	3.16	28.75	494.50	2128.22	LN518RA	LN518RK
Green	.82	5	20	100	60	10	1,500	500	20	2.2	P412-ND	P416-ND	3.82	34.70	596.75	2568.30	LN518GA	LN518GK
Amber	.82	5	20	100	60	10	800	300	20	2.2	P413-ND	—	4.07	37.00	636.40	2738.93	LN518YA	—
Orange	.82	3	20	100	60	10	1,200	500	20	2.1	P414-ND	—	4.07	37.00	636.40	2738.93	LN518OA	—
Red	.43	5	20	100	60	5	450	150	20	2.2	P334-ND	P355-ND	2.11	19.17	329.72	1419.06	LN524RA	LN524RK
Green	.43	5	20	100	60	10	1,500	500	20	2.2	P335-ND	P356-ND	2.44	22.14	380.81	1638.92	LN524GA	LN524GK
Amber	.43	5	20	100	60	10	600	200	20	2.2	P336-ND	P357-ND	2.89	26.25	451.50	1943.16	LN524YA	LN524YK
Red	.57	5	20	100	60	5	600	250	20	2.2	P337-ND	P358-ND	2.06	18.75	322.50	1387.97	LN526RA	LN526RK
Green	.57	5	20	100	60	10	1,500	500	20	2.2	P338-ND	P359-ND	2.44	22.14	380.81	1638.92	LN526GA	LN526GK
Amber	.57	5	20	100	60	10	800	300	20	2.2	P339-ND	P360-ND	2.97	27.00	464.40	1998.68	LN526YA	LN526YK
Red	.28	5	10	60	30	5	200	100	10	2.03	P453-ND*	P454-ND*	9.76	88.75	1526.50	6569.74	LN543RAN8	LN543RKN8
Green	.28	5	10	60	30	10	200	80	10	2.03	P455-ND*	P456-ND*	10.48	95.25	1638.30	7050.90	LN543GAN8	LN543GKN8

* Multiplexed display

† The condition of I_{FP} is duty 10%, pulse width is 1 msec.

Panasonic® LEDs

Pack-age	Lens Size	Color	Electro-Optical Character (Ta=25°C)					Dimensions		Lead Spac-ing	Digi-Key Part No.	Pricing				Panasonic Part No.
			P_D (mW)	I_F (mA)	V_R (V)	I_O (mcd)	λ_p (nm)	Lens Height	Lead Length			10	200	1,000	5,000	
T-1	ϕ3.0	Red Diffused	70	25	4	0.8	700	5.0	15.0, 16.5	2.54	P363-ND	1.68	27.00	100.02	92.58/M	LN28RP
	ϕ3.0	Red Clear	70	25	4	1.5	700	5.0	15.0, 16.5	2.54	P308-ND•	1.68	27.00	100.02	92.58/M	LN28RCP
	ϕ3.0	Green Diffused	90	30	4	2.0	565	5.0	15.0, 16.5	2.54	P364-ND	2.15	34.51	127.83	118.32/M	LN38GP
	ϕ3.0	Green Clear	90	30	4	4.0	565	5.0	15.0, 16.5	2.54	P309-ND•	2.15	34.51	127.83	118.32/M	LN38GCP
	ϕ3.0	Amber Diffused	90	30	4	4.0	590	5.0	15.0, 16.5	2.54	P365-ND	2.24	36.00	133.36	123.44/M	LN48YP
	ϕ3.0	Amber Clear	90	30	4	6.0	590	5.0	15.0, 16.5	2.54	P310-ND•	2.24	36.00	133.36	123.44/M	LN48YCP
	ϕ3.0	Orange Diffused	90	30	4	6.0	630	5.0	15.0, 16.5	2.54	P366-ND	2.24	36.00	133.36	123.44/M	LN88RP
T-1½	ϕ4.0	Red Diffused	70	25	4	1.5	700	6.0	15.0, 16.5	2.54	P367-ND	1.68	27.00	100.02	92.58/M	LN29RPP
	ϕ4.0	Red Clear	70	25	4	1.5	700	6.0	15.0, 16.5	2.54	P311-ND•	1.68	27.00	100.02	92.58/M	LN29RCP
	ϕ4.0	Green Diffused	90	30	4	5.0	565	6.0	15.0, 16.5	2.54	P368-ND	2.15	34.51	127.83	118.32/M	LN39GPP
	ϕ4.0	Green Clear	90	30	4	3.0	565	6.0	15.0, 16.5	2.54	P312-ND•	2.15	34.51	127.83	118.32/M	LN39GCP
	ϕ4.0	Amber Diffused	90	30	4	10.0	590	6.0	15.0, 16.5	2.54	P369-ND	2.24	36.00	133.36	123.44/M	LN49YPP
	ϕ4.0	Amber Diffused	90	30	4	5.0	590	6.0	15.0, 16.5	2.54	P314-ND•	2.24	36.00	133.36	123.44/M	LN49YP
	ϕ4.0	Orange Diffused	90	30	3	10.0	630	6.0	15.0, 16.5	2.54	P370-ND	2.24	36.00	133.36	123.44/M	LN89RPP
	ϕ4.0	Orange Clear	90	30	3	30.0	630	6.0	15.0, 16.5	2.54	P371-ND	2.24	36.00	133.36	123.44/M	LN89RCPP
T-1¾	ϕ5.0	Red Diffused	70	25	4	3.0	700	8.65	12.0, 13.5	2.54	P300-ND•	1.68	27.00	100.02	92.58/M	LN21RPHL
	ϕ5.0	Red Clear	70	25	4	5.0	700	8.65	12.0, 13.5	2.54	P301-ND•	1.68	27.00	100.02	92.58/M	LN21RCPHL
	ϕ5.0	Green Diffused	90	30	4	15.0	565	8.65	12.0, 13.5	2.54	P303-ND•	2.15	34.51	127.83	118.32/M	LN31GPHL
	ϕ5.0	Green Clear	90	30	4	20.0	565	8.65	12.0, 13.5	2.54	P302-ND•	2.15	34.51	127.83	118.32/M	LN31GCPHL
	ϕ5.0	Amber Diffused	90	30	4	8.0	590	8.65	12.0, 13.5	2.54	P306-ND•	2.24	36.00	133.36	123.44/M	LN41YPHL
	ϕ5.0	Amber Clear	90	30	4	20.0	590	8.65	12.0, 13.5	2.54	P304-ND•	2.24	36.00	133.36	123.44/M	LN41YCPHL
	ϕ5.0	Orange Diffused	90	30	3	10.0	630	8.65	12.0, 13.5	2.54	P307-ND•	2.24	36.00	133.36	123.44/M	LN81RPHL
	ϕ5.0	Orange/Red Clear	90	30	3	20.0	630	8.65	12.0, 13.5	2.54	P305-ND•	2.24	36.00	133.36	123.44/M	LN81RCPHL
	ϕ5.0	†Orange Clear	90	30	3	25.0	630	8.65	12.0, 13.5	2.54	P457-ND	2.24	36.00	133.36	123.44/M	LN81CPHL
T-1¾	ϕ5.0	Red Diffused	70	25	4	3.0	700	8.65	25.0, 26.5	2.54	P374-ND	1.68	27.00	100.02	92.58/M	LN21RPH
	ϕ5.0	Green Diffused	90	30	4	15.0	565	8.65	25.0, 26.5	2.54	P375-ND	2.15	34.51	127.83	118.32/M	LN31GPH
	ϕ5.0	Amber Diffused	90	30	4	8.0	590	8.65	25.0, 26.5	2.54	P372-ND	2.24	36.00	133.36	123.44/M	LN41YPH
	ϕ5.0	Orange Diffused	90	30	3	10.0	630	8.65	25.0, 26.5	2.54	P373-ND	2.24	36.00	133.36	123.44/M	LN81RPH
Panel Mounting Clip and Ring											MP52-ND	1.80	17.00	54.00	40.00/M	—

• **LED-KIT-ND** ***Digi-Key® LED Kit*** 10 ea. of 14 popular LEDs indicated above plus P315-ND, P316-ND, P318-ND and P319-ND (180 total pieces) **$36.95**

† *Water clear lens when off.*

Blue LEDs

High Brightness

Max Ratings:

Power Consumption: 120mW
Forward Current: 30mA
Reverse Voltage: 5V
Operating Ambient Temperature: -25 ~ +80°C.
Storage Temperature: -30 ~ +100°C

Water clear lens when off.

Blue LED Precautions in Handling:

A blue LED is sensitive to static electricity and care should be fully taken in handling it. Particularly, when an overvoltage is applied, which exceeds the absolute maximum rating of the blue LED, its energy damages the LED.

Fig. 1 T-1¾

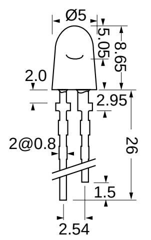


Fig. 2 T-1¾

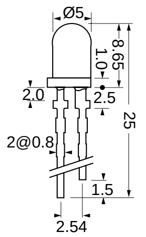


Fig. 3 T-1¾

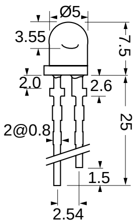


Fig.	Io								IR		Viewing Angle (deg)	Digi-Key Part No.	Pricing				Panasonic Part No.
	mcd Typ	mcd Min	(mA) I_F	VF (V) Max	VF (V) Typ	λ_p Typ	Δλ Typ	(mA) I_F	(μA) Max	(V) V_R			1	10	200	1,000	
1	1500	640	20	4.0	3.5	470	30	20	10	5	15	P465-ND	2.67	24.95	463.32	1980.40	LNG992CFBW
2	650	260	20	4.0	3.5	470	30	20	10	5	30	P466-ND	2.67	24.95	463.32	1980.40	LNG901CFBW
3	350	140	20	4.0	3.5	470	30	20	10	5	45	P467-ND	2.67	24.95	463.32	1980.40	LNG91LCFBW

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